

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

Weekly Summary

California Weekly Summary Comments:

Humans:

This week, California reported 72 new humans infected with West Nile virus (WNV). As of September 17, 2004, a total of **558** WNV infections have been reported from the following local health jurisdictions: San Bernardino (174), Los Angeles (225), Riverside (85), Orange (30), Kern (17), Fresno (9), Imperial (1), Lassen (1), Ventura (1), Butte (4), Lassen (1), Merced (1), San Diego (1), Santa Clara (1), Shasta (2), Tehama (4), Tulare (1) and Yolo (1) counties. Fifty-four of the 523 WNV infections were initially detected in asymptomatic individuals through screening done at blood banks – six of these individuals later became symptomatic. Of the 510 WNV cases with symptoms, 181 are classified as West Nile fever cases, 172 are classified as West Nile neuroinvasive disease, and 157 are of unknown status. The median age for all cases where data was available is 52 years (range: 2-91 years). Median age for West Nile fever cases is 48 years (range 7-83 years). Median age for West Nile neuroinvasive disease cases is 59 years (range:5-91 years). Sixty-three per cent (320/510) of the cases are male. There have been 15 fatalities to date in California in San Bernardino (4), Los Angeles (7), Riverside (2) Orange (1) and Tehama (1) counties.

Equine:

The California Department of Food & Agriculture confirmed 74 WNV equine cases from Butte (4), Colusa (1), Glenn (4), Kern (4), Lake (1), Lassen (1), Los Angeles (3), Placer (2), Riverside (10), Sacramento (13), San Bernardino (1), Shasta (9), Siskiyou (1), Sonoma (1), Stanislaus (2), Sutter (5), Tehama (9), Trinity (1), and Yuba (2) counties. These are the first WNV positive horse results for Siskiyou, Sonoma, Stanislaus, and Trinity counties. Currently, the YTD total stands at 327 positive cases. A total of 141 horses have died or euthanatized from the WNV infection.

Dead Birds:

The hotline received 2,570 reported dead birds last week (YTD = 79,597). The UC Davis Center for Vectorborne Diseases (CVEC) reported 271 out of 332 dead birds submitted last week have tested positive for WNV by RT-PCR: acorn woodpecker (1), American crows (45), American kestrels (3), American robins (2), barn owls (6), a black-chinned sparrow (1), black-headed grosbeaks (2), a bronze turkey (1), a California quails (1), a California towhee (1), a cedar waxwing (1), common ravens (2), Cooper's Hawks (4), a dark-eyed junco (1), a double-crested cormorant (1), European starlings (2), great-horned owls (2), a hermit thrush (1), house finches (4), house sparrows (7), lesser goldfinches (6), a lesser nighthawk (1), a mountain quail (1), mourning doves (2), a northern goshawk (1), an osprey (1), a Pacific-slope flycatcher (1), a peregrine falcon (1), pine siskins (2), a pinyon jay (1), red-shouldered hawks (3), red-tailed hawks (3), a red-winged blackbird (1), sharp-shinned hawks (2), a song sparrow (1), spotted towhees (3), Steller's jays (15), a turkey vulture (1), western bluebirds (2), western scrub jays (92), western tanagers (2), a white-tailed kite (1), Wilson's warblers (2), and yellow-billed magpies (38). The black-chinned sparrow, bronze turkey, cedar waxwing, dark-eyed junco, double-crested cormorant, hermit thrush, lesser nighthawk, mountain quail, osprey, Pacific-slope flycatcher, peregrine falcon, pinyon jay, red-winged blackbird, spotted towhees, turkey vulture, and Wilson's warblers were the first of their species to test positive for WNV this year. The YTD total stands at 2,075 positive bird carcasses.

The positive birds were collected within the 48 counties of Alameda (6), Amador (2), Butte (1), Calaveras (1), Colusa (5), Contra Costa (2), El Dorado (3), Fresno (18), Glenn (13), Humboldt (2), Inyo (1), Kern (11), Lake (3), Lassen (4), Los Angeles (25), Madera (2), Marin (4), Mariposa (1), Merced (3), Mono (2), Monterey (1), Napa (2), Nevada (3), Placer (2), Plumas (2), Riverside (3), Sacramento (9), San Diego (8), San Francisco (5), San Joaquin (9), San Luis Obispo (4), San Mateo (3), Santa Barbara (1), Santa Clara (2), Santa Cruz (6), Shasta (19), Siskiyou (7), Solano (3), Sonoma (6), Stanislaus (13), Sutter (6), Tehama (18), Trinity (1), Tulare (5), Tuolumne (16), Ventura (2), Yolo (3), and Yuba (2). **This was the first WNV positive dead bird results from the counties of Inyo and Merced.**

A cumulative total of 332 dead birds were tested from 49 of the 56 WNV positive counties. Thus 81.6% (271/332) of the birds tested from these counties were WNV positive. No birds were tested this week from the two remaining negative counties in California: Del Norte and San Benito.

