

UC Berkeley

UC Berkeley Electronic Theses and Dissertations

Title

Going Nowhere: The Social Life of Opioids in Backcountry California

Permalink

<https://escholarship.org/uc/item/61c4s56c>

Author

Showalter, David Burkhart

Publication Date

2022

Peer reviewed|Thesis/dissertation

Going Nowhere: The Social Life of Opioids in Backcountry California

By

David Burkhart Showalter

A dissertation submitted in partial satisfaction of the

requirements for the degree of

Doctor of Philosophy

in

Sociology

in the

Graduate Division

of the

University of California, Berkeley

Committee in charge:

Professor Loïc Wacquant, Chair
Professor Jennifer Johnson-Hanks
Professor Christopher Muller
Professor Seth M. Holmes

Summer 2022

Going Nowhere: The Social Life of Opioids in Backcountry California

Copyright 2022
by
David Burkhart Showalter

Abstract

Going Nowhere: The Social Life of Opioids in Backcountry California

by

David Burkhart Showalter

Doctor of Philosophy in Sociology

University of California, Berkeley

Professor Loïc Wacquant, Chair

Drug-related deaths, most of which involve opioids, have skyrocketed in the United States to over 107,000 in 2021 and more than one million in the 21st century. In contrast to previous drug crises, the overdose crisis has severely affected nonurban areas. In 2017 I entered California's mountainous backcountry with several questions: how had opioids spread in regions where they seemingly had not previously? How were drugs obtained in places that lacked organized drug markets? How did isolation and scarcity affect the health consequences of opioid use? And how were drugs policed in towns where authorities lived alongside their targets?

To answer these questions, I conducted in-depth interviews and over two years of ethnographic fieldwork across a dozen counties, almost all remote and nonurban. I interviewed 69 people who used drugs, mostly heroin and other opioids, spending time with many as they bought, sold, and used drugs. I also interviewed 176 local officials and service providers, including practitioners in health care, public health, substance use treatment, harm reduction, and social services, as well as law enforcement officers, judges, attorneys, and probation officers. In this dissertation I report in-depth on two counties that I call Oak and Sage.

In the first two chapters, I discuss the history of the overdose crisis in the United States and California and highlight changing inequalities in its impact over time, by place, and by race and ethnicity. In Chapter 3, I construct several concepts to account for distinctive features of nonurban social structure, subjectivity, and local government. In particular, I argue that geographic isolation and dense, multiplex social ties generate "acquainted marginality," exposing people who use drugs to formal and informal surveillance, durably spoiling their reputations, and discouraging them from seeking health care and other services.

Chapter 4 recounts how opioids were used in the backcountry to compensate for weak local health systems and to soothe untreated anguish, and how residents sought out heroin as pharmaceuticals became scarce. In Chapter 5 I describe a small-town heroin scene and catalogue the extensive planning, coordination, time, and money necessary to consistently obtain the drug from urban markets. The sixth chapter illustrates how geography and social structure jointly affect the health consequences of opioid use, including pain and withdrawal, infection and injury, and natural hazards. In Chapter 7, I examine how people who use drugs are tracked through

gossip, by neighbors, and in public space, how social ties are appropriated by law enforcement, and how stigma and drug criminalization reinforce each other.

In the Conclusion I outline a sociological model of drug use and addiction as an effect of institutional and organizational relations that selectively expose people to hardship, sources of meaning and inclusion, and experiences with drugs. This approach implies that drug use is a normal element of human social life and that negative consequences from drugs are not inevitable but shaped by policy choices. Since efforts to eliminate drugs have caused significant harm, I argue for accommodating drug use and recommend policy changes to achieve that goal.

Contents

| | |
|--|-----|
| List of Figures | ii |
| List of Tables | iii |
| Acknowledgements | iv |
| 1. Introduction: “How Could Anybody Be an Addict in this Environment?” | 1 |
| 2. Remapping the Overdose Crisis | 14 |
| 3. Theorizing the Geography of Ambivalence | 27 |
| 4. “Now We Have Heroin”: Opioid Booms and Backlash | 38 |
| 5. Inside a Small-Town Heroin Scene | 54 |
| 6. Where it Hurts: Place Effects on Pain, Illness, and Injury | 76 |
| 7. “Everyone’s a Cop”: Acquainted Marginality and Small-Town Policing | 95 |
| 8. Conclusion: A Place for Drugs | 110 |
| References | 128 |
| Methodological Appendix | 169 |

List of Figures

| | |
|---|----|
| Figure 1. Drug-related deaths in the United States, 1979–2021 | 3 |
| Figure 2. Past-year opioid use and opioid use disorder in the United States, 2019 | 4 |
| Figure 3. Estimated rates of past-year prescription opioid misuse and heroin use in California per 100,000 people age 12+ by substate region, 2016–2018 | 5 |
| Figure 4. Age-adjusted opioid-related mortality rates, by urbanization: California, 1999–2019 | 22 |
| Figure 5. Planned [A] and realized [B] versions of Drew and Beverly’s deal to exchange pills for heroin | 65 |

List of Tables

| | |
|--|-----|
| Table 1. Local officials and service providers by county and organization | 172 |
| Table 2. Characteristics of research participants who used drugs by county | 174 |

Acknowledgements

This dissertation would not have been possible without the trust and generosity of the people who spoke with me, let me into their homes, offered me food and a place to stay, and, as friends do, asked me for help when they needed it. They let me see and hear the things I share in the chapters that follow, and their actions, words, and memories helped inspire the arguments I make. In the Methodological Appendix I describe how several of them were instrumental to each stage of my fieldwork. I wish that I could thank them all by name, but several deserve special recognition, even if under pseudonyms. In Oak County, the people I call Drew, Beverly, and Victor treated me like family, while Jeremy Bingham and Brandon Lewis in the public health department welcomed me like an esteemed colleague. In Sage County, Mark opened his door to me without asking anything in return, and Ray and Alex looked out for me in a place that was not always friendly. The man I call Jake Derrick in Summit County is responsible for many of my fondest and most meaningful experiences during my fieldwork. A harm reduction activist in Pine County, another nonurban county I visited but do not directly discuss in this dissertation, schooled me on backcountry life and kept me alert to the machinations of local politics. I have tried to live up to the confidence that they and others put in me.

I came to UC Berkeley to work with Loïc Wacquant and have never regretted my decision. Loïc introduced me to many of the ideas that scaffold my thinking and to the methods on which I rely. He gave me my first invitation to ethnographic fieldwork and his example lent me license to expand my own ambitions. Jenna Johnson-Hanks taught two of my first-semester courses at UC Berkeley and has been a role model of intellectual openness and acuity since. Her dual expertise in demography and ethnography has been doubly beneficial for my thinking on how local events contribute to societal trends. Chris Muller has been an unfailingly thoughtful and supportive mentor. His precise and judicious comments have strengthened my thinking immensely. Seth Holmes pushed me to enrich my ethnographic voice, make clear the stakes of my research, and think harder about the implications of my findings for fixing inequalities in health and wellbeing.

I am indebted to numerous other scholars for their contributions to my thinking and scholarship. At the University of Chicago, Bernard Harcourt supervised my unique major in Tutorial Studies and advised my undergraduate thesis. Kristen Schilt introduced me to sociology and encouraged me to go to graduate school. At UC Berkeley, Margaret Weir took me on when I arrived and helped advise my Master's thesis on the history of harm reduction in California. John Lie encouraged my wide-ranging interests in social theory. A seminar on ethnography with Martín Sánchez-Jankowski provided a refreshingly pluralist introduction to the method. Franklin Zimring's invigorating course on Criminal Law the Regulation of Vice inspired my first peer-reviewed publication. Mara Loveman skillfully supervised my qualifying exam in Political Sociology. Samuel Lucas included me in a methodology workshop that consistently challenged me for the better. Dave Harding gave generous feedback on my arguments regarding neighborhood effects. I learned a great deal as a Graduate Student Instructor with Heather Haveman and Dylan Riley. Claire Snell-Rood generously invited me to assist with her research on opioid use disorder treatment in nonurban California. Outside of UC Berkeley, I am exceptionally lucky to have met and worked with inspiring researchers who share my commitment to harm reduction, including Ingrid Binswanger, Ricky Bluthenthal, Sarah Brothers, Megan Comfort, Alex Kral, Barrot Lambdin, Andrea López, Jennifer Lorvick, and Lynn

Wenger. I am also very grateful to Stefan Timmermans for encouraging me to pursue this project beyond my dissertation.

I thank the following institutions for their generous financial support for my work during graduate school: the University of California, Berkeley (UCB) Graduate Division; National Science Foundation; Horowitz Foundation for Social Policy; UCB Center for the Study of Law and Society (especially KT Albiston for leading the Berkeley Empirical Legal Studies [BELS] Fellowship); UCB Sociology Department; and the Center for Engaged Scholarship (in particular Fred Block and Mridula Udayagiri for their kindness and patience). I was humbled to receive the 2020 and 2021 Bruce D. Johnson Student Paper Awards from the Drugs and Society Section of the American Sociological Association (ASA) and Honorable Mention for the 2021 Bruce D. Johnson Award from the Drinking and Drugs Section of the Society for the Study of Social Problems (SSSP) for earlier versions of some of my dissertation findings.

I am grateful to those that provided feedback on drafts of these chapters. I presented early versions of my findings from Sage Flats at the 2018 and 2020 ASA Annual Meetings and the 2018 National Harm Reduction Conference. I also planned to present them at the 2020 SSSP Annual Meeting that was cancelled due to the COVID-19 pandemic. I shared early versions of material from Chapters 5 and 6 at the 2019 Chicago Ethnography Incubator (where I received sharp and insightful comments from Claudio Benzecry, Sarah Brayne, Kimberly Kay Hoang, Armando Lara-Millan, Rhacel Parreñas, and Robert Vargas and the other Fellows), as well as at the 2019 and 2021 ASA Annual Meetings. I also benefited from comments on this material and discussion with the other 2019–2020 BELS Fellows (Ilya Akdemir, Matthew Cannon, Michel Estefan, Isabel García Valdivia, Ivy Hammond, Kira Jeter, Brian Klein, Benjamin Krause, Eunice Lee, Pauline White Meeusen, and Max Zahnd). I thank the other 2021–2022 Fellows at the Center for Engaged Scholarship (Sabrina Dycus, Justine Modica, Teona Williams, Teona Wilson, Liang Wu, and Jennifer Zelnick) and invited discussants Javier Auyero, Jessica Katzenstein, and Kathryne M. Young for their rich feedback on a combined version of Chapters 4 and 5. Sections of Chapter 3 originally appeared in “Steps Toward a Theory of Place Effects on Drug Use: Risk, Marginality, and Opportunity in Small and Remote California Towns,” *International Journal of Drug Policy* 85: 102269, as part of a special issue on “Rural Risk Environments” edited by Umedjon Ibragimov, April M. Young, and Hannah L. F. Cooper, and are reproduced here in accordance with Elsevier copyright and permissions policies.

My fellow students at UC Berkeley were also important to my development as a scholar and colleague. For valuable conversations over the years I want to thank Ghaleb Attrache, Alex Barnard, Lindsay Berkowitz, Boróka Bó, Jenae Carpenter, Dani Carrillo, Paul Chung, Isaac Dalke, Martin Eiermann, Aya Fabros, Jason Ferguson, Tom Gilbert, Tara Gonslaves, Chris Herring, Katherine Hood, Andrew Jaeger, Joe LaBriola, Steven Lauterwasser, Tyler Leeds, Seth Leibson, Zachary Levenson, Matty Lichtenstein, Allison Logan, Sigrid Luhr, Liz McKenna, Santiago Molina, Robert Pickett, Mark Quinn, Ogi Radic, Nick Ramsey, Alex Roehrkasse, Michaeljit Sandhu, Caleb Scoville, Josh Seim, Jonathan Smucker, Ingvill Stuvøy, Phung Su, Jay Varellas, Ana Villarreal, William Welsh, and Allen Micheal Wright. In my final year at Cal, I was lucky to be asked by Chris Muller to work with members of the Underground Scholars Research Cohort (Elizabeth Brown, James Carlin, Martin Lara, Eli Martinez, and Erin McCall). I am especially grateful to count Véronique Irwin and Fatinha Santos as friends.

I would not have come to Cal and undertaken this research were it not for my time in the harm reduction movement. Volunteering with Chicago Recovery Alliance (CRA) during college showed me something bigger to which I could give myself and set me on a path of intellectual

development that now includes this dissertation. The time I spent on CRA outreach vans proved as important as my time in university classrooms. Joining NEED when I moved to Berkeley was the best decision I could have made. Doing harm reduction kept me grounded during grad school and kept me accountable to my community. As I explain in the Methodological Appendix, it also proved crucial to this research. The opportunity to support NEED as President of the Board of Directors has been an unparalleled honor.

My final and ultimate thanks go to my birth family and my partner, without whom I would not be the person I am today.

Chapter 1. Introduction: “How Could Anybody Be an Addict in this Environment?”

January 2017 (first day of fieldwork)

I traveled this morning to the village of Heavenly to meet a man named Jake Derrick. Heavenly was founded during the California Gold Rush by miners who bivouacked on flat land at a river fork. Today it anchors one side of remote and rugged Summit County. On the two-hour drive from the town of Acorn where I was overnighing, I crossed a mountain pass covered in seven-foot snowdrifts and watched a road crew scrape feebly at a mudslide that blanketed half the road. The houses of Heavenly’s several hundred residents cluster around the riverbanks at the base of pine-covered hills, like pebbles at the bottom of a pan.

Jake was the only substance use counselor serving the area. Once a week he trekked from his home in the town of Toro on the other side of the county over the pass to the office where we met. A barrel-chested man with wavy silver hair, Jake had called the area home for nearly three decades. Raised in southern California, he enlisted in the Army soon after high school and spent two years on a base in Germany in the 1970s. “The army was really my first exposure to drugs other than pot,” he recalled. “There was a lot of heroin, and the different kinds of hash they had. I met a lot of heroin addicts in the Army that came from Vietnam.”

After returning to California, Jake took to riding motorcycles and joined a large outlaw biker club. He found his way to the mountains after trouble with drugs and the law. “A lot of people—addicts—will do that, they’ll relocate, call it a geographical change to start over, and it worked for a little while... until somebody said, here, try this.” Jake worked for a few years at a manufacturing plant, then almost two decades at a sawmill, where methamphetamine was “really big... it was a lot of fun, until it wasn’t anymore.” During a night of despair, he put a gun in his mouth, pulled the trigger—but the weapon wouldn’t fire. The next day, “I just went in and threw my drugs on the boss’s table,” spent three months in residential treatment, “and life’s been getting better ever since.”

Like many, Jake eventually made a career of his recovery. “I’ve always done it, you know, taking people to meetings, sponsoring people and all that,” he shrugged. “Then when they closed the mill”—a local consequence of the forest industry’s decades-long retreat from the region—“I didn’t know what to do, so I went to school to get my alcohol and drug license.” He worked for the local district attorney as a peer counselor, joined the county drug court team, and six years ago was hired by Summit County Health and Human Services.

Jake had half a dozen formal clients in Heavenly, all of whom had used heroin—a drug that until recent years was almost unknown in the area. He knew another ten or twenty people in town who had struggled with drugs whom he would often “bump into” on his lunch break. They included most of a past graduating class from little Heavenly High School, who took up opioids after being injured together in a car crash. Jake’s family was visible and well-known in the community: his wife fed Toro’s children in the school cafeteria and his son was a probation officer and Rotary leader. And he and his government colleagues counted clients and suspects as neighbors, which entailed some mutual accommodation—for instance from the district attorney for his neighbor’s “fifteen-foot marijuana plants hanging over his fence.”

After about an hour of conversation, Jake suggested we stretch our legs. We strolled through downtown Heavenly—a short corridor of historic stores—and crossed a steel bridge over the river. Jake pointed out mining claims on the slope above us as he led me to the town’s

medical clinic, announced by wooden signs hand-lettered in yellow. Staffed by a solemn nurse practitioner named Judith, the clinic's cramped quarters and pine paneling lent it the feel of a coffin. "This is such a beautiful place," Judith lamented, gesturing to the river coursing past her office window. "it's almost magical... then we have all these addictions." In his office, Jake had mentioned three recent deaths involving opioids.

Around one o'clock, Jake and I traipsed back across the bridge, ice and salt crunching on the pavement. The swollen river crashed beneath us, its roar reverberating between the hills. Thick grey clouds scattered the midday sun, and the snowy forest sparkled like a field of stars. The cold air caught in my throat, and we were silent for a few moments. At the other end of the bridge, Jake spoke up, echoing Judith's unease. "You know," he wondered, "a lot of times I think, gosh, man, how could anybody just be an addict in this environment?" He searched for more words. "I don't know why I used meth; I don't know why I did what I did. I think it was just fun, you know? But I know I sure appreciate living here a lot more now."

A short time later I bid Jake goodbye for the day and retraced my path back over the pass. On his advice I took a long detour through the other end of Summit County, stopping at the probation office in Toro to meet his son and then circumnavigating a broad valley to return to Acorn. By then it was late afternoon. I was alone on the wind-swept road, passing wordlessly through rangy, rawboned outposts named for men long dead. Ahead of me the pale sun hung just above the horizon. In its fading light, the snow turned a moribund shade of blue.

In 2017, I went looking for drugs in the mountains of California. I was on the local tracks of a nationwide crisis: unprecedented numbers of drug-related deaths, over 107,000 in 2021 alone and more than one million in the 21st century.¹ Most of these deaths involved opioids, a class of chemicals that includes medicines like morphine, methadone, and fentanyl, as well as illicit drugs like opium, heroin, and fentanyl (produced clandestinely). Opioids relieve pain, give comfort, and deliver euphoria. They also create physical dependence and withdrawal symptoms, euphemistically described as "flu-like" but often more debilitating. And taken in doses beyond the user's tolerance or in combination with other drugs, they can lead to fatal respiratory

¹ Hedegaard et al. 2021; Ahmad et al. 2021; Kornfield 2022. I have chosen the term "overdose crisis" over alternatives such as "opiate epidemic" or "opioid crisis." Referring solely to a rise in "opiate" or "opioid" deaths is inaccurate, because most fatal "overdoses" involve multiple substances. Even "overdose" is technically a misnomer: relatively few drug-related deaths result from a reckless person consuming a substance beyond their tolerance and rapidly perishing. The typical victim of heroin overdose, for instance, is older and experienced in its use, has consumed other drugs, and succumbs over a period of hours (Darke 2014). Fentanyl-related overdose is more rapid, but polydrug use remains the norm (Hill et al. 2020). With these caveats, I use "drug-related" and "overdose" as adjectives for fatalities involving opioids and other substances. I also use "overdose" as a verb or noun to describe loss of consciousness from opioid-related respiratory depression, which may or may not be fatal. I call the rise in drug-related deaths a "crisis" rather than an "epidemic" because it does not only concern people with the "disease" of substance use disorder, and because the problem is not merely one of health. However, crises are implicitly temporary phenomena, and with overdose deaths still on the rise and attention waning in the face of competing issues, at some point describing the death toll as a "crisis" may abet its elimination from public concern (Carr 2019).

depression. Despite nationwide preventive efforts, the grim tally continued climbing nearly every year, sextupling from 8,050 opioid-related deaths in 1999 to 49,860 in 2019 (Hedegaard et al. 2020b). Isolation, stress, and disruptions in drug markets and services during the COVID-19 pandemic added fuel to the conflagration—over ninety thousand people died of all drug-related causes in 2020² and over a hundred thousand in 2021 (Ahmad et al. 2021) (Figure 1).

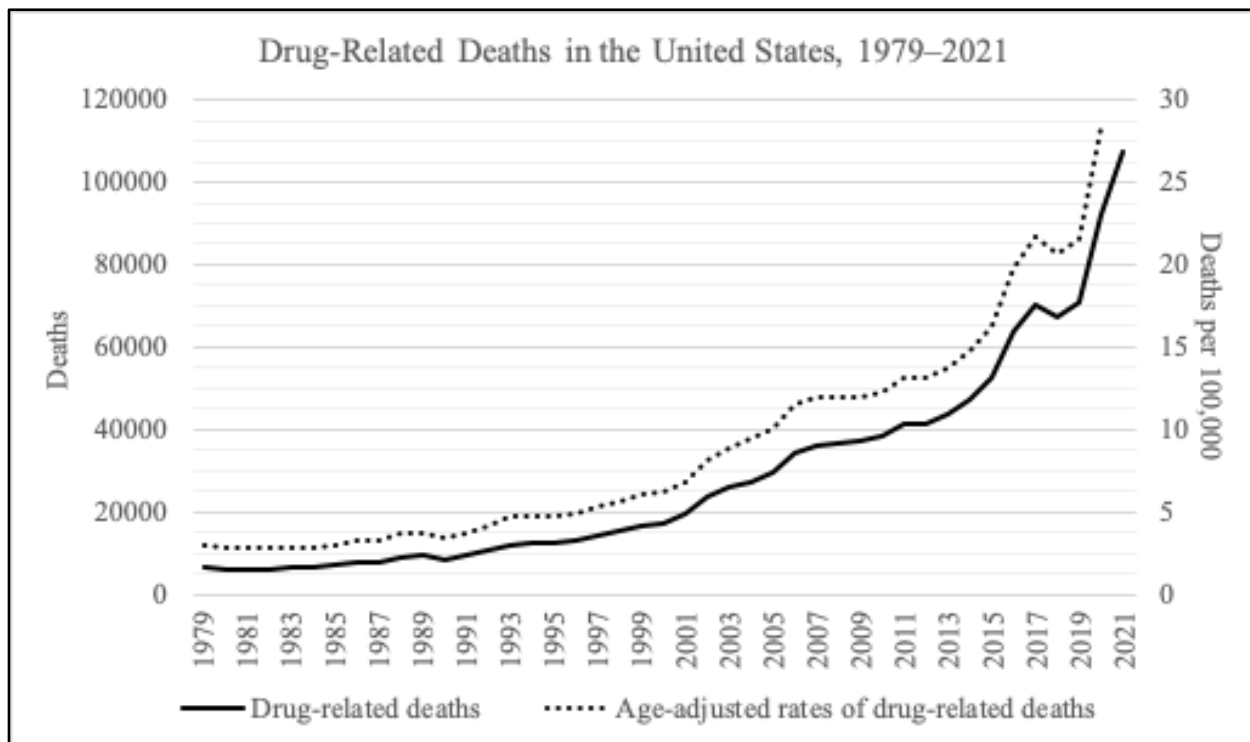


Figure 1. Drug-related deaths in the United States, 1979–2021. Drug-related deaths and rates for 1979 to 1998 are identified using the *International Classification of Diseases, 9th Revision* codes E850–E858, E950.0–E950.5, E962.0, E980.0, and E980.1–E980.5 with data from National Center for Health Statistics, National Vital Statistics System, Mortality: Compressed Mortality File 1979-1998 on CDC WONDER Online Database (<http://wonder.cdc.gov/cmfi-icd9>). Data for 1999–2020 are from Hedegaard et al. 2021, Data table for Figure 1, available at (<https://www.cdc.gov/nchs/products/databriefs/db428.htm>); drug-related deaths are identified using the *International Classification of Diseases, 10th Revision* underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Drug-related deaths for 2021 are from Ahmad et al. 2021; age-adjusted death rate for 2021 was not available at time of publication.

The lives lost are the most devastating indicator of a much larger population affected by the crisis. An estimated one in four people who inject drugs in the United States have endured a nonfatal overdose in the previous year, nearly half have overdosed at some point in their lives, and most have witnessed someone else overdose.³ In 2019, 9.7 million people age 12 and older

² 68,630 of these deaths involved opioids (Hedegaard et al. 2021).

³ Colledge et al. 2019. These deaths have touched a broad swath of the country: according to opinion polls by Kaiser Family Foundation (2016; 2017), over forty percent of Americans say

reported misusing prescription opioids in the past year, 745,000 reported using heroin, and approximately 1.6 million people had a past-year opioid use disorder (Substance Abuse and Mental Health Services Administration [SAMHSA] 2020c). Ten to twelve percent of these people resided in California (SAMHSA 2020b: Table 19) (Figure 2). Some far northern and eastern counties—California’s least urbanized regions—have reported the Golden State’s highest rates of opioid prescribing, opioid use, and opioid-related overdose (Overdose Prevention Initiative 2021; SAMHSA 2020a) (Figure 3). These areas also lag coastal metropolises in delivering treatment and other services (Anthony 2016; Showalter 2020).

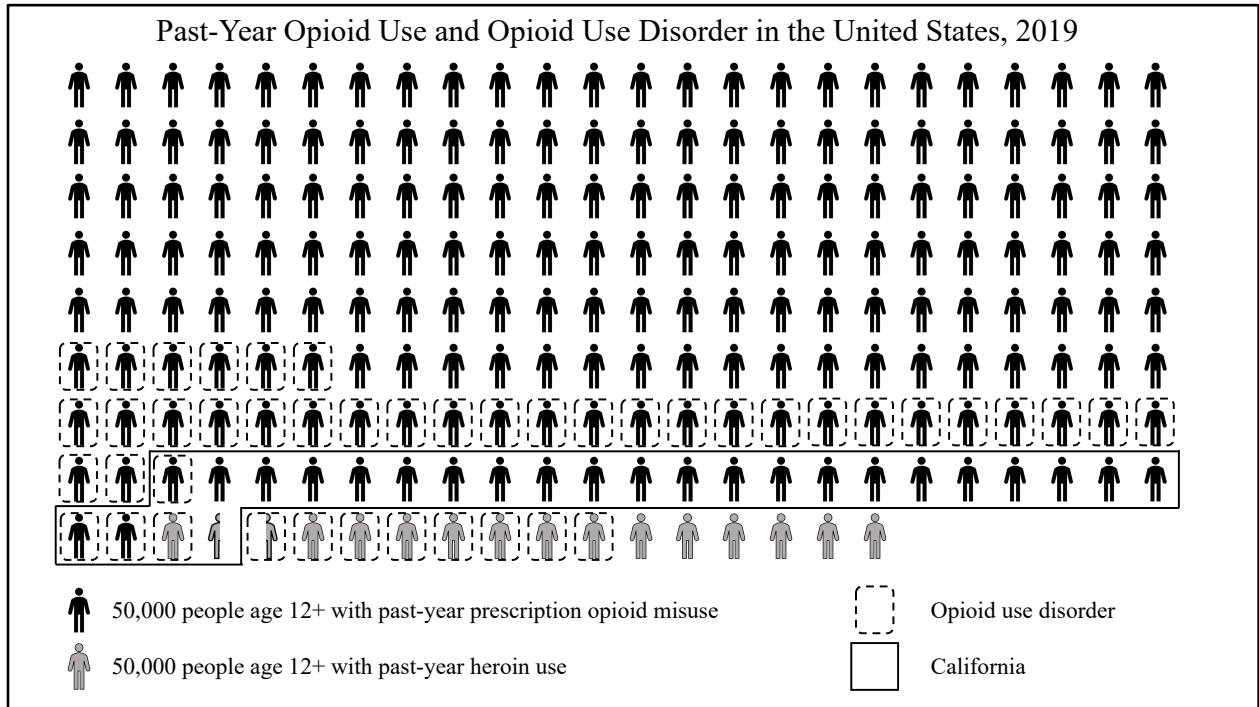
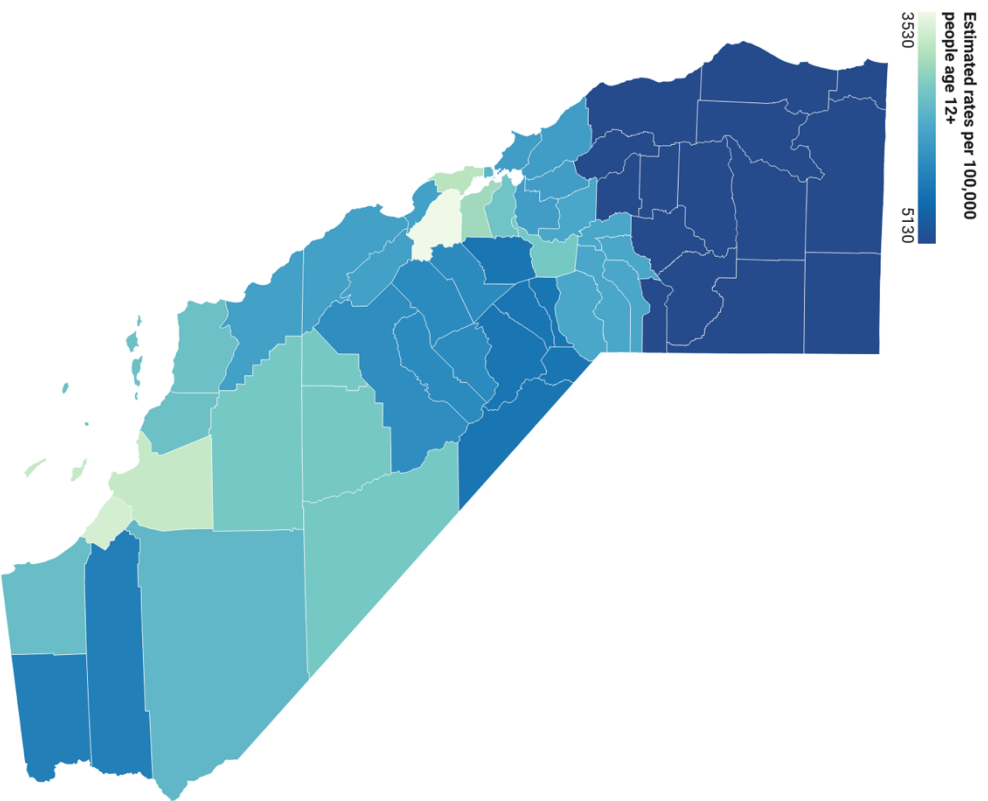


Figure 2. Past-year opioid use and opioid use disorder in the United States, 2019. Data for United States from SAMHSA 2020c. Data for California from SAMHSA 2020b: Table 19. 2019 is the most recent year for which all data is available.

they know someone who has been addicted to prescription opioids, and one in five say they know someone who has died of a prescription opioid overdose.

Past-Year Prescription Opioid Misuse in California, 2016–2018



Past-Year Heroin Use in California, 2016–2018

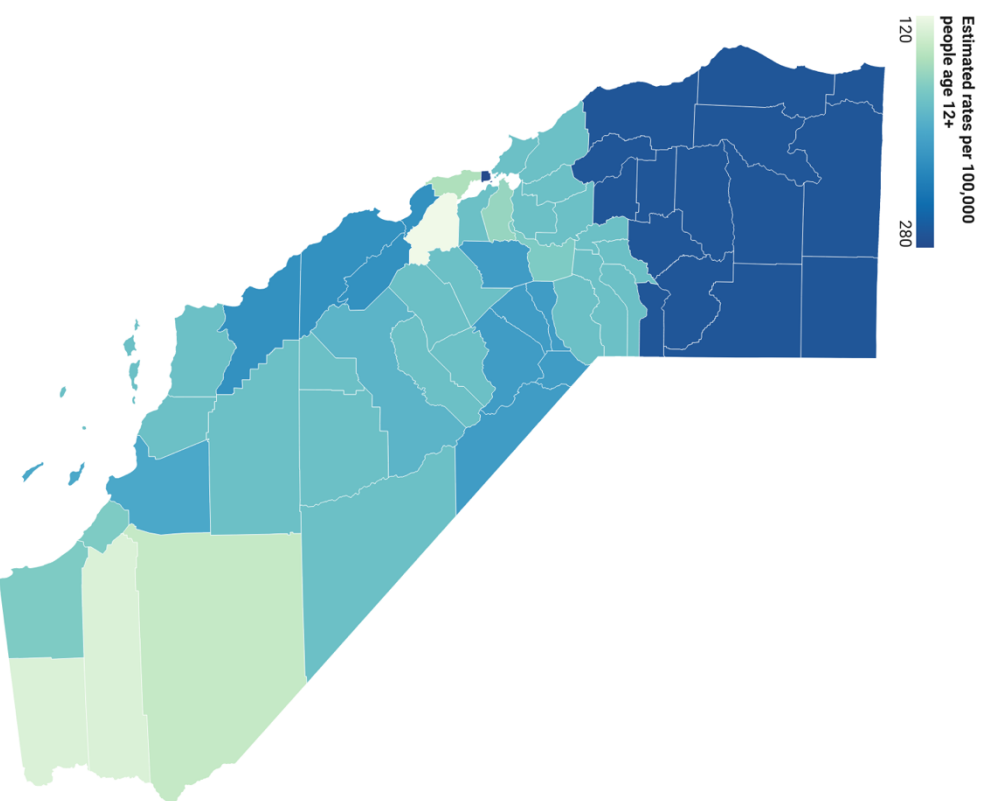


Figure 3. Estimated rates of past-year prescription opioid misuse and heroin use in California per 100,000 people age 12+ by substate region, 2016–2018 (SAMHSA 2020a: Tables 9 and 12). Created with Datawrapper (<https://app.datawrapper.de/>).

For a harm reduction sociology

Though I was a newcomer to places like Heavenly and Acorn, I was not a novice. I took with me nearly a decade of experience working shoulder-to-shoulder with people who use drugs. In 2009, after my first year of college at the University of Chicago, I began volunteering with the Chicago Recovery Alliance, one of the largest harm reduction organizations in the United States. “Harm reduction” is a grassroots movement led by people who use drugs that recognizes substance use as a permanent feature of human societies, rejects abstinence as a universal goal, and instead addresses the negative consequences of criminalized drug use. Harm reductionists distribute drug use equipment like syringes and pipes, train people to use the opioid overdose reversal medication naloxone, and operate legally sanctioned sites where people can use drugs more safely.⁴ Delivering free, lifesaving services on the street was an exhilarating contrast to the University’s cloistered classrooms and affluent milieu. And I was inspired by the perseverance of harm reduction organizations in a country so invested in punitive drug prohibition. So a year after graduating, I enrolled in the Sociology program at the University of California, Berkeley intent on unraveling the story of their success.

Upon arriving on the West Coast in 2013, I joined NEED, the local harm reduction organization.⁵ I devoured books and articles on drugs, law, crime, and punishment, and wrote a master’s thesis on the history of harm reduction in California (Showalter 2020). Digging through organizational archives and interviewing early activists, I pieced together how bands of people who use drugs, researchers, health care providers, and anarchists came together in the late 1980s to distribute syringes in defiance of the law on the streets of San Francisco, Oakland, Los Angeles, and other cities. But I was struck that over two decades later, harm reduction services were still clustered along the metropolitan coast and largely absent from the state’s great inland ranges, valleys, and deserts. My surprise turned to concern when I realized that some of these nonmetropolitan regions were suffering the state’s highest overdose rates. I initially set my sights on the backcountry because I wanted to understand drug use in places that lacked the infrastructure for safer drug use found in urban areas.

The people I met there were not so dissimilar from those I knew from my years practicing harm reduction in Chicago and Berkeley. Some were raised in or had lived in large cities. They used similar equipment and slang as urban dwellers. They too struggled with poverty, criminalization, and unstable family relations and social ties. By and large, they saw both good and bad in their substance use. They wanted to keep themselves and the people they loved safe and often took steps to do so, though their need or desire to use drugs sometimes led them into danger. But their social and physical milieu was a world away from the dense, concrete expanse that backdrops most writing on drugs and addiction. They resided in small towns that were separated by lengthy drives along isolated roads. Local services including harm reduction and treatment programs were scarce or nonexistent. And they were surrounded by people who knew them personally, sometimes since childhood, including law enforcement officers and health care

⁴ I refer to “people who use drugs” rather than “drug users” to avoid essentializing behaviors as identities. Person-first language is less stigmatizing and is increasingly standard in research and clinical services (Botticelli and Koh 2016). I similarly refer to people with “substance use disorder” and “addiction” rather than “addicts” or “drug abusers.”

⁵ For more information, see (www.berkeleyneed.org). I served as the President of NEED’s Board of Directors until summer 2022.

providers. This dissertation is the result of my effort to understand their lives and the challenges they faced, based on what I saw and was told over more than two years in the California backcountry.

My work in harm reduction has led me through an epistemological break from mainstream, “common sense” understandings of drug use. Émile Durkheim (1982 [1895]) advises social scientists to intentionally dispense with the notions and categories furnished by everyday speech or by state agencies to gain a more objective perspective on social phenomena. In my case, participating in organizations, gatherings, and campaigns led by people who were actively using criminalized substances forced me to dispense with the state categories of licit and illicit drugs and reject how those categories influenced perceptions of what and whose drug use was acceptable, normal, and beneficial and whose was impermissible, deviant, and destructive. Pierre Bourdieu and colleagues (1991 [1968]) add that a complete sociological analysis must then reincorporate the subjective experience of social phenomena to explain the origins of folk understandings and grasp practical logics of people’s actions. Working for and alongside people who used drugs to deliver supplies that made drug use safer demonstrated that the commonsense belief that illicit drug use was inevitably harmful was false: instead, these harms appeared to be intrinsic to the use of some drugs because criminalization forced people to use them under riskier circumstances and reinforced perceptions that illicit drugs were more villainous than their legal counterparts.

Mainstream drug research operates from the presumption that using drugs always has negative effects on people’s health, safety, and wellbeing, and that criminalization is a response to those effects.⁶ It sets out to measure the negative consequences, particularly among marginalized and institutionalized populations such as people who use safety-net health services, are experiencing homelessness, or are involved with the criminal legal system. Corresponding to the presumption that using drugs causes harm is the presumption that the goal of policy interventions should be to prevent people from using drugs and get people already using to stop, usually through formal treatment. Research on the benefits of drug use is comparatively scarce, as is research on cessation of drug use without treatment. As a consequence of these experiences, I approach drug use not from this “correctional” approach to studying stigmatized and criminalized behavior, but from an “appreciative” perspective associated with midcentury sociologists of deviance (David Matza (2010 [1969]: Ch. 2).

Harm reduction services and research challenge each presumption of the correctional approach (Tammi and Hurme 2007). First, drugs are not presumed to only cause harm; they are found in every human society because they fulfill important physical, mental, emotional, and spiritual functions. They relieve pain, give energy, provide insight, and facilitate revelation. Second, many or most people who use drugs, even illicit and “addictive” drugs, do not develop addiction or other serious medical, social, or legal problems.⁷ Third, many, perhaps most, people who do experience addiction recover without receiving formal treatment. Based on these empirical facts, harm reductionists and heterodox drug researchers emphasize the significance of the “risk environment,” (as distinguished from individual “risk factors”) for exposing people to drug-related harm, preventing them from using drugs more safely, and discouraging them from

⁶ Stephen Mugford and Pat O’Malley (1991) dub this the “pathology paradigm” of illicit drug use.

⁷ Compare the numbers of people who use various drugs with the corresponding numbers of people with substance use disorders in SAMHSA 2020c.

seeking help (Rhodes 2002; Rhodes 2009). They note the widely reported benefits of managed and moderate drug use, even of drugs like methamphetamine and heroin (Hart 2021). They point out that people tend to avoid addiction and recover more easily when they have more stable, secure, active, and meaningful lives outside of their drug use, and that these outcomes may be more common than successful recovery through formal treatment (Granfield and Cloud 1999). They highlight the arbitrary distinctions made between legal and criminalized substances and cite extensive research showing that policing and punishment are expensive and ineffective responses to drug use compared to low-cost, evidence-based harm reduction services (Wilson et al. 2015). And they offer policy counterfactuals based on analogies with other human activities to illustrate that the goal of drug prohibition is illogical and unrealistic.

On this view, intoxication is one of a family of sources of pleasure that significant numbers of people seek despite their risks. Others include extreme sports and motorsports, gambling, and sex. What unites these *risky pleasures* conceptually and as policy concerns is their combination of intense bodily sensations achieved through acquired techniques, often using specialized tools or equipment, as well as their potential for unintended consequences for the immediate participants, and in some cases for close associates and onlookers as well.⁸ They are also (aside from sex for procreation) typically consumption-oriented activities—if they contribute to a public good or higher end it is the multiplication of happiness and collective effervescence rather than the production of instrumentally useful goods, services, or relations. But instead of blanket bans on other risky pleasures as many countries have attempted with the use of some drugs, we more often design policies around the goals of reducing risk and increasing safety for those who choose to pursue them. Common interventions include trainings

⁸ Other analytic categories overlap with the notion of risky pleasures. In a long essay on casino gambling, Erving Goffman (1967: 185) defines *action* as “activities that are consequential, problematic, and undertaken for what is felt to be their own sake.” He includes along with gambling a variety of collective leisure pursuits, including commercialized competitive sports and games and “fancy milling” at recreational establishments that mixes serendipitous sociability with conspicuous consumption (197). Goffman focuses on the chanciness or fatefulness of these activities, which he acknowledges “does not seem to be the main purpose” of drug use (ibid: 201). Intoxication is often a factor in but not a focus of action.

With respect to extreme sports and other cases of “voluntary risk-taking,” Lyng (1990: 855; 2004) conceptualizes “edgework” as activities that combine threats to physical and mental well-being with a subjective sense of mastery or control over the circumstances or outcome, or at a higher level of abstraction, “the problem of negotiating the boundary between chaos and order.” Lyng’s category is both broader and narrower than Goffman’s. He excludes gambling because its participants are seeking chance rather than control, but includes hazardous occupations like firefighting and soldiering which, while voluntary, are typically undertaken instrumentally and not for “their own sake” like Goffman’s primary examples of action.

Importantly, neither of these categories directly applies to most drug-taking. Goffman admits straightforwardly that drugs are not like games of chance. Lyng (ibid: 857) strains to include experimental drug use and binge-drinking in the edgework category as experiences that “negotiate the line between consciousness and unconsciousness,” citing Hunter S. Thompson as an authority, but as I show below, this is neither the goal nor the typical experience of most people who use drugs. What is important in the idea of risky pleasures is that the goal is to experience *pleasures* that nevertheless carry risks, not the experience of chance or risk itself.

on safety procedures, protective equipment like helmets, seatbelts, and condoms, and upgrading venues through sanitation, restricted entry, supervision, and rules designs that promote safer decisions. Each of these has counterparts in the realm of harm reduction for drug use, including training in safer injection and overdose prevention, distribution of new syringes and naloxone, and supervised drug consumption services. That these interventions are—compared to punitive alternatives—relatively rare, unpopular, and legally tenuous with respect to drug use but not other risky pleasures should be seen as an aberration in need of explanation rather than a commonsensical and unproblematic policy approach.

Important sociological features of drug use appear if you treat it like other risky pleasures. First, in contrast to depictions of addiction as a state of impulsivity and loss of self-control (Weinberg 2013), habitual drug use entails a significant amount of planning and budgeting, as one man who had used opioids for over a decade stressed to me in spring 2019.

We have to *think* about what we're doing. We have to prepare shit days in advance, otherwise you're gonna be fucking sick. Like, junkies are not irresponsible people, actually. *This takes a lot of work and preparation and shit to keep this going!*

Addiction is experienced at times as a loss of control over one's impulses and actions, especially when people articulate a desire to quit that they are unable to maintain in practice. But sustaining a pattern of frequent and intensive substance use also requires regular attention, concerted effort, and complex relational accounting to maintain a consistent supply.⁹ While gamblers and thrill seekers can often find legal outlets for their desires, criminalization eliminates those options, forcing people who use illicit drugs to use opaque, underground markets and to keep their use a secret. As the following chapters attest, these challenges are exacerbated in nonurban places by geographic distance from urban drug markets, social proximity to authorities, and lack of local organizations and resources. The larger investments of time and money required to obtain drugs in remote places reduces the margins for error, accident, inconvenience, or delay. And physical dependence on opioids prevented them from taking breaks from buying and using, like a full-time job with frequent, firm deadlines, poor working conditions, and no time off.¹⁰

This is the perspective through which I evaluated the data I collected during my fieldwork. What I observed and was told was not always pleasant, and some of what is reported in the following chapters may be difficult to read. For instance, I discuss drug use among parents and their children, fatal and near-fatal overdoses and accidents, and serious infections and injuries treated at home. I mention these details in the context of my own perspective on drug use for three reasons. First, to warn readers of what is to come. Second, to avoid censoring the painful details of poor and marginalized people's lives at the expense of understanding causes, consequences, and potential solutions for their distress. Third and most importantly, to provide an alternative way of thinking about these harms and how to prevent them that does not presume them be intrinsic or inevitable consequences of drug use, that does not presume abstinence from

⁹ Wherry (2016: 132) defines relational accounting as “the set of cultural and social processes used by individuals and households to organize, evaluate, justify and keep track of financial activities.” With respect to drug use, this means cultivating and keeping tabs on the social ties that make ongoing exchanges of money, drugs, syringes, and related resources possible.

¹⁰ I thank Chris Muller for suggesting this phrasing.

drugs to be the only healthy, normal, responsible, or worthy state, and that does not presume punishment or deprivation to be appropriate policy interventions.

Multiple sites and multiple sides

My goal at the outset of this project was to approach the overdose crisis from multiple locations across the region and from multiple vantage points, including those of people who use opioids as well as of those charged with responding to opioid use. One of my main sites was Acorn, in Oak County, where I rented a room from spring 2017 to spring 2019. I spent most of 2017 traversing the state to meet local officials and service providers. Though I quickly gained footing and access in Oak County, I needed to check whether and how it resembled its regional neighbors to know what to make of the data I collected there. So I asked everyone I interviewed who else I should speak with, searching particularly for horizontal referrals across county lines, for instance from one public health department, criminal court, or treatment facility to another. I hoped to develop additional field sites as comparisons and, since each little county offered a limited pool of potential research participants, to expand my interview and ethnographic samples. I focused on counties rather than towns first, because many if not most of the settlements in the regions I traveled were unincorporated and lacked municipal governments and second, because even incorporated areas, county rather than city governments were the primary managers of criminal legal systems and health and human services.

These travels eventually led me to a dozen different counties—mostly small and remote, with one large urban county as a shadow comparison—and resulted in interviews with 176 local officials and service providers spanning health care, substance use treatment, harm reduction, social services, law enforcement, criminal courts, and probation. I report in-depth on towns in two counties, Oak and Sage, with some supplemental evidence from elsewhere. I observed all I could about my interviewees' work: policy planning meetings, court sessions and meetings of court officers, substance use treatment groups, harm reduction trainings and services, and public gatherings such as town hall forums and meetings of government bodies. Much of that data is not analyzed in this dissertation and will appear in future publications. I also attended events and functions in Oak County and elsewhere such as farmers' markets, concerts, county fairs, car and mountain bike races, and seasonal festivals to get a feel for the pace and pleasures of backcountry life. I began interviewing people about their drug use in early 2018, once I had gained the lay of the land and obtained a Certificate of Confidentiality from the National Institute on Drug Abuse to protect my data from law enforcement investigations. I recruited people who used drugs through a combination of diligent networking and some socially structured serendipity in meeting the right people at the right times. Eventually I spoke with 69 people about their drug use, many of whom I spent time with as they bought, sold, and used drugs, ran errands, cared for loved ones, relaxed at home, and dealt with law enforcement and other services.¹¹

¹¹ See the tables in the Methodological Appendix for more details about my research participants.

By virtue of my membership in NEED, I was able to provide some harm reduction supplies to people I met who needed them, including injection equipment and naloxone.¹² The most compelling reason to do so was ethical rather than ethnographic. I watched people share and reuse syringes in dangerous ways and heard stories of people overdosing without naloxone. Once these risks are known, nothing is learned from withholding health and harm reduction services. Otherwise researchers risk complicity in calamities like preventable OD deaths and outbreaks of HIV and hepatitis.¹³ Failure to participate in public health efforts can also compromise scientific findings. At the outset of the HIV/AIDS crisis, many believed that syringe sharing was an ingrained cultural practice that would undermine harm reduction efforts. This scholarly myth was vanquished by people eagerly seeking new syringes when they were made available. Collaboration by researchers in early syringe services helped produce persuasive evidence that those programs prevented disease transmission (Showalter 2018).

Providing harm reduction supplies was not a formal element of my research protocol, but it paid ethnographic dividends by introducing me to people who use drugs, allaying their suspicions that I might be a snitch or a cop, and demonstrating my familiarity with drug use. While syringe services are legal in California where locally authorized, offering supplies carried some methodological risks. I informed local officials that I was spending time with people who used drugs, but some might have been irritated to discover the depth of my relationships. Though I was not the direct target of law enforcement during my research, I did encounter them in connection with my participants.

Backcountry trails

The rest of the dissertation includes seven chapters. In Chapter 2 I argue that the conventional narrative of the overdose crisis as a moralistic story of villainous drug companies and victimized patients is too limited and superficial for sociological understanding. I offer an alternative account that is grounded in recent research on the crisis and attentive to the crisis' differential effects across time and place. In the third chapter I review and contribute to existing social scientific theories of the relationships between place and inequality. Using analytic tools from Pierre Bourdieu and Erving Goffman, I construct several concepts to account for distinctive features of nonurban social structure, subjectivity, and government. In Chapter 4 I guide the reader through the history of drug use in backcountry California, from opium use in Gold Rush-era mining camps to the opioid boom of the 1990s and 2000s. I then trace recurring concerns over opioid use to persistent sources of pain and deficient health care services, showing how overburdened providers prescribed high doses of opioids that created widespread dependence. As overdose deaths increased and professional standards changed, physicians cut back their prescribing and some of those who relied on opioid pills sought an alternative in black tar heroin.

In Chapter 5 I investigate how people buy, sell, and use heroin in places like Acorn that are too small and too remote to sustain conventional drug markets. After explaining how heroin

¹² So-called “secondary” distribution of harm reduction supplies by those who obtain them directly from service providers is a common way to reach those who are unable to do so themselves (Murphy et al. 2004; Newland et al. 2016).

¹³ Failure by researchers to intervene on preventable risks also invites comparisons to past medical disasters like the Tuskegee Syphilis Study, distrust from which undermined HIV/AIDS prevention efforts among Black Americans for decades (Freimuth et al. 2001).

took over from pills, I take the reader inside the hidden world of a small-town heroin scene to reveal how the drug was obtained in cities, transported to Acorn, and surreptitiously resold to a tight knit yet fractious group of customers. In the sixth chapter, I chronicle how geography and social structure jointly affect the costs of heroin use to Acorn residents' health. I accompany my participants through the duress of opioid withdrawal, their agonizing decisions to reuse and share syringes and other equipment, and their messy means of making the most of their scant supplies of drugs. I also discuss their experiences seeking help and their reasons for avoiding supportive services and relying on one another for care, even in emergencies. In Chapter 7, I shift the story from Oak County to Sage County to trace how people who use drugs are tracked through gossip and in public space, and how relations with friends, family, and neighbors are appropriated by law enforcement. I follow a small crew who attempted to operate an informal harm reduction program in the town of Sage Flats. While their experience with drugs lent them motivation, knowledge, and skills to help their peers use more safely, it also indelibly branded them in town as criminals. Their spoiled reputations and public visibility ultimately stymied their efforts at mutual aid and landed some in jail.

In the concluding chapter, I reflect on the lessons of my research for the study of drug use, crime, health, and place, and suggest how the three core concepts I develop—acquainted marginality, small-town habitus, and weak and personalistic bureaucratic fields—can be used in future work. I also outline a sociological model of addiction as an effect of institutional and organizational relations that selectively expose people to hardship, sources of meaning and inclusion, and experiences with drugs. Two important implications of this model are that drug use is a universal and “normal” element of human life—drugs have a place in society—and that the consequences of drug use are shaped by collective sentiments and policy choices. Since drugs have never been eliminated and efforts to do so have created significant harm, I argue that our drug policy should instead have the goal of accommodating drug use as safely as possible. I offer practical recommendations for harm reduction, treatment, health care, legal, and social services to move closer to that goal. These services can and should be expanded to remote and low-resource areas like the backcountry without compromising their appeal or accessibility to poor and marginalized people. Marrying the goals of coverage and quality is key to preventing overdose deaths at the edges of the map.

December 2017

Hunched in his office chair in Heavenly, Jake's eyes were red with tears. A man's body had been discovered near the road between two tiny villages. Law enforcement believed he suffered an overdose while riding in a moving vehicle and was abandoned by his companions. Jake knew the man, as well as those he was with when he passed.

Since I met Jake in January, I had tracked his dogged efforts to saturate the area with kits containing naloxone. He gave them to his clients and to their friends and loved ones; to volunteer firefighters and probation officers; to Toro's longtime pharmacist; to owners of general stores in outlying villages; he even placed a kit at the town dump. Flyers for naloxone proclaiming that "You can save a life!" dotted bulletin boards around Summit County—I passed one as I entered the building. Today he told me about two overdose reversals by a local nurse, who rescued one man on a trail near Heavenly and another whose friend drove them,

unresponsive, to the nurse's home and "beat on the door" for help. The program was working—but it wasn't a panacea.

Jake knew for certain there was naloxone at the firehouses in those two villages near where the deceased was found. "And the people that were in the car with him"—he faltered for a moment in frustration—"they know they can get it; I've talked to them about it. They could have had their own." Perhaps past tussles with law enforcement dissuaded them from seeking help, Jake speculated, or maybe they just panicked. No matter the reason, it was a tragic and bitter irony, like a verdict from the implacable landscape. "So close, but so far away, you know?" I left town just as the cool afternoon light started to yellow and shadows began slanting across the hilltops. Marcescent oaks glowed orange amid the evergreens, their autumn colors briefly revived under the setting sun. The road angled sharply upward to round off a bend in the river, and in moments Heavenly sank silently beneath the treetops behind me and disappeared from sight.

Chapter 2. Remapping the Overdose Crisis

Catastrophes like the overdose crisis generate a multitude of narratives. Journalists, who prize urgency in their quests for large audiences, typically beat social scientists to the punch, who are slowed by their more methodical pace of production, distinctive professional concerns, and rarified readers. To reach the broadest public, journalists simplify dispersed and unruly events into efficient, relatable narratives. To grab attention, they present phenomena as new or unprecedented. To communicate complex issues succinctly they squeeze structural processes into the biographies of sympathetic individuals. And to galvanize readers' emotions, they clearly demarcate the "good" and "bad" sides of the story.¹⁴ This was the case with the overdose crisis, which has been primarily defined for the US public by moralistic tales purveyed by journalists. Researchers who come to the scene with the narrative table already set are at risk of adopting for scientific use terms and assumptions about their objects that were designed for different purposes.¹⁵ I begin, then, by recounting and revamping the mainstream story of the overdose crisis with one more suited for sociological analysis.

The mainstream story: A modern morality play

As I describe later in this chapter, the overdose crisis has undergone several major changes over its two-decade-plus history—the scale of the crisis, its geographic and demographic scope, and the substances involved have all shifted dramatically. In contrast, the dominant public narrative about the crisis has remained surprisingly static. Elements of this story have been in the public record for over twenty years, finally coalescing in the mid-2010s when the crisis was over a decade old.

Word of an emerging disaster first trickled in from the hinterlands of New England and Appalachia at the turn of the twenty-first century. "Dozens of rural areas in Eastern states" were facing "a growing wave of drug abuse involving a potent painkiller," the *New York Times* announced on February 9, 2001, in a front-page story that introduced its readers to a medication called OxyContin. The article explained that "Oxy," a timed-release formulation of oxycodone manufactured by Purdue Pharma, had become the drug *du jour* from Maine to Kentucky. The report encapsulated a frightful narrative that would come to dominate coverage of OxyContin and by extension the broader overdose crisis. First, opioids were *pharmacological invaders*, taking hold in "areas not previously considered drug problems." Second, opioids, especially OxyContin, were *juggernaut drugs*: removing OxyContin's controlled-release coating yielded a massive dose of oxycodone. As a result, potent pills were pushing out other drugs. Third, opioids

¹⁴ These tendencies are especially pronounced in the United States, where journalism has long been subject to strong market pressures (Benson 2013).

¹⁵ Pierre Bourdieu and colleagues (1991 [1968]: 13) warn that "epistemological vigilance is particularly necessary in the social sciences, where the separation between everyday opinion and scientific discourse is more blurred than elsewhere." Social scientists must first deliberately and methodically break with the superficial "prenotions" supplied by popular discourse in order to form their own terms and concepts based in an analytic framework rather than common sense, then constantly confront and test their theories with empirical evidence in a "methodic circle" (ibid: 65).

attacked indiscriminately and affected unexpected groups: young people, “some of the best students, some of the best athletes,” and, implicit in the article’s geographic touchpoints—white people. Finally, prescription opioids were a *wellspring of criminality* among unscrupulous physicians and “doctor shopping” patients (Clines and Meier 2001).

Over the next fourteen months one of the authors of that initial report, Barry Meier, wrote another dozen articles on OxyContin for the *Times* that introduced the key *dramatis personae* in coverage of the overdose crisis. This coverage took the rough form of a morality play, an allegorical genre in which personified virtues and vices fight for the soul of an “everyman” protagonist, in this case the unexpectedly white, middle-class, and youthful victims of misprescribed opioids.¹⁶ On one side were the valiant doctors, treatment centers, and law enforcement officials who were struggling to save those who had fallen prey and protect those at risk. On the other were the “pill mills” pushing out opioids at unprecedented rates (Meier 2002b; Meier 2002c). Standing at their shoulders were the indefatigable sales representatives of Purdue and other companies who foisted trips, drug samples, and other enticements on high-prescribing doctors (Meier 2001a). In the shadows were Purdue’s executives and owners, members of the Sackler family, who disregarded safety measures and downplayed OxyContin’s dangers in their efforts to increase profits (Meier 2001b; Meier and Petersen 2001). In one article, the allegory was etched into the claustrophobic geography of a small North Carolina town: “two doctors... separated by a few streets, a world of trouble and a tiny drugstore,” one flooding the town with OxyContin and the other raising the alarm (Meier 2002a).

Meier collected and expanded his reporting in a 2003 book on OxyContin and Purdue, *Pain Killer*. Appearing “at the dawn of the opioid epidemic,” when the issue was primarily a regional and specialist concern, “the sun quickly set” on the book and it went out of print in a year (Meier 2018b). But by the mid-2010s overdose deaths had doubled, Purdue executives had pled guilty for misbranding OxyContin, and the story of the drug had spread around the country, creating an audience eager to make sense of the emerging crisis. Publishers met this demand with a wave of almost a dozen new books by journalists, physicians, and recovery advocates between 2015 and 2021, including Sam Quinones’ (2015) award-winning *Dreamland*, Beth Macy’s (2016) bestselling *Dopesick*, and Patrick Radden Keefe’s (2021) acclaimed Sackler family exposé, *Empire of Pain*.¹⁷ Each used the case of OxyContin and Purdue to advance the story that Big Pharma’s greed had ignited an unprecedented health crisis that struck at the heart of mainstream America. The narrative is clear even from these books’ subtitles. Purdue Pharma was the *Drug Company that Addicted America* (Macy 2016)—or was at least part of an *American Cartel* (Higham and Horwitz 2022) of *Drug Companies that Delivered the Opioid Epidemic*

¹⁶ *Everyman* (1510) is perhaps the best-known English-language morality play. See *The Oxford Dictionary of Literary Terms, 4th Edition*, edited by Chris Baldick (Oxford: Oxford University Press, 2015), s.v. “morality play.”

¹⁷ In addition to Quinones 2015, Macy 2016, and Keefe 2021, see Daly 2014, Temple 2015, Lembke 2016, Hampton 2018, McGreal 2018, McMillian 2019, Wiland 2019b, Eyre 2020, Posner 2020, Hampton 2021, and Quinones 2021. Meier’s book was republished in 2018 to capitalize on the booming market (Meier 2018a). Elements of the conventional narrative are also present in other books that discuss the overdose crisis, including Westhoff 2019, Herzberg 2020, Bismuth 2021, Cooke 2021, Higham and Horwitz 2022, and Hughes 2022. White supremacists have taken advantage of this glut of books about hardworking white people victimized by corrupt corporations by publishing their own imitation (Garrison and McClure 2021).

(Eyre 2020).¹⁸ Purdue was aided by a *Ring of Doctors* that *Unleashed America's Deadliest Drug Epidemic* (Temple 2015) while other *Doctors Were Duped* and their *Patients Got Hooked* (Lembke 2016), contributing to Big Pharma's *Poisoning of America* (Posner 2020).

What is striking about these books is their repetitiveness. They explain how Arthur Sackler invented modern pharmaceutical advertising and popularized drugs like Valium, and how his brothers Raymond and Mortimer built Purdue on opioids, first a long-acting morphine formulation called MS Contin and then OxyContin. They introduce researchers and doctors like J. David Haddox, Kathleen Foley, and Russell Portenoy who used flimsy concepts like “pseudoaddiction” and weak research suggesting that opioids were safe to advocate for increased opioid prescribing.¹⁹ They cite internal Purdue messages and initiatives—often the exact same emails and sales materials—illustrating the craven sales tactics and ballooning revenues demanded by executives.²⁰ Moving from boardroom to Main Street, they tell heart-rending stories of innocent, hardworking Americans—almost all of them from deindustrialized and economically “left behind” Appalachian or Midwestern towns—who suffered mightily from addiction to prescribed opioids and then, sometimes, to heroin. They end with green shoots of hope, typically people in recovery, treatment providers, or families sharing their stories and fighting earnestly for change.²¹ And they adduce their reporting to diagnose the state of American society—typically that it is imperiled by corruption, selfishness, and despair but can be saved through the rediscovery of honesty, altruism, and hope.²²

The stereotyped story reinforced by these books is reflected in the larger corpus of news coverage of the overdose crisis. Illegal and unethical behavior by pharmaceutical companies is

¹⁸ Purdue was one of several pharmaceutical companies embroiled in legal actions related to opioid marketing and sales, including Johnson & Johnson, Mallinckrodt Pharmaceuticals, Teva Pharmaceutical Industries, Insys Therapeutics, and Endo International (Higham and Horwitz 2022; Hughes 2022).

¹⁹ Haddox, who worked for Purdue and coined the term “pseudoaddiction” to describe the so-called drug-seeking behavior of people who are undertreated for pain, appears in Meier 2003, Quinones 2015, Temple 2015, Macy 2016, McGreal 2018, Posner 2020, and Keefe 2021. Foley and Portenoy, whose small, coauthored study of chronic opioid use (1986) was used to deflate fears of addiction to prescribed opioids, appear in Meier 2003, Quinones 2015, Lembke 2016, Macy 2016, McGreal 2018, Posner 2020, and Keefe 2021.

²⁰ One email about Purdue's sales successes with the subject line “\$\$\$\$\$\$\$\$\$\$\$\$ It's Bonus Time in the Neighborhood!” appears in Posner 2020: 416, Hampton 2021: 71, and Keefe 2021: 118. Another email in which Richard Sackler urged Purdue to “hammer on the abusers in every possible way” to deflect blame from the company is quoted in McMillian 2019: 5, Hampton 2018: xix, Herzberg 2020: 278, Posner 2020: 441, Keefe 2021: 230, Hampton 2021: 76, and Quinones 2021: 176. A promotional CD of swing music distributed by Purdue is referenced in Meier 2003: 33, Quinones 2015: 134, Macy 2016: 33, McGreal 2018: 47, Westhoff 2019: 27, and Posner 2020: 413.

²¹ Again these characters recur. Art Van Zee, a physician from a small Virginia town who was among the early critics of OxyContin, is featured in Meier 2003, Macy 2016, McGreal 2018, and Keefe 2021.

²² Both Quinones (2021) and Macy (2022) followed their first blockbuster opioid books with sequels that mention “hope” in the subtitle and self-consciously contrast with their predecessors by highlighting local, grassroots, and incremental efforts to effect positive change.

“the most ubiquitous narrative surrounding the cause of the opioid crisis” (Eichenlaub and Nasher 2021). While illicit drug use is commonly associated with people of color and poor people, people who use and overdose on prescription opioids are more often portrayed as white and middle- or upper-class (Netherland and Hansen 2016; Dollar 2019; Frederick and Mooney 2021). Following the morality-play script, news articles emphasize that these “normal” people have become “unexpected” victims of unethical doctors and opioid sellers, and obituaries of people who died of opioid overdose reinforce that prescription opioids are a pervasive threat that crosses ethnoracial and class boundaries (McLean 2017; Mendoza et al. 2019; Revier 2020). Beyond the news, Purdue Pharma and the Sacklers have been the subjects of several films and miniseries, including Alex Gibney’s 2021 documentary film *The Crime of the Century*, Danny Strong’s 2021 Hulu miniseries *Dopesick*, based on Macy’s (2016) book, and the upcoming Netflix limited series *Painkiller*, based on Keefe’s (2021) history of the Sacklers and the republished version of Meier’s (2018) book on OxyContin (Fitzerman-Blue and Harpster 2022).²³ These productions also tend to equate the actions of the Sacklers with the entirety of the crisis, for instance in the Purdue-centric 2018 PBS miniseries simply titled *Do No Harm: The Opioid Epidemic* (Wiland and Bell 2018).²⁴

Promulgating such a simplistic, morally polarized account of the overdose crisis has had several negative consequences. Framing the crisis as a corporate conspiracy that victimized innocent white, middle-class Americans also masks the complex consequences of policy interventions. While previous drug panics surrounding crack cocaine in 1980s and methamphetamine in the 1990s were primarily framed as criminal threats to be combated through policing and punishment, the opioid overdose crisis has more often been discussed as a public health issue warranting medical treatment and harm reduction (McGinty et al. 2019; Shachar et al. 2020).²⁵ Media coverage notwithstanding, there is little evidence that white people who use drugs or those that live in nonurban places have been treated less punitively during the overdose crisis than in the past. Between 2007 and 2018, drug arrest rates declined by a quarter in cities overall and by more than half in large cities but increased by almost twenty percent in small cities and nonmetropolitan areas (Beckett and Brydolf-Horwitz 2020: 523).²⁶ Racial disparities in imprisonment generally and for drug offenses specifically have also decreased in recent years as drug incarceration rates have fallen for Black people while remaining stable or increasing among white people (Subramanian et al. 2018; Gottschalk 2020; Muller and Roehrkasse 2021).

Policymakers and journalists have overcompensated for the sanguine view of opioids in the 1990s by warning that even short-term, low-dose opioid use risks lifelong addiction. In fact, opioids are generally safe when taken as directed and not combined with other substances that

²³ Ryan Hampton’s (2021) book about Purdue Pharma’s bankruptcy proceedings is also being adapted as a limited television series (Enos 2021).

²⁴ This series was later adapted into a documentary (Wiland 2019a) and published as a book (Wiland 2019b).

²⁵ Similar trends have been identified in media coverage of Canada’s overdose crisis (Johnston 2020; Webster et al. 2020).

²⁶ Despite their lower crime rates, nonurban counties tend to be more punitive than urban counties overall, sending their residents (Beckett and Beach 2021). In states across the country incarceration rates are plateauing or declining in large cities but rising in nonmetropolitan counties (Kang-Brown et al. 2018).

cause respiratory depression. Very few people who receive an initial opioid prescription go on to develop opioid use disorder, transition to illicit opioids, or overdose (Rose 2018; Oliver and Carlson 2020). Misconceptions like these hurt pain patients and others who need opioids. The number of states with laws restricting who can be prescribed opioids or the duration, formulation, or maximum dosage of opioid prescriptions nearly quadrupled between 2016 and 2019, from 10 to 39 (Davis and Lieberman 2021). Health care providers have warned that these broad restrictions may not significantly affect dangerous prescribing and could harm patients who are stable on opioid therapy and others who need opioids (Darnall et al. 2019; Kroenke et al. 2019; Rubin 2019a; Chua et al. 2020). As I show in Chapter 4, restricting access to prescription opioids without providing safer alternatives pushed some people toward illicit opioids such as heroin. What is needed is an analysis that aims not to identify guilty culprits but bring to light the social mechanisms that made their actions so consequential.

From blame to understanding

From a sociological perspective, the mainstream narrative is both empirically inadequate and directed to alternative ends. The Big Pharma-focused story does include some important facts. Purdue did market OxyContin aggressively and misleadingly and ignored or downplayed evidence of its dangers for years. Some doctors did prescribe it and other opioids irresponsibly—though as I discuss below opioids were also underprescribed to some patients. The company and its owners, the Sackler family, have been pilloried in protests, and elite institutions like the Tate, Guggenheim, and Metropolitan Museum of Art have ended decades-long philanthropic relationships with the family. Purdue has paid billions of dollars in legal settlements, including a 2020 agreement with the federal Department of Justice to pay \$8 billion in civil and criminal fines and forfeitures (Keefe 2021). A class action case encompassing thousands of local jurisdictions is proceeding.²⁷

However, single-mindedly pursuing the Sacklers ignores other important paths to the crisis, which I detail in the next section. As I recount in Chapter 4, pharmaceutical drugs, including opioids, were not new to the nonurban areas featured in most reporting on the crisis but rather had soothed the pain and anguish of backcountry residents for decades. Pharmaceutical companies were not the first to champion opioids for pain management, and overdose deaths were on the rise prior to the introduction of Oxycontin. Bad doctors were less often the source of misused opioids than friends, family, and other informal sources, and it is uncommon for pharmaceutical opioids to be the only substances involved in fatal overdoses. The prominence of Appalachia and other “rural” places ignores complex regional and spatial inequalities within the crisis, while the elevation of white people who use opioids has obscured the crisis’ effects on other ethnoracial groups, especially Black and Native people. Fixating for years on prescription opioids left the press unprepared for rapid recent shifts toward illicit opioids and synthetic drugs as the drivers of drug-related mortality.

Legal and journalistic investigations into corporate malfeasance should not be conflated with scientific analysis of the social catastrophe of the overdose crisis. As I suggested at the beginning of this chapter, these tendencies result from pressure within the journalistic field to produce stories that be rewarded economically in the form of revenue and ratings or symbolically

²⁷ On the 2020 federal settlement, see Davis 2021. For information on the ongoing class action suit, see (<https://www.opioidsnegotiationclass.info/>).

in the form of recognition and accolades (Benson 2006). Keeping with these dynamics, investigative journalists in the overdose crisis has aimed to profile sympathetic victims with whom the public can identify, expose the villains who harmed them to public condemnation, and impose on the relationship between those two parties a synoptic moral view of American life. The most successful have garnered prestigious awards, appeared on bestseller lists, and, as I mentioned in the previous section, had their books adapted for other media.²⁸

The scientific field, in which audiences are largely restricted to fellow producers, allots different goals and strategies to its members (Bourdieu 1975). Rather than trying to offer a moving story that is palatable to the broadest audience, which leads to the narrative convergence and repetition seen in coverage of the overdose crisis, scientists are accountable primarily to their peers and are judged on their perceived contributions to previous research. Since their goals conflict, attempting to straddle the two fields and reap the rewards from both audiences risks undermining analytic rigor and pushes scientists onto terrain to which they are ill-suited. Pierre Bourdieu and Loïc Wacquant (1999: 44) warn against practicing the “logic of the trial” evident in journalism under “the guise of science,” lest the tools of the latter be converted into “mere instrument[s] of accusation.” This temptation is especially strong at times of crisis when stakes are high and the disruption of commonsense ostensibly presents the intellectual with the most opportunity for outsize influence. The risk of submitting to this temptation is that, by bandwagoning onto the term, concept, or framing of the moment, one’s sociological insight is rendered less insightful in the present and rapidly obsolete in the future.²⁹

By repeating and reinforcing a simplistic and moralistic narrative, mainstream coverage of the crisis has stopped sociological analysis too soon and overshadowed important questions.³⁰ How did opioids become the default treatment for pain, and why were “rural” places, previously ignored by organized drug sellers and drug enforcement, so receptive to them? Once opioids arrived, how did they spread so quickly in remote places that lacked drug markets like those in urban areas? How were they exchanged and used among isolated groups of people with little access to harm reduction supplies and services? Where did people who needed help with their

²⁸ Sam Quinones received the 2015 National Book Critics Circle Award for General Nonfiction for *Dreamland* (2015). He was nominated for the same award for *The Least of Us* (2021). Patrick Radden Keefe was also nominated for that award for *Empire of Pain* (2021), which received other awards and nominations and appeared on several year-end lists (<https://www.penguinrandomhouse.com/books/612861/empire-of-pain-by-patrick-radden-keefe/>). Beth Macy’s (2016) *Dopesick* received more than a dozen awards, nominations, and bestseller designations on their website (<https://www.littlebrown.com/titles/beth-macy/dopesick/9780316551281/>). The Hulu adaptation of *Dopesick* received numerous awards and nominations, including a Golden Globe nomination for Best Television Motion Picture (<https://www.goldenglobes.com/tv-show/dopesick>).

