

Paediatric Respiratory Pathogen Report

Week 50, 12th December – 18th December 2022

- PathWest detected 23 cases of RSV in paediatric patients this week. Proportion positive increased to 7.7% which is similar to levels historically observed at this time of year.
- Other common respiratory viruses detected in paediatric patients this week were SARS-CoV-2 (55 cases), adenovirus (50 cases), hMPV (28 cases) and rhinovirus (22 cases).
- RSV cases and proportion positive in paediatric patients increased this week.

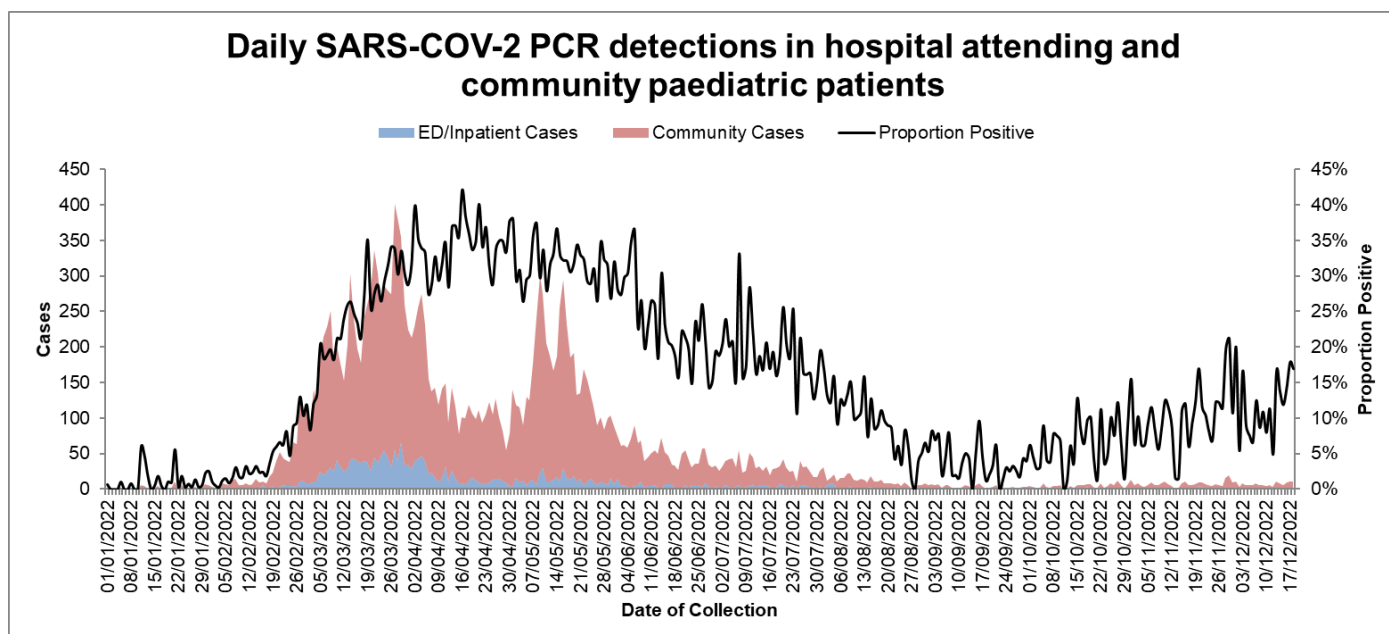


Figure 1: Daily SARS-CoV-2 detections in hospital attending patients and community paediatric patients. Data is for PCR samples tested by PathWest only.

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.

