

Paediatric Respiratory Pathogen Report

Week 22, 29th May – 04th June 2023

- Influenza proportion positive in paediatric patients increased this week and remains above levels historically observed at this time of year.
- PathWest detected 179 influenza cases in paediatric patients. Of these, 115 were influenza A/H1, 32 influenza B, 26 influenza A yet to be subtyped, 5 influenza A/H3 and 1 mixed infection. 58% of these detections were in children from the Metro area.
- Other common respiratory viruses detected in paediatric patients this week were RSV (31 cases), rhinovirus (21 cases), SARS-CoV-2 (18 cases) and adenovirus (17 cases).
- RSV proportion positive decreased and remains below levels historically observed at this time of year.

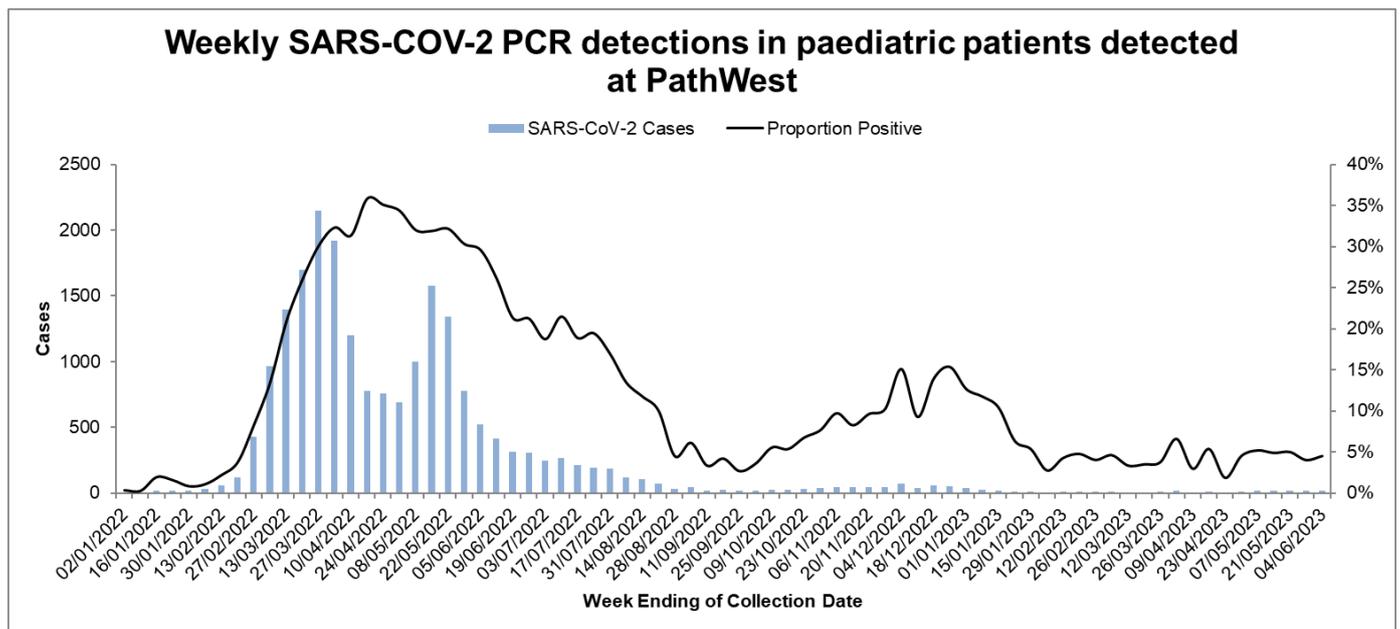


Figure 1: Daily SARS-CoV-2 detections in hospital attending patients and community paediatric patients. Data is for PCR samples tested by PathWest only.

