

Fifth Disease Parvovirus Infection

What is fifth disease?

Fifth disease is an infection caused by a virus called parvovirus B19. It is an infection of the airway and lungs. It often appears as a bright red rash on the face, especially in children. It is sometimes called "slapped cheek" disease. It is most common in late winter to early spring.

What are the symptoms of fifth disease?

Many of the symptoms, including fever, rash, cough or runny nose, also occur in other illnesses. About a quarter of all people who get fifth disease have no symptoms.

The most common signs of fifth disease that differ from other illnesses are:

- About 2 to 3 weeks after being exposed to the virus, a red rash may appear on the face. This rash looks like the cheeks have been slapped, while the area around the mouth looks pale. These signs are usually seen only in children.
- A red, spotty, lace-like rash may appear on the arms and may spread to the chest, back and thighs. The rash may fade away and then come back or get worse when the person is exposed to heat, such as in a warm bath or direct sunlight. The rash may last for several weeks. For some people, the rash may not appear at all, or it may look different in adults.
- Some people may only have pain in their joints, usually in the hands, feet, or knees, and no other symptoms. This is more common in adults, especially women. The joint pain usually lasts 1 to 3 weeks, but it can last longer. It usually goes away without any long-term problems.

How is fifth disease spread?

A person with fifth disease can spread it to others by coughing or sneezing. Sometimes you can get the disease just by touching the saliva or nasal discharge of a person with the disease and then touching your own eyes or mouth (e.g., from a wet tissue, a child's hands, or a toy). A pregnant woman who gets fifth disease can pass it to her developing baby. The disease can also be spread through blood or blood products.

If you have fifth disease, you will be contagious, which means you can spread the disease to others, for about 7 to 10 days before the rash appears. By the time the rash appears you will no longer be contagious. Therefore, once the rash appears, there is no reason to stay away from work, school, or child care as long as you or your child feels well.

Who can get fifth disease?

Anyone can get fifth disease, but it is more common in young children. Most preschoolers and school-age children have not had it. If the virus spreads, children are more likely than adults to get it.

Once you have had fifth disease, you are protected from getting it again. More than half of all adults have already had fifth disease, and therefore cannot get it again.

Is fifth disease serious?

Fifth disease is usually mild. However, some people are at risk of serious complications if they become infected, including:

- those with chronic hemolytic anemias (such as sickle cell disease) can have life threatening complications;
- those with weakened immune systems due to disease or medical treatment; and
- pregnant women, as they can pass the infection onto their developing baby. This could result in the baby developing anemia or in a miscarriage or still birth, although this is rare.

Babies born to mothers who were infected while pregnant do not have an increased risk of birth defects.

If you are at risk of serious complications from fifth disease there is a blood test that can determine if you have recently been infected with parvovirus B19 or if you are immune.

What should you do if you or your child has been exposed to fifth disease?

If you or your child has been exposed to someone with fifth disease, you should watch for cold-like symptoms over the next 4 to 20 days.

If such symptoms occur, be sure to cough or sneeze into a tissue or your shirt sleeve rather than your hands to prevent droplets from spreading to others. Put used tissues directly into the garbage. Wash your hands often. For more information, see [HealthLinkBC File #85 Hand Washing for Parents and Children](#).

If you are pregnant, have anemia, or a weakened immune system, you should tell your health care provider that you have been in contact with someone who has fifth disease.

What should you do if you think your child has fifth disease?

You should contact your health care provider if you think that your child has fifth disease and you or your child is in one of the groups at risk of complications. Other illnesses caused by viruses, such as rubella or measles, can have similar symptoms. Sometimes a blood test is needed.

What is the treatment?

For generally healthy people, home treatment is usually the only care needed for fifth disease. Antibiotics are not used to treat fifth disease because it is caused by a virus. Antibiotics only work against infections caused by bacteria.

The following home treatment tips may help you to be more comfortable while you rest and recover:

- Drink plenty of liquids to prevent dehydration.
- Reduce fever and relieve headache and joint pain with acetaminophen or ibuprofen.

Acetaminophen (e.g. Tylenol®) or ibuprofen* (e.g. Advil®) can be given for fever or soreness. ASA (e.g. Aspirin®) should not be given to anyone under 18 years of age due to the risk of Reye Syndrome.

*Ibuprofen should not be given to children under 6 months of age without first speaking to your health care provider.

For more information on Reye Syndrome, see [HealthLinkBC File #84 Reye Syndrome](#).

- Prevent scratching by trimming fingernails and wear gloves at night to help prevent scratching during sleep.
- Reduce itchiness by applying a lotion or cream to the rash, and wear loose-fitting cotton clothing. Ask your health care provider about lotions and other remedies for the itching. Taking a non-prescription antihistamine may help if the itching is very bothersome. These are not recommended for children under 6 years of age. These medications can make children and adults sleepy.



BC Centre for Disease Control
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