

Hillsborough County Mosquito-Borne Disease FAQ

The Hillsborough County Health Department has elevated the *Mosquito-Borne Illness Advisory* for the county to a *Mosquito-Borne Illness Alert* due to further increased mosquito-borne disease activity.

Why are we having this mosquito-borne disease problem?

A working hypothesis is that the severe cold winter changed the nesting patterns of certain birds. The crows and other types of jays that would have nested in the northern parts of Florida, i.e. Pensacola to Jacksonville, nested further south, where it was warmer. This area extended into Tampa and even Miami. As these diseases are transmitted by birds, more birds means we are seeing more mosquito-borne illnesses.

Is this mosquito-borne illness, specifically Eastern Equine Encephalitis (EEE), a Hillsborough County problem only?

No. This week there were 24 sentinel chickens statewide that tested positive for EEE. None were in Hillsborough County.

What is Hillsborough County doing about the mosquito-borne disease problem?

Hillsborough County Mosquito Control is working closely with the Hillsborough County Health Department to identify areas considered at high risk for mosquito-borne disease. In these high risk areas, Hillsborough County Mosquito Control is intensifying inspections and increasing its aerial spraying activity for adult mosquitoes, as well as increasing its ground spraying for larval mosquitoes.

Hillsborough County Mosquito Control takes a proactive approach year round to kill both adult and larval stages of mosquitoes. Since January 2010, when the first case of a positive sentinel chicken was reported, Hillsborough County Mosquito Control has:

- monitored mosquito populations by checking 74 traps each week;
- monitored disease entry in our county by checking 15 sentinel chicken sites with 90 chickens;
- responded to more than 1,400 reports of nuisance mosquitoes;
- conducted more than 10,000 inspections by ground and more than 380 inspections by air;
- controlled aquatic weeds to kill larval mosquitoes;
- sprayed more than 32,000 acres with its trucks to kill larval mosquitoes, and sprayed more than 15,000 acres with its helicopters and more than 92,000 acres with its fixed-wing air plane to kill adult mosquitoes; and
- concentrated and intensified both larval and adult mosquito spraying in areas surrounding reports of dead horses.

How effective is aerial spraying for killing mosquitoes?

Data from population sampling of pre- and post- aerial spraying shows a mosquito population reduction between 80-90 percent.

How does the aerial spraying work?

The ultra-low volume (ULV) spray involves typically less than 3 ounces per acre of the pesticide's active ingredient in relation to the size of the area treated. This minimizes exposure and risks to people and the environment while the very fine aerosol droplets stay aloft and kill flying mosquitoes on contact.

Is the chemical used in aerial spraying safe for people?

Yes. According to the Environmental Protection Agency, adulticides can be used for public health mosquito control programs without posing unreasonable risks to the general population or to the environment when applied according to the pesticide label.

Is there an EEE vaccine for humans?

A) No. The only vaccine is for horses.

If a horse dies in my neighborhood, should I be afraid?

No. Mosquito-borne diseases are not re-transmitted by mosquitoes from horse to human or human to horse, nor are they transmitted by direct contact between humans, horse and human, or between horses.

What should I do to keep me and my family safe?

Follow the recommendations of the Hillsborough County Health Department by taking basic precautions to help limit exposure to mosquitoes and following the **5-Ds** for prevention:

- **Dusk and Dawn** – Avoid being outdoors when mosquitoes are seeking blood. For many mosquito species, this is during the dusk and dawn hours.
- **Dress** – Wear clothing that covers most of your skin.
- **DEET** – When the potential exists for exposure to mosquitoes, repellents containing DEET (N, N-diethyl-meta-toluamide, or N, N-diethyl-3-methylbenzamide) are recommended. Picaridin and oil of lemon eucalyptus are other repellent options.
- **Drainage** – Check around your home to rid the area of standing water, which is where mosquitoes can lay their eggs. (Make sure that pools and spas have continuous circulation and appropriate chlorination to prevent mosquitoes from laying eggs.)

Hillsborough County Mosquito Control also recommends properly maintaining window or enclosure screens and replacing old ones as necessary.