



## Annual Summary of Reported Pertussis, Wisconsin, 2016

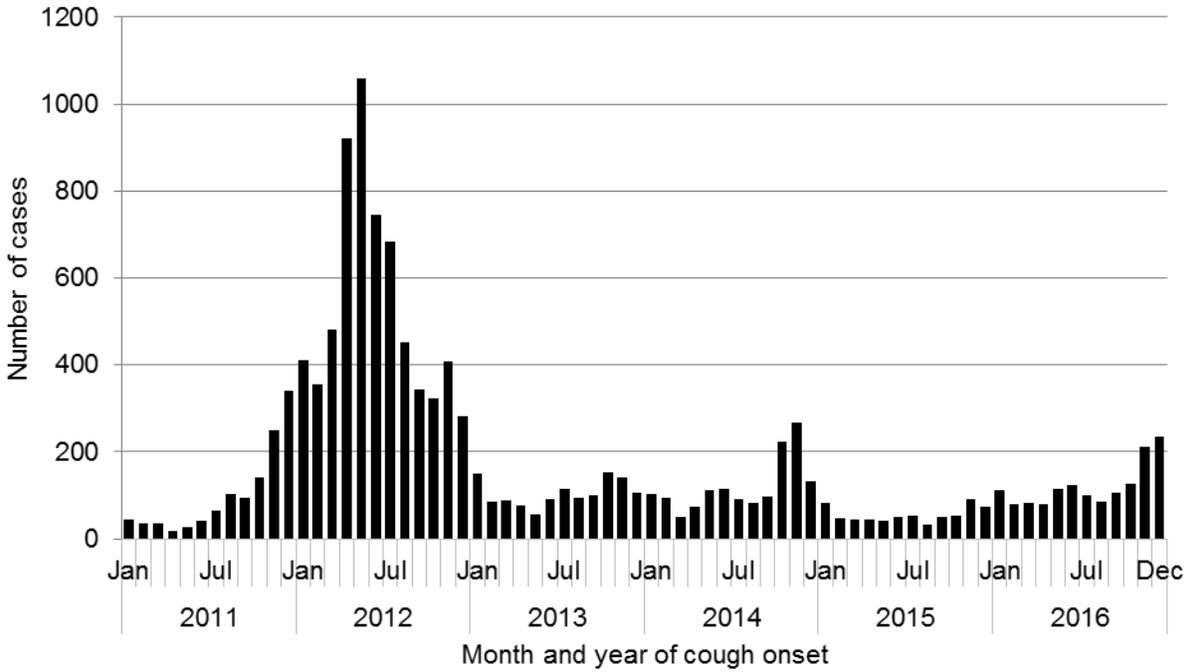
Using information reported to the Wisconsin Division of Public Health (DPH) via the Wisconsin Electronic Disease Surveillance System (WEDSS), this report summarizes pertussis case occurrence in Wisconsin during 2016.

