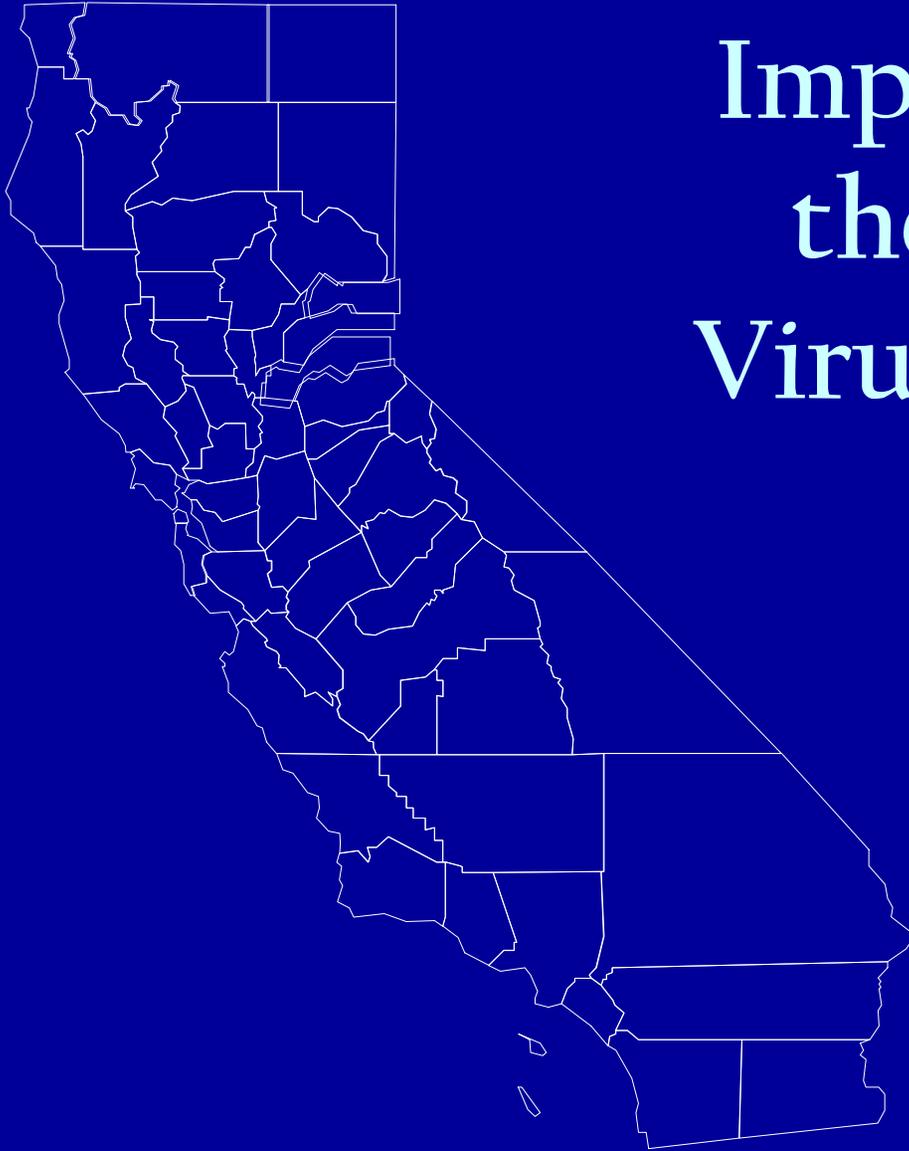


Current & Future Improvements to the West Nile Virus Surveillance Program



Purpose of Statewide WNV Surveillance Program

- Detect and monitor WNV activity to prompt and guide enhanced surveillance, control, and public education
- Ensure that local and state resources are used most effectively to reduce WNV associated morbidity and mortality
- Provides basis for risk assessment using the in the California Mosquito-borne Virus Surveillance and Response Plan and DYCAST

Positive Counties by Element: 2005 & 2006

| YEAR |  |  |  |  |  |  |
|------|---|---|---|---|---|---|
| 2005 | 52 | 29 | 31 | 43 | 40 | 13 |
| 2006 | 53 | 34 | 29 | 23 | 36 | 9 |

These counties had at least one WNV case
in 2006.

