Pioneer Valley MCD Weekly Report

EPI Week 26 **Week Ending: June 29, 2024**

EPI Week 26 Surveillance Summary

EPI Week 26 Target Species Surveillance Summary					Cumulative Totals: EPI Weeks 24-26			
Species	# Collected	Pools	WNV+	EEEV+	Cumulative Specimens	Cumulative Pools	Cumulative WNV+	Cumulative EEEV+
Cx. *pipiens/restuans*	41	4	0	0	874	29	0	0
Cs. *melanura*	7	1	0	0	66	7	0	0
Cq. *perturbans*	2902	29	0	0	8383	51	0	0
Oc. *canadensis*	64	2	0	0	378	10	0	0
Oc. *japonicus*	42	5	0	0	254	10	0	0
Cx. *salinarius*	391	4	0	0	405	4	0	0
Ae. *albopictus*	8	1	0	0	8	1	0	0

Positive Samples

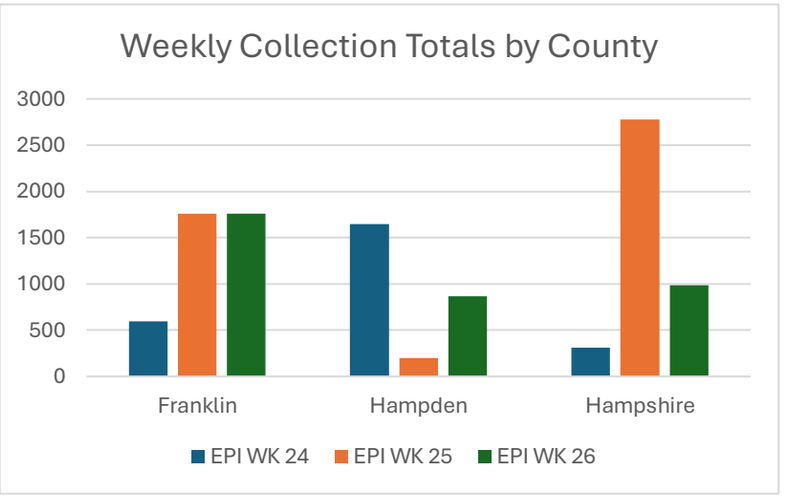
- There were no positive samples reported during EPI week 25.

