CALSURV CONTINUES TO REVOLUTIONIZE MOSQUITO CONTROL

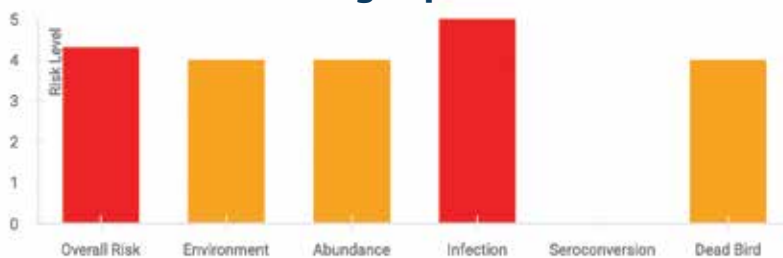**The California Vectorborne Disease Surveillance Gateway (CalSurv)** is an essential tool in fighting vector-borne diseases. It is recognized in statute (AB 320 – Quirk) as the statewide surveillance database critical to preventing the spread of mosquito-borne diseases. The platform was included in the 2024-25 state budget as an annual appropriation. The state's ongoing support for this online interactive platform is critical as it enables real-time collection, visualization, and analysis of data on vector-borne diseases.

State Funding Has Sustained Calsurv And Enabled the Addition of New Capabilities

- User-friendly tick abundance and pathogen maps, along with a tick abundance calculator that shows how tick numbers have changed over the past five years, help track tick activity and risk in counties.
- New dengue risk map estimates the relative potential for dengue virus transmission based on *Aedes aegypti* counts and environmental temperature data, offering real-time, weekly risk assessments at the county level.
- Open-data portal to accelerate research on the spread of invasive species and climate change-related impacts.
- Support for Integrated Vector Management practices through immediate reporting of mosquito and tick surveillance and pathogen test results.
- Improved local, state, and national interoperability.

West Nile Virus Human Infection Risk Assessment for Week Ending September 7, 2024

West Nile Virus Risk Components for Week Ending September 7, 2024

Overall West Nile Virus Risk Levels for 2024

Risk Level
- Normal Season
- Emergency Planning
- Epidemic

Learn How CalSurv Works

Turns data into evidence for public-health decision-makers
- Tracks the spread of invasive mosquitoes
- Enables real-time control decisions based on surveillance data to prevent the spread of vector-borne diseases

Supports cutting-edge research
- Provides data that supports research to enhance surveillance and control strategies and predict new disease outbreaks
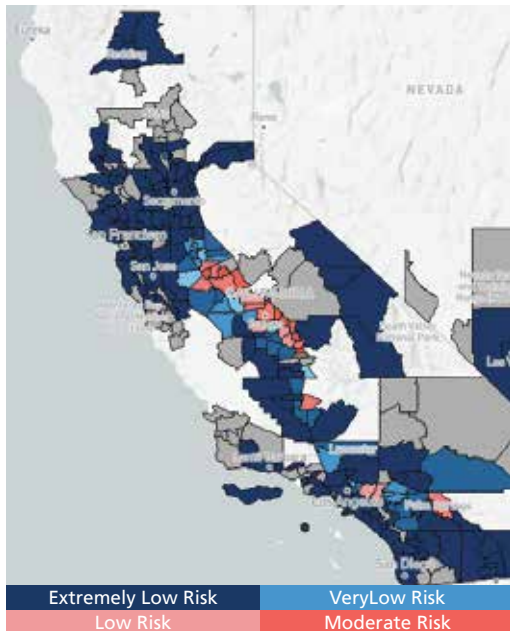
Enables state and national reporting and risk assessment
- CA Dept. of Public Health uses CalSurv data on mosquito abundance, mosquito infection rates, dead birds, sentinel chickens, and weather to provide statewide reports and assess transmission risk for vector-borne diseases.
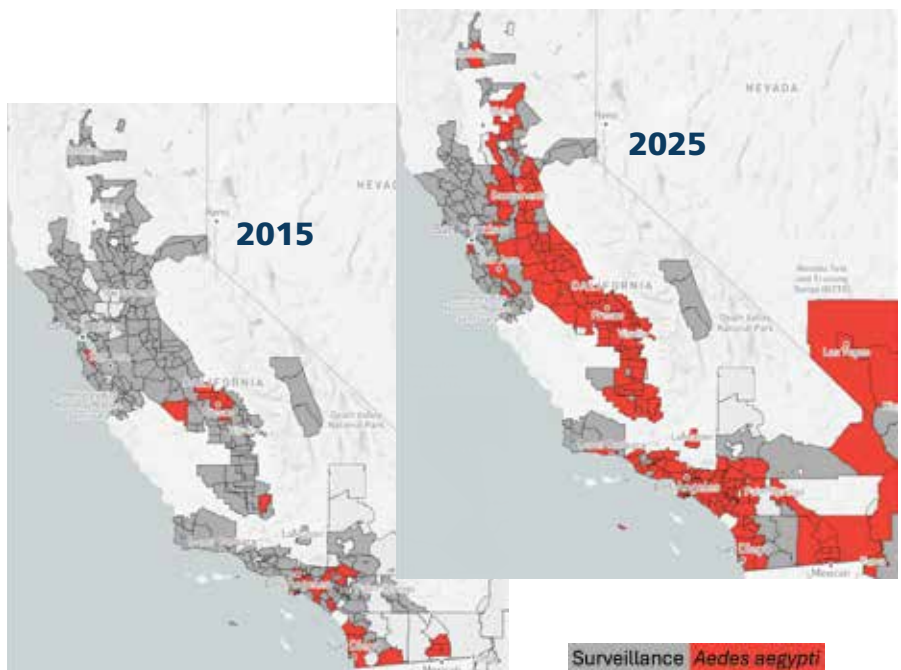
Reduces health disparities
- Local vector control programs vary greatly in funding and operational capacity.
- CalSurv provides a software solution for surveillance data in smaller rural communities that have a higher risk of arbovirus transmission but limited vector control resources.

Dengue Risk Map for Week Ending August 24, 2024

| Extremely Low Risk | VeryLow Risk |
| Low Risk | Moderate Risk |

Aedes aegypti Detections Based on Surveillance

2015

2025

Surveillance *Aedes aegypti*

CalSurv Visualizes Disease Outbreak Risks

CalSurv, based at UC Davis, provides local and statewide data to support 80+ mosquito and vector control agencies in making informed public health decisions. Amid ongoing West Nile virus and new invasive *Aedes* mosquito threats, CalSurv plays a crucial role in controlling these mosquitoes by identifying pesticide resistance and mapping disease outbreak risks.