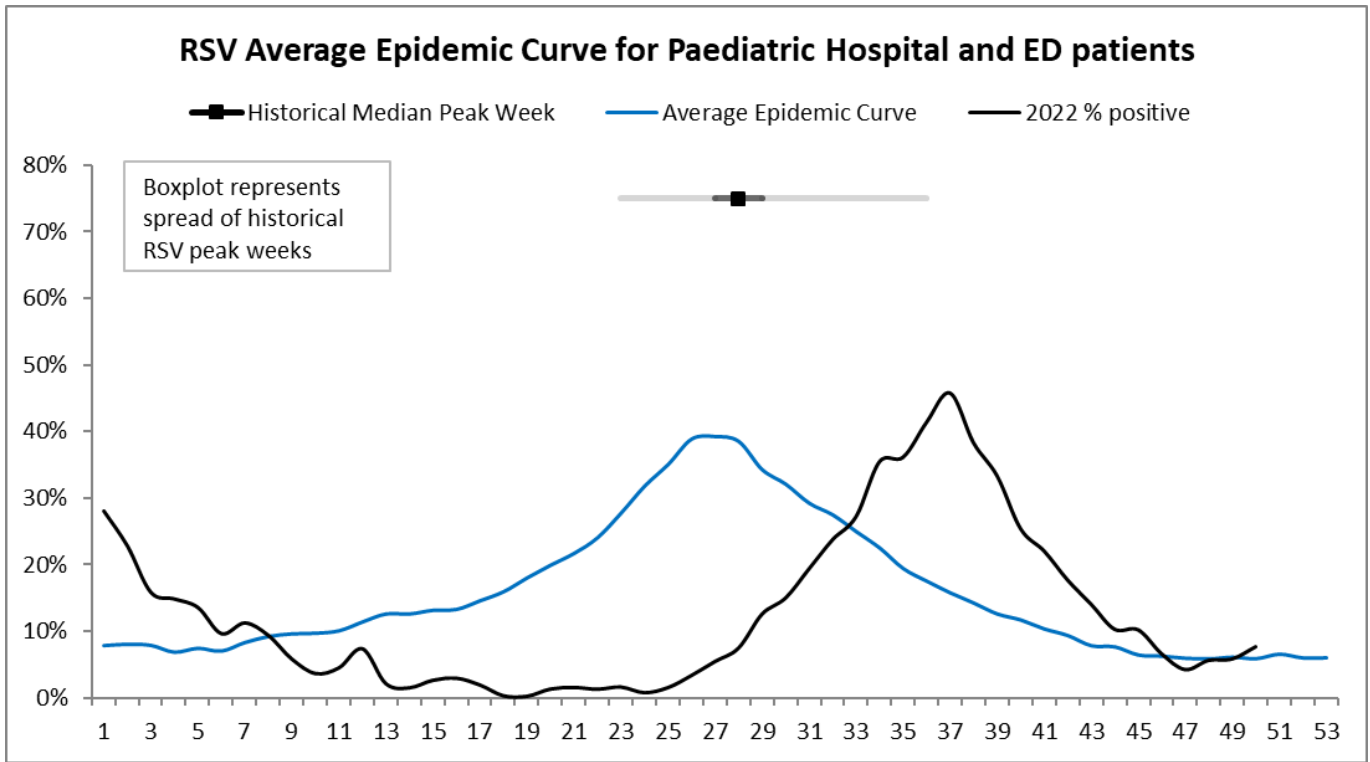


Figure 2: The current season plotted against the Paediatric RSV Average Epidemic Curve. The average epidemic curve was constructed by averaging all seasons measured at PathWest QE2 from 2007-2019. Data represents all WA hospitalised and ED paediatric patients tested by PathWest.

PathWest detected 23 cases of RSV in paediatric patients. Proportion positive increased to 7.7% and is similar to levels historically observed at this time of year.