Will your county be listed in 2007?

ALAMEDA

BUTTE

COLUSA

CONTRA COSTA

EL DORADO

FRESNO

GLENN

IMPERIAL

KERN

KINGS

LAKE

LOS ANGELES

MARIN

MERCED

MODOC

MONO

NAPA

NEVADA

ORANGE

PLACER

RIVERSIDE

SACRAMENTO

SAN BERNARDINO

SAN DIEGO

SAN JOAQUIN

SAN LUIS OBISPO

SANTA CLARA

SHASTA

SOLANO

STANISLAUS

SUTTER

TEHAMA

TULARE

VENTURA

YOLO

YUBA

Notification of local agencies about cases

- Humans
- Horses

Gateway: 2006 and Beyond

California Vectorborne Disease Surveillance Gateway

Login:

Password:

Cookies and Javascript must be enabled to use this site.

If you do not have a login, please click [HERE](#) to determine who you should contact to get one.

Copyright © 2005 - 2006 Center for Vectorborne Diseases, UC Davis

Process Time (secs): 0.2292

2007: Mapping from Gateway

California Vectorborne Disease Surveillance

Jump To:

Map Layers [Feedback](#)

- SLE
- WEE
- WN
 - Chickens
 - Latest WN Positive Chickens
 - YTD WN Positive Chickens
 - Mosquito Pools
 - Latest WN Positive Mosquito Pools
 - YTD WN Positive Mosquito Pools

http://cvecmaps.ucdavis.edu - Mozilla Firefox

Query Results
YTD WN Positive Chickens

| Band # | Positive For | Collection Date |
|--------|--------------|-----------------|
| 4113 | WN | 08/22/2006 |
| 4113 | WN | 09/05/2006 |
| 4113 | WN | 08/08/2006 |
| 4113 | WN | 08/30/2006 |
| 4110 | WN | 08/22/2006 |
| 4110 | WN | 09/05/2006 |
| 4110 | WN | 08/08/2006 |
| 4110 | WN | 08/30/2006 |

Scale: 1:292,617 Map Tool: Active Layer: YTD WN Posi

Computerized Functions (chicken flock example)

Registration
of
chicken
bands

Pre-bleed
data
preparation

Preparation
of
packing
lists

Received
notice

Email
notification
of positives

Updates
of
maps on
website

Production
of
weekly
bulletin

Analysis of
results

Surveillance Tools on Gateway

- Geographic coordinate conversions
- Location geocoding
- Detailed interactive maps
- Mosquito infection rate calculator
- Mosquito abundance calculator
- Mosquito species comparisons



Mosquito Surveillance Reporting 2006

- CVEC switched to an every day testing schedule, so no longer a requirement to have samples received by Wednesday
- Turnaround time was about 1-2 days

Mosquito Surveillance Reporting 2007

- Adult mosquito occurrence reports will be part of Gateway system
- Easy - to - read Arbovirus Bulletin

Dead Bird Surveillance 2006

- DYCAST updated daily online for ALL counties
- Almost all hotline callers spoke with operator either directly or via a call back
- 42.1% of WNV positive birds were identified by VecTest or RAMP versus 25% in 2005
- Public allowed to deliver carcass to local agency

Dead Bird Surveillance 2007

- Centralized database for all reported dead birds with Dept. of Food & Ag and Dept. of Fish & Game: Avian Influenza
- Will be web-based
- Local agencies will be able to:
 - Submit VecTest & RAMP electronically
 - Query database

Sentinel Chickens 2006

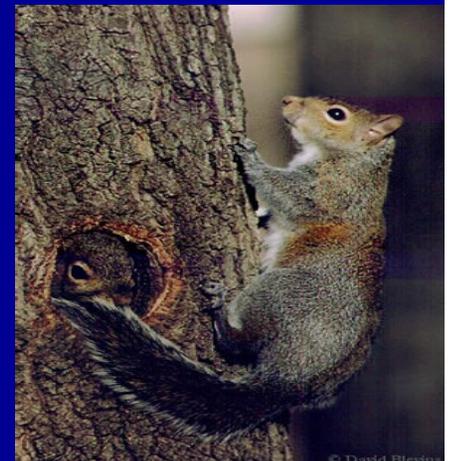
- VRDL began using western blot as a adjunct to neutralization test to confirm sera samples
- Subsequent flavivirus positives in confirmed WNV flock were usually reported as WNV + thus eliminating the need to send in additional samples

