

Lymphocytic Choriomeningitis Virus (LCMV)

Occupational Viral Infection from Handling Rodents

What is Lymphocytic choriomeningitis virus (LCMV)?

LCMV is a virus that is found worldwide. It primarily spreads via the common house mouse, but other domestic and wild rodents may carry the virus.

How does infection occur?

Having direct contact with an infected rodent can transmit the infection. Exposure to an infected rodent's feces, urine, or nesting material can also result in infection. The virus does not transmit from person to person.

What are the symptoms?

After exposure it can take 5 to 13 days for symptoms to show, or a person may be asymptomatic. Symptoms include fever, headache, nausea, vomiting, and loss of appetite. In most cases symptoms resolve in a few days and do not need treatment. Sometimes symptoms may disappear for a few days and then come back worse. The second stage has similar symptoms to the first, but also nervous system symptoms such as meningitis or encephalitis, which may manifest as confusion, drowsiness, sensory disturbances, motor deficits and, in severe cases, paralysis.

How do I prevent it?

Prevent LCMV by not coming into contact with wild rodents. When handling rodents wear proper PPE such as gloves. Clean rodent cages regularly in well ventilated areas and wash hands after contact with animals and related equipment/supplies.

How is it treated?

Supportive care is given to help treat LCMV.

Resources used:

- The Center for Food Security and Public Health Zoonotic Disease Factsheets: Lymphocytic Choriomeningitis
- The Center for Food Security and Public Health Zoonotic Transmission Routes: Lymphocytic Choriomeningitis
- Chapter 28, Selected Zoonoses, (2015) *Lab Animal Medicine*, 3rd ed.