

Paediatric Respiratory Pathogen Report Week 1, 1 January – 7 January 2024

- Pathwest detected 27 cases of SARS-CoV-2 in paediatric patients this week.
- There were 5 paediatric RSV cases detected at PathWest this week. RSV proportion positive is below levels normally seen at this time of year.
- PathWest detected 5 influenza cases in paediatric patients. 4 cases were of influenza A/H3 and 1 was influenza B.
- Other common respiratory pathogens detected in paediatric patients this week were Adenovirus (9 cases), parainfluenza (7 cases) and rhinovirus (3 cases).

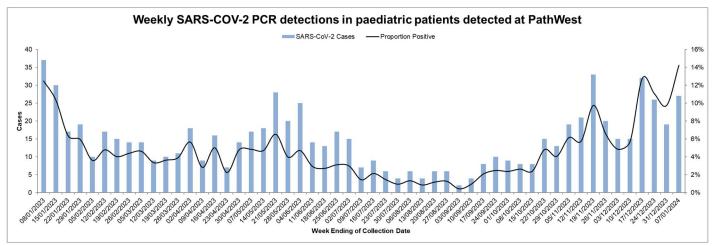


Figure 1: Weekly SARS-CoV-2 detections in hospital attending patients and community paediatric patients. Data is for PCR samples tested by PathWest only.

SARS-CoV-2 cases (n=27) and proportion positive (14.2%) increased in paediatric patients this week.

Data is representative of all patients attending a hospital (public or private) in Western Australia, for which a respiratory sample was collected and tested at a PathWest laboratory.

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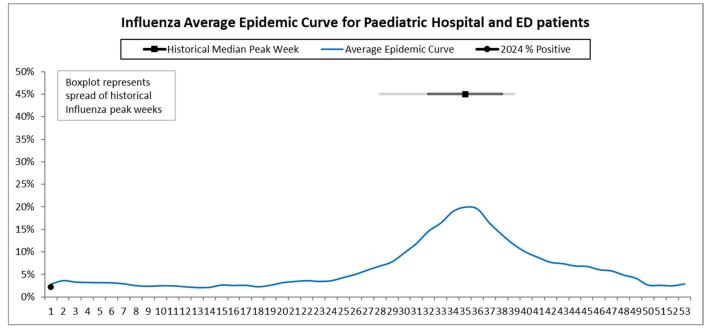


Figure 2: The current season plotted against the Paediatric Influenza Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised, and ED paediatric patients tested by PathWest.

Influenza proportion positive (2.2%) is similar to levels historically observed at this time of year.

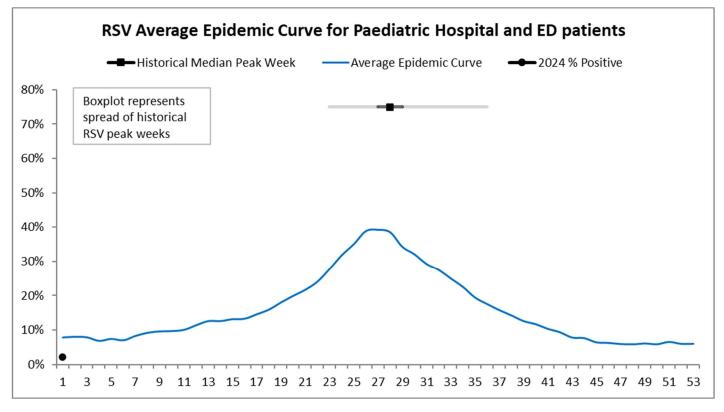


Figure 3: The current season plotted against the Paediatric RSV Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised, and ED paediatric patients tested by PathWest.

RSV proportion positive (2.2%) is below levels historically seen at this time of the year.

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Pathogen Genomics & Surveillance Unit



RSV, Influenza, hMPV and Other Respiratory Pathogens in Hospital and ED Paediatric Patients Week 01 2024

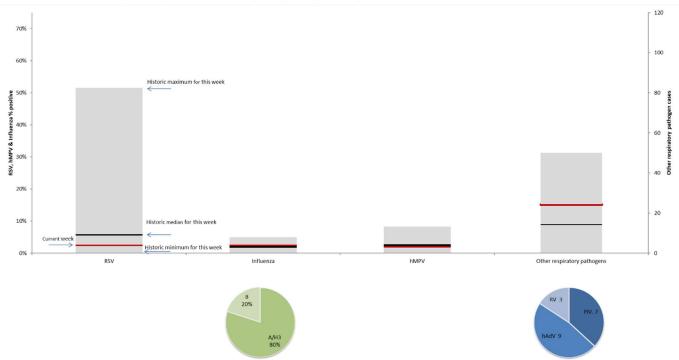


Figure 4: Proportion positive (RSV, hMPV & influenza) or cases (other respiratory pathogens) for the current week (red line) plotted against the historic range (grey box) and median (black line) for this week. Pie charts represent the breakdown of influenza subtypes and the count of other respiratory pathogens. Data represents hospitalised and ED paediatric patients tested by PathWest. Historic data is for years 2007-2019. Please note: Due to the escalation of rapid PCR testing, the number of influenza and RSV positive samples which do not receive a subtyping test has increased.

