



Bordetella Pertussis

Pertussis activity increased in Michigan since late Fall 2016.

The increase has been seen particularly in children age 4 or younger who have not completed their 5th dose of DTaP and who are in childcare settings.

To help ensure proper diagnosis, treatment, prevention, and control, clinicians should have heightened awareness to consider pertussis in symptomatic children or childcare providers who may have been exposed. Children who are partially vaccinated against pertussis are significantly less likely to present with a whoop or other classic presenting signs, yet can still infect others and should, therefore, be tested and treated. **The Recommended diagnostic method is PCR.** Serology and DFA tests are **NOT** recommended. Cases should be reported to local public health departments, investigated, and classified according to the national surveillance.

Clinicians should begin therapy prior to test results if the clinical history is strongly suggestive of pertussis, the patient is at high risk of severe disease, (e.g., infant), or the patient has been a close contact to a confirmed pertussis case. Children and childcare providers who are symptomatic or who have confirmed pertussis should be excluded from childcares pending evaluation, testing and completion of the recommended antimicrobial therapy. A 5-day course of azithromycin is the appropriate first-line choice for treatment and for post-exposure prophylaxis (PEP); other choices include 7 days clarithromycin or 14 days erythromycin.

Close contacts who are unimmunized or under-immunized should have pertussis immunization initiated or continue vaccination according to the recommended schedule; this includes:

- Off-label use of Tdap in children 7-10 years of age who did not complete the DTaP series
- Household contacts and other children in childcare, PEP is recommended regardless of immunization status.
- Face-to-face exposure within 3 feet of a symptomatic person
- Direct contact with respiratory, nasal, or oral secretions
- Sharing the same confined space in close proximity to an infected person for 1 hour or more

Contacts should receive antibiotic prophylaxis within 3 weeks of exposure using the same options as for case treatment.

Infants are at highest risk of severe disease and death; older siblings and adults often are the source. Infants and children should receive pertussis vaccine series (DTaP) as per the U.S. recommended schedule. A pertussis vaccine booster dose (Tdap) is recommended for adolescents and adults, and is especially important for those in contact with infants. Current recommendations call for a single lifetime Tdap booster with the following exception: Tdap is recommended for pregnant females between 27–36 weeks gestation.

Test Name	Number	SCC	Epic	Sample Type
Bordetella pertussis by PCR	8099	PCBPG	LAB923	Nasopharyngeal (NP) aspirate or swab (polyester tip)

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