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Improving Bioterrorism Response in Los Angeles County: Helping the UCLA Center for Public Health and Disasters Make a Good Plan Better

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# **Improving Bioterrorism Response in Los Angeles County: Helping the UCLA Center for Public Health and Disasters Make a Good Plan Better**

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16 May 2005

**UCLA**  
SCHOOL OF  
PUBLIC AFFAIRS  
Department of Public Policy

**UCLA**

THE RALPH & GOLDY LEWIS CENTER FOR REGIONAL POLICY STUDIES

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## Acknowledgements

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William Shakespeare once wrote “Wisely, and slowly. They stumble that run fast.” The second part of that statement often resembled our progress on this Applied Policy Project (APP). The first part always reflected the advice of our advisor, Dr. Arleen Leibowitz. We would like to thank her for picking us up so often after we stumbled.

We would also like to thank our client, the UCLA Center for Public Health and Disasters. They gave us their time, their expertise, and their critical eye. Dr. Kimberly Shoaf has been our toughest critic and our greatest supporter. We did a better job because of her. Dr. Steven Rottman graciously allowed two-thirds of our group to be a little tardy to class from time to time. This paper is our excuse. We also want to thank Jason Cuomo and Allison Kamerman for putting up with our incessant questions and pleas (as well as for not kicking us out of the office).

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We also need to thank the subjects of our “laugh tests.” Put simply, we approached three individuals during the final stages of this paper, and we would have cried if you laughed. Governor Michael Dukakis, Lieutenant John Sullivan of the Los Angeles Terrorism Early Warning Group, and Dr. Sam Stratton of the UCLA School of Public Health provided us with feedback and guidance that made our APP better. Major General Dennis Kenneally (Retired) of the California National Guard was also an invaluable resource.

Dr. Robert Kim-Farley, the author of the current smallpox response plan for Los Angeles County, was willing to sit down with us and provide us with the confidence that our recommendations were sound. Our APP began as a rather audacious attempt to make his plan better, and we were only able to accomplish that goal with his help.

Finally, we must acknowledge Maciek Kolodziejczak and Kyna Williams. Many people in the department fail to recognize that everything would simply stop working — including the APPs — were it not for their tireless care and attention.

To all of those we have mentioned, it is your fault if we did this paper well. We take credit for the rest.

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## Acronym Glossary

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<b>Acronym</b>	<b>Meaning</b>
APP	Applied Policy Project
CA NG	California National Guard
CDC	Centers for Disease Control and Prevention
CPHD	Center for Public Health and Disasters
CRI	Cities Readiness Initiative
DMAT	Disaster Medical Assistance Team
EMS	Emergency Medical Services
EOC	Emergency Operations Center
FTS	Field Treatment Sites
LAC	Los Angeles County
LAC-DHS	Los Angeles County Department of Health Services
LAC-EOC	Los Angeles County Emergency Operations Center
MOU	Memorandum of Understanding
NDMS	National Disaster Medical System
NORTHCOM	U.S. Northern Command
OES	Office of Emergency Services
PHO	Public Health Officer
PODs	Points of Dispensing
SNS	Strategic National Stockpile
TEW	Terrorism Early Warning Group
USPS	United States Postal Service



## Executive Summary

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This Applied Policy Project (APP) focuses on ways to improve response in Los Angeles County (LAC) to a smallpox or plague bioterrorist attack. We are undertaking this study to assist the UCLA Center for Public Health and Disasters (CPHD) with long term planning for this kind of crisis. This APP makes use of publicly available LAC terrorism and emergency plans, academic works, news stories, and forty interviews to thread together how LAC would respond to a smallpox or plague emergency.

We divide the paper into four components: patient surge, decision making, dispensing medication, and security. Within each of these four problem areas, we identify specific problems. We then propose possible options and assess these options based upon criteria specific to the individual problem. Throughout the report, we rank an option's ability to fulfill the criteria and choose the highest ranking options as our recommendations.

### Problem Area One: Patient Surge

Problem 1: With no pre-designated sites for smallpox or plague patient treatment, LAC must rely on current hospital facilities and risks spreading the disease to non-infected patients and hospital staff.

- Recommendation. The Los Angeles County Department of Health Services (LAC-DHS) should identify alternative suitable locations near some of the larger hospitals and create Memoranda of Understanding (MOUs) with these facilities, establish Field Treatment Sites (FTS) augmented by mobile clinics for hospitals which have already received infected patients, and activate the alternate locations for unaffected hospitals.

### Problem Area Two: Decision Making

Problem 2A: There is no systematic way to provide the public health officer with updated information in a timely manner.

- Recommendation. The status quo is the best alternative, but it should be augmented by the MOU Summary. Under the current plan, the public health officer would have major police, fire, and EMS personnel at his disposal in the LAC-EOC to answer his questions. He could also obtain information about cities by contacting their EOCs. We also recommend that LAC-DHS collect MOUs and summarize them to guide the health officer's decisions.

Problem 2B: While the Governor needs to make important decisions, there is no system in place to educate the Governor or Governor's staff about questions they will face in this kind of emergency.

- Recommendation. The CPHD should work with the CA Department of Health Services and the Governor's Office of Emergency Services to recommend that a member of the Governor's personal staff receive training on issues that will confront the Governor during a bioterrorist crisis.

## Executive Summary

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Problem 2C: The agencies involved in response have clashing cultures and know little about one another.

- Recommendation. As a frequent author of County-wide terrorism scenarios, including a recent anthrax exercise, and a patron of LAC-DHS, the CPHD is uniquely positioned to advocate for an exercise devoted to smallpox or plague to help build interagency communication on this issue.

### Problem Area Three: Dispensing Medication

Problem 3A: There is a shortage of medical personnel to mass vaccinate the public during a smallpox emergency.

- Recommendation. LAC should establish a thorough program which recruits students from some of the larger medical, nursing, dentistry, and veterinary schools in our area as smallpox vaccinators.

Problem 3B: The plan to use the USPS to dispense antibiotics adds unnecessary complexity to bioterrorism response.

- Recommendation. The CPHD should use its relationships at the CDC and the National Association of State and County Health Officials to advocate for the reorientation of this program. It is too confusing to have two different plans for bioterrorism.

### Problem Area Four: Security

Problem 4: There are not enough law enforcement personnel in Los Angeles to secure the SNS and maintain civil order.

- Recommendation. The CPHD should help LAC prepare MOUs with large security guard companies in the greater Los Angeles area. Law enforcement officials can plan to pair security guards with police officers as partners to mitigate concerns about political feasibility. As an incentive, the MOUs can include provisions to vaccinate security guards and their families before the general public.

## Introduction

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*“The time to repair the roof is when the sun is shining.”  
--John F. Kennedy*

The Centers for Disease Control and Prevention (CDC) identifies potential bioterrorist weapons which pose the most risk to the public as “Category A Agents.” These diseases include anthrax, botulism toxin, pneumonic plague, smallpox, tularemia, and viral hemorrhagic fever. Within this group, smallpox, plague, and hemorrhagic fever pose the greatest risk of secondary transmission. Smallpox and plague were also mass produced by the former Soviet Union and might have fallen into non-Russian hands.<sup>1</sup>

### **The UCLA Center for Public Health and Disasters**

If smallpox or plague were released Los Angeles County (LAC), then the complex characteristics of our community would present challenges for responders and decision makers. LAC is comprised of 88 cities covering about 4,000 square miles. With a highly mobile population, a contagious disease like smallpox or plague could spread quickly before public health authorities even recognize the outbreak. With widely dispersed hospitals and medical offices, victims of an attack would appear at many different locations. With an ethnically diverse population, LAC responders would contend with residents who speak over 170 languages.<sup>2</sup>

One way the Federal government has confronted this challenge is by designating Centers for Public Health Preparedness at forty-one colleges and universities across the country. The CDC funds these Centers to work with state and local partners to respond to bioterrorism and other public health threats. The UCLA Center for Public Health and Disasters (CPHD) serves this function for LAC.<sup>3</sup>

In 1997, UCLA established the CPHD in the School of Public Health’s Department of Community Health Sciences. In addition to teaching courses and conducting research at UCLA, the CPHD offers training to diverse audiences throughout this region. In fact, many professionals throughout the region have been trained by the CPHD.<sup>4</sup>

Last December, the CPHD agreed to serve as the client for this APP. We are undertaking this study to assist the CPHD with long term planning for bioterrorist attacks with smallpox and plague. In addition to granting us their own time and providing direction over the course of this project, the CPHD’s wide range of contacts and relationships in the fields of public health and disaster management made this APP better.

Many of the CPHD’s audiences include local and State public health agencies, community-based organizations, schools, hospitals, and agencies in the public and private sector. For the purposes of this APP, the CPHD’s partnership with the Los Angeles Department of

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<sup>1</sup> Shoaf presentation, 26 Jan 05; Bioterrorism, pp. 100-101 and 121-122.

<sup>2</sup> Grigsby presentation, 26 Jan 05.

<sup>3</sup> [www.cphd.ucla.edu](http://www.cphd.ucla.edu).

<sup>4</sup> *Ibid.*

## Introduction

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Health Services (LAC-DHS) is vital. A recent anthrax tabletop exercise hosted by the CPHD brought together a varied list of agencies and organizations, including the Federal Bureau of Investigation, the U.S. Postal Service (USPS), the California Department of Health Services, the American Red Cross, the Los Angeles Fire Department, the Los Angeles Police Department, the Los Angeles Mayor's Office, as well as LAC-DHS and other County agencies.<sup>5</sup>

### **The Current Smallpox and Plague Plan for Los Angeles County**

The general public does not have access to the LAC smallpox or plague response plans. This APP makes use of publicly available LAC terrorism and emergency plans, academic works, news stories, and nearly forty interviews to thread together how LAC would respond to a smallpox or plague emergency. The interviews, in particular, made us realize that the response portion of any smallpox or plague emergency would include four essential components.

Patient Surge. Hospitals and their staff will witness a sudden surge of patients with flu-like symptoms. Such a surge could trigger medical personnel to send blood samples to the State Health Laboratories and the CDC. These agencies can confirm the presence of smallpox or plague, but the real issue is what to do with infected patients.<sup>6</sup>

Decision Making. Once the labs confirm the presence of a biological agent, the emergency decision making apparatus for LAC assembles to confront the emergency. At the top of this apparatus is the incident commander, LAC's Public Health Officer, Dr. Jonathan Fielding. The most important question facing Dr. Fielding will be whether to recommend that Governor Arnold Schwarzenegger ask the Federal government for nationally stockpiled medication to fight the outbreak.<sup>7</sup>

Dispensing Medication. If Governor Schwarzenegger requests medications from the Federal government, the vaccines for smallpox or antibiotics for plague will be drawn from the Strategic National Stockpile (SNS). The SNS is designed to supply the American public with pharmaceuticals during a public health emergency. If necessary, the SNS could supply vaccines or antibiotics to every person in the United States. Once requested, the Federal government could transfer supplies from one of 12 SNS storage facilities to a warehouse in Los Angeles within 12 hours. LAC would then distribute these medications to the public through 200 Points of Dispensing (PODs) scattered throughout our area.<sup>8</sup>

Security. The cumulative needs of securing these 200 locations, local hospitals, and a panicked public will stretch the combined strength of all law enforcement in LAC to its limit. To meet these needs, local police will initially form mobile field forces with approximately 59

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<sup>5</sup> *Ibid.*; CPHD "Operation Rolling Show Participant List," 26 Jan 05.

<sup>6</sup> Bioterrorism, pp. 103 and 111.

<sup>7</sup> Kim-Farley, et al., pp. 313-5

<sup>8</sup> Tao interview, 03 Feb 05; [www.bt.cdc.gov](http://www.bt.cdc.gov)

## Introduction

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personnel to secure the PODs and hospitals. They may also look to the military to assist with security operations and to help maintain law and order.<sup>9</sup>

This APP assumes that our area might need to become self-sufficient during a “worst case” smallpox emergency. It tells the story of an LAC response to a mass smallpox or plague event. The APP then highlights problems that might arise due to insufficient resources or knowledge during an outbreak and utilizes the CPHD’s position as a major player in planning for emergencies to make recommendations to remedy these problems.

We believe the current LAC plans would work well during a small scale or containable incident. Our APP attempts to take these plans and make them better. Specifically, we address the challenges brought on by a regional or national epidemic, which would reduce the resources available through mutual aid, or assistance from other jurisdictions.

*“Communities must learn to become self-sufficient. Don’t rely on mutual aid if it’s an infectious disease.”  
-Dr. Robert Kim-Farley, the author of the current smallpox response plan for LAC*

Many of the recommendations in this APP are the result of problems identified by our interviews. For each of our four areas, we spoke to as many experts who counsel LAC about terrorism as time permitted. At times, this process left us with comments that were not for attribution or information not for public distribution. Even these occasional limitations did not prevent us from recognizing recurring themes within the four major problem areas identified in our interviews:

### Problem Area One: Patient Surge

- Problem 1: With no pre-designated sites for smallpox or plague patient treatment, LAC must rely on current hospital facilities and risks spreading the disease to non-infected patients and hospital staff.

### Problem Area Two: Decision Making

- Problem 2A: There is no systematic way to provide the public health officer commander with updated information in a timely manner.
- Problem 2B: While the Governor needs to make important decisions, there is no system in place to educate the Governor or Governor’s staff about questions they will face in this kind of emergency.
- Problem 2C: The agencies involved in response have clashing cultures and know little about one another.

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<sup>9</sup> Kim-Farley, et al., p. 316.

## Introduction

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### Problem Area Three: Dispensing Medications

- Problem 3A: There is a shortage of medical personnel to mass vaccinate the public during a smallpox emergency.
- Problem 3B: The plan to use the USPS to dispense antibiotics adds unnecessary complexity to bioterrorism response.

### Problem Area Four: Security

- Problem 4: There are not enough law enforcement personnel in Los Angeles to both protect the SNS and maintain security.

For each problem, we propose possible options and assess these options based upon criteria specific to the individual problem. Many of these criteria revolve around political, financial, and administrative feasibility, but the most important criteria are often the speed of implementation or execution. Throughout the report, we rank an option's ability to fulfill the appropriate criteria and choose the highest ranking options as our recommendations.

