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MCHD places sentinel chickens throughout the county to monitor for diseases

MOBILE, Alabama — For almost 30 years, the Mobile County Health Department’s Vector Control has monitored sentinel chickens placed throughout the county to help detect the presence of viruses carried by mosquitoes. The practice is being renewed this week, as the first of 13 coops were deposited today in various predetermined locations.

“We are one of the few health departments along the northern Gulf Coast that has this program,” said Jerry Folsie, the director of Vector Control. “There might be some in the Florida Panhandle, but they are not coordinated with a health department.”

In March, 100 chicks arrived at Vector Control the day after they were born. A special facility houses the flock at Vector Control (vector is any insect, rodent or animal capable of harboring or transmitting diseases to humans) in Downtown Mobile. It has taken several months for the chickens to mature enough to be placed into service.

On Monday, the chickens received their initial blood draw to ensure they were healthy. They have also been vaccinated for fowl pox. Each hen is then numbered and a band is placed on them for tracking purposes.

Starting next week, the Vector Control inspectors will draw blood samples at each location from the wings of two hens, usually on Mondays. John Marshall, MCHD’s entomologist who oversees the sentinel chicken project, sends the samples to a lab in Tampa, Florida. The results are available by that Friday.

The tests can reveal the presence of West Nile Virus, Eastern Equine Encephalitis and St. Louis Encephalitis. Folsie said there is currently no mention in any official publication about a test for Zika Virus in the chicken blood.

With the use of 13 coops, it means only 52 hens are used at one time. The rest are kept in reserve at Vector Control. If one dies, the remaining three are left in the field. Should two die, the entire coop is replaced.

The program continues into the fall, usually until Thanksgiving or mid-December. At that point, the hens are given away to the people at the locations where the coops are kept. A new group of 100 chicks will start the program the following spring.

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In 2016, the program resulted in 11 sentinel chickens testing positive for West Nile. With the information, Folsie said his department was able to increase spraying and conduct door-to-door

surveys in the immediate area. Inspectors also attempted to trap adult mosquitoes and test them for the presence of West Nile.

“It most definitely is an important part of our battle with mosquitoes,” Folsie said. “Without the chickens, we would not have known about the West Nile Virus being present until we had a human case.”

Vector Control also has had mosquito traps set up across Mobile County for the last two months. The traps are used with reports from inspectors and complaints from the public to track the local mosquito population. Marshall said there are more than 50 species of mosquitoes in Mobile County.

The department’s fleet of trucks has been covering 50 routes across Mobile County with night-time spraying since June. Vector Control is rotating first- and second-generation chemical insecticides and organophosphates so that no tolerance is built up in the mosquito population.

MCHD also has an airplane — a Cessna 182Q — that can spray insecticides along coastal areas and in other places that are inaccessible by truck.

“The Mobile County Health Department opened in 1816 to deal with Yellow Fever, which we learned later was being carried by mosquitoes,” Folsie said. “We are still fighting mosquitoes today, and I am sure we are going to be for a long time.”

To learn more about the battle to control mosquitoes, please visit <http://mchd.org>. Under the “Services” tab find “Vector Control” and then “Mosquito Control – General Information.” A mosquito complaint may be submitted to Vector Control by calling 251-690-8124 or via email at VectorServices@mchd.org.