

VECTOR AND NUISANCE CONTROL – ADMINISTRATIVE GUIDELINES

SUBJECT: FIELD POLICIES AND PROCEDURES      NUMBER: 1115(1)

TITLE: APPLICATION OF ADULTICIDES ABSENCE OF WEST NILE VIRUS

EFFECTIVE: 01/08/02                      LAST REVIEWED DATE: 06/28/04

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**POLICY STATEMENT**

Per Vector and Nuisance Control's (MCVNC) strategic plan, the Department intends to convene an Integrated Pest Management (IPM) Advisory Group in October 2004.

- Balanced Membership
- Group size 7-9
- Advise on a wide-range of IPM issues to be prioritized by the Advisory Group and accomplished within the 5 year strategic plan period. Examples of issues to prioritize include:
  - Adulticide use: ongoing/annual re-evaluation
  - Larvicide use
  - Other controls (e.g. *Gambusia*)
  - Public Education
  - Environmental impact evaluation

Mosquito Control in the Absence of WNV (for example):

- Local mosquito species that are not vectors of human disease
- Exotic mosquito species with unknown vector competence
- Local mosquito species with suspected but unknown vector competence for WNV
- Local mosquito species with vector competence for endemic mosquito-borne disease (i.e. WEE, SLE, and malaria)

**PROCEDURE**

Prior to any program changes made as a result of the IPM Advisory Group, mosquito control in the absence of WNV on private and public lands will operate as follows:

*(NOTE: All MCVNC private or public land applications include efficacy evaluation)*

- Complaint-driven system for Private Land (~60% of historical adulticide use, primarily barrier application), in which MCVNC will:
  - respond to mosquito complaints
  - offer advice to mitigate mosquito problems
  - recommend effective non-adulticide alternatives
  - present adulticide use as an option when other effective control measures are not available; MCVNC will *not* recommend adulticides.
  - apply adulticides at the landowner's request *only* when MCVNC judges application to be appropriate and likely to be effective (e.g. when adult traps exceed 100 or more mosquitoes in an 8 hour period) (Note: When there is WNv in the community, actions will be guided by WNv Policy)
  - *not* use aerial application of adulticides
  - maintain current program scope
  
- Complaint-driven system for Public Lands
  - MCVNC will respond to complaints and offer routine control and surveillance as specified by any existing contracts
  - MCVNC will offer comprehensive recommendations to mitigate mosquitoes (as for private lands)
  - MCVNC will present adulticide use as an option when other effective control measures are not available; MCVNC will *not* recommend adulticides.
  - Any application of adulticide will be at the *total discretion of the land steward* when there is no WNv in the community (Note: When there is WNv in the community, actions will be guided by WNv Policy)
  - MCVNC will not use aerial application of adulticides
  
- Contracts for public lands (Note: No contracts exist or would be entered into between MCVNC and private land owners.)
  - *Note: This issue area requires further discussion/development.* All public land contracts are subject to the parameters set forth above in the complain-driven public lands section (i.e. range of control options without specific recommendations to use adulticides). Contracts do not include acreage amounts for adulticides. All work is based on the mosquito ecology and population dynamics of a given season, and again, is *subject to the total discretion of the land steward*.
  - Recommendations on contracts from the Spring 2004 WNv Task Force Small Group were:
    - No new contracts that include possible use of adulticides for nuisance control
    - No expansion of acreage that include possible use of adulticides for nuisance control in existing contracts
    - No new areas of adulticide use within lands covered by existing contracts – i.e., no “swapping” of old lands where adulticide was allowed for new lands where adulticide was not previously used

## **ADDITIONAL CONSIDERATIONS**

For application of adulticides should include, at a minimum the following;

- Best adulticide active ingredient choice and other label requirements
- Best application of adulticide including timing of application and equipment used to apply product.
- General ecology of the area such as key habitat types and the presence of natural barriers (i.e. large rivers)
- Flight or migrational range of the affected/infected hosts (birds, mammals, etc)
- Flight range of vectors known or believed to be of importance in the area
- Population density and age proportion of parous females, those females with ability to produce offspring, potential.
- Human population at risk in relationship to locality (i.e. urban vs. rural)
- Human population at risk and the perception of the relative risk of use of adulticides for control
- Human population at risk and the age demographics within the locality
- Evidence of persistent transmission activity detected by the surveillance program
- Season of the year and its relationship to the vector
- Other relative surveillance data specific to mosquito-borne disease of concern