

Paediatric Respiratory Pathogen Report

Week 36, 4th September – 10th September 2023

- Pathwest reported 83 paediatric RSV cases this week. Both the number of cases and the proportion positive are stable, aligning with typical levels for this time of year.
- The influenza proportion positive is stable but below the historical averages typically observed at this time of year.
- PathWest detected 26 influenza cases in paediatric patients. Of these, 15 were influenza B, 5 were influenza A/H3, 4 were influenza A/H3, 1 was influenza A yet to be subtyped and there was 1 mixed infection.
- Other common respiratory viruses detected in paediatric patients this week were parainfluenza (35 cases), human metapneumovirus (31) adenovirus (21 cases) and rhinovirus (21 cases).

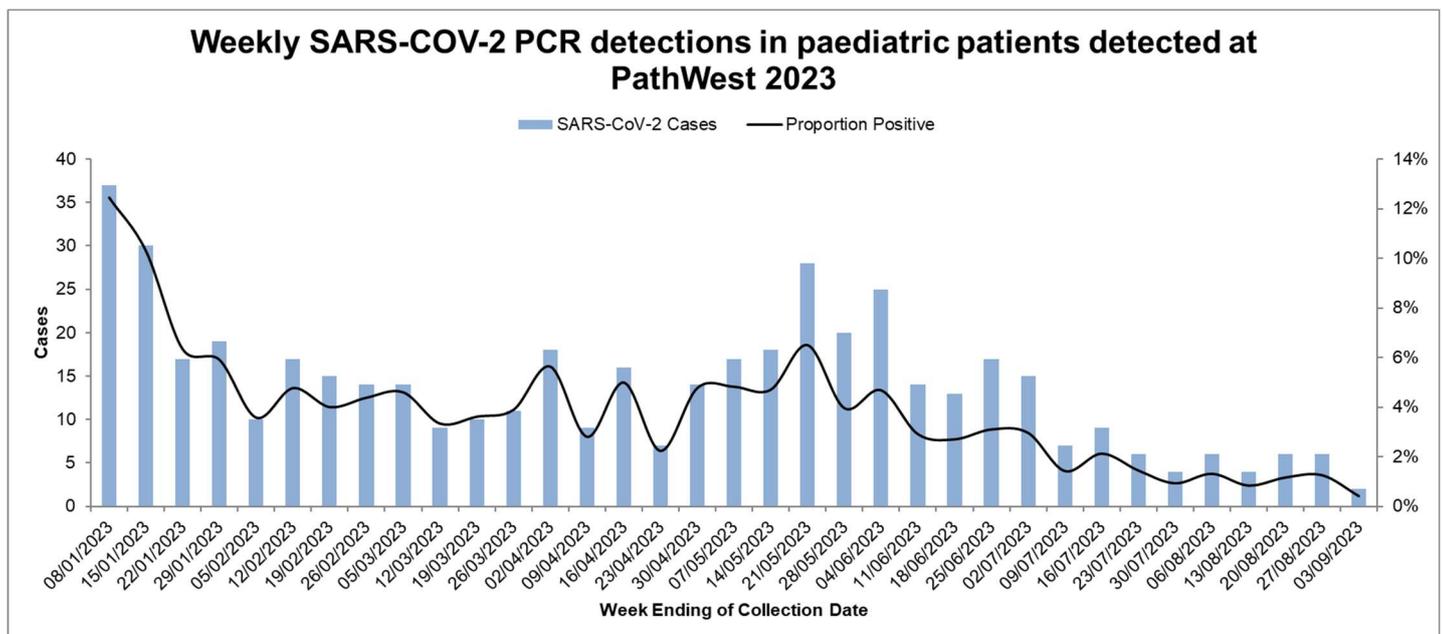


Figure 1: Weekly SARS-CoV-2 detections in hospital attending patients and community paediatric patients. Data is for PCR samples tested by PathWest only.

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

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.

