

WEST NILE VIRUS

Mosquito-borne disease information sheet

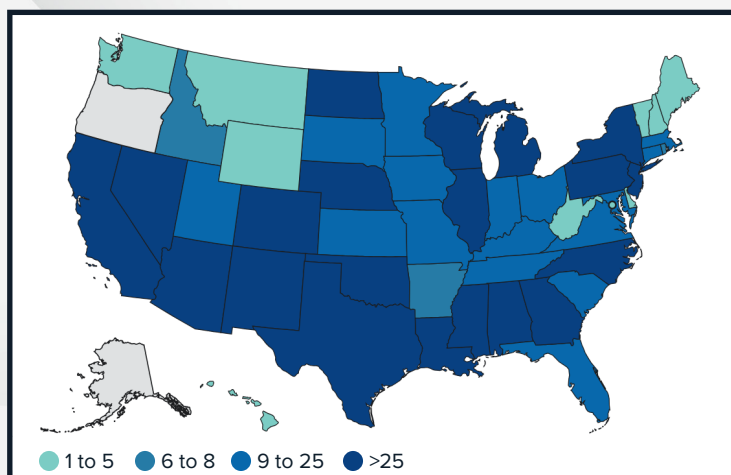


West Nile Virus (WNV) belongs to the virus family Flaviviridae and was first isolated in Uganda in 1937. Widely distributed in Africa, the Middle East, Europe, Russia and India it was first identified in the U.S. in New York City in 1999. Since then, it has become the most common mosquito-borne illness in the country. While most humans recover from WNV, it can be fatal or result in lifelong health issues.

DISEASE TRANSMISSION

- WNV is primarily spread through the bite of infected *Culex* spp. mosquitoes.
- WNV cases typically run from the summer and peak in early autumn.
- Birds serve as the amplifying hosts; over 300 bird species can be infected via mosquito bites, as well as consuming mosquitoes or other birds carrying the disease.
- 25 mammals and at least 2 reptile species are also susceptible to WNV.
- Reporting dead birds to your local government wildlife agency can help alert them to the presence of WNV.

2024 WEST NILE VIRUS ACTIVITY



States with the highest incidence of human West Nile virus cases

Texas (176)
California (123)
New York (98)
Nebraska (92)
Colorado (76)
Pennsylvania (61)

SIGNS AND SYMPTOMS IN HUMANS

- Many people infected with WNV exhibit no symptoms or mild flu-like symptoms.
- Severe cases can cause disorientation, convulsions, vision loss, paralysis, or coma.
- In approximately 1 in 150 cases, the central nervous system is affected, resulting in encephalitis (inflammation of the brain) or death.



TIPS TO REDUCE YOUR RISK OF INFECTION

- Use insect repellent.
- Be aware of peak mosquito hours. Peak mosquito hours for many *Culex* mosquitos is late evening to night time hours.
- Wear clothing to protect yourself.
- Empty standing water.
- Install and repair window screens.



CHART/GRAPH OF CDC CASE COUNTS

Year	Total Cases	Neuroinvasive Cases
2020	731	559
2021	2,911	2,008
2022	1,132	827
2023	2,566	1,738
2024	1,466	1,063

HOW VDCI CAN HELP

VDCI offers comprehensive services that support government entities and businesses with education and reducing the risk of mosquito-borne disease. Visit vdc.net for more details on Integrated Mosquito Management (IMM) programs.



Surveillance & Disease Testing



Data Collection & Reporting



GIS Mapping & Aerial Applications



Government Coordination & Public Education



Emergency Response & Freshwater Management



Regulatory Compliance



Contact our experts at admin@vdc.net or call **866.403.4111** so that they can help you develop a custom IMM program to meet your workplace's needs.