

Guide to interpreting notifiable infectious disease data for Western Australia

1. Data Source

The data summarised in the graphs and tables on the dashboard are sourced from the WA Notifiable Infectious Diseases Database (WANIDD) maintained by the Communicable Disease Control Directorate, Public and Aboriginal Health Division, Department of Health WA. This database contains information on notifiable infectious diseases and related conditions that have been reported to the Department of Health, as mandated by the Public Health Act 2016 and Public Health Regulations 2017. For more information go to Notification of infectious diseases and related conditions (health.wa.gov.au).

2. Data extraction and reporting

Notifiable disease data are extracted from WANIDD using the "optimal date of onset", with the exception of the following diseases: hepatitis B (includes both newly acquired cases and cases of unspecified duration), hepatitis C (includes both newly acquired cases and cases of unspecified duration), leprosy and tuberculosis, which are extracted by "date of receipt" of the notification. The "optimal date of onset" is derived from the 'true' date of onset of illness provided by the notifying doctor or obtained during case follow-up, or if this is not available the date of specimen collection for laboratory notified cases, and when neither of these dates is available, the date of notification by the doctor or laboratory, or the date of receipt of notification, whichever is earliest. Data presented in the <u>dashboard</u> can be aggregated by month, quarter and year, gender, age groups, Aboriginal status and region. The region signifies the location where the person resides. The tables and graphs present data up to the previous day.

3. Inclusion Criteria

This dashboard includes notifiable infectious diseases in WA residents diagnosed in WA and crossborder notifications, who are WA residents diagnosed with notifiable diseases in other Australian jurisdictions. Data are available for all infectious diseases and related conditions that are currently notifiable in WA, with the exception of COVID-19, HIV/AIDS, *Candida auris*, acute rheumatic fever, carbapenemase-producing organism (CPO) infection or colonisation, vancomycin-resistant enterococci (VRE) infection or colonisation and methicillin resistant *Staphylococcus aureus* (MRSA) infection or colonisation.

4. Timeliness, accuracy and completeness

Data are current and accurate as of the displayed "Data are current to " date. The number of cases reported is subject to change, as notifications may be received late, or rejected after further investigation and data cleaning.

Completeness of case ascertainment for notifiable diseases varies, depending on the characteristics of the particular disease, which determines the extent to which infected persons seek medical attention and are tested; whether doctors request specimen collection and testing; the availability of sensitive diagnostic methods; and the completeness of notification information by treating doctors and diagnostic laboratories. Ascertainment is less likely to be complete for more common and/or less serious infections (e.g. influenza, chlamydia, rotavirus).

5. Case definitions for notifiable infectious diseases

For current national case definitions see <u>Australian National Notifiable Diseases Case Definitions</u>. Additionally, several diseases are notifiable in WA but not nationally. These include: acute rheumatic fever, chancroid, melioidosis, typhus (rickettsial infection) and yersiniosis. Case definitions for these diseases are listed <u>Surveillance Case Definitions for notifiable infectious</u> <u>diseases and related conditions in WA</u>.

6. Data interpretation

Caution should be exercised in interpreting trends in notification data, due to changes over time in case definitions, laboratory diagnostic tests and notification requirements. One should also be aware that the most recent time periods reported in tables (where presented) may contain incomplete data for that period. Rates should be interpreted with caution especially those diseases with low numbers of notifications, as small changes in numbers reported can result in large changes in rates. Comparing the rate of the current year with previous years should be interpreted with caution as data are incomplete for the current year and some diseases have seasonal changes in the number of notifications reported (e.g. Ross River virus infections increases in summer). Diagnosis and notification in WA does not mean the disease was acquired in WA. A significant number of cases of many diseases, and in some instances, all cases, are acquired overseas. For instance, there is no local transmission of malaria and dengue fever in WA as appropriate mosquito vectors do not occur, and all notified cases are acquired overseas, but limited local transmission may occur from imported cases. If necessary, appropriate assistance should be sought in interpreting notifiable infectious disease data.

7. Citation of the WA Notifiable infectious disease data

Acknowledgement of the Communicable Disease Control Directorate, Department of Health Western Australia, should accompany any use of these data.

Suggested citation: Communicable Disease Control Directorate, Department of Health Western Australia. *Notifiable Infectious Disease Dashboard,* available at: Notification of infectious diseases and related conditions, available at <u>Notifiable infectious disease dashboard (health.wa.gov.au)</u>, accessed [include date].

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