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

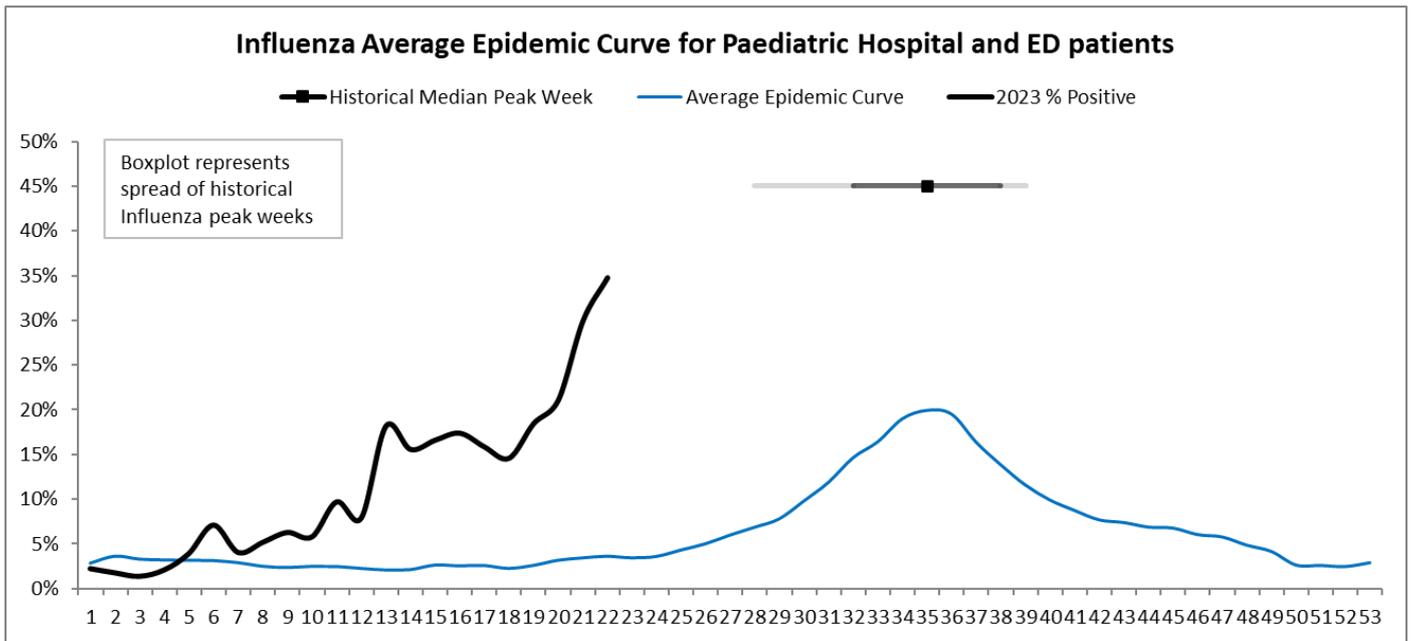


Figure 2: The current season plotted against the Paediatric Influenza Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised and ED paediatric patients tested by PathWest.

Influenza proportion positive (34.7%) increased and remains above levels historically observed at this time of year.

