

**Multistate Lymphocytic Choriomeningitis Virus Outbreak, August 2012
(8/16/2012)**

The Georgia Department of Public Health (DPH) and the Georgia Department of Agriculture are working with the Centers for Disease Control and Prevention (CDC) on a multi-state investigation of Lymphocytic Choriomeningitis virus (LCMV) infections in commercial feeder mice that were shipped from an Indiana breeding facility to pet stores and other purchasers in many states, including Georgia. We have recently been notified that some mice that could have been infected with LCMV were shipped to this pet store between January 2012 and June 2012. These mice can potentially infect other rodents and also pose a health risk to people who come into contact with them.

People can become infected with LCMV when exposed to infected rodents (mice, hamsters, guinea pigs) or their bedding and equipment. Infected rodents shed the virus in their bodily secretions, which can become aerosolized in high rodent density environments. People at risk of contracting LCMV include anyone that directly handles the rodents or their dirty bedding, and people who spend time in close proximity to infected animals. LCMV infection in people produces symptoms ranging from mild illness to aseptic meningitis (inflammation of the membranes surrounding the brain). Infected pregnant women may pass the virus to the fetus, resulting in birth defects. Persons with weak immune systems are also at increased risk for developing severe disease.

The goal of our investigation is to determine if you had exposure to these mice since January 1st, 2012 and to determine whether you need to be tested for exposure to the virus. If you purchased mice or other rodents from this pet store any time since January 1st, 2012, there is a possibility you were exposed to LCMV.

Please complete a survey to assist us in determining the extent of your exposure to these mice. The survey will be securely entered into our electronic system, and all information will remain confidential. It can be accessed at this link: <http://sendss.state.ga.us/survey/form/1917>. If you are unable to access this survey, you can contact the DPH directly at 404-657-2588 to complete the survey by telephone.

More information about LCMV is available at:

- 877-664-3092 (pre-recorded information)
- The CDC website: www.cdc.gov
- Current information about the investigation can be found at the Georgia DPH website: www.health.state.ga.us
-

For further questions or concerns, contact the Georgia DPH at 404-657-2588



Q&A

What is LCMV?

LCMV is a viral infection in mice, but it can also be carried by other rodents such as hamsters, gerbils and guinea pigs. Infected rodents can pass the disease to humans.

Which animals can transmit LCMV?

A small percentage of wild house mice have 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. Urine, droppings, saliva, and nesting materials (bedding) of rodents that contain LCMV can spread the virus. The virus can be in the air or around these materials. Breathing this air or coming into direct contact with these materials then touching the nose, eyes, or mouth, or open skin wounds can cause an infection. The virus is not spread person-to-person. 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 illness that may include fever, loss of appetite, headache, muscle aches, chills, nausea, and vomiting. Other symptoms that can occur include sore throat, cough, and pain in the joints, chest, testicles, or mouth. Some people may develop a more severe form of disease 1 to 2 weeks after the fever starts. This severe form can cause swelling in the brain that may require hospitalization. A woman who gets LCMV while pregnant may have a miscarriage or a baby with severe birth defects.

What should I do if I think I have LCMV?

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

Given that LCMV might be present in my rodents, what precautions should I take?

Women who are or may be pregnant should be educated concerning risks to the fetus, and there is also an increased health risks for persons who may be immunocompromised. Anyone who is pregnant or immunocompromised and directly handled the potentially infected rodents should be tested to

determine if they have been exposed to LCMV. Anyone handling potentially LCMV-infected rodents should wear proper personal protective equipment (see next question).

What is the proper PPE (Personal Protective Equipment) to handle potentially LCMV-infected rodents?

Proper PPE for any persons handling potentially LCMV-infected rodents, cleaning their cages, or handling their bedding materials includes latex or nitrile gloves, a facemask (if you have access to an N95 filtering facepiece respirator or higher level particulate respirator, they offer the best protection), and eye protection. Because broken skin can be a portal for entry of the virus, breaks in the skin should be covered. Efforts should be made to minimize the generation of aerosols while cleaning cages. All respirator users should be fit-tested before use and respirators should be used within the context of a complete respirator program that meets the requirements in the OSHA respirator standard (29 CFR 1910.134). Hands should be washed with soap and water or an alcohol-based hand sanitizer after removing gloves. A lab coat, coverall, or work shirt that can be removed after exposure to the animals and laundered is also recommended.

Is it possible for an LCMV-infected mouse to infect other rodents, like hamsters and gerbils?

Yes—any rodents that were in direct contact with potentially infected mice or shared the same housing (cage, water bottle, feed dish) without disinfecting between uses could become infected and these animals may potentially pass the infection to people.

Can the reptiles or birds that consumed these infected mice develop asymptomatic LCMV infection, symptomatic LCMV disease, or be able to transmit LCMV to their human handlers via contact with them or their feces?

Since LCMV infection in animals eating feeder mice has not been widely studied, we do not know whether reptiles or birds consuming such animals may themselves develop an infection. There is, however, a risk for charrichid primates (marmosets and tamarins) who consume infected mice to develop infection, which results in hepatitis with high fatality rates. If there have been any unusual recent illnesses or deaths in any animals that were fed live mice, CDC would be interested in testing any available specimens.

Is CDC willing to conduct testing for LCMV for people who were potentially exposed to the virus?

Yes. CDC is especially concerned about pregnant or immunocompromised persons who may have come in contact with the mice, and would recommend testing these people because of the risk of more severe disease and congenital illness. They would also be interested in testing any persons who had exposure to the potentially LCMV-infected mice and were treated with symptoms of meningitis. Contact the Georgia DPH at 404-657-2588 for more information about testing.