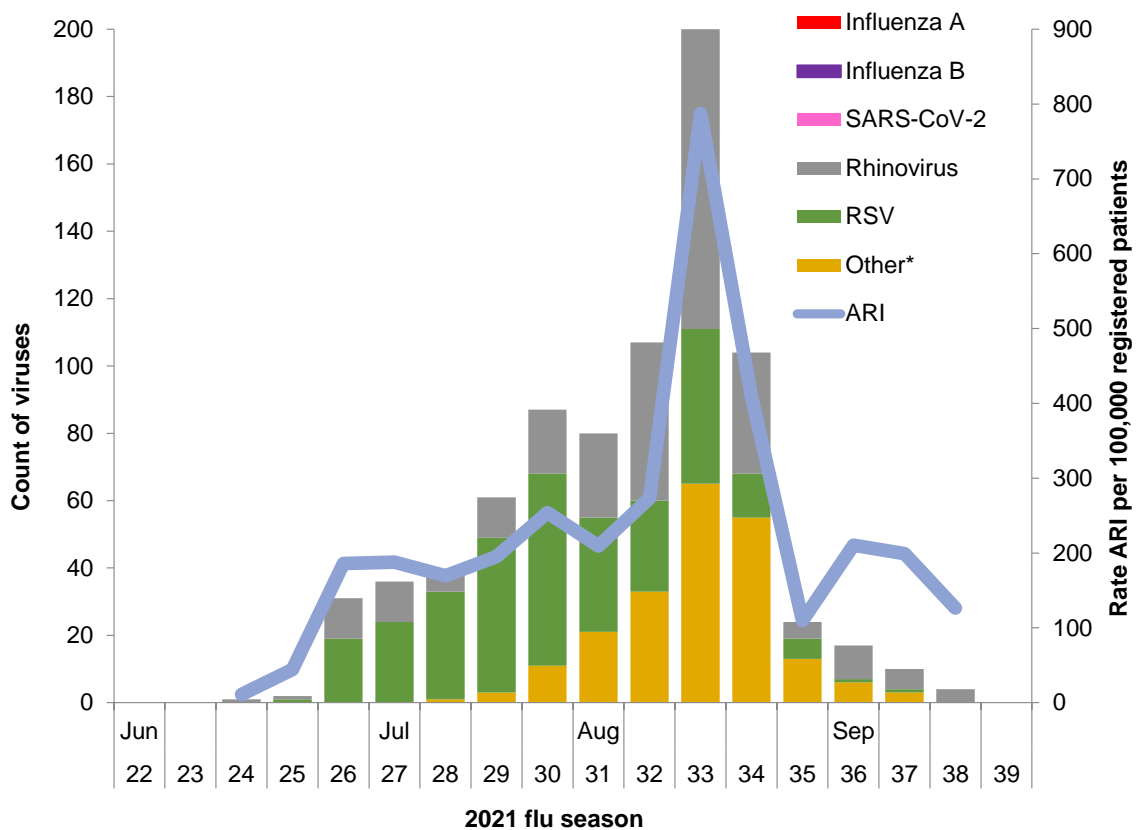


SHIVERS-V weekly report on acute respiratory illness and associated viruses among consultation seeking patients in sentinel general practices

Week 38 ending 26 September, 2021

The SHIVERS-V surveillance for sentinel general practice (GP) consultation seeking patients with acute respiratory illness (ARI) provides evidence to inform public health measures, to reduce the impact of influenza virus infection and other important respiratory pathogens in New Zealand. The report includes incidence and viruses among consultation seeking patients with ARI in those sentinel general practices for the past week as well as the cumulative virus counts since 14 June 2021.

Figure 1 show the weekly rate of acute respiratory illness (ARI) and associated viruses detected among GP consultation seeking patients during the winter surveillance period.