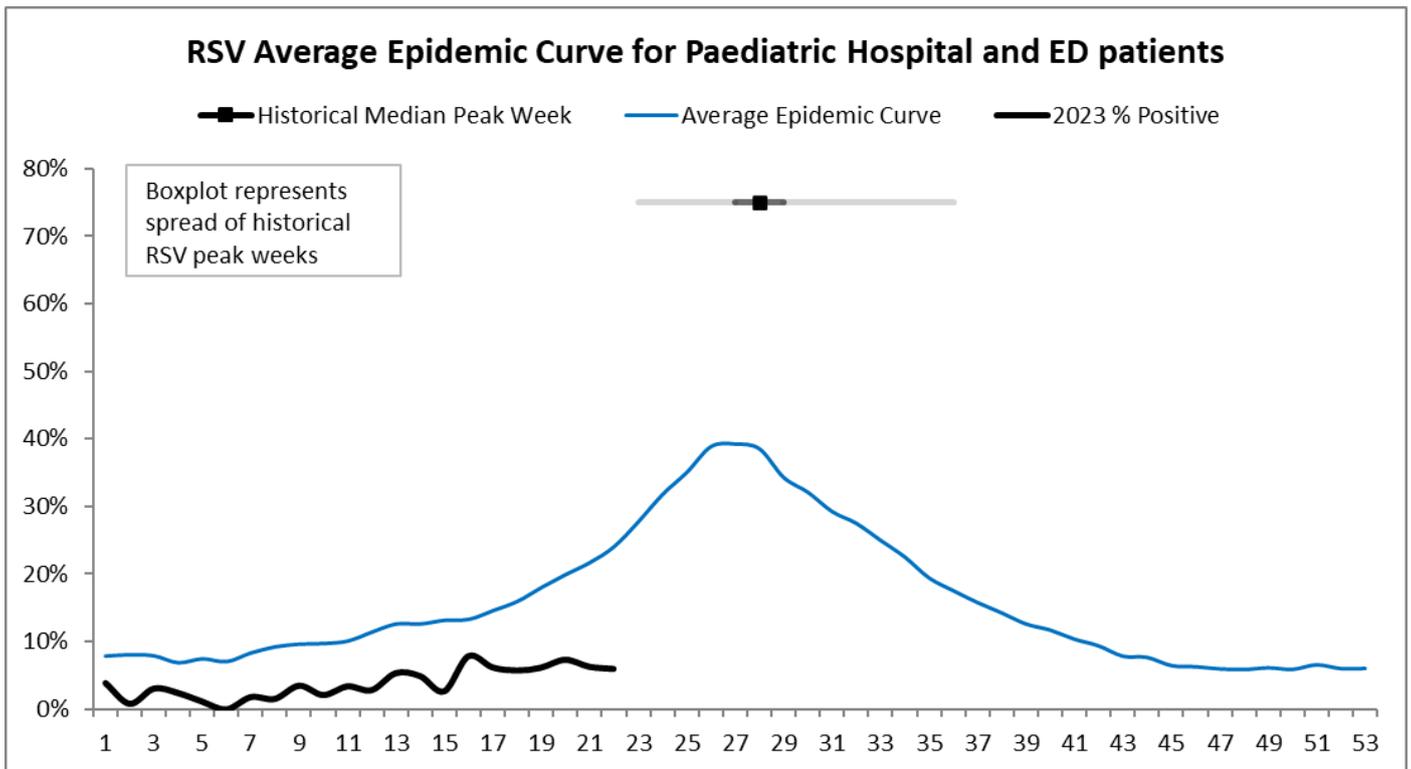


Figure 3: The current season plotted against the Paediatric RSV Average Epidemic Curve. The average epidemic curve was constructed by averaging historic WA seasons using PathWest data from 2007-2019. Data represents all WA hospitalised and ED paediatric patients tested by PathWest.

RSV proportion positive (5.9%) decreased and remains below levels historically observed at this time of year.

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.

