

Laboratory-based Virology Weekly Report

Week 11 ending 19 March, 2023

The laboratory-based surveillance for influenza and common respiratory viruses is carried out all-year-around by the NZ virus laboratory network consisting of the WHO National Influenza Centre (NIC) at ESR and six hospital laboratories in Auckland (2), Waikato, Wellington, Christchurch and Dunedin. This laboratory network tests specimens ordered by clinicians for hospital inpatients and outpatients during normal clinical practice (serving ~70% of the NZ population). In addition, this laboratory network also conducts testing for public health surveillance, including SARI, ILI and WellKiwis (i.e. SHIVERS) cohort surveillance.

Caution is needed in the interpretation: 1) Sample collection is ordered by clinicians based on clinical judgement for patient management, rather than a systematic sampling approach for surveillance; 2) The number of laboratory tests can be influenced by testing priorities and demands, reagent and resource availability; 3) Testing technology and instruments evolve over the years which may have contributed to improved sensitivity for detection in recent years.

Tables and Figures below show the weekly influenza and common non-influenza viruses reported from the laboratory network in 2023. (Note: SARS-CoV-2 is reported: https://nzcoviddashboard.esr.cri.nz/#!/)

Table 1. Influenza respiratory viruses reported, since 1 January 2023

Influenza viruses	Total
No. of positive specimens	537
Influenza A	466
A (not subtyped)	287
A(H1N1)pdm09	156
A(H1N1)pdm09 by PCR	156
A/Sydney/5/2021 (H1N1)pdm09-like	0
A(H3N2)	23
A(H3N2) by PCR	23
A/Darwin/6/2021 (H3N2)-like	0
Influenza B	71
B (lineage not determined)	46
B/Yamagata lineage	0
B/Yamagata lineage by PCR	0
B/Phuket/3073/2013-like	0
B/Victoria lineage	25
B/Victoria lineage by PCR	25
B/Austria/1359417/2021-like virus	0

Table 2. Non-influenza respiratory viruses reported, since 1 January 2023

Non-influenza respiratory viruses	Total
No. of positive specimens	1074
SARS-CoV-2	16
Respiratory syncytial virus (RSV)	291
Parainfluenza 1 (PIV1)	1
Parainfluenza 2 (PIV2)	32
Parainfluenza 3 (PIV3)	7
Rhinovirus (RV)	394
Adenovirus (AdV)	238
Human metapneumovirus (hMPV)	41
Enterovirus	70





RSV Parainfluenza 1 Parainfluenza 2 80 60 40 20 0 Count of detected viruses Parainfluenza 3 Rhinovirus Adenovirus 80 60 40 20 0 Hmpv Enterovirus SARS-CoV-2 80 60 40 20 0 5 10 15 0 5 10 15 0 5 10 15

Figure 1. Non-influenza respiratory viruses reported, since 1 January 2023, by week.

Numbers for recent weeks are updated due to time lag in receiving laboratory test results.



Figure 2. Influenza viruses reported, since 1 January 2023, by week.

Week 2023

This weekly report is compiled by ESR. For more information please contact: Tim Wood: T: +64 4 529 0611 E: Tim.Wood@esr.cri.nz Sue Huang: T: +64 4 529 0606 E: Sue.Huang@esr.cri.nz

