



Annual Summary of Reported Pertussis, Wisconsin, 2017

Using information reported to the Wisconsin Division of Public Health (DPH) via the Wisconsin Electronic Disease Surveillance System (WEDSS), this report summarizes pertussis case occurrence in Wisconsin during 2017.

SUMMARY OF CASES

- During January 1 through December 31, 2017, 776 cases (529 confirmed and 247 probable) of pertussis with onset during 2017 were reported among Wisconsin residents. In comparison, 1,452 cases were reported during the same time period in 2016 and 725 cases were reported during the same time period in 2015 (**Figure 1**).
- Of the 72 Wisconsin counties, 62 reported cases during 2017. The greatest numbers were reported from Milwaukee, Kenosha, and Outagamie counties. Reported incidence of pertussis was highest in Oneida, Kenosha, and Taylor counties (**Figure 2**).
- Median patient age at cough onset was 13 years (range: less than 1 month to 89 years). The Northern region had the highest incidence of pertussis in the less than 1 year and 15 —19 year old categories. The Southeastern region had the highest incidence of pertussis in the other categories (**Figure 3**). Incidence was highest among infants aged less than 1 year and adolescents aged 14 —17 years (**Figure 4**).
- Among case patients, 25 (3%) had reported hospitalizations. The median length of stay was two days. Among hospitalized patients, 14 (56%) were aged less than 1 year.
- No deaths were reported.
- Race and ethnicity were not reported for 26% of cases. Among those with race reported, the incidence of pertussis was highest among American Indian/Alaska Natives (11.0 per 100,000), followed by Whites (9.8), Blacks/African Americans (5.6), and Asians (4.1). Among those with ethnicity reported, the incidence of pertussis was higher among Hispanics (24.9 cases per 100,000) than non-Hispanics (8.1).
- Among case patients aged 2 months through 10 years, 66% were up to date for age with pertussis immunizations before cough onset. Among case patients aged 11 through 18 years, 85% had reportedly received Tdap before cough onset.
- There were 78 (10%) reported cases among children aged less than 1 year. Among these case patients, 49 (63%) were aged less than 6 months and 14 (18%) were hospitalized. Additionally, 53% were up to date for age with pertussis immunizations, 15% were too young for immunization, 22% were under-immunized for age and 10% were eligible for another dose.

Case of pertussis: An acute cough illness, with a completed investigation, meeting the CDC/CSTE case definition for confirmed or probable pertussis. CDC/CSTE definitions: <http://www.cdc.gov/pertussis/surv-reporting.html#case-definition>.

Figure 1. Number of reported confirmed and probable cases of pertussis by month and year of cough onset, Wisconsin, January 1, 2012, through December 31, 2017.