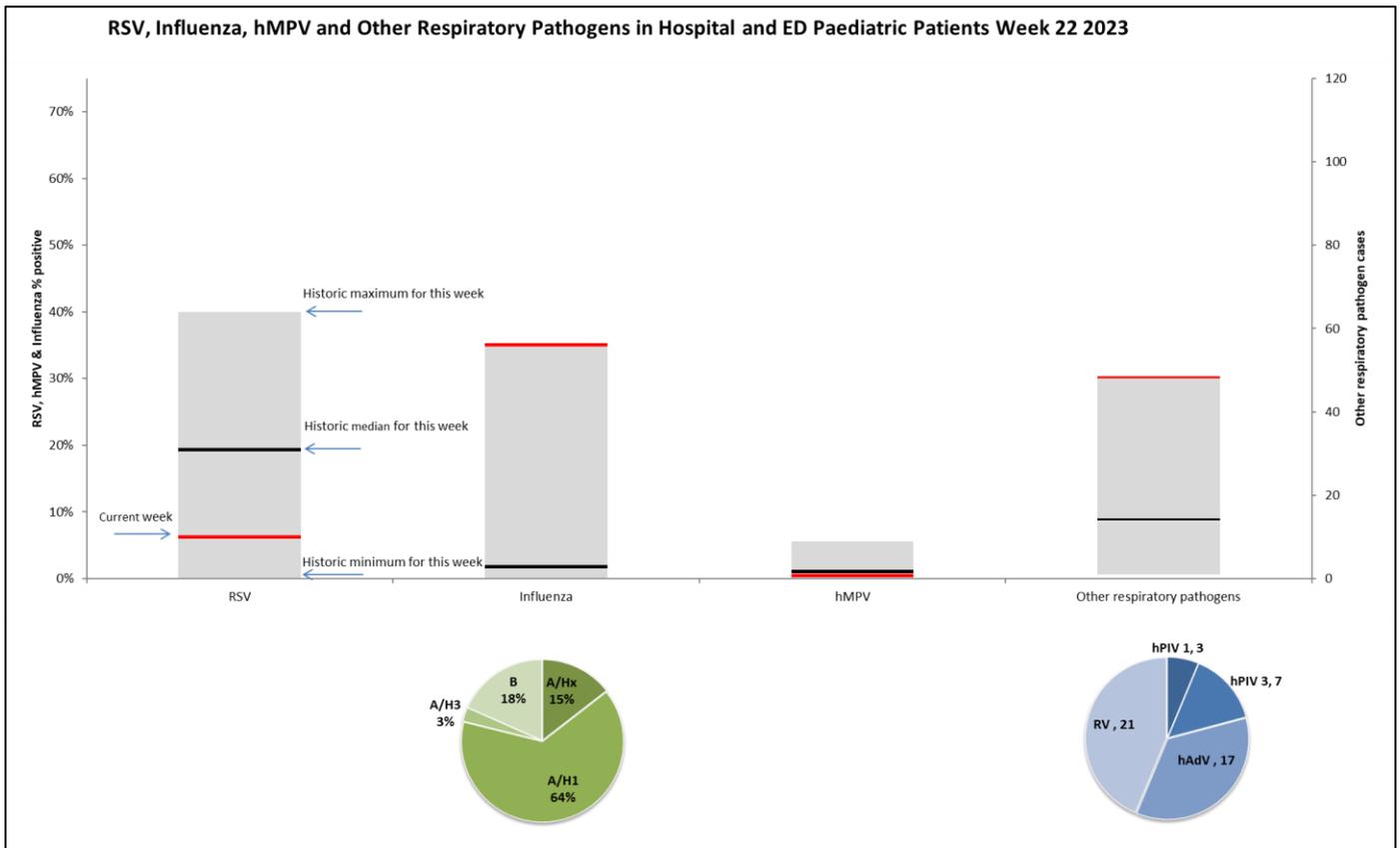


Figure 4: Proportion positive (RSV, hMPV & influenza) or cases (other respiratory pathogens) for the current week (red line) plotted against the historic range (grey box) and median (black line) for this week. Pie charts represent the breakdown of influenza subtypes and the count of other respiratory 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 influenza and RSV positive samples which do not receive a subtyping test has increased.

Influenza proportion positive (34.7%) was higher than the historic median (1.5%) for this week. RSV proportion positive (6.0%) was lower than the historical median (19.0%) for this week. Other respiratory virus detections were higher than the historic median for this week. These detections were predominantly adenovirus, rhinovirus and parainfluenza viruses. Testing for these viruses is currently higher than it has been in previous years.

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.

