



Communicable Disease Surveillance Guidance

PERTUSSIS

I. IDENTIFICATION

- A. **CLINICAL DESCRIPTION:** In the absence of a more likely diagnosis, a cough illness lasting ≥ 2 weeks with one of the following symptoms: paroxysms of coughing OR inspiratory “whoop” OR posttussive vomiting OR [for infants aged < 1 year only] apnea (with or without cyanosis).
- B. **REPORTING CRITERIA:** Clinical diagnosis
- C. **LABORATORY CRITERIA FOR CONFIRMATION:**
- Isolation of *Bordetella pertussis* from clinical specimen (culture), OR
 - Positive polymerase chain reaction (PCR) assay for *B. pertussis* DNA
- D. **WISCONSIN CASE DEFINITION:**
- Confirmed:
 - A case of acute cough illness of any duration with a positive culture for *B. pertussis*; OR
 - A case that meets the clinical description and is confirmed by PCR; OR
 - A case that meets the clinical description AND has a direct epidemiologic link to a patient with an illness that has been laboratory-confirmed as pertussis using either culture or PCR
 - Probable:
 - An illness that meets the clinical description, is not laboratory-confirmed (either not tested or tested with a negative result), and is not epidemiologically linked to a laboratory-confirmed case;
OR
 - [For infants aged < 1 year ONLY] Acute cough illness of any duration:
 - With at least one of the following signs or symptoms: paroxysms of coughing, OR inspiratory “whoop,” OR posttussive vomiting, OR apnea (with or without cyanosis);
AND
 - Polymerase chain reaction (PCR) positive for pertussis;
OR
 - [For infants aged < 1 year ONLY] Acute cough illness of any duration:
 - With at least one of the following signs or symptoms: paroxysms of coughing, OR inspiratory “whoop,” OR posttussive vomiting, OR apnea (with or without cyanosis);
AND
 - Contact with a laboratory-confirmed case of pertussis
 - Suspect: 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 patient with a confirmed or probable case
 - Any acute cough illness lasting ≥ 7 days when there is a reported outbreak of pertussis in the community
 - Any acute cough illness with positive PCR results for *B. pertussis* that does not meet the definition of probable or confirmed pertussis



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II. ACTIONS REQUIRED / PREVENTION MEASURES

A. WISCONSIN DISEASE SURVEILLANCE CATEGORY I

Report **IMMEDIATELY BY TELEPHONE** to the patient's local health department upon identification of a confirmed or suspected case. The local health department shall then notify the state epidemiologist **immediately** of any confirmed or suspected cases. Within 24 hours, submit a case report electronically through the Wisconsin Electronic Disease Surveillance System (WEDSS), by mail or fax using an Acute and Communicable Disease Case Report ([F-44151](#)), or by other means.

B. EPIDEMIOLOGY REPORTS REQUIRED:

- *Electronically* – Report through WEDSS, including appropriate disease-specific tabs
- OR**
- *Paper Copy* – Acute and Communicable Disease Case Report ([F-44151](#)) along with:
Pertussis Case Report ([F-44236](#))

C. PUBLIC HEALTH INTERVENTIONS:

In accordance with Wisconsin Administrative rule DHS 145.05, local public health should follow the methods of control recommended in the current edition of *Control of Communicable Diseases Manual*, edited by David L. Heymann, published by the American Public Health Association.

For further detailed information regarding control measures, please see the additional references cited at the end of this document. The Wisconsin Division of Public Health Immunization Program should also be consulted regarding state-specific guidelines. See the Wisconsin Pertussis Surveillance and Control Guidelines located on the Immunization Program website at: <http://www.dhs.wisconsin.gov/immunization/pertussis.htm>

D. PREVENTION MEASURES:

Vaccination with pertussis vaccine:

