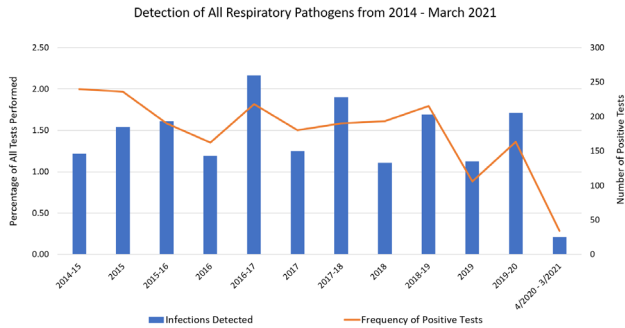
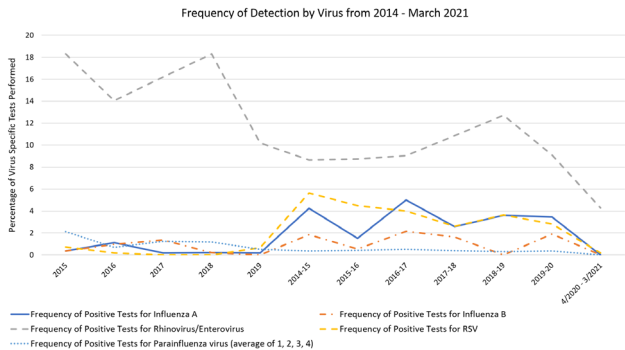


continued, but with a substantially lower frequency of 4.27% in 4/20-3/21, compared with an annual range of 8.65-18.28% from 1/14-3/20 ( $p < 0.001$ ).



Frequency of detection of all respiratory pathogens tested using the Biofire FilmArray multiplex PCR respiratory pathogen panel from January 2014 through March 2021. The frequency of pathogen detection from April 2020 through March 2021 declined substantially in comparison with previous years.



Frequency of detection of influenza A, influenza B, rhinovirus/enterovirus, parainfluenza (1, 2, 3, 4), and respiratory syncytial virus from January 2014 through March 2021. The frequency of detection of these pathogens declined sharply starting in April 2020.

**Conclusion.** During the pandemic, the burden of viral respiratory infections detected among patients at the NIH Clinical Center improved considerably. This reprieve was likely thanks to the layered COVID-19 prevention and mitigation measures implemented in the community and the hospital: masking, distancing, symptom screening, isolation and testing symptomatic persons. As COVID-19 vaccination allows relaxation of masking, community transmission of respiratory viruses will likely resume; continued mask-wearing in the hospital may provide an enduring benefit by preventing nosocomial transmission.

**Disclosures.** Tara N. Palmore, MD, Nothing to disclose

### 153. Gone Are the Other Respiratory Viruses During COVID...but the Rhinovirus/Enterovirus "Cockroach" Persists!

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**Session:** O-31. Respiratory Infections

**Background.** In a typical winter respiratory season, Influenza A, Influenza B, Respiratory Syncytial Virus (RSV) and human Metapneumovirus (hMPV) infections are common in pediatrics. During the COVID-19 pandemic, we noted a marked decrease in all except for Rhinovirus/Enterovirus at our free-standing quaternary level children's hospital.

**Methods.** We prospectively reviewed all patients with positive testing for viral respiratory pathogens from October 1, 2018 through May 29, 2021. Testing was done by polymerase chain reaction (PCR) (BioFire<sup>®</sup> FilmArray<sup>™</sup> Respiratory 2 Panel, UT) and by SARS-CoV-2 PCR testing (Cepheid<sup>®</sup>, CA). The latter may have been done for pre-procedure or admission screening. We submitted 74 specimens to the California Department Public Health (CDPH) for definitive identification and serotyping analysis.

**Results.** The number of Rhinovirus/Enterovirus (RV/EV) infections was compared with Influenza A & B, RSV, and hMPV over the past 3 years. There was a 152% increase in RV/EV from 2018-2019 to 2020-2021 with near absence of other respiratory viruses (Figure 1). In 2020-2021, RV/EV (N=877, 84%) made up a larger percentage of all viral etiologies compared to 2018-2019 (N=348, 11%) (Figure 2). Healthcare acquired infections (HAI) due to respiratory viruses decreased in 2020-2021 compared to both of the prior seasons, though all cases were due to RV/EV (Figure 3). There were no RV/EV associated deaths. Of 74 submitted, CDPH did typing on 24 samples; all were found to be rhinovirus (RV).

