



# Lymphocytic Choriomeningitis Virus (LCMV)



The Centers for Disease Control and Prevention has recently published information regarding a human outbreak of LCMV associated with a rodent breeding facility in Indiana. Mice from this facility in Indiana were reported to have been sent to Iowa last spring, but no associated human illness has been reported.

See: [http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6132a5.htm?s\\_cid=mm6132a5\\_e%0d%0a](http://www.cdc.gov/mmwr/preview/mmwrhtml/mm6132a5.htm?s_cid=mm6132a5_e%0d%0a)

## What is LCMV?

LCMV is a viral infection in mice, but it can also be carried by hamsters, gerbils, guinea pigs, and other rodents. Mice can be infected with LCMV for a long time without symptoms, and they can pass the virus to humans, who may become ill.

## Why is LCMV a concern?

About 5% of mice naturally carry LCMV. Recently, a rodent breeding facility in Indiana was determined to have a higher percentage of mice infected with the virus. Mice from this facility in Indiana were reported to have been sent to Iowa last spring, but no associated human illness has been reported.

## Which animals can transmit LCMV?

A small percentage of wild house mice carry LCMV. The virus has also been found in some breeding populations of mice which can lead to pet or feeder mice having the virus. Some mice can carry this virus their entire lives without showing any signs of illness. Other rodents, like hamsters, gerbils, and guinea pigs, that have contact with mice can also get the virus.

## How is LCMV spread to humans?

People can get LCMV by handling and being around rodents carrying the virus, even if the animals are not sick. Urine, droppings, saliva, and nesting materials (animal bedding) of infected rodents that contain LCMV can spread the virus. Breathing the air around these materials or coming into direct contact with these materials then touching the nose, eyes, mouth, or open skin wounds may cause someone to get the virus. LCMV is not spread from one person to another. However, women who get LCMV when they are pregnant can pass the virus to their unborn babies.

## What are the symptoms of LCMV?

Most healthy people who get LCMV will not have any symptoms or will only have a mild flu-like illness that may include fever, loss of appetite, headache, muscle aches, chills, nausea, and vomiting. Some people may develop a more severe form of this disease that causes swelling of the brain and may require hospitalization. This is especially true for those with a weak immune system. A woman who gets LCMV while pregnant may have a miscarriage or a baby with birth defects.

## What should I do if I think I have LCMV?

See your doctor immediately if you think you are sick with LCMV, especially if you are pregnant or have a weak immune system. Tell your doctor if you have been around any wild mice, feeder mice, or pet rodents. Your doctor can decide if you need to be tested and how best to treat your symptoms.

## Which pet stores have LCMV-infected rodents?

Rodents and other pets from *any* pet store have some risk of diseases and should be handled with caution. Rodents infected with LCMV may look and act normally. For more information on how to reduce the risk of diseases from a pet, please see the CDC *Healthy Pets* Web site at:

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



# Lymphocytic Choriomeningitis Virus (LCMV)



## What should I do if I no longer want my pet rodent?

People who no longer wish to keep their pet rodent should consult a veterinarian to put the animal down. Do not release pet rodents into the wild (this is not humane, as they often starve or are killed by predators).

## Can I have my pet rodent tested for LCMV?

Testing on live rodents can be inaccurate. Reliable testing requires the animal to be killed. Always assume that pet rodents may carry the virus and are capable of spreading disease.

Follow precautions as described on CDC's *Healthy Pets* Web site ([www.cdc.gov/healthypets](http://www.cdc.gov/healthypets)) when handling any pets.

## How is LCMV prevented?

LCMV infection can be prevented by avoiding contact with wild mice and by taking precautions when handling pet rodents.

If you have a pet rodent, take the following precautions to reduce the risk of LCMV infection:

- Wash hands with soap and water after handling pet rodents; use waterless alcohol-based hand rubs when soap is not available.
- Keep rodent cages clean and free of soiled bedding.
- Clean the cage in a well-ventilated area or outside.
- Wash hands thoroughly with soap and water after cleaning up pet droppings. Closely supervise young children, especially those less than five years old, when cleaning cages, and make sure they wash their hands immediately after handling rodents and their caging or bedding.
- Do not kiss pet rodents or hold them close to your face.

If you have a rodent infestation in and around your home, take the following precautions to reduce the risk of LCMV infection:

- Seal up rodent entry holes or gaps with steel wool, lath metal, or caulk.
- Trap rats and mice by using an appropriate snap trap.
- Clean up rodent food sources and nesting sites and take precautions when cleaning rodent-infested areas (ventilate the space by opening the doors and windows for at least 30 minutes to allow fresh air to enter the area).
- Keep wild rodents away from pet rodents.

## Where can I get more information?

You can get more information about cleaning up after rodents at:

<http://www.cdc.gov/rodents/cleaning/index.html>

You can get more information on LCMV at:

[http://www.cdc.gov/healthypets/lcmv\\_rodents.htm](http://www.cdc.gov/healthypets/lcmv_rodents.htm)

Contact the Iowa Department of Public Health with questions at: 1-800-362-2736.