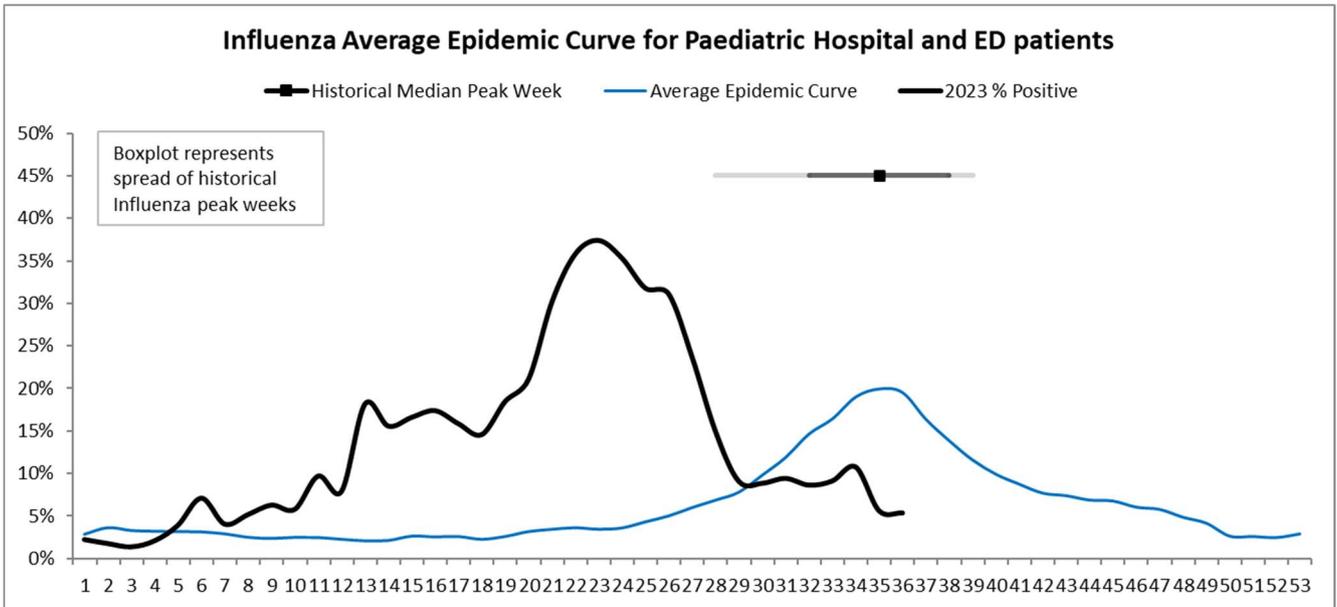


Figure 2: The current season plotted against the Paediatric Influenza Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised, and ED paediatric patients tested by PathWest.

Influenza proportion positive (5.3%) is below levels historically observed at this time of year.

