

Laboratory-based Virology Weekly Report

Week 38 ending 24 September 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	12013
Influenza A	7637
A (not subtyped)	5949
A(H1N1)pdm09	1420
A(H1N1)pdm09 by PCR	1346
A/Sydney/5/2021 (H1N1)pdm09-like	74
A(H3N2)	268
A(H3N2) by PCR	268
A/Darwin/6/2021 (H3N2)-like	0
Influenza B	4376
B (lineage not determined)	3718
B/Yamagata lineage	0
B/Yamagata lineage by PCR	0
B/Phuket/3073/2013-like	0
B/Victoria lineage	658
B/Victoria lineage by PCR	618
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	20155
SARS-CoV-2	4588
Respiratory syncytial virus (RSV)	7397
Parainfluenza 1 (PIV1)	174
Parainfluenza 2 (PIV2)	153
Parainfluenza 3 (PIV3)	532
Rhinovirus (RV)	7814
Adenovirus (AdV)	1609
Human metapneumovirus (hMPV)	1664
Enterovirus	812



Institute of Environmental Science & Research Limited ESR NCBID - Wallaceville 66 Ward Street, Wallaceville, Upper Hutt, 5018 Telephone: +64 4 529 0600, Facsimile: +64 4 529 0601

RSV Parainfluenza 1 Parainfluenza 2 600 400 200 0 -Parainfluenza 3 Rhinovirus Adenovirus 600 400 200 0 -SARS-CoV-2 Hmpv Enterovirus 600 400 200 0 40 40 10 20 30 0 10 20 30 40 0 0 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.

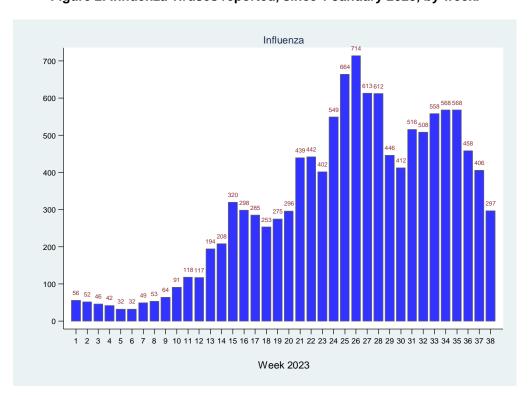


Figure 2. Influenza viruses reported, since 1 January 2023, by week.

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