- For children aged 6 weeks through 6 years, routinely administer pertussis vaccine as DTaP (diphtheria toxoid, tetanus toxoid, and acellular pertussis vaccine). The primary series of 3 doses should be received at 2, 4 and 6 months of age. Booster doses should be received at 15-18 months of age and school entry (4-6 years of age).
- Children aged 7 through 10 years not fully vaccinated against pertussis (defined as 5 doses of DTaP or 4 doses of DTaP if the fourth dose was administered on or after the fourth birthday) should receive a single dose of Tdap (tetanus toxoid, diphtheria toxoid, acellular pertussis vaccine).
- Routinely administer a booster dose of Tdap vaccine at 11-12 years of age. Except among pregnant women, Tdap vaccine is administered as a one-time booster dose.
- Pregnant women should receive Tdap vaccine during each pregnancy. Optimal timing for Tdap administration is between 27 and 36 weeks of gestation, although Tdap may be given at any time during pregnancy. For women not previously vaccinated with Tdap, if Tdap is not administered during pregnancy, Tdap should be administered immediately postpartum.
- Adults who have not already received Tdap (especially those who have or anticipate having contact with an infant aged less than 12 months) should be administered Tdap in place of their next Td (tetanus toxoid, diphtheria toxoid vaccine) booster or whenever vaccination with Tdap is indicated.



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III. CONTACTS FOR CONSULTATION

- A. LOCAL HEALTH DEPARTMENT – REGIONAL OFFICES – TRIBAL AGENCIES:
<http://www.dhs.wisconsin.gov/localhealth/counties/regional.htm>
- B. REGIONAL IMMUNIZATION PROGRAM REPRESENTATIVES:
<http://www.dhs.wisconsin.gov/immunization/CentralStaff.htm>
- C. BCDER/ IMMUNIZATION PROGRAM: (608) 267-9959
- D. WISCONSIN STATE LABORATORY OF HYGIENE
Communicable Disease Division
Customer Service: (800) 862-1013 or (608) 262-6386
Clinical Supplies: (800) 862-1088 or (608) 265-2966

IV. RELATED REFERENCES

- Heymann DL, ed. *Pertussis: Control of Communicable Diseases Manual*. 19th ed. Washington, DC: American Public Health Association, 2008: 455-461.
- Pickering LK, ed. *Pertussis: Red Book: 2009 Report of the Committee on Infectious Diseases*. 28th ed. Elk Grove Village, IL: American Academy of Pediatrics, 2009: 504-519.
- CDC Manual for the surveillance of vaccine-preventable diseases. 5th edition, 2011 Pertussis: Chapter 10-1
<http://www.cdc.gov/vaccines/pubs/surv-manual/chpt10-pertussis.html>
- CDC Recommended Antimicrobial Agents for Treatment and Postexposure Prophylaxis of Pertussis: 2005 CDC Guidelines, MMWR 2005; 54 (No. RR-14):1-16. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5414a1.htm>
- CDC Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid, and Acellular Pertussis Vaccine (Tdap) in Pregnant Women - Advisory Committee on Immunization Practices (ACIP), 2012, MMWR 2013; 62(07);131-135. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6207a4.htm>
- CDC Updated Recommendations for Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis (Tdap) Vaccine from the Advisory Committee on Immunization Practices, 2010, MMWR 2011; 60(1):13-15. <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6001a4.htm>
- CDC Preventing Tetanus, Diphtheria and Pertussis among Adolescents: Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccines, MMWR 2006; 55(RR-3):1-43. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5503a1.htm>
- CDC Preventing Tetanus, Diphtheria and Pertussis among Adults: Use of Tetanus Toxoid, Reduced Diphtheria Toxoid and Acellular Pertussis Vaccines, MMWR 2006; 55(RR-17):1-37 <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5517a1.htm>
- CDC Pertussis Vaccination: Use of Acellular Pertussis Vaccines among Infants and Young Children, Advisory Committee on Immunization Practices (ACIP) recommendations, MMWR 1997; 46 (RR-7):1-25 <http://www.cdc.gov/mmwr/preview/mmwrhtml/00048610.htm>