*Note: other viruses include enterovirus, adenovirus, parainfluenza virus types 1-3 and human metapneumovirus. The left axis indicates number of respiratory viruses detected among registered patients with acute respiratory illnesses each week. The different coloured bars on the graph represent the count of the different respiratory viruses detected. The right axis shows weekly ARI rates - the purple line is the weekly rate of ARI reported by registered patients (per 100,000), meeting the case definition¹. The 2021 national lockdown at Level 4 may lead to health seeking behaviour changes among consultation seeking patients which may contribute to a higher than usual ARI rate (week 33).

¹ The case definition: any acute respiratory illness with at least one of the following symptoms (with or without fever): new or worsening cough, fever (at least 38°C), shortness of breath, sore throat, coryza (runny nose), anosmia (loss of sense of smell, dysgeusia (loss of sense of taste). Some people may present with less typical symptoms such as only fever, diarrhoea, headache, myalgia (muscle aches), nausea/vomiting, or confusion/irritability. For people with less typical symptoms, if there is not another more likely diagnosis, they should also be tested.

New Zealand's public health measures (including border restrictions) have eliminated COVID-19 infection in our communities during most of the time in 2020-2021. It is important to understand influenza and non-influenza respiratory virus transmission in our communities in the post-COVID-19 world. Tables 1&2 below indicate all swabs tested for influenza and non-influenza respiratory viruses from week 24 (starting 14 June) to this week.

Table 1 Non-influenza respiratory viruses among GP consultation seeking patients with ARI, since 14 June 2021

<i>Non-influenza respiratory viruses</i>	Total
No. of specimens tested	2277
No. of positive specimens (%)	764 (33.6)
Respiratory syncytial virus (RSV)	307
Parainfluenza 1 (PIV1)	0
Parainfluenza 2 (PIV2)	0
Parainfluenza 3 (PIV3)	151
Rhinovirus (RV)	284
Adenovirus (AdV)	19
Human metapneumovirus (hMPV)	41
Enterovirus	0
SARS-CoV-2	0
Single virus detection (% of positives)	727 (95.2)
Multiple virus detection (% of positives)	37 (4.8)

Table 2. Influenza respiratory viruses among GP consultation seeking patients with ARI, since 14 June 2021

<i>Influenza viruses</i>	Total
No. of specimens tested	2277
No. of positive specimens (%)	0 (0.0)
Influenza A	0
A (not subtyped)	0
A(H1N1)pdm09	0
A(H1N1)pdm09 by PCR	0
A/Victoria/2570/2019 (H1N1)pdm09 - like	0
A(H3N2)	0
A(H3N2) by PCR	0
A/Hong Kong/2671/2019 (H3N2)-like	0
Influenza B	0
B (lineage not determined)	0
B/Yamagata lineage	0
B/Yamagata lineage by PCR	0
B/Phuket/3073/2013 - like	0
B/Victoria lineage	0
B/Victoria lineage by PCR	0
B/Washington/02/2019-like	0
Influenza and non-influenza co-detection (% +ve)	0 (0.0)

APPENDIX

SHIVERS-V is a study to understand the impact of border restrictions and other public health measures on the transmission and disease burden of influenza and other respiratory viruses in New Zealand.

Led by University of Auckland, SHIVERS-V is a multi-centre and multi-disciplinary collaboration between University of Auckland, ESR, UniServices, Counties Manukau District Health Board and the Immunisation Advisory Centre (IMAC). SHIVERS-V is the fifth iteration of research programmes into influenza viruses and vaccines called SHIVERS (Southern Hemisphere Influenza and Vaccine Effectiveness Research and Surveillance).

ESR leads an objective of SHIVERS-V – surveillance of influenza and other respiratory viral infections among GP consultation seeking patients with acute respiratory illness. The aim is to measure the impact of non-pharmaceutical interventions such as border restrictions on disease burden and viral transmission, seasonality and predominant strains of influenza, respiratory syncytial virus (RSV) and other respiratory viruses in NZ. This sub-study is also a multi-centre and multi-disciplinary collaboration among ESR, IMAC, primary care advisory group, sentinel general practices in Wellington and Auckland. These practices began to provide swabs for those GP patients with ARI at different time points between 14 June to 25 July 2021.

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