²⁹ In a study of the rise and fall of the so-called “underclass,” Loïc Wacquant (2022b: 172–173) warns that this “lemming effect” of scholars “rushing en masse to invoke a notion because everyone around them is invoking it” is more common “when a novel phenomenon,” in this case the overdose crisis, “is believed to have appeared on the social horizon.”

³⁰ More than eighty years ago in his article proposing a “Sociological Theory of Drug Addiction,” Alfred Lindesmith (1938: 596–597) similarly argued that conceptualizing drug addiction as an effect of prior mental illness or personal defects smuggles in a “moralistic taint” and “is more in the nature of an attempt to place blame than it is an explanation of the matter.”

opioid use turn in places where, as the century-old cliché goes, “everyone knows everything about everyone else?”³¹ And what did the influx of pain-numbing drugs signify about “community,” or lack thereof, in small-town America? I begin by summarizing what existing research can tell us.

Correcting the record

As discussed above, the mainstream narrative presents an incomplete picture of the origins, development, and impact of the overdose crisis, as well as the available policy responses. It suggests that Purdue and other pharmaceutical companies were the primary advocates of opioids for the treatment of pain, and that the push toward opioids started in the mid-1990s with the introduction of OxyContin. In fact, opioids were first embraced by a range of medical groups, public health officials, and international organizations over the course of the 1980s. The specialty field of pain medicine that emerged from the 1950s to 1970s was skeptical of relying on pharmaceutical solutions to pain. Instead, leading organizations and practitioners favored multimodal treatments that integrated physical and psychological therapy as well as non-pharmacological interventions from surgery to complementary health approaches alongside medication (Baszanger 1998; Wailoo 2014). They accepted a central role for opioids in the course in their efforts to define for their field a legitimate domain of expertise (Pryma 2022).

An important early catalyst for this transformation was the World Health Organization (WHO), which in 1982 convened a group of pain experts to develop “a simple regimen” for the treatment of cancer pain “that could be disseminated rapidly and cheaply to the rural villages of the developing world,” where most patients lacked access to pain treatments (Meldrum 2005: 42). Opioid medications were a “feasible one-size-fits-all solution” (Pryma 2022: 29), and the “cancer pain ladder” they created relied heavily on opioid as well as non-opioid painkillers (WHO 1986). The WHO’s efforts gave pain specialists access to professional opportunities, resources, and legitimacy while also starting to destigmatize opioids. Despite the field’s continued advocacy for a range of approaches to pain treatment, other international and US organizations followed WHO in recommending the use of opioids for pain relief, including the United Nations and the American Medical Association (Pryma 2022). Rather than driving efforts to increase opioid prescribing, pharmaceutical companies were just one of several interest groups that collaborated over the fifteen years prior to OxyContin’s debut to elevate opioids as critical tools for pain management.

Permissive opioid prescribing was a significant catalyst of the initial upsurge in opioid-related deaths. Prescription opioid sales quadrupled from 1999 to 2010, opioid-related emergency visits almost tripled from 2004 to 2011, and treatment admissions for opioid use nearly sextupled from 1999 to 2009 (Paulozzi et al. 2011; SAMHSA 2013: Table 21). However, drug-related deaths were on the rise long before the prescribing boom, more than doubling from 6,094 in 1980 to 12,779 in 1995, the year OxyContin was approved by the Food and Drug Administration.³² Opioids were also not the only substances involved in the rise in drug-related

³¹ Compare Albert Blumenthal’s (1932: 101) statement of this maxim in his classic *Small-Town Stuff* with Lyn Macgregor’s (2010: 5) recent confirmation that even in the 21st century, “everyone in a small town knows everyone else” and “knows everyone else’s business.”

³² Author’s calculations from NCHS 2000/2003 including drug-related deaths by all manners; accidental drug-related deaths (excluding suicide and other manners of death) more than tripled

deaths: numbers and rates of fatal overdoses involving other substances also increased significantly (Ruhm 2019). The regions hardest hit in the crisis were especially vulnerable to the influx of painkillers. Pharmaceutical companies targeted marketing resources to deindustrializing regions and places with high rates of work-related injuries, chronic illness, and disabilities (Van Zee 2009; Lee et al. 2018; Hadland et al. 2019). Economic and civic decline exacerbate overdose rates, fueling a narrative championed by the economists Anne Case and Angus Deaton (2020) that fatal overdoses represent “deaths of despair” (Hollingsworth et al. 2017; Zoorob and Salemi 2017; Monnat 2019). Legal status and industrial-scale distribution made pharmaceutical opioids widely attractive and accessible, but they found special affinity in places where economic and social deprivation sent large numbers of people searching for alternative sources of solace and succor.

At the dawn of the 21st century, drug-related mortality overall was higher in urban areas but was equaled in nonmetropolitan areas in 2004 and then surpassed by them until 2016, when metropolitan areas again took the lead.³³ In general, the less urbanized the place, the more significant the overall rise in opioid-related mortality: from 1999 to 2016, opioid overdose rates increased 721% in noncore, nonmetropolitan counties, compared to 158% in large central metropolitan areas. Below the national level, overdose rates have been higher in the Northeast and Midwest than in the South and West; in some regions and in some years drug-related mortality has been greater in medium or large cities than in nonmetropolitan areas (Rigg et al. 2018). California’s opioid statewide opioid overdose rate has been consistently lower than the national average, but this comparison masks a gap between low rates in the state’s large cities and higher rates in non-core nonmetropolitan areas (Figure 4). Understanding why some areas have suffered more than others requires going beyond “urban” and “rural” to excavate the social mechanisms at play in particular places.

from 2,492 in 1980 to 8,000 in 1995 (Jalal et al. 2018). Naloxone distribution was initially developed in the 1990s in response to what was already seen at the time as an “alarming” rise in heroin-related deaths (Maxwell et al. 2006: 89).

³³ Hedegaard and Spencer 2021. The National Center for Health Statistics (NCHS) classifies all U.S. counties into one of six categories, four metropolitan and two nonmetropolitan. All metropolitan counties—those containing or connected to cities of at least fifty thousand residents—are considered “urban,” all nonmetropolitan—those containing smaller cities, towns, and sparsely populated areas—are considered “rural” (Ingram and Franco 2014). I put “rural” in quotation marks to indicate that it is more of a folk concept than an analytic category. Researchers adopt urban-rural classifications out of concession to common usage or the constraints of existing datasets, as I do where relevant. Elsewhere I use descriptive terms such as “remote” “backcountry,” and “isolated,” while specifying the social mechanisms that make geographic relations meaningful.

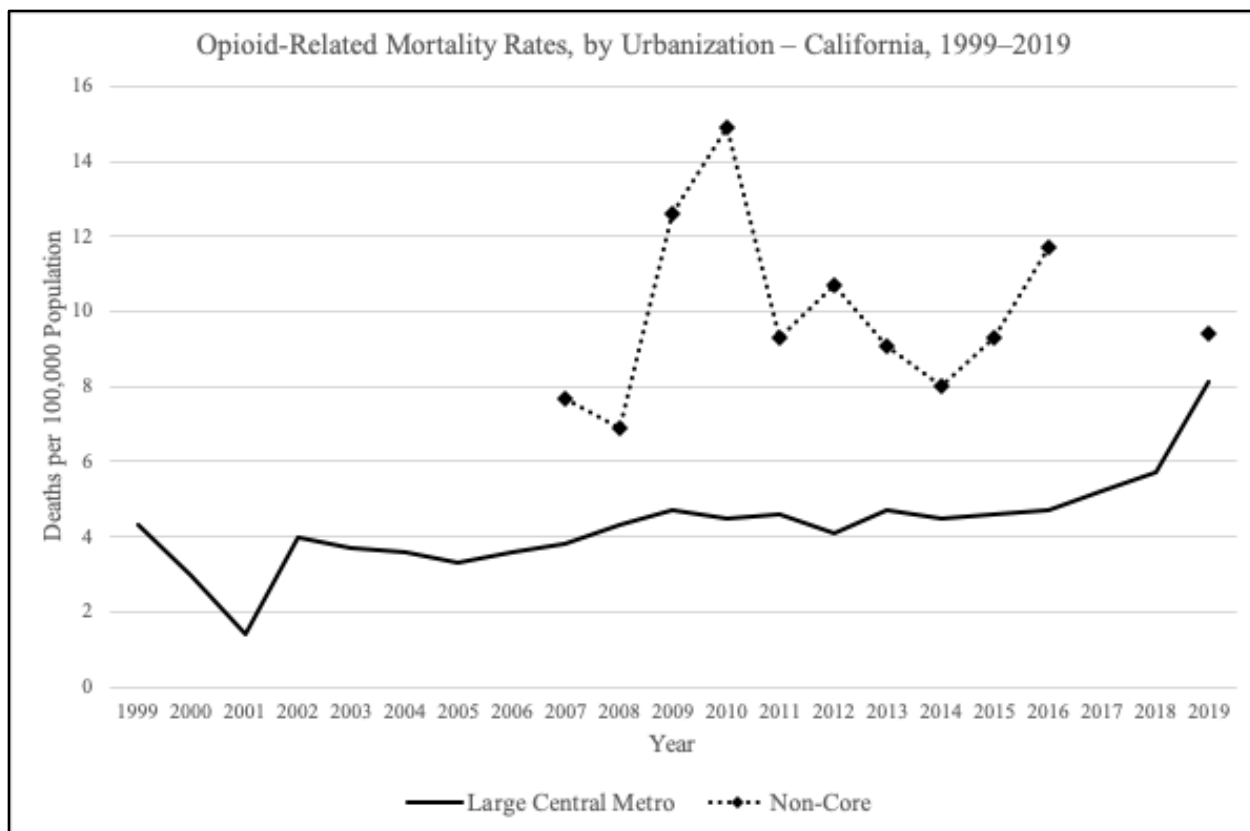


Figure 4. Age-adjusted opioid-related mortality rates, by urbanization: California, 1999–2019. Opioid-related deaths are identified using the *International Classification of Diseases, 10th Revision* underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14, and specific multiple-cause-of-death codes T40.0–T40.4 and T40.6. Missing data in non-core series are not reported or unreliable. Source: National Center for Health Statistics, National Vital Statistics System, Multiple Cause of Death 1999–2019 on CDC WONDER Online Database (<http://wonder.cdc.gov/mcd-icd10.html>).

In stark contrast to the crack scare of the 1980s that predominantly affected Black people, media coverage of the overdose crisis has focused on white people, either young people seduced by pharmaceuticals or poor people trapped in rural poverty (Netherland and Hansen 2016; McLean 2017; Shachar et al. 2020). Opioid-related mortality has increased more consistently among whites, approximately 13 percent annually from 1989 to 2006, than Black people, among whom it remained flat from 1994 to 2011 (Alexander et al. 2018). However, opioid-related mortality is as high or higher among Native people than among whites, and overdose rates rose faster among Black people than among whites during the 2010s (Joshi et al. 2018; Cano 2021; Furr-Holden et al. 2021). Initial increases in opioid mortality among white people distorted the public image of the crisis and masked other important health care inequalities (James and Jordan 2018). For instance, relatively low rates of prescription opioid-related mortality among Black people compared to white people in the early years of the crisis may have been an unanticipated consequence of discrimination against Black people and other people of color in pain assessment and treatment (Cintron and Morrison 2006; Pletcher et al. 2008; Hoffman et al. 2016).

Beyond Purdue’s corporate misdeeds, significant media and scholarly attention has been trained on predatory doctors running “pill mills” and malingerers going “doctor shopping” for

unnecessary prescriptions (Temple 2015; Biernikiewicz et al. 2019). But among people who share their prescription opioids, fewer than one in ten engage in obvious fraud, and unlike black markets in other drugs, there is “little to no organized criminal involvement” in pharmaceuticals.³⁴ Four out of five people with opioid use disorder received opioids from a health care provider prior to developing use disorder, often for legitimate medical complaints (Shei et al. 2015). Many if not most people who use prescription opioids outside of medical supervision report suffering physical pain and taking opioids to relieve it (Amari et al. 2011; Dahlman et al. 2017). Rather than a criminal enterprise, widespread circulation of prescription opioids between patients and those who use them “nonmedically” is better understood as an informal response to sources of pain, distress, alienation, and acedia that were not addressed by formal medical and welfare systems.

Multiple waves across time and space

Another reason to avoid narrowly focusing on pharmaceutical opioids and their manufacturers is that they are no longer the primary substances involved in drug-related deaths. Physician-ethnographer Dan Ciccarone (2019b; 2021) breaks the crisis into three “waves” defined by the rise and spread of different substances, each with both supply- and demand-side drivers.

The first wave, beginning around the turn of the 21st century, was led by pharmaceutical opioids. As I have argued, most media on the crisis have focused on the supply of new opioid medications in the 1990s and downplayed the role of demand-side factors. They also ignored the fact that pharmaceutical opioids were not only being prescribed and consumed in Appalachia and other nonurban areas but were entering and changing urban drug markets as well. As mentioned above, overdose rates rose in metropolitan and nonmetropolitan areas alike. Mounting negative attention to deaths related to their products pushed pharmaceutical companies to reformulate opioid pills in the early 2010s to be more difficult to snort or inject.³⁵ Health care providers also cut

³⁴ Hulme et al. 2018: 242. Less than one in five young people reported buying pills from illicit sellers, and contra racial stereotypes about drug use, young white people were more likely to report obtaining pills through theft or fraud (Ford et al. 2020).

³⁵ These so-called “abuse deterrent formulations” were designed to break into larger shards rather than fine powder, making them less pleasant to snort, and when dissolved with water would congeal into gummy paste that clogged syringes. Purdue quietly stopped shipping original OxyContin and replaced it with a reformulated version without changing the label in 2010. Research confirmed that the new formulation discouraged nonoral use, and the Food and Drug Administration (FDA) approved new labeling indicating the pills’ deterrent properties in 2013. However, many people switched from OxyContin to generic oxycodone rather than reducing their opioid use (Zhang and Guth 2021). Endo International released a reformulated version of its drug Opana ER (extended release oxycodone) in 2012, but the FDA declined to approve similar labeling for lack of comparable evidence (Cicero et al. 2016). Widespread injection of Opana ER was subsequently identified as a factor in a massive 2014–2015 outbreak of injection-related HIV in Scott County, Indiana (Peters et al. 2016). The reformulated drug’s deterrent properties led people to use more water to dissolve it, which entailed more injections and more risk of disease transmission (Broz et al. 2018). In 2017 Opana ER was withdrawn from the market at the request of the FDA (FDA 2017).

back on opioid prescriptions, which peaked in 2012 (Pezalla et al. 2017; Zhu et al. 2019). Rates of fatal overdose involving pharmaceutical opioids also plateaued.

The second wave, from about 2010 to 2015, was defined by rising rates of heroin-related overdose deaths (Rudd et al. 2014). The number of people using heroin had been increasing since the mid-2000s, and interviews revealed that many people switched from pills to heroin as a result of their demand for pills outpacing what could be obtained on the street (Mars et al. 2014). Over the same period of time a growing proportion of people entering treatment reporting starting their opioid use with heroin rather than pharmaceuticals, suggesting that access to heroin was increasing as well (Cicero et al. 2018). Supply side factors within heroin markets separate from their interaction with prescription opioids were at least partly responsible for this increasing access. In the 2000s, the United States heroin supply began to consolidate from several source regions to two: Mexican-origin black tar heroin dominated in the western United States while Colombian-origin heroin took over east of the Mississippi. In Mexico this transformation entailed large increases in farmland for opium poppies (Grandmaison et al. 2019). Over the past decade this trend continued, with producers in Mexico refining and diversifying their heroin products to push out Colombian supplies and monopolize the market—in 2018 over ninety percent of heroin samples analyzed by the Drug Enforcement Administration (DEA) originated in Mexico (DEA 2020). As drug organizations based in Mexico ramped up competition with other suppliers they also increased production, pushing up heroin availability across the United States (DEA 2017).

Producing heroin from opium poppies requires farmland that is vulnerable to government surveillance and requires labor to cultivate, harvest, and refine. The poppy is an annual plant that delivers only one harvest a year, limiting production cycles. As early as the mid-2000s drug suppliers in Mexico began experimenting with synthetic alternatives, namely fentanyl and its chemically related analogues, that could be produced year-round in factories at industrial scale (Quinones 2021). By the second half of the 2010s, they had succeeded, helping usher in the third and deadliest wave of the crisis. The first significant supplies of illicit fentanyl to reach the United States in the mid-2010s originated in Chinese factories and were ordered by drug sellers in the US on anonymous, restricted internet networks known as the dark web. The influx of cheap, potent fentanyl that could be used to stretch heroin or diluted and sold as heroin undermined demand for Mexican-origin heroin and made opium cultivation unprofitable, pushing heroin producers to focus more on synthetics (Grandmaison et al. 2019). In 2019, the Chinese government cracked down on the fentanyl trade under pressure from the US government, and the companies that had been manufacturing the drug instead started shipping its precursors to organizations in Mexico that completed the process and sold the products (Westhoff 2019). Increases in fentanyl-related deaths began in the eastern United States, where the synthetic drug could be easily mixed with the powder heroin products that dominate there, and then swept westward in the late 2010s. During my fieldwork the overdose rate in California was among the fastest growing in the country (Hedegaard et al. 2020a; Shover et al. 2020). I carried test strips for fentanyl with me in the field that sometimes detected the drug in my research participants' heroin.

Ciccarone (2021) and other researchers, including in mainstream media outlets, have argued that a “fourth wave” of the crisis is now emerging. Deaths related to stimulants such as cocaine and methamphetamine have risen rapidly in recent years. Some commentators, most prominently Quinones (2021), have claimed that stimulant supplies are being widely contaminated with fentanyl as a way of hooking new customers. Modest adulteration of

methamphetamine is occurring, on the scale of five percent of samples analyzed in a recent study in Ohio (Zibbell et al. 2022). But research in California showed that fentanyl metabolites were virtually never found in the urine of people who used meth but not opioids, suggesting that meth supplies were not being contaminated (Meacham et al. 2020). Interviews and observations with people who use fentanyl and meth instead point to increasing intentional co-use of the drugs to explain the trend (Daniulaityte et al. 2020; López et al. 2021). Without stronger evidence a) that fentanyl is being systematically introduced into stimulant supplies or b) that rising deaths involving stimulants are not related to co-use with fentanyl, I hesitate to brand this pattern a new “wave” rather than a continuation of existing trends.³⁶

Lessons from the crisis

In sum, the story of the overdose crisis as a straightforward crime of corporation-engineered addiction—an “epidemic” of “opioids”—does not withstand empirical scrutiny. Referring to the crisis as a single event caused by a handful of drug companies obscures deeper historical roots, variegated geographic spread, and dynamic interactions between supply and demand. It is also of limited usefulness for more fine-grained sociological inquiry. While it does include some important facts about the crisis at a high level of generality, it sheds little light on why the crisis followed such distinctive spatial and temporal patterns, both regionally and across levels of urbanicity. Focusing attention on the forensic details of a few powerful individuals’ actions ignores the patterned social processes that unfolded across the country and which hold broader lessons for the links between place, health, and inequality.

These links are both empirical and analytic. Empirically, much of our research on drug use practices, drug markets, drug criminalization, and the health consequences of drug use relies on data collected in large metropolitan areas. As I show in the following chapters, how people buy, sell, and use drugs depends on their proximity to and interactions with organized drug markets, sources of drug use equipment, places to use drugs safely, and the means to reach them—all of which are scarcer outside of cities. The health and legal consequences of illicit drug use similarly depend on people’s ability to access supportive services and their exposure to law enforcement, which are also conditioned by place of residence.

Theoretically, contemporary sociological theories of place-based inequality and the mechanisms that produce it, such as the dominant “neighborhood effects” approach, are theories of *urban* neighborhoods characterized by large populations, public anonymity, and dense organizational webs. As a result, they miss key aspects of nonurban life. Conversely, theories of health disparities overlook how health-promoting resources are unevenly distributed across geographic space, while analyses of policing that assume social distance between law enforcement officers and the people they regulate fail to capture the significance of social ties between them in smaller, more tight-knit places.

³⁶ Another serious emerging trend about which we do not yet have enough data to characterize as a distinct “wave” is the introduction of nonpharmaceutical benzodiazepines, xylazine, and other nonopioid psychoactive substances into illicit opioid supplies in Canada, Scotland, and the United States (Pardo 2021; Friedman et al. 2022; McAuley et al. 2022). These drugs carry significant risk of overdose, especially when used with opioids, and because they are not opioids they do not respond to naloxone.

In light of these lessons, I use what I saw and heard in the mountains to sharpen our empirical understanding of the social life of opioids in nonurban places: how small-town residents became acquainted with opioids through health care providers, friends, and family; how using opioids in physically isolated, socially dense, and organizationally deprived places reconfigured their day-to-day lives and future plans; and how they struggled to maintain their health, liberty, and reputations under the circumstances. By doing so I also define several place-specific mechanisms that lead people into opioid use, that make it more difficult to use safely and to get help, and that expose people who use opioids to scrutiny by police and the public. In the next chapter I develop a theoretical approach and suite of concepts suited this question.

Chapter 3. Theorizing the Geography of Ambivalence

To understand the geographic and social inequalities in the effects of the overdose crisis, we need a theoretical framework that explains how the places in which people live shape their behavior and health. I begin this chapter by outlining three dominant frameworks used by social scientists to conceptualize the relationships between place and health. I describe the strengths of each and where they have room for improvement, including their relevance for research outside of large cities. Then I introduce my alternative approach, which requires several shifts in analytic perspective. I build on Pierre Bourdieu's attention to the interplay of physical, social, and symbolic space to coin three concepts that help me make sense of my ethnographic data and extend urban centric theories of space, place, and inequality.³⁷

Three theories of place and inequality

I first outline the “social determinants of health” approach most common in the health sciences and the related concept of “risk environment” developed by drug researchers to encompass the effects of social conditions, and argue for extending its insights into the realms of politics and power. Then I introduce the notions of “structural violence” and “syndemic” developed by anthropologists and other social scientists to capture the influence of large-scale social structures on individual outcomes, and emphasize the importance of complementing large-scale social processes with more local explanatory mechanisms. Finally, I describe the theory of “neighborhood effects” that dominates sociological research on the social and spatial structure of urban inequality, and highlight the limitations of its focus on large, dense metropolises.

Social determinants of health and the “risk environment”

Epidemiology originated in the search for connections between people's health and their surroundings (Krieger 2011). Today, scientists describe these connections as biological, behavioral, and environmental “risk factors,” intersecting in a “web of causation” that generates health and disease (MacMahon et al. 1960; Susser 1985; Krieger 1994). The language of “social determinants of health” adopted in recent decades by many scientists and health agencies extends this “risk factorology” approach to encompass the effects of social conditions (McKinlay and Marceau 2000; Marmot 2005). The “risk environment” elaborated by sociologist of drug use Tim Rhodes (2002; 2009) is an even more explicit attempt to center aspects of place in the analysis of health, illness, and inequality, including built environments, frontline organizations, and local policy regimes. The risk environment concept is a straightforward framework for documenting geographic, social, political, and cultural forces that influence which drugs are used, by whom, under what circumstances, and with what effects at different times and in different places. However, the risk environment model does not “delineate causal pathways” (Rhodes 2009: 193), leaving the task of explaining the mechanisms that generate patterns of drug-related harm to more substantive social theories.

³⁷ Portions of this chapter originally appeared in “Steps Toward a Theory of Place Effects on Drug Use: Risk, Marginality, and Opportunity in Small and Remote California Towns,” *International Journal of Drug Policy* 85: 102629. They are reproduced here with permission.

Research on social determinants has demonstrated the health effects of socioeconomic status, education, living and working conditions, and ethnic, racial, and gender discrimination (Friel and Marmot 2011). Inequalities in social determinants of health are strongly influenced by policy choices and the exercise of political and economic power, but relatively little public health research directly measures or analyzes these inputs (Navarro 2009; Bamba et al. 2005). I emphasize the importance of power, politics, and institutions as influences on health and illness even at the local level (Troostle and Sommerfeld 1996; Bourgois 1999). In the chapters that follow, I show how investigations of health care providers for opioid prescribing provoked public consternation, how the actions of a relatively small number of local providers helped accelerate the spread of prescription opioids and then heroin, how the health consequences of opioid use were exacerbated by service gaps and spoiled reputations, and how formal social control in the form of policing was influenced by informal social control in the form of gossip and stigma. Each of these developments illustrate how health, illness, and health care in nonurban places are embedded in a dense web of local status, influence, and power.

Syndemics and structural violence

To capture how social forces such as poverty, poor health, ethnoracial discrimination, and incarceration intersect to compound suffering among those at the bottom and margins of society, social scientists have described “oppression illnesses” (Singer 2004: 17), “everyday violence” (Bourgois, Prince, and Moss 2004), “syndemics” of “violence, in its many forms” (Singer 1996: 100), and systems of “structural violence” (Farmer 2004). Structural violence strains, scars, and cuts short the lives of poor and vulnerable people, but its effects are often normalized or “conflated with ‘otherness’” (Farmer 1996: 277). Health scientists measure these consequences of structural violence as social determinants, while social scientists focus their attention upstream on the policies and institutions that generate them (Navarro and Shi 2001; Navarro et al. 2006; Muntaner et al. 2011). For instance, sociologists and anthropologists have argued that “big events,” such as the collapse of political regimes, economic transformations, ethnic conflicts, and wars, can intersect with changes in drug supply chains to increase drug-related harm among particular groups (Agar 2003; Bourgois 2003; Friedman et al. 2009; McLean 2016).

Because the concept of structural violence encompasses the many forces keeping people from achieving their full potential (Galtung 1969; Farmer 2004), some argue it unhelpfully mingles too many social mechanisms (Bourgois and Scheper-Hughes 2004; Wacquant 2004). For people who use drugs in the United States, widespread poverty is intensified by criminalization, racism, gendered violence, and interpersonal stigma. These forms of physical, economic, legal, and symbolic domination often coincide, but they are enforced by a variety of institutions and require analyses sensitive to place and to the differential effects of interlocking systems of oppression. Ethnographers of crime and drug use frequently invoke large-scale and long-term social processes to explain their research participants’ actions, such as colonial dispossession, deindustrialization, neoliberalism, and discriminatory policing and penal policies in the “War on Drugs” (Bourgois and Schonberg 2009; Fairbanks 2010; Garcia 2010; Goffman 2014). These explanations elucidate how people are more or less likely to be exposed to harm or pushed into dangerous and illicit activities based on their positions in social space and can be coupled with more proximate mechanisms to explain more fine-grained differences across place or between similarly situated people (Duff 2007; Katz 2019). I contribute to these efforts by

integrating regional legacies of indigenous genocide and economic decline with local features of social structure and interaction.

Neighborhood effects

The “neighborhood effects” approach most commonly used by sociologists represents an ambitious effort to synthesize a wide range of place-focused research on urban inequality into a dynamic, multi-scale framework that is attentive to individual outcomes over the life course and collective effects of local disadvantage. Neighborhood effects research investigates how residential contexts, typically urban neighborhoods with high levels of poverty and other kinds of disadvantage, matter for residents’ development and well-being (Sampson 2012). This line of inquiry has substantiated links between neighborhood characteristics and phenomena such as crime, educational performance, and sexual activity (Sampson et al. 2002; Sharkey and Faber 2014; van Ham et al. 2011). Poor health also clusters in disadvantaged areas, and many of these associations persist when individual attributes are held constant (Duncan and Kawachi 2018).

Scholars have developed a suite of concepts to explain these associations. Wilson (1987; see also Kain 1968; Kasarda 1989) argued that deindustrialization and the transition to a service-based economy led to “spatial mismatches” between jobs and urban workers that increased neighborhood-level poverty. Deepening pockets of urban disadvantage created “concentration effects” that exacerbated spatial inequalities in crime, educational access, and work opportunities. Concentrated poverty was said to create “social isolation” between residents of high-poverty neighborhoods and “mainstream,” middle-class people and institutions. A primary consequence of these factors, according to Rob Sampson (2012), was reduced “collective efficacy,” or the capacity of poor neighborhood residents to maintain shared standards of social control. Mario Small (2004; 2006) added local organizations to this picture, arguing that they moderated the isolation and collective efficacy of neighborhood residents by “brokering” important resources influencing their patterns of movement, interaction, and social tie formation.

The “neighborhood” as unit of analysis originated in efforts by the early twentieth-century Chicago School of Sociology to elaborate an ecological theory of urban settlement. As a city grows, Robert Park (1915: 579) explained, its residents tend to sort themselves according to “the subtler influences of sympathy, rivalry, and economic necessity,” so that mere geographic divisions are “converted” into localities defined by shared “sentiments, traditions, [and] history.” This means that neighborhoods are only found in packs: they emerge when some residents use location to distinguish themselves from others. Despite perennial debate over how to define neighborhoods, researchers seem to agree that the term makes intuitive sense in urban settings (Galster 2001). Methodologically, most substitute census tracts for neighborhoods or adopt other administrative boundaries (Sharkey and Faber 2014). In nonurban areas, however, populations can be so small or so scattered that they are not readily divisible into residential districts and can contain too few census tracts to permit internal comparisons. For these reasons I argue that urban neighborhood effects should be considered a subcategory of a broader range of *place effects*.

Place effects and sociological ambivalence

Understanding place effects in nonurban areas requires three shifts in perspective. First, a transformation in social morphology—the distribution of people across physical space—from contiguous neighborhoods to dispersed settlements (Durkheim 1982: 241–242). While urban

residents can use extensive street systems and public transit to reach resources and organizations in other neighborhoods, comparable travel in remote areas covers longer distances and typically requires access to a vehicle. Inclement weather, road closures, and natural disasters can interrupt travel and communication between settlements altogether. Second, a reconfiguration of institutional arrangements from linked webs to isolated segments. Cities offer their residents numerous schools, parks, libraries, grocery stores, businesses, and other organizations, which are important brokers of material resources and social ties (Marwell and Morrissey 2020). By comparison, small towns exhibit less “institutional completeness,” the capacity to meet their residents’ needs internally rather than requiring travel to other places.³⁸ They may have only one or two of each kind of organization that all residents share, and often lack some amenities and services entirely. Finally, a passage from the city’s “world of strangers” to a more tight-knit and densely acquainted group (Lofland 1973). Most city residents are strangers to one another, so face-to-face relations rely on generalized expectations rather than interpersonal relationships (Simmel 1971 [1903]). In contrast, small and isolated populations form significantly denser ties in which social roles such as coworker, client, neighbor, and kin frequently coincide or overlap (Beggs et al. 1996). Consequently, personal ties between people of different class positions and social statuses are not uncommon in small places.

These three shifts have a common consequence: they reduce the differentiation and segregation that is the basis for neighborhood identity. The average small-town resident knows a greater proportion of their neighbors than in large cities. They also share organizational and institutional ties with many or most other residents—attending the same schools, patronizing the same stores, working in the same businesses—so that the people one counts as friends and neighbors are more likely to also be coworkers, customers, or clients. Social network researchers call this feature of social ties *multiplexity*, a term which originated in anthropologist Max Gluckman’s (1955) analysis of how, in rural Zambian villages, juridical processes are embedded in preexisting arrangements such as kinship relations. Instead of occupying disjunct social microcosms at home, work, and in public space, small-town residents spend much of their time mingling within the same milieu.

The shared world of a small town is at once the basis for trust, reciprocity, and neighborliness as well as a tinderbox for suspicion, jealousy, and nosiness. Conflicting feelings like these are an expression of what Robert Merton and Elinor Barber (1963: 7) called “sociological ambivalence,” the condition of being subject to divergent expectations as a consequence of the “social definition” of one’s structural position. For instance, a therapist is at once a clinician, an organizational administrator, and a professional colleague, and the rules for these aspects of their position may diverge. Such conflicts are intrinsic to the relations and roles entailed by certain social statuses, rather than expressions of their occupants’ individual personalities. Sociological ambivalence is especially salient in relationships that involve significant differences in power or prestige, such as that of professionals and their clients or police officers and their suspects, which are consequential for their subordinate members and simultaneously command respect and foment resentment.

I argue that sociological ambivalence is *unevenly distributed across physical space* because of how local differences in social morphology and network structure affect the frequency and intensity of conflict within and between statuses. Two conditions common to small and remote towns exacerbate sociological ambivalence. First, the common coincidence of

³⁸ Raymond Breton (1964) originally coined this term in his analysis of urban ethnic enclaves.

disparate roles in multiplex relations, such as when therapists or prosecutors are also neighbors, friends, customers, or constituents of their clients or targets.³⁹ Second, that remote inhabitants are, in a sense, “locked in’... and can escape only at great cost,” as in restricted territories like ghettos and reservations or closed facilities like prisons or asylums (Smelser 1998: 9; Wacquant 2010b). Geographic isolation increases the price of exit for unhappy residents, particularly for poorer people who lack transportation and are bound to local work or kin, and creates feelings of being “stuck” in place (Draus and Carlson 2009; Buer et al. 2016). Returning to relations between professionals and their clients, isolation and multiplexity again intensify sources of ambivalence. Lack of competition and outside options in small towns keeps people in uneasy relationships with doctors, attorneys, therapists, and others; in Hirschman’s (1970) terms, small-town residents find it harder to exit the market in response to lackluster service offerings. And overlap between hierarchical ties like those with clients and horizontal ties like those between friends can undermine the deference expected by professionals.

Theorizing the geography of ambivalence

Articulating a new conceptual vocabulary and theoretical framework for the links between place, practice, institutions, and inequality offers an opportunity to rethink notions that no longer serve researchers’ needs (Gans 1997). I argue that “rural” is one such term. The urban-rural opposition originated in classical social theory in the spatial division of labor under emerging capitalism (Marx 1970 [1846]; Durkheim 1984 [1893]; Tönnies 2001 [1887]). In industrial and post-industrial societies, the “real economic basis” for the category of rural “disappears,” though it “lingers... within the realms of ideology” (Harvey 1978: 114). The social and political salience of the folk category of “rural” has persisted and perhaps increased since the election of Donald Trump (Wuthnow 2018). But used as a broad analytic category it covers over important heterogeneity in local demographics, economies, politics, and culture, which is why for a half-century researchers have argued that “even as a classificatory device,” the rural-urban continuum “seems to be of little value” (Pahl 1966: 316).⁴⁰

³⁹ Merton and Barber (1963: 10, emphasis in original) argue that “the conflicting demands of different statuses,” such as the statuses of professional and kin, “ordinarily involve *different* people in the role-sets of the conflicting statuses... But in the core type, the ambivalence is built into the social relation with the *same* people.” Rose Laub Coser (1966: 178) adds that ambivalence is especially acute when the “insulating and segregating mechanisms” by which roles are differentiated in modern society break down. But they miss the geographic dimension of this pattern.

The “insulating and segregating mechanisms” that Coser describes—primarily organizations that cordon off various domains of activity—differentiate social networks as well as social roles. Network scholars argue that weak ties are important for fostering connections between close knit groups (Granovetter 1973). Based on this insight, Robert Sampson (2012: 151) speculates that “less intimate connections between people based on infrequent social interaction may nonetheless be critical for establishing social resources... When ties are ‘thick,’ it may even be that outcomes are worse rather than better.”

⁴⁰ “Rural” is not the only popular place concept that deserves critical interrogation, reconstruction, and potential rejection. Others include the settler-colonial notion of “frontier” (Hogan 1985; Cronon 1987), for which I substitute *remote* and *backcountry* as more

Researchers adopt urban-rural classifications out of concession to common usage, or because the prohibitive cost of collecting original data leads them to rely on the categories used in administrative sources (Woods 2011). But for many important social processes, “geography *per se* is not the fundamental causal attribute” (Hoggart 1988: 36). Rather than using secondhand concepts, researchers should specify the causal mechanisms that generate place-based disparities and construct geographic categories that reflect those mechanisms (Gans 2009). I construct three concepts to capture the consequences of sociological ambivalence in small and remote places. To do so, I draw upon Erving Goffman’s (1963; 1983) microsociology of the “interaction order,” and Pierre Bourdieu’s (1986; 1990; 2018) “trialectical” analysis of the links between social, physical, and symbolic space (Wacquant 2018).

Bourdieu defined society topologically, as a relational distribution of people according to their stocks of socially effective resources, or *capitals*. Important types of capital include economic (money and productive assets), cultural (such as educational credentials); social (ties to other people and groups with capital), and symbolic (legitimacy and recognition). The unifying metaphor of capital is useful because it highlights how, like economic capital, other forms of capital can be invested for profit and converted into one another at variable exchange rates. For instance, economic capital can be invested in or converted into cultural capital in the forms of education or cultural object like artworks, which can later be reconverted for profit (Bourdieu 1986). However, as I explain below, these investments are not a consequence only of calculative rationality but the system of conscious and unconscious dispositions that comprise one’s habitus (Bourdieu and Wacquant 1992: 115–120). People can be assigned definite positions in social space based on the capitals they possess. These relations tend to reappear in physical space as geographic disparities in access to resources and organizations, and in symbolic space as differences in dispositions and categories of perception, which compose what Bourdieu calls *habitus*. Goffman reveals the tethers between physical, social, and mental structures as they play out in copresence, interaction, and tie formation by tracking how people’s self-presentation and mutual regard reflect and rework their social standing. I combine Bourdieu’s social cartography and Goffman’s social choreography to chart the concurrences between places, people, and practices in the backcountry.

Acquainted marginality

Marginalization is a particularly important place-based process for the study of drug use. In general, marginalization refers to subordination in social space through dispossession, stigmatization, and physical relegation, and often entails intervention from law enforcement and other state agencies (Beckett and Western 2001; Wacquant 2009). The concept of marginality in contemporary sociology has two distinct and somewhat dissimilar lineages (Goetze 1976). First is the image of the margin as an intermediate or ambivalent position between social groups or

descriptively accurate alternatives, and the multifarious idea of “community” (Bell and Newby 1971; Wilkinson 1991), which I usually specify as a *scene* in cases of institutionalized milieus (Irwin 1977) or as a *town* or *settlement* in cases of population clusters. The urban notion of “neighborhood,” which I critique above, is of similarly limited usefulness as an analytic category. Querying or dispensing with these terms does not mean that the place-based patterns they are intended to name do not exist or are not worthy of study, only that we need concepts that more accurately describe and explain the social processes that produce those patterns.

physical zones. Robert E. Park (1928: 893) defined the “marginal man” as a personality type characterized by “spiritual instability, intensified self-consciousness, restlessness, and malaise” that resulted from life in conflicting cultural milieus, for instance among immigrants or people of mixed ethnic backgrounds. Park was influenced by W. E. B. Du Bois’ (1997 [1903]: 38) earlier concept of the “double-consciousness” and “two-ness” experienced by Black people in the United States as a result of always “measuring one’s soul by the tape of a world that looks on in amused contempt and pity,” and cited Du Bois on this point in an earlier essay on “race consciousness” (Park 1923: 510–511; Goldberg 2012).

Park’s student Everett V. Stonequist (1937) developed Park’s concept in a comparative study of intermediate ethnoracial groups and social statuses, linking the ambivalence and tension experienced by those who occupy marginal positions to the dominance of the receiving or mainstream group over the group of origin. He combined Du Bois’ idea of double-consciousness with Charles H. Cooley’s (1902: 183–184) notion of the “looking-glass self” that is shaped by how one imagines others to perceive oneself to describe marginal persons as regarding themselves “through two looking-glasses presenting clashing images” (Stonequist 1935: 1). Though I also focus on the sociological ambivalence experienced by backcountry residents, I argue that it comes less from feeling torn between divergent cultural expectations than between divergent expectations embedded in overlapping social roles and positions.

The second image of marginality is that of being pushed to the fringes of one society rather than the boundaries between two. Applied to economic positions, the concept of marginality was revived by Latin American sociologists in the 1960s and 1970s to refer to segments of the working classes that had been rendered informal or rejected from the labor market entirely as a result of industrialization under conditions of dependency on a hegemonic core (Goetze 1976; Auyero 1997). In a different vein, bell hooks (2015 [1984]: xvii) used the idea of the margin as the outskirts or periphery in her analysis of Black women’s position in the United States as “part of the whole but outside the main body.”

Loïc Wacquant (2010b) took this image of marginality as a peripheral or “lowly position in a hierarchical structure” (personal communication, May 20, 2019) and used Pierre Bourdieu’s (2018) principle of homologies between social space and physical space to define relegation to disreputable and dangerous places as a key mechanism of marginalization. Alongside urban ghettos and semi-urban camps, Wacquant gives the example of remote indigenous reservations, where geographic isolation reinforces discrimination and exclusion from dominant institutions. Though I do not equate small and remote towns with reservations analytically, I do argue that remoteness from urban centers and isolation from larger populations affects residents’ access to resources, social networks, and organizational memberships and services.

Interventions by state authorities against marginalized people rely on physical coercion as well as the collection of personal information, such as the evidence police officers gather during criminal investigations. Dense and multiplex ties between residents create opportunities to manipulate the obligations of acquaintanceship to aid these interventions, a condition I call *acquainted marginality*. Acquainted marginality aids law enforcement’s efforts by augmenting their capacity for formal and informal surveillance, and deepens stigma by indelibly spoiling the personal reputations of people among other residents. Goffman (1963: 132) argues that acquaintanceship entails the right to initiate interaction, and that dense ties turn small towns in “open regions” where most everyone can be hailed and even unacquainted people exchange greetings. Law enforcement and other authorities can use this right as a pretext to approach and interrogate people under the guise of friendly conversation. Ostensibly benign inquiries can be

used to uncover incriminating information, while a wayward glance or flubbed word can serve as evidence of intoxication or deception. As a result, poor and marginalized people occupy “exposed positions” that increase opportunities for official surveillance (ibid: 125). Network structures also regulate the flow of sensitive information. In urban areas, social closure between authorities and the people they police and administer distinguishes “gossip” within the latter from “snitching” to the former (Duck 2015). But in small towns, personal ties between these groups conflate the two forms of information-sharing and their consequences. By undermining public anonymity and personal privacy, acquainted marginality can intensify criminalization and stigmatization and discourage people who use drugs from seeking help, including for emergencies like overdoses.⁴¹

Small-town habitus

These effects penetrate the realm of subjectivity, affecting backcountry inhabitants’ experiences of space, time, the natural world, and everyday life. Some drug use researchers have adopted Bourdieu’s (1990 [1980]: 55) concept of *habitus*—referring to “an acquired system of generative schemes” deposited in the body in response to social conditions—for its capacity to bridge oppositions between mind and body, structure and agency, and internal and external sensations that are untenable in the experience of addiction (Duff 2007; Bourgois and Schonberg 2009; Parkin 2016). The links between habitus and the broader structures of social and physical space extend from microenvironments such as homeless encampments and shooting galleries in dense urban settings to macrosocial forces like trade, migration, displacement, and war. I unite these analytic frames in a context that has received less attention than large cities in order to help extend research on drugs and place across the full range of human settlements.

I argue that the conditions of small-town and backcountry life tend to inculcate over time a set of dispositions and schemata of perception, appreciation, and action that I call *small-town habitus*. This is not simply the inverse of an “urban habitus”—there is no such thing, because city life does not impress upon residents a uniform set of social conditions or individual conditionings. Cities are by definition diverse in population and physical setting. In the Chicago School tradition, Louis Wirth (1938: 16) points out that “interaction among such a variety of personality types in the urban milieu... induces a more ramified and differentiated framework of social stratification than is found in more integrated societies.” Claude Fischer (1975: 1325, emphasis in original) agrees that “[t]he more urban a place, the greater its subcultural variety. In general, population concentration generates distinctive subcultures.” From a Bourdieusian perspective, cities are the “domain of accumulation, differentiation and contestation of manifold forms of capital,” and consequently foster “a great diversity of competing sets of dispositions” rather than a single, consistent habitus (Wacquant 2018: 104, 100n18). By the same logic, however, small and remote towns of the sort I examine are less heterogenous and impose on their residents more consistent circumstances and more of a shared way of life. Geographic isolation limits travel to other places and meager infrastructure offers less insulation from natural cycles

⁴¹ Though I develop the concept of acquainted marginality in the context of small and remote towns, I argue in Chapter 8 for its fruitful potential for understanding the relationships between face-to-face interaction, information-sharing, and the reproduction of local inequality in other milieus.

and threats. These homogenizing forces create a shared social foundation for small-town habitus that does not exist at larger scales of social organization.

Some of the important qualities of small-town habitus include unhurriedness and acceptance of unexpected delays, nostalgia for a harmonious past, and existential humility regarding the forces of nature. Small-town habitus also exhibits consonant paired dispositions like insularity from broader society and embeddedness in local community, as well as potentially dissonant pairs, such as individual self-sufficiency and reciprocity with neighbors. These generic dispositions ramify differently at different locations in social space. For poor and criminalized people, they contribute to experiences of acquainted marginality and bodily hazard. Wealthy and high-status residents, on the other hand, can enjoy beautiful surroundings and dense local ties while visiting the city as they need or please. Since habitus is neither static nor the automatic “replica of a single social structure,” the predominance of the dispositions of small-town habitus in a given individual will depend on the timing and duration of their exposure to the conditions of small-town life (Wacquant 2016: 68).

The qualities of small-town habitus manifest in a variety of social domains. In town and county politics, mistrust of broader society and local embeddedness are expressed in the valorization of interpersonal forms of influence over institutionalized forms, and in the salience of insider-outsider statuses in public disputes. Small-town elected officials typically have few staff and work directly with their colleagues and constituents to advance their goals, so they do “not add to [their] political stature by engaging in divisive political behavior, but soon [develop] a reputation... as being ‘difficult to work with’” (Wikstrom 1993: 115). With respect to economic life, “personalized service and personal relationships local merchants had with customers [are] as much a part of their product as their products themselves,” because they allow them “to live up to the expectations customers [have] of them” (Macgregor 2010: 177). This was true not only in small businesses owned by town residents but also in national chain stores and the “highly bureaucratized retail setting of the post office... because such places were still staffed by people likely to be one’s neighbors or friends or members of one’s extended family” (ibid: 185–186).

Weak and personalistic bureaucratic fields

Social morphology and social structure also influence local government. Bourdieu (1994) described the state as a “bureaucratic field” composed of governmental agencies and their nongovernmental ancillaries. In general, fields are structured spaces of specialist positions that exist in relative autonomy from the rest of social space and share structural features that facilitate linked developments between them (Bourdieu 1993). In particular, fields are internally organized by competition for their specific form of capital, which creates a divide between challengers and incumbents. Challengers in different fields tend to share an outsider perspective and follow similar strategies, sometimes unknowingly. These structural homologies provide a basis for collective behavior and group formation among agents occupying congruent positions in their respective fields.

Fields are elements of the broader “field of power,” in which those occupying dominant positions in each field compete to determine “the relative value and magnitude of the different forms of power that can be wielded in the different fields” (Bourdieu 1996: 265). The field of power is internally divided between fields oriented toward economic or cultural capital. This opposition is grounded in the internal strategies of competition within different fields. For

instance, insofar as prestige within the field of cultural production is gained from the real or ostensible renunciation of commercial success, large holders of cultural capital will aim to enhance the standing of their own investments at the expense of large holders of economic capital. This general opposition also tends to reappear in homologous form in other fields, for instance between “theoretical” and “applied” researchers in the academic field or between avant-garde and mass-market producers in artistic fields.

The bureaucratic field of the state is a central site of struggles within the field of power and reflects broader divisions in the social organization of capitals. Most state agencies fall into a disciplinary “right hand” of legal institutions or a nurturing “left hand” of health, education, and welfare departments, which come into perennial conflict but can also overlap and act with complicity (Wacquant 2010a; Berlin et al. 2019).⁴² Large state organizations reach deep into the lives of their constituents,⁴³ and guard their turf by enforcing barriers to entry in the form of professional and political credentials. By comparison, small and remote places feature *weak and personalistic bureaucratic fields*. Their governments lack resources, infrastructure, and personnel. They offer lower pay and have difficulty attracting qualified job candidates (Weisheit et al. 2006; Mackie and Lips 2010). Local officials are typically not career politicians and can perceive professional managers and staff as threats to the conventional order (Sokolow 1982; Mattson 1997). As a result, small local governments are “rickety structures” that can struggle to meet residents’ needs (Lingeman 1980: 474). With fewer staff, agency heads must work more closely with one another, strengthening interpersonal ties across organizations and increasing the influence of charismatic leaders (Wikstrom 1993). Reduced professionalization lowers barriers to entering politics and government, while closer relations among officials can attenuate the conflict and increase complicity between left- and right- hand agencies, as I show in Chapter 7.⁴⁴

Beyond negative definitions

These interlocking concepts help me link the circumstances faced by the people I met in the mountains to their actions. They also provide a complement to concerns about the fraying social and economic fabric in “rural America.” Social scientists overwhelmingly study urban places and populations, reinforcing a pattern of “urbanormativity” in theories, explanations, and policies to address drug use and other issues (Fulkerson and Thomas 2014). Other places are often defined negatively in relation to the urban in terms of their cultural and political backwardness, the services they lack, and the resources of which they are deprived. The negative or “privative” conceptual relationship between cities and other places is similar to that between wealthy districts and poor “inner city” neighborhoods and ethnoracial ghettos accused of “social disorganization” (Wacquant 1997). As in the latter case, scientists should explicate the place-specific institutional and interactional processes that generate observed disparities (Sánchez-Jankowski 2008).

⁴² I thank Seth Holmes for pointing out this ambivalence, particularly at the local level.

⁴³ Mann (1984) refers to this dimension of state power as “infrastructural power.”

⁴⁴ Because this dissertation focuses directly on the experiences of people who use opioids and only indirectly and to a lesser extent on the views and actions of local government, I plan to make more use of the concept of weak and personalistic bureaucratic fields in future publications.

Purveyors of the “deaths of despair” narrative that I debunked in the previous chapter trace the root causes of overdose, suicide, and alcohol-related liver disease to “lives that have come apart and have lost their structure and significance” (Case and Deaton 2020: 4). They argue that diverse forces from deunionization to secularization to fragile families to a rapacious health care industry have pushed people toward substance use as a salve for deprivation and disillusionment. They have less to say about the ground-level social mechanisms that link local manifestations of these macro-trends to specific drug-related risks. Acquainted marginality, small-town habitus, and weak bureaucratic fields provide some of these connections by linking social morphology and social networks to the dangerous conditions under which people use drugs, reluctance to seek supportive services, and obstacles to implementing effective policy responses.

With this framework in mind it is time to enter the California backcountry to see how these mechanisms play out in residents’ everyday lives. To avoid uncritically accepting the overdose crisis as an unprecedented development as it has been portrayed in most media, I begin with a longer historical view that reveals drugs in general and opioids in particular as longtime companions of backcountry life.

Chapter 4. “Now We Have Heroin”: Opioid Booms and Backlash

Though nonurban areas are often “assumed to stand at some remove from the problem of illicit narcotics,” substance use is a longstanding aspect of backcountry life (Garriott 2011:7–8). Cannabis has cultivated for half a century in remote regions like northern California’s “Emerald Triangle” (Raphael 1985; Brady 2013). And since the 1990s methamphetamine, which could be manufactured locally with household goods rather than transported from urban areas, has been common in rural and remote regions across the United States (Garriott 2011; Pine 2019). Opioids did not arrive recently either—opium and its derivatives have been employed in the mountains for medicinal and recreational purposes since the 19th century.

The abiding presence of opioids in nonurban places reflects three important dimensions of social life in remote and rugged regions. First, the settlement and reproduction of small towns in isolated and hostile environments has historically required arduous labor that generated intense and chronic pain. Not only physical pain from hard work, but emotional and psychological pain stemming from loneliness, hopelessness, and depression. Second, health care systems in nonurban regions are often unable to address the underlying sources of their patients’ pain, leaving analgesics as a convenient short-term solution. And third, once introduced, opioids could not be confined to medical settings. Because the sensations of physical and mental pain often coincide and desires for recuperation and recreation often comingle, the boundary between opioid use for pain relief and opioid use in search of pleasure or escape is frequently ambiguous. Consequently, policing the proper use of opioids was a recrudescing preoccupation that often followed xenophobic and class-based boundaries—opium dispensed by a doctor was a miracle drug, but the same substance smoked by Chinese immigrants or injected in vice districts was a menace.

In this chapter I explore the cycles of opioid boom and backlash that have lashed backcountry California for over a century, culminating in the influx of pharmaceutical opioids in the late 20th century and the emergence of heroin use in the 21st. I link the recurring issue of opioid and other drug use to enduring structural sources of pain and poor health, then enter the small mountain town of Acorn, Oak County, and follow the arc of pharmaceutical opioid prescribing and the rise of heroin on the ground. This history is rife with makeshift solutions with unintended consequences. Providers in Acorn, facing patients in pain and possessing relatively few tools, relied for years on generous opioid prescribing as an expeditious but superficial fix. But as awareness of the overdose crisis grew and professional opinion turned against opioids they abruptly reversed course, leaving some patients without legal sources for the opioids on which they were dependent. Some residents tried to fill the resulting gap in opioid supply by seeking out and supplying the town with heroin for the first time in memory.

Approaching Acorn

Acorn nestles at the edge of an oblong valley, the outer ring of its five thousand residents’ homes nipping at the ankles of densely forested hills. A two-lane highway twists out of the mountains and sweeps down into the valley to bisect the little town. A wooden welcome sign sprouts from a grassy meadow among grazing cattle to greet entering visitors. Traffic slows to a crawl as the highway narrows into Main Street, providing time to admire downtown Acorn’s cheerful row of one- and two-story painted-brick shops, neatly kept parks shaded by tall and

bulbous oaks, modest church steeples, colorful gardens, and gleaming courthouse. Side streets unfurl for a few blocks in either direction until they dead end at the rising hillside on one side and at pasture fences on the other. As motorists pass through town, the evergreen hills ripple in and out of sight behind buildings like parents hovering over the valley. The cultivated rusticity of quaint homesteads, antiques, signage, and craft production was an important influence on small-town habitus. In the backcountry, imagining the future often involved recalling and refurbishing the past.

Miners and other settlers from the east staked out numerous camps in what would become Oak County during the mid-19th century California Gold Rush, including one that was later named Acorn. The mining boom drew others to the region over the next several decades. Ranchers and farmers settled into the valleys, planting crops and raising cattle for beef and dairy. Dozens of sawmills sprouted along rivers and rail lines as newcomers demanded lumber for mines, homes, and businesses. Their arrival was disastrous for the indigenous peoples of California. By the turn of the 20th century their populations were cut by up to ninety percent by disease and state-sanctioned campaigns of violence and dispossession (Madley 2016). In Oak County they lost at least half their members, according to a local historian. The demographic and economic waves that transformed California crested and declined in the postwar period. Technological advances and shifts in demand reduced timber employment, while conservation efforts and changes in forest policy restricted logging (Raphael 1994; Beesley 2008). Though sawmills were still among Oak County's largest employers, only a handful still operated in the region.

Acorn's limited commercial landscape was enriched by a familiar and amiable ambience. Eateries included a walk-up burger stand, a sit-down Italian restaurant, a cheap pizza joint, two diners, two sandwich shops, two modern cafes, and a coffee shop too cozy to keep any conversation private. A grocery co-op competed with two chains and a dollar store. On summer afternoons the warm air could be leavened with folk music drifting from the farmer's market, or hum from the rumble of races and concerts outside of town. As evening fell and the sky bruised, people strolled among a handful of drinking establishments, from the Pink Flamingo, a cozy wine bar, to the Log Cabin, a dim dive decorated with mining memorabilia, to Downtown Pub, a sports bar that hosted weekly karaoke and taco nights. Oak County offered ample opportunity for outdoor and wilderness recreation but lacked cultural amenities, and for many young people boredom predominated, as it had for decades. In a late-1980s article in the *Pioneer*, the primary newspaper in Oak County, the director of the local recreation district acknowledged the widespread sentiment that there was "nothing" for teenagers to do in the area, leading many to drink and use drugs. Those I interviewed more recently confirmed that young people still had to "make their own fun." Daniel, a white man in his mid 20s, moved with his mother to a tiny village near Hillside when he was in elementary school. "It felt like living in the middle of nowhere," he recalled. "Trying to find things to do without getting into trouble was the hardest thing to do when I was growing up."

Services were similarly sparse. local health care system employed a half-dozen primary care physicians, five substance use therapists and counselors, and three pharmacists. Three criminal defense attorneys represented indigent defendants against three prosecutors in the district attorney's office, presided over by a similar number of judges. With so few legal professionals, specialization was difficult and choice limited. The people I interviewed who used illicit drugs typically knew most or all the town's doctors and lawyers through personal experience or stories from friends. A restricted pool of professionals is a key factor in weak and

personalistic bureaucratic fields. Lower wages, fewer clients, and occupational isolation awaited anyone who hung out a shingle in Acorn. The hospital, court, and other institutions had trouble attracting and retaining practitioners. The small clique that remained relied on one another to meet the town's legal and therapeutic needs, with interpersonal trust and charisma rather than bureaucratic regimentation scaffolding their work. The reduced ranks of professionals also contributed to acquainted marginality. With only a few judges handling all legal matters, contact between the court and its parties in everyday life was inevitable. The same was true for the town's doctors, nurses, therapists, and health and human services staff, who often lived near their clients or encountered them around town. Casual observation and conversation could elicit clinically or legally relevant information, such as a rekindled relationship or consumption of alcohol. Multiplex ties between authorities and their constituents were easily appropriated for disciplinary or paternalistic ends.

Backcountry life was also shaped by landscape, climate, and ecology. Direct routes between settlements yielded to topographical tangents and tectonic interruptions. Cultivation and production all followed the advance and retreat of the seasons across the ranges and valleys. Hikers, bikers, fishers, and vacationers canvassed the land through spring and summer, giving up ground as rain and snow arrived. Subjection to the exigencies and dangers of the natural world was another key input on small-town habitus. Isolation and exposure to natural forces taught residents to take additional precautions and to anticipate obstacles, delays, and hazards. These conditions also shaped the circumstances under which they used drugs.

A brief history of backcountry drug use

Heavy substance use arrived in California with the first waves of white settlement. During the Gold Rush, “the saloon was arguably, next the miners themselves, the most ubiquitous” economic force in the state. “Literally no settlement” was without an establishment where weary miners could purchase a drink to celebrate or commiserate.⁴⁵ Opioids also permeated the United States in the 19th century. Per-capita importation of opium for the manufacture of morphine increased consistently from 1840 until its peak in 1896 (Musto 1999: 2). In an era when patent medications were widely sold and those containing opioids did not require labels, many Americans consumed morphine, laudanum (a tincture of morphine in alcohol), and heroin as ingredients in common remedies. In addition to pain relief, opioids were taken as sleep aids, for digestive issues, and to combat diarrhea—constipation having long been noted as a side effect of their use. As in the present, heavy opioid use in sparsely settled regions was often a pragmatic, makeshift response to limitations in medical care. Opium was a common therapeutic tool in remote outposts and on wagon expeditions in the Western United States, where trained physicians were scarce and lay doctoring was common (Bethard 2013; Agnew 2014).

Chinese immigrants brought with them to California the pastime of opium smoking, including out to the gold diggings and mountain villages. Oak County's historian writes in a book on the area that each of Oak County's Gold Rush-era settlements featured a small Chinatown with its own opium den. Though medicinal use of opium was widespread among whites, the practice of smoking the same substance was reframed as a nefarious foreign vice. Opium smoking—productive of pungent aromas, performed with unfamiliar equipment, enjoyed

⁴⁵ Maxwell-Long 2014; see also Johnson 2000: Ch. 3; Holliday 2015.

in somnolent settings and often in repose—was seen as the sensory and social opposite of the carousing elicited by saloon drinking. Of course, opium soothed the pain of Chinese workers just as it did that of whites, and smoking was as much a shared activity as drinking (Sinn 2013). The technical complexity of the practice, which involved heating and molding hunks of opium several times using a needle and specialized pipe, “was not so simple as downing a spoonful” of patent medication, and “ensured [smoking’s] status as a social, rather than a private act” (Courtwright 2001a:70–71). Opium smoking spread from Chinese ethnic enclaves into the criminal underworld in the later decades of the 19th century. Opium dens often became hubs for gambling and the sex trade, while rumors spread that the habit was ensorcelling affluent white women as well (ibid:62–77).

Ironically, the association between oral opiate use and addiction helped popularize an even more habit-forming mode of administration. The hypodermic syringe—originally invented to inject morphine—was introduced to the United States in the 1850s and within two decades had become a staple of medical practice. Some 19th century physicians believed that addictions were akin to appetites that sprang from the digestive system, and that, in the words of one doctor, “the danger of the habit of opium-eating will be avoided if we inject the opiate” (Rosales 1998: 105). A century before the introduction of OxyContin and its repurposing for non-oral use, patients acquired syringes from drugstores and friends to escape medical oversight of their morphine use. When true syringes could not be found, a needle could be attached to a “medicine dropper with a bulb on the end,” a baby bottle nipple, or even a pacifier (Courtwright et al. 1989:110). With these rudimentary tools scars and abscesses were virtually unavoidable, singling out people who injected from those who took opioids by other means. Ethnic prejudice, fear of moral corruption, and disgust at the act and effects of injection combined to uniquely stigmatize opioid use at the end of the 19th century (Brownrigg 2019).

State laws limiting opiate sales and use accumulated around the turn of the 20th century, and in 1909 importation and nonmedical use of opium were prohibited. In 1914 the Harrison Act extended that ban into a more comprehensive system for the regulation of “narcotics” (Musto 1999). In the 1900s and 1910s, the *Pioneer* reported on opiate-related arrests and deaths around the region, using their hardships to illustrate the “degradation and horrors resulting from the morphine habit.” An investigator from the state Board of Pharmacy explained his agency’s undercover operations against doctors and druggists in a statement published in the *Pioneer*. State law prohibited the sale of drugs like opium and morphine to “habitual users,” so the board enlisted drug “fiends” to pose as patients and catch prescribers willing to skirt the law.⁴⁶

Then as now, anti-opioid enforcement efforts reached directly into the social fabric of small towns. In the late 1920s, a doctor relocated with his wife to Oak County from the California coast and took over the practice—and home—of a departing physician. Less than five years later he was arrested for illegally dispensing morphine and sentenced to three years of probation and several months in the Oak County Jail. The conviction did not dent his reputation. He resumed his medical practice immediately upon release and continued caring for patients in the area for more than a decade until he moved to another part of the state. He maintained ties to Oak County for years, returning to visit friends, manage his real estate holdings, and serve as a court witness, all while maintaining a practice in his new town.⁴⁷

⁴⁶ This paragraph is based on twelve articles published in the Oak County *Pioneer*.

⁴⁷ This paragraph is based on ten articles published in the Oak County *Pioneer* and other newspapers.

Panic over drugs in the mountains reignited in the 1960s and 1970s as a reaction to the coastal counterculture and transformation of backcountry economies. The shrinking timber industry and spread of back-to-the-land groups encouraged the growth of an illicit marijuana industry that was perceived by many as a dire threat to traditional ways of life (Raphael 1985; Anders 1990). In Oak County, law enforcement showcased confiscated marijuana and heroin to the public. A panel of “convicted felons” warned youth that using marijuana could get them locked up “in the pen.” The *Pioneer* ran large advertisements from addiction treatment providers proclaiming that heroin “has no favorites” and a “pill-taking” society was pushing youngsters to experiment with “speed” and “acid.”⁴⁸

Public concern over drug use was selective. Until at least the mid-1980s and likely later it was tradition for Oak County’s high school seniors to speed out into the dark woods with kegs of beer to celebrate graduation. Oak County’s elected sheriff Rick Evans, who grew up in the area, remembered that era—in uniform from behind his office desk—with a mix of nostalgia and embarrassment. “When I was in high school, we drank [whispering] *a lot*. I mean... [silently mouthing the word] *drank*. It’s what you did, you know, especially later in high school. Keggers out in the woods, I mean, *all the time*.” The 1960s drug scare was more smoke than fire: at least one year, the *Pioneer* noted, Oak County recorded zero drug arrests. The newspaper also became a battleground over the reputations and memories of locals who used drugs. In the early 1970s after the *Pioneer* reported that a young performer from Acorn was found dead of a heroin overdose in the Bay Area, several of his friends wrote letters to the editor insisting that the man was a “proud resident” of the area who was “cared for” by many. Even people with less sterling reputations were important members of the community, like one young, wealthy man who gained notoriety from repeated arrests around the Christmas holidays. His death from an overdose in the mid-1970s elicited several letters ruing his early passing.⁴⁹

Pharmaceutical opioids were not unknown in Oak County prior to the overdose crisis. When sheriff’s deputies broke up an Acorn drug ring in the late 1970s, they found opioid pills along with some syringes and a “small” amount of heroin. A few years later a man was taken into custody after forging a prescription for painkillers, and a nurse was arrested for stealing opioids to sell. And other drugs were not difficult to obtain. The Oak County Sheriff’s Office ramped up anti-drug efforts in the 1980s, forming a drug enforcement unit and a SWAT team that raided illicit marijuana grows and swept through every town in the county, sometimes netting dozens of suspects at once. The sheriff solicited information in the *Pioneer*—asking residents to report suspicious activity such as increased traffic at a neighbor’s home—hired new deputies to infiltrate local schools, and paid informants from outside the county to pose as newcomers looking for drugs.⁵⁰

Arrests for cocaine and methamphetamine sales were common, but heroin was virtually nonexistent. As far as I can tell the drug was first found in the county in the mid-1970s, when a drug raid unearthed a \$25 hunk of black tar along with much larger amounts of marijuana and amphetamine pills; a similar quantity was discovered a few years later. But in the late 1980s a sheriff’s deputy tasked with drug enforcement admitted that despite “a lot” of cocaine flowing into the area, he had found no heroin.⁵¹ Sheriff Evans told me flatly, “you couldn’t find heroin in

⁴⁸ This paragraph is based on six articles published in the Oak County *Pioneer*.

⁴⁹ This paragraph is based on eleven articles published in the Oak County *Pioneer*.

⁵⁰ This paragraph is based on seventeen articles published in the Oak County *Pioneer*.

⁵¹ This passage is based on three articles published in the Oak County *Pioneer*.

Oak County thirty years ago to save your life. As a deputy and as a detective, [I] *never, ever* came across heroin. And now we see heroin regularly.”

Injection drug use in Oak County was first and most prominently associated with methamphetamine, not opioids. Starting in the mid-1980s sheriffs regularly discovered injecting paraphernalia in their drug raids, usually with meth and other drugs. A brief report in the *Pioneer* from the early 1990s on two methamphetamine-related arrests included a large, close-up crime scene photograph of several spoons and syringes. It appeared alongside a glowing profile of the drug enforcement unit that featured pictures of a gun cache found at the home of “a suspected drug user or dealer.” Toward the end of that decade, a long interview with a woman in recovery from meth addiction introduced readers of the *Pioneer* to the practices of syringe sharing and neck injection and the details of injection-related injuries and scarring. But now that the woman had moved from the California coast to Oak County to be near family, the newspaper assured readers, she had quit the drug and found a “much improved lifestyle.” Though boredom and hardship pushed some toward substance use, others held fast to the hope of pastoral recovery.⁵²

This historical sojourn reveals several consistent themes. First, despite public perceptions, opioids are an old and established element of social life in nonurban and remote places. Unprecedented levels of opioid-related mortality have brought new attention to a perennial issue. Extended-release opioid tablets of shipped to small-town pharmacies were a high-tech, corporatized version of the opium boluses carried into the Western United States on wagon trains. Second, in rugged and isolated settlements sustained by brutal and dangerous labor, these substances—like the alcohol consumed in innumerable saloons—addressed real and pressing needs in for pain relief, sociability, and euphoric escape from unpleasant circumstances. While opium was dismissed in 1900 by one physician as “the lazy doctor’s remedy,” the agonies it relieved were real and alternatives were often scarce.⁵³ The persistence and proliferation of nonurban opioid use in the present reflects the endurance of hard living conditions.

Finally, and despite these preceding themes, opioids were repeatedly framed in the backcountry as invasive threats, either pushed by encroaching ethnic groups or emanating from urban dens of iniquity. Symbolic oppositions between immoral cities and the upright countryside date back to the colonial era; in the second half of the 20th century in particular, accounts of heroin use in crumbling and abandoned urban centers crystallized the connection between city living and civic decline in the minds of many Americans (Schneider 2008; Conn 2014). What was distinctive about the pharmaceutical boom of the 1990s and 2000s was that prescription pills did not easily fit the mold of a criminal urban infiltration, and so seemed more trustworthy to many patients (Daniulaityte et al. 2012). But their rapid uptake revealed the persistence of untreated pain and unresolved angst in nonurban places. When pills in turn became scarce those vulnerabilities remained, and some residents searched for another source of relief.

Opioid boom

Dr. Frank Meyers served as Oak County’s public health officer and picked up shifts in the emergency department at Acorn’s small hospital. In medical school in the 1980s, “we were taught to prescribe opiates appropriately when people have acute, severe pain,” he recalled, “but

⁵² This paragraph is based on approximately fifty articles and sheriff’s blotter entries in the Oak County *Pioneer*.

⁵³ Kennison’s comment on Crothers 1900:413, quoted in Courtwright 2001a:50.