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

News Flash:

CVEC reported Wednesday and Thursday that 112 of 159 dead birds have tested positive for WNV. The positive birds were collected within the 39 counties of Alameda (2), Calaveras (1), Contra Costa (2), Fresno (7), Glenn (10), Humboldt (1), Inyo (2), Kern (2), Kings (1), Lake (3), Los Angeles (3), Marin (2), Merced (1), Mono (1), Napa (2), Nevada (1), Orange (2), Placer (3), Plumas (2), Riverside (3), Sacramento (10), San Francisco (2), San Joaquin (2), San Luis Obispo (1), Santa Cruz (6), Shasta (2), Siskiyou (8), Solano (2), Stanislaus (6), Sutter (3), Tehama (10), Trinity (1), Tulare (3), Tuolumne (2), and Yuba (2).

Mosquito Pools:

CVEC reported 96 positive pools from Butte (1), Fresno (2), Los Angeles (35), Kern (38), Lake (7), Orange (11), Sacramento (1), and Sutter (1) counties. To date, 16 CA counties have reported positive mosquito activities. WNV has been isolated from nine mosquito species: *Culex tarsalis*, *Cx. erythrothorax*, *Cx. quinquefasciatus*, *Cx. stigmatosoma*, *Cx. thriambus*, *Cx. pipiens*, *Anopheles hermsi*, and *Ochlerotatus squamiger* and *Oc. melaninon*. The YTD total stands at 929 positive pools.

Chickens:

Forty-three WNV chicken seroconversions were detected in 18 flocks from Butte (11), Glenn (3), Kern (12), Placer (4) Riverside (4), Sacramento (1), Shasta (2), Sutter (2), and Tehama (4) counties. Of the 43 seroconversions, 22 positives came from 14 new flocks in Butte (7), Glenn (1), Kern (6), Placer (3), Sacramento (1), Shasta (2) and Sutter (2) counties. These were the first seroconversions from Placer and Shasta counties. Currently, 14 counties: Butte, Glenn, Imperial, Kern, Los Angeles, Orange, Placer, Riverside, San Bernardino, San Joaquin, Shasta, Sutter, Tehama, and Ventura have positive WNV seroconversions. The current YTD total stands at 444 WNV seroconversions.

Website Information:

For updated information on WNV, please visit the California WNV website, www.westnile.ca.gov; the CDC website, www.cdc.gov, and the USGS website, 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

Individuals Tested	Week YTD	Number Tested	WNV Positive		WEE Positive		SLE Positive		Other Positive	
			Imported	Local	Imported	Local	Imported	Local	Imported	Local
Individuals Tested	Week YTD	83 1225	0 0	72 558	0 0	0 0	0 0	0 0	0 0	0 0
Suspect Equine Cases	Week YTD	175 874	0 0	74 327	0 0	0 0	0 0	0 0	0 0	0 0

Dead Birds

	Number Tested	WNV Positive
Week	331	270
YTD	3,922	2,345

Sentinel Chickens and Mosquito Pools

Chicken sera	Week YTD	Number Tested	WNV Positive	WEE Positive	SLE Positive	Other Positive
			1166* 23,110	43 444	0 0	0 0
Mosquito pools	Week YTD	514 10,020	96 929	0 0	0 0	0 0

*This total has been adjusted to include local agency submissions

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

POSITIVES

Human Positives Reported:

