DEP NEWS RELEASE
New Jersey Department of Environmental Protection
Chris Christie, Governor
Kim Guadagno, Lt. Governor
Bob Martin, Commissioner

IMMEDIATE RELEASE
June 8, 2017
www.nj.gov/dep

Contact: Caryn Shinske (609) 984-1795
Lawrence Hajna (609) 984-1795
Bob Considine (609) 292-2994

DEPARTMENT OF ENVIRONMENTAL PROTECTION PREPARES FOR MOSQUITO SEASON WITH INCREASED INSECT MONITORING AND TESTING

STATE'S 21 COUNTY MOSQUITO CONTROL AGENCIES STEP UP PROGRAMS TO EDUCATE PUBLIC, COMBAT MOSQUITO-BORNE ILLNESSES

(17/P59) TRENTON – – The Department of Environmental Protection is working closely with New Jersey's county mosquito control agencies to step up public education efforts to reduce mosquito-breeding habitats and combat illnesses such as West Nile Virus, Eastern Equine Encephalitis, and the non-native Zika virus, Commissioner Bob Martin announced today.

With a wet spring under way as well as the arrival of warmer weather, DEP is reminding the public that common-sense actions such as eliminating standing water, or removing containers where water can collect, can reduce the risk of exposure to mosquito bites and illnesses.

"We continue to take our role of protecting the public seriously and the actions taken by our state mosquito experts in coordination with their county and local colleagues will help give us an advantage in protecting the population from all species of disease-carrying mosquitos," Commissioner Martin said.

"It is important to note that while the Zika virus has received a great deal of attention in the last 20 months, the Christie Administration's response to the other mosquito-borne illnesses that naturally occur here are critical to both protecting public health and the quality of life throughout New Jersey."

The 21 county mosquito control agencies use a variety of methods to combat mosquitos, including public awareness campaigns, larval habitat source reduction programs, use of natural predators, and judicious application of approved insecticides by ground and aerial means to manage mosquito populations and reduce the threat of disease transmission.

"We are working closely with all our local mosquito control programs to be on top of the situation this spring," Office of Mosquito Control Coordination Administrator Scott Crans said.

"All our programs are building on last season's capacity-building efforts that significantly improved Zika virus surveillance and control capabilities."

As part of mosquito-control efforts this year, DEP will take the following actions:

- Raise, distribute and stock in appropriate sites fish that eat mosquito larvae.
- Use mosquito traps purchased and provided to the counties last year to collect exotic, invasive container-inhabiting mosquitos found in backyard settings. The information will be shared with state and federal partners to track the distribution of Zika virus vectors in the United States.
- Expand the State Mosquito Control Commission's Eastern Equine Encephalitis surveillance program to monitor for this deadly and debilitating disease in areas where activity has previously not been monitored closely.
- Increase access to the state-supported arbovirus testing services that are in place.
- Educate the public on how to reduce exposure to mosquito bites, and the risks associated with mosquito-borne illnesses.
- Perform insecticide resistance monitoring on Asian tiger mosquito populations found breeding across the state.

These efforts build on top of a 2016 statewide investment that distributed $500,000 in grants to county mosquito control agencies to supplement budgets for increased mosquito control projects, monitoring and identification efforts, as well as supplies and additional staffing. Additionally, the state purchased four distribution tanks to assist in the transport of mosquito-eating fish throughout the state and five temporary holding tanks to assist counties with their distribution of the mosquito-eating fish.

The federal Centers for Disease Control and Prevention is investigating the extent to which the *Aedes albopictus* – also known as the Asian tiger mosquito, which is found in New Jersey – can spread Zika. In April, the Pan American Health Organization and World Health Organization reported that Mexico had identified Asian tiger mosquitos carrying Zika.

Aedes aegypti is the primary mosquito most known for carrying and spreading the Zika virus. It is normally found in tropical climates and is unable to survive New Jersey's cold winter conditions.

Zika is a viral infection that is usually spread by the bite of an infected *Aedes* mosquito, which can also spread dengue and chikungunya. Outbreaks typically occur in tropical Africa and Southeast Asia. In May 2015, Brazil reported the first outbreak of Zika in the Americas. This activity expanded dramatically during 2016 with more than 60 countries where Zika is present. Local transmission of Zika also occurred in the continental United States for the first time in 2016, in South Florida and South Texas.

