

Paediatric Respiratory Pathogen Report

Week 42, 16 October – 22 October 2023

- There were 13 paediatric RSV cases detected at PathWest this week. RSV proportion positive is below levels normally seen at this time of year.
- Influenza proportion positive increased this week but remained below historical averages typically observed at this time of year.
- PathWest detected 18 influenza cases in paediatric patients, 7 of these were influenza A/H3, 6 were influenza B, 3 were influenza A yet to be subtyped and 2 influenza A/H1.
- Other common respiratory viruses detected in paediatric patients this week were human metapneumovirus (26 cases), parainfluenza (16 cases), rhinovirus (16 cases) and adenovirus (13 cases).

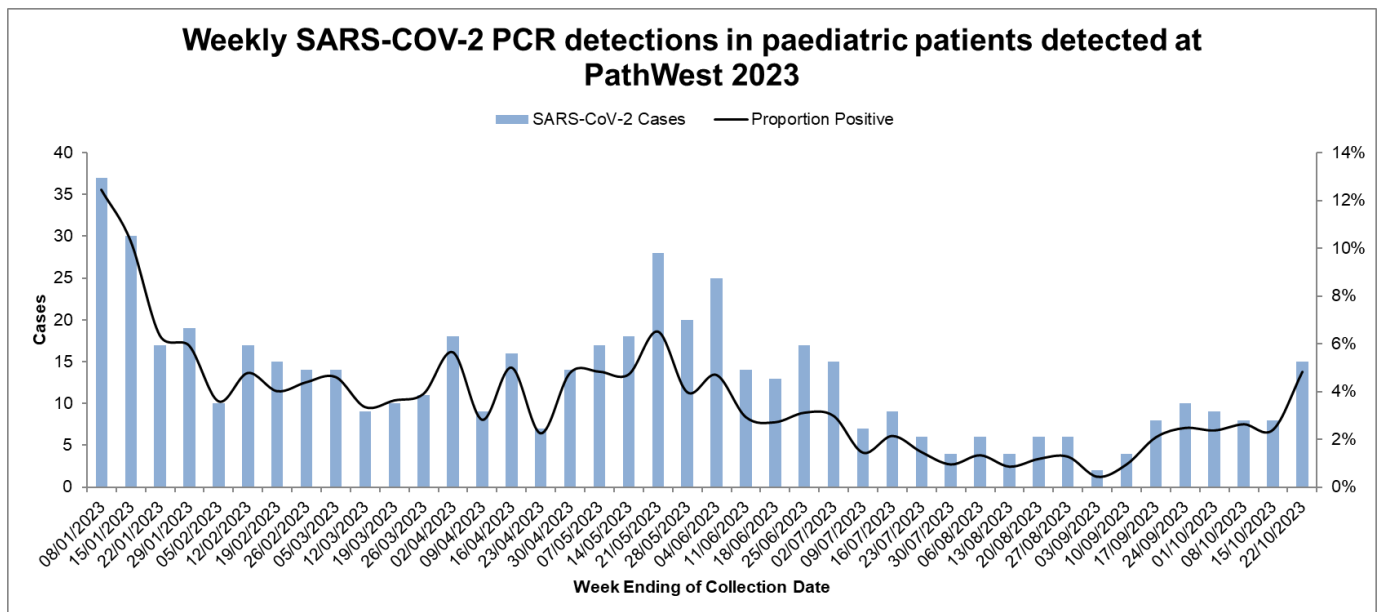


Figure 1: Weekly SARS-CoV-2 detections in hospital attending patients and community paediatric patients. Data is for PCR samples tested by PathWest only.

SARS-CoV-2 cases and proportion positive in paediatric patients increased 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.

