Presentation Type:

Poster Presentation Subject Category: COVID-19

Characteristics of On-Site Infection Prevention and Control Visits for COVID-19—California, February 2020–December 2020

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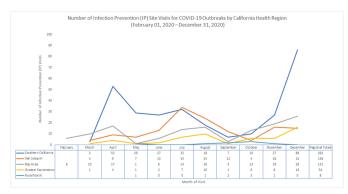
Background: The novel coronavirus (COVID-19) pandemic has caused significant morbidity and mortality in California: 2,218,000 cases and 24,598 deaths had occurred by December 31, 2020. Deaths at skilled nursing facilities (SNFs) and assisted living facilities (ALFs) comprise 26.2% of deaths in California; the fatality rate (299 per 10,000 SNF and ALF residents) in such facilities is nearly 50 times the statewide COVID-19 mortality rate (6.4 per 10,000 California residents). For healthcare facility (SNF, ALF, acute-care hospitals) and correctional facility outbreak management, the California Department of Public Health (CDPH) Healthcare-Associated Infections (HAI) Program deployed trained infection preventionists (IPs) to perform on-site infection prevention and control (IPC) assessments and to provide recommendations to staff and local health departments (LHDs). We describe the number and distribution of visits across the state and common IPC challenges identified. Methods: From February 1, 2020, to December 31, 2020, CDPH IP visits were requested directly by facilities, coordinated through LHDs and other state agencies, or prompted by a facility's increasing case count on twice weekly review of the daily California healthcare facility data survey (Survey 123). Deployed IPs evaluated facility COVID-19 IPC protocols, assessed facility staff adherence using a standardized assessment tool, and provided verbal feedback followed by written summary reports and recommendations. We categorized visits geographically into 5 California Health Officer Association regions and by month, and we reviewed visit reports for common findings. Results: In total, 623 visits were performed for 489 outbreaks at 465 distinct facilities across 46 LHDs; 71 facilities received ≥2 visits. Southern California facilities received 292 visits (46.9%), San Joaquin region facilities received 138 visits (22.2%), Bay Area facilities received 131 visits (21%), Greater Sacramento facilities received 54 visits (8.7%), and Rural North facilities received 8 visits (1.3%) (Figure 1). The highest number of visits per month occurred in December (n = 143, 22.9%), followed by July (n = 87, 13.9%), and April (n = 83, 13.3%). Common IPC challenges included inappropriate resident cohorting practices, improper use of personal protective equipment, and lapses in physical distancing, and source control in breakrooms. Conclusions: On-site visits by CDPH IPs during the COVID-19 pandemic in California, though resourceintensive, provided substantial technical support for healthcare facilities during outbreaks and identified key areas for IPC improvement. Ongoing CDPH HAI guidance and training materials for facility-based IP staff are now being informed by these IPC challenges.

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Presentation Type: Poster Presentation Subject Category: COVID-19 COVID-19 Outbreak in a Hemodialysis Center Using Universal Masking and Eye Protection

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Background: Up to half of all new SARS-CoV-2 infections are acquired from presymptomatic or asymptomatic individuals. Hemodialysis patients and healthcare providers (HCPs) may be at increased risk for COVID-19 due to the need for extended close contact. Universal masking and eye protection are strategies used to reduce SARS-CoV-2 exposure, particularly from presymptomatic or asymptomatic individuals. We describe an outbreak of COVID-19 in an outpatient hemodialysis center despite universal masking and universal HCP eye protection. Methods: An COVID-19 outbreak investigation was performed in a hemodialysis center where universal masking was in use by all HCPs and patients and universal eye protection (goggles, safety glasses) was in use by all HCPs when directly encountering patients. After a cluster of cases was identified in early November 2020, all patients and HCPs were tested for SARS-CoV-2 by real-time reverse transcription polymerase chain reaction (RT-PCR) when symptomatic and weekly until the conclusion of the outbreak. Results: From November 12, 2020, through December 7, 2020, 14 (23.3%) of 60 patients and 9 (28.1%) of 32 HCPs tested positive for SARS-CoV-2 by RT-PCR (Figure 1). The median ages of the patients and HCPs were 64 years (range, 42-87) and 42 years (range, 29-68), respectively. Also, 5 (5.4%) individuals (3 patients and 2 HCPs) were asymptomatic at the time of testing. Furthermore, 7 (7.6%) individuals (5 patients and 2 HPCs) were hospitalized; 2 patients and no HCPs died. No lapses in universal masking or, for HCPs, eye protection prior to or during the outbreak were identified during the investigation. All HCPs and patients wore medical-grade face masks that were discarded at the end of the day; HCPs wore safety glasses or goggles during patient interactions. Although audits of face mask and eye protection compliance were not performed, independent interviews supported high HCP and patient adherence prior to the outbreak. Neither the staff nor patients shared meals at or outside the hemodialysis center. Most patients and HCPs shared the same hemodialysis shift, suggesting the presence of an index case; however, a source case could not be identified despite an extensive investigation. Conclusions: Universal masking and eye protection have been shown to reduce transmission of SARS-CoV-2 from presymptomatic or asymptomatic individuals in the healthcare setting. This report suggests that such measures cannot prevent all outbreaks. We speculate that certain factors associated with hemodialysis care, such as prolonged close patient-HCP contact, may have facilitated this outbreak. Whether nonadherence to universal masking and eye protection or failure of empiric droplet precautions contributed to this outbreak remains unknown.

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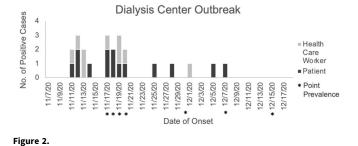


Figure 1.

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