## Problem Area One: Patient Surge

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### Detecting Bioterrorism in the Current Plan

Before responding to a smallpox or plague outbreak, the public health system must become aware of the disease. The first receivers during a smallpox outbreak are the hospitals across LAC. Smallpox (*variola major*) typically incubates from 12 to 14 days. After this period, patients will develop high fever, malaise, and prostration due to headache or backache. Finally, a rash will develop. It is during the rash period of the disease that smallpox patients are infectious to others. It is important to note that the rash may develop first in the victim's throat, where it would be hidden. Someone with smallpox sores in the throat can transmit the disease to others by coughing.<sup>10</sup>

Since the initial symptoms reflect those commonly associated with the flu and smallpox control measures successfully eradicated the disease nearly three decades ago, it is entirely possible that doctors will misdiagnose the disease. LAC-DHS is conducting an ongoing campaign to raise awareness about the disease to prevent this from happening.<sup>11</sup> A doctor who suspects smallpox will send samples to both the CDC and the State Health Laboratory for investigation. Within a short time, these labs can confirm a case of smallpox.<sup>12</sup>

Similarly, plague (*Y pestis*) would resemble a severe respiratory illness with fever, cough, shortness of breath, and chest pain. Symptoms of plague occur within one to six days of exposure and the patient deteriorates rapidly before death. After sending samples to the CDC and State Health Laboratory, confirmation should occur within 24 to 48 hours.<sup>13</sup>

Surge Capacity. A sudden surge of patients with flu-like symptoms can be a telling sign to medical professionals that there has been a bioterrorist attack. Given LAC's population of over 10 million people (excluding commuters, travelers, and undocumented workers), such a surge could quickly overwhelm the resources of local hospitals. When the Federal government conducted a mock plague outbreak exercise in May 2000 in Denver, Colorado, the disease overwhelmed the number of staff, equipment, and available beds within three days.<sup>14</sup> Los Angeles has only approximately 23,000 hospital beds available — one for every 435 citizens.<sup>15</sup>

While public information does not indicate that specific measures to address surge capacity are a current part of the LAC Smallpox Preparedness, Response, and Recovery Plan, the LAC-DHS Emergency Plan does provide some potential remedies to this issue. These include the following measures:

- Field Treatment Sites (FTS) staffed and supplied by LAC-DHS on hospital grounds to treat non-critical patients.

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<sup>10</sup> Bioterrorism, p. 103.

<sup>11</sup> *Ibid.*, 111; Klein, et al., p. 256.

<sup>12</sup> *Ibid.*, p. 111.

<sup>13</sup> *Ibid.*, p. 128.

<sup>14</sup> Inglesby, et al., p. 438.

<sup>15</sup> California Healthcare Association, 2004 Member Hospitals and Health Systems.

## Problem Area One: Patient Surge

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- Using mobile clinics (LAC currently has five) with LAC-DHS medical staff and supplies to treat patients near major shelters, including American Red Cross shelters.
- These mobile clinics could be augmented by additional clinics from the Los Angeles Coalition of Mobile Medical Units, through the State or Federal governments, or through blood collecting and HIV testing vehicles owned by non-profit organizations.
- The power to designate private facilities such as hospitals, clinics, and skilled nursing facilities as Casualty Collection Points.<sup>16</sup>

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<sup>16</sup> The Los Angeles County Department of Health Services Emergency Plan, Volume 1, available at [www.ladhs.org/ems](http://www.ladhs.org/ems).



## Problem Area One: Patient Surge

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**Problem 1: With no pre-designated sites for smallpox or plague patient treatment, LAC must rely on current hospital facilities and risks spreading the disease to non-infected patients and hospital staff.**

Although hospitals are the first places that smallpox or plague patients would likely turn to, they are actually the last places where public health personnel should want them to go. Smallpox and plague prey upon groups with suppressed immune systems or patients with special needs — especially patients with cancer, HIV, hereditary immunodeficiency disorders, and pregnant women. These groups also have special problems with various treatments for either smallpox or plague. Nevertheless, they are also likely to inhabit a hospital at any given time.<sup>17</sup>

Smallpox, in particular, finds a hospital to be a good environment for spreading. The bed sheets and clothes of smallpox patients require stringent decontamination techniques to ensure their safety. In addition, the corpses of smallpox victims can infect the living.<sup>18</sup>

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### CRITERIA

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1) *Administrative Feasibility*. Can the agencies reasonably implement the option? Even if implementation is possible, are the complexities of doing so unreasonable?

2) *Political Feasibility*. How much opposition will the option or its outcome generate?

3) *Quickly Executable*. How quickly could this option be exercised in an emergency?

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### ALTERNATIVES

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We considered two alternatives for this problem: pre-designation and the status quo.

#### Pre-Designation: Pre-designate non-hospital treatment facilities throughout Los Angeles

This option would involve activating pre-designated treatment facilities throughout LAC once the CDC and/or State Laboratories confirm the presence of smallpox or plague. Pre-vaccinated medical staff and volunteers could man these facilities.

The CPHD could offer its expertise to write Memoranda of Understanding (MOUs) between LAC-DHS and these facilities. The CPHD could also offer to help adjust current LAC-DHS communications templates to give people information about where they are located.

1) *Administrative Feasibility*. (+) LAC-DHS and the CPHD have the necessary expertise to expedite the MOU drafting process and adjust public communications messages.

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<sup>17</sup> Bioterrorism, pp. 115 and 130; Eads interview, 14 Feb 05.

<sup>18</sup> *Ibid.*, p. 115

## Problem Area One: Patient Surge

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2) *Political Feasibility*. (-) Private facilities might chafe at the idea of pre-designating themselves as repositories for smallpox or plague patients.

3) *Quickly Executable*. (+) Based upon the facility's proximity to the hospitals, this plan can be executed very quickly.

### Status Quo: Do Nothing, and Let Present Trends Continue

As described earlier, LAC-DHS currently has a plan to respond to any situation that might arise. In particular, the FTS, mobile clinics, and the ability to declare Casualty Collection Points are promising.

1) *Administrative Feasibility*. (-) Even if this option looks good on paper, the complexities of establishing FTS and requisitioning additional mobile clinics are daunting.

2) *Political Feasibility*. (+) Maintaining the status quo will cause no political difficulties.

3) *Quickly Executable*. (-) In the event of a smallpox or plague emergency, this option will take considerable time to execute.

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## COMPARISON OF ALTERNATIVES

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**Decision Matrix 1**

	Administrative Feasibility	Political Feasibility	Quickly Executable	Score
Pre-Designation	1	2	1	4
Status Quo	2	1	2	5

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## RECOMMENDATION

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Before labs can determine the presence of smallpox or plague, some hospitals in LAC will probably already have infected patients. Decontaminating a hospital with smallpox or plague can be a vast undertaking and can cost valuable time during this kind of emergency. The current LAC-DHS plan to establish FTS staffed by mobile clinics can help to keep all but the most critical patients out of the hospitals and away from vulnerable populations. Nevertheless, LAC-DHS should have plans in place to protect unaffected hospitals and their populations. LAC-DHS should accomplish the following tasks:

- Identify alternative suitable locations near some of the larger hospitals and create MOUs with these facilities. See Appendix C for a list of large hotels near the five largest hospitals in LAC.

## Problem Area One: Patient Surge

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- Establish FTS augmented by mobile clinics at hospitals *that have already received infected patients*.
- Activate the alternate locations for *unaffected* hospitals.
- Write MOUs with additional blood collecting and HIV testing mobile units controlled by non-profit organizations like AIDS Project LA and Bienestar. See Appendix C for a short list of organizations that perform these tasks and their contact information.<sup>19</sup>

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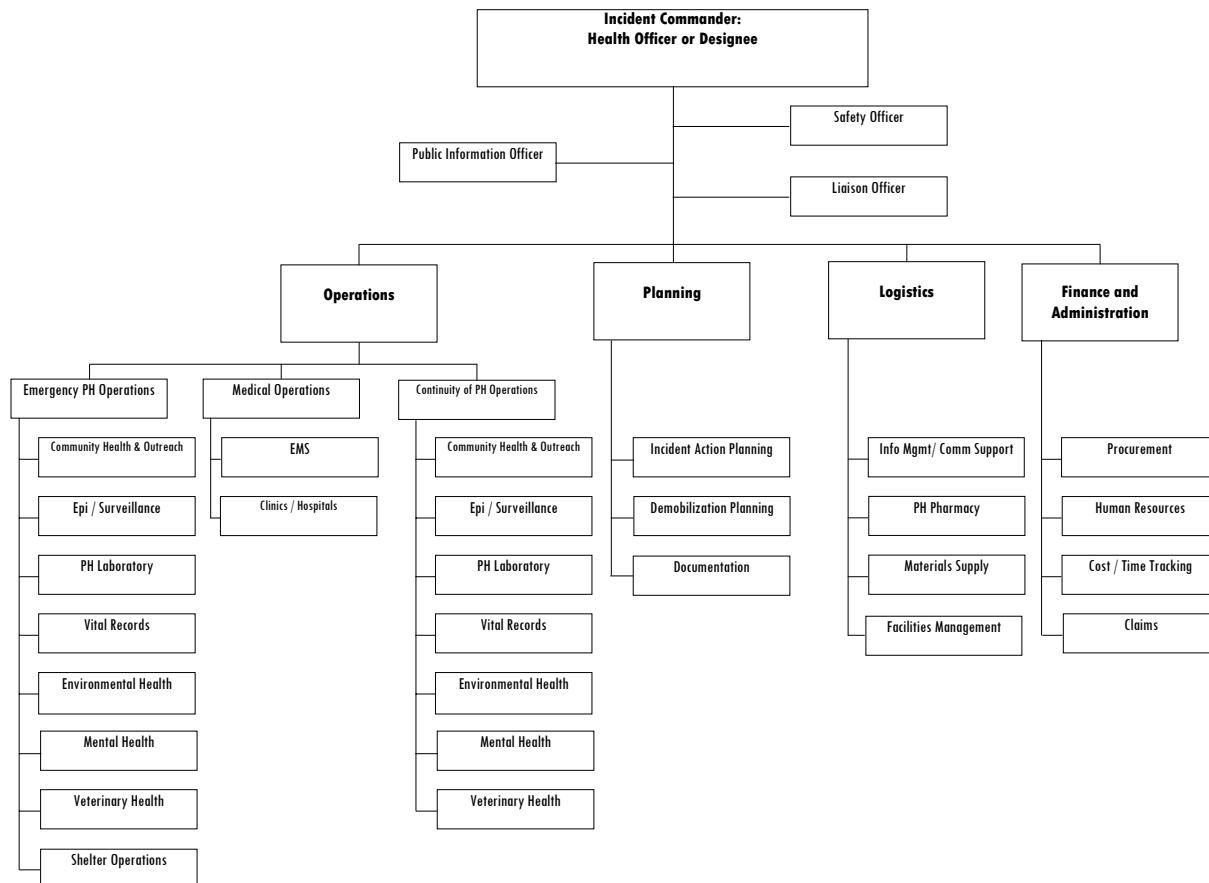
<sup>19</sup> Leibowitz interview, 01 Mar 05.

## Problem Area Two: Decision Making

### Decision Making in the Current Plan

Once the CDC and State Health Laboratories determine that the sickness affecting the citizens of Los Angeles is smallpox or plague, the “response” portion of the LAC Smallpox Preparedness, Response, and Recovery Plan begins. This process would be identical for plague.

### **Incident Command System for Public Health Agencies**



**Figure 1: Diagram of the Incident Command System<sup>20</sup>**

The initial phases of the plan designate the LAC Director of Public Health and Health Officer (PHO) as the “incident commander.” The PHO actually shares the position of incident commander with the LAC Sheriff for bioterrorist incidents, but all decisions and authorities described in this report fall under the domain of the PHO. In this case, that person would be Dr. Jonathan E. Fielding, the LAC-PHO. The chart above shows that Dr. Fielding’s responsibilities

<sup>20</sup> Diagram courtesy of Dr. Kim Shoaf, CPHD

## Problem Area Two: Decision Making

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include overall operational responsibility, risk communication to the public and other agencies, safety and security measures, and liaison with other levels of government. Dr. Fielding would manage the LAC-DHS Emergency Control Center with the Sheriff and the LAC Emergency Operations Center (LAC-EOC). In a county-wide smallpox or plague incident, the plan dictates when to open the LAC-EOC.<sup>21</sup>

Overall Operational Responsibility. Once the LAC-EOC is open, communications work begins immediately for “lead” agencies. LAC emergency plans define lead agencies as departments which are current voting members of the County Emergency Management Council (and the Coroner’s Department). These agencies include the following: the Chief Administrative Office, the Department of Public Works, the Coroner’s Department, the Sheriff’s Department, the Department of Public Social Services, the Department of Health Services, the Department of Mental Health Services, the Department of Internal Services, and the Fire Department. The lead agencies provide a point of contact between the LAC-EOC and their contact departments during an emergency. Appendix E contains a list of lead agencies and their contact departments. This is especially important because only the lead agencies have access to the Emergency Management Information System, which gives real time estimates of casualty and devastation statistics. Beyond the County-level departments, the LAC-EOC contacts individual cities within LAC through secure channels to get them to provide specific information.<sup>22</sup>

Risk Communications to the Public. As a part of their own emergency plan, LAC-DHS has several “canned” messages about potential emergencies that could face LAC. These messages would be modified for a smallpox or plague emergency.<sup>23</sup>

Security and Safety. The incident commander would also focus on security issues at the macro level. One of the issues, falling under “Planning/Intelligence,” is whether or not to issue a quarantine or shelter-in-place order. The implementation of this order would involve communication with the Governor and Federal officials.<sup>24</sup>

Liaison. Finally, the incident commander would need to communicate with the State and Federal governments. Under Federal protocols, the Governor’s Office that must make the official request from the CDC or the Department of Health and Human Services to receive the Federal stockpile of pharmaceutical supplies, the Strategic National Stockpile (SNS). The Epidemiologic Surveillance cell in Figure 1 should give Dr. Fielding the necessary information to make a recommendation to the Governor’s office about requesting the SNS.<sup>25</sup>

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<sup>21</sup> Kim-Farley, et al., pp. 313-315.