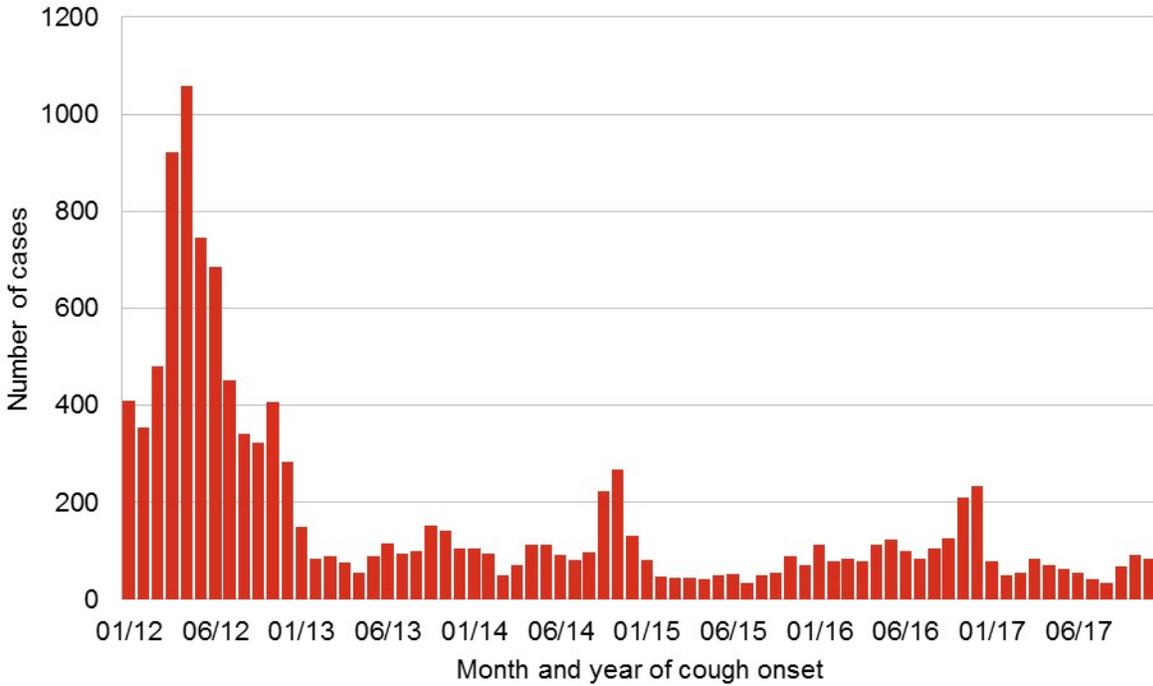


Figure 2. Number and incidence of reported confirmed and probable cases of pertussis, by county of residence, Wisconsin, January 1 through December 31, 2017 (N=776).