Sentinel Chickens 2007

- VRDL plans to do the following:
 - Notify agencies of “definitely negative” results weekly by Wednesday
 - Confirm almost all WNV, SLE, WEE positives with filter paper samples reducing confirmation process by one week
- Local Agencies: Samples must arrive Friday
- Chickens: North pick up in April
South pick up in May

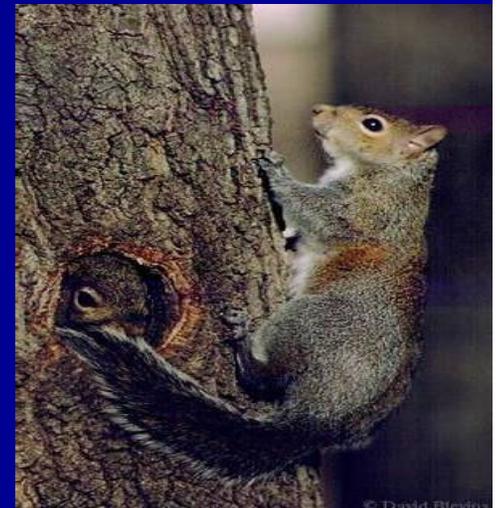
Tree Squirrels - 2006

- 24% (32/135) squirrels tested positive for WNV
- Comparable to dead birds (24.7%)
- Positive results posted this year on website
- Media became aware of testing



Tree Squirrels - 2007

- Educate the public to report dead squirrels as well as dead birds
- Great surveillance tool since squirrels indicate highly localized transmission
- Need local agency support in picking up dead squirrels deemed testable



Public Education 2006

- <13% of the 25,000 callers received WNV hotline number from media
- 4% called police or 911 for number
- Created WNV brochure for seniors

Public Education 2007

- “Faces of West Nile Virus”
 - PSA and video
 - Need to find WN survivors to participate
- Be a West Nile Watcher
- Stress importance of reporting ALL dead birds
 - Avian Influenza + WNV

One-stop shopping for surveillance information and data



Slides compliments of Bruce Eldridge

Surveillance Websites

| Website | Purpose | URL |
|-------------------------|--|--|
| California Surveillance | Public and agency information on CA vectorborne diseases | calsurv.org |
| West Nile virus | Public and agency information on WN virus | westnile.ca.gov |
| Gateway | MAD management of mosquito-borne disease surveillance | surv.mvcac.org |

Vectorborne Disease Website

California Vectorborn... Gateway

 California Vectorborne Disease Surveillance System

Navigation

- Surveillance
- blogs
- content
- image galleries
- recent popular content
- recent posts
- news aggregator
- tinymce

Home

Welcome to CalSurv

Submitted by administrator on November 21, 2006 - 9:18pm.

Welcome to CalSurv, the California Vectorborne disease Surveillance System. This is a cooperative program between the Mosquito and Vector Control Association of California (an association of nearly 60 California agencies with mosquito and vector control responsibilities), the California Department of Public Health, and the University of California. You will find up-to-date information on many vectorborne diseases of California, including diseases caused by West Nile virus, plague, and rodent-associated diseases caused by hantaviruses.

» [administrator's blog](#) | [login](#) or [register](#) to post comments

Mosquito bites don't hurt

Submitted by BigStan on November 22, 2006 - 5:46pm.

I have always heard that mosquito bites are painful. I don't believe this. How could anything as small as a mosquito hurt you?

--- Big Stan

» [login](#) or [register](#) to post comments

Who's online

There are currently 1 user and 0 guests online.