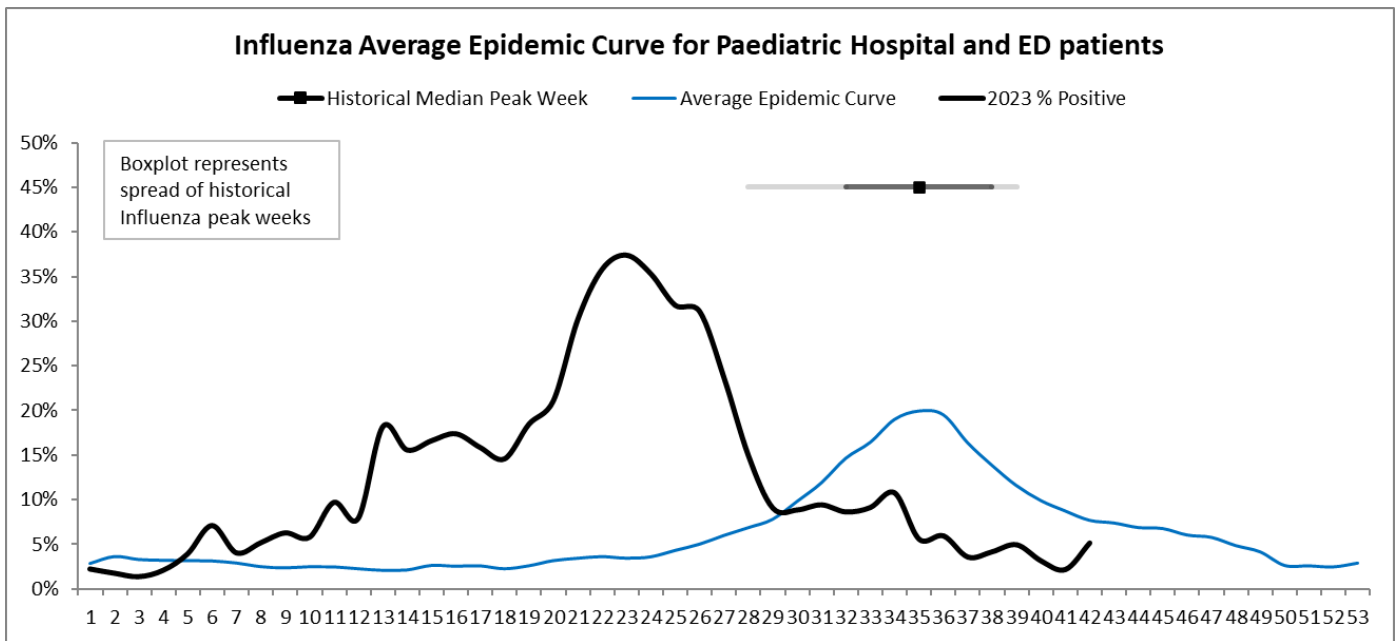


Figure 2: The current season plotted against the Paediatric Influenza Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised, and ED paediatric patients tested by PathWest.

Influenza proportion positive (5.1%) is below levels historically observed at this time of year.

