Conclusion. We describe a multispecies outbreak of IFI in HM and HSCT patients potentially associated with new building construction that occurred despite implementation of multiple pre-construction control efforts. A multifaceted strategy to improve air quality and protect patients on and off high-risk units was needed to mitigate the outbreak.

Figure 1: Distribution of Proven/Probable IFI Cases by Month

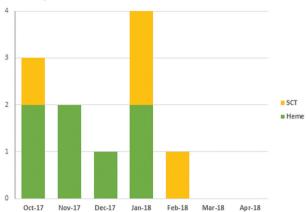


Figure 2: Proven/Probable IFI Cases by Organism by Month

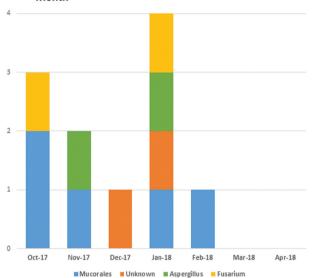
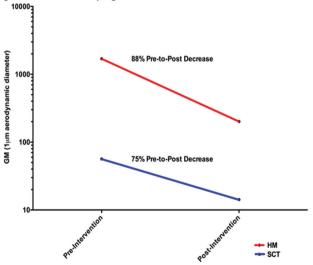


Figure 3: Particulate Sampling Pre and Post Intervention on HSCT and HM Wards



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# 1263. Managing an Influenza Outbreak Which Spilled Over to an Acute Care Hospital from a Behavioral Health Unit

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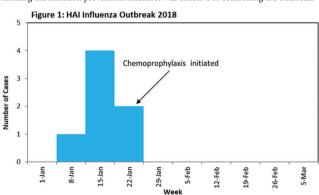
**Session:** 139. Healthcare Epidemiology: Outbreaks *Friday, October* 5, 2018: 12:30 PM

**Background.** Behavioral health units (BHU) have been implicated in influenza outbreaks due to group activities, low availability of alcohol-based hand gels and unique host factors. We describe the management of an unusual influenza outbreak, which started in the BHU and then spilled over to the acute care hospital (ACH).

Methods. University of Maryland Harford Memorial Hospital is a 95-bed ACH with a 14-bed closed-door adult BHU located on the fifth floor. Two cases each of hospital-acquired influenza were identified in our BHU during 2016 and 2017. In January 2018, however, hospital-acquired influenza cases in the BHU spilled over to the adjacent ACH to cause an outbreak. A case was defined as a patient with fever of >100.4°F, presence of influenza-like illness, and a positive influenza test >72 hours after admission. Outbreak control measures included twice daily fever screening, enhanced droplet precautions, visitor restrictions, discontinuing community activities, enforcing hand hygiene at all hospital entrances, and hospital-wide chemoprophylaxis with oseltamivir.

**Results.** On January 15, 2018, the index patient developed influenza in the BHU followed by a second case in BHU 4-days later. Over the next 10 days, five more patients on the third and fourth floors of ACH tested positive. Attack rate was 3% and average length of stay was 8.9 days. Chemoprophylaxis with oseltamivir 75 mg orally once a day was given to 71% of all eligible hospitalized patients for a week (at a cost \$17,000). All seven patients yielded influenza A, subtype H3N2 and were successfully treated with oseltamivir 75 mg orally twice a day for 7 days. The outbreak lasted 11 days. Figure 1 shows the epidemiologic curve.

**Conclusion.** Special attention should be paid to influenza prevention in the BHUs due to the risk of spillover effect to sicker patients in the adjacent ACH. A short, 7-day course of hospital-wide oseltamivir chemoprophylaxis, in addition to promptly implementing the infection prevention measures was effective in controlling the outbreak.



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### 1264. Healthcare-Acquired Influenza in Critical Ill Patients

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**Background.** Healthcare-associated infections (HAIs) increases morbidity and mortality. During 2014, at Hospital Clínico Red de Salud UC CHRISTUS (RS-UCCH), was estimated that 15% of viral respiratory infections were acquired during hospitalization, and influenza was the main etiologic agent. The aim of this study was to obtain clinical characterization of HAIs due to influenza virus in patients hospitalized in critical care units (CCU) and special care units (chronic patients who need hospitalized nurse care).

*Methods.* Descriptive study of CCU and special care patients with hospital acquired influenza during 2014–2017. HAI due to influenza was defined as: symptoms onset and/or positive influenza PCR ≥48 hours after hospital admission, without previous respiratory symptoms or with negative PCR.

