

Parvovirus B19 (Fifth Disease)

Last updated: 1 July 2012

Parvovirus B19 infection is a mild rash illness that occurs most commonly in children. The ill child typically has a "slapped-cheek" rash on the face and a lacy red rash on the trunk and limbs. The child is not very ill, and the rash resolves in 7 to 10 days.

What is Parvovirus B19 (Fifth Disease)?

Parvovirus B19 is a common childhood viral illness. It is also called fifth disease, "slapped cheek" or erythema infectiosum. About 50 per cent of all adults have been infected sometime during childhood. Parvovirus B19 only infects humans and cannot be transmitted to or from animals.

What are the symptoms?

The ill child typically has a "slapped-cheek" rash on the face, which may be followed by a lace like rash on the trunk and limbs. Occasionally, the rash may itch. The child may have a low-grade fever, runny nose, and nausea and diarrhoea a few days before the rash breaks out. The rash resolves in 7 to 10 days but may recur in when exposed to sunlight or heat for 3 weeks or longer.

An adult who is infected with parvovirus B19 may have no symptoms at all, or may develop a rash, joint pain or swelling, or both. It is usually the small joints of both hands and occasionally ankles, knees and wrists that are affected. The joint symptoms usually resolve in a week or two, but can last longer.

Symptoms usually develop between 4 and 20 days after being infected with the virus.

How is it spread?

The virus is spread by contact with infected respiratory secretions (for example, by coughing), and from mother to unborn baby.

Persons are most contagious before the rash develops.

Who is at risk?

Any one who is not immune to it. (People who have had parvovirus B19 are usually immune to it for life).

What if I am pregnant?

Usually there is no serious complication for a pregnant woman or her baby following exposure to a person with parvovirus B19 infection.

About 50 per cent of women are already immune to parvovirus B19, and these women and their babies are protected from infection and illness. For women who are not immune, the infection usually only causes a mild illness. Rarely, miscarriages can occur usually when the mother becomes infected early in the pregnancy.

How is it prevented?

There is no vaccine or medicine that prevents parvovirus B19 infection.

- Frequent hand washing is recommended to reduce the spread of parvovirus.

- Excluding infected persons from work, child care centres, schools, or other settings is not likely to prevent the spread of parvovirus B19, since ill persons are contagious before they develop the rash.

How is it diagnosed?

A doctor can often diagnose parvovirus B19 by seeing the typical rash during a physical examination. In cases in which it is important to confirm the diagnosis, a blood test may be done to look for antibodies to parvovirus. A blood test for parvovirus B19 may show that you are either:

- immune to parvovirus B19 and do not have the infection
- are not immune and could be infected if exposed, or
- have had a recent infection.

How is it treated?

Treatment of symptoms such as fever, pain, or itching is usually all that is needed for parvovirus B19. Adults with joint pain and swelling may need to rest, restrict their activities, and take medicines such as aspirin or ibuprofen to relieve symptoms.

What is the public health response?

Parvovirus B19 infection is not notifiable in New South Wales. Infected individuals are not excluded from childcare, school or work but should be advised to rest at home until they feel better.

For further information please call your local Public Health Unit on 1300 066 055 or visit the New South Wales Health website www.health.nsw.gov.au