[to] be aware, they're very habit forming.” The opioid mantra back then was, “*Caution, caution!*” But as he passed one decade and then two in Acorn, he began to fall out of step with his colleagues. “I noticed that nurse practitioners and doctors” trained after the introduction of stronger painkillers in the 1990s “were much more liberal with opiates.” In a small county it didn’t take many prolific opioid prescribers for their effects to be felt in the emergency department. “We had two or three docs that came here around the same time, same thing: if you had chronic back pain, a lot of people were ending up on Dilaudid⁵⁴ or methadone.” Initially Dr. Meyers was shocked, but eventually chalked it up to medical progress. “I really had no idea that we were an outlier, I thought this was going on everywhere... It was like, the world has changed. This is the way we do things now.”

Dr. Meyers’ perception was not inaccurate. Until the mid-1980s, pain was a minor focus of medical education and prescription of opioids was often discouraged. But new opioid medications using timed-release technology—including MS Contin, a predecessor of OxyContin introduced in 1984—and new research purporting to show that opioids were rarely addictive helped change medical opinion. In the 1990s organizations like the American Pain Society, the Joint Commission on Accreditation of Healthcare Organizations, and the Veterans Health Administration endorsed treating pain as a “fifth vital sign” around the same time that OxyContin appeared on the market. Physicians trained in this new professional context and armed with powerful new tools became accustomed to prescribing opioids for more and more varieties of pain (Meier 2003; Quinones 2015; Baker 2017). The number of opioid prescriptions increased across the country, more than doubling nationally from 1992 to 2010, but was concentrated in certain places and among certain people (Pezalla et al. 2017). Throughout the 2000s and 2010s the top one percent of prescribers were responsible for one in five opioid prescriptions and more than forty percent of all opioid doses in the United States (Kiang et al. 2020). Opioids tended to be prescribed at higher rates in nonurban compared to urban places (Prunuske et al. 2014; Guy et al. 2017; Lund et al. 2019). But rates were highest in mountainous and mining-dependent regions like Appalachia, the Southwest, and backcountry California, with much lower rates in other rural regions like the Great Plains (McDonald et al. 2012; Rigg et al. 2018).

From the mid 2000s to the mid 2010s, Oak County residents were prescribed opioids at approximately twice the statewide rate. In many years Oak County had more opioid prescriptions than residents (Centers for Disease Control and Prevention 2020). Overdoses followed. “I’d see the people coming in the ER where they’d come in and they’d be overdosed, and I’d have to keep them overnight,” Dr. Meyers remembered. Each incident came as a shock. “We’re a little ER, we’re gonna see fourteen [patients] a day. We’d see an overdose like that maybe a couple a month, maybe one a month. It doesn’t seem like a lot—I saw also three hundred other patients—but we knew there was a problem.”

The physicians prescribing opioids to these patients were not strangers to Meyers, and after treating someone who overdosed he would sometimes try to get their doctor on the phone and probe their decisions. He rehearsed one of those conversations, adopting a tone of politely naïve concern. “Hey, wow, you know, it does look like they’re on an awful lot of dope. You know, I sure hope you’re not going to give ‘em the same amount because, you know, that person almost died. The next time they might die.” By now he was chuckling and stammering nervously, like a passenger pleading with a reckless driver. “Uh, and you really should, you

⁵⁴ Dilaudid is a brand name for the opioid hydromorphone hydrochloride.

know, *be careful!* You know, is there any way I can help, you know?”—he imitated being brusquely brushed off the phone—“Okay!” Click. Even in a tight-knit medical community providers did not appreciate nosy colleagues.

Some Oak County physicians who prescribed opioids profusely were experienced hospitalists and family doctors who cared for complex patients their colleagues were reluctant to treat. Health care providers in nonurban places face a “double disparity” (Harris et al. 2016). On the one hand, they serve populations that are in worse overall health than their urban counterparts. Inequalities in health and mortality between urban and nonurban areas have been growing for decades (Singh and Siahpush 2014; Cosby et al. 2019). Nonurban residents suffer from higher rates of many leading causes of death, including heart and respiratory diseases, cancer, stroke, suicide, and unintentional injuries, contributing to higher burdens of chronic pain (Moy et al. 2017; Rossen et al. 2018; Garcia et al. 2019; Zelaya et al. 2020). On the other hand, nonurban health care systems are smaller, weaker, and more fragile than urban systems. Rural areas have suffered health care provider shortages for decades, with the most remote areas at the most disadvantage. Professional isolation, lack of opportunities for specialization, and limited employment and social opportunities for spouses and families often discourage providers without biographical or vocational affinities for country living from settling in nonurban places (Hart et al. 2002; Hancock et al. 2009; MacQueen et al. 2018). Shrinking populations, uncompensated care, and unsustainable operating costs have forced many rural hospitals to close, leaving providers that remain with less competition to maintain high-quality services (Government Accountability Office 2018; Frakt 2019).⁵⁵ Offering patients pain medication was an easy and effective way of relieving pressure on the local medical system and soothing patients who could not or would not access more intensive care.

On top of their patients’ medical complaints, backcountry providers in tight-knit communities faced significant social pressure to fulfill requests for opioids. Margaret Nelson, a physician assistant who worked at a federally qualified health center (FQHC) just over the Oak County border, described her own introduction to the area.

What happens is, whenever you’re new... all the people who use [opioids] in the community come and test you, come and see what they can get out of you. And so when you first start you’re just *deluged* with the most unpleasant visits of people who wheedle you, or kiss your butt, or get angry if you’re not doing what they want, to try and see if they can get a lot of opiates out of you.

And once you establish and it becomes known that you’re not a soft touch, those people—they don’t come to you anymore. (DS: How long did that take?) *Years*, oh, it takes a long time to fill your schedule with your nice, solid patients and just kind of weed out the chaff! [laughing] It’s really painful.

Coworkers also prodded her to prescribe more opioids, in part to share the emotional burden and risk they entailed.

⁵⁵ Nonurban local health departments also tend to employ fewer staff with a narrower range of skills and to perform their essential public health functions worse than urban departments (Harris et al. 2016).

[When] I came and took a permanent job here ... I would say, [firmly] “No, no, no—*no*, I don’t prescribe long-acting morphine, *no*, I don’t this, and I don’t do that.” And the doctor who was here actually came to me and said, [whining] “Well, you know, if you say no, then *I* just have to see them,” and pressured me into saying yes. And I remember thinking, “I don’t want to do that, [shrugging reluctantly] but alright.”

While some prescribers offered opioids with the sincere hope of helping their patients, others seemed to take advantage of the region’s weak professional oversight and shortage of qualified providers by offering doses and combinations of medications well outside their colleagues’ conventions. An older physician named Jenkins lived near the end of a secluded wooded road in a small town called Hillside half an hour from Acorn. Dr. Jenkins once worked in a clinic in town, but after it closed he welcomed patients into his home. They would wait their turn in the living room while he examined patients in the dining room. He would listen to their complaints, scratch out a few notes (or not), and prescribe opioids and other medications on prescription pads bearing multiple addresses. Sometimes patients would leave his house with pills in hand.⁵⁶ Daniel was friends with Dr. Jenkins’ stepchild and spent time at his house. In high school he broke his hand and received 100 Percocets for pain.⁵⁷ When he later reinjured the same hand, he returned to Jenkins’ home as a patient, continuing to receive Percocets for years. He remembered the doctor was “kind of like Colonel Sanders,” avuncular but soft-spoken. A white woman in her twenties named Tasha told me that for over a year she received four hundred opioid and benzodiazepine pills each month from Dr. Jenkins. She smiled as she reminisced about her visits to his home.

They made it *just* like a doctor’s office. They would give hors d’oeuvres in the morning, like breakfast biscuits, and you’d have tea and coffee if you’d like, and water, and there was a restroom you could use. It was actually really quaint... it was pretty professional—I mean, for how illegal it was!

Doctor Jenkins’s colleagues grew more and more concerned. The pharmacist in Hillside stopped accepting the prescriptions he wrote on old pads from his defunct clinic.⁵⁸ Referring to Jenkins, Dr. Meyers told me that, “we had one doctor who we knew was way overprescribing. I had numerous conversations with him about like, how come this 30-year-old woman is on methadone or Dilaudid?” But Jenkins was adamant about his decisions. “Oh no, doctor,” Meyers remembers him saying, “She has horrible, horrible pain and there’s no other doctor who will prescribe this for her, and I really have to prescribe it.” He was, according to Meyers, “really convinced that we were undertreating a lot of our patients.” Some of Jenkins’ patients suffered from agonizing conditions—work injuries, scoliosis, cancer, fibromyalgia, neck and back pain—but he seemed

⁵⁶ Some details in this section are drawn from public records of investigations into Dr. Jenkins’ medical practice.

⁵⁷ Percocet is a brand name for a combination of the opioid oxycodone and acetaminophen.

⁵⁸ Pharmacists were key gatekeepers in the backcountry. Each pharmacist had access to a significant portion of their town’s medical information and controlled a significant proportion of their medications. These ties contributed to acquainted marginality. For instance, Daniel told me he stopped filling his opioid prescriptions in Hillside because his elementary school teacher was married to the wife of the pharmacy owner, who would later become an elected county official.

to know that some came to see him for other purposes. “You know, they call me the Candyman,” one patient told me he said to them, apparently to reassure them about his generosity.

Doctor Richards, a supervisor at Acorn’s primary care clinic, shared similar concerns about Jenkins’ practice. But he also expressed some sympathy for the situation faced by older sole practitioners like Jenkins. They encountered patients with health needs that exceeded their local resources but could not or would not travel to specialized services elsewhere. Opioids offered a defensible escape from this double bind, Dr. Richards explained.

We’re paid by productivity. Productivity is primarily office visits. An office visit where you literally say, “Hey, you know, everything’s the same? Okay, here’s your prescription, come back in a month,” you know, that’s an easy way to make money. So I don’t want to say there isn’t a financial motive at all.

But bigger than that, I believe, is simply, we’re all pretty burned out. I know saying “burned out” is pretty vague, but we’re all—we’re busy, stressed, we’ve got enough work, you know? And having conversations with patients that would maybe lead to a reduction in their opiate [use] is like, a very long, difficult, arduous, *emotionally draining visit*, you know? It pays the same as the one where, you know, [chuckles] you say, “Everything’s okay? Okay, see you next month.” It takes a lot of energy and time, and it’s not reimbursed, you know? And the patients are perfectly happy to have you just kind of gloss over it. So you’re pleasing the patient [and] you’re making your day easier if you don’t—if you just get lazy about it.

What I feel can often happen is, later in people’s careers they’re more prone. If they’re kind of, maybe they... [choosing his words carefully] uh, they’ve fallen off a little bit, and they’re not at the top of their, you know, [chuckles] top of their game. They know these younger, more recently trained, more energetic, quicker, smarter doctors are in here now. It’s just, I guess, an easy way to keep the practice going.

And I think people can justify it in their own minds. I believe probably the majority of them honestly think they’re doing the right thing, you know? That if I don’t give it [opioids] to them, they’re gonna go shoot heroin, or they’re gonna get it from somebody else.

The perennial “lazy doctor’s remedy” of generous opioid prescribing reflected serious challenges in rural medicine, on the one hand of severe pain and on the other of isolated, overburdened, and ethically entangled providers.

This double bind of widespread pain and economic decline is not entirely unique to nonurban areas. Gabriel Winant (2021) describes a corresponding situation in Rust Belt cities where withering manufacturing industries left aging workers in need of more care. In cities like Pittsburgh, however, “the health crisis did not go untreated” (ibid: 202). Instead, a growing health care economy “and the public support on which it relied came to shelter the economically displaced somewhat. Care for the poor was undoubtedly worse in quality and hard to access... [but] still exceeded the assistance offered elsewhere” (ibid). In contrast, nonurban health care systems have been negatively affected by declining numbers of patients, decreasing reimbursement rates from Medicare, and, in some states, the failure to expand Medicaid under the Affordable Care Act (Cosgrove 2018). But policy responses to high opioid prescription rates focused heavily on changing or punishing those individual prescribing decisions rather than improving nonurban systems of care.

Opioid backlash

In a county as small as Oak, even a single death could be a catalyst for change. Jeremy Bingham arrived in Oak County in 2015 to manage the county's HIV/AIDS services program and watched as attention to the overdose crisis first coalesced in the area.

When I first got here we had a young person [who] overdosed on fentanyl... Someone's son at work, it was a friend of theirs. People in the community all knew this young person... And I sort of was asking, like, "Oh, do we have any naloxone here?"... So I organized this whole training where we had people from [an urban harm reduction program] come up, and we packed the library and people came for that talk...

But like, that [program]'s not here, like, *there's nothing here for people!* How can that possibly be? We have to do something... I think people *knew* that there was a lot of deaths, but like, no one had looked at the numbers. There was work happening on the medical side, and awareness that there was a problem, but I don't think that there was a full community effort before.

What Jeremy meant by "work happening on the medical side" was rapid reductions in opioid prescribing encouraged by law enforcement pressure on the one hand and changing professional standards on the other.

In the late 2000s and 2010s the Drug Enforcement Agency, California Medical Board, and Oak County Sheriff launched investigations into local doctors and nurses that left some on professional probation and cost others their jobs. Dr. Royce, a physician in the town of Timberfall, about an hour from Acorn and half the size, received probation for writing opioid prescriptions for herself under family members' names; the investigation elicited supportive letters from her patients in the *Pioneer*. A nurse was caught stealing opioids from their employer; another was arrested for heroin possession. Both lost their licenses. Dr. Meyers was shocked by his colleagues' behavior, including Dr. Croft, who practiced in a town about an hour from Acorn.

We knew of a doctor in the Grandee region—when I moved here, I admired this guy to death. Five years after that, I found out this guy is way overprescribing opiates, you know, he's one of the candy men up there!

The area's dense professional networks ensured that questionable practices like Croft's and Jenkins' were well-known. "Docs talk, you know, it's a club," Dr. Meyers explained. "I talked to the other docs in town and in the ER and after a time, you know who the people are that are overprescribing." Sometimes they went beyond talk; in Jenkins' case, "several of the ED docs, we started calling the DEA" directly, Dr. Meyers told me.

Doctor Jenkins moved out of the county after multiple investigations. In their reports, the state medical board investigators noted that Jenkins' home did not have an exam table or other equipment and that his paperwork was lacking. Though he treated patients and dispensed controlled substances from his house, he left his doors unlocked. This was common neighborly practice in Acorn. I also left the house where I lived unlocked whether I was home or not. Leaving homes and vehicles unlocked was a subtle way of indicating trust in others. It was also a reflection of the relatively low crime rate in the area, and of residents' belief that thieves

wouldn't get far in the backcountry before getting caught, spotted, or stuck. But the gesture took on different connotations and consequences in the case of a putative medical clinic. Other practices—like exchanging firewood for fentanyl lollipops, as one patient remembered Jenkins doing—similarly reflected a bent for barter common among backcountry residents but incompatible with the bureaucratic and ethical standards of contemporary medicine. Jenkins passed away before I began my research. In an obituary, his children recalled with fondness how patients would come to their home to see their father.

Providers in and around Oak County also reevaluated their own personal standards and limits. Dr. Richards told me he stopped prescribing OxyContin fifteen years prior after seeing patients become addicted to it, and Margaret told me she would not “be prescribing methadone and OxyContin anymore, [I] haven't prescribed fentanyl in a long time... [and] I've said no to Dilaudid for a long time.” In late winter 2018, four physicians held a town hall meeting at a cavernous recreation center in Timberfall to discuss their approaches to pain management. Along with Meyers and Royce the panel included two doctors, a man and a woman, who were relatively new to the area. I was one of a handful of people in the audience who were not affiliated with the local hospital system. Aside from the doctors, all of the hospital staff present were white women; most wore their hair long with straight bangs. Doctor Meyers told us that “forty people a day” were dying from prescription opioid overdoses, not including “the people who are shooting up,”⁵⁹ but patients' pain hasn't improved. In fact, he continued, “what we're finding out now is that... it's *better* if we can find a way to take them off” opioid medications.

Speaking after him, Dr. Royce—only a few years removed from professional probation for self-prescribing—boasted to the audience of adopting this mission in her clinic with zeal. All of her patients receiving opioids signed pain contracts and took drug tests with severe consequences.

One hundred percent of the time with my patients, [if they break the contract] I refuse to prescribe controlled substances ever again. And we have this argument, “what if I break my leg?” *Bummer!* [the audience laughs] You know, you've lost your privilege.

She avouched to have reduced opioid dosages for “almost everybody” and to have stopped prescribing to five patients for transgressions in the previous year, including a longtime patient who “lied like a rug” about the results of a urine screening. Her at-risk patients, she assured the audience, were “not a bunch of homeless deadbeats,” but residents of some of the county's most affluent areas and likely neighbors to those in attendance—“you may know them.” The intimacy and geographic isolation of the small county pushed doctors and patients closer to one another physically and socially. This proximity generated unavoidable ambivalence in their relationships. On the one hand doctors knew patients' lives in detail and could be strongly motivated to alleviate their suffering; on the other they often witnessed patients' struggles and foibles firsthand and were dogged by a sense of personal complicity in their fates that was exacerbated by the lack of local professional support.

⁵⁹ At the time Doctor Meyers was speaking, deaths involving prescription opioids had for two years already been matched or exceeded by deaths involving heroin and deaths involving illicit fentanyl. See National Center for Health Statistics, National Vital Statistics System, Mortality Multiple Cause Files, 2016–2018 (https://www.cdc.gov/nchs/data_access/vitalstatsonline.htm#Mortality_Multiple).

Shifts in prescribing behavior were encouraged and sometimes entrenched through new rules and standards. In 2016, California's prescription drug monitoring program introduced mandatory prescriber and pharmacist registration and automatic alerts for certain dosages and combinations of opioids, changes which were associated with decreases in opioid prescribing (Castillo-Carniglia et al. 2021). State grant programs also incentivized implementation of stricter opioid monitoring, including the Public Hospital Redesign and Incentives in Medi-Cal (PRIME) project that began in 2016 (Pagel and Schwartz 2017). Among the most significant of these efforts at standardizing practice was a guideline published in 2016 by the Centers for Disease Control and Prevention that offered recommendations on initiating, continuing, and monitoring opioid therapy for chronic pain and assessing benefits, risks, and harms of opioids (Dowell et al. 2016). It recommended incorporating nonopioid therapies when possible and helping patients who developed opioid use disorder seek treatment using medications like methadone and buprenorphine, sometimes called medication-assisted treatment (MAT). One of the guideline's recommendations (ibid:22) attempted to quantify appropriate dosages:

5. When opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when increasing dosage to ≥ 50 morphine milligram equivalents (MME)/day, and should avoid increasing dosage to ≥ 90 MME/day or carefully justify a decision to titrate dosage to ≥ 90 MME/day.

The guideline also included a table for converting dosages of common opioids into their morphine-milligram equivalents, though these conversions are challenging to standardize across the full range of opioid medications, are made differently by different providers, and are often influenced by patient characteristics (Kroenke et al. 2019; Pergolizzi et al. 2019).

The CDC guideline was quickly incorporated into safety-net systems and health care funding mechanisms around the country. By 2018, 34 states including California had implemented the guideline or planned to do so in Medicaid fee-for-service programs, and eighteen states required or planned to require managed care organizations to use the guideline (Centers for Medicare and Medicaid Services 2019). Its dissemination was associated with significant downward shifts in opioid prescribing, including in settings like postsurgical care to which it was not intended to apply (Bohnert et al. 2018; Goldstick et al. 2021; Gumidyala et al. 2021; Sutherland et al. 2021). How professional standards are adopted in practice depends on whether standards align with providers' own goals, whether organizations have mechanisms for reliably imposing standards on their staff, and whether professionals find ways to evade, neutralize, or reappropriate the standard to their own ends (Timmermans and Berg 1997). Even if guidelines like the CDC's are effectively implemented, they may not have the intended effect on opioid prescribing or may simply accompany rather than independently influence changes in professional behavior.

In and around Oak County, the CDC guideline provided an authoritative professional shorthand that entrenched and seemingly accelerated changes in opioid prescribing that were already afoot. Margaret told me that the guideline—especially its MME thresholds—encouraged her personal about-face on opioid prescribing and offered her a readymade shield against patient complaints.

Since the CDC guidelines came out last year, I've gotten super hard-assed, and I am harassing—I say that jokingly—I am *working* with my patients on getting everybody down on their dosages...

I'm telling you, those CDC guidelines that came out last year just tore it for me, I [was] just like, *yes*, somebody has come out and said, "Here's the number!" And it makes it so easy for me because... I say [to patients], "You watch TV, you know what's going on in this country, all this talk about opiate addiction," and they can't deny it, because it's *everywhere*... And then I say, "These guidelines came out last year and they're *very clear*: you cannot take these two medicines together."

Hanna Perkins, a registered nurse who was hired at Acorn's hospital to implement new performance standards, explained how the hospital used the guideline as a basis for a highly restrictive facility-wide opioid prescribing policy.

We kind of took the CDC guidelines and modified them a little bit. We actually took the morphine mil[ligram] equivalents that the CDC guidelines had and dropped them, because we want [patients] to be seeing pain specialists sooner... Ours is fifty [MME], so if they hit fifty, then they need to be seeing the pain specialist.

And Dr. Richards described how the guideline, including its recommendations that prescribers use signed "pain contracts," urinalysis, and other surveillance tools, reshaped his colleagues' practices.

I think [the CDC guideline] helped us to identify those [opioid] levels where we say hey, we're over our head here. And it created, I think, a new awareness that as primary care providers who don't have expertise in managing chronic pain, we should be really uncomfortable treating this patient with chronic non-cancer pain with more than fifty morphine-milligram-equivalents a day. That should be something that we don't see very often and get really uncomfortable with when we do, and that we make every effort to get that person to somebody else [a specialist], and work on reducing their doses...

Every single exam room's got a bulletin board with a poster that basically says our monitoring guidelines, our prescribing guidelines. They sign an annual consent form, which sends the message that hey, yeah, you know, we're offering you something that's actually kind of risky, are you sure you want to do this? ...

And then they also sign a contract agreement, which means that they have full knowledge that we may very well call them in, we will require urine testing, we will potentially require a social worker visit, and things like that...

Patients, they're getting this message that, you know, *we're* being monitored, *you're* gonna be monitored. This is like a real serious deal. I think the word is out in the community, and so no one really is surprised when they find out, I have a urine test, or you're gonna count my pills, that kind of thing. Public awareness has really increased on it.

So I'm actually grateful for all the negative press because it's just allowed us to do what we wanted to do, [chuckles] and it's made it easier because patients know that this is not some harebrained idea that we [came up with] because we had too much time on our hands.

Doctor Meyers pointed out that unlike sole practitioners like Dr. Jenkins, physicians employed by hospitals, FQHCs, and other health care organizations were bound to their facilities' policies, including with respect to pain management and opioid prescription. The financial challenges of maintaining a small rural medical practice meant most providers in Oak County were associated with such organizations, and as a result their policy changes could have relatively rapid community-wide effects.

Implementing some opioid restrictions, for instance against receiving prescriptions from multiple providers, contradicted local norms like the reluctance to second-guess decisions of professional peers. Hanna told me how she pushed physicians in Acorn to communicate more openly with one another about their prescribing decisions.

If I'm prescribing a Percocet to you and I signed a contract with you saying that you don't go anywhere else, if you go see another provider and the provider is like, harping on you for going to me or going to another provider, I kind of said to the providers, you know, you shouldn't just be harping on the patient. You should be picking up the phone and calling the [prescription] writer and saying, hey, do you mind if I prescribe to your patient or do you want me to tell them they have to set up a different appointment?

Requiring patients on high and moderate doses of opioids to see a pain specialist was framed as an expansion of the continuum and quality of care. But Oak County employed only one part-time pain specialist and other pain clinics were hours away in larger towns and cities. At the Timberfall town hall meeting Dr. Molina, who worked in a large metropolitan research hospital before moving to the mountains, explained that “in the city we were able to have this whole entire team” of specialists, “where we would admit the patient for an entire month, and we would slowly get them off” opioids. But “in rural America,” he complained, “we don't have that multidisciplinary team... it's basically just us, the family doctor or a nurse practitioner, and maybe a nurse.” Doctor Royce echoed him that “the hardest thing on earth is to find access to treatment centers in rural areas.” She trained in acupuncture for years and offered the alternative therapy to “five or ten” patients regularly, but for many in Oak County capping and rapidly tapering opioid doses had the practical effect of restricting rather than enhancing pain treatment.

Opioid prescription rates in Oak County plateaued through the early 2010s and began declining rapidly around the middle of the decade, falling over one-third in three years. Prescription rates statewide also began falling around the same time but did so more slowly and from a much lower peak. It was several more years, however, before significant efforts began in Oak County to expand harm reduction services and treatment for opioid use disorder. These included a “hub-and-spoke” system to link isolated treatment providers to regional comprehensive hubs, implemented in 2017 (Snell-Rood et al. 2020), and the CA Bridge program to provide treatment medications in emergency departments, Tribal MAT Project, and Naloxone Distribution Project, all in 2018 (NASADAD 2019). Consequently, pharmaceutical opioid supplies tightened in Oak County before harm reduction and treatment services arrived.

As pills became harder to find, some began to sell and use heroin in the county for the first time in memory. Sheriff Evans saw a clear connection. “As it becomes more difficult to obtain the prescription medication, now we have heroin.” Oak County District Attorney Alan Corbett noted the same transformation.

Five years ago, if you asked me how many heroin cases we had in Oak County, I could answer right away: the answer would be *zero*, there were *no* heroin cases here. Now it is almost as prevalent as methamphetamine.

And Dr. Meyers observed transitions among his own patients.

Our deaths are like, 90 to 95% prescription opiates, [but] it's all changing... I have a patient who shoots heroin and everything and she's got this group of anywhere between eight and 20 friends and associates who are using heroin in Grandee. Well, that is like, really basically a new phenomenon for our county...

I saw a gentleman just a month ago at the jail... and that's exactly what he said. "My doc had me amped up because of my chronic knee pain until I was on Dilaudid eight milligrams, three times daily. And then all of a sudden, one day I go to the office and she says, we can't be doing this anymore." [...] So of course, heroin is readily available... so then for two years he's doing heroin.

The shift to illicit opioids in Acorn was an unintended consequence of the pharmaceutical opioid boom and subsequent backlash. In the 1990s opioids appeared, as they had over a century before, as a solution to the stubborn problems of untreated pain and weak medical systems. In local providers' efforts to address their patients' complaints with new tools they created dependence and demand that could not easily be allayed. As a result, some people with opioid dependence looked for a pharmacological substitute in the form of heroin.

Chapter 5. Inside a Small-Town Heroin Scene

Historically heroin was scarce outside major cities.⁶⁰ How did it become “readily available,” as Dr. Meyers put it, in places where it was not previously? In his bestselling book *Dreamland: The True Tale of America’s Opiate Epidemic*, crime reporter Sam Quinones (2015) pins responsibility on traffickers from the Mexican city of Xalisco, who took the taffy-like “black tar” heroin common in western states eastward to smaller cities where prescription opioids had created unmet demand.⁶¹ But heroin use and overdose also increased in regions outside of the so-called Xalisco Boys’ territory.⁶² R. Terry Furst and colleagues (2004) suggest another mechanism of heroin diffusion: nonurban residents who were dependent on pharmaceutical opioids and could no longer get them traveled to cities to purchase heroin and sold it back home to cover their costs. In Acorn, doing so required people to work together and pool their resources, creating a distinctive and unprecedented heroin “scene.”

Scenes are “activity systems” consisting of venues and networks that connect people who share enthusiasms (Irwin 1977:27). They may include formal markets as well as outlets for expression and socializing. Drug scenes take different forms depending on substances’ legal status and corresponding market structures. Bars that sell licit substances like alcohol operate openly and customers need no links to underground networks. Pharmaceutical drugs can be obtained legally through medical gatekeepers. When they circulate beyond prescriber-patient relations they often follow social ties among kin and friends, so that finding pills nonmedically requires some special social capital. However, those who share, trade, or sell their pills are not typically members of criminal organizations (Jonas et al. 2012; Daniulaityte et al. 2014; Hulme et al. 2018). Illicit drugs like heroin must be purchased in costlier clandestine markets. Cities can support semi-public, spatially concentrated drug markets on street corners and in storefronts and apartments that make locating suppliers easier. But successful purchases require knowledge and savvy that is not readily available to outsiders (Bourgeois 1996; Duck 2015). Towns like Acorn were too small and remote to attract organized drug sellers. Instead, heroin in Acorn was supplied by residents who purchased it in urban markets. As a result Acorn and other small towns I studied developed what one of my participants described as “*carpool*” drug scenes.

In this chapter I chart the rise and transformation of the Acorn heroin scene, showing how some residents sought out heroin in response to shrinking pill supplies and how they bought, sold, and used the drug in town. Just as local prescribers’ decisions could increase or decrease

⁶⁰ Courtwright 2001a; Schneider 2008. One exception is northern New Mexico, which has long histories of heroin use (Garcia 2010).

⁶¹ See also Díaz-Briseño 2010. Black tar heroin is a dark and resinous product manufactured in Mexico. It is difficult to divide up prior to dissolving, which typically requires heat, leaves significant residue, and is prone to clogging syringes. Black tar heroin use is associated with more severe vein damage, skin and soft tissue infections, and illnesses such as botulism, gangrene, tetanus, and necrotizing fasciitis (Ciccarone and Bourgeois 2003; Mars et al. 2016).

⁶² Compare Quinones’ (2015: ix) map of Xalisco turf with Stewart and colleagues’ (2017: Figure 1) maps of growing heroin-related deaths. Black tar is sold in eastern markets such as Ohio and the Carolinas but has not displaced powder; instead, novel powder products have spread across the country (Mars et al. 2016; Ciccarone et al. 2017; Drug Enforcement Administration [DEA] 2018a; DEA 2018b).

the availability of pharmaceutical opioids, individual drug sellers could exert influence over the volume and composition of the town's illicit drug supply. And geographic isolation and lack of alternatives bound backcountry residents who used and sold heroin to one another despite perennial arguments and betrayals. On the demand side, customers could not easily exit the local scene due to lack of outside sources of heroin or lack of transportation (Hirschman 1970). On the supply side, sellers relied on their regular customers' money to finance their own drug use and survival. The result was a kind of simultaneous monopoly and monopsony in miniature, in which both supply and demand were concentrated in a small group of individuals that were consequently in constant exchange with one another. These mutual entanglements meant their transactions mixed the logics of impersonal market exchanges between autonomous agents that carried no future obligations, and personal gifts between interdependent associates that would eventually have to be repaid.⁶³ The "moral economy" that emerged through their interactions encouraged reciprocity and mutual aid, but ambiguity and disagreement over which exchanges followed which logics sparked many of the conflicts among scene members (Bourgois 1998; Bourgois and Schonberg 2009: 82–85).

From pills to heroin

When I first met people who used opioids in Acorn in early 2018, pills could still be found in town. After our first conversation in February of that year, Drew, a Native man in his early thirties, asked for a ride to one of the remaining sources. We pulled into to a small mobile home park a long stone's throw from the sheriff's station, and Drew knocked at the door of one of the trailers. Hearing no response, he opened the unlocked door to look in vain for the trailer's inhabitant, a man named Terrance. "I could do a morphine [pill]," he offered like a consolation prize. We drove across town to another mobile home park. Drew disappeared down a long and shadowy row of campers and trailers, then returned a few minutes later and got in the car without a word.

At home, Drew retrieved a syringe and pulled two round, maroon, thirty milligram morphine pills from his sock, which he purchased from an older man at the second park. He sucked on one of the pills for a few seconds, then spat it into his hand and wiped off the colored coating with the hem of his sweater. Placing the now-white tablet in a spoon, Drew crushed it with the butt end of a plastic lighter, then scooped several drops of tap water from a glass into the spoon with the flat end of the syringe plunger. He held mixture over the lighter as the powder dissolved, then tore a long tuft from a cigarette filter and dropped it into the spoon.⁶⁴ Inserting the needle into the clump of fiber, Drew pulled back the plunger until the barrel was nearly full.

⁶³ In a study of gift practices in several ancient and indigenous societies, anthropologist Marcel Mauss (2002 [1925]) argued that gift exchanges are not transactions of private individuals but part of systems of reciprocity that span social groups, and that at stake in them is not merely material ownership but the honor and status of the participants and their groups.

⁶⁴ People who inject drugs use filters to remove clumps and particles that can clog syringes and cause serious health problems if introduced to the bloodstream. Filters specifically designed for injection drug use are more effective at removing particles than those made from cigarette filters or cotton balls but are not available in many places and can be more difficult to use (Scott et al. 1998; Keijzer and Imbert 2011). Fiber filters retain drug residue and so are often reused when drugs are not available, as I describe in detail in Chapter 6. They also retain infectious agents like

Tightening a belt around his right forearm and muttering under his breath, Drew cupped his right hand downward and with the fingers of his left gently prodded the small veins running across his right thumb and forefinger. Finding a promising spot, he inserted the needle and worked it in and out and side to side in millimeter-sized motions, feeling for the point entering the blood vessel. After thirty seconds with little progress, Drew removed the needle, retightened the belt around his left arm, and tried again in the corresponding location. A bulb of bright red blood in the syringe barrel signaled his success, and he drove the plunger home.

As the shot took effect and he relaxed into his chair, Drew complained that “most of the time lately, me using hasn’t even really been to get high, it’s been just to get well,” that is, to avoid slipping into opioid withdrawal. Others shared this experience, dividing their experience into two states: “sick,” or in withdrawal, and “well.” The therapeutic analogy was earnest and extended: they called dissolved heroin “medicine” and safeguarded it as carefully as any prescribed pharmaceutical.⁶⁵ Once they developed opioid dependence, consistent use helped them feel “normal,” that is, lucid, pain-free, and capable of daily tasks, and became necessary to avoid withdrawal, or “getting sick.” As pills became scarce, the need to stay well pushed Drew and others to switch to heroin.

Terrance and Daniel were two of the sellers that facilitated the scene’s transition to heroin. Daniel in fact claimed to be the first. After investigations closed Dr. Jenkins’ practice and interrupted Daniel’s Percocet supply, he began buying OxyContin from a friend who taught him to smoke the pills off foil to obtain a more immediate high. Not long after he learned from another friend to use heroin the same way.⁶⁶

I walked into my buddy’s room one day and I just see them smoking stuff off of foil, and I thought it was a pill and it wasn’t. They were smoking black [tar heroin]. And so yeah, I was interested, and I asked him, and that’s when I started smoking it.

Daniel’s buddy lived in Silver City about two hours from Acorn, where heroin was easy to find, and Daniel developed a routine that others would later follow. “[I’d] pick up from him and come back, and I’d sell enough to be able to go and re-up again and still have enough to where I was getting high. And I would do that every other day, pretty much.” His operation expanded rapidly.

I used to go to Silver City and pick up a bunch, and then I’d go to L.A. and pick up *a lot*... A girl I was seeing at the time, it was her uncle or cousin... and so I was

hepatitis C virus and so can pose risk of disease transmission if shared or reused (Doerrbecker et al. 2013).

⁶⁵ Connors (1994) reports the similar language of “getting cured” among her participants in Massachusetts. Following the same analogy, people who inject drugs call those who help others inject “doctors” (Brothers 2019). I put “staying well” and its variants in quotation marks throughout to indicate that it is a folk rather than analytic term.

⁶⁶ To smoke pills or other drugs off aluminum foil, the substance is placed on creased foil and held over a flame, releasing fumes that are captured and inhaled through a straw or other tube (Strang et al. 1997). Heroin smoking is relatively uncommon in the United States, in part because the dominant heroin products tend to burn rather than vaporize, eliminating much of their euphoric effect (Ciccarone 2019a).

selling it for her. And then I found out how much she was getting for the price and I jumped on that bandwagon pretty quick...

When I was going to L.A. I was picking up about an ounce at a time, so I only had to go once a week... Sometimes we had it shipped up to us in the mail... But I knew there was profit to be made in Acorn, so I was selling it at \$20 a point.

Daniel supplied six or seven daily customers, “running all over the place, all over town.” Law enforcement took quick notice and tried to use acquainted marginality against his circle of friends and customers.

People used to get caught [with heroin] walking from our old [house]. The cops would pressure them and try and have them self-incriminate themselves, and then they’d end up spilling, dropping names, and saying what was going on. And that’s how my name got brought up, and I was being watched.

But because Daniel was not on probation and refused to talk to the sheriffs who stopped him, “the cops knew what I was doing, but they could never get me.”

We were sitting in Drew’s kitchen as Daniel told this story. While he talked, his girlfriend Kim came over carrying a syringe of weak heroin that she had received from Drew, knelt in front of Daniel, and pointed to a spot on her forearm. He took the syringe and gently massaged her arm before inserting the needle. Kim moved to Acorn several years before to help her grandmother run a store in town. One day a friend offered her OxyContin. Kim remembered it feeling like “God coming down from heaven and giving you a warm hug.” She asked her friend for more, which they got from Terrance. Terrance grew up in Acorn, but his reputation in town as an adult was mixed. After several encounters with the law as a young man he found legal work, but he also became a reliable supplier of opioid pills, including pale blue thirty-milligram OxyContin tablets he sold for twenty or thirty dollars each. Drew told me that Terrance turned to selling pills because he lost his job, “he didn’t have no money, he had gotten hurt at the time, and they prescribed him a bunch of Oxys.”⁶⁷

People using prescription opioids could only switch to heroin if the drug was available for them to try. Few people in Acorn had the time, resources, and wherewithal to travel like Terrance did to cities and buy enough heroin to resell in town. Because of their central positions in the town’s drug transaction network, changes in the practices of these key individuals reshaped the entire scene. A few weeks after Drew and I went looking for Terrance at home, Drew recounted how the shrinking pill supply led Terrance to start supplementing his income by selling heroin.

[A year ago, in early 2017] there was three to four probably good main dealer sources to be able to get stuff to get well, and then... it seemed it went down to like, one or two, and then it ended up going down to one.⁶⁸ And then after that one got popped then, shit, it

⁶⁷ This paragraph is based on fourteen articles in the Oak County *Pioneer* and interviews with Drew and other members of the scene. Terrance was unwilling to speak with me, but he was a fixture in the lives and stories of almost all members of the scene.

⁶⁸ These sources included the people I introduce below as Daniel and his girlfriend Kim, Victor and his partner Monica, and Ron.

was *ridiculous hard* to get anything for a good minute. And then we talked the one guy who always gets pills [Terrance] into getting black... I explained [that heroin] may be cheaper for *us*, but *he* would still be able to make *his* profit if he would go out of town to pick it up. So it would work for everybody, not just one person.

The timeline Drew described aligned with the accounts I heard from Hanna and other providers. The pill supply dwindled after efforts by local hospitals to implement more restrictive rules on opioid prescribing. Scarcity pushed up the price of pharmaceuticals past that of heroin, realigning the incentives of local sellers. Drew said more about this price advantage in another conversation.

I talked [Terrance] into it, 'cause he was whining about how he wasn't making any more money off the pills. He was fucking *charging up the ass* when he would bring 'em here! I was like, bro, if you want to fucking make actual money, you gotta switch your game up. And he did, and started making money again.

Terrance was the most reliable heroin seller in Acorn, in part because he did not use the drug himself. Drew echoed a view I heard from more than one of his customers.

With Terrance I can go over there usually whenever I need to, I just—here, there's my money, boom, got my stuff, and I'm out. With everybody else I gotta call 'em, meet up with 'em, or go to their house and have to wait, or wait for a certain time to go over, it was all a process. Terrance, it was quick, easy.

At twenty dollars for a tenth of a gram (a "point"), the heroin Terrance sold in Acorn was two to four times the prices charged in urban areas like Silver City where Daniel's connection lived, or Garden City where Terrance bought it, a small city an hour and a half in the opposite direction. Their customers paid the premium because they could not or would not make the trips themselves.

Terrance was arrested on opioid-related charges in summer 2018, which came as a shock to some Acorn residents. Brandon Lewis, one of Jeremy Bingham's colleagues in the public health department, told me that the charges against Terrance—one of his "closest friends," someone he knew growing up in town—constituted a "witch hunt" that would "throw his reputation through the mud for no reason." Some of these reactions struck Drew and Victor as hypocritical; if Terrance hadn't been so well known, "they would've been like, 'Good job cleaning up the *scum!*'" They inferred that Terrance had been set up by another member of the scene, whom they believed was the last to buy from him before sheriffs raided his house. To maintain their heroin supply, Drew and Victor started catching rides to Silver City themselves.

A 'carpool' drug scene

During my fieldwork, the heroin scene in Acorn included ten to twenty-five members, depending on who was in town, who had money, who was trying to quit, and who was on good or bad terms with whom. For decades sociologists have tracked how poor urban residents form resource-sharing networks with kin, friends, and strangers (Stack 1974; Edin and Lein 1997). Ethnographer Matthew Desmond (2012: 1296) argues that to survive eviction and other crises,

poor city dwellers often rely on “disposable ties formed with new acquaintances” that are “brittle and fleeting, lasting only for short bursts.” Repeatedly “forming, using, and burning” ties (ibid.) necessitates finding replacements, often through organizations such as shelters, service providers, and illicit drug markets (Bourgois and Schonberg 2009). Doing so was harder in the backcountry where populations were small, newcomers rare, and memories long. Relations within the Acorn heroin scene were neither stable nor tranquil. Its members annoyed, deceived, and betrayed one another. But without alternatives, severing ties could mean the irreparable loss of money, drugs, favors, or intimacy.

Much of the scene’s activity took place before, during, and after long highway trips. Jonathan, a young man who lived in the town of Sage Flats, Sage County—which was comparable in size and isolation to Acorn and is the focus of Chapter 7—described the “carpool” drug scene that emerged in such places.

There’s not people that sell dope. There’s people that want to use it, and they need more... It’s like the concept of carpool. Now, the person willing to drive, that’s really just about it. [Their reason] could go from anywhere to, I lost rent, to my kids need diapers and my fucking older kid needs fucking money for the field trip. I’ve seen it that wide a variety.

The travel, time, and money required to maintain a heroin supply was virtually impossible for a single person to manage, so the scene was anchored by several couples, some romantic like Daniel and Kim and some friendly.

Aaron, a Latino man, had dated Antoinette, a white woman, for four years. Both were in their mid-twenties, and neither held formal jobs during my fieldwork. Aaron began using and selling heroin as a teenager in southern California after being prescribed benzodiazepines and trying other synthetic drugs. He moved to Acorn in his late teens in a failed attempt to quit. “I had never seen so many fucking trees,” he remembered, perched on the arm of a couch in the home he shared with Antoinette. “I came out here to stay away from drugs, and frickin’ got strung back out on it,” he admitted. He was jailed for hitting a sheriff at the end of a bad acid trip, where he met other people who used drugs, one of whom introduced him to Antoinette.

Antoinette was born and raised in Acorn. Her mother was heavily medicated for chronic health problems and her father was a “functional alcoholic.” She got Percocets and Valium from her mother as a preteen, and at age 14 was prescribed about 160 hydrocodone tablets by Dr. Richards for, she told me, a persistent cough and a painfully infected toe.⁶⁹ Antoinette’s father died in her teenage years and her mother passed five later; the losses pushed her into heavy alcohol and pharmaceutical use. Her striking height and unusual name made her instantly recognizable, including to law enforcement, and as a young adult she accumulated charges for public intoxication and driving under the influence. After a stint in a group home she returned to Oak County and found her way to Dr. Jenkins and other prescribers around the region. At one point, the Hillside doctor prescribed her 240 tablets of forty-milligram OxyContin, ninety Xanax,

⁶⁹ Valium is a brand name for diazepam, a benzodiazepine commonly prescribed for anxiety disorders.

and sixty Soma each month.⁷⁰ She also received pills from older relatives. Though she preferred to smoke pills off foil, she had injected heroin for several years, ever since asking a friend to inject her on the side of a scenic highway.

Victor, a Latino man in his late twenties, and Monica, a white woman about the same age, both grew up in the Bay Area. Many of Victor's male relatives were involved in the drug trade. He told me that he tried cocaine at age 9 with an uncle who also injected him with heroin at age 13, and that he sold drugs in San Francisco as a teenager. Monica's mother was linked to a large outlaw biker gang and was serving a lengthy prison sentence. Victor and Monica moved to Acorn about five years before I met them on advice of a relative who knew the area. Like Aaron, they were looking to escape the urban drug scene. "I thought we were moving to Bumfuck, Nowhere!" Monica told me. For six months they succeeded. But Victor met Daniel working at the pizza restaurant and began using opioids again. He initially hid his habit from Monica, but her curiosity about his attraction to heroin led her to ask him one day to inject her as well. Their experience selling drugs helped them set up shop in Acorn. They each served several months of jail time during my fieldwork, which along with their substance use prevented them from working.

Drew was Acorn's most consistent heroin seller, and the single-wide, two-bedroom trailer he shared with Beverly and their cat, Puzzle, was a hub of the heroin scene. In the carpeted living room three recliners—one missing a leg—a glass top side table, and a couch layered with blankets were arrayed around a television stand piled with hundreds of DVDs. Drew favored movies and shows with swaggering men and violent action, like Vin Diesel's films and the California-based outlaw biker drama *Sons of Anarchy*. Against the wall at the end of the couch were tall stacks of Beverly's romance novels. The room was adorned with tokens of Drew's Native heritage, through his birth father's line. Several dreamcatchers hung in the corner behind the armchairs. Next to the front door was a picture frame containing an image of a woman in deerskin clothing and an arrowhead, and behind the television was a painting on leather of a bald eagle stretched across a fur-accented wooden frame. Similar pictures crowded shelves next to childhood photos of Drew and his sister. The trailer was in poor condition. The back bedroom was uninhabitable due to black mold spreading across the ceiling, so Beverly slept on the couch and Drew slept on the living room floor. Their hot water sometimes went out and the drains regularly clogged. A section of the ceiling had collapsed into a cabinet above the oven. During the wet season water leaked in through the top of the front door. The propane heating system didn't work, so Drew traded a friend some heroin for a kerosene space heater that was not allowed under their lease and gave the landlord pretext to threaten eviction.

Drew's family had lived in Oak County and fought with the sheriffs for several generations. Beverly's father was shot by a sheriff's deputy, and her uncle was serving a long prison sentence. The surname they shared with Drew was well known to law enforcement. For a time when Beverly was younger she transported methamphetamine to Oak County. Now in her sixties, she suffered from cancer and other painful ailments and was prescribed Percocet for pain. Drew cared part-time for her as a home health aide. She sometimes sold her pills to neighbors or shared them with Drew if he could not get heroin. Likewise, when she ran out of pills and needed pain relief, Drew would squirt heroin under her tongue. She preferred to crush and snort her pills,

⁷⁰ Xanax is a brand name for alprazolam, a benzodiazepine commonly prescribed for anxiety disorders. Soma is a brand name for carisoprodol, a muscle relaxer prescribed to treat musculoskeletal pain that can also cause euphoric effects.

she said because swallowing was difficult. Drew, in a sour mood, once snapped at her, “Don’t lie, you just like snorting pills!” She did not deny that both could be true. “I still choke!”

Drew’s initiation into opioid use reflected the real need for pain treatment in places like Acorn and the limits of backcountry health systems. At age fifteen Drew’s back was crushed by a metal plate while he was working off the books at his father’s mechanic shop and he did not receive proper care. When he slipped on ice and reinjured his back several years later, his girlfriend at the time injected him with a morphine pill. “My body didn’t hurt, I felt upbeat, I felt like I could do anything,” he remembered. “I slept better on them, I functioned better, I was able to work better on ‘em ‘cause my back wasn’t hurting as bad.” Drew’s girlfriend taught Drew to use syringes, which he purchased at a pharmacy in a neighboring county by posing as a patient with diabetes.⁷¹ As Drew’s appetite for painkillers grew he sought prescriptions from multiple doctors around the county, including Richards. But they each terminated him for running out of pills too quickly or because methamphetamine was detected in his urine. As his access to prescribed opioids shrank, he turned to sellers like Terrance and began using heroin.

Transitioning from swallowing or snorting opioids to injecting them entails a multi-step learning process, often in communication with others (Becker 1963). A novice must learn to perceive new aspects of their body and articulate them with new equipment: to locate functional veins and avoid arteries by sight and touch; to prepare heroin and fill a syringe without waste or clogs; to angle and advance the needle with enough pressure to penetrate the vein without missing or impaling it; to pierce their own flesh without flinching or losing focus; to draw back blood into the syringe to confirm an accurate “register”; and to smoothly empty its contents and withdraw with minimal tissue damage.⁷² Most people I interviewed, like Drew and Victor, learned to inject from close friends and family. Some members of the scene, like Daniel, learned to inject from others or, like Kim, relied on others for assistance. Requests for such an intimate, delicate, and risky service bred resentment on the part of those who provided it, especially without compensation such as money or drugs (Brothers 2019).

Learning to inject also required revising one’s self-image, ethical limits, and personal presentation. Many people report that before they began injecting, they viewed injection as the mark of a genuine “addict” and its practitioners with disgust or hostility (Harocopos et al. 2009; Mars et al. 2014). Injection, especially of black tar heroin, also creates dark “track marks” that can be identified by law enforcement, health care providers, and others. This visibility led people in Acorn who injected heroin to reduce their interaction with those who did not use and limit the time they spent in public, especially if, like Drew, their drug use was not a matter of legal or neighborly scrutiny.

Drew’s days and nights revolved around using enough heroin to stave off pain and withdrawal. He usually woke at three or four in the morning, stomach churning and hot and cold flashes rippling through his body. He often preloaded a syringe before he went to bed so that he could alleviate his predawn discomfort and return to sleep. When he woke again a few hours later he would inject again, assuming he had heroin on hand, and would continue to do so at least

⁷¹ Pharmacists may dispense unlimited numbers of syringes without a prescription under California state law. But in practice pharmacy syringe access is restricted, and many pharmacists discriminate against people who use drugs or demand identification or other information. (Office of AIDS 2017; Syvertsen and Pollini 2020).

⁷² See National Harm Reduction Coalition 2020 [1998] for a detailed guide to injection techniques and safety considerations.

every two to three hours throughout the day. If supplies allowed he would spend most of the day reclining in the living room, mixing up shots, injecting heroin, making sales, caring for his body, and looking after Beverly. He occasionally ventured out to get cigarettes from the gas station a few blocks from their home, food from a discount grocery store, or mail from the post office.

Among the scene's regular customers were a clique of young women who grew up in Oak County together. They included Kaitlyn, a white woman in her early 20s who lived with her infant daughter at her grandparents' home, which was adjacent to one of Acorn's two nonprofit social services providers. She was open with them about her heroin use and relied on them for money, but her relative youth, parenthood, and lack of independence made it difficult for her to frequently travel to Silver City. She was often with her friend Isabel, who lived uneasily with her parents and, because she was unable to inject herself, relied even more upon others for money and drugs. Some of the more experienced customers in Acorn also acted as brokers for others who lacked their own direct connections to sellers. For instance, Elizabeth, who was a few years older than the other women in the scene, lived on her own, and sometimes gave others rides to the city, sold heroin and brokered deals for her less experienced friends, including Anna. These positions in the scene were not permanent: people who typically sold heroin could become customers if they couldn't make the trip. Likewise, customers could become brokers or sellers if they picked up from the city themselves. As I explain below, this unstable hierarchy encouraged buyers and brokers to deceive and collude against one another to obtain the greater profit and prerogatives that sellers accrued.

Antoinette and Aaron and Kim and Daniel owned cars that they could drive to and from the city. But for much of my fieldwork, Drew, Victor, and Monica were dependent on rides from their friends and customers. Among the customers who sometimes drove was Tasha. She grew up in Acorn with Antoinette and Isabel and was an avid gymnast from age three until the town lost its gymnastics program when she was thirteen. The nearest conditioning gym was an hour and half away by car, so Tasha abruptly quit the sport. As she lost muscle mass, the joints in her hands and hips began to deteriorate; she recalled enduring more than a dozen reparative surgeries by age twenty-one. She received opioid pills from Drs. Richards and Jenkins, and in her late teens was introduced to heroin by Antoinette. Drew told me enjoyed her company more than the other women, not least for her help and cooperation on their trips.

[Tasha]'s a really cool girl. I've known her, shit, since high school... She gave us the ride, helped us with the connect [in Silver City], you know, it was cool... Tasha told us where she was gonna go, she went to that one spot, didn't leave... Like, *that* was cool, like, she wasn't trying to fuck around.

This crew constituted the core of the Acorn heroin scene and were responsible for most of the heroin trade in town.

There were people in Acorn who used heroin but did not regularly interact with the main scene. Madison, a white woman in her mid-20s, split her childhood between Acorn and, after her father was released from prison and obtained custody of her, the Bay Area. She was introduced to heroin in her early 20s and bought it for herself in Garden City and Silver City. There were also hints that others not connected to the main scene sometimes sold the drug, especially as several sellers left Acorn, including Victor, Monica, Kim, and Daniel. In autumn 2018, Beverly took a friend to the emergency room. While they were there, a teenager was brought in whom Beverly overheard had overdosed on alcohol and heroin. Drew wondered, "where'd he get the

H?” Two months later, Drew noticed that his best customers were contacting him less frequently. “Somebody [new] is selling in town,” he surmised. Ten months after that in autumn 2019—I had moved away from Acorn but still visited occasionally—Drew discovered that a woman was selling heroin in town. “She’s got it popping, but she won’t fuck with Aaron or with me,” he complained. With no one to introduce me, the new sellers remained unknown to me as well. Just as Drew, Victor, Aaron, and the others replaced a previous cohort of sellers that included Terrance, they were eventually succeeded as others found their way into heroin use.

Selling drugs in the backcountry

At least once a week Drew ran out of heroin. He would text and call the few people in town who might have some of the drug, or who could give him money to buy it or a ride to the city. Providing money ahead of time rather than purchasing after the trip typically earned a customer a discount, while a ride would often be rewarded with a few points of free heroin, enough to cover a modest habit for a day or more. If Drew made it there with at least a hundred dollars he tried to buy one or two grams of heroin, each about the size of a large wad of chewed gum. Drew needed to use at least half a gram of heroin a day to “stay well,” and if he sold the rest in Acorn at \$20 a point, he made enough to cover the next trip. Planning a trip, gathering cash, finding a ride, using before departing, driving to Silver City, waiting for the seller, making the transaction, using before leaving the city, and returning home could consume an entire day. Once home, Drew would pinch off pea-sized points from the larger chunk and wrap them in shreds of plastic film or wax paper. He arranged most sales ahead of time over the phone. Customers would drive into the mobile home park, dart inside, hand over their money—sometimes with food or a household item they could claim to be bringing if they were stopped by law enforcement—converse for a few minutes, and stay to use their drugs if Drew allowed.

Heroin was usually paid for in cash but could also be exchanged for nonmonetary goods. Sometimes different drugs were exchanged for each other depending on personal preferences or goals. For instance, when Drew and Victor were able to obtain the opioid treatment medication Suboxone from friends or medical providers, they would sometimes trade it for pills or cannabis.⁷³ Suboxone, which comes in sublingual strips, was typically sought by people who did not inject or who were trying to reduce or quit using heroin because it provided a moderate high that could be measured into smaller doses by slicing up the strips. One eight-milligram strip of Suboxone traded for one point of heroin or its equivalent. “Subs go for twenty bucks,” Victor explained to me in late spring 2018, as he and Drew tried to arrange an exchange with Drew’s relative Jerry, who used opioid pills and other drugs but did not inject heroin. “It gets you just as well as a point, so they’re gonna charge you whatever a point goes for”—twenty dollars in

⁷³ Suboxone is a brand name for sublingual strips that combine the opioid treatment medication buprenorphine with the opioid antagonist and overdose reversal drug naloxone. The combination is intended to prevent nonmedical use: while naloxone has little effect when taken orally, if the strips are dissolved for injection the naloxone is intended to block any euphoric effect of the buprenorphine. The mechanism is imperfect; I observed Victor dissolve and inject a strip of Suboxone with no obvious naloxone-related effects. However, injecting the sublingual strips carried significant risk of vein damage (Horyniak et al. 2007). Both Victor and Alex, a young woman who lived in Sage Flats whom I introduce in the next chapter, developed abscesses that they attributed to Suboxone injection.

Acorn—“and in Garden City and everything else, it’s like ten bucks.” The price for larger doses of Suboxone scaled up accordingly, “so [a] twelve [milligram strip] would go for like, twenty-five or thirty” dollars, Victor continued. “That’s what I like about drug dealing,” he concluded with satisfaction. “The math just makes sense.”

Drugs could also be exchanged for other useful goods. On another occasion in winter 2018, after the propane heater in Drew and Beverly’s trailer stopped working and their landlord refused to repair it, Drew traded a bag of used cottons to a Grandee resident named Matthew for a finicky kerosene floor heater. Since goods like appliances could turn out to be faulty and were less easily converted to other resources than cash, such exchanges depended on a match in immediate needs (in this case protection against winter weather) and trust between the parties that the goods offered would be worth the cost. Matthew had less need of the heater than Drew as he lived in a cozy home with a fireplace and was trusted not to disclose Drew’s drug selling because Matthew’s wife held an administrative position in a local law enforcement agency and had much to lose were her husband’s own habit discovered.

Ostensibly isolated drug transactions implicated and affected the overall structure of relationships within the scene in at least two ways. First, because many members of the scene did not regularly work for a formal wage they had to obtain cash through other “hustles,” whether legal such as off-the-books work and borrowing from friends and family, or illegal such as selling or brokering drugs or fencing stolen property.⁷⁴ Hustles distributed the cost of a person’s habit—and the potential consequences of their debts—among their peers. Second, because transactions took place within a network of acquaintances, word of unequal or unreciprocated exchanges spread like fallout, tarnishing the regard in which the accused was held by others. As was seen in the previous chapter, occasional offerings of heroin from one person to another out of sympathy or largesse came, like all gifts, with the obligation to repay the favor at a later date whether in drugs, money, a ride, or some other compensation. But the inconsistency of Acorn’s opioid supply and the poverty of scene members meant these obligations often could not be repaid, pitting people in pain against each other and straining their personal relationships.

The most serious argument I witnessed between Beverly and Drew concerned five Norcos in autumn 2018 (Figure 5). Beverly got the pills from a neighbor by complaining of her swollen knee and promised she would pay for them after Drew received his next paycheck. Drew, who was sick and out of heroin, planned to sell them to an older neighbor they called Auntie with whom they regularly exchanged favors and use the profit to buy a small amount of heroin from Daniel and Kim. But when Beverly admitted to taking three of the pills, Drew was livid. “My knee is hurting,” Beverly moaned, to no avail. “I don’t give a fuck, that wasn’t your pills to be taking, Mother! I have to pay for these, still!” His voice broke with frustration. “You just fucked me over right there by doing that. I had fifteen dollars coming!” He would have sold the pills to Auntie for three dollars each, a discount from the five dollars he charged others.

⁷⁴ Hustling refers to informal income-generating activities that “require mastery of a particular type of symbolic capital, namely, the ability to manipulate others” through charm, deception, or violence (Wacquant 1998: 3). Generations of ethnographers have documented the centrality and necessity of hustling in poor Black urban neighborhoods due to lack of good-paying jobs and pervasive instability in everyday life (Valentine 1978; Anderson 1999; Venkatesh 2006). Nonurban places also feature hustling in informal economies and drug markets (Edgcomb and Thetford 2004), though the strategy, like that of finding and burning disposable ties (Desmond 2012), may offer shorter-lived returns in places with fewer potential marks (Scorsone 2021).

Beverly tried to reassure him. “Well, you got ten [dollars], and that’s enough for”—but Drew cut her off, his voice rising. “No, that’s not even ten bucks now! Auntie gets ‘em at three, she isn’t paying fucking the higher cost!” And Jerry, their relative with the injured back who would pay five dollars a pill, only wanted Percocets, not Norcos. Drew demanded that she phone another woman who was also prescribed Percocets and try to buy some from her to make up the difference. On the phone, Beverly adopted a piteous tone. “I need to talk to you. I’m hurting really bad, you should see my knee.” The woman told Beverly to come over, and I drove her there. When I picked her up later she clutched a bottle of at least a dozen pills. Back home she offered Drew three at first and then counted out five on his demand, keeping her hand wrapped around the bottle to hide its full contents from him. “She’s a hustler,” he exclaimed with a mix of frustration and respect, “she hustles her pills!” Beverly gave us a terse, crafty smile. “She may be old, but she still hustles. I gotta keep on my game,” he insisted to me. If he sold all five pills to Jerry he would make \$25, \$10 more than his initial plan, or he could sell three and keep two for future deals. “Now you can go buy us cigarettes” with the extra profit, Beverly instructed him. “Why?” he replied, pulling a ten-dollar bill from his pocket like a magician revealing a purloined watch. “I already had ten for that.” Each had actually hustled the other.

This incident illustrates three important aspects of backcountry opioid use. First, that the wellbeing of poor people dependent on opioids in places where they are hard to find is so fragile that it can be disrupted even by the unexpected loss of even one or a few pills. Second, how opioids motivate complex sequences of transactions that implicate larger social networks in an individual’s substance opioid use. Third, how the monetary value of opioids is moderated by the social relations through which they are exchanged, so that the same pills can carry different meanings and garner different prices depending to whom they are sold.

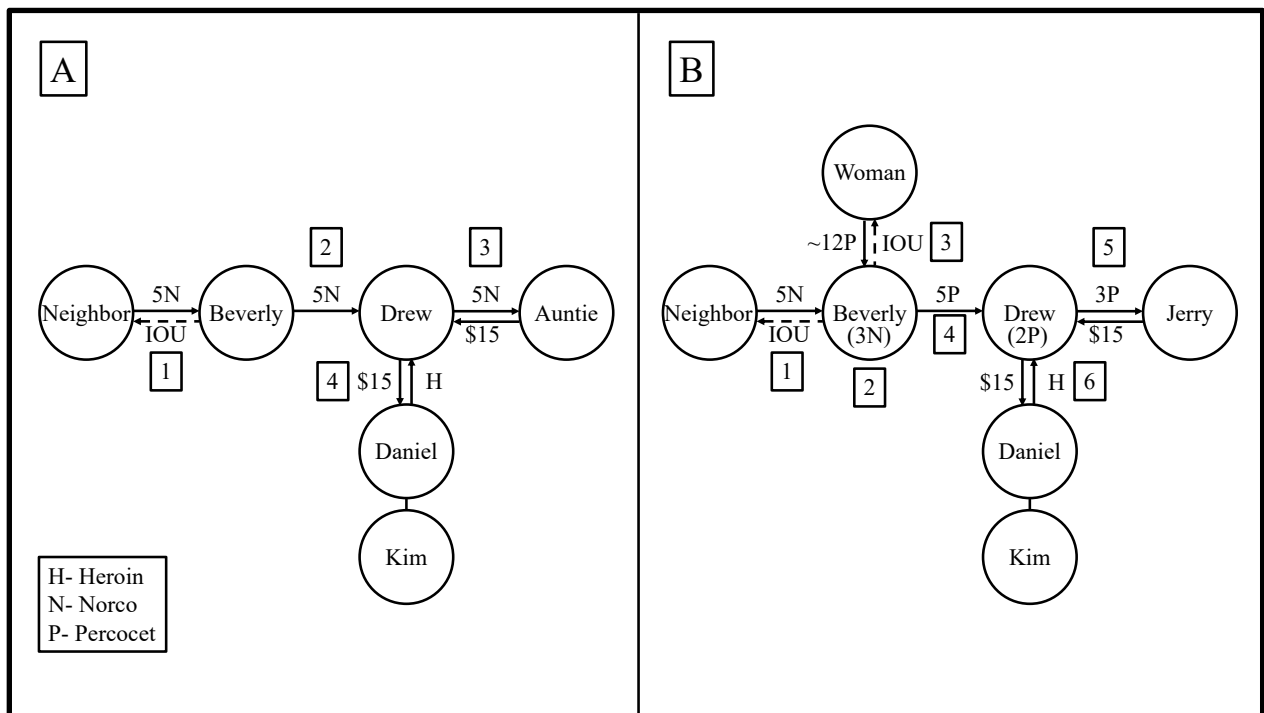


Figure 5. Planned [A] and realized [B] versions of Drew and Beverly’s deal to exchange pills for heroin. Boxed numbers identify steps in the process.

Drug selling crews in urban areas often compete with each other for turf and customers. They may try to claim key street corners or high-traffic routes, distinguish their products with unique brand names or packaging, or pitch customers quickly and aggressively to beat their rivals.⁷⁵ If sellers are affiliated with street gangs, supply-side competition can spark cycles of violence. In Acorn's tiny market, however, sellers often had to work together to buy and sell heroin. The practical need to pool resources and geographic distance from urban centers made urban battlelines irrelevant and even counterproductive, as I learned from Victor one late afternoon in spring 2018. I had given Victor and Drew a ride to Aaron's house to purchase two points and we were returning to Drew's trailer on a road that sliced through Acorn Valley. The setting sun spread warm yellows and oranges across the pasture. With heroin in hand the men were in good spirits, and Victor told me how small-town life helped him and Aaron—members of rival regional gangs—put their differences aside after some initial confusion.

In regular situations, we would never talk to each other. If anything, we'd be like, *enemies*, you know what I mean? And when we met... he hopped in the car and I saw his tattoos and I was like, "What's up, you know what I mean, this is [my turf], *you know what time it is!*" [...] Aaron's like, "Look, bro, we could either make problems, or make money, it's your choice... Besides, we're in the mountains," he goes, "what are we [gang]bangin' on, *the trees??*"

The remote physical setting and small-town social milieu of Acorn's heroin scene made its members behave differently than they would in a big city. Rather than being immersed in the market like many who use drugs in large cities, Acorn residents were outsiders with few connections. Rather than competing aggressively for customers, Acorn's heroin sellers had to cooperate constantly to make their trips. And rather than choosing among rival sellers, customers without transportation were stuck with what was brought to town.

A good trip

In spring 2018, Drew and Victor met a young woman named Vera who brokered heroin deals in Silver City and could get them a "ball"—an eighth of an ounce, usually rounded down to three grams—for \$180, or six dollars a point. On paper, Drew and Victor could charge enough for heroin in Acorn to make their trips financially viable. If they each kept one gram and sold the third at twenty dollars a point, they could make \$200, enough to pay for the next ball and gas for the next trip. But sustaining this equilibrium required self-control—neither to use up their share of heroin before the next trip nor dip into what they needed to sell—and diligence—to sell off that portion quickly and at full price. It also required making at least two or three trips each week while maintaining good terms with their regular customers.

To illustrate these intertwined dynamics, I recount an evening I spent in Drew's trailer in late spring 2018 after he and Victor returned from a successful trip to Silver City. When I arrived, Victor was enthroned in one armchair and Drew dozed in another. Beverly was sitting at one end of the couch, while Tasha did her makeup in one of the bedrooms. I took my usual seat

⁷⁵ Jacobs (1999: 43–65) describes strategies that urban drug sellers use to ensnare customers on the street and cultivate their loyalty.

at the other end of the couch and watched members of the scene converge to exchange money, drugs, favors, and gossip.

Victor announced their success with quiet pride. “It went good. We went up and it worked out. We went how I’ve been saying we should’ve done for the longest, just us... We showed up, it was quick, simple, really good stuff. It’s like, really strong.” He extended an unwrapped hunk of heroin toward me, and I caught a whiff of its vinegary aroma. “You can smell it? That’s the potent smell.”

Their reward was an afternoon of naps and chores. Beverly happily recounted how they cleaned her house and laughed with Victor at Drew dropping his cigarettes and drooling as he slept.

“You’re just jealous,” Drew mumbled.

“I *am* jealous!” Victor admitted. “I wish I could get like that. I can’t.” He held his hand up straight, then ticked it sharply to the side. “It’s like, almost there—OD. So I just don’t risk it.”

Soon Drew received a text message from a man named Ron, who purchased heroin from them and occasionally tried to sell it himself.

“Victor, can you do three [points] for forty [dollars]?” That was a significant discount from \$20 per point.

Victor furrowed his brow and stared at the floor, calculating. “I’ll do three for forty-five. That’s the best I can do. I gotta get fifteen apiece.” The men had purchased a ball between them, leaving Victor with five or six points to sell. At fifteen dollars per point, Victor’s six points would net \$90, barely enough to cover his half of another ball. Ron agreed, telling Drew he would be in touch once he left work.

Drew’s contribution to the purchase came from brokering the sale of some Norco pills,⁷⁶ buying twenty-five from one person for two dollars each and selling them to a woman who lived with Terrance for four. He wagered that buying heroin with the money he made from the sale would keep him well longer than swallowing the relatively weak Norcos, and that injecting the heroin would be easier than crushing, dissolving, and injecting dozens of pills.

Victor was thinking about other ways to make money. Aaron and Antoinette owed him sixty dollars for three points he lent them several days earlier. He asked Drew to text Aaron, but Drew kept dozing off. Victor shook his head. “That’s what everyone chases... I don’t get it, but it’s what I want too. That’s the fucked-up part.”

Drew ignored him and boasted to me about their connection with Vera, but Victor was annoyed that he had shared the news with Aaron and Antoinette. “I don’t know why you told them that too.”

“I didn’t say a name or anything,” Drew protested.

“Yeah, but there was no point to telling ‘em,” Victor reiterated. “Cause now if they do ask, that’s a whole thing.”

“And I’ll be like, I can’t get ahold of my person!”

A call from Kaitlyn interrupted the squabble. I could hear her voice leaking from the earpiece. “You bought today?” she asked.

“Uh, yeah,” Drew answered, trying to sound casual.

Kaitlyn’s voice rose in excitement. “*Yeah??* Can I buy a couple?”

⁷⁶ Norco is a brand name for a combination of the opioid hydrocodone and acetaminophen.

“Yeah.” Drew hung up and turned to Victor. “She’s paid you back, right, what she owes you?” Victor loaned her heroin on their previous trip. “She wants to buy a couple... so I wanted to make sure before you sold her anything that she”—

Victor interrupted him. “No, you didn’t! That’s why you answered before you looked at me and asked!”

A few minutes later there was a knock at the door and in came Kaitlyn, wearing leopard-print mini-shorts and a t-shirt, and Isabel, clad in a purple cardigan and tie-dye bell-bottoms.

Drew took two of the wax paper-wrapped points from Victor and passed them to Kaitlyn in exchange for forty dollars. “This stuff is some fucking fire,” he boasted.

Isabel edged toward Victor, hoping to catch him in a generous mood.

“You got anything to help me out with, Victor?”

“I don’t,” he answered flatly, explaining that he was still owed money by Aaron and Antoinette.

“Oh, really? Damn!” Isabel told us that she had not used in five days. “I should just stick with it.”

“I would, at five days.” Victor said. Drew agreed. By then, they reckoned, she was probably over the worst of the withdrawal and cravings. Plus, if she wasn’t using she would stop asking them for favors.

“Yeah, right?” Isabel said, not sounding convinced. Then, as if she said nothing about quitting, she rounded on Drew. “Do *you* have something you could help me out with? Just a shot? Remember when I shared with you last time? *Please?*” She stuck out her bottom lip in a pout. “*Pleeze?*”

Drew waved her off. “I’ve *been* sharing with you, sweetheart! I don’t have any, I have to save the rest of this.”

“*Just one little shot? Please?*” Isabel’s voice was high and urgent.

