



COLORADO
Department of Public
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

HEALTH ALERT NETWORK BROADCAST

MESSAGE ID: 07252019 14:00

FROM: CO-CDPHE

SUBJECT: HAN Advisory - West Nile Virus Activity in Colorado

RECIPIENTS: Local Public Health Agencies / IPs / Clinical Labs / EDs / ID Physicians / Coroners

RECIPIENT INSTRUCTIONS: Local Public Health Agencies - Please forward to healthcare providers

HEALTH ADVISORY | West Nile Virus Activity in Colorado | July 24, 2019

Health care providers: Please distribute widely in your office

Key points

- Mosquitoes have been found with West Nile virus (WNV) in Colorado.
- The identification of a positive mosquito pool within the state indicates the virus is present and circulating in Colorado and that there is a risk of human infection. The risk will be present in specific areas until the first hard freeze occurs in that area (typically in October for non-mountainous areas of Colorado).
- Mosquito testing began in mid-June this year, and 560 mosquito pools have been tested.
- WNV should be considered in any person with an acute febrile or neurologic illness who has had recent exposure to mosquitoes, a blood transfusion or organ transplant. WNV should also be considered in any infant born to a mother infected with WNV during pregnancy or while breastfeeding.
- West Nile virus cases should be reported to local public health agencies within four days of laboratory testing.
- Commercial serology of IgM is recommended for all suspect patients; the CDPHE lab is also available for fee-for-service IgM serology and confirmatory testing if a false-positive test is suspected. With prior approval, CDC can also conduct testing for other arboviruses if the provider suspects an arbovirus and WNV has been ruled out.

Background information

- One West Nile virus-positive mosquito pool has been identified this season in Pueblo County. The identification of a mosquito pool indicates West Nile virus is currently circulating in Colorado, and the risk of infection is present.
 - Mosquito collection for statewide West Nile virus testing began mid-June; so far 560 pools have been tested. Additional counties will see positive mosquito pools as the season progresses. Not all counties in Colorado collect and test mosquitoes for West Nile virus. Where mosquitoes are present Coloradans are risk for mosquito-borne diseases, including West Nile virus.
 - So far this year, one human case has been identified in Boulder County; that case had travel history and exposure in a different state. One bird-of-prey has also been identified with the virus, it is unknown where that bird was exposed.
 - During the 2018 season there were 96 cases of human WNV virus. Fifty-two of these cases had neuro-invasive involvement, leading to 5 deaths. In addition to the 96 people who experienced illness, there were two blood donors with infection who did not develop symptoms of disease.
-

Symptoms of West Nile virus

- The incubation period from mosquito bite to symptoms for WNV is typically 2 to 6 days but may range from 2-14 days.
 - Most patients with WNV are asymptomatic; however, approximately 20% of cases will have an acute febrile illness which may include headache, myalgias, arthralgias, transient maculopapular rash, or gastrointestinal symptoms.
 - Less commonly, patients present with neuroinvasive disease such as aseptic meningitis, encephalitis, or acute flaccid paralysis. The elderly and those patients with underlying immunosuppressive health conditions are at increased risk of severe complications from infection. Symptoms of neuroinvasive involvement may include an acute onset of fever, stiff neck, altered mental status, seizures, focal neurologic deficits, or movement disorders such as tremors or parkinsonism.
-

West Nile virus complications

- WNV acute flaccid paralysis is clinically identical to polio-virus poliomyelitis and may progress to respiratory paralysis requiring mechanical ventilation. It may present with limb paresis or paralysis and can occur without fever or apparent viral prodrome.
- WNV-associated Guillain-Barre syndrome and radiculopathy have also been reported and can be distinguished from WNV poliomyelitis by clinical manifestations and electrophysiologic testing.
- Patients who have recovered from neuroinvasive disease may experience prolonged weakness, fatigue and malaise for weeks to months or have residual neurologic deficits. Rarely, cardiac dysrhythmias, myocarditis, rhabdomyolysis, pancreatitis, hepatitis, optic neuritis and other ocular manifestations have been described in patients with WNV
- The case fatality rate for patients with neuroinvasive disease is 10%, but is significantly higher in patients with WNV encephalitis and poliomyelitis than those with meningitis.

Recommendations / guidance

- Commercial IgM serology testing is recommended for individuals presenting with an acute febrile or neurologic illness who has had recent exposure to mosquitoes, a blood transfusion or organ transplant.
- West Nile virus cases should be reported to local public health agencies within four days of laboratory testing.

For more information

- <https://www.colorado.gov/cdphe/west-nile-virus>
- CDPHE Disease Reporting Line: 303-692-2700 or 303-370-9395 (after hours)