Virus	Date of Onset	Status	Diagnosis	County	Imported/Local	From
WNV	8/16/04	Probable	West Nile Fever	Kern	Local	
WNV	8/01/04	Probable	West Nile Fever	Kern	Local	
WNV	8/17/04	Probable	West Nile Fever	Kern	Local	
WNV	8/21/04	Probable	West Nile Neuroinvasive Disease	Kern	Local	
WNV	Unknown	Probable	West Nile Fever	Kern	Local	
WNV	Unknown	Probable	Unknown	Kern	Local	
WNV	Week 32	Probable	West Nile Fever	Butte	Local	
WNV	8/28/04	Probable	Unknown	Los Angeles	Local	
WNV	8/27/04	Probable	West Nile Neuroinvasive Disease	Fresno	Local	
WNV	Unknown	Probable	Unknown	Fresno	Local	
WNV	Unknown	Probable	Unknown	Tehama	Local	
WNV	Unknown	Probable	Unknown	Tehama	Local	
WNV	Unknown	Probable	Unknown	Tehama	Local	
WNV	8/31/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	8/03/04	Probable	West Nile Fever	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Orange	Local	
WNV	8/30/04	Probable	West Nile Neuroinvasive Disease	Orange	Local	
WNV	Unknown	Probable	Unknown	Riverside	Local	
WNV	Unknown	Probable	Unknown	Riverside	Local	
WNV	Unknown	Probable	West Nile Fever*	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Ornage	Local	
WNV	Unknown	Probable	Unknown	Butte	Local	
WNV	7/29/04	Probable	West Nile Fever*	San Bernardino	Local	
WNV	6/25/04	Probable	West Nile Neuroinvasive Disease	San Bernardino	Local	
WNV	8/08/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	7/14/04	Probable	West Nile Fever	San Bernardino	Local	
WNV	Unknown	Probable	West Nile Fever	San Bernardino	Local	
WNV	Unknown	Probable	West Nile Fever	San Bernardino	Local	
WNV	Unknown	Probable	West Nile Neuroinvasive Disease	San Bernardino	Local	
WNV	9/07/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/28/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	9/07/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	8/21/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	9/07/04	Probable	Unknown	Los Angeles	Local	
WNV	8/15/04	Probable	West Nile Fever	Los Angeles	Local	
WNV	Unknown	Probable	West Nile Fever	Los Angeles	Local	
WNV	9/03/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	Unknown	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	8/22/04	Probable	West Nile Neuroinvasive Disease	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	8/26/04	Probable	West Nile Fever	Riverside	Local	
WNV	9/05/04	Probable	Unknown	Riverside	Local	
WNV	Unknown	Probable	Unknown	Orange	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	Unknown	Probable	Unknown	Los Angeles	Local	
WNV	8/24/04	Probable	West Nile Fever	Santa Clara	Local	
WNV	Week 30	Probable	Unknown	Shasta	Local	

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

Virus	Date of Onset	Status	Diagnosis	County	Imported/Local	From
WNV	Not Applicable	Probable	Asymptomatic - Blood Bank	Los Angeles	Local	
WNV	Not Applicable	Probable	Asymptomatic - Blood Bank	Los Angeles	Local	
WNV	Not Applicable	Probable	Asymptomatic - Blood Bank	San Bernardino	Local	
WNV	Not Applicable	Probable	Asymptomatic - Blood Bank	San Bernardino	Local	
WNV	Not Applicable	Probable	Asymptomatic - Blood Bank	Orange	Local	

*Indicates fatality

Chicken Seroconversions Reported by DHS:

Virus	County	State	Acode	City	Location
**** WNV Butte	CA	BUCO0001	Chico	Elmer Street	Probable Seroconversion Date: 17-August-04
Bands: 1101, 1103, 1104, 1105					
**** WNV Butte	CA	BUCO0001	Chico	Elmer Street	Probable Seroconversion Date: 31-August-04
Bands: 1107					
**** WNV Butte	CA	BUCO0004	Gridley	Gray Lodge	Probable Seroconversion Date: 18-August-04
Bands: 1136, 1143					
**** WNV Butte	CA	BUCO0004	Gridley	Gray Lodge	Probable Seroconversion Date: 31-August-04
Bands: 1134, 1135, 1138					
**** WNV Butte	CA	BUCO0007	Chico	M&T Ranch	Probable Seroconversion Date: 17-August-04
Bands: 1167					
**** WNV Glenn	CA	GLEN9701	Willows	N.E. Willows	Probable Seroconversion Date: 18-August-04
Bands: 1810					
WNV Glenn	CA	GLEN9701	Willows	N.E. Willows	Probable Seroconversion Date: 31-August-04
Band: 1801, 1802					
**** WNV Kern	CA	KERN016	Bakersfield	Oildale	Probable Seroconversion Date: 16-August-04
Band: 1996					
WNV Kern	CA	KERN0106	Bakersfield	Oildale	Probable Seroconversion Date: 30-August-04
Band: 2000					
**** WNV Kern	CA	KERN0107	Arvin	John Dale	Probable Seroconversion Date: 16-August-04
Band: 2001, 2005, 2007					
WNV Kern	CA	KERN0107	Arvin	John Dale	Probable Seroconversion Date: 30-August-04
Band: 2002, 2004, 2008, 2009, 2010					
**** WNV Kern	CA	KERN0112	Wasco	Wells Residence	Probable Seroconversion Date: 30-August-04
Band: 2032, 2034					
**** WNV Placer	CA	PLCR0021	Lincoln	Nelson Lane	Probable Seroconversion Date: 17-August-04
Band: 2720					
WNV Placer	CA	PLCR0021	Lincoln	Nelson Lane	Probable Seroconversion Date: 30-August-04
Band: 2712					
**** WNV Placer	CA	PLCR0026	Sheridan	Sheridan	Probable Seroconversion Date: 17-August-04
Band: 2733, 2734					
WNV Riverside	CA	NWST6666	Riverside	Lake Elsinore	Probable Seroconversion Date: 8-September-04
Band: 2625, 2628					
WNV Riverside	CA	RIVR0016	Riverside	17221 Owl Tree	Probable Seroconversion Date: 8-September-04
Band: 2812, 2813					
**** WNV Sacramento	CA	SAYO0607	Winters	Winters	Probable Seroconversion Date: 27-August-04
Band: 2921					
**** WNV Shasta	CA	SHAS0401	Olinda	Double W	Probable Seroconversion Date: 19-August-04
Band: 3405					

