

# California Arbovirus Surveillance Bulletin # 18

Week 33 Friday, August 20, 2004

## Weekly Summary

### California Weekly Summary Comments:

#### **Humans:**

This week, California reported eighty-one new humans infected with West Nile virus (WNV). As of August 20, 2004, a total of 249 WNV infections have been reported from the following local health jurisdictions: San Bernardino (96), Los Angeles (81), Riverside (51), Orange (8), Imperial (1), Kern (4), Fresno (2), Tulare (1), Ventura (1), Butte (1), Lassen (1), Merced (1), and Yolo (1) counties. Butte, Lassen, and Merced counties reported their first human WNV case this week. Sixteen of the 249 WNV infections were initially detected in asymptomatic individuals through screening done at blood banks – one of these individuals later became symptomatic. Of the 234 WNV cases with symptoms, 97 are classified as West Nile fever cases, 93 are classified as West Nile neuroinvasive disease, and 44 are of unknown status. The median age for all cases where data was available is 51 years (range: 2-91 years). Median age for West Nile fever cases is 46 years (range 9-84 years). Median age for West Nile neuroinvasive disease cases is 50 years (range: 15-91 years). Sixty-Four per cent (149/234) of the cases are male. There have been six fatalities to date in California in Orange (1), San Bernardino (2), and Los Angeles (3) counties.

#### **Equine:**

The California Department of Food & Agriculture confirmed 36 WNV equine cases from Butte (4), Colusa (1), Fresno (5), Glenn (3), Kern (2), Los Angeles (2), Riverside (7)\*, Sacramento (1), San Bernardino (4), Shasta (2) and Tehama (4) counties. This is the first reporting of positive horse from Colusa County. Currently, the YTD stands at 122 positive cases. Sixty horses have died or euthanized from the WNV infection.

*\* One Riverside case was reclassified from a confirmed to a non-clinical case. Both Riverside and statewide YTD totals have been revised to reflect this change.*

#### **Dead Birds:**

The hotline received 6,369 reported dead birds last week (YTD = 58,237). The UC Davis Center for Vectorborne Diseases (CVEC) reported 197 out of 270 dead birds submitted in the past week have tested positive for WNV by RT-PCR: 78 American crows, 2 American kestrels, 1 American robin, 1 barn owl, 1 barn swallow, 1 black-headed grosbeak, 1 California gull, 1 common raven, 1 house finch, 3 house sparrows, 1 Mallard duck, 1 mourning dove, 1 northern goshawk, 3 northern mockingbirds, 1 red-shouldered hawk, 1 red-tailed hawk, 3 Steller's jays, 54 western scrub jays, and 41 yellow billed magpies. The American goldfinch, American kestrels, barn swallow, black-headed grosbeak, California gull, mourning dove, and northern goshawk were the first of their species tested positive for WNV this year. The YTD stands at 1,447 positive bird carcasses.

The positive birds were collected within the 33 counties of Alameda (1), Butte (48), Calaveras (1), Contra Costa (1), El Dorado (2), Fresno (9), Glenn (5), Kern (3), Lake (1), Lassen (1), Los Angeles (37), Mariposa (1), Mendocino (1), Orange (20), Placer (1), Plumas (1), Riverside (1), Sacramento (16), San Diego (1), San Joaquin (2), San Luis Obispo (1), San Mateo (1), Santa Barbara (1), Shasta (4), Sierra (1), Solano (1), Sonoma (7), Stanislaus (3), Sutter (2), Tehama (18), Tulare (1), Yolo (1), and Yuba (1). **These are the first WNV positive bird results from the counties of Calaveras, Lake, Lassen, Mariposa, Plumas, San Luis Obispo, San Mateo, Sierra, Sutter, Yolo, and Yuba.**

A cumulative total of 263 dead birds were tested from 33 or the 41 WNV positive counties. Thus 74.9% (197/263) of the birds tested from these counties were WNV positive. Seven dead birds from six other counties in CA tested negative this week.

#### **News Flash:**

CVEC reported Thursday that 279 of 358 dead birds have tested positive for WNV. The positive birds were collected within the 35 counties of Alameda (2), Butte (25), Calaveras (1), El Dorado (2), Fresno (19), Glenn (17), Imperial (1), Kern (12), Lake (1), Lassen (2), Los Angeles (56), Madera (1), Marin (1), Mendocino (1), Napa (1), Nevada (2), Orange (22), Placer (2), Plumas (2), Riverside (3), Sacramento (10), San Diego (2), San Joaquin (7), San Mateo (4), Santa Clara (5), Shasta (21), Sierra (2), Siskiyou (4), Solano (1), Sonoma (3), Stanislaus (8), Sutter (1), Tehama (32), Trinity (2), and Tulare (4). **These are the first WNV positive dead bird results from the counties of Imperial, Madera, Napa, Nevada, Siskiyou, and Trinity.**

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## Mosquito Pools:

CVEC reported 92 WNV positive pools from Los Angeles (36), Orange (21), Kern (20), San Bernardino (6), Riverside (3), Sutter (2), Fresno (1), Lake (1), Placer (1) and Sacramento (1) counties. This is the first reporting of positive mosquito activity from Lake and Placer counties. To date, the YTD stands at 615 positive pools.