“I can’t, I’ve gotta save the rest of this!”

“I’ll give you money tomorrow!”

Drew paused, taken aback. “You still owe me!”

Kaitlyn called for Isabel from the bedroom where she was talking with Tasha, and Isabel retreated.

“Nobody shared with fucking us when we need it!” Victor hissed under his breath after she left.

“*Right??*”

“Nobody wants to help us out with a fucking ride.”

“For real!”

Beverly joined in. “She does that every time!”

“Yeah, every time!” Victor agreed.

Kaitlyn and Isabel wandered back into the room, Isabel singing snippets of Prince’s “Kiss.” “*You don’t have to be... to be my girl... ain’t no particular...*” Bidding us good night, they exited the trailer, the door slamming behind them.

“Not dealing with that.” Victor muttered.

Drew agreed. “Not with her again, shit. *Always* with Kaitlyn.”

“You didn’t fucking help me out *once*.” Victor said.

“All day long yesterday when we were asking her for a ride, she didn’t come through,” Drew added. “Maybe if you would’ve had some *money* maybe we’d have helped out, but you never have *money*, and you never *help*.”

“And Kait’s gonna help her out [share with her] anyways, so I don’t know why she does that, so she can get extra. And I gave her the two biggest ones.” Victor took a drag from his cigarette. After selling those two points for forty dollars he had three left, four if he dipped into his own supply, and he needed to make at least ninety dollars to cover his half of their next ball. “I need to sell the other three at twenty apiece.” As for Ron, “if [he] really can only do thirty [dollars], I can do—two is the best, you know what I mean, but I’m not gonna hold three for him.”

Drew reminded him of his leverage. “If anybody else hits you up, I mean, you could make that quick sale instead of having to wait for his ass, you know what I mean? You’re just being nice fucking waiting for him.”

Beverly groused about the young women hanging around. “Why do they come here to put their makeup on? I haven’t figured that out yet.”

“Cause Drew allows it,” Victor said with a laugh.

Drew did not disagree. “You’re gonna look pretty for me? I love it!” Beverly rolled her eyes.

The men admitted to me that they were attracted to several women in the scene. In a town as small and isolated as Acorn, the pool of potential romantic partners was limited. Poverty, drug use, and fear of arrest prevented them from spending time in the places where people in town flirted and partnered like bars, parties, concerts, and fairs. And the grinding schedule demanded by the heroin trade meant that they were often on the road, busy buying or selling, or too exhausted to entertain guests.

But there was a simpler reason why Tasha, Kaitlyn, Isabel, and others hung around the trailer, and why Drew and Victor often invited them in. The visitors needed heroin, and Drew was one of the only sources in town. And likewise, the two men needed to sell heroin to finance their own use, and the women were excellent customers.

Kaitlyn returned alone forty-five minutes later, having changed from her t-shirt into a sports bra. She handed over twenty dollars for another point, which she stashed in one of her bra straps, making sure to double-check for it in front of the men before exiting with Tasha.

Drew followed them outside to say goodbye and came back inside grinning. “Drew’s house is poppin’ tonight!”

“That’s not a good thing,” Victor muttered. Neighbors had noticed the frequent traffic, and a few weeks prior Drew and Beverly complained that someone screamed “heroin” at their visitors. The sheriffs who regularly patrolled the park needed no excuse to keep an eye on Drew.

Ron eventually agreed to pay Victor forty dollars that night for two points and twenty for a third in the morning, bringing Victor’s sales to six points of heroin for \$120, more than enough for his share of the next trip. And Drew reported proudly that Tasha had offered them a ride. With an evening of deals completed and their next trip planned, Drew settled happily into his chair and reached for a syringe. “I can finally do a shot now in peace!”

By traveling to buy heroin, Drew and Victor tried to make a virtue of Acorn’s remote location. They charged premium prices to pay for their own use while acquiring social capital in the forms of favors and companionship, but their success came with annoyances and unwanted attention. Customers arrived at inconvenient times, stayed too long, asked for too much, and behaved indiscreetly. Maintaining a steady supply of heroin required sellers to balance their needs to regularly travel, to sell heroin efficiently, and to avoid exposure. The mutual frustration expressed by sellers and customers when these needs clashed illustrates how small and remote towns exacerbate sociological ambivalence. While urban residents can burn social ties that no

longer benefit them, the lack of alternatives and the inability to leave meant people in the backcountry often maintained ties with unwanted peers and endured repeated conflicts and resentments.

Bad trips

Acorn heroin sellers sometimes could not travel because of delays, lack of money, or lack of a ride. If they reached the city they could be stood up, robbed, or assaulted. After returning they might discover that the heroin they bought was weak or underweight. And sometimes one person took more than their share and left their friends lacking. Since Acorn's heroin sellers financed each trip with the profits of the previous one and usually pooled their resources to buy larger quantities, the consequences of bad trips rippled through the scene. Sometimes that meant heroin was simply unavailable in Acorn.

Before the trip

Heroin trips took money, time, and transportation. The sellers bought as much as they could each time, often spending hundreds of dollars to supply multiple people. Garden City was at least ninety minutes away, Silver City at least two hours assuming no delays. Traveling also required a car or a ride and cooperative environmental conditions. Because of heroin's high cost in Acorn, scene members competed to make trips themselves rather than go along for the ride or worse, accept whatever was brought back. Mutual reliance and competition made their relationships more ambivalent and sometimes sabotaged their plans.

One morning in late summer 2018, I arrived at the trailer to find Drew and Victor huddled under thick quilts to quell the shivers of opioid withdrawal. They had no heroin and no vehicle and were trying to plan a trip. Kaitlyn owed Victor a hundred dollars, sixty for three points he had given her and forty for her share of what they planned to buy, which covered "half a ball, [and] I've got twenty-five in my pocket—that covers gas." But as Drew told me in another conversation, they did not place orders with Vera before securing a ride.

I don't like fucking around or wasting [Vera's] time or wasting my time. So if I tell [her] I'm coming over, I'm coming over, like, on my way there. Not like, oh, I'm coming over, then have [her] wait four hours and then find out I'm not coming over.

"Our biggest issue is the ride ninety-nine percent of the time," Victor explained as he considered their options. Elizabeth told them she too busy to drive. Aaron and Antoinette were also sick and unwilling to go, and Isabel refused because, she told Drew, she was trying to quit using. Tasha had not replied to a text from Drew, while Ron would later tell Victor that he was similarly "trying to figure out money and a ride."

Victor groaned. "That doesn't leave too many options."

"That leaves no options," Drew corrected him, except for Daniel, whom they anticipated would drag out the trip with "bullshit" side errands and prevent them from leaving "'til like, three or four today," which meant four or five more hours of worsening withdrawal.

About half an hour later, Victor got a text message from Kaitlyn. "Aw, *hell no!* Our plan is *fucked now!* Kaitlyn just said, I'll be home in a couple hours." A phone call to her grandparents' house confirmed that she had left the house.

Drew inferred that she took the money she owed Victor to the city with someone else, perhaps Ron, whose phone was no longer accepting calls as if he was on the highway with spotty cell service. Drew sniffed to stanch his running nose. “She’s using that hundred bucks to go pick up!” Even if they found a ride, without that money they wouldn’t be able to buy enough heroin to make the trip worthwhile.

“Well, now we’re fucked,” Victor concluded. “If she’s got my hundred, they can go down there and pick up a fucking ball, sell a gram of it, and then give me my hundred back, you know what I mean?” In other words, Kaitlyn could do to him what he usually did to her.

“This is the shit that fucks me over,” he complained. “Cause I didn’t have to front Kaitlyn three points. I’d have three points right now. I wouldn’t have that sixty bucks, but I’d have three points right now... so we’re not sick at least.” Nonreciprocity within the scene undermined the cooperation on which its members relied to “stay well.”

A few months later after almost a year of catching rides, Drew purchased an old sedan for four hundred dollars from the father of a man with whom Drew went to school. Though the car was bulky, scuffed, and unheated, it was a prize for Drew and Beverly. Before shaking on the deal, Drew took the car for a test drive with Beverly riding shotgun and me in the backseat.

We circled a few blocks as Drew tested the car’s instruments and controls. Then quietly, as if asking permission, he said, “Right, Momma?”

“Yeah,” Beverly replied. “We’ve got a car.” Drew patted her left knee gently.

Soon after we returned to the trailer with the car, Isabel called to ask Drew to accompany her on a trip to buy heroin. Previously he would likely have agreed, but now he had no need. “Hell no,” he crowed after hanging up the phone, “I’ll go to Silver City *my damn self!*”

During the trip

Preplanned deals regularly fell through, as when Drew traveled to Garden City in spring 2018 to buy heroin from a couple who used to sell the drug in Acorn. “I got ripped off yesterday, a hundred and forty dollars,” he seethed. He had run out of heroin and was in severe withdrawal. “I ended up throwing up on the way down [to Garden City], and then I threw up like, six or seven times on the way back up. I couldn’t even drive, the lady I was with”—an older woman who did not use heroin—“had to drive. I felt *bad*.” The sellers met Drew in Garden City and told him they would return with his heroin in twenty minutes. But after an hour Drew’s ride needed to leave—it was starting to get dark, and her car had no headlights. The sellers told Drew over the phone they would bring what they owed him to Acorn if necessary. With this assurance Drew left Garden City, but when he had trouble reconnecting with them later he realized he might have been deceived and threatened to “come back down there... and I’m gonna beat your ass.”

Drew took offense at the apparent trickery. “I told [them] it was kind of like a slap in the face, like you had it almost set up like you were gonna take my money, use it, and then today come through with a ball,” as he and Victor suspected Kaitlyn of doing in the previous episode.

Beverly mentioned another warrant for his suspicion. “With Aaron and them...”

Drew explained that the same sellers recently went with Aaron and Victor to Silver City and were also ripped off. Then they “called Aaron and Victor and told *them* to bring a bunch of money too... Victor’s thinking that they were trying to get payback by ripping me off and them, but [I’m] wondering *why me*, because *I* wasn’t involved in any of that shit!” Though Drew hadn’t been part of that specific transaction he had participated in many others, each reflecting

combined effort and resources, financed by previous purchases, and helping to finance the next. Despite periodic conflicts the Acorn sellers often acted in concert and so were seen as associates.

Unfamiliar urban environments also caused confusion, as Drew angrily explained after he and Vera were robbed of four hundred dollars in Silver City in December 2018.

She couldn't go through her person, and so she had to go through some other person... She went to go do the deal and she was waiting in the car for [their broker, another woman] to come back, and the girl left to go meet her dude and never came back! [...] But it was just a mixed-up day. Like, Vera should've waited for me to get there before she set it up, and she did it thinking I was gonna be there, and know exactly where to go and everything else, and like, I didn't!

I kept telling her I wasn't from Silver City! And like, she wanted me to meet her "downtown," and I was like, *girl*, I don't know Silver City, *I don't know where the fuck you want me to go!* Like, I have a hard enough time as it is trying to find the place you sent me to the first time, you know? And if we go *anywhere* in Silver City you have to give me directions! [laughing scornfully] So like, what the fuck makes you think I'm gonna know my way around?

Drew preferred to buy through Vera because of his tenuous market access. As in the Moroccan bazaars described by anthropologist Clifford Geertz (1978: 29), information in illicit drug markets is "poor, scarce, maldistributed, inefficiently communicated, and intensely valued." Buying heroin consistently required social and cultural capital in the forms of ties with sellers and up-to-date knowledge of local market dynamics. Outsiders like Drew, who were not immersed in the urban scene and made only brief visits to the city, occupied peripheral, low-information market positions that made acquiring these forms of capital more difficult. If Vera was unavailable Drew had to search for a new source by "shoulder tapping" at a casino, the delicate and time-consuming process of approaching strangers who appeared to be under the influence and inquiring about drugs.

You walk off somewhere, you know, the other person [you came with] walked off somewhere else... when you find somebody [who is selling] you don't want to make it fucking look *obvious*. So you'll sit down at a machine, you know, act like you're playing, or you're actually playing while you're bullshitting with the guy and you're getting it all set up. But if you don't have all the money on you, you need to go find another person with the other half of the money. That usually takes a minute.

At worst, Drew and others' marginal positions in urban heroin markets exposed them to physical violence. In summer 2018, Victor went with Daniel to Garden City to purchase heroin. Unbeknownst to Victor, he explained to me, Daniel owed the seller money and was robbed of two hundred dollars. "As soon as we got down there and we're in the parking lot [where they planned to meet] Daniel goes, 'Fuck, he just texted me, he said that we have to go pick it up, but I can go with him.'" Despite Victor's misgivings, Daniel hopped in the man's car and drove off. "About fifteen minutes later I get a phone call and it's Daniel, crying. And when I pulled up, his head was split open and it was bleeding, his shirt was ripped, his watch was gone, money was gone, scale was gone, his wallet was gone." Victor and Drew were left with only half a gram of heroin, "and we've been stretching it out *all day long*" to avoid withdrawal.

Drew eventually tried to cultivate a romantic relationship with Vera that eventually put him directly in harm's way, as I record in fieldnotes from early 2019.

Drew told me he recently met up with Vera at a casino hotel in Silver City. After spending some time in their hotel room, they went down to the casino floor to gamble. There they ran into "some dude that Vera happened to know." She argued loudly with him, then she and Drew left him behind and started gambling. Drew started feeling sick and headed back to their room to rest, planning to meet back up with Vera later.

The man and his friend followed Drew off the casino floor and attacked him. In self-defense, Drew pulled a knife from his pocket and lunged, then ran to the hotel room. Worried that the man would come looking for him, Drew told Vera that he had to return to Acorn to avoid a coming storm. He left the city and drove home. Vera didn't learn the real reason for his departure until he saw her on his next trip to the city.

Drew was shaken by the experience. "I've never, ever had to pull a knife on anybody, but I knew if I didn't I was gonna go down." They had heard nothing from the man since. "I guess dude let it go, whatever beef he had with me." Finishing the story, Drew reached for his belt and wrapped it around his right bicep.

After the trip

Drew and others stuck with one seller in hopes of securing a consistent heroin supply. But since they could only test what they purchased by using it, they often could not be sure a trip was successful until they returned to Acorn, as Drew explained in late autumn 2018.

I went over and my girl couldn't go through her normal person, she had to go through a different person, and I guess the different person that *she* had to go through was actually getting stuff from a person that *he* doesn't even normally get stuff. So it was like, a bunch of different people's not-normal connects, and I ended up getting a bunch of crap. I don't think there was *maybe, maybe*, a point or two of H [heroin] actually in that stuff, and I bought a little over a ball... that's a hundred and sixty bucks that I didn't have to waste.

People who live in cities also prefer trusted sellers to anonymous public dealers. Sarah Mars and colleagues found in San Francisco that people "generally had established connections with more reliable sources," buying from open-air heroin markets "only when their usual contacts could not be reached." But living in the city meant, as one man explained, they were never without backups. "If I can't get ahold of anybody with anything good I'll go to the [open street market] and get shitty dope just to stay well."⁷⁷ In another conversation, Victor confirmed that "in the big cities, it's *impossible* not to find anything" on the street. If Drew lived in Silver City, he would have realized his misfortune with the bad batch and quickly found another seller. But by the time he checked his product in Acorn, it was too late to go back.

⁷⁷ Mars et al. 2015: 48. Relying on known sources is a matter of safety as well as convenience, especially during an overdose crisis driven by inconsistent illicit drug supplies (McKnight and Des Jarlais 2018; Carroll et al. 2020).

Relying on others sometimes led to misunderstandings and betrayals. In summer 2018, Drew and Victor agreed to buy heroin from Aaron and Antoinette, but Drew told me they were kept waiting in agonizing withdrawal.

Aaron and Antoinette fucking did a bunch, wouldn't sell any to us that night when they had a bunch, fucking wouldn't give us none the next morning, so me and Victor had been going through [withdrawal] already through the night and in the morning.

And then they say, oh, now we're all out, so we gotta go pick up. We're like, alright, fuck, so here goes half the day we're gonna be sick, so all day we were sick. Here comes the night, we were figuring, oh, maybe they'll be back early, around seven, eight, hopefully.

No! *Three o'clock in the fucking morning* they finally get back to Acorn... I was like, *are you fucking kidding me?* I was *pissed!* I showed up to Aaron's house the next morning and I fucking started banging on the door, I was like, it's Drew, I have cash, either you open the door or I'm coming through the *fucking window!*

I go, bro, that was fucked up for you to do that to me, dude, like, you had me waiting for almost two days, when I *have cash*. I wouldn't do that to you, not when you're fucking hurting sick! And by the time we finally got something, I was throwing up and puking so bad I could barely move.

Deceits like these threatened even the closest relationships. Drew and Victor claimed to share their heroin and supplies equally, but occasionally this proved not to be the case. In early 2019 Tasha gave Drew a Subutex pill containing the opioid treatment medication buprenorphine to try as a safer substitute for heroin.⁷⁸ “He ended up giving it to Victor, and Victor slammed [injected] it and he said he didn't even *feel it*... but I think it was just ‘cause he wanted to get some heroin from Drew.”

Despite spending most waking hours together, the two men still managed to keep secrets from each other. In autumn 2018, after Victor was arrested for violating probation, I watched Drew clean up around his living room. The action movie *XXX: Return of Xander Cage* blared from the television. Drew was planning a trip to Silver City with Aaron the next morning. He needed another \$120 to buy a quarter ounce—two balls, or six grams—for \$350. But he couldn't sell six points “without me being too low just to hold myself over. ‘Cause I don't like to leave myself where I'm out, *at all*... So I try to leave myself with a safety net of something, where I'm not sick.” Usually Drew's safety net would be the piles of cotton pellet filters that he used to draw up his shots, which retained heroin residue that could be extracted later in “wash” shots. But Elizabeth, he told me, was “taking my washes, so I don't have my washes,” and more surprising, “Victor was taking a few of my washes too,” without telling Drew. “He'd go to the

⁷⁸ In contrast to the more commonly prescribed Suboxone, which combines buprenorphine with naloxone to discourage nonmedical use, Subutex contains only buprenorphine, which makes it more appealing to people who wish to continue using other opioids. The buprenorphine monoproduct is more commonly prescribed to pregnant people due to fears that naloxone exposure (or opioid withdrawal due to interrupted treatment) could cause fetal harm and adverse pregnancy outcomes (Center for Substance Abuse Treatment 2004). More recent evidence suggests little difference in pregnancy outcomes between monoproduct and combination formulations (Link et al. 2020).

bathroom and do it,” Beverly explained. Victor frequently injected in the bathroom because his most reliable vein was in his neck, and the mirror helped him access it more safely.

Drew picked up a DVD case for the post-apocalyptic film *Waterworld* and cracked it open. Inside were three used syringes.

“Where’d those come from,” Beverly asked, puzzled.

“Inside this movie case. Obviously they were being hid for something.”

“Are they yours,” she asked.

“No, that’s why I said they were obviously being saved for something or hid for something. ‘Cause they’re not mine.”

“They’d have to be Victor’s, then,” Beverly concluded. “You guys were sharing everything, though.”

Drew snorted. “That doesn’t mean shit, Mother.”

Conflict between drug-selling and -using partners is not unique to the backcountry (Bourgois and Schonberg 2009). But in Acorn personal disputes between medical and illicit providers of opioids and their customers also affected others’ access to opioids and ability to avoid withdrawal and other risks. Living in Acorn made abandoning dysfunctional ties more difficult, and since most scene members were friends or associates, conflicts aroused stress among people with ties to both parties. Acorn’s constricted social structure thereby generated interpersonal antagonisms with collective consequences, including interruptions in the town’s heroin supply. Running out of heroin was more than a matter of inconvenience or lost income; it also affected people’s health. In Chapter 6 I confront these consequences directly, cataloguing the toll taken by isolation and scarcity on the bodies and wellbeing of the heroin scene’s members, and the ways they combatted withdrawal, illness, and overdose.

Chapter 6. Where it Hurts: Place Effects on Pain, Illness, and Injury

February 2018

I arranged to meet Drew for the first time today at his home in Acorn. I pulled into the gravel patch next to his trailer, climbed the steps, and knocked twice on the false-wood front door. After a few moments Drew opened the door wearing a loose t-shirt.

He was frail and slightly hunched. His face was wan and his brown skin sallow, with dark circles around his eyes. His black hair hung limply; his teeth were discolored and some were missing. He clutched his stomach, and I saw injection marks and scars on his arm and hand. The curtains were drawn in the living room behind him to keep out the unseasonably bright sunlight.

I asked how he was doing. Not too good, Drew muttered weakly. I could tell he was suffering the nausea, aches, and other symptoms of opioid withdrawal. I asked if he wanted me to come in, or if we should reschedule our meeting for another day. He suggested rescheduling—he seemed in neither the mood nor the condition for an interview. We planned to talk another time, and after offering him a naloxone kit I bid him farewell.

I left town later that day with the sun still high. Clear skies led me down mountain slopes to valley pastures turned deep green by late-winter rain. I passed an orchard of bare trees chopped down in rough piles. Their pale, gnarled limbs seemed to writhe in agony.

Pain and discomfort are nearly ubiquitous among people who use opioids. Many people initiate opioid use to cope with acute or chronic physical pain. Others use opioids to relieve emotional distress or soothe psychological trauma (Cicero and Ellis 2017; Dahlman et al. 2017). However, repeated opioid use can backfire by increasing tolerance, requiring higher doses for similar effects, and for some can lead to increased pain sensitivity, a condition called opioid-induced hyperalgesia (Lee et al. 2011). And for people dependent on opioids, pervading each day is the race against agonizing withdrawal symptoms, including chills, hot flashes, sweating, running nose, cramps, vomiting, and diarrhea (Pergolizzi et al. 2020). One in three people who use opioids experience withdrawal at least weekly, and most say their symptoms are extremely painful (Bluthenthal et al. 2020).

Understanding the link between consistent opioid use and relief from painful withdrawal changes opioids' "psychological significance" to people with dependence from a source of pleasure to a functional necessity (Lindesmith 1968: 32). Some people I interviewed learned they were opioid-dependent from the unexpected onset of withdrawal. Kaitlyn got her first opioid pills in her late teens from her boyfriend. "I didn't really know the effects it was having on me... and then one day it was just like, I was sick on the couch for a week." Kaitlyn later introduced Isabel to opioids, who was confused when she felt weak and lethargic several weeks into using them. "I didn't even know what it was like to be detoxing... I'm like, why do I feel like shit today?" Her initial resolution to abstain was quickly overturned. "The next day I woke up and I was like, *fuck that*, I'm never fucking doing drugs again! And then little Kaitlyn comes over and she's like, I got something for us! And I was like, oh, perfect timing!"

Dependence, which is caused by many substances including essential medications, is not inherently incompatible with a healthy and functional life (Zinberg 1984; Walker 2017). Access

to appropriate doses of opioids, prescribed or not, helps people with dependence maintain a baseline of functionality, safety, and stability (Cicero, Ellis, and Chilcoat 2018). Avoiding withdrawal and using opioids safely requires, among other resources, reliable supplies of syringes and other equipment and competent first responders in case of overdose or injury. Access to health promoting resources like these is influenced by the places in which people live. Urban sociologists call these place-based inequalities *neighborhood effects* (Sampson 2012; Sharkey and Faber 2014). A range of poor health conditions cluster in disadvantaged urban neighborhoods, even controlling for the attributes of their residents (Duncan and Kawachi 2018).⁷⁹ But as I described in the introduction, by focusing on large cities neighborhood effects research ignores how geographic isolation, sparse and incomplete institutional landscapes, and densely acquainted and multiplex social ties affect nonurban residents' health.

I extend the neighborhood effects approach to the broader study of *place effects* on health by describing several place-based mechanisms that shape the distribution of health-related resources, behaviors, and outcomes. First, place of residence operates as a “fundamental cause” of health by regulating access to resources that help people protect their health, like money, status, knowledge, and social ties (Lutfiyya et al. 2012). Fundamental causes, including socioeconomic status, racism, and stigma, reproduce health disparities by reinforcing inequalities in health-promoting resources such as money, knowledge, status, and social ties (Hatzenbuehler et al. 2013; Phelan and Link 2015).⁸⁰ Other forms of advantage may mitigate but cannot eliminate spatial inequalities in these resources: even wealthy backcountry residents must contend with geographic isolation and weak local infrastructure. Second, physical relegation to isolated and undesirable places increases exposure to environmental hazards and perilous conditions, such as industrial contamination in poor urban areas (Auyero and Swistun 2009). In nonurban areas, harsh conditions and lengthy travel can endanger residents and strand them far from help. Finally, spatial arrangements influence local interaction orders. Urban theorists have warned of the “social isolation” of marginalized city dwellers in decrepit neighborhoods far from more prosperous areas (Small and Newman 2001). I argue that the dense and multiplex ties of small and remote towns can instead create acquainted marginality, discouraging marginalized people from seeking help for fear of surveillance and criminalization.

In this chapter I draw out the histories of un- and undertreated pain, injury, and distress that led member of the Acorn heroin scene into opioid use, uncover the ordeals they faced staying well, and follow them deep into the perilous backcountry. I focus primarily on the first two of the place effects I define. I argue that place-based inequalities exacerbate pain, pushing

⁷⁹ Neighborhoods with higher rates of poverty actually tend to have slightly more health care organizations, though more segregated Black neighborhoods feature fewer (Small and McDermott 2007; Anderson 2017).

⁸⁰ Fundamental cause theory was developed by Bruce Link and Jo Phelan to explain the persistence of socioeconomic health disparities despite advances in overall health and health care (Link and Phelan 1995; Phelan et al. 2010). Fundamental causes are “metamechanisms” that underlie numerous “specific proximate mechanisms” that each affect health (Lutfey and Freese 2005: 1327). Amelioration of some of these proximate mechanisms, for instance through advances in medical technology and treatment, may not durably affect the broader fundamental-cause relationship. Link and Phelan (1995:87) claim that the resources at the heart of their theory are “transportable from one situation to another,” but obtaining and using them requires access to organizations and networks that are unavailable in some places.

people toward opioids, and restrict access to resources that promote health and safety among those who use them. The physical isolation and local scarcities at the root of these inequalities also make push people into perilous situations to overcome them.

Escaping pain

Many members of the heroin scene reported significant injuries and traumas prior to their opioid use. As I described in the previous chapter, Tasha's opioid use was spurred by sports-related injuries and surgeries, while Drew initially took opioids to soothe his damaged back. Antoinette started feeling chronic pain as a teenager from "so many car accidents, quad accidents, dirt bike, motorcycle, all that kind of stuff." Victor grew up immersed in criminal organizations and survived so many episodes of violence and incarceration that he sometimes mixed up their details, as when he told me how he met Monica at a party in the Bay Area.

I was just chilling there, 'cause I had just gotten out [of prison]—no, I was *on the run* [from the police]. I had just gotten out when I got with my other baby mama, that's a *different story*—I got knocked out that time!

At age thirteen, Victor watched a friend get shot and cradled the boy in his lap as he died. By age twenty-one Victor had been shot once himself, shot at more than once, stabbed three times, including in the head and spine, and "lumped up" in countless fights. As he rose in seniority within his gang he was also compelled to take the lead in organized violence, including the night he met Monica, which ended in a gunfight with a rival gang.

I'm in front of a bunch of my youngsters... that's the fucked-up part about being in a gang, you gotta lead by example, and I'm one of the OGs. So when... [the other gang members] start walking up and [I] see one of 'em start reaching for something, I don't even wait, I just unloaded my whole clip.

Monica was also tragically familiar with violence: the year before she met Victor, her previous boyfriend was killed by police.

When Monica and Victor learned she was pregnant, they resolved to leave the city. Acorn was supposed to be "my Mayberry," Victor said, referring to the peaceful hamlet depicted in *The Andy Griffith Show*. As a symbol of domesticity he swapped his Eagle Talon sports car for a sensible beige sedan. Though the obligations of his previous life still followed him—as when he was once summoned to Garden City to assist in a retaliatory stabbing—Victor was largely left to grapple privately with the psychic consequences of his actions. "Every time I've had to stab somebody, or every time I have shot at people, I do get a sense of remorse," he admitted. We were in Drew's trailer in autumn 2018, watching the 1991 gangster film *Boyz n the Hood*. "I've caught myself thinking about it, like, *years* down the line." Torrents of automatic gunfire and terrified screams erupting from the television gave Victor's dark memories stomach-churning immediacy.

Victor and Monica's early and intimate knowledge of violence and untimely death was shared by many of the people I met in Acorn who used heroin. Drew was seven years old when his grandfather was killed by law enforcement, and a teenager when his great-uncle gained notoriety for another criminal case. "It was on TV," Beverly remembered. "It was hard for me to

try to explain to my kids why their uncle was like that.” As a young child Elizabeth was injured trying to stop her father from beating her mother. Madison was abused and neglected as a child and attempted suicide and was hospitalized multiple times beginning in her early teens. When Aaron was 13 or 14, a close friend of his died of a heroin overdose. Though he initially swore off heroin and syringes after the tragedy, he compensated by using large amounts of Xanax, ketamine, and ecstasy, and by age 17 had begun injecting heroin.⁸¹ Antoinette’s father died from injuries sustained in a car accident, her mother from long-term illness. Experiences of violence and injury like these are common among poor and marginalized people (Western 2015). Poverty undermines stability at home, provoking stress and conflict within families (Evans 2004). As I mentioned above, residents of impoverished neighborhoods suffer from worse health. Concentrations of poverty and the withdrawal of state and organizational resources also contribute to violence; in places where authorities are absent or indifferent, some residents may engage in individual or organized violence to survive, achieve goals, or enforce preferred norms (Sampson and Wilson 1995; Wacquant 2008).

In nonurban areas where depression and other mental health problems can reflect long-term, collective experiences of decline, loss, and isolation, health care providers often rely on widespread pharmacotherapy to compensate for the absence of other medical remedies or sources of social support (Jenkins and Snell-Rood 2021). Mental health medications introduced future members of the heroin scene to the soothing power of pharmaceuticals and synthetic drugs.⁸² Elizabeth was given antidepressants and stimulants for attention deficit disorder in elementary school. Doctors “get all confused when I’m addicted to opiates and amphetamines,” she told me, “but they are the ones who provided the opiates and the amphetamines for my entire life!” Aaron and Antoinette were both prescribed Xanax before the age of 15. Drew began taking medication for bipolar disorder as a teenager. Victor received treatment for post-traumatic stress disorder for ten years. Madison rattled off the pharmacopeia she had been prescribed since her first hospitalization at age thirteen.

I’ve been on every med you can imagine. I’ve been on Thorazine, I’ve been on Seroquel, I’ve been on Risperdal, I’ve been on fucking all the antipsychotics, all the bipolar meds, the mood stabilizers, Depakote, fucking every anxiolytic.⁸³

For some, like Elizabeth, opioids were among these early prescriptions, in her case for pain from back and knee injuries. Others, including Madison, preferred to use opioids instead of psychiatric medications. “Heroin makes everything better,” she told me. “If I’m manic, heroin calms it down. If I’m depressed, heroin numbs it.”

⁸¹ Xanax is a brand name for alprazolam, a benzodiazepine commonly prescribed for anxiety disorders. Ketamine is a nonopioid anesthetic that has hallucinogenic and dissociative effects. Ecstasy or MDMA is neither an opioid nor a benzodiazepine but rather a stimulant-like drug that produces altered sensations and emotions.

⁸² Most young adults who use pharmaceutical opioids have also used benzodiazepines, a class of medications prescribed for anxiety and other mental health conditions (Guarino et al. 2018; Gaines et al. 2020).

⁸³ Thorazine (chlorpromazine), Seroquel (quetiapine) and Risperdal (risperidone) are brand names for antipsychotic medications. Depakote is a brand name for sodium valproate, which is prescribed to treat bipolar disorder.

Those who sought care for their injuries and pain from Oak County's limited medical system, as Beverly had for nearly four decades, were often given too little pain medication, out of attempts to prevent addiction, or too much, in efforts to provide care absent alternatives such as surgery, physical therapy, counseling, or other interventions. Beverly's father moved from Oklahoma to California as a child in the 1950s and ended up in Hillside. He started "driving truck" as a teenager and worked for lumber companies for 35 years. From age 9 Beverly worked in her aunts' restaurant in town. For extra money, the family collected wood and scrap metal, with young Beverly pitching in. After spending two years as a teenager caring for an older woman she decided to train as a nursing assistant. She worked at the Hillside hospital for twenty years, watching the town reproduce itself. "The doctor that delivered me, I took care of [him] in his old age," she remembered. He opened a practice in Hillside in the 1930s and founded the hospital. "He delivered all my friends, most of my family members he delivered. His wife would even come to birthday parties when we were kids... She was even at my bridal shower!"

A few years into her career, Beverly injured her back lifting a heavy patient. "The gurney did not go up like it was supposed to on my end, and something in my back just popped. They could hear it all the way down the hall." Hillside hospital's only physician, Dr. Harrison, told her that surgery would not help, while physical therapy "just made it worse." He prescribed her two pain medications, Darvocet and Vicodin, and alternated them on a monthly basis, "trying to keep me from getting addicted."⁸⁴ The regimen helped for a couple of years, "and then I just felt like it wasn't enough." Dr. Harrison was unwilling to adjust her doses, so Beverly switched to Dr. Royce in Timberfall, who gave her high doses of morphine. "I wasn't functioning normally at all," she told me. "I could hardly get up off the couch! [...] It takes away your appetite, so I lost a lot of weight. It was all bad." Aside from her pain, Dr. Royce treated Beverly for depression, high blood pressure, and other ailments. She also cared for Beverly's husband, Drew, and his sister. But an acrimonious divorce in the mid-2000s repelled Beverly from Dr. Royce's practice. "I didn't want to be in the same doctor's [office]" with her ex-husband. Without a physician to renew her prescriptions she was cut off from all her medications and became seriously ill.

Beverly then sought care from Dr. Richards in Acorn, who transitioned her from morphine to a lower dose of the hydrocodone formulation Percocet. Richards also required her to sign a pain contract and submit to occasional urine tests. The Percocet did not fully relieve her pain, and in 2015 Beverly was "hurting so bad" at a family funeral that she accepted a morphine pill from a relative, which a urine test administered Dr. Richards detected. As I described in Chapter 4, at the time Oak County was engulfed in opioid backlash. "That was the first time I'd ever done anything like that, usually my pee tests were clean," Beverly averred, but Richards told her he could no longer see her. Beverly needed a doctor—she had had valve replacement surgery and was being treated for cancer—so Richards recommended her to another Acorn physician, an older man named Blalock, who further reduced her Percocet dosage. Beverly told me her typical pain level was nine out of ten.

In total, the experiences of my research participants mesh with the revised account of the overdose crisis I developed in Chapter 2. They were not victims of an overbearing

⁸⁴ Darvocet was a brand name for a combination of the opioid dextropropoxyphene and acetaminophen. Vicodin is a brand name for a combination of the opioid hydrocodone and acetaminophen. In 2010 the Food and Drug Administration (2010) recommended against prescribing and using medications containing propoxyphene and requested they be withdrawn from the market due to risk of arrhythmia.

pharmaceutical industry pushing pills on people who would otherwise not worry about addiction and overdose. What unites their stories with each other and with that of the broader crisis is instead their social and economic precarity, their prior exposures to hardship, instability, deprivation, and violence, and their first- and secondhand experience of substance use—including but not limited to opioids—as a response to those challenges. They lived in a place where strenuous and injurious labor was common and underpaid, and which lacked the social and medical infrastructure to prevent or adequately address the injuries they predictably incurred. In the absence of other sources of support, opioids and other substances—often prescribed but also and, as their use progressed, increasingly shared or purchased nonmedically—were an accessible tool that could ameliorate a range of physical and psychological complaints. The stories of people like Drew, Elizabeth, and Madison suggest that being exposed early to medications in response to hardship, chaos, and trauma can instill an affinity for pharmacological solutions that persists into adulthood.⁸⁵

People who received opioids from health care providers frequently shared them with others, often in response to their own complaints of pain, as illustrated by Beverly’s acceptance of a morphine pill and Drew’s initial receipt of morphine from his girlfriend for his back pain. While Beverly and I teased out her history with opioids in the kitchen Drew was in the living room, planning to sell some of her pain pills to a relative named Jerry who hurt their back and singing along with rapper Lil Wyte’s drug anthem “Oxy Cotton.”

*OxyContin, Xanax bars, Percocets, and Lortabs,
Valiums, morphine, patches, ecstasy, and it's all up for grab—
Whatcha want, whatcha need? Hit me up, I got you man!*⁸⁶

Consistent with studies in other nonurban places, sharing and initiation into opioid use among the people I spoke with in Acorn followed ties among kin, friends, and romantic partners (Nolte et al. 2020). Intergenerational opioid use was not uncommon. For instance, after Tasha began having surgeries at age thirteen, her mother began taking—and, when Tasha got older, buying—some of her pain pills.

⁸⁵ Of course, my account has important limitations. Because I recruited people who had largely been using opioids for some time, had problems with opioids in the past, or used heroin and other drugs in addition to pills, I collected few stories of people who used opioids briefly, temporarily, or without lasting significance for their lives. My findings illustrate some common paths into problematic opioid use but are not representative of the broader population of people who take opioids.

⁸⁶ Lil Wyte, “Oxy Cotton,” featuring Lord Infamous and Crunchy Black, track 12 on *Doubt Me Now*, Hypnotize Minds, March 4, 2003. Lortab is a brand name for a combination of the opioid hydrocodone and acetaminophen. Valium is a brand name for diazepam, a benzodiazepine. Prior to the widespread introduction of illicitly manufactured fentanyl, that opioid was most often used in extended-release transdermal “patches.” Combining opioids and benzodiazepines, which also have sedative and tranquilizing effects, is common and increases overdose risk (Jones et al. 2012). Opioid references have proliferated in hip hop in the 21st century (Coomes et al. 2019). In contrast to the 1990s, when many rap artists adopted the imagery of crack selling to boast about profit and power (Bogazianos 2012), today opioids are more often invoked as tools for recreation and self-medication (Yeun 2018; Richey 2020).

While some people shared opioids to help their peers soothe pain or address medical complaints, opioids were also sometimes used as a means to deepen relationships or obtain control over others. Elizabeth was introduced to opioids by her ex-boyfriend, a man named Colton, who injected her with opioid pills while she was asleep. “He wanted me to be on his level... so that we could do his drugs his way.” They smoked heroin together once, but Elizabeth did not begin using it regularly until 2017, when she injected it with Antoinette and Drew. “They both wanted me hooked on it because I had a job,” she came to believe. “I had money to be able to afford all three of our habits.” By the end of summer she moved into Victor and Monica’s house and started selling and brokering heroin herself.

Tasha was also introduced to heroin injection by Antoinette. The two young women had been friends since elementary school and had shared other drug experiences like using psychedelic mushrooms for the first time. Though Tasha avoided “powdered drugs” she was already quite familiar with injection from her surgical experiences.

It was normal. I understood the process, I understood how to find a vein... Never in a million years did I even think twice about taking a needle and putting it in me... because that’s exactly how the doctors did it.

Antoinette received inheritance money after her father’s death and took Tasha to Silver City for a lengthy binge at a casino hotel.

We didn’t leave the room for a whole month. We ordered food on room service and we just did heroin. We bought like, four boxes of rigs [400 syringes], they were all gone by the end of the month. I mean, we did a thousand dollars’ worth of heroin a week easy, *easy*, and I’m pretty sure we both OD’d a couple times and didn’t even know it.

Eventually Tasha returned to Acorn and discovered she was dependent. Withdrawal was so painful, she told me, that “I thought I was gonna die for about a week.” She avoided opioids for two weeks but soon went back to using the pills she was prescribed.

Isabel was introduced to opioids by Kaitlyn. Isabel grew up in Timberfall, which she found it dull and insular. When she was twenty-one, she started smoking methamphetamine after friends offered her the drug. About a year later she was caught by police in a neighboring county with a small amount of meth and received probation. She moved to Acorn and devoted herself to recovery, starting therapy, working at two restaurants, and beginning a new relationship. “I was doing fucking awesome.” Then one day in spring 2017 Kaitlyn, whom Isabel had met a month earlier at a party, came over to her apartment, crying and asking for emotional support. Then she took out a piece of tinfoil and an opioid pill and began smoking it. “I was like, *what are you doing??*” Isabel told me. “I’d never even seen anybody smoke a pill before. My mind was *fucking blown.*” Kaitlyn offered her the pill, and despite her apprehension, Isabel tried it as well. At first the opioids made her nauseous, a common reaction among inexperienced users. But Kaitlyn kept coming over, “like every day, feeding me pills pretty much, trying to get me high... And then then it came to the point where I needed it.” Isabel, still working two jobs, relied on Kaitlyn for the pills, which like other members of the scene she bought from Terrance, while Kaitlyn, who did not work and relied on her grandparents, needed Isabel’s money. “You want to use with me today,” she remembers Kaitlyn offering cheerfully, “I just need forty bucks and I got you.” Isabel would provide the money and use some of what she bought, but Kaitlyn kept the

rest. A few weeks later, Kaitlyn offered her heroin. “I was like, okay, fuck no, I’m not fucking doing heroin... that’s disgusting,” Isabel told her, but Kaitlyn assured her “it’s just like Oxys, it’s literally the same thing.” Isabel acquiesced and was soon smoking the drug regularly.

Once people were introduced to opioids, they often made new acquaintances through their efforts to “stay well.” After she began using heroin, Isabel was introduced by Kaitlyn to the rest of the scene. They bought heroin at Terrance’s trailer and at the house that Victor and Monica operated. After those sellers were arrested she bought from Drew or gave Aaron and Antoinette rides to Silver City. Without her own connections or access to a local, semi-public market she was dependent on others for continued access to opioids and often found herself on the losing end of their deals.

I pretty much would just hang around for their drug deals and like, *barely get well from it*, and be like, wasting my whole day and will have [used] my whole tank of gas on them... They [would] spend all their three hundred dollars on heroin and barely give me anything... So we’d have to panhandle to get home, like beg people for money and shit.

Without her own connections and left at the whim of others to obtain opioids, Isabel was often desperate for relief from withdrawal. One day in spring 2018 she was hanging out with Aaron and Antoinette. “I was hella sick and all they had was like, a cotton or something. And I was like, *fuck it*, I don’t even care.” She asked them to inject her with their syringes. “That kind of felt nice the first time I did it, and I was like, *just do it again!*” Soon Isabel didn’t want to use any other way. Terrance, Drew, and Victor were people that Isabel, had she not used heroin, might have known of but not associated with. In contrast to urban heroin scenes that center around organized drug markets, the Acorn heroin scene was little more than an amalgamation of smaller, preexisting cliques and friendships. Differences in scale shaped public perceptions of the heroin “problem.” While the decision of a handful of young people to begin using heroin together would be virtually inconsequential to the scale of heroin use in a large city, in a town the size of Acorn even one, two, or a few prominent initiates could create the perception of a full-blown crisis.

Pain, injury, psychological distress, and use of other substances are significant contributors to opioid use among urban and nonurban residents alike (Wang et al. 2013). In small and remote places like Acorn, however, the absence of a street market and the scarcity of medical care meant that those who began using opioids were more reliant on family, friends, a few friendly local doctors, and other relatively close ties. People who receive pharmaceutical opioids from nonmedical sources tend to transition to illicit opioid use more quickly than those who get their pills from medical providers (Gaines et al. 2020; McCabe et al. 2021). Semi-organized urban drug markets facilitate tie formation among people who use drugs by providing a central meeting place for collaboration and socializing (Bourgois and Schonberg 2009). While low-level sellers often use themselves and may associate with others who use, more organized sellers and those higher-up in the supply chain are more likely to treat their customers like anonymous, fungible, and exploitable objects. While they may try to cultivate brand loyalty they are not after personal relationships with those who buy their drugs.⁸⁷ In contrast, even the “highest-level” sellers in Acorn—those who regularly brought heroin to town from the cities—

⁸⁷ Bourgois (1996: 84–85) reports the contempt with which the crack sellers he studied in New York City spoke about and to their customers.

were close friends and associates with their customers. The dense character of small-town social networks facilitated the formation of ties among previously disconnected cliques of people who used drugs, rapidly creating the semi-functional scene I described in Chapter 5. But using personal ties to buy, sell, and share opioids also freighted those relationships with obligations that could not always be met and power that could be misused, as I show in the next section.

Running out

Scarcity and inconsistency in Acorn's opioid supply gave those with access to opioids influence over those who did not that could be used for selfish purposes, as Isabel experienced from Drew. "Drew uses [heroin] to *taunt me* or whatever," Isabel told me in late 2018. "Like just for instance, today he hit me up, he's like, if you don't have cash, don't worry about it... So I went over there and I was like, oh yeah, I'll give you this for now and give you cash tomorrow or whatever, 'cause you said it was cool. And he's like, [gruffly] 'No, no, no, I didn't say that!' [...]. He pretty much just wanted me to know that he had it... A lot of people use [drugs to exploit others]. Once they have that in their hand, it's like power, control, and I even catch *myself* sometimes" feeling the urge to hold drugs over others.

Accusations of exploitation in the heroin scene were most common between sellers and their customers. But buyer-seller relationships were both reversible within town day-to-day—those who had heroin to sell to their friends one day often found themselves seeking it from those same friends another—and recursive at different levels of the market. People like Drew and Victor who sold in Acorn and derived influence in the local scene from their positions became buyers when they traveled to Silver City to purchase in bulk and, as I explained in Chapter 5, became vulnerable themselves to those from whom they attempted to buy. For example, Tasha was upset at how Drew was treated by Vera, whom Tasha introduced to him, telling me about what she observed on a previous trip.

She put like, over a hundred and fifty dollars in her *bra* after he handed her three hundred and some-odd dollars for a quarter... You're gonna go and pocket half of that money and not even say anything, and then ask him to help her out [with heroin] anyway afterwards?

Small-town sellers' power over their local customers consisted not in the heroin they held at a given time but the relationships with larger or more consistent sellers by which they could get heroin when they needed it; when those relationships dwindled, so did the local power they conveyed.

By making opioid supplies less consistent and less predictable, dysfunctional relations between sellers and customers inflicted real bodily harm. When there was no heroin in Acorn and no way to reach the city, Drew and Victor endured severe withdrawal that left them virtually bedridden, and scrounged for anything that might soothe their symptoms. Their search for relief often entailed resorting to riskier drug use techniques such as collecting and combing through used syringes for residue. I observed them do so on several occasions, including one morning in late summer 2018.⁸⁸ It was about 11 o'clock, and Drew and Victor had been calling and texting their friends for hours, trying to organize a trip to Silver City. They needed to take at least one

⁸⁸ This was the same day that I described in the previous chapter at the beginning of the section, "Before the trip."

more order from someone in town so they would have enough cash to make the run worthwhile. They also needed a ride because they were tired of fronting Elizabeth heroin after each trip without being paid back. But Aaron, Antoinette, Tasha, Isabel, Ron, Daniel, and Kaitlyn all either turned them down or did not answer. Both men were already grumpy and sluggish. Drew had been examining his used syringes and other supplies and passed Victor a cooker stuffed full of shriveled cottons. “Does it look good or not?” Victor peered at it and frowned. “No, this one looks pretty used. It’s pretty dry,” he replied, showing me how pale and dense the cottons were. They had already been wetted and mashed at least once to extract whatever heroin residue was left.

Half an hour later, having given up on getting to the city, Drew went down the hall to the back bedroom and returned with two red, wastebasket-sized biohazard containers full of used syringes.⁸⁹ Victor eyed them suspiciously. “We didn’t use that many!” He was right, Drew replied with annoyance. “Everybody thinks this is their fucking drop off spot.” They leaned down to the rug and rummaged through the bins with their bare hands, looking for heroin residue stuck inside a syringe barrel or encrusted on the flat end of a plunger that was used to mix up a shot. They pulled out fistfuls of syringes, some uncapped, and examined them closely to distinguish the dark, gummy flecks of heroin from the light-brown, grainy residue of worthless cutting agents. As they pawed through the piles, each selected a few “good ones” and set them aside. After several minutes of hunting, Drew gathered up the dozen or so syringes they picked out and took them to the kitchen table. There he used a razorblade to meticulously scrape the residue from them into a new cooker, combining in the process any infectious agents still living on supplies used by several different people. The wisp of brown dust Drew and Victor produced from all that work was barely enough to cook a single shot, which they split. Desperate gambits like these were not uncommon. Once when Drew couldn’t afford a trip to Silver City and was stuck at home sick, he told me Aaron demanded \$10 for a large wad of Aaron’s “already squeezed” cottons, which contained almost no heroin. The unequal, coercive trade upset Drew since it broke with the rhetoric of reciprocity in which the sellers tended to couch their unavoidable, practical entanglements with one another within the town’s claustrophobic drug scene.

Before I met members of the heroin scene in 2018 and began bringing them syringes and other supplies, injection equipment was scarce in Oak County. Though pharmacists in California may dispense unlimited numbers of syringes without a prescription, those in Oak County were unwilling to do so. People were also reluctant to seek syringes locally to avoid sparking rumors that they were using drugs. So they purchased them at pharmacies elsewhere, or occasionally visited the harm reduction program in Silver City. But often they were forced to make do with the few syringes they had, as Victor and Drew recalled in spring 2018. “It’s nice to be able to get clean [syringes] compared to the way it was just even a year ago in town,” Victor said. “If you couldn’t make it out of town you were just getting a rig [and] using it until it *zig-zagged*. Like, you’re doing this, you know?” He mimed twisting a syringe in his arm like a joystick.

“Yeah, it was bad,” Drew concurred. “You couldn’t get a new rig half the time.”

“So you’d just be like, ‘Well, let me get yours and I’ll bleach it,’” Victor added.

⁸⁹ I gave these sharps disposal containers to Drew and Victor and also provided them with new syringes to prevent them from reusing their used ones, as they recount doing frequently before I arrived.

“Or you just end up keeping using the same one,” Drew said, “and it’d break on you. And then you got to fucking try to figure out how to fix it. Like, I’ve used shoestrings before and tied the tips back on and shit.” He chuckled at the absurdity. “It gets pretty desperate sometimes.” Other supplies were also scarce; as I described in the previous chapter, the first time I observed Drew inject drugs, before I was able to give him any supplies, he drew up the solution using a piece of cigarette filter, which contain substances that can be harmful if injected, especially if they have been smoked (National Harm Reduction Coalition 2020 [1998]).⁹⁰

Reusing syringes quickly blunts and bars the needle, which causes more damage to skin, tissue, and veins. Some members of the scene were no longer able to consistently inject into the most accessible veins in their arms and resorted to smaller veins like those in their hands and feet, and riskier sites, like their legs and necks.⁹¹ Victor told me how, after injecting for more than half his life, he ended up most often using the bathroom mirror in Beverly and Drew’s trailer to inject into his neck. “I don’t have too many *usable veins* left... I used to have these huge veins right here”—he brandished the outsides of his forearms—“they’re gone now, like, *gone!*” He chuckled. “So it’s usually either the neck or the ones right here”—he indicated the crooks of his elbows—“but there’s so much [scar tissue] on these ones that it hurts to push through.” Injecting in his neck was “pretty effective,” compared to his other veins, though “I’m sure it’s not good for it,” he admitted with a laugh, leaning forward to show me the thin, dark red track mark already visible along his throat.

A person who injects drugs therefore faces the same dilemma as the boxers studied by Loïc Wacquant (2004: 130), to “make use of one’s body without using it up,” that is, to nurture and preserve their “bodily capital.” To stay in fighting shape, boxers pursue elaborate regimens of training, exercise, diet, and abstinence that entail “practical mastery of time” (ibid: 143) and strict control over consumption, and which are buttressed by specialized equipment, dedicated venues, and peers that provide assistance and accountability. People who inject drugs must analogously manage the time between injections and the time it takes to inject; must learn how to use their equipment on their own bodies and, in some cases, those of others; and must do so without causing bodily damage that would make future injections more difficult or lead other health problems. They must also try to avoid as long as possible the bodily marks that would reveal their illicit drug use to others. Marginalization makes maintaining bodily capital more challenging by exposing people to deprivation and peril and, through the bodily harms that attend these conditions, is incarnated in its bearers as visible stigmata and invisible debilities. Urban ethnographers have painfully illustrated how poverty, homelessness, and aggressive policing strip people of the physical, social, and temporal resources they need to inject drugs

⁹⁰ Their experiences match accounts from residents of small towns and nonurban areas in other parts of the United States where pharmacies do not sell syringes and syringe services programs do not exist. In New Hampshire, Robin Pollini and colleagues (2021: 113) heard similar stories of reusing syringes until they broke and fashioning makeshift syringes from household objects—practices that “more closely resembled carceral than community” settings (see also Cloud et al. 2019).

⁹¹ National Harm Reduction Coalition 2020 (1998): 34–41 describes a *hierarchy of safety and risk* among injection sites. In general, larger and more visible veins are safer for injection, though some large veins, such as the jugular veins in the neck and femoral veins in the groin, are much riskier due to their proximity to major arteries and nerves, which can cause serious, even life-threatening injuries if damaged.

safely (Bourgois and Schonberg 2009). As I showed in the previous chapter, physical isolation in the backcountry compounds these obstacles.

Many people who inject drugs require assistance due to lack of injecting skill, confidence, or equipment, damaged or inaccessible veins, or the urgency of withdrawal (Fairbairn et al. 2010; McElrath and Harris 2013). Since providing injection assistance is relatively intimate and risky, people often rely on romantic partners, trusted friends, or specialized “street doctors” to whom they are referred by others (Brothers 2019). On the first day I spent with Antoinette and Aaron, I watched him help her inject twice. When I first entered their home in Acorn, Antoinette was hunched over in a recliner in the living room, trying to inject heroin into her left thumb. Judging from the blood-red tint of the solution in her syringe she had been at it for some time. After standing to introduce herself she sat in a chair at the kitchen table and explained that usually she needs Aaron’s help to inject. “He usually hits my neck, which is gross,” she said, sounding embarrassed. She offered her hand to Aaron, who leaned down and gently clasped it, squeezing the skin on top of her thumb to push up the vein. Their faces drew near and their eyes lowered in intense, shared focus. Together they prodded for several minutes with no success, until the syringe began to clog with blood. Antoinette rose abruptly in frustration and, grumbling and sighing, pulled the plunger from the syringe and flung its contents into the sink.

At the end of our conversation, almost four hours later, Antoinette was eager to use again, this time using her more reliable neck injection site. She sat sideways at the kitchen table, swept her hair over her right shoulder, laid her hands in her lap, and lifted her chin to offer Aaron the left side of her neck, where a faint line of track marks was visible. Aaron leaned over her like a dentist. With his left hand he gently pinched Antoinette’s skin to lift the vein and with his right inserted the syringe almost perpendicular to her neck. Softly asking her to remain still, he adjusted his grip on the syringe and within ten seconds registered in her vein. As he slowly emptied the syringe into Antoinette’s neck she let out a muffled groan of relief.

With fewer peers and no local harm reduction services, people in Oak County who were relatively new to injection, like Isabel, had trouble learning how to do so themselves and so remained dependent on others.⁹² Isabel in particular had to frequently ask others for help. But Aaron, Antoinette, Drew, and Victor quickly grew tired of Isabel’s requests, so she tried to figure it out herself, with harmful and upsetting results. “I couldn’t take it anymore, I really couldn’t, her poking herself,” Beverly once told me after Isabel visited. “Over an hour, almost two hours, I couldn’t deal with it.” Depending on others for assistance injection often led to syringe sharing and increased risk of disease transmission. Though to my knowledge none of the members of the Acorn heroin scene were living with HIV, several had contracted the liver disease hepatitis C as a consequence of sharing and reusing equipment.⁹³ Isabel, for instance, believed she had been infected by another member of the scene soon after being introduced to injection.

⁹² Injection assistance is especially common among those with less experience injecting, and nearly universal for first-time injections, when people are least likely to know how to inject or to have their own syringe (Lamb et al. 2018; Gicquelais et al. 2020).

⁹³ Like HIV, hepatitis C virus (HCV) is a bloodborne infection transmitted among people who inject drugs primarily through sharing and reuse of syringes and other injecting equipment. HCV is more easily transmitted this way than HIV, and since the introduction of highly active antiretroviral treatments for HIV infection in the 1990s chronic HCV infection has passed HIV as a cause of death in the United States (Chung and Baumert 2014). The overdose crisis has

The effect of peer relationships on drug practices and bodily capital therefore depended on whether those relationships could deliver protective resources such as new syringes, hygiene supplies, and clean and safe spaces in which to use drugs. When peers could share these and other benefits to each other along with drugs in a pattern of mutual exchange, they could work together to maintain their physical health and social positions. When those patterns became one-sided, as in Isabel's case, or when peer relationships could no longer provide other sources of resources and support but were good only for buying or selling drugs, people were less able to cooperate to preserve their bodies.

Poor injection technique and vein damage made "missed" shots, when drugs were accidentally injected under the skin or into muscle, more likely. Missed shots wasted drugs, money, and time, and risked causing skin and soft tissue infections that led to abscesses: large, painful, infected swellings of pus (Hope et al. 2016). Infections and abscesses could also result from reusing contaminated supplies, unsanitary injection conditions, or adulterated drugs. A few months before I met Drew, he and Victor purchased from Terrance what they thought were his usual 30 milligram OxyContin pills.⁹⁴ But unlike those pale blue tablets, these were darker—"stupid blue," Victor remembered, as if they had been dyed with food coloring. "I was even scared" to inject them, Victor admitted, "but I was sick." The pills turned out to be duds. "We did a hundred dollars of 'em in one night and didn't even get high *or* feel better," Drew grumbled. Soon after, he developed an abscess on his left arm. His previous, small abscesses "all went away real quick," so he ignored it. But over the next week "it just got bigger and bigger and bigger" until his arm was "the size of two softballs." He tried to numb the pain by injecting more heroin, but eventually could not feel its effects. Finally their next-door neighbor drove Drew to the hospital. There a surgeon anesthetized Drew's arm, cut it open, and, with Drew conscious, manually removed several ounces of pus. Drew saw him "four fingers deep inside my arm, scraping out the shit." The smell was so "raunchy" that another clinician left the room to keep from fainting. The surgeon told Drew the infection could have killed him within days. Once the wound was dressed, Drew left the hospital. "They wanted to keep me overnight and observate me [sic] and I was like, no, just let me go home, because I was in so much pain." In photos taken back at home, Drew raised his wounded arm like a trophy. A ragged oval of flesh about two inches long was missing below his elbow. A swath of distended skin rippled around it. "It's still not healed all the way," he told me a few months after the surgery. "You can feel the hole." He showed me a soft divot under the pale scar tissue.

Because obtaining heroin in Acorn required cooperation and pooling resources, and because Drew sold more, used more, and injected more than most other members of the scene,

fueled increasing rates of acute HCV infection, particularly among young adults (Zibbell et al. 2018). Most people who inject drugs in the United States likely have chronic HCV infection, though many do not know it because "acute infection is typically asymptomatic and chronically infected individuals may not develop significant sequelae for decades after initial infection," including liver disease for most and life-threatening liver cirrhosis or cancer for a significant minority (Smith et al. 2015: 911–912; See also Nelson et al. 2011). Direct-acting antiretroviral treatments for HCV were introduced in the mid-2010s and have proven highly effective among people who use drugs (Hajarizadeh et al. 2018).

⁹⁴ I have reconstructed this event using Drew, Beverly, and Victor's accounts from my initial interview with Drew in late winter 2018, a conversation with the three of them in early autumn 2018, and a conversation with Drew and Beverly several weeks after that.

his physical health was tied to the vitality of the scene. Arrests, moves, health crises, and other events that removed people from the heroin scene in turn undermined Drew's ability to stay safe and well. By the end of my fieldwork, Victor and Monica, Daniel and Kim, and Aaron and Antoinette had all fled Acorn to avoid arrest or after being arrested, while others, including Elizabeth, Isabel, and Ron, were in jail, in poor health, or were trying to quit using drugs. The shrinking scene meant Drew had to shoulder more of the burden of traveling, buying, and selling on his own. His deteriorating veins made it difficult for him to inject, and he developed numerous abscesses on his arms and legs. His poor health made traveling more difficult, particularly with fewer people around to help, drawing him into a vicious cycle of illness, injury, and opioid withdrawal that reached its peak in spring 2019.

"I hope you don't have a weak stomach," Drew warned me from his armchair as I entered the trailer one evening. Beverly stood over him, holding antibiotic ointment and gauze. Drew unwrapped an ACE bandage from his right bicep to reveal a crater-shaped wound two inches long, one inch wide, and half an inch deep. It glistened milky white and meaty pink. A second bandage on his forearm covered several more abscesses, all of them new since I watched him drain yet another last week. Drew dabbed ointment around the edges of the exposed wound and then, with Beverly's help, covered it with fresh gauze and rewrapped the bandage. He explained that his wound was aggravated from steering his car on a trip to Silver City, which he only made out of desperation from dopesickness. "I had no fuckin' medicine," he told me crossly, "I had *none*, I've been DT-ing [detoxing] for the last three days," because he got shorted by Vera on his last trip. Acorn's spring rains had sent ants into the leaky house, and Drew described waking up to them crawling over his seeping bandages. He told me he would go to the hospital for antibiotics the next day, but he did not. In the final months of my fieldwork, Drew developed numerous abscesses like these and repeatedly drained them at home rather than risk hospital staff identifying his illicit drug use.

Acorn's geographic remoteness exacerbated two sets of place effects on residents' health. First, it operated as a fundamental cause: physical distance from drug markets and other urban organizations restricted access to important resources, preventing backcountry residents from using drugs more safely. The effects of geographic remoteness on the mobility of these resources were exacerbated by challenging terrain, dangerous weather and flimsy ties to urban drug scenes and organizations. Less access meant greater costs for drugs and drug use equipment that were paid monetarily through higher prices or bodily by suffering the ordeals of withdrawal, illness, and abscesses. In such resource-poor contexts, close ties to peers could provide few forms of support beyond sources for drugs and were easily manipulated for exploitation by others in the scene or, as I explain in the next chapter, surveillance by law enforcement and other authorities. Living far from larger settlements also exposed residents to inordinate physical risk at home and on the road, which I detail in the next section.

In harm's way

Geographic isolation compounded spatial inequalities in drugs, supplies, and other resources by forcing backcountry residents to take lengthy and hazardous trips. During my fieldwork I put more than forty thousand miles on my Subaru, which offered me a front-row seat to the hazards of travel in the mountains. I may have traveled more than the typical Oak County

resident, but my experiences were not unique.⁹⁵ The most immediately life-threatening hazards were snow and rain. Traveling safely during winter meant paying attention to changing weather and road conditions and carrying the tools to escape impassable roads or survive in one's vehicle until conditions changed or help arrived. Each morning during the wet season I checked online for highway closures, expected delays, and chain requirements. When flashing roadside signs alerted me, I turned on my radio to hear computerized advisories, like this one from February 2019.

ALL VEHICLES MUST CARRY CHAINS. WEATHER AND ROAD CONDITIONS CHANGE RAPIDLY. BE ALERT FOR WET OR ICY ROAD CONDITIONS.

VEHICLES NOT HAVING CHAINS WILL BE TURNED BACK AT CHAIN CONTROL CHECKPOINTS. PLEASE DO NOT CREATE A TRAFFIC HAZARD BY SITTING ON THE SHOULDER WAITING FOR CHAIN CONTROLS TO LIFT...

MOTORISTS ARE ADVISED TO REDUCE SPEED AND EXPECT DELAYS. THERE IS NO ESTIMATE FOR THE ROADWAY TO FULLY REOPEN AT THIS TIME...

These were precautions that all Oak County residents were required to take for winter travel, regardless of their substance use. Exposure to the mortal risk posed by weather and disasters contributed to the cognizance of elemental forces characteristic of small-town habitus. This awareness could be expressed as wariness for those who lacked the experience or tools for extreme conditions, or eagerness for those who had been raised and equipped to appreciate winter recreation. Residents with more resources could also plan ahead or schedule around storms to forestall the need for dangerous travel. But the never-ending race to obtain enough opioids to avoid withdrawal meant that members of the heroin scene had less flexibility.

Drew and his friends regularly traveled during winter storms, often under the influence of heroin or other drugs. Only once did I see Drew turn back because of a blizzard, in January 2019. It was around 2pm. Drew and Victor had only a few points of heroin. A storm was forecast for late afternoon, and Drew was in a hurry to reach Silver City before it arrived. He pulled on a heavy coat, kissed Beverly on the forehead, and handed her the pill bottle in which he kept his heroin before departing. Thirty-five minutes later he stormed back inside. "Fucking weather's too bad! It started *dumping snow on me* before I even got to Grandee," he exclaimed. "It started sticking to the roads and shit, and I went like *this* with the car, and fucking, it started going like this." He wiggled his hand to show the car fishtailing. "*Son of a bitch!*" With the weather turning bad for several days, he didn't know how long they would have to stretch their remaining heroin.

"You don't think anyone in town has anything that you could buy?" I asked.

"I won't spend my money in town, I can't!" He needed to take advantage of the city's lower prices.

"Should've just left in the morning," Victor chided him.

"I know. I fucked up," Drew replied glumly.

I also sometimes rashly braved bad weather. One day in late winter 2018 I repeatedly courted disaster on the road to keep an important appointment in Heavenly. Twenty miles from Acorn I took an icy curve too fast, lost control, and skidded head on into a rocky sidehill cut, narrowly avoiding breaking through a guardrail and careening down a wooded slope. My

⁹⁵ Vehicular travel is inversely related to population density, but the average nonurban driver travels only about fourteen thousand miles a year (Federal Highway Administration 2017).

vehicle's bumper was cracked, a fog lamp damaged, and the lining of the driver side wheel well shredded, but the airbags did not deploy and the engine was running, so after clawing ice and mud out of the grille and lights I continued toward Heavenly. At the mountain pass the snow was an inch deep on the road. A snowplow driver honked at me in warning, and I slid to a halt—again almost slipping off the roadway—to follow in his wake. We inched down the mountain in tandem until the snow turned to drizzle and the highway reappeared. Only a light drizzle greeted me in Heavenly, but when I left an hour and a half later it had turned to snow.

Ten miles up the highway the snow was so thick that my tire treads no longer reached the pavement. I pulled off the road to attach my tire chains, cursing myself for not practicing with them before. Laying in the muddy snow, I snaked a set of chains around the back left wheel but could not make them latch. Alone on the road, I started to panic—would I be stuck there? At that moment, a pickup truck rolled down the mountain toward me. I raised my hand and the driver slowed and lowered his window. He wore a heavy work jacket and a ball cap.

How's the pass, I asked.⁹⁶

It's getting bad, he replied with a shrug. *Are you having trouble?* I knelt and tugged ineffectually at the chains.

You know what you need to do, he explained before departing, *is feel around the whole wheel and make the chain lay totally flat*. I followed his advice and, stopping between each tire to warm my purple, stiffening hands in front of the car's heater vents, managed to attach the chains and rumble back onto the highway. The car shook and rattled as I cut through snow that lay four to six inches deep in some spots. I white-knuckled the wheel, heart pounding, hunched forward, willing the car to keep going. I made it over the mountain pass without seeing another vehicle and returned to Acorn late, exhausted, muddy, and embarrassed.

Vehicle crashes and near misses were also regular events in the lives of Drew and his friends. In spring 2018, was Drew driving Victor and Isabel back from buying heroin in Garden City via a winding backcountry highway. A truck suddenly came around a sharp bend, veering into their lane, and Drew swerved sharply onto the shoulder to avoid it. They were in Isabel's car, and Drew and Victor feared that if she had been driving they would have collided with the truck head-on. In spring 2019, Drew was run off the highway by another inattentive driver. One night that autumn, he blew out a tire about twenty miles from Acorn, left the car on the side of the road, and hitchhiked home, returning the next morning and persuading a sheriff deputy he knew who had found the car to let him drive it home on a spare tire. Less than two months later, he was broadsided in Silver City, leaving long gashes in his car.⁹⁷ Drew and others drove at high speeds, often after dark because of delays or to avoid detection. Occasionally they ran out of gas and had to panhandle at service stations to get home. To “stay well” on their trips, Drew and his friends used wherever they could. Sometimes that was the Silver City casino bathroom, where the security guard told me he installed a syringe disposal container after finding too many used

⁹⁶ I use italics to indicate that this conversation was not recorded verbatim.

⁹⁷ Motor vehicle fatality rates are more than twice as high in rural compared to urban areas (National Highway Traffic Safety Administration 2010). Rural roads are less likely to have safety features like guardrails and dividers between traffic streams, and long stretches of uninterrupted road encourage higher travel speeds. Rural drivers are less likely to wear seatbelts and more likely to drive older, less safe vehicles. And lengthy emergency response times and distance from medical care make dying of crash-related injuries more likely (Zwerling et al. 2005).

syringes. Or they would inject in the car while others drove. Using opioids under these circumstances carried grave perils.

In spring 2018, Isabel went to Silver City with Victor, Aaron, and Antoinette. After purchasing heroin, they parked at a casino and Victor went to gamble, leaving the other three behind in the car. “When I left, Isabel was smoking” heroin, Victor told me in the trailer with Drew and Beverly a few days after the trip. He was unaware that Isabel had begun experimenting with injecting, as she explained to me late that year in her room at the Bridge, an emergency and transitional housing facility in Acorn where she was trying to quit heroin.⁹⁸ “I was fairly new at it. I wasn’t even [injecting] myself then. I remember Antoinette, she gave me a shot, and then she said, ‘I don’t feel that one, I want to give you another shot [and] I’m gonna do one too.’ And I was like, [blithely] ‘Okay, *yeahhh*,’ like, whatever, you know? And I don’t remember anything after that shot.” Victor suspected that Antoinette had prepared “a regular dose” and “just cooked it up in one spoon and split it,” overwhelming Isabel’s tolerance. Isabel passed out in the back seat of the car next to Antoinette. “I guess I apparently was like this”—she flopped forward in her chair with her arms tucked under her torso—and she didn’t know I was [passed] out the whole time.”

That was how Victor found her when he returned to the car. “She’s getting a backrub [from Antoinette], and then the next thing I know I look back and her lips are blue and I’m like, *hey, sit her up*.” “I was *dead*, literally dead in her lap, not breathing,” Isabel told me. “It scares the fuck out of me to think about... I remember seeing everything and hearing everything like I was there, but it wasn’t from my eyes, it was from *out of body*.” Victor gave her chest compressions and Antoinette rushed them to the emergency room. “Next thing I know I’m waking up in the ER parking lot and they’re slapping my face,” Isabel remembered. “They’re like, ‘Come back, Isabel!’ I’m like, ‘What the fuck happened?’ Like, I had no idea, I was so confused. But they all left me at the ER because they thought they were gonna get in trouble, and then Victor was the only one that stayed with me—*Victor*, and he’s the one with the most charges! He’s the one that probably I would least expect to stay there with me, but he fucking stayed, just to make sure that I had a familiar face when I opened my eyes... [He] brought me back to life, I’m pretty sure. He’s the one who knew what to do. Like, I don’t think I’d be alive if it wasn’t for him.” I asked Victor if he had his naloxone kit with him at the time. “No, we did not!” he exclaimed with a mix of embarrassment and astonishment. Beverly explained that they had left it on the kitchen table.

