

Weekly Pertussis Update for Washington State

Washington State Department of Health

2024 year-to-date (YTD) confirmed and probable cases reported through 10/26/2024 (week 43).

This update summarizes all reports of pertussis in persons with illness onset dates during CDC weeks 1 - 43. The included reports were received by local health jurisdictions (LHJs) and reported to Washington State Department of Health (DOH) – Communicable Disease Epidemiology. 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 pertussis. The data presented in this report is therefore subject to change over time.

There have been a total of 1099 cases reported statewide so far in 2024, compared to 49 cases reported by week 43 in 2023. Dates for the 2023/2024 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 CDC Week of Symptom Onset: 2023 (blue) vs 2024 (red)

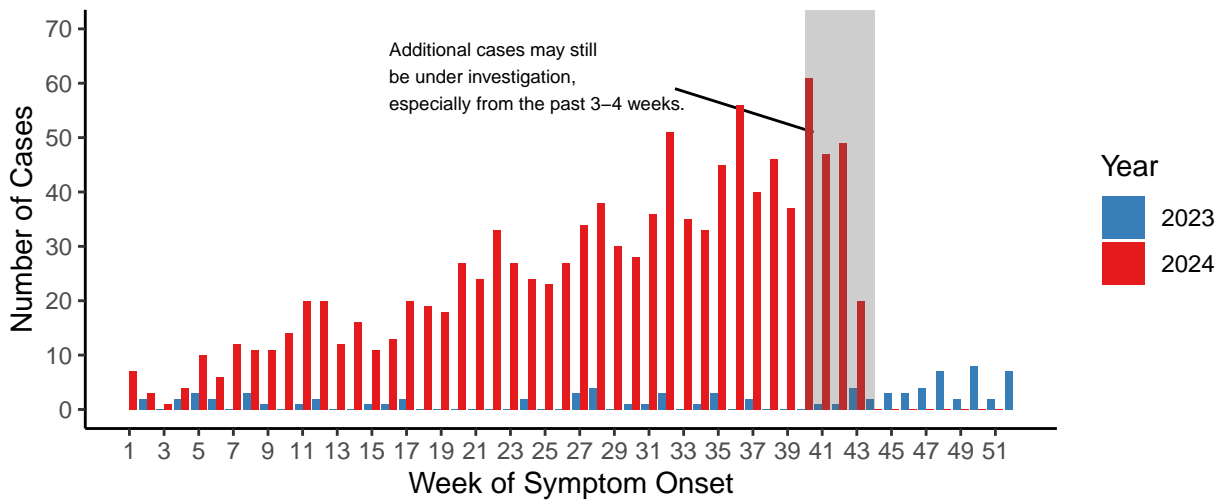


Figure 2: WA State Pertussis Cases Reported by Month and Year (black) with Projected Baseline and Epidemic Thresholds (red dashed lines), 2014 through year-to-date 2024¹. *The most recent 2 months may still be incomplete (dotted line).*

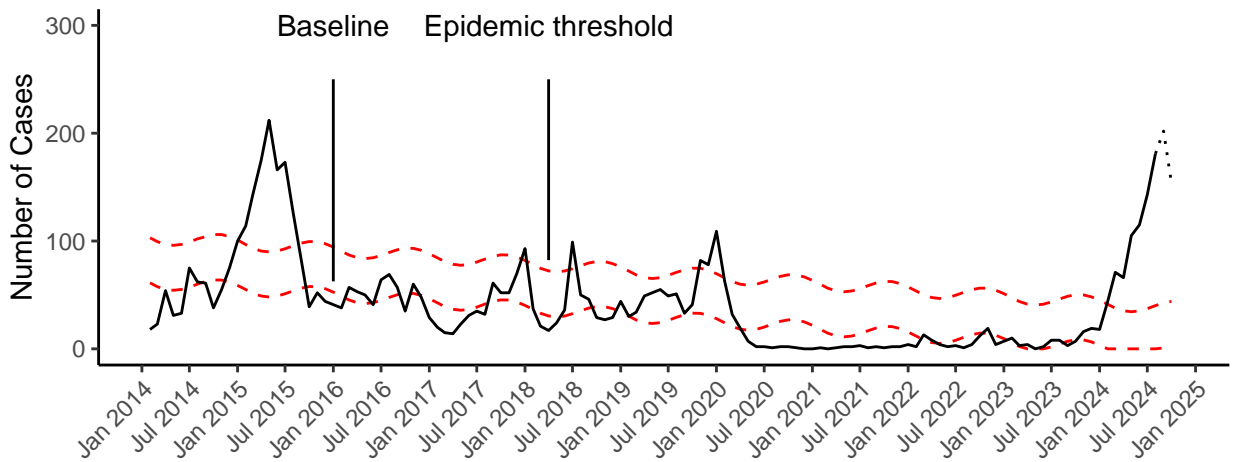


Table 1: WA State Pertussis Cases by Age Group, 2024 weeks 1 - 43

Age Group	OFM 2022 Population	Number of Cases	Rate per 100,000 persons	% of cases by age group*
< 1	88,441	113	127.8	10
1 - 4	349,505	267	76.4	24
5 - 9	476,054	206	43.3	19
10 - 13	396,426	124	31.3	11
14 - 18	480,566	203	42.2	18
19 - 24	588,771	75	12.7	7
25 - 44	2,225,672	67	3.0	6
45 - 64	1,911,375	31	1.6	3
65+	1,347,568	13	1.0	1
All ages	7,864,378	1,099	14.0	100

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

The overall year-to-date incidence rate is 14 pertussis cases per 100,000 Washington residents from weeks 1 through 43, with an incidence rate among infants under one year of age of 127.8 cases per 100,000 (see Table 1). Infants under one year of age are among the most vulnerable to severe pertussis disease.