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

Virus	County	State	Acode	City	Location
**** WNV	Shasta	CA	SHAS9704	Anderson	Shasta MVCD Probable Seroconversion Date: 19-August-04 Band: 3416
**** WNV	Sutter	CA	SUYA0014	Sutter	Dean Probable Seroconversion Date: 19-August-04 Band: 3554
**** WNV	Sutter	CA	SUYA0030	Live Oak	Sheppard Probable Seroconversion Date: 19-August-04 Band: 3535
WNV	Tehama	CA	TEHA0001	Red Bluff	Red Bluff Shop Probable Seroconversion Date: 1-September-04 Band: 3602, 3607, 3609
WNV	Tehama	CA	TEHA0002	Corning	Woodson Bridge Probable Seroconversion Date: 1-September-04 Band: 3616

****Indicates a new flock

Virus Isolations From Mosquito Pools:

Virus	Mosquito species	Date Collected	ACODE	Pool #	City	County	Date Received
WNV	Culex tarsalis	2-Sept	BUCO	14	Oroville	Butte	3-Sept
WNV	Culex quinquefasciatus	1-Sept	CNSL	82	Laton	Fresno	1-Sept
WNV	Culex quinquefasciatus	8-Sept	CNSL	91	Fresno	Fresno	9-Sept
WNV	Culex quinquefasciatus	1-Sept	GRLA	1790	Santa Clarita	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	1-Sept	GRLA	1794	Northridge	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	1-Sept	GRLA	1796	Northridge	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	1797	Los Angeles	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	1799	Los Angeles	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	1802	Los Angeles	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	1804	Los Angeles	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3097	Long Beach	Los Angeles	9-Sept
WNV	Culex erythrothorax	30-Aug	GRLA	3102	Gardena	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3103	Long Beach	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3104	Long Beach	Los Angeles	9-Sept
WNV	Culex tarsalis	30-Aug	GRLA	3105	Long Beach	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3106	Gardena	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3114	Los Angeles	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3116	Los Angeles	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3118	Los Angeles	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3119	Long Beach	Los Angeles	9-Sept
WNV	Culex tarsalis	30-Aug	GRLA	3126	Harbor City	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	30-Aug	GRLA	3132	Signal Hill	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	1-Sept	GRLA	3140	Whittier	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	1-Sept	GRLA	3144	Whittier	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	1-Sept	GRLA	3145	Whittier	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	1-Sept	GRLA	3146	Whittier	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	3147	Montebello	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	3148	Lakewood	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	3149	Montebello	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	3152	Lakewood	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	GRLA	3154	Lakewood	Los Angeles	9-Sept

