



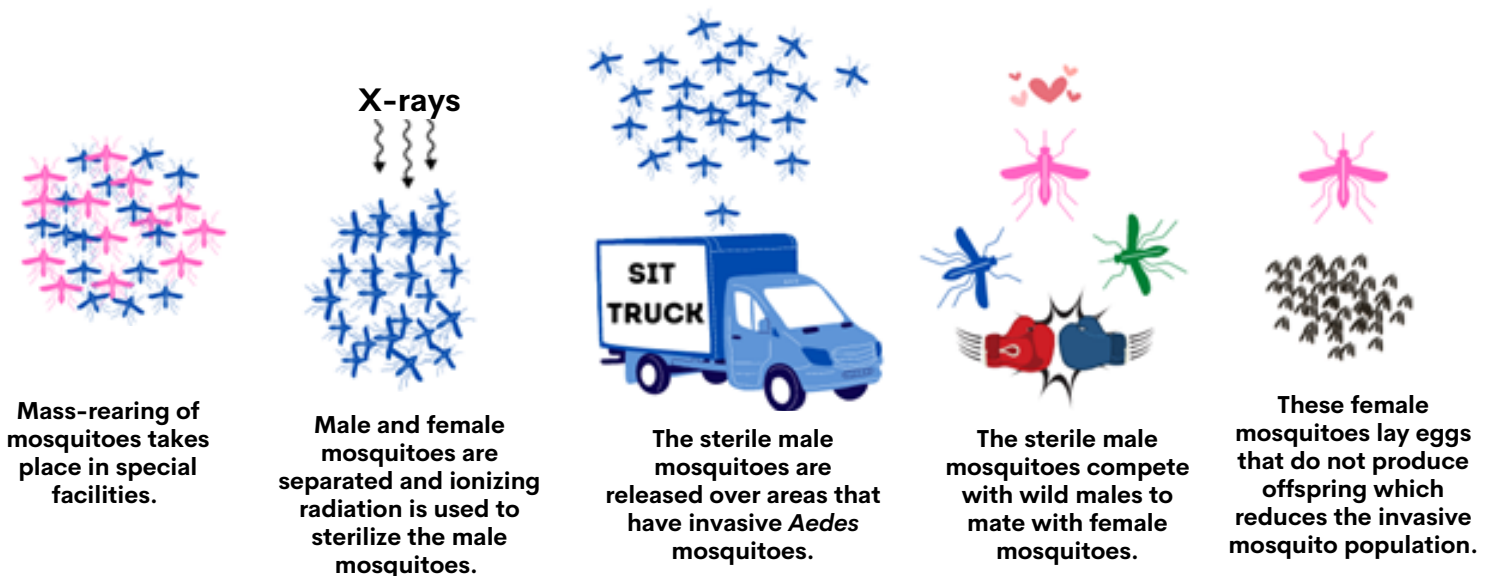
# CALIFORNIA MOSQUITO CONTROL DISTRICTS USE IRRADIATED MOSQUITOES TO PROTECT PUBLIC HEALTH

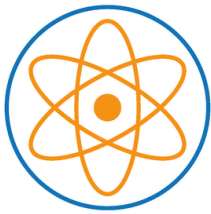
A growing number of mosquito and vector control districts in California are turning to innovative technologies, specifically irradiation, to reduce the population of *Aedes* mosquitoes in their communities. *Aedes* mosquitoes are aggressive daytime biters and can spread pathogens that cause diseases like dengue, Zika, and chikungunya in people, and animal heartworm in pets.

Irradiation is a type of Sterile Insect Technique (SIT) that targets specific mosquitoes while reducing the use of traditional insecticides and the chance of insecticide resistance in mosquitoes. Irradiation and other innovative technologies can augment traditional mosquito control methods and are part of an Integrated Vector Management program.

## HOW IRRADIATION WORKS

Irradiated mosquitoes are raised in a laboratory where the male mosquitoes are separated from the females. Male mosquitoes, which don't bite, are sterilized using the same radiation found in X-rays. The sterile male mosquitoes are released to mate with wild females resulting in eggs that do not hatch. This can reduce the overall number of disease-spreading mosquitoes over time. According to the Centers for Disease Control and Prevention, irradiated mosquitoes cannot make people or animals like fish, birds, or pets sick.





Irradiation

**Currently, four mosquito and vector control districts in Southern California are using or evaluating irradiation to complement their traditional mosquito control efforts**



### **West Valley Mosquito and Vector Control District**

- Using irradiation as part of their Integrated Vector Management Program



### **Greater Los Angeles County Vector Control District**

- Conducting an irradiation pilot program to test for effectiveness and efficiency



### **Orange County Mosquito and Vector Control District**

- First irradiated male mosquito releases expected in Fall 2024 or Spring 2025



### **Coachella Valley Mosquito and Vector Control District**

- Completing laboratory assessments on the usefulness of irradiating male mosquitoes

Since 1996, the Mediterranean Fruit Fly Preventive Release Program has successfully used irradiation to reduce the number of medflies. This same technique is now being used to reduce mosquitoes.

Irradiation is part of an evidence-based, data-driven decision-making approach to suppress mosquito-borne diseases called Integrated Vector Management. Local mosquito and vector control districts determine which mosquito control techniques will be most effective to protect public health in their areas. Innovative technologies are often used in conjunction with traditional mosquito control methods to protect the public from mosquito-transmitted diseases.

**To learn more about irradiation and other Sterile Insect Techniques visit [mvacac.org](http://mvacac.org).**