## Chickens:

Forty-nine WNV chicken seroconversions were detected in 14 flocks from Glen (1), Imperial (1), Kern (1), Los Angeles (3), Riverside (4) and San Bernardino (4) counties. Of the 49 seroconversions, 12 positives came from eight new flocks in Glenn (1), Kern (1), Los Angeles (2), Riverside (1), and San Bernardino (3) counties. This is the first seroconversions from Glen and Kern counties. Currently, six counties: Imperial, Los Angeles, Riverside, San Bernardino, Kern, and Glenn have positive WNV seroconversions. The current YTD total stands at 263 WNV seroconversions.

## Website Information:

For updated information on WNV, please visit the California WNV website, [www.westnile.ca.gov](http://www.westnile.ca.gov); the CDC website, [www.cdc.gov](http://www.cdc.gov), and the USGS website, [www.westnilemaps.usgs.gov](http://www.westnilemaps.usgs.gov). Please go to the Vector website at <http://vector.ucdavis.edu/arbo.html> for flock location and more information on WNV and other vector-borne diseases.

## TESTING SUMMARIES

### Humans and Equines

		Number Tested	WNV Positive		WEE Positive		SLE Positive		Other Positive	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Individuals Tested	Week	112	0	81	0	0	0	0	0	0
	YTD	828	0	249	0	0	0	0	0	0
Suspect Equine Cases	Week	127	0	36	0	0	0	0	0	0
	YTD	467	0	122	0	0	0	0	0	0

### Dead Birds

	Number Tested	WNV Positive
Week	270	197
YTD	2795	1,446

### Sentinel Chickens and Mosquito Pools

		Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
Chicken sera	Week	731*	49	0	0	0
	YTD	19,965	263	0	0	0
Mosquito pools	Week	506	92	0	0	0
	YTD	8315	615	0	0	0

\*This total has been adjusted to include local agency submissions

### Human Positives Reported:

### POSITIVES

Virus	Date of Onset	Status	Diagnosis	County	Imported/Local	From
WNV	Unknown	Probable	Unknown	Riverside	Local	
WNV	Unknown	Probable	Unknown	Riverside	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	7/37/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	7/30/04	Probable	West Nile Fever	Los Angeles	Local	
WNV	7/26/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	7/23/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	7/26/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	7/19/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	Unknown	Probable	West Nile Fever	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	West Nile Neuroinvasive Disease	San Bernardino	Local	
WNV	7/23/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	Week 30	Probable	West Nile Fever	Merced	Local	
WNV	Week 30	Probable	West Nile Fever	Butte	Local	
WNV	7/25/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/03/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/06/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/09/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/06/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/10/04	Probable	West Nile Fever	Los Angeles	Local	
WNV	7/31/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	

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Virus	Date of Onset	Status	Diagnosis	County	Imported/Local	From
WNV	7/29/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/13/04	Probable	West Nile Fever	Los Angeles	Local	
WNV	8/01/04	Probable	West Nile Neuroinvasive Disease	Orange	Local	
WNV	7/26/04	Probable	West Nile Neuroinvasive Disease	Riverside	Local	
WNV	7/26/04	Probable	West Nile Fever	Riverside	Local	
WNV		Probable		Lassen	Local	
WNV	8/09/04*	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	7/28/04	Probable	West Nile Fever	Los Angeles	Local	
WNV	8/05/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/01/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	7/22/04	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	7/25/04	Probable	Unknown	Riverside	Local	
WNV	Unknown	Probable	Unknown	Riverside	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	7/18/04	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	West Nile Fever	Riverside	Local	
WNV	8/09/04	Probable	West Nile Fever	Riverside	Local	
WNV	8/11/04	Probable	West Nile Fever	Riverside	Local	
WNV	Unknown	Probable	West Nile Neuroinvasive Disease	Riverside	Local	
WNV	8/12/04	Probable	Unknown	Riverside	Local	
WNV	8/14/04	Probable	West Nile Neuroinvasive Disease	Riverside	Local	
WNV	8/01/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	8/02/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	7/17/04	Probable	West Nile Neuroinvasive Disease	San Bernardino	Local	
WNV	6/25/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	7/30/04	Probable	West Nile Neuroinvasive Disease	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	West Nile Neuroinvasive Disease	San Bernardino	Local	
WNV	Unknown	Probable	West Nile Fever	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	8/30/04	Probable	West Nile Neuroinvasive Disease	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	7/24/04	Probable	Unknown	Kern	Local	
WNV	8/04/04	Probable	Unknown	Kern	Local	
WNV	8/01/04	Probable	West Nile Fever	Los Angeles	Local	
WNV	Unknown	Probable	West Nile Fever	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	Unknown	Probable	Unknown	San Bernardino	Local	
WNV	8/06/04	Probable	West Nile Fever	Riverside	Local	
WNV	8/04/04	Probable	West Nile Fever	Orange	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	Riverside	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	Riverside	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	Riverside	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	San Bernardino	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	Los Angeles	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	Los Angeles	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	Los Angeles	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	Los Angeles	Local	
WNV	Not Applicable	Probable	Assymptomatic – Blood Bank	San Bernardino	Local	

