

West Nile Virus (WNV) Response Plan

03





Table of **Contents**

03	1. BACKGROUND
04	2. INTRODUCTION
05	3. CT MOSQUITO MANAGEMENT PROGRAM
06	4. AGENCY ROLES
08	5. DISEASE ECOLOGY
09	6. SURVEILLANCE
13	7. MOSQUITO MANAGEMENT ACTIVITIES
15	8. COMMUNICATION PLAN
16	9. RESPONSE AND RECOMMENDATIONS FOR RISK REDUCTION
18	10. PUBLIC HEALTH ACTION LEVELS
20	11. PUBLIC HEALTH EMERGENCY
21	12. IMPORTANT STATE PHONE NUMBERS AND WEBSITES



Background

West Nile Virus (WNV) belongs to a group of viruses called flaviviruses and is the leading cause of mosquito borne disease in the United States. The WNV life cycle involves replication of the virus in mosquitos and transmission to birds, which are the primary environmental reservoir, and other mammals. Humans can develop WNV disease after being bitten by an infected mosquito. Humans, horses, and other mammals are considered "dead end" hosts, which means they cannot transmit (pass on) the virus to other mosquitos, unlike birds. Human to human transmission is rare but may occur through blood transfusions, organ transplantation, and from mother to child during pregnancy, delivery, and breastfeeding.

Fortunately, most humans who develop WNV disease remain asymptomatic. <u>Symptoms of WNV disease</u> usually appear between 1 to 14 days following infection and range from self-limited flu-like illness to severe neurological symptoms. Approximately 20% of infected individuals will develop a fever or other symptoms and less than 1% develop West Nile Neuroinvasive Disease (WNND), which is a serious, sometimes fatal illness.

<u>Humans at higher risk for the development of WNV neuroinvasive disease include:</u>

- · Infants, young children, and individuals over 60 years of age
- Immunocompromised individuals
- Other possible risk factors include immunocompromising conditions, hypertension,cerebrovascular disease, chronic renal disease, alcohol abuse, and diabetes mellitus

As there are currently no WNV vaccines available for humans and treatment consists of symptomatic and supportive care, prevention measures are paramount and focus on protection from mosquito bites.



2 Introduction

The West Nile Virus (WNV) Surveillance and Response Plan was originally developed in conjunction with the Mosquito Management Program (MMP) in 2000, by an interagency state working group led by the Department of Energy and Environmental Protection (DEEP), the Connecticut Department of Public Health (DPH), the Connecticut Agricultural Experiment Station (CAES), the Connecticut Department of Agriculture (DoAg), the Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL), and the Connecticut Association of Directors of Health. This plan is used as a guide for the state's mosquito-borne disease prevention activities.





03

Connecticut Mosquito Management Program (MMP)

In 1997, Public Act 97-289, "An Act Concerning Mosquito Control and Aerial Application of Pesticides," (CT Gen Stat § 22a-45b) created the MMP to monitor mosquito breeding populations for the prevalence of infectious agents that can cause disease in humans and to determine when measures to abate a threat are necessary. The original focus of the program was to monitor for the threat of eastern equine encephalitis (EEE) virus. The Act authorizes the measures necessary to abate any mosquito-borne threat, including prevention and remedial measures, and allows for the application of broad-spectrum chemical pesticides to address an imminent peril to the public health, safety, or welfare posed by mosquitoes, including those that carry WNV. The Mosquito Management Program is based on an integrated pest management (IPM) approach, which includes a combination of surveillance, education, source reduction, larval and adult mosquito control and personal protection measures.









Connecticut Department of Energy and Environmental Protection (DEEP)

DEEP is responsible for the systematic identification and monitoring of mosquito breeding sites, application of mosquito larvicides to select state properties, provision of technical assistance to municipalities and private property owners regarding mosquito control, procurement of licensed pesticide applicators, and collection and communication of information and data. Long term mosquito breeding site management will continue through DEEP's wetland restoration program.



Connecticut Agricultural Experiment Station (CAES)

CAES conducts statewide mosquito trapping and virus identification. Trapping is conducted in areas known or suspected to support mosquito populations, which have historically tested positive for WNV, are capable of supporting such populations, and/or are proximate to locations where WNV-related human or equine (horse) cases have occurred. CAES will communicate results to partner agencies in near-real time, inform the media of findings increasing risk of human infection, and make mosquito trapping and testing data available weekly online to the public.



