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COVID-19 Vaccine Superstations as a Model to Rapidly Achieve Herd Immunity

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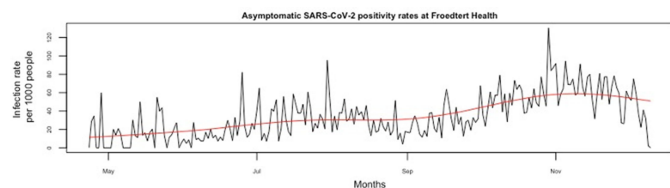


Figure 1.

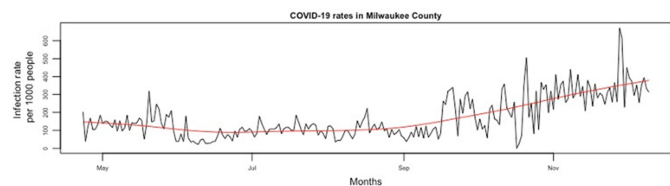


Figure 2.

December 10, 2020, there were 2,347 new asymptomatic infections detected at FH and 75,196 new COVID-19 cases reported in Milwaukee County. Figure 1 shows the time-series plot of asymptomatic SARS-CoV-2 positivity rates at FH and Figure 2 shows COVID-19 rates in Milwaukee County. As the COVID-19 rate in Milwaukee County increased by 1 unit, the asymptomatic infection rate in FH decreased by 0.024 unit (95% CI, -0.053 to 0.004 ; $P = .095$) after accounting for autocorrelation over time. Thus, there was no association between these rates. **Conclusions:** The positivity rates among asymptomatic patients at a large medical center were not predicted by the positivity rate at the county level. This finding suggests that the epidemiology at a county level may be determined by pockets in the population who may not interact, and thus not affect, the positivity rates among asymptomatic patients served by a hospital system within the county.

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Poster Presentation

Subject Category: COVID-19

Investigation on Occupational Protection and Exposure of Medical Staff in the Diagnosis and Treatment of COVID-19 in Sichuan

Wenzhi Huang; Zhiyong Zong; Fu Qiao and Ji Lin

Background: We investigated the contact status of medical staff with confirmed or suspected patients with COVID-19 in Sichuan Province, China, as well as the use of personal protective equipment at the time of contact, and we explored the factors affecting the effective use of personal protective equipment. **Methods:** We performed a cross-sectional study by distributing a questionnaire on occupational protection and exposure of medical staff in the diagnosis and treatment of COVID-19 using a convenience sampling method for online surveys from February 23 to February 29, 2020. **Results:** In total, 13,829 valid questionnaires from 644 hospitals in Sichuan Province were retrieved, and 802 people were exposed to confirmed or suspected patients with COVID-19, accounting for 5.80%. 688 (85.79%) of 802 people who reported that they had taken effective personal protection measures for each exposure. Sex, work department, and length of service were the independent factors influencing the effective use of personal protective equipment in multivariate analysis ($P < .05$). **Conclusions:** Medical institutions need to continue to strengthen the training regarding standard precautions and personal protection, especially for general departments other than fever clinics and isolation wards, as well as medical staff with few working years, to ensure the occupational safety of medical staff.

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Presentation Type:

Poster Presentation

Subject Category: COVID-19

COVID-19 Vaccine Superstations as a Model to Rapidly Achieve Herd Immunity

Jocelyn Keehner; Francesca Torriani; Shira Abeles and Lucy Horton

Background: The County of San Diego Health and Human Services (SDHSA) established a goal to vaccinate 1.9 million residents as quickly as possible to attain vaccine induced herd immunity. This strategy would minimize the emergence of more transmissible variants, to which some vaccines may be less effective. With this strategy in mind, UC San Diego Health (UCSDH) collaborated with the local health authorities and the San Diego Padres to build a superstation in downtown San Diego in the parking lot of a baseball stadium. **Methods:** Building on the experience of rapidly vaccinating the UCSDH workforce in mid-December 2020, UCSDH and SDHSA partnered to more efficiently distribute SARS-CoV-2 vaccine in San Diego County by building a vaccine superstation. The San Diego Padres offered their parking lot as the site; it was centrally located, easily accessible, quick to set up, and semipermanent. They also provided infrastructure support, event coordination, and internet capability. Occupying a space of ~6.5 acres, the superstation included 12 lanes serving 12 cars each, with ~3 cycles every hour, as well as a pedestrian walk-up station. Altogether, the site had the capacity for >5,000 vaccinations daily. This effort required coordination among administration, healthcare providers, IT specialists, and support staff—a daily workforce of >300 persons. The workforce needs were met using a multipronged approach, including flexible staffing, coordination of volunteers, and recruitment of previously retired providers. The private-public partnership enabled the superstation to be up and running in 5 days. **Results:** The operation was quickly ramped up to provide >6,000 vaccines daily. Initially only open to healthcare workers, on January 17 the superstation was expanded to persons aged >75 years, with further expansion to those aged ≥65 years on January 23. From January 11 to February 5, >100,000 individuals received their first dose of vaccine at the superstation, corresponding to ~31% of all San Diego county vaccinations. **Conclusions:** Vaccination of as many people as quickly as possible is essential to controlling the pandemic. Unchecked replication of SARS-CoV-2 allows increases the chance that the virus may develop mutations that render vaccines and therapeutics less effective. Our model vaccine superstation was replicated at 3 more sites around the county, the limited allocation of vaccine has been the only barrier to further expansion. A force of 10 superstations could administer a first dose to the remaining 1.6 million county residents within 32 days.

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Subject Category: COVID-19

Mortality Among Veterans' Affairs Community Living Center (CLC) Residents with COVID-19

Taissa Bej; Brigid Wilson; Sunah Song; Janet M Briggs; Richard Banks; Sonya Kothadia; Federico Perez; Robin Jump and Nicole Mongilardi

Background: Outcomes among nursing home residents with asymptomatic compared to symptomatic COVID-19 are not well characterized. We assessed all-cause mortality among Veterans' Affairs (VA) community living center (CLC) residents; we compared those residents with a negative SARS-CoV-2 test to residents with symptomatic, presymptomatic, and