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

Virus	Mosquito species	Date Collected	ACODE	Pool #	City	County	Date Received
WNV	Culex quinquefasciatus	2-Sept	GRLA	3155	Montebello	Los Angeles	9-Sept
WNV	Culex quinquefasciatus	2-Sept	KERN	379	Bakersfield	Kern	9-Sept
WNV	Culex quinquefasciatus	2-Sept	KERN	382	Bakersfield	Kern	9-Sept
WNV	Culex quinquefasciatus	2-Sept	KERN	383	Bakersfield	Kern	9-Sept
WNV	Culex quinquefasciatus	2-Sept	KERN	384	Bakersfield	Kern	9-Sept
WNV	Culex quinquefasciatus	2-Sept	KERN	385	Bakersfield	Kern	9-Sept
WNV	Culex quinquefasciatus	2-Sept	KERN	386	Bakersfield	Kern	9-Sept
WNV	Culex quinquefasciatus	2-Sept	KERN	388	Bakersfield	Kern	9-Sept
WNV	Culex quinquefasciatus	2-Sept	KERN	390	Bakersfield	Kern	9-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5485	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5488	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5489	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5490	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5491	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5492	Bakersfield	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5493	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5498	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5501	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5502	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5510	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5511	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5514	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5521	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5523	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5530	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5531	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5532	Arvin	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5533	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5538	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5547	Arvin	Kern	10-Sept
WNV	Culex tarsalis	1-Sept	KERN	5554	Arvin	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5560	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5561	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5562	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5563	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5564	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5565	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5567	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	1-Sept	KERN	5568	Bakersfield	Kern	10-Sept
WNV	Culex quinquefasciatus	31-Aug	LACW	160	Inglewood	Los Angeles	8-Sept
WNV	Culex stigmatosoma	2-Sept	LAKE	250	Upper Lake	Lake	9-Sept
WNV	Culex tarsalis	3-Sept	LAKE	253	Kelseyville	Lake	9-Sept
WNV	Culex stigmatosoma	7-Sept	LAKE	256	Upper Lake	Lake	9-Sept
WNV	Culex stigmatosoma	7-Sept	LAKE	257	Upper Lake	Lake	9-Sept
WNV	Culex stigmatosoma	8-Sept	LAKE	259	Upper Lake	Lake	9-Sept

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

Virus	Mosquito species	Date Collected	ACODE	Pool #	City	County	Date Received
WNV	Culex stigmatosoma	8-Sept	LAKE	261	Upper Lake	Lake	9-Sept
WNV	Culex tarsalis	8-Sept	LAKE	264	Nice	Lake	9-Sept
WNV	Culex quinquefasciatus	1-Sept	LONG	332	Long Beach	Los Angeles	3-Sept
WNV	Culex quinquefasciatus	1-Sept	LONG	335	Long Beach	Los Angeles	3-Sept
WNV	Culex quinquefasciatus	1-Sept	LONG	340	Long Beach	Los Angeles	3-Sept
WNV	Culex quinquefasciatus	2-Sept	LONG	344	Long Beach	Los Angeles	3-Sept
WNV	Culex quinquefasciatus	31-Aug	ORCO	1428	Anaheim	Orange	8-Sept
WNV	Culex quinquefasciatus	31-Aug	ORCO	1429	Anaheim	Orange	8-Sept
WNV	Culex quinquefasciatus	31-Aug	ORCO	1437	Fullerton	Orange	8-Sept
WNV	Culex quinquefasciatus	31-Aug	ORCO	1438	Cypress	Orange	8-Sept
WNV	Culex tarsalis	31-Aug	ORCO	1440	Anaheim	Orange	8-Sept
WNV	Culex quinquefasciatus	31-Aug	ORCO	1441	Anaheim	Orange	8-Sept
WNV	Culex quinquefasciatus	31-Aug	ORCO	1444	Garden Grove	Orange	8-Sept
WNV	Culex quinquefasciatus	2-Sept	ORCO	1449	Orange	Orange	8-Sept
WNV	Culex stigmatosoma	2-Sept	ORCO	1458	Laguna Niguel	Orange	8-Sept
WNV	Culex quinquefasciatus	2-Sept	ORCO	1459	Irvine	Orange	8-Sept
WNV	Culex quinquefasciatus	3-Sept	ORCO	1467	Orange	Orange	8-Sept
WNV	Culex pipiens	3-Sept	SAYO	974	Davis	Solano	7-Sept
WNV	Culex tarsalis	7-Sept	SAYO	239	Pennington	Sutter	7-Sept