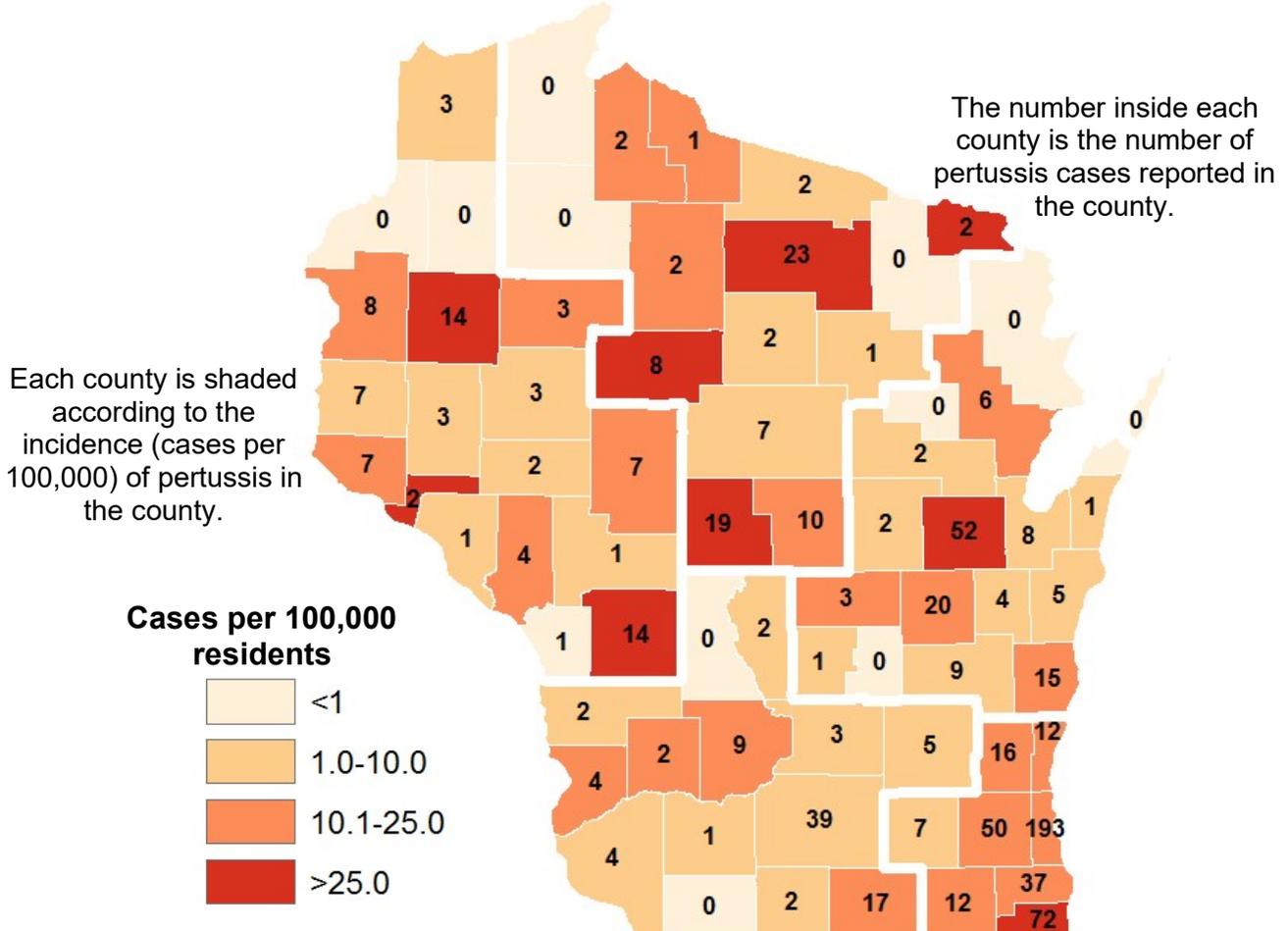


Figure 3. Incidence (per 100,000) of confirmed and probable pertussis cases, by age group and public health region, Wisconsin, January 1 through December 31, 2017 (N=776).

