

2018-2019

CDC BOTTLE BIOASSAY

INSECTICIDE RESISTANCE TESTING TRAINING EVALUATION



PACIFIC SOUTHWEST CENTER OF
VECTOR-BORNE DISEASES EXCELLENCE IN



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PACIFIC SOUTHWEST CENTER OF
VECTOR-BORNE DISEASES EXCELLENCE IN

WORKSHOP OVERVIEW

One of the main objectives of the Pacific Southwest Center of Excellence in Vector-Borne Diseases (PacVec) is to enhance the capacity of the southwestern United States and Pacific Islands to respond to vector-borne disease threats by providing training to vector control and public health professionals. Since 2018, PacVec has provided insecticide resistance testing training and support in the form of workshops to vector control personnel throughout our region. The purpose of the workshops were to better equip vector control agencies to make operational decisions regarding insecticide applications.

WORKSHOP CONTENT

- Insecticide Resistance (Field and/or Lab)
 - Hands-on Bottle Bioassay Training
 - Mosquito Identification
 - Integrated Pest Management
- Bottle Bioassay as a service for *Aedes aegypti*, *Culex pipiens*, *Culex quinquefasciatus*, and *Culex tarsalis*



TEAM

Training workshops led by Research Associate Katherine Brisco.



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WORKSHOPS BY REGION

A total of 66 people were trained from 28 vector control agencies in 9 workshops reaching 6 states/countries in the Pacific Southwest.



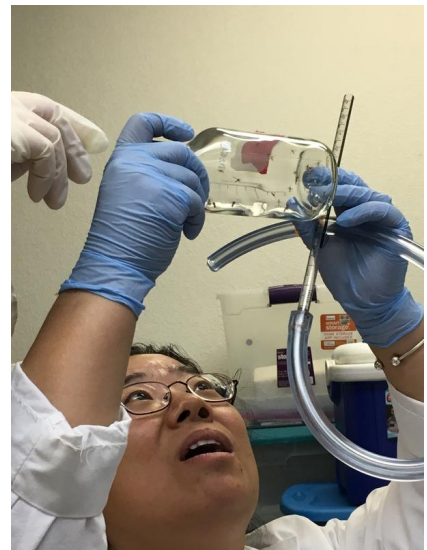
YUMA COUNTY WORKSHOP

October 15th - 18th, 2018
Yuma County Pest Abatement District
Somerton, AZ

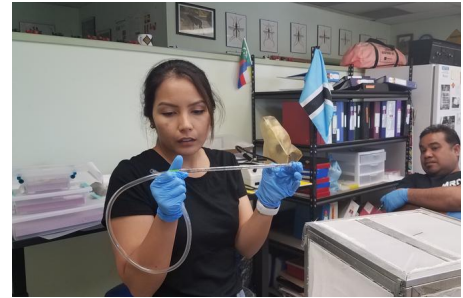
2019 AZ ANNUAL VECTOR CONFERENCE

April 3rd - 4th, 2019
Maricopa Agricultural Center
Maricopa, AZ

- 1 - Yuma County Pest Abatement District
- 2 - Yuma County Health District
- 3 - Quechan Indian Tribe Health Services
- 4 - Ak-Chin Indian Community
- 5 - Gila River Indian Community



- 6 - Lake County Vector Control District
- 7 - Sacramento-Yolo Mosquito & Vector Control District
- 8 - Contra Costa Mosquito & Vector Control District
- 9 - Alameda County Mosquito Abatement District
- 10 - Turlock Mosquito Abatement District
- 11 - Fresno Westside Mosquito Abatement District
- 12 - Fresno Mosquito & Vector Control District
- 13 - Consolidated Mosquito Abatement District
- 14 - Delta Vector Control District
- 15 - Tulare Mosquito Abatement District
- 16 - Delano Mosquito Abatement District
- 17 - Kern Mosquito & Vector Control District
- 18 - Greater LA County Vector Control District
- 19 - Long Beach Department of Health & Human Services
- 20 - Northwest Mosquito & Vector Control District
- 21 - Orange County Mosquito & Vector Control District
- 22 - County of San Diego Vector Control Program



SOUTHERN CA WORKSHOP

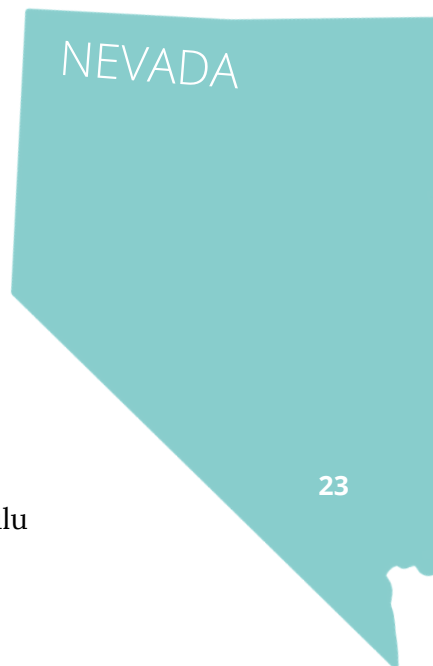
March 20th, 2019
Greater LA County Vector Control District
Santa Fe Springs, CA