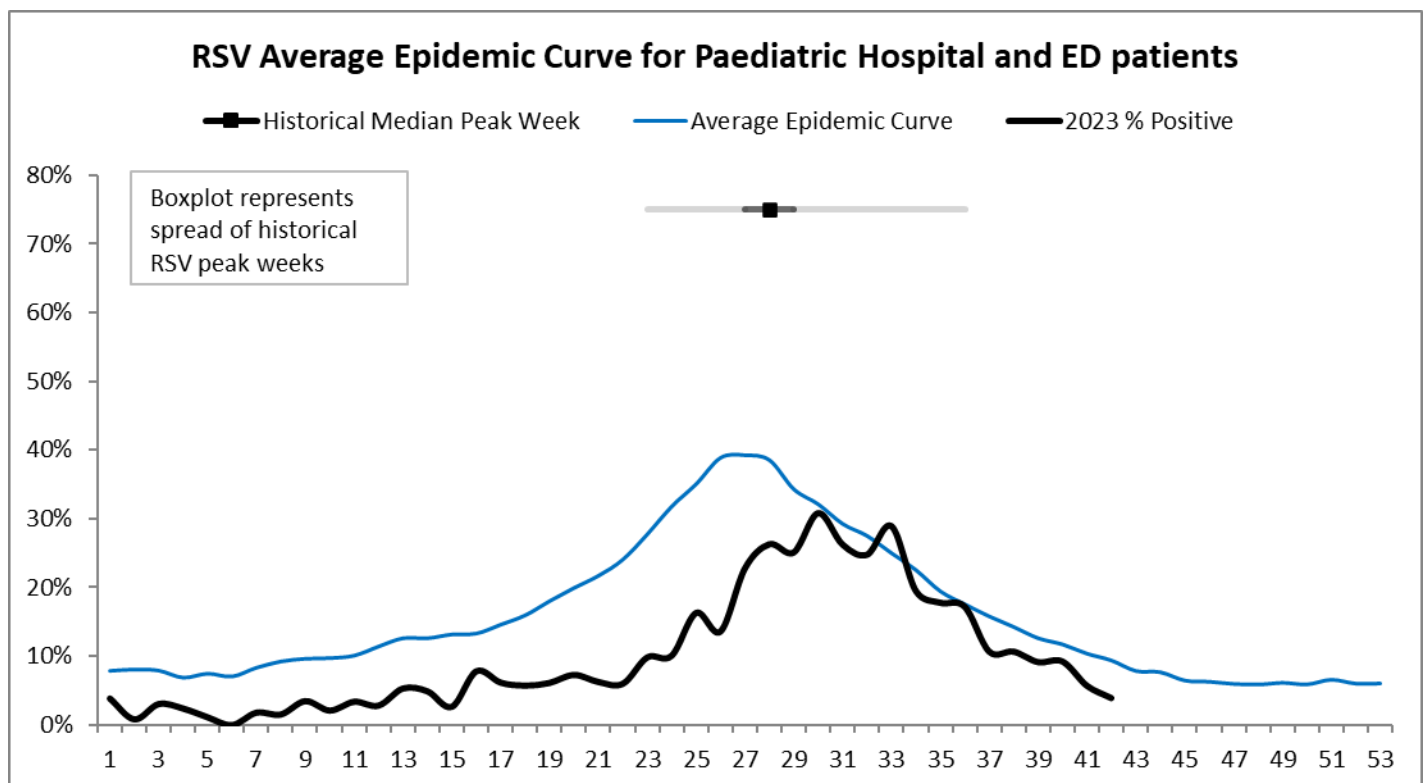


Figure 3: The current season plotted against the Paediatric RSV Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised, and ED paediatric patients tested by PathWest.

The RSV proportion positive (3.7%) is below levels historically seen at this time of the year.

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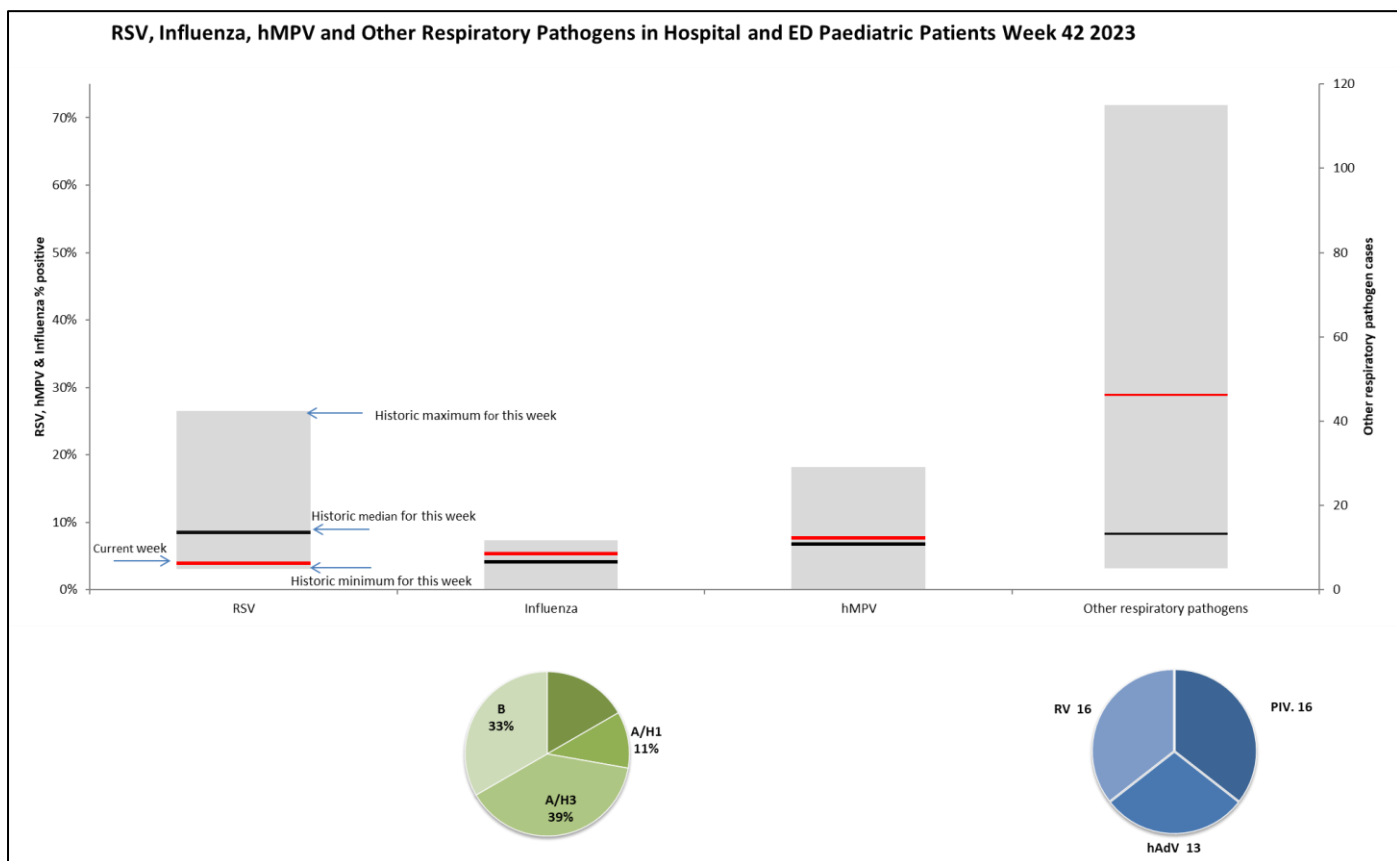


