

## **Annual Summary of Reported Pertussis, Wisconsin, 2015**

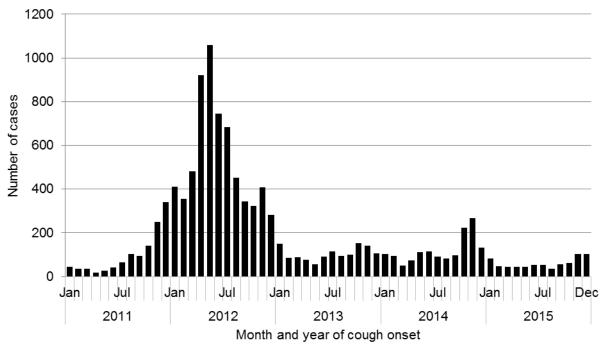
Using information reported to the Wisconsin Division of Public Health (DPH) via the Wisconsin Electronic Disease Surveillance System (WEDSS), this report summarizes pertussis case occurrence in Wisconsin during 2015.

## **SUMMARY OF CASES**

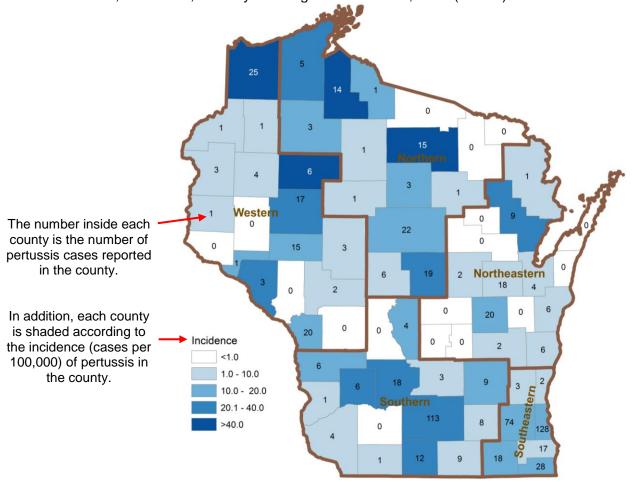
- During January 1 through December 31, 2015, 725 cases (514 confirmed and 211 probable) of pertussis with onset during 2015 were reported among Wisconsin residents. In comparison, 1,437 cases were reported during the same time period in 2014 and 1,258 cases were reported during the same time period in 2013 (Figure 1).
- In 2015, 55 of the 72 Wisconsin counties reported cases. The greatest numbers were reported from Milwaukee, Dane, and Waukesha counties. Incidence was highest in Ashland, Douglas, and Oneida counties (**Figure 2**).
- Median patient age at cough onset was 14 years (range: <1 month to 81 years). Statewide, and in every region, occurrence was highest among infants aged <1 year and adolescents aged 14–17 years (Figures 3 and 4).
- Among case patients, 22 (3%) had reported hospitalizations. Among hospitalized patients, 13 (59%) were aged <1 year. The median length of stay was three days.
- No deaths were reported.
- Race and ethnicity were not reported for 25% of cases. Rates are reported for racial/ethnic groups with 10 or more cases in the numerator. Among children aged <1 year, the incidence of pertussis was higher among Blacks/African Americans (172.3 cases per 100,000) than among Whites (69.8 cases per 100,000). Among all age groups, the incidence of pertussis was highest among Whites (10.2 cases per 100,000), followed by Blacks/African Americans (7.8) and Asians/Pacific Islanders (6.1). Among all age groups, the incidence of pertussis was higher among Hispanics (15.3 cases per 100,000) than among non-Hispanics (9.1).</li>
- Among case patients aged two months through 10 years, 25% were not up to date with pertussis immunizations before cough onset. Among case patients aged 11 to 18 years, 86% had reportedly received Tdap before cough onset.
- There were 77 (11%) reported cases among children aged <1 year. Among these case patients, 49 (64%) were aged <6 months and 13 (17%) were hospitalized. Additionally, 49% were up to date for age with pertussis immunizations, 24% were too young for immunization, 19% were underimmunized for age, and 8% were eligible for another dose.</li>

**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: <a href="http://www.cdc.gov/pertussis/surv-reporting.html#case-definition">http://www.cdc.gov/pertussis/surv-reporting.html#case-definition</a>.

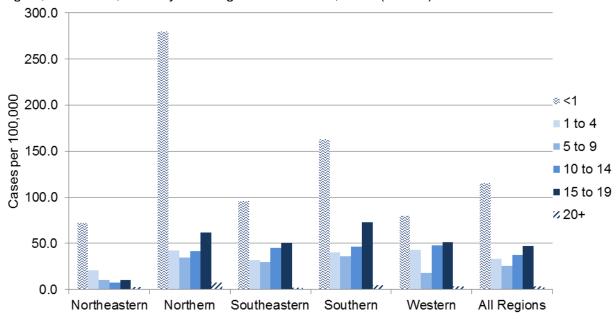
**Figure 1.** Number of reported confirmed and probable cases of pertussis by month and year of cough onset, Wisconsin, January 1, 2011 through December 31, 2015



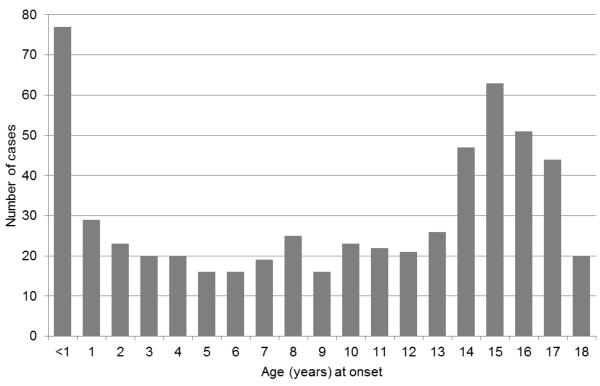
**Figure 2.** Number and incidence of reported confirmed and probable cases of pertussis, by county of residence, Wisconsin, January 1 through December 31, 2015 (N=725)



**Figure 3.** Incidence of confirmed and probable pertussis cases, by age group and public health region, Wisconsin, January 1 through December 31, 2015 (N=725)



**Figure 4.** Number of reported confirmed and probable cases of pertussis among children aged ≤18 years, by age at onset, Wisconsin, January 1 through December 31, 2015 (N=578)



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.