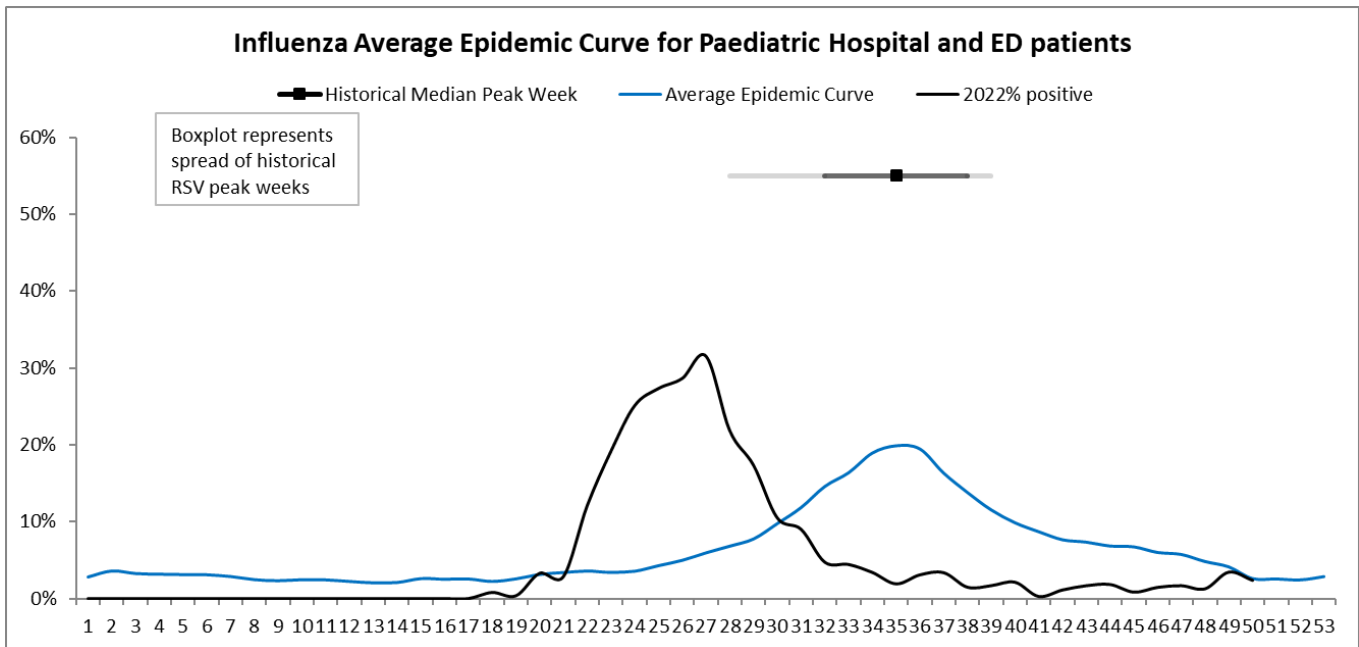


Figure 3: The current season plotted against the Paediatric Influenza Average Epidemic Curve. The average epidemic curve was constructed by averaging all seasons measured at PathWest QE2 from 2007-2019. Data represents all WA hospitalised and ED paediatric patients tested by PathWest.

Influenza proportion positive (2.3%) decreased this week and is similar to levels historically observed at this time of year.

