



Australian Government

Department of Health, Disability and Ageing

National Notifiable Diseases Surveillance System

Salmonellosis Public Data Set

2009 to 2024

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INTRODUCTION

- The Salmonellosis Public Data Set includes salmonellosis notification data collected via the National Notifiable Diseases Surveillance System (NNDSS) from 1 January 2009 to 31 December 2024.
- See Table 1 for a description of the NNDSS data available in the Salmonellosis Public Data Set.

Table 1: NNDSS data available in the Salmonellosis Public Data Set

| State or Territory | NNDSS Data |
|-------------------------------------|---|
| Australian Capital Territory | Australian Capital Territory data are not included in this data set. <i>See notes below with regard to how access to these data.</i> |
| New South Wales | Week ending date, State, Age group, Sex and Serovar. |
| Northern Territory | Week ending date, State, Age group, Sex and Serovar. |
| Queensland | Week ending date, State, Age group, Sex and Serovar. |
| South Australia | Week ending date, State, Age group, Sex and Serovar. |
| Tasmania | Week ending date, State, Age group, Sex and Serovar. |
| Victoria | Week ending date, State, Age group, Sex and Serovar. |
| Western Australia | Week ending date, State, Age group, Sex and Serovar. |

- If salmonellosis data for Australian Capital Territory (ACT) are required, a formal data request should be submitted directly to the Surveillance & Management, Communicable Disease Control, Health Protection Service. Please contact the ACT Surveillance Officer on (02) 6205 2155 or at cdc@act.gov.au.

DATA CAVEATS AND INTERPRETATION

It should be noted there are several caveats to the National Notifiable Diseases Surveillance System (NNDSS) data for salmonellosis notifications in this public dataset release:

General

- These salmonellosis notification data are based on data extracted from the NNDSS on the date specified in the downloaded MS Excel salmonellosis public dataset. Due to the dynamic nature of the NNDSS, data in this extract is subject to retrospective revision and may vary from data reported in published NNDSS reports and reports of notification data by states and territories.
- These notification data represent only a proportion of the total cases occurring in the community, that is, only those cases for which health care was sought, a test conducted, and a diagnosis made, followed by a notification to health authorities. The degree of under-representation of all cases is unknown and is most likely variable by disease and jurisdiction.
- In interpreting these data, it is important to note that changes in notifications over time may not solely reflect changes in disease prevalence or incidence. Changes in testing policies; screening programs including the preferential testing of high-risk populations; the use of less invasive and more sensitive diagnostic tests; and periodic awareness campaigns, may influence the number of notifications that occur annually.
- Changes in diagnostic laboratory testing procedures from 2013 including the increasing uptake of culture independent diagnostic testing (CIDT) using polymerase chain reaction (PCR) and introduction of multiplex PCR (which can detect multiple enteric pathogens on one test) have resulted in an increase in notifications for salmonellosis.
- Implementation of COVID-19 related public health measures in Australia from mid-March 2020¹, such as physical distancing, travel restrictions and emphasis on hygiene is likely to have contributed to the lower than expected notification numbers of many communicable diseases including salmonellosis

¹ Australian Government Department of Health (on behalf of the Australian Health Protection Principal Committee). *Statements: Coronavirus (COVID-19)*. 2020 [cited 27 October 2020]; Available from: <https://www.health.gov.au/committees-and-groups/australian-health-protection-principal-committee-ahppc>.

during 2020 and 2021. In addition to these measures, it is important to acknowledge that changes in testing priorities, including laboratory resourcing for PCR testing shifting to COVID-19 PCR testing, changes in health seeking behaviours, and encouraged use of telehealth services are likely to have contributed to the decline in notified cases.²

Cross-border NNDSS Notification Protocol

- From 1 January 2009 the Communicable Diseases Network Australia (CDNA) implemented the Cross-border NNDSS Notification Protocol. The Protocol establishes that notifications are reported by the jurisdiction of residence, regardless of the jurisdiction of diagnosis. In the instance that a case is usually resident overseas, the notification is reported to the NNDSS by the jurisdiction of diagnosis.

