



relating to triage and isolation of contagious patients and fit testing of respiratory protection devices. For these topics, 3,208 HCP (66.21%) and 3,657 HCP (75.48%) HCP, respectively, did not understand the topic well enough to teach others (Fig. 1). The highest number of HCP (n = 2,512, 39.36%) requested additional training in methods on how to educate others about IPC topics (ie, “train the trainer”). Surveyed respondents most frequently used personal computers for job trainings in both work and at-home settings (n = 4,603, 72.12%) and 3,437 HCP (53.85%) were open to either in-person or remote formats for job education. The CDC and OHA were the most frequented and trusted IPC sources among surveyed HCP: 4,124 HCP (64.62%) and 3,584 HCP (56.16%), respectively. **Conclusions:** IPC is a critical topic in HCP training across all healthcare facility types and employee roles. Effective educational planning includes understanding the learners’ knowledge needs and preferred methods of learning. Our learning needs assessment identified important IPC knowledge gaps and will help ensure that our training courses will be offered in effective educational formats for Oregon’s diverse HCP. Future training will include appropriate triage of potentially infectious patients, respiratory fit testing, and general IPC “train the trainer” sessions. Additionally, we will offer both in-person and remote options.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s87–s88

doi:10.1017/ash.2023.348

Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: Other

Environmental factors associated with invasive mold infections at a tertiary-care hospital

Lindsey Tully; Schuyler L. Gaillard; Lucy Zheng; Tara Millson; Princy Kumar and Joseph Timpono

Background: Invasive mold infections (IMIs) in hospitalized patients can result in significant morbidity and mortality. Environmental factors, such as hospital construction and negative air-pressure rooms (NAPRs), have been associated with hospital-acquired IMI. Increased utilization of NAPRs during the COVID-19 pandemic created a unique opportunity to examine the impact of NAPRs on IMI risk. **Methods:** From 2018 to present, a new pavilion was being constructed adjacent to our hospital. The Theradoc platform was used to identify positive mold cultures among adult patients hospitalized at our institution between March 1, 2017, and October 15, 2022. We performed a retrospective chart review of 262 mold isolates to determine patient demographics, timing of IMI, and their relationship to hospital construction and exposure to NAPR. IMI incidence was compared across 3 observation periods: (A) before hospital construction; (B) during hospital construction alone; and (C) during hospital

construction and NAPR enhancement during the COVID-19 surge. Hospital-acquired IMI was defined as an infection that occurred >72 hours after admission. A REDCap database was created for data storage and R software was used for data analysis. **Results:** Of the 262 mold isolates identified, 61 cases were classified as IMI, of which 29 were hospital-acquired IMI. The mean age of IMI patients was 51.8 years, and 55.2% were male. Among them, 20.7% were exposed to NAPR during admission; 65.5% were immunocompromised; and 2 patients were diagnosed with COVID-19. The all-cause mortality rate among hospital-acquired IMI cases was 79.3% (23 of 29). Also, 82.8% of hospital-acquired IMI cases were respiratory in nature, with 83.3% of these cases due to *Aspergillus* spp. Yearly rates of hospital-acquired IMI were 3.0 before construction versus 5.6 during construction (periods B and C). Yearly rates of hospital-acquired IMI, respiratory IMI, and invasive pulmonary aspergillosis by period were as follows: Period A had 3 hospital-acquired IMI cases per year, 2 hospital-acquired respiratory IMI cases per year, and 3 hospital-acquired invasive pulmonary aspergillosis cases per year. Period B had 4.5 hospital-acquired IMI cases per year, 3.5 hospital-acquired respiratory IMI cases per year, and 3.0 hospital-acquired invasive pulmonary aspergillosis cases per year. Period C had 6.5 hospital-acquired IMI cases per year, 5.4 hospital-acquired respiratory IMI cases per year, and 5.0 hospital-acquired invasive pulmonary aspergillosis cases per year. **Conclusions:** Hospital-acquired IMI was associated with a high mortality. Our data demonstrate a >2-fold increase in yearly incidence of hospital-acquired IMI before construction compared with during construction in association with increased implementation of NAPR. We have now reversed the trend in NAPR at our hospital’s designated COVID-19 units.

Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2023;3(Suppl. S2):s88

doi:10.1017/ash.2023.349

Presentation Type:

Poster Presentation - Poster Presentation

Subject Category: Outbreaks

Fanny pack transmission of carbapenem-resistant *Acinetobacter baumannii*

Amber DelleFave; Juliana Mandarano and Nayef El-Daher

Background: Carbapenem-resistant *Acinetobacter baumannii* (CRAB) is a gram-negative coccobacillus that has garnered notoriety as a formidable cause of nosocomial infection with significant mortality. This organism poses a significant threat due to its multitude of resistance mechanisms and ability to endure within the environment. In the summer of 2022, a 350-bed acute-care hospital identified an outbreak of CRAB among critically ill patients in the intensive care unit (ICU) and intensive nursing care unit (INCU). Here, we report actions taken to contain the outbreak and to identify a common environmental source. **Methods:** In total, 7 nosocomial CRAB infection cases were identified by the infection prevention team between July and September 2022. A multidisciplinary team reviewed the cases using relevant medical history and available microbial susceptibilities. Clinical culture sites include 1 PICC tip, 1 urine sample, 1 peritoneal fluid samples, 5 wounds, and 1 sputum sample. Of 7 infections, 6 met the criteria for hospital onset, with an average time to infection from admission of 61 days. We quickly initiated universal contact precautions in the ICU and INCU for 6 weeks, enhanced daily cleaning of high-touch surfaces, provided staff and visitor education, conducted adenosine triphosphate (ATP) testing, collected observations, and performed selective environmental culturing based on observations. **Results:** In total, 71 environmental specimens were collected for culture. All were negative with the exception of 1 isolate obtained from the fanny pack of a wound-care nurse that was positive for CRAB. Also, 4 available patient isolates and the environmental isolate were sent to New York State Department of Health Wadsworth Center (NYSDOH Wadsworth) for genome sequencing, and relation to the same cluster was confirmed. Of 7 isolates, 6 were confirmed to express the *bla*OXA-23 resistance mechanism (1 was not available for testing). Subsequently, chart review identified that a wound-care nurse had had contact with all 7 patients within 30 days of their infections.