

Weekly pertussis update for Washington State

Washington State Department of Health

2023 year-to-date (YTD) confirmed and probable cases reported through 12/30/2023 (week 52).

This update summarizes all reports of pertussis in persons with illness onset dates during CDC weeks 1 - 52. The included reports were received by local health jurisdictions (LHJs) and made visible to Washington State Department of Health (DOH) — Communicable Disease Epidemiology, and contained sufficient information for a case classification to have been assigned. Lab result reporting and case investigations take time, so it sometimes takes 3 to 4 weeks after a positive test for a case to be classified as confirmed or probable.

There have been a total of 68 cases reported statewide so far in 2023, compared to 76 cases reported by week 52 in 2022. Dates for the 2022/2023 comparison are based primarily on symptom onset dates. For information about pertussis case counts in prior years, please refer to DOH's Communicable Disease Annual Reports or the Annual Pertussis Reports.

Figure 1: Number of Pertussis Cases Reported in Washington State by Week of Symptom Onset: 2022 (blue) vs 2023 (red)

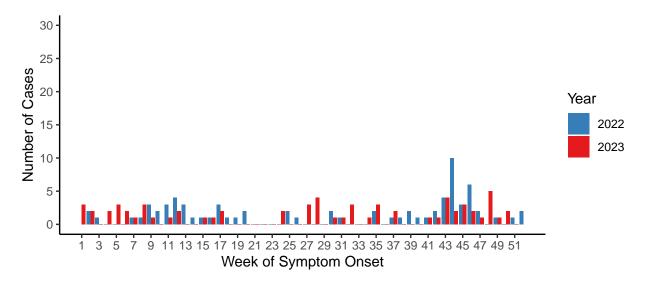


Figure 2: WA State Pertussis Cases Reported by Month and Year (black) with Projected Baseline and Epidemic Thresholds (red dashed lines), 2013-2022, with YTD 2023 data overlaid

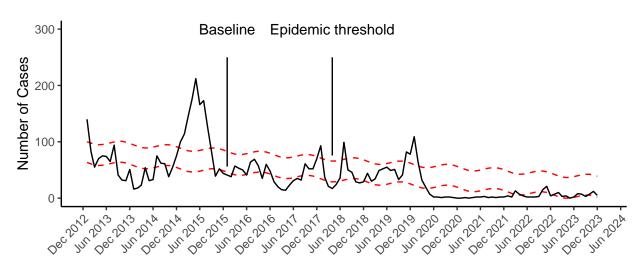




Table 1: WA State Pertussis Cases by Age Group, 2023 weeks 1 - 52

Age Group	OFM 2020 Population	Number of Cases	Rate per 100,000 persons	% of cases by age group*
< 1	89,038	8	9.0	12
1 - 4	360,093	18	5.0	26
5 - 9	481,675	9	1.9	13
10 - 13	390,105	6	1.5	9
14 - 18	468,897	12	2.6	18
19 - 24	593,072	0	0.0	0
25 - 44	2,086,393	6	0.3	9
45 - 64	1,905,515	5	0.3	7
65+	1,281,417	4	0.3	6
All ages	7,656,205	68	0.9	100

^{*}Due to rounding, percentages may not always add up to 100%

The overall year-to-date incidence rate is 0.9 pertussis cases per 100,000 Washington residents from weeks 1 through 52, with an incidence rate among infants under one year of age of 9 cases per 100,000 (see Table 1). Infants under one year of age are among the most vulnerable to severe pertussis disease.

None of the four infants who had pertussis so far in 2023 were up-to-date on pertussis vaccine.

Table 2: WA State Pertussis Cases by County, 2023 weeks 1 - 52

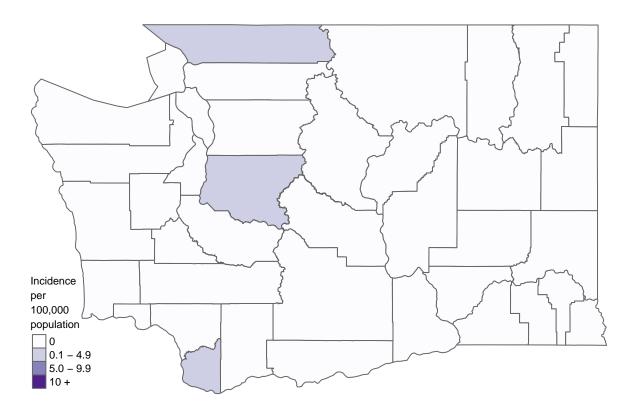
County	Number of Cases	OFM 2020 Population	Rate per 100,000 persons
King	24	2,260,801	1.1
Clark	14	499,193	2.8
Pierce	10	900,697	1.1
Whatcom	9	228,002	3.9
Kitsap	3	272,197	1.1
Snohomish	3	830,503	0.4
Skagit	2	130,453	1.5
Island	1	85,529	1.2
Okanogan	1	43,135	2.3
Whitman	1	50,485	2.0

Among the 10 counties with reported pertussis activity so far in 2023, the number of pertussis cases in a given county ranges from 1 to 24 and county-level YTD incidence rates range from 0.4 to 3.9 per 100,000 persons (see Table 2).

- The median and mean county-level year-to-date incidence rates in counties reporting pertussis activity are 1.4 and 1.7 per 100,000 persons, respectively.
- 29 counties have reported no pertussis cases as of CDC week 52 of this year.



Figure 3: Six-Week Pertussis Incidence Rates by County, 2023 weeks 46 - 52



The incubation period for pertussis is up to 21 days, so six weeks represents two 21-day incubation periods. Outbreaks of pertussis are usually declared over after six weeks have passed with no additional cases. The map above uses the past six weeks of data to highlight areas where the potential for continuing outbreaks exists based on current patterns of reported pertussis disease.

NOTE: To request this document in another format, call 1-800-525-0127. Deaf or hard of hearing customers, please call 711 (Washington Relay) or email doh.information@doh.wa.gov.