Dead Birds Tested Positive for WNV last week

Species	County	City	Zip Code	Date Collected	Date Tested
California Quail	Alpine	Markleeville	96120	8/17/2004	8/30/2004
California Quail	Alpine	Markleeville	96120	8/17/2004	8/30/2004
Western Scrub-Jay	Butte	Chico	95973	8/17/2004	8/30/2004
American Crow	Butte	Gridley	95948	8/18/2004	8/30/2004
American Crow	Butte	Oroville	95966	8/16/2004	8/30/2004
Western Scrub-Jay	Butte	Oroville	95966	8/17/2004	8/30/2004
Red-shouldered Hawk	Butte	Oroville	95965	8/17/2004	8/30/2004
Black Phoebe	Calaveras	Copperopolis	95228	8/13/2004	8/30/2004
Western Scrub-Jay	Colusa	Colusa	95932	8/17/2004	8/30/2004
American Crow	Colusa	Colusa	95932	8/19/2004	8/30/2004
American Crow	Colusa	Colusa	95932	8/18/2004	8/30/2004
Orange-crowned Warbler	Colusa	Colusa	95932	8/19/2004	8/30/2004
American Crow	Colusa	Colusa	95932	8/23/2004	8/30/2004
American Crow	Colusa	Colusa	95932	8/23/2004	8/30/2004
House Sparrow	Colusa	Colusa	95932	8/23/2004	8/30/2004
Yellow-billed Magpie	Colusa	Colusa	95932	8/23/2004	8/30/2004
Yellow-billed Magpie	Colusa	Grimes	95950	8/17/2004	8/30/2004
Western Scrub-Jay	Colusa	Grimes	95950	8/17/2004	8/30/2004
Yellow-billed Magpie	Colusa	Maxwell	95955	8/23/2004	8/30/2004
Yellow-billed Magpie	Colusa	Princeton	95970	8/18/2004	8/30/2004
American Kestrel	Contra Costa	Antioch	94509	8/16/2004	8/30/2004
Cooper's Hawk	Contra Costa	Discovery Bay	94514	8/18/2004	8/30/2004
Western Scrub-Jay	Contra Costa	Orinda	94563	8/20/2004	9/1/04

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

Western Scrub-Jay	El Dorado	Cameron Park	95682	8/16/2004	9/1/04
Steller's Jay	El Dorado	South Lake Tahoe	96150	8/17/2004	8/30/2004
Steller's Jay	El Dorado	South Lake Tahoe	96150	8/17/2004	9/1/04
Western Scrub-Jay	Fresno	Clovis	93611	8/16/2004	8/30/2004
Black-headed Grosbeak	Fresno	Clovis	93611	8/17/2004	8/30/2004
Western Scrub-Jay	Fresno	Clovis	93611	8/18/2004	8/30/2004
American Crow	Fresno	Clovis	93611	8/18/2004	8/30/2004
American Crow	Fresno	Clovis	93619	8/19/2004	8/30/2004
Western Scrub-Jay	Fresno	Clovis	93612	8/19/2004	8/30/2004
Cooper's Hawk	Fresno	Coalinga	93210	8/18/2004	8/30/2004
Western Scrub-Jay	Fresno	Firebaugh	93622	8/17/2004	8/30/2004
American Crow	Fresno	Fresno	93740	8/16/2004	8/30/2004
American Crow	Fresno	Fresno	93727	8/18/2004	8/30/2004
American Crow	Fresno	Fresno	93704	8/19/2004	8/30/2004
Western Scrub-Jay	Glenn	Willows	95988	8/16/2004	8/30/2004
American Crow	Glenn	Willows	95988	8/18/2004	8/30/2004
American Crow	Glenn	Willows	95988	8/18/2004	8/30/2004
American Crow	Humboldt	McKinleyville	95519	8/16/2004	8/30/2004
American Crow	Kern	Bakersfield	93308	8/17/2004	8/30/2004
Western Scrub-Jay	Kern	Bakersfield	93306	8/18/2004	8/30/2004
Western Scrub-Jay	Kern	Bakersfield	93307	8/19/2004	8/30/2004
Western Scrub-Jay	Kern	Bakersfield	93308	8/19/2004	8/30/2004
Western Bluebird	Kern	Glennville	93226	8/17/2004	9/1/04
Common Raven	Kern	Shafter	93263	8/18/2004	8/30/2004
Western Scrub-Jay	Kings	Lemoore	93245	8/18/2004	8/30/2004
American Crow	Lake	Clearlake	95422	8/18/2004	8/30/2004
American Crow	Lake	Clearlake Oaks	95423	8/19/2004	8/30/2004
Western Scrub-Jay	Lake	Lakeport	95453	8/15/2004	8/30/2004
Black-billed Magpie	Lassen	Doyle	96109	8/18/2004	8/30/2004
Steller's Jay	Lassen	Susanville	96130	8/16/2004	9/1/04
Black-billed Magpie	Lassen	Susanville	96127	8/18/2004	8/30/2004
Evening Grosbeak	Lassen	Westwood	96137	8/19/2004	9/1/04
Western Scrub-Jay	Madera	Madera	93637	8/17/2004	8/30/2004
Western Scrub-Jay	Mendocino	Gualala	95445	8/18/2004	8/30/2004
Brewer's Blackbird	Mono	Mammoth Lakes	93546	8/19/2004	8/30/2004
Western Sandpiper	Monterey	Moss Landing	95039	8/17/2004	9/1/04
Western Scrub-Jay	Monterey	Prunedale	93907	8/18/2004	8/30/2004
American Robin	Napa	American Canyon	94503	8/18/2004	9/1/04
Western Scrub-Jay	Nevada	Grass Valley	95949	8/20/2004	8/30/2004
Sharp-shinned hawk	Nevada	Nevada City	95959	8/17/2004	8/30/2004
Western Scrub-Jay	Nevada	Penn Valley	95946	8/19/2004	8/30/2004
Red-tailed Hawk	Nevada	Truckee	96161	8/16/2004	8/30/2004
American Crow	Orange	Anaheim	92802	8/15/2004	8/30/2004
American Crow	Orange	Anaheim	92802	8/17/2004	8/30/2004
American Crow	Orange	Costa Mesa	92627	8/18/2004	8/30/2004
American Crow	Orange	Garden Grove	92840	8/17/2004	8/30/2004

