

MURINE TYPHUS (ENDEMIC TYPHUS)

What is murine typhus?

Murine typhus is a disease caused by small bacteria called rickettsiae, specifically *Rickettsia typhi*. Murine typhus is found worldwide, chiefly in tropical and coastal areas. In the 1930s and 1940s, 42,000 cases of murine typhus were reported in the U.S. Today, fewer than 80 cases are reported annually, mostly from Texas, Hawaii, and California. Murine typhus is considered endemic in small selected areas of Los Angeles, but may also occur in other parts of southern California.

How do you get murine typhus?

Typhus bacteria are transferred to humans usually as the result of flea bites. Fleas shed the bacteria in their feces and will often defecate while biting and feeding. When a person scratches the flea bite, they can allow some of the bacteria in the flea feces to enter the blood stream. People can also be infected by transferring the bacteria to their eye, nose, or mouth.

What animals carry can the typhus bacteria?

Rats, mice, and other small mammals and their associated fleas carry the bacteria in nature. In the U.S., typhus is acquired by bite from the cat flea, *Ctenocephalides felis*, the flea that is commonly found on pet dogs and cats. Cat fleas acquire the bacteria from rats in urban areas, or from opossums in suburban areas.

What are the symptoms of this disease, and how do you treat it?

Most infected persons experience fever, headache, chills, and muscle aches 6 -14 days after contact with an infected flea. A rash that begins on the chest and spreads to the sides and back is also common. Most illnesses are mild, but about 10% of patients have a more severe illness and need to be hospitalized. Death from typhus is rare. Most persons recover within a few days after starting treatment with antibiotics.

How do you protect yourself from murine typhus?

Remove pet food, cover garbage containers, and trim vegetation around buildings to discourage rats and opossums from around your home. If you see live or dead opossums on your property, call your local animal control. Keep pet cats indoors as much as possible and consult your veterinarian about proper flea control on pets.