Though less visibly dramatic, high winds in the backcountry also posed threats at home or on the road. Strong gusts could snap tree limbs, loosen rocks from cliffs, choke roads with dust, smoke, tumbleweeds, and other obstructions, and topple trucks. Like winter storms, high winds occasioned radio advisories discouraging travel by recreational vehicles, trailer trucks, and other tall vehicles. Vicious winds also contributed to California’s increasingly deadly and destructive wildfire seasons. During my fieldwork powerline failures amid high winds started some of the largest wildfires in state history, including the 2017 Wine Country Fires that killed more than forty people and burned thousands of buildings and the 2018 Camp Fire that killed 85 people and destroyed the town of Paradise.⁹⁹ Wildfires are also propelled by abundant fuel from

⁹⁸ I combine their two perspectives to provide a fuller account of this event.

⁹⁹ Pacific Gas & Electric (PG&E), which serves northern and central California, was put on a five-year term of federal probation in 2017 following a deadly natural gas pipeline. While on probation the company “set at least 31 wildfires, burned nearly one and one-half million acres,

decades of fire suppression and timber harvesting (Keeley and Syphard 2019), as well as significant growth in the “wildland–urban interface,” where homes “meet or intermingle” with forest, chaparral, and other vegetation (Radeloff et al. 2005: 800).¹⁰⁰ As a result, more than twice as much land in California burned in the first two decades of the 21st century than in the last two decades of the 20th (Keeley and Syphard 2020).

Acorn and other towns were repeatedly menaced by wildfires during my fieldwork. These threats triggered acute anxiety and reinforced the existential humility, vigilance, and reverence for natural forces that is characteristic of backcountry habitus. One summer evening in 2017, I went to the Pink Flamingo in downtown Acorn. A wildfire raged a few miles away and at night smoke filled the streets. Hulking fire trucks patrolled town, and helicopters swinging buckets and trailing siphons carried water to release over the blaze. A middle-aged man named Tommy whom I regularly saw around town sidled over. “Welcome to the fire zone!” He sighed. “Everyone’s been pretending, going to the store, acting like it’s cool, but underneath there’s this layer of *stress*.” He admitted the spectacle also stoked curiosity. “We can see it from my place. We have cocktail parties on the ridge and we look down and watch the fire. Watch trees exploding.” I asked if he had been through other fires. He looked straight ahead and nodded. A few years earlier a blaze had forced another town where he owned rental property to evacuate. “There was a CAL FIRE truck parked on my property,” he remembered.¹⁰¹ “To be honest I was feeling a little PTSD’d after that.” For some merchants, however, wildfires sparked business. “My buddy at Acorn Hardware sold out of sleeping bags and tents for all the firefighters, so he’s winning!” And while guests were cancelling at boutique rentals like his, cheaper motels in town were full. The bartender, who also worked at a café in town and whose sibling volunteered as a firefighter, had been listening. “We have a lot more business [at the café] because of the fire, but we’re losing so much” to it as well. She trailed off, unable to reconcile these disparate effects.

All evening the bucket copters continued their rounds, targeting a clutch of small spot fires burning in the ravine directly above Acorn. I followed several others up a staircase on the patio and looked toward the dark hills. Stark against the night sky was a patch of raw orange fire, close enough to see individual trunks igniting. Flames shot over a hundred feet in the air and rafts of smoke flowed toward town. Those next to me laughed in nervous awe, reflecting the ambivalent mix of wonder and worry I heard from Tommy. Two hours later the Oak County Sheriff issued a voluntary evacuation order for downtown Acorn. Firefighters stopped that wildfire in the ravine and it did not threaten Acorn again. Soon dozens of handmade signs

burned 23,956 structures, and killed 113 Californians” (ibid: 1), a pattern of negligence that a federal judge described as a “crime spree” (Final Comments of District Court Upon Expiration of PG&E’s Probation at 2, *United States v. PG&E*, No. CR 14-0175 [N.D. Cal., Jan. 19, 2022]). On the Wine Country Fires, see Alexander 2018; on the Camp Fire, see Gee and Anguiano 2020 and Johnson 2021.

¹⁰⁰ By 2010, nearly one in three residents and housing units in the state were located in these areas (Gabbe et al. 2020). More buildings, power infrastructure, and activity creates more opportunities for human-caused fires (Kramer et al. 2019).

¹⁰¹ The California Department of Forestry and Fire Protection (CAL FIRE) is responsible for “fire protection and stewardship of over 31 million acres of California’s privately-owned wildlands,” and contracts with many local governments to provide emergency services (<https://www.fire.ca.gov/about-us/>). Wildland firefighting in national forests is administered by the United States Forest Service (<https://www.fs.usda.gov/managing-land/fire>).

appeared around town in an outpouring of gratitude. “Firefighters save more than homes,” one testified, “They save HEARTS, MEMORIES, and DREAMS.” Another was pithier: “You guys kick ash!” Respect for wildfire and concern for its prevention were instilled in backcountry residents from an early age and inscribed into the built environment. In addition to official signage warning of heightened fire danger, Oak County’s highways were lined with enlarged illustrations of fire safety guidelines drawn by local elementary schoolers.

In cities natural disasters temporarily disrupt open-air drug markets, though even after major hurricanes many are still able to find illicit drugs.¹⁰² In the backcountry, closed highways could cut towns off altogether from the cities that supplied their drugs, raising prices and making risky compromises like those I discussed earlier more likely. Because of where they lived, Acorn residents who were dependent on opioids, especially heroin, were distant from the drugs and supplies they needed to “stay well.” But because withdrawal could be neither avoided nor long tolerated, they were compelled to take a variety of additional risks to overcome their spatial disadvantages. Their isolation also meant that in cases of emergency, they often found themselves far from help. In other words, the risks they faced often resulted from features of the places they lived, rather than the actions they took or the drugs they used. In the next chapter I turn to the problem of acquainted marginality, a third place effect that pervaded everyday life in the backcountry.

¹⁰² In New Orleans, “the drug market functioned as a continuous, though diminished, operation” in the immediate aftermath of Hurricane Katrina and “reformulated itself rather quickly” during the recovery (Dunlap et al. 2012: 477–478). In a survey of people who use drugs in New York City about their experiences after Hurricane Sandy, about half of respondents had more trouble obtaining drugs and most experienced withdrawal at least once (Pouget et al. 2015).

Chapter 7. “Everyone’s a Cop”: Acquainted Marginality and Small-Town Policing

People who are dependent on illicit drugs live in a state of permanent vulnerability to arrest and criminalization, whether for possession of controlled substances or simply being under their influence. Mundane acts of everyday life like running errands around town can constitute crimes like public intoxication or driving while intoxicated. Criminalization and incarceration are one of the main ways that people who use drugs are marginalized in the United States. These interventions rely on physical coercion as well as the collection of personal information, such as the evidence police officers gather during criminal investigations. Acquainted marginality aids law enforcement’s efforts by augmenting their capacity for formal and informal surveillance and deepens stigma by indelibly spoiling the personal reputations of people among other residents.

I conceptualize acquainted marginality as an effect of three intersecting features of local social structure that are common in, though not exclusive to, small and remote towns like Sage Flats. First, *geographic isolation* from large populations, so that the activities and associations of everyday life including work and sociability take place primarily among neighbors. Second, high *density of acquaintanceship* among local residents, that is, the proportion of people who are personally known to one another. This dimension of social network structure is higher in nonurban areas and smaller communities (Freudenburg 1986; Beggs et al. 1996). While cities are “by definition full of strangers” (Jacobs 1961: 30), small-town residents often feel as though everyone “knows everyone else” (Macgregor 2010: 5).

Third, acquainted marginality emerges when *domination is exercised between neighbors*, so that authority flows through multiplex ties that meld impersonal institutional positions with personal status and relations. In large cities, residential segregation ensures that powerful and marginalized people, for instance police officers and those they pursue, tend to live far apart, have few personal ties with one another, and rarely encounter one another in informal settings.¹⁰³ As a result, urban social order “does not require that neighbors or local police officers be one’s friend,” instead relying on impersonal and generalized norms and expectations (Sampson 2012: 151–152). In contrast, personal ties like these between law enforcement and their targets are common and consequential in nonurban places (Weisheit et al. 2006; Garriott 2011). This aspect of small-town life allowed officers to manipulate the obligations of acquaintanceship to casually observe and interrogate people who used drugs and to obtain information about them through personal networks.

In this chapter I travel from Acorn to the smaller town of Sage Flats in Sage County to show how backcountry conditions created acquainted marginality, how acquainted marginality exposed people who use drugs to criminalization, and how criminalization impeded their efforts to use drugs more safely. I conclude by reflecting on the relationship between selective criminalization of substances and people and the widespread stigma against people who use drugs, and consider how it might be addressed.

¹⁰³ In a scene from the HBO crime drama *The Wire*, a trio of off-duty narcotics officers in the Baltimore Police Department run into three of the young drug sellers they have been investigating while on dates at a movie theater. The moment is played for laughs because of its improbability in a large city. “All Due Respect,” episode 2 of *The Wire: The Complete Third Season*, directed by Steve Shill (2004; New York: HBO Video, 2006), DVD.

“A long way from nowhere”: Geographic isolation and risky drug use

The first condition of acquainted marginality is isolation from larger populations. When urban sociologists consider the problem of separation between groups in the city, they often invoke the notion of “social isolation” of poor residents, which is enforced in physical space through residential segregation and the concentration of poverty (Wilson 1987; Small 2004). Isolation in this context refers to a lack of social ties and interaction between low-income and middle-class city dwellers, which deprives poor residents of connections that help them find work, social support, and other resources. Though poor people do rely on extensive networks of kin and peer support, these networks tend to form within low-income neighborhoods among low-income people, rather than linking them to more affluent residents (Stack 1974; Desmond 2016). Poor and marginalized people in nonurban places face an inverted relationship to place and inequality. Rather than experiencing social isolation from other groups enforced through physical boundaries, poor residents of backcountry towns are forced into social proximity with neighbors of all statuses and positions as a result of their shared remoteness from urban centers. In this section I describe the physical and social milieu of Sage Flats and illustrate its effects on the local drug scene, some of which will be familiar from Acorn.

Sage Flats is a compact town of a few thousand people in a flat tract of scrubland over two hours from the nearest city—“a long way from nowhere,” as Sage County’s elected sheriff Travis Fields put it. Situated on a remote stretch of blustery state highway, the town had the feel of a stone scoured smooth by blowing sand. The road grid ran barely twenty blocks from end to end and is pocked with large, undeveloped lots. The streets were wide, the buildings low, and the shop signs faded and peeling. Tumbleweed rolled across Main Street, trailed in the daylight by the pungent scent of sagebrush and in the evening by the piquant aroma of juniper chimney smoke. Deer roamed the neighborhoods, and a single red stoplight blinked on the edge of town. The nights were silent save the whistle of wind and the rumble of passing 18-wheelers.

White settlers entered the region in the second half of the 19th century, and within two generations had nearly eliminated the indigenous peoples through genocidal campaigns of dispossession, expulsion, and violence (Madley 2016). Reflecting this history, the town today is over eighty percent white with smaller Latin American, Native, and Asian groups. While logging at one time employed one-third of the working men in Sage County, lumber production in the county has fallen two-thirds since its midcentury peak, and Sage Flats’ population is no larger than in 1950 (May 1953; McIver et al. 2015). The county had among the lowest median household incomes and highest unemployment rates in California.

Sage Flats’ organizational landscape if anything sparser than Acorn’s. Downtown included a line of small shops, several of them closed, a vehicle dealership, three grocery stores, four restaurants, two gas stations, and a historic hotel with a wood-paneled bar. With other options a long car ride away, these establishments were hubs of social activity. The local criminal legal system consisted of a few judges and a handful of prosecutors, criminal defense attorneys, and probation officers processing and supervising all criminal defendants in the county. Health care was limited. Sage Flats’ hospital and clinic employed a handful of physicians and a few nurses and physician assistants. They were supported by two pharmacies and several county mental health and substance use counselors. Almost all specialty services, including pain management, were hours away. If a client was unhappy with how they were treated by a particular provider, alternatives were in short supply and exit from the local system of care was

difficult, forcing vulnerable people in need of services to endure poor treatment or forego care altogether.

In this context, prescribing narcotics was often easier for local providers than linking patients to more intensive services. As physician assistant Josh Kaufman put the choice to me, “if you had ten patients a day that you didn’t have to actually *see*, that you just refilled prescriptions for them? I mean, if you’re trying to make a living, it’s legitimately generating money—if you don’t get caught doing it.” Kaufman started working in Sage Flats in the mid-2010s, around the time an older physician retired following a Drug Enforcement Agency investigation into their prescribing practices, and Kaufman received many of that physician’s former patients. “Whenever there’s a new provider in town, the word gets out, and it’s like [patients] *challenge you*, they come in, ‘I’ve got chronic pain, you know, I’m on this medication, I’m on that medication,’” he complained. “Right off the bat I was like, ‘I don’t know if I want to work in an environment like this, this is not really what I went to school for.’” He was shaken by the fatalism he perceived in some patients regarding their poor health, loneliness, and isolation.

Out here, it’s almost like [there are] these people who *just don’t have any future* of breaking out of it. They accept it like, that’s the way it’s gonna be, and they’re never gonna improve their quality of life... After a while it’s like, okay, well that’s just the way it is, and you accept it and you can’t fight it, *you can’t*. And they can’t find doctors to come up here. They just can’t keep people up here because they come up here and they’re like, blown away by the intensity [of suffering].

Kaufman tried to meet the needs of his patients by learning to treat some severe mental illnesses and obtaining authorization to prescribe buprenorphine for opioid use disorder. For lack of alternative pain therapies, however, he largely acquiesced to patients’ requests for opioids.

I’ve sort of gotten sucked into the whole thing, and I’m probably one of the culprits as much as anyone else of writing prescriptions for people for narcotics. The majority of [patients] end up getting something because it’s sometimes hard to really know who is legitimate. As long as they’re respectful, they’re not breaking too many of the rules, they’re not calling all the time, they’re not asking for dosage increases, and I haven’t seen them over at the jail. [chuckles sardonically]

Other providers, however, refused to offer opioids at all. When I asked the medical director at Kaufman’s clinic how many patients the director started on new opioid prescriptions, he smiled wryly and curled his right hand into a zero—“unless you’ve got a bone sticking out.” As in other nonurban areas, restrictions on pharmaceutical drugs push some people to seek illicit alternatives, including “diverted” pills, heroin, and methamphetamine.

Similar to Acorn, illicit drugs were brought to Sage Flats by people who use drugs from Silver City or one of several other mid-sized cities, each at least a two-hour drive away, and were sold as means to support people’s own use. As a result, the drug supply in Sage Flats was inconsistent. Though methamphetamine—or something sold by that name—was almost always available in town, cocaine and heroin were relatively rare, as Jonathan, the young man who coined the “carpool drug market” term, explained.

This town gets spun up, heroin-ed out, pillied in, and fucking jacked up, [but] it's *so thin of a market* that sometimes you can *only* get up to a 20 [a \$20 bag containing a fraction of a gram]. There's no like, "I can go to the corner and get a ball."

Most people I met in Sage Flats who used drugs did not have access to a highway-safe vehicle and were dependent for their drugs on those who could travel. They paid a premium for their isolation. Heroin, when it was available, sold for \$20 per point (tenth of a gram), two to four times the prices charged in cities.

The drug scene was organized around private homes where people gathered to sell drugs, use drugs, and socialize. Among the more raucous of these was owned by a man named Ray, who grew up in Sage County. He began selling and using drugs as a young man, but eventually left town to try to escape notoriety. When his brother passed away, Ray moved back to look after his elderly mother. Several times a day he injected morphine pills, often mixed with methamphetamine, and could usually be found at home tinkering and tending a small cannabis garden in his backyard. "I swore I'd never come back here, and then I got up here and I was stuck right back in the same boat I was in before I left, license-less, jobless—*hopeless*," he chuckled grimly to me one day in winter 2017, as Chris Isaak's "Wicked Game" oozed from the radio between us. Ray and I were sitting with Jonathan at Ray's kitchen table, which was scattered with drug paraphernalia. After injecting his "breakfast"—a syringe full of clear morphine and methamphetamine solution that he had prepared and stowed in a kitchen drawer the night before—Ray handed Jonathan a second syringe, prefilled with about half the amount of drug solution, which Jonathan took gratefully and injected just below his left elbow.

Prior to my arrival, injection equipment was extremely scarce in Sage Flats. Sage Flats' two pharmacists were reluctant to sell syringes unless they were prescribed, particularly to people whose drug use and personal reputations were widely known and negatively viewed. The nearest syringe services programs were in the same cities from which drugs were transported, and people in Sage Flats who injected drugs avoided traveling with syringes for fear of being stopped and searched by police. Because of its small size and remote location, Sage Flats also lacked the extensive informal economies in drugs and other goods that urban residents have historically used to obtain syringes. The lack of consistent access to adequate supplies of drugs and equipment exacerbated the negative health and social consequences of illicit drug use. People who injected drugs reused syringes to disastrous ends, as Alex, a white woman in her late twenties, recounted.

I've sat there and watched [Ray's syringe] almost snap off, like, bending it. His girlfriend got [a needle] broke off in her arm... I took her to the hospital, and just hearing her scream... Needles were so hard to come by to where we were saving 'em, you know, to look for the sharpest one, [but] there were so many collected to hold on to because you didn't want to *not* have one that it was gross.

Supply shortages and the physical pains of withdrawal also led Alex and others to share drugs with their friends, which, if it went badly, bred mistrust and fear of health problems. As a result, Alex told me, she and Ray tried to start their own, informal harm reduction program.

We talked about it for a long time, a needle exchange here, like I'd always complain about it... to where I finally got [Ray] like, really thinking about it, and I like, pushed it on him, pushed it on him, 'til finally he like, started looking into it.

Alex would occasionally purchase syringes from pharmacies in urban areas and bring them back to share with their friends.

[I would go] buy a couple boxes of them... and then if anybody needed them, I'm more than happy to give them to people. I had a couple friends that would pretty much do the same thing, and they'd call me up to see if I needed any... we would actually, like, seek people out and ask them if they needed them, 'cause we knew how scarce they were around here.

They found an unexpected accomplice in Ray's neighbor Mark, a white man in his mid-fifties who grew up in Sage Flats. When his parents passed away, Mark moved back into their home down the block from Ray. He no longer worked due to health problems and spent most of his time at home watching war movies and cable news. Though reclusive, Mark maintained cordial relations with those he knew in town, including a former schoolteacher of his who also lived on his block. Ray often walked or rode his bike past Mark's house, and the two became acquainted.

When Mark learned in spring 2017 that people were injecting drugs at Ray's house, he started purchasing boxes of syringes from a local pharmacist who did not suspect him of using drugs. These he gave to Ray, who offered them to his friends in exchange for their used equipment. Ray boxed up the syringes he collected and returned them to Mark, who tossed them into his fireplace at night as a makeshift incinerator. Harm reduction resonated with Ray's preference for barter and decommodified exchange. "Some people are going, 'Now, how much are [the syringes]?' They're *nothing*. You do the exchange, [making money] ain't the point—the point is to keep the dirty rigs off the street." After I started visiting Sage Flats in summer 2017, I provided Mark and Ray with new syringes as well as other harm reduction supplies including biohazard disposal containers and naloxone kits.

In winter 2017 I asked Ray about his friends' reactions to the new supplies. "Oh, people are getting spoiled," he answered with a chuckle. "Why would you use an old, rusty" syringe if you don't have to? Mark and Ray estimated that by early 2018 they were exchanging five hundred syringes a month; by that fall they estimated a thousand a month. I inspected the biohazard containers that Ray returned to Mark, which corroborated their estimates. I also received reports of two overdose reversals using the naloxone I brought to Sage Flats. In the next two sections I describe how dense ties among and between people who used drugs and local authorities affected law enforcement practices and this grassroots effort to prevent drug-related harm.

“We live amongst each other”: Dense social ties and backcountry policing

The second and third conditions that give rise to acquainted marginality are densely acquainted social networks, and insiders, rather than outsiders, exercising authority. As I mentioned at the beginning of the previous section, the image of dense and tight-knit city neighborhoods is familiar from urban ethnography, particularly studies of ethnic enclaves and racially segregated ghettos that are isolated from other neighborhoods by physical, linguistic, and

cultural boundaries and provided for by internal organizations. Many of Herbert Gans' (1962: 15) mid-century Italian-American *Urban Villagers* "had known each other for years, if only as acquaintances who greeted each other on the street. Everyone might not know everyone else; but [they] did know something about everyone[.]" Half a century later, Mario Small's (2004) study of a predominantly Puerto Rican housing project in Boston and Iddo Tavory's (2016) account of a Jewish district of Los Angeles confirm that concentrations of local organizations can sustain densely acquainted neighborhoods that remain relatively socially isolated from surrounding areas.

The image of the "urban village," however, is both empirically atypical and theoretically too limited to capture the phenomenon of acquainted marginality. On the one hand, urban neighborhoods that feature such dense and insular social networks are often unusual because of their ethnoracial or cultural homogeneity, and so tend to overstate the general prevalence and salience of local acquaintanceship in everyday life. Contemporary research finds that people who live in poor urban areas regularly travel to other neighborhoods and interact with their residents (Krivo et al. 2013). However, the areas they visit tend to be comparably disadvantaged to their home neighborhoods (Wang et al. 2018). The segregation of residence as well as movement by class and race in large cities has two important consequences for the process and experience of marginalization. First, poor city dwellers' everyday interactions, while not restricted to their immediate surroundings, tend to be with other disadvantaged people. And second, the people in higher social positions with which they do interact—particularly those employed by formal organizations of social control—tend to live elsewhere, in more affluent areas and lack personal ties to the people they process.

It is precisely this lack of meaningful social ties through which information can more easily flow that necessitates the extensive apparatus of surveillance and coercion on which urban police rely to extract information from and exercise authority over constituents who often view them as outside occupiers. In the backcountry the situation is reversed. Law enforcement agencies lack the resources and skills of their larger counterparts, but they compensate by appropriating incriminating information through their own networks and in the course of everyday interactions with the people they police.

Sage County law enforcement was hampered by scarce personnel and resources. When I visited the Sage Flats Police Headquarters in summer 2017, a poster in the cramped foyer featured a photograph of a cowering child and a bleak admonishment in red capital letters, "HIDING WON'T MAKE MY PARENT'S DRUG PROBLEM GO AWAY." Down the hall, sitting at a folding table in the vacant city council chambers, Police Chief Hank Beaufort explained to me that Sage Flats employed about a dozen sworn police officers, of which only one or two were on duty at any time. Recruiting qualified officers was difficult because of the department's low pay and remote location, leaving them understaffed. In such small departments, all officers were forced into generalist roles no matter their rank, as the area's highway patrol commander explained.

I could be handling the front desk because [that officer] may be tied up with a car seat appointment or verifying the VIN on a vehicle or something like that, and then the next moment I could be out heading up a scene... We're a 24/7 operation [and] I can't work [my sergeants] 24/7, so there's times where I don't have a sergeant and I've got to fill that role.

Sheriff Field explained that limited infrastructure also constrained the scale of law enforcement operations and forced officers to use significant discretion. “If we went by the *letter of the law* every day, every officer, every deputy, we don’t have facilities large enough to house these people.” Sage County’s small jail was full of defendants awaiting felony trials or serving “local prison” sentences under California’s “realignment” policy (Grattet et al. 2017), while most people arrested for misdemeanors were booked and released. Local agencies’ lack of investigative capacity frustrated District Attorney Trotter, who previously worked in an urban prosecutors’ office.

We don’t have a dick bureau [detective unit], we can’t take fingerprints... the quality of the investigative work we do is a *joke*... When I was in [the urban office], you did fingerprint stuff all the time... the 18 years I’ve been here, I have not seen one single fingerprint lifted. I don’t even think the guys know how to lift a fucking fingerprint.

Weak organizational capacity prevented Sage County law enforcement from carrying out extended, technology-intensive investigations. They tried to compensate for deficiencies in material and human resources by acquiring information informally.

Dense ties and social proximity between residents and authorities offered qualified advantages to local law enforcement. Their familiarity with residents and their exploits helped them identify criminal suspects. As Sage County Sheriff Travis Field told me, “We know who the players are—these people stick out like a sore thumb... You would put the drug traffickers in this county on edge after doing just one or two busts.” Acquaintanceship and sometimes stronger ties were almost ubiquitous in the county’s courts. A judge told me that in twenty to thirty percent of the cases he heard he knew at least one party well enough that in an urban county with more judges he would recuse himself. Law enforcement’s awareness of social and symbolic outsiders was more than a matter of dense personal networks. In places like Sage Flats where residents became used to seeing a small number of consistent faces, sensitivity to the presence of strangers was a cognitive heuristic inculcated as part of small-town habitus and amplified by the professional attunement of law enforcement officers to unusual activity. Chief Beaufort voiced what came to his mind when he spotted someone new around town.

Are they on the run, are they transient? Why are they here? [...] This is an out of the way place. I mean, it’s—I don’t know why you would come here on purpose most of the time. There’s very little economic activity, you’re not going to come here looking for a job or a career... I don’t know why people would move here.

Long-term familiarity with their neighbors gave officers granular personal knowledge, as the juvenile probation officer Allison, who grew up in Sage County, explained.

Part of the perks of a small town is that I *know a lot* about these kids already, or their families, so a lot of the kids I get on my caseload I’ve been hearing about for the last five years as they go through the school system.

Other practitioners, including health care and human services providers, also collected information about their clients in the course of everyday life. For instance, a program director at Sage Flats’ main nonprofit social services organization ticked off a list of their clients who used

drugs to me, including a woman who used opioids whom the director had recently seen at the local movie theater apparently nodding off, as if under the influence. However, Allison continued, their familiarity with residents and suspects was mutual, and sometimes exposed them to reciprocal surveillance.

[On the other hand], people know *you*, and I wasn't a very good kid! [laughs] So sometimes I'll get kids that are like, oh yeah, my brother went to school with you, and I'm like, [wincing] *oh!*

Encountering her clients around town helped her keep closer watch on them but made it difficult to separate work time and personal time. "I don't want to know what that person [at the store] is buying," Allison complained. "If I see an adult and I know they're not supposed to be getting alcohol, *I just don't want to know* because I just want to be off work."

Social and physical proximity to their targets also complicated law enforcement's ability to use the information they collected. Sheriff Field described how, in contrast with urban departments whose officers are strangers to most residents, recognition of law enforcement by members of the public limited the kinds of investigations they could pursue.

[In a large city], you can drive a different car the next day, put different people in it... We start working on those people, we start trying to put surveillance on their residence, it doesn't work, 'cause they know everybody. They recognize the police cars; they recognize the officers. We live amongst each other.

Even high-ranking elected officials like the sheriff and district attorney were publicly accessible to the people they policed and prosecuted. Some criminal defendants approached Sage County District Attorney Jacob Trotter to convince him they had been rehabilitated—to his bemusement.

I'm on a first-name basis with... probably eighty percent of [defendants]. "You're back, how you doing?" [...] They come up to me, they shake my hand, whatever. "How you doing," or, "I'm sorry, I'm gonna really straighten it out." I'm like, [dismissively] yeah, sure you are, buddy.

On the other hand, acquaintanceship with so many defendants meant legal officials sometimes had to choose between aggressively enforcing the law and maintaining good relations with colleagues and constituents. As Ralph Landingham, a former Sage County district attorney, told me, "If you do the job and really you do it correctly, you're going to piss off half the county 'cause you've prosecuted them!" These pressures widened the gap between the informal knowledge available to law enforcement and their organizational capacity to effectively act on it.

As a result, law enforcement tended to focus their efforts on people who were widely known to use drugs, such as Alex and Ray. In summer 2018, I visited Alex at a friend's home where she was spending nights on a mattress in a corner of the living room floor. She told me she had recently been arrested three times in the course of one week, including for possessing harm reduction supplies she received from Mark and Ray. Showing me her most recent citation and the empty wooden cabinet where her supplies were kept, Alex remembered with contempt the officers questioning why she had so many new syringes.

I flat told them, you know, everybody in this fucking town will sit in a circle and share the same fucking needle! What's wrong with giving somebody a new one when they need it? So yeah, I have them on hand when people need them. I'm not gonna keep that a secret, I'm *proud* to say that!

Nevertheless, she was charged with possession of drug paraphernalia. Sage County law enforcement contributed to the reputational damage of arrests by regularly posting the names and alleged offenses of arrestees like Alex on social media. "I'm so ready to leave this town," she concluded bitterly. "I guess it depends on what your last name is around here," and she felt hers had been irreparably marked as criminal and unworthy. Ray agreed that officials and residents in town "label-make you. If you've been here all your life and they label you, that's it. I left for a few years, came back, had the same label." A remark by District Attorney Trotter about his constituents who died of opioid overdoses indicated that Alex and Ray's pessimism was well-founded.

If you want to get addicted and die, I don't have a problem with it. We've had a number of deaths here, and I don't find any of them to be tragic. A lot of people seem to get up in arms over adult opiate use—I'm like, *let 'em use, give 'em more!* Maybe they'll croak and they'll get off SSDI and Social Security won't get bankrupted after all... It's a terrible thing to say, but it's the truth, 'cause most of the ones that die of opiate overdoses are complete derelicts. They're not contributing.

Law enforcement was aided in their efforts to identify criminal suspects by other local authorities, including health care providers. Alex recalled being arrested after a visit to her doctor's office in a vivid illustration of the frequent complicity between the left and right hands of the state in small and remote places.

My doctor called the cops on me. I didn't know he knew I even had a warrant for not going to court, but like, I was getting a checkup... and he said something about the cops. But it didn't click until I was leaving, and then all of a sudden I was swarmed by cops. So I was like, *fuck, everyone's a cop up here.* It's like even the doctors are cops, I swear.

Fear among people who used drugs of being scrutinized in public and tracked by local practitioners discouraged some from accessing health and human services (Ellis et al. 2020). Ray told me that his friends liked visiting his house for supplies in part because "they don't have to go down [to the health department], like, on Tuesday from two to three [p.m.] and then have all the cops sitting there watching them." What Ray and his friends were trying to avoid was acquainted marginality and its effects. In the next section I show that while Ray's involvement was also fraught, worries within the drug scene of exposure to law enforcement were warranted.

Acquainted marginality in action: Surveillance and spoiled reputations

Acquainted marginality allows local authorities to appropriate their embeddedness in the social networks and everyday lives of their constituents for their own ends. Arrests and incarceration resulting from acquainted marginality did not only result in loss of liberty and the mark of a criminal record; by removing people from the drug scene they disrupted interpersonal

relationships and interrupted life projects in ways that affected the broader scene. In Sage Flats, this eventually led to the collapse of the effort by Mark, Ray, and Alex to protect themselves and others from the health risks of injection drug use.

Ray lived across the street from a former Sage Flats police chief named Walt Moore and law enforcement vehicles frequently rolled past his house, but he shrugged off the legal risks he took by distributing and collecting syringes at home. “It’s a charge I’m willing to take to keep these dirty [syringes] from our grammar schools, from our streets, you know, keep people from fucking passing deadly diseases.” But Ray’s central position in the drug scene also lent him influence over others’ drug use that was in some cases augmented by his possession of syringes. Alex explained her ambivalence about his role in the project.

I think it’s kind of cool that he got into this needle exchange thing, but I don’t know, he’s kind of weird about it too... He uses it more like a power thing, like a power trip... [Ray]’s the type to where, like, if you don’t have something, he ain’t gonna answer the door. So now it’s kind of like, “Well, if they’re wanting needles I know they’ve got something [drugs].”

Ray did not deny that he received certain privileges for providing supplies and a private place for people to use drugs.

I get fringe benefits, yes, I’m not gonna lie. When people come over they’ll kick me down something [drugs], or they’ll bring me a pack of cigarettes and a Pepsi, you know? And plus I get a new [syringe] every time— [laughs] I do personally, yes, I do. So?

These benefits made Ray suspicious when others tried to distribute supplies. In autumn 2018 Alex told me, “[Ray]’s made comments here and there, talking—you know, sarcastically kind of but not, making it sound like he’s joking—about me taking his business away or some shit,” by giving out syringes more generously than him. Ray could also be inconsistent, sometimes refusing to answer his door or phone for several days. Since their informal efforts relied on such a small group of people, they were inherently threatened by personal vicissitudes.

Alex, Ray, and Mark’s efforts were also vulnerable to discovery by law enforcement. As I was reminded by Alex’s mother Rhonda, who also used drugs, “Walt Moore lives right across the street from Ray, come on! Ray’s [security] camera points at his house, and his points at Ray’s house – they watch each other’s property, you know? Just friendly neighbors.” She laughed at the image. I asked Alex if she thought the police knew the extent of the drug-related activity at Ray’s house.

Oh, of course they do! How can they not, you know? There are the people that come and go, like, shit, [Ray]’ll go out and tweak out on his yard in the middle of the night all night long... [laughs] It’s really funny, the shit he does, it’s like, how could they not know?

Because high- and low-status residents of Sage Flats were intermingled rather than segregated, it was virtually impossible for people who used drugs to avoid being visible to their neighbors. I experienced this feeling of exposure myself on numerous occasions as I unloaded bulky, colorful cases of syringes out of my trunk in Mark’s driveway or stood on Ray’s patio while his middle-

class neighbors tended their property. This visibility made people more vulnerable to surveillance and the reputational damage it could incur.

Early urban harm reduction groups in California's coastal cities publicized their efforts, provoked arrests, and defended themselves in criminal court to win support for their cause (Showalter 2020). They were led by direct-action movement veterans and health professionals and sought friendly juries in liberal jurisdictions. While most people who used drugs in Sage County lacked these privileges and protections, Mark's reputation was relatively unscathed, and he hoped to avoid being arrested for helping his friends stay safe. So, in spring 2017 he contacted the local health department, law enforcement, and district attorney to gauge their reactions. Unsurprisingly, District Attorney Trotter told me that he was not supportive.¹⁰⁴

I got a phone call from a guy [and] he wanted to do a needle exchange, and I said, "I'm not gonna support it." I'm not even sure there's enough needle use up here to justify a needle exchange but I told him, I said, "Look, I think when you take away the consequences of a particular conduct, you get more of it, and if the consequences are, uh, the spreading of disease, I think that consequence needs to be there."

The sheriff's employee Mark spoke with was uninterested in his inquiry, and the police didn't return his call.

Law enforcement did confirm that they were aware of the informal harm reduction effort one afternoon in autumn 2017. Mark was using an ax to hack at some weeds in his front yard, cursing loudly, and his neighbor called the police, thinking he was threatening them. A few minutes later a sheriff's deputy and a police officer arrived. After resolving the confusion regarding the ax, the police officer asked, *are you the guy doing the needle exchange?* Surprised, Mark demurred, though the officers "seemed to be accepting of the idea, more than anything... they didn't say anything negative, or have any bad expressions on their faces." Perhaps because he did not have a reputation for using drugs, Mark was not targeted by law enforcement during my fieldwork.

By contrast, Ray and Alex had long and public histories of substance use and criminal entanglement that ultimately undermined their efforts. Alex was born in Sage County and by the end of elementary school Alex was smoking cigarettes and cannabis and getting into fights. Her guardian sent her away to live with her mother, but she ended up cycling through the juvenile justice system and a group home. As a teenager she helped transport methamphetamine on the West Coast, and after she turned eighteen she moved back to Sage County in a futile effort to quit using. She was introduced to opioids and syringes by Ray in her early twenties and had been in and out of the local jail for years. Alex was arrested at least five times during my fieldwork, mostly for minor drug charges.

Ray's negative reputation in town began in young adulthood and persisted during my fieldwork. In late 2017, he and I went to the hotel bar to relax but were quickly asked to leave by the bartender, who was the mother of his ex-girlfriend and blamed Ray for her drug use. We went across town to another establishment where the bartender, a woman named Daisy, served us with polite distance. Not long after in early 2018, a Sage Flats city councilmember directed Police Chief Beaufort to investigate "numerous" complaints about Ray's dogs, which often

¹⁰⁴ During my fieldwork I do not believe that local law enforcement knew of my relationships with Mark, Ray, or Alex.

barked at night or got loose from his yard. A few weeks later, I was back at the hotel bar alone, sitting a few stools down from Ralph Landingham, the former district attorney. Daisy was tending bar there as well and informed me that Ray “is not welcome here,” and warned me about hanging out with “the wrong kind of people.” Landingham chimed in, “He’s been dealing for thirty years! He was a piece of work when *I* was the DA,” decades earlier. Daisy lamented, “It’s sad, at one point [Ray] was somebody’s kid, and now nobody would care if he was killed and they found him in the middle of Main Street.” Longstanding and overlapping relationships among residents meant reputations were easily spoiled, and without strong evidence to the contrary tended to stay that way.

The risk that people’s drug use could be uncovered through surveillance or gossip created barriers to implementing drug-related health services that would be acceptable to their intended recipients. I was initially introduced to Mark through Melissa Gallant, a nurse at the Sage County health department, whom he had contacted at the outset of his harm reduction efforts. Melissa offered prevention and testing services for sexually transmitted infections, HIV, and hepatitis C, and was also in charge of the county’s nascent official harm reduction efforts. She had secured a few dozen naloxone kits to distribute and helped convince the health department to install an outdoor, public syringe disposal bin. During my fieldwork I repeatedly encouraged Mark, Ray, and Melissa to collaborate, but those efforts ran aground on the realities of acquainted marginality.

The visibility caused by acquainted marginality prevented agreement on where collaborative services could be provided. In autumn 2017 Mark invited Melissa to his home to meet Ray. She was initially hesitant. “I probably had slight prejudice, which I didn’t think I had, but I was a little nervous wondering if I would be safe.” Because her department had so few staff Melissa regularly had to work alone, and out of precaution she refused to enter the homes of people like Mark and Ray with whom she was unfamiliar. “As a female with two males I was like, I don’t quite feel comfortable.” So they stood outside in Mark’s front yard to hear her pitch.

I was telling him how I can do HIV testing and hep C testing, and I don’t mind going out in the field to do it as long as I’m safe... I don’t feel *super* comfortable going into some people’s houses, [but] I can meet outside as long as it’s warm, or they can come up to my car.

She gave them condoms and about six naloxone kits to distribute and invited them to contact her if anyone was interested in being tested. They spread the word to others—Mark estimated fifteen people had told him they were interested in testing, including a couple who suspected that they had been exposed to disease through shared syringes—but none were willing to be tested by a nurse or outdoors. Because Melissa was the point of contact for many of the department’s drug-related services, being spotted in public with her posed a significant reputational risk.

Melissa might have been willing to offer testing services in someone’s home if she was accompanied by at least one other colleague. But with less than a half-dozen nurses in her department who each managed other programs it was difficult to coordinate schedules, especially without assurance that people would agree to be tested. Mark asked several times if Melissa could give him disease tests that could be self-administered at home, but health department procedures required the tests be performed by trained staff. As the department’s primary test provider, Melissa bore the brunt of Mark’s growing annoyance with this impasse. “I understand his frustrations, and I am the easiest target to... *target them*,” she told me in spring 2018, a few

weeks after a hostile meeting with him. “But,” she continued with a weary sigh, “I can only do so much... If I could do it, I would do it!” Ray’s reputation as a public nuisance also prevented him and Mark from partnering with the county health and human services department to deliver harm reduction supplies. When I broached the topic with two staff members in early 2019, they grimaced and admitted that Ray and his friends “would not be people we want having control” of a program.

So few people lived in Sage Flats that even a small clique was proportionally similar to an urban organization with dozens or hundreds of members, while the loss of a few individuals could crush a collective effort. In spring 2019, Mark was flown to a regional hospital and placed in intensive care after an apparent aneurysm. He died before Ray or I were able to visit him. Mark’s estranged siblings soon arrived in Sage Flats, parked a dumpster in his driveway, and emptied his house. Mark sometimes let Ray and Alex wash their clothes there, so Alex and I walked over to retrieve their laundry. Mark’s brother blocked the front door and told us to “get the cops” if we wanted to enter. Mark had complained to me that his relatives were uncomfortable with harm reduction, and they were probably displeased to find syringes and other supplies in his home. A few nights after Mark passed, I visited Ray. His power had been shut off, and his mood matched the darkened room. Sitting in the dark, Ray speculated grimly that that Mark’s sudden injury could have resulted from foul play, perhaps by someone in his own small peer group. Since the health department was reluctant to partner with people like Ray and Alex who were actively using drugs and entangled in the criminal legal system, Mark’s passing also broke the only reputable link between the drug scene and local officials. By early summer Alex and Ray were both arrested again. Alex was sentenced to a year in jail for drug charges, while Ray faced a prison sentence for firearms found in his home. With no one to hand out supplies, harm reduction efforts in Sage Flats faltered.

Undoing the damage of acquainted marginality

In this chapter I showed how acquainted marginality arises from the physical and social conditions of everyday life in small and remote towns, and how it threatens the health and wellbeing of people who use drugs.¹⁰⁵ Acquainted marginality allows local authorities to compensate for their relative lack of coercive and information-gathering resources by appropriating the resources of their own networks. The public visibility of marginalized people and the ubiquity of drug use as a topic of gossip made it easier for law enforcement to identify gather information on poor people who used drugs. Their targets in turn tried to protect themselves through informal mutual aid rather than formal services that could be co-opted by law enforcement. But these efforts fell prey to the precarity, visibility, and disgrace experienced by those who led them. In the case of illicit drug use, the harms of acquainted marginality therefore result from the links between social network structure, widespread stigma that makes

¹⁰⁵ Similar dynamics have been identified by other scholars of nonurban policing. In an ethnographic study of methamphetamine in rural West Virginia, William Garriott (2011: 45) reports that for a pharmacist, “local knowledge acquired through long-term relationships was a superior method for monitoring the illicit acquisition of prescription drugs than the state’s bureaucratic measures.” He also notes that “many of the people on probation were former classmates” of the probation officer (ibid: 72).

drug use a popular topic of gossip and vehicle for moral judgments, and the criminalization of drug use. What are the prospects for addressing each of these factors?

The social network qualities I have described, including locally dense acquaintanceship, have been linked to the social morphology of small and isolated settlements for over a century.¹⁰⁶ One can imagine conditions that could moderate them, for instance increasing links to other settlements through political, economic, or technological integration. Ironically, less complete local organizational landscapes could also force residents to spend more time away from home fulfilling basic needs, weakening their ties to neighbors. But entirely eliminating the feeling of dense social ties among neighbors common to small towns would likely mean eliminating the very qualities that make them “small towns.”

Anti-drug stigma is also deep-seated. Most people in the United States and other countries hold negative beliefs about people who use drugs, including that they are dangerous, irresponsible, incorrigible, and blameworthy. These views are more widely held about people who use drugs than those who suffer from severe mental illness (Yang et al. 2017). Ironically, propagating the view that addiction is a brain disease seems not to attenuate stigma and perhaps even reinforces it (Trujols 2015; Rundle et al. 2021). There is some evidence that anti-drug stigma intersects with other dimensions of inequality and prejudice. On the one hand, anti-drug stigma is stronger toward poorer people. On the other, anti-opioid stigma in particular is greater toward white people, perhaps as a result of overwhelming media focus during on the overdose crisis on opioid use among whites as opposed to other ethnoracial groups (Sobotka et al. 2020; Wood and Elliott 2020). Finally, drug-related stigma is quite sticky—people who quit using drugs continue to face derision, mistrust, and discrimination that undermine their efforts to maintain sobriety (McCradden et al. 2019).

Combating anti-drug stigma is challenging, particularly in nonurban places like Sage Flats (Ezell et al. 2021). In health care settings, having personal contact with people who use drugs or learning more about their experiences can reduce stigmatizing views, for instance by integrating people with people experience into care teams (National Academies of Sciences, Engineering, and Medicine 2016). But workplace relationships are different than those between neighbors—or for that matter between small-town service providers and their clients—which cannot so easily be left behind at the office. Instead, my findings indicate that drug-related stigma can pose extra challenges in places where dense and longstanding social ties make salvaging reputations difficult and avoiding disfavored people difficult (Draus and Carlson 2009; Burgess et al. 2021).

The reason stigma is especially harmful to people who use drugs is its intersection with criminalization. Other conditions, such as several mental illnesses, are also widely stigmatized, and those who have those conditions in nonurban places face considerable obstacles to getting help and leading healthy and happy lives, not least among them the discriminatory stereotypes and emotional reactions that their neighbors and caregivers may express (Mohatt et al. 2006; Magnus and Advincula 2021). But they do not face the risk of being arrested, charged with a crime, losing their liberty, or being separated from their children and other loved ones as a result of their health condition. As I have shown, fear of these devastating personal and family

¹⁰⁶ These qualities are recognizable in Ferdinand Tönnies’ distinction between the personal bonds of *Gemeinschaft* and the formal ties of *Gesellschaft* and in Émile Durkheim’s distinction of the mechanical solidarity typical of isolated, segmental social units and the organic solidarity generated by increasing interdependence across society (Bell and Newby 1971: 21–27).

consequences discourages people from seeking the help they need and prevents them from taking reasonable steps to protect themselves. These consequences are not inevitable, as illustrated by the experiences of my participants who used prescribed opioids, sometimes for years, with fewer negative consequences. Rather they result from the selective and harsh criminalization of a relatively small group of substances. In small and remote towns like Sage Flats where dense social networks are almost inherent to the milieu and anti-drug stigma is deeply entrenched, mitigating acquainted marginality will likely require rolling back the curtain of criminalization that cloaks some people who use drugs in fear and shame. In the concluding chapter, I lay out how to go about addressing the problems I have identified.

Chapter 8. Conclusion: A Place for Drugs

The preceding chapters introduced the terrain, pace, stakes, and risks of the lives of marginalized people who use heroin and other opioids in backcountry California. They excavated the long history of opioids in that region, plotted the most recent cycle of boom and backlash in opioid prescribing, mapped the fragile heroin scene that emerged in its aftermath, charted the damaging effects of distance and deprivation, and captured residents' exposure to surveillance and vulnerability to stigma. Along the way I deployed new concepts to explain the distinctive qualities of nonurban social life. This chapter considers three sets of implications that follow from my findings. First, I suggest future directions for the ideas I developed here. Second, I sketch a sociological theory of addiction to balance the brain-centric theories currently in vogue. Finally, I enumerate a suite of policy changes that would begin to address the harms faced by my research participants and move beyond the failures of drug prohibition.

Pursuing the geography of ambivalence

The value of the concepts I have introduced here will be measured in their usefulness for asking and answering future research questions. I will first sketch out several directions in which they could be pursued and developed.

The concept of acquainted marginality casts a new light on perennial theme in social science: the relationship between interaction, social networks, and local inequality. I argue that overlapping roles and multiplex ties expose poor and criminalized people to surveillance, gossip, and stigma from their more powerful neighbors. But several dimensions of acquainted marginality's origins and effects deserve further attention. First, its variation over time and place. Lingeman's (1980: 60) history of small towns in the United States demonstrates that many of the effects of acquainted marginality I found in backcountry California, including the "suspicion of strangers," the "informal, personal politics," and the "'neighborliness' accompanied by a proclivity to pry into the private lives of those neighbors," all date to colonial New England. However, this tendency could be fostered or hindered by other aspects of social morphology and social structure. With respect to morphology, public visibility is enhanced in settlements like Acorn and Sage Flats that feature a town center where important businesses and services operate in close proximity and residents are drawn for errands and sociability. Acquainted marginality may be reduced in nonurban areas with more dispersed settlement patterns. With respect to structure, Lingeman argues that the traits I mentioned were fostered by the Puritan church's strict beliefs and hierarchical structure, which was replicated in colonists' families and civic life. Places or societies grounded in different moral and organizational principles could mitigate the expression of acquainted marginality.

Second, its intersection with other dimensions of inequality, particularly race and ethnicity. Though Acorn was predominantly white, many of the people who consistently sold heroin in town during my fieldwork were Native, Latin American, or Black. Their minority statuses carried negative stereotypes regarding involvement in drug use and crime, and they drew frequent attention from law enforcement. Differences in local demographic composition could influence these dynamics. In "skewed" populations where the dominant group significantly outnumbers minority groups, "token" minority members tend to receive outsized attention and perceptions of their differences from dominant group are exaggerated (Kanter 1977). It is

therefore possible that the effects of acquainted marginality could be muted in more ethnoracially diverse places where nonwhite people are less subject to tokenization, or in places where people selling and using drugs are more representative of the broader population. However, others argue that dominant groups perceive gains in number or power by minority groups as threats and respond by treating minority group members more harshly (Blalock 1967). It is thus also possible that acquainted marginality could be exacerbated in places where larger or less marginalized populations of ethnoracial minorities are governed by predominantly white officials.

Third, its relevance in other regions of social space. Like their underground counterparts, elite subcultural scenes consist of exclusive venues and networks in which relatively small populations sharing mutual interests and mutual acquaintances can congregate for sociability and status competition (Irwin 1977). In elite scenes, internal authorities derive their clout from their conspicuous consumption, “connections” to others, control over members’ access to scene venues, and influence over members’ status within the scene. Generalized from the social morphology of small and remote towns, the concept of acquainted marginality therefore complements Fischer’s (1975) influential subcultural theory of urbanism and contributes to a longstanding theoretical tradition that emphasizes the importance of small groups and face to face interaction in modern human societies (Simmel 1950; Goffman 1983; Fine 2012). Ashley Mears’ (2020) ethnographic study of the global party circuit illustrates how hierarchies pervade elite spaces, on the one hand between ultra-wealthy “whales” and merely well-to-do “mooks,” and on the other between rich older men and the younger women that they recruit and flaunt. However, while previous generations of elites were primarily embedded in the status networks of the cities where they lived and worked, today they are part of a “globally connected and hypermobile” upper class that is also “more anonymous” (ibid: 240). The relative value of interpersonal relations and personal reputations compared to other forms of capital among contemporary elites deserves more attention.

This study also contributes to research on the spatial dimension of habitus. Spatial position and orientation are key to habitus. At the micro scale, for instance, the body acts as an “analogical operator establishing all kinds of practical equivalences among the different divisions of the social world,” giving meaning through its posture and movement in space to symbolic oppositions such as high and low, left and right, and forward and backward (Bourdieu 1990 [1980]: 71). With respect to a broader sense of place, the fit between a person’s habitus and their physical and social environment influences the efficacy and perception of their actions. Matthew Desmond (2007: 29) illustrates how rural upbringings lend wildland firefighters a generic habitus in which the “distinction between... ‘the country’ and ‘the city,’ functions as their primary symbolic binary.” The primary habitus of a “country boy” draws them to the outdoors and facilitates the acquisition of a secondary habitus based on the professional identity and organizational rules of wildland firefighting. The fit between habitus and place is not automatic or permanent. Removal or displacement from the physical and social conditions in which one’s primary habitus was formed can lead to misinterpretations and inappropriate actions, as when Aaron teased Victor for adhering to urban gang loyalties “in the mountains.”

Sketching a sociological theory of addiction

Another path forward from this study of how drug use is shaped by social and physical context is to develop a sociological theory of addiction. In recent decades, major government

agencies, funders, and professional organizations have advocated the brain disease model of addiction, which conceptualizes the condition as a chronic, relapsing brain disorder (Campbell 2007: Ch. 8; Courtwright 2010). Proponents of this model rely on neuroimaging studies in humans and nonhuman animals that show how dopamine signaling triggered by drug use contributes to persistent changes in areas of the brain associated with decision making, impulse control, and positive reinforcement (Koob and Volkow 2010). This evidence, however, is less robust and persuasive than often portrayed (Satel and Lilienfeld 2014; Hall et al. 2015). Animal studies often involve placing research subjects in artificial, austere, antisocial environments with few alternatives to drug use (Ahmed et al. 2013). Among humans, addiction is not usually a permanent condition: many people will change their drug use in response to relatively small incentives, for instance in contingency management programs that offer small rewards for achieving treatment goals, and most people who meet the criteria for addiction at one time later quit using drugs, often without treatment (Heyman 2009). As I argue below, these facts fit better with a sociological concept of addiction as a mismatch between drugs, the individuals using them, and the organizational and institutional environment encompassing both. In the remainder of this section, I review major accounts of addiction to develop a clearer sociological picture of the condition. I also outline several mechanisms that lead people toward and away from addiction at different positions across social space and over the life course.

Drug use and addiction were once central topics in sociology. Alfred Lindesmith published a “sociological theory of addiction” in the *American Journal of Sociology* in 1938 and later expanded his findings into an influential book (Lindesmith 1968 [1947]). The key sociological process in his theory is learning. Any theory of addiction, Lindesmith (1938: 598) argued, must “account for this fact that not all persons who are given opiates become addicts.” What separates the two, he claimed, was the realization that withdrawal (in my participants’ terms, getting “sick”) results from interrupting use, so that “avoiding these symptoms” becomes the “consciously understood motive” for using (ibid). This theory remains incomplete. People can understand the withdrawal mechanism and still not become addicted, either by deciding to quit upon discovering their dependence, or by failing to obtain enough of the drug to keep using.¹⁰⁷ In each of these cases, continued drug use is influenced by other aspects of the person’s social position and trajectory. Moreover, Lindesmith’s definition offers no way to distinguish between addiction and mere physical dependence on a substance. Patients dependent on other medications understand very well the connection between their use and their continued wellbeing and go to great lengths to use consistently. But people with diabetes, for instance, are not therefore said to be addicted to insulin.¹⁰⁸

To account for these additional factors, I combine Howard Becker’s analysis of drug use with Bourdieu’s theory of how people’s positions in social space influence their strategies and practices.¹⁰⁹ In a chapter of Becker’s (1963) classic book *Outsiders* on “Marihuana Use and

¹⁰⁷ Biernacki (1986: 44–49) discusses cases of people who stop using opioids when they lose access to them or because other activities take up their attention.

¹⁰⁸ In “The Land of Insulin Addiction,” Henry A. Davidson (1959: 559) offers a caustic parody of drug prohibition by imagining a world “where taking insulin is a crime.”

¹⁰⁹ In contrast to Lindesmith’s focus on addiction, Becker’s (1963: 41) empirical object is drug use “for pleasure.” In contrast to opioids, he argues, “marijuana does not produce addiction” because “the user experiences no withdrawal sickness and exhibits no ineradicable craving for the drug” (ibid: 40). More recent research suggests that cessation of cannabis use can produce

Social Control,” he moves beyond a person’s understanding of a drug’s physiological effects to consider the roles of supply, secrecy, and sanctions in regulating drug use. He points out that graduating from occasional use to regular, heavy use requires people to find a consistent source, create personal routines that permit surreptitious use, and avoid or otherwise come to terms with the potential sanctions of being discovered. However, Becker’s account extends only to the individual’s direct associates—friends, family, drug sellers, and so on—and does not attempt to systematically locate them in social space. Bourdieu’s more robust account comes in handy here. Social space is not a “simple ‘awareness context’ in the interactionist sense,” he argues, but the combination of individuals’ objective “positions in the distribution of capital” and their “practical reactions” based on their positions and the conditionings of their habitus (Bourdieu 2000 [1997]: 183). In other words, a person’s propensity and ability to engage in drug use depends on their position in social and physical space—for instance, their proximity to drug scenes and the risk to their status of discovery or arrest.

People in different social positions face different “push” and “pull” factors that make drug use a more or less attractive or risky investment of their time and capitals. In the lower regions of social space, a lack of available or valued alternative investment opportunities in work, family, or other domains may make drug use appear more attractive or less risky by comparison. By the same token, people’s positions in social and physical space may make drug use more difficult to avoid, for instance frequent, unsought exposure to drugs and instruction in their use as a consequence of family ties, peer networks, or residential locations. On the other hand, there are pull factors that could make drug use a less attractive investment, say if work or family are valued and would be endangered by continued use, or prevent people from continuing their use even if desired, for instance lack of a consistent source.¹¹⁰ In the upper regions of social space, drug use may be more consonant with some capital investment strategies than others, for instance in fields of cultural production where drugs may be valorized as creative tools, or in high-energy professional field where they may be used as productivity aids.¹¹¹

Gene M. Heyman’s *Addiction: A Disorder of Choice* (2009) attempts to formulate a theory of addiction as a functional disorder of the relationship between drugs and their users, rather than a chronic brain disease. Addiction is caused, Heyman (ibid: 128–129) argues, by “a mismatch between how choices are made and certain properties of addictive drugs,” namely that

withdrawal-like symptoms, though its severity depends on a range of individual and environmental factors (Bonnet and Preuss 2017). Cannabis use disorder is estimated to affect approximately 10 percent of people who use cannabis; lifetime risk of use disorder and individual and public health burdens are lower for cannabis than for other substances (Connor et al. 2021).

¹¹⁰ In Biernacki’s (1986: Ch. 2) study of people who quit addictive opioid use without treatment, most did so in response to negative changes in circumstances or threats to wellbeing or valued relationships. Similarly, Granfield and Cloud (1999: Ch. 5) find that recovery from addiction without treatment was embedded in a context of renewed social and organizational ties. This social capital often predated individuals’ addiction, suggesting that people already occupying elevated positions in social space are better positioned to recover from addiction as well as to avoid it.

¹¹¹ As I explain below, these investments of time, energy, and resources are not necessarily the result of rational calculation, but of the relationship between the dispositions of one’s habitus and one’s position in social space.

their “costs are delayed, indirect, and uncertain,” creating a “misleading bias in the relationship between perceived costs and perceived benefits.” This bias is not pathological but typical of how humans make choices in contexts of limited information. However, Heyman (ibid: 39) reduces the relationship between social setting and rates of addiction to “the influence of ideas, values, and attitudes,” ignoring how social and organizational settings influence drug use choices by shaping the availability and acceptability of drugs and the practical accommodations made to their use. A more profitable direction for social scientific approaches to addiction is Natasha Dow Schüll’s (2012) *Addiction by Design*, an ethnographic study of machine gambling. Schüll shows how the trance-like “machine zone” experienced by gamblers of heightened sensitivity and susceptibility to gambling is elicited by meticulously designed environments and ingrained in gamblers’ bodies as habits, reflexes, and proclivities. In a literalization of the competing sources of meaning and investment I described earlier, Schüll shows how casino floors are designed to usher gamblers into “secluded, private playing worlds” where distractions, delays, and disruptions are carefully minimized (Friedman 2000: 12, quoted in Schüll 2012: 41). These physical and social arrangements are conducive to profitmaking as well as addictive gambling practices.

Examples like these suggest that addiction is defined by a dysfunctional relationship between personal goals, drug use practices, and organizational and institutional expectations. In this respect, addiction bears an analogical resemblance to what Lewis Coser (1967; 1974) called “greedy institutions.” In modern societies, Coser (ibid: 197) notes, following Georg Simmel, most people are “enmeshed in a web of group affiliations and hence subject to the pushes and pulls of many claimants to [their] commitment.” But some organizations “are not content with claiming a segment of the energy of individuals but demand their total allegiance,” and intentionally undermine their competing commitments, for instance to the family (ibid: 198). Among Coser’s cases are political eunuchism in imperial courts, sacerdotal celibacy in the Catholic Church, and the demands placed on live-in domestic servants and adherents of radical political and religious sects. A hallmark of addiction is that it also makes increasingly exclusive claims on the time, attention, resources, and relations of those who endure it. Addiction is sustained through networks and organizations, but unlike in Coser’s examples it is the practice of drug use and not the sellers and brokers that facilitate it that is “greedy.”

The relationship between the propensity for addictive behavior and an environment of incentives, facilitators, barriers, and sanctions demands an approach that accounts for how the boundaries of addiction are shaped by social conditions, institutional expectations, and inequality of risk and opportunity across people and places. Millions of Americans are dependent on alcohol and nicotine and consume large quantities of these drugs daily, but do not become medical or penal targets because their consumption does not conflict with interpersonal, organizational, or legal obligations (Walker 2017). In other settings, however, the same substance use practices, by virtue of their defiance of legal, cultural, and social expectations, could be considered evidence of addiction. As a result, understanding addiction requires attention to how drug use is evaluated and regulated in context. From this perspective, addiction can be conceptualized as an effect of relations with kinship and peer networks, markets in drugs and other goods, and civic and service-providing organizations rather than a defect of individuals. These organizations and institutions selectively expose people to 1) traumatic experiences, to which substance use can be a comforting and adaptive response; 2) sources of meaningful social participation in domains such as work, family, or avocation, which substance use can augment, deepen, strain, or replace; and 3) opportunities to learn how to obtain and use drugs. The

dynamic interaction of these factors generates a range of drug use patterns across individuals and over the life course.

Bringing the organizational surrounds of addiction back in is not enough. The other side of the relationship is the individual using drugs and the embodied history of experience, desire, emotion, and sensation that constitutes habitus. Darin Weinberg (2011: 303) argues that sociological theories of addiction fail to explain the compulsion, involuntariness, and loss of self-control commonly reported by people with addiction, instead framing decisions to use drugs as either explicitly rational or a consequence of “reflexive interpretation.” The concept of habitus offers an alternative to this tendency toward “voluntarism” (Weinberg 2019). Conceptualized as an embodied system of dispositions, habitus dissolves the strict dichotomy between voluntary and involuntary actions. And, as Wacquant (2016) observes, the dispositions that compose one’s habitus need not be and in fact often are not fully coherent, integrated, or concordant with one’s social milieu. Internally, growing up in a “sequence of congruent institutions and stable microcosms” tends to yield more coherent dispositions, while subjection to divergent or disrupted influences or expectations may interfere with integration (*ibid*: 68). Externally, one’s dispositions and actions tend to be more congruent with social contexts similar to the conditions in which one’s habitus developed, while mismatches between past and present contexts can provoke more discordant responses (Bourdieu 2000 [1997]: Ch. 4). The apparent quandary of whether drug use is “rational” or “voluntary” can thereby be recast in terms of whether a person’s drug use reflects dispositions that are first, internally consistent across degrees of consciousness and intentionality and second, externally congruent with the conventions and expectations of their environment.¹¹²

I offer two pointers for conceptualizing the relationship between habitus and addiction. First, regarding the life course: Bourdieu differentiates between the primary habitus formed early in life, particularly through family experiences, and secondary or tertiary habitus formed later through, for example, educational or professional experiences. “Because learning is an irreversible process” the layers of habitus accrete over time, conditioning the “reception and assimilation” of future dispositions (Bourdieu and Passeron 1977 [1970]: 43). With respect to drug use, we would expect experiences with drugs early in life when dispositions are more malleable to lead more frequently to addiction than those later in life. Second, regarding bodily capital: propensity and capacity for more or less intense patterns of drug use are shaped by the body’s vulnerability or resilience to drug-related effects, how one’s body is marked by drug use, and how one’s body and those marks are perceived by others. The relationship between drug use and bodily capital frequently vacillates over the course of one’s drug using career, since many people begin taking drugs to repair or enhance their bodies, whether opioids to relieve pain or methamphetamine to boost energy and productivity.¹¹³ Injection drug use poses special risks to the integrity of one’s bodily capital because of its elevated health risks and the characteristic

¹¹² Wacquant (2022a [2004]: 297–301) elaborates how the intersecting axes of internal coherence and external congruence imply, broadly, four potential combinations: internally coherent and externally congruent, internally coherent but externally incongruent, internally incoherent and externally incongruent, and internally incoherent but externally congruent.

¹¹³ Anthropologist Jason Pine (2016: 302) argues that small-scale meth manufacturing in nonurban regions of the United States represents a form of “late industrial alchemy” that allows ordinary people to transform household commodities into “more life.”

scars it can leave.¹¹⁴ The visible signs of injection drug use are more difficult to avoid for people who lack the time or resources to obtain new supplies, clean their skin before injecting, or inject in sanitary places (Larney et al. 2017; Dunleavy et al. 2019; Robertson et al. 2021). For people who inject drugs, there can also be tradeoffs between physical and visual integrity of bodily capital, because injecting in less visible places such as the leg or groin can increase risk of infections and other health problems (Coull et al. 2021).

The approach I have outlined here encompasses the common phenomena of drug dependence without addiction and recovery from addiction without formal treatment. People can become dependent but avoid addiction when their substance use is socially sanctioned, a legitimate supply is provided, and its practice and effects accommodated. The example of diabetes is relevant again: insulin is prescribed for a recognized health condition, is made available through legal means, and its injection is socially tolerated. And by the same token, many people who use illicit drugs do so without meeting the criteria for substance use disorder because they are able to find ways to accommodate their drug use in more or less functional ways (Zinberg 1984; Sharp et al. 1991; Walker 2017). For instance, people with stable family lives, ample formal education, and professional occupations feel some protection from potential consequences and repercussions related to their drug use. These more secure organizational footholds provide them with resources that can be used to conceal their drug use and divert official scrutiny. For instance, to prevent discovery they can use in a private residence away from family, colleagues, or police and under safer and more sanitary circumstances, while their perceived status tends to protect them from severe criminal consequences (Mohamed and Fritzvold 2010; Jacques and Wright 2015; Askew and Salinas 2019). As mentioned above, drugs can also be used for functional purposes. Like illicit opioids, methamphetamine has legal pharmaceutical counterparts that are commonly prescribed for conditions like attention deficit disorder, and some people who use methamphetamine report similar benefits for attention, focus, and productivity (Lende et al. 2007).

People can recover without treatment when the push and pull factors that led them to addiction change to make drug use less attractive, less accessible, or more costly. Survey and interview studies consistently show that many if not most people who quit using drugs do so without formal treatment. Accounts from people of how they quit often involve a transformation in circumstances or motivation rather than treatment; in many cases they involve explicit and rationally considered decisions to quit (Biernacki 1986: Ch. 2). With regards to social conditions and resources, the same economic, social, and cultural capitals that people use to protect themselves from addiction can also aid in recovery (Granfield and Cloud 1999). Employment, social ties with family and friends that do not use, and alternative productive and meaningful activities all contribute to recovery without treatment (Walters 2000; Granfield and Cloud 2001; Rudolph et al. 2021). These changes do not happen for everyone equally, at an equal pace, or to an equal degree, and not all incentives or changes in environment are similarly effective. As I discuss below, enforcing punitive sanctions on people who use drugs without providing appropriate treatment or better alternatives to drug use rarely leads to lasting change in drug use or drug-related risk. These patterns again indicate that habitus and organizational surrounds influence drug use and addiction and do so in different ways and with different effects at different social positions.

¹¹⁴ People who inject drugs report that injection scars are a common source of stigma and poor treatment by health care providers (Ellis et al. 2020; Muncan et al. 2020).

This outline of a sociological theory of drug use and addiction has two major implications. First, psychoactive substances have an irrevocable place in human societies. The presence and use of mind-altering substances are widespread across time and place (Courtwright 2001b). Virtually all societies have conditions under which it is permissible, normal, encouraged, or even mandatory to take drugs. Drugs fulfill widely felt, timeless, and beneficial personal and collective purposes. They are used to enhance mood, stamina, alertness, and performance; to soothe physical, mental, and emotional anguish; to activate alternative aesthetic experiences and ways of sensing, perceiving, and understanding the world; and to commune with ineffable and transcendental ideas and values (Hart 2021). Though they are not the only tools fit for these purposes, one is hard pressed to find a human group that does not make use of them in one form or another. Eliminating the use of drugs would require eliminating the purposes and functions to which they are put. Second, the effects of any given drug are not universal or automatic but shaped by public sentiment and public policy. As the experiences of my research participants showed, whether, and how, and with what consequences different drugs are used depends to a large extent on physical, social, legal, and organizational features of the places in which people live and the resources they can muster rather than on properties of the drugs themselves. The cost of their heroin depended on where it was bought and sold, not its quality, and the health effects of their heroin use depended on the circumstances under which they were able to use and their access to health-promoting supplies and services. As the success of harm reduction services demonstrates, modifying the “risk environment” of drug use is often more efficient and expedient than trying to force individuals to modify their drug use (Rhodes 2009).

Approaching addiction as problem of mismatch and discordance between drugs, individual habitus, and their institutional surroundings also suggests policy interventions targeting the social bases of risky substance use. Ameliorating violence, exclusion, and deprivation would reduce the traumas and isolation which often lead people to use drugs to excess, and reorienting drug policy around harm reduction and non-punitive responses would more safely accommodate the reality of substance use. In the next section I detail some of the interventions.

Creating a place for drugs

After more than a century of national and international efforts to eliminate the use of some drugs, the United States is losing more of its residents to drug-related death than ever before. Recent efforts to crack down on pharmaceutical opioid use by prosecuting drug companies, restricting prescribing, and reformulating pills have increased overdose deaths rather than reduced them. Producers of illicit opioids and methamphetamine have responded to interdiction operations, crop eradication, and prohibitions on precursor chemicals by shifting to synthetic substances that can be manufactured at greater scale and higher potency. As I argued in the previous chapter, criminalization hardens stigma against people who use drugs, distorts their social ties, and undermines their health—effects that are all exacerbated in small, remote, and resource-poor places. Instead of continuing to fight a losing “War on Drugs,” we would do better to design drug policies that recognize a legitimate place for drugs in our society and minimize their harms to personal and public health (Saloner et al. 2018b). In the remainder of this chapter, I offer evidence-based recommendations for policies that meet these criteria in the domains of health care, harm reduction, substance use treatment, and law enforcement.

Health care

Preventing risky opioid use requires addressing its causes, including untreated and poorly managed pain. Federal and state governments have adopted several sets of policies designed to reduce unnecessary and risky opioid prescribing and expand access to pain treatment. All states have created prescription drug monitoring programs (PDMPs) that allow health care providers to access databases of controlled substance prescriptions to monitor dates, sources, dosages, and combinations of patients' medications. More than half of states make it mandatory under some circumstances for providers to consult the PDMP before prescribing controlled substances. Mandatory PDMPs reduce the proportion of patients on opioids, overlapping opioid prescriptions, prescriptions from multiple prescribers, and higher daily opioid dosages (Lee et al. 2021). PDMPs appear to reduce overdose deaths related to pharmaceutical opioids, but several studies suggest that they may increase deaths involving illicit opioids (Fink et al. 2018). These divergent findings suggest that when providers use the information they receive from PDMPs to reduce patients' access to opioids, some patients turn to riskier sources, as I showed happened in backcountry California.

Helping health care providers understand the medications their patients are taking can allow them to make more informed and safer decisions regarding treatment and care. But providers also need better information about the potential consequences of restricting access to opioids, for instance through academic detailing programs that use trained peers to deliver education to providers (Kulbokas et al. 2021). Beyond information, providers trying to prevent opioid overdose also need resources and alternatives to offer their patients who are having problems with their opioid use, including MOUD and harm reduction services, which I discuss in detail below. Rather than pushing people toward dangerous alternatives by broadly restricting opioid prescriptions or discharging patients who are using opioid riskily, we should improve access to primary and specialty care, which is limited in nonurban areas by insurance coverage and lack of providers. State-level expansion of Medicaid eligibility as permitted under the Affordable Care Act did not increase opioid painkiller prescription, but dramatically increased use of buprenorphine to treat opioid use disorder and reduced opioid-related overdose deaths (Sharp et al. 2018; Cher et al. 2019; Kravitz-Wirtz et al. 2020). After Medicaid expansion in West Virginia, a less urbanized state that has been among those most affected by the overdose crisis, buprenorphine use sextupled and the proportion of people with opioid use disorder receiving the medication rose from one in three to three in four (Saloner et al. 2018a).