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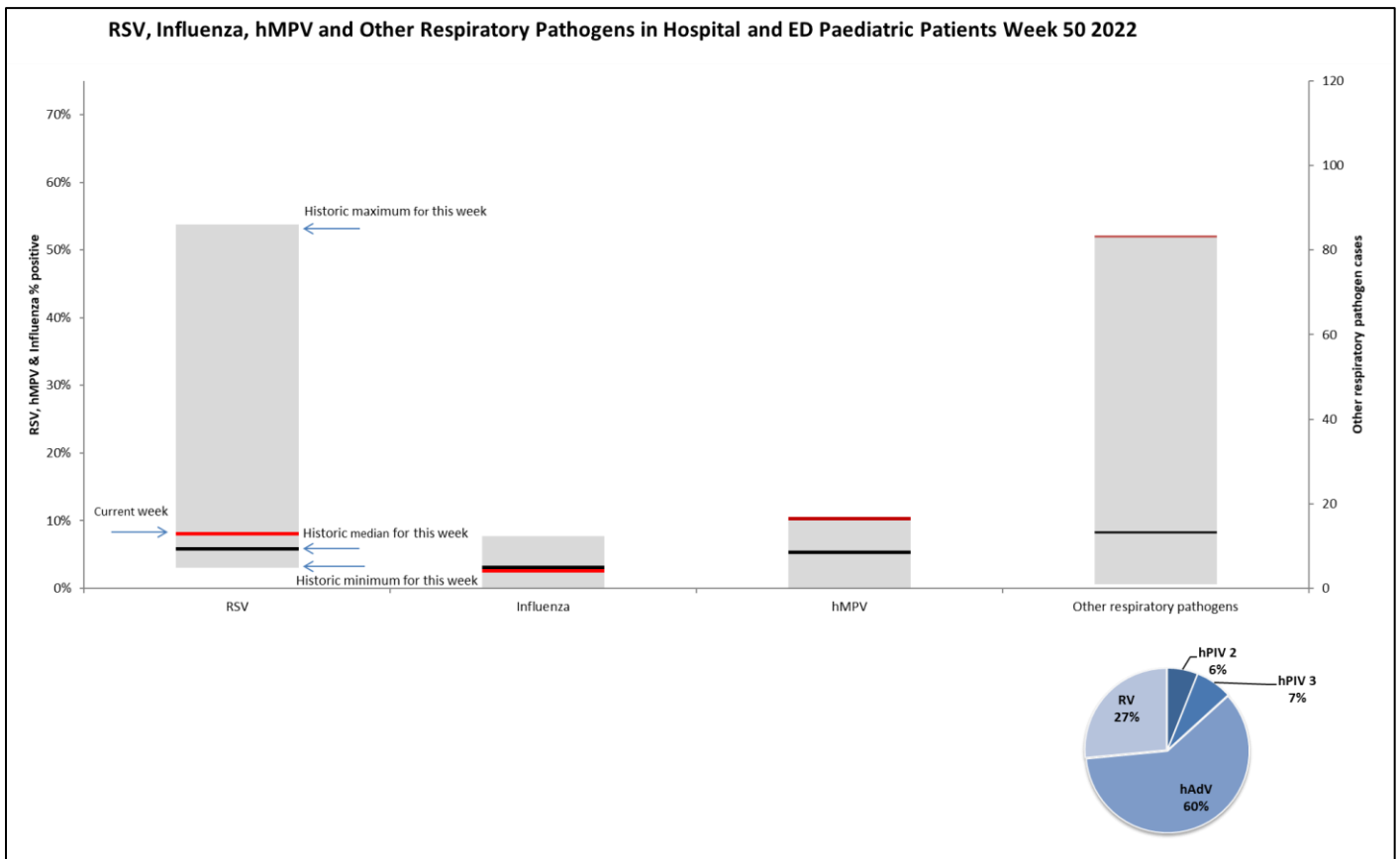


Figure 4: Proportion positive (RSV & influenza) or cases (other respiratory pathogens) for the current week (red line) plotted against the historic range (grey box) and median (black line) for this week. Pie charts represent the breakdown of influenza subtypes and the count of other respiratory pathogens. 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.

hMPV (10%) and RSV (7.8%) proportion positive were higher than their historical medians (5.1% and 5.6% respectively) for this week. Proportion positive for influenza (2.3%) was similar to the historic median. 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.

