Missoula City-County Health Department
301 West Alder Street | Missoula MT 59802-4123
Infectious Disease Office
Phone | 406.258.INFO

ATTENTION PARENTS:

- **Your child does NOT need treatment now.**
- **They should continue school.**
- **Bring your child to the doctor if they later develop any symptoms listed below.**

Dear Parent or Guardian,

This letter is to inform you that your child has been identified as a close contact to a confirmed case of pertussis (whooping cough). At this time we are requesting that you monitor your child for symptoms for 21 days after their most recent exposure. The Centers for Disease Control also recommends that all children and adults be fully immunized against pertussis. Please see more information about the benefits of immunization and how you can obtain it on the following "Frequently Asked Question" sheet.

Whooping cough starts with the following symptoms:

- Runny or stuffed-up nose
- Sneezing
- Mild cough
- A pause in breathing in infants (apnea)

After 1 to 2 weeks, coughing, which can be severe, starts.

- Children and babies can develop very hard and frequent coughing fits.
- When children gasp for breath after a coughing fit, they sometimes make a “whooping” sound. This sound is where the name “whooping cough” comes from.
- Coughing fits make it hard to breathe, eat, drink, or sleep. Coughing fits happen more at night.
- Babies and young children may turn blue while coughing from lack of oxygen.
- Coughing fits can last for 10 weeks, and sometimes recur with the next respiratory illness.

If your child develops any of these symptoms in the next 21 days, please contact your health care provider for assessment and testing. If you have any questions, please contact the Infectious Disease Office at the Missoula City-County Health Department at (406)258-INFO.

Thank you for your support in our continued effort to control the spread of this disease.

Sincerely,

Missoula City-County Health Department
Infectious Disease Staff

Missoula City-County Health Department
301 West Alder Street | Missoula MT 59802-4123
Infectious Disease Office
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Frequently Asked Questions

What is pertussis?
Pertussis, a respiratory illness commonly known as whooping cough, is a contagious disease caused by a type of bacteria called *Bordetella pertussis*. These bacteria attach to the cilia (tiny, hair-like extensions) that line part of the upper respiratory system. The bacteria release toxins, which damage the cilia and cause inflammation (swelling).

Is pertussis treatable?
Yes. Pertussis is generally treated with antibiotics and early treatment is very important. Treatment may make your infection less severe if it is started early, before coughing fits begin. Treatment can also help prevent spreading the disease to close contacts (people who have spent a lot of time around the infected person) and is necessary for stopping the spread of pertussis.

How is pertussis spread?
Pertussis is only found in humans and is spread from person to person. The disease is usually spread when people who have pertussis cough or sneeze while in close contact with others, who then breathe in the pertussis bacteria. It is important to stress that pertussis is spread by ***close*** contact with those who have contracted the disease.

How do I know if I have been identified as a close contact of someone who has been diagnosed with pertussis?
The Missoula City-County Health Department is working closely with Missoula Public Schools staff to interview every person with a confirmed case of pertussis to identify close contacts. Schools or Health Department staff will then contact those people who have been identified as close contacts. In short, the Missoula City-County Health Department will contact you if you or your child has been identified as a close contact of a confirmed case.

Who qualifies as a close contact?
The Health Department and Missoula Schools health staff are using guidance from the US Centers for Disease Control (CDC) to identify close contacts. In a school setting, the CDC defines a close contact as someone who has "direct contact with respiratory, oral, or nasal secretions from a person who has pertussis and who is symptomatic and those who have direct face-to-face contact or who shared confined space in close proximity for a prolonged period of time with a symptomatic case-patient."

In practice, public health nurses and Health Department staff are utilizing interviews with students, parents, and staff as well as classroom seating charts to identify and get in touch with close contacts of confirmed cases. Generally, this means students who sit near (next to, in front of, or behind) a confirmed case in a classroom setting, or other students or staff who have direct face-to-face contact or prolonged contact in a closed space. Health Department staff is also working to identify close contacts in home or work settings. Careful attention is being paid to identify people who may be medically vulnerable – babies under the age of six months, the elderly, or people with underlying health problems – who are close contacts of a confirmed case.

What happens if my child is a close contact?
The answer to this question depends on a few factors including whether your child has symptoms, the vaccination status and health risks of your child and family members, and school circumstances. Even if your child does not have symptoms, the health department nurse may recommend that you take your child to a health care provider to obtain antibiotics to prevent symptoms from occurring. Parents of contacts are asked watch for symptoms developing in your child for a period of three weeks unless antibiotics are given. Close contacts who **are exhibiting symptoms** of the disease are advised to take antibiotics and have a laboratory test to determine whether they have the disease.

