

New York State Department of Health

Cytomegalovirus (CMV)

Last Reviewed: November 2006

What is Cytomegalovirus (CMV)?

CMV is a common virus that infects most people at some time during their lives but rarely causes obvious illness. It is a member of the herpes virus family. Other members of the herpes virus family cause chickenpox, infectious mononucleosis, fever blisters (herpes I) and genital herpes (herpes II). Like other herpes viruses, CMV infection can become dormant for a while and may reactivate at a later time. The virus is carried by people and is not associated with food, water or animals.

Who gets CMV?

Anyone can become infected with CMV. Almost all people have been exposed to CMV by the time they reach adulthood.

How is CMV spread?

Although the virus is not highly communicable, it can be spread from person to person by direct contact. The virus is shed in the urine, saliva, semen and to a lesser extent in other body fluids. Transmission can also occur from an infected mother to her fetus or newborn and by blood transfusion and organ transplants.

What are the symptoms of CMV infection?

Most children and adults who are infected with CMV do not develop symptoms. Those who develop symptoms may experience an illness resembling infectious mononucleosis and have fever, swollen glands and feel tired. People with a compromised immune system (such as AIDS patients or those receiving chemotherapy) may experience more serious illness involving fever, pneumonia and other symptoms.

Is CMV infection very serious in infants?

Approximately 10 out of every 1,000 babies born in the United States will have CMV infection; but nine of these will have no symptoms and one may have significant illness involving nervous system damage or developmental disabilities.

How soon after exposure do symptoms appear?

Although most people never develop symptoms after exposure, the incubation period appears to be between three and 12 weeks.

How long can an infected person carry CMV?

CMV remains in the body throughout a lifetime. Infected people may occasionally shed the virus in urine or saliva. Several studies have found that from three to 11 percent of normal adults and up to 50 percent of healthy children shed the virus in either urine or saliva. The virus rapidly dies once outside the body.

How is CMV diagnosed?

There are special laboratory tests to culture the virus but such testing is difficult, expensive and not widely available. Specific blood tests can be helpful to the physician in making a diagnosis or determining if a person has been exposed but the results are sometimes inaccurate.

What is the treatment for CMV infection?

In most cases, there is no treatment. An effective vaccine has not yet been developed.

Should an infected child be excluded from school or daycare?

There is no reason to exclude children who have CMV.

What precautions should pregnant women take when performing patient care or child care?

Pregnant women should practice good hygiene and carefully wash their hands after caring for patients or children. This is particularly important when handling diapers or having contact with the child's urine or saliva.

The risk of CMV infection in hospital workers is not greater than it is in others in the community and is probably low because of careful hand washing practices. In daycare centers, where hand washing practices may not be as good, there may be a greater risk of infection. In both settings, good hygiene and careful hand washing are the most important control measures. Pregnant women working in child care facilities should minimize direct exposure to saliva and avoid kissing babies or young children on the mouth. Hugging is fine and is not a risk factor.

Routine blood testing during pregnancy for CMV antibody is not generally recommended. Pregnant women should consult their physician on an individual basis regarding this issue.

What can be done to prevent the spread of CMV?

Good handwashing is the best preventive measure. Plastic disposable gloves should be worn when handling linen or underclothes soiled with feces or urine.

Revised: June 2004