RSV proportion positive (2.2%) is lower than the historical median of 5.5%. Influenza proportion positive (2.2%) is slightly higher than the historic median for this week. Other respiratory viruses, mainly, Adenovirus, parainfluenza, and rhinovirus were higher than their historic median levels. Testing for these viruses is currently higher than it has been in previous years.

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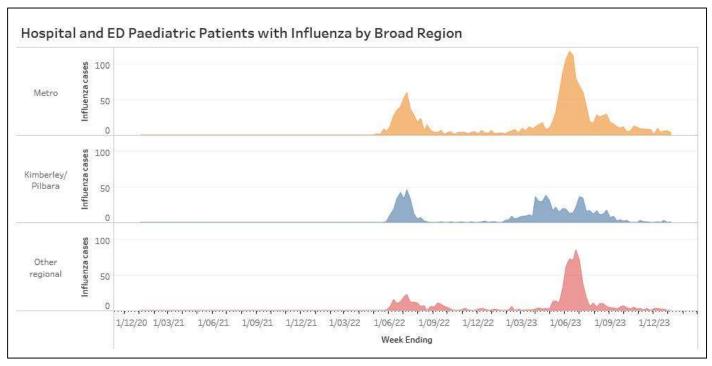


Figure 5: Hospital attending paediatric patients with influenza in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 5 paediatric influenza cases, 4 were from the Metro area and 1 was from the Kimberley/Pilbara.

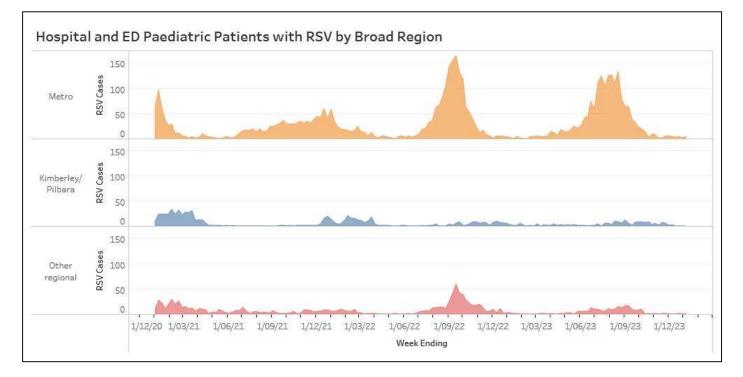


Figure 6: Hospital attending paediatric patients with RSV in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 5 paediatric RSV cases 4 were from the Metro area and 1 was from the Southwest.

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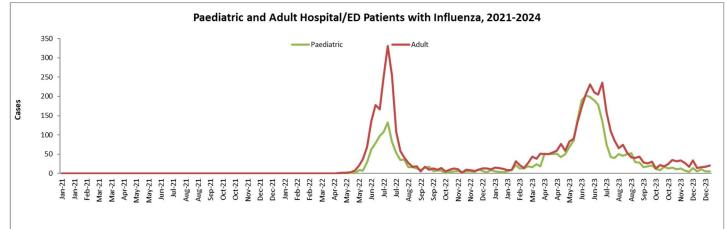


Figure 7: Paediatric and adult hospital attending patients with influenza, 2019-2024.

There were 5 children and 21 adults with influenza who attended a hospital.

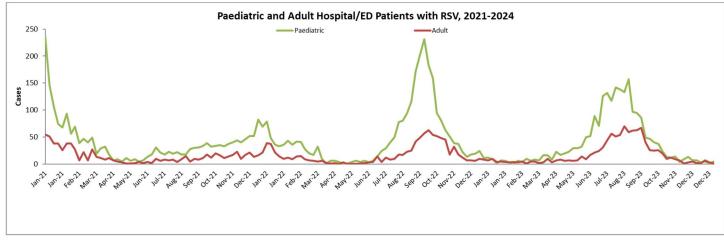


Figure 8: Paediatric and adult hospital attending patients with RSV, 2019-2024.

There were 5 children and 1 adult with RSV who attended a hospital.

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