

INTRODUCTION

- 12 million pediatric COVID-19 cases since March 2020
- Average positivity rate amongst pediatric patients lower than adult counterparts (**4.3% vs. 14.3%**)
- Public health measures by the government enacted in an attempt to slow the spread of the virus
- Multiple foreign studies have noted a shift in the usual seasonality of other respiratory viruses as a result of public health orders

BACKGROUND

Saravanos et. al (2022)	RSV shifted to summer from winter and autumn
Van Brusselen et al (2021)	Reduction in RSV due to public health measures by governments
Vittucci et al (2021)	80.66% reduction in respiratory cases (less extent in Rhinovirus)

AIMS

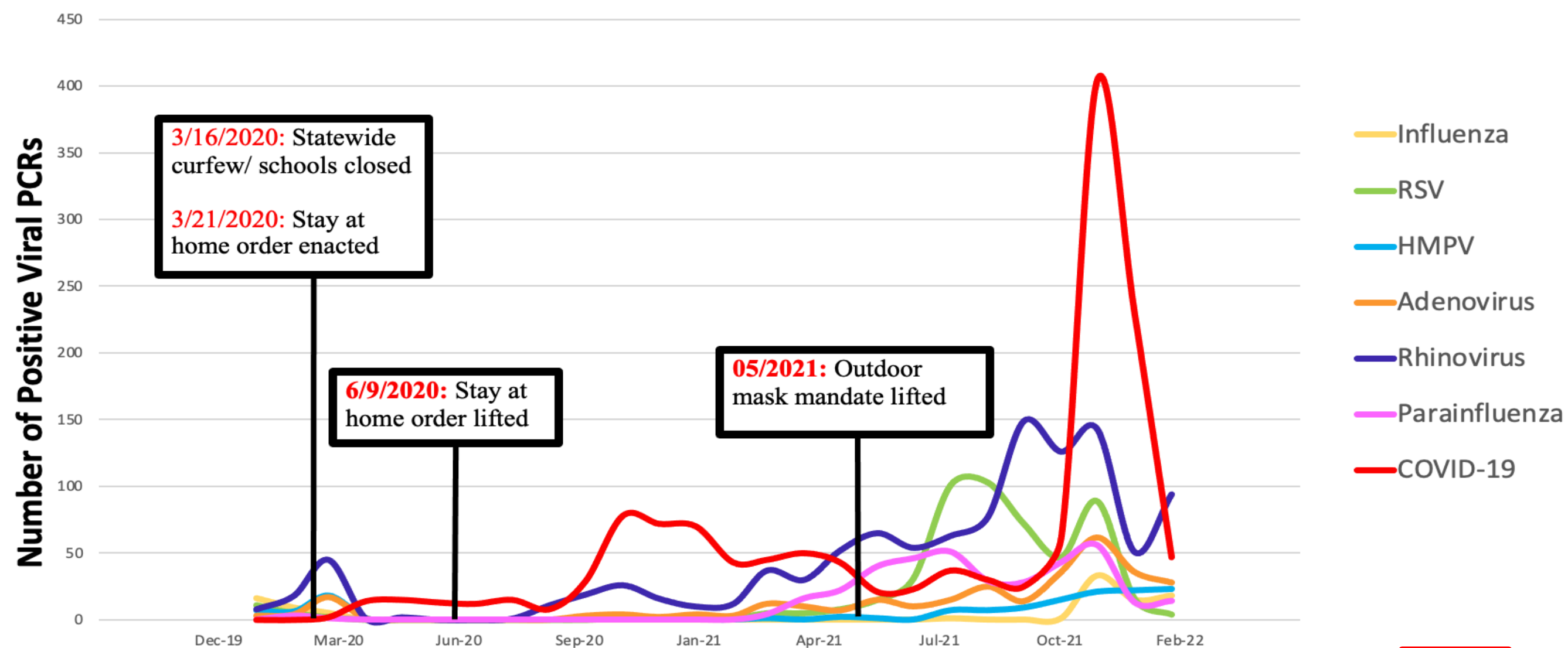
- Were public health measures effective in reducing viral infections in the community?
- Was there a shift in seasonality of common respiratory viruses during the pandemic?
- Document the epidemiology of COVID-19 and other common respiratory viruses at Saint Peter's University Hospital

