
Coachella Valley Mosquito & Vector Control District

The Coachella Valley Mosquito and Vector Control District is a special district with a mission to reduce the risk of disease transmission by mosquitoes and other vectors for Coachella Valley residents and visitors. Established in 1928, the District is governed by an 11-member Board of Trustees, and its boundaries encompass 2,400 square miles. The District's primary focus is controlling mosquitoes, Red Imported Fire Ants (RIFA), and eye gnats. Residents are provided assistance, as well as suppressing roof rats and flies through inspections and information on habitat reduction.



Integrated Vector Management

The District uses an integrated approach to control the presence of vectors in the community. Our Integrated Vector Management (IVM) program targets mosquitoes, RIFA, eye gnats, and filth flies and takes into account the interest of and impacts on society and the environment. The IVM program includes four key components: surveillance, control, quality assessments, and public outreach.

Vector and Arbovirus Surveillance

The District closely monitors mosquito and RIFA abundance through its surveillance program. Arbovirus activity in the Coachella Valley is determined through routine testing of mosquitoes and sentinel chickens for the presence of arboviruses such as West Nile Virus (WNV). Surveillance information helps guide efficient control of mosquitoes, mosquito-borne diseases and RIFA across the Coachella Valley.

Control Strategies

Physical control is a preferred approach in IVM and is achieved by altering ecological components of the environment, such as draining water, controlling vegetation, promoting appropriate irrigation techniques, and encouraging mosquito reduction practices in suburban, agricultural, and wetland

habitats. **Biological** control is the use of organisms to control a particular pest. The most common biological control organism used for larval mosquito control in the Coachella Valley is mosquitofish, or *Gambusia affinis*. When these fish are introduced into man-made mosquito breeding sources, such as neglected pools, they quickly adapt, multiply, and become highly capable of sustaining effective control. **Microbial** and **chemical** control is the prudent use of microbial and chemical compounds (insect growth regulators and insecticides) to reduce both mosquito and RIFA populations. These materials are

applied when other methods are unable to maintain numbers below an acceptable level or when emergency control measures are needed to rapidly disrupt vectorborne disease transmission.

IVM Program Assessment

District staff perform routine quality control assessments on components of the IVM program. Data collected from assessments are used to modify and enhance the effectiveness and efficiency of the program. Chemical control resistance assays are also performed annually to minimize resistance in local vector species and ensure products are effective.

Public Outreach

The District's outreach program educates and informs the public about mosquitoes, vectors, vectorborne diseases, and personal protective measures. The District raises awareness through media campaigns, community events, presentations and partnerships with local agencies. Service requests from the public are also utilized by District staff as an opportunity to educate the public about what they can do to minimize their contact with vectors around their home and community.