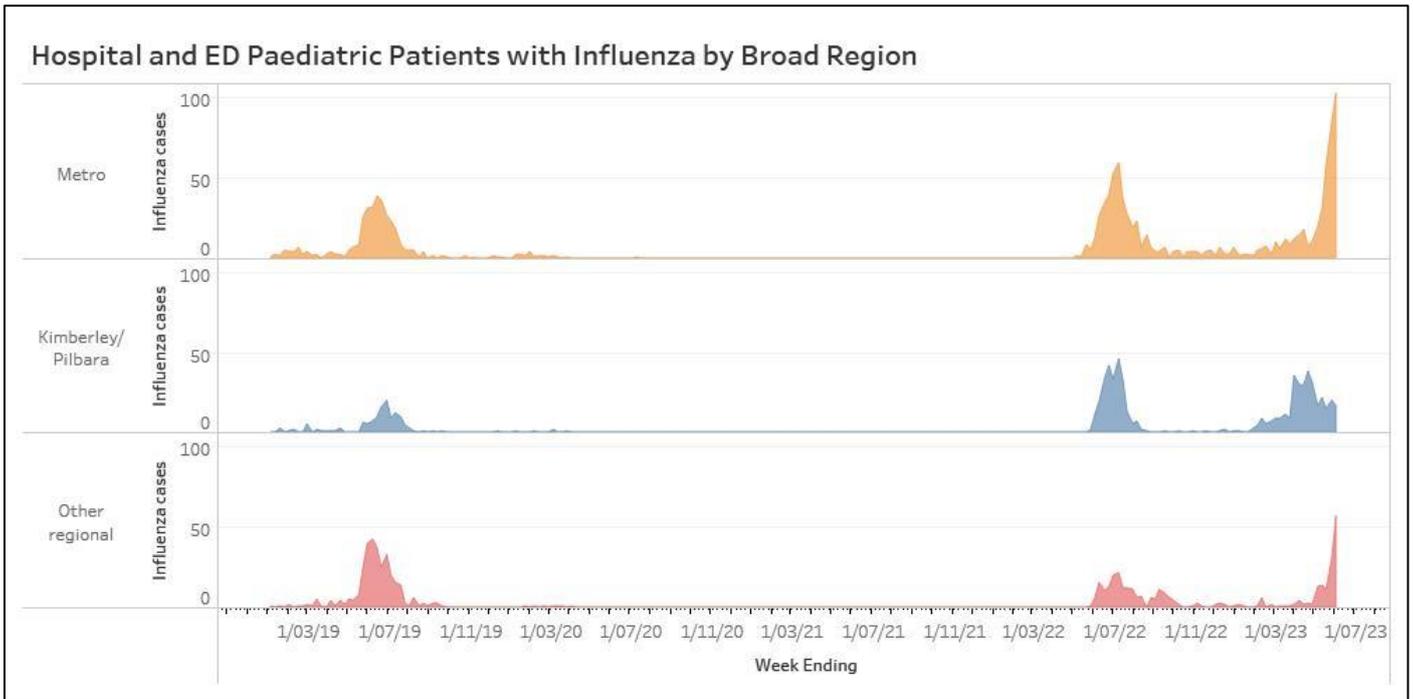


Figure 5: Hospital attending paediatric patients with influenza in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 179 paediatric influenza cases this week, 105 were from the Metro area, 32 were from the Southwest, 17 were from the Goldfields, 14 were from the Pilbara, 6 were from the Wheatbelt, 3 were from the Kimberley and 2 were from the Midwest.

