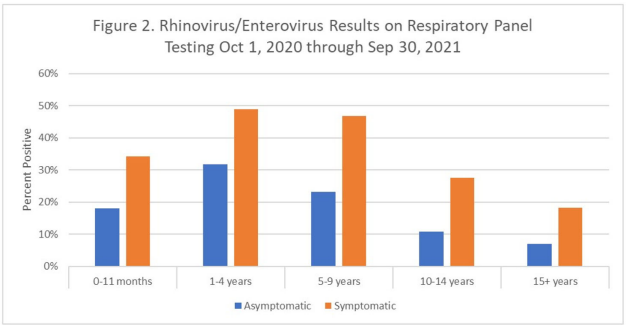

shedding of SARS-CoV-2 may explain why asymptomatic prevalence surpasses symptomatic prevalence in the resolution phase after outbreaks.
Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s61–s62
doi:10.1017/ash.2022.175

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: Respiratory Viruses Other than SARS-CoV-2
Relevance of RSV in hospitalized adults and the need for continued testing
Katherine Miller; Arnold Monto; H. Keipp Talbot; Manjusha Gaglani; Tresa McNeal; Fernanda Silveira; Richard Zimmerman; Donald Middleton; Shekhar Ghamande; Kempapura Murthy; Lindsay Kim; Jill Ferdinands; Manish Patel and Emily Martin

Background: RSV is underrecognized in hospitalized adults. A better understanding of RSV in this population could help prioritize targeted viral-testing resources. Hospitalization and in-hospital outcomes are widely accepted as markers of clinical severity with respect to acute respiratory illness (ARI). We compared characteristics and clinical outcomes between adults hospitalized with ARI from October 2016 through May 2019. **Methods:** All hospitalized adults (≥ 18 years) who met a standardized case definition of ARI were prospectively enrolled across 3 respiratory seasons from 9 hospitals participating in the US Hospitalized Adult Influenza Vaccine Effectiveness Network (HAIVEN). Demographic data were collected during enrollment interviews, and electronic medical records (EMRs) were reviewed to extract comorbidity data. Throat and nasal swabs collected at enrollment were tested for ARI pathogens using real-time PCR assays at respective HAIVEN research laboratory sites. Characteristics and clinical outcomes of participants were compared using χ^2 or nonparametric tests where appropriate. Multivariable logistic regression models were used to test associations between infection status, characteristics, and clinical outcomes, adjusting for age, sex, race, Charlson comorbidity index (CCI), body mass index (BMI), site, season, and days to admission. **Results:** In total, 10,311 adults were included, 22.3% (n = 2,300) were aged 18–49 years, 33.2% (n = 3,423) were aged 50–64 years, and 44.5% (n = 4,588) were aged ≥65 years. Moreover, 6% of adults tested positive for RSV (n = 622), 18.8% positive for influenza (n = 1,940), and 75.1% negative for both (n = 7,749). Obesity and age ≥65 years were significantly associated with RSV detection when compared with participants negative for both RSV and influenza. Patients aged 18–49 years and ≥65 years with RSV had significantly higher median CCI scores compared to patients with influenza (Fig. 1.). The proportion of adults with CHF or COPD was significantly (p-value **Conclusions:** Severe RSV illness may differ from severe influenza illness, and those infected with RSV may have different characteristics than those infected with influenza. Hospitalized adults with RSV infection were more likely to have underlying cardiopulmonary comorbidities and higher CCI scores as well as experience an extended length of hospital stay and need for mechanical ventilation. These data highlight the importance of retaining testing for RSV in older adults hospitalized with ARI.

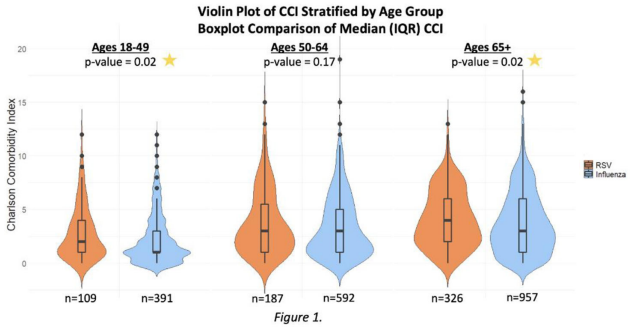

Fig. 1.

Funding: None
Disclosures: None

Antimicrobial Stewardship & Healthcare Epidemiology 2022;2(Suppl. S1):s62
doi:10.1017/ash.2022.176

Presentation Type:
Poster Presentation - Poster Presentation
Subject Category: SSI
Feasibility and acceptability of intranasal povidone iodine decolonization among orthopedic trauma surgery patients
Marin Schweizer; Loreen Herwaldt; Linda Boyken; Jean Pottinger; Rachel Quinn; Daniel Diekema; Fiona Armstrong Pavlik; Melissa Ward; Poorani Sekar and Michael Willey

Background: Nasal decolonization significantly decreases the incidence of *Staphylococcus aureus* surgical-site infections (SSIs). Patient adherence with self-administration of a decolonization ointment (ie, mupirocin) is low, especially among patients having urgent surgery. Povidone-iodine decolonization may overcome patient adherence challenges because povidone-iodine needs to be applied only on the day of surgery. We assessed the effectiveness and acceptability of povidone-iodine decolonization given on the day of surgery among patients having orthopedic trauma surgery. **Methods:** Adult patients who underwent operative fixation of traumatic lower extremity fractures were consented to receive 10% intranasal povidone-iodine solution. Povidone-iodine was applied ~1 hour before surgical incision and was reapplied the evening after surgery. Patients were tested for *S. aureus* nasal colonization before surgery, the evening after surgery (before povidone-iodine reapplication), and the day after surgery. Swabs were inoculated into Dey-Engley neutralizer and processed in a vortexer. A series of dilutions were performed and plated on mannitol salt agar plates. *S. aureus* cultures were quantitatively assessed to determine the reduction in *S. aureus* after povidone-iodine use. Reductions in *S. aureus* nasal growth were evaluated using the Skillings-Mack test. SSIs manifesting within 30 and 90 days of surgery were identified using NHSN definitions. A survey was administered the morning after surgery to determine the acceptability of intranasal povidone-iodine. **Results:** In total, 51 patients participated in this pilot study between February 2020 and June 2021. Nasal samples from 12 participants (23.5%) grew *S. aureus*. The *S. aureus* concentration decreased significantly across the time points (P = .03) (Fig. 1). No SSIs were identified within 30 days of surgery. One SSI occurred within 90 days of surgery; this patient did not carry *S. aureus*, and cultures from the infected site were negative. Also, 31% of patients reported at least 1 mild side effect while using povidone-iodine: dripping (n = 7), itching (n = 6), dryness (n = 4), stinging (n = 4), staining (n = 3), unpleasant taste (n = 3), runny nose (n = 2), burning (n = 1), sneezing (n = 1), sore throat (n = 1), tickling (n = 1), and/or cough (n = 1). Also, 86% of patients stated that povidone-iodine felt neutral, pleasant, or very pleasant, and only 14% stated that it felt unpleasant or very unpleasant. **Discussion:** In this pilot study, 2 applications of nasal povidone-iodine