<sup>22</sup> The Los Angeles County Department of Health Services Emergency Plan, Volume 1, available at [www.ladhs.org/ems](http://www.ladhs.org/ems); the Los Angeles County Operational Area Terrorism Plan, March 2003, available at [www.lacoa.org/Library](http://www.lacoa.org/Library).

<sup>23</sup> The Los Angeles County Department of Health Services Emergency Plan, Volume 1.

<sup>24</sup> Kim-Farley, et al., pp. 315-6.

<sup>25</sup> *Ibid.*; <http://www.bt.cdc.gov/stockpile>.

## **Problem Area Two: Decision Making**

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We identified three problems regarding the implementation of response at the decision making level:

Problem 2A. There is no systematic way to provide the public health officer with updated information in a timely manner.

Problem 2B. While the Governor needs to make important decisions, there is no system in place to educate the Governor or the Governor's staff about questions they will face in this kind of emergency.

Problem 2C. The agencies involved in response have clashing cultures and know little about one another.

## Problem Area Two: Decision Making

### Problem 2A

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#### **Problem 2A: There is no systematic way to provide the public health officer with updated information in a timely manner.**

As the PHO handles the initial phase of a smallpox or plague crisis, current plans will allow him to get up to date information about the size and the scope of the outbreak. The current plan also details how many first receivers (medical personnel) and first responders (police, fire fighters, etc.) Dr. Fielding will need to make an adequate response. Nevertheless, he may not know what assets are available to him because of systemic issues with information management. This applies to conventional resources, such as response personnel, and unconventional resources, such as volunteers or supplies available through MOUs. This would probably not be a weakness in a controllable and localized smallpox or plague epidemic, but it would be a major liability in the event of a regional or statewide crisis when mutual aid might not be available.

As documented in Appendix F, the incident commander does have a few raw numbers with which to work. While these numbers will be useful, they are somewhat misleading. For example, the figure of 18,000 EMS personnel reflects EMS workers at both hospitals and elsewhere. In a crisis, the already overtaxed hospitals could not and would not divert their workers to vaccine or antibiotic distribution sites.<sup>26</sup> In addition, the fire and police numbers do not reflect shift status or baseline duty requirements that will continue despite the emergency.

To assist them with a crisis, EMS, police, fire, and other departments often have volunteers and MOUs with other agencies, private entities, or non-profit organizations to assist them. The current plan does not take these additional resources into account.

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### **CRITERIA**

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1) *Administrative Feasibility.* Can the agencies reasonably implement the option? Even if implementation is possible, are the complexities of doing so unreasonable?

2) *Financial Feasibility.* What would it cost to establish this alternative as a program?

3) *Quickly Implementable.* How long would it take to put the desired option in place?

Weighting: Getting accurate information into the hands of the incident commander by quickly implementing an option is key during and infectious disease outbreak. This criterion is therefore weighted as twice as important as all others.

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<sup>26</sup> Goodman interview, 17 Feb 05.

## Problem Area Two: Decision Making

### Problem 2A

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#### ALTERNATIVES

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We considered four alternatives for this problem: a comprehensive plan, a MOU summary, a comprehensive database, and the status quo.

#### Comprehensive Plan: *A Detailed, Comprehensive Plan that Includes All Manpower Assets*

LAC (i.e., the Los Angeles Operational Area) currently has a generic plan for smallpox, but does not have a full scale, detailed plan.<sup>27</sup> The CPHD could assist LAC-DHS with beginning such a plan under its advisory capacity for Focus Area A funds. These funds are targeted toward responding to bioterrorist emergencies “through the development, exercise, and evaluation of a *comprehensive* public health emergency preparedness and response plan.”<sup>28</sup> As a part of a network of CDC Centers for Public Health Preparedness, the CPHD is uniquely situated to obtain plans from other large urban areas to obtain “best practices” and review any comprehensive plan put forward by LAC or its individual cities. For example, the CPHD is currently reviewing the plan for the City of Long Beach.

1) *Administrative Feasibility.* (-) Even if LAC-DHS could devote the staffing needs necessary to create this plan, it would be subject to constant revision. As soon as a final plan was complete, it would be out of date.

2) *Financial Feasibility.* (-) The staff time required to produce a plan that accounted for all County-level manpower assets, as well as the manpower assets of LAC’s 88 cities would drive up the cost of this option. The CPHD would need to charge a fee to perform this task.<sup>29</sup>

3) *Quickly Implementable.* (-) Due to the administrative difficulties of ascertaining all manpower available in LAC, this option would take considerable time to execute.

#### MOU Summary: *Cataloging Existing MOUs in a Quick-Reference Format*

According to former County EMS Director, Dr. Sam Stratton, one of the biggest failings of the MOU system during disasters is that while all County MOUs are on file with County Counsel, there is no catalogue of these agreements. As an organization funded by the LAC-DHS, the CPHD could recommend that LAC-DHS collect these agreements and put them into an organized format to guide the decisions of the incident commander. Many of the MOUs are outdated, and some of them conflict with each other. LAC-DHS could review the MOU summary annually.<sup>30</sup>

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<sup>27</sup> Hutchens interview, 31 Jan 05.

<sup>28</sup> www.cdc.bt.gov.

<sup>29</sup> Kamerman interview, 14 Mar 05.

<sup>30</sup> Stratton lecture, 08 Feb 05.



## **Problem Area Two: Decision Making**

### **Problem 2A**

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1) *Administrative Feasibility.* (+) This option would require some staff time, but it would consist of going over to the County Counsel's office, pulling the MOUs, and summarizing their contents. The "one stop shopping" aspect of this option makes it very administratively feasible.

2) *Financial Feasibility.* (+) This option would not have a high price tag in terms of staff time. It could even be accomplished as a short-term summer project for an intern.

3) *Quickly Implementable.* (+) This option would not require extensive time to implement.

#### Comprehensive Database: *Creating a Database for Tracking All First Responders and Receivers*

The CPHD could use its grant writing expertise to recommend that the County look into technology devoted to responder information. The Mid-America Regional Council is developing such technology, and it might become an example of a best practice. The CPHD could also offer to evaluate the usefulness of such technology.

1) *Administrative Feasibility.* (-) The process of gathering data from across LAC is daunting due to the staff time required to input data. This is compounded by the constant necessity to ensure accurate data entry and updating.

2) *Financial Feasibility.* (-) The cost of this technology could be high, especially when taking account of staff time to enter data from all over LAC and training staff to use the new technology. The Mid-America Regional Council is currently developing such a database for the 116 jurisdictions in its area (8 counties in Missouri and Kansas). The database will cost \$2 million to create and approximately \$300 thousand per year to maintain (database management and technical support).<sup>31</sup>

3) *Quickly Implementable.* (-) This option would require extensive implementation time.

#### Status Quo: *Do Nothing, and Let Present Trends Continue.*

Under the current plan, Dr. Fielding would have major police, fire, and EMS personnel at his disposal in the LAC-EOC to answer any manpower questions that he might ask. He could also obtain information from city response personnel by having his staff contact local jurisdictions.

1) *Administrative Feasibility.* (+) This system is already in place.

2) *Financial Feasibility.* (+) This system is already in place.

3) *Quickly Implementable.* (+) This system is already in place.

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<sup>31</sup> May email, 21 Feb 05.

## Problem Area Two: Decision Making

### Problem 2A

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#### COMPARISON OF ALTERNATIVES

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**Decision Matrix 2A**

	Administrative Feasibility	Financial Feasibility	Quickly Implementable (Weighted X 2)	Score
Comprehensive Plan	4	3	8	15
MOU Summary	2	2	4	8
Comprehensive Database	3	4	6	13
Status Quo	1	1	2	4

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#### RECOMMENDATION

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The status quo is the best alternative, but it should be augmented by the MOU Summary. Under the current plan, Dr. Fielding would have major police, fire, and EMS personnel at his disposal in the LAC-EOC to answer his questions. He could also obtain information about cities by contacting their EOCs. We also recommend that LAC-DHS collect MOUs and summarize them to guide the PHO's decisions.

The Mid-America Regional Council's database may prove to be a wise long-term investment, but the technology is still unproven. The CPHD should monitor the development of their database to see if it would be feasible for LAC.

## Problem Area Two: Decision Making

### Problem 2B

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**Problem 2B: While the Governor needs to make important decisions, there is no system in place to educate the Governor or the Governor’s staff about questions they will face in this kind of emergency.**

Very few statewide elected officials anywhere in the country come to office trained to make the tough choices facing them in the event of a smallpox or plague crisis. Governor Schwarzenegger is not an exception to this general rule. The Governor is clearly a key player in bioterrorism response, and he will face several important decisions in a very short timeframe.

Whether to ask for the SNS. This decision should actually be a fairly easy one based upon the epidemiological material provided to the Governor and the advice of his staff, or other State staff with medical expertise. Nevertheless, medical officials may only call for enough medication to treat impacted areas, and the Governor may wish to provide medications to a larger population to allay public concerns.<sup>32</sup>

*“In a real scenario, decisions about prophylaxis would be a political decision, not a medical decision.”*  
—Inglesby, et al.

Whether to use State assets to vaccinate/treat all first receivers/responders or selected ones. When the Federal government conducted a mock plague outbreak exercise in May 2000 in Denver, Colorado, the Governor’s staff decided to vaccinate EMS personnel, police, hospital workers, and their families. This decision caused consternation among hospital workers because they ran short of drugs to treat patients. Although the SNS would arrive quickly (much more so than at the time of the Denver exercise), this could still be a problem in the short-term.<sup>33</sup>

Whether to issue travel restrictions. The Governor could use the news media to communicate instructions to the public, which would assist LAC with containing the disease. For instance, he could tell them to stay home or tell them how to report sick family members. On Day 1 of the exercise in Denver, the Governor’s staff chose to restrict travel in and out of the area.<sup>34</sup>

Whether to call up the National Guard or call for Federal troops. The current Public Affairs Officer of the California National Guard (CA NG), a former Major General who commanded the CA NG, and the current Governor of New York all agree that the Governor should keep the NG under his control (Title XXXII authority) during a crisis. The alternative is for the NG to be under Federal authority (Title X). Active Duty and Reserve Component military personnel are always under Title X; NG troops are under Title XXXII unless they are federalized. The case against using Title X authority is simple: the Governor will lose control of the troops to the

*“One of the most challenging tasks facing the National Guard is educating civilian policy makers.”*  
—Major General Dennis Kenneally, Retired (CA NG)

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<sup>32</sup> Kim-Farley, et al., p. 316.

<sup>33</sup> Inglesby, et al., p. 440.

<sup>34</sup> Inglesby, et al., p. 438; Bioterrorism, p. 229

## Problem Area Two: Decision Making

### Problem 2B

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Federal Government, and the Governor knows what is best for his own state. This issue has caused problems in the past. During the 1992 Los Angeles riots, Governor Pete Wilson requested the support of Federal troops under Title X authority, and his decision was a significant mistake. If Federal forces respond to assist LAC, then they will not be directly accountable to the Governor or to the incident commander. Using Federal forces adds a new, cumbersome bureaucratic link to the chain-of-command.<sup>35</sup>

Whether to waive State “scope of practice” requirements for non-certified personnel. Under emergency powers provisions in State law, the Governor of California can waive requirements that prohibit uncertified personnel from assisting with dispensing pharmaceuticals. This action could increase the number of available vaccinators to treat LAC residents.<sup>36</sup>

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### CRITERIA

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1) *Administrative Feasibility.* Can the agencies reasonably implement the option? Even if implementation is possible, are the complexities of doing so unreasonable?

2) *Strength of Relationships/Regular Contacts.* Does the outcome result in increased communication, trust, and understanding?

Weighting: Increasing understanding through strengthened relationships/regular contacts is critical to effective performance by the Governor during the infectious disease outbreak. This criterion is therefore weighted as twice as important as all others.

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### ALTERNATIVES

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We considered two alternatives for this problem: formal training and the status quo.

Formal Training: *Require a Member of the Governor’s Staff to Be Trained*

The CPHD could work with the CA Department of Health Services and the Governor’s Office of Emergency Services (OES) to recommend that a member of the Governor’s staff receive training on issues that will confront the Governor during a bioterrorist crisis. The CDC, the LAC-DHS, the CA Department of Health Services, or the CPHD could easily prepare a training session by condensing existing training materials. This training session could include the consequences of answers to the following questions:

- How/when would you vaccinate/offer antibiotics to first responders and first receivers?

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<sup>35</sup> Kenneally interview, 15 Dec 04; Delk, Fires and Furies; Hart interview, 02 Feb 05. Pataki testimony, U.S. House Committee on Government Reform, 29 Apr 04.

<sup>36</sup> Stratton interview, 07 Mar 05.

## Problem Area Two: Decision Making

### Problem 2B

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- How would you define or differentiate amongst first responders and first receivers if there were not enough pharmaceuticals for all of them?
- What consideration would you give to their families?
- Under what circumstances would you issue travel restrictions?
- Would you vaccinate the entire population or just the sick? How would you decide?
- How would you allocate manpower resources in a regional bioterrorist crisis?
- How would you communicate with the media?
- Under what circumstances would you waive State “scope of practice” requirements?
- What materiel and services would you recommend commandeering, and why?

The CPHD could also recommend that a representative of the Governor’s office attend all State-level and large city table top exercises and full scale drills. At a minimum, the Governor’s office should get the final reports from any future exercises.

1) *Administrative Feasibility.* (+) Any of the agencies mentioned in this option could easily put a presentation together and make experts available to answer questions. In addition, the CPHD could easily put the Governor’s Office on its mailing and call lists.

