Cytomegalovirus (CMV), a virus from the herpes and chickenpox virus family, is a common cause of infection and illness worldwide. CMV infection can be congenital (present at birth) or passed from an infected pregnant woman to her baby. Congenital CMV infection is a leading nongenetic cause of deafness in children. The April 14, 2010, issue of JAMA contains an article about testing for CMV infection in newborn infants.

**POSSIBLE EFFECTS OF CONGENITAL CMV INFECTION**
- Deafness
- Mental disability, which may be severe
- Cerebral palsy
- Visual impairment
- Seizure disorder
- **Neonatal** (newborn) jaundice, hepatitis, and low platelet counts. These findings go away on their own in most infants.
- Intrauterine growth retardation
- Microcephaly (small head size)

Approximately 90% of babies with CMV infection will not show any signs of the infection. However, about 10% of these children develop hearing loss in early childhood. Newborns with symptoms are much more likely to develop long-lasting problems.

**CMV AT OLDER AGES**
In adults and older children, CMV infection may be present without symptoms. Sometimes, a flu-like illness may occur, including fever, fatigue, or a rash. Individuals who are **immunocompromised** (have a weakened immune system), such as persons who have human immunodeficiency virus (HIV) infection or patients who have had an organ transplant, a bone marrow transplant, or certain types of cancers, may become seriously ill if they are exposed to CMV. A type of severe eye infection, CMV retinitis, can cause blindness. CMV can also be responsible for pneumonia in persons with weak immune systems.

**PREVENTION AND TREATMENT**
- Good hygiene is the most important way to stop spread of CMV, just like with all viral illnesses. Careful and frequent hand washing is the key step to keeping yourself free of CMV, especially after diaper changes and contact with body fluids.
- Pregnant women and persons with weak immune systems should pay close attention to hand washing and avoiding contact with others’ body fluids.
- CMV can be passed through blood, saliva, mucus, and urine. It can also be spread through sexual contact.
- Donated blood is tested for the presence of CMV, along with other viruses such as HIV and the hepatitis viruses.
- Antiviral medications are routinely used to treat immunocompromised adults with CMV infection. Antiviral medications may be prescribed to newborns who show signs of CMV infection at birth. Because these medications have serious side effects, their use is limited to those with confirmed infection and severe disease.

**FOR MORE INFORMATION**
- Centers for Disease Control and Prevention
  [www.cdc.gov](http://www.cdc.gov)
- March of Dimes
  [www.marchofdimes.com](http://www.marchofdimes.com)
- World Health Organization
  [www.who.int](http://www.who.int)

**INFORM YOURSELF**
To find this and previous JAMA Patient Pages, go to the Patient Page link on JAMA’s Web site at [www.jama.com](http://www.jama.com). Many are available in English and Spanish. A Patient Page on blood transfusion was published in the October 6, 2004, issue; one on causes of visual impairment was published in the October 15, 2003, issue; one on premature infants was published in the June 3, 2009, issue; one on genital herpes was published in the June 27, 2001, issue; one on chickenpox was published in the August 17, 2005, issue; and one on shingles was published in the July 1, 2009, issue.

Sources: Centers for Disease Control and Prevention, World Health Organization, March of Dimes, American Academy of Family Physicians, American Academy of Pediatrics, American Congress of Obstetricians and Gynecologists

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