

Laboratory-based Virology Weekly Report

Week 40 ending 6 October 2024

The laboratory-based surveillance for influenza and common respiratory viruses is carried out all-year-around by the New Zealand 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 New Zealand 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 2024. The latest information on COVID-19 cases is available on the Ministry of Health website here

Table 1. Influenza respiratory viruses reported since 1 January 2024

Influenza viruses	Total
No. of positive specimens	11613
Influenza A	11438
A (not subtyped)	8264
A(H1N1)pdm09	941
A(H1N1)pdm09 by PCR	829
A/Victoria/4897/2022 (H1N1)pdm09-like	112
A(H3N2)	2233
A(H3N2) by PCR	2127
A/Thailand/8/2022 (H3N2)-like	106
Influenza B	175
B (lineage not determined)	162
B/Yamagata lineage	0
B/Yamagata lineage by PCR	0
B/Phuket/3073/2013-like	0
B/Victoria lineage	13
B/Victoria lineage by PCR	4
B/Austria/1359417/2021-like	9

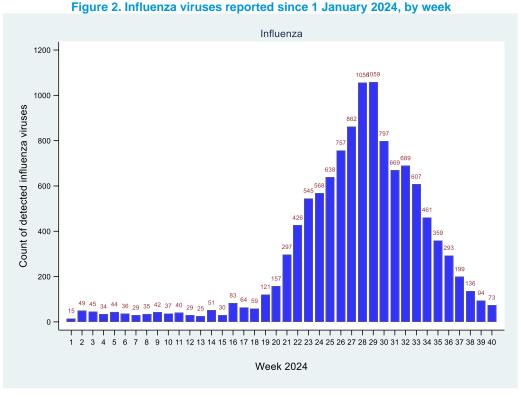
Table 2. Non-influenza respiratory viruses reported since 1 January 2024

Non-influenza respiratory viruses	Total
No. of positive specimens	17536
SARS-CoV-2	4523
Respiratory syncytial virus (RSV)	7226
Parainfluenza 1 (PIV1)	322
Parainfluenza 2 (PIV2)	171
Parainfluenza 3 (PIV3)	439
Rhinovirus (RV)	6983
Adenovirus (AdV)	1030
Human metapneumovirus (hMPV)	772
Enterovirus	593



RSV Parainfluenza 1 Parainfluenza 2 600 400 200 0 -Count of detected viruses Parainfluenza 3 Rhinovirus Adenovirus 600 400 200 0 SARS-CoV-2 Hmpv Enterovirus 600 400 200 -0-0000000000 10 20 30 40 20 30 40 Week 2024 Numbers for recent weeks are updated due to time lag in receiving laboratory test results. Figure 2. Influenza viruses reported since 1 January 2024, by week

Figure 1. Non-influenza respiratory viruses reported since 1 January 2024, by week



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