

# Pima County Health Department

## Consumer Health & Food Safety Program PROGRAM POLICIES AND PROCEDURES

<b>Subject:</b>	<b>Mosquito-borne Surveillance – Prevention – Control - Enforcement</b>	<b>PPP NO.</b> <b>CHFS-15-04</b>
<b>Approved by:</b>		<b>Approval Date:</b>
<b>Program Manager:</b>	<b>David F. Ludwig MPH, RS, REHS, CMP</b> <b>Consumer Health &amp; Food Safety Manager</b>	
<b>Applies to: Consumer Health &amp; Food Safety Staff</b>		

### A. STATEMENT OF PURPOSE

The purpose of this PPP is to provide guidance to Consumer Health & Food Safety Staff when responding to arboviral diseases including West Nile Virus, Dengue and Chikungunya and sporadic St. Louis Encephalitis and Western Equine Encephalitis cases in Pima County. The goal of the program is to prevent illness to residents and visitors due to arboviral disease.

### B. DEFINITIONS

1. **Confirmed Case:** Is a person that through appropriate testing for a particular illness meets the standard as defined by the Pima County Communicable Disease Control Program within the Pima County Health Department.
2. **Outbreak:** An outbreak is defined as any significant increase of a disease over the expected baseline incidence.

### C. POLICY

All staff of CHFS will follow the procedure delineated in D to determine appropriate actions necessary to protect the public's health from mosquito-borne illnesses.

### D. PROCEDURE

1. Surveillance – An effective mosquito-borne disease program relies on a sustained, consistent, surveillance program that targets vector species.
  - a. Surveillance Season – Starts with a confirmed case of human illness, or upon receiving a higher than expected level of complaint calls in a specific area, or on April 1<sup>st</sup>, whichever comes first.

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- b. End of Surveillance Season – occurs when two consecutive sampling periods without disease positive mosquitoes are trapped or on November 1<sup>st</sup> whichever is later.

## 2. Surveillance Procedures

- a. Adult Mosquito Surveillance – Is used to qualify and quantify the abundance of the various mosquito species and to map their distribution throughout the County.

- i) Vector Control Sites

- (1) Sites will be geographically distributed throughout Pima County based on population and historical data.

- (2) Flood Control sites will be determined by the district should there be a need for an annual change in location.

- ii) Routine Trapping includes the use of proper traps for the targeted species. Routine surveillance will occur weekly during the surveillance season.

- (1) *Culex* mosquitoes – CDC Light Traps using CO<sub>2</sub>

- (2) *Aedes* mosquitoes – Ova Traps

- b. Larva Mosquito Surveillance – Is used to identify the mosquito species by dipping the aquatic habitats, determining present or absence of mosquitoes and growing the larva in growth chambers for speciation.

- c. Data Collection – The following data will be captured for all adult mosquito samples.

- i) Collector

- (1) Pima County CHFS Environmental Health Tech Staff

- (2) Pima County Health Department Volunteer Staff

- (3) Outside Public Service Staff

- ii) Date Collected

- iii) Type of trap used for collection

- iv) Location of trap

- (1) Street Address

- (2) GPS Coordinates

- v) Environmental Conditions

- (1) Presence or Absence of Rain

- (2) Temperature

- (3) Wind speed

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## vi) Mosquito Data

- (1) Number of female by species
- (2) Total number found
  - (a) Estimate of non-vector species collected
- (3) RAMP Test results
- (4) Note if sample is sent to ADHS for further testing and results of their test

## 3. Prevention

## a. Complaint Investigation

## i) Prioritization – Complaints will be prioritized as follows

- (1) Human Case – Investigate case location looking for potential vector mosquito breeding areas. Conduct assessment on neighboring surrounding properties after receiving permission from the property owner.
  - (a) Do not disclose the medical information of the case as per HIPA rules.
- (2) Breeding Site – Investigate site for larva when water is present. Dip for mosquitoes to determine mosquito larvae are present. Work with owner to determine appropriate action is taken.
  - (a) Standing water and water retention areas
  - (b) Green and non-functioning pools
- (3) Mosquitoes present
  - (a) Observation of adult mosquitoes

## b. Community Outreach – Provide educational information to the immediate community to increase their awareness to decrease the risk of disease transmission this will be accomplished through:

- i) Public Presentations and Meetings
- ii) Press Releases
- iii) Development and Distribution of Education Materials

## 4. Control

## a. Complaint Response

- i) Source Identification – This is the first step in verifying a complaint.
  - (1) Check the complainant's property for potential standing water or container sources

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- (a) Have complainant remove their possible sources of mosquito breeding
- (2) Check the adjacent properties or the property indicated by the complainant as the possible source
  - (a) Attempt to gain access onto the complaint property after properly identifying yourself and asking permission to inspect subject property.
  - (b) If complaint property is not legally accessible for inspection, attempt to view area from complainant's property taking necessary photos and documenting what was observed.
  - (c) Hang a door hanger notifying the owner of a potential violation and correction is required within 48 hours.
  - (d) Schedule a re-inspection attempt once again to contact the owner of the complaint property. If not present and property can be legally viewed from adjacent property document findings as necessary.
  - (e) If property is in violation issue an NOV to property giving them 48 hours to contact office and make corrections.
- (3) Use of Larvacides – after determining that mosquito larva are present and the source of the water cannot be eliminated
  - (a) When it is in the best interest of public health the Environmental Health Tech can larvacide areas with contained water when the property owner provides them a written request and authorization to do so, whereby holding the department without liability and taking on sole responsibility as the owner of the property.
  - (b) The larvacide will only be applied after the written request AND with the provision that the owner will take the necessary actions to eliminate the source of the mosquito breeding area if there is a feasible action that can be taken.
    - (i) Type of Larvacide and amount will be documented on the complaint report.
    - (c) The Environmental Health Tech will follow up with the complaint property owner to

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verify correction has been made and then the complaint will be closed out.

5. Enforcement for Absentee owners and non-compliant owners

The Arizona Revised Statutes Title 36-601 defines mosquitos and the elements that allow for mosquito breeding as a Public Health Nuisance requiring property owners to abate the nuisance in a timely manner.

- a. When an owner fails to respond to the request to eliminate a mosquito breeding area on their property either by their not being present or the property is abandoned, the Environmental Health Tech will send a legal notice to the best available address requiring corrective action. The notice shall go out Certified Mail with a receipt requested.
- b. If the certified mail comes back unable to be delivered the EH Tech will request "Service by Public Notification". This is by posting a public notice in an area newspaper once a week for 4 weeks. A second certified mail notice is sent to the owner. (pursuant to 36-183.06)
- c. Upon the passing of the due date as indicated in the second certified letter, the Environmental Health Tech will initiate corrective action to eliminate the hazard.
- d. Cost of abatement can be assessed against the property as detailed in Title 36-602.