Figure 1. High-Risk Winter Viral Infections 2019-2021.

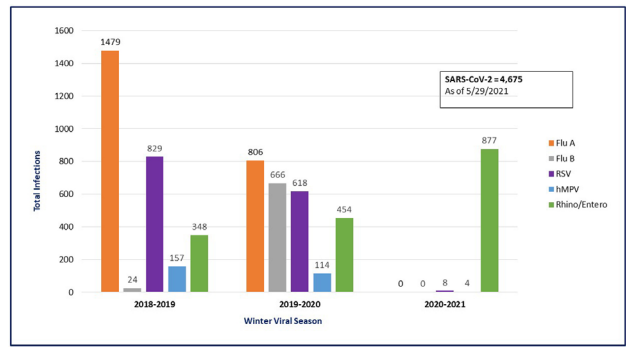


Figure 2. Distribution of Winter Viral Pathogens 2018-2019 Compared to 2020-2021 Season.

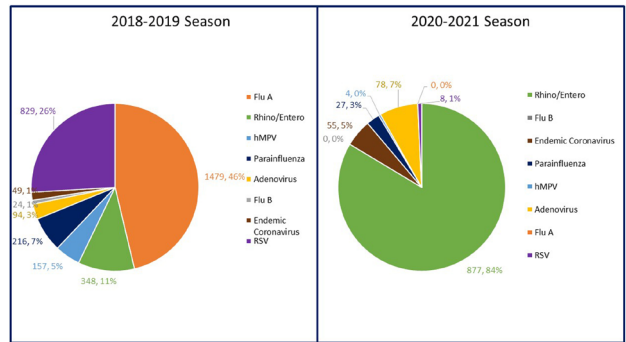
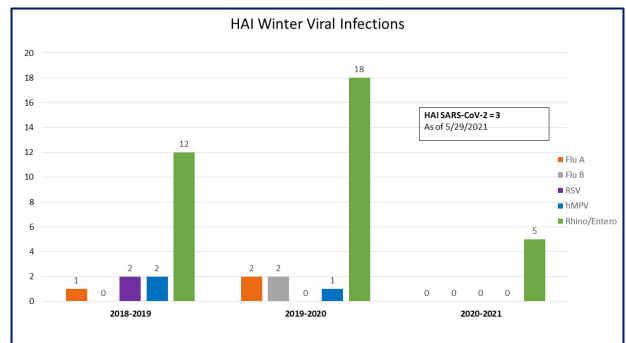
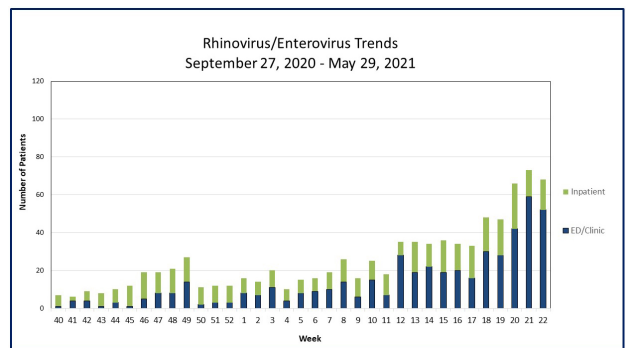


Figure 3. Winter Viral Healthcare Associated Infections 2019-2021.



**Conclusion.** We experienced a marked increase in RV/EV during COVID precautions, despite a near absence of other common respiratory viruses. This was reflected in both our community data and HAI due to respiratory viruses. There was a marked increase in RV/EV starting with week 18 (Figure 4). We hypothesize this is due to schools' re-opening. Understanding RV epidemiology and transmission is important, as it may inform return to school and work protocols for the upcoming respiratory viral season.

Figure 4. Rhinovirus/Enterovirus by Week for the 2020-2021 Season.



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