

Laboratory-based Virology Weekly Report

Week 49 ending 11 December 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: complete SARS-CoV-2 reporting is provided at https://nzcoviddashboard.esr.cri.nz/#!/

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

Influenza viruses	Total
No. of positive specimens	13100
Influenza A	8449
A (not subtyped)	6467
A(H1N1)pdm09	1569
A(H1N1)pdm09 by PCR	1497
A/Sydney/5/2021 (H1N1)pdm09-like	72
A(H3N2)	413
A(H3N2) by PCR	413
A/Darwin/6/2021 (H3N2)-like	0
Influenza B	4651
B (lineage not determined)	3692
B/Yamagata lineage	0
B/Yamagata lineage by PCR	0
B/Phuket/3073/2013-like	0
B/Victoria lineage	959
B/Victoria lineage by PCR	919
B/Austria/1359417/2021-like	40

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

Non-influenza respiratory viruses	Total
No. of positive specimens	24500
SARS-CoV-2	6123
Respiratory syncytial virus (RSV)	8464
Parainfluenza 1 (PIV1)	264
Parainfluenza 2 (PIV2)	156
Parainfluenza 3 (PIV3)	918
Rhinovirus (RV)	9806
Adenovirus (AdV)	1933
Human metapneumovirus (hMPV)	1914
Enterovirus	1045



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Parainfluenza 2 Parainfluenza 1 600 400 200 0 Parainfluenza 3 Rhinovirus Adenovirus 600 400 200 0 Hmpv Enterovirus SARS-CoV-2 600 400 200 50 50 Week 2023

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.

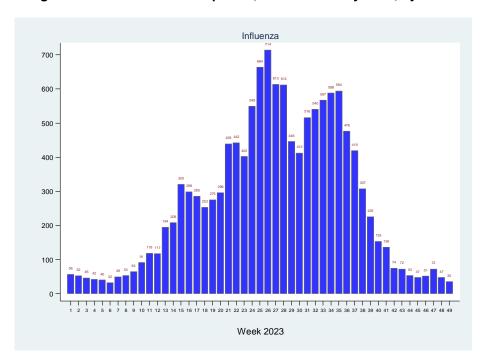


Figure 2. Influenza viruses reported, since 1 January 2023, by week.

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