Connecticut Department of Agriculture (DoAg)

DoAg conducts surveillance for WNV disease among horses, farm-raised birds, and other domestic animals. DoAg works with veterinary personnel and animal owners to identify potential cases of WNV, facilitates laboratory testing of animals, provides vaccination guidance and recommendations for equines (horses), and communicates findings to the MMP for dissemination to partners and local health departments.





Connecticut Department of Public Health (DPH)

DPH conducts human surveillance for WNV. DPH, along with CAES and DEEP, reviews all mosquito, human, and animal surveillance data and evaluates the epidemiological significance of these data. Based on the potential human health risk, DPH provides recommendations regarding actions individuals, municipalities, and states can take to reduce this risk. DPH also works to identify potential WNV human illnesses, facilitate laboratory testing, and communicate findings to MMP partners and local health departments.



University of Connecticut, Connecticut Veterinary Medical Diagnostic Laboratory (CVMDL)

CVMDL conducts animal testing for WNV by quantitative polymerase chain reaction. If unable to perform testing at CVMDL, the lab will facilitate testing of animal specimens at the National Veterinary Services Laboratory. Additionally, next generation sequencing is available for WNV upon request.

Local Health Departments/Districts (LHDs)

Local Health Departments/Districts (LHDs) are the local health authorities and the primary points of contact between municipalities and DPH. DPH provides surveillance information to the LHDs who may conduct educational outreach via the media and/or other means, assist DPH in investigating human WNV cases, disseminate surveillance and risk assessment information to other municipal leaders, and undertake other activities, including mosquito control, based on their community's needs.



Disease Ecology

WNV has been classified immunologically within the Japanese encephalitis serocomplex in the genus Flavivirus. Historically, its distribution was limited to Africa and Asia, but the virus arrived in New York City in 1999 and subsequently expanded throughout the continental United States. In the northeastern United States, WNV is maintained in many species of perching birds (songbirds), associated with a variety of habitats (hardwood swamps, parks and recreation areas, fresh and saltwater marshes, river and stream courses), in close proximity to human development. The virus is transmitted between birds primarily by the mosquito species *Culex pipiens* and *Culex restuans*, species that almost exclusively bite birds. It is thought WNV virus is introduced into the Northeast each year by migratory birds, and its typical appearance from July to August coincides with the hatching of highly susceptible bird populations. There is also evidence to support that WNV successfully overwinters in a small percentage of hibernating female *Culex pipiens*, which can re-initiate the transmission cycle in the spring.

At the beginning of the mosquito season, a smaller proportion of birds and mosquitos carry the virus, and continuous transmission between mosquito vectors and bird reservoir hosts increases the proportion of infected mosquitos and birds throughout the season. This leads to a larger amount of circulating virus in the environment from late June to mid-September. This is called the virus amplification cycle. In the Northeast, WNV virus transmission among mosquitoes is prevalent in urban and suburban communities where artificial containers including stormwater catch basins, untreated swimming pools and ornamental ponds, and household or industrial items (used tires, buckets, bins, clogged gutters) provide ample habitats for *Cx. pipiens* to develop. In suburban and rural areas, *Cx. restuans* and *Culiseta melanura* also contribute to the transmission of WNV among bird populations.

The amount of rainfall during the summer is one of the main factors affecting *Culex* populations, with hot dry summers associated with increased populations of *Culex pipiens*. Under prolonged dry or drought conditions, mosquito populations can thrive in areas where stagnant water is present, such as catch basins or containers, leading to increased WNV amplification in birds. With high virus amplification, there may eventually be spillover into secondary, or "bridge", mosquito vectors that feed on both birds and mammals, including humans.



In the Northeast, these bridge vector species include *Culex salinarius*, *Aedes cinereus*, *Aedes vexans*, and other mosquito species that can have an increased abundance in late summer, especially following heavy rain events that produce temporary pools that persist for 7–14 days. Peak human cases of WNV are reported from late July to mid-September in most years.

Populations of *Culex* mosquitoes naturally decrease throughout the month of September as daylight and temperatures decrease, resulting in decreased transmission of WNV throughout the month. Although risk of WNV transmission to humans becomes low in in the fall, it does not become zero until mosquitoes are killed during the first hard freeze.



Connecticut conducts passive human and veterinary surveillance and active mosquito surveillance. Data from these surveillance systems, plus the extensive expertise of state and local agencies, are combined to assess risk of human disease.