In the late 1990s and 2000s, the Veterans Health Administration (VHA) helped popularize the idea of pain as a "fifth vital sign" that contributed to widespread opioid prescribing. Since 2009, however, the VHA has launched a series of efforts to standardize guidelines for opioid prescribing, reduce risky opioid use, expand nonopioid pain management options, and broaden access to MOUD (Mattocks et al. 2020). One focus of these efforts is an interdisciplinary, team-based model that progresses in response to patients' pain needs from nonopioid analgesics to opioids to other interventions such as physical therapy, counseling, and alternative and complementary therapies (Murphy et al. 2021). Another is the coordination of electronic medical records to identify riskier prescriptions, such as combinations of opioids and benzodiazepines (Gellad et al. 2017).

These efforts have led to significant and largely beneficial changes in opioid prescribing and pain management. Interdisciplinary teams are available at most VHA facilities and have contributed to significant reductions in opioid prescribing, especially the number of patients

beginning long-term opioid therapy (Hadlandsmayth et al. 2018; Sandbrink et al. 2020). Providing multidisciplinary care has increased uptake of non-pharmaceutical pain treatments among VHA patients (Frank et al. 2019), and VHA patients are more likely to receive non-pharmaceutical pain care than non-VHA patients (Mannes et al. 2022). Access to complementary and integrative therapies including acupuncture, mindfulness, and hypnosis have expanded, with benefits to patients (Ashrafioun et al. 2018; Taylor et al. 2019a; Taylor et al. 2019b; Brintz et al. 2020; Williams et al. 2022). Hundreds of thousands of patients have been prescribed the opioid overdose medication naloxone, resulting in over one thousand reported overdose reversals (Bounthavong et al. 2019; Sandbrink et al. 2020; Oliva et al 2021). Telehealth options for rural patients have also expanded (Chen et al. 2022). However, many patients with substance use disorders still report negative experiences in VHA facilities, indicating that these broad policy changes have not been fully or uniformly implemented (Jones et al. 2020). Discontinuation of opioids among VHA patients is also associated with increased risk of fatal overdose and suicide, emphasizing the need for extreme caution before cutting off opioid prescriptions and additional support for patients who lose access to opioids (Oliva et al. 2020).¹¹⁵

Harm reduction

People using drugs need local access to injection equipment, smoking supplies, naloxone, and other tools that mitigate drug-related health risks including disease transmission, skin and soft tissue infections, and overdoses. Syringe services programs (SSPs) were invented during the HIV/AIDS crisis, have operated in the United States for over thirty years, and are backed by a large and comprehensive body of scientific evidence (Wodak and Cooney 2004). Initially illegal in many states including California, they often took the form of civil disobedience and direct action by groups of people who used drugs, their loved ones, and political radicals (Bluthenthal 1998; Stoller 1998; Showalter 2020). As a result of this legal and political history, until recently they have been heavily concentrated in large metropolitan areas that fostered progressive politicians and social movements (Des Jarlais et al. 2015). SSPs have expanded outside of cities in the wake of the overdose crisis and some conservative states authorized SSPs after the 2014–2015 HIV outbreak in Indiana, but they remain illegal in several states (Showalter 2018; Showalter 2020).

Harm reduction programs serving nonurban areas must overcome their participants' geographic remoteness and vulnerability to acquainted marginality. For much of my fieldwork the nearest formal syringe services program to my backcountry participants was in Silver City and, like many urban harm reduction programs, operated only for several one- or two-hour shifts scattered across the week and around the city. My participants were not familiar with its services and often were not the city at the times when they were open. If local SSPs are not available, mail-based harm reduction services are an effective way to deliver supplies to people who use drugs in the convenience and privacy of their homes (Yang et al. 2020). A SSP started partway

¹¹⁵ It is not a coincidence that some of the biggest strides in improving care for people who use opioids have come from publicly operated health care services like Medicaid and the VHA rather than private systems. Purveyors of the mainstream narrative of the overdose crisis are not wrong that the quest for profit incentivizes expensive and unnecessary tests, drugs, and treatments over preventive care. By contrast, large, integrated programs run for the public good can negotiate lower prices and provide care to all regardless of ability to pay.

through my fieldwork by the public health department was received with skepticism by most of my participants due to its affiliation with local government and fears that it would be surveilled by law enforcement. It initially reached only a few members of the heroin scene directly including people who had already disclosed their drug use by engaging in drug treatment, like Elizabeth and Isabel. They in turn took supplies to Drew and others who were reluctant to risk exposure by visiting the program themselves, which harm reduction providers call “secondary distribution” (Murphy et al. 2004; Brothers 2016). Public health staff attempted to ameliorate these concerns by offering to use their personal vehicles rather than those bearing government insignia to deliver supplies directly to people’s homes, and tried to build trust by hiring people who had used drugs, including some peripheral members of the heroin scene like Ron and Anna.

Policymakers in nonurban areas can take several steps to improve implementation of harm reduction services (Childs et al. 2021). First, they should lay groundwork for implementation by proactively educating residents about the format, timeline, and benefits of the program. Second, they should bring together stakeholders from different agencies and organizations to ensure that each has their perspectives and concerns addressed. Third, since influence in small-town and -county governments depends on personal familiarity and trust developed over time (Sokolow 1982; Wikstrom 1993; Mattson 1997), harm reduction efforts should be led by trusted local champions who have a personal stake in the issue and responsibility for its success. Fourth, services should be integrated with the everyday lives of the people they intend to serve. They can do so by employing people who are members of drug scenes, or by co-locating services like naloxone distribution at commonly visited establishments like bars, general stores, parks, or even the local dump, as Jake Derrick did. Finally, services must be responsive to local living conditions. Mobile programs are essential for reaching residents of remote and inaccessible areas (Strike and Miskovic 2018). Nonurban SSPs should help participants stock up on supplies in advance of storms, wildfires, and other natural threats, and naloxone distribution programs should provide car kits and advice on safe medication storage during cold and inclement weather.

Low-threshold service protocols can reduce harm reduction programs’ overhead costs and their participants’ barriers to access simultaneously. Reducing or eliminating the collection of personal data at point-of-services streamlines workflows, reduces back-end administrative labor, and addresses participants’ concerns that their information could be used against them (Davidson et al. 2020). Needs-based distribution of syringes and other supplies, rather than strict one-for-one syringe exchange, reduces staff workload, risk of needlestick injuries, syringe scarcity, and risk of HIV transmission without increasing improper syringe disposal (Vogt et al. 1998; Kral et al. 2004; Bluthenthal et al. 2007a; Bluthenthal et al. 2007b; Kerr et al. 2010). Distributing rather than exchanging syringes—along with sufficient disposal containers and other supplies—also encourages secondary distribution of harm reduction supplies to peers who cannot or will not come in person. Vending machines for syringes and other health supplies that can be installed in discreet locations and accessed anonymously 24 hours a day are another promising distribution mechanism (Dodding and Gaughwin 1995; Islam and Conigrave 2007). Some states like California allow pharmacists to sell syringes over the counter at their discretion, which empowers pharmacists to discriminate against people they perceive to be using drugs, as my participants experienced (Barnett and Morris 2021). In small towns where gossip spreads quickly and memories change slowly, allowing pharmacists and other gatekeepers to selectively deny services entrenches acquainted marginality and alienates poor and criminalized residents from what few services are locally available (Syvertsen and Pollini 2020; Pollini et al. 2021).

The overdose crisis also demands “non-reformist reforms” that begin to dismantle punitive systems and create places and ways for people to use drugs safely and legally. First, unless obtained from health care providers or other authorized sources, syringes also remain criminalized as drug paraphernalia in nearly every state. Decriminalizing syringe possession entirely would help people who use drugs access essential safety equipment with less fear of discrimination or arrest. Second, supervised drug consumption services (also called overdose prevention sites), which typically take the form of rooms, tents, trailers, yards, and other spaces where people are permitted to use drugs under trained supervision, prevent syringe sharing and reuse, disease transmission, and fatal overdose (Armbrecht et al. 2021). They also provide venues for other services, such as drug-checking and treatment initiation, as well as for sociability, mutual aid, and political organizing. While many such services operate in Canada, Europe, and elsewhere, they are threatened in the United States by the so-called federal “crack house” law that criminalizes venues for drug use (Beletsky et al. 2008). While the Trump Administration went to court to stop a Philadelphia organization from opening a supervised consumption service, the Biden Administration has declined to intervene against two organizations that have recently done so in New York City (Rubin and Suran 2022).¹¹⁶ Supervised consumption services are much less common in smaller communities, though they have been provided in two mid-sized Canadian cities using recreational vehicles. Participants’ experiences were largely positive, though limited hours and cramped space were concerns (Mema et al. 2019). Locations and operational hours for such services in smaller towns must be chosen carefully to avoid stigmatization of their participants through acquainted marginality.

Finally, since overdose deaths are increasingly caused by extremely potent fentanyl and its analogues, offering a regulated supply of opioids for nonmedical use would provide a safer alternative for people who do not want treatment. To compete with the illicit market, substances provided through such “safer supply” programs must provide comparable experiences to their users, including pleasurable feelings of intoxication and euphoria. Harm reduction programs in Canada have offered successful demonstrations of small-scale safer supply services that offer hydromorphone for oral or injectable use (Olding et al. 2020; Ivsins et al. 2021). During the COVID-19 pandemic, the government of British Columbia authorized “risk mitigation” guidelines that allowed prescribers to offer pharmaceutical alternatives to people who used drugs to “support a reduced risk of withdrawal, exposure to COVID-19, and exposure to a limited and toxic drug supply” (British Columbia Centre on Substance Use [BCCSU] 2020: 10; quoted in McNeil et al. 2022: S152). These programs should be expanded from emergency interventions dependent on health care providers to regular services managed by people who actively use the drugs being distributed, in order to maintain accountability and fidelity to the needs and goals of

¹¹⁶ A community-based organization in the United States has operated an unauthorized supervised consumption service since 2014 (Kral and Davidson 2017). In five years of operation the service supervised more than ten thousand injections and reversed 33 overdoses with no deaths (Kral et al. 2020). Crime in the surrounding area also decreased over the same period (Davidson et al. 2021). People who used this service were less likely to visit emergency rooms and to be hospitalized than people who did not (Lambdin et al. 2022). Operating “underground” allowed the organization to base rules and procedures on the needs of its participants rather than the demands of government officials but limited the service’s capacity and integration with other programs (Davidson et al. 2018; Davidson et al. 2022).

the people being served.¹¹⁷ In the absence of regulated alternatives, providing point-of-service drug testing in conjunction with harm reduction services using portable mass spectrometers represents a potentially powerful tool for understanding and mitigating overdose risk. The technical complexity of the equipment, time involved to test, and concerns about legality all present barriers to widespread implementation (Carroll et al. 2022; Davis et al. 2022). Informing people of adulterants in their drugs has the potential to undermine relationships between people who use drugs, including sellers and their customers, so design and implementation of such services should include consistent engagement with people who use and sell drugs (Bardwell et al. 2019).

Substance use treatment

Medications for opioid use disorder (MOUD) such as methadone and buprenorphine are standard-of-care interventions that reduce mortality rates and HIV transmission by half (MacArthur et al. 2012; Sordo et al. 2017). These treatments should be universally available, and training in addiction medicine and capacity to offer medication-assisted treatment should be integrated into system-wide service and sustainability plans for state and county health systems and hospitals (Stein et al. 2015; Fiscella et al. 2018; Saloner et al. 2018c). However, provision of these medications is hampered in many places by unnecessary restrictions. In the United States methadone is tightly regulated by federal and state governments (Jackson et al. 2020). The treatment is restricted to specialized clinics that patients must often visit daily to take their medication under direct observation and take-home doses must be “earned,” which makes initiating and continuing treatment as well as maintaining work and other obligations more challenging (Peles et al. 2011; Gomes et al. 2022). Methadone clinics are rare in nonurban areas (Lister et al. 2020). Buprenorphine can be prescribed by physicians, physician assistants, and nurse practitioners who have undergone a special course of training but is also less available outside of urban areas (Amiri et al. 2021). Moreover, abstinence-based treatment services and 12-step groups commonly exclude people taking MOUD under the belief that these medications are not different than other “narcotics” (Kepple et al. 2019). Avoiding MOUD-related stigma may be more difficult in nonurban places where there are fewer recovery programs (Andraka-Christou et al. 2022).

Nonurban residents have fewer local treatment options and must drive further to access MOUD than their urban counterparts (Amiri et al. 2021; Kiang et al. 2021). Improving treatment for opioid use disorder in nonurban areas requires innovative approaches. In 2021, the Drug Enforcement Administration released a new policy permitting approval of vehicle-based mobile methadone medication units for the first time since 2007 (Gibbons et al. 2022). Mobile treatment units may be the only way to consistently deliver methadone to remote and low-population areas

¹¹⁷ Organizations of people who use drugs and researchers in Canada have proposed safe supply through community-based, noncommercial “compassion clubs,” similar to those that currently provide cannabis for therapeutic use (BCCSU 2019; Drug User Liberation Front 2021). These groups have already turned their plans into action at a small scale, acquiring illicit drugs online, testing them for purity, and distributing them for free in public demonstrations (see press releases at www.dulf.ca; Graham et al. 2021). Their efforts have led to zero documented overdoses. In October the Vancouver City Council endorsed their call for a compassion club pilot program (Zwarenstein 2021).

that cannot support a standalone clinic (Chan et al. 2021). So-called “hub-and-spoke” treatment systems, which operate in California and other states, link local treatment providers with regional hubs such as methadone clinics for more comprehensive services.¹¹⁸ The California system includes 18 hubs and 174 spokes, almost thirty percent of which were in rural areas (Darfler et al. 2020b: 6). Preliminary findings suggest benefits for patients in line with other research on MOUD, but barriers persist in nonurban areas, including long travel times for patients and challenges in care coordination with distant hubs for providers (Darfler et al. 2020a; Snell-Rood et al. 2021b). MOUD providers in nonurban spokes find it especially challenging to provide comprehensive services for patients with co-occurring substance use and mental health disorders (Snell-Rood et al. 2021a). Telehealth services delivered by phone or computer—including via mobile clinics—can reach patients in nonurban areas who cannot attend in-person services (Rubin 2019b; Weintraub et al. 2021).

In low-resource areas, making treatment protocols simpler and more flexible can increase access while reducing program expenses (Kourounis et al. 2016). While buprenorphine treatment is traditionally initiated under clinical supervision, it can be safely started and continued by patients at home (Sigmon 2014; Martin et al. 2018). Psychosocial counseling is often recommended in conjunction with buprenorphine treatment and may improve treatment retention for patients with more severe mental health needs, but there is little evidence that it should be a required treatment component (Samples et al. 2022; Stimmel et al. 2022). If staff shortages limit counseling capacity, buprenorphine alone is safe and effective for overdose prevention, reduction of illicit opioid use, and treatment retention even absent additional behavioral health interventions (Friedmann and Schwartz 2012; Ling et al. 2013; Schwartz 2016). During the COVID-19 pandemic the federal government relaxed restrictions on methadone take-home doses and allowed buprenorphine to be prescribed without an initial in-person appointment. These changes improved patient recruitment and retention, made delivering services easier in nonurban and low-resource areas, and helped nonurban patients save time and resources traveling, devote more attention to recovery, and feel “more like a normal person” (Levander et al. 2021: 5; Wang et al. 2021; Hoffman et al. 2022; Ward et al. 2022).

Finally, the United States needs to authorize the use of additional medications for opioid use disorder. Injectable diacetylmorphine (heroin) and hydromorphone improve treatment retention and health outcomes among patients for whom other medications have not worked (Oviedo-Joekes et al. 2016). The increasing prevalence of illicit fentanyl makes initiating treatment with existing medications more difficult. Patients’ opioid tolerance may be too high for methadone to work effectively, while buprenorphine can precipitate painful opioid withdrawal (Silverstein et al. 2019; Krausz et al. 2021). As a result, pharmaceutical fentanyl may even need to be considered for treatment purposes (Bardwell et al. 2019; Krausz et al. 2022). Substance use treatment programs entail additional structure and services such as counseling or other health care interventions that distinguish them from nonmedical safer supply efforts. And historically substance treatment providers have been resistant to offering any medication that could provide the pleasurable, euphoric feelings that many people who use opioids seek. But given the

¹¹⁸ Hub-and-spoke systems were first implemented in Vermont (Brooklyn and Sigmon 2017) and have since been developed in other states with large nonurban regions and populations including Montana (Green et al. 2021), Pennsylvania (Kawasaki et al. 2019), Tennessee (Marcovitz et al. 2021), Washington (Reif et al. 2020), and West Virginia (Winstanley et al. 2020). As I mentioned above, Medicaid expansion has been crucial for several of these programs.

increasingly unpredictable and deadly illicit drug supply in the United States, offering additional medications is urgently needed to help people who want treatment get it and stay on it.

Law enforcement

Law enforcement efforts to combat drug use by reducing the supply of illicit drugs do not achieve their aims and carry severe negative consequences. On the demand side, reformulating OxyContin did not reduce opioid mortality because many people switched to generic oxycodone and other opioids; when supplies of those medications shrank, many took up more dangerous illicit opioids (Zhang and Guth 2021). Among the factors that led heroin producers in Mexico to switch to synthetic opioids like fentanyl were the cost of maintaining cropland for opium poppies, especially in the face of competition from other fentanyl sources such as China, and the relative ease with which synthetics could be smuggled into the United States (Grandmaison et al. 2019; Quinones 2021). More potent substances can be smuggled in smaller packages and then heavily cut before reaching the street. But higher potency makes achieving a consistent mix more difficult, and the opaque spread of fentanyl and its analogues has introduced unprecedented and deadly uncertainty into the drug supply (Ciccarone et al. 2017; Mars et al. 2018).

Aggressively policing local drug markets is often counterproductive. Arrested drug sellers are usually replaced quickly and easily and law enforcement operations rarely cause more than temporary interruptions in drug supplies, but drug law enforcement significantly increases drug market violence (Werb et al. 2011). Law enforcement actions negatively affect the health and safety of people who use drugs. Disrupting drug markets makes it more difficult for people who buy drugs to rely on trusted and consistent sources. People who use drugs are often stopped and searched by police, leading some to avoid carrying syringes and making them more likely to share syringes with others (Kerr et al. 2005). If caught with drugs or equipment they may be arrested, and their drugs and drug use equipment are often confiscated or destroyed (Moskos 2008; Beletsky et al. 2015). Law enforcement actions that shut down places where people gather to use drugs often push them into more isolated circumstances where emergency assistance may not reach them. People who inject drugs in public places due to homelessness are frequently forced to rush injections and eschew hygiene and safety precautions due to fear of being seen or arrested (Small et al. 2007).¹¹⁹

Many believe that incarceration can be beneficial by interrupting people's drug use. However, few people who use opioids receive MOUD or other effective treatment while incarcerated and so most exit incarceration with reduced opioid tolerance and quickly return to opioid use (Binswanger et al. 2012; Krawczyk et al. 2017; Joudrey et al. 2019). As a result, people who use opioids are at extremely high risk of fatal overdose after being released from incarceration, especially in the first two weeks post-release. During that period, overdose rates are several times higher than in the following months, and up to 129 times higher than among the general population (Binswanger et al. 2007; Merrall et al. 2010; Ranapurwala et al. 2018; Ranapurwala et al. 2022). Each additional stint in county jail seems to increase overdose risk (Victor et al. 2022). Efforts are now underway in many jurisdictions, including California, to expand access to MOUD during incarceration, link people to treatment upon release without interruption, and to distribute naloxone to people when they are released in case they experience

¹¹⁹ Rushed injection is associated with higher risk of syringe sharing, HIV transmission, and nonfatal overdose (Booth et al. 2013; Bazazi et al. 2015; Ti et al. 2015).

or witness an overdose—these services should be available in every penal facility.¹²⁰ But conflicts between the “institutional logics” and organizational priorities of incarceration and harm reduction hinder implementation of destigmatizing and non-punitive interventions like these for people who use drugs (Showalter et al. 2021).

Drug courts and court-mandated substance use treatment programs are also attempts to achieve therapeutic goals by criminal-legal means. In these programs, criminal defendants who use drugs are given the option of embarking on a term of mandated treatment and regular court appearances that, if completed, can grant relief from criminal charges. Defendants are usually required to plead guilty as a condition of entering drug courts so that if they are unsuccessful the judge may easily impose punishment (Marlowe et al. 2016). Eligibility criteria, program duration and structure, treatment and other required services, and requirements for completion all vary widely by jurisdiction (Shaffer 2011). Though heralded as an effective form of “tough love” for recalcitrant defendants, these programs often deliver low-quality treatment and are wielded as mechanisms of surveillance and discipline, particularly against women and people of color (Kaye 2019; McCorkel 2013; McKim 2017; Sue 2019). Many, perhaps most, drug courts do not allow evidence-based treatment with MOUD, (Matusow et al. 2013) and less than five percent of patients referred to substance use treatment by courts and diversionary programs receive MOUD (Krawczyk et al. 2017). Research on drug courts is overwhelmingly focused on criminal-legal outcomes like rearrest rather than treatment quality or health outcomes (Joudrey et al. 2021), but in a long-term, randomized study, drug court did not reduce drug-related deaths (Kearley et al. 2019).

Beyond prohibition

It is well past time to try alternatives to these failed, punitive drug policies. Supervised consumption services and safer supply programs that I discussed above are meaningful steps towards the eventual decriminalization and regulation of all drugs. Eliminating criminal penalties by statute better addresses geographic disparities than reforms that rely on discretionary decisions by local officials such as drug courts, diversion programs, and charging directives issued by big-city “progressive prosecutors” (Romero 2020). Expanding legal sources of drugs would also reduce the risks urban and nonurban residents alike face accessing illicit drug markets. And decriminalization—as opposed to medicalizing access to psychoactive substances by reframing them all as forms of treatment—could counteract the negative effects of acquainted marginality, which I have shown can emanate from medical gatekeepers such as doctors and nurses as well as from law enforcement. From a practical standpoint, relying on treatment to

¹²⁰ MOUD are available in all 34 California prisons and have been prescribed to more than twenty-two thousand incarcerated people; overdose, skin and soft tissue infections, and hepatitis C reinfection among incarcerated people have all decreased significantly (Kanan et al 2022). Continuing MOUD during incarceration reduces illicit opioid use, injection drug use, and overdose after release and improves treatment retention (Brinkley-Rubinstein et al. 2018; Malta et al. 2019; Moore et al. 2019). The San Francisco Jail naloxone program was perhaps the first in the United States. In a study of the program’s first four years, my colleagues and I found that 663 people were trained to use naloxone and two-thirds opted to receive it upon release. Nearly half of those people later received a refill, and one in three of those who did reported that they used their previous kit to reverse an overdose (Wenger et al. 2019).

address opioid-related use and overdose is impossible, because less than one in five people who meet the criteria for opioid use disorder think that they need treatment (Choi et al. 2019). Since coercing people into treatment does not reduce overdose risk, the most realistic way to protect people who use drugs from overdose is to provide them with regulated alternatives to the dangerous and unpredictable substances they are forced to buy from illicit markets.

Some progress in this direction is being made, including local campaigns to decriminalize psychedelic plants in Denver, Oakland, Santa Cruz, Washington DC, and elsewhere, and Oregon’s recent decriminalization of personal possession of small quantities of drugs (Roberts 2021; Netherland et al. 2022). The grassroots mobilization for a safer drug supply in Canada that I discussed earlier provides a model of the power of coalitions between grassroots organizations of marginalized people, researchers, and health care providers. Similarly savvy organizing contributed to the harm reduction movement’s early gains in the United States: activists in liberal cities were sometimes backed up by local leaders who helped them advocate for changes to state prescription and paraphernalia laws that criminalized syringe services (Showalter 2020). Just as that movement was forged through direct action in response to a health crisis, the mounting and changing overdose crisis could engender a new wave of activism directed at the regime of drug prohibition itself.

However, the overdose crisis poses different challenges to direct action than the HIV/AIDS crisis. Policy change on some issues has accelerated and spread to new areas, for instance the adoption of SSPs in some conservative states and efforts to expand non-prescription access to naloxone. Public protest and vocal advocacy by people who use drugs and their allies contributed to these victories (López 2018), but the overdose crisis has featured less transgressive contention compared to the aggressive, sometimes mass civil disobedience that characterized the AIDS movement (Roth 2017; Schulman 2021). Canadian activists have forced the opening of supervised consumption services in several cities (Wallace et al. 2019), but in the United States direct action on the issue has been limited and largely underground.¹²¹ These tactical differences reflect legal risks. Syringe-related offenses are typically misdemeanors under state law, but supervised consumption services are also threatened by federal laws that could lead to lengthy prison sentences, forfeiture of organizational assets, or even loss of federal funding by jurisdictions that authorize supervised consumption services (Beletsky et al. 2008). The limited recent progress that has been made to offer supervised consumption services in the United States has come through negotiated agreements between harm reduction organizations and local governments coupled with tacit support from state and federal officials.¹²²

If the pace of progress for relatively modest harm reduction services since the advent of the AIDS crisis is any indication, creating a society that is safe for all people who use drugs could be the work of generations. But the strategy that has dominated US drug policy for decades—belated corporate prosecutions and media villainization for elites coupled with

¹²¹ Two supervised consumption services began operating publicly in New York only with city approval (Office of the Mayor of the City of New York 2021). The few documented activist-led sites have not been publicly identified (*Our Best Shot* 2017; Kral and Davidson 2017).

¹²² The opening of the first “overdose prevention sites” in New York City was delayed for several years due to inaction by then-governor Andrew Cuomo and fear of prosecution by the Trump Department of Justice. In contrast Governor Kathy Hochul, who took over after Cuomo’s resignation in 2021, supported the effort and worked “with the city to get the Biden Administration on board as well” (Eisenberg 2021).

punitive policing and punishment for poor and marginalized people—has not won even a Pyrrhic victory. There is little evidence the overdose crisis is abating and more that it is advancing. A record 107,000 thousand people in the United States died of drug-related causes in 2021, pushing the death toll for the 21st century past one million (Kornfield 2022). Restrictions on opioids have not stemmed the tide of overdose deaths and the illicit drug supply is only getting more dangerous. Powerful new adulterants continue to appear across the Northern Hemisphere, including novel synthetic opioids as well as nonopioids like benzodiazepines and the tranquilizer xylazine that cannot be repelled by naloxone (Laing et al. 2021; Pardo 2021; Friedman et al. 2022; McAuley et al. 2022). Though opioid prescribing has fallen for a decade, pills are making a comeback in the form of counterfeits containing fentanyl and other substances and pressed to imitate popular pharmaceuticals like OxyContin and Percocet (Drug Enforcement Administration 2021; Daniulaityte et al. 2022). While harm reduction services and effective treatment can keep many people alive, a criminalized drug supply cannot be effectively regulated. Recognizing this fundamental reality will help overcome the futile and fatal deadlock between crackdowns on drugs and care for the people who use them.

References

- Agar, Michael. 2003. "The Story of Crack: Towards a Theory of Illicit Drug Trends." *Addiction Research & Theory* 11(1): 3–29.
- Agnew, Jeremy. 2014. *Alcohol and Opium in the Old West: Use, Abuse, and Influence*. Jefferson, NC: McFarland & Company.
- Ahmad, Farida B., Lauren M. Rossen, Paul Sutton. 2021. *Provisional Drug Overdose Death Counts*. Hyattsville, MD: National Center for Health Statistics.
- Ahmed, Serge H., Magalie Lenoir, and Karine Guillem. 2013. "Neurobiology of Addiction Versus Drug Use Driven by Lack of Choice." *Current Opinion in Neurobiology* 23: 581–587.
- Alexander, Kurtis. 2018. "12 Northern California Wildfires Sparked by PG&E Power Lines, Investigators Say." *San Francisco Chronicle*, June 8.
- Alexander, Monica J., Mathew V. Kiang, and Magali Barbieri. 2018. "Trends in Black and White Opioid Mortality in the United States, 1979–2015." *Epidemiology* 29: 707–715.
- Amari, Erica, Jürgen Rehm, Elliot Goldner, and Benedikt Fischer. 2011. "Nonmedical Prescription Opioid Use and Mental Health and Pain Comorbidities: A Narrative Review." *The Canadian Journal of Psychiatry* 56(8): 495–502.
- Amiri, Solmaz, Michael G. McDonell, Justin T. Denney, Dedra Buchwald, and Ofer Amram. 2021. "Disparities in Access to Opioid Treatment Programs and Office-Based Buprenorphine Treatment Across the Rural-Urban and Area Deprivation Continua: A US Nationwide Small Area Analysis." *Value in Health* 24(2): P188–P195.
- Anders, Jentri. 1990. *Beyond Counterculture: The Community of Mateel*. Pullman, WA: Washington State University Press.
- Anderson, Elijah. 2003 [1976]. *A Place on the Corner*. Chicago, IL: University of Chicago Press.
- Anderson, Elijah. 1999. *Code of the Street: Decency, Violence, and the Moral Life of the Inner City*. New York: W. W. Norton.
- Anderson, Kathryn Freeman. 2017. "Racial Residential Segregation and the Distribution of Health-Related Organizations in Urban Neighborhoods." *Social Problems* 64: 256–276.
- Andraka-Christou, Barbara, Rachel Totaram, and Olivia Randall-Kosich. 2022. "Stigmatization of Medications for Opioid Use Disorder in 12-Step Support Groups and Participant Responses." *Substance Abuse* 43(1): 415–424.
- Anthony, Susan. 2016. "Remedy for the Rural Opioid Epidemic: Leaders Discuss Medication-Assisted Addiction Treatment in Primary Care." Oakland, CA: California Health Care Foundation. (<https://www.chcf.org/publication/remedy-for-the-rural-opioid-epidemic-leaders-discuss-medication-assisted-addiction-treatment-in-primary-care/>)
- Armbrecht, Eric, Greg Guzauskas, Ryan Hansen, Rajshree Pandey, Katherine Fazioli, Rick Chapman, Steven D. Pearson, and David M. Rind. 2021. *Supervised Injection Facilities and Other Supervised Consumption Sites: Effectiveness and Value*. Boston, MA: Institute for Clinical and Economic Review. (https://icer.org/wp-content/uploads/2020/10/ICER_SIF_Final-Evidence-Report_010821-1.pdf)
- Ashrafioun, Lisham, Kelli D. Allen, and Wilfred R. Pigeon. 2018. "Utilization of Complementary and Integrative Health Services and Opioid Therapy by Patients Receiving Veterans Health Administration Pain Care." *Complementary Therapies in Medicine* 39: 8–13.

- Askew, Rebecca, and Mike Salinas. 2019. "Status, Stigma and Stereotype: How Drug Takers and Drug Suppliers Avoid Negative Labelling by Virtue of Their 'Conventional' and 'Law-Abiding' Lives." *Criminology & Criminal Justice* 19(3): 311–327.
- Auyero, Javier. 1997. "Wacquant in the Argentine Slums: Comment on Loïc Wacquant's 'Three Pernicious Premises in the Study of the American Ghetto.'" *International Journal of Urban and Regional Research* 21(3): 508–511.
- Auyero, Javier and Débora Alejandra Swistun. 2009. *Flammable: Environmental Suffering in an Argentine Shantytown*. New York: Oxford University Press.
- Baker, David W. 2017. "History of The Joint Commission's Pain Standards: Lessons for Today's Prescription Opioid Epidemic." *Journal of the American Medical Association* 317(11): 1117–1118.
- Baldick, Chris, editor. 2015. *The Oxford Dictionary of Literary Terms, 4th Edition*. Oxford: Oxford University Press.
- Bambra, Clare, Debbie Fox, and Alex Scott-Samuel. 2005. "Towards a Politics of Health." *Health Promotion International* 20(2): 187–193.
- Bardwell, Geoff, Jade Boyd, Jaime Arredondo, Ryan McNeil, and Thomas Kerr. 2019. "Trusting the Source: The Potential Role of Drug Dealers in Reducing Drug-Related Harms via Drug Checking." *Drug and Alcohol Dependence* 198: 1–6.
- Bardwell, Geoff, Evan Wood, and Rupinder Brar. 2019. "Fentanyl Assisted Treatment: A Possible Role in the Opioid Overdose Epidemic?" *Substance Abuse Treatment, Prevention, and Policy* 14: 50.
- Barnett, Brian S., and Nathaniel P. Morris. 2021. "Pharmacy Access to Sterile Injection Supplies for People Who Inject Drugs." *JAMA Internal Medicine* 181(2): 153–154.
- Baszanger, Isabelle. 1998. *Inventing Pain Medicine: From the Laboratory to the Clinic*. New Brunswick, NJ: Rutgers University Press.
- Bazazi, Alexander R., Alexei Zelenev, Jeannia J. Fu, Ilias Yee, Adeeba Kamarulzaman, and Frederick L. Altice. 2015. "High Prevalence of Non-Fatal Overdose Among People Who Inject Drugs in Malaysia: Correlates of Overdose and Implications for Overdose Prevention from a Cross-Sectional Study." *International Journal of Drug Policy* 26: 675–681.
- Becker, Howard S. 1963. *Outsiders: Studies in the Sociology of Deviance*. New York: The New Press.
- Beckett, Katherine, and Lindsey Beach. 2021. "The Place of Punishment in Twenty-First-Century America: Understanding the Persistence of Mass Incarceration." *Law & Social Inquiry* 46(1): 1–31.
- Beckett, Katherine, and Marco Brydolf-Horwitz. 2020. "A Kinder, Gentler Drug War? Race, Drugs, and Punishment in 21st Century America." *Punishment & Society* 22(4): 509–533.
- Beckett, Katherine, and Bruce Western. 2001. "Governing Social Marginality: Welfare, Incarceration, and the Transformation of State Policy." *Punishment & Society* 3(1): 43–59.
- Beesley, David. 2008. *Crow's Range: An Environmental History of the Sierra Nevada*. Reno, NV: University of Nevada Press.
- Beggs, John J., Valerie A. Haines, and Jeanne S. Hurlbert. 1996. "Revisiting the Rural-Urban Contrast: Personal Networks in Nonmetropolitan and Metropolitan Settings." *Rural Sociology* 61(2): 306–325.
- Beletsky, Leo, Jess Cochrane, Anne L. Sawyer, Chris Serio-Chapman, Marina Smelyanskaya, Jennifer Han, Natanya Robinowitz, and Susan G. Sherman. 2015. "Police Encounters Among

- Needle Exchange Clients in Baltimore: Drug Law Enforcement as a Structural Determinant of Health.” *American Journal of Public Health* 105: 1872–1879.
- Beletsky, Leo, Corey S. Davis, Evan Anderson, and Scott Burris. 2008. “The Law (and Politics) of Safe Injection Facilities in the United States.” *American Journal of Public Health* 98(2): 231–237.
- Bell, Colin, and Howard Newby. 1971. *Community Studies: An Introduction to the Sociology of the Local Community*. New York: Praeger Publishers.
- Benson, Rodney. 2006. “News Media as a ‘Journalistic Field’: What Bourdieu Adds to New Institutionalism, and Vice Versa.” *Political Communication* 23(2): 187–202.
- Benson, Rodney. 2013. *Shaping Immigration News: A French-American Comparison*. New York: Cambridge University Press.
- Berlin, Anita, Victoria Koski-Karell, Kathleen R. Page, and Sarah Polk. 2019. “The Right and Left Hands of the State — Two Patients at Risk of Deportation.” *New England Journal of Medicine* 381(3): 197–201.
- Bethard, Wayne. 2013. *Lotions, Potions, and Deadly Elixirs: Frontier Medicine in the American West*. Lanham, MD: Roberts Rinehart.
- Biernacki, Patrick. 1986. *Pathways from Heroin Addiction: Recovery Without Treatment*. Philadelphia, PA: Temple University Press.
- Biernikiewicz, Małgorzata, Vanessa Taieb, and Mondher Toumi. 2019. “Characteristics of Doctor-Shoppers: A Systematic Literature Review.” *Journal of Market Access & Health Policy* 7(1): 1595953.
- Binswanger, Ingrid A., Marc F. Stern, Richard A. Deyo, Patrick J. Heagerty, Allen Cheadle, Joann G. Elmore, and Thomas D. Koepsell. 2007. “Release from Prison – A High Risk of Death for Former Inmates.” *New England Journal of Medicine* 356(2): 157–165.
- Binswanger, Ingrid A., Carolyn Nowels, Karen F. Corsi, Jason Glanz, Jeremy Long, Robert E. Booth, and John F. Steiner. 2012. “Return to Drug Use and Overdose After Release from Prison: A Qualitative Study of Risk and Protective Factors.” *Addiction Science & Clinical Practice* 7: 3.
- Bismuth, Charlotte. 2021. *Bad Medicine: Catching New York’s Deadliest Pill Pusher*. New York: One Signal Publishers.
- Blalock, Hubert M. 1967. *Toward a Theory of Minority-Group Relations*. New York: Wiley.
- Blumenthal, Albert. 1932. *Small-Town Stuff*. Chicago, IL: University of Chicago Press.
- Bluthenthal, Ricky N. 1998. “Syringe Exchange as a Social Movement: A Case Study of Harm Reduction in Oakland, California.” *Substance Use & Misuse* 33(5): 1147–71.
- Bluthenthal, Ricky N., Rachel Anderson, Neil M. Flynn, and Alex H. Kral. 2007a. “Higher Syringe Coverage Is Associated with Lower Odds of HIV Risk and Does Not Increase Unsafe Syringe Disposal Among Syringe Exchange Program Clients.” *Drug and Alcohol Dependence* 89: 214–222.
- Bluthenthal, Ricky N., Greg Ridgeway, Terry Schell, Rachel Anderson, Neil M. Flynn, and Alex H. Kral. 2007b. “Examination of the Association Between Syringe Exchange Program (SEP) Dispensation Policy and SEP Client-Level Syringe Coverage Among Injection Drug Users.” *Addiction* 102(4): 638–646.
- Bluthenthal, Ricky N., Kelsey Simpson, Rachel Carmen Ceasar, Johnathan Zhao, Lynn Wenger, and Alex H. Kral. 2020. “Opioid Withdrawal Symptoms, Frequency, and Pain Characteristics as Correlates of Health Risk Among People Who Inject Drugs.” *Drug and Alcohol Dependence* 211: 107932.

- Bogazianos, Dimitri A. 2012. *5 Grams: Crack Cocaine, Rap Music, and the War on Drugs*. New York: New York University.
- Bohnert, Amy S.B., Gery P. Guy Jr., and Jan L. Losby. 2018. "Opioid Prescribing in the United States Before and After the Centers for Disease Control and Prevention's 2016 Opioid Guideline." *Annals of Internal Medicine* 169: 367–75.
- Bonnet, Udo, and Ulrich W. Preuss. 2017. "The Cannabis Withdrawal Syndrome: Current Insights." *Substance Abuse and Rehabilitation* 8: 9–37.
- Booth, Robert E., Sergey Dvoryak, Min Sung-Joon, John T. Brewster, William W. Wendt, Karen F. Corsi, Oleg Y. Semerik, and Steffanie A. Strathdee. 2013. "Law Enforcement Practices Associated with HIV Infection Among Injection Drug Users in Odessa, Ukraine." *AIDS and Behavior* 17: 2604–2614.
- Botticelli, Michael P., and Howard K. Koh. 2016. "Changing the Language of Addiction." *JAMA* 316(13): 1361–1362.
- Bounthavong, Mark, Emily Beth Devine, Melissa L. D. Christopher, Michael A. Harvey, David L. Veenstra, and Anirban Basu. 2019. "Implementation Evaluation of Academic Detailing on Naloxone Prescribing Trends at the United States Veterans Health Administration." *Health Services Research* 54: 1055–1064.
- Bourdieu, Pierre. 1975. "The Specificity of the Scientific Field and the Social Conditions of the Progress of Reason." *Social Science Information* 14(6): 19–47.
- Bourdieu, Pierre. 1986. "The Forms of Capital." Pp. 241–258 in *Handbook of Theory of Research for the Sociology of Education*, edited by John G. Richardson. Westport, CT: Greenwood.
- Bourdieu, Pierre. 1990. *The Logic of Practice*. Stanford, CA: Stanford University Press.
- Bourdieu, Pierre. 1993. "Some Properties of Fields." Pp. 72–77 in *Sociology in Question*. London: SAGE Publications.
- Bourdieu, Pierre. 1994. "Rethinking the State: Genesis and Structure of the Bureaucratic Field." *Sociological Theory* 12(1): 1–18.
- Bourdieu, Pierre. 1996 [1989]. *The State Nobility: Elite Schools in the Field of Power*. Stanford, CA: Stanford University Press.
- Bourdieu, Pierre. 2000 [1997]. *Pascalian Meditations*. Stanford, CA: Stanford University Press.
- Bourdieu, Pierre. 2018 [1991]. "Social Space and the Genesis of Appropriated Physical Space." *International Journal of Urban and Regional Research* 42(1): 106–114.
- Bourdieu, Pierre, Jean-Claude Chamboredon, and Jean-Claude Passeron. 1991 [1968]. *The Craft of Sociology: Epistemological Preliminaries*. New York: Walter de Gruyter.
- Bourdieu, Pierre, and Jean-Claude Passeron. 1977 [1970]. *Reproduction in Education, Society and Culture*. London: Sage Publications.
- Bourdieu, Pierre, and Loïc Wacquant. 1992. *An Invitation to Reflexive Sociology*. Chicago, IL: University of Chicago Press.
- Bourdieu, Pierre, and Loïc Wacquant. 1999. "On the Cunning of Imperialist Reason." *Theory, Culture, & Society* 16(1): 41–58.
- Bourgois, Philippe. 1996. *In Search of Respect: Selling Crack in El Barrio*. New York: Cambridge University Press.
- Bourgois, Philippe. 1998. "The Moral Economies of Homeless Heroin Addicts: Confronting Ethnography, HIV Risk, and Everyday Violence in San Francisco Shooting Encampments." *Substance Use & Misuse* 33(11): 2323–2351.

- Bourgois, Philippe. 1999. "Theory, Method, and Power in Drug and HIV-Prevention Research: A Participant-Observer's Critique." *Substance Use & Misuse* 34(14): 2155–2172.
- Bourgois, Philippe. 2003. "Crack and the Political Economy of Suffering." *Addiction Research and Theory* 11(1): 31–37.
- Bourgois, Philippe, Bridget Prince, and Andrew Moss. 2004. "The Everyday Violence of Hepatitis C Among Young Women Who Inject Drugs in San Francisco." *Human Organization* 63(3): 253–264.
- Bourgois, Philippe and Nancy Scheper-Hughes. 2004. "Comments on 'An Anthropology of Structural Violence.'" *Current Anthropology* 45(3): 317–318.
- Bourgois, Philippe and Jeffrey Schonberg. 2009. *Righteous Dopefiend*. Berkeley, CA: University of California Press.
- Brady, Emily. 2013. *Humboldt: Life on America's Marijuana Frontier*. New York: Grand Central Publishing.
- Braveman, Paula, Susan Egerter, and David R. Williams. 2011. "The Social Determinants of Health: Coming of Age." *Annual Review of Public Health* 32: 381–398.
- Breton, Raymond. 1964. "Institutional Completeness of Ethnic Communities and the Personal Relations of Immigrants." *American Journal of Sociology* 70(2): 193–205.
- Brinkley-Rubinstein, Lauren, Michelle McKenzie, Alexandria Macmadu, Sarah Larney, Nickolas Zaller, Emily Dauria, and Josiah Rich. 2018. "A Randomized, Open Label Trial of Methadone Continuation Versus Forced Withdrawal in a Combined US Prison and Jail: Findings At 12 Months Post- Release." *Drug and Alcohol Dependence* 184: 57–63.
- Brintz, Carrie E., Shari Miller, Kristine Rae Olmsted, Michael Bartoszek, Joel Cartwright, Paul N. Kizakevich, Michael Butler, Nakisa Asefnia, Alex Buben, and Susan A. Gaylord. 2020. "Adapting Mindfulness Training for Military Service Members with Chronic Pain." *Military Medicine* 185: 385–393.
- British Columbia Centre on Substance Use (BCCSU). 2019. *Heroin Compassion Clubs*. (<https://www.bccsu.ca/wp-content/uploads/2019/02/Report-Heroin-Compassion-Clubs.pdf>)
- British Columbia Centre on Substance Use (BCCSU). 2020. *Risk Mitigation in the Context of Dual Public Health Emergencies: Interim Clinical Guidance*. (<https://www.bccsu.ca/wp-content/uploads/2020/04/Risk-Mitigation-in-the-Context-of-Dual-Public-Health-Emergencies-v1.5.pdf>)
- Brooklyn, John R., and Stacey C. Sigmon. 2017. "Vermont Hub-and-Spoke Model of Care for Opioid Use Disorder: Development, Implementation, and Impact." *Journal of Addiction Medicine* 11(4): 286–292.
- Brothers, Sarah. 2016. "Merchants, Samaritans, and Public Health Workers: Secondary Syringe Exchanger Discursive Practices." *International Journal of Drug Policy* 37: 1–8.
- Brothers, Sarah. 2019. "A Good 'Doctor' Is Hard to Find: Assessing Uncredentialed Expertise in Assisted Injection." *Social Science & Medicine* 237: 112446.
- Brownrigg, Michael. 2019. "'The Morphine Man': The Emotional Politics of America's Early War on Drugs, 1870s–1920s." PhD dissertation, Northwestern University.
- Broz, Dita, Jon Zibbell, Carrie Foote, Jeremy C. Roseberry, Monita R. Patel, Caitlin Conrad, Erika Chapman, Philip J. Peters, Richard Needle, Cameron McAlister, and Joan M. Duwve. 2018. "Multiple Injections Per Injection Episode: High-Risk Injection Practice Among People Who Injected Pills During the 2015 HIV Outbreak in Indiana." *International Journal of Drug Policy* 52: 97–101.

- Buer, Lesly-Marie, Carl G. Leukefeld and Jennifer R. Havens. 2016. “‘I’m Stuck’: Women’s Navigations of Social Networks and Prescription Drug Misuse in Central Appalachia.” *North American Dialogue* 19(2): 70–84.
- Burgess, Amanda, Emily Bauer, Shane Gallagher, Brianne Karstens, LeeAnna Lavoie, Katherine Ahrens, and Alane O'Connor. 2021. “Experiences of Stigma Among Individuals in Recovery from Opioid Use Disorder in a Rural Setting: A Qualitative Analysis.” *Journal of Substance Abuse Treatment* 130: 108488.
- Campbell, Nancy D. 2007. *Discovering Addiction: The Science and Politics of Substance Abuse Research*. Ann Arbor, MI: University of Michigan Press.
- Cano, Manuel. 2021. “Racial/Ethnic Differences in US Drug Overdose Mortality, 2017–2018.” *Addictive Behaviors* 112: 106625.
- Carr, E. Summerson. 2019. “The Work of ‘Crisis’ in the ‘Opioid Crisis.’” *Journal of Extreme Anthropology* 3(2): 161–166.
- Carroll, Jennifer J., Sarah Mackin, Clare Schmidt, Michelle McKenzie, and Traci C. Green. 2022. “The Bronze Age of Drug Checking: Barriers and Facilitators to Implementing Advanced Drug Checking Amidst Police Violence And COVID-19.” *Harm Reduction Journal* 19: 9.
- Carroll, Jennifer J., Josiah D. Rich, and Traci C. Green. 2020. “The Protective Effect of Trusted Dealers Against Opioid Overdose in the U.S.” *International Journal of Drug Policy* 78: 102695.
- Case, Anne, and Angus Deaton. 2020. *Deaths of Despair and the Future of Capitalism*. Princeton, NJ: Princeton University Press.
- Castillo-Carniglia, Alvaro, Andrés González-Santa Cruz, Magdalena Cerdá, Chris Delcher, Aaron B. Sheve, Garen J. Wintemute, and Stephen G. Henry. 2021. “Changes in Opioid Prescribing After Implementation of Mandatory Registration and Proactive Reports Within California’s Prescription Drug Monitoring Program.” *Drug and Alcohol Dependence* 218: 108405.
- Center for Substance Abuse Treatment. 2004. *Clinical Guidelines for the Use of Buprenorphine in the Treatment of Opioid Addiction. Treatment Improvement Protocol (TIP) Series 40*. DHHS Publication No. (SMA) 04-3939. Rockville: Substance Abuse and Mental Health Services Administration.
- Centers for Disease Control and Prevention. 2020. “U.S. Opioid Prescribing Maps.” (<https://www.cdc.gov/drugoverdose/maps/rxrate-maps.html>).
- Centers for Medicare and Medicaid Services. 2019. “CMCS Informational Bulletin: Medicaid Strategies for Non-Opioid Pharmacologic and Non-Pharmacologic Chronic Pain Management.” (<https://www.medicare.gov/federal-policy-guidance/downloads/cib022219.pdf>).
- Chan, Brian, Kim A. Hoffman, Christina Bougatsos, Sara Grusing, Roger Chou, and Dennis McCarty. 2021. “Mobile Methadone Medication Units: A Brief History, Scoping Review and Research Opportunity.” *Journal of Substance Abuse Treatment* 129: 108483.
- Chen, Jessica A., Rian J. DeFaccio, Hannah Gelman, Eva R. Thomas, Jess A. Indresano, Timothy C. Dawson, Lisa H. Glynn, Friedhelm Sandbrink, and Steven B. Zeliadt. 2022. “Telehealth and Rural-Urban Differences in Receipt of Pain Care in the Veterans Health Administration.” *Pain Medicine* 23(3): 466–474.

- Cher, Benjamin A.Y., Nancy E. Morden, and Ellen Meara. 2019. "Medicaid Expansion and Prescription Trends: Opioids, Addiction Therapies, and Other Drugs." *Medical Care* 57(3): 208–212.
- Childs, Ellen, Katie B. Biello, Pablo K. Valente, Peter Salhaney, Dea L. Biancarelli, Jennifer Olson, Joel J. Earlywine, Brandon D. L. Marshall, and Angela R. Bazzi. 2021. "Implementing Harm Reduction in Non-Urban Communities Affected by Opioids and Polysubstance Use: A Qualitative Study Exploring Challenges and Mitigating Strategies." *International Journal of Drug Policy* 90: 103080.
- Choi, Namkee G., Diana M. DiNitto, C. Nathan Marti, and Bryan Y. Choi. 2019. "Adults Who Misuse Opioids: Substance Abuse Treatment Use and Perceived Treatment Need." *Substance Abuse* 2: 247–255.
- Chua, Kao-Ping, Lauren Kimmel, Chad M. Brummett. 2020. "Disappointing Early Results from Opioid Prescribing Limits for Acute Pain." *JAMA Surgery* 155(5): 375–376.
- Chung, Raymond T., and Thomas F. Baumert. 2014. "Curing Chronic Hepatitis C — The Arc of a Medical Triumph." *New England Journal of Medicine* 370(17): 1576–1578.
- Ciccarone, Daniel. 2017. "Fentanyl in the US Heroin Supply: A Rapidly Changing Risk Environment." *International Journal of Drug Policy* 46: 107–111.
- Ciccarone, Daniel. 2019a. "Heroin Smoking is Not Common in the United States." *Journal of the American Medical Association* 76(4): 508.
- Ciccarone, Daniel. 2019b. "The Triple Wave Epidemic: Supply and Demand Drivers of the US Opioid Overdose Crisis." *International Journal of Drug Policy* 71: 183–188.
- Ciccarone, Daniel. 2021. "The Rise of Illicit Fentanyls, Stimulants and the Fourth Wave of the Opioid Overdose Crisis." *Current Opinion in Psychiatry*, epub ahead of print.
- Ciccarone, Daniel and Philippe Bourgois. 2003. "Explaining the Geographical Variation of HIV Among Injection Drug Users in the United States." *Substance Use & Misuse* 38(14): 2049–2063.
- Ciccarone, Daniel, Jeff Ondocsin, and Sarah G. Mars. 2017. "Heroin Uncertainties: Exploring Users' Perceptions of Fentanyl-Adulterated and -Substituted 'Heroin.'" *International Journal of Drug Policy* 46: 146–155.
- Cicero, Theodore J., and Matthew S. Ellis. 2017. "Understanding the Demand Side of the Prescription Opioid Epidemic: Does the Initial Source of Opioids Matter?" *Drug and Alcohol Dependence* 173: S4–S10.
- Cicero, Theodore J., Matthew S. Ellis, and Howard D. Chilcoat. 2018. "Understanding the Use of Diverted Buprenorphine." *Drug and Alcohol Dependence* 193: 117–123.
- Cicero, Theodore J., Matthew S. Ellis, and Zachary A. Kasper. 2016. "A Tale Of 2 ADFs: Differences in the Effectiveness of Abuse-Deterrent Formulations of Oxycodone and Oxycodone Extended-Release Drugs." *PAIN* 157: 1232–1238.
- Cicero, Theodore J., Matthew S. Ellis, Hilary L. Surratt, and Steven P. Kurtz. 2014. "The Changing Face of Heroin Use in the United States: A Retrospective Analysis of the Past 50 Years." *JAMA Psychiatry* 71(7): 821–826.
- Cicero, Theodore J., Zachary A. Kasper, and Matthew S. Ellis. 2018. "Increased Use of Heroin as an Initiating Opioid of Abuse: Further Considerations and Policy Implications." *Addictive Behaviors* 87: 267–271.
- Cintron, Alexie, and R. Sean Morrison. 2006. "Pain and Ethnicity in the United States: A Systematic Review." *Journal of Palliative Medicine* 9(6): 1454–1473.

- Clines. Francis X., and Barry Meier. 2001. "Cancer Painkillers Pose New Abuse Threat." *New York Times*, February 9.
- Cloud, David H., Umedjon Ibragimov, Nadya Prood, April M. Young, and Hannah L.F. Cooper. 2019. "Rural Risk Environments for Hepatitis C Among Young Adults in Appalachian Kentucky." *International Journal of Drug Policy* 72: 47–54.
- Coffin, Phillip O., Melissa Tracy, Angela Bucciarelli, Danielle Ompad, David Vlahov, and Sandro Galea. 2007. "Identifying Injection Drug Users at Risk of Nonfatal Overdose." *Academic Emergency Medicine* 14(7): 616–623.
- Colledge, Samantha, Amy Peacock, Janni Leung, Sarah Larney, Jason Grebely, Matthew Hickman, Evan Cunningham, Adam Trickey, Jack Stone, Peter Vickerman, Louisa Degenhardt. 2019. "The Prevalence of Non-Fatal Overdose Among People Who Inject Drugs: A Multi-Stage Systematic Review and Meta-Analysis." *International Journal of Drug Policy* 73: 172–184.
- Compton, Wilson M., Christopher M. Jones, and Grant T. Baldwin. 2016. "Relationship between Nonmedical Prescription-Opioid Use and Heroin Use." *New England Journal of Medicine* 374(2): 154–163.
- Conn, Steven. 2014. *Americans Against the City: Anti-Urbanism in the Twentieth Century*. New York: Oxford University Press.
- Connor, Jason P., Daniel Stjepanović, Bernard Le Foll, Eva Hoch, Alan J. Budney, and Wayne D. Hall. 2021. "Cannabis Use and Cannabis Use Disorder." *Nature Reviews Disease Primers* 7: 16.
- Connors, Margaret M. 1994. "Stories of Pain and the Problem of AIDS Prevention: Injection Drug Withdrawal and Its Effect on Risk Behavior." *Medical Anthropology Quarterly, New Series* 8(1): 47–68.
- Cooke, William. 2021. *Canary in the Coal Mine: A Forgotten Rural Community, a Hidden Epidemic, and a Lone Doctor Battling for the Life, Health, and Soul of the People*. Carol Stream, IL: Tyndale.
- Cooley, Charles H. 1902. *Human Nature and the Social Order*. New York: Scribner.
- Coomes, Eric A., Keith Gunaratne, and Hourmazd Haghbayan. 2019. "Temporal Trends in Opioid References in Popular Hip-Hop Song Lyrics." *Journal of Addiction Medicine* 13(6): 500–502.
- Cosby, Arthur G., M. Maya McDoom-Echebiri, Wesley James, Hasna Khandekar, Willie Brown, and Heather L. Hanna. 2019. "Growth and Persistence of Place-Based Mortality in the United States: The Rural Mortality Penalty." *American Journal of Public Health* 109(1): 155–162.
- Coser, Lewis A. 1967. "Greedy Organizations." *European Journal of Sociology* 8(2): 196–215.
- Coser, Lewis A. 1974. *Greedy Institutions: Patterns of Undivided Commitment*. New York: Free Press.
- Coser, Rose Laub. 1966. "Rose Distance, Sociological Ambivalence, and Transitional Status Systems." *American Journal of Sociology* 72(2): 173–187.
- Cosgrove, James. 2018. *Rural Hospital Closures: Number and Characteristics of Affected Hospitals and Contributing Factors, GAO-18-634*. Washington, DC: Government Accountability Office.
- Coull, Alison F., Richard G. Kyle, Coral L. Hanson, and Andrew E. Watterson. 2021. "Risk Factors for Leg Ulceration in People Who Inject Drugs: A Cross-Sectional Study." *Journal of Clinical Nursing* 30: 1623–1632.

- Courtwright, David T. 2001a [1982]. *Dark Paradise: A History of Opiate Addiction in America*. Cambridge, MA: Harvard University Press.
- Courtwright, David T. 2001b. *Forces of Habit: Drugs and the Making of the Modern World*. Cambridge, MA: Harvard University Press.
- Courtwright, David T. 2010. “The NIDA Brain Disease Paradigm: History, Resistance, and Spinoffs.” *BioSocieties* 5(1), 137–147.
- Courtwright, David T., Herman Joseph, and Don Des Jarlais. 1989. *Addicts Who Survived: An Oral History of Narcotic Use in America before 1965*. Knoxville, TN: The University of Tennessee Press.
- Cronon, William. 1987. “Revisiting the Vanishing Frontier: The Legacy of Frederick Jackson Turner.” *Western Historical Quarterly* 18(2): 157–176.
- Crothers, T. D. 1900. “Medicolegal Relations of Opium Inebriety and the Necessity for Legal Recognition.” *Journal of the American Medical Association* 35(7): 409–413.
- Dahlman, Disa, Alex H. Kral, Lynn Wenger, Anders Hakansson, and Scott P. Novak. 2017. “Physical Pain is Common and Associated with Nonmedical Prescription Opioid Use Among People Who Inject Drugs.” *Substance Abuse Treatment, Prevention, and Policy* 12: 29.
- Daly, Erin Marie. 2014. *Generation Rx: A Story of Dope, Death, and America’s Opiate Crisis*. Berkeley, CA: Counterpoint Press.
- Daniulaityte, Raminta, Russel Falck, and Robert G. Carlson. 2012. “I’m Not Afraid of Those Ones Just ‘Cause They’ve Been Prescribed’: Perceptions of Risk Among Illicit Users of Pharmaceutical Opioids.” *International Journal of Drug Policy* 23: 374–384.
- Daniulaityte, Raminta, Russel Falck, and Robert G. Carlson. 2014. “Sources of Pharmaceutical Opioids for Non-Medical Use among Young Adults.” *Journal of Psychoactive Drugs* 46(3): 198–207.
- Daniulaityte, Raminta, Sydney M. Silverstein, Timothy N. Crawford, Silvia S. Martins, William Zule, Angela J. Zaragoza, and Robert G. Carlson. 2020. “Methamphetamine Use and Its Correlates among Individuals with Opioid Use Disorder in a Midwestern U.S. City.” *Substance Use & Misuse* 55(11): 1781–1789.
- Daniulaityte, Raminta, Kaylin Sweeney, Seol Ki, Bradley N. Doebbeling, and Natasha Mendoza. 2022. “They Say it’s Fentanyl, but They Honestly Look Like Perc 30s”: Initiation and Use of Counterfeit Fentanyl Pills.” *Harm Reduction Journal* 19: 52.
- Darfler, Kendall, José Sandoval, Valerie Pearce Antonini, and Darren Urada. 2020a. “Preliminary Results of the Evaluation of the California Hub and Spoke Program.” *Journal of Substance Abuse Treatment* 108: 26–32.
- Darfler, Kendall, Aida Santos, Liliana Gregorio, Eva Vazquez, Brittany Bass, Vandana Joshi, Valerie Antonini, Elizabeth Hall, Cheryl Teruya, José Sandoval, Darren Urada. 2020a. *California State Targeted Response to the Opioid Crisis: Final Evaluation Report*. Los Angeles, CA: UCLA Integrated Substance Abuse Programs.
- Darke, Shane. 2014. “Opioid Overdose and the Power of Old Myths: What We Thought We Knew, What We Do Know and Why It Matters.” *Drug and Alcohol Review* 33: 109–114.
- Darnall, Beth D., David Juurlink, Robert D Kerns, Sean Mackey, Brent Van Dorsten, Keith Humphreys, Julio A. Gonzalez-Sotomayor, Andrea Furlan, Adam J. Gordon, Debra B. Gordon, Diane E. Hoffman, Joel Katz, Stefan G. Kertesz, Sally Satel, Richard A. Lawhern, Kate M. Nicholson, Rosemary C. Polomano, Owen D. Williamson, Heath McAnally, Ming-Chih Kao, Stephan Schug, Robert Twillman, Terri A. Lewis, Richard L. Stieg, Kate Lorig, Theresa Mallick-Searle, Robert W. West, Sarah Gray, Steven R. Ariens, Jennifer Sharpe

- Potter, Penney Cowan, Chad D. Kollas, Danial Laird, Barby Ingle, J. Julian Grove, Marian Wilson, Kshelle Lockman, Fiona Hodson, Carol S. Palackdharry, Roger B. Fillingim, Jeffrey Fudin, Jennifer Barnhouse, Ajay Manhapra, Steven R. Henson, Bruce Singer, Marie Ljosenvoor, Marlisa Griffith, Jason N. Doctor, Kimeron Hardin, Cathleen London, Jon Mankowski, Andrea Anderson, Linda Ellsworth, Lisa Davis Budzinski, Becky Brandt, Greg Hartley, Debbie Nickels Heck, Mark J. Zobrosky, Celeste Cheek, Megan Wilson, Cynthia E. Laux, GERALYN Datz, Justin Dunaway, Eileen Schonfeld, Melissa Cady, Thérèse LeDantec-Boswell, Meredith Craigie, John Sturgeon, Pamela Flood, Melita Giummarra, Jessica Whelan, Beverly E. Thorn, Richard L. Martin, Michael E. Schatman, Maurice D. Gregory, Joshua Kirz, Patti Robinson, James G. Marx, Jessica R. Stewart, Phillip S. Keck, Scott E. Hadland, Jennifer L. Murphy, Mark A. Lumley, Kathleen S. Brown, Michael S. Leong, Mechele Fillman, James W. Broatch, Aaron Perez, Kristine Watford, Kari Kruska, Dokyoung Sophia You, Stacy Ogbeide, Amy Kukucka, Susan Lawson, James B. Ray, T. Wade Martin, James B. Lakehomer, Anne Burke, Robert I. Cohen, Peter Grinspoon, Marc S. Rubenstein, Stephani Sutherland, Kristie Walters, and Travis Lovejoy. 2019. “International Stakeholder Community of Pain Experts and Leaders Call for an Urgent Action on Forced Opioid Tapering.” *Pain Medicine* 20(3): 429–433.
- Davidson, Henry A. 1959. “The Land of Insulin Addiction.” *American Journal of Psychiatry* 116(6): 559–560.
- Davidson, Peter J., Priya Chakrabarti, and Michael Marquesen. 2020. “Impacts of Mandated Data Collection on Syringe Distribution Programs in the United States.” *International Journal of Drug Policy* 79: 102725.
- Davidson, Peter J., Barrot H. Lambdin, Erica N. Browne, Lynn D. Wenger, and Alex H. Kral. 2021. “Impact of an Unsanctioned Safe Consumption Site on Criminal Activity, 2010–2019.” *Drug and Alcohol Dependence* 220: 108521.
- Davidson, Peter J., Andrea M. López, and Alex H. Kral. 2018. “Using Drugs in Un/Safe Spaces: Impact of Perceived Illegality on an Underground Supervised Injecting Facility in the United States.” *International Journal of Drug Policy* 53: 37–44.
- Davidson, Peter J., Lynn D. Wenger, Barrot H. Lambdin, and Alex H. Kral. 2022. “Establishment and Enforcement of Operational Rules at an Unsanctioned Safe Drug Consumption Site in the United States, 2014–2020.” *American Journal of Public Health* 112(S2): S166–S172.
- Davis, Corey S. 2021. “The Purdue Pharma Opioid Settlement — Accountability, or Just the Cost of Doing Business?” *New England Journal of Medicine* 384: 97–99.
- Davis, Corey S., and Amy Judd Lieberman. 2021. “Laws Limiting Prescribing and Dispensing of Opioids in the United States, 1989–2019.” *Addiction* 116(7): 1817–1827.
- Davis, Corey S., Amy Judd Lieberman, and Madelyn O’Kelley-Bangsberg. 2022. Legality of Drug Checking Equipment in the United States: A Systematic Legal Analysis.” *Drug and Alcohol Dependence* 234: 109425.
- Des Jarlais, Don C., Ann Nugent, Alisa Solberg, Jonathan Feelemyer, Jonathan Mermin, and Deborah Holtzman. 2015. “Syringe Service Programs for Persons Who Inject Drugs in Urban, Suburban, and Rural Areas — United States, 2013.” *Morbidity and Mortality Weekly Report* 64(48): 1337–1341.
- Desmond, Matthew. 2007. *On the Fireline: Living and Dying with Wildland Firefighters*. Chicago, IL: University of Chicago Press.

- Desmond, Matthew. 2012. "Disposable Ties and the Urban Poor." *American Journal of Sociology* 117(5): 1295–1335.
- Desmond, Matthew. 2014. "Relational Ethnography." *Theory & Society* 43: 547–579.
- Desmond, Matthew. 2016. *Evicted: Poverty and Profit in the American City*. New York: Crown Books.
- Díaz-Briseño, José. 2010. "Crossing the Mississippi: How Black Tar Heroin Moved into the Eastern United States." Pages 95 to 120 in *Shared Responsibility: U.S.-Mexico Policy Options For Confronting Organized Crime*, edited by Eric L. Olson, David A. Shirk, and Andrew Selee. Washington, DC: Woodrow Wilson International Center for Scholars.
- Dodding, Jane, and Matt Gaughwin. 1995. "The Syringe in the Machine." *Australian Journal of Public Health* 19(4): 406–409.
- Doerrbecker, Juliane, Patrick Behrendt, Pedro Mateu-Gelabert, Sandra Ciesek, Nina Riebesehl, Corinne Wilhelm, Joerg Steinmann, Thomas Pietschmann, and Eike Steinmann. 2013. "Transmission of Hepatitis C Virus Among People Who Inject Drugs: Viral Stability and Association with Drug Preparation Equipment." *The Journal of Infectious Diseases* 207(2): 281–287.
- Dollar, Cindy Brooks. 2019. "Criminalization and Drug 'Wars' or Medicalization and Health 'Epidemics': How Race, Class, and Neoliberal Politics Influence Drug Laws." *Critical Criminology* 27: 305–327.
- Dowell, Deborah, Tamara Haegerich, and Roger Chou. 2016. "CDC Guideline for Prescribing Opioids for Chronic Pain — United States, 2016." *Morbidity and Mortality Weekly Report* 65(1): 1–49.
- Draus, Paul and Robert G. Carlson. 2009. "Down on Main Street: Drugs and the Small-Town Vortex." *Health & Place* 15: 247–254.
- Drug Enforcement Administration. 2017. *2017 National Drug Threat Assessment*. Washington, DC: Department of Justice. (<https://www.dea.gov/documents/2017/2017-10/2017-10-01/2017-national-drug-threat-assessment>)
- Drug Enforcement Administration. 2018a. *2016 Heroin Domestic Monitor Program*. Washington, DC: Department of Justice. (<https://www.dea.gov/documents/2018/2018-10/2018-10-29/heroin-domestic-monitor-report>)
- Drug Enforcement Administration. 2018b. *2018 National Drug Threat Assessment*. Washington, DC: Department of Justice. (<https://www.dea.gov/documents/2018/2018-10/2018-10-02/2018-national-drug-threat-assessment-ndta>)
- Drug Enforcement Administration. 2020. *The 2018 Heroin Signature Program*. Washington, DC: Department of Justice. (<https://www.dea.gov/documents/2020/2020-09/2020-09-03/2018-heroin-signature-program>)
- Drug Enforcement Administration. 2021. *2020 National Drug Threat Assessment*. Washington, DC: Department of Justice. (<https://www.dea.gov/documents/2021/03/02/2020-national-drug-threat-assessment>)
- Drug User Liberation Front. 2021. "DULF (Drug User Liberation Front) Fulfillment Centre and Compassion Club Pilot." (<https://www.dulf.ca/suap>)
- Du Bois, W. E. B. 1997 [1903]. *The Souls of Black Folk*, edited by David W. Blight and Robert Gooding-Williams. Boston, MA: Bedford/St. Martin's.
- Duck, Waverly. 2015. *No Way Out: Precarious Living in the Shadow of Poverty and Drug Dealing*. Chicago, IL: University of Chicago Press.