Online users

- Bruce Eldridge

MVCAC/CDPH/UCD



California Vectorborne Disease Surveillance System

Welcome to the California Vectorborne Disease Surveillance System website. Here you will find both recent and historical data on surveillance for diseases caused by arthropod vectors.

- Home
- Arboviruses
- Hantavirus
- Plague
- Tickborne Diseases
- CVEC
- Contacts

The California Vectorborne Disease Surveillance System is a cooperative project of the Mosquito and Vector Control Association of California, the California Department of Health Services, and the University of California. To find other information concerning these cooperating agencies click on the logos below or the links to the right.



MVC



LINKS

[CVEC - UCD](#)

[Entomology - UCD](#)

[Entomology - UCR](#)

[Entomology - UCB](#)

[CDC - Fort Collins, CO](#)

[American Mosquito Control Association](#)

[West Nile Information](#)

welcome to



California



West Nile Virus

Home

Public Information and Resources

- Latest Activity
- West Nile Basics
- Prevention
- Repellent Info
- Mosquito Control
- Find Your Local Mosquito Control Agency

Identify and Report Dead Birds

Professional Resources

- Maps and Data
- Educational Materials
- Press/Media
- Information for Local Agencies
- Clinician Info
- Veterinarian and Horse Owner Information

Links

California West Nile Virus Home 09/29/06

This web site is updated on Tuesdays and Fridays, by 4:00 p.m.
 Mosquito data is updated on Tuesdays only. Horse data is updated on Fridays only.

Note: Sentinel Chicken results will be updated on Monday, October 2.



Help fight WNV: Report a dead bird by either [submitting an online report](#) or by calling 1-877-WNV-BIRD

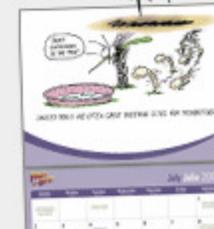
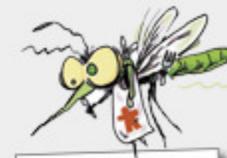
| | |
|--------------------|---|
| Counties | 52 counties have reported WNV activity in California. |
| Human Cases | 237 human cases have been identified from the following counties: Alameda (1), Butte (30), Colusa (2), Contra Costa (8), El Dorado (1), Fresno (8), Glenn (12), Imperial (1), Kern (45), Kings (1), Lake (1), Los Angeles (10), Marin (1), Merced (2), Modoc (2), Mono (1), Napa (1), Nevada (1), Orange (5), Placer (7), Riverside (3), Sacramento (11), San Bernardino (1), San Diego (1), San Joaquin (8), San Luis Obispo (1), Santa Clara (5), Shasta (2), Solano (6), Stanislaus (10), Sutter (11), Tehama (3), Tulare (4), Ventura (3), Yolo (25), and Yuba (3). |
| Horses | 49 horses* have been identified from the following counties: Fresno (5), Kern (3), Lake (2), Lassen (7), Marin (1), Mendocino (2), Merced (3), Modoc (2), Placer (1), Sacramento (1), San Diego (1), San Joaquin (1), San Luis Obispo (4), Santa Barbara (2), Shasta (4), Sonoma (1), Stanislaus (3), Sutter (1), Tehama (1), Tulare (2), and Yuba (2). |
| Dead Birds | 1,162 dead birds have been identified from the following counties: Alameda (29), Amador (2), Butte (40), Calaveras (2), Colusa (9), Contra Costa (73), El Dorado (17), Fresno (68), |



