

# Lymphocytic Choriomeningitis Virus (LCMV) and Pregnancy

## Facts and Prevention



### What is LCMV and how is it spread?

Lymphocytic choriomeningitis virus (LCMV) is carried by wild mice. Laboratory rodents and pet rodents, such as hamsters and guinea pigs, can become infected with LCMV from contact with wild mice. This can happen in a breeding facility, in a laboratory facility, in a pet store, or in the home (e.g., if wild mice are present).

Humans can become infected with LCMV through contact with urine, blood, saliva, droppings, or nesting materials of infected rodents. This could occur, for example, through a break in the skin or a bite from an infected rodent. Infection can also be spread by inhaling dust or droplets containing LCMV, such as while sweeping infected rodent droppings. A pregnant woman who becomes infected with LCMV can pass the infection to her unborn baby. LCMV infection can also be spread to patients who receive an organ transplant from an infected donor. However, spread of LCMV infection from one person to another is not known to occur outside these situations (1).

About 5% of adults have a positive blood test that shows they were infected with LCMV at some time in their lives (2, 3). Some people with normal immune systems have no symptoms during LCMV infection. Others have a mild illness with symptoms such as headache, fever, chills, and muscle aches. Sometimes, meningitis (inflammation around the brain and spinal cord) will occur.

### What are the risks of LCMV during pregnancy?

If you have an LCMV infection during your pregnancy, your unborn baby can also become infected. LCMV infection during pregnancy can result in loss of the pregnancy. Infants who are infected with LCMV before they are born can have severe birth defects. It is not known how often this happens because pregnant women with LCMV infection might have only mild symptoms or no symptoms at all, and babies often are not tested for the infection (4, 5). Since LCMV infection was first identified, more than 50 babies have been reported with LCMV infection worldwide (6, 7).

### How can I prevent becoming infected with LCMV?

In general, the risk of LCMV infection is low. If you are pregnant or planning to become pregnant, you should avoid contact with rodents, including pets such as hamsters and guinea pigs, and rodent droppings whenever possible. Following these instructions can reduce the risk of LCMV infection:

- If you suspect there are mice in your home, call a professional pest control company to control them or have another member of the household remove them. Avoid vacuuming or sweeping rodent urine, droppings, or nesting materials.
- Ask a friend or family member who does not live with you to care for pet rodents in his or her home while you are pregnant. If this is not possible, keep the pet rodent in a separate part of the home and have another family member or friend care for the pet and clean its cage. Avoid being in the same room where the rodent is kept.



- If you have contact with a wild rodent or its urine, droppings, or nesting materials, thoroughly wash your hands afterward.
- Further guidance on preventing LCMV infection, including management and prevention of rodents in the home, is available at: <http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/lcmv.htm> and <http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/lcmv/prevent.pdf>.

### ***Is there treatment for LCMV infection during pregnancy?***

Currently, there is no specific treatment available for LCMV infection. Pregnant women who have LCMV infection should talk with their doctors about how to manage their symptoms and how the infection might affect the outcome of their pregnancy.

If you are pregnant and have come in contact with a rodent, or have fever or other symptoms during your pregnancy, contact your doctor. A blood test is available to detect current or previous LCMV infection. Having had LCMV infection in the past is not a risk for current or future pregnancies.

#### **For More Information:**

Organization of Teratology Information Services (OTIS) visit [www.OTISpregnancy.org](http://www.OTISpregnancy.org) or call (866) 626-6847

Special Pathogens Branch of Centers for Disease Control  
<http://www.cdc.gov/ncidod/dvrd/spb/mnpages/dispages/lcmv.htm>

### ***References***

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[www.cdc.gov/ncbddd](http://www.cdc.gov/ncbddd)