2) *Strength of Relationships/Regular Contacts.* (+) Formal training for a member of the Governor’s staff would place the relevant agencies in touch with the highest level of State government. This educational session should be welcomed by the Governor’s staff because it will prevent them from making mistakes similar to Governor Wilson’s during the 1992 LA riots.<sup>37</sup>

#### Status Quo: Do Nothing, and Let Present Trends Continue

Through State departments, the Governor is surrounded by knowledgeable experts on these issues. During a crisis, the Governor will be in contact with experts on the ground who can make recommendations to him. Even if a crisis is the first time that the Governor comes into contact with this issue, he will have good advice.

1) *Administrative Feasibility.* (+) This option is already in place.

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<sup>37</sup> Dukakis interview, 10 Mar 05; Delk, Fires and Furies

**Problem Area Two: Decision Making**

**Problem 2B**

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2) *Strength of Relationships/Regular Contacts.* (-) Governors are probably more likely to listen to their personal staff members than personnel from State departments and agencies.

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**COMPARISON OF ALTERNATIVES**

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**Decision Matrix 2B**

	Administrative Feasibility	Relationships (Weighted X2)	Score
Formal Training	2	2	4
Status Quo	1	4	5

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**RECOMMENDATION**

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The CPHD should work with the CA Department of Health Services and the OES to recommend that a member of the Governor’s staff receive training on issues that will confront the Governor during a bioterrorist crisis.

## Problem Area Two: Decision Making

### Problem 2C

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#### **Problem 2C: The agencies involved in response have clashing cultures and know little about one another.**

One of the biggest problems in any response to a bioterrorist event will be getting agencies with different cultures and priorities to act in a unified manner to respond to the problem. As Jim Morrison, the Public Health Nurse assigned to the Epidemiological-Intelligence section of the Los Angeles Terrorism Early Warning Group (TEW) noted, a smallpox or plague incident would create the problem of “strangers converging at the command center for the first time.”<sup>38</sup> During the TOPOFF exercise in Denver, decision making was done by conference call. As many as 50 to 100 people would get on each call, many of whom had not spoken with each other before. One of the chief problems was the simple exchange of contact information. In Los Angeles, the TEW and the County-level Emergency Management Council are steps in the right direction to address this problem at the decision making level, but the problem still exists at the street level.<sup>39</sup>

*“We’re seen as civilians. If we aren’t cops or firemen, then we don’t get access.”*

*-Unidentified TEW Participant*

Problems Between the Police and the National Guard. The CA NG’s Civil Support Team 9 has what some sources describe as a very good relationship with LAC and a definite willingness to help, but there are some issues to consider when getting the CA NG involved with local police at the street level. Most of them revolve around vocabulary and mindset. For example, saying “cover me” to a member of the 40<sup>th</sup> Infantry Division is, in his jargon, a request for covering fire. The same term essentially means “watch my back” to a police officer. The point is that miscommunication is likely, and additional measures need to be taken to avoid problems.<sup>40</sup>

Public Health has a very different culture from other response agencies. During the TOPOFF exercise, the public health personnel involved tried to build consensus with their peers. This is not only a foreign way of thinking to other agencies involved, but it is also time consuming. In addition, some of the emergency management terminology was foreign to some of the public health personnel during the Denver exercise.<sup>41</sup>

Other agencies do not have sufficient respect for the role of public health during the incident. While Dr. Fielding is the incident commander for a bioterrorist emergency, street level public health officials have to contend with access to sites similar to civilians and other agencies not taking them seriously because they lack a uniform.<sup>42</sup>

*“Cops don’t like listening to civilians — especially female civilians from public health.”*

*-Unidentified Participant at an Anthrax Tabletop Exercise*

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<sup>38</sup> Morrison interview, 10 Feb 05.

<sup>39</sup> Inglesby, et al., p. 439; Morrison interview, 10 Feb 05.

<sup>40</sup> Sullivan interview, 15 Feb 05; Hutchens interview, 31 Jan 05; Cuoso-Vasquez interview, 24 Jan 05.

<sup>41</sup> Inglesby, et al., p. 439.

<sup>42</sup> Megli interview, 11 Feb 05; Morrison interview, 10 Feb 05.

## Problem Area Two: Decision Making

### Problem 2C

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#### CRITERIA

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1) *Administrative Feasibility*. Can the agencies reasonably implement the option? Even if implementation is possible, are the complexities of doing so unreasonable?

2) *Financial Feasibility*. What would it cost to establish this alternative as a program?

3) *Strength of Relationships/Regular Contacts*. Does the outcome result in increased communication, trust, and understanding?

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#### ALTERNATIVES

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We considered three alternatives for this problem: more exercises, more joint operations, and the status quo.

##### More Exercises: *Conduct Smallpox or Plague Exercises Which Require LAC Self-Sufficiency*

The “Awareness/Education” section of the LAC Operational Area Terrorism Plan states, the “County’s exercise program will, for the near future, focus on terrorist events.”<sup>43</sup> To this end, the County implemented an exercise with a botulism toxin incident last year. However, smallpox and plague are very different from botulism toxin — its effects are similar to those of a chemical agent, and it is not contagious. LAC clearly needs to conduct exercises based on smallpox and plague scenarios to establish interagency communications about the subject of highly infectious diseases.<sup>44</sup>

As a frequent author of County-wide terrorism scenarios, including a recent anthrax exercise, and a patron of LAC-DHS, the CPHD is uniquely positioned to advocate for an exercise devoted to smallpox or plague. The CPHD could easily adapt its existing smallpox exercises and scenarios to serve this purpose. Such an exercise should assume that the outbreak spread throughout Southern California to make mutual aid virtually impossible. Furthermore, participants should include the National Guard, the Governor’s office, and the CDC. Finally, this exercise should focus on terminology that may be different from one set of first responders/first receivers to the other. The after action report should be provided to all agencies and disseminated widely to enhance understanding of problems.<sup>45</sup>

1) *Administrative Feasibility*. (+) The CPHD is uniquely situated to write this kind of exercise.

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<sup>43</sup> Los Angeles County Operational Area Terrorism Plan, Mar 03, available at [www.lacoa.org](http://www.lacoa.org).

<sup>44</sup> Rottman lecture, 22 Feb 05.

<sup>45</sup> CPHD Orange County Smallpox and Anthrax exercises.



## **Problem Area Two: Decision Making**

### **Problem 2C**

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2) *Financial Feasibility*. (+) Since exercises are required on an annual basis, this option should impose no additional costs on LAC.

3) *Strength of Relationships/Regular Contacts*. (+) By design, these exercises bring many different agencies together and increase understanding.

#### Joint Operations: *Conduct More Interagency Operations*

One way to solve interagency culture and communications problems is to have the agencies work together more often. The City of Boston has a program which could be a useful model for Los Angeles. Each of Boston's four Joint Hazardous Materials Assessment Teams consists of one firefighter, one police officer, and one paramedic (separate from the Fire Department in Boston). These teams go through Boston in civilian clothes and unmarked vehicles with sensitive equipment to detect radiological, biological, or chemical agents. While this information is currently only uploaded twice daily, Boston is now starting a program to update its equipment to transmit this information as it is received. The information is then reviewed by experts who use it to determine if Boston is in danger. This kind of detection system facilitates a unified response because the teams train and work together.<sup>46</sup>

A similar system could be useful in LAC. Since Fire and EMS personnel are the same, the three person team could be modified to include an LAC-DHS public health worker. The CPHD could offer its grant writing services to LAC to facilitate funding for this endeavor.

1) *Administrative Feasibility*. (+) If ordered and supported by the LAC government, this option is administratively feasible.

2) *Financial Feasibility*. (-) Implementing this option would impose a hefty price tag on LAC because it would require staff time, vehicles, specialized detection and analysis equipment, and trained experts to evaluate the information. Also, the scope of interaction is limited, which makes the cost questionable.

3) *Strength of Relationships/Regular Contacts*. (+) More joint operations would definitely build interagency understanding.

#### Status Quo: *Do Nothing, and Let Present Trends Continue*

LAC continues its annual disaster drills with no special attention to smallpox or plague. The drills will continue to foster understanding between agencies at the current pace.<sup>47</sup>

1) *Administrative Feasibility*. (+) This option is already in place.

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<sup>46</sup> Fontana interview, 21 Feb 05.

<sup>47</sup> Sullivan interview, 15 Feb 05.

## Problem Area Two: Decision Making

### Problem 2C

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2) *Financial Feasibility.* (+) This option is already in place.

3) *Strength of Relationships/Regular Contacts.* (+) Even if this option does not focus specifically on smallpox or plague, the annual exercises do increase interagency understanding.

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### COMPARISON OF ALTERNATIVES

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**Decision Matrix 2C**

	Administrative Feasibility	Financial Feasibility	Relationships	Score
More Exercises	1.5	1.5	1	4
More Joint Operations	3	3	3	9
Status Quo	1.5	1.5	2	5

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### RECOMMENDATION

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As a frequent author of County-wide terrorism scenarios, including a recent anthrax tabletop exercise for the City of Los Angeles, and a patron of LAC-DHS, the CPHD is uniquely positioned to advocate for an exercise devoted to smallpox or the plague to help building interagency communication on this issue. Please see Appendix G for an abridged version of the Dark Winter smallpox scenario and Appendix H for an abridged version of the TOPOFF plague scenario.

#### **SUMMARY OF PROBLEM AREA TWO RECOMMENDATIONS**

Problem 2A. The status quo is the best alternative, but it should be augmented by the MOU Summary. Under the current plan, Dr. Fielding would have major police, fire, and EMS personnel at his disposal in the LAC-EOC to answer his questions. He could also obtain information about cities by contacting their EOCs. We also recommend that LAC-DHS collect MOUs and summarize them to guide the PHO's decisions.

Problem 2B. The CPHD should work with the CA Department of Health Services and the OES to recommend that a member of the Governor's staff receive training on issues that will confront the Governor during a bioterrorist crisis.

Problem 2C. As a frequent author of County-wide terrorism scenarios, including a recent anthrax exercise, and a patron of LAC-DHS, the CPHD is uniquely positioned to advocate for an exercise devoted to smallpox or plague to help build interagency communication on this issue.

## Problem Area Three: Dispensing Medication

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### Dispensing Vaccines and Antibiotics in the Current Plan

To tackle the challenge of distributing antibiotics or vaccines to the public during a smallpox or plague emergency, LAC worked with the Federal government to devise a plan specific to the unique needs of our large population. Once the Governor requests the SNS for the entire population of Los Angeles, the Federal government transports these supplies to a distribution base at an undisclosed location within LAC. According to the CDC, the SNS can be delivered anywhere in the United States within 12 hours. Upon arrival, local authorities sort the vaccines or antibiotics and deliver them to 200 Points of Dispensing (PODs) throughout LAC. LAC currently contracts with UPS and Federal Express to get the supplies from the warehouse to the PODs. The LAC Department of Parks and Recreation works closely with LAC-DHS to determine POD sites. While little information is available to the public about the exact location of the PODs, research indicates that many are situated in the City of Los Angeles.<sup>48</sup>

*"We are just like Los Angeles County State."  
-Dr. Glen Tao*

Vaccination for smallpox must be done by trained personnel. It requires 15 perpendicular strokes of the needle within a 5 millimeter diameter. Success needs to be monitored, and there is potential for side effects (especially in vulnerable populations, such as cancer patients, HIV infected persons, and pregnant women). It is possible for people who are otherwise healthy to have adverse reactions to the vaccine. The vaccine will also fail to take effect for some people. Please see Appendix I for more information about the SNS.<sup>49</sup>

LAC will use the USPS to deliver medications in pill form. The goal of this voluntary program is to distribute antibiotics to all households in LAC within 48 hours in the event of an anthrax attack. In addition to the three or four doses of medication per household, residents will receive an instruction sheet outlining dosages and precautions. The POD system will augment the USPS delivery to ensure that all residents receive antibiotics to treat plague. The delivery timeframe is especially important for plague because the fatality rate is high when antibiotics are not administered within 24 hours of exposure.<sup>50</sup>

An important distinction between smallpox and plague is the number of medical personnel required for effective response. The nature of smallpox vaccination and examination necessitates workers with some medical background. Plague antibiotics do not require as many medical personnel for administration.

We identified two problems regarding dispensing vaccines and antibiotics:

Problem 3A. There is a shortage of medical personnel to mass vaccinate the public during a smallpox emergency.

Problem 3B. The plan to use the USPS to dispense antibiotics adds unnecessary complexity to bioterrorism response.

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<sup>48</sup> Burton, p. 3

<sup>49</sup> Eads interview, 14 Feb 05; <http://www.bt.cdc.gov/stockpile>; Kim-Farley, et al., p. 317; Bioterrorism, pp. 113-115.

<sup>50</sup> Tao interview, 03 Feb 05; Bioterrorism, p. 130.

## Problem Area Three: Dispensing Medication

### Problem 3A

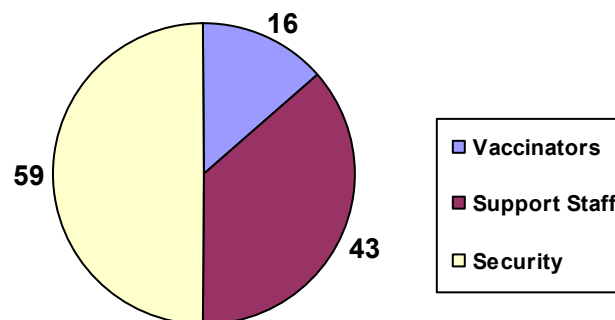
**Problem 3A: There is a shortage of medical personnel to mass vaccinate the public during a smallpox emergency.**

The Vaccine Dispensing Plan. LAC used a statistical model developed by the Medical College of Cornell University to predict a need for 30,000 to 80,000 staff to dispense medications from the PODs. The current LAC goal is to vaccinate 250 people per hour at each POD. Assuming nearly twenty-four hour service to the residents of LAC, each POD could then vaccinate 5,000 people per day. Thus, the 200 PODs could provide a combined total of 1,000,000 residents with smallpox vaccinations every day and complete the process of vaccinating LAC in roughly 10 days. Conversations with one of the authors of this model, a current CPHD employee, indicate that his design is often misused. One example of this misapplication is the comparative estimate that New York City would require 600,000 staff to dispense medication to a population several million people smaller than LAC in the event of a mass vaccination. Even if the current estimate is too low, simple math indicates that LAC does not have enough trained staff available for mass vaccination during a smallpox emergency.<sup>51</sup>

*“The quantity of vaccines is not the problem. Distribution is the problem. It’s a real Pandora’s Box.”*

*-Dr. Peter Katona, UCLA  
Associate Clinical Professor of  
Medicine (Infectious Disease)*

The POD Vaccinator Shortfall. As Figure 2 indicates, each POD requires 234 staff to operate on two shifts — 32 of those people are vaccinators. Under this approach, each vaccination clinic would have eight vaccination stations. In total, LAC would need 46,800 staff to operate 200 PODs — including 6,400 vaccinators. To reach this goal, LAC-DHS has created a cadre of 1,000 highly trained and highly drilled vaccinators since 2002. While this group could serve as a potential “skeleton crew” at the PODs, LAC remains 5,400 vaccinators short of the total number required to implement mass vaccination.<sup>52</sup>



Source: Kim-Farley, et al., p. 317

**Figure 2: Staff for a 12-Hour POD Shift**

<sup>51</sup> Cuomo interview, 03 Feb 05; Tao email, 07 Mar 05; Eads interview, 14 Feb 05.