Most Abundant Species

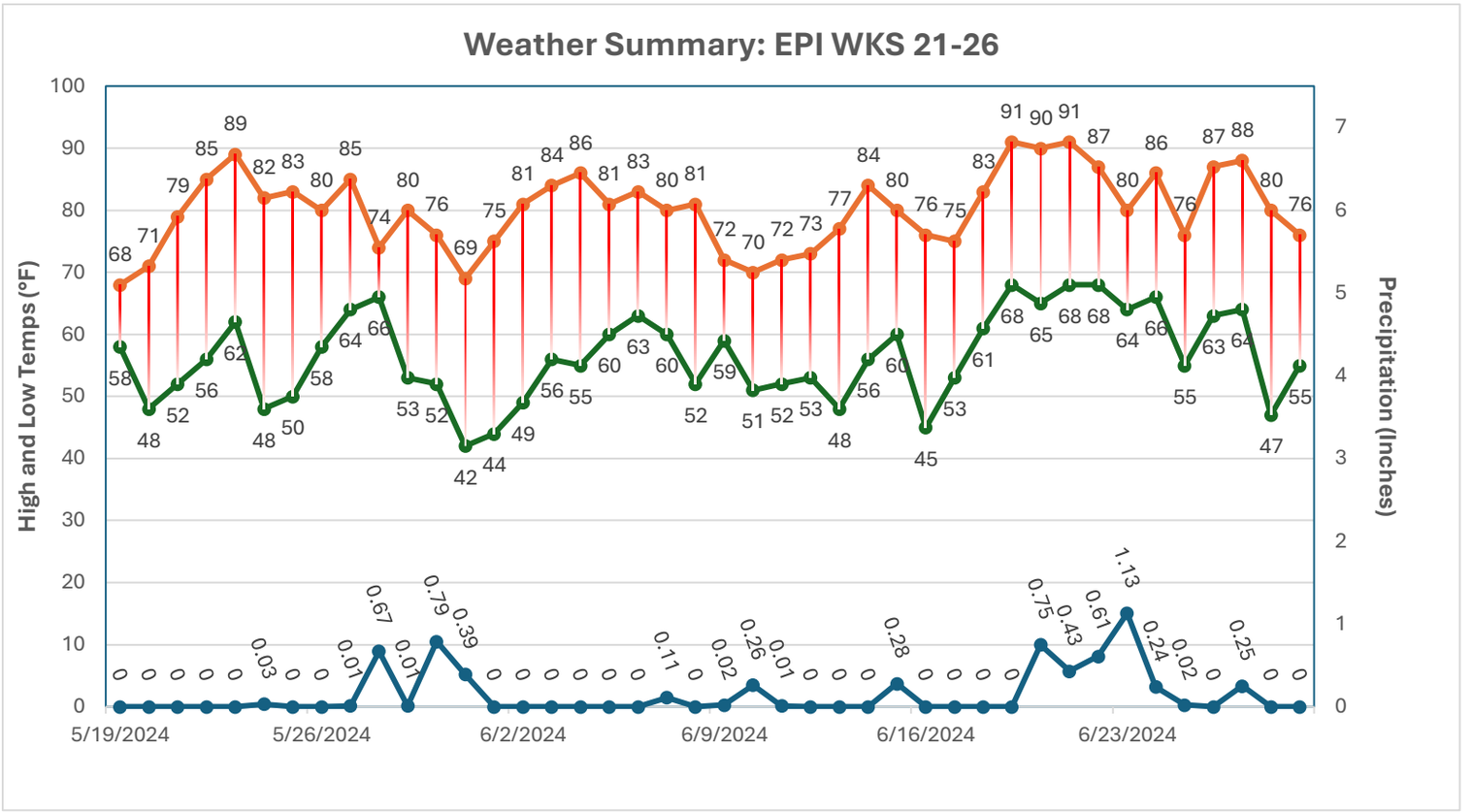
- Cq. *perturbans* were the most abundant vector species collected during EPI week 26, totaling 2902 specimens. *Perturbans* collections are down 20% from the previous week. This number is expected to remain stable or increase during EPI weeks 27-28. Cq. *perturbans* are a bridge vector for EEE and WNV and can be found in permanent swamps with emergent vegetation (e.g. cattails and hummocks/tussocks). Cq. *perturbans* are aggressive human biters and are primarily active during the night.

EPI WK 26 Summary by County

- Franklin County
  - EPI WK 25 Pools Tested: 15
  - Positive Samples: 0
  - Most Abundant Species: Cq. *perturbans* (1552)
  - Total Mosquitoes Collected: 1758
- Hampden County
  - EPI WK 25 Pools Tested: 11
  - Positive Samples: 0
  - Most Abundant Species: Cq. *perturbans* (487)
  - Total Mosquitoes Collected: 866
- Hampshire County
  - EPI WK 25 Pools Tested: 12
  - Positive Samples: 0
  - Most Abundant Species: Cq. *perturbans* (863)
  - Total Mosquitoes Collected: 983
- Total Mosquitoes Collected (All Counties): 3607



Weather Data



Weather Summary

- Weather conditions remained favorable for mosquitoes during EPI weeks 24-26. For total mosquitoes collected, EPI week 26 produced roughly the same number of mosquitoes as the previous week, with 3607 mosquitoes collected. If weather conditions continue to remain favorable, it is expected that mosquito populations will continue to remain stable or increase.
- **Weekly Changes**

Station	Name	EPI Week	PRCP Total (in.)	TMAX AVG (°F)	TMIN AVG (°F)
USC00190120	AMHERST, MA US	**24**	**0.57**	**75.43**	**54.14**
USC00190120	AMHERST, MA US	**25**	**1.79 (+214%)**	**84.71 (+12%)**	**61.14 (+13%)**
USC00190120	AMHERST, MA US	**26**	**1.64 (-8%)**	**81.86 (-3%)**	**59.14 (-3%)**

NOAA Rain Forecast (Sunday-Friday)

Sunday 7/7	Monday 7/8	Tuesday 7/9	Wednesday 7/10	Thursday 7/11	Friday 7/12
20% Showers **High: 89 °F** **Low: 65 °F**	**0% Showers** **High: 92 °F** **Low: 69 °F**	**50% Showers** **High 89 °F** **Low: 69 °F**	**60% Showers** **High: 85 °F** **Low: 67 °F**	**50% Showers** **High: 86 °F** **Low: 65 °F**	**30% Showers** **High: 86 °F** **Low: ND**

