



# New Hanover County Board of Health Mosquito Control Policy

New Hanover County Health Department (NHCHD) provides mosquito control services to protect and promote the public's health as authorized by North Carolina General Statutes Chapter 130A-39. NHCHD uses Environmental Protection Agency (EPA) approved pesticides to achieve effective control of mosquitoes with the least impact on human health and the environment. NHCHD's preferred mosquito control strategy is the reduction of mosquito larva numbers through public education, source reduction, and the use of mosquito larvicides. However, the attractions of a coastal environment include characteristics and features that support the rapid development and succession of mosquito populations during much of the year. Therefore, methods to control adult mosquitoes are also required. The recognized practice and standard for adult mosquito control, by ultra-low volume (ULV) application of pesticide, is conducted using truck-mounted equipment in residential areas for nuisance abatement and to protect the public's health from mosquito-borne disease.

## **I. Adult Mosquito Nuisance Control**

Moderate to large numbers of mosquitoes can adversely impact the quality of life for citizens and visitors to New Hanover County. In recognition and response, the New Hanover County Board of Health establishes this policy addressing implementation of measures to control adult mosquito populations in residential areas of New Hanover County.

The adult mosquito population must meet or exceed a minimum density to justify the application of pesticide. NHCHD uses two measurements to assess density of the adult mosquito population: (1) light traps, and (2) landing rate counts.

The minimum light trap collection per night to warrant spraying of pesticide with ULV ground application equipment is 100 female mosquitoes of a species known to feed on humans. The minimum landing rate threshold to initiate ULV ground spraying is five (5) to ten (10) mosquitoes within a minute based on the species and the habitat as determined by NHCHD staff.

Service requests alone, i.e. complaints, do not provide sufficient justification for adult mosquito nuisance control. However, service requests will result in increased mosquito surveillance by NHCHD staff. NHCHD staff will respond to a service request within three (3) business days after the request is received. Upon making a site visit, NHCHD staff will assess the outdoor environment, provide education on mosquitoes and make recommendations on the best control methods including source reduction, and larvicide and/or adulticide applications.

## **II. Exclusions of Property from Adult Mosquito Nuisance Control Spraying**

An individual may have his/her owned or leased property excluded from mosquito control nuisance treatment. This exclusion may include a buffer of approximately 300 feet around the property. Each individual requesting this exclusion must submit the request in writing to NHCHD and provide a copy to the appropriate functional community association. The request must include the address of the property to be excluded from spraying, the reason for the exclusion, and must be signed by the owner(s) or lessee(s). Annual updates are required of requests for exclusion from spraying.

If the number of individual objectors and/or location of the excluded property preclude an effective mosquito control adulticide service for a community, the service may be suspended. Adult mosquito control service may be reinstated to the community upon written request to NHCHD from the local authority (city, town or functional community association) if continuation of the mosquito control service is determined to be in the best interest of the public. All disputes regarding this issue will be settled by the local authority (city, town, or functional community association). NHCHD will notify individuals who have filed requests for exclusion of decisions by the local authority and/or requests to reinstate service. Upon reinstatement of mosquito control adulticide service, NHCHD may attempt to exclude the application of pesticide immediately adjacent to the property of individual(s) requesting the exclusion, but will not commit to providing an approximated 300 feet buffer around property as a factor in settling the dispute.

### III. Adult Mosquito Control to Protect Public Health from Mosquito-Borne Disease

West Nile encephalitis and eastern equine encephalitis are the primary mosquito-borne diseases that can adversely impact human health in New Hanover County. If any mosquito-borne disease becomes a real or imminent public health threat, adult mosquito control will be a priority issue. Under such conditions, spray exclusion zones will not be recognized and the action thresholds may be lowered. NHCHD will exercise all means possible to reduce the adult mosquito population to the lowest level possible within any delineated area where potential disease transmission to humans is a threat.

### IV. Public Avoidance and Impedance of Adult Mosquito Control Activities

Although an individual's chances of experiencing any negative health effects from mosquito control spraying are quite low, it is still wise to reduce exposures to pesticides during spraying activities. Announcements of planned mosquito control spraying activities/schedules will be posted on the NHCHD website and made available to the local media. The best choice for reducing pesticide exposure is to remain indoors while mosquito control applications are underway in the immediate vicinity. NEVER allow children to play near or behind truck-mounted applicators when mosquito control pesticide is being dispersed. Sound from the spray unit is indicative of its operation. Do not rely on visual evidence of emission from the spray unit to verify active operation. Individuals should not impede NHCHD from applying mosquito control pesticide by obstructing the path or following within 300 feet of the spray truck.

### V. Exclusion Procedure

NHCBH procedure addressing objection to adult mosquito nuisance control by truck-mounted ULV application of pesticide is as follows:

- An individual may have his/her owned or leased real property and a surrounding buffer up to 300 feet on all sides of the property excluded from ground based ULV adult mosquito nuisance control treatment with the concurrence and signatures of adjacent occupants of two separate properties. A property separated by a vehicular street or road from the subject parcel requesting exclusion shall constitute an adjacent property for purposes of consent.
- Each individual requesting exclusion must file a written submittal to NHCHD by completing an "*Adult Mosquito Nuisance Control Exclusion Form*", and must provide copies to the appropriate functional community association. All information denoted on the form must be supplied in order for the request to be processed by NHCHD. The completed form must provide a complete description of the property to be excluded and must be signed by the owner(s) or lessee(s).
- If the number of individual objectors, and/or the location of excluded properties preclude an effective mosquito control adulticide service for a community, the service in that community will be suspended. Adult mosquito control service may be reinstated to the community upon the written request of the local authority (city, town or functional community association), and further evaluation with favorable recommendation by NHCHD legal counsel.
- A city, town or functional community homeowner association may request NHCHD to rescind or modify a spray exclusion zone if they demonstrate the exemption adversely impacts other residents who desire adult mosquito nuisance control service. Appeals to rescind or modify spray exclusion requests must be made in writing and submitted for evaluation to NHCHD. The party (parties) having originally requested the exclusion shall be given notice of the request to rescind/modify.
- NHCHD may periodically verify the continued occupancy/ownership by objectors of properties excluded from ULV ground spraying.
- **In the event of mosquito-borne disease or conditions that threaten the public's health, the suspension of mosquito adulticide service in an area due to objectors will be discontinued and the full range of available mosquito control resources will be expeditiously launched.**
- Related communication or correspondence should be directed to:  
New Hanover County Health Department  
Environmental Health Services  
230 Government Center Drive Suite 140  
Wilmington, NC 28403  
Phone #: 910-798-6667  
Office hours: Monday – Friday 7:30 a.m. to 5:00 p.m