

(also as herpes B, monkey B virus, herpes simiae, and herpesvirus B)

What is B Virus?

B virus infection is caused by a herpes virus. B virus is also commonly referred to as herpes B, monkey B virus, herpesvirus simiae, and herpesvirus B. The virus is found among macaque monkeys, including rhesus macaques and pig-tailed macaques. Macaque monkeys are thought to be the natural host for the virus and usually have no or only mild symptoms when infected with B virus. Infection in monkeys can only be transmitted when the virus is being actively shed in their body fluids.

Who gets B Virus and how is it spread?

Persons at greatest risk for B virus infection are veterinarians, laboratory workers, and others who have close contact with macaques or monkey cell cultures. Infection is typically caused by animal bites or scratches, exposure to the tissues or secretions of macaques, or through mucosal contact (contact with the eyes, nose or mouth with infected body fluid or tissue.) Human infection can also result from indirect contact via, for example, a needlestick injury from a contaminated needle.

What are the symptoms of B Virus?

Symptomatic human infections with the B virus are rare, but can result in acute inflammation of the brain and spinal cord resulting in death or severe nervous system impairment. Disease progression depends on the location of the exposure and on the number of infectious virus particles spread during exposure. The first signs of disease typically are flu-like symptoms such as fever, muscle ache, fatigue, and headache. Other symptoms observed include inflamed lymph nodes, nausea and vomiting, abdominal pain, and hiccups.

How soon after exposure do symptoms appear?

Onset of symptoms typically occurs within one month of exposure, although the actual incubation period can be as little as three to seven days.

How is B Virus diagnosed?

In cases of B virus exposure and infection, specimens for virus culture and serologic testing should be obtained from the exposed person and, when feasible, from the source animal.

What is the treatment for B Virus?

Although B virus infection in humans is extremely rare, when it does occur, it is often fatal unless treated right away; approximately 70% of untreated patients die of complications associated with the infection. Treating B Virus may involve both first aid protocols and antiviral therapy.

How can B Virus be prevented?

There are no vaccines available for B virus. Experimental vaccines have been evaluated in animal

models, but none are being considered for human trial. While exposures that involve unpredictable, potentially aggressive animals are not completely preventable, adherence to appropriate laboratory and animal facility protocols will greatly reduce the risk of B virus transmission.

How can I learn more about B Virus?

- If you have concerns about B virus, contact your healthcare provider.
- Call your local health department. A directory of local health departments is located at <https://www.vdh.virginia.gov/local-health-districts/>.
- Visit the Centers for Disease Control and Prevention website at <https://www.cdc.gov/herpesvirus/index.html>.

October 2018