Mosquito Surveillance

Statewide mosquito trapping is conducted from the first week of June to the end of October at 108 collection sites in 88 municipalities. This includes the 16 new trapping locations that were added in 2020 to increase trap coverage in high-risk areas in eastern Connecticut (Figure 1). Other mosquito trap sites are concentrated in more urban and suburbanparts of the State where WNV is more prevalent. These sites include municipal parks, greenways, golf courses, undeveloped wood lots, sewage treatment plants, dumping stations, and temporary wetlands associated with waterways. One-third of the sites are located in southern Fairfield and New Haven counties where the highest levels of WNV activity in mosquitoes and humans have been detected (Figures 2, 3). Culex pipiens collections are typically higher in urban and suburban communities in densely populated regions in Fairfield, Hartford, and New Haven counties. Trapping locations to monitor EEE virus were established in more sparsely populated rural settings that included permanent freshwater swamps (red maple/white cedar) and bogs, coastal salt marshes, horse stables, and swamp-forest border environs.



Mosquito trapping occurs four days per week (Monday–Thursday). Traps are set overnight at each site every 10 days on a regular rotation and trapping frequency is increased to twice a week after detection of EEE or WNV at that site.

Two trap types are used at all trapping stations.

- 1. A CO2-baited CDC Light Trap, designed to trap host-seeking adult female mosquitoes (all species); and
- 2. A Gravid Mosquito Trap, designed to trap previously blood-fed adult female mosquitoes (principally *Culex* species).

Mosquitoes are transported to the laboratory the following morning where they are identified on the date of collection. Mosquitoes are grouped into a "pool" according to species, collecting site, trap type, and date, and processed for virus testing the following day. A maximum of 50 female mosquitoes are included in each pool.

All of the virus isolation work is conducted in a certified Bio-Safety Level 3 laboratory at the CAES. Aliquots of each mosquito pool are inoculated into Vero cell cultures for detection of WNV, EEE, Jamestown Canyon (JC), Cache Valley (CV), Trivittatus (TVT), Highlands J (HJ), LaCrosse (LAC), and Potosi (POT) viruses. Cell cultures are incubated at 37°C in 5% CO2 for up to 7 days and examined daily for viral growth. Isolated viruses are identified by Real Time (TaqMan) reverse transcriptase polymerase chain reaction (RT-PCR) or standard RT-PCR using virus- specific primers.

Complete processing of mosquitoes (from collection to virus isolation and identification) is completed within 10 days. Test results include, but are not limited to, trap sites, number and species of mosquitoes, collection date and arbovirus testing results. CAES reports results to DPH and CDC via <u>ArboNet</u>, the national arboviral surveillance system managed by CDC. <u>CAES test results</u> are posted online weekly.



Figure 1. Distribution of Mosquito Trapping Stations. White dots indicate long-term sites established from 1997–2000 with annual sampling until 2019. Green dots represent 16 locations added in 2020 in eastern CT, for enhanced surveillance related to EEE activity in 2019.

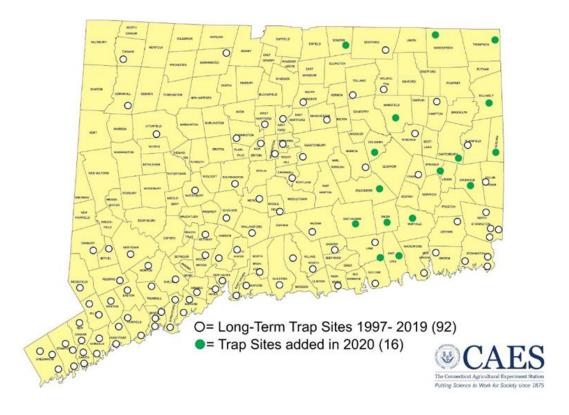
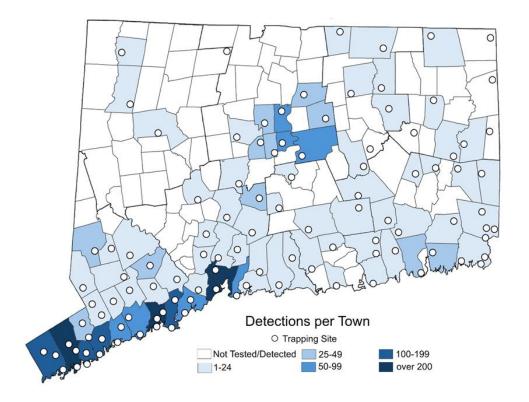


