Zoonosis control field training courses

CSTE Stories FROM THE Field

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CATEGORY: **Epidemiology & Laboratory Capacity (ELC)**

The Texas Department of State Health Services developed zoonotic disease courses for public health professionals to learn sampling techniques and surveillance needs associated with the prevention of zoonotic diseases of public health concern.

The "What"

Zoonotic diseases in Texas are numerous and can vary greatly depending on the region and animal species densities, which differ based on ecosystems. The Texas Department of State Health Services (DSHS) Zoonosis Control Branch, which uses funding from the Epidemiology and Laboratory Capacity for the Prevention and Control of Emerging Infectious Diseases (ELC) cooperative agreement developed two zoonotic disease courses for public health professionals. Each course focuses on a different Texas ecosystem and gives participants the chance to learn about sampling, trapping, and surveillance techniques related to zoonotic diseases occurring closest to their geographic areas.

The "So What"

DSHS zoonosis control employees must be trained on a variety of field sampling methods in the attempt to detect infectious diseases in domestic and wildlife animals. Sampling techniques are focused on the following diseases: rabies, anthrax, plague, hantavirus, tularemia, typhus, West Nile virus, and animal SARS-CoV2. These field skills can provide communities with trained professionals who can assist with mosquito, tick, kissing bug, fly, rodent, and mesocarnivore trapping methods for either outbreak or pandemic responses as well as general surveillance needs. Ultimately, the goal is to prevent the spread of zoonotic diseases of public health concern.

The "Now What"

Samples collected during the field skills courses include blood, tissue, and ectoparasites which are evaluated for disease potential via laboratory procedures. Utilizing these fundamental skills is important considering SARS-CoV2 continues to be identified in a variety of wildlife species. DSHS is in the beginning stages of sampling Texas wildlife to see if there are SARS-CoV2 reservoirs. This work will help communicate disease risks to outdoor recreational enthusiasts, campers and hunters, and shall provide additional insight to how these coronaviruses are maintained in animal reservoir populations.

There are limited chances to train employees on infectious disease, especially as more is learned about animal populations throughout the state. This hands-on experience provides invaluable skills sets for public health professionals focusing on zoonotic diseases.

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