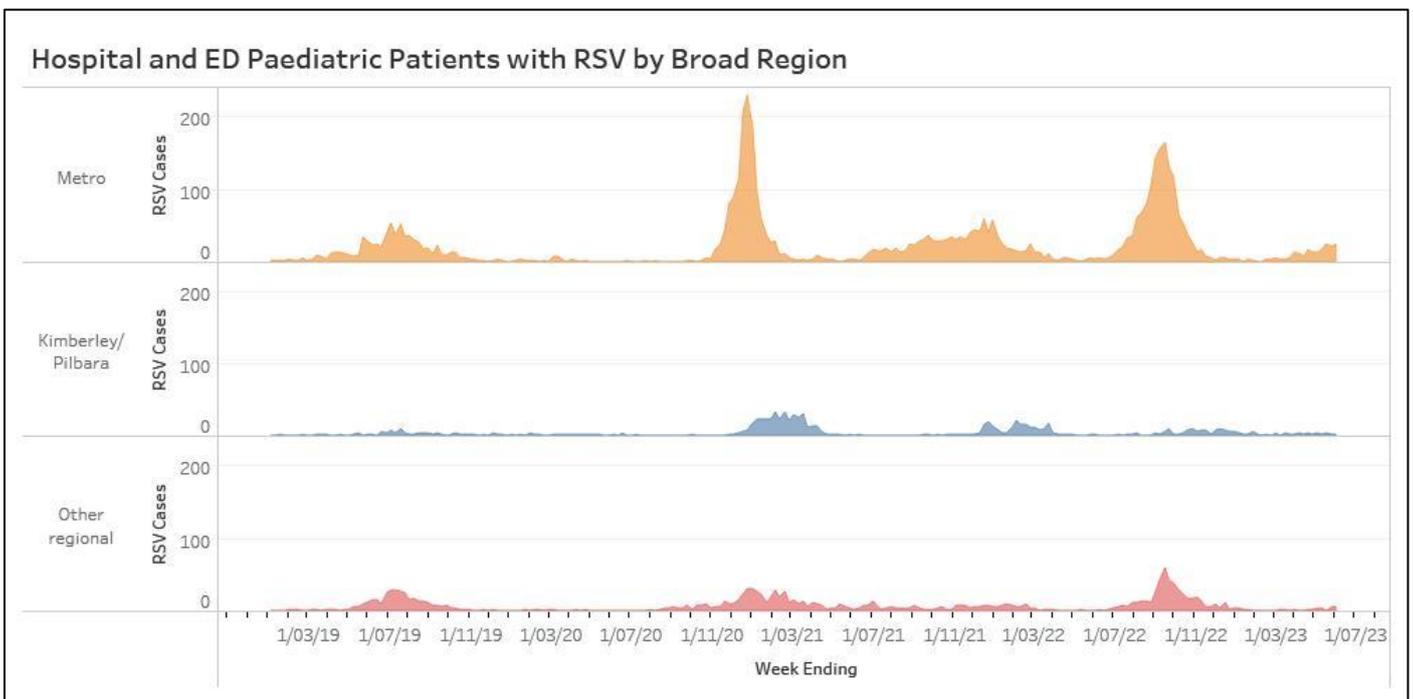


Figure 6: Hospital attending paediatric patients with RSV in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 31 paediatric RSV cases this week, 25 were from the Metro area, 3 were from the Southwest, 2 from the Goldfields and 1 from the Kimberley.

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.