Results. 22 patients with median age of 74 years old were identified, only three pediatric cases. The average time of acquired influenza was at 13th day of hospitalization. In 77% Influenza A was the only agent detected and 27% had respiratory co-infection. Thirteen (59%) were previously hospitalized in CCU, but only 2 (15%) due to respiratory problems. Nineteen patients (86%) presented comorbidity such as arterial hypertension (59%), chronic kidney disease (18%), and immunosuppression (18%). Half of them had a decompensation, mainly respiratory, associated to influenza infection. The observed lethality was 18%. Among all the influenza HAI, 59% occurred in unvaccinated patients, although 46% of them met criteria for vaccination recommendation.

**Conclusion.** HAI due to influenza occurred in chronic, older, and unvaccinated patients. Education about HAIs and continuing high vaccination coverage must be a priority.

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## 1265. Application of the ALERT Influenza Trigger for Enhanced Prevention Activities

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**Background.** Accurate prediction of the onset of increased influenza activity in a healthcare setting can allow for optimal use of enhanced prevention activities. The ALERT (Above Local Elevated Respiratory Illness Threshold) algorithm, described by Reich et al. (2015), utilizes historical weekly case counts of laboratory-confirmed influenza infections to set a trigger point of cases/week that anticipates elevated disease incidence. This can then be used in real-time, during subsequent influenza seasons, for initiation of enhanced prevention, including masking by nonvaccinated healthcare workers.

Methods. Historical data collected from UnityPoint Health-Des Moines (3-hospital, 800-bed system), between 2011 and 2014, was analyzed using the ALERT method (Reich et al. 2015) to set a threshold number of diagnosed influenza cases per week to predict the start of the influenza season. Each following year the threshold was re-analyzed, adding the most recent year's data to the historical data set. Our goal was to capture at least 80% of influenza cases within our "ALERT period," without prolonging the duration of heightened prevention efforts.

**Results.** For the initial year of real-time application (2015–2016), the threshold was defined as seven cases. In subsequent years, the threshold was 5. Compared with the 3 years prior, use of the ALERT method resulted in more accurate and consistent identification of the influenza season, including anticipating the increase in cases and defining the total duration of the season.

	Threshold Trigger	Onset Date of Enhanced Prevention	Total Cases per Season	Percent of Cases Captured During Alert	Duration of Alert Period (Weeks)
Influenza Season Metrics					
2012-2013	N/A	November 15, 2012	725	99%	22
2013-2014	N/A	December 30, 2013	255	77%	9
2014-2015	N/A	December 11, 2014	773	73%	19
ALERT Trigger Initiated					
2015-2016	7	February 22, 2016	250	87%	13
2016-2017	5	January 3, 2017	791	95%	17
2017-2018 <sup>a</sup>	5	December 11, 2017	1,445	98%	20

<sup>&</sup>lt;sup>a</sup>As of April 28, 2018.

Conclusion. The ALERT method utilizes health system specific historical data to more precisely define the period of high influenza incidence allowing for focused utilization of enhanced measures to prevent transmission. This results in a safer environment, optimal use of resources and improved employee and patient satisfaction.

Disclosures. All authors: No reported disclosures.

### 1266. Multifaceted Infection Control Strategies to Control Multidrug-Resistant Acinetobacter baumanii in Adult Intensive Care Unit in a Tertiary Hospital in Eastern Region, Saudi Arabia

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**Background.** Multidrug-resistant Acinetobacter baumanii (MDR-AB) has emerged globally as a significant pathogen in hospitals. During 2010, our hospital experienced an increase of MDR-AB in Adult intensive care unit (ICU). Our adult ICU is consists of 10 acute care beds. The hospital is a tertiary institution located in Eastern region of Saudi Arabia. Multidisciplinary team was formed to implement and determine the effect of multifaceted strategies in controlling MDR-AB.

Methods. Active surveillance culture (ASC) was initiated to determine the prevalence rate of MDR-AB per 1,000 patient-days (PD). Using ASC, which was done during admission in ICU, after 48 hours of admission and every week for all patients if there is a positive MDR-AB case, acquisition rate of MDR-AB was calculated per 1,000 PD.

Average daily colonization pressure was also monitored. In addition, a multifaceted infection control strategies were carried out. These include hand hygiene, contact isolation, cohorting of patients, Chlorhexidine bath, and environmental cleaning and disinfection. Compliance with hand hygiene was observed using direct observation method. We use the Fluorescent Gel Method for evaluating the thoroughness of disinfection and cleaning for environmental surfaces.