Figure 2. West Nile Virus Detections from Mosquitoes, Connecticut, 1999–2024





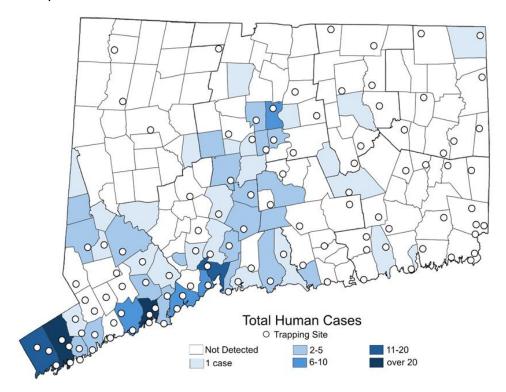


Figure 3. Reported West Nile Virus Human Cases, Connecticut, 2000–2024

Domestic Animal Surveillance

DoAg investigates potential cases involving domestic animals, poultry and pet birds with suspicious neurologic disease reported to the State Veterinarian and/or presented for necropsy and testing to the CVMDL. Horses are emphasized since they are most frequently affected. Horses presenting with the following clinical signs during the mosquito season may be infected: apprehension, head shaking, inability to stand, depression, flaccid paralysis of lower lip, single or multiple limb paralysis, listlessness, loss of coordination, weakness of hind limbs, or acute death. WNV cannot be distinguished clinically from EEE in horses. Surveillance (approximately 50,000 horses in the state) provides another means to detect the presence of WNV and assess the risk of WNV infection to the human population, especially in more rural areas where mosquito trapping is not conducted. A WNV vaccine for horses is available.



Human Surveillance

Surveillance for WNV disease in humans is coordinated by DPH. WNV has been a reportable disease in Connecticut since 2000. Testing of serum and cerebrospinal fluid specimens for WNV antibodies and antibodies to other arboviruses (e.g., EEE and St. Louis Encephalitis (SLE) virus) is currently available at the DPH State Public Health Laboratory (SPHL). IgM antibody to SLE is considered presumptively positive and will be forwarded to the Centers for Disease Control and Prevention (CDC) or a regional laboratory for Plaque Reduction Neutralization Test (PRNT) confirmatory testing. Samples from hospitalized patients demonstrating acute neurologic symptoms are prioritized for testing. Testing is available year-round but is of particular importance for Connecticut residents who have not traveled during the June through October timeframe indicating locally acquired infection.

Laboratory reporting of positive test results from laboratories to DPH and the local health department is required by CT Gen Stat § 19a-2a and Conn. Agencies Regs. § 19a-36-A2, the List of Reportable Diseases, Emergency Illnesses and Health Conditions and the List of Reportable Laboratory Findings.

DPH's Environmental and Occupational Health Assessment Program monitors potential health impacts of pesticide exposure among workers. Physicians are encouraged to report work-related pesticide exposures to the Connecticut Department of Labor and DPH within 48 hours. These reports are entered into the Occupational Illness and Injury Surveillance System as they fall under the National Institute for Occupational Safety and Health's (NIOSH) classification of acute pesticide-related illnesses.

DPH also addresses pesticide-related health concerns from the public. The Toxicology Unit offers expertise over the phone and develops fact sheets to provide key information about pesticide exposure. In cases where unusual patterns or clusters are identified, DPH notifies DEEP's Pesticide Management Program.

Wild Bird Surveillance

WNV has been detected in over 300 species of dead birds. During the first several years of WNV surveillance in Connecticut, reports of dead birds, especially crows and jays, served as sentinel events for the presence of WNV. However, since 2006, mosquito surveillance has been more reliable than avian surveillance in indicating the level of local WNV activity. Therefore, available resources are currently devoted to maintaining the statewide mosquito trapping and testing program conducted June through October.





Mosquito Management Activities

Pre-emptive mosquito control is the most effective way to prevent transmission of WNV and other mosquito-borne viruses. The most effective and economical way to control mosquitoes is by larval source reduction through local abatement programs that monitor mosquito populations and initiate control before disease transmission occurs. In addition, larval control allows for the use of target-specific agents in definable areas, which is an environmental benefit over other methods. Depending on the time of year, these programs also can be used in an emergency response for mosquito control if disease is detected in humans or domestic animals.

