

Parvovirus B19

B19V

B19V is a risk group 2 virus. It is considered a **reproductive pathogen** as infection in the first trimester of pregnancy may result in fetal loss. Infection in the second or third trimester may result in fetal anemia, myocarditis, high output cardiac failure, hydrops fetalis (severe organ swelling), and stillbirth. Fetal death may occur in up to 10% of infected fetuses.

How can I be exposed to B19V?

- Exposure occurs most commonly by personal contact, via aerosols, respiratory secretions, or saliva droplets.
- Transmission can occur (~33%) vertically from mother to fetus.
- Contaminated blood products and organ transplants have been sources of exposure.
- Laboratory workers may be exposed by inhalation of infectious aerosols and parenteral inoculation.

How can I protect myself from exposure?

- Avoid direct skin contact by wearing protective clothing and gloves.
- Avoid mucous membrane exposure by using eye/face protection for procedures that may produce splashes.
- Avoid respiratory exposure by using a biosafety cabinet and other primary containment devices and wearing a respirator for procedures that may produce aerosols, particularly centrifugation, resuspension of pellets, and washing.
- The use of needles, syringes, and other sharp objects should be strictly limited, and additional precautions should be taken when working with animals.

What should I do if I think I've been exposed?

Wash the affected area immediately for 15 minutes with soap and water and seek medical attention. Individuals with underlying hemolytic anemia (e.g., sickle cell) can develop a severe, life-threatening condition.

What symptoms should I look for after a potential exposure?

Many people (25%) with B19V infection are asymptomatic. Erythema infectiosum (Fifth Disease) is the most recognizable symptom presenting as a rash of the cheeks, generally affecting children between 4-10 years old and less pronounced in adults. The second stage of rash appears on the trunk and extremities after 1-4 days.

How long does it take for symptoms to develop?

Symptoms develop between 4-14 days after exposure but could be as long as 21 days.

Is there a treatment or vaccine?

Fifth Disease is usually self-limiting and does not require treatment. There is currently no vaccine.

Can I transmit it to other people?

Yes, the illness is most infectious prior to onset of rash.

Can I transmit it to my pets?

No, B19V only affects humans.

Can it survive on surfaces?

B19V is highly resilient and can survive on, and be transmitted from, environmental surfaces such as countertops, doorknobs, and toys.

See Pathogen Safety Data Sheet for More Information

