



KENTUCKY HEALTH ALERT

Increase in Mosquito-borne Illnesses in Kentucky, Including West Nile Virus and La Crosse Virus

September 30, 2025

Kentucky and neighboring states are currently experiencing an increase of West Nile Virus (WNV) and La Crosse virus. In Kentucky, 19 cases, including 1 death, of WNV have been reported from local health jurisdictions across Kentucky, compared to an average of 7 cases of WNV in previous years. In addition, there have been two confirmed cases of La Crosse virus and two additional suspected cases under investigation from Eastern/Central Kentucky this year. This is compared to only 11 cases reported in total in Kentucky from 2003 to 2024.

KEY POINTS

- Common symptoms of WNV and La Crosse infections include fever, fatigue, headache, rash, myalgias, nausea/vomiting and diarrhea. Most infections cause little to no symptoms leading to underreporting.
- In severe cases, these arboviruses can cause neurologic disease including meningitis, encephalitis and acute flaccid paralysis. The mainstay of treatment is supportive care. Treatments such as monoclonal antibodies, corticosteroids and ribavirin have not shown benefit.
- Preliminary diagnosis is by disease-specific immunoglobulin (IgM) antibody testing of serum and/or cerebrospinal fluid. Isolated Immunoglobulin (IgG) testing without concurrent IgM is not recommended, as it cannot prove active infection.
- Antibody testing for La Crosse and WNV is widely available at commercial labs.
- Kentucky Department for Public Health (KDPH) recommends all positive IgM test results for La Crosse virus, and other related California serogroup viruses, and certain cases of WNV be confirmed by the Centers for Disease Control and Prevention (CDC).
- For patients being tested for arboviral illness, it is recommended to freeze and hold a specimen (at least 0.5mL serum and 1mL CSF) to be used for confirmation testing.
- All positive lab results (IgM, IgG) for any [arboviral infections](#) should be [reported](#) to the [local health department](#) where the patient resides within one business day.
- Contact KDPH to coordinate confirmatory testing or for questions regarding possible arboviral infections (**502-564-3418** or after hours **888 9-REPORT (888-973-7678)**).

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Our Vision: Healthier People, Healthier Communities.

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2025-04





Testing:

The primary testing method for diagnosing WNV and La Crosse virus should first be testing for disease-specific immunoglobulin (IgM) antibodies in serum and/or cerebrospinal fluid (CSF). Due to possible cross-reactivity between California serogroup viruses and La Crosse virus (reported by ARUP arboviral panel as California encephalitis), confirmatory neutralizing antibody testing should be performed through the CDC to confirm La Crosse virus infection.

In some cases, positive IgM results for WNV may need confirmation testing as well, such as those with possible exposure to cross-reactive flaviviruses (e.g. St. Louis encephalitis, dengue), suspected route of transmission through organ transplant, blood transfusion, lab exposure, etc., atypical/unusually severe presentation or death or presentation outside the typical arboviral season.

Specimen submission to the CDC for all arboviral testing will go through the state public health lab, coordinated by KDPH. Specimens from initial testing can be acquired from commercial testing facilities if needed, however this may delay confirmation testing. It is recommended to freeze and hold a serum/CSF specimen for patients with high suspicion of arboviral illness to quickly facilitate confirmatory testing at a public health lab.

Reporting:

All positive lab results (IgM, IgG, PCR) for West Nile virus, La Crosse, and other arboviral infections are reportable to public health within **1 business day** by electronic lab reporting (ELR) AND an [EPID 200](#). The [KY Reportable Disease Regulation \(902 KAR 2:020\)](#) and the KDPH [Reportable Diseases and Conditions Amended Table](#) can be found on the KDPH Reportable Disease [webpage](#), along with all required reporting documents.

Advise patients to prevent mosquito bites by:

- Using an [Environmental Protection Agency \(EPA\)-registered insect repellent](#) that is registered for mosquitoes
- Wearing long-sleeved shirts and pants, or clothing treated with permethrin
- Eliminate, turn over, cover, or throw out containers (e.g., discarded tires) that hold standing water and are mosquito breeding sites.
- Stay in places with air conditioning or that use window and door screens; use mosquito nets over beds, especially in areas with high mosquito populations.

Further Information:

- [West Nile Virus | West Nile Virus | CDC](#)
- [CDC West Nile Diagnostic Algorithm](#)
- [About La Crosse | La Crosse Virus | CDC](#)

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