<sup>52</sup> Kim-Farley et al., p. 317; Kim-Farley interview, 03 Feb 05.

## Problem Area Three: Dispensing Medication

### Problem 3A

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State law prohibits non-licensed personnel from assisting with the vaccinations. Under emergency powers, the Governor of California can waive the “scope of practice” requirements that prohibit non-certified personnel from assisting in vaccine dispensing. In addition, LAC-DHS has a quick training program that could prepare these personnel to vaccinate in a very short period of time.<sup>53</sup>

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#### CRITERIA

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1) *Political Feasibility*. How much opposition will the option or its outcome generate?

2) *Financial Feasibility*. What would it cost to establish this alternative as a program?

3) *Maximize Delivery*. Does the outcome maximize the general social welfare of the public during a bioterrorist incident? This means getting the most vaccine to the most people in the shortest amount of time.

4) *Quickly Implementable*. How long will it take to put the desired option in place?

Weighting: Prompt and massive vaccination is the key to mitigating an infectious disease outbreak. This criterion is therefore weighted as twice as important as all others.

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#### ALTERNATIVES

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We considered three alternatives for this problem: the National Disaster Medical System, medical campuses, and the status quo.

##### National Disaster Medical System (NDMS): Utilize Disaster Medical Assistance Teams

The NDMS is a cooperative effort by the Departments of Health and Human Services, Defense, Veterans Affairs, FEMA, State and local governments, and the private sector. The NDMS provides Federal emergency medical teams to aid local health personnel during crises. The Disaster Medical Assistance Teams (DMATs) within the NDMS system could provide a potential pool of licensed vaccinators during a smallpox epidemic.<sup>54</sup>

Through formal agreements with the NDMS, LAC sponsors and operates its own DMAT. The LAC-DMAT includes over 200 members. At any given time, about thirty of these personnel are “on call” for emergency situations. However, it is important to note that many of these personnel have full time jobs as health care professionals, first responders, or other critical jobs, and activating the DMAT might pull these people from other important responsibilities.<sup>55</sup>

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<sup>53</sup> Stratton interview, 07 Mar 05.

<sup>54</sup> <http://www.dhs.co.la.ca.us/ems/DMAT/dmatca9.htm#ABOUT%20DMAT%20CA-9>.

<sup>55</sup> *Ibid.*; Stratton interview, 07 Mar 05.

## Problem Area Three: Dispensing Medication

### Problem 3A

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The CPHD could recommend that LAC-DHS incorporate the local DMAT into the LAC Smallpox Preparedness, Response, and Recovery Plan. In addition, the CPHD could recommend that LAC-DHS contact representatives of the local DMAT to participate in any County-wide smallpox training exercises.

1) *Political Feasibility.* (+) This option should face few political obstacles because LAC-DHS needs more vaccinators, and DMATs were created to respond to large-scale public health emergencies.

2) *Financial Feasibility.* (+) Incorporating DMATs into the current plan is actually cheaper than training new vaccinators. Training with local DMAT personnel (in addition to personnel from many other State and County agencies) should also involve minimal cost.

3) *Maximize Delivery.* (-) During a true smallpox pandemic, the local DMAT team might be the only NDMS entity available to LAC. With only 200 total members, their presence will do little to add to the total number of vaccinators needed for 10.5 million residents.

4) *Quickly Implementable.* (+) Adding the local DMAT to a call list during an emergency or inviting them to training exercises should only take a minimal amount of LAC-DHS staff time.

#### Medical Campuses: Use Medical Students to Fill the Shortage

A quick survey of some of the largest schools in Los Angeles indicates that LAC is home to over 5,000 medical, nursing, dentistry, and veterinary students.<sup>56</sup> While these students cannot provide vaccination services during normal times, they could serve as a rich source of vaccinators if the Governor of California waived “scope of practice” requirements under emergency conditions.<sup>57</sup>

It would also be necessary to draft MOUs between the schools and LAC-DHS to guard against liability. This practice is not without precedent. LAC-DHS has already formed MOUs with both UCLA and USC Medical Schools to assist with dispensing the SNS. While this MOU does not specify that students will be used to assist with vaccination, it does explore the idea of using students to assist in other capacities.<sup>58</sup>

The CPHD could recommend that LAC-DHS draft MOUs with some of the larger medical, nursing, dentistry, and veterinary schools in LAC. With its MOU drafting expertise and the UCLA/LAC-DHS MOU as a guide, the CPHD can also lend technical expertise to this process. Schools should circulate lists to acquire volunteers for SNS distribution. As a respected

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<sup>56</sup> Please see Appendix J — Medical Campuses.

<sup>57</sup> Stratton interview, 07 Mar 05.

<sup>58</sup> Eads interview, 14 Feb 05; Kim-Farley Interview, 03 Feb 05.

## Problem Area Three: Dispensing Medication

### Problem 3A

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member of the academic community, the CPHD should also be able to facilitate this process at many of the larger schools. The current LAC-DHS “skeleton crew” for PODs can train and monitor the students to ensure that vaccinations proceed in an efficient and professional manner.

1) *Political Feasibility.* (+) The current UCLA and USC MOUs with LAC-DHS should make this process politically palpable to other schools across LAC.

2) *Financial Feasibility.* (+) Since current MOUs about this subject are already available, the staff time required for drafting should be minimal. In addition, the CPHD would either use existing grant money or cover the cost of consultation with a nominal fee.<sup>59</sup>

3) *Maximize Delivery.* (+) If a sufficient number of students decides to volunteer for this program, it will effectively solve the manpower shortage issue.

4) *Quickly Implementable.* (+) This option may take time to accomplish, but a focus on the largest schools can quickly yield large results.

#### Status Quo: Do Nothing, and Let Present Trends Continue

LAC-DHS is currently spending millions of dollars to train medical professionals to vaccinate during a smallpox emergency. In addition to the 1,000 existing well-trained and well-drilled personnel, LAC has 2,000 more people who still require training and drilling before they can join current POD “skeleton crews.”

1) *Political Feasibility.* (+) The status quo will cause no political opposition.

2) *Financial Feasibility.* (-) If past trends are indicative of the future, training and drilling will be a costly process.

3) *Maximize Delivery.* (-) Even if LAC-DHS trains the remaining people, it will still need to recruit over 3,000 more to fully staff PODs during a mass vaccination.

4) *Quickly Implementable.* (-) LAC-DHS has taken more than two years to develop a well-trained and drilled corps of 1,000 vaccinators (and an additional 2,000 trained but un-drilled vaccinators). At this pace, LAC would still not have enough vaccinators two years from now.

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<sup>59</sup> Kamerman interview, 14 Mar 05.

## Problem Area Three: Dispensing Medication

### Problem 3A

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#### COMPARISON OF ALTERNATIVES

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##### Decision Matrix 3A

	Political Feasibility	Financial Feasibility	Maximize Delivery (Weighted X 2)	Quickly Implementable	Score
NDMS	1.5	1.5	5	1.5	9.5
Medical Campuses	1.5	1.5	2	1.5	6.5
Status Quo	3	3	5	3	14

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#### RECOMMENDATION

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The CPHD should recommend that LAC-DHS establish a program which recruits students from medical, nursing, dentistry, and veterinary schools in our area as smallpox vaccinators. Such a program would accomplish or facilitate the following actions:

- Establish MOUs between schools listed in Appendix J and LAC-DHS using the UCLA and USC Medical School MOUs as a guide.
- Circulate volunteer sign up sheets among students once these MOUs are established.
- Ensure that at least one representative from each school attends future LAC exercises.

If approximately two-thirds of the students at these schools sign up as volunteers, then LAC-DHS would be able to fully staff its PODs for mass vaccination.



## Problem Area Three: Dispensing Medication

### Problem 3B

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#### **Problem 3B: The plan to use the USPS to dispense plague antibiotics adds unnecessary complexity to bioterrorism response.**

Plague response, unlike smallpox, does not rely exclusively upon the POD system. For smallpox, more medically trained personnel are needed to deliver shots than to dispense pills. Due to the potential for self-administration, antibiotics can be delivered twice as fast as vaccines. As a separate plan mandated through the CDC's Cities Readiness Initiative (CRI), the USPS has become a key player in the event of any outbreak requiring antibiotics.<sup>60</sup>

The USPS program is too new to evaluate, but some knowledgeable sources believe that it could be a success. Nevertheless, the program has caused some controversy. Critics of the program point to two primary flaws. First, the program is voluntary. As an incentive to participate, postal employees in the program and their families will be first in line for medication. Nevertheless, the program has severe limitations if postal workers choose not to participate. Second, the program creates a secondary plan for bioterrorism. While different diseases will involve different types of responses, the USPS plan will add a new layer of complexity while still requiring backup from the POD system.<sup>61</sup>

There are several obvious problems with the LAC plan to dispense antibiotics through the USPS:

- Relying on USPS volunteers.
- Possible absenteeism even if the postal workers volunteer.
- Security for postal workers who must carry valuable antibiotics — and the decision about whether to guard the postal worker or the truck full of pharmaceutical supplies.
- The backlog created by vaccinating thousands of postal workers during a plague emergency.
- The possibility that residents may not be able to read the instructions delivered to them due to limited English or other language skills.
- Space considerations in postal vehicles required to carry a postal worker, a security guard, and thousands of bottles of antibiotics.
- Households that have more people than the allotted doses delivered.

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<sup>60</sup> Kim-Farley interviews, 03 Feb 05, 15 Mar 05; Tao email, 07 Mar 05.

<sup>61</sup> Kim-Farley interview, 03 Feb 05; Stratton interview, 07 Mar 05; Morrison interview, 10 Feb 05; Stanley interview, 27 Jan 05.

## Problem Area Three: Dispensing Medication

### Problem 3B

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- Apartment buildings, which only have a set of mailboxes at one centralized location (the postal worker would have to deliver the antibiotics to a person at each residence, rather than leave them unattended).
- Households that include members with special considerations regarding antibiotics (e.g., pregnant women).

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### CRITERIA

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1) *Financial Feasibility*. What would it cost to establish this alternative as a program?

2) *Maximize Delivery*. Does the outcome maximize the general social welfare of the public during a bioterrorist incident? This means getting the most vaccine to the most people in the shortest amount of time.

3) *Quickly Implementable*. How long will it take to put the desired option in place?

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### ALTERNATIVES

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We considered two alternatives for this problem: PODs and the status quo (USPS).

#### PODs: Rely on the POD system rather than the USPS to dispense antibiotics

The CPHD could use its relationships with top level officials at the CDC and the National Association of State and County Health Officials to recommend that the Federal government end the CRI and focus its attention and financial resources on creating a POD system that can serve the public irrespective of the public health emergency. The CPHD could also recommend more constructive ways to include the USPS during a bioterrorist event, such as the following alternatives:

- Transporting vaccines and antibiotics from the SNS warehouse in LAC to the PODs, rather than the current contract approach with UPS and Federal Express.
- Delivering instruction sheets to the public regarding the location of the PODs.
- Delivering information to the public about how to identify sick persons in your household and how contact medical authorities to get them treatment.
- Vaccinating USPS workers for smallpox now because of their contact with the public.

1) *Financial feasibility*. (+) This approach could actually save money and divert much-needed financial resources to other POD programs. It could also save LAC money by getting an

## Problem Area Three: Dispensing Medication

### Problem 3B

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interested party to transport SNS supplies to PODs essentially for free under the condition that USPS employees and their families receive antibiotics or vaccines.

2) *Maximize delivery.* (-) There are no time estimates available to test the PODs against the USPS plan, but the CRI approach might provide for faster delivery.

3) *Quickly Implementable.* (+) This option would probably require an MOU between the USPS and LAC-DHS, as well as volunteers. Nevertheless, it would only require hundreds of volunteers as opposed to thousands under the status quo. It can be implemented relatively fast.

#### Status Quo: Do Nothing, and Let Present Trends Continue

It is a well known fact that the USPS suffered casualties during the anthrax attacks on the United States in 2001. The men and women who serve in the USPS have a very legitimate stake in any bioterrorist incident, and the current CRI plan for Los Angeles and other American cities reflects this fact. If this program worked perfectly, experts believe that every household in Los Angeles would receive antibiotics within 48 hours. In the case of plague, this is a very important statistic due to the high fatality rate for people who do not receive antibiotics within 24 hours of exposure. In many respects, the CRI program remains too new to offer a complete evaluation about its potential effectiveness. However, it also has many unaddressed and unresolved problems.

1) *Financial feasibility.* (+) The Federal government has already committed money to this endeavor.

2) *Maximize delivery.* (?) If this program is successful, then it promises to deliver antibiotics in the event of plague within 48 hours. Nevertheless, the program is too new to determine its success.

3) *Quickly Implementable.* (-) This program will take months to years to implement. It will also cost countless hours of staff time.

