

Jim Doyle
GovernorHelene Nelson
Secretary

State of Wisconsin

Department of Health and Family Services

608-266-1251
FAX: 608-267-2832
dhfs.wisconsin.gov**Definitions pertaining to pertussis:**

- **Clinical case definition:** A cough illness lasting at least 2 weeks with one of the following: paroxysms of coughing, inspiratory "whoop," or post-tussive vomiting, and without other apparent cause (as reported by a health professional). The occurrence of a classic "whoop" is relatively infrequent past infancy.
- **Confirmed Case:**
 - An acute cough illness of any duration in which *B. pertussis* has been isolated by culture, or
 - meets the clinical case definition and is confirmed by polymerase chain reaction (PCR) assay for *B. pertussis*, or
 - meets the clinical case definition AND has a direct epidemiologic link to a case which has been lab-confirmed by either culture or PCR.
- **Probable Case:**
 - Meets the clinical case definition, is not laboratory confirmed, and is not epidemiologically-linked to a laboratory-confirmed case, or
 - cough for 14 or more days AND has a direct epidemiologic link to a confirmed case (applies to cases in areas of increased incidence)

Note: A specimen with negative PCR result that was obtained 14 or more days after cough onset cannot be considered sufficiently reliable enough to rule out a probable case of pertussis.

- **Suspect Case:**

A clinical syndrome or illness consistent or compatible with pertussis and without other apparent cause such as:

 - any acute cough illness with paroxysmal cough or inspiratory whoop
 - any acute cough illness in a person who is a close contact to a confirmed or probable case
 - any cough associated with apnea in an infant
 - any acute cough illness lasting 7 or more days when there is a reported outbreak of pertussis in the community
- **Close Contact:**

Specific definitions of a contact are problematic and will vary according to the situation. Transmission can be expected with:

 - direct face-to-face contact for a period (not defined) with a case-patient who is symptomatic (e.g., in the catarrhal or paroxysmal period of illness).
Note: Catarrhal refers to first stage symptoms of pertussis including cold-like illness, runny nose, sneezing and mild cough.
 - shared confined space in close proximity for a prolonged period of time, such as ≥ 1 hour, with a symptomatic case-patient; or
 - direct contact with respiratory, oral, or nasal secretions from a symptomatic case-patient (e.g., an explosive cough or sneeze in the face, sharing food, sharing eating utensils during a meal, kissing, mouth-to-mouth resuscitation or performing a full medical exam including examination of the nose and throat). Note: Droplet precautions apply only if the suspected exposure occurred within a 3-ft radius.
 - Contact in a setting with known pertussis transmission: e.g., 2 or more cases in same classroom or sports team, students working closely together, bus mates or carpool contacts, or other similar extensive interaction

Index of Suspicion Clarifications

The Wisconsin Division of Public Health realizes that individual clinical judgment may vary. The following are provided as guidelines for the types of situations that may be associated with the three different categories of suspicion listed on the flowchart.

High: Patient had close contact with a confirmed or probable pertussis case and presents with one or more classic symptoms or signs of pertussis (paroxysms, inspiratory whoop, or post-tussive vomiting), or there have been reports of widespread pertussis illness in the patient's school or workplace environment, or individual has not been immunized within the last 3-5 years and has classic symptoms of pertussis.

Medium: Patient has no known contact with a confirmed or probable pertussis case, but presents with symptoms or signs suggestive of pertussis, or a few individuals from the patient's school or workplace setting have had a cough illness suggestive of pertussis, but no diagnosis has been made, or individual has been immunized within the last 3-5 years, but has symptoms suggestive of pertussis. Testing done only as a "rule out pertussis."

Low: Case appears to be sporadic. There is no epidemiologic link to a confirmed or probable pertussis case. None of the classic symptoms or signs of pertussis are present (i.e., no paroxysms, inspiratory whoop, or post-tussive vomiting).

Recommendations for case management

- Case: All probable cases of pertussis and all suspect cases with a high index of suspicion should be tested, treated with appropriate antibiotics (see attachment) and isolated from school, work, summer camp and similar activities until the 5th day of antibiotic therapy has been completed. These cases must be reported immediately by telephone to the local health officer. Individual cases with negative laboratory tests can return to normal activity.
- Close contacts of confirmed or probable cases:
 - **High Priority:** Known close contact with the case or there is widespread pertussis-like illness present in the school, workplace, etc. – **Treat prophylactically**
 - **Low Priority:** The individual is in a group at low risk for pertussis complications, and has no household or other close contacts in high risk contacts* for pertussis complications, or individual's contact with case is minimal – **No treatment necessary**

For individuals who fall somewhere between high priority and low priority consultation with the local public health department staff is suggested to determine the appropriate treatment, isolation and case management.

***High risk contacts** include those who are:

- under 1 year old
- pregnant
- elderly
- immune compromised
- or those with frequent contact with above