

West Nile Virus (WNV) Diagnosis

Potential exposures

Mosquitoes, blood transfusion, organ transplantation, lab, mother-to-baby

Risk factors for severe disease

Older age, hypertension, diabetes, cancer, chronic kidney disease, alcohol use disorder, immunosuppressive drugs or conditions

Suspected WNV Disease

Patient presents with fever and recent exposure
within 2-6 days, up to 14 days

Suspected
WNV
disease

WNV Fever

(20-30% of infections)

Fever, headache, fatigue, myalgia, nausea, vomiting, occasional rash

Guillain-Barré Syndrome

(Immune-mediated demyelinating peripheral neuropathy, 1-8 weeks after infection)

Symmetrical, ascending weakness, sensory loss, painful paresthesias

WNV Neuroinvasive Disease

<1% of infections, 10% fatality

Acute Flaccid Myelitis

(Viral infection of anterior horn cells, 24-48 hours after fever onset)

Asymmetrical limb weakness, risk of respiratory failure

Meningitis

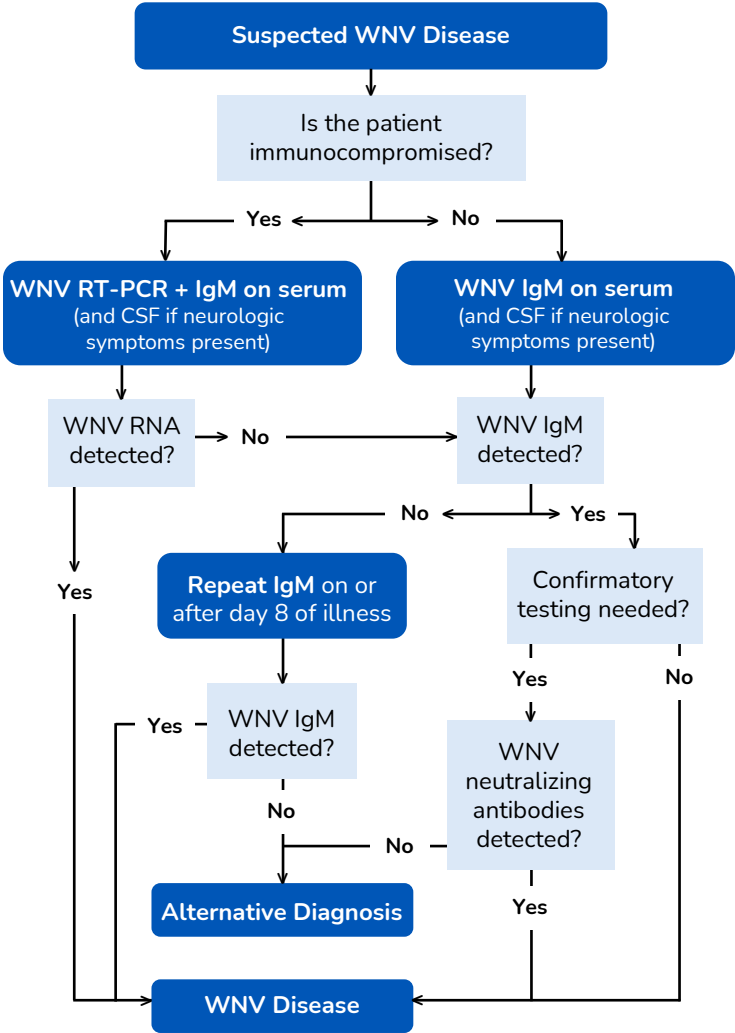
Headache, neck stiffness, photophobia

Encephalitis

Altered mental status, lethargy, seizures, focal neurologic deficits, movement disorders

Other possible complications (rare): myocarditis, rhabdomyolysis, optic neuritis, uveitis, chorioretinitis, orchitis, pancreatitis, hepatitis

Diagnostic Testing Algorithm



WNV IgM can usually be performed at commercial or state public health laboratories.