METHODS

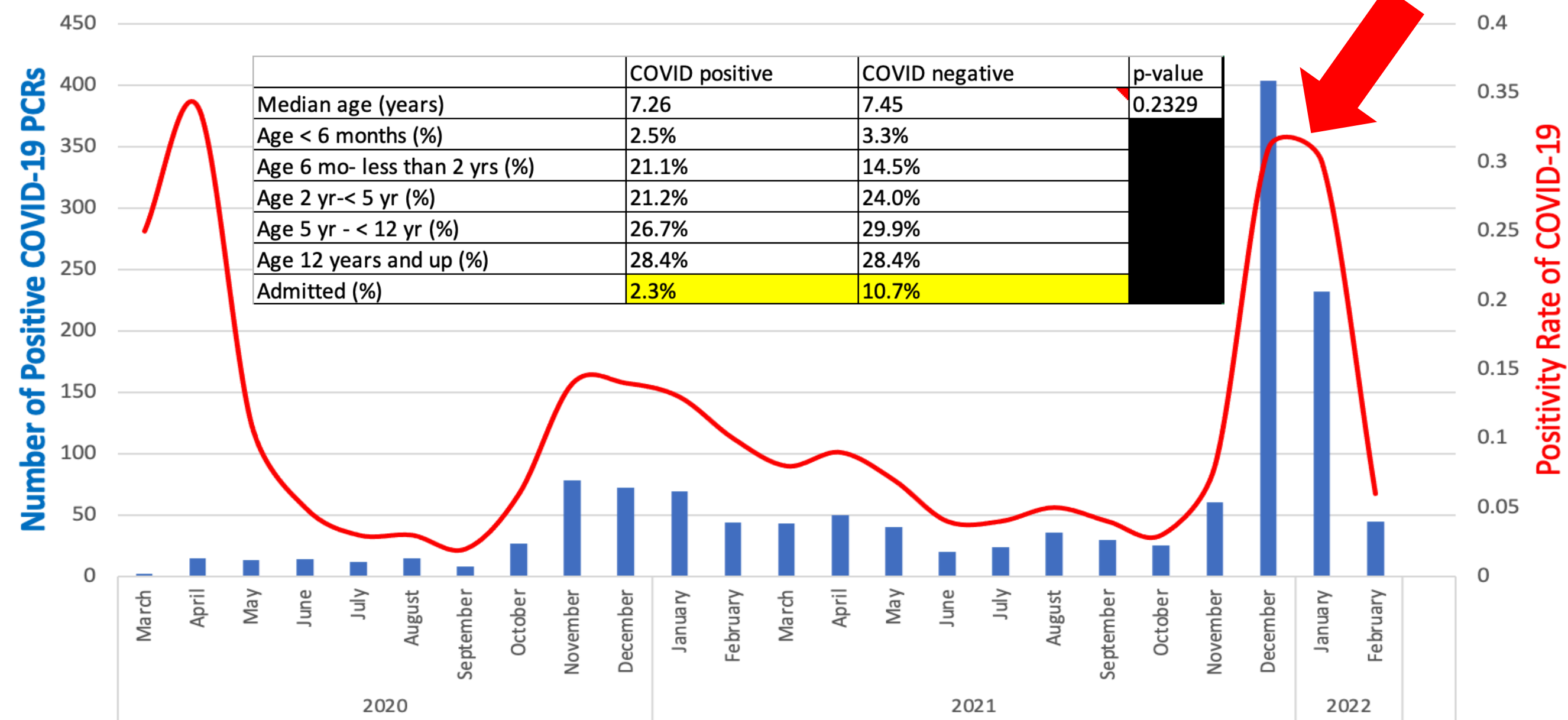
- Study has been approved by the Saint Peter's University Hospital Institutional Review Board
- Descriptive retrospective review of RVPs and COVID-19 PCRs from 1/1/2020 – 2/28/2022
- **Inclusion:** Patients 18 years or less who had a RVP or COVID-19 PCR test performed
- **Data collected:** Gender, age, race/ ethnicity, test results
- t-test to determine statistical significance
- Aggregate data used to determine epidemiology

