



TITLE: Discuss Mosquito Control

MEETING DATE: September 18, 2012

DEPARTMENT: Code Compliance/Development Services

CONTACT: Lori Dees, Environmental Health Manager

RECOMMENDED CITY COUNCIL ACTION:

- Discuss mosquito control

ITEM SUMMARY:

- Current mosquito control options

BACKGROUND INFORMATION:

- This agenda item is intended to provide the latest information on the city's ongoing Mosquito Control Program and to answer questions about West Nile Virus. Dr. Marshall, the Collin County Health Authority and Dr. Wittie, Collin County's Chief Epidemiologist will be present to answer the City Council's questions.
- There has been a significant increase in the presence of West Nile Virus (WNV) in mosquitoes and humans in 2012 in the Metroplex. Year to date, the City has 9 confirmed human WNV cases and 16 positive mosquito pools. Results are currently pending on 11 mosquito pool samples. In 2011, the City had no confirmed WNV mosquito pools or human cases.
- Collin County Health Care Services recommends using the **Five D's** to protect yourself and your family against West Nile Virus:
 - **Drain** – Drain all areas of standing water including changing water in wading pools and bird baths every other day, cleaning out gutters, and not allowing water to stagnate in old tires, flowerpots, trash containers, pet bowls, etc.;
 - **DEET** - Use insect repellents that contain DEET or are recommended by the Centers for Disease Control (CDC) to provide protection for the amount of time you will be outdoors;
 - **Dress** - Dress in light-colored clothing with long sleeves and pants;
 - **Dusk/Dawn** – Limit outdoor exposure at dusk and dawn;
 - **Doors** – Keep doors and window screens in good repair.
- The city Mosquito Control Program was created in 2004. This program utilizes an Integrated Pest Management program (IPM) to control mosquitoes, which includes:

- Education
- Prevention
- Surveillance
- Treatment
- Staff conducts property inspections to identify and minimize mosquito breeding habitats. Citizens can help by removing sources of stagnant water on their property, including French drains, gutters, old tires, flowerpots, trash containers, swimming pools, bird baths and pet bowls.
- Larviciding is conducted by the city between April and October. Citizens may actively treat areas of stagnant water on their property, not including creeks and other protected waterways. Mosquito larvicidal treatments can be purchased at feed stores and home improvement centers.
- Surveillance (trapping/testing) is conducted from May to October by staff. Mosquitoes found in the traps set by city staff are sent to the Texas Department of State Health Services Laboratory to be tested for the presence of West Nile Virus.
- Ground Spraying is conducted if the following conditions occur:
 - A positive mosquito pool is confirmed by the Texas Department of State Health Services Laboratory.
 - A human case of West Nile Virus, Encephalitis, or Dengue fever is reported to the Collin County Epidemiologist.
- An approximate ½ mile radius surrounding a location where a human case or positive mosquito pool has been confirmed is sprayed. Areas surrounding a confirmed positive mosquito pool are sprayed one night. Ground spraying has been increased to comply with the Center for Disease Control's (CDC) recent recommendation to spray an area three consecutive nights surrounding human cases of West Nile Virus.
- Staff has increased their surveillance to more closely monitor the effectiveness of ground spraying.
- The city contracts with Express Pest Control to ground spray. Spraying is conducted between the hours of 10:00 p.m. and 6:00 a.m.
- Notification of area to be sprayed is posted on the website and signs are posted at major thoroughfares in the spray area.
- Citizens have the option to opt out of spraying in front of their house by contacting staff by 2:00 p.m. the day spraying is to occur.
- Spraying has been conducted 17 nights this season.

FINANCIAL SUMMARY:

- The current budget for the Mosquito Control Program is \$28,000.
 - Fiscal year to date expenditures total \$15,000. Based on the current program procedures, the end of fiscal year expenditures will total approximately \$24,000. The mosquito season will extend into the beginning of the upcoming fiscal year.
 - Previous year Mosquito Control Program expenditures were \$2900 in 2011 and \$5900 in 2010.

- In the event the contractor cannot accommodate the demand for service, staff has received quotes on truck mounted (approximately \$7,000 each) and backpack/all-terrain vehicle mounted foggers (\$700 each) and chemicals. Staff with non-commercial applicators license would be able to apply the chemical. Chemical costs would vary year-to-year depending on the frequency and area to be sprayed.

BOARD OR COMMISSION RECOMMENDATION:

- N/A