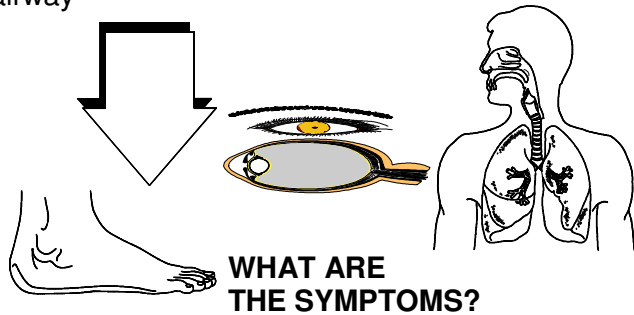


## WHAT IS ENDEMIC TYPHUS FEVER?

Murine typhus, flea-borne typhus, and shop fever are other names used for this disease. Endemic typhus fever is caused by bacteria called *Rickettsia typhi* or another bacteria called *Rickettsia felis*. Endemic typhus is not directly spread from person to person. People become infected when they come into contact with fleas infected with the bacteria that cause endemic typhus fever. Endemic typhus differs from epidemic or louse-borne typhus, which does not usually occur in this country.

## HOW DO I GET ENDEMIC TYPHUS?

Fleas defecate as they feed. Infection occurs when flea feces containing the disease agent are scratched into the bite site or other skin opening, are transferred to the eye (conjunctiva), or when dried or crushed feces are inhaled and enter the airway



Symptoms may begin from 6 to 14 days after exposure. All infected persons have fever and most have headache, chills, body aches and pains. A rash on the chest, back, arms and/or legs can sometimes occur. Endemic typhus shares symptoms with many other diseases and can be incorrectly diagnosed if a specific blood test is not performed. Many of the cases reported in Austin/Travis County have required hospitalization.

## HOW IS THE DISEASE TREATED?

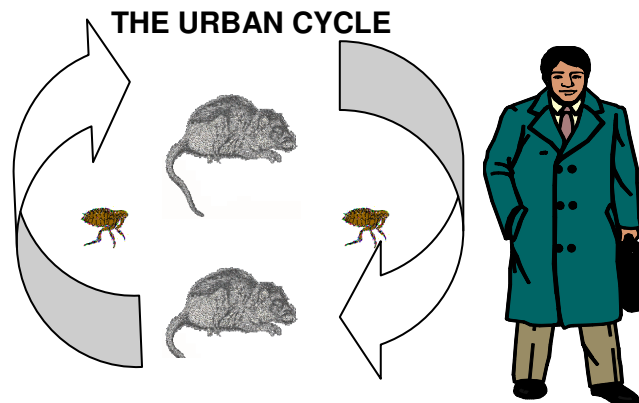
This disease is readily treatable with the appropriate antibiotic therapy.

## WHAT ANIMALS ARE INVOLVED?

In Austin/Travis County, rats, opossums, and cats all carry the fleas which can transmit the disease. Because these animals frequently come into close contact with people, they can be involved in the transmission cycle of this disease to humans. The animals become infected and pass the organism to their fleas. Infected fleas can pass the organism to their offspring for up to 17 generations. Infected animals usually do not display symptoms.

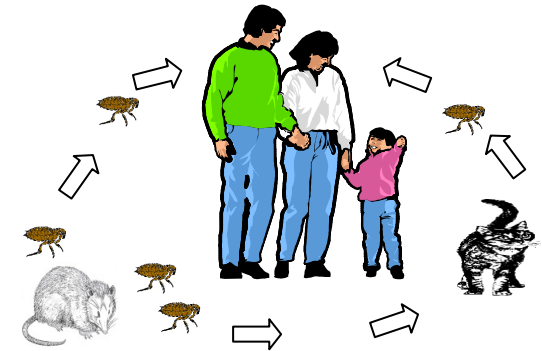
## WHERE CAN THIS DISEASE BE FOUND?

The disease is found in both urban and suburban areas, and manifests itself in two separate transmission cycles based on the environment and the animals involved. The **urban cycle** is the most classic and occurs in cities with densely developed downtown areas where the disease circulates primarily among rats and their fleas.



The **suburban cycle** occurs most often in residential areas. The disease circulates primarily among domestic cats and opossums, and is transmitted by the cat flea. This cycle accounts for almost all of the reported cases in Austin/Travis County.

## THE SUBURBAN CYCLE



## HOW HAS MAN CONTRIBUTED TO THE CONTINUED THREAT OF THIS DISEASE?

In Austin/Travis County, man has played an active role by introducing the animals involved in the transmission cycle and by creating environmental conditions conducive for the maintenance and spread of endemic typhus. Opossums and free-roaming cats often exist in significant numbers in commercial or residential communities because of an ample food supply, accessible harborage, changing public attitudes, and inadequate environmental controls.

## SHOULD THIS DISEASE BE REPORTED?

Physicians should report suspect cases to the Epidemiology & Disease Surveillance Unit (512) 972-5555. Disease reporting information for clinician can be downloaded at:

## HOW WILL I KNOW IF MY PET HAS ENDEMIC TYPHUS?

Infected pets usually do not display noticeable symptoms. If these pets are infested with fleas, their fleas may become infected and can transmit the disease to you.

## WHAT STEPS CAN I TAKE TO PREVENT MY PETS AND MYSELF FROM CONTRACTING THE DISEASE?

**Practice effective flea control.** Pets, yards, and homes should be kept free of fleas. Don't allow pets to roam freely where they can come into contact with infected fleas. Oral and topical flea control medications can be effective. Consult your veterinarian for advice. When purchasing pesticides to treat yards and homes, use only materials which target fleas and follow all label directions carefully.

**Eliminate harborage.** Homes should be kept in good repair to prevent rodents, opossums, and stray or feral cats from entering the structure or nesting in crawl spaces below structures. Yards should be kept clear of heavy undergrowth and accumulated debris to reduce areas where animals may nest or hide.

**Eliminate food and water sources.** Do not encourage animals to visit your yard by directly or indirectly feeding them. Open trash cans, bird feeders, fallen fruit, and pet food and water attract rodents and other animals. Pick up all fallen fruit and do not leave food and water out for stray animals.

**Take personal precautions.** Before cleaning nesting areas, apply effective insect repellent

(one with DEET), and wear protective equipment such as a dust particle mask or respirator, goggles, and gloves. These measures and spraying the area thoroughly with disinfectant, helps reduce exposure to flea bites and rodent excretions which may cause other diseases. When opossums or feral cats become pests, well-intentioned individuals may attempt to capture and relocate these animals to other areas. Relocating opossums violates Texas Fish and Game laws and is considered inhumane.



Prior to any attempts to trap opossums and stray or feral cats on your property, contact your local animal control agency. **DO NOT RELOCATE ANIMALS.** This practice is not a solution and it helps spread disease.

## HOW CAN I GET ADDITIONAL INFORMATION?

Epidemiology & Disease Surveillance Unit  
(512) 972-5555  
Rodent & Vector Program  
(512) 978-0370

**Austin/Travis County Health & Human Services  
Epidemiology & Disease Surveillance Unit  
15 Waller St.  
Austin, Texas 78702**



**Austin/Travis County  
Health & Human Services**



# ENDEMIC (MURINE) TYPHUS FEVER IN TRAVIS COUNTY