Of the 113 infants who had pertussis so far in 2024: 95 were old enough to have received a dose of pertussis-containing vaccine, and 18 (16%) had received at least one dose.

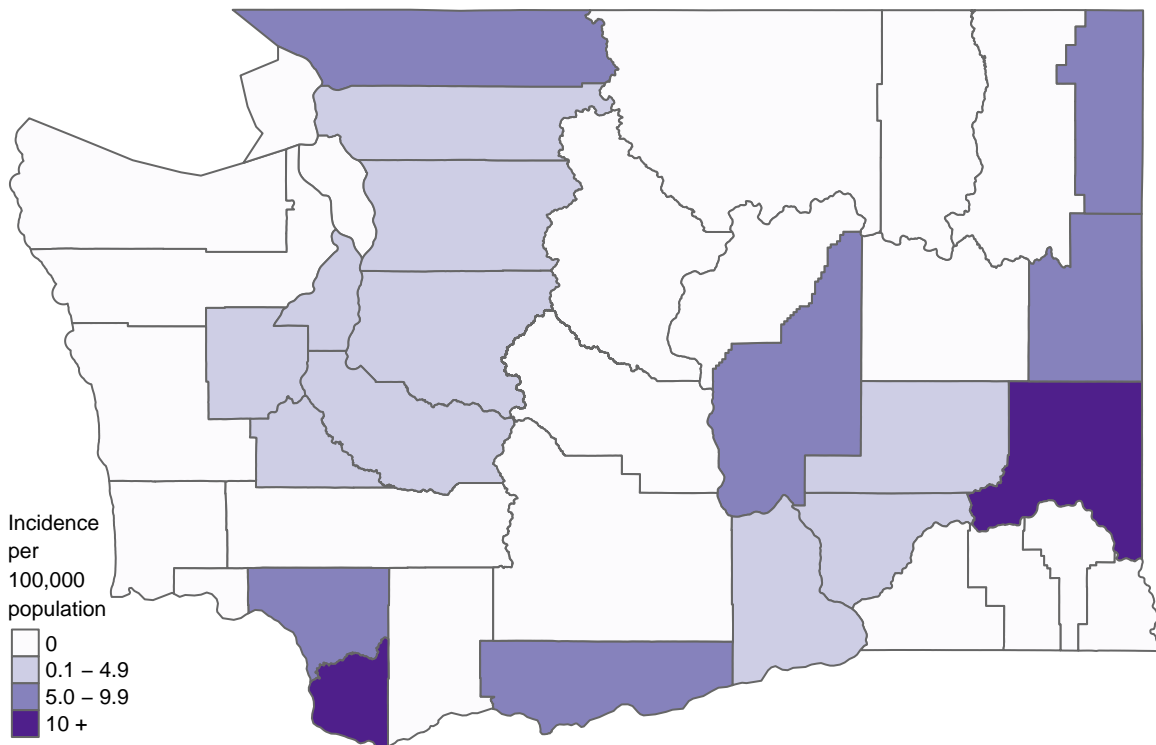
Table 2: WA State Pertussis Cases by County, 2024 weeks 1 - 43

County	Number of Cases	OFM 2022 Population	Rate per 100,000 persons
Clark	401	520,898	77.0
King	136	2,317,702	5.9
Spokane	104	550,703	18.9
Pierce	77	937,403	8.2
Chelan	63	80,648	78.1
Snohomish	59	847,301	7.0
Grant	48	101,800	47.2
Whitman	43	47,802	90.0
Whatcom	33	231,648	14.2
Douglas	24	43,997	54.5
Cowlitz	23	112,353	20.5
Thurston	13	300,496	4.3
Skagit	12	131,253	9.1
Jefferson	9	33,347	27.0
Stevens	8	47,047	17.0
Franklin	6	99,756	6.0
Yakima	6	259,952	2.3
Benton	5	212,300	2.4
Clallam	5	77,625	6.4
Adams	4	21,100	19.0
Grays Harbor	4	76,396	5.2
Okanogan	4	42,702	9.4
Island	3	87,703	3.4
Klickitat	2	23,143	8.6
Lewis	2	83,400	2.4
Kitsap	1	280,898	0.4
Lincoln	1	11,047	9.1
Mason	1	66,204	1.5
Pend Oreille	1	13,622	7.3
Walla Walla	1	62,621	1.6

Among the 30 counties with reported pertussis activity so far in 2024, the number of pertussis cases in a given county ranges from 1 to 401 and county-level YTD incidence rates range from 0.4 to 90 per 100,000 persons (see Table 2).

- The median and mean county-level year-to-date incidence rates in counties reporting pertussis activity are 8.4 and 18.8 per 100,000 persons, respectively.
- 9 counties have reported no pertussis cases as of CDC week 43 of this year.

Figure 3: Six-Week Pertussis Incidence Rates by County, 2024 weeks 37 - 43



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.

1. Pelat C, Boëlle PY, Cowling BJ, Carrat F, Flahault A, Ansart S, Valleron AJ. Online detection and quantification of epidemics. *BMC Med Inform Decis Mak.* 2007 Oct 15 ; 729 – software available at <https://periodic.sentiweb.fr/>

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