



WASHINGTON STATE DEPARTMENT OF HEALTH

Provider Alert

Provider Alert: Pertussis Cases Continue to Increase in Washington State

November 6, 2024

This is a Provider Alert from the Washington State Department of Health (DOH) regarding an increase in pertussis (whooping cough) cases. Healthcare providers should:

- Remain alert for patients with symptoms of pertussis.
- Test patients who may have pertussis and treat patients strongly suspected of having pertussis.
- Ensure patients are up-to-date with DTaP or Tdap vaccines.

This is an update to the Provider Alert sent in [May 2024](#).

Current Pertussis Situation in Washington

There has been a total of 1,099 confirmed and probable cases of pertussis reported statewide during 2024 through 10/26/2024 (CDC Week 43), compared to 49 cases reported by the same week in 2023. This represents a 21-fold increase in pertussis cases over the previous year. 27 of 39 counties have reported pertussis activity during 2024; however, the Centers for Disease Control and Prevention (CDC) estimates that only approximately 10% of pertussis infections are identified and reported to public health.

Current information about pertussis in Washington state can be found in the [DOH Weekly Pertussis Update](#). This report is updated every Friday.

Vaccine Coverage Situation Update

According to the Washington State Immunization Information System (WAIS), pertussis vaccine coverage in Washington state has decreased in children 19 to 35 months of age since 2019. In 2019, 72% of children in this cohort were up to date on DTaP vaccination. As of 2023, only 65% of this cohort were up to date on DTaP vaccination, marking a 10% decrease over 4 years. This underscores the importance of promoting vaccination and keeping children up to date given the increase in pertussis. According to the Washington Pregnancy Risk Assessment Monitoring System, also known as WAPRAMS, Tdap uptake during pregnancy has also slightly declined from 86% in 2019 to 82% in 2022.

Persons at high risk for pertussis:

- Infants less than one year old, who are at greatest risk for severe disease and death
- Pregnant people in their last trimester who may expose their newborn
- Healthcare workers with direct patient contact
- Family members or caregivers of infants or pregnant persons

Actions Requested

- Be aware of a substantial increase in pertussis activity in most regions of Washington state.
- Assure children and adults are up to date on pertussis-containing vaccine according to [national guidelines](#).
 - DTaP vaccine is recommended for children at 2, 4, and 6 months of age. Booster doses are recommended at 15 months and 4 years.
 - Give Tdap vaccine at 11-12 years of age.
 - Tdap is recommended during each pregnancy during 27 through 36 weeks gestation.
 - Give Tdap to adults who have never received it and a Td or Tdap booster every 10 years.
 - Prioritize vaccination of household members and caregivers of infants.
- If you suspect pertussis:
 - **Test:** Collect a nasopharyngeal (NP) swab for *Bordetella pertussis* PCR or culture. (More information below.)
 - **Treat:** CDC provides [detailed treatment guidance](#). The most commonly used antibiotic is azithromycin. Clarithromycin, erythromycin, and trimethoprim-sulfamethoxazole are also options. We encourage careful selection of antibiotics based on the patient's age, allergy history, and other factors.
 - **Exclude:** Tell the patient to stay home from work, school, or childcare. Advise them that they are considered contagious until they have completed 5 full days of appropriate antibiotics.
 - **Report** the illness to the [local health jurisdiction](#) of the patient's residence within 24 hours, who will assist you in determining recommendations for prophylaxis and exclusion.
 - **Consider** preventive antibiotics for the entire household if a member meets any "High Risk" criteria (above).
- Consider the diagnosis of pertussis in the following situations:
 - Respiratory symptoms in infants younger than 12 months of age, especially if accompanied by difficulty feeding or apnea.
 - A cough illness, in patients of any age, characterized by one or more of the following:
 - A sudden attack or reemergence of symptoms of pertussis (paroxysms).
 - Gagging, vomiting after coughing (post-tussive emesis), or inspiratory whoop.
 - A duration of two weeks or more.
 - Respiratory illness of any duration in patients who have had contact with someone known to have had pertussis or symptoms consistent with pertussis.
 - Note that people who have received pertussis-containing vaccine can still get pertussis.
- Consider testing. Collect a nasopharyngeal swab for pertussis polymerase chain reaction (PCR) or culture. PCR is the most sensitive and fastest diagnostic test and is widely available at commercial laboratories.
 - Please note that a negative pertussis PCR or culture result **cannot** rule out pertussis. Treatment and case reporting may still be warranted, even with negative test results, per the clinician's assessment.
 - CDC provides information about [best practices for using PCR to diagnose pertussis](#).
 - Note that serology should not be used for diagnosing pertussis cases in Washington state.