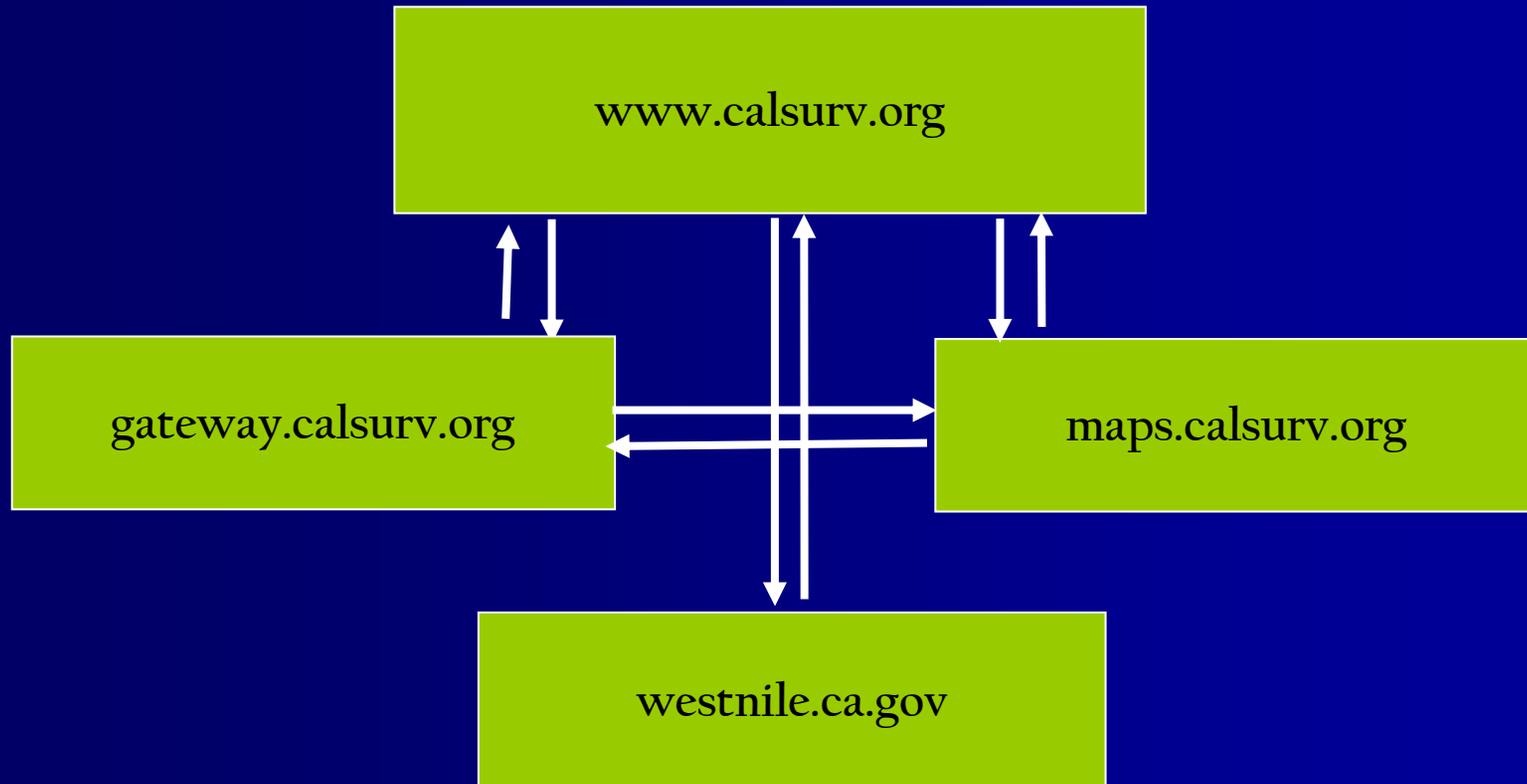
Latest News

Third WNV fatality reported in California this year was a resident of Contra Costa County