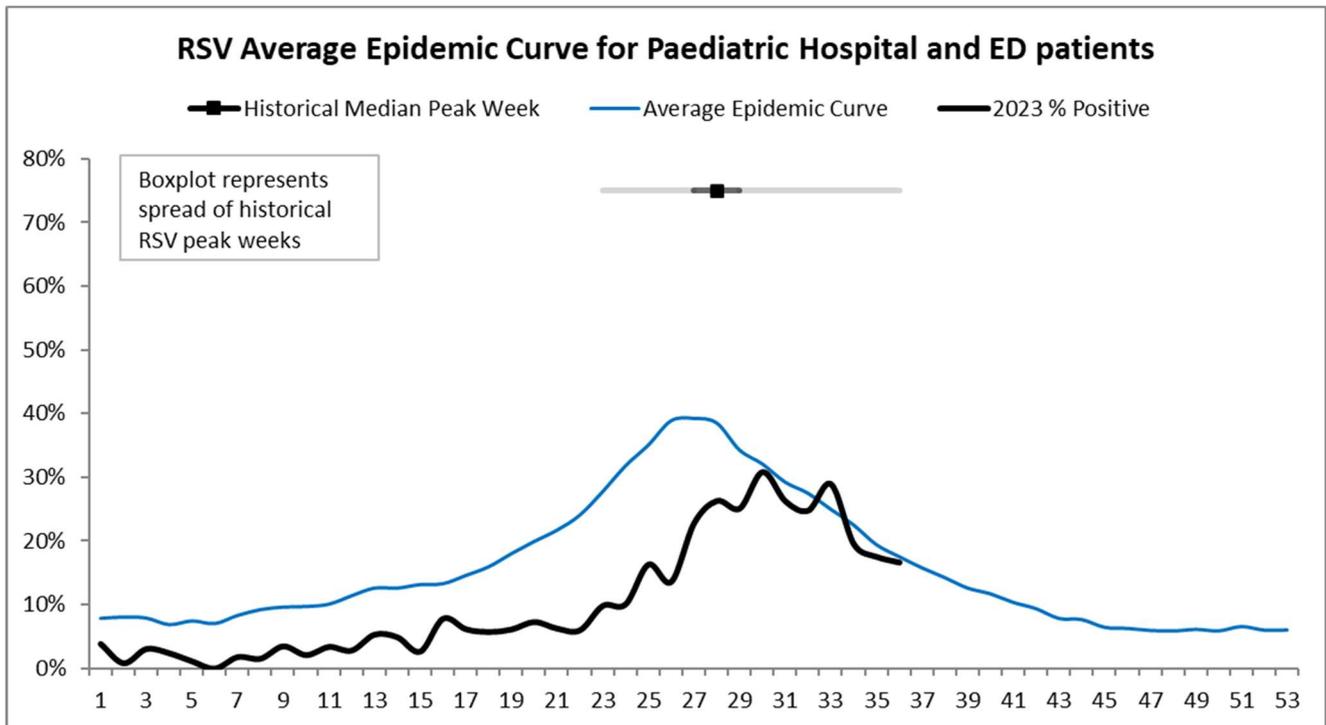


Figure 3: The current season plotted against the Paediatric RSV Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised, and ED paediatric patients tested by PathWest.

The RSV proportion positivity (16.7%) is consistent with levels historically seen at this time of the year.

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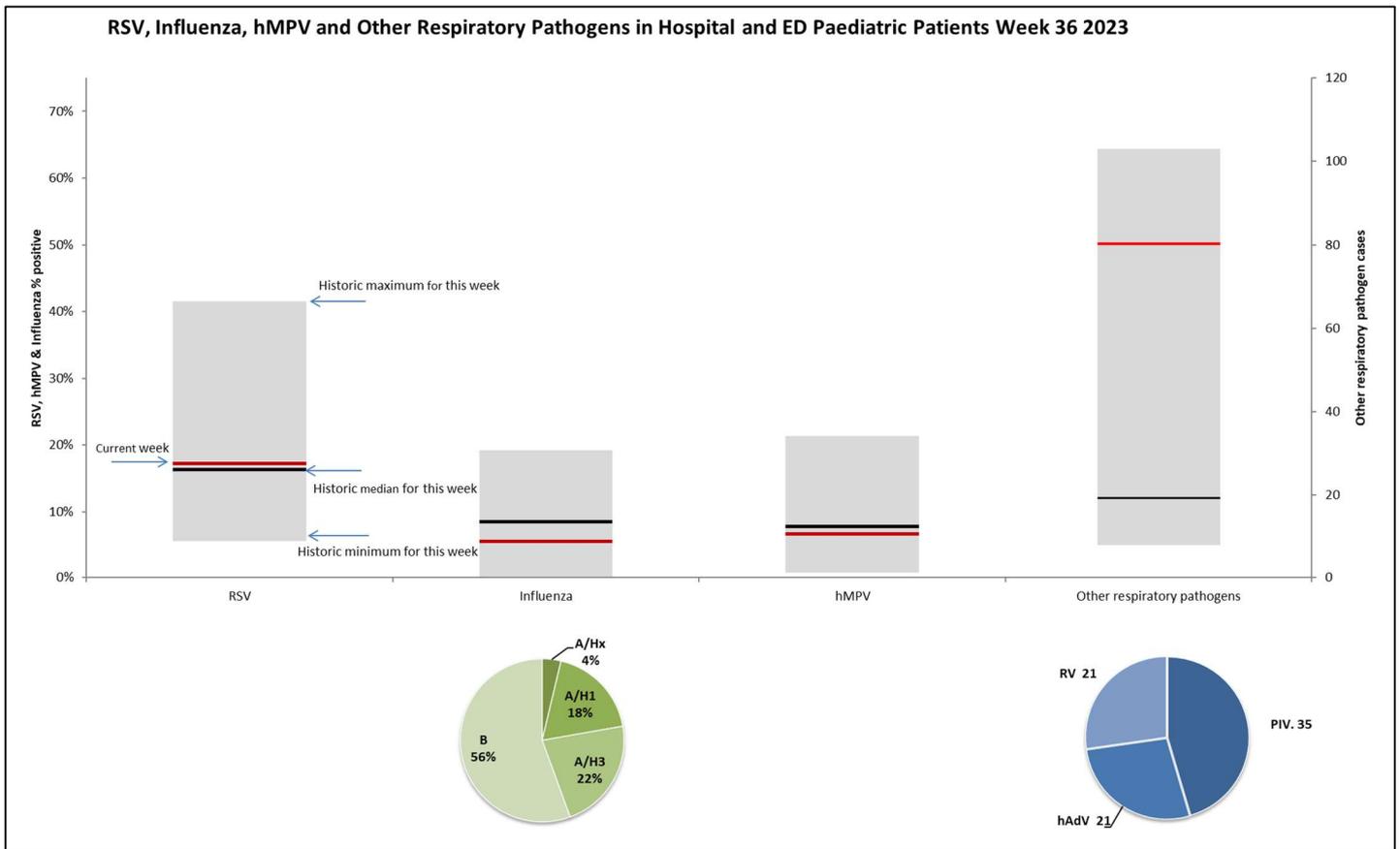


