

## Resource Document Supporting the Need for a Science-Based Community Mosquito Management Policy

Abating mosquito-borne disease is best achieved through a science-based approach that prioritizes preventative measures. These measures include surveillance, monitoring, public education on eliminating breeding sites and personal protective actions, consideration of local ecology, habitat manipulation, larviciding with biological materials, full disclosure of all pesticide use, advance notice of spraying, and opt-out opportunities. Mosquito adulticides are hazardous chemicals that should be given strong consideration as to their need and effectiveness before any use occurs. Aerially applied mosquito adulticides are excessively risky in exposures to people and nontarget organisms, are relatively ineffective in relation to those risks, and should be completely prohibited. The following resources can be used to support the need for a policy that achieves the above purpose statement.

### Hazards and Ineffectiveness of Mosquito Adulticides

Fact sheets and resources – Beyond Pesticides

- [Fact sheet on synthetic pyrethroids](#)
- [Fact sheet on naled](#)
- [Fact sheet on malathion](#)
- [Mosquito control and pollinator health](#)

Scientific Studies

- Reddy et al. 2006. Efficacy of Resmethrin Aerosols Applied from the Road for Suppressing Culex Vectors of West Nile Virus. Vector-Borne and Zoonotic Diseases. Volume 6, #2. <https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.491.2202&rep=rep1&type=pdf>.
- Pimentel, David. 2004. West Nile Virus and Mosquito Control. Encyclopedia of Pest Management. DOI: [10.1081/E-EPM-120009995](https://doi.org/10.1081/E-EPM-120009995)
- Zhong H, Latham M, Hester PG, Frommer RL, Brock C. 2003. Impact of naled on honey bee Apis mellifera L. survival and productivity: aerial ULV application using a flat-fan nozzle system. Arch Environ Contam Toxicol. 45(2):216-20. <https://link.springer.com/article/10.1007/s00244-002-0185-8>
- Surveillance for Acute Insecticide-Related Illness Associated with Mosquito-Control Efforts — Nine States, 1999–2002 (*Morbidity and Mortality Weekly Report*, CDC, July 11, 2003/52(27): 629–634) <http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5227a1.htm>
- 

### Importance of a Science-Based Ecological Approach

Management Strategies – Beyond Pesticides

- [Public Health Mosquito Management Strategy for Decision Makers and Communities](#)
- [The Truth About Mosquitoes, Pesticides, and West Nile Virus](#)
- [Least Toxic Mosquito Repellents](#)
- [Backyard Mosquito Management](#)

Examples From Other Communities

- [City of Boulder, Colorado West Nile Virus Mosquito Management Plan](#)
  - [Fact sheet/overview](#)
  - [Recent updates and story map](#)
- [Washington, DC Arbovirus Surveillance, Mitigation and Prevention Plan](#)