Figure 4: Proportion positive (RSV, hMPV & influenza) or cases (other respiratory pathogens) for the current week (red line) plotted against the historic range (grey box) and median (black line) for this week. Pie charts represent the breakdown of influenza subtypes and the count of other respiratory 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 (3.7%) is lower than the historical median of 8.2%. The influenza proportion positive (5.1%) was higher than the historical median of 3.9 % for this week. Other respiratory viruses, mainly human metapneumovirus, 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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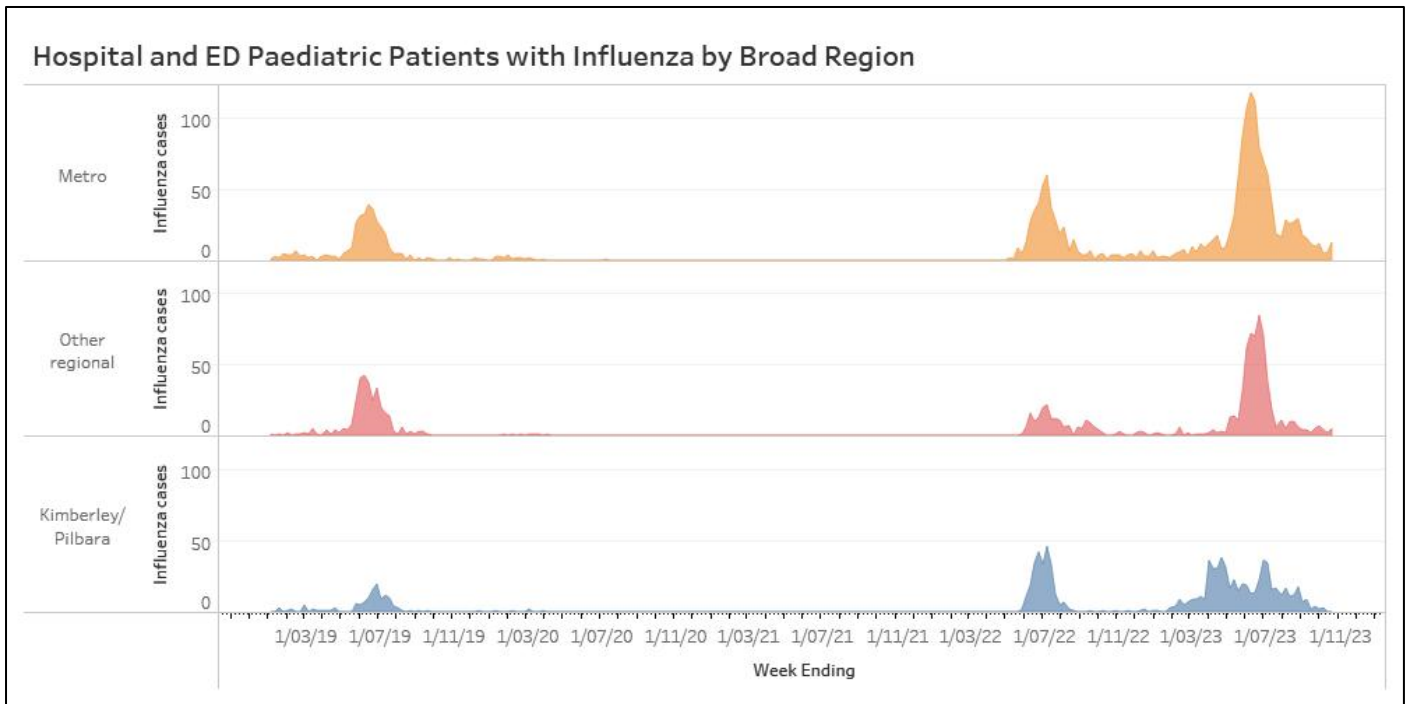


Figure 5: Hospital attending paediatric patients with influenza in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 18 paediatric influenza cases, 13 were from the Metro area, and 5 were from the Southwest.

