

West Nile Virus: Response to an Emerging Health Threat

Long Beach Department of Health
and Human Services (LBDHHS)



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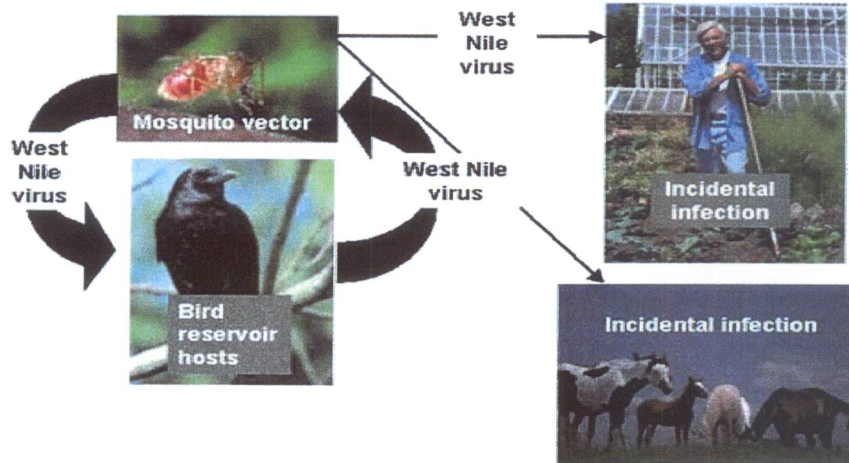
What is West Nile Virus (WNV)?

- WNV is an *arbovirus* (*arthropod-borne*, or carried by mosquitoes)
- Birds are the main host for the virus; mosquitoes bite birds and get the virus, then can pass it on to people or animals through bites
- The disease is not transmissible human-to-human or from animal to human



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West Nile Virus Transmission Cycle



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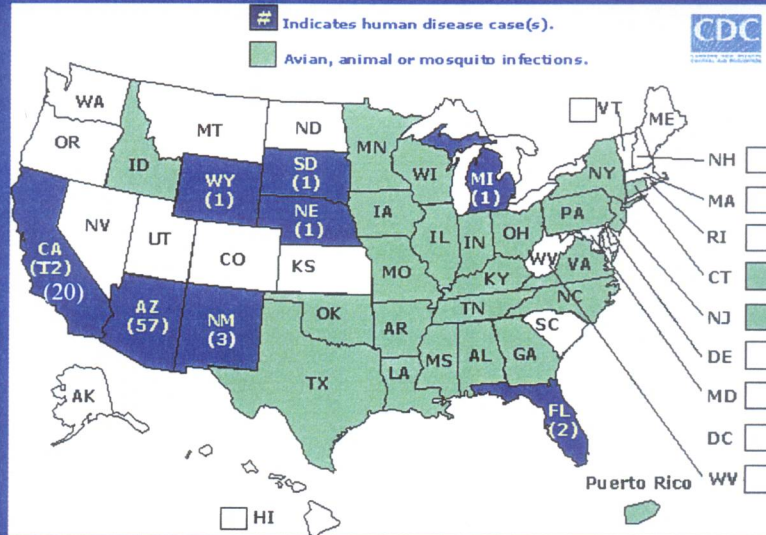
Is WNV Infection Serious?

- Most people bitten by infected mosquitoes do not get sick
- About 20% of people infected will have fever, headache and flu-like symptoms (West Nile Fever)
- Less than 1% develop severe disease, which leads to neurological problems (encephalitis or meningitis) and possibly death



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WNV in the US, 2004*



*As of July 6

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West Nile Virus Human Case Counts United States, 1999-2004

Year	Number of Confirmed cases	Number of Deaths (%)
1999	62	7 (11)
2000	21	2 (10)
2001	66	9 (14)
2002 ^A	4156	284 (7)
2003 ^B	9862	264 (3)
2004*	108	3 (3)

*As of July 13

A = 30% of cases West Nile Fever
 B = 70% of cases West Nile Fever

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What is LBDHHS Doing About WNV?

- Surveillance to detect presence of the virus in the community
- Health alerts to healthcare providers
- Disease Prevention
 - Control of mosquito habitats
 - Public education
- Collaboration with other districts (task force, media campaign, etc.)