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

American Crow	Orange	Garden Grove	92840	8/17/2004	8/30/2004
American Crow	Orange	Garden Grove	92841	8/17/2004	8/30/2004
American Crow	Orange	Garden Grove	92841	8/17/2004	8/30/2004
House Finch	Orange	Garden Grove	92845	8/19/2004	8/30/2004
Rufous Hummingbird	Orange	Laguna Hills	92653	8/14/2004	8/30/2004
Rufous Hummingbird	Orange	Laguna Woods	92653	8/17/2004	8/30/2004
House Finch	Orange	Los Alamitos	90720	8/18/2004	8/30/2004
American Crow	Orange	Orange	92866	8/18/2004	8/30/2004
American Crow	Orange	Rossmoor	90720	8/16/2004	8/30/2004
American Crow	Orange	Santa Ana	92706	8/17/2004	8/30/2004
American Crow	Orange	Santa Ana	92703	8/17/2004	8/30/2004
American Crow	Orange	Tustin	92780	8/16/2004	8/30/2004
American Crow	Orange	Villa Park	92861	8/12/2004	8/30/2004
Western Scrub-Jay	Orange	Yorba Linda	92886	8/17/2004	8/30/2004
Yellow-billed Magpie	Placer	Granite Bay	95746	8/17/2004	8/30/2004
House Finch	Plumas	Chester	96020	8/18/2004	9/1/04
Brewer's Blackbird	Plumas	Chester	96020	8/23/2004	8/30/2004
Western Tanager	Plumas	Chilcoot	96105	8/17/2004	8/30/2004
American Robin	Plumas	Greenville	95947	8/19/2004	8/30/2004
American Robin	Plumas	Quincy	95971	8/19/2004	8/30/2004
American Robin	Plumas	Taylorsville	95983	8/19/2004	8/30/2004
Brewer's Blackbird	Plumas	Westwood	96137	8/18/2004	9/1/04
House Finch	Sacramento	Elk Grove	95624-	8/23/2004	8/30/2004
American Crow	Sacramento	Mcclellan	95652	8/17/2004	8/30/2004
Common Yellowthroat	Sacramento	Sacramento	95817	8/19/2004	8/30/2004
Western Scrub-Jay	Sacramento	Sacramento	95864	8/20/2004	9/1/04
Western Scrub-Jay	San Francisco	San Francisco	94129	8/17/2004	9/1/04
Western Scrub-Jay	San Joaquin	Stockton	95219	8/15/2004	9/1/04
American Kestrel	San Luis Obispo	Arroyo Grande	93420	8/12/2004	8/30/2004
Red-shouldered Hawk	San Luis Obispo	Arroyo Grande	93420	8/17/2004	9/1/04
Steller's Jay	San Mateo	Atherton	94027	8/13/2004	8/30/2004
Steller's Jay	San Mateo	Portola Valley	94028	8/18/2004	9/1/04
American Crow	San Mateo	San Mateo	94403	8/16/2004	8/30/2004
Cooper's Hawk	Santa Clara	Saratoga	95070	8/17/2004	8/30/2004
Western Scrub-Jay	Santa Cruz	Aptos	95003	8/18/2004	9/1/04
Western Scrub-Jay	Santa Cruz	Aptos	95003	8/20/2004	9/1/04
Cliff Swallow	Santa Cruz	Watsonville	95076	8/19/2004	9/1/04
Steller's Jay	Shasta	Cottonwood	96022	8/18/2004	8/30/2004
American Crow	Shasta	Cottonwood	96022	8/19/2004	8/30/2004
Western Scrub-Jay	Shasta	Palo Cedro	96073	8/18/2004	8/30/2004
Western Scrub-Jay	Shasta	Redding	96002	8/17/2004	8/30/2004
Yellow-billed Magpie	Shasta	Redding	96001	8/17/2004	8/30/2004
Common Raven	Shasta	Redding	96003	8/19/2004	8/30/2004
Anna's Hummingbird	Siskiyou	Yreka	96097	8/18/2004	8/30/2004
American Crow	Sonoma	Petaluma	94954	8/17/2004	9/1/04
American Crow	Sonoma	Santa Rosa	95403	8/17/2004	8/30/2004