\*Indicates fatality

### Chicken Seroconversions Reported by DHS:

Virus	County	State	Acode	City	Location	
****	WNV	Glenn	CA	GLEN9710	Orland	Orland flock
	<b>Bands:</b>	1848, 1849				<b>Probable Seroconversion Date:</b> 21-July-04
	WNV	Glenn	CA	GLEN9710	Orland	Orland flock
	<b>Bands:</b>	1839, 1844				<b>Probable Seroconversion Date:</b> 4-August-04
	WNV	Imperial	CA	IMPR0012	Westmorland	Westmorland
	<b>Bands:</b>	1310, 1315				<b>Probable Seroconversion Date:</b> 9-August-04
****	WNV	Kern	CA	KERN0111	Arvin	Blackburn residence
	<b>Bands:</b>	2047				<b>Probable Seroconversion Date:</b> 19-July-04

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Virus	County	State	Acode	City	Location
WNV <b>Bands:</b> 2022, 2025, 2027	Kern	CA	KERN0111	Arvin	Blackburn residence <b>Probable Seroconversion Date:</b> 2-August-04
WNV <b>Bands:</b> 3912, 3914, 3916, 3920	Los Angeles	CA	GRLA2002	Long Beach	El Dorado Park <b>Probable Seroconversion Date:</b> 9-August-04
**** WNV <b>Band:</b> 3162	Los Angeles	CA	SGVA0009	Walnut	Gartel Dr. <b>Probable Seroconversion Date:</b> 21-July-04
**** WNV <b>Band:</b> 3124	Los Angeles	CA	SGVA0024	Altadena	Eaton Canyon Nature Center <b>Probable Seroconversion Date:</b> 2-August-04
WNV <b>Band:</b> 1419	Riverside	CA	COAV0035	Mecca	Adohr <b>Probable Seroconversion Date:</b> 9-August-04
WNV <b>Band:</b> 1428 and 1432	Riverside	CA	COAV0122	Mecca	Gordon <b>Probable Seroconversion Date:</b> 9-August-04
WNV <b>Band:</b> 2651 and 2659	Riverside	CA	NWST9226	Riverside	Mockingbird Canyon <b>Probable Seroconversion Date:</b> 11-August-04
**** WNV <b>Band:</b> 2611, 2613, 2618, and 2620	Riverside	CA	NWST9227	Highgrove	Center St. <b>Probable Seroconversion Date:</b> 14-July-04
WNV <b>Band:</b> 2612, 2614, 2616, and 2617	Riverside	CA	NWST9227	Highgrove	Center St. <b>Probable Seroconversion Date:</b> 28-July-04
WNV <b>Band:</b> 2615	Riverside	CA	NWST9227	Highgrove	Center St. <b>Probable Seroconversion Date:</b> 11-August-04
**** WNV <b>Band:</b> 2959	San Bernardino	CA	SANB0001	Needles	Treatment Plant <b>Probable Seroconversion Date:</b> 12-July-04
WNV <b>Band:</b> 2952, 2957, 2960, and 3041	San Bernardino	CA	SANB0001	Needles	Treatment Plant <b>Probable Seroconversion Date:</b> 9-August-04
WNV <b>Band:</b> 3007	San Bernardino	CA	SANB0007	Fontana	Fontana <b>Probable Seroconversion Date:</b> 10-August -04
**** WNV <b>Band:</b> 3013	San Bernardino	CA	SANB0008	Upland	Upland Crosswalls <b>Probable Seroconversion Date:</b> 13-July-04
WNV <b>Band:</b> 3012, 3014, 3015, 3017, 3018, and 3020	San Bernardino	CA	SANB0008	Upland	Upland Crosswalls <b>Probable Seroconversion Date:</b> 27-July-04
WNV <b>Band:</b> 3019	San Bernardino	CA	SANB0008	Upland	Upland Crosswalls <b>Probable Seroconversion Date:</b> 10-August -04
**** WNV <b>Band:</b> 3822	San Bernardino	CA	WVAL0004	Ontario	4 <sup>th</sup> Street <b>Probable Seroconversion Date:</b> 13-July-04
WNV <b>Band:</b> 3819, 3823, 3824, and 3838	San Bernardino	CA	WVAL0004	Ontario	4 <sup>th</sup> Street <b>Probable Seroconversion Date:</b> 28-July-04

\*\*\*\*Indicates a new flock

### Virus Isolations From Mosquito Pools:

Virus	Mosquito species	Date Collected	ACODE	Pool #	City	County	Date Received
WNV	Culex tarsalis	5-Aug	AFSB	358	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	359	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	360	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	361	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	362	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	363	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	364	Arvin	Kern	11-Aug