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WNV Surveillance

- Human
- Veterinary
- Dead birds
- Sentinel Chicken
- Mosquito



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Human Surveillance

- WNV now a reportable disease, and cases of encephalitis and aseptic meningitis have been reportable by law to the local health department
- LBDHHS does initial testing of specimens from people, then sends to the state for confirmation



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Veterinary Surveillance

- WNV may cause a fatal disease in horses
- Free testing for suspect equine cases is available
- A conditionally licensed WNV vaccine is available for horses.



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Dead Bird Surveillance

- Report dead birds by calling **1-877-WNV-BIRD**
- If the bird is still there after 24 hours, you may dispose of it yourself
- The presence of dead birds does not pose a threat to your health, but don't touch them with your bare hands



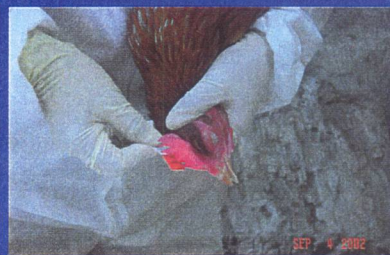
Do not pick up a bird with your bare hands...use gloves, the inside of a plastic bag, or a shovel to pick it up



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Sentinel Chicken Surveillance

- 4 sentinel flocks are located in Long Beach.
- Blood is drawn from chickens bi-weekly to test for WNV; specimens are sent to the state



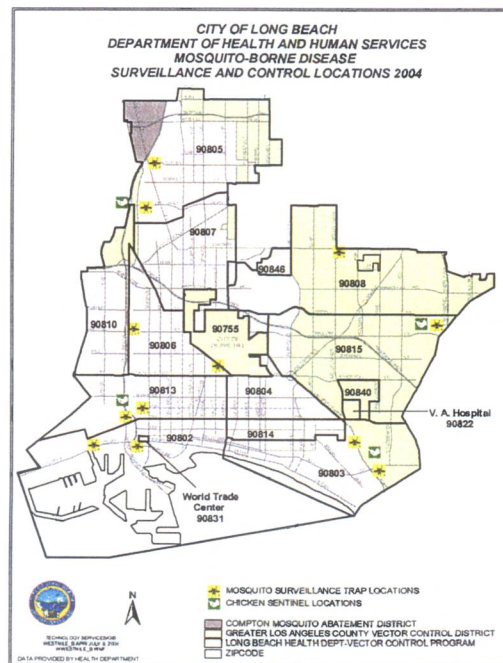
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Mosquito Surveillance

1. Mosquitoes are collected by vector control staff from traps placed throughout the city.
2. Mosquitoes are counted and separated by species.
3. Mosquitoes are sent to the state for testing

