



## **Cytomegalovirus in Child Care (CMV)**

This is a viral illness and is spread by:

- bodily fluids such as blood, urine or saliva
- CMV is common though it normally remains inactive and caused no symptoms.
- Child care workers are at risk of infection.

### **No Vaccine Exists**

### **Good personal hygiene is an important way of prevention**

Employers should control occupational exposure to CMV by using risk management approach and encouraging good hygiene practices.

### **What is Cytomegalovirus (CMV)?**

CMV is a common viral infection that affects many people, and currently there is no vaccine that can protect against it. Because infection usually does not cause illness in healthy people many people may be unaware they have been infected with the virus. However, CMV can have serious effects for pregnant women and their unborn children.

### **CMV Infection**

The first time that a person is infected with CMV is called a primary infection. After primary infection, the virus continues to live in the body in an inactive or dormant state. CMV can become active again periodically, and this is called a reactivation of infection. Reactivation of infection can occur, for example, when a person has another infection or illness, or during pregnancy. A previously infected person can also be infected with a different strain of CMV, and this is called a re-infection.

### **How CMV is spread**

CMV is spread occupationally from person to person by contact with body fluids, including urine and saliva. A person can pass the virus to another person even though they do not have symptoms. Good hygiene and other control measures can be very effective in preventing the spread of CMV.

## Cytomegalovirus (CMV) Fact Sheet

CMV can also be transmitted from a mother to her unborn child during pregnancy. This is called congenital infection.

### The risk of CMV infection in the child care industry

People who have occupational contact with young children are particularly at risk of CMV infection. Studies show that workers in child day-care centres are at highest risk, **especially when caring for children younger than two years of age**. This is because child care workers have frequent contact with children's urine and saliva from activities such as changing nappies, assisting with toilet care and feeding infants.

Health care workers caring for infants and children and patients who have an impaired immune system may also be at increased risk.

### The effects of CMV

CMV infection does not usually cause illness in healthy people, and people may be unaware that they have been infected. Occasionally it causes a glandular fever-like illness with fever, sore throat and swollen glands. CMV infection can however cause serious illness in people who have an impaired immune system, and there can be adverse health effects for unborn children if they are infected during their mother's pregnancy.

In a landmark decision in NSW, a childcare worker and her severely disabled son were awarded \$4.65 million. A Court of Appeal ruled that the child's disabilities resulted from the woman being infected with cytomegalovirus (CMV) at work (Hughes v SDN Children's Services 2002).

### CMV and Pregnancy

An infected mother can transmit CMV to her unborn baby. The most severe form of the disease generally occurs in infants born to mothers who have a primary infection during pregnancy. The risk to an infant from reactivation of infection or re-infection during pregnancy is generally lower.

A small number of babies who have been infected with CMV during pregnancy have symptoms at birth. Health effects can include damage to the brain, liver, eyesight and hearing. Many of these infants will have life-long disabilities of varying degrees. The majority of infants who have been infected with CMV during pregnancy do not have symptoms at birth. However, some of these children may develop disabilities later in childhood, such as hearing loss, learning difficulties and developmental delay.

Women working in the child care industry who are pregnant or expect to become pregnant should discuss the risks of CMV with their doctor, and inform their employer so that their individual risk can be assessed and managed.

The doctor may suggest a blood test to determine if the woman has had a CMV infection in the past. This will assist in determining if a woman is at risk of a primary infection during her pregnancy. There is no vaccine to prevent CMV infection during pregnancy, however good hygiene practices, including hand washing, can reduce the risk.

## Preventing CMV in Child Care

There is currently no vaccine to prevent against infection with CMV. Good personal hygiene, including hand washing, is the most important way to prevent CMV infection, as CMV is readily killed with soap and detergent.

CMV infections are common among children in childcare settings but most children will not have symptoms and their infection will be unknown. Children known to have CMV do not require exclusion from childcare because the virus may persist in their urine and saliva for months to years.

The occupational risks of CMV infection in child care facilities should be managed with a risk management approach.

The following methods can be effective control methods in preventing CMV infection:-

- Employees to inform the Employer if pregnant or expect to become pregnant.
- Employers to encourage Employees to discuss CMV risks with a doctor if pregnant or considering becoming pregnant.
- Provide information to workers about CMV risks during pregnancy and work practices to reduce the risk of infection. Keep training records.
- Relocate workers who are pregnant or who expect to become pregnant, to care for children aged over two years of age, as contact with urine and saliva (in the over two years of age group) is generally lower in this age group.
- Workplace design that encourages good hygiene practices, e.g. nappy changing areas close to hand-washing amenities.
- All staff to wash hands frequently, especially after contact with urine and saliva and after removing disposable gloves.
- Use alcohol-based hand rub for situations where hand washing facilities are not readily available, e.g. excursions
- Cover cuts with water resistant dressings
- Use disposable gloves e.g. latex or vinyl for activities that involve contact with urine and saliva and instruct workers in their use and correct disposal procedures.
- Implement procedures for hygienic nappy changing and the storage and disposal of soiled nappies. Take steps to prevent urine from spraying into the face of workers if infants pass urine during nappy changing (especially infant boys).
- Instruct Employees not to kiss children on the mouth and face.
- Implement cleaning programs for surfaces and items that are soiled with urine and saliva, including nappy change mats, potties and toys.
- Implement procedures for cleaning up accidental spills of urine, such as occur during toilet training.
- Implement laundry procedures for linen that is soiled with urine and saliva. Make sure that soiled personal clothing and linen are placed in a sealed bag and sent home with the child for washing.

**This information has been provided by ACSEA as general guidance and should not be treated as advice. Please contact ACSEA for further advice.**