RESULTS

Positive Viral PCRs from 1/1/2020 - 2/28/2022

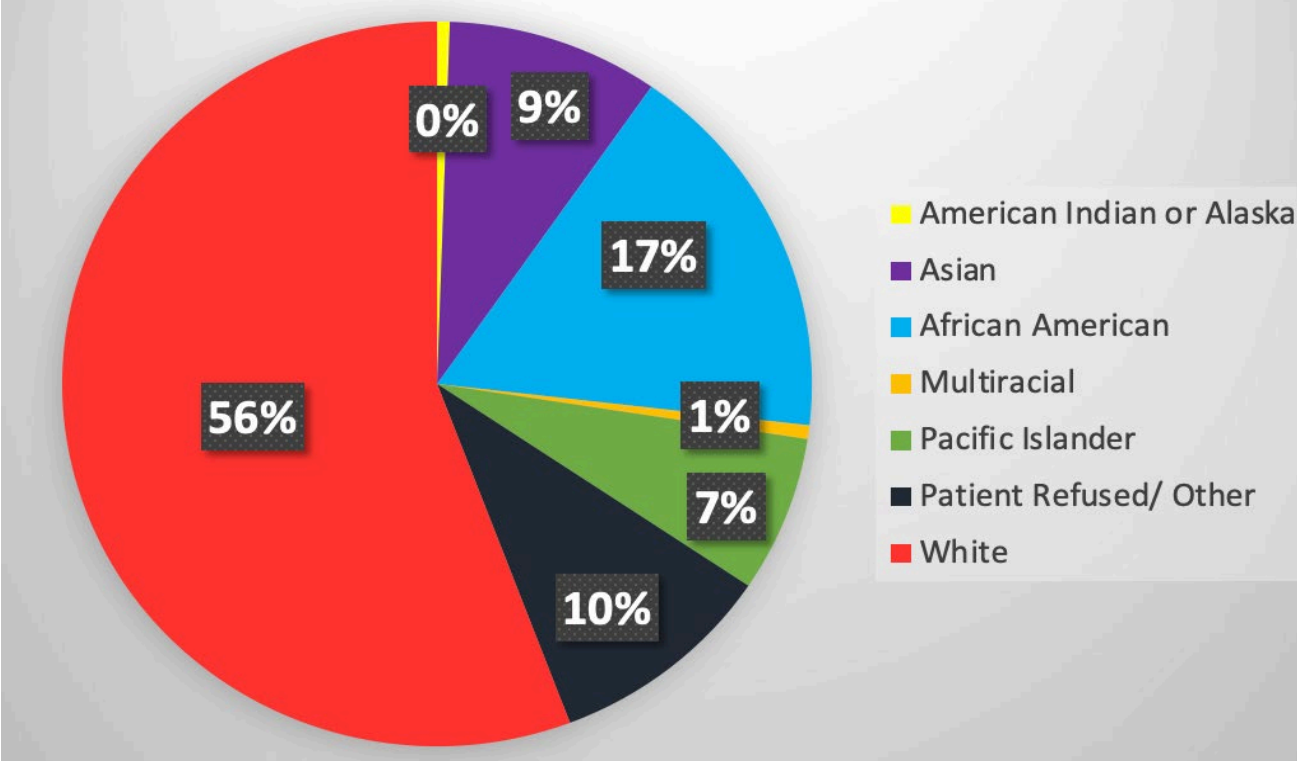


COVID-19 Positivity Rate in Relation to Positive Case Totals



RESULTS

Racial Breakdown of Positive COVID-19 PCR Tests



DISCUSSION

- **Total 4,513 RVPs and 14,750 COVID-19 PCRs** performed in 1/1/2020 – 2/28/2022
- Statewide public health measures shown to **decrease** total positive cases of all viruses
- No regular RSV and Influenza season during the pandemic
- All viruses originally **“disappeared”** at the start of pandemic
- **Rhinovirus** persistent more than other viruses
- **Rise** in RSV cases in the Summer of 2021
- COVID-19 positivity rate mimics the NJ statewide trend
- Increased positive cases amongst **Pacific Islanders** compared to local demographic data
- **No** significant difference in median age of COVID positive vs COVID negative patients with average age of **7 years**
- **2%** of COVID positive patients were **admitted**
- **Limitations:**
 - Shortage of RVPs in Spring 2020 due to national emergency
 - RSV/ Flu Ag not included in this study
 - Patients admitted to the NICU not included
 - Reason the test was performed unknown

REFERENCES

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