Figure 4: Proportion positive (RSV, hMPV & influenza) or cases (other respiratory pathogens) for the current week (red line) plotted against the historic range (grey box) and median (black line) for this week. Pie charts represent the breakdown of influenza subtypes and the count of other respiratory 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 (16.7%) is similar to the historical median of 17.0%. The influenza proportion positive (5.3%) was lower 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.

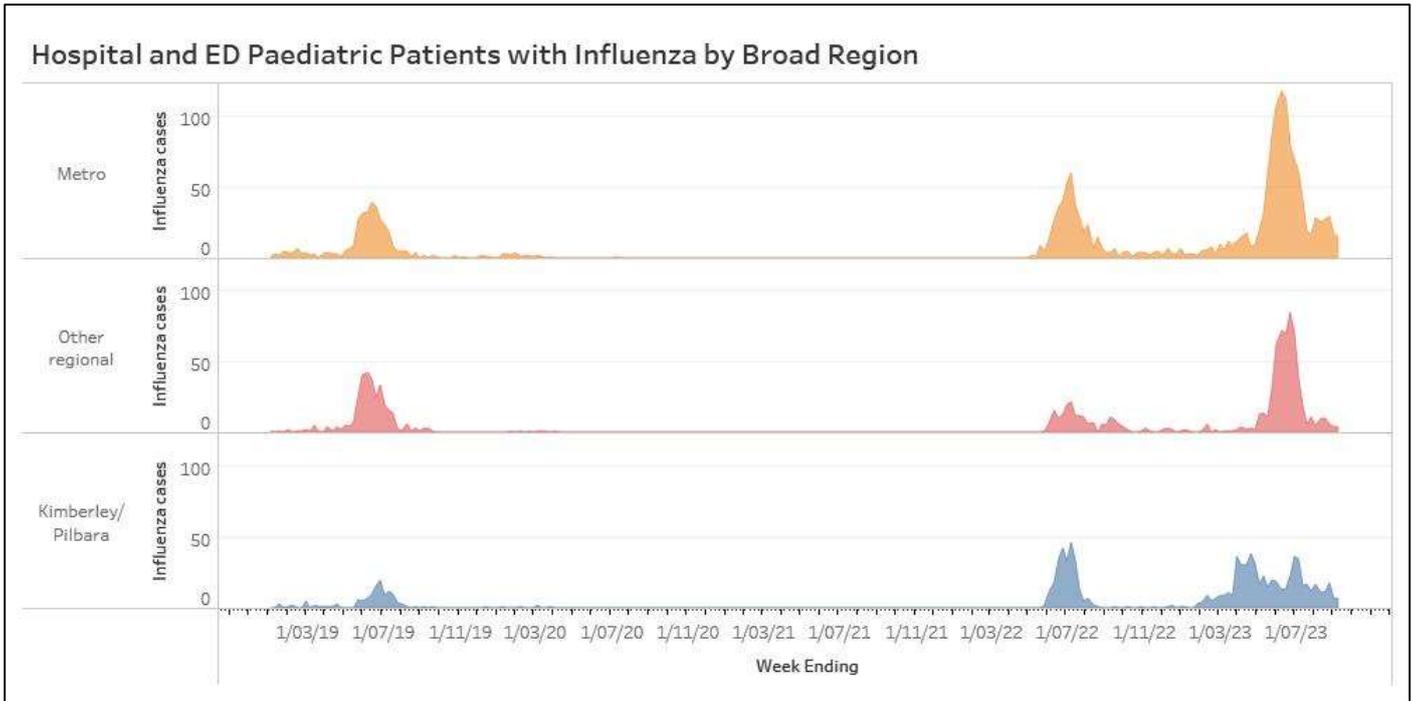


Figure 5: Hospital attending paediatric patients with influenza in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 26 paediatric influenza cases, 15 were from the Metro area, 7 were from the Pilbara, 2 from the Southwest and 1 from each of the Goldfields and Great Southern.