Case definition and notification to the NNDSS

- The current surveillance case definitions for salmonellosis, including any historical edits, are available at: <https://www.health.gov.au/resources/publications/salmonellosis-surveillance-case-definition>.
- In September 2003, new national case definitions for notifications reported to NNDSS were endorsed by CDNA, with nearly all jurisdictions implementing the new definitions in January 2004 (New South Wales commenced in August 2004). Prior to the adoption of the national definitions, some jurisdictions used the 1994 NHMRC case definitions, some jurisdictions used modified definitions that were based on the NHMRC case definitions, and some others used definitions specific to the state for some diseases.
- The case definition for salmonellosis was last reviewed in 2016.

FIELD DEFINITIONS

Week Ending (Friday)

The date of the Friday, following the day that the notified case was diagnosed with salmonellosis.

Notes on interpretation:

- “Diagnosis date” is a derived field representing the disease onset date or when the date of onset is not known, the earliest of the specimen collection, the notification, or the notification received dates.
- While the final period in this dataset ends in 2025, all cases included have a diagnosis date no later than 31/12/2024

State

The State or Territory which sends the notification. Additionally, this field represents the jurisdiction of residence of the notified case. Where the case usually resides overseas, State is the jurisdiction where the diagnosis took place.

Note: information on salmonellosis cases from the Australian Capital Territory are not available in this public dataset. Please contact the ACT Surveillance & Management, Communicable Disease Control, Health Protection Service (details on page 2).

Data domain:

- NSW = New South Wales
- NT = Northern Territory
- Qld = Queensland
- SA = South Australia

² Bright A, Glynn-Robinson A, Kane S, Wright, R, Saul N. The effect of COVID-19 public health measures on nationally notifiable diseases in Australia: preliminary analysis. *Communicable Diseases Intelligence*. 2020 Nov; 44. Available from: <https://doi.org/10.33321/cdi.2020.44.85>

- Tas = Tasmania
- Vic = Victoria
- WA = Western Australia

Age Group

Age in years of the notified case at onset of disease presented in 5-year age groups. Age is based on the age of the individual as reported to the health authority or the calculated age at onset, using the difference between date of birth and diagnosis date. The age at onset is always rounded down to the age at last birthday, for example a case aged 3 years and 10 months at disease onset is reported as being 3 years. Age groups are presented according to a notified case's age in completed years, for example the 00-04 years age group includes cases from birth to 4 full years of age, but less than 5 years of age.

Where age at onset is not reported by the jurisdiction, it is calculated by determining the age at the date of diagnosis.

Data domain:

- Five-year age groups: 0 to 84 years
- 85+: 85 years and over

Sex

These data represent the sex of the individual at the time of notification.

Data domain:

- Male
- Female
- X
- Unknown.

Notes on interpretation:

- In accordance with the Australian Government Guidelines on Recognition of Sex and Gender 'X' can equal indeterminate, intersex or unspecified.
- 'Unknown' is reserved for where no information on sex is provided.

Serovar

The subtype of *Salmonella enterica* causing disease in the notified case. Please note the serovar "UNSPECIFIED" could refer either to a specimen tested using a culture independent method which is unable to be serotyped or to a specimen that was cultured but the isolate was not serotyped at an enteric reference laboratory.

RESOURCES

It is recommended that the following resources are used in interpreting the data provided:

- OzFoodNet: Foodborne disease in Australia Annual reports of the OzFoodNet network Annual report series published in Communicable Diseases Intelligence, available at: <http://health.gov.au/internet/main/publishing.nsf/Content/cda-pubs-annlrpt-ozfnetar.htm>
- Australia's notifiable diseases status: Annual report of the National Notifiable Diseases Surveillance System Annual report series published in Communicable Diseases Intelligence, available at: <http://www.health.gov.au/internet/main/publishing.nsf/Content/cda-pubs-annlrpt-nndssar.htm>

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ACRONYMS

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|-------|--|
| CIDT | Culture independent diagnostic testing |
| CDNA | Communicable Diseases Network Australia |
| NHMRC | National Health and Medical Research Council |
| NNDSS | National Notifiable Diseases Surveillance System |
| PCR | Polymerase chain reaction |