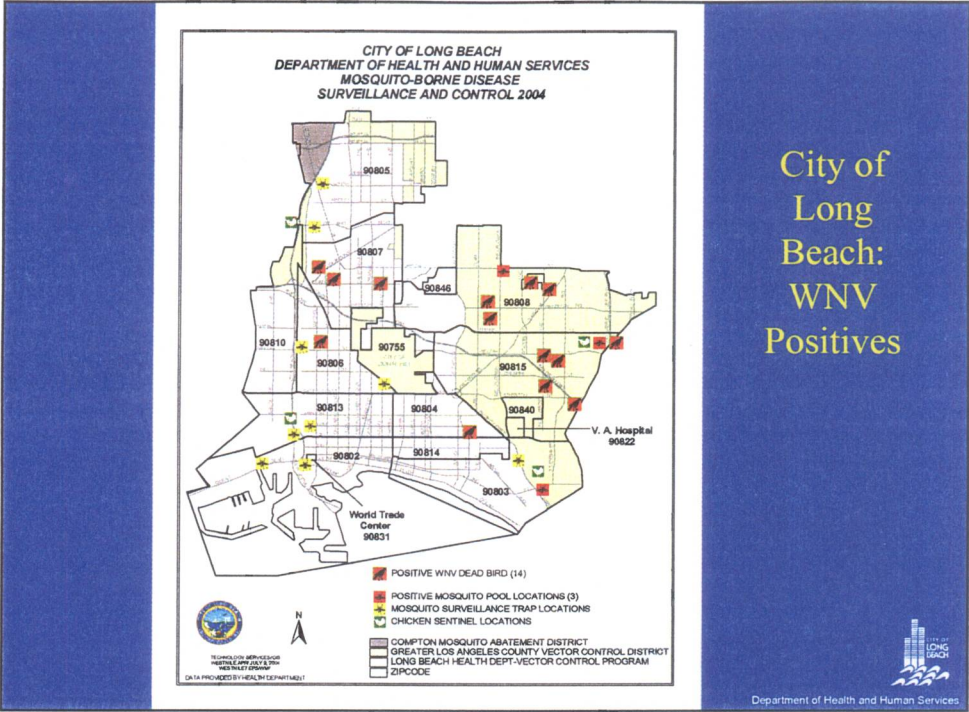


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City of Long Beach:
Location of Mosquito Traps and Sentinel Chicken Flocks

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Prevention

- Public education
- Personal measures
- Habitat control
- Mosquito control

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Public Education

- Brochures in English, Spanish and Khmer
- Press releases
- Radio and TV public service announcements (PSAs)
- Presentations to community groups and healthcare providers
- Posting signs in parks, PSAs at outdoor evening concerts
- Website and information line



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Prevention – Personal Measures

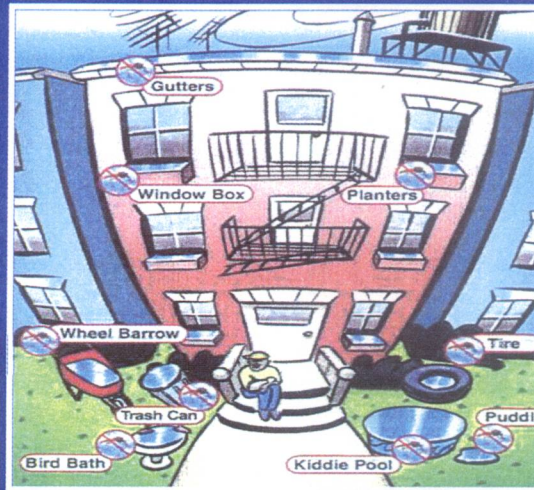
- If outdoors during dawn, dusk or early evening, use mosquito repellent containing DEET or wear long-sleeved shirts and long pants
- Use mosquito netting over infant carriers
- Install or repair window/door screens



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Prevention – Private Habitat Control

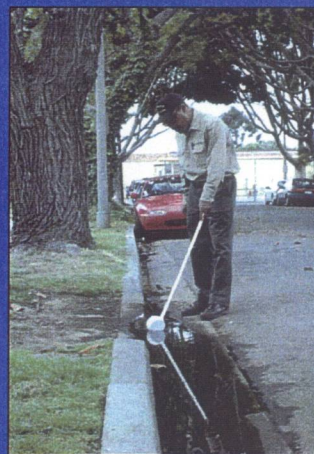
- Eliminate standing water around your home
- Make sure rain gutters drain properly
- Avoid over-watering



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Prevention – Public Habitat Control

- The LBDHHS Vector Control Program will respond to complaints of standing water in public places in their district
- They will sample water to see if mosquitoes are breeding in it (not all standing water breeds mosquitoes)
- If no mosquitoes noted, nothing needs to be done
- If mosquito larvae found, area will be treated



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Mosquito Control

- Vector control uses different methods to control mosquito breeding (sprays, pellets, etc.) in problem areas on a regular basis
- Referrals are made to public works for areas in which remediation may help eliminate standing water



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What the Public Needs to Know about WNV: Summary

- Protect yourself from bites (fight the bite!)
- Eliminate standing water in your yard
- Report dead birds to 1-877-WNV-BIRD
- Report standing water in public places to the appropriate vector control district
- Always leave your name and number when reporting so you can get follow-up