To prevent standing water, federal, state and local governments need to maintain existing drainage structures on their properties such as sumps, recharge basins, sewage or wastewater treatment facilities, street catch basins, upland streams, ponds, and pools. DEEP Wetlands Habitat and Mosquito Management Program directly conducts mosquito control activities on state-owned property in coastal marsh areas and on contiguous land. DEEP also works with municipal officials statewide to identify mosquito-breeding habitat (e.g., tidal and inland wetlands, catch basins) and develop appropriate control strategies based on IPM strategies to eliminate larval mosquito breeding sites.

Municipalities are responsible for coordination of mosquito control activities on municipal and private lands in their jurisdictions, working with state agencies on behalf of residents, and enforcement of abatement requirements of mosquito breeding areas, if necessary. Mosquito breeding on residential and commercial properties can be reduced significantly by reducing the amount of standing water available for mosquito breeding. Regulations relevant to mosquito control and the powers of local directors of health are addressed in the <u>Public Health Code</u>.



To further reduce the risk of mosquito-borne virus infections, individuals are urged to take <u>personal protective measures to avoid mosquito bites</u> when outdoors and mosquitoes are biting through the use of repellents and proper clothing (e.g., light-colored, loose-fitting pants and shirts, head nets). Homeowners are advised to ensure that window and door screens are in good repair.

Insecticides

Larvicides can be used to control mosquitoes in the aquatic stage before they become biting adults. Larvicides are generally the most effective method to control mosquitoes and have less impact on non-target species and the environment. Ideally, use of larvicides is started early in the mosquito season and repeated as necessary. The use of larvicides may require a permit from DEEP, and the product must be registered for use in Connecticut. Depending upon the type of product used, or for commercial applications, the applicator must be licensed by DEEP Pesticide Division to apply mosquito pesticides.

Adulticides can be used to kill adult mosquitoes when a quick reduction of mosquitoes is needed. Currently available adulticides may be applied by hand-held, backpack or truck-mounted ultra low volume (ULV) foggers, or by fixed-wing or rotary aircraft. These methods have advantages and disadvantages that will influence which is most appropriate for a given situation, and all must be applied according to regulations and label directions. Weather and logistical conditions are important factors influencing the ability to effectively control adult mosquito populations and include the following:

- Ground-level adulticiding is done when mosquitoes are most active (between dusk and dawn).
- Aerial application is done between dusk and dawn, under favorable weather conditions and at the discretion of DEEP and its aerial contractor.
- Wind speed is less than 10-12 mph.
- Wind direction and temperature inversions favor drift onto the target area.
- Air temperature is above 50° F.
- Adulticide application is not made during rainfall.
- When making a ground-level application, the distribution and network of roads and access areas in the treatment zone are considered, as this affects the level of coverage.



Communication Plan

Identification of WNV in mosquitoes from a town for the first time during a season is reported by DPH to the LHD by telephone within 24 hours of identification. Laboratory confirmation of a human WNV case is reported within 24 hours to the LHD for the town where the case resides. If CVMDL performs testing, they will inform partner agencies (DPH and/or DEEP and DoAg) of laboratory confirmation of WNV infection in a domestic, wild, or captive/zoo animal (including non-flighted birds) within 24 hours. If DoAg or DEEP receives a positive result from a veterinary laboratory other than CVMDL, the recipient of those results will inform DPH and the MMP. DPH will inform the LHD for the town in which a positive captive animal resides within 24 hours of notification. Local health directors are encouraged to notify municipal leaders and elected officials of human, veterinary, or mosquito findings. After all appropriate state and local agencies have been notified, positive surveillance findings will be made available to the media and the public.

Weekly summaries of human and animal cases, and mosquito trapping and testing results will be posted at https://portal.ct.gov/mosquito. This website, which also includes links to educational materials related to mosquito-borne diseases, is updated throughout the arbovirus season. To protect patient confidentiality, only limited information is released to the public on any individual person. DPH generally releases only age category, gender, current patient status, county or county equivalent of residence and likely exposure location, if known. Summaries include a town-level map with locations of positive mosquitoes and animal cases indicated.

Participating state agencies will issue public health alerts through the media when surveillance information indicates an increased risk of human disease or if a significant surveillance event occurs (for example, the first arbovirus activity of the season). In general, alerts include current surveillance information and emphasize prevention strategies. Local health departments or districts, or municipalities, may issue public health alerts to share risk and prevention information with community members.

