

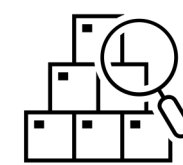
COVID-19 Croup: A More Common Presentation During the Omicron Wave

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Our Question

Is Omicron causing more croup?

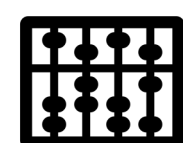


Methods

We identified discharged patients (ED and Inpatient) with COVID-19 (by + PCR) and searched for diagnoses of croup.

We sorted patients into a pre-Omicron group (9/5/21-12/4/21) and an Omicron prevalent group (12/5/21-1/31/21) based on initial cases in NY (12/2/21) and observed a process change in COVID+ croup cases on a control chart.

Data extracted from Epic via reporting workbench. Statistical analysis was performed in Excel with QI-Macros (control chart, two tailed T test to compare groups).



$$\% \text{ COVID Cases as Croup} = \frac{\text{Discharges with diagnosis of croup}}{\text{Discharges with SARS - CoV - 2 (+) PCR}}$$



Results

6.2% of children with COVID-19 presented with croup during Omicron period
 1.8% of children with COVID-19 presented with croup during baseline period
+4.4% (CI 1.7-7.28%, p = 0.03) (Fig 1A)

Viral etiologies of croup shifted dramatically during study period (Fig 1B)



Conclusion

The Omicron variant is 3.4x as likely to present with croup.

Future studies should evaluate severity of illness compared to other causes of croup and focus on describing treatment options for COVID-19 croup.

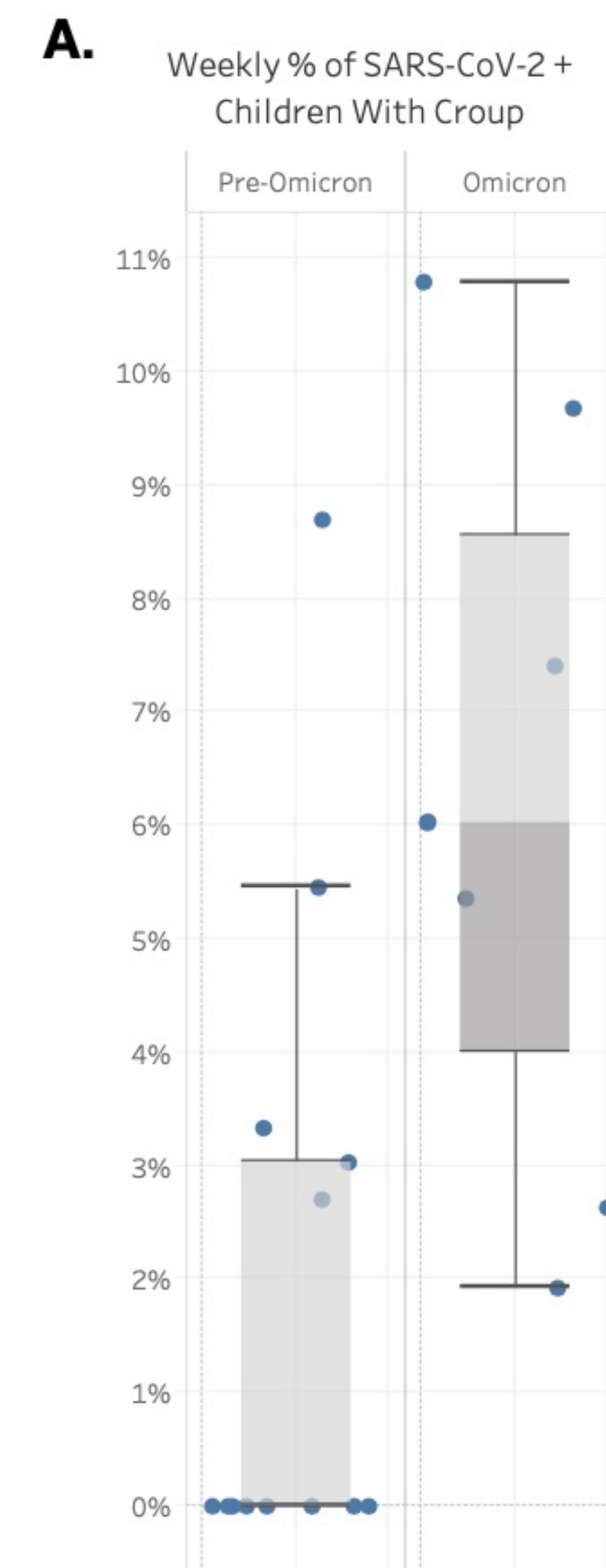


Figure 1A: Compares the average weekly % of SARS-CoV-2 positive children with croup in the Pre-Omicron and Omicron periods.