SOUTH SAN JOAQUIN REGION (CENTRAL CA) WORKSHOP

May 1st, 2019
Consolidated Mosquito Abatement District
Parlier, CA

NORTHERN CA WORKSHOP

May 22nd, 2019
Sacramento-Yolo Mosquito & Vector
Control District
Elk Grove, CA



23 - Southern Nevada Health District

24, 25, 26 - Hawaii Department of Health - Kona, Hilo, Honolulu

27 - Saipan, Northern Mariana Islands

28 - Kosrae, Federated States of Micronesia

HAWAI'I DEPARTMENT OF HEALTH TRAINING DAY

August 9th, 2019

Hawai'i Department of Health
Hilo, HI

SOUTHERN NEVADA HEALTH DISTRICT WORKSHOP

June 13th, 2019

Southern Nevada Health District
Las Vegas, NV

HAWAI'I DEPARTMENT OF HEALTH WORKSHOP

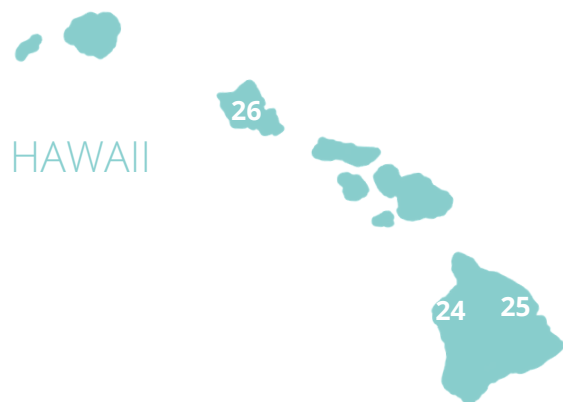
August 15th, 2019

Hawai'i Department of Health
Kona, HI

SAIPAN, CNMI AND KOSRAE, FSM

August 21st - 23rd, 2019

UC Davis Mosquito Control Research Lab
Parlier, CA



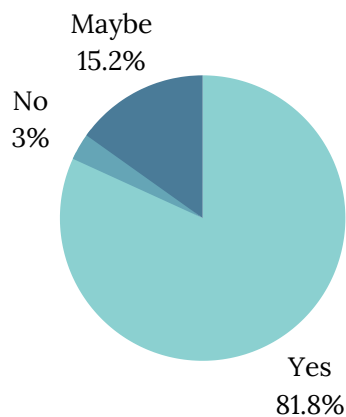
US AFFILIATED
PACIFIC ISLANDS



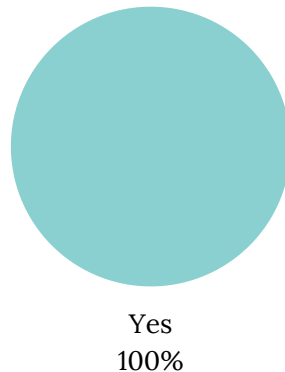
WORKSHOP EVALUATION & FEEDBACK

All 66 attendees were invited to participate in the survey with 33 individuals completing the survey. All results below are based on the 33 completed surveys received.

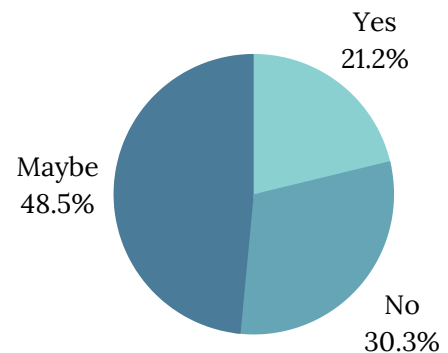
Do you see yourself conducting CDC bottle bioassays on your own at your district in the future?



Were you satisfied with the quality of this training? Did you find it useful to you?



Do you think you will need more assistance conducting CDC bottle bioassays in the future?



Common Comments:

A majority of the participants (81.8%) see themselves conducting CDC bottle bioassays on their own at their district in the future, however some common comments regarding that were:

- Staffing or program funding concerns
- Vector control not being their only priority

A majority of the participants (69.7%) believe that they will or may need more assistance conducting CDC bottle bioassays in the future. Common comments regarding that were:

- More practice may be necessary
- Concerns with future changes to the protocol

Anonymous Feedback:

Of the 66 attendees, a total of 39 participants provided anonymous feedback on the training. Of the 39 participants, 25 indicated that they enjoyed the interactive structure of the workshops and felt that the training covered all the topics needed for them to conduct their own bioassays; 9 expressed that the workshops were informative and prepared them to conduct their own bioassays; and, 5 expressed that the workshops raised awareness on the importance of conducting bioassays and plan to increase the frequency in their agencies.



“We have already been conducting bottle bioassays at our district but I think now we will increase the frequency.”

“This training was very helpful as I have never done/set-up a complete bottle bioassay myself. Even though this is new to me, I definitely feel a lot more confident about doing one.”



“We have been working towards bottle bioassay insecticide resistant testing and now after this workshop we feel ready to start.”

NEXT STEPS

PacVec will continue to offer training workshops across the Pacific Southwest. The center aims to increase the vector management capacity in the region, with specific focus on the US-Affiliated Pacific Islands.