### SUMMARY OF CASES

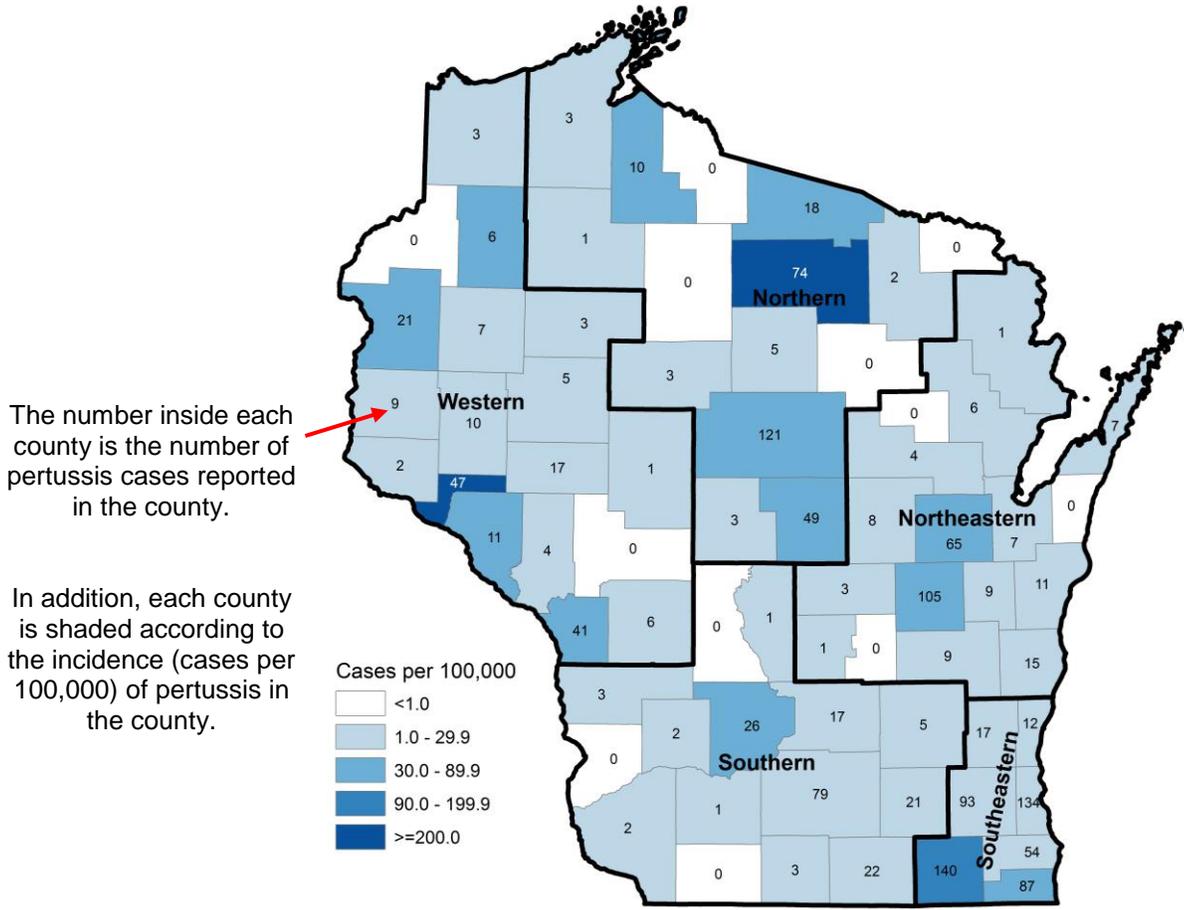
- During January 1 through December 31, 2016, 1,452 cases (943 confirmed and 509 probable) of pertussis with onset during 2016 were reported among Wisconsin residents. In comparison, 725 cases were reported during the same time period in 2015 and 1,437 cases were reported during the same time period in 2014 (**Figure 1**).
- 60 of the 72 Wisconsin counties reported cases during 2016. The greatest numbers were reported from Walworth, Milwaukee and Marathon Counties. Reported incidence of pertussis was highest in Pepin, Oneida and Walworth Counties (**Figure 2**).
- Median patient age at cough onset was 14 years (range: <1 month to 89 years). The Northern region had the highest incidence of pertussis in every age category (**Figure 3**). Occurrence was highest among infants aged <1 year and adolescents (**Figure 4**).
- Among case patients, 32 (2%) had reported hospitalizations. The median length of stay was 3 days. Among hospitalized patients, 18 (56%) were aged <1 year.
- No deaths were reported.
- Race and ethnicity were not reported for 21% of cases. Among those with race reported, the incidence of pertussis was highest among Whites (19.8 per 100,000), followed by Asians (12.9), American Indian/Alaska Natives (11.0), and Blacks/African Americans (7.7). Among those with ethnicity reported, the incidence of pertussis was higher among Hispanics (23.6 cases per 100,000) than non-Hispanics (16.7).
- Among case patients aged 2 months through 10 years, 72% were up to date for age with pertussis immunizations before cough onset. Among case patients aged 11 through 18 years, 86% had reportedly received Tdap before cough onset.
- 102 (7%) reported cases occurred among children aged <1 year. Among these case patients, 69 (68%) were aged <6 months and 18 (18%) were hospitalized. Additionally, 65% were up to date for age with pertussis immunizations, 16% were too young for immunization, 11% were under-immunized for age and 8% 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/surveillance-reporting.html#case-definition>.

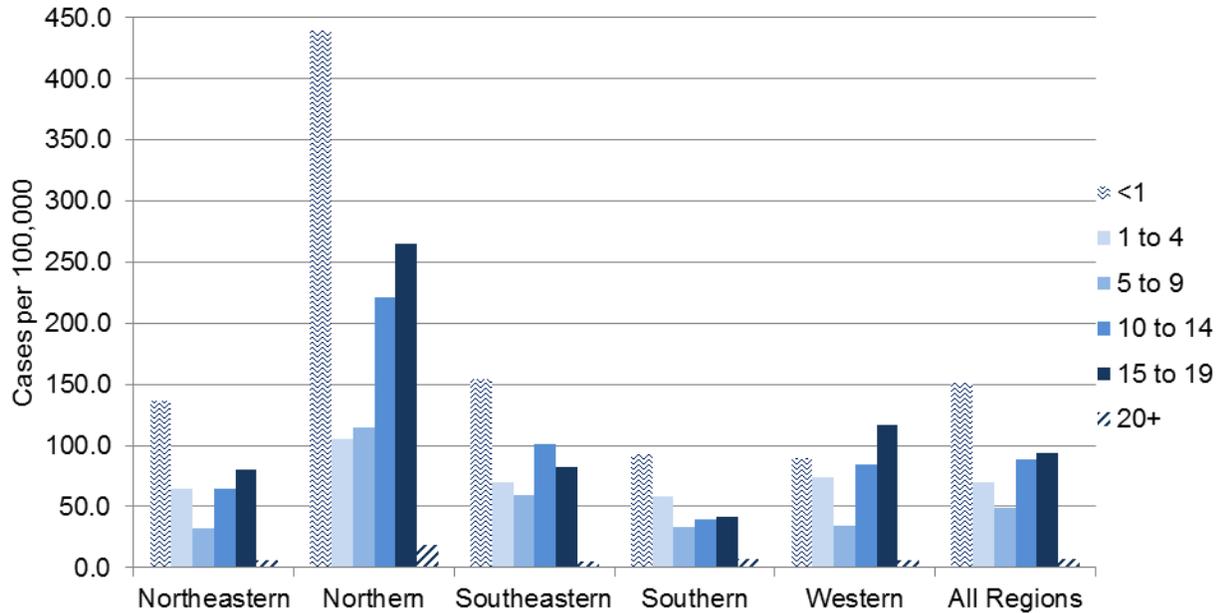
**Figure 1.** Number of reported confirmed and probable cases of pertussis by month and year of cough onset, Wisconsin, January 1, 2011 through December 31, 2016