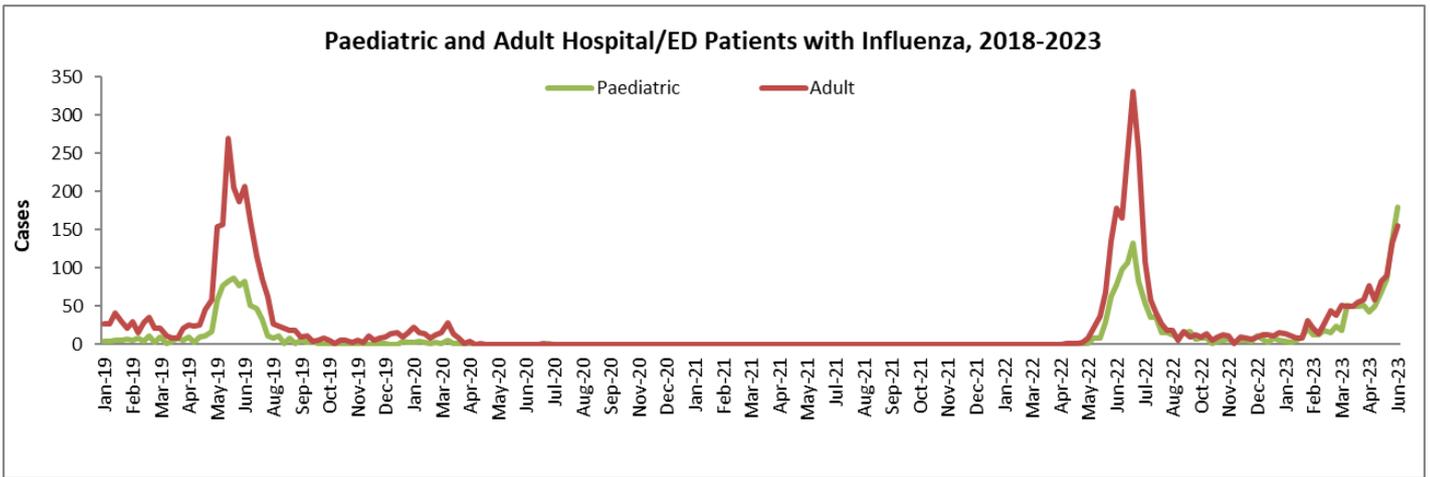


Figure 8: Paediatric and adult hospital attending patients with RSV, 2018-2023.

There were 179 children and 156 adults with influenza who attended a hospital.

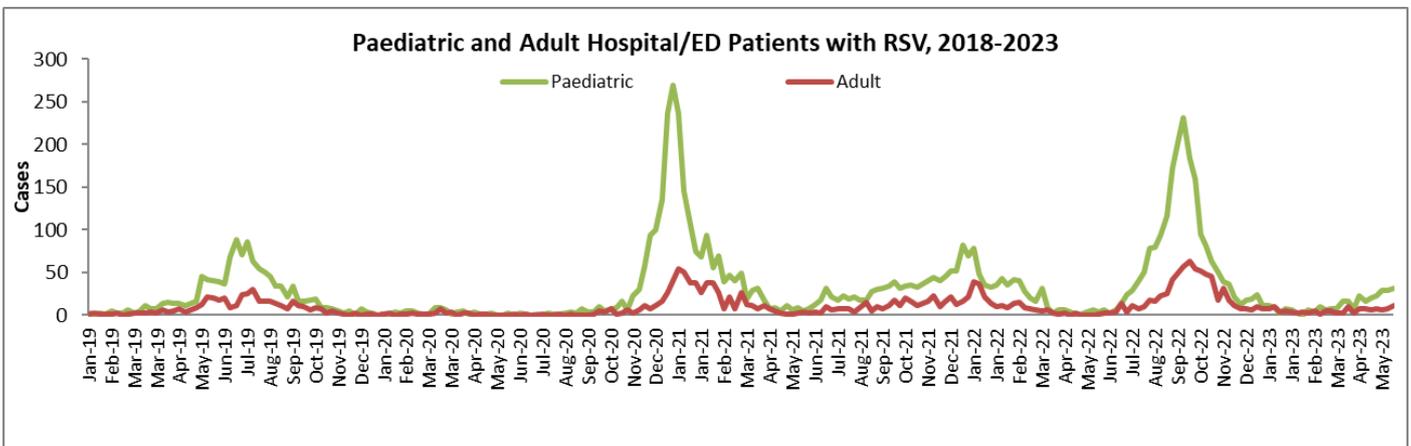


Figure 7: Paediatric and adult hospital attending patients with influenza, 2018-2023.

There were 31 children and 11 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.