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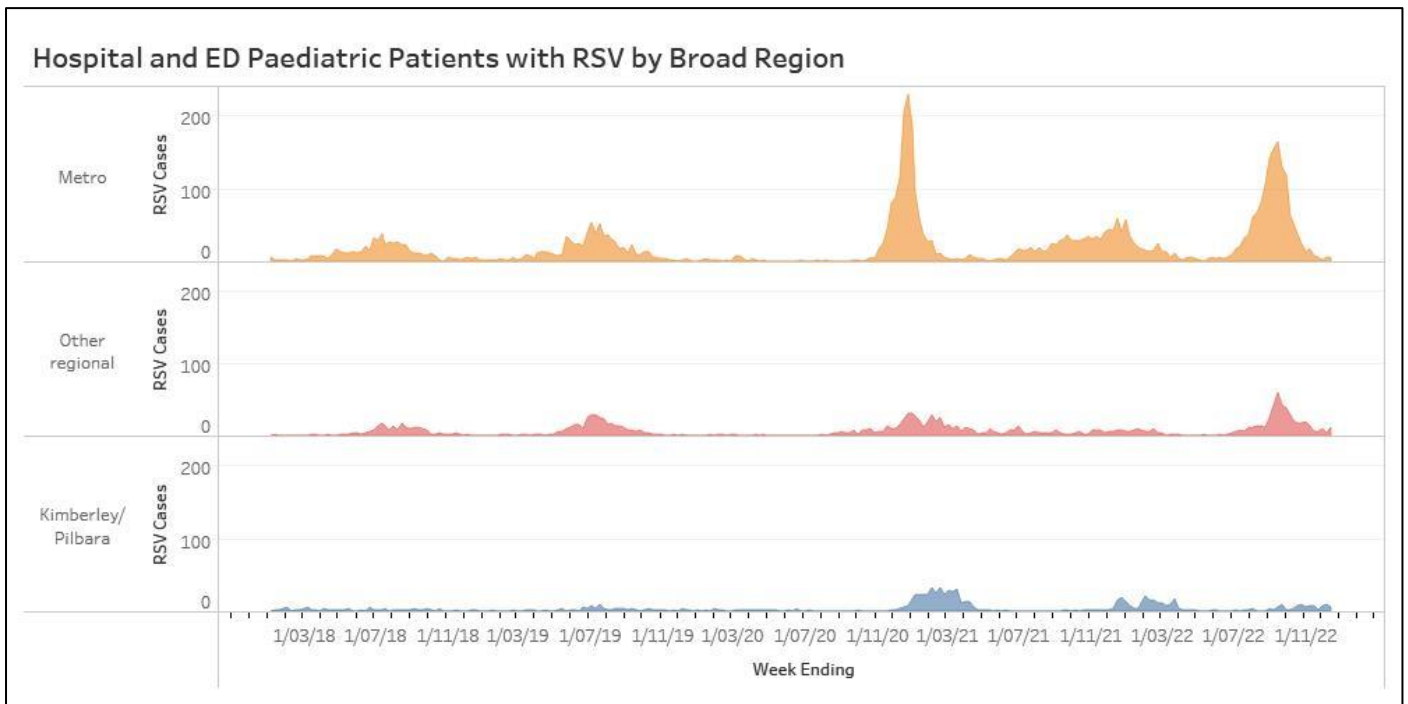


Figure 5: Hospital attending paediatric patients with RSV in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 23 paediatric cases of RSV this week six were from the Metro area, eight were from the Midwest, five were from the Pilbara, two were from Wheatbelt and one from each of the Great Southern and Kimberley.