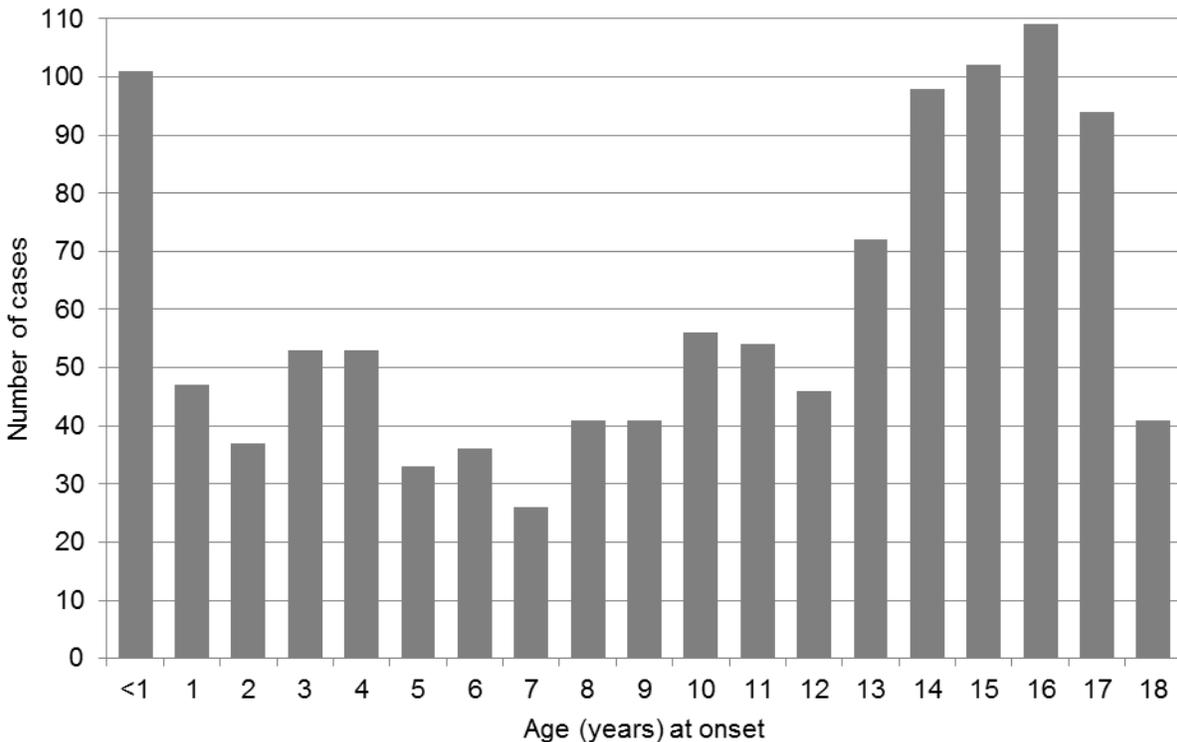
**Figure 2.** Number and incidence of reported confirmed and probable cases of pertussis, by county of residence, Wisconsin, January 1, 2016 through December 31, 2016 (N=1,452)



**Figure 3.** Incidence (per 100,000) of confirmed and probable pertussis cases, by age group and public health region, Wisconsin, January 1, 2016 through December 31, 2016 (N=1,452)



**Figure 4.** Number of reported confirmed and probable cases of pertussis among children aged ≤18 years, by age at onset, Wisconsin, January 1, 2016 through December 31, 2016 (N=1,140)



Routine vaccination with the 5-dose DTaP series is recommended at ages 2, 4, 6, and 15-18 months and 4-6 years; routine vaccination with 1 dose of Tdap is recommended at age 11-12 years.