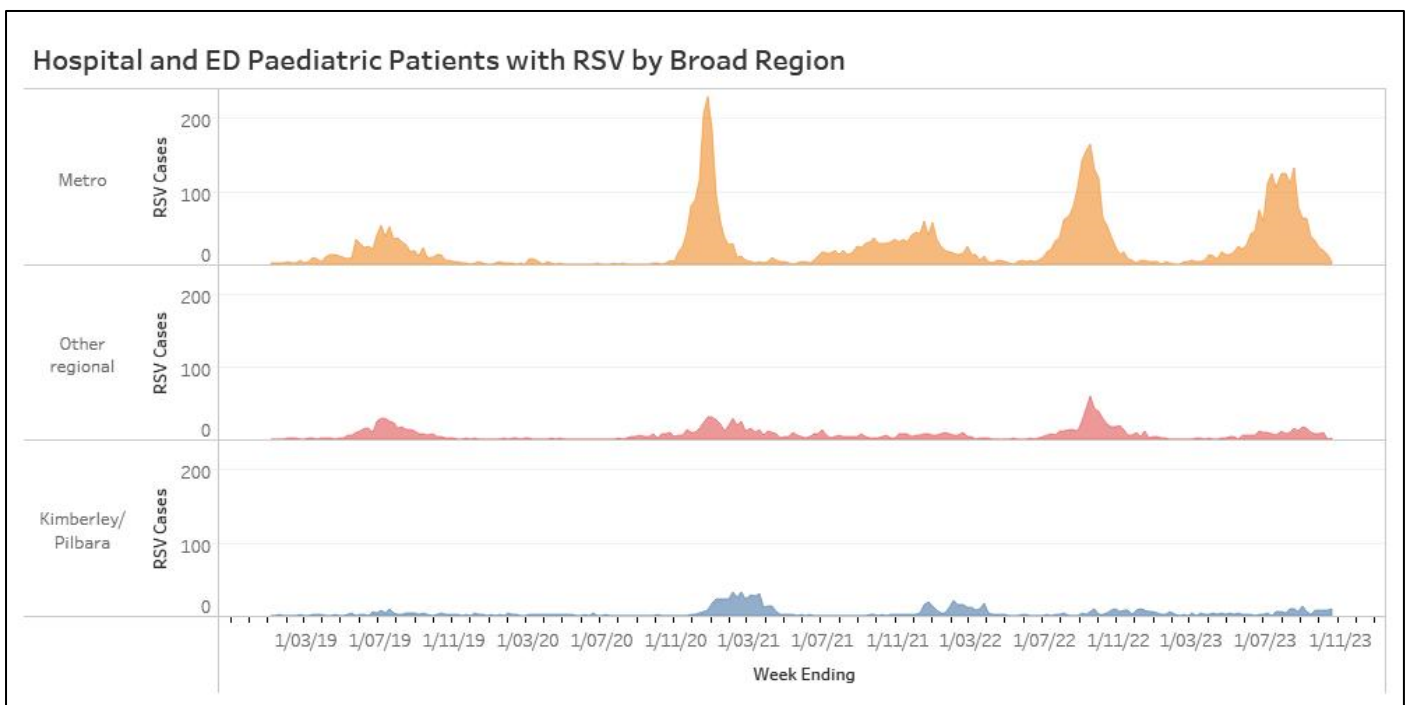


Figure 6: Hospital attending paediatric patients with RSV in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 13 paediatric RSV cases, 3 were from the Metro area. 7 from the Pilbara, 2 from the Kimberley and 1 from the Great Southern.

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.