During seasons of elevated WNV transmission risk, multi-agency conference calls will be held weekly or more frequently as needed. Affected LHDs and municipal officials as well as adjacent LHDs and municipalities will be invited to participate in these calls. Risk assessment changes will be communicated to the LHD and any immediately adjacent community.





Response and Recommendations for Risk Reduction

The following recommendations are general guidelines only. Specific situations and local risk levels within communities should be considered individually. Assessment of risk of human disease is complex; no single finding can provide a precise measure of individual risk, and no single prevention measure can eliminate risk of infection. **Personal protective measures must form the basis of all risk reduction activities.**

The need to use these personal protective measures must continue even if other mosquito control activities, including aerial spraying, are conducted. Communication with the public and public awareness of what can be done to reduce individual risk of infection is of utmost importance.

Typically, risk for any individual is expected to be relatively low, and the routine precautions taken by individuals may be sufficient to reduce opportunities for infection.

To reduce the risk of being bitten by mosquitoes, residents should:

- Minimize time spent outdoors between dusk and dawn when mosquitoes are most active.
- When it is necessary to be outdoors, use mosquito repellents containing an Environmental Protection Agency (EPA)-registered active ingredient, including DEET, Picaridin, IR3535, oil of lemon eucalyptus, para-menthane-diol (PMD), or 2-undecanone. EPA registration of skin-applied repellent products indicates that they have been evaluated and approved for human safety and effectiveness when applied according to instructions on the label.
- Wear shoes, socks, long pants, and a long-sleeved shirt when outdoors for long periods of time, or when mosquitoes are more active. Clothing should be light-colored and loose-fitting and made of tightly woven materials that keep mosquitoes away from the skin.
- Wear clothing and gear treated with permethrin. Permethrin is an insecticide that kills or repels mosquitoes and ticks.
- Be sure door and window screens are tight-fitting and in good repair.
- When sleeping outdoors, use tents or mosquito netting in an unscreened structure. Treat camping gear with permethrin when possible.
- Cover strollers and baby carriers with mosquito nets when outside.



In addition to the above measures, during periods of elevated risk, all people spending time outdoors should be cautioned to avoid wooded areas where mosquitoes are prevalent. Mosquitoes in densely wooded or shaded areas will often bite when disturbed during daytime hours.

Depending on level of risk as outlined below, community level precautions may include:

- DEEP may prepare and post signs containing recommended personal protective measuresin state owned land and recreation areas.
- LHDs may consider postingsigns containing recommended personal protective measuresin town owned properties, land trusts, and other areas.
- Consider restricting, rescheduling, or cancelling outdoor group activities between dusk and dawn within focal areas of moderate to high transmission risk (intensive virus activity).
- Consider ground level ultra-low volume (ULV) application of mosquito adulticide.

Although mosquitoes are unlikely to be active when temperatures fall below 50° Fahrenheit (F) in the evening, EEE infection risk continues until the first hard freeze, which kills most remaining adult mosquitoes and virtually eliminates risk of transmission. A hard freeze is defined as two consecutive hours of temperatures below 28°F or three hours below 32°F. This will occur at different times for different communities. However, before the first freeze, mosquito activity may decline to a degree that the risk of ongoing transmission is low. Communities should consider this information when making decisions about planned outdoor group activities late in the season.

In situations where there is an identified elevated risk of human disease, state officials may consider the use of focal (backpack or truck mounted), or aerial pesticide spraying to reduce the number of potentially infected adult mosquitoes. Aerial spraying is conducted by aircraft. Licensed mosquito control professionals apply EPA approved pesticides in an ULV spray, which dispenses fine aerosol droplets that kill adult mosquitoes on contact. Spraying occurs during evenings into overnight if weather conditions are favorable. Many areas of high concern for transmission in hardwood swamp areas are not fully accessible by truck or backpack mounted ground sprayers. Any decision to use focal (backpack or truck mounted) or large-scale aerial application of pesticide will be made only after evaluation of the multiple factors which contribute to risk of transmission of EEE to people and after discussion with officials from the potentially affected communities.

Aerial, truck, or backpack mounted pesticide applications can be used in conjunction with all other available risk mitigation tools. However, these measures do not eliminate all disease risk, and it is critical that residents continue to protect themselves from mosquito bites.