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## COMPARISON OF ALTERNATIVES

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**Decision Matrix 3B**

	Financial Feasibility	Maximize Delivery	Quickly Implementable	Score
PODs	1.5	1.5	1	4
Status Quo	1.5	1.5	2	5

## Problem Area Three: Dispensing Medication

### Problem 3B

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#### RECOMMENDATION

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The CPHD should use its relationships with top level officials at the CDC and the National Association of State and County Health Officials to advocate for the reorientation of this program. Beyond the reasons cited above, the main rationale is that it is simply too confusing to have two different plans for bioterrorism response. The USPS plan would also have to be supported by a network of PODs. Smallpox and plague epidemics would impact postal workers just like anthrax. They will be some of the first victims because they have contact with a lot of people. They might also be carriers of the disease who would allow it to spread more easily. By transporting SNS supplies to PODs and getting information out to the public, USPS employees can feel that they are an important part of bioterrorism response — regardless of the agent involved.

“The Postal Service is a tremendous resource. Without a doubt, they should have been in the game a long time ago, but this [SNS distribution] is not the mission for them.”  
-Mr. Ellis M. Stanley, Sr.,  
General Manager, LA City  
Emergency Preparedness  
Department

#### SUMMARY OF PROBLEM AREA THREE RECOMMENDATIONS

Problem 3A. LAC-DHS should establish a thorough program which recruits medical students from some of the larger medical, nursing, and dentistry schools in our area as smallpox vaccinators.

Problem 3B. The CPHD should use its relationships at the CDC and the National Association of State and County Health Officials to advocate for the reorientation of this program. It is too confusing to have two different plans for bioterrorism.

## Problem Area Four: Security

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Providing Security in the Current Plan. As the public becomes aware of a smallpox or plague outbreak, authorities make decisions, and PODs open for dispensing medication, security will become an issue. The current plan relies on mutual aid to generate enough manpower to respond to any crisis. Whether it is a riot in Los Angeles (1992) or a train wreck in Burbank (2005), first responders from neighboring jurisdictions or other parts of California go to where they are most needed. For example, thousands of police officers were flown to Los Angeles in 1992, and more than 300 firefighters arrived at the train wreck. The rule with mutual aid is simple: “send what you can, when you can.” If mutual aid cannot produce enough personnel to meet the needs of the crisis, then State assets, such as the National Guard or the Highway Patrol, are brought to bear on the problem. California is divided into mutual aid zones. LAC’s mutual aid partners are Ventura, San Bernardino, and Orange Counties. If they cannot provide the necessary help, then requests for assistance are sent to other zones. Meanwhile, the OES monitors the situation and mobilizes additional resources, as necessary. Some first responders acknowledge that personal relationships between department chiefs expedite requests for mutual aid. One chief also acknowledged that some jurisdictions send more assistance than they should — leaving their own jurisdiction at risk. An official from the Los Angeles Sheriff’s Department indicated that LAC will call upon its neighbors for mutual aid as soon as the demand for manpower is clear. We hope to reveal the error of this impulse.<sup>62</sup>

*“Given that a smallpox outbreak would produce fear and widespread demands for action, a security and law-enforcement response will be required to manage civil disorder, provide secure locations for vaccine distribution, and protect the supplies sent from the Strategic National Stockpile (SNS).”*  
-Kim-Farley, et al., p. 318.

Security Needs During a Smallpox or Plague Emergency. There are barely over 20,000 law enforcement officers serving LAC (see Appendix F). Due to recent Federal budget cutbacks, we can expect the number of local police officers to decrease. After a bioterrorist incident, we can further presume that some law enforcement officers would become casualties. It is also likely that some officers either would not or could not be able to come to work for various reasons. In the interest of clarity, this section assumes that all officers are available to respond.

As noted earlier, there will be approximately 200 PODs located in LAC, which has a population of approximately 10.5 million people. During a large scale outbreak that requires a complete vaccination, each POD would have to service approximately 52,500 citizens. Each POD would require a security force for the personnel operating the site and to secure the supplies at the site. Crowd and traffic control will be a requirement at the each POD.

Law enforcement agencies usually respond to such events by organizing mobile field forces (MFFs), which usually have approximately 50 personnel. Using Figure 2 (Dr. Kim-Farley’s manpower requirements), two MFFs totaling 118 security personnel would be required for each POD (one for each shift). If two MFFs had to be deployed to each POD, then 23,600

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<sup>62</sup> Megli interview, 11 Feb 05; Alderson interview, 09 Feb 05; Sprewell interview, 27 Jan 05; Hutchens interview, 31 Jan 05.

## Problem Area Four: Security

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officers would be required. In addition to this, there are 80 hospitals in the greater-Los Angeles area which have trauma centers or emergency rooms.<sup>63</sup> Securing these hospitals would require another 9,440 officers. LAC planners have discussed providing less security at each POD, but this is inadvisable when considering the size of the crowds that are likely to gather.<sup>64</sup>

Assuming that no officers were casualties to the disease and that every officer in LAC was able to report for duty, LAC would be more than 8,000 officers short of the requirement. There would be no officers remaining to provide normal law and order operations, to conduct the criminal investigation, to operate and secure the police stations, or to maintain law and order. We have not yet begun to enumerate the number of officers needed to enforce quarantine or to prevent opportunistic criminal activity.

*“When asked what would be possible if the situation actually required it, the police and National Guard admitted to the Emergency Epidemic Response Committee that they would be unable to keep people at home.”*  
–Inglesby, et al., p. 442

Not anyone can provide law enforcement services. Just as with medical personnel, it is necessary to find ways to ensure that there will be enough trained and accountable personnel capable of providing for public safety. Police officers cannot simply abandon their current duties if a bioterrorist attack occurs. As with medical staff, there are existing requirements which they cannot neglect.

Bioterrorism adds a requirement to ensure law and order that is more pronounced than in other disasters. Quarantine has not been enforced in America in over 80 years, but more recent events, such as the SARS epidemics in Asia and Canada, clearly demonstrate that the fear of disease can cause widespread psychological distress to the affected population. Also, Federal exercises, such as TOPOFF and Dark Winter, made efforts to account for the unlikely but ominous possibility of civil unrest in conjunction with bioterrorist incidents. Appendix L demonstrates that the unique aspects of a bioterrorist attack place an even higher requirement on the already overburdened law enforcement agencies in LAC.<sup>65</sup>

*“There is a higher probability for civil unrest. We have a lack of experience with epidemic smallpox, and we live in a pampered society.”*  
–Dr. Peter Katona, UCLA Associate Clinical Professor of Medicine (Infectious Disease)

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<sup>63</sup> Excel spreadsheet from Joe Betance, LAC-DHS.

<sup>64</sup> Dickson interview, 31 Mar 05.

<sup>65</sup> Cheng and Cheung, p. 262; Inglesby, et al.; O’Toole, et al.

## Problem Area Four: Security

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### **Problem 4: There are not enough law enforcement personnel in Los Angeles to secure the SNS and maintain civil order.**

Los Angeles needs more qualified law enforcement manpower to respond effectively to a bioterrorist incident. Police officers will have enough to do already. They will not be able to secure the SNS and perform their other expected duties. The response will need to continue 24 hours per day, seven days a week, until the threat to public safety is eradicated.

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### **CRITERIA**

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1) *Self-Sufficiency of Neighboring Jurisdictions.* Will surrounding areas be capable of responding to their own security issues?

2) *Sufficient Manpower Supply.* How many personnel will the option actually provide?

3) *Quickly Executable.* How quickly could this option be exercised in an emergency?

4) *Political Feasibility.* How much opposition will the option or its outcome generate?

Weighting: The ability of each jurisdiction to handle the crisis with its own organic resources is vital to success. The epidemic will affect numerous communities simultaneously. This criterion is therefore weighted as twice as important as all others.

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### **ALTERNATIVES**

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We considered four alternatives for this problem: National Guard, private security, Federal armed forces, and the status quo (mutual aid).

#### National Guard: *Activate the National Guard to Augment Local Law Enforcement Agencies*

As the capabilities of local law enforcement agencies are outstripped, CA NG support can be requested through the OES. Under this option, all CA NG forces would remain under the Governor's authority (Title XXXII). Under Title XXXII, the NG has the authority to conduct law enforcement operations without violating Federal posse comatitus considerations.<sup>66</sup> This option applies only to those CA NG personnel involved directly with security and law enforcement tasks. For example, the use of CA NG medical or Chemical Corps personnel would not apply.

*The Posse Comatitus Act of 1878 was passed after Reconstruction to ensure that the military could not be used to perform domestic police functions.*

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<sup>66</sup> Kenneally interview, 15 Dec 04.

## Problem Area Four: Security

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1) *Self-Sufficiency of Neighboring Jurisdictions.* (+) This option would not affect the self-sufficiency of neighboring jurisdictions.

2) *Sufficient Manpower Supply.* (?) Up to one half of the CA NG is not available for use in a domestic emergency because of the ongoing global war on terrorism. Furthermore, many National Guardsmen are either preparing for or returning from overseas duty.<sup>67</sup>

3) *Quickly Executable.* (-) It would take days before enough National Guardsmen were available to actually assist local law enforcement officers. Also, current procedures prevent the CA NG from planning with local officials. The OES rightly acts as a filter between local authorities and the CA NG.<sup>68</sup>

4) *Political Feasibility.* (+) Based on the experience of the 1992 LA riots, there was a significant amount of political pressure to get National Guardsmen on the street quickly. Their presence seemed to be very important to politicians and the public.<sup>69</sup>

### Private Security: Commandeer the Services of Private Security Guards

The Governor can use his emergency powers to requisition the use of any materiel and services which are needed to effectively respond to a disaster. This includes using private security guards. Security guards are regulated by the State Bureau of Security and Investigative Services.<sup>70</sup> They have to undergo background checks, weapons qualifications, and meet other requirements.<sup>71</sup> With the Governor's authority, LAC can contact major security guard employers now and integrate them into response plans via MOUs.

1) *Self-Sufficiency of Neighboring Jurisdictions.* (+) This option would not affect the self-sufficiency of neighboring jurisdictions.

2) *Sufficient Manpower Supply.* (+) This option would provide enough manpower to Los Angeles. There are over 31,000 security guards in LAC. Please see Appendix M for more precise information about the security guard firms in LAC.<sup>72</sup>

3) *Quickly Executable.* (+) Since the guards are already in LAC, this option could be exercised more quickly than other options.

4) *Political Feasibility.* (-) It might be risky to use private security guards to ensure public safety (some consider them to be less qualified or capable than law enforcement officers).

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<sup>67</sup> Kenneally interview, 15 Dec 04; Burns, 25 Jan 05.

<sup>68</sup> Kenneally interview, 20 Feb 05; Hart interview, 02 Feb 05.

<sup>69</sup> Delk, Fires and Furies.

<sup>70</sup> [www.dca.ca.gov/bsis](http://www.dca.ca.gov/bsis)

<sup>71</sup> Kenneally interview, 20 Feb 05.

<sup>72</sup> Teitelman, 17 Jan 00.



## Problem Area Four: Security

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### Federal Armed Forces: Request/Use Military Forces under Title X Authority

If the State's resources are truly outstripped, then the Governor may request Federal armed forces to assist with security and civil order. Alternatively, the President may insert Federal forces and/or place the CA NG under Federal authority. Under this arrangement, military forces operating in LAC would be under the control of the U.S. Northern Command (NORTHCOM). NORTHCOM would then have a representative located at the LAC-EOC to coordinate the deployment and allocation of the troops.

1) *Self-Sufficiency of Neighboring Jurisdictions.* (+) This option would not affect the self-sufficiency of neighboring jurisdictions.

2) *Sufficient Manpower Supply.* (?) Because of the global war on terrorism, the availability of active duty service members is unclear.

3) *Quickly Executable.* (?) While the military does have substantial logistics and force projection capabilities, current commitments would likely delay deployment to LAC.

4) *Political Feasibility.* (?) Using the active duty military to police citizens is a dangerous proposition. Posse comatitus considerations may limit the appeal of this option. However, the severity of the outbreak may require drastic action (especially if the disease crossed state lines).<sup>73</sup>

### Status Quo: Do Nothing, and Let Present Trends Continue

As with any other disaster requiring increased manpower, this option would rely on county, regional, and State mutual aid compacts to ensure that LAC has the required number of personnel to provide security and maintain civil order. Using this option, thousands of police officers, highway patrolmen, and sheriff's deputies could be placed under the direction of the LAC incident commander.

1) *Self-Sufficiency of Neighboring Jurisdictions.* (-) This option would leave other jurisdictions at risk by drawing off their manpower.

2) *Sufficient Manpower Supply.* (+) This option would provide enough manpower to Los Angeles.

3) *Quickly Executable.* (+) This option could be exercised quickly.

4) *Political Feasibility.* (+) This option would use standard mutual aid compacts.

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<sup>73</sup> Bioterrorism, p. 223.

## Problem Area Four: Security

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### COMPARISON OF ALTERNATIVES

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**Decision Matrix 4**

	Neighbors' Self-Sufficiency (Weighted X 2)	Manpower Supply	Quickly Executable	Political Feasibility	Score
National Guard	6	1	3	2	12
Private Security	2	3	2	3	10
Federal Armed Forces	4	2	4	4	14
Status Quo	8	4	1	1	14

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### RECOMMENDATION

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Using private security guards is the best option. It will not place a strain on the resources of other jurisdictions, it will provide a large source of manpower that can be mobilized quickly, and it can be groomed into a politically acceptable option for decision makers.

Because of globalization and the speed of modern travel, infected people can move hundreds or thousands of miles before becoming symptomatic.<sup>74</sup> Given the high number of people who commute to or pass through LAC every day, it unacceptable to place other communities at risk to help Los Angeles — they will need their own responders at home because the outbreak could be uncontained. Officials must fight the instinct to call for mutual aid.

The CPHD can help LAC prepare MOUs with large security guard companies in the greater Los Angeles area. Rather than wait for emergency powers to be invoked by the State, local officials can be proactive and plan on using security guards now. As an incentive, the MOUs can include provisions to vaccinate the security guards and their families before the general public.

