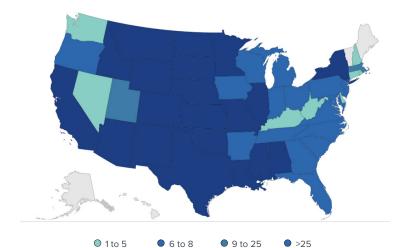


# WEST NILE VIRUS Mosquito-borne disease information sheet

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.

### 2023 WEST NILE VIRUS ACTIVITY



States with the highest incidence

### of human West Nile virus cases

Colorado (216) California (351) Nebraska (150) Illinois (113) South Dakota (91)

#### States with the highest West Nile virus death toll

Colorado (626) California (367) Nebraska (150) Illinois (113) South Dakota (93) Texas (92) Arizona (83) New Mexico (80)

## DISEASE TRANSMISSION

 WNV is primarily spread through the bite of inflected 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.











#### **CHART/GRAPH OF CDC CASE COUNTS**

Year	Total Cases
2018	2,647
2019	971
2020	731
2021	2,911
2022	1,132
2023	2,406

#### 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 these species is late evening to nighttime hours.
- Wear clothing to protect yourself.
- Empty standing water.
- Install and repair window screens.

### HOW VDCI CAN HELP

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



Disease Testing
Data Collection &

GIS Mapping &

Aerial Applications

Surveillance &

Reporting



Government Coordination & Public Education



Emergency Response & Freshwater Management

**Regulatory Compliance** 



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