Public Health Action Levels

If WNV is detected in Connecticut, the MMP evaluates the human health risk. Following evaluation of the data obtained from public health surveillance activities and depending on the risk, either the DPH Commissioner or the DEEP Commissioner, after consulting with the DPH Commissioner, will recommend implementation of control measures.

Recommendations reflect a graded response that is in proportion to the threat of WNV infections in people. Numerous factors contribute to the level of increased risk making each situation unique. The goal is to prevent a sustained outbreak of human infections. Sporadic cases are likely to occur each season that WNV is circulating in mosquitoes since the principal mosquito species responsible for transmission is found in high numbers in residential areas.

Factors

The following factors are important considerations in formulating an appropriate response to the identification of WNV:

- Mosquito populations and relative species abundance.
- Proportion of mosquitoes infected and number of positive pools previously identified.
- Local surveillance data in previous season.
- · Time of the season.
- · Weather conditions.
- Geographic extent.
- Nature and proximity of potential mosquito habitat.
- Proximity and nature of human residential areas and/or activities.
- Number and location of infected horses.
- Number and residence of human patients with WNV related illness.
- Community concern and acceptance of mosquito control activities.
- Extent of previous larval mosquito control activities.
- Likely effectiveness of local application of larval or adult insecticides.



Activities

The following activities may be part of the response:

- Evaluation of the findings by the MMP, in consultation with local directors of health and other municipal officials.
- · Advice to community groups regarding outdoor activities.
- Dissemination of information on prevention and control methods locally or statewide.
- Emphasize the importance of Culex mosquito breeding site reduction on residential properties.
- Urge adoption of personal protective measures among high risk residents in affected areas.
- Expansion of mosquito trapping and human surveillance locally and beyond town lines.
- Identification of locations in the affected area where larviciding would be effective.
- Disseminate information on adulticide applications.
- Assess the need, practicality, frequency, extent and methods necessary to control mosquitoes.
- Application of adulticide by the state with approval and at the request of municipal officials for assistance in the towns affected.
- Application of adulticide by the municipality at their discretion.



Public Health Emergency

If indicated, the Governor may proclaim a Public Health Emergency in consultation with the DPH Commissioner pursuant to CT Gen Stat § 19a-131a. After WNV is confirmed in a town or contiguous towns in Connecticut, the following additional actions would be taken should a Public Health Emergency be proclaimed:

- The application of adulticides by the state under these circumstances does not require the approval of the municipal officials in the towns affected.
- After consultation with the Commissioner of DPH, the Commissioner of DEEP has the responsibility and authority to act unilaterally if the application of chemical pesticides from the air or ground is necessary to control mosquito vectors of human disease pursuant to CT Gen Stat § 22a-54(e). Concurrent with this determination, officials from the Mosquito Management Program will meet with local officials in the affected communities to inform them of the situation and to discuss the logistics of spraying.



12

Important State Phone Numbers and Websites

Mosquito Management Program Website

https://portal.ct.gov/mosquito

Department of Energy and Environmental Protection

https://portal.ct.gov/deep

Communications Division

(860) 424-4100

• State mosquito control policy and programs, media inquiries.

Main Wildlife Division Number

(860) 424-3011

Technical questions regarding mosquitoes, mosquito control measures.

Pesticide Management Program

(860) 424-3369

Technical questions regarding safe pesticide use and chemical make-up. Also, persons
who wish to be specifically notified prior to a pesticide application or those who are
chemically sensitive to pesticides should register here: Pesticide Pre-Notification
 Registry.

Department of Public Health

https://portal.ct.gov/dph

Epidemiology and Emerging Infections Program

(860) 509-7994

• WNV infections in people, laboratory testing of human specimens.

Environmental and Occupational Assessment Program

(860) 509-7740

Technical assistance on potential pesticide toxicity.

Virology Laboratory

(860) 920-6662

 Technical questions regarding testing of human specimens from physicians, hospitals, laboratories.

Connecticut Agricultural Experiment Station

https://portal.ct.gov/caes

Main Number (203) 974-8510

 Technical questions from local health departments regarding mosquito trapping and testing.



Connecticut Veterinary Medical Diagnostic Laboratory

https://cvmdl.uconn.edu/cvmdl

Admissions Office

(860) 486-3738

Diagnostic testing and necropsy of animals.

Department of Agriculture

https://portal.ct.gov/doag

Office of the State Veterinarian

(860) 713-2505

• WNV infections in domestic animals, including livestock, poultry, and pets.