are likely looking at the tip of the iceberg when analyzing infected cases. It is difficult to attribute causality to any one of these exposures without concomitant surveillance cultures of environment and personnel. Retrospective WGS is of limited value in infection control. We now have third generation sequencing with which we also validated some of our samples.

**Disclosures.** Atul Kohari, MD, Ansun Biopharma (Consultant)

870. *Mycobacterium chimaera* Outbreak: Infection Control and Clinical Experiences in Edmonton, Alberta

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**Session:** P-41. HAI: Outbreaks

**Background.** *Mycobacterium chimaera* is responsible for a global outbreak due to contaminated heater-cooler units (HCUs) used in cardiothoracic surgery and has been associated with high mortality. Optimal treatment is not known. The objectives of this study were to describe the Infection Control strategies utilized by the University of Alberta hospital and Mazankowski Heart Institute (MAZ) prior to availability of new HCUs, and outline the clinical course of locally acquired *M. chimaera* infection. MAZ aimed to mitigate the risk of *M. chimaera* infection. Any MAZ patient with *M. chimaera* isolated at an anatomic site with a history of cardiothoracic surgery from 2012 present were identified. Charts were reviewed for patient and infection characteristics.

**Results.** All manufacturer’s instructions in HCU cleaning-disinfection were followed. The MAZ was compliant with CDC recommendations for directing HCU ventili- nation exhaust away from the surgical field and to the use of filtered water. *M. chimaera* was isolated in 3/8 local HCUs. After decontamination procedure, 1 HCU grew *M. chimaera* but cleared after a second attempt. Smoke studies demonstrated aerosolization of HCU exhaust in October 2016 therefore the laminar air curtains were manipulated for increased flow in October and November 2016. By June 2017, HCU retro-fit and in late 2017 all pre-2014 Sorin HCUs were replaced. 10 patients have been diagnosed with *M. chimaera* infection post-cardiothoracic surgery performed at MAZ. None occurred after manipulation of the laminar air curtain. Mean patient age at time of cardiothoracic surgery was 62.3 years and 6 were male. All had implantation of prosthetic material. The most common culture-positive sites were blood in 9/10, urine in 5/10 and prosthetic material or surgical site in 5/10. 6/10 have died due to infection and mean life expectancy of those deceased from first positive culture is 123 days. An additional survivor has been transitioned to comfort care and lost to follow-up.

**Conclusion.** *M. chimaera* post cardiothoracic surgery has been challenging from an infection control perspective but the risk appears to have been mitigated through manipulation of the laminar air curtain. Locally, *M. chimaera* has been associated with significant (60%) mortality.

**Disclosures.** All Authors: No reported disclosures

871. Assessment of the Wide-resistant *Pseudomonas aeruginosa* Outbreak at a University Hospital in Brazil: Have We Lost This War?!

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**Session:** P-41. HAI: Outbreaks

**Background.** How effective were infection control measures implemented in the University Hospital in Brazil: Have We Lost This War?!

**Results.** All manufacturer’s instructions in HCU cleaning-disinfection were followed. The MAZ was compliant with CDC recommendations for directing HCU ventilation exhaust away from the surgical field and to the use of filtered water. *M. chimaera* was isolated in 3/8 local HCUs. After decontamination procedure, 1 HCU grew *M. chimaera* but cleared after a second attempt. Smoke studies demonstrated aerosolization of HCU exhaust in October 2016 therefore the laminar air curtains were manipulated for increased flow in October and November 2016. By June 2017, HCU retro-fit and in late 2017 all pre-2014 Sorin HCUs were replaced. 10 patients have been diagnosed with *M. chimaera* infection post-cardiothoracic surgery performed at MAZ. None occurred after manipulation of the laminar air curtain. Mean patient age at time of cardiothoracic surgery was 62.3 years and 6 were male. All had implantation of prosthetic material. The most common culture-positive sites were blood in 9/10, urine in 5/10 and prosthetic material or surgical site in 5/10. 6/10 have died due to infection and mean life expectancy of those deceased from first positive culture is 123 days. An additional survivor has been transitioned to comfort care and lost to follow-up.

**Conclusion.** *M. chimaera* post cardiothoracic surgery has been challenging from an infection control perspective but the risk appears to have been mitigated through manipulation of the laminar air curtain. Locally, *M. chimaera* has been associated with significant (60%) mortality.

**Disclosures.** All Authors: No reported disclosures

872. Burden of Influenza Outbreaks in Long-Term Care Facilities in Philadelphia, 2012-2020

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**Session:** P-41. HAI: Outbreaks

**Background.** GAS can cause severe postpartum infections and may be transmitted from colonized healthcare workers (HCWs).

**Methods.** Two cases of GAS bacteremia following vaginal delivery were identified on the L&D unit June-July 2019 (Cluster 1), prompting a carrier-disseminator investigation. Two additional cases were identified September-October 2019 (Cluster 2), followed by an additional 3 cases late October 2019, all of whom delivered on the same night (Cluster 3).

**Results.** All patients and HCWs were evaluated for GAS risk factors and screened to prevent its transmission and to detect outbreaks. Broadly resistant strains (BR) have a high mortality rate in invasive infections. By analyzing the clinical and microbiological characteristics of these infections, one can define more effective actions in a nosocomial outbreak setting in a university hospital in Brazil.

**Methods.** From January to September 2019, 13 patients from the oncohematology services and intensive care unit (ICU) followed by the stewardship program of a public university hospital in Brazil had *Pseudomonas aeruginosa* (PA) BR infection. Resistant multidrug (MDR) was defined as resistant to three or more antimicrobial classes. Extensively resistant (XDR) was sensitive to a maximum of two antimicrobial classes. Resistant pandrug (PDR) has been defined as resistant to all antimicrobial classes. Bacterial samples were identified by the automated VITEK®2 system (BioMérieux).

**Conclusion.** The investigation of the outbreak of *Pseudomonas aeruginosa* high- lights the importance of infectious surveillance of this pathogen with this resistance profile, to better understand the causalties, minimize its damage and reduce potential recurrence of new outbreaks.

**Disclosures.** All Authors: No reported disclosures