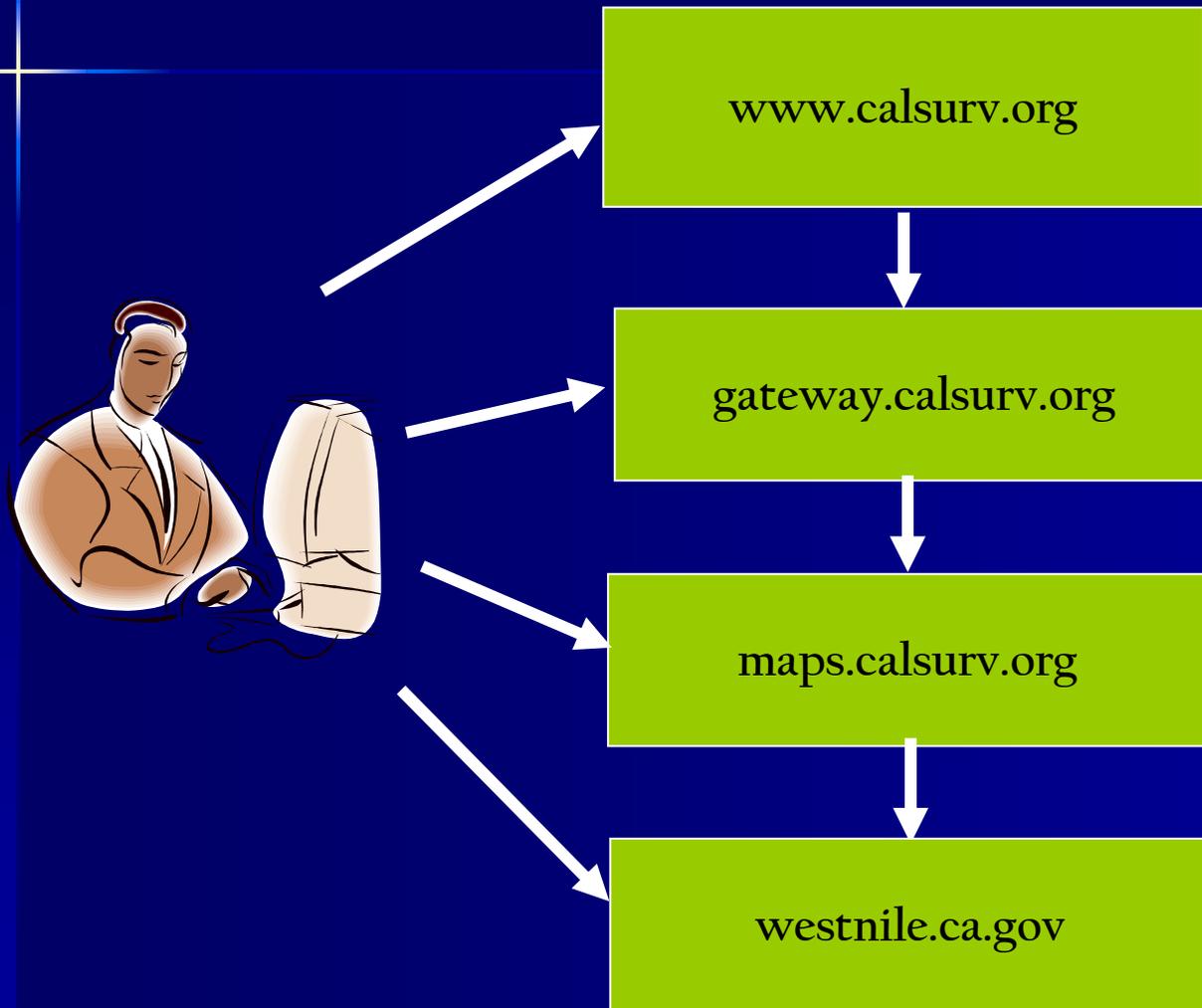
For more news and press releases, visit the [Press/Media section](#).



Access to Websites from Vectorborne Diseases Website



Direct Access to Websites



WNV Website

- 25% of dead bird reports made online
- Modified homepage
- Confirmation feature added
 - Person reporting knows their report was received

Questions?

Panel come forward, please

Total Tested by Element: 2005 & 2006

| YEAR | BIRDS | CHICKEN SERA | HORSES | HUMANS | MOSQUITO POOLS | SQUIRRELS |
|------|--------------------|-----------------|--------|--------|-------------------|-----------|
| 2005 | 9221 *(108,706) | 29,051 | 714 | 2182 | 20,292 | 160 |
| 2006 | 5,648 *(44,769) | 30,768 | 473 | 1,451 | 24,067 | 135 |

2007 Surveillance Goals

| BIRDS | CHICKEN SERA | MOSQUITO POOLS | SQUIRRELS |
|--------------------|-----------------|-------------------|-----------|
| 5,000 *(50,000) | 30,000 | 24,000 | 200 |

Note: * Total Reported