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Virus	Mosquito species	Date Collected	ACODE	Pool #	City	County	Date Received
WNV	Culex tarsalis	5-Aug	AFSB	365	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	366	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	367	Arvin	Kern	11-Aug
WNV	Culex tarsalis	5-Aug	AFSB	369	Arvin	Kern	11-Aug
WNV	Culex quinquefasciatus	4-Aug	AFSB	353	E. Bakersfield	Kern	11-Aug
WNV	Culex tarsalis	2-Aug	COAV	895	Mecca	Riverside	11-Aug
WNV	Culex tarsalis	2-Aug	COAV	883	Indio	Riverside	11-Aug
WNV	Culex quinquefasciatus	9-Aug	FRNO	22	Fresno	Fresno	11-Aug
WNV	Culex quinquefasciatus	4-Aug	GRLA	918	Harbor City	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	4-Aug	GRLA	919	Harbor City	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	4-Aug	GRLA	920	Harbor City	Los Angeles	12-Aug
WNV	Culex tarsalis	4-Aug	GRLA	924	Harbor City	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	3-Aug	GRLA	911	Whittier	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	3-Aug	GRLA	912	Whittier	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	3-Aug	GRLA	913	Whittier	Los Angeles	12-Aug
WNV	Culex stigmatosoma	3-Aug	GRLA	914	Whittier	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	2-Aug	GRLA	1665	Encino	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	2-Aug	GRLA	1666	Encino	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	2-Aug	GRLA	1669	Encino	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	2-Aug	GRLA	1671	Encino	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	2-Aug	GRLA	1672	Encino	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	2-Aug	GRLA	1673	Encino	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	2-Aug	GRLA	1675	Encino	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	2-Aug	GRLA	1676	Encino	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	4-Aug	GRLA	1681	Los Angeles	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	4-Aug	GRLA	1682	Los Angeles	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	4-Aug	GRLA	1683	Los Angeles	Los Angeles	12-Aug
WNV	Culex stigmatosoma	4-Aug	GRLA	1684	Los Angeles	Los Angeles	12-Aug
WNV	Culex stigmatosoma	5-Aug	GRLA	1690	Los Angeles	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	3-Aug	GRLA	916	Lakewood	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	3-Aug	GRLA	917	Lakewood	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	5-Aug	GRLA	1685	Northridge	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	5-Aug	GRLA	1686	Northridge	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	5-Aug	GRLA	1687	Northridge	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	9-Aug	GRLA	1691	Granada Hills	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	9-Aug	GRLA	1693	Granada Hills	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	9-Aug	GRLA	1694	Granada Hills	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	9-Aug	GRLA	1695	Granada Hills	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	9-Aug	GRLA	1696	Granada Hills	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	9-Aug	GRLA	1697	Granada Hills	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	9-Aug	GRLA	1698	Granada Hills	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	9-Aug	GRLA	1699	Granada Hills	Los Angeles	12-Aug
WNV	Culex quinquefasciatus	5-Aug	KERN	274	Bakersfield	Kern	11-Aug
WNV	Culex quinquefasciatus	5-Aug	KERN	269	Bakersfield	Kern	11-Aug
WNV	Culex quinquefasciatus	5-Aug	KERN	270	Bakersfield	Kern	11-Aug
WNV	Culex quinquefasciatus	5-Aug	KERN	276	Arvin	Kern	11-Aug
WNV	Culex quinquefasciatus	5-Aug	KERN	277	Arvin	Kern	11-Aug
WNV	Culex quinquefasciatus	5-Aug	KERN	278	Arvin	Kern	11-Aug