EPI Week 26 Arbovirus Detections

Town	County	Virus Detected	Mosquito Species
Carver	Plymouth	EEEv	Culiseta *melanura*
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Carver	Plymouth	EEEv	Culiseta *melanura*
Carver	Plymouth	EEEv	Coquillettidia *perturbans*
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Quincy	Norfolk	WNV	Culex *pipiens/restuans*
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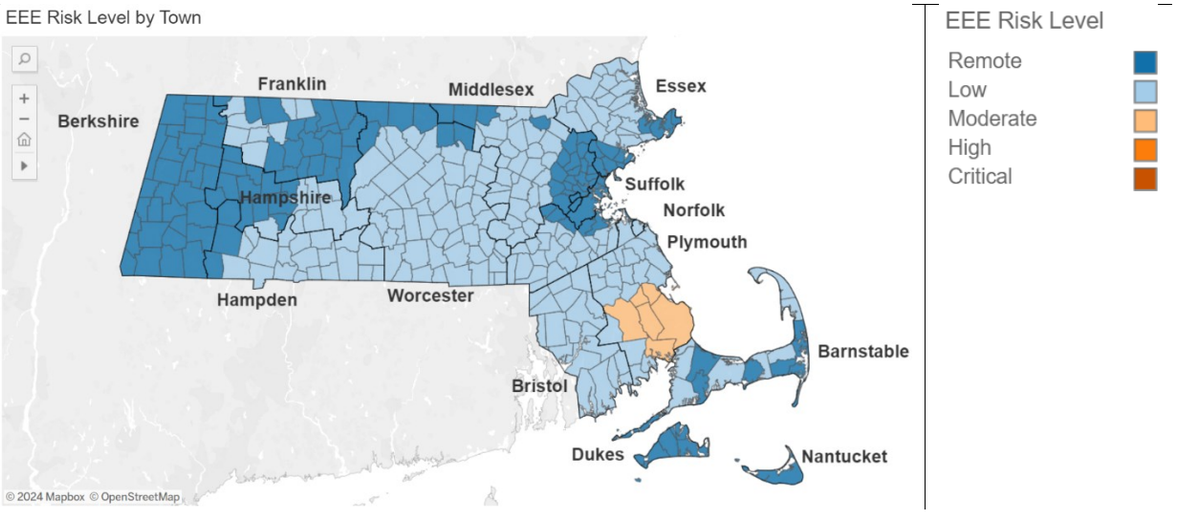
EEE Impacted Areas

Recent detections of EEEv in mosquitos has resulted in a risk level change to "Moderate" in the following communities: Carver, Kingston, Middleborough, Plymouth, Plympton, and Wareham.



Current EEE Risk Map from: https://www.mass.gov/info-details/massachusetts-arbovirus-update

WNV Impacted Areas

There were no changes to the WNV risk map during EPI week 26.

Current WNV Risk Map From: https://www.mass.gov/info-details/massachusetts-arbovirus-update

Dengue Fever in Massachusetts (Non-local Transmissions)

- There were no additional dengue cases reported in Massachusetts during EPI Week 26.
- It should be noted that none of the 50 reported dengue cases were acquired locally. Local transmissions of dengue are very remote.
- Dengue infection typically occurs in the following regions: the Caribbean, Central America, South America, Southeast Asia, and the Pacific Islands.
- Dengue is spread through a human-to-mosquito-to-human cycle.
- Onset is up to two weeks with illness lasting 2-7 days. Transmission to mosquitoes is possible for up to 12 days.
- Symptoms include:
    - Fever
    - Nausea and vomiting
    - Rash
    - Aches and pains
    - Joint and muscle pain
    - Pressure and pain around the eye sockets
    - Headache

PE Poster Printouts and Helpful Links

- Mosquito Bite Prevention Poster
- EEE Transmission Cycle Poster
- WNV Transmission Cycle Poster
- Dengue Virus Transmission Cycle Poster
- CDC Dengue Fever Information
- DPH Mosquito PE Materials: https://www.mass.gov/lists/mosquito-borne-disease-educational-materials
- CDC Press Kit: https://www.cdc.gov/mosquitoes/communication-resources/press-kit-mosquitoes.html
- DPH Tick PE Materials: https://www.mass.gov/info-details/tick-borne-educational-materials

Recommended Messaging

- Use EPA approved bug-repellent
- Cover skin/wear long sleeves and pants
- Avoid outdoor activities during peak mosquito times (between dusk and dawn)
- Repair window screens
- Containers in yards with standing water should be emptied to reduce mosquito breeding

Questions/Comments: Please email John Briggs, the District Director, at john.c.briggs@mass.gov.