**Results.** Hand hygiene compliance of HCWs initially was 89%, in 2017 was increased to 98%. Daily Chlorhexidine bath was adopted for all patients in ICU. Initially, the compliance for thoroughness of disinfection and cleaning is 84.6% was increased to 92% in 2013–2017. Prevalence rate of MDR-AB was 20.7/1,000 PD in 2010, it was decreased by 50% in 2011–2012. In 2017, declined to 0.9/1,000 PD. MDR-AB acquisition rate was 11.8/1,000 PD in 2010, it was decreased by 57% in 2011–2012. In 2017, dropped to 0.6/1,000 PD. Average daily colonization pressure was 0.21 in 2010. In 2011–2012, it was decreased by 31%. In 2017, it was reduced to 0.02. Death rate among MDR-AB patient in 2010 was 25.7%. It was decreased to 14% in 2011–2012. In 2017, an enormous drop to 0% was achieved.

**Conclusion.** Implementing these multifaceted strategies help in controlling MDR-AB in our hospital. The commitment and adherence of the HCW to all infection control strategies are essential in sustaining low prevalence rate and acquisition rate of MDR-AB.

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## 1267. Nonventilator Hospital Acquired Pneumonia (NV-HAP) Prevention Initiative in Colombia. Bogotá

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**Background.** Pneumonia is the second most common healthcare-associated infection worldwide. Non ventilator – Hospital Acquired Pneumonia (NV-HAP) affects more people than VAP, has a comparable mortality rate (18.7% vs. 18.9%), and has higher total costs (\$156 million vs. \$86 million), respectively. The objective of this study was to describe the result of the implementation of a bundle of measures for the prevention of NV-HAP in adult patients in a University Hospital in Colombia.

Methods. Descriptive study. In a period of 2 years, a care bundle for prevention of NV-HAP was implemented in adult patients in a university hospital that consisted of: (1) identification of patients at risk (patients over 60 years of age, or with altered consciousness, or swallowing disorder, or patients with tracheostomy), (2) marking the patient with a sticker on the head of the bed, and (3) implementation of the following measures: head of the bed elevation to 30°–45°, oral care every 12 hours, chlorhexidine oral rinse decontamination every 12 hours and aspiration of secretions as needed. In the first 6 months, training was carried out for all staff, the monthly adherence to the strategy was measured.

**Results.** During 2016, 1,045 patients were included, with 10,011 observations, bundle adherence during the first year was 33%. in the second year, 1,400 patiens were included, with 13,198 observations, the bundle adherence increased to 90% throughout the hospital. The rate of NV-HAP decreased from 4.2 (96 cases) to 3.4 (89 cases) per 1,000 patient-days, in the second year compared with the previous intervention year.

**Conclusion.** The strategy of prevention of NV-HAP decreased the cases of nosocomial pneumonia in a university hospital, through the education a high adherence to the strategy was achieved. Studies with a better design should be done to confirm the findings.

Disclosures. All authors: No reported disclosures.

1268. Transmissibility of Candida auris by Type of Inpatient Healthcare Facility Prabasaj Paul, PhD, MPH¹; Kaitlin Forsberg, MPH²; Snigdha Vallabhaneni, MD, MPH¹; Shawn R Lockhart, PhD³; Anastasia P. Litvintseva, PhD²; Janna L. Kerins, VMD, MPH⁴; Angela S. Tang, MPH⁵; Olufemi Jegede, MPH⁶; Patricia M. Barrett, MSD²; Kathleen Ross, MPH′; Rachel Slayton, PhD, MPH¹ and John A. Jernigan, MD, MS¹; ¹Division of Healthcare Quality Promotion, Centers for Disease Control and Prevention, Atlanta, Georgia, ³Mycotic Diseases Branch, Centers for Disease Control and Prevention, Atlanta, Georgia, ³Centers for Disease Control and Prevention, Atlanta, Georgia, ⁵Illinois Department of Public Health, Chicago, Illinois, ⁵Infectious Diseases, Detroit Medical Center/Wayne State University, Detroit, Michigan, <sup>7</sup>New Jersey Department of Health, Trenton, New Jersey

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**Background.** Candida auris is a multidrug-resistant yeast causing outbreaks in healthcare settings. Stopping the spread of *C. auris* requires rapid identification of healthcare facilities at risk of higher transmission to help targeted implementation of infection control measures. We used data collected during public health investigations to quantify transmissibility of *C. auris* by type of healthcare facility.

*Methods.* In two states, 3,159 patient swabs were collected during 96 *C. auris* point prevalence surveys conducted at 36 inpatient healthcare facilities in November 2016