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WNV	Culex quinquefasciatus	5-Aug	KERN	279	Arvin	Kern	11-Aug
WNV	Culex quinquefasciatus	5-Aug	KERN	280	Arvin	Kern	11-Aug
WNV	Culex tarsalis	10-Aug	LAKE	154	Nice	Lake	11-Aug
WNV	Culex quinquefasciatus	3-Aug	LONG	244	Long Beach	Los Angeles	11-Aug
WNV	Culex quinquefasciatus	3-Aug	LONG	236	Long Beach	Los Angeles	11-Aug
WNV	Culex quinquefasciatus	3-Aug	ORCO	1235	Fullerton	Orange	10-Aug
WNV	Culex quinquefasciatus	3-Aug	ORCO	1236	Fullerton	Orange	10-Aug
WNV	Culex quinquefasciatus	3-Aug	ORCO	1237	Fullerton	Orange	10-Aug
WNV	Culex quinquefasciatus	3-Aug	ORCO	1238	Fullerton	Orange	10-Aug
WNV	Culex quinquefasciatus	3-Aug	ORCO	1233	Garden Grove	Orange	10-Aug
WNV	Culex quinquefasciatus	3-Aug	ORCO	1234	Garden Grove	Orange	10-Aug
WNV	Culex erythrothorax	3-Aug	ORCO	1243	Rancho Santa Margarita	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1260	Santa Ana	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1254	Cypress	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1255	Cypress	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1250	La Habra	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1251	La Habra	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1259	Brea	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1258	Cypress	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1252	Anaheim	Orange	10-Aug
WNV	Culex stigmatosoma	4-Aug	ORCO	1253	Anaheim	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1261	Fullerton	Orange	10-Aug
WNV	Culex quinquefasciatus	4-Aug	ORCO	1262	Fullerton	Orange	10-Aug
WNV	Culex quinquefasciatus	3-Aug	ORCO	1231	Anaheim	Orange	10-Aug
WNV	Culex quinquefasciatus	3-Aug	ORCO	1232	Anaheim	Orange	10-Aug
WNV	Culex quinquefasciatus	5-Aug	ORCO	1266	Fullerton	Orange	10-Aug
WNV	Culex tarsalis	5-Aug	PLCR	77	Roseville	Placer	6-Aug
WNV	Culex tarsalis	5-Aug	RIVR	146	San Jacinto	Riverside	12-Aug
WNV	Culex quinquefasciatus	2—Jul	SANB	160	Redlands	San Bernardino	12-Aug
WNV	Culex tarsalis	29-Jul	SANB	165	Redlands	San Bernardino	12-Aug
WNV	Culex tarsalis	29-Jul	SANB	167	Redlands	San Bernardino	12-Aug
WNV	Culex tarsalis	28-Jul	SANB	168	Colton	San Bernardino	12-Aug
WNV	Culex tarsalis	28-Jul	SANB	169	Colton	San Bernardino	12-Aug
WNV	Culex quinquefasciatus	6-Aug	SANB	174	Colton	San Bernardino	12-Aug
WNV	Culex tarsalis	6-Aug	SAYO	741	Wilton	Sacramento	9-Aug
WNV	Culex tarsalis	9-Aug	SUYA	220	Sutter	Sutter	11-Aug
WNV	Culex tarsalis	9-Aug	SUYA	207	Pennington	Sutter	11-Aug

## Dead Birds Tested Positive for WNV last week

Species	County	City	Zip Code	Date Collected	Date Tested
American Crow	Alameda	Fremont	94538	7/28/2004	8/9/2004
Western Scrub-Jay	Butte	Biggs	95917	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95973	7/28/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95928	7/28/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95973	7/29/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95926	7/29/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95928	7/29/2004	8/9/2004
American Crow	Butte	Chico	95926	7/29/2004	8/9/2004

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Species	County	City	Zip Code	Date Collected	Date Tested
American Crow	Butte	Chico	95973	7/29/2004	8/9/2004
American Crow	Butte	Chico	95973	7/29/2004	8/9/2004
American Crow	Butte	Chico	95973	7/29/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95928	7/29/2004	8/9/2004
American Crow	Butte	Chico	95926	7/30/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95928	7/30/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95926	7/30/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95973	7/30/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95973	7/30/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95973-	7/30/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95973	7/30/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95928	7/30/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95973	8/2/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95973	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95973	8/2/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95928	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95973	8/1/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95928	8/2/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95928	8/2/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95928	7/30/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95929	8/2/2004	8/9/2004
Western Scrub-Jay	Butte	Chico	95928	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Chico	95973	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Durham	95938	7/29/2004	8/9/2004
Western Scrub-Jay	Butte	Durham	95938	7/29/2004	8/9/2004
Yellow-billed Magpie	Butte	Durham	95938	7/30/2004	8/9/2004
Yellow-billed Magpie	Butte	Durham	95938	7/30/2004	8/9/2004
Yellow-billed Magpie	Butte	Durham	95938	7/30/2004	8/9/2004
Yellow-billed Magpie	Butte	Nelson	95938	7/29/2004	8/9/2004
Western Scrub-Jay	Butte	Oroville	95965	7/28/2004	8/9/2004
Yellow-billed Magpie	Butte	Oroville	95965	7/29/2004	8/9/2004
Western Scrub-Jay	Butte	Oroville	95965	7/29/2004	8/9/2004
American Crow	Butte	Oroville	95965	7/29/2004	8/9/2004
Western Scrub-Jay	Butte	Oroville	95966	7/30/2004	8/9/2004
Western Scrub-Jay	Butte	Oroville	95966	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Oroville	95965	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Oroville	95965	8/2/2004	8/9/2004
Western Scrub-Jay	Butte	Oroville	95965	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Oroville	5965	8/2/2004	8/9/2004
Yellow-billed Magpie	Butte	Oroville	5965	8/2/2004	8/9/2004
Western Scrub-Jay	Butte	Palermo	95968	7/29/2004	8/9/2004
Western Scrub-Jay	Calaveras	Angels Camp	95221	7/29/2004	8/9/2004
American Crow	Contra Costa	Knightsen	94548	7/29/2004	8/9/2004
Western Scrub-Jay	El Dorado	Placerville	95667	7/29/2004	8/9/2004
Steller's Jay	El Dorado	South Lake Tahoe	96150	7/29/2004	8/9/2004
Western Scrub-Jay	Fresno	Clovis	93611	7/29/2004	8/9/2004
Western Scrub-Jay	Fresno	Clovis	93612	7/29/2004	8/9/2004
American Crow	Fresno	Clovis	93611	7/30/2004	8/9/2004