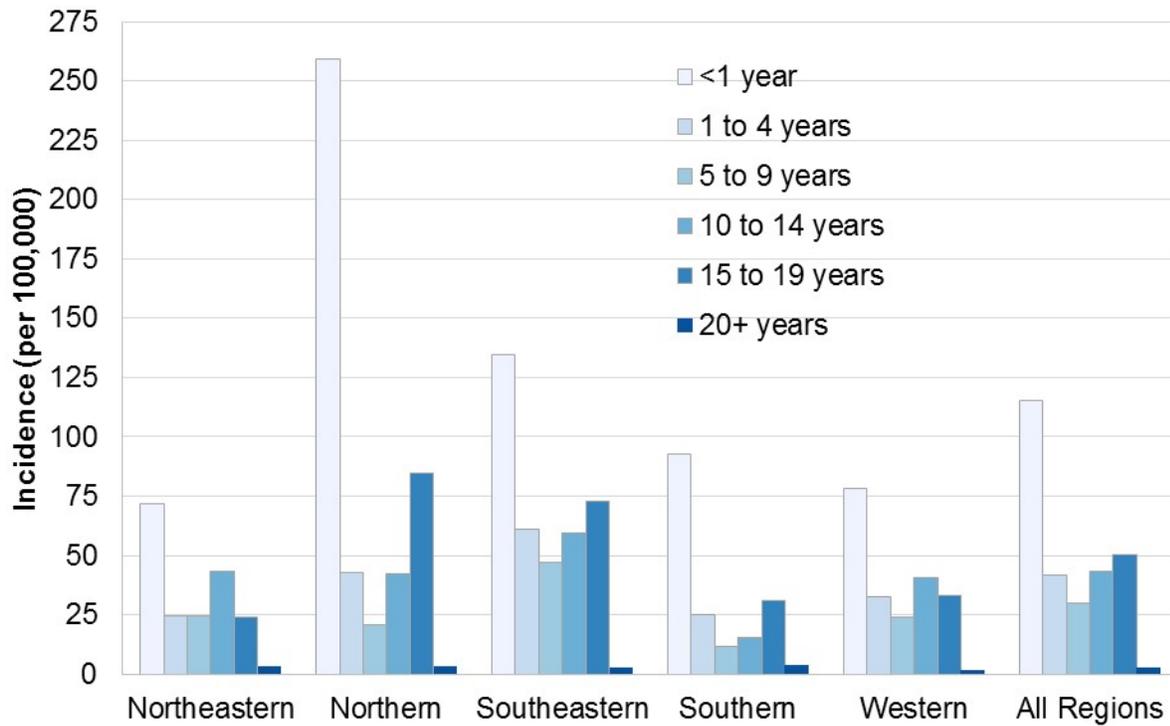
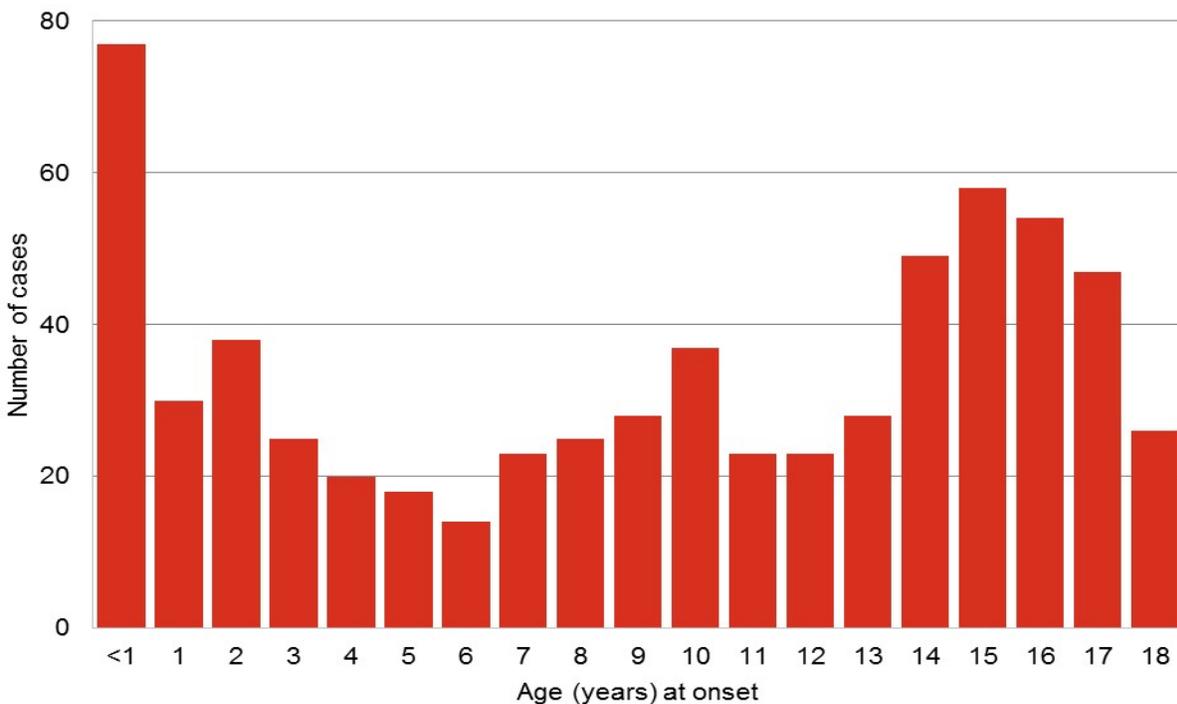


Figure 4. Number of reported confirmed and probable cases of pertussis among children aged less than or equal to 18 years, by age at onset, Wisconsin, January 1 through December 31, 2017 (N=643).



Routine vaccination with the five-dose DTaP series is recommended at ages 2, 4, 6, and 15-18 months and 4-6 years; routine vaccination with one dose of Tdap is recommended at age 11-12 years.