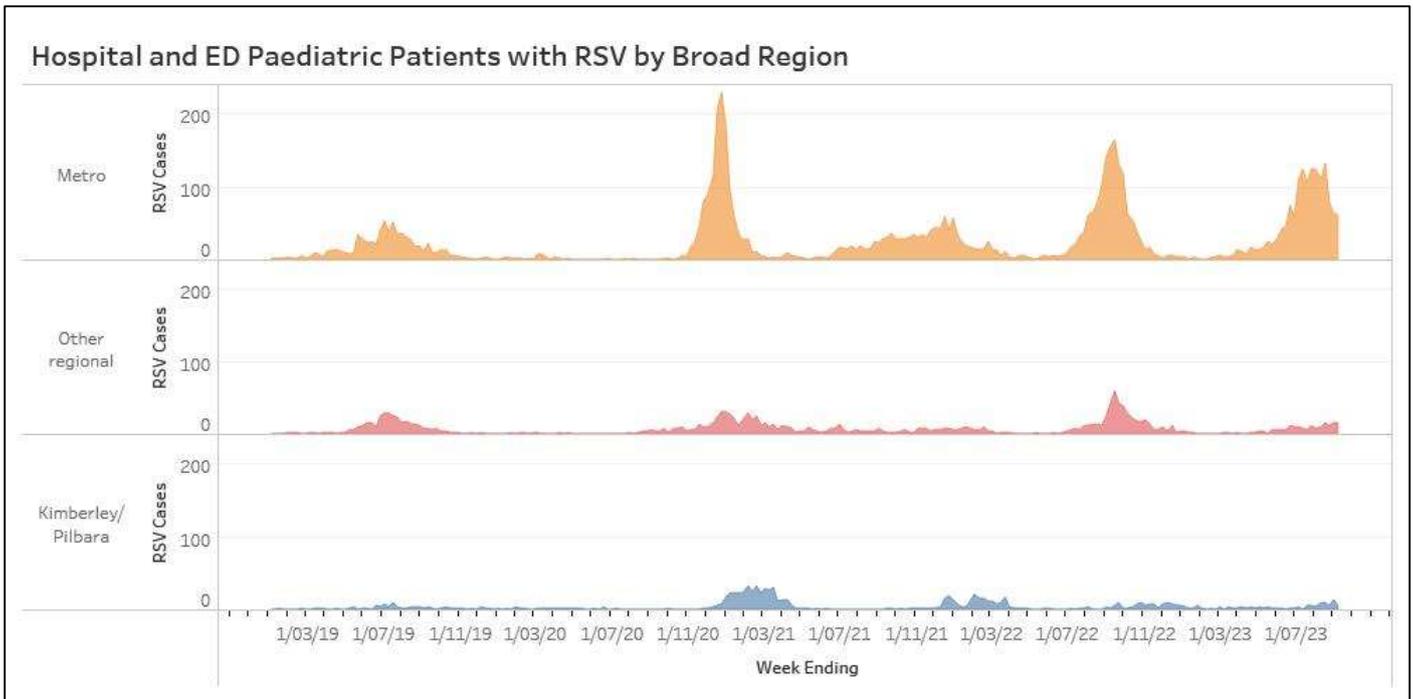


Figure 6: Hospital attending paediatric patients with RSV in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

This week, of the 83 paediatric RSV cases, 62 were from the Metro area, 5 were from the Midwest, 3 from each of the Kimberley, Pilbara, Southwest and Wheatbelt and 2 from each of the Goldfields and Great Southern.

