

Laboratory-based Virology Weekly Report

Week 32 ending 13 August, 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 | 9009 |
| Influenza A | 5689 |
| A (not subtyped) | 4605 |
| A(H1N1)pdm09 | 1010 |
| A(H1N1)pdm09 by PCR | 936 |
| A/Sydney/5/2021 (H1N1)pdm09-like | 74 |
| A(H3N2) | 74 |
| A(H3N2) by PCR | 74 |
| A/Darwin/6/2021 (H3N2)-like | 0 |
| Influenza B | 3320 |
| B (lineage not determined) | 2839 |
| B/Yamagata lineage | 0 |
| B/Yamagata lineage by PCR | 0 |
| B/Phuket/3073/2013-like | 0 |
| B/Victoria lineage | 481 |
| B/Victoria lineage by PCR | 441 |
| 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 | 6921 |
| SARS-CoV-2 | 84 |
| Respiratory syncytial virus (RSV) | 3620 |
| Parainfluenza 1 (PIV1) | 19 |
| Parainfluenza 2 (PIV2) | 69 |
| Parainfluenza 3 (PIV3) | 58 |
| Rhinovirus (RV) | 1787 |
| Adenovirus (AdV) | 699 |
| Human metapneumovirus (hMPV) | 427 |
| Enterovirus | 242 |



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 2 300 200 100 0 Parainfluenza 3 Rhinovirus Adenovirus 300 200 100 0 -SARS-CoV-2 Hmpv Enterovirus 300 200 100 -----0 30 10 10 20 10 20 30 30 0 0 20 0

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.

Week 2023

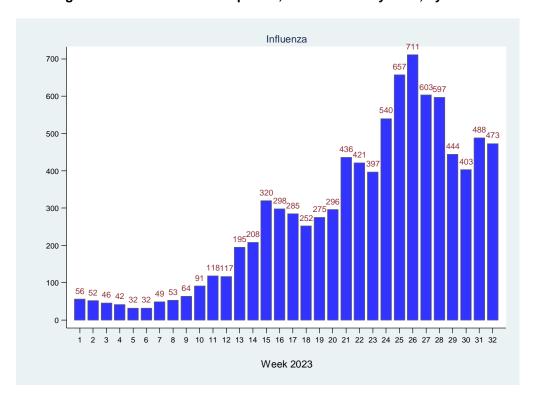


Figure 2. Influenza viruses reported, since 1 January 2023, by week.

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

