

DALLAS COUNTY DEPARTMENT OF HEALTH AND HUMAN SERVICES

PHILIP HUANG, MD, MPH DIRECTOR / HEALTH AUTHORITY

HEALTH ALERT:

Flea-borne (Murine) Typhus Activity in Dallas County

To date for 2021, Dallas County Health and Human Services (DCHHS) has received reports of twenty cases of flea-borne typhus, the second most in 5 years after forty-nine cases in 2020. An average of 16 cases was reported each year between 2017 and 2019. An increase of flea-borne typhus has also been reported across multiple areas of Texas since 2017. Most of the cases in Dallas County were indigenous, and 15% of the Dallas cases were in the age group 6 to 15 compared to more than 25% of cases in Texas that were among the same age group.

Flea-borne typhus is caused by infection with the bacterium *Rickettsia typhi*. Rats, opossums, and cats are thought to be the primary reservoirs for the disease in Texas. Domestic pets may serve as a source of fleas that may transmit the disease. Pets often get infested with fleas through contact with other animals or contact with fleas in shrubs, leaves, or trees. The disease is transmitted through the fleas' feces. While feeding, fleas can defecate on their host. The fecal materials can get into the bite wound or a mucous membrane of the host.

Because rodents are widely distributed, are in close proximity, and serve as a reservoir for the fleas that transmit murine typhus, we would like to continue to reinforce steps that individuals can take to prevent pets and family members from contracting the disease?

<u>Inspection</u>— Make a thorough inspection of your property and look for areas and conditions that are or could be providing entry, feeding opportunities and shelter for rodent nesting.

<u>Identification</u>- Identify rodent signs that include droppings, damage to goods or structures, rub or grease marks, runways, tracks, burrows, odors and sightings of live or dead rodents.

<u>Sanitation</u>- Removal of food and water sources is a key component for successful rodent control. Good sanitation practices also include removal of woodpiles, tall weeds and grass, junk vehicles, old equipment and anything else that does or could provide rodent harborage in the environment.

Baiting and Trapping- Depending on the circumstances and the extent of the infestation, baiting, trapping, or a combination of both may be the preferred method of rodent control. Baiting involves the use of ready-to-use baits containing an anticoagulant poison. When

using rodent baits, they should be kept out of reach of children, pets and wildlife. Trapping is another method of extermination and includes the use of live traps, snap traps and glue boards. When exterminating rodents it is important to take into account that once the rodent is no longer a source of food, the fleas will look elsewhere for food (see section below on fleas).

Rodent Proofing- Exclusion is the most effective and permanent method of rodent control. Locate openings of ½ inch or more in all structures and eliminate them with rat proofing materials such as steel wool, sheet metal, and heavy gauge hardware cloth or spray plastic foam that expands and hardens to seal around pipes and other small openings.

<u>Fleas-</u> Rodent fleas have the potential to spread disease, and it is important to control them both inside and outside your home. Limit your exposure by avoiding areas that may be infested with fleas and wearing heavy clothing (long sleeved shirts, long pants, socks and shoes) and use insect repellents containing DEET. Contact a commercial pest control company or use products specifically labeled for flea control and follow the label directions carefully. Thoroughly vacuum carpets and furniture to remove flea eggs, larvae, pupae and adults before any flea control product is applied. Use disposable vacuum bags and place them in a plastic bag before discarding in the trash. Consult your veterinarian regarding oral and topical medications used for flea control and make sure all household pets are treated.

For questions or consultation please contact DCHHS at 214-819-1949. Information about Typhus is available from CDC at: https://www.cdc.gov/typhus/murine/index.html

 2377 N. Stemmons Freeway
 Office: 214-819-2004

 Dallas, Texas 75207
 Fax: 214-819-1933