

Communicable Diseases Prevention Unit, Public Health Services

# **Special Focus Report**

Pertussis (Whooping cough) 13 October 2024



## **Special Focus Report**

#### Pertussis (Whooping cough)

Pertussis (commonly known as whooping cough) is caused by the bacteria *Bordetella pertussis*. Pertussis affects people of all ages, but it can be especially serious in babies. Pertussis can cause uncontrollable coughing and breathing difficulties that are life threatening. The bacteria are spread from people while infectious, usually during coughing or sneezing. Immunisation provides good protection against infection and risk of severe disease, especially in the short-term. The most effective way to protect young babies who are too young to be vaccinated is to receive the pertussis vaccine during pregnancy. Additional information about pertussis and how it is prevented can be found on the Whooping cough (Pertussis) page.

Pertussis activity typically follows a seasonal trend, with higher activity in the Spring and Summer months. Epidemics of pertussis usually occur every few years as immunity wanes. The last epidemic in Tasmania occurred mid-2018 until early 2020 (Figure 1). Since early 2024, there has been a steady increase in pertussis notifications in Tasmania, consistent with epidemic activity (Figure 2). This trend has been observed in other states and territories.

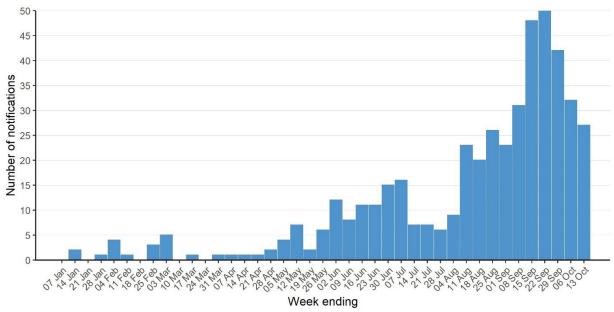
**Number of notifications** 

Figure 1. Pertussis notifications by year, Tasmania, 01-Jan-09 to 13-Oct-24

Source: Tasmanian Notifiable Diseases Surveillance System (TNDSS). Data for 2024 is from 1 January to 13 October 2024 Note: Changes in health-seeking behaviour and testing practices should be considered when comparing notifications of pertussis across multiple years.

Notifications remain highest in school aged children aged 5-11 years and 12-17 years, which is similar to previous epidemic periods (Table 1). As of 13 October 2024, there have been <5 notifications in infants <6 months this year. Pertussis notifications notably increased from May 2024. There was a decline in notifications in July, and again in the last two weeks, coinciding with the school holidays and reduced mixing of school-aged children (Figure 2).

Figure 2. Pertussis notifications by week, Tasmania, 01-Jan-24 to 13-Oct-24



Source: Tasmanian Notifiable Diseases Surveillance System (TNDSS).

Table 1. Notification of pertussis, 01-Jan-24 to 13-Oct-24

|                   |  | Number | Percentage | Rate* |
|-------------------|--|--------|------------|-------|
|                   | Total notifications                          | 466    | 100        | 81.3  |
| Sex               | Female                                       | 233    | 50.0       | 80.6  |
|                   | Male   | 233    | 50.0       | 82.0  |
| Age-group (years) | 0-4  | 26     | 5.6        | 90.0  |
|                   | 5-11   | 182    | 39.1       | 409.2 |
|                   | 12-17  | 130    | 27.9       | 316.8 |
|                   | 18-24  | 27     | 5.8        | 63.4  |
|                   | 25-64  | 87     | 18.7       | 29.6  |
|                   | 65 years and over                            | 14     | 3.0        | 11.4  |
| Region            | South  | 316    | 67.8       | 106.2 |
|                   | North  | 125    | 26.8       | 74.0  |
|                   | North-West                                   | 25     | 5.4        | 23.4  |
| Aboriginal status | Aboriginal and/or<br>Torres Strait Islander  | 47     | 10.1       | 155.7 |
|                   | Not Aboriginal and/or Torres Strait Islander | 391    | 83.9       | 78.0  |
|                   | Missing/Not stated                           | 25     | 5.4        | N/A   |
|                   | Declined to answer                           | 3      | 0.6        | N/A   |

Confirmed and probable cases. \* Notification rate per 100,000 population. Sources: Tasmanian Notifiable Diseases Surveillance System (TNDSS), Australian Bureau of Statistics estimated resident population (Jun 2023).

### **Appendix**

Surveillance systems used in this report are described below.

#### **Tasmanian Notifiable Diseases Surveillance System (TNDSS)**

Pertussis is a notifiable in Tasmania under the *Public Health Act* (1997). Consequently, all pathology laboratories in Tasmania are required to notify cases that meet the nationally agreed case definition to Public Health Services. Notifications are received regularly from public and private laboratories and clinicians in Tasmania. Data are correct at the time of reporting but are subject to change due to late notifications.

**Population under surveillance**: Tasmanian residents or overseas visitors diagnosed in Tasmania who meet laboratory criteria for a confirmed or probable case of pertussis. Access CDNA surveillance case definitions | Australian Government Department of Health and Aged Care.

**Notes on interpretation**: Data are reported by calculated onset date, the earliest of symptom onset date, specimen date or notification date. Notification data are heavily influenced by factors including health-seeking behaviours and testing practices. Changes in surveillance indicators may reflect changes in testing practices and not actual disease incidence in the community. As such, care is required in comparing notifications over time, including between years.



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