PIONEEER VALLEY MOSQUITO CONTROL DISTRICT

FIGHT THE BITE

AND HELP PREVENT THE SPREAD OF MOSQUITO BORNE DISEASES

USE REPELLENT

Be sure to apply EPA approved insect repellents containing plant based eucalyptus or DEET when outdoors.

AVOID DUSK AND DAWN

Most mosquito species are very active at dusk and dawn. Avoid engaging in outdoor activities during these times whenever possible.

WEAR PROPER CLOTHING

Wearing long-sleeves and pants will significantly help reduce mosquito bites.

PREVENT ARTIFICIAL HABITAT

Buckets, plant pots, kiddie pools, tire swings, and anything that holds water should be emptied to prevent mosquito habitat.

FIX DOORS AND WINDOWS

Screens with holes should be repaired and be sure that all doors and windows are working properly to keep the mosquitoes out.

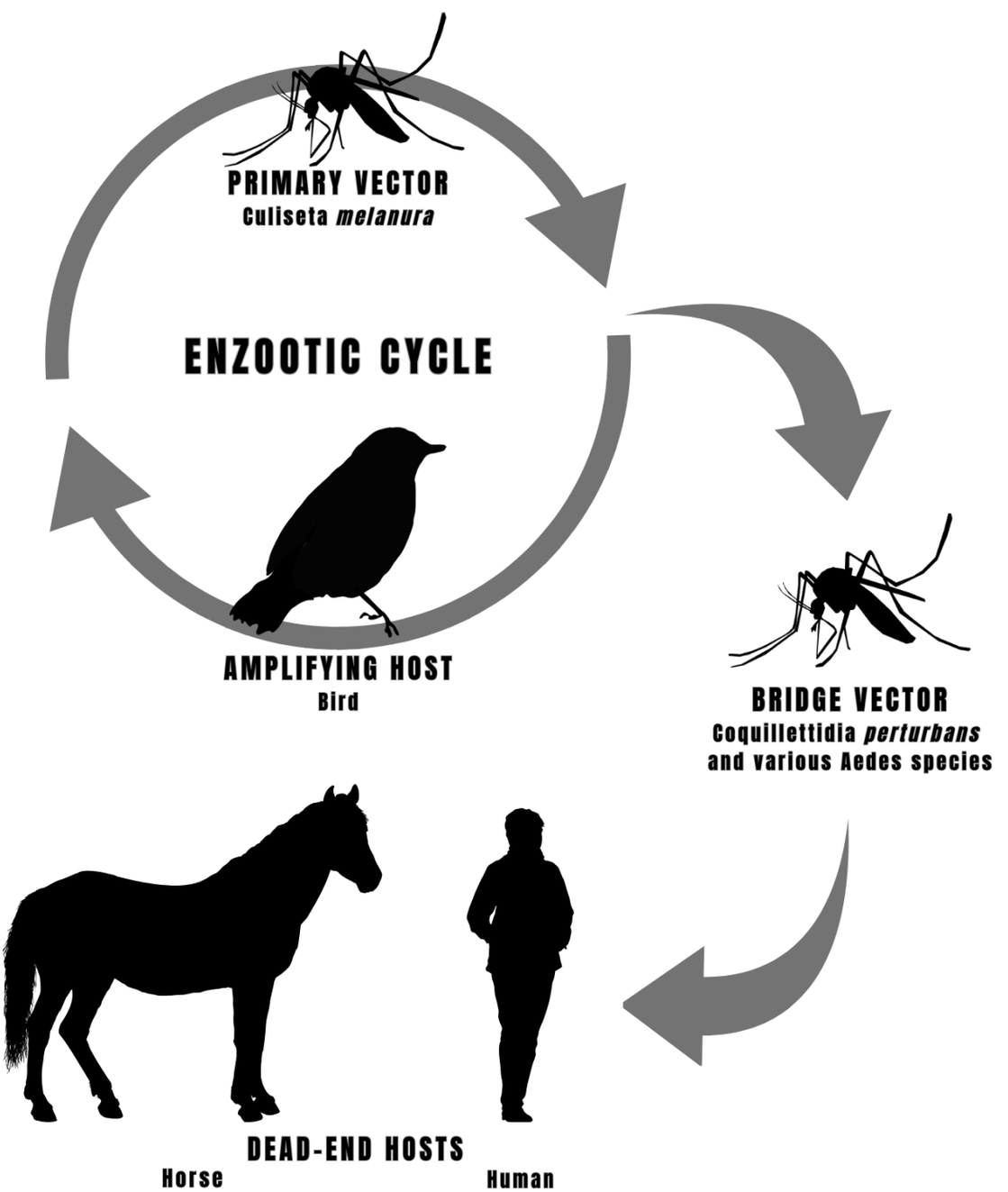
FIRST AID FOR BITES

Wash bite with soap and water and apply anti-itch cream. If necessary, apply a cold cloth to reduce swelling.

Email: john.c.briggs@mass.gov
Web: mass.gov/info-details/pioneer-valley-mosquito-control-district-pvmcd

PIONEEER VALLEY MOSQUITO CONTROL DISTRICT

EASTERN EQUINE ENCEPHALITIS VIRUS TRANSMISSION CYCLE



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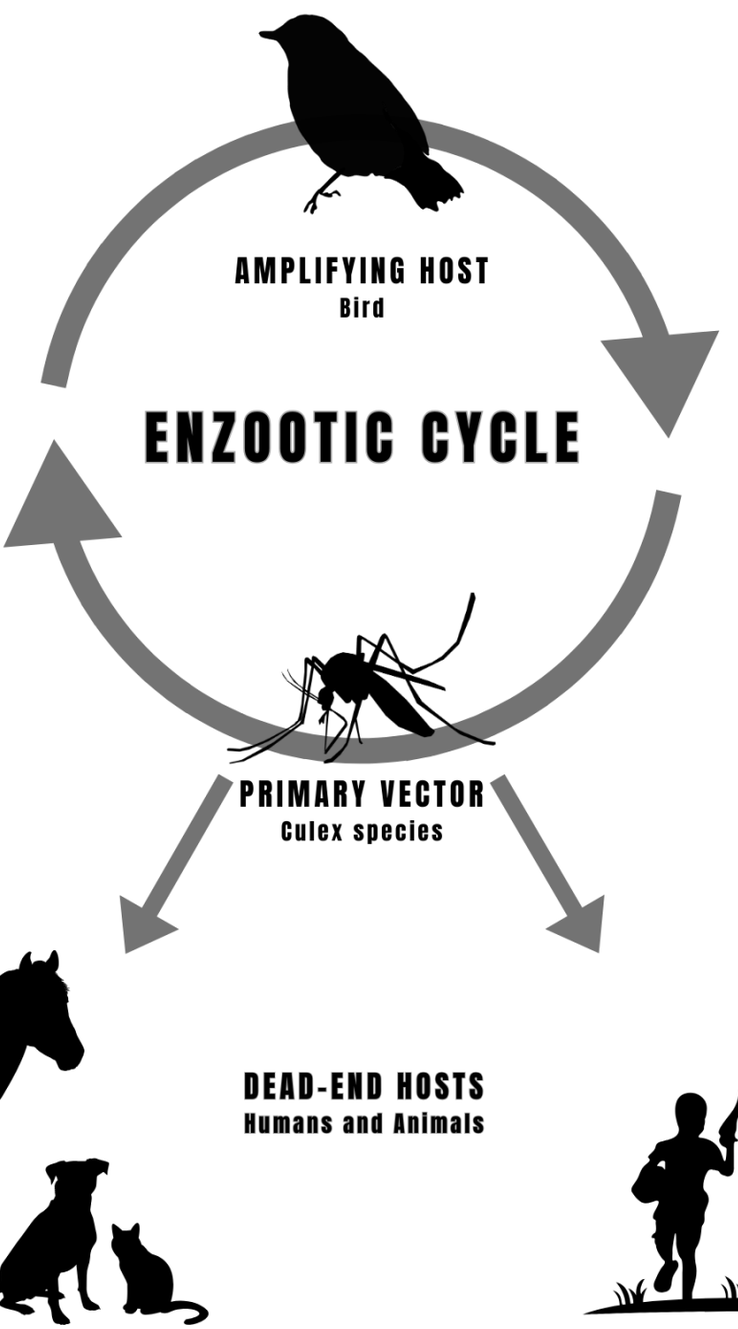
PIONEEER VALLEY MOSQUITO CONTROL DISTRICT

