

West Nile Virus (WNV) — Frequently Asked Questions (FAQ)

What is West Nile virus?

West Nile virus (WNV) is a **mosquito-borne virus** that can infect humans, birds, and some mammals.

Not everyone infected becomes ill, but some people develop symptoms ranging from mild to severe neurologic disease.

In California, WNV is the most commonly transmitted mosquito-borne disease.

How do people get infected?

- Humans get WNV when an infected mosquito bites them.
- Mosquitoes become infected by feeding on birds that carry WNV.
- WNV is **not** spread person-to-person (except in rare scenarios like organ transplant or blood transfusion).
- WNV is **not** spread by casual contact, touching, or handling birds.

When is WNV more common?

WNV is most active during **warm months**, typically **summer through early fall**.

Mosquitoes that carry WNV usually bite more at **dawn and dusk**.

Who can get WNV?

Anyone can be infected. Risk of **severe disease** is higher in:

- Older adults (especially age 60+)
- People with weakened immune systems
- People with certain chronic health conditions

Many infected people **have no symptoms** or mild symptoms.

What are symptoms?

Most infections are **asymptomatic** (no symptoms).

When symptoms do occur, they may include:

- Fever
- Headache
- Body aches
- Fatigue
- Nausea or vomiting
- Occasionally rash or swollen lymph nodes

A small proportion develop **neuroinvasive disease** (e.g. meningitis, encephalitis, paralysis).

How is it diagnosed?

- Blood tests or sometimes tests of cerebrospinal fluid (CSF) for WNV antibodies or viral markers.
- Because many cases are mild or asymptomatic, testing is often done only when symptoms are consistent with WNV, especially neurologic signs.

What is the treatment?

- There is **no specific antiviral medication** for WNV.
- Treatment is **supportive** (rest, fluids, pain relief).
- Severe cases may require hospitalization, IV fluids, respiratory support, or intensive care.
- Recovery may be slow in severe cases; some people have lingering symptoms.

What areas in Riverside County are most affected?

WNV can occur anywhere mosquitoes are present, but higher risk areas include **western Riverside County, unincorporated communities, and locations near water or agricultural zones** where mosquitoes breed.

The **Vector Control Program** places traps and tests mosquitoes regularly and works with **CDPH** to monitor dead birds as early indicators of virus activity.

What efforts does Riverside County make to prevent WNV?

RUHS and the Department of Environmental Health's **Vector Control Program** help prevent WNV through:

RUHS–Public Health:

- Monitors and reports human WNV cases.
- Provides public education and prevention messaging.
- Coordinates with local agencies to strengthen response efforts.

Vector Control Agencies:

- Trap and test mosquitoes and dead birds.
- Treat breeding sites with larvicides or adult mosquito control when needed.
- Educate residents on mosquito prevention and reporting.

How can infection be prevented?

To reduce your risk:

1. **Drain standing water weekly** (containers, gutters, birdbaths, tires)
2. **Use EPA-registered mosquito repellent** when outdoors (especially at dawn/dusk)
3. **Wear long sleeves, pants, and light-colored clothing** during peak mosquito times
4. **Install or repair screens** on windows and doors
5. **Avoid outdoor activity at dawn/dusk** when possible
6. **Help report dead birds** (especially crows, jays, magpies, ravens) to CDPH or local vector control ■ see links below
7. **Support local mosquito control efforts** (e.g. allow access for treatments)

What should I do if I am sick?

- If you develop fever, severe headache, confusion, stiff neck, or weakness, especially after mosquito exposure, seek medical attention promptly
- Tell your provider about possible mosquito exposure
- Providers may order laboratory tests if suspicion is high
- Cases of WNV are reportable to local public health authorities per CDPH guidelines

Resources:

- **CDPH – West Nile Virus (WNV)**
<https://www.cdph.ca.gov/Programs/CID/DCDC/Pages/WestNileVirus.aspx>
- **CDC – West Nile Virus**
<https://www.cdc.gov/west-nile-virus/index.html>
- **RUHS –Disease Control :** <https://www.ruhealth.org/public-health/disease-control>
- **West Nile CA website :** <https://westnile.ca.gov>
- **Vector Control Agencies in Riverside County:**
- Riverside County Environmental Health – Vector Control Program: <https://rivcoeh.org/vector-control>
- Northwest Mosquito and Vector Control District: <https://www.northwestmvcd.org>
- Coachella Valley Mosquito and Vector Control District: <https://www.cvmosquito.org>