

Murine Typhus (Fleaborne Typhus)

What is murine typhus?

Murine typhus, also called fleaborne or endemic typhus, is a rickettsial disease caused by the organism *Rickettsia typhi*. Another organism, *R. felis*, may also play a role in causing murine typhus. Rickettsiae are a type of bacteria. Most of the murine typhus cases in Texas occur in South Texas from Nueces County southward to the Rio Grande Valley, but a few cases are reported in other parts of the state each year.

Where does it come from?

Rats and their fleas are the natural reservoirs (animals that both maintain and transmit the disease organism) for murine typhus. Other animals, such as opossums and domestic cats, may also be involved in the transmission of murine typhus. Fleas, such as the rat flea, *Xenopsylla cheopis*, and the cat flea, *Ctenocephalides felis*, are the most common vectors (animals that transfer the disease from one host to another) of murine typhus.

How do I get it?

People get murine typhus from an infected flea. Most fleas defecate while biting; the feces of infected fleas contain the rickettsial organism. The rickettsiae enter the body through the bite wound or from a person scratching the bite area. It is possible to get murine typhus by inhaling contaminated, dried flea feces. However, this method of transmission is not as common as transmission from a biting flea.

How will I know I have it?

The incubation period for murine typhus is 6 to 14 days. Symptoms of the disease include headache, fever, nausea, and body aches. Five or six days after the initial symptoms, you may get a rash that starts on the trunk of your body and spreads to your arms and legs. If left untreated, the disease may last for several months. A doctor can conduct tests to tell you if you have murine typhus.

What do I do if I get murine typhus?

If you suspect that you have murine typhus, see a doctor as soon as possible. If you wait too long to see a doctor, you may have to be hospitalized. Murine typhus is easily treated with certain antibiotics. Once you recover, you will not get it again.

What can I do to prevent murine typhus?

The best way to protect yourself and your family from murine typhus is to:

- Clean your yard so that rodents, opossums, and stray cats cannot live there.
- Remove any brush or trash, keep the grass mowed, and keep firewood off the ground.
- Do not leave pet food out at night as this attracts other animals.
- Prevent rodents from living in your house.
- Treat for fleas before you begin rodent control in your house or yard. Otherwise, when the rodents die, the fleas will search for new hosts, possibly you and your family. There are several commercial flea control products on the market. Pick one and follow the label instructions.
- If you own pets, control the fleas on them regularly. If they come in contact with infected fleas, they could bring them home to you. Ask a veterinarian about flea control products that are safe to use on your pets.

Who can I call if I have questions about murine typhus?

If you have more questions about murine typhus or flea control, consult with a physician or a veterinarian. Questions can also be answered by your local health department or the Texas Department of Health [Zoonosis Control Division](#).