Background

Pertussis is a bacterial respiratory illness caused by *Bordetella pertussis*, with an incubation period of 5 to 21 days. The illness progresses through three [clinically distinct stages](#), with patients being contagious from the

day of cough onset. Although adults and older children who get pertussis may experience a relatively mild illness, some individuals in our communities are at increased risk for severe disease, especially infants less than 1 year old, persons who are immunocompromised, and individuals with pre-existing respiratory disease (e.g., asthma). Pertussis can be life threatening, especially for infants.

Diagnosing pertussis can be difficult, particularly during the early (catarrhal) stage of illness, which features non-specific symptoms and may not initially include a cough. A key feature that distinguishes pertussis from other common respiratory illnesses is the duration of cough symptoms which usually last longer than two weeks and can last 10 weeks or longer. Clinicians should include pertussis on the differential diagnosis if a patient has respiratory symptoms or a known or suspected exposure to pertussis.

Antibiotic treatment is recommended for patients highly suspected of having pertussis, because antibiotics can reduce the duration of the contagious period. However, once toxin-mediated tissue damage in the respiratory tract has occurred, antibiotic treatment may not reduce the duration of illness. In some situations, post-exposure prophylaxis may also be recommended to contacts of a pertussis case, see above for more details.

Vaccination with pertussis-containing vaccines (e.g., DTaP and Tdap) is essential to reducing the burden of pertussis disease in the community; however, a reduction in routine immunization coverage for pertussis has been observed in Washington State since 2020 (see above). Promoting routine and catch-up vaccination for pertussis is necessary to protect patients from pertussis.

Pertussis is a notifiable condition in Washington State with a requirement to report cases to the [Local Health Jurisdiction](#) within 24 hours. Over the past several decades, reported pertussis activity has varied considerably from year-to-year, with occasional spikes in activity. Between 2010 and 2019, the median number of reported confirmed or probable pertussis cases was 685.5 per year, with a range of 598 to 4,916 cases. Recent years with increased pertussis activity include 2015 with 1,383 cases and 2012 with 4,916 cases. More information on historical trends can be found in the [Communicable Disease Annual Reports](#). This year's increase in pertussis represents a significant resurgence. Starting in early- to mid-2020, reported pertussis incidence dropped to a very low level (< 100 cases per year), and incidence remained low for approximately three and a half years. This decrease may be associated with widespread non-pharmaceutical interventions in response to the COVID-19 pandemic.

Resources for Providers

- [Clinical Features of Pertussis \(CDC\)](#)
- [Treatment of Pertussis \(CDC\)](#)
- [Washington State Local Health Jurisdictions](#)
- [Pertussis Testing Video: Collecting a Nasopharyngeal Swab Clinical Specimen \(YouTube\)](#)
- [Best Practices for Use of Polymerase Chain Reaction for Diagnosing Pertussis \(CDC\)](#)
- [Weekly Pertussis Update for Washington State](#)
- [Immunization Schedules \(CDC\)](#)
- [Whooping Cough Vaccination \(CDC\)](#)

To report suspected cases of Pertussis, or for any other questions, please contact your [Local Health Jurisdiction](#).