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Species	County	City	Zip Code	Date Collected	Date Tested
Western Scrub-Jay	Fresno	Fresno	93726	7/29/2004	8/9/2004
Black-Headed Grosbeak	Fresno	Fresno	93720	7/29/2004	8/9/2004
American Crow	Fresno	Fresno	93724	7/29/2004	8/9/2004
American Crow	Fresno	Fresno	93720	7/30/2004	8/9/2004
Western Scrub-Jay	Fresno	Fresno	93702	7/30/2004	8/9/2004
Mallard (domestic)	Fresno	Fresno	93727	7/30/2004	8/9/2004
Western Scrub-Jay	Glenn	Orland	95963	7/23/2004	8/9/2004
Yellow-billed Magpie	Glenn	Orland	95963	8/2/2004	8/9/2004
Western Scrub-Jay	Glenn	Orland	95963	8/2/2004	8/9/2004
Yellow-billed Magpie	Glenn	Orland	95963	8/2/2004	8/9/2004
Yellow-billed Magpie	Glenn	Willows	95988	8/2/2004	8/9/2004
Western Scrub-Jay	Kern	Bakersfield	93308	7/28/2004	8/9/2004
Western Scrub-Jay	Kern	Bakersfield	93306	7/29/2004	8/9/2004
American Kestrel	Kern	Wasco	93280	7/28/2004	8/9/2004
Western Scrub-Jay	Lake	Lakeport	95453	8/2/2004	8/9/2004
American Goldfinch	Lassen	Susanville	96130	7/29/2004	8/9/2004
American Crow	Los Angeles	Carson	90745	7/28/2004	8/9/2004
American Crow	Los Angeles	Compton	90220	8/3/2004	8/9/2004
American Crow	Los Angeles	El Monte	91733	7/21/2004	8/9/2004
American Crow	Los Angeles	Encino	91316	7/29/2004	8/9/2004
American Crow	Los Angeles	Encino	91316	8/2/2004	8/9/2004
Northern Mockingbird	Los Angeles	Glendale	91206	7/30/2004	8/9/2004
American Crow	Los Angeles	Long Beach	90803	7/30/2004	8/9/2004
American Crow	Los Angeles	Long Beach	90814	7/29/2004	8/9/2004
American Crow	Los Angeles	Los Alamitos	90720	7/29/2004	8/9/2004
American Crow	Los Angeles	Los Angeles	90045	8/2/2004	8/9/2004
American Crow	Los Angeles	Los Angeles	90039	8/2/2004	8/9/2004
American Crow	Los Angeles	Lynwood	90262	8/3/2004	8/9/2004
American Crow	Los Angeles	Manhattan Beach	90266	8/2/2004	8/9/2004
American Crow	Los Angeles	Marina Del Rey	90292	7/29/2004	8/9/2004
American Crow	Los Angeles	Rolling Hills Estates	90274	7/29/2004	8/9/2004
American Crow	Los Angeles	Santa Clarita	91387	8/2/2004	8/9/2004
American Crow	Los Angeles	Sherman Oaks	91403	7/30/2004	8/9/2004
American Crow	Los Angeles	Sherman Oaks	91411	8/2/2004	8/9/2004
American Crow	Los Angeles	Sunland	91040	8/2/2004	8/9/2004
Western Scrub-Jay	Los Angeles	Sunland	91040	8/4/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	7/28/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	7/28/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	7/28/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	7/28/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	7/28/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	7/29/2004	8/9/2004
House Sparrow	Los Angeles	Van Nuys	91406	7/30/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	8/2/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	8/1/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	8/1/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	8/1/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	8/1/2004	8/9/2004

