UPDATE: Increase in Pertussis Cases- Delaware County

Summary
Surveillance conducted by the Delaware General Health District (DGHD) is continuing to show an increase in Pertussis in our community. Between August 1st - November 20th, 2019, the Health District has received 51 reports of Pertussis, including multiple cases in at least two different school districts. Cases range from 5 years of age to 63 years of age with a median age of 14 years and a mean age of 17 years. Cases are from 9 different zip codes with the most (47%) from 43074.

Background
Pertussis, also known as whooping cough, is a highly contagious respiratory disease caused by the bacterium Bordetella pertussis. People with pertussis usually spread the disease to another person by coughing or sneezing or when spending a lot of time near one another where you share breathing space. While pertussis vaccines are the most effective tool, they are not perfect. Pertussis vaccines offer good levels of protection within the first two years after getting the vaccine, but then protection decreases over time. Pertussis infection is usually not as severe in vaccinated individuals. Pertussis is naturally cyclic in nature, with peak in disease every three to five years.
Symptoms of pertussis usually develop within 5 to 10 days after exposure. Sometimes pertussis symptoms do not develop for as long as 3 weeks.

Early symptoms can last for 1 to 2 weeks and usually include:
- Runny nose
- Low-grade fever (generally minimal throughout the course of the disease)
- Mild, occasional cough
- Apnea – a pause in breathing (in babies)

After 1 to 2 weeks and as the disease progresses, the traditional symptoms of pertussis may appear and include:
- Paroxysms (fits) of many, rapid coughs followed by a high-pitched “whoop” sound
- Vomiting (throwing up) during or after coughing fits
- Exhaustion (very tired) after coughing fits

The “whoop” is often not there if you have milder (less serious) disease. The infection is generally milder in teens and adults, especially those who have gotten the pertussis vaccine.

**Recommendations**
- Consider Pertussis as a diagnosis in individuals with the symptoms mentioned above.
- Early treatment of pertussis is very important. The earlier a person, especially an infant, starts treatment the better. Clinicians should strongly consider treating prior to test results if clinical history is strongly suggestive or patient is at risk for severe or complicated disease (e.g., infants).
- The recommended antimicrobial agents for treatment or chemoprophylaxis of pertussis are azithromycin, clarithromycin, and erythromycin. Clinicians can also use Trimethoprim-sulfamethoxasole.
- Postexposure prophylaxis with an effective antimicrobial agent can be administered to contacts prior to illness onset. Prophylaxis of asymptomatic household contacts within 21 days of onset of cough in the index patient is recommended by CDC and can prevent symptomatic infection. Symptomatic (coughing) household members of a pertussis patient should be treated as if they have pertussis. The recommended antimicrobial agents and dosing regimens for postexposure prophylaxis are the same as those for treatment of pertussis.
- Encourage vaccination. Children and infant should receive 5 doses of DTaP. Adolescents should receive single dose of Tdap at 11 to 12 years of age. Pregnant women should receive a single dose of Tdap during every pregnancy. Adults should receive a single dose of Td every 10 years. If adults do not have a record of receiving a Tdap vaccine, they should receive 1 dose of Tdap followed by Td. Please refer to CDC’s childhood and adult immunization schedules for further information.

For suspect and confirmed cases of Pertussis, The Ohio Administrative Code (OAC 3701-3-13, (R)) states that “a person with pertussis who is not treated with effective antimicrobial therapy, shall be isolated, including exclusion from school or child care center, until three weeks after the onset of paroxysms. If effective antimicrobial therapy is given, the person shall be isolated for five days after initiation of antimicrobial therapy”.

**Reporting**
Pertussis is a Class B reportable disease, meaning cases are required to be reported by the nest business day. Please report all cases to the Delaware General Health District (DGHD) by calling (740) 203-2039 or fax reports to our secure fax line (740) 203-2044.

**For more information** [https://www.cdc.gov/pertussis/index.html](https://www.cdc.gov/pertussis/index.html)