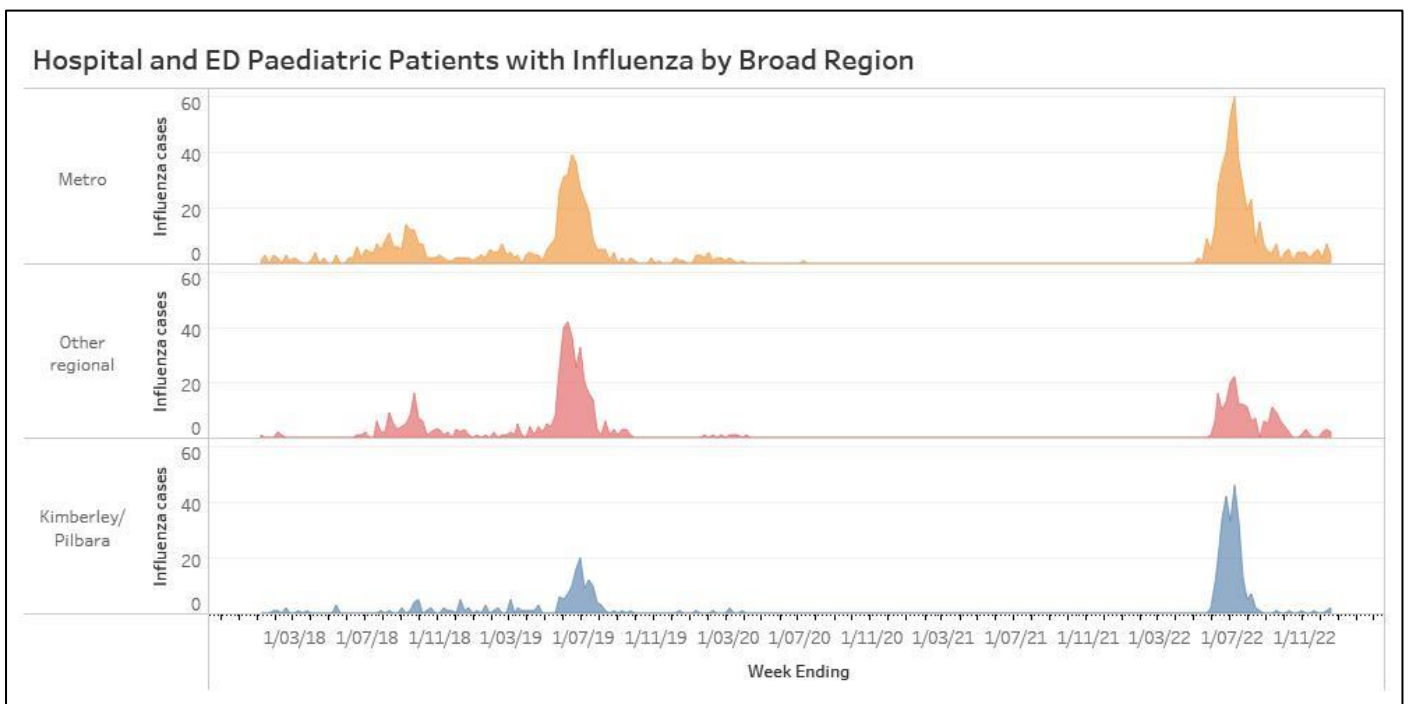


Figure 6: Hospital attending paediatric patients with influenza in Perth metropolitan region, in both Kimberley and Pilbara combined and in the remaining regions combined.

Of the 7 paediatric influenza cases this week, three were from the Metro area, two were from the Pilbara and one from each of the Great Southern and Southwest.