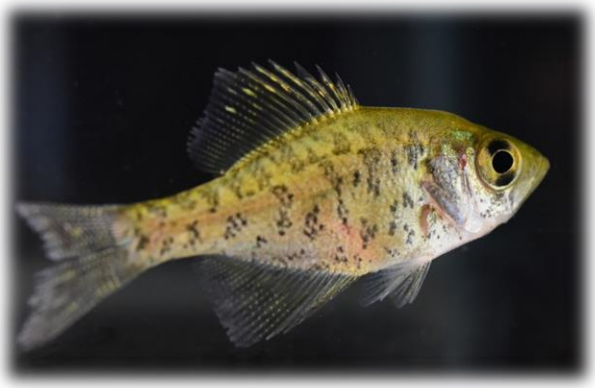
About one in five people develop symptoms for Zika and infection is usually mild. The most common symptoms are fever, rash, joint pain or red eyes. Pregnant women are especially vulnerable if bitten by an infected *Aedes* mosquito because the Zika virus can cause birth defects.

The eggs of the Yellow Fever mosquito, *Aedes aegypti*, can be transported long distances if they are deposited in water-holding containers. These eggs can withstand long periods of drying. If introduced into New Jersey at the right time of the year and sufficient rainfall occurs, the mosquito can breed locally until winter temperatures kill off the population. The last time a population of the Yellow Fever mosquito was found breeding in New Jersey occurred in 1991.

"As mosquito season continues in New Jersey and families travel this summer, residents should apply EPA-registered insect repellent, use air conditioning and wear long sleeves and pants when possible," said New Jersey Health Commissioner Cathleen D. Bennett. "Travelers returning from areas with mosquito-borne disease, such as Zika, should especially protect against mosquito bites for three weeks after travel to avoid spreading the disease to local mosquito populations."

DEP also is using biocontrol methods to combat mosquitos, by producing larvae-eating fish at the Charles O. Hayford State Fish Hatchery in Hackettstown, Warren County. To date, the hatchery has stocked 5.3 million mosquitofish since the program's inception in 1991.

Counties stock the fish in places of the greatest attraction to species of mosquitoes that are native to New Jersey, are a nuisance, or have the potential to spread disease. This summer, building on last year's efforts in response to concerns about Zika and mosquito-transmitted viruses, the hatchery is acquiring, raising and distributing enough fish to meet local program's needs. To date, 10 counties have worked with the state hatchery to replenish their supply of these fish.



"The Hayford Hatchery's biocontrol fish program has been a critical component of our mosquito eradication efforts for years, and its importance only grows in protecting public health," said Acting Division of Fish and Wildlife Director Larry Herrighty. "These fish eat mosquito larvae, which in turn prevents the young from growing into adult mosquitos, biting, and producing more mosquitos."

Five species of mosquito-eating fish are bred at Hackettstown for biocontrol of mosquitos: the fathead minnow (*Pimephales promelas),* the freshwater killifish *(Fundulus diaphanus),* the pumpkinseed sunfish *(Lepomis gibbosus),* the bluegill sunfish *(Lepomis macrochirus)* and the *Gambusia affinis,* also known commonly as the mosquitofish. The fish are raised at the Hayford Hatchery and distributed, at no charge, to county mosquito control agencies.

The first four fish species are native to New Jersey, but the *Gambusia* originates in Central and South America. They are placed in water bodies with no resident fish, and no natural or manmade water outlets. They are stocked only in standing water sources which cannot be drained and produce mosquitoes by the millions.

“We are continuing last year’s increased mosquitofish production to provide counties with this valuable counter measure against the real and annual threats posed by virus-carrying mosquitos in our state,” said Hackettstown Hatchery Superintendent Craig Lemon. “We will be ready to assist in getting these resources to the counties and into the areas where they are needed most, when they are needed, and at levels large enough to ensure success.”

DEP encourages residents, business owners and contractors to follow these steps to help reduce mosquito populations on their properties:

- At least once or twice a week, empty water from flower pots, pet food and water dishes, birdbaths, swimming pool covers, buckets, barrels and cans.
- Clean out clogged rain gutters. Cover rain barrels to prevent access by adult mosquitoes looking to lay eggs. Downspout elbows and corrugated extension tubes moving water away from house foundations can also hold small amounts of water that serve as breeding grounds for exotic invasive mosquitoes.
- Remove discarded tires, and other items that could collect water.
- Check for containers or trash in places that might be difficult to see, such as beneath bushes or under your home.

For more information on Zika, visit: www.nj.gov/dep/mosquito/docs/zika-fact-sheet.pdf or www.nj.gov/health/cd/documents/faq/zika_faq.pdf

For a June 2016 podcast featuring a discussion of mosquito control and the Zika virus with DEP Deputy Commissioner David Glass and Dr. Arturo Brito from the state Department of Health, visit: https://njdep.podbean.com/e/epsiode-12-zika-virus-and-mosquitoes-with-deputy-commissioners-david-glass-dep-and-dr-arturo-brito-doh/

For information on the State’s Mosquito Control Commission, visit: www.nj.gov/dep/mosquito/index.html

For more information on the DEP’s Charles O. Hayford State Fish Hatchery in Hackettstown visit: www.state.nj.us/dep/fgw/hacktown.htm

###