

Cytomegalovirus (CMV) Infection

An infection caused by cytomegalovirus (CMV). This virus occurs worldwide and humans are the only source of human CMV.

Infection in children and adults is usually without symptoms. Occasionally, symptoms similar to glandular fever can occur. In certain groups, infection can result in severe disease.

These groups are:

- > infants infected before, during, or shortly after birth
- > people who have had a transplant, either solid organ or bone marrow/ stem cell
- > people with severe immune suppression such as AIDS.

Once someone has been infected with CMV, they are thought to remain infected for life, even though they usually won't have any symptoms. People can become infected with a number of different strains of the virus. Also, especially during periods of illness or stress, the virus can reactivate, and may or may not cause symptoms.

Diagnosis in infants is made by growing the virus, usually from urine. Diagnosis in adults is more complicated and usually requires growing the virus, blood tests or PCR tests.

The method of spread of the infection varies. Infants usually acquire the infection while in the uterus or during passage through the birth canal. Young children are frequently infected by contaminated saliva when sucking and sharing toys. People with weakened immune systems may have a return of a previous infection with CMV (reactivation) or may be infected with a new strain of the virus. CMV can be transmitted during blood transfusions and organ transplants.

Infection of a baby before birth can result in serious congenital abnormalities, with highest risk during the first half of the pregnancy and in women who have not previously been infected. CMV infection occurs in 1% or less of pregnancies, and of these cases less than 10% are likely to have severe illness. In developed countries more than half the population carry CMV virus by the time they reach adulthood, though this figure is much higher in developing countries.

Incubation period

(time between becoming infected and developing symptoms)

3 – 12 weeks.

Infectious period

(time during which an infected person can infect others)

The virus is often shed for months in urine or saliva following infection in children and adults. Infants and immune suppressed adults can shed the virus for months to years following infection or reactivation of infection.

Treatment

Specific antiviral treatment is available for use in severe CMV infections.

Control of spread

- > Good hand washing after handling articles contaminated with urine or saliva, particularly after changing nappies.
- > Exclusion from child care, preschool, school or work is not necessary.
- > There is currently no vaccine available to prevent CMV infection.

- > PCR
- > Hand Hygiene
- > Glandular Fever