- Duff, Cameron. 2007. "Towards a Theory of Drug Use Contexts: Space, Embodiment, and Practice." *Addiction Research & Theory* 15(5): 503–519.
- Duncan, Dustin T., and Ichiro Kawachi. 2018. *Neighborhoods and Health*. New York: Oxford University Press.
- Dunlap, Eloise, Jennifer Graves, and Ellen Benoit. 2012. "Stages of Drug Market Change During Disaster: Hurricane Katrina and Reformulation of the New Orleans Drug Market." *International Journal of Drug Policy* 23: 473–480.
- Dunleavy, Karen, Vivian Hope, Kirsty Roy, and Avril Taylor. 2019. "People Who Inject Drugs' Experiences of Skin and Soft Tissue Infections and Harm Reduction: A Qualitative Study." *International Journal of Drug Policy* 65: 65–72.
- Durkheim, Émile. 1982 [1899]. *The Rules of Sociological Method*. New York: The Free Press.
- Durkheim, Émile. 1984 [1893]. *The Division of Labor in Society*. New York: The Free Press.
- Edgcomb, Elaine L., and Tamra Thetford. 2004. *The Informal Economy: Making It In Rural America*. Washington, DC: The Aspen Institute.
- Edin, Kathryn, and Laura Lein. 1997. *Making Ends Meet: How Single Mothers Survive Welfare and Low-Wage Work*. New York: Russell Sage Foundation.
- Eichenlaub, Joseph D., and Essma Nasher. 2021. "Thematic Content Analysis of Newspaper Coverage of the Causes of the Opioid Crisis." *Open Access Journal of Sociology* 2(1): 1–13.
- Eisenberg, Amanda. 2021. "De Blasio Administration Pushes to Approve Supervised Injection Sites." *Politico*, October 25. (<https://www.politico.com/states/new-york/albany/story/2021/10/25/de-blasio-administration-pushes-to-approve-supervised-injection-sites-1392031>)
- Ellis, Kaitlin, Suzan Walters, Samuel R. Friedman, Lawrence J. Ouellet, Jerel Ezell, Kris Rosentel, and Mai T. Pho. 2020. "Breaching Trust: A Qualitative Study of Healthcare Experiences of People Who Use Drugs in a Rural Setting." *Frontiers in Sociology* 5: 593925.
- Enos, Gary. 2021. "With New Book and TV Deal Announced, Activist Laments Purdue Settlement." *Alcohol and Drug Abuse Weekly* 33(40): 1, 7–8.
- Evans, Gary W. 2004. "The Environment of Childhood Poverty." *American Psychologist* 59(2): 77–92.
- Eyre, Eric. 2020. *Death in Mud Lick: A Coal Country Fight Against the Drug Companies That Delivered the Opioid Epidemic*. New York: Scribner.
- Ezell, Jerel M., Suzan Walters, Samuel R. Friedman, Rebecca Bolinski, Wiley D. Jenkins, John Schneider, Bruce Link, and Mai T. Pho. 2021. "Stigmatize the Use, not the User? Attitudes on Opioid Use, Drug Injection, Treatment, and Overdose Prevention in Rural Communities." *Social Science & Medicine* 268: 113470.
- Fairbairn, Nadia, Will Small, Natasha Van Borek, Evan Wood, and Thomas Kerr. 2010. "Social Structural Factors that Shape Assisted Injecting Practices Among Injection Drug Users in Vancouver, Canada: A Qualitative Study." *Harm Reduction Journal* 7: 20.
- Fairbanks, Robert P., II. 2010. *How it Works: Recovering Citizens in Post-Welfare Philadelphia*. Chicago, IL: University of Chicago Press.
- Farmer, Paul. 1996. "On Suffering and Structural Violence: A View from Below." *Daedalus* 125(1): 261–283.
- Farmer, Paul. 2004. "An Anthropology of Structural Violence." *Current Anthropology* 45(3): 305–325.
- Federal Highway Administration. 2017. *2017 National Household Travel Survey*. Washington, DC: U.S. Department of Transportation. (<https://nhts.ornl.gov>)

- Fine, Gary Alan. 2012. *Tiny Publics: A Theory of Group Action and Culture*. New York: Russell Sage Foundation.
- Fink, David S., Julia P. Schleimer, Aaron Sarvet, Kiran K. Grover, Chris Delcher, Alvaro Castillo-Carniglia, June H. Kim, Ariadne E. Rivera-Aguirre, Stephen G. Henry, Silvia S. Martins, and Magdalena Cerdá. 2018. "Association Between Prescription Drug Monitoring Programs and Nonfatal and Fatal Drug Overdoses: A Systematic Review." *Annals of Internal Medicine* 168: 783–790.
- Fiscella, Kevin, Sarah E. Wakeman, and Leo Beletsky. 2018. "Buprenorphine Deregulation and Mainstreaming Treatment for Opioid Use Disorder: X the X Waiver." *JAMA Psychiatry*, epub ahead of print (doi:10.1001/jamapsychiatry.2018.3685).
- Fischer, Claude S. 1975. "Toward a Subcultural Theory of Urbanism." *American Journal of Sociology* 80(6): 1319–1341.
- Fitzerman-Blue, Micah, and Noah Harpster. 2022. *Painkiller*. Netflix.
- Fliss, Michael Dolan, Mary E. Cox, Samantha W. Dorris, and Anna E. Austin. 2021. "Timely Overdose Death Reporting Is Challenging but We Must Do Better." *American Journal of Public Health* 111(7): 1194–1196.
- Food and Drug Administration. 2010. "FDA Drug Safety Communication: FDA Recommends Against the Continued Use of Propoxyphene." (<https://www.fda.gov/drugs/drug-safety-and-availability/fda-drug-safety-communication-fda-recommends-against-continued-use-propoxyphene>)
- Food and Drug Administration. 2017. "FDA Requests Removal of Opana ER for Risks Related to Abuse." (<https://www.fda.gov/news-events/press-announcements/fda-requests-removal-opana-er-risks-related-abuse>)
- Ford, Jason A., Corey Pomykacz, Alec Szalewski, Sean Esteban McCabe, and Ty S. Schepis. 2020. "Friends and Relatives as Sources of Prescription Opioids for Misuse Among Young Adults: The Significance of Physician Source and Race/Ethnic Differences." *Substance Abuse* 41(1): 93–100.
- Frakt, Austin B. 2019. "The Rural Hospital Problem." *Journal of the American Medical Association* 321(23): 2271–2272.
- Frank, Joseph W., Evan Carey, Charlotte Nolan, Robert D. Kerns, Friedhelm Sandbrink, Rollin Gallagher, and P. Michael Ho. 2019. "Increased Nonopioid Chronic Pain Treatment in the Veterans Health Administration, 2010–2016." *Pain Medicine* 20: 869–877.
- Frederick, Brittany Lee, and Heather Mooney. 2021. "Sixteen Miles: New Users, Stock Dealers, and Racialization in Small Cities." *Journal of Race, Ethnicity and the City* 2(2): 183–209.
- Freimuth, Vicki S., Sandra Crouse Quinn, Stephen B. Thomas, Galen Cole, Eric Zook, Ted Duncan. 2001. "African Americans' Views on Research and the Tuskegee Syphilis Study." *Social Science & Medicine* 52(5): 797–808.
- Freudenburg, William R. 1986. "The Density of Acquaintanceship: An Overlooked Variable in Community Research." *American Journal of Sociology* 92(1): 27–63.
- Friedman, Bill. 2000. *Designing Casinos to Dominate the Competition*. Reno, NV: Institute for the Study of Gambling and Commercial Gaming.
- Friedman, Joseph, Fernando Montero, Phillippe Bourgois, Rafik Wahbi, Daniel Dye, David Goodman-Meza, and Chelsea Shover. 2022. "Xylazine Spreads Across the US: A Growing Component of the Increasingly Synthetic and Polysubstance Overdose Crisis." *Drug and Alcohol Dependence* 233: 109830.

- Friedman, Samuel R., Diana Rossi, and Naomi Braine. 2009. "Theorizing 'Big Events' as a Potential Risk Environment for Drug Use, Drug-Related Harm and HIV Epidemic Outbreaks." *International Journal of Drug Policy* 20: 283–291.
- Friedmann, Peter D., and Robert P. Schwartz. 2012. "Just Call It 'Treatment.'" *Addiction Science and Clinical Practice* 7: 10.
- Friel, Sharon and Michael G. Marmot. 2011. "Action on the Social Determinants of Health and Health Inequities Goes Global." *Annual Review of Public Health* 32: 225–236.
- Fulkerson, Gregory M. and Alexander R. Thomas, editors. 2014. *Studies in Urbanormativity: Rural Community in Urban Society*. Lanham, MD: Lexington Books.
- Furr-Holden, Debra, Adam J. Milam, Ling Wang, and Richard Sadler. 2021. "African Americans Now Outpace Whites in Opioid-Involved Overdose Deaths: A Comparison of Temporal Trends from 1999 to 2018." *Addiction* 116(3): 677–683.
- Furst, R. Terry, Christopher Herrmann, Ray Leung, John Galea, and Kirsten Hunt. 2004. "Heroin Diffusion in the Mid-Hudson Region of New York." *Addiction* 99: 431–441.
- Gabbe, C. J., Gregory Pierce, and Efren Oxlaj. 2020. "Subsidized Households and Wildfire Hazards in California." *Environmental Management* 66: 873–883.
- Gaines, Tommi L., Karla D. Wagner, Maria Luisa Mittal, Jeanette M. Bowles, Elizabeth Copulsky, Mark Faul, Robert W. Harding, and Peter J. Davidson. 2020. "Transitioning from Pharmaceutical Opioids: A Discrete-Time Survival Analysis of Heroin Initiation in Suburban/Exurban Communities." *Drug and Alcohol Dependence* 213: 108084.
- Galea, Sandro and David Vlahov. 2002. "Social Determinants and the Health of Drug Users: Socioeconomic Status, Homelessness, and Incarceration." *Public Health Reports* 117(suppl 1): S135–S145.
- Galster, George. 2001. "On the Nature of Neighbourhood." *Urban Studies* 38(12): 2111–2124.
- Galtung, Johan. 1969. "Violence, Peace, and Peace Research." *Journal of Peace Research* 6(3): 167–191.
- Gans, Herbert J. 1962. *The Urban Villagers: Group and Class in the Life of Italian-Americans*. New York: The Free Press.
- Gans, Herbert J. 1997. "Uses and Misuses of Concepts in American Social Science Research: Variations on Loïc Wacquant's Theme of 'Three Pernicious Premises in the Study of the American Ghetto.'" *International Journal of Urban and Regional Research* 21(3): 504–507.
- Gans, Herbert J. 2009. "Some Problems of and Futures for Urban Sociology: Toward a Sociology of Settlements." *City & Community* 8(3): 211–219.
- Garcia, Angela. 2010. *The Pastoral Clinic: Addiction and Dispossession Along the Rio Grande*. Berkeley, CA: University of California Press.
- Garcia, Macarena C., Lauren M. Rossen, Brigham Bastian, Mark Faul, Nicole F. Dowling, Cheryll C. Thomas, Linda Schieb, Yuling Hong, Paula W. Yoon, and Michael F. Iademarco. 2019. "Potentially Excess Deaths from the Five Leading Causes of Death in Metropolitan and Nonmetropolitan Counties — United States, 2010–2017." *Morbidity and Mortality Weekly Report* 68(10): 1–11.
- Garriott, William. 2011. *Policing Methamphetamine: Narcopolitics in Rural America*. New York: New York University Press.
- Garrison, Trey, and Richard McClure. 2021. *Opioids for the Masses: Big Pharma's War on Middle America and the White Working Class*. Quakertown, PA: Antelope Hill Publishing.
- Gee, Alastair, and Dani Anguiano. 2020. *Fire in Paradise: An American Tragedy*. New York: W. W. Norton.

- Geertz, Clifford. 1978. "The Bazaar Economy: Information and Search in Peasant Marketing." *American Economic Review* 68(2): 28–32.
- Gellad, Walid F., Chester B. Good, and David J. Shulkin. 2017. "Addressing the Opioid Epidemic in the United States: Lessons from the Department of Veterans Affairs." *JAMA Internal Medicine* 177(5): 611–612.
- Gibbons, Jason B., Elizabeth A. Stuart, and Brendan Saloner. 2022. "Methadone on Wheels—A New Option to Expand Access to Care Through Mobile Units." *JAMA Psychiatry* 79(3): 187–188.
- Gibney, Alex. 2021. *The Crime of the Century*. HBO.
- Gicquelais, Rachel E., Dan Werb, Charles Marks, Carolyn Ziegler, Shruti H. Mehta, Becky L. Genberg, and Ayden I. Scheim. 2020. "Prevalence and Correlates of Providing and Receiving Assistance with the Transition to Injection Drug Use." *Epidemiologic Reviews* 42(1): 4–18.
- Gluckman, Max. 1955. *The Judicial Process Among the Barotse of Northern Rhodesia (Zambia)*. Manchester, UK: Manchester University Press.
- Goetze, Dieter. 1976. "Marginality and Marginalization as Key Concepts in a Sociology of Latin America." *Sociologia Ruralis* 16(1): 56–74.
- Goffman, Alice. 2014. *On the Run: Fugitive Life in an American City*. Chicago, IL: University of Chicago Press.
- Goffman, Erving. 1963. *Behavior in Public Places*. New York: Free Press.
- Goffman, Erving. 1967. *Interaction Ritual: Essays on Face-to-Face Behavior*. New York: Pantheon Books.
- Goffman, Erving. 1983. "The Interaction Order: American Sociological Association, 1982 Presidential Address." *American Sociological Association* 48(1): 1–17.
- Goldberg, Chad Alan. 2012. "Robert Park's Marginal Man: The Career of a Concept in American Sociology." *Laboratorium* 4(2): 199–217.
- Goldstick, Jason E., Gery P. Guy, Jan L. Losby, Grant Baldwin, Matthew Myers, and Amy S. B. Bohnert. 2021. "Changes in Initial Opioid Prescribing Practices after the 2016 Release of the CDC Guideline for Prescribing Opioids for Chronic Pain." *JAMA Network Open* 4(7): e2116860.
- Gomes, Tara, Tonya J. Campbell, Sophie A. Kitchen, Ria Garg, Nikki Bozinoff, Siyu Men, Mina Tadrous, Charlotte Munro, Tony Antoniou, Dan Werb, and Jennifer Wyman. 2022. "Association Between Increased Dispensing of Opioid Agonist Therapy Take-Home Doses and Opioid Overdose and Treatment Interruption and Discontinuation." *Journal of the American Medical Association* 327(9): 846–855.
- Gottschalk, Marie. 2020. "Caught in the Countryside: Race, Class, and Punishment in Rural America." *Political Power and Social Theory* 37: 25–52.
- Government Accountability Office. 2018. *Rural Hospital Closures: Number and Characteristics of Affected Hospitals and Contributing Factors*. (GAO Publication No. 18-634). Washington, D.C.: U.S. Government Printing Office. (<https://www.gao.gov/products/gao-18-634>)
- Graham, Brittany, Eris Nyx, and Jeremy Kalicum. 2021. *URGENT REQUEST: Section 56(I) Exemption to the Controlled Drugs and Substances Act (CDSA) Required to Ensure the Equitable Application of Public Health Protections to Vulnerable Canadians*. (<https://www.dulf.ca/sect56>)

- Grandmaison, Romain Le Cour, Nathaniel Morris, and Benjamin T. Smith. 2019. “No More Opium for the Masses. From the U.S. Fentanyl Boom to the Mexican Opium Crisis: Opportunities Amidst Violence?” Network of Researchers in International Affairs.
- Granfield, Robert, and William Cloud. 1999. *Coming Clean: Overcoming Addiction Without Treatment*. New York: New York University Press.
- Granfield, Robert, and William Cloud. 2001. “Social Context and ‘Natural Recovery’: The Role of Social Capital in the Resolution of Drug-Associated Problems.” *Substance Use & Misuse* 36(11): 1543–1570.
- Granovetter, Mark S. 1973. “The Strength of Weak Ties.” *American Journal of Sociology* 78(6): 1360–1380.
- Green, Brandn Q., Danielle Christine Rhubart, and Matthew R. Filteau. 2021. “Barriers for Implementing the Hub and Spoke Model to Expand Medication for Opioid Use Disorder: A Case Study of Montana.” *Substance Abuse: Research and Treatment* 15: 1–8.
- Guarino, Honoria, Pedro Mateu-Gelabert, Jennifer Teubl, and Elizabeth Goodbody. 2018. “Young Adults' Opioid Use Trajectories: From Nonmedical Prescription Opioid Use to Heroin, Drug Injection, Drug Treatment and Overdose.” *Addictive Behaviors* 86: 118–123.
- Gumidyala, Lalitha, Sajjad A. Savul, Frances S. Shofer, and Judith Green-McKenzie. 2021. “Effect of CDC Opioid-Prescribing Guidelines in a Community Hospital Emergency Department.” *Journal of Public Health Management and Practice* 27(3 Suppl): S186–S190.
- Guy Jr., Gery P., Kun Zhang, Michele K. Bohm, Jan Losby, Brian Lewis, Randall Young, Louise B. Murphy, and Deborah Dowell. 2017. “Vital Signs: Changes in Opioid Prescribing in the United States, 2006–2015.” *Morbidity and Mortality Weekly Report* 66(26): 697–704.
- Hadland, Scott E., Ariadne Rivera-Aguirre, Brandon D. L. Marshall, and Magdalena Cerdá. 2019. “Association of Pharmaceutical Industry Marketing of Opioid Products with Mortality from Opioid-Related Overdoses.” *JAMA Network Open* 2(1): e186007.
- Hadlandsmyth, Katherine, Hilary Mosher, Mark W. Vander Weg, and Brian C. Lund. 2018. “Decline in Prescription Opioids Attributable to Decreases in Long-Term Use: A Retrospective Study in the Veterans Health Administration 2010–2016.” *Journal of General Internal Medicine* 33(6): 818–824.
- Hajarizadeh, Behzad, Evan B. Cunningham, Hannah Reid, Matthew Law, Gregory J. Dore, Jason Grebely. 2018. “Direct-Acting Antiviral Treatment for Hepatitis C Among People Who Use or Inject Drugs: A Systematic Review and Meta-Analysis.” *The Lancet Gastroenterology and Hepatology* 3(11): 754–767.
- Halfacree, K. H. 1993. “Locality and Social Representation: Space, Discourse and Alternative Definitions of the Rural.” *Journal of Rural Studies* 9(1): 23–37.
- Hall, Wayne, Adrian Carter, and Cynthia Forlini. 2015. “The Brain Disease Model of Addiction: Is it Supported by the Evidence and Has it Delivered on its Promises?” *Lancet Psychiatry* 2: 105–110.
- Hampton, Ryan. 2018. *American Fix: Inside the Opioid Addiction Crisis—and How to End It*. With Claire Rudy Foster. New York: All Points Books.
- Hampton, Ryan. 2021. *Unsettled: How the Purdue Pharma Bankruptcy Failed the Victims of the American Overdose Crisis*. With Claire Rudy Foster and Hillel Aron. New York: St. Martin’s Press.
- Hancock, Christine, Alan Steinbach, Thomas S. Nesbitt, Shelley R. Adler, and Colette L. Auerswald. 2009. “Why Doctors Choose Small Towns: A Developmental Model of Rural Physician Recruitment and Retention.” *Social Science & Medicine* 69: 1368–1376.

- Harocopos, Alex, Lloyd A. Goldsamt, Paul Kobrak, John J. Jost, and Michael C. Clatts. 2009. "New Injectors and the Social Context of Injection Initiation." *International Journal of Drug Policy* 20: 317–323.
- Harris, Jenine K., Kate Beatty, J.P. Leider, Alana Knudson, Britta L. Anderson, and Michael Meit. 2016. "The Double Disparity Facing Rural Local Health Departments." *Annual Review of Public Health* 37: 167–184.
- Hart, Carl L. 2021. *Drug Use for Grown-Ups: Chasing Liberty in the Land of Fear*. New York: Penguin.
- Hart, L. Gary, Edward Salsberg, Debra M. Phillips, and Denise M. Lishner. 2002. "Rural Health Care Providers in the United States." *The Journal of Rural Health* 18(5): 211–231.
- Harvey, David. 1978. "The Urban Process Under Capitalism: A Framework for Analysis." *International Journal of Urban and Regional Research* 2(1–3): 101–131.
- Hatzenbuehler, Mark L., Jo C. Phelan, and Bruce G. Link. 2013. "Stigma as a Fundamental Cause of Population Health Inequalities." *American Journal of Public Health* 103(5): 813–821.
- Hedegaard, Holly, Arialdi M. Miniño, Merianne Rose Spencer, and Margaret Warner. 2021. "Drug Overdose Deaths in the United States, 1999–2020." *NCHS Data Brief No. 428*. Hyattsville, MD: National Center for Health Statistics.
- Hedegaard, Holly, Arialdi M. Miniño, and Margaret Warner. 2020a. "Drug Overdose Deaths in the United States, 1999–2018." *NCHS Data Brief No. 356*. Hyattsville, MD: National Center for Health Statistics.
- Hedegaard, Holly, Arialdi M. Miniño, and Margaret Warner. 2020b. "Drug Overdose Deaths in the United States, 1999–2019." *NCHS Data Brief No. 394*. Hyattsville, MD: National Center for Health Statistics.
- Hedegaard, Holly and Merianne Rose Spencer. 2021. "Urban–Rural Differences in Drug Overdose Death Rates, 1999–2019." *NCHS Data Brief No. 403*. Hyattsville, MD: National Center for Health Statistics.
- Herzberg, David. 2020. *White Market Drugs: Big Pharma and the Hidden History of Addiction in America*. Chicago, IL: University of Chicago Press.
- Heyman, Gene M. 2009. *Addiction: A Disorder of Choice*. Cambridge, MA: Harvard University Press.
- Higham, Scott, and Sari Horwitz. 2022 *American Cartel: Inside the Battle to Bring Down the Opioid Industry*. New York: Twelve Books.
- Hill, Rob, Rakulan Santhakumar, William Dewey, Eamonn Kelly, Graeme Henderson. 2020. "Fentanyl Depression of Respiration: Comparison with Heroin and Morphine." *British Journal of Pharmacology* 177(2): 254–265.
- Hirschman, Albert O. 1970. *Exit, Voice, and Loyalty: Responses to Decline in Firms, Organizations, and States*. Cambridge, MA: Harvard University Press.
- Hoffman, Kelly M., Sophie Trawalter, Jordan R. Axt, and M. Norman Oliver. 2016. "Racial Bias in Pain Assessment and Treatment Recommendations, and False Beliefs About Biological Differences Between Blacks and Whites." *Proceedings of the National Academy of Sciences* 113(16): 4296–4301.
- Hoffman, Kim A., Canyon Foot, Ximena A. Levander, Ryan Cook, Javier Ponce Terashima, John W. McIlveen, P. Todd Korthuis, Dennis McCarty. 2022. "Treatment Retention, Return to Use, and Recovery Support Following COVID-19 Relaxation of Methadone Take-Home

- Dosing in Two Rural Opioid Treatment Programs: A Mixed Methods Analysis.” *Journal of Substance Abuse Treatment*, epub ahead of print.
- Hogan, Richard. 1985. “The Frontier as Social Control.” *Theory and Society* 14(1): 35–51.
- Hoggart, Keith. 1988. “Not a Definition of Rural.” *Area* 20(1): 35–40.
- Holliday, J. S. 2015 [1993]. *The World Rushed In: The California Gold Rush Experience*. Norman, OK: University of Oklahoma Press.
- Hollingsworth, Alex, Christopher J. Ruhm, and Kosali Simon. 2017. “Macroeconomic Conditions and Opioid Abuse.” *Journal of Health Economics* 56: 222–233.
- hooks, bell. 2015 [1984]. *Feminist Theory: From Margin to Center*. New York: Routledge.
- Hope, Vivian D., John V. Parry, Fortune Ncube, and Matthew Hickman. 2016. “Not in the Vein: ‘Missed Hits’, Subcutaneous and Intramuscular Injections and Associated Harms Among People Who Inject Psychoactive Drugs in Bristol, United Kingdom.” *International Journal of Drug Policy* 28: 83–90.
- Horyniak, Danielle, Stuart Armstrong, Peter Higgs, David Wain, and Campbell Aitken. 2007. “Poor Man's Smack: A Qualitative Study of Buprenorphine Injecting in Melbourne, Australia.” *Contemporary Drug Problems* 34(3): 525–548.
- Hughes, Evan. 2022. *The Hard Sell: Crime and Punishment at an Opioid Startup*. New York: Doubleday.
- Hulme, Shann, David Bright, Suzanne Nielsen. 2018. “The Source and Diversion of Pharmaceutical Drugs for Non-Medical Use: A Systematic Review and Meta-Analysis.” *Drug and Alcohol Dependence* 186: 242–256.
- Ingram, Deborah D., and Sheila J. Franco. 2014. “2013 NCHS Urban–Rural Classification Scheme for Counties.” *Vital and Health Statistics* 2(166).
- Irwin, John. 1977. *Scenes*. Beverly Hills, CA: SAGE Publications.
- Islam, Md Mofizul, and Katherine M. Conigrave. 2007. “Syringe Vending Machines as a Form of Needle Syringe Programme: Advantages and Disadvantages.” *Journal of Substance Use* 12(3): 203–212.
- Ivsins, Andrew, Jade Boyd, Samara Mayer, Alexandra Collins, Christy Sutherland, Thomas Kerr, Ryan McNeil. 2021. “‘It’s Helped Me a Lot, Just Like to Stay Alive’: a Qualitative Analysis of Outcomes of a Novel Hydromorphone Tablet Distribution Program in Vancouver, Canada.” *Journal of Urban Health* 98: 59–69.
- Jackson, Joanna R., Christopher A. Harle, Ross D. Silverman, Kosali Simon, and Nir Menachemi. 2020. “Characterizing Variability in State-Level Regulations Governing Opioid Treatment Programs.” *Journal of Substance Abuse Treatment* 115: 108008.
- Jacobs, Bruce A. 1999. *Dealing Crack: The Social World of Streetcorner Selling*. Boston, MA: Northeastern University Press.
- Jacobs, Jane. 1961. *The Death and Life of Great American Cities*. New York: Vintage.
- Jacques, Scott, and Richard Wright. 2015. *Code of the Suburb: Inside the World of Young Middle-Class Drug Dealers*. Chicago, IL: University of Chicago Press.
- Jalal, Hawre, Jeanine M. Buchanich, Mark S. Roberts, Lauren C. Balmert, Kun Zhang, and Donald S. Burke. 2018 “Changing Dynamics of the Drug Overdose Epidemic in the United States From 1979 Through 2016.” *Science* 361(6408): eaau1184.
- James, Keturah and Ayana Jordan. 2018. “The Opioid Crisis in Black Communities.” *The Journal of Law, Medicine, and Ethics* 46(2): 404–421.
- Jenkins, Ryan, and Claire Snell-Rood. 2021. “Rural Perspectives Challenging Pharmacotherapy.” *The Journal of Behavioral Health Services & Research* 48(1): 112–119.

- Johnson, Lizzie. 2021. *Paradise: One Town's Struggle to Survive an American Wildfire*. New York: Crown.
- Johnson, Susan Lee. 2000. *Roaring Camp: The Social World of the California Gold Rush*. New York: W. W. Norton.
- Johnston, Genevieve. 2020. "The Kids Are All White: Examining Race and Representation in News Media Coverage of Opioid Overdose Deaths in Canada." *Sociological Inquiry* 90(1): 123–146.
- Jonas, Adam B., April M. Young, Carrie B. Oser, Carl G. Leukefeld, and Jennifer R. Havens. 2012. "Oxycontin® as Currency: Oxycontin® Use and Increased Social Capital Among Rural Appalachian Drug Users." *Social Science & Medicine* 74: 1602–1609.
- Jones, Audrey L., Stefan G. Kertesz, Leslie R.M. Hausmann, Maria K. Mor, Ying Suo, Warren B.P. Pettey, James H. Schaefer Jr., Adi V. Gundlapalli, and Adam J. Gordon. 2020. "Primary Care Experiences of Veterans with Opioid Use Disorder in The Veterans Health Administration." *Journal of Substance Use Treatment* 113: 107996.
- Jones, Jermaine D., Shanthi Mogali, Sandra D. Comer. 2012. "Polydrug Abuse: A Review of Opioid and Benzodiazepine Combination Use." *Drug and Alcohol Dependence* 125: 8–18.
- Joshi, Sujata, Thomas Weiser, and Victoria Warren-Mears. 2018. "Drug, Opioid-Involved, and Heroin-Involved Overdose Deaths Among American Indians and Alaska Natives — Washington, 1999–2015." *Morbidity and Mortality Weekly Report* 67(50): 1384–1387.
- Joudrey, Paul J., Benjamin A. Howell, Kate Nyhan, Ali Moravej, Molly Doernberg, Joseph S. Ross, and Emily A. Wang. 2021. "Reporting of Substance Use Treatment Quality in United States Adult Drug Courts." *International Journal of Drug Policy* 90: 103050.
- Joudrey, Paul J., Maria R. Khan, Emily A. Wang, Joy D. Scheidell, E. Jennifer Edelman, D. Keith McInnes, and Aaron D. Fox. 2019. "A Conceptual Model for Understanding Post-Release Opioid-Related Overdose Risk." *Addiction Science & Clinical Practice* 14: 17.
- Kain, John F. 1968 "Housing Segregation, Negro Employment, and Metropolitan Decentralization." *The Quarterly Journal of Economics* 82(2): 175–197.
- Kaiser Family Foundation. 2016. "Kaiser Health Tracking Poll – April 2016." (<https://files.kff.org/attachment/topline-methodology-kaiser-health-tracking-poll-april-2016>)
- Kaiser Family Foundation. 2017. "Kaiser Health Tracking Poll – November 2017." (<https://files.kff.org/attachment/Topline-Kaiser-Health-Tracking-Poll-November-2017>)
- Kanan, Renee, Annette Lambert, Donna Kalauokalani, and Denise Allen. 2022. *Transforming Substance Use Disorder Treatment in California's Prison System: Impacts of the Integrated Substance Use Disorder Treatment Program, 2019–2021*. Sacramento, CA: California Department of Corrections and Rehabilitation and California Correctional Health Care Services. (<https://cchcs.ca.gov/wp-content/uploads/sites/60/ISUDT/Impacts-ISUDT-Program2019-22.pdf>)
- Kang-Brown, Jacob, Oliver Hinds, Jasmine Heiss, and Olive Lu. 2018. *The New Dynamics of Mass Incarceration*. New York: Vera Institute of Justice.
- Kanter, Rosabeth Moss. 1977. "Some Effects of Proportions on Group Life: Skewed Sex Ratios and Responses to Token Women." *American Journal of Sociology* 82(5): 965–990.
- Kasarda, John. 1989. "Urban Industrial Transition and the Underclass." *ANNALS of the American Association of Political and Social Sciences* 501: 26–47.
- Katz, Jack. 2019. "Hot Potato Criminology: Ethnographers and the Shame of Poor People's Crimes." *Annual Review of Criminology* 2: 21–52.

- Kawasaki, Sarah, Erica Francis, Sara Mills, Glenn Buchberger, Ruth Hogentogler, and Jennifer Kraschnewski. 2019. "Multi-Model Implementation of Evidence-Based Care in the Treatment of Opioid Use Disorder in Pennsylvania." *Journal of Substance Abuse Treatment* 106: 58–64.
- Kaye, Kerwin. 2019. *Enforcing Freedom: Drug Courts, Therapeutic Communities, and the Intimacies of the State*. New York: Columbia University Press.
- Kearley, Brook W., John A. Cosgrove, Alexandra S. Wimberly, and Denise C. Gottfredson. 2019. "The Impact of Drug Court Participation on Mortality: 15-Year Outcomes from a Randomized Controlled Trial." *Journal of Substance Abuse Treatment* 105: 12–18.
- Keefe, Patrick Radden, 2021. *Empire of Pain: The Secret History of the Sackler Dynasty*. New York: Doubleday.
- Keeley, Jon E., and Alexandra D. Syphard. 2019. "Twenty-First Century California, USA, Wildfires: Fuel-Dominated vs. Wind-Dominated Fires." *Fire Ecology* 15: 24.
- Keeley, Jon E., and Alexandra Syphard. 2020. "Nexus Between Wildfire, Climate Change and Population Growth in California." *Fremontia* 47(2): 18–27.
- Keijzer, Lenneke, and Elliot Imbert. 2011. "The Filter of Choice: Filtration Method Preference Among Injecting Drug Users." *Harm Reduction Journal* 8: 20.
- Kepple, Nancy J., Amittia Parker, Susan Whitmore, Michelle Comtois. 2019. "Nowhere to Go? Examining Facility Acceptance Levels for Serving Individuals Using Medications for Opioid Used Disorder." *Journal of Substance Abuse Treatment* 104: 42–50.
- Kerr, Thomas, Will Small, Chris Buchner, Ruth Zhang, Kathy Li, Julio Montaner, and Evan Wood. 2010. "Syringe Sharing and HIV Incidence Among Injection Drug Users and Increased Access to Sterile Syringes." *American Journal of Public Health* 100: 1449–1453.
- Kerr, Thomas, Will Small, and Evan Wood. 2005. "The Public Health and Social Impacts of Drug Market Enforcement: A Review of the Evidence." *International Journal of Drug Policy* 16: 210–220.
- Kiang, Mathew V., Michael L. Barnett, Sarah E. Wakeman, Keith Humphreys, and Alexander C. Tsai. 2021. "Robustness of Estimated Access to Opioid Use Disorder Treatment Providers in Rural vs. Urban Areas of the United States." *Drug and Alcohol Dependence* 228: 109081.
- Kiang, Mathew V., Keith Humphreys, Mark R. Cullen, and Sanjay Basu. 2020. "Opioid Prescribing Patterns Among Medical Providers in the United States, 2003-17: Retrospective, Observational Study." *BMJ* 368: 16968.
- Knight, Kelly Ray. 2015. *addicted.pregnant.poor*. Durham, NC: Duke University Press.
- Koob, George F., and Nora D. Volkow. 2010. "Neurocircuitry of Addiction." *Neuropsychopharmacology* 35: 217–238.
- Kornfield, Meryl. 2022. "U.S. Surpasses Record 100,000 Overdose Deaths in 2021." *Washington Post*, May 11. (<https://www.washingtonpost.com/health/2022/05/11/drug-overdose-deaths-cdc-numbers/>)
- Kourounis, Georgios, Brian David Wensley Richards, Evdokia Kyprianou, Eva Symeonidou, Minerva-Melpomeni Malliori, Lampros Samartzis. 2016. "Opioid Substitution Therapy: Lowering the Treatment Thresholds." *Drug and Alcohol Dependence* 161: 1–8.
- Kral, Alex H., Rachel Anderson, Neil M. Flynn, and Ricky N. Bluthenthal. 2004. "Injection Risk Behaviors Among Clients of Syringe Exchange Programs with Different Syringe Dispensation Policies." *Journal of Acquired Immune Deficiency Syndrome* 37(2): 1307–1312.

- Kral, Alex H., and Peter J. Davidson. 2017. "Addressing the Nation's Opioid Epidemic: Lessons from an Unsanctioned Supervised Injection Site in the U.S." *American Journal of Preventive Medicine* 53(6): 919–922.
- Kral, Alex H., Barrot H. Lambdin, Lynn D. Wenger, and Peter J. Davidson. 2020. "Evaluation of an Unsanctioned Safe Consumption Site in the United States." *New England Journal of Medicine* 383(6): 589–590.
- Kramer, Heather Anu, Miranda H. Mockrin, Patricia M. Alexandre, and Volker C. Radeloff. 2019. "High Wildfire Damage in Interface Communities in California." *International Journal of Wildland Fire* 28: 641–650.
- Krausz, R. Michael, Jean N. Westenberg, Nickie Mathew, George Budd, James S. H. Wong, Vivian W. L. Tsang, Marc Vogel, Conor King, Vijay Seethapathy, Kerry Jang, and Fiona Choi. 2021. "Shifting North American Drug Markets and Challenges for the System of Care." *International Journal of Mental Health Systems* 15: 86.
- Krausz, R. Michael, Jean N. Westenberg, and Marc Vogel. 2022. "Addressing Fentanyl Use Disorder with Fentanyl-Assisted Treatment." *The Lancet Psychiatry* 9: 103–105.
- Kravitz-Wirtz, Nicole, Corey S. Davis, William R. Ponicki, Ariadne Rivera-Aguirre, Brandon D. L. Marshall, Silvia S. Martins, and Magdalena Cerdá. 2020. "Association of Medicaid Expansion with Opioid Overdose Mortality in the United States." *JAMA Network Open* 3(1): e1919066.
- Krawczyk, Noa, Caroline E. Picher, Kenneth A. Feder, and Brendan Saloner. 2017. "Only One in Twenty Justice- Referred Adults in Specialty Treatment for Opioid Use Receive Methadone or Buprenorphine." *Health Affairs* 36(12): 2046–2053.
- Krieger, Nancy. 1994. "Epidemiology and the Web of Causation: Has Anyone Seen the Spider?" *Social Science & Medicine* 39(7): 887–903.
- Krieger, Nancy. 2011. *Epidemiology and the People's Health: Theory and Context*. New York: Oxford University Press.
- Krivo, Lauren J., Heather M. Washington, Ruth D. Peterson, Christopher R. Browning, Catherine A. Calder, and Mei-Po Kwan. 2013. "Social Isolation of Disadvantage and Advantage: The Reproduction of Inequality in Urban Space." *Social Forces* 92(1): 141–164.
- Kroenke, Kurt, Daniel P. Alford, Charles Argoff, Bernard Canlas, Edward Covington, Joseph W. Frank, Karl J. Haake, Steven Hanling, W. Michael Hooten, Stefan G. Kertesz, Richard L. Kravitz, Erin E. Krebs, Steven P. Stanos, and Mark Sullivan. 2019. "Challenges with Implementing the Centers for Disease Control and Prevention Opioid Guideline: A Consensus Panel Report." *Pain Medicine* 20(4): 724–735.
- Kulbokas, Victoria, Kent A. Hanson, Mary H. Smart, Monika Rao Mandava, Todd A Lee, and A. Simon Pickard. 2021. "Academic Detailing Interventions for Opioid-Related Outcomes: A Scoping Review." *Drugs in Context* 10: 2021-7-7.
- Laing, Matthew K., Lianping Ti, Allison Marmel, Samuel Tobias, Aaron M. Shapiro, Richard Laing, Mark Lysyshyn, and M. Eugenia Socías. 2021. "An Outbreak of Novel Psychoactive Substance Benzodiazepines in the Unregulated Drug Supply: Preliminary Results from a Community Drug Checking Program Using Point-Of-Care and Confirmatory Methods." *International Journal of Drug Policy* 93: 103169.
- Lamb, Shona, Alex H. Kral, Karina Dominguez-Gonzalez, Lynn D. Wenger, and Ricky N. Bluthenthal. 2018. "Peer-to-Peer Injection: Demographic, Drug Use, and Injection-Related Risk Factors." *International Journal of Drug Policy* 61: 44–51.

- Lambdin, Barrot H., Peter J. Davidson, Erica N. Browne, Leslie W. Suen, Lynn D. Wenger, and Alex H. Kral. 2022. "Reduced Emergency Department Visits and Hospitalisation with Use of an Unsanctioned Safe Consumption Site for Injection Drug Use in the United States." *Journal of General Internal Medicine*, epub ahead of print.
- Larney, Sarah, Amy Peacock, Bradley M. Mathers, Matthew Hickman, and Louisa Degenhardt. 2017. "A Systematic Review of Injecting-Related Injury and Disease Among People Who Inject Drugs." *Drug and Alcohol Dependence* 171: 39–49.
- Lee, Austin J., Jathin Bandari, Liam C. Macleod, Benjamin J. Davies, and Bruce L. Jacobs. 2018. "Concentration of Opioid-Related Industry Payments in Opioid Crisis Areas." *Journal of General Internal Medicine* 34(2): 187–189.
- Lee, Byungkyu, Wanying Zhao, Kai-Cheng Yang, Yong-Yeol Ahn, and Brea L. Perry. 2021. "Systematic Evaluation of State Policy Interventions Targeting the US Opioid Epidemic, 2007-2018." *JAMA Network Open* 4(2): e2036687.
- Lee, Marion, Sanford Silverman, Hans Hansen, Vikram Patel, and Laxmaiah Manchikanti. 2011. "A Comprehensive Review of Opioid-Induced Hyperalgesia." *Pain Physician* 14: 145–161.
- Lembke, Anna. 2016. *Drug Dealer, MD: How Doctors Were Duped, Patients Got Hooked, and Why It's so Hard to Stop*. Baltimore, MD: Johns Hopkins University Press.
- Lende, Daniel H., Terri Leonard, Claire E. Sterk, and Kirk Elifson. 2007. "Functional Methamphetamine Use: The Insider's Perspective." *Addiction Research & Theory* 15(5): 465–477.
- Levander, Ximena A., Kim A. Hoffman, John W. McIlveen, Dennis McCarty, Javier Ponce Terashima, and P. Todd Korthuis. 2021. "Rural Opioid Treatment Program Patient Perspectives on Take-Home Methadone Policy Changes During COVID-19: A Qualitative Thematic Analysis." *Addiction Science & Clinical Practice* 16: 72.
- Lindesmith, Alfred R. 1938. "A Sociological Theory of Drug Addiction." *American Journal of Sociology* 43: 593–613.
- Lindesmith, Alfred R. 1968 [1947]. *Addiction & Opiates*. New Brunswick, NJ: AldineTransaction.
- Ling, Walter, Maureen Hillhouse, Alfonso Ang, Jessica Jenkins, and Jacqueline Fahey. 2013. "Comparison of Behavioral Treatment Conditions in Buprenorphine Maintenance." *Addiction* 108: 1788–1798.
- Lingeman, Richard. 1980. *Small Town America: A Narrative History, 1620–The Present*. Boston: Houghton Mifflin.
- Link, Heather M., Hendree Jones, Lauren Miller, Karol Kaltenbach, and Neil Seligman. 2020. "Buprenorphine-Naloxone Use in Pregnancy: A Systematic Review and Metaanalysis." *American Journal of Obstetrics and Gynecology MFM* 2(3): 100179.
- Link, Bruce G., and Jo Phelan. 1995. "Social Conditions as Fundamental Causes of Disease." *Journal of Health and Social Behavior* 35(Extra Issue): 80–94.
- Lister, Jamey J., Addie Weaver, Jennifer D. Ellis, Joseph A. Himle, and David M. Ledgerwood. 2020. "A Systematic Review of Rural-Specific Barriers to Medication Treatment for Opioid Use Disorder in the United States." *The American Journal of Drug and Alcohol Abuse* 46(3): 273–288.
- Lofland, Lyn C. 1973. *A World of Strangers: Order and Action in Urban Public Space*. New York: Basic Books.
- López, Andrea M. 2018. "Resisting Overdose: In Washington, DC, People Who Use Opioids Confront the Epidemic and Intervene to Stop Death." *Anthropology News* 59(1): e50–e56.

- López, Andrea M., Zena Dhatt, Mary Howe, Marwa Al-Nassir, Amy Billing, Eleanor Artigiani, and Eric D. Wish. 2021. "Co-Use of Methamphetamine and Opioids Among People in Treatment in Oregon: A Qualitative Examination of Interrelated Structural, Community, and Individual-Level Factors." *International Journal of Drug Policy* 91: 103098.
- Lund, Brian C., Michael E. Ohl, Katherine Hadlandsmyth, and Hilary J. Mosher. 2019. "Regional and Rural–Urban Variation in Opioid Prescribing in the Veterans Health Administration." *Military Medicine* 184(11–12): 894–900.
- Lutfey, Karen and Jeremy Freese. 2005. "Toward Some Fundamentals of Fundamental Causality: Socioeconomic Status and Health in the Routine Clinic Visit for Diabetes." *American Journal of Sociology* 110(5): 1326–1372.
- Lutfiyya, May Nawal, Joel Emery McCullough, Irina V. Haller, Stephen C. Waring, Joseph A. Bianco, and Martin Stephen Lipsky. 2012. "Rurality as a Root or Fundamental Social Determinant of Health." *Disease-a-Month* 58(11): 620–628.
- Lyng, Stephen. 1990. "Edgework: A Social Psychological Analysis of Voluntary Risk Taking." *American Journal of Sociology* 95(4): 851–886.
- Lyng, Stephen, editor. 2004. *Edgework: The Sociology of Risk-Taking*. New York: Routledge.
- MacArthur, Georgie J., Silvia Minozzi, Natasha Martin, Peter Vickerman, Sherry Deren, Julie Bruneau, Louisa Degenhardt, and Matthew Hickman. 2012. "Opiate Substitution Treatment and HIV Transmission in People Who Inject Drugs: Systematic Review and Meta-Analysis." *BMJ* 345: e5945.
- MacCoun, Robert, and Peter Reuter. 2001. *Drug War Heresies: Learning from Other Vices, Times, and Places*. New York: Cambridge University Press.
- Macgregor, Lyn C. 2010. *Habits of the Heartland: Small-Town Life in Modern America*. Ithaca, NY: Cornell University Press.
- Mackie, Paul Force-Emory, and Renee Anastasia Lips. 2010. "Is There Really a Problem with Hiring Rural Social Service Staff? An Exploratory Study Among Social Services Supervisors in Rural Minnesota." *Families in Society* 91(4): 433–439.
- MacMahon, Brian, Thomas F. Pugh, and Johannes Ipsen. 1960. *Epidemiologic Methods*. Boston, MA: Little, Brown, and Company.
- MacQueen, Ian T., Melinda Maggard-Gibbons, Gina Capra, Laura Raaen, Jesus G. Ulloa, Paul G. Shekelle, Isomi Miake-Lye, Jessica M. Beroes, and Susanne Hempel. 2018. "Recruiting Rural Healthcare Providers Today: A Systematic Review of Training Program Success and Determinants of Geographic Choices." *Journal of General Internal Medicine* 33(2): 191–199.
- Macy, Beth. 2018. *Dopesick: Dealers, Doctors, and the Drug Company that Addicted America*. New York: Little, Brown and Company.
- Macy, Beth. 2022. *Raising Lazarus: Hope, Justice, and the Future of America's Overdose Crisis*. New York: Little, Brown and Company.
- Madley, Benjamin. 2016. *An American Genocide: The United States and the California Indian Catastrophe, 1846-1873*. New Haven, CT: Yale University Press.
- Magnus, Amy M., and Patricia Advincula. 2021. "Those Who Go Without: An Ethnographic Analysis of the Lived Experiences of Rural Mental Health and Healthcare Infrastructure." *Journal of Rural Studies* 83: 37–49.
- Malta, Monica, Thepikaa Varatharajan, Cayley Russell, Michelle Pang, Sarah Bonato, and Benedikt Fischer. 2019. "Opioid-Related Treatment, Interventions, and Outcomes Among Incarcerated Persons: A Systematic Review." *PLoS Medicine* 16(12): e1003002.

- Mann, Michael. 1984. "The Autonomous Power of the State: Its Origins, Mechanisms and Results." *European Journal of Sociology* 25(2): 185–213.
- Mannes, Zachary L., Malki Stohl, David S. Fink, Mark Olfson, Katherine M. Keyes, Silvia S. Martins, Jaimie L. Gradus, Andrew J. Saxon, Charles Maynard, Ofir Livne, Sarah Gutkind, and Deborah S. Hasin. 2022. "Non-pharmacological Treatment for Chronic Pain in US Veterans Treated Within the Veterans Health Administration: Implications for Expansion in US Healthcare Systems." *Journal of General Internal Medicine*, epub ahead of print.
- Marcovitz, David E., Mariah Pettapiece-Phillips, Kristopher A. Kast, Katie White, Heather Himelhoch, and Carolyn Audet. 2021. "Implementation of a Hub-and-Spoke Partnership for Opioid Use Disorder Treatment in a Medicaid Nonexpansion State." *Psychiatric Services*, epub ahead of print.
- Marlowe, Douglas B., Carolyn D. Hardin, and Carson L. Fox. 2016. *Painting the Current Picture: A National Report on Drug Courts and Other Problem-Solving Courts in the United States*. Alexandria, VA: National Drug Court Institute. (<https://www.ndci.org/wp-content/uploads/2016/05/Painting-the-Current-Picture-2016.pdf>)
- Marmot, Michael. 2005. "Social Determinants of Health Inequalities." *Lancet* 365: 1099–1104.
- Mars, Sarah G., Philippe Bourgois, George Karandinos, Fernando Montero, and Daniel Ciccarone. 2014. "'Every 'Never' I Ever Said Came True': Transitions from Opioid Pills to Heroin Injecting." *International Journal of Drug Policy* 25: 257–266.
- Mars, Sarah G., Philippe Bourgois, George Karandinos, Fernando Montero, and Daniel Ciccarone. 2016. "The Textures of Heroin: User Perspectives on 'Black Tar' and Powder Heroin in Two U.S. Cities." *Journal of Psychoactive Drugs* 48(4): 270–278.
- Mars, Sarah G., Jason N. Fessel, Philippe Bourgois, Fernando Montero, George Karandinos, Daniel Ciccarone. 2015. "Heroin-Related Overdose: The Unexplored Influences of Markets, Marketing and Source-Types in the United States." *Social Science and Medicine* 140: 44–53.
- Mars, Sarah G., Jeff Ondocsin, and Daniel Ciccarone. 2018. "Sold as Heroin: Perceptions and Use of an Evolving Drug in Baltimore, MD." *Journal of Psychoactive Drugs* 50(2): 167–176.
- Mars, Sarah G., Daniel Rosenblum, and Daniel Ciccarone. 2018. "Illicit Fentanyl in the Opioid Street Market: Desired or Imposed?" *Addiction* 114(5): 774–780.ci
- Martin, Stephen A., Lisa M. Chiodo, Jordon D. Bosse, and Amanda Wilson. 2018. "The Next Stage of Buprenorphine Care for Opioid Use Disorder." *Annals of Internal Medicine* 169(9): 628–635.
- Marwell, Nicole P. and Shannon L. Morrissey. 2020. "Organizations and the Governance of Urban Poverty." *Annual Review of Sociology* 46: 18.1–18.18.
- Marx, Karl, and Friedrich Engels. 1970 [1846]. *The German Ideology*. New York: International Publishers.
- Mateu-Gelabert, Pedro, Milagros Sandoval, Peter Meylakhs,1, Travis Wendel, and Samuel R. Friedman. 2010. "Strategies to Avoid Opiate Withdrawal: Implications for HCV and HIV Risks." *International Journal of Drug Policy* 21: 179–185.
- Mattocks, Kristin, Marc I. Rosen, John Sellinger, Tu Ngo, Brad Brummett, Diana M. Higgins, Thomas E. Reznik, Paul Holtzheimer, Alicia M. Semiatin, Todd Stapley, and Steve Martino. 2020. "Pain Care in the Department of Veterans Affairs: Understanding How a Cultural Shift in Pain Care Impacts Provider Decisions and Collaboration." *Pain Medicine* 21(5): 970–977.
- Mattson, Gary. 1997. "Small Community Governance: Some Impediments to Policy Making." Pages 317–347 in *Handbook of Local Government Administration*, edited by John J. Gargan. New York: Marcel Dekker.

- Matusow, Harlan, Samuel L. Dickman, Josiah D. Rich, Chunki Fong, Dora M. Dumont, Carolyn Hardin, Douglas Marlowe, and Andrew Rosenblum. 2013. "Medication Assisted Treatment in US Drug Courts: Results from a Nationwide Survey of Availability, Barriers and Attitudes." *Journal of Substance Abuse Treatment* 44: 473–480.
- Matza, David. 2010 [1969]. *Becoming Deviant*. New Brunswick, NJ: Transaction Publishers.
- Mauss, Marcel. 2002 [1925]. *The Gift: The Form and Reason for Exchange in Archaic Societies*. New York: Routledge.
- Maxwell, Sarz, Dan Bigg, Karen Stanczykiewicz, and Suzanne Carlberg-Racich. 2006. "Prescribing Naloxone to Actively Injecting Heroin Users." *Journal of Addictive Diseases* 25(3): 89–96.
- Maxwell-Long, Thomas. 2014. *Daily Life During the California Gold Rush*. Santa Barbara, CA: Greenwood Press.
- May, Richard H. 1953. *A Century of Lumber Production in California and Nevada*. Berkeley, CA: U.S. Department of Agriculture, Forest Service, California Forest and Range Experiment Station.
- McAuley, Andrew, Catriona Matheson, and J. Roy Robertson. 2022. "From the Clinic to the Street: The Changing Role of Benzodiazepines in the Scottish Overdose Epidemic." *International Journal of Drug Policy* 100: 103512.
- McCabe, Sean Esteban, Carol J. Boyd, Rebecca J. Evans-Polce, Vita V. McCabe, John E. Schulenberg, and Philip T. Veliz. 2021. "Pills to Powder: A 17-Year Transition From Prescription Opioids to Heroin Among US Adolescents Followed Into Adulthood." *Journal of Addiction Medicine* 15: 241–244.
- McCorkel, Jill A. 2013. *Breaking Women: Gender, Race, and the New Politics of Imprisonment*. New York: New York University Press.
- McCraden, Melissa D., Denitsa Vasileva, Ani Orchanian-Cheff, and Daniel Z. Buchman. 2019. "Ambiguous Identities of Drugs and People: A Scoping Review of Opioid-Related Stigma." *International Journal of Drug Policy* 74: 205–215.
- McDonald, Douglas C., Kenneth Carlson, and David Izrael. 2012. "Geographic Variation in Opioid Prescribing in the U.S." *The Journal of Pain* 13(10): 988–996.
- McElrath, Karen, and Julie Harris. 2013. "Peer Injecting: Implications for Injecting Order and Blood-Borne Viruses Among Men and Women Who Inject Heroin." *Journal of Substance Use* 18(1): 31–45.
- McGinty, Emma E., Elizabeth M. Stone, Alene Kennedy-Hendricks, Kaylynn Sanders, Alexa Beacham, and Colleen L. Barry. 2019. "U.S. News Media Coverage of Solutions to the Opioid Crisis, 2013–2017." *Preventive Medicine* 126: 105771.
- McGreal, Chris. 2018. *American Overdose: The Opioid Tragedy in Three Acts*. New York: PublicAffairs.
- McIver, Chelsea P., Joshua P. Meek, Micah G. Scudder, Colin B. Sorenson, Todd A. Morgan, and Glenn A. Christensen. 2015. *California's Forest Products Industry and Timber Harvest, 2012*. General Technical Report PNW-GTR-908. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station.
- McKim, Allison. 2017. *Addicted to Rehab: Race, Gender, and Drugs in the Era of Mass Incarceration*. New Brunswick, NJ: Rutgers University Press.
- McKinlay, John B. and Lisa D. Marceau. 2000. "To Boldly Go..." *American Journal of Public Health* 90(1): 25–33.

- McKnight, Courtney, and Don C. Des Jarlais. 2018. "Being 'Hooked Up' During a Sharp Increase in the Availability of Illicitly Manufactured Fentanyl: Adaptations of Drug Using Practices among People Who Use Drugs (PWUD) in New York City." *International Journal of Drug Policy* 60: 82–88.
- McLean, Katherine. 2016. "'There's Nothing Here': Deindustrialization as Risk Environment for Overdose." *International Journal of Drug Policy* 29: 19–26.
- McLean, Katherine. 2017. "From 'Junkies' to 'Soccer Moms': Newspaper Representations of Overdose, 1988–2014." *Critical Criminology* 25: 411–432.
- McMillian, John. 2019. *American Epidemic: Reporting from the Front Lines of the Opioid Crisis*. New York: The New Press.
- McNeil, Ryan, Taylor Fleming, Samara Mayer, Allison Barker, Manal Mansoor, Alex Betsos, Tamar Austin, Sylvia Parusel, Andrew Ivsins, and Jade Boyd. 2022. "Implementation of Safe Supply Alternatives During Intersecting COVID-19 and Overdose Health Emergencies in British Columbia, Canada, 2021." *American Journal of Public Health* 112(S2): S151–S158.
- Meacham, Meredith C., Kara L. Lynch, Phillip O. Coffin, Amanda Wade, Eliza Wheeler, and Elise D. Riley. 2020. "Addressing Overdose Risk Among Unstably Housed Women in San Francisco, California: An Examination of Potential Fentanyl Contamination of Multiple Substances." *Harm Reduction Journal* 17: 17.
- Mears, Ashley. 2020. *Very Important People: Status and Beauty in the Global Party Circuit*. Princeton, NJ: Princeton University Press.
- Meier, Barry. 2001a. "Overdoses of Painkiller Are Linked to 282 Deaths." *New York Times*, October 28.
- Meier, Barry. 2001b. "U.S. Asks Painkiller Maker To Help Curb Wide Abuse." *New York Times*, May 1.
- Meier, Barry. 2002a. "A Small-Town Clinic Looms Large as a Top Source of Disputed Painkillers." *New York Times*, February 10.
- Meier, Barry. 2002b. "Doctor Guilty In 4 Deaths Tied to a Drug." *New York Times*, February 20.
- Meier, Barry. 2002c. "OxyContin Prescribers Face Charges in Fatal Overdoses." *New York Times*, January 19.
- Meier, Barry. 2003. *Pain Killer: A "Wonder" Drug's Trail of Addiction and Death*. Emmaus, PA: Rodale Books.
- Meier, Barry. 2018. *Pain Killer: An Empire of Deceit and the Origins of America's Opioid Epidemic*. New York: Random House.
- Meier, Barry. 2018. "Reviving an Old Book to Tell a New Story About Oxycontin, Purdue, and the Sackler Family." *STAT News*, June 6. (<https://www.statnews.com/2018/06/06/oxycontin-purdue-sackler-barry-meier-book/>)
- Meier, Barry, and Melody Petersen. 2001. "Sales of Painkiller Grew Rapidly, But Success Brought a High Cost." *New York Times*, March 5.
- Meldrum, Marcia. 2005. "The Ladder and the Clock: Cancer Pain and Public Policy at the End of the Twentieth Century." *Journal of Pain and Symptom Management* 29(1): 41–54.
- Mema, Silvina C., Gillian Frosst, Jessica Bridgeman, Hilary Drake, Corinne Dolman, Leslie Lappalainen, and Trevor Corneil. 2019. "Mobile Supervised Consumption Services in Rural British Columbia: Lessons Learned." *Harm Reduction Journal* 16: 4.
- Mendoza, Sonia, Allyssa Stephanie Rivera, and Helena Bjerring Hansen. 2019. "Re-racialization of Addiction and the Redistribution of Blame in the White Opioid Epidemic." *Medical Anthropology Quarterly* 33(2): 242–262.

- Merrall, Elizabeth L. C., Azar Kariminia, Ingrid A. Binswanger, Michael S. Hobbs, Michael Farrell, John Marsden, Sharon J. Hutchinson, and Sheila M. Bird. 2010. "Meta-Analysis of Drug-Related Deaths Soon After Release from Prison." *Addiction* 105: 1545–1554.
- Merton, Robert K and Elinor Barber. 1976. "Sociological Ambivalence." Pp. 3–31 in *Sociological Ambivalence and Other Essays* by Robert K. Merton. New York: The Free Press.
- Mohamed, A. Rafik, and Erik D. Fritsvold. 2010. *Dorm Room Dealers: Drugs and the Privileges of Race and Class*. Boulder, CO: Lynne Rienner Publishers.
- Mohatt, Dennis F., Mimi M. Bradley, Scott J. Adams, and Chad D. Morris. 2006. *Mental Health and Rural America: 1994–2005, An Overview and Annotated Bibliography*. Washington, DC: U.S. Department of Health and Human Services.
- Monnat, Shannon M. 2019. "The Contributions of Socioeconomic and Opioid Supply Factors to U.S. Drug Mortality Rates: Urban-Rural and Within-Rural Differences." *Journal of Rural Studies* 68: 319–335.
- Moore, Kelly E., Walter Roberts, Holly H. Reid, Kathryn M. Z. Smith, Lindsay M. S. Oberleitner, and Sherry A. McKee. 2019. "Effectiveness of Medication Assisted Treatment for Opioid Use in Prison and Jail Settings: A Meta-Analysis and Systematic Review." *Journal of Substance Abuse Treatment* 99: 32–43.
- Moskos, Peter. 2008. *Cop in the Hood: My Year Policing Baltimore's Eastern District*. Princeton, NJ: Princeton University Press.
- Moy, Ernest, Macarena C. Garcia, Brigham Bastian, Lauren M. Rossen, Deborah D. Ingram, Mark Faul, Greta M. Massetti, Cheryl C. Thomas, Yuling Hong, Paula W. Yoon, and Michael F. Iademarco. 2017. "Leading Causes of Death in Nonmetropolitan and Metropolitan Areas — United States, 1999–2014." *Morbidity and Mortality Weekly Report* 66(1): 1–8.
- Mugford, Stephen K., and Pat O'Malley. 1991. "Heroin Policy and Deficit Models: The Limits of Left Realism." *Crime, Law and Social Change* 15: 19–36.
- Muller, Christopher, and Alexander F. Roehrkasse. 2021. "Racial and Class Inequality in US Incarceration in the Early Twenty-First Century." *Social Forces*, epub ahead of print.
- Muncan, Brandon, Suzan M. Walters, Jerel Ezell, and Danielle C. Ompad. 2020. "'They Look at Us Like Junkies': Influences of Drug Use Stigma on the Healthcare Engagement of People Who Inject Drugs in New York City." *Harm Reduction Journal* 17: 53.
- Muntaner, Carles, Carme Borrell, Edwin Ng, Haejoo Chung, Albert Espelt, Maica Rodriguez-Sanz, Joan Benach, and Patricia O'Campo. 2011. "Politics, Welfare Regimes, and Population Health: Controversies and Evidence." *Sociology of Health and Illness* 33(6): 946–964.
- Murphy, Jennifer L., Sarah A. Palyo, Zachary S. Schmidt, Lauren N. Hollrah, Evangelia Banou, Cynthia P. Van Keuren, and Irina A. Strigo. 2021. "The Resurrection of Interdisciplinary Pain Rehabilitation: Outcomes Across a Veterans Affairs Collaborative." *Pain Medicine* 22(2): 430–443.
- Murphy, Sheigla, Margaret S. Kelley, and Howard Lune. 2004. "The Health Benefits of Secondary Syringe Exchange." *Journal of Drug Issues* 34(2): 245–268.
- Musto, David F. 1999 [1973]. *The American Disease: Origins of Narcotic Control*. New York: Oxford University Press.
- Nadelmann, Ethan. 1989. "Drug Prohibition in the United States: Costs, Consequences, and Alternatives." *Science* 245(4921): 939–947.

- National Academies of Sciences, Engineering, and Medicine. 2016. *Ending Discrimination Against People with Mental and Substance Use Disorders: The Evidence for Stigma Change*. Washington, DC: The National Academies Press.
- National Association of State Alcohol and Drug Abuse Directors (NASADAD). 2019. “California: Use of STR/SOR Grant Funds to Address the Opioid Crisis.” (<http://www.californiamat.org/wp-content/uploads/2020/07/NASADAD-CA-State-Profile.pdf>)
- National Center for Health Statistics (NCHS). 2000/2003. *Compressed Mortality File 1979–1998*. CDC WONDER Online Database. (<https://wonder.cdc.gov/cmfi-icd9.html>)
- National Harm Reduction Coalition. 2020 [1998]. *Getting Off Right: A Safety Manual for Injection Drug Users*. Original version by Rod Serge and Sara Kershner. (<https://harmreduction.org/issues/safer-drug-use/injection-safety-manual/>)
- National Highway Traffic Safety Administration. 2010. *Traffic Safety Facts, 2008 Data: Rural/Urban Comparison*. Washington, DC: U.S. Department of Transportation.
- Navarro, Vicente. 2009. “What We Mean By Social Determinants of Health.” *International Journal of Health Services* 39(3): 423–441.
- Navarro, Vicente, Carles Muntaner, Carme Borrell, Joan Benach, Águeda Quiroga, Maica Rodríguez-Sanz, Núria Vergés, and M. Isabel Pasarín. 2006. “Politics and Health Outcomes.” *Lancet* 368: 1033–1037.
- Navarro, Vicente and Leiyu Shi. 2001. “The Political Context of Social Inequalities and Health.” *International Journal of Health Services* 31(1): 1–21.
- Nelson, Paul K., Bradley M. Mathers, Benjamin Cowie, Holly Hagan, Don Des Jarlais, Danielle Horyniak, and Louisa Degenhardt. 2011. “Global Epidemiology of Hepatitis B and Hepatitis C in People Who Inject Drugs: Results of Systematic Reviews.” *The Lancet* 378: 571–83.
- Netherland, Julie, and Helena B. Hansen. 2016. “The War on Drugs That Wasn’t: Wasted Whiteness, ‘Dirty Doctors,’ and Race in Media Coverage of Prescription Opioid Misuse.” *Culture, Medicine, and Psychiatry* 40: 664–686.
- Netherland, Jules, Alex H. Kral, Danielle C. Ompad, Corey S. Davis, Ricky N. Bluthenthal, Nabarun Dasgupta, Michael Gilbert, Riona Morgan, and Haven Wheelock. 2022. “Principles and Metrics for Evaluating Oregon’s Innovative Drug Decriminalization Measure.” *Journal of Urban Health* 99: 328–331.
- Newland, Jamee, Christy Newman, and Carla Treloar. 2016. “‘We Get By With a Little Help from Our Friends’: Small-Scale Informal and Large-Scale Formal Peer Distribution Networks of Sterile Injecting Equipment in Australia.” *International Journal of Drug Policy* 34: 65–71.
- Nolte, Kerry, Aurora L. Drew, Peter D. Friedmann, Eric Romo, Linda M. Kinney, and Thomas J. Stopka. 2020. “Opioid Initiation and Injection Transition in Rural Northern New England: A Mixed-Methods Approach.” *Drug and Alcohol Dependence* 217: 108256.
- Office of AIDS. 2017. “What Pharmacists Need to Know About Non-Prescription Sale of Syringes.” California Department of Public Health. (https://www.cdph.ca.gov/Programs/CID/DOA/Pages/OA_prev_npss.aspx)
- Office of the Mayor of the City of New York. 2021. “Mayor de Blasio Announces Nation’s First Overdose Prevention Center Services to Open in New York City.” November 30. (<https://www1.nyc.gov/office-of-the-mayor/news/793-21/mayor-de-blasio-nation-s-first-overdose-prevention-center-services-open-new-york>)

- Olding, Michelle, Andrew Ivsins, Samara Mayer, Alex Betsos, Jade Boyd, Christy Sutherland, Coco Culbertson, Thomas Kerr, and Ryan McNeil. 2020. "A Low-Barrier and Comprehensive Community-Based Harm-Reduction Site in Vancouver, Canada." *American Journal of Public Health* 110: 833–835.
- Oliva, Elizabeth M., Thomas Bowe, Ajay Manhapra, Stefan Kertesz, Jennifer M. Hah, Patricia Henderson, Amy Robinson, Meenah Paik, Friedhelm Sandbrink, Adam J. Gordon, and Jodie A. Trafton. 2020. "Associations Between Stopping Prescriptions for Opioids, Length of Opioid Treatment, and Overdose or Suicide Deaths in US Veterans: Observational Evaluation." *BMJ* 368: m283.
- Oliva, Elizabeth M., John Richardson, Michael A. Harvey, and Pamela Bellino. 2021. "Saving Lives: The Veterans Health Administration (VHA) Rapid Naloxone Initiative." *The Joint Commission Journal on Quality and Patient Safety* 47: 469–480.
- Oliver, June E., and Cathy Carlson. 2020. "Misperceptions about the 'Opioid Epidemic': Exploring the Facts." *Pain Management Nursing* 21(1): 100–109.
- Our Best Shot: The True Story of an Illegal Supervised Injection Facility in the USA*. 2017. San Francisco, CA: Silver Sprocket.
- Overdose Prevention Initiative, California Department of Public Health. 2021. *California Opioid Overdose Surveillance Dashboard*. (<https://skylab.cdph.ca.gov/ODdash/>)
- Oviedo-Joekes, Eugenia, Daphne Guh, Suzanne Brissette, Kirsten Marchand, Scott MacDonald, Kurt Lock, Scott Harrison, Amin Janmohamed, Aslam H. Anis, Michael Krausz, David C. Marsh, and Martin T. Schechter. 2016. "Hydromorphone Compared with Diacetylmorphine for Long-term Opioid Dependence: A Randomized Clinical Trial." *JAMA Psychiatry* 73(5): 447–455.
- Pagel, Lucy and Tanya Schwartz. 2017. "The Public Hospital Redesign and Incentives in Medical (PRIME) Program: Continuing California's Delivery System Transformation." (https://www.dhcs.ca.gov/provgovpart/Documents/PRIME/PRIME_Fact-Sheet_Final_1_18_17.pdf)
- Pahl, R. E. 1966. "The Rural-Urban Continuum." *Sociologia Ruralis* 6(3): 299–329.
- Pardo, Bryce. 2021. "Insights into Mixing Fentanyl and Benzodiazepines from Canadian Drug Seizures." *JAMA Psychiatry* 79(1): 81–83.
- Park, Robert Ezra. 1915. "The City: Suggestions for the Investigation of Human Behavior in the City Environment." *American Journal of Sociology* 20(5): 577–612.
- Park, Robert Ezra. 1923. "Negro Race Consciousness as Reflected in Race Literature." *American Review* 1 (September–October): 505–516.
- Park, Robert Ezra. 1928. "Human Migration and the Marginal Man." *American Journal of Sociology* 33(6): 881–893.
- Parkin, Stephen. 2016. *Habitus and Drug Using Environments: Health, Place and Lived-Experience*. New York: Routledge.
- Paulozzi, Leonard J., Christopher M. Jones, Kevin A. Mack, and Rose A. Rudd. 2011. "Vital Signs: Overdoses of Prescription Opioid Pain Relievers — United States, 1999–2008." *Morbidity and Mortality Weekly Report* 60(43): 1487–1492.
- Peles, Einat, Shaul Schreiber, Anat Sason, and Miriam Adelson. 2011. "Earning 'Take-Home' Privileges and Long-Term Outcome in a Methadone Maintenance Treatment Program." *Journal of Addiction Medicine* 5: 92–98.