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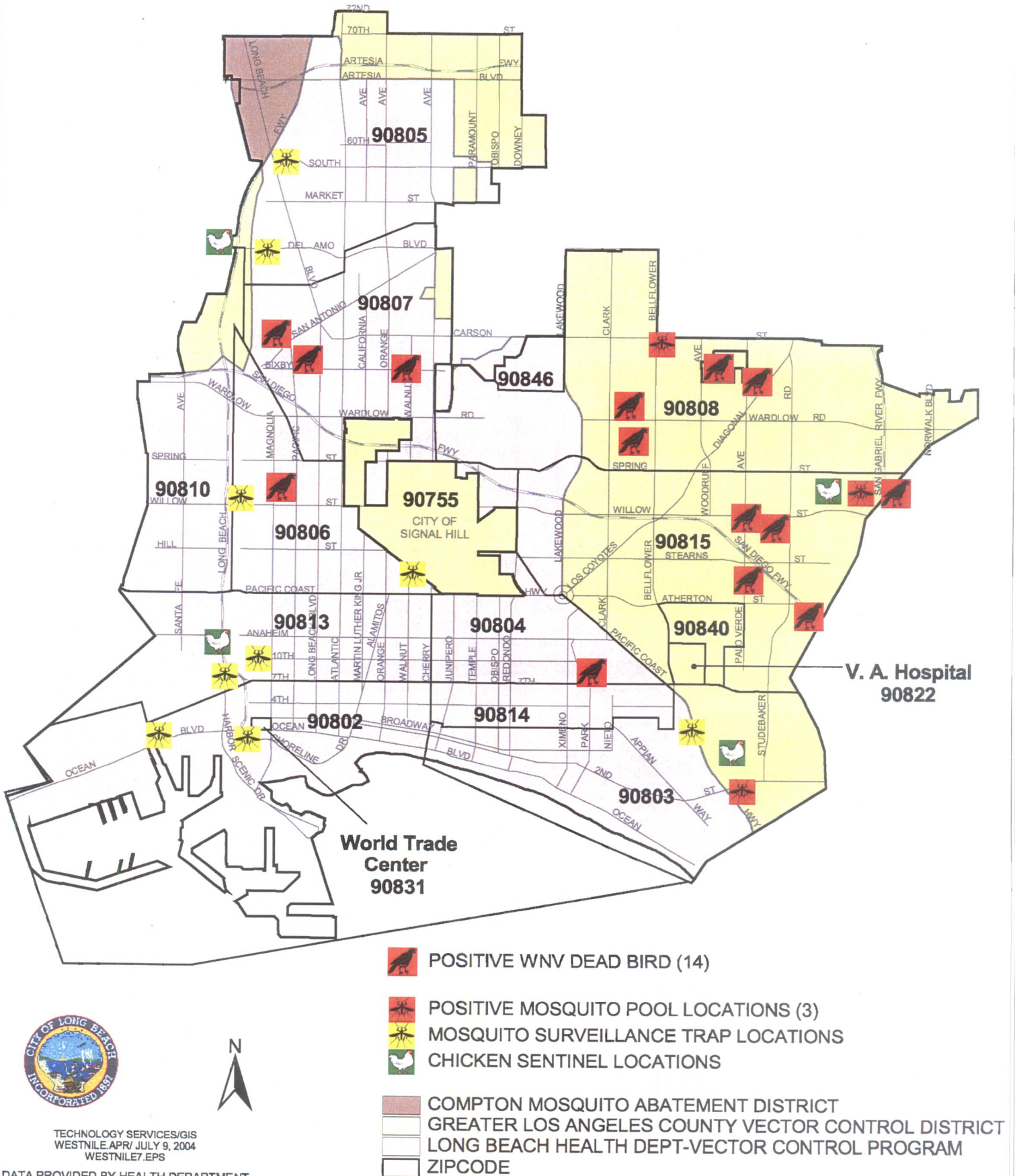
Information

- Vector Control Programs
 - LBDHHS Vector Control Program (562) 570-4090
 - Greater LA County Vector Control District: (562) 944-9656
 - Compton Creek Vector Control District: (310) 639-7375
- To report dead birds: 1-877-WNV-BIRD
- LBDHHS WNV Information Line: 562-570-4499
- Websites:
 - LBDHHS: www.longbeach.gov/health
 - LA County DHS: www.ladhs.org
 - California DHS web page: www.westnile.ca.gov
 - CDC web site: www.cdc.gov



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CITY OF LONG BEACH DEPARTMENT OF HEALTH AND HUMAN SERVICES MOSQUITO-BORNE DISEASE SURVEILLANCE AND CONTROL 2004



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