What are the symptoms of pertussis?
The disease usually starts with cold-like symptoms and maybe a mild cough. After 1 to 2 weeks, severe coughing can begin. Unlike the common cold, pertussis can become a series of coughing fits that continues for weeks.

In infants, the cough can be minimal or not even there. Infants may have a symptom known as "apnea." Apnea is a pause in the child's breathing pattern. Pertussis is most dangerous for babies. More than half of infants younger than 1 year of age who get the disease must be hospitalized.

Pertussis can cause violent and rapid coughing, over and over, until the air is gone from the lungs and you are forced to inhale with a loud "whooping" sound. This extreme coughing can cause you to throw up and be very tired. The "whoop" is often not there and the infection is generally milder (less severe) in teens and adults, especially those who have been vaccinated.

Early symptoms can last for 1 to 2 weeks and usually include:

- Runny nose
- Mild, occasional cough
- Apnea – a pause in breathing (in infants)

Because pertussis in its early stages appears to be nothing more than the common cold, it is often not suspected or diagnosed until the more severe symptoms appear. Infected people are most contagious during this time, up to about 2 weeks after the cough begins. Antibiotics may shorten the amount of time someone is contagious.

As the disease progresses, the traditional symptoms of pertussis appear and include:

- Paroxysms (fits) of many, rapid coughs followed by a high-pitched "whoop"
- Vomiting (throwing up)
- Exhaustion (very tired) after coughing fits

The coughing fits can go on for up to 10 weeks or more.

Although you are often exhausted after a coughing fit, you usually appear fairly well in-between. Coughing fits generally become more common and severe as the illness continues, and can occur more often at night. The illness can be milder (less severe) and the typical "whoop" absent in children, teens, and adults who have been vaccinated.

Recovery from pertussis can happen slowly. The cough becomes less severe and less common. However, coughing fits can return with other respiratory infections for many months after pertussis started.

How can I prevent pertussis?
Over the long term, the best way to prevent pertussis (whooping cough) among infants, children, teens, and adults is to get vaccinated. Outbreaks such as the one happening in Missoula are a major reason that health

officials work so hard to convince families to follow the CDC's recommended vaccine schedule, which includes a series of vaccinations against pertussis.
For the current outbreak, it is important to keep infants and other people at high risk for pertussis complications away from infected people. If you or your child has been identified as a close contact of someone who has the disease, it is important to follow accepted medical guidelines, which call for a round of preventative antibiotics for all those identified as close contacts.

If vaccines are so important, then why are immunized kids getting sick?
No vaccine is 100 percent effective, and no community is 100 percent vaccinated. Also, it is important to know that vaccine immunity wanes over time. As a result, high school students are more likely to contract the disease as they get older. We do know, however, that vaccinated people who contract the disease tend to have a less severe illness than children with no immunity.
The huge benefit of vaccines is evident by examining mortality rates from pertussis in the United States before and after vaccines. Before a pertussis vaccine was developed, an average of 4,000 people died each year in the United States from the disease. Since the advent of a vaccine, an average of 27 people die from the disease, according to a 2007 study published in the Journal of the American Medical Association. The pertussis vaccine saves thousands of lives each year.

Why isn't everyone immunized?
The School District and Health Department strongly recommend that all students receive all vaccinations recommended by the CDC's Advisory Committee on Immunization Practice (ACIP). The ACIP's recommendations include a series of vaccinations against pertussis. However, Montana state law allows parents to enroll their children in school without being fully immunized if they submit a medical or religious exemption. When parents submit that exemption in Missoula County Public Schools, they are asked to sign a form stating that they understand that their child may be excluded from school in the case of a disease outbreak for which their child is unimmunized.

My child has an exemption from immunization. What procedures must be followed?
The Health Department and schools health staff are working closely with physicians, infectious disease experts and partners with the Montana Department of Public Health and Human Services to assess exemptions of students. The Health Department and staff with Missoula Public Schools will contact parents if students need to be excluded. These are not easy decisions, nor decisions that are made lightly.

What if I don't want my child to take antibiotics?
Parents with concerns about antibiotics should discuss those concerns with their health care provider. They should also know that CDC guidance during a pertussis outbreak is to use antibiotics as a preventative measure for people who have been designated as close contacts of confirmed cases.
The Health Department understands the concerns some parents may have about providing antibiotics to students or adults who are not symptomatic. They should know, however, that it is accepted medical practice to utilize antibiotics in this manner during an outbreak. They should also know that one of the reasons that health officials generally advise careful and measured use of antibiotics is so that those medications will be effective in situations like those that we are experiencing now at several MCPS schools.

How can I find out more about pertussis?

The Centers for Disease Control maintains an extensive compilation of information about pertussis on its web site: http://www.cdc.gov/pertussis/ Most of the information in this letter was drawn from the CDC literature.