- Pergolizzi, Joseph V., Jr., Robert B. Raffa, and Jo Ann LeQuang. 2016. "The Centers for Disease Control and Prevention Opioid Guidelines: Potential for Unintended Consequences and Will They Be Abused?" *Journal of Clinical Pharmacy and Therapeutics* 41(6): 592–593.
- Pergolizzi, Joseph V., Jr., Robert B. Raffa, and Melanie H. Rosenblatt. 2020. "Opioid Withdrawal Symptoms, a Consequence of Chronic Opioid Use and Opioid Use Disorder: Current Understanding and Approaches to Management." *Journal of Clinical Pharmacy and Therapeutics* 45: 892–903.
- Pergolizzi Jr., Joseph V., Melanie H. Rosenblatt, and Jo Ann LeQuang. 2019. "Three Years Down the Road: The Aftermath of the CDC Guideline for Prescribing Opioids for Chronic Pain." *Advances in Therapy* 36: 1235–1240.
- Peters, Philip J., Pamela Pontones, Karen W. Hoover, Monita R. Patel, Romeo R. Galang, Jessica Shields, Sara J. Blosser, Michael W. Spiller, Brittany Combs, William M. Switzer, Caitlin Conrad, Jessica Gentry, Yury Khudyakov, Dorothy Waterhouse, S. Michele Owen, Erika Chapman, Jeremy C. Roseberry, Veronica McCants, Paul J. Weidle, Dita Broz, Taraz Samandari, Jonathan Mermin, Jennifer Walthall, John T. Brooks, and Joan M. Duwve for the Indiana HIV Outbreak Investigation Team. 2016. "HIV Infection Linked to Injection Use of Oxycodone in Indiana, 2014–2015." *New England Journal of Medicine* 375(3): 229–239.
- Pezalla, Edmund J., David Rosen, Jennifer G. Erensen, J. David Haddox, and Tracy J. Mayne. 2017. "Secular Trends in Opioid Prescribing in the USA." *Journal of Pain Research* 10: 383–387.
- Phelan, Jo C., and Bruce G. Link. 2015. "Is Racism a Fundamental Cause of Inequalities in Health?" *Annual Review of Sociology* 41: 311–330.
- Phelan, Jo C., Bruce G. Link, and Parisa Tehranifar. 2010. "Social Conditions as Fundamental Causes of Health Inequalities: Theory, Evidence, and Policy Implications." *JHSB* 51(S): S28–S40.
- Pine, Jason. 2016. "Last Chance Incorporated." *Cultural Anthropology* 31(2): 297–318.
- Pine, Jason. 2019. *The Alchemy of Meth: A Decomposition*. Minneapolis, MN: University of Minnesota Press.
- Pletcher, Mark J., Stefan G. Kertesz, Michael A. Kohn, Ralph Gonzales. 2008. "Trends in Opioid Prescribing by Race/Ethnicity for Patients Seeking Care in US Emergency Departments." *Journal of the American Medical Association* 299(1): 70–78.
- Pollini, Robin A., Catherine E. Paquette, Susannah Slocum, and Dean LeMire. 2021. "It's Just Basically a Box Full of Disease"—Navigating Sterile Syringe Scarcity in a Rural New England State." *Addiction* 116: 107–115.
- Portenoy, Russell K., and Kathleen M. Foley. 1986. "Chronic Use of Opioid Analgesics in Non-Malignant Pain: Report of 38 Cases." *Pain* 25(2): 171–186.
- Posner, Gerald. 2020. *Pharma: Greed, Lies, and the Poisoning of America*. New York: Avid Reader Press.
- Pouget, Enrique R., Milagros Sandoval, Georgios K. Nikolopoulos & Samuel R. Friedman. 2015. "Immediate Impact of Hurricane Sandy on People Who Inject Drugs in New York City." *Substance Use & Misuse* 50(7): 878–884.
- Prunuske, Jacob P., Catherine A. St. Hill, Keri D. Hager, Andrine M. Lemieux, Michael T. Swanoski, Grant W. Anderson, and M. Nawal Lutfiyya. 2014. "Opioid Prescribing Patterns for Non-Malignant Chronic Pain for Rural Versus Non-Rural US Adults: A Population-Based Study Using 2010 NAMCS Data." *BMC Health Services Research* 14: 563.

- Pryma, Jane. 2022. "Technologies of Expertise: Opioids and Pain Management's Credibility Crisis." *American Sociological Review* 87(1): 17–49.
- Quinones, Sam. 2015. *Dreamland: The True Tale of America's Opiate Epidemic*. New York: Bloomsbury.
- Quinones, Sam. 2021. *The Least of Us: True Tales of America and Hope in the Time of Fentanyl and Meth*. New York: Bloomsbury.
- Radeloff, Volker C., Roger B. Hammer, Susan I. Stewart, Jeremy S. Fried, S. S. Holcomb, and J. F. McKeefry. 2005. "The Wildland–Urban Interface in the United States." *Ecological Applications* 15: 799–805.
- Ranapurwala, Shabbar I., Meghan E. Shanahan, Apostolos A. Alexandridis, Scott K. Proescholdbell, Rebecca B. Naumann, Daniel Edwards Jr., and Stephen W. Marshall. 2018. "Opioid Overdose Mortality Among Former North Carolina Inmates: 2000–2015." *American Journal of Public Health* 108(9): 1207–1213.
- Ranapurwala, Shabbar I., Mary C. Figgatt, Molly Remch, Carrie Brown, Lauren Brinkley-Rubinstein, David L. Rosen, Mary E. Cox, and Scott K. Proescholdbell. 2022. "Opioid Overdose Deaths Among Formerly Incarcerated Persons and the General Population: North Carolina, 2000–2018." *American Journal of Public Health* 112(2): 300–303.
- Raphael, Ray. 1985. *Cash Crop: An American Dream*. Caspar, CA: Ridge Times Press.
- Raphael, Ray. 1994. *More Tree Talk: The People, Politics, and Economics of Timber*. Washington, DC: Island Press.
- Reif, Sharon, Mary F. Brolin, Maureen T. Stewart, Thomas J. Fuchs, Elizabeth Speaker, Shayna B. Mazel. 2020. "The Washington State Hub and Spoke Model to Increase Access to Medication Treatment for Opioid Use Disorders." *Journal of Substance Abuse Treatment* 108: 33–39.
- Revier, Kevin. 2020. "'A Life Lived': Collective Memory and White Racial Framing in Digital Opioid Overdose Obituaries." *Contemporary Drug Problems* 47(4): 320–337.
- Rhodes, Tim. 2002. "The 'Risk Environment': A Framework for Understanding and Reducing Drug-Related Harm." *International Journal of Drug Policy* 13: 85–94.
- Rhodes, Tim. 2009. "Risk Environments and Drug Harms: A Social Science for Harm Reduction Approach." *International Journal of Drug Policy* 20(3): 193–201.
- Richey, Austin T. 2020. "'Hey, Let's Have a Very Good Time': The Opioid Aesthetics of Post-Verbal Rap." Pp. 201 to 217 in *The Opioid Epidemic and US Culture: Expression, Art, and Politics in an Age of Addiction*, edited by Travis D. Stimeling. Morgantown, WV: West Virginia University Press.
- Rigg, Khary K., Shannon M. Monnat, and Melody N. Chavez. 2018. "Opioid-Related Mortality in Rural America: Geographic Heterogeneity and Intervention Strategies." *International Journal of Drug Policy* 57 (2018): 119–129.
- Rios, Victor M. 2015. "On the Run: Fugitive Life in an American City by Alice Goffman." *American Journal of Sociology* 121(1): 306–308.
- Roberts, Aaron. 2021. "An Overview of Decriminalization Efforts in Regard to Psychedelic Plants in the United States, 2019-2020." *Ohio State Legal Studies Research Paper No. 663*. (https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3944724)
- Robertson, Roy, Barbara Broers, and Magdalena Harris. 2021. "Injecting Drug Use, the Skin and Vasculature." *Addiction* 116(7): 1914–1924.
- Romero, Maybell. 2020. "Rural Spaces, Communities of Color, and the Progressive Prosecutor." *The Journal of Criminal Law and Criminology* 110(4): 803–822.

- Rosales, Patricia Ann. 1998. "A History of the Hypodermic Syringe, 1850's-1920's." PhD dissertation, Harvard University.
- Rose, Mark Edmund. 2018. "Are Prescription Opioids Driving the Opioid Crisis? Assumptions vs Facts." *Pain Medicine* 19: 793–807.
- Rossen, Lauren M., Holly Hedegaard, Diba Khan, and Margaret Warner. 2018. "County-Level Trends in Suicide Rates in the U.S., 2005–2015." *American Journal of Preventive Medicine* 55(1): 72–79.
- Rossen, Lauren M., Holly Hedegaard, Margaret Warner, Farida B. Ahmad, and Paul D. Sutton. 2021. "Early Provisional Estimates of Drug Overdose, Suicide, and Transportation-related Deaths: Nowcasting Methods to Account for Reporting Lags." *NCHS Vital Statistics Rapid Release Report No. 011*. Hyattsville, MD: National Center for Health Statistics.
- Roth, Benita. 2017. *The Life and Death of ACT UP/LA: Anti-AIDS Activism in Los Angeles from the 1980s to the 2000s*. New York: Cambridge University Press.
- Rubin, Rita. 2019a. "Limits on Opioid Prescribing Leave Chronic Pain Patients Vulnerable." *Journal of the American Medical Association* 321(21): E1–E3.
- Rubin, Rita. 2019b. "Using Telemedicine to Treat Opioid Use Disorder in Rural Areas." *Journal of the American Medical Association* 322(11): 1029–1031.
- Rubin, Rita, and Melissa Suran. 2022. "Supervised Consumption Sites—A Tool for Reducing Risk of Overdose Deaths and Infectious Diseases in People Who Use Illicit Drugs." *JAMA* 327(16): 1532–1534.
- Rudd, Rose A., Len J. Paulozzi, Michael J. Bauer, Richard W. Burlinson, Rick E. Carlson, Dan Dao, James W. Davis, Jennifer Dudek, Beth Ann Eichler, Jessie C. Fernandes, Anna Fondario, Barbara Gabella, Beth Hume, Theron Huntamer, Mbabazi Kariisa, Thomas W. Largo, JoAnne Miles, Ashley Newmyer, Daniela Nitcheva, Beatriz E. Perez, Scott K. Proescholdbell, Jennifer C. Sabel, Jessica Skiba, Svetla Slavova, Kathy Stone, John M. Tharp, Tracy Wendling, Dagan Wright, and Anne M. Zehner. 2014. "Increases in Heroin Overdose Deaths — 28 States, 2010 to 2012." *Morbidity and Mortality Weekly Report* 63(39): 849–854.
- Rudolph, Abby E., Elizabeth Upton, April M. Young, and Jennifer R. Havens. 2021. "Social Network Predictors of Recent and Sustained Injection Drug Use Cessation: Findings from a Longitudinal Cohort Study." *Addiction* 116(4): 856–864.
- Ruhm, Christopher J. 2019. "Nonopioid Overdose Death Rates Rose Almost as Fast as Those Involving Opioids, 1999–2016." *Health Affairs* 38(7): 1216–1224.
- Rundle, Samantha M., John A. Cunningham, and Christian S. Hendershot. 2021. "Implications of Addiction Diagnosis and Addiction Beliefs for Public Stigma: A Cross-National Experimental Study." *Drug and Alcohol Review* 40(5): 842–846.
- Saloner, Brendan, Rachel Landis, Bradley D. Stein, and Colleen L. Barry. 2018a. "The Affordable Care Act in the Heart of the Opioid Crisis: Evidence from West Virginia." *Health Affairs* 38(4): 633–642.
- Saloner, Brendan, Emma E. McGinty, Leo Beletsky, Ricky Bluthenthal, Chris Beyrer, Michael Botticelli, and Susan G. Sherman. 2018b. "A Public Health Strategy for the Opioid Crisis." *Public Health Reports* 133(Suppl 1): 24S–34S.
- Saloner, Brendan, Kenneth B. Stoller, and G. Caleb Alexander. 2018c. "Moving Addiction Care to the Mainstream — Improving the Quality of Buprenorphine Treatment." *New England Journal of Medicine* 379(1): 4–6.

- Samples, Hillary, Arthur Robin Williams, Stephen Crystal, and Mark Olfson. 2022. "Psychosocial and Behavioral Therapy in Conjunction with Medication for Opioid Use Disorder: Patterns, Predictors, and Association with Buprenorphine Treatment Outcomes." *Journal of Substance Use Treatment*, epub ahead of print.
- Sampson, Robert J. 2012. *Great American City: Chicago and the Enduring Neighborhood Effect*. Chicago, IL: University of Chicago Press.
- Sampson, Robert J., Jeffrey D. Morenoff, and Thomas Gannon-Rowley. 2002. "Assessing 'Neighborhood Effects': Social Processes and New Directions in Research." *Annual Review of Sociology* 28:443–478.
- Sampson, Robert J., and William Julius Wilson. 1995. "Toward a Theory of Race, Crime, and Urban Inequality." Pp. 37–54 in *Crime and Inequality*, edited by John Hagan and Ruth D. Peterson. Stanford, CA: Stanford University Press.
- Sánchez-Jankowski, Martín. 2008. *Cracks in the Pavement: Social Change and Resilience in Poor Neighborhoods*. Berkeley, CA: University of California Press.
- Sandbrink, Friedhelm, Elizabeth M. Oliva, Tara L. McMullen, Amy R. Aylor, Michael A. Harvey, Melissa L. Christopher, Francesca Cunningham, Taeko Minegishi, Thomas Emmendorfer, and Jenie M. Perry. 2020. "Opioid Prescribing and Opioid Risk Mitigation Strategies in the Veterans Health Administration." *Journal of General Internal Medicine* 35(Suppl 3): S927–S934.
- Satel, Sally, and Scott O. Lilienfeld. 2014. "Addiction and the Brain-Disease Fallacy." *Frontiers in Psychiatry* 4: 141.
- Schneider, Eric C. 2008. *Smack: Heroin and the American City*. Philadelphia, PA: University of Pennsylvania Press.
- Schwartz, Robert P. 2016. "When Added to Opioid Agonist Treatment, Psychosocial Interventions Do Not Further Reduce the Use of Illicit Opioids: A Comment on Dugosh et al." *Journal of Addiction Medicine* 10(4): 283–285.
- Schüll, Natasha Dow. 2012. *Addiction by Design: Machine Gambling in Las Vegas*. Princeton, NJ: Princeton University Press.
- Schulman, Sarah. 2021. *Let the Record Show: A Political History of ACT UP New York, 1987–1993*. New York: Farrar, Straus and Giroux.
- Scorsone, Krista L., Emily A. Haozous, Leslie Hayes, and Kim J. Cox. 2021. "Ending the Chase: Experiences of Rural Individuals with Opioid Use Disorder." *Substance Use & Misuse* 56(8): 1224–1231.
- Scott, Jennifer, Emily J. Kennedy, Arthur J. Winfield, and Christine Bond. 1998. "Investigation into the Effectiveness of Filters for Use by Intravenous Drug Users." *International Journal of Drug Policy* 9(3): 181–186.
- Shachar, Carmel, Tess Wise, Gali Katznelson, Andrea Louise Campbell. 2020. "Criminal Justice or Public Health: A Comparison of the Representation of the Crack Cocaine and Opioid Epidemics in the Media." *Journal of Health Politics, Policy, and Law* 45(2): 211–239.
- Shaffer, Deborah Koetzle. 2011. "Looking Inside the Black Box of Drug Courts: A Meta-Analytic Review." *Justice Quarterly* 28(3): 493–521.
- Sharkey, Patrick, and Jacob W. Faber. 2014. "Where, When, Why, and For Whom Do Residential Contexts Matter? Moving Away from the Dichotomous Understanding of Neighborhood Effects." *Annual Review of Sociology* 40: 559–579.

- Sharp, Alana, Austin Jones, Jennifer Sherwood, Oksana Kutsa, Brian Honermann, and Gregorio Millett. 2018. "Impact of Medicaid Expansion on Access to Opioid Analgesic Medications and Medication-Assisted Treatment." *American Journal of Public Health* 108(5): 642–648.
- Sharp, Rachel, Mark David McGregor Davis, Gary W. Dowsett, Susan Kippax, Kim Hewitt, Sue Morgan, and William Robertson. 1991. *Ways of Using: Functional Injecting Drug Users*. Sydney, Australia: Centre for Applied Social Research, School of Behavioural Sciences, Macquarie University.
- Shei, Amie, J. Bradford Rice, Noam Y. Kirson, Katharine Bodnar, Howard G. Birnbaum, Pamela Holly, and Rami Ben-Joseph. 2015. "Sources of Prescription Opioids Among Diagnosed Opioid Abusers." *Current Medical Research and Opinion* 31(4): 779–784.
- Sherman, Jennifer. 2009. *Those Who Work, Those Who Don't: Poverty, Morality, and Family in Rural America*. Minneapolis, MN: University of Minnesota Press.
- Shover, Chelsea L., Titilola O. Falasinnu, Candice L. Dwyer, Nayelie Benitez Santos, Nicole J. Cunningham, Rohan B. Freedman, Noel A. Vest, and Keith Humphreys. 2020. "Steep Increases in Fentanyl-Related Mortality West of the Mississippi River: Recent Evidence from County and State Surveillance." *Drug and Alcohol Dependence* 216: 108314.
- Showalter, David. 2018. "Federal Funding for Syringe Exchange: Explaining a Long-Term Policy Failure." *International Journal of Drug Policy* 55: 95–104.
- Showalter, David. 2020. "Crisis and Policy Change: HIV/AIDS and Syringe Services in California." *Mobilization: An International Quarterly* 25(1): 71–92.
- Showalter, David, Lynn D. Wenger, Barrot H. Lambdin, Eliza Wheeler, Ingrid Binswanger, and Alex H. Kral. 2021. "Bridging Institutional Logics: Implementing Naloxone Distribution for People Exiting Jail in Three California Counties." *Social Science & Medicine* 285: 114293.
- Sigmon, Stacey C. 2014. "Access to Treatment for Opioid Dependence in Rural America: Challenges and Future Directions." *JAMA Psychiatry* 71(4): 359–360.
- Silverstein, Sydney M., Raminta Daniulaityte, Silvia S. Martins, Shannon C. Miller, and Robert G. Carlson. 2019. "'Everything Is Not Right Anymore': Buprenorphine Experiences in an Era of Illicit Fentanyl." *International Journal of Drug Policy* 74: 76–83.
- Simmel, Georg. 1950. *The Sociology of Georg Simmel*. New York: The Free Press.
- Simmel, Georg. 1971 [1903]. "The Metropolis and Mental Life." Pp. 324 to 339 in *Georg Simmel on Individuality and Social Forms*, edited by Donald N. Levine. Chicago, IL: University of Chicago Press.
- Singer, Merrill. 1996. "A Dose of Drugs, a Touch of Violence, a Case of AIDS: Conceptualizing the SAVA Syndemic." *Free Inquiry* 24(2): 99–110.
- Singer, Merrill. 2004. "The Social Origins and Expressions of Disease." *British Medical Bulletin* 69: 9–19.
- Singh, Gopal K., and Mohammad Siahpush. 2014. "Widening Rural-Urban Disparities in Life Expectancy, U.S., 1969–2009." *American Journal of Preventive Medicine* 46(2): e19–e29.
- Sinn, Elizabeth. 2013. *Pacific Crossing: California Gold, Chinese Migration, and the Making of Hong Kong*. Hong Kong: Hong Kong University Press.
- Small, Mario Luis. 2004. *Villa Victoria: The Transformation of Social Capital in a Boston Barrio*. Chicago, IL: University of Chicago Press.
- Small, Mario Luis. 2006. "Neighborhood Institutions as Resource Brokers: Childcare Centers, Interorganizational Ties, and Resource Access among the Poor." *Social Problems* 53(2): 274–292.

- Small, Mario Luis, and Monica McDermott. 2007. "The Presence of Organizational Resources in Poor Urban Neighborhoods: An Analysis of Average and Contextual Effects." *Social Forces* 84(3): 1697–1724.
- Small, Mario Luis, and Katherine Newman. 2001. "Urban Poverty after The Truly Disadvantaged: The Rediscovery of the Family, the Neighborhood, and Culture." *Annual Review of Sociology* 27: 23–45.
- Small, Will, Tim Rhodes, Evan Wood, and Thomas Kerr. 2007. "Public Injection Settings in Vancouver: Physical Environment, Social Context and Risk." *International Journal of Drug Policy* 18: 27–36.
- Smelser, Neil J. 1998. "The Rational and the Ambivalent in the Social Sciences: 1997 Presidential Address." *American Sociological Review* 63(1): 1–16.
- Smith, Daniel J., Joan Combellick, Ashly E. Jordan, and Holly Hagan. 2015. "Hepatitis C Virus (HCV) Disease Progression in People Who Inject Drugs (PWID): A Systematic Review and Meta-Analysis." *International Journal of Drug Policy* 911–921.
- Snell-Rood, Claire, Robin A. Pollini, and Cathleen Willging. 2021a. "Barriers to Integrated Medication-Assisted Treatment for Rural Patients with Co-Occurring Disorders: The Gap in Managing Addiction." *Psychiatric Services* 72(8): 935–942.
- Snell-Rood, Claire, Cathleen Willging, David Showalter, Hannah Peters, and Robin A. Pollini. 2021b. "System-Level Factors Shaping the Implementation of "Hub and Spoke" Systems to Expand MOUD in Rural Areas." *Substance Abuse* 42(4): 716–725.
- Sobotka, Tagart Cain, and Sheridan A. Stewart. 2020. "Stereotyping and the Opioid Epidemic: A Conjoint Analysis." *Social Science & Medicine* 255: 113018.
- Sokolow, Alvin D. 1982. "Small Town Government: The Conflict of Administrative Styles." *National Civic Review* 71(9): 445–452.
- Sordo, Luis, Gregorio Barrio, Maria J. Bravo, B. Iciar Indave, Louisa Degenhardt, Lucas Wiessing, Marica Ferri, and Roberto Pastor-Barriuso. 2017. "Mortality Risk During and After Opioid Substitution Treatment: Systematic Review and Meta-Analysis of Cohort Studies." *BMJ* 357: j1550.
- Stack, Carol. 1974. *All Our Kin: Strategies for Survival in a Black Community*. New York: Basic Books.
- Stein, Bradley D., Adam J. Gordon, Andrew W. Dick, Rachel M. Burns, Rosalie Liccardo Pacula, Carrie M. Farmer, Douglas L. Leslie, Mark Sorbero. 2015. "Supply of Buprenorphine Waivered Physicians: The Influence of State Policies." *Journal of Substance Abuse Treatment* 48: 104–111.
- Stewart, Kathleen, Yanjia Cao, Margaret H. Hsu, Eleanor Artigiani, and Eric Wish. 2017. "Geospatial Analysis of Drug Poisoning Deaths Involving Heroin in the USA, 2000–2014." *Journal of Urban Health* 94: 572–586.
- Stimmel, Matthew A., David Smelson, and Andrea K. Finlay. 2022. "Moving Beyond the Medication or Psychosocial Treatment Dichotomy to Address the Opioid Epidemic." *Psychiatric Services*, epub ahead of print.
- Stoller, Nancy E. 1998. *Lessons from the Damned: Queers, Whores, and Junkies Respond to AIDS*. New York: Routledge.
- Stonequist, Everett V. 1935. "The Problem of the Marginal Man." *American Journal of Sociology* 41(1): 1–12.
- Stonequist, Everett V. 1937. *The Marginal Man: A Study in Personality and Culture Conflict*. New York: Scribner/Simon & Shuster.

- Strang, John, Paul Griffiths, and Michael Gossop. 1997. "Heroin Smoking by 'Chasing the Dragon': Origins and History." *Addiction* 92(6): 673–683.
- Strike, Carol, and Miroslav Miskovic. 2018. "Scoping out the Literature on Mobile Needle and Syringe Programs—Review of Service Delivery and Client Characteristics, Operation, Utilization, Referrals, and Impact." *Harm Reduction Journal* 15: 6.
- Strong, Danny. 2021. *Dopesick*. Hulu.
- Stuart, Forrest. 2016. *Down, Out, and Under Arrest: Policing and Everyday Life on Skid Row*. Chicago, IL: University of Chicago Press.
- Subramanian, Ram, Kristine Riley, and Chris Mai. 2018. *Divided Justice: Trends in Black and White Jail Incarceration, 1990-2013*. New York: Vera Institute of Justice.
- Substance Abuse and Mental Health Services Administration (SAMHSA). 2013. *Drug Abuse Warning Network, 2011: National Estimates of Drug-Related Emergency Department Visits*. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
- Substance Abuse and Mental Health Services Administration (SAMHSA). 2020a. *2016-2018 Substate Estimates of Substance Use and Mental Illness*. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. (<https://www.samhsa.gov/data/report/2016-2018-substate-estimates-substance-use-and-mental-illness>)
- Substance Abuse and Mental Health Services Administration (SAMHSA). 2020b. *2018-2019 NSDUH State Estimates of Substance Use and Mental Disorders*. Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. ([samhsa.gov/data/report/2018-2019-nsduh-state-estimates-substance-use-and-mental-disorders](https://www.samhsa.gov/data/report/2018-2019-nsduh-state-estimates-substance-use-and-mental-disorders))
- Substance Abuse and Mental Health Services Administration (SAMHSA). 2020c. *Key Substance Use and Mental Health Indicators in the United States: Results from the 2019 National Survey on Drug Use and Health* (HHS Publication No. PEP20-07-01-001, NSDUH Series H-55). Rockville, MD: Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. (<https://www.samhsa.gov/data/>)
- Sue, Kimberly. 2019. *Getting Wrecked: Women, Incarceration, and the American Opioid Crisis*. Berkeley, CA: University of California Press.
- Susser, Mervyn. 1985. "Epidemiology in the United States after World War II: The Evolution of Technique." *Epidemiologic Reviews* 7: 147–177.
- Sutherland, Tori N., Hannah Wunsch, Ruxandra Pinto, Craig Newcomb, Colleen Brensinger, Lakisha Gaskins, Brian T. Bateman, and Mark D. Neuman. 2021. "Association of the 2016 US Centers for Disease Control and Prevention Opioid Prescribing Guideline with Changes in Opioid Dispensing After Surgery." *JAMA Network Open* 4(6): e2111826.
- Syvertsen, Jennifer L., and Robin A. Pollini. 2020. "Syringe Access and Health Harms: Characterizing "Landscapes of Antagonism" in California's Central Valley." *International Journal of Drug Policy* 75: 102594.
- Tammi, Tuukka, and Toivo Hurme. 2007. "How the Harm Reduction Movement Contrasts Itself Against Punitive Prohibition." *International Journal of Drug Policy* 18: 84–87.
- Tavory, Iddo. 2016. *Summoned: Identification and Religious Life in a Jewish Neighborhood*. Chicago, IL: University of Chicago Press.
- Taylor, Stephanie L., Rendelle Bolton, Alexis Huynh, Kelly Dvorin, A. Rani Elwy, Barbara G. Bokhour, Allison Whitehead, and Benjamin Kligler. 2019a. "What Should Health Care

- Systems Consider When Implementing Complementary and Integrative Health: Lessons from Veterans Health Administration.” *The Journal of Alternative and Complementary Medicine* 25(Suppl 1): S52–S60.
- Taylor, Stephanie L., Patricia M. Herman, Nell J. Marshall, Qing Zeng, Anita Yuan, Karen Chu, Yijun Shao, Craig Morioka, and Karl A. Lorenz. 2019b. “Use of Complementary and Integrated Health: A Retrospective Analysis of U.S. Veterans with Chronic Musculoskeletal Pain Nationally.” *The Journal of Alternative and Complementary Medicine* 25(1): 32–39.
- Temple, John. 2015. *American Pain: How a Young Felon and His Ring of Doctors Unleashed America’s Deadliest Drug Epidemic*. Guilford, CT: Lyons Press.
- Thomas, Natalie, Katinka van de Ven, and Kyle J. D. Mulrooney. 2020. “The Impact of Rurality on Opioid-Related Harms: A Systematic Review of Qualitative Research.” *International Journal of Drug Policy* 85: 102607.
- Ti, Lianping, Kanna Hayashi, Karyn Kaplan, Paisan Suwannawong, Evan Wood, and Thomas Kerr. 2015. “Contextual Factors Associated with Rushed Injecting Among People Who Inject Drugs in Thailand.” *Prevention Science* 16: 313–320.
- Timmermans, Stefan, and Marc Berg. 1997. “Standardization in Action: Achieving Local Universality through Medical Protocols.” *Social Studies of Science* 27: 273–305.
- Tönnies, Ferdinand. 2001 [1887]. *Community and Civil Society*. Cambridge, UK: Cambridge University Press.
- Trostle, James A. and Johannes Sommerfeld. 1996. “Medical Anthropology and Epidemiology.” *Annual Review of Anthropology* 25: 253–274.
- Trujols, Joan. 2015. “The Brain Disease Model of Addiction: Challenging or Reinforcing Stigma?” *The Lancet Psychiatry* 2(4): P292.
- Valentine, Bettylou. 1978. *Hustling and Other Hard Work: Life Styles in the Ghetto*. New York: The Free Press.
- van Ham, Maarten, Duncan MacLennan, Ludi Simpson, David Manley, and Nick Bailey, editors. 2011. *Neighbourhood Effects Research: New Perspectives*. Dordrecht, Netherlands: Springer.
- Van Zee, Art. 2009. “The Promotion and Marketing of OxyContin: Commercial Triumph, Public Health Tragedy.” *American Journal of Public Health* 99(2): 221–227.
- Venkatesh, Sudhir. 2006. *Off the Books: The Underground Economy of the Urban Poor*. Cambridge, MA: Harvard University Press.
- Victor, Grant, Catherine Zettner, Philip Huynh, Bradley Ray, and Emily Sightes. 2022. “Jail and Overdose: Assessing the Community Impact of Incarceration on Overdose.” *Addiction* 117(2): 433–441.
- Vogt, Richard L., Mark C. Breda, Don C. Des Jarlais, Sena Gates, and Peter Whiticar. 1998. “Hawaii’s Statewide Syringe Exchange Program.” *American Journal of Public Health* 88(9): 1403–1404.
- Volkow, Nora D. and Carlos Blanco. 2021. “The Changing Opioid Crisis: Development, Challenges and Opportunities.” *Molecular Psychiatry* 26: 218–233.
- Wacquant, Loïc. 1997. “Three Pernicious Premises in the Study of the American Ghetto.” *International Journal of Urban and Regional Research* 21(2): 341–353.
- Wacquant, Loïc. 1998. “Inside the Zone: The Social Art of the Hustler in the Black American Ghetto.” *Theory, Culture & Society* 15(2): 1–36.
- Wacquant, Loïc. 2004. “Comments on ‘An Anthropology of Structural Violence.’” *Current Anthropology* 45(3): 322.

- Wacquant, Loïc. 2008. *Urban Outcasts: A Comparative Sociology of Advanced Marginality*. Malden, MA: Polity Press.
- Wacquant, Loïc. 2009. *Punishing the Poor: The Neoliberal Government of Social Insecurity*. Durham, NC: Duke University Press.
- Wacquant, Loïc. 2010a. "Crafting the Neoliberal State: Workfare, Prisonfare, and Social Insecurity." *Sociological Forum* 25(2): 197–220.
- Wacquant, Loïc. 2010b. "Designing Urban Seclusion in the Twenty-First Century." *Perspecta: The Yale Architectural Journal* 43: 164–175.
- Wacquant, Loïc. 2016. "A Concise Genealogy and Anatomy of Habitus." *The Sociological Review* 64: 64–72.
- Wacquant, Loïc. 2018. "Bourdieu Comes to Town: Pertinence, Principles, Applications." *International Journal of Urban and Regional Research* 42(1): 90–105.
- Wacquant, Loïc. 2022a [2004]. *Body and Soul: Notebooks of an Apprentice Boxer, Expanded Anniversary Edition*. New York: Oxford University Press.
- Wacquant, Loïc. 2022b. *The Invention of the "Underclass": A Study in the Politics of Knowledge*. Medford, MA: Polity Press.
- Wailoo, Keith. 2014. *Pain: A Political History*. Baltimore, MD: Johns Hopkins University Press.
- Walker, Ingrid. 2017. *High: Drugs, Desire, and a Nation of Users*. Seattle, WA: University of Washington Press.
- Wallace, Bruce, Flora Pagan, and Bernadette (Bernie) Pauly. 2019. "The Implementation of Overdose Prevention Sites as a Novel and Nimble Response During an Illegal Drug Overdose Public Health Emergency." *International Journal of Drug Policy* 66: 64–72.
- Walters, Glenn D. 2000. "Spontaneous Remission from Alcohol, Tobacco, and Other Drug Abuse: Seeking Quantitative Answers to Qualitative Questions." *The American Journal of Drug and Alcohol Abuse* 26(3): 443–460.
- Wang, Karen H., William C. Becker, and David A. Fiellin. 2013. "Prevalence and Correlates for Nonmedical Use of Prescription Opioids Among Urban and Rural Residents." *Drug and Alcohol Dependence* 127: 156–162.
- Wang, Linda, Jeffrey Weiss, Elizabeth Bogel Ryan, Justine Waldman, Stacey Rubin, and Judy L. Griffin. 2021. "Telemedicine Increases Access to Buprenorphine Initiation During the COVID-19 Pandemic." *Journal of Substance Abuse Treatment* 124: 108272.
- Wang, Qi, Nolan Edward Phillips, Mario L. Small, and Robert J. Sampson. 2018. "Urban Mobility and Neighborhood Isolation in America's 50 Largest Cities." *Proceedings of the National Academy of Sciences* 115(30): 7735–7740.
- Ward, Kathleen M., Ayden Scheim, Jonathan Wang, Benjamin Cocchiario, Katie Singley, and Alexis M. Roth. 2022. "Impact of Reduced Restrictions on Buprenorphine Prescribing During COVID-19 Among Patients in a Community-Based Treatment Program." *Drug and Alcohol Dependence Reports* 3: 100055.
- Webster, Fiona, Kathleen Rice, and Abhimanyu Sud. 2020. "A Critical Content Analysis of Media Reporting on Opioids: The Social Construction of an Epidemic." *Social Science & Medicine* 244: 112642.
- Weinberg, Darin. 2011. "Sociological Perspectives on Addiction." *Sociology Compass* 5(4): 298–310.
- Weinberg, Darin. 2013. "Post-Humanism, Addiction and the Loss of Self-Control: Reflections on the Missing Core in Addiction Science." *International Journal of Drug Policy* 24: 173–181.

- Weinberg, Darin. 2019. "Psychosomatic Subjects and the Agencies of Addiction." *Medical Humanities* 45: 162–168.
- Weintraub, Eric, Chamindi Seneviratne, Jessica Anane, Kelly Coble, Jessica Magidson, Sarah Kattakuzhy, Aaron Greenblatt, Christopher Welsh, Alexander Pappas, Terri L. Ross, and Annabelle M. Belcher. 2021. "Mobile Telemedicine for Buprenorphine Treatment in Rural Populations with Opioid Use Disorder." *JAMA Network Open* 4(8): e2118487.
- Weisheit, Ralph A., David N. Falcone, and L. Edward Wells. 2006. *Crime and Policing in Rural and Small-Town America, Third Edition*. Long Grove, IL: Waveland Press.
- Wenger, Lynn D., David Showalter, Barrot Lambdin, David Leiva, Eliza Wheeler, Peter J. Davidson, Phillip O. Coffin, Ingrid A. Binswanger, and Alex H. Kral. 2019. "Overdose Education and Naloxone Distribution in the San Francisco County Jail." *Journal of Correctional Health Care* 25(4): 394–404.
- Werb, Dan, Greg Rowell, Gordon Guyatt, Thomas Kerr, Julio Montaner, and Evan Wood. 2011. "Effect of Drug Law Enforcement on Drug Market Violence: A Systematic Review." *International Journal of Drug Policy* 22: 87–94.
- West, Kelsa L., Karla Lindquist, and Luke N. Rodda. 2021. "Fentanyl Epidemic Hits the U.S. West Coast: Opioid-Related Deaths in San Francisco from 2009–2019." *International Journal of Drug Policy* 95: 103402.
- Western, Bruce. 2015. "Lifetimes of Violence in a Sample of Released Prisoners." *The Russell Sage Foundation Journal of the Social Sciences* 1(2): 14–30.
- Westhoff, Ben. 2019. *Fentanyl, Inc.: How Rogue Chemists Created the Deadliest Wave of the Opioid Epidemic*. New York: Grove Atlantic.
- Wherry, Frederick F. 2016. "Relational Accounting: A Cultural Approach." *American Journal of Cultural Sociology* 4(2): 131–156.
- Wikstrom, Nelson. 1993. *The Political World of a Small Town: A Mirror Image of American Politics*. Westport, CT: Greenwood Press.
- Wiland, Harry. 2019a. *Do No Harm: The Opioid Epidemic*. Santa Monica, CA: Media Policy Center
- Wiland, Harry. 2019b. *Do No Harm: The Opioid Epidemic*. Nashville, TN: Turner Publishing Company.
- Wiland, Harry and Dale Bell. 2018. *Do No Harm: The Opioid Epidemic*. Santa Monica, CA: Media Policy Center.
- Wilkinson, Kenneth P. 1991. *The Community in Rural America*. Westport, CT: Greenwood Press.
- Williams, Rhonda M., Melissa A. Day, Dawn M. Ehde, Aaron P. Turner, Marcia A. Ciol, Kevin J. Gertz, David Patterson, Shahin Hakimian, Pradeep Suri, and Mark P. Jensen. 2022. "Effects of Hypnosis vs Mindfulness Meditation vs Education on Chronic Pain Intensity and Secondary Outcomes in Veterans: A Randomized Clinical Trial." *PAIN*, epub ahead of print.
- Wilson, David P., Braedon Donald, Andrew J. Shattock, David Wilson, and Nicole Fraser-Hurt. 2015. "The Cost-Effectiveness of Harm Reduction." *International Journal of Drug Policy* 25: S5–S11.
- Wilson, William Julius. 1987. *The Truly Disadvantaged: The Inner City, the Underclass, and Public Policy*. Chicago, IL: University of Chicago Press.
- Winant, Gabriel. 2021. *The Next Shift: The Fall of Industry and the Rise of Health Care in Rust Belt America*. Cambridge, MA: Harvard University Press.

- Winstanley, Erin L., Laura R. Lander, James H. Berry, James J. Mahoney III, Wanhong Zheng, Jeremy Herschler, Patrick Marshalek, Sheena Sayres, Jay Mason, and Marc W. Haut. 2020. "West Virginia's Model of Buprenorphine Expansion: Preliminary Results." *Journal of Substance Abuse Treatment* 108: 40–47.
- Wirth, Louis. 1938. "Urbanism as a Way of Life." *American Journal of Sociology* 44(1): 1–24.
- Wodak, Alex and Annie Cooney. 2004. *Effectiveness of Sterile Needle and Syringe Programming in Reducing HIV/AIDS Among Injecting Drug Users*. Geneva: World Health Organization. (<http://www.who.int/hiv/pub/idu/pubidu/en/>).
- Wood, Emily, and Marta Elliott. 2020. "Opioid Addiction Stigma: The Intersection of Race, Social Class, and Gender." *Substance Use & Misuse* 55: 818–827.
- Woods, Michael. 2011. *Rural*. New York: Routledge.
- World Health Organization. 1986. *Cancer Pain Relief*. Geneva: World Health Organization.
- Wuthnow, Robert. 2018. *The Left Behind: Decline and Rage in Rural America*. Princeton, NJ: Princeton University Press.
- Yang, Carol, Jamie Favaro, and Meredith C. Meacham. 2020. "NEXT Harm Reduction: An Online, Mail- Based Naloxone Distribution and Harm-Reduction Program." *American Journal of Public Health* 111: 667–671.
- Yang, Lawrence H., Liang Y. Wong, Margaux M. Grivel, and Deborah S. Hasin. 2017. "Stigma and Substance Use Disorders: An International Phenomenon." *Current Opinion in Psychiatry* 30(5): 378–388.
- Yeun, Che. 2018. "Art and Hip-Hop in the Age of the Opioid Crisis." In *The Opioid Epidemic in Historical Perspective: An Anthology*, edited by Allan Brandt and Alyssa Botelho. (<https://projects.iq.harvard.edu/historyopioidepidemic/yeun>)
- Zelaya, Carla E., James M. Dahlhamer, Jacqueline W. Lucas, and Eric M. Connor. 2020. "Chronic Pain and High-impact Chronic Pain Among U.S. Adults, 2019." *NCHS Data Brief No. 390*. (<https://www.cdc.gov/nchs/products/databriefs/db390.htm>)
- Zhang, Shiyu and Daniel Guth. 2021. "The OxyContin Reformulation Revisited: New Evidence from Improved Definitions of Markets and Substitutes." arXiv:2101.01128v2 [econ.GN].
- Zhu, Wenjia, Michael E. Chernew, Tisamarie B. Sherry, and Nicole Maestas. 2019. "Initial Opioid Prescriptions among U.S. Commercially Insured Patients, 2012–2017." *New England Journal of Medicine* 380: 1043–1052.
- Zibbell, Jon E., Alice K. Asher, Rajiv C. Patel, Ben Kupronis, Kashif Iqbal, John W. Ward, and Deborah Holtzman. 2018. "Increases in Acute Hepatitis C Virus Infection Related to a Growing Opioid Epidemic and Associated Injection Drug Use, United States, 2004 to 2014." *American Journal of Public Health* 108(2): 175–181.
- Zibbell, Jon E., Sarah Duhart Clarke, Alex H. Kral, Nicholas J. Richardson, Dennis Cauchon, and Arnie Aldridge. 2022. "Association Between Law Enforcement Seizures of Illicit Drugs and Drug Overdose Deaths Involving Cocaine and Methamphetamine, Ohio, 2014–2019." *Drug and Alcohol Dependence* 232: 109341.
- Zinberg, Norman E. 1984. *Drug, Set, and Setting: The Basis for Controlled Intoxicant Use*. New Haven, CT: Yale University Press.
- Zoorob, Michael J. and Jason L. Salemi. 2017. "Bowling Alone, Dying Together: The Role of Social Capital in Mitigating the Drug Overdose Epidemic in the United States." *Drug and Alcohol Dependence* 173: 1–9.
- Zwarenstein, Carlyn. 2021. "Compassion Clubs Advance Toward Authorization in Vancouver." *Filter*, October 27. (<https://filtermag.org/compassion-clubs-vancouver/>)

Zwerling, Craig, Corinne Peek-Asa, Paul S. Whitten, Seong-Woo Choi, Nancy L. Sprince, and Michael P. Jones. 2005. "Fatal Motor Vehicle Crashes in Rural and Urban Areas: Decomposing Rates into Contributing Factors." *Injury Prevention* 11: 24–28.

Methodological Appendix

This appendix describes how I planned and conducted the study. I first discuss research design, included alternative designs I considered. Then I explain how I selected and gained ethnographic access to my fieldsites. I offer separate reflections on how I first recruited local officials and then how I recruited people who used drugs, and I give an overview of my interview sample. I emphasize how my experience and embeddedness in harm reduction organizations facilitated my entry to the field and my recruitment of research participants. Next is an account of how I collected my data under conditions of isolation and acquainted marginality, how I practiced harm reduction, and how I eventually left the field. I end with some lessons for fieldwork in nonurban places, across multiple sites, and in pursuit of rapidly changing social phenomena like the overdose crisis.

Research design

In the Introduction I explained how my interest in studying nonurban opioid use emerged from the disconnect between the trajectories of the overdose crisis in California's progressive cities and its agricultural and mountainous hinterlands. That gave me the idea for a multisite ethnographic study of opioid use and opioid-related services. I initially wanted to compare three nonurban regions across California, but the scale of this undertaking proved unfeasible. In my dissertation prospectus I instead proposed a two-region comparison between the mountainous backcountry and an urban region. My idea was to do parallel interviews and fieldwork in each region and write a fully comparative study, though over time the design increasingly tilted toward my backcountry fieldsites. Collecting some urban data helped me confirm important place-based differences, but the main contribution of this dissertation comes from my backcountry data.

Most ethnographic studies of criminalized or stigmatized activities focus either on those engaged in them, usually people who are marginalized by race or ethnicity, class, or gender, or the people attempting to regulate them, usually police, health care providers, and other street-level bureaucrats. Often researchers argue that the harms faced by marginalized people are not so much the consequences of their own decisions but of the more powerful people and institutions that disrupt their lives, define them as criminals, dispossess them, and detain them. But ethnographers will gain a limited understanding of these forces if they interview and follow only marginalized people and not those with power.¹²³ So I started with the goal of linking multiple sides, showing directly what service providers were saying and doing and how inequality was produced in interaction.¹²⁴ I had a hunch that these relationships would be more salient in

¹²³ Alice Goffman (2014) was prominently criticized for making claims about the actions of police officers based on fieldwork conducted almost exclusively with young men who were targeted by police (Rios 2015).

¹²⁴ Desmond (2014) calls this "relational ethnography," in which the analytic object is neither a place nor a group but relationships between groups that occupy unequal positions in social space. Future versions of this project will fulfill this goal by including additional chapters on the operations of local criminal legal organizations and the efforts of health care, treatment, and harm reduction services providers.

nonurban areas where officials were physically and socially closer to their constituents and clients. So I planned to collect data from people who used drugs as well as people who worked in health care, substance use treatment, and law enforcement.

Gaining and maintaining access

I decided to first interview officials and service providers across the two regions I selected to learn more about specific counties, cities, and towns and gauge potential ethnographic access. I also wanted to obtain a Certificate of Confidentiality from the National Institute on Drug Abuse to protect my data from being subpoenaed before I interviewed people about their illicit drug use. I began interviewing local officials and service providers in early 2017, obtained the Certificate of Confidentiality in late 2017, and began interviewing people who used drugs in early 2018.

My experience and position in California's harm reduction community facilitated each stage of data collection. I gained an important initial contact in Oak County in my capacity as President of the Board of Directors for NEED, the harm reduction organization in Berkeley. In summer 2016 I joined a conference call with others who were working on harm reduction services, including Jeremy Bingham, Oak County's HIV/AIDS services director. When I explained my interest in studying nonurban opioid use he invited me to visit, and in January 2017 I traveled there to get to know the region. Jeremy let me stay at his house in Acorn, shared my contact information with several of his colleagues in Oak and other counties, and threw a party where I met more of his friends and coworkers. Over the next two months I traveled to another nonurban county I call Pine where I visited a community-based harm reduction organization, and I interviewed about ten harm reductionists and substance use treatment providers in the urban region I had selected. I also prepared to move to the backcountry. I bought a used vehicle with all-wheel drive, which was critical for winter travel. I looked for lodging in Acorn but online I found only a single rental listing. Jeremy told me that a friend of his that I met at his party needed a roommate, and they agreed to rent me their second bedroom.

My next trip to Acorn in spring 2017 was disorienting and serendipitous. Rather than following the same route I took before, I idly punched my new address into my phone's map application and took off. Instead of directing me along state highways the app took me onto an undeveloped road that snaked up and over the mountains surrounding Acorn. As the elevation rose, snowbanks grew on each shoulder. Eventually I reached a tiny village. Two people standing next to a truck turned to watch me chug up the slope. Above the village a lowered gate blocked my way, a tall snowbank rising behind it—the road hadn't been plowed all winter. The couple by the truck was waiting for me to return and pointed me back down the hill to a narrow, poorly marked side road that eventually led me back to the highway. I reached my roommate's house in Acorn late that evening, where I had a second surprise. My roommate was playing video games in the living room with a white man with long hair named T.J. When I told him about my research, he replied that he used drugs and offered to talk with me and introduce me to his friends. The following year, T.J. connected me with several members of the heroin scene including Drew, Aaron, and Kaitlyn.

In summer 2017 I began spending longer stretches of time in the mountains. I made a second visit to Pine County and my first to Sage County. I was becoming more comfortable living out of a suitcase and taking daylong car trips alone, sometimes for a single interview. I appreciated having the reason and means to visit new places. Summer was also the best time of

the year to live and meet people in the backcountry. Tourists and locals alike took to the mountains for recreation and sightseeing. Acorn hosted lively public events, musicians set up in parks and on patios to serenade bargoers, and backyard parties lasted late into the balmy nights. I enjoyed the company of people I met and savored the belonging I started to feel, symbolized by my ability to go downtown in the evening on a whim and frequently find an acquaintance at one of the restaurants or bars. Some of Jeremy's friend group had grown up in Acorn but many had lived out of the area for school or work. They included professionals, artists, and artisans. Many were fixtures of local businesses and civic and performing organizations. They were welcoming to me and seemed to find my unusual work and lifestyle amusing.

I continued to interview service providers in the urban region and made more visits to Pine County, but as my attachments and obligations in Oak and Sage Counties grew it became increasingly difficult to maintain parallel access in each region. I realized that my ethnographic success depended in large part on my physical presence, making my decisions about where to spend my time somewhat zero-sum. The miniaturized institutional milieu of places like Oak County also made planning my fieldwork comparatively simpler. There seemed an endless list of officials and service providers in big cities; in smaller counties that number was finite, and it was often possible for me to interview most or all members of a given profession. Once I began interviewing people who used drugs, the challenges of a full-fledged comparison multiplied. The drug scene in Acorn and Sage Flats were hardly similar to the organized drug markets of large cities—as social formations they more resembled the numerous small peer networks that form in the vicinity of those markets. While I was able to monitor a large portion of a small-town scene, grasping a congruent portion of the urban scene proved untenable. While I interviewed more than twenty people who used drugs between the urban region and Pine County, I chose not to risk the depth of my relationships in Oak and Sage Counties for more superficial breadth across multiple regions. This dissertation is therefore primarily a study of backcountry opioid use that uses other research on urban drug use to support comparisons across place.

Recruiting local officials

I was initially worried that it would be difficult to get officials in small and remote counties to talk with me. I imagined that they could be suspicious of an outsider from the liberal Bay Area asking about a topic like drug use that could cast their communities in a negative light. My provenance from left-leaning Berkeley was brought up occasionally—“You're probably a *raging conservative*,” Sage County District Attorney Trotter teased me in our first conversation. But overwhelmingly I found local officials welcoming and scheduling appointments with them easy. Jeremy introduced me to his coworkers and colleagues in other counties, particularly in public and behavioral health departments that typically managed drug-related services. They often faced similar local issues and many shared frustrations with the lack of attention paid to nonurban areas by researchers and policymakers. That I came to visit, braved their weather, and saw their beautiful surroundings firsthand—when they were often expected to travel to cities for professional events—seemed to mean a lot. I also scheduled many interviews with officials and service providers using publicly available contact information for their organizations. In contrast to my experience approaching urban bureaucracies, I was often connected directly to the person for whom I asked, even if they were the head of the organization. The smaller scale of their workplaces and the more relaxed pace of life helped officials make time for me quickly and easily. Before my first visit to Sage County, I called ahead to make appointments with Police

Chief Beaufort and Sheriff Field but was told to simply come to their offices and they would likely be available. Sure enough, when I arrived I was ushered back to meet with each.

Scheduling appointments with backcountry officials proved almost too easy. My schedule quickly filled with appointments that kept me racing from town to town and county to county, sometimes without time to rest or eat. By the end of 2017 I had conducted interviews in a dozen counties spanning hundreds of miles. But even though I was willing to make the trips, I simply couldn't keep up with everyone I met and didn't have the money to pay for constant hotel lodging. It proved crucial to my fieldwork in Acorn and Sage Counties that I had reliable, stable, and affordable accommodations—the number of interviews I conducted in a given county seemed roughly correlated with the number of nights I spent there. As a result there were several counties where my ethnographic access faltered or withered from neglect. Over time I stopped visiting Pine County. I made one or two visits to five other nonurban counties where I conducted a handful of interviews but did not try to collect a comprehensive sample. My goals in these counties were modest: to courteously accept invitations, leave myself open to a serendipitous connection, and see how they compared to the counties where I was investing more of my time. I checked whether local officials told me about similar issues they faced and comparable strategies they employed, whether the patterns of drug use they described sounded familiar, and whether they offered similar accounts of local geography (large expanses pocked with small towns), economy (previously dominated by agriculture or primary industries but now in decline), and culture (deeply conservative and imbued with nostalgia for the “frontier”). I was reassured to hear broadly similar things on these exploratory visits, which gave me confidence that my deeper fieldwork in Oak and Sage Counties would pay off.

Overall I interviewed 176 local officials and service providers across these counties, including 37 in Oak County and 29 in Sage County (Table 1). This included 52 mental health and substance use treatment providers, 35 health care and emergency services providers, 21 public health agency staff, 19 harm reduction services providers, 19 judges, prosecutors, defense attorneys, and court staff, 18 members of police, sheriff, and probation departments, 9 providers of social services, and a handful of others. I intentionally spent less time with law enforcement to preserve the trust of my participants who used drugs.

| Organization | Counties | | | |
|---------------------------------------|------------------|-------------------------|--------------------------|------------------------------|
| | Total (n=176) | Oak County (n=37) | Sage County (n=29) | Other counties (n=110) |
| Mental health and drug treatment | 52 (30%) | 7 (19%) | 4 (14%) | 41 (37%) |
| Health care and emergency services | 35 (20%) | 10 (27%) | 3 (10%) | 22 (20%) |
| Public health | 21 (12%) | 5 (14%) | 4 (14%) | 12 (11%) |
| Harm reduction services | 19 (11%) | 4 (11%) | 1 (3%) | 14 (13%) |
| Criminal courts and attorneys | 19 (11%) | 5 (14%) | 7 (24%) | 7 (6%) |
| Law enforcement and probation | 18 (10%) | 3 (8%) | 7 (24%) | 8 (7%) |
| Social services | 9 (5%) | 2 (5%) | 3 (10%) | 4 (4%) |
| Other officials and service providers | 3 (2%) | 1 (3%) | 0 (0%) | 2 (2%) |

Table 1. Local officials and service providers by county and organization. Percentages may not total 100 due to rounding.

Several factors contributed to my success recruiting local officials. First, they were usually aware of UC Berkeley's stature in California and its reputation for academic excellence. Though many did not fully grasp the distinctions between graduate students and faculty in terms of status, resources, and audience, they seemed to infer that if I was getting a PhD at Cal then I must be worth talking to. Second, they welcomed the opportunity to share their experiences. The officials and service providers I met in the backcountry were proud of their work, especially considering their limited staff and resources. They wanted to share the challenges they faced and how they differed from big cities. Third, they sometimes thought I would be able to help them by providing expert guidance. They were usually less familiar with ethnography than policy evaluations and other applied approaches, and sometimes expected me to take a more active role, like a consultant or internal evaluator might. Over the course of my fieldwork I received many questions about whether the problems local officials were facing were similar to those in other places, and what I (or the research literature) thought they should do to address them.

It was sometimes difficult to navigate these expectations. I did want to help them improve their services and help their clients, and sometimes I knew what existing research would suggest as the best course of action. At the same time, I was conscious of my potential to influence what I was observing. It would be inappropriate for me to write about a policy change that I somehow helped spur as if it was spontaneous. I generally tried to limit my advice while remaining courteous, polite, and empathetic. Because I disclosed my own experience with harm reduction to explain my interest and expertise in the field of substance use, I did honestly answer questions about those services when they were asked. But I am confident that I did not have a significant independent influence on policies that were implemented in my fieldsites. I became familiar to the people I interviewed, but as an outsider who was only a part-time presence and carried no independent clout I wasn't influential enough to transform what officials who lived and worked in these counties wanted to do. Whatever direction they were headed when I arrived, that was the direction in which they continued.

Recruiting people who used drugs

As I mentioned above, I did not recruit people who used drugs until I received a Certificate of Confidentiality. In addition to my personal assurances about how their information would be handled, being able to tell participants about the Certificate's provisions often helped allay their concerns. Once I was ready to recruit, I gave my contact information to service providers to share with their clients. This yielded a handful of interviews, mostly among people in treatment or recovery. My higher priority was talking with people who were actively using opioids: my goal was to directly observe as much of the day-to-day reality of selling, buying, and as I could, just as urban ethnographers had (Bourgois and Schonberg 2009; Knight 2015). So in early 2018 I interviewed T.J., first in Acorn's cozy coffee shop and then, once our conversation became too sensitive to be overheard, on the bank of a creek on the edge of town. He shared my information with his friends in the heroin scene. Within a few months I was hanging out at Drew's trailer regularly, and over the rest of the year was able to meet and interview most of the other members of the heroin scene.

I took a similar tack in Sage County. I met Mark through Melissa and Ray through Mark, and then Ray introduced me to several of his friends, including Jonathan, Alex, her mother Rhonda, and others who visited or hung out at his home. They in turn introduced me to others, including several people who I never saw at Ray's house. One person I met through Ray turned

out to be visiting Sage Flats from another county. I also interviewed a group of three friends in Sage Flats who received my contact information from a nurse. In Pine County I interviewed eleven people who used drugs that I recruited by sharing information about my research at a local harm reduction program. I did the same in early 2019 in the urban region where I had interviewed service providers, eventually interviewing a dozen people who used drugs, primarily younger people who were unstably housed or living in encampments.

By the end of my fieldwork, I had interviewed 69 people who used drugs across eight counties but concentrated in Oak and Sage Counties. They were mostly white, roughly in line with the overall ethnracial makeup of counties in the region, which are seventy-five to eighty-five percent white with smaller Latin American, Native, Asian, and Black populations. Though population-level inferences from such small samples are difficult to draw, I followed several Native people, who face exceptionally high overdose rates (Joshi et al. 2018). I interviewed slightly more men than women, though my samples in Oak and Sage Counties were almost evenly split. In most counties the people I interviewed tended to be in their twenties to mid-thirties, but in Sage County my interview sample was older, perhaps because Ray was older and his houseguests and friends spanned more of the life course.

| Characteristic | Counties | | | |
|-----------------------|-----------------|----------------------|-----------------------|--------------------------|
| | Total (n=69) | Oak County (n=29) | Sage County (n=13) | Other counties (n=27) |
| Race/ethnicity | | | | |
| White | 57 (83%) | 22 (76%) | 11 (85%) | 24 (89%) |
| Latino/a | 6 (9%) | 4 (14%) | 1 (8%) | 1 (4%) |
| Native | 5 (7%) | 3 (10%) | 1 (8%) | 1 (4%) |
| Black | 1 (1%) | 0 (0%) | 0 (0%) | 1 (4%) |
| Gender | | | | |
| Men | 37 (54%) | 14 (48%) | 7 (54%) | 16 (59%) |
| Women | 32 (46%) | 15 (52%) | 6 (46%) | 11 (41%) |
| Age | | | | |
| 18–34 | 38 (55%) | 18 (62%) | 4 (31%) | 16 (59%) |
| 35+ | 31 (45%) | 11 (38%) | 9 (69%) | 11 (41%) |

Table 2. Characteristics of research participants who used drugs by county. Percentages may not total 100 due to rounding.

My account of how I met the people I interviewed illustrates again the dual roles of embeddedness and serendipity in recruiting members of marginalized and noninstitutionalized populations. My embeddedness in the California harm reduction world lent me connections to organizations that could serve as venues for recruitment. My harm reduction experience also gave me resources and information that was of value to people who used drugs and taught me how to talk about drug use in ways that helped me gain their trust. However, I could only put this preparation to use if I met the right people, and I received those opportunities in part through my immersion in the field and in part through luck, for instance that my Acorn roommate was friends with people who used drugs. Had I relied solely on formal gatekeepers like service

providers, or had I been satisfied to talk only with people in recovery, I would not have met the people who made this study possible.

At the same time, my own position and perceived identity in the field made it difficult for me to recruit some people. In Chapter 5 I noted several signs that others in Acorn were using heroin outside of the main scene. I gained access to the scene partially through the luck of meeting T.J., and since these other people were unknown to the rest of the scene I was unable to identify them. I later learned from Ron that my contact information had been passed to multiple people, including him, who were hesitant to speak with a stranger from out of town about drugs. Terrance also would not talk to me, I believe out of concern that I could be a snitch or cop. As I mentioned above, getting to know people who were actively using drugs seemed to require being on-call and on-scene. I regularly visited other counties in the region, including Summit County where Jake Derrick worked, but without spending days and nights on end there it was hard to find informal opportunities to meet people who used drugs.

It likely would have been more challenging to do fieldwork on illicit drug use in predominantly white towns had I not been white myself. Being white made me appear at first glance as less of an outsider or stranger in towns to which I was in fact new. My self-presentation as a bespectacled professional with lots of formal education also helped insulate me from suspicions that I personally used drugs or was involved in other questionable activity. In autumn 2018, Oak County law enforcement followed me and Victor, eventually questioning, searching, and arresting him. A sheriff's deputy asked me what we were doing together and whether I was on probation. I did not disclose my research activities or university affiliation, but I think the fact that I could honestly and convincingly answer no to the latter question and that I basically looked, dressed, and talked like other respected young adults in town helped me avoid further scrutiny.

Backcountry fieldwork

I let my interview participants choose where we met. For service providers, that was in their offices or, if they did not have a private office and did not feel comfortable talking in front of colleagues, usually at a local coffee shop or restaurant. I interviewed most people who used drugs in their homes, but some people had to hide their drug use at home or did not wish to invite me over. Kaitlyn, for instance, lived with her grandparents. She had no cell phone, so to reach her I had to call their home phone and ask for her, putting me in the difficult position of explaining who I was without disclosing why I wished to speak with her. The lack of destigmatized and noncommercial public space in small towns like Acorn and Sage Flats made scheduling interviews more challenging, especially in places with long, cold, and snowy winters that made outdoor interviews a physical ordeal. As I mentioned, T.J. suggested talking indoors at a coffee shop—he had come to terms with his negative reputation and did not fear others' disapproval—but I quickly became worried about the effects on *my* reputation of talking graphically about drug use in public, and suggested we find a more secluded spot. If people did not want to talk at home and the weather was nice, we usually met in local parks where we were less likely to be overheard and where idly hanging out appeared less suspicious. Or we would meet a friend's home, like Drew's or Ray's. Interviews typically lasted between 90 minutes and three hours, though some lasted up to four hours, and I interviewed many of my core research participants numerous times. With one exception, everyone I interviewed about their drug use agreed to be audio recorded.

Unlike in large cities where a significant amount of drug sales and use take place outdoors, the small-town drug scenes I observed were largely indoor affairs. As a result, many of my observations took place in private homes. I also shadowed people on local errands to go shopping, visit the post office, and the like. I regularly encountered people I had interviewed around town, either local officials or people who used drugs. While many were openly friendly with me regardless of the setting, depending on the context I sometimes practiced the modified civil inattention that others told me they used to enact invisible boundaries between work and home life. I frequently worried that being seen with me would reveal people's drug use, but my participants did not share this concern. They seemed to feel that whatever my presence potentially signaled was outweighed by their own reputations. However, being seen with me did pose a challenge for keeping people's participation in my research confidential. I sometimes kept a slight distance from people in public so that I could separate myself from them quickly I spotted someone who knew me. I did not accompany my research participants on trips out of town to purchase drugs. I knew that my presence could arouse suspicion, and I feared that trying to explain why I was there could add to the confusion or jeopardize our safety. I did not think what I would potentially learn through direct observation was worth the risk, especially after hearing consistent stories from multiple people about how deals in the city went down. I have tried to make clear when I am recounting stories that I did not directly observe. I routinely used my audio recorder with me during observation sessions. I also took photos to document travel, physical settings and built environments, weather conditions, living spaces, drug use techniques, drug-related health problems, and so on. Participants quickly came to expect me to record all of our interactions, and it was extremely rare for someone to ask me to turn off my recorder. I would typically write fieldnotes and handle appointments with local officials and service providers in the late morning and afternoon, spend time with people who used drugs during afternoons and into the evenings, and continue writing notes at night after I came home.

Just as the setting of a small town limited who I could recruit, it posed challenges for spending time with some people. Several people in the scene, mostly women, lived with older relatives, looked after young children, or resided in other settings where they had to hide their drug use. Spending time alone with younger women was especially tricky—I was warned early in my fieldwork that a person's car parked in front of someone else's house was enough to start speculation that the two were dating. Other people had inconsistent phone and internet access that made it difficult to stay in contact with them, since I was extremely hesitant to surprise people or intrude on their personal space by visiting their homes unannounced. Still others, like Aaron and Antoinette, were often out of town; I tended to only see them when they met up with other members of the scene. These facts and exigencies of small-town life shaped whose perspectives contributed to my understanding of the scene. To compensate, I made sure to ask the women with whom I developed rapport, including Isabel and Tasha in Oak County and Alex in Sage County, for their perspectives on the people with whom I spent more time (for instance, their complaints in Chapters 6 and 7 about being manipulated by men who sold heroin). I also gathered additional information on some research participants' lives, families, and backgrounds from local newspapers, which published granular personal information like birthday announcements, school awards and graduating class lists, write-ups of youth sporting events, and lengthy blotters of accidents and law enforcement activity.

As I mentioned in the Introduction, providing harm reduction supplies during my fieldwork was an ethical obligation for me rather than a research activity. It would have been unconscionable to withhold new health supplies to which I had ready access from people who

were engaged out of desperation and necessity in high-risk drug use, especially because syringe sharing had already contributed to massive outbreaks of HIV in nonurban places (Peters et al. 2015). I have emphasized at several points how important harm reduction experience was for my ethnographic access; it also proved valuable for building trust and rapport with people who used drugs. My willingness to bring supplies free of charge seemed highly persuasive of my motives. Handling syringes and discussing the practical intricacies of injection drug use also helped make some people more comfortable using drugs in front of me by showing that I would not be shocked or squeamish. I tried to provide a similar range of supplies to what could be obtained from a syringe services program. This including new syringes, cookers, cottons, tourniquets, disinfecting wipes, ampoules of sterile water, naloxone kits, fentanyl test strips, and biohazard disposal containers to collect used supplies. I also offered to collect full biohazard containers and drop them off at disposal sites if people were unable or reluctant to do so themselves. I was conscious that giving out supplies had the potential to contribute to resource inequalities within drug scenes if those who received the supplies withheld them from those who needed them. Though this concern did not outweigh my ethical obligation to help those whom I could, I tried to prevent gatekeeping by giving supplies to people who occupied different positions and reached different niches of the scene. For instance, I regularly gave supplies directly to Alex to share with those who could not get them from Ray, and left supplies with Mark to give out in my absence.

Several factors converged in spring 2019 to bring my fieldwork to a close. With Mark's passing I lost my stable lodging in Sage County. A short time later my roommate in Acorn decided to move away as well. I looked for other housing, but as when I had searched two years prior, rental listings were scarce and openings sporadic. I was also exhausted from over two years of almost constant travel and from compounding tragedies and disasters, including deadly wildfires that ravaged communities across California. I continued to visit Oak County during the remainder of 2019 to keep in touch with Drew and others, making day trips or staying over with friends in the area. But the onset of the COVID-19 pandemic in March 2020 and the interruption of all in-person research put an end to my regular travels. That the termination of my time in the field was only partially voluntary and in response to tragedy left me with regret. The circumstances of my departure from the field and my inability to continue visiting people with whom I had become close was difficult. Since my continued access and relationships with members of local drug scenes seemed directly related to my time spent around town, and since many of them lacked consistent phone or internet access, being away meant losing reliable contact. I have stayed in touch with Drew, Beverly, and several others over the two years since but have not resumed regular research activities in the mountains.

Lessons

In closing I will mention three lessons. First, regarding the unique challenges of fieldwork in small and remote places. Urban ethnographies typically focus on one or a few compact block groups, housing developments, or neighborhoods—even a single establishment (Anderson 2003 [1976]; Small 2004; Stuart 2016; Tavory 2016). Restricting spatial scope allows for more intensive observation and makes it more likely that the ethnographer can be on the scene for whatever happens in the site. Ethnographers of nonurban life face a choice between attempting the same intensity of focus by selecting a single locale (Sherman 2009; Garcia 2010; Macgregor 2010)—with the risk that the chosen site proves unfruitful or unusual—or sacrificing

some depth for breadth and scale by spreading their attention across multiple towns or counties (Garriott 2011).¹²⁵ I tried to split the difference between these two approaches by canvassing a broad swath of counties to detect consistent themes while diving more deeply into a few to capture social life in detail and over time. Aside from the analytic tradeoffs, the decision presents practical challenges, especially in western states like California where counties can be as large as entire East Coast states. My decision to pursue multisite fieldwork entailed costs in time, both day-to-day on the road and overall to collect adequate data, money for gas, food, lodging, and other travel expenses, and energy to maintain relationships at a distance. I could not fully anticipate these costs at the outset of the project.

Second, with respect to multisite ethnographic research. Though I originally planned my project comparatively and conducted fieldwork between a variety of sites, in this dissertation I have been less interested in direct, systematic comparison across place categories than in synthesizing my evidence across multiple counties in service of a consistent argument about drug use and social life in small and remote places. As I described above, this shift away from a comparative design was driven in part by practical exigencies and the investment of time and resources it took to maintain ethnographic access in the backcountry. It was difficult to develop parallel access in multiple places to which I was newcomer. As a solo researcher, conducting simultaneous comparisons across lengthy distances proved especially challenging. But given the rapidly changing character of the overdose crisis I was concerned that conducting sequential fieldwork would end up comparing two different phases of the crisis.

Despite the nonurban focus of the project as it was realized, it was still important for me to conduct fieldwork in multiple sites for at least three reasons. First, as I mentioned above, as a means of checking whether the places I spent most of my time were similar enough to their regional neighbors to justify my focus on them. Second, a single county the size of Oak or Sage offered a finite number of research participants: many county departments employed fewer than ten or fifteen employees total, only a handful of whom worked on drug-related topics. Miniature departments meant recruiting specific individuals was more important: if a county only employed a few people in a given occupation, rejection by even one of them could have locked me out of entire an organization or institution. Though my fears of rejection were rarely confirmed, covering multiple small counties gave me more opportunities to gain solid ethnographic access and helped me meet more people and collect more data than would have been possible in a single county.

Third, concerning the relationship of ethnographic fieldwork to time. Because of the time it takes to collect and analyze mortality data from across the country, our scientific understanding of the scale and development of the overdose crisis is always outdated (Fliss et al. 2021). Final mortality data is released on approximately a one-year lag.¹²⁶ When I was designing this project in 2016, the most recent mortality data available was from 2015 and most research

¹²⁵ In his study of methamphetamine policing in West Virginia, Garriott (2011: 13) chooses to write about the five-county region he studied as if it were one county “to better insure the anonymity” of his participants. Since I was studying concrete relationships between people who use drugs and local officials and service providers who lived alongside each other, I gave all people and places pseudonyms but did not change who lived in which place.

¹²⁶ As a result of recent efforts by the National Center for Health Statistics, provisional overdose data is now released only 3 to 9 months after the period in which the deaths occurred (Rossen et al. 2021).

concerning the crisis relied on data from the first half of the 2010s or earlier. So while I tried to pick counties with high opioid overdose rates as potential fieldsites, all I could be sure of is that I was picking counties that *had high overdose rates several years prior*. At that time, a major research question was why opioid-related deaths seemed to be transitioning away from pharmaceuticals toward heroin (Cicero et al. 2014; Mars et al. 2014; Compton et al. 2016). Fentanyl was an emerging problem in the eastern half of the United States that was not fully understood, and it remained an open question whether and how it would spread to western states where tar heroin was more common (Ciccarone 2017). The CDC Guideline that would be used to in Oak County to justify further restrictions on opioid prescribing was new (Dowell et al. 2016), though concerns over its potential impacts had already appeared (Pergolizzi et al. 2016). What qualitative research had been published on nonurban opioid use focused mainly on Appalachia with little evidence from other regions (Thomas et al. 2019). These were the debates that oriented the empirical research questions I initially took into the field.

It was not until I had completed my fieldwork that data and research covering the years 2017 to 2019 was released and I was able to put my decisions about research design into fuller context. In hindsight, the years of my fieldwork likely postdated the initial peak of the overdose crisis in nonurban California (see Figure 4). By the time I entered the field the national transition from pharmaceutical to illicit opioids was pushing up urban overdose rates compared to nonurban rates, while the appearance of fentanyl in powder heroin markets was pushing up overdose rates in eastern states relative to western states. Each of these developments made nonurban California seem, in hindsight, like a less critical empirical case than when I had planned the project. And while I wondered in 2017 if I would observe the rise of fentanyl on the West Coast directly, that regional trend accelerated most rapidly in 2019 as my fieldwork drew to a close (Shover et al. 2020; West et al. 2021). Team-based rapid ethnographic assessments have been crucial for elucidating ground-level changes in drug markets, drug use practices, and overdose risks (Ciccarone et al. 2017; Broz et al. 2018; López et al. 2021). But my more exploratory, longer-term, solo fieldwork across multiple sites proved better suited to investigate the effects of more durable physical, social, and symbolic structures and the organizational and interactional processes they generate.