WEST NILE VIRUS TRANSMISSION CYCLE



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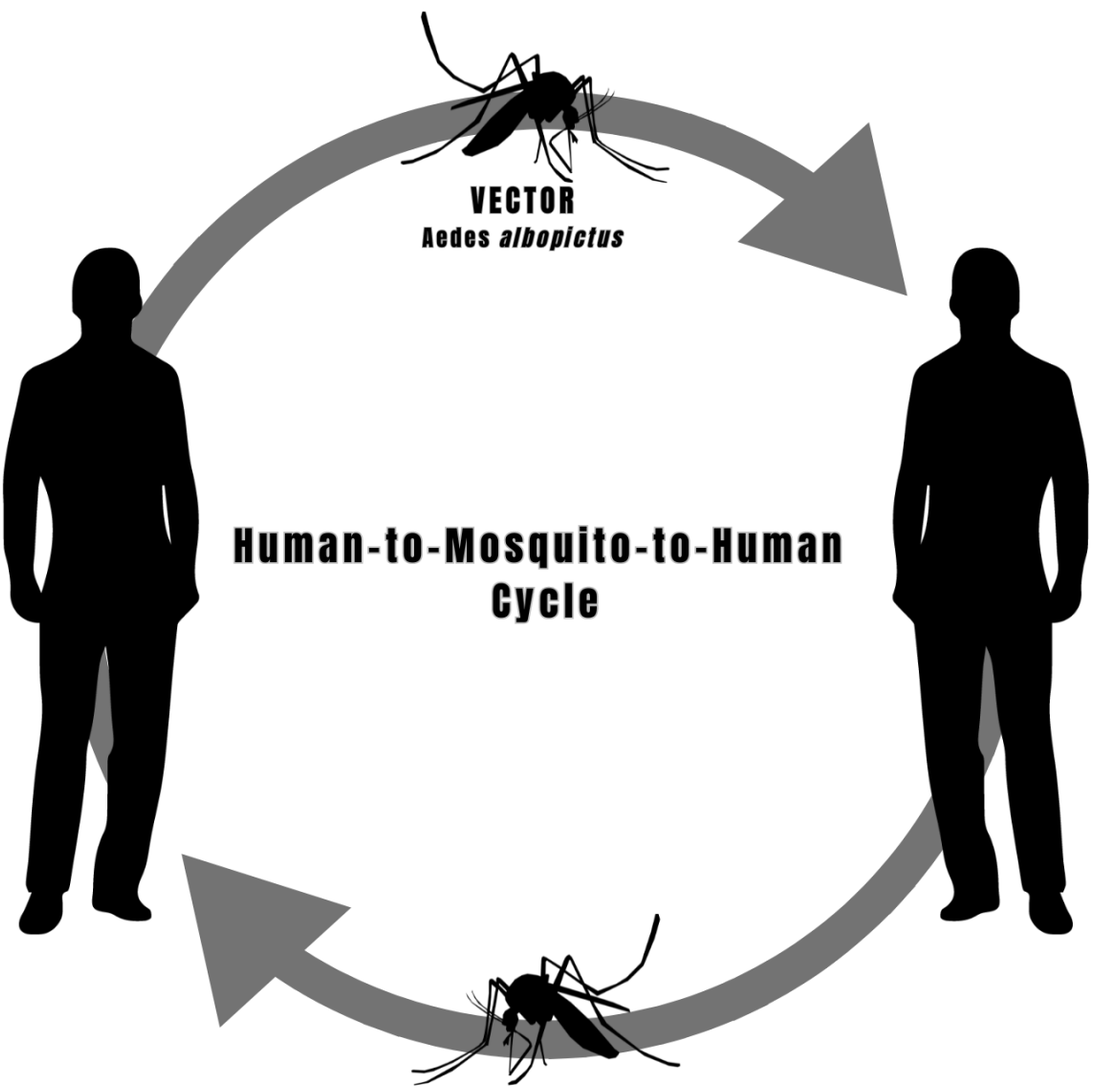
PIONEEER VALLEY MOSQUITO CONTROL DISTRICT

DENGUE VIRUS TRANSMISSION CYCLE



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