To mitigate concerns about political feasibility, law enforcement officials can plan to pair security guards with police officers as partners. This will ensure that law enforcement officers can gain wider coverage, and at the same time it will allay any concerns about the reliability of security guards.

It would still be appropriate to use NG soldiers during a crisis involving infectious diseases, but it would not be wise to rely too heavily on them. Because of the global war on terrorism and the speed with which they can be deployed in sufficient numbers, we believe that the NG should not be the first choice. However, they would certainly be needed to augment or backfill the local law enforcement officers who will be the first to respond to the crisis.

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<sup>74</sup> Bioterrorism, p. 226.

## Conclusion

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We very deliberately began this paper with a remark by President John F. Kennedy about repairing the roof while the sun is shining. As we told the story about a LAC response to smallpox or plague, we focused on the “repair” part of this sentiment. What might get lost is that LAC already has a pretty good “roof” — just one not yet ready to handle the worst storm in several generations. Our recommendations strive to take this good plan and make it better.

We chose many of our recommendations because of our focus on increasing self-sufficiency for LAC. While we concentrated on smallpox and plague, we were also well aware that many of our recommendations could apply to other disasters confronting LAC. Methods to increase surge capacity at hospitals, let incident commanders know about existing MOUs, and enhance security could easily transfer to disasters such as earthquakes, tsunamis, general civil disorder, and non-biological acts of terrorism. Recommendations to train Governor’s staff and augment the SNS POD system could easily benefit a response to other infectious diseases like SARS or an influenza pandemic.

We also chose many of our recommendations because they dovetailed nicely with the wide variety of skills and relationships that the CPHD brings to disaster planning in LAC. While we concentrated on our area, we knew that the CPHD often exports innovative ideas and new approaches about disaster preparedness and planning to similar experts and institutions throughout the United States and even the world. Some of what we believe will work for LAC could easily work for Nashville, Boston, or even Taiwan. It is our hope that the CPHD enters some of the recommendations in this APP into that dialogue.

## Appendix A - Interviews

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Mark Alderson, Captain, Oceanside Fire Department, 09 Feb 05

William Bratton, Los Angeles Chief of Police, 13 Jan 05

Albert Carnesale, Chancellor, UCLA, 25 Feb 05

Jason Cuomo, MPH, UCLA Center for Public Health and Disasters, 04 Feb 05

Gary Cuoso-Vasquez, Montebello Chief of Police, 24 Jan 05

King Davis, Jr., Azusa Chief of Police, 02 Feb 05

Dickson Diamond, MD, LAC-DHS Bioterrorism Preparedness Program, 31 Mar 05

Governor Michael S. Dukakis, UCLA School of Public Affairs, 10 Mar 05

James Eads, CA Region I Disaster Medical Health Specialist, LAC-DHS, 14 Feb 05

Frank Fabrega, Lieutenant, Santa Monica Police Department, 25 Jan 05

Jerry Fontana, Deputy Chief, Boston Fire Department, 21 Feb 05

Sandy Hutchens, Chief, Office of Homeland Security, Los Angeles Sheriff's Department,  
31 Jan 05

Raymond Goodman, MD, LAC Medical Reserve Corps, 17 Feb 05

Douglas Hart, Colonel, CA NG Public Affairs Officer, 02 Feb 05

Allison Kamerman, MS, UCLA Center for Public Health and Disasters, 14 Mar 05

Peter Katona, MD, Infectious Disease Center, 15 Feb 05

Dennis Kenneally, Major General, Retired, Former Adjutant, CA NG, and Deputy  
Sheriff, San Diego County, 15 Dec 04 and 20 Feb 05

Robert Kim-Farley, MD, UCLA School of Public Health, 03 Feb 05 and 16 Mar 05

Mark Kleiman, PhD, UCLA School of Public Affairs, 07 Feb 05

Mark Leap, Commander, Counter-Terrorism and Criminal Intelligence Bureau, Los Angeles  
Police Department, 08 Mar 05

Arleen Leibowitz, PhD, UCLA School of Public Affairs, 01 Mar 05

## Appendix A - Interviews

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Vic Lopez, Lieutenant Commander, U.S. Navy, Employer Support of the Guard and Reserve,  
21 Dec 04

Tom Lorenz, Adjutant, Glendale Police Department, 24 Jan 05

David Loughran, PhD, RAND and UCLA School of Public Affairs, 27 Jan 05

Matt May, Mid-America Regional Council, 18 Jan 05

Rod Megli, Chief, Ventura County Fire Department, 11 Feb 05

Phillip Moore, LAC-DHS, BT Preparedness Program, 14 Feb 05

Jim Morrison, PHN, LAC Terrorist Early Warning Group, 10 Feb 05

Janet Nakamura, Monterey Park Police Department, 26 Jan 05

Dave Olson, Captain, CA NG Recruitment Officer, 24 Jan 05

Andrew Sabl, PhD, UCLA School of Public Affairs, 24 Jan 05

Kimberly Shoaf, DrPH, UCLA Center for Public Health and Disasters, 12 Jan 05

Mike Sicilia, CA Department of Homeland Security, 26 Jan 05

Roland Sprewell, Captain, LAC Fire Department, 27 Jan 05

Ellis M. Stanley, Sr., General Manager, Emergency Preparedness Department, City of Los  
Angeles, 27 Jan 05

Samuel Stratton, MD, UCLA Center for Public Health and Disasters, 07 Mar 05

Terri Stratton, Public Information Officer, CA Department of Health Services, 26 Jan 05

John Sullivan, Lieutenant, LAC Terrorist Early Warning Group, 15 Feb 05

Glen Tao, M.D., LAC SNS Coordinator, 03 Feb 05

Jim Terbush, M.D., U.S. Navy, 08 Mar 05

## Appendix B - References

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Information about mobile AIDS clinics available at <[www.aidshealth.org](http://www.aidshealth.org)>, <[www.map-usa.org](http://www.map-usa.org)>, <[www.apla.org](http://www.apla.org)>, and <[www.bienestar.org](http://www.bienestar.org)>.

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<<http://proquest.umi.com/pqdweb?index=0&did=132724891&SrchMode=1&sid=6&Fmt=3&VInst=PROD&VType=PQD&RQT=309&VName=PQD&TS=1107804653&clientId=1564>>

## Appendix C – Hotels Near Major Hospitals

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### Hotels Near Five of the Largest Hospitals in LAC<sup>75</sup>

#### **Cedars-Sinai Medical Center (877 beds)**

8700 Beverly Blvd., Los Angeles, CA 90048

Hotel	Address	Proximity	# of Rooms
Sofitel Hotel Los Angeles	855 Beverly Blvd.	0.06 miles	311
Elan Hotel Modern	8435 Beverly Blvd.	0.25 miles	50
The Orlando Hotel	8384 Beverly Blvd.	0.42 miles	98

#### **LAC-Harbor-UCLA Medical Center (553 beds)**

1000 W. Carson Street, Torrance, CA 90502

Hotel	Address	Proximity	# of Rooms
Quality Inn South Bay	888 E. Dominquez St.	1.98 miles	?
Torrance Travelodge	2448 Sepulveda Blvd.	2.08 miles	?
Days Inn Torrance	4111 Pacific Coast Hwy.	4.04 miles	89

#### **LAC-USC Medical Center (1,417 beds)**

1200 North State Street, Los Angeles, CA 90033

Hotel	Address	Proximity	# of Rooms
Hacienda Heights Courtyard	1905 Azusa Ave.	1.34 miles	150
Days Inn Downtown Los Angeles	711 North Main Street	1.60 miles	?
Best Western Dragon Gate Inn	818 North Hill Street.	1.72 miles	52

#### **Long Beach Memorial Medical Center (739 beds)**

2801 Atlantic Avenue, Long Beach, CA 90806

Hotel	Address	Proximity	# of Rooms
Colonial Motel	802 E. Pacific Coast Hwy.	1.26 miles	?
Westin Long Beach	333 E. Ocean Blvd.	2.85 miles	460
Hyatt Regency Long Beach	200 S. Pine Ave.	3.00 miles	522

#### **UCLA Medical Center (668 beds)**

10833 Le Conte Ave., Los Angeles, CA 90095

Hotel	Address	Proximity	# of Rooms
Royal Palace Westwood Hotel	1052 Tiverton Ave.	0.20 miles	?
Century Wilshire	10776 Wilshire Blvd.	0.32 miles	99
Travelodge LA West	10740 Santa Monica Blvd.	1.02 miles	55

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<sup>75</sup> California Healthcare Association; [www.hotels.com](http://www.hotels.com)

## Appendix D – Mobile HIV Clinics

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### Examples of Mobile HIV Testing Services in LAC and Contact Information

<b>Organization Name</b>	<b>Phone Number</b>	<b>Source</b>
AHF Prevention and Testing Programs	323-468-2581	<a href="http://www.aidshealth.org">www.aidshealth.org</a>
Minority AIDS Project	323-936-4949	<a href="http://www.map-usa.org">www.map-usa.org</a>
AIDS Project LA	213-201-1600	<a href="http://www.apla.org">www.apla.org</a>
Bienestar	626-444-9453	<a href="http://www.bienestar.org">www.bienestar.org</a>

## Appendix E – Lead Agencies and Contact Departments

### County Contact Departments/Special Districts List<sup>76</sup>

<b>CHIEF ADMINISTRATIVE OFFICER (Lead)</b>	<b>SHERIFF (Lead)</b>
Affirmative Action	Alternate Public Defender
Art Museum	Animal Care and Control
Consumer Affairs	Courts
Consumer Affairs	District Attorney
Executive Office, Board of Supervisors	Probation
Natural History Museum	Public Defender
Registrar Recorder	Office of Ombudsman
Treasurer and Tax Collector	
Human Resources	<b>PUBLIC SOCIAL SERVICES (Lead)</b>
County Counsel	Children and Family Services
	Community and Senior Services
<b>PUBLIC WORKS (Lead)</b>	Office of Education
Assessor	Parks and Recreation
Sanitation	Public Library
Regional Planning	Library Districts
County Development Commission	School Districts
Garbage Districts	Park Districts
Irrigation Districts	Child Support Services
Landscape Districts	
Special Road Districts	<b>HEALTH SERVICES (Lead)</b>
Street Lighting Districts	Agricultural Commissioner/Weights & Measures
Water Districts	Mosquito Districts
	Hospital Districts
<b>CORONER (Lead)</b>	
Military and Veteran Affairs	<b>INTERNAL SERVICES (Lead)</b>
Cemetery Districts	Chief Information Office
	All Utilities Except Water
<b>MENTAL HEALTH SERVICES (Lead)</b>	<b>FIRE (Lead)</b>
	Beaches and Harbors

<sup>76</sup> Los Angeles County Department of Health Services Emergency Plan, Volume 1, available at [www.ladhs.org/ems](http://www.ladhs.org/ems).

## Appendix F – First Responder Manpower Summary

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### Manpower Resources in Los Angeles County Fact Sheet<sup>77</sup>

The County Emergency Medical Services web site indicates that there are over 18,000 trained EMS personnel in Los Angeles County.

The Los Angeles County Fire Department has approximately 3,700 personnel.

The Los Angeles Fire Department has 3,382 sworn personnel.

The Los Angeles Sheriff's Department has approximate 8,000 sworn personnel.

The Los Angeles Police Department has 9,150 sworn personnel.

The Long Beach Police Department has 958 sworn personnel.

The remaining police from independent cities across Los Angeles add more than 2,000 additional personnel to the total.

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<sup>77</sup> [www.ladhs.org/ems](http://www.ladhs.org/ems); [www.lacofd.org](http://www.lacofd.org); [www.lafd.org](http://www.lafd.org); [www.lasd.org](http://www.lasd.org); information from the Measure A campaign.

## Appendix G – Abridged Dark Winter Scenario (Smallpox)

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**(NOTE: Since this exercise took place in 2002, its authors assumed that there would not be sufficient smallpox vaccine)<sup>78</sup>**

Overview: Each segment portrayed an NSC meeting, which were set several days apart in the story: on 9, 15, and 22 December 2002.

In the Dark Winter scenario, 3,000 people were infected with smallpox virus during 3 simultaneous attacks in 3 separate shopping malls in Oklahoma City, Philadelphia, and Atlanta.

*Information presented to NSC members, 9 December 2002.*

In Oklahoma, 20 cases have been confirmed by the CDC, with 14 more suspected. There are also reports of suspect cases in Georgia and Pennsylvania. These cases are not yet confirmed. The initial exposure is presumed to have occurred on or about 1 December.

The NSC members agree that the public should be fully informed as quickly as possible to maximize public confidence and adherence to disease-containment measures and to minimize the possibility that disease-containment measures would need to be forcibly imposed. NSC members decide to sue vaccine distribution policy option 1, which is the ring vaccination policy intended to focus and limit vaccination efforts to those at highest risk of contracting smallpox (e.g., patient contacts and health care and public safety personnel in Oklahoma, Georgia, and Pennsylvania) while preserving as much vaccine as possible for use as the epidemic unfolds. NSC members decide that the same directed vaccination strategy will be followed if additional new cases emerge in other cities or states.

*Information presented to NSC members, 15 December 2002.*

A total of 2,000 smallpox cases have been reported in 15 states, with 300 deaths. The epidemic is now international, with isolated cases in Canada, Mexico, and United Kingdom. Both Canada and Mexico request that the United States provide them with vaccine. All the cases appear to be related to the 3 initial outbreaks in Oklahoma, Georgia, and Pennsylvania. The public health investigation points to 3 shopping malls as the initial sites of exposure.

Several international borders are closed to US trade and travelers. Food shortages emerge in affected states as a result of travel problems and store closings. Sporadic violence has been reported against minorities who appear to be of Arab descent. There are no solid leads regarding who may have perpetrated this attack. The government response to the epidemic has been criticized. The media continues its 24-h news coverage of the crisis. Misinformation regarding the smallpox outbreak begins to appear on the Internet and in the media, including false reports of cures for smallpox. Schools are closed nationwide. Public gatherings are limited in affected states. Some states limit travel and nonessential gatherings. The Department of Health and Human Services establishes a National Information Center.

