



## CITY COUNCIL MEMORANDUM

**FROM:** The Office of the City Manager   **DATE:** November 11, 2024  
**SUBJECT:** Mosquito Surveillance and Ground Spraying Program  
**PRESENTER:** Stefanie Martinez, Director of Neighborhood Services

### **SUMMARY:**

North Richland Hills has been a participant city in the Tarrant County Vector Control program since 2013. Per a recent update from Tarrant County Public Health, “this season was the largest outbreak in decades, with 907 positive mosquito pools and 71 human WNV cases in Tarrant County to date.” Through this program most of the municipalities within Tarrant County and Johnson County monitor traps designed to catch different species of mosquitos. Staff is seeking input from Council on participation in the program, including continued ground spraying efforts.

### **GENERAL DESCRIPTION:**

Mosquitoes can carry viruses such as West Nile Virus (WNV), St. Louis encephalitis virus (SLEV), chikungunya virus (CHIKV), dengue virus (DENV) and Zika virus (ZIKV) which are shared between humans and animals. The surveillance of the mosquitoes allows public health officials to assess the infection risk level of residents. Mosquitoes will typically test positive for diseases before human cases appear.

The Neighborhood Services Consumer Health Division encourages citizens to be conscientious of mosquitos and recommends preventative measures such as draining stagnant water, maintaining yard/vegetation, using insect repellent, wearing appropriate dress, and ensuring window screens are properly maintained. Personal protection is the most effective way to prevent the spread of these viruses.

We also participate in the Tarrant County Mosquito Surveillance Program from Spring through mid-November. During this program, thousands of traps are set throughout the County utilizing gravid water traps designed to attract adult mosquitos. Each week, North Richland Hills deploys 8 static traps, with the potential to also utilize 2 additional roaming traps. These roaming traps are placed in different locations at the request of residents. The entrapped insects are then submitted to Tarrant County Public Health for testing. Tarrant County provides the results to the city within a few days. If the collected insects test positive for either WNV or SLEV, the city follows the recommended Tarrant County Public Health response and will activate a ground spraying response to help reduce the mosquito population.



Ground spraying is conducted at dusk or later when mosquitoes are active. This is also a time of day in which pollinators such as bees and butterflies are not active and, in their hive, or not flying. It is advised that a one-mile radius from the positive trap site be sprayed. When ground spraying is scheduled, the public is notified via social media, Everbridge and the city's website of the date and time of spraying. The Ultra Low Volume (ULV) spray targets adult life stage mosquitos which are capable of transmitting illness to humans and other animals. Residents can be placed on the "do not spray" list at which time the Public Works representative applying the ground spray will turn off the device as they pass that location.

Per a recent update from Tarrant County Public Health, "this season was the largest outbreak in decades, with 907 positive mosquito pools and 71 human WNV cases in Tarrant County to date." Although collection of the mosquito samples ends in mid-November the potential for human cases continues for several weeks after the end of the collection season.

Neighborhood Services has an intern position from March through November designated for mosquito surveillance. The salary of that position is \$12,200. Public Works also plays a large part in the mosquito surveillance program. Currently funding for Public Works is \$16,086 for their portion of the program which includes licensing, overtime and material costs. The trapping equipment and materials themselves are provided free of charge to the city by Tarrant County Public Health.

#### **RESOURCES:**

<https://www.tarrantcountytx.gov/en/public-health/health-protection-and-response/environmental-health-promotion/vector.html>

<https://statutes.capitol.texas.gov/Docs/HS/htm/HS.341.htm>

<https://statutes.capitol.texas.gov/Docs/HS/htm/HS.343.htm>

<https://mosquitosafari.tamu.edu/>

<https://www.dshs.texas.gov/mosquito-borne-diseases/west-nile-virus>