



Pertussis (Whooping Cough) in Community Congregate Settings

Background

Whooping cough, also known as pertussis, is a very contagious respiratory illness caused by a type of bacteria called *Bordetella pertussis*. The disease is only found in humans. The bacteria attach to the cilia (tiny, hair-like extensions) that line part of the upper respiratory system. The bacteria release toxins (poisons), which damage the cilia and cause airways to swell. The bacteria that cause whooping cough spread easily from person-to-person through the air. When a person who has whooping cough sneezes or coughs, they can release small particles with the bacteria in them. Other people then breathe in the bacteria. It also spreads when people spend a lot of time together or share breathing space, like when you hold a newborn on your chest.

Symptoms Associated with Whooping Cough:

- Runny or stuffed-up nose
- Low-grade fever (less than 100.4°F)
- Mild, occasional cough (babies do not do this)
- Apnea (life-threatening pauses in breathing) and cyanosis (turning blue or purple) in babies and young children

One to two weeks after the first symptoms start, people with whooping cough may develop paroxysms — also known as rapid, violent, and uncontrolled coughing fits. These coughing fits usually last 1 to 6 weeks but can last for up to 10 weeks. Coughing fits generally get worse and become more common as the illness continues.

Coughing fits can cause people to:

- Make a high-pitched “whoop” sound when they are finally able to inhale at the end of a coughing fit
- Vomit during or after coughing fits
- Feel very tired after the fit, but usually seem well in-between fits
- Struggle to breathe

How long does it take from exposure to onset of symptoms?

Symptoms of whooping cough usually develop within 5 to 10 days after you come into contact with the bacteria that causes it. Sometimes symptoms do not develop for as long as 3 weeks.

Risk Factors Associated with Contracting Pertussis:

Risk factors for acquiring pertussis include:

- Close contact with an infected individual
- Lack of immunization or impaired immune response to vaccination

Populations at increased risk for complications and death from severe pertussis include:

- Infants aged under 12 months
- Women in their third trimester of pregnancy
- Persons with pre-existing health conditions that may be exacerbated by a pertussis infection (ex: immunocompromised persons)

Immediate Next Steps for Case Treatment and Monitoring:

Upon the identification of a resident or staff with symptoms consistent with whooping cough:

1. Ask the staff member to return home and follow up with medical provider promptly.
2. If a resident is displaying symptoms, they should be isolated away from others and referred to a medical provider promptly.
3. [Droplet precautions](#) should be used when coming into contact with anyone with pertussis. Cases should be isolated away from others for at least five days from the start of appropriate antibiotics or 21 days from onset (whichever is first). Individuals who do not receive treatment can remain contagious for up to three weeks following the development of paroxysms.
4. Contact the Special Populations team at the Chicago Department of Public Health to report any cases of pertussis here: <https://redcap.link/specpopreport>
5. Following the identification of a case of pertussis within your facility, contact tracing should take place and any close contacts should be identified. For pertussis, close contacts include family members and roommates (for guests living in private/semi-private rooms). Additionally, staff and guests at increased risk for severe pertussis (infants age <12 mo., women in their 3rd trimester of pregnancy, and immunocompromised persons) as well as family members of those at high risk of severe pertussis should be assessed for contact with the person with pertussis. The facility should discuss the extent of this contact with CDPH to determine who should receive follow-up per step 6.
6. Identified contacts (per step 5) should be referred to a health provider as soon as possible for preventative antibiotics (PEP). Contacts should also be brought up-to-date on vaccination as appropriate.
7. All close contacts should be monitored for signs and symptoms of pertussis (i.e. cough) for 21 days after their final exposure. Promptly isolate symptomatic individuals, notify CDPH, and refer for evaluation.

Preventing Whooping Cough:

1. The best way to prevent whooping cough is to get vaccinated.
2. Cover your cough or sneeze:
 - Cover your mouth and nose with a tissue when you cough or sneeze
 - Throw away used tissues in the waste basket right away
 - Cough or sneeze into your upper sleeve or elbow if you don't have a tissue. Never cough into your hands because you can spread germs this way
3. Wash your hands often:
 - Wash your hands often with soap and water for at least 20 seconds.
 - Use an alcohol-based hand sanitizer if soap and water are not available.
4. Cleaning and disinfectant of frequently use items

Organization	Contact Information:
CDPH Community Congregate Settings Team	Email: SpecialPops@cityofchicago.org Reporting Link: https://redcap.link/specpopreport