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<sup>78</sup> Abridged from O’Toole, et al.

## Appendix G – Abridged Dark Winter Scenario (Smallpox)

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*Information presented to NSC members, 22 December 2002.*

A total of 16,000 smallpox cases have been reported in 25 states (14,000 within the past 24 h). One thousand people have died. Ten other countries report cases of smallpox believed to have been caused by international travelers from the United States.

States have restricted nonessential travel. Food shortages are growing in some places, and the national economy is suffering. Residents have fled and are fleeing cities where new cases emerge. Canada and Mexico have closed their borders to the United States. The public demands mandatory isolation for smallpox victims and their contacts, but identifying contacts has become logistically impossible. Although speculative, the predictions are extremely grim: an additional 17,000 cases of smallpox are expected to emerge during the next 12 days, bringing the total number of second generation cases to 30,000. Of these infected persons, approximately one-third, or 10,000, are expected to die.

The scenario ends when it is announced that the New York Times, the Washington Post, and USA Today have each received an anonymous letter demanding the removal of all US forces from Saudi Arabia and all warships from the Persian Gulf within 1 week.

## Appendix H – Abridged TOPOFF Scenario (Plague)

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### Plague Scenario<sup>79</sup>

*May 17, 2000*

An aerosol of plague (*Y. pestis*) bacilli is released covertly at the Denver Performing Arts Center.

*May 20, 2000*

The Colorado Department of Public Health and Environment receives reports of increased persons seeking medical attention in the Denver area for fever and cough. By early afternoon, this number reaches 500 persons and the Department notifies the CDC.

The State laboratory confirms plague. The CDC later confirms plague. The State health officer declares a public health emergency and alerts the Governor's staff.

The Denver police and the FBI notify the CDC that a dead man has been found with terrorist literature in his possession.

Local antibiotics become scarce as the Governor issues travel restrictions into and out of 14 Denver metropolitan counties. The healthy are directed to stay at home and avoid public gatherings. Confirmed cases of plague are identified in Colorado locations outside of Denver.

*May 21, 2000*

The CDC brings in "push-packs" of antibiotics from the National Pharmaceutical Stockpile [now called the Strategic National Stockpile]. The CDC expands its epidemiological investigation to 41 cases by 5:00 P.M. local time.

Out of state cases begin to be reported. Denver hospitals are filled to capacity and are unable to admit new patients by the end of the day. As the day ends, 1,871 cases are reported throughout the United States, London, and Tokyo. 389 persons have died.

*May 22, 2000*

There are difficulties getting NPS supplies to facilities that need them. Hospital care begins to shut down as patient charts go unchecked. Secondary spread appears to be occurring. The population of Denver is encouraged to wear face masks. The Governor seals Colorado state borders and there is concern about getting food and supplies into the State.

By noon, there are 3,060 U.S. and international patients with pneumonic plague. 795 persons have died.

*May 23, 2000*

There are conflicting reports about the number of new cases and deaths. Some are as high as 4,000 persons infected and 2,000 deaths.

*The TOPOFF exercise is terminated*

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<sup>79</sup> Abridged from Inglesby et al.



## Appendix I – SNS Fact Sheet

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- Because of Los Angeles’s position as a terrorist target, our area has been a priority for the Federal Strategic National Stockpile (SNS) Program and its predecessor, the National Pharmaceutical Stockpile.<sup>80</sup>
- The Strategic National Stockpile is a Federally-administered program designed to supply the American public with antibiotics or vaccines if local authorities run out of supplies during a public health emergency.
- Once Federal authorities approve a local request for the SNS, it can be delivered anywhere in the United States within 12 hours.
- Each State, including California, formulated plans in recent years to receive and distribute the SNS supplies to Local Communities.
- Like some other large cities across the United States, Los Angeles has its own SNS funding and an independent operating apparatus distinct from the State of California.
- There are currently 12 SNS storage facilities at undisclosed locations across the United States.
- Each of these facilities contains 15 tons of medical supplies.
- Federal estimates indicate that each ton can serve 20,000 people.
- The SNS serves as a “last resort” for situations that overwhelm the resources of local governments.

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<sup>80</sup> Tao interview, 03 Feb 05; [www.bt.cdc.gov](http://www.bt.cdc.gov).

## Appendix J – Medical Campuses

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### Medical, Nursing, Dentistry, and Veterinary Student Populations in Los Angeles County<sup>81</sup>

#### *Schools of Medicine*

School	Number
Western University	704
University of California - Los Angeles	674
University of Southern California	659
<b>Total</b>	<b>2,037</b>

#### *Dental Schools*

School	Number
University of Southern California	1,000
University of California - Los Angeles	400
<b>Total</b>	<b>1,400</b>

#### *Veterinary Schools*

School	Number
Cal State University - Poly	600
Western University	160
<b>Total</b>	<b>760</b>

#### *Nursing Schools*

School	Number
University of California - Los Angeles	400
Azusa Pacific University	200
California State University, Long Beach	180
Biola University	80
California State University, Los Angeles	60
<b>Total</b>	<b>920</b>

**Total** **5,117**

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<sup>81</sup> Our undergraduate assistant used a combination of internet searches and phone calls to determine this information.

## Appendix K – Law and Order

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A biological incident will have a profound psychosocial effect on the population. The fear of smallpox is actually more contagious than the disease itself.<sup>82</sup> Unlike earthquakes or hurricanes, the fear of disease can produce a high degree of mistrust towards people. Special considerations must be made to ensure the maintenance of law and order. Local law enforcement agencies do not have the means to deal with the additional security burden precipitated by a bioterrorist attack. Some police departments will be faced with the dilemma of maintaining law and order *or* securing PODs and hospitals.<sup>83</sup>

According to Lieutenant John Sullivan of the Los Angeles Terrorist Early Warning Group, “citizens are prone *not* to riot. They will first look to authority figures for direction and guidance.” However, there may be an increased probability for unlawful behavior under certain conditions.<sup>84</sup>

We believe that law and order will be a function of several factors:

- the speed of the government’s response;
- the effectiveness of the government’s ability to control the epidemic;
- the effectiveness of the government’s public information campaign;
- the ability of the government to provide for the public’s basic needs.

If the government fails to meet the public’s expectations in any of these four categories, then additional consideration needs to be given to security. The probability of a constructive public reaction will increase as public trust in the government’s ability to meet these four expectations increases. Studies indicate that the public will *not* panic if government officials issue information and instructions in a clear and consistent manner.<sup>85</sup>

Unlawful behavior may be a more likely if the government tries to enforce a quarantine in Los Angeles. It would be in the interest of healthy people to leave LA as soon as possible. Bioterrorism is different from events like an earthquake or 9/11. With bioterrorism, the threat is ongoing, and there is great risk from a secondary spread of the disease.<sup>86</sup> Healthy people will want to get away from that threat – it would be dangerous to stay. While it is important to note that past disasters have brought out the “best” in human behavior, an infectious disease is not an event which quickly comes and passes. People will be constantly facing the stress and fear of potential infection, and this continuous stress will increase the need for more security.

A bioterrorism event would also have a pronounced effect on our economy. The second largest port complex in the world would be effectively shut down. Planes, ships, and trucks

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<sup>82</sup> Siegel, 31 Oct 02.

<sup>83</sup> An unidentified police department in LAC.

<sup>84</sup> Sullivan interview, 15 Feb 05.

<sup>85</sup> RAND Symposium, Oct 00.

<sup>86</sup> Siegel, 31 Oct 02; Bioterrorism, p. 226.

## Appendix K – Law and Order

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would stop coming. The shelves of our supermarkets would empty. The livelihoods of our citizens would be at risk, and fear could drive people to extreme behaviors. Federal exercises even went as far as exploring the notional possibility of civil unrest. “Some time into the exercise, [notional] civil unrest broke out. People had not been allowed to shop. Stores were closed. Food supplies ran out because no trucks were being let into the state. Rioting began to occur.”<sup>87</sup>

There are also concerns of vigilantism. Citizens may take security into their own hands. One significant concern here is that certain ethnic minorities might be targeted for violence if the terrorists are suspected of being from a particular background. This pattern of violence appeared after 9/11.<sup>88</sup> A retired CA NG General suggests that we plan for vigilantism, which he considers to be inevitable.<sup>89</sup>

Perceived social inequities may also increase the likelihood for unlawful behavior. If the outbreak were to begin in West Los Angeles, then LAC-DHS might decide to vaccinate citizens in the affected area first. However, if the disease appeared in less affluent parts of Los Angeles while the bulk of the vaccine supply was going to West Los Angeles, then officials may be creating a social problem.<sup>90</sup>

During the Los Angeles riots of 1992, thousands of California National Guardsmen, Highway Patrolmen, and law enforcement officers from other jurisdictions had to be sent to Los Angeles to augment the beleaguered police officers and sheriff’s deputies. Drawing support from other jurisdictions would not be wise when responding to a disease outbreak, though.<sup>91</sup>

While PODs may be a focal point for crowds, small groups of citizens engaging in unlawful behavior can cause problems in other parts of the county. The police would largely be committed to securing the PODs and hospitals, which might leave other locations unsecured. During the LA riots, the first targets were liquor stores, gun stores, and food stores.<sup>92</sup>

We must also plan for civilians to mob the PODs and hospitals when the public becomes aware of the threat. Even if the crowds are well-behaved, crowd control will still be necessary. As with any large concentration of people today, security is a necessity.<sup>93</sup> Some citizens may also engage in disruptive behavior at the PODs (beyond cases of pushing in line). LAC-DHS planners are currently considering the implications of citizens who have adverse reactions to vaccines, who develop vaccinia but think they have smallpox, or even those who receive the vaccine without it taking effect. While the expected percentage for each of these possibilities is

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<sup>87</sup> Inglesby, et al., p. 442.

<sup>88</sup> Kleiman interview, 07 Feb 05.

<sup>89</sup> Delk, Fires and Furies.

<sup>90</sup> “Operation Rolling Show,” 26 Jan 05.

<sup>91</sup> Delk, Fires and Furies.

<sup>92</sup> *Ibid.*

<sup>93</sup> Tao interview, 03 Feb 05.

## Appendix K – Law and Order

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small, LAC-DHS planners realize that these cases may lead to unproductive public reactions (such as distrust of public health officials).<sup>94</sup>

Historical examples of adverse public reactions:

- During smallpox outbreaks in Europe during the 1960s and 1970s, widespread concern and panic swept through the public. “Extensive emergency control measures” were necessary for even small outbreaks. “During the smallpox epidemics in the 1960s and 1970s in Europe, there was public alarm whenever outbreaks occurred and, sometimes, a demand for mass vaccination over a wide area, even when the vaccination coverage of the population was high. In the United States, where few people now have protective levels of immunity, similar levels of concern might be anticipated.” If people attempted to flee from the outbreaks, they were actually helping the disease spread.<sup>95</sup>
- An 1893 smallpox outbreak in Muncie, Indiana led to civil unrest. The government imposed mandatory vaccinations, home confinement of the sick, and armed patrols of neighborhoods. “Violence broke out as civilians resisted public health impositions, and several public officials were shot.”<sup>96</sup>
- A plague outbreak in 1900 caused severe economic damage for a Chinese neighborhood in San Francisco. Only Chinese households were quarantined.<sup>97</sup>
- A smallpox outbreak in Montreal, Quebec in 1885 resulted in riots.<sup>98</sup>
- An 1892 quarantine in New York was enforced by groups of vigilantes.<sup>99</sup>

While the more extreme examples involving civil unrest and violence are unlikely, special care needs to be given for maintaining law and order during after a biological terrorist attack.

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<sup>94</sup> Diamond interview, 31 Mar 05.

<sup>95</sup> *Bioterrorism*, pp. 101, 110, and 122.

<sup>96</sup> *Ibid.*, p. 225.

<sup>97</sup> *Ibid.*

<sup>98</sup> *Ibid.*, p. 227.

<sup>99</sup> *Ibid.*

## Appendix L – Security Guards

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Below is a rank ordered list of the fifteen largest security guard firms operating in Los Angeles County.<sup>100</sup> These employment figures document that there are more than 31,000 security guards in Los Angeles County. Given that the Governor could commandeer their services involuntarily, it is in the interest of these firms to cooperate with local officials seeking to establish MOUs.

<u>Firm</u>	<u>Guards in LAC</u>
Burns International Security Services 3333 Wilshire Blvd. Suite 614 Los Angeles, CA 90010	7,500
Pinkerton's, Inc. 4330 Park Terrace Drive Westlake Village, CA 91361	4,770
Inter-Con Security Systems, Inc. 210 S. DeLacey Drive Pasadena, CA 91105	3,500
Argenbright/AHL Services 5200 W. Century Blvd., Suite 320 Los Angeles, CA 90045	2,027
Guard Systems, Inc. 3057 Roswell St. Los Angeles, CA 90065	1,900
International Services, Inc. 3771 W. 242 <sup>nd</sup> St., Suite 205 Torrance, CA 90505	1,500
Shield Security, Inc. 200 N. Westmoreland Ave. Los Angeles, CA 90004	1,475
The Wackenhut Corp. 4929 Wilshire Blvd., Suite 610 Los Angeles, CA 90010	1,420
American Commercial Security Services 500 Shatto Place, Suite 400 Los Angeles, CA 90020	1,400

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<sup>100</sup> Teitelman, 17 Jan 00.

## Appendix L – Security Guards

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Construction Protective Services 436 W. Walnut St. Gardena, CA 90248	1,400
Premium Property Protective Services 3345 Wilshire Blvd., Suite 707 Los Angeles, CA 90010	1,350
Universal Protection Services 5900 S. Eastern Ave., Suite 186 Commerce, CA 90040	1,125
GHG Security and Investigations, Inc. 13200 Crossroads Pkwy. North, Suite 305 City of Industry, CA 91746	868
California Security, Inc. 3250 Wilshire Blvd., Suite 1501 Los Angeles, CA 90010	822
Langner Security Services, Inc. 2501 Cherry Ave., Suite 200 Signal Hill, CA 90806	792
	Total = over 31,000 in LAC