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Species	County	City	Zip Code	Date Collected	Date Tested
American Crow	Los Angeles	Van Nuys	91406	8/1/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	8/1/2004	8/9/2004
Northern Mockingbird	Los Angeles	Van Nuys	91411	8/3/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	8/3/2004	8/9/2004
American Crow	Los Angeles	Van Nuys	91406	8/4/2004	8/9/2004
House Sparrow	Mariposa	Hornitos	95325	8/2/2004	8/9/2004
Common Raven	Mendocino	Mendocino	95460	7/29/2004	8/9/2004
American Crow	Orange	Anaheim	92804	7/27/2004	8/9/2004
American Crow	Orange	Costa Mesa	92626	7/26/2004	8/9/2004
American Crow	Orange	Costa Mesa	92626	7/27/2004	8/9/2004
American Crow	Orange	Fountain Valley	92708	7/29/2004	8/9/2004
American Crow	Orange	Fullerton	92833	7/26/2004	8/9/2004
American Crow	Orange	Garden Grove	92841	7/26/2004	8/9/2004
American Crow	Orange	Garden Grove	92840	7/27/2004	8/9/2004
American Crow	Orange	Orange	92868	7/29/2004	8/9/2004
American Crow	Orange	Orange	92868	7/29/2004	8/9/2004
House Sparrow	Orange	Orange	92867	7/29/2004	8/9/2004
Western Scrub-Jay	Orange	Placentia	92870	7/28/2004	8/9/2004
Northern Mockingbird	Orange	Rancho Santa Margarita	92688	7/16/2004	8/9/2004
American Crow	Orange	Santa Ana	92705	7/26/2004	8/9/2004
American Crow	Orange	Santa Ana	92701	7/26/2004	8/9/2004
American Crow	Orange	Santa Ana	92705	7/29/2004	8/9/2004
American Crow	Orange	Santa Ana	92703	7/29/2004	8/9/2004
House Finch	Orange	Seal Beach	90740	7/27/2004	8/9/2004
American Crow	Orange	Stanton	90680	7/26/2004	8/9/2004
American Crow	Orange	Tustin	92780	7/27/2004	8/9/2004
American Crow	Orange	Westminster	92683	7/27/2004	8/9/2004
Northern Goshawk	Placer	Emigrant Gap	95715	7/30/2004	8/9/2004
Barn Swallow	Plumas	Quincy	95971	7/29/2004	8/9/2004
American Kestrel	Riverside	Nuevo	92567	7/27/2004	8/9/2004
American Crow	Sacramento	Elk Grove	95624	7/28/2004	8/9/2004
American Crow	Sacramento	Elk Grove	95624	8/2/2004	8/9/2004
Western Scrub-Jay	Sacramento	Elk Grove	95624	8/2/2004	8/9/2004
American Crow	Sacramento	Elk Grove	95758	8/3/2004	8/9/2004
Red-Tailed Hawk	Sacramento	Galt	95632	7/29/2004	8/9/2004
Western Scrub-Jay	Sacramento	Herald	95638	7/30/2004	8/9/2004
American Crow	Sacramento	Sacramento	95826	8/2/2004	8/9/2004
Yellow-billed Magpie	Sacramento	Sacramento	95826	8/4/2004	8/9/2004
Yellow-billed Magpie	Sacramento	Wilton	95693	7/27/2004	8/9/2004
Western Scrub-Jay	Sacramento	Wilton	95693	7/29/2004	8/9/2004
Yellow-billed Magpie	Sacramento	Wilton	95693	7/29/2004	8/9/2004
Western Scrub-Jay	Sacramento	Wilton	95693	7/29/2004	8/9/2004
Western Scrub-Jay	Sacramento	Wilton	95693	7/29/2004	8/9/2004
Western Scrub-Jay	Sacramento	Wilton	95693	7/30/2004	8/9/2004
Western Scrub-Jay	Sacramento	Wilton	95693	8/2/2004	8/9/2004
Western Scrub-Jay	Sacramento	Wilton	95693	8/3/2004	8/9/2004
American Crow	San Diego	Del Mar	92014	7/30/2004	8/9/2004
Steller's Jay	San Joaquin	Lodi	95240	7/30/2004	8/9/2004

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Species	County	City	Zip Code	Date Collected	Date Tested
American Crow	San Joaquin	Lodi	95240	8/2/2004	8/9/2004
Mourning Dove	San Luis Obispo	Paso Robles	93446	7/29/2004	8/9/2004
American Crow	San Mateo	Redwood City	94063	7/28/2004	8/9/2004
American Crow	Santa Barbara	Solvang	93463	7/28/2004	8/9/2004
Western Scrub-Jay	Shasta	Cottonwood	96022	7/29/2004	8/9/2004
Yellow-billed Magpie	Shasta	Cottonwood	96022	7/29/2004	8/9/2004
Western Scrub-Jay	Shasta	Redding	96001	7/29/2004	8/9/2004
American Crow	Shasta	Redding	96002	7/29/2004	8/9/2004
Yellow-billed Magpie	Sierra	Loyalton	96118	8/2/2004	8/9/2004
California Gull	Solano	Vallejo	94592	8/3/2004	8/9/2004
Red-shouldered Hawk	Sonoma	Cloverdale	95425	7/28/2004	8/9/2004
Barn Owl	Sonoma	Cotati	94931	7/28/2004	8/9/2004
Steller's Jay	Sonoma	Forestville	95436	7/29/2004	8/9/2004
Western Scrub-Jay	Sonoma	Petaluma	94952	7/27/2004	8/9/2004
Western Scrub-Jay	Sonoma	Petaluma	94952	7/28/2004	8/9/2004
American Crow	Sonoma	Rohnert Park	94928	7/29/2004	8/9/2004
American Crow	Sonoma	Windsor	95492	7/28/2004	8/9/2004
Western Scrub-Jay	Stanislaus	Modesto	95356	7/29/2004	8/9/2004
American Crow	Stanislaus	Modesto	95355	7/30/2004	8/9/2004
Western Scrub-Jay	Stanislaus	Turlock	95380	7/27/2004	8/9/2004
Western Scrub-Jay	Sutter	Yuba City	95993	7/29/2004	8/9/2004
Yellow-billed Magpie	Sutter	Yuba City	95991	8/2/2004	8/9/2004
Yellow-billed Magpie	Tehama	Corning	96021	7/30/2004	8/9/2004
Western Scrub-Jay	Tehama	Corning	96021	8/2/2004	8/9/2004
Yellow-billed Magpie	Tehama	Corning	96021	7/30/2004	8/9/2004
American Crow	Tehama	Corning	96021	8/2/2004	8/9/2004
Yellow-billed Magpie	Tehama	Corning	96021	8/2/2004	8/9/2004
Yellow-billed Magpie	Tehama	Corning	96021	8/2/2004	8/9/2004
Yellow-billed Magpie	Tehama	Corning	96021	8/20/2004	8/9/2004
Steller's Jay	Tehama	Gerber	96035	7/30/2004	8/9/2004
Yellow-billed Magpie	Tehama	Los Molinos	96055	7/30/2004	8/9/2004
Western Scrub-Jay	Tehama	Proberta	96078	7/29/2004	8/9/2004
American Crow	Tehama	Red Bluff	96080	7/27/2004	8/9/2004
American Crow	Tehama	Red Bluff	96080	7/29/2004	8/9/2004
American Crow	Tehama	Red Bluff	96080	7/29/2004	8/9/2004
Yellow-billed Magpie	Tehama	Red Bluff	96080	7/30/2004	8/9/2004
American Crow	Tehama	Red Bluff	96080	7/30/2004	8/9/2004
American Crow	Tehama	Red Bluff	96080	7/30/2004	8/9/2004
Western Scrub-Jay	Tehama	Red Bluff	96080	7/30/2004	8/9/2004
Western Scrub-Jay	Tulare	Visalia	93292	7/29/2004	8/9/2004
Yellow-billed Magpie	Yolo	Esparto	95627	7/29/2004	8/9/2004
Western Scrub-Jay	Yuba	Loma Rica	95901	8/1/2004	8/9/2004
Yellow-billed Magpie	Yuba	Marysville	95901	7/28/2004	8/9/2004
Western Scrub-Jay	Yuba	Marysville	95901	8/3/2004	8/9/2004