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

Western Screech-Owl	Sonoma	Santa Rosa	95404	8/18/2004	9/1/04
Yellow-billed Magpie	Stanislaus	Modesto	95356	8/17/2004	8/30/2004
American Crow	Stanislaus	Modesto	95355	8/18/2004	9/1/04
Western Scrub-Jay	Stanislaus	Modesto	95358	8/19/2004	8/30/2004
American Crow	Sutter	Pleasant Grove	95668	8/18/2004	8/30/2004
Yellow-billed Magpie	Sutter	Pleasant Grove	95668	8/19/2004	8/30/2004
Yellow-billed Magpie	Sutter	Pleasant Grove	95668	8/20/2004	8/30/2004
Western Scrub-Jay	Sutter	Yuba City	95993	8/18/2004	8/30/2004
Yellow-billed Magpie	Tehama	Corning	96021	8/16/2004	8/30/2004
Western Scrub-Jay	Tehama	Corning	96021	8/17/2004	8/30/2004
Yellow-billed Magpie	Tehama	Corning	96021	8/18/2004	8/30/2004
Western Scrub-Jay	Tehama	Corning	96021	8/7/2004	8/30/2004
Cooper's Hawk	Tehama	Corning	96021	8/19/2004	8/30/2004
Yellow-billed Magpie	Tehama	Corning	96021	8/18/2004	8/30/2004
Yellow-billed Magpie	Tehama	Corning	96021	8/19/2004	8/30/2004
Yellow-billed Magpie	Tehama	Gerber	96035	8/18/2004	8/30/2004
Yellow-billed Magpie	Tehama	Gerber	96035	8/18/2004	8/30/2004
American Crow	Tehama	Los Molinos	96055	8/17/2004	8/30/2004
Yellow-billed Magpie	Tehama	Red Bluff	96080	8/16/2004	8/30/2004
American Crow	Tehama	Red Bluff	96080	8/18/2004	8/30/2004
Yellow-billed Magpie	Tehama	Red Bluff	96080	8/19/2004	8/30/2004
Western Tanager	Trinity	Weaverville	96093	8/17/2004	9/1/04
Western Scrub-Jay	Tulare	Ivanhoe	93235	8/22/2004	8/30/2004
Western Scrub-Jay	Tulare	Porterville	93257	8/19/2004	8/30/2004
Western Scrub-Jay	Tulare	Visalia	93292	8/16/2004	8/30/2004
Northern Flicker	Tuolumne	Groveland	95321	8/18/2004	9/1/04
Brewer's Blackbird	Tuolumne	Groveland	95321	8/20/2004	8/30/2004
Lesser Goldfinch	Tuolumne	Jamestown	95327	8/18/2004	8/30/2004
Acorn Woodpecker	Tuolumne	Sonora	95370	8/23/2004	9/1/04
Western Scrub-Jay	Tuolumne	Sonora	95370	8/20/2004	9/1/04
American Robin	Tuolumne	Sonora	95370	8/20/2004	8/30/2004
Lesser Goldfinch	Tuolumne	Tuolumne	95379	8/23/2004	9/1/04
American Robin	Tuolumne	Twain Harte	95383	8/18/2004	8/30/2004
American Crow	Yolo	Davis	95616	8/19/2004	8/30/2004
Western Scrub-Jay	Yolo	Davis	95616	8/19/2004	9/1/04
American Crow	Yolo	Davis	95616	8/20/2004	9/1/04
American Crow	Yolo	Woodland	95695	8/18/2004	9/1/04
Yellow-billed Magpie	Yolo	Woodland	95695	8/23/2004	8/30/2004

National Comments:

As of September 14, 2004, West Nile Virus (WNV) activity has been detected in 47 states, Puerto Rico, and New York City. Over 1300 human WNV cases have been reported in 39 states and New York City. At this time in 2003, 4137 cases had been reported from 37 states. Idaho, New York, and Oregon reported their first human cases in 2004 this week. Of the 1,347 WNV cases where data is available, the median age is 51 years (range: 1 month – 99 years) and 57% are male. Thirty-five percent of the cases were neuroinvasive. There have been 35 WNV-related fatalities nationwide in 2004.

California Arbovirus Surveillance Bulletin # 22

Week 37 Friday, September 17, 2004

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.

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.

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.

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].