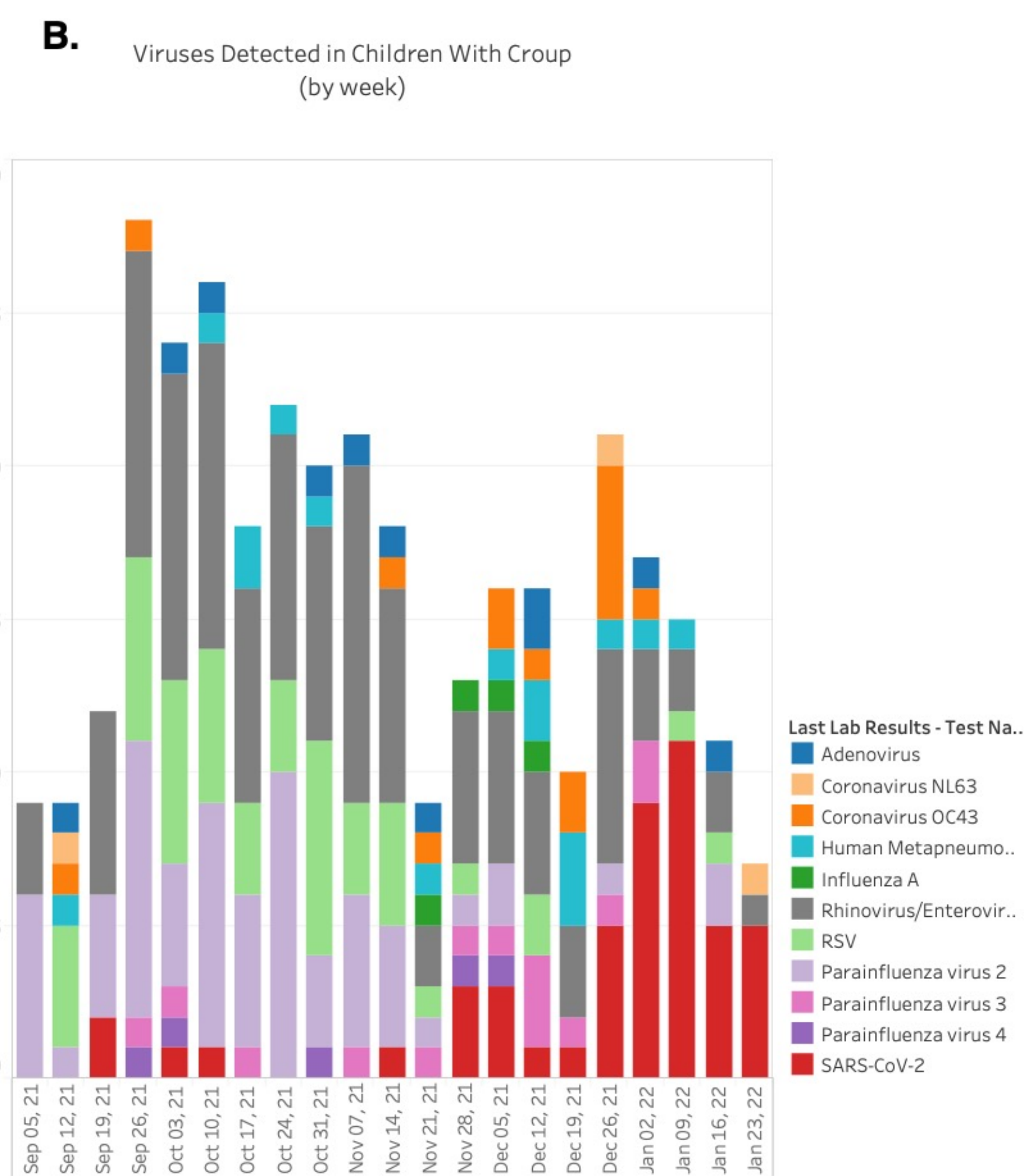


Figure 1B: Visual depiction of different viruses detected in children with croup, on a weekly basis.

