

**MEMORANDUM**

TO: DeKalb County Healthcare Providers

FROM: Lisa Gonzalez, MPH  
Public Health Administrator

Michael Thornton, MD  
Medical Director

DATE: November 22, 2019

RE: **Pertussis Health Alert**

The Illinois Department of Public Health (IDPH) has observed a recent increase in pertussis cases, especially in children and adolescents, and continues to monitor for outbreaks. From January 1, 2019 to September 30, 2019, 389 individual cases and three outbreaks of pertussis have been reported in Illinois.

As of November 21, 2019, there have been no confirmed pertussis cases in DeKalb County. However, surrounding counties in the Northern Illinois region have received confirmation of cases. In order to be proactive with prevention messaging, the DeKalb County Health Department is sharing information to health care providers which includes guidelines and recommendations from IDPH.

**Symptoms**

Mild upper respiratory symptoms similar to the common cold such as a runny nose, mild cough, and little to no fever may occur initially. A week or two later, individuals will experience paroxysm (fits) of cough associated with an inspiratory whoop, nocturnal cough, and post-tussive vomiting. Adolescents and young adults tend to have a milder presentation. If infected with pertussis, infants, small children, and those who have weak immune systems may develop severe, life threatening illness.

**Transmission**

Pertussis is caused by the bacterium, *Bordetella pertussis*, that infects the nose and throat and spreads through the air by coughing, sneezing, and talking. Individuals develop symptoms nine to ten days after exposure and are the most contagious the first two weeks of cough.

**Laboratory Testing**

Isolation of *B. pertussis* from clinical specimen or positive polymerase chain reaction (PCR) test for *B. pertussis*. Laboratory confirmation of suspect cases is important, PCR should be collected from suspect cases and sent to a commercial laboratory that conducts PCR testing. Testing of those that are asymptomatic, including those that are contacts to cases, is not recommended.

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## Reporting

All cases, including suspect cases, should be reported as soon as possible, within 24 hours.

*Suspected cases include:*

- An acute cough illness of any duration with detection of *B. pertussis*-specific nucleic acid by polymerase chain reaction (PCR) that does not meet the confirmed case definition OR
- An acute cough illness of <2 weeks with at least one of the following: paroxysms of coughing, inspiratory “whoop”, or post-tussive vomiting, that is epidemiologically-linked directly to a confirmed case OR
- An acute cough illness of > 2 weeks without at least one of the following: paroxysms of coughing, inspiratory “whoop”, or post-tussive vomiting, that is epidemiologically-linked directly to a confirmed case.

*Confirmed cases include:*

- A positive culture for *B. pertussis* and an acute cough illness of any duration OR
- PCR positive for pertussis and cough illness lasting at least 14 days, with at least one of the following:
  - Paroxysm of coughing; or
  - Inspiratory whoop; or
  - Post-tussive vomiting; or
  - Apnea (with or without cyanosis) (FOR INFANTS AGED<1 YEAR ONLY) AND
  - Contact with a laboratory-confirmed (culture or PCR) case of pertussis

## Prevention and Post-Exposure Chemoprophylaxis (PEP)

<https://www.cdc.gov/pertussis/outbreaks/pep.html>

Vaccination is the best preventative measure against infection. Patients should be up-to-date on their immunizations including Tdap.

Patients should always be encouraged to:

- Cover their mouth and nose when coughing or sneezing
- Wash their hands with soap and water or use alcohol-based sanitizer often.
- Do not share foods, drinks or anything that will go in the mouth.

Center for Disease Control and Prevention (CDC) supports targeting PEP to persons at high risk of developing severe pertussis and to persons who will have close contact with those at high risk of developing severe pertussis.

- Accordingly, CDC supports the following: providing PEP to all household contacts of a pertussis case, within 21 days of onset of cough in the index patient.

## Summary

- When pertussis is suspected, nasopharyngeal (N/P) swab for PCR and/ or culture for confirmation is recommended.
- Individuals with symptoms of pertussis should be excluded from school, childcare, work, and other public settings until testing is completed, results have returned, and proper treatment given as recommended, especially if pertussis has been reported at their school, daycare, or workplace.
- Review Case’s immunization records and consider Tdap or DTap booster, if indicated.
- Identify and treat close contacts with pertussis prophylaxis and confirm they are up to date on their pertussis immunization.
- CDC Resource Page <https://www.cdc.gov/pertussis/index.html>

Prevention and control measures are needed for cases and contacts, so prompt notification is critical. Please report suspected and confirmed cases of pertussis **within 24 hours** to the DeKalb County Health Departments Communicable Disease Program at 815-748-2467. After hours 815-758-6673.