Annual Summary of Reported Pertussis, Wisconsin, 2013
March 20, 2014

This summary of the reported pertussis case occurrence in Wisconsin during 2013 was prepared using information reported to the Wisconsin Division of Public Health (DPH) via the Wisconsin Electronic Disease Surveillance System (WEDSS).

DEFINITIONS
Case: An acute cough illness meeting the CDC/CSTE case definition for confirmed or probable pertussis. CDC/CSTE definitions: http://www.cdc.gov/pertussis/surv-reporting.html#case-definition.

SUMMARY OF CASES
- 1258 cases (868 confirmed and 390 probable) of pertussis with illness onsets during 2013 were reported among Wisconsin residents (incidence: 22.0 cases per 100,000). In comparison, 6462 cases (incidence: 113.1) were reported during 2012 and 1193 cases (incidence: 20.9) were reported during 2011 (Figure 1).
- The reported occurrence of pertussis during 2013 remained above the occurrence reported during previous non-outbreak years (Figure 2).
- 65 of the 72 Wisconsin counties reported cases during 2013. The greatest numbers occurred in Milwaukee, Dane, Waukesha, and Racine Counties. Reported incidence of pertussis was greatest in Menominee, Dane, Racine, Trempealeau, Taylor, and Washburn Counties (Figure 3).
- Among cases reported during 2013, median patient age at cough onset was 11.4 years (range: <1 month to 95 years). In all public health regions, the incidence of pertussis was highest among children aged <1 year. Although the largest number of cases occurred in the Southeastern region, the incidence of pertussis was highest in the Northern region in all age groups (Figures 4 and 5).
- Among case patients, 52 (4%) had reported hospitalizations. The median age of hospitalized patients was 5 months (range: <1 month to 95 years). The median length of hospitalization was 3 days (range: 1 to 30 days).
- No deaths were reported.
- Race and ethnicity were not reported for 21% of cases. Among those with race or ethnicity reported, non-Hispanic American Indian/Alaskan Natives had the highest reported incidence of any racial/ethnic group (34.5 per 100,000), followed by non-Hispanic whites (17.1), Hispanic whites (16.8), non-Hispanic blacks (15.5), and non-Hispanic Asians (10.3).
- Among case patients aged ≤10 years, 68% were up to date for age with pertussis immunizations, 19% were under-immunized for age, 9% were eligible for another dose, and 4% were too young for immunization. Additionally, 82% of case patients aged 11 to 18 years had reportedly received Tdap before cough onset.
- 133 (11%) reported cases occurred among children aged <1 year. Among these case patients, 90 (68%) were aged <6 months at cough onset and 33 (25%) were hospitalized. Additionally, 69 (52%) were up to date for age with pertussis immunizations, 25 (19%) were too young for immunization, 23 (17%) were under-immunized for age and 16 (12%) were eligible for another dose. No deaths were reported.
**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, 2013

![Graph showing pertussis cases by month and year](image1.png)

**Figure 2.** Number of reported confirmed and probable cases of pertussis by month and year of cough onset, Wisconsin, January 1, 2004 through December 31, 2013

![Graph showing pertussis cases by month and year](image2.png)
**Figure 3.** Number and incidence (per 100,000 persons) of reported confirmed and probable cases of pertussis, by county of residence, Wisconsin, January 1, 2013 through December 31, 2013 (N=1258)

The number inside each county is the number of pertussis cases reported in the county.

In addition, each county is shaded according to the incidence (cases per 100,000) of pertussis in the county.
Figure 4. Incidence (per 100,000) of confirmed and probable cases of pertussis, by age group and public health region, Wisconsin, January 1, 2013 through December 31, 2013 (N=1258)

Figure 5. Number of reported confirmed and probable cases of pertussis, by age group and public health region, Wisconsin, January 1, 2013 through December 31, 2013 (N=1258)