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## National Comments:

As of August 17, 2004, West Nile Virus (WNV) activity has been detected in 43 states, Puerto Rico, and New York City. Massachusetts and Oregon reported their first WNV activity this week. Over 700 human WNV cases have been reported in 27 states and New York City. The majority of the cases have been reported from Arizona, California, and Colorado. At this time in 2003, there were 715 human cases from 29 states. Of the 681 WNV cases where data is available, the median age is 51 years (range: 1 month – 99 years) and 57% are male. Thirty-seven percent of the cases were neuroinvasive. There have been 20 WNV-related fatalities nationwide in 2004. In addition, 55 asymptomatic blood donors who tested positive for West Nile virus have been reported nationwide. Thirteen of these blood donors later developed symptoms and were added to the case totals.

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## Dead Birds:

Dead bird kidney tissues are tested at CVEC using the PCR Taqman assay, subsequent to carcass necropsy at the California Animal Health and Food Safety (CAHFS) Laboratories. Organ pools from PCR positive carcasses are tested using cell culture for virus isolation. The WNV Dead Bird Surveillance Coordinator, Ryan Carney, can be reached directly at (510) 412-6251.

Crows from positive zip codes are no longer accepted for necropsy. Positive Vec-tests from oral swabs from crows are no longer confirmed. Other bird species tested by RT-PCR using singleplex and confirmed with a second primer set.

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## Sentinel Chickens:

Dried blood spot specimens from sentinel chickens submitted each week to the DHS Viral and Rickettsial Disease Laboratory (VRDL) are tested for the presence of antibodies to West Nile virus (WNV), western equine encephalomyelitis (WEE), and St. Louis encephalitis (SLE) viruses by EIA and IFA. The VRDL performs additional testing (including Plaque Reduction Neutralization (PRNT) and IgM Capture – Enzyme Linked Immunosorbent Assay (MAC-ELISA)) on specimens from sentinel chickens in which antibodies are detected in new geographic areas. The VRDL also forwards selected serum to the UC Davis Center for Vectorborne Diseases (CVEC) for additional testing for WNV, WEE, and SLE antibodies as needed.

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## Mosquito Pools:

All mosquito pools are screened for WEE, SLE, and WNV viral RNA using a Taqman multiplex RT-PCR. CVEC will cease confirmation testing on PCR-positive pools of *Cx. tarsalis* and *Cx. quinquefasciatus* but will continue to confirm multiplex PCR-positive results for other mosquito species using singleplex RT-PCR. There will be an elimination of *in situ* EIA testing for all mosquito species.

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*Prepared by the Vector-Borne Disease Section (Infectious Diseases Branch) and the Viral and Rickettsial Disease Laboratory Branch, Division of Communicable Disease Control, California Department of Health Services, 850 Marina Bay Parkway, Richmond, CA 94804. Questions concerning this bulletin should be addressed to Al Hom by phone (510) 412-6254, FAX (510) 412-6263, or email [ahom@dhs.ca.gov].*