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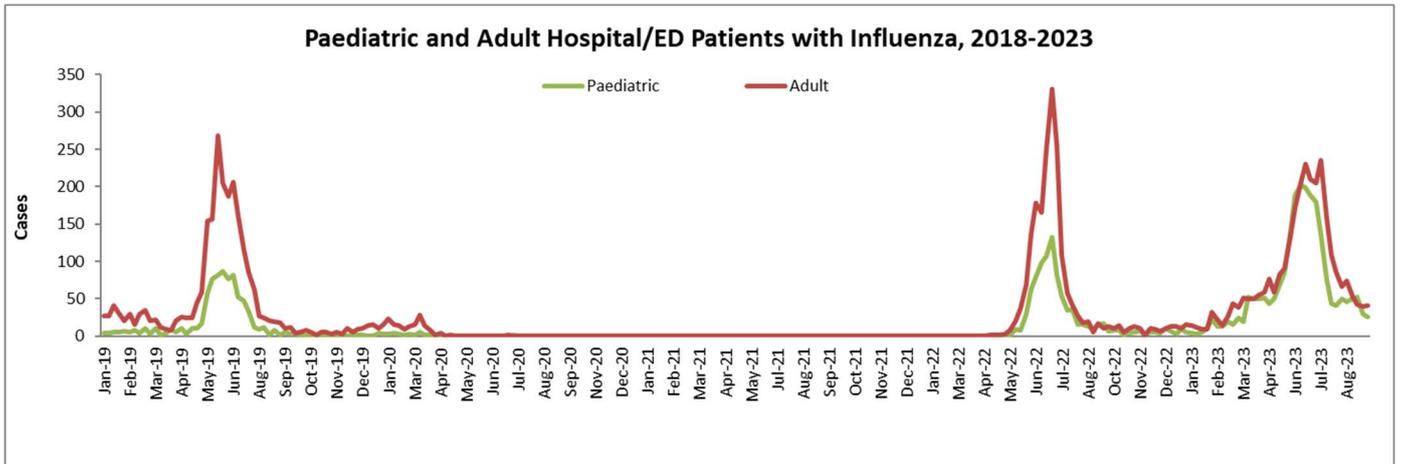


Figure 7: Paediatric and adult hospital attending patients with influenza, 2018-2023.

There were 26 children and 41 adults with influenza who attended a hospital.

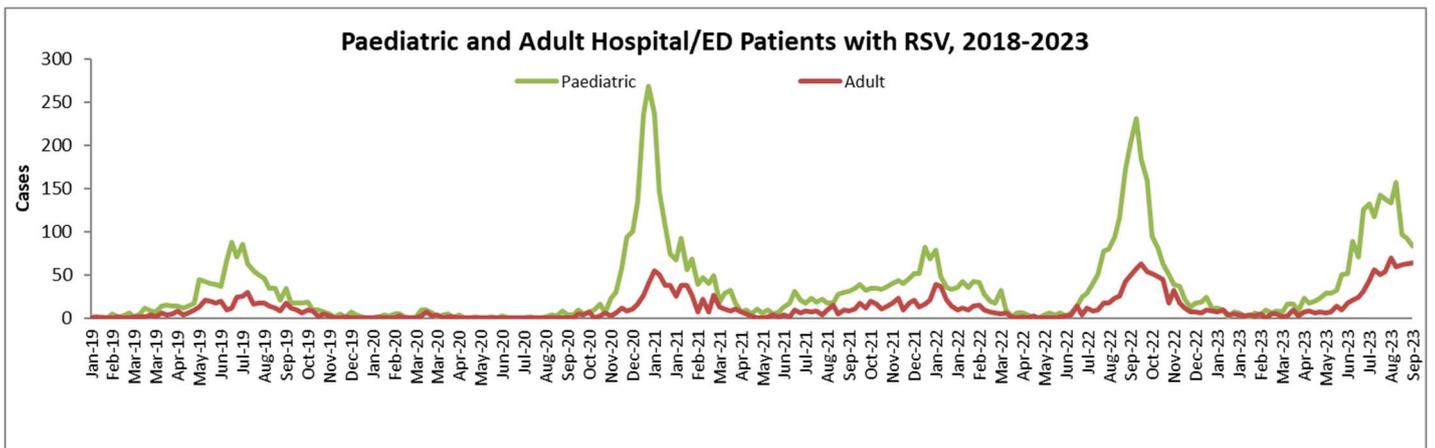


Figure 8: Paediatric and adult hospital attending patients with RSV, 2018-2023.

There were 83 children and 64 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.