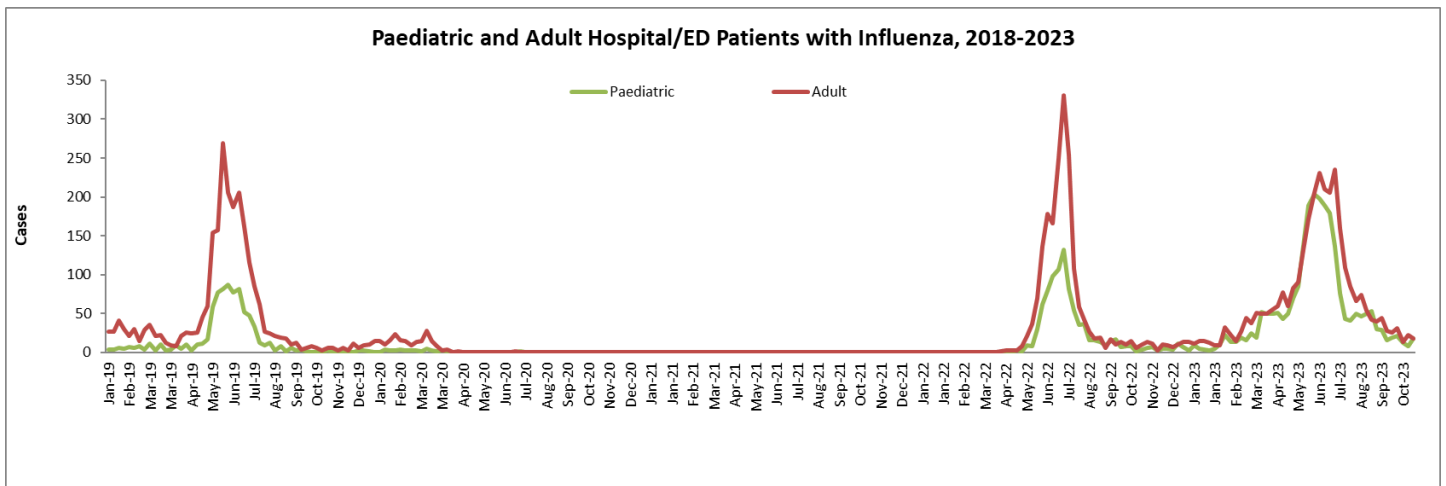


Figure 7: Paediatric and adult hospital attending patients with influenza, 2018-2023.

There were 18 children and 18 adults with influenza who attended a hospital.

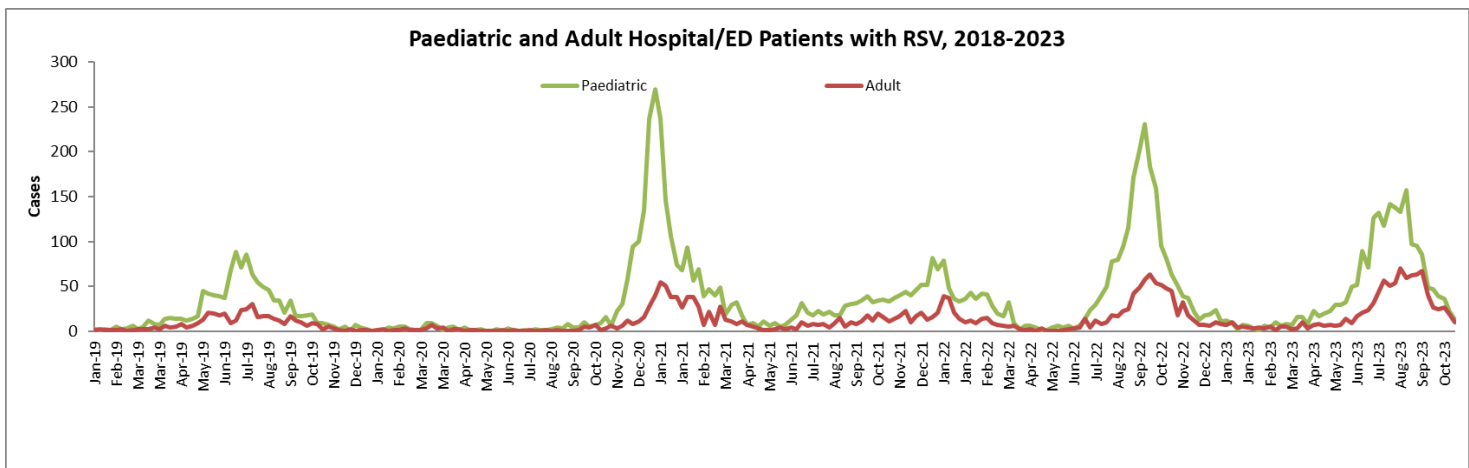


Figure 8: Paediatric and adult hospital attending patients with RSV, 2018-2023.

There were 13 children and 10 adults with RSV who attended a hospital.

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.