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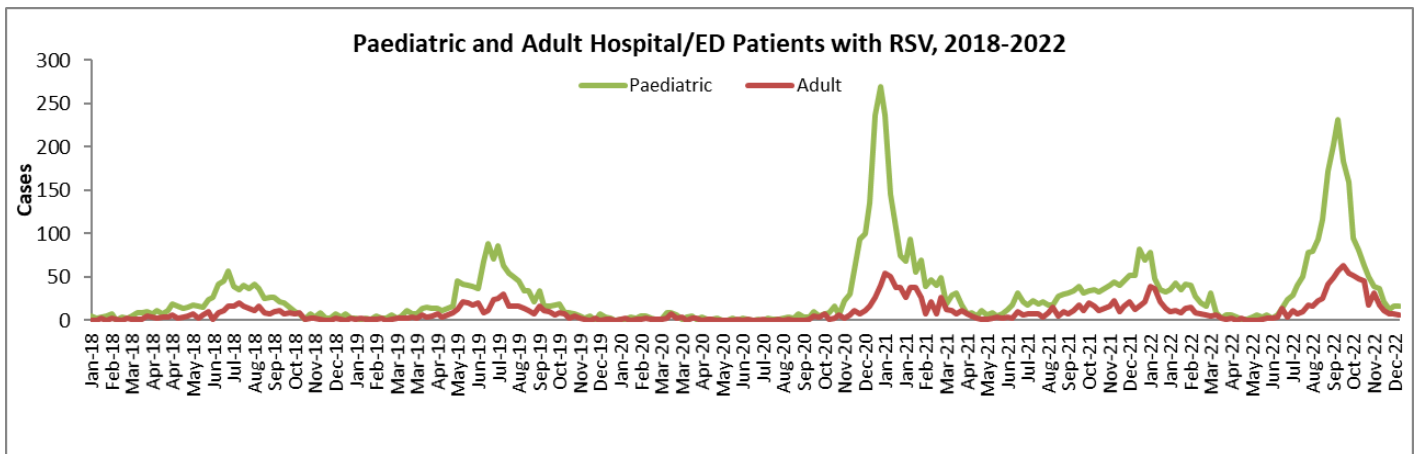


Figure 7: Paediatric and adult hospital attending patients with RSV, 2018-2022.

There were 23 children and 10 adults with RSV who attended a hospital.

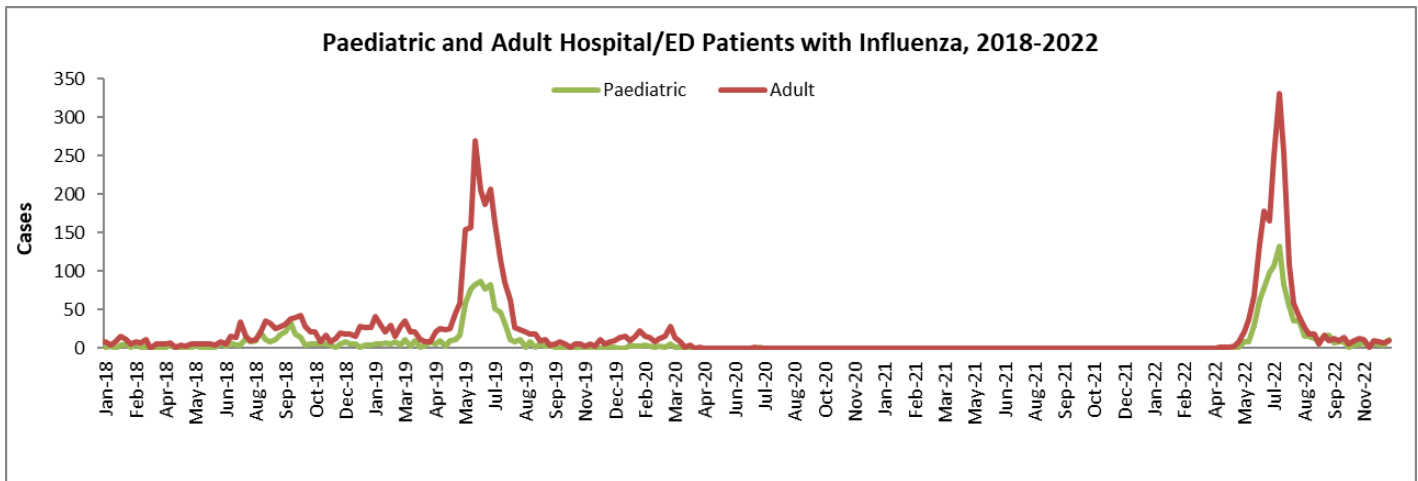


Figure 8: Paediatric and adult hospital attending patients with influenza, 2018-2022.

There were 7 children and 11 adults with influenza who attended a hospital.

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