



2025 WEST NILE VIRUS ANNUAL SUMMARY

In May 2025, vector control districts throughout North Dakota and state lab employees in Bismarck began West Nile virus (WNV) surveillance. PCR and RAMP testing for WNV was conducted on mosquito pools and dead birds. Surveillance ran until cooler fall temperatures significantly decreased mosquito activity. Results were reported to North Dakota Department of Health and Human Services (NDHHS).

In 2025 there were 86 cases of human WNV cases reported within 23 counties in North Dakota (Figure 1). Of the 86 cases reported, 43 (50%) met the case definition of West Nile neuroinvasive disease and 43 (50%) cases were classified as West Nile fever. 36 of the cases were hospitalized and two cases were fatal. Ten asymptomatic blood donors with WNV infections were also reported to NDHHS in 2025.

Of the 86 total human cases, 38 were female, and 48 were male. Thirty-nine (~45%) of cases were age 60 or older. The elderly, especially those over 60, are at an increased risk for severe WNV illness (Table 1).

Mosquito surveillance and WNV testing was conducted from late May through September in 10 counties, including the state lab in Bismarck (Figure 2).

Culex tarsalis, the main species that transmits WNV in the Midwest, typically reaches its peak numbers in North Dakota at the end of July or beginning of August. An increased number of *Culex tarsalis* pose a higher risk for human WNV infection.

Figure 1. 2025 WNV Human Cases by County, ND

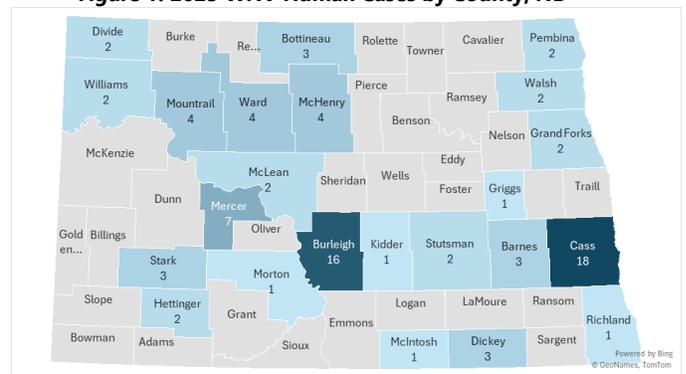


Table 1. 2025 WNV Human Cases by Age Group, ND

Age Group	Cases
<10	0
10-19	2
20-29	8
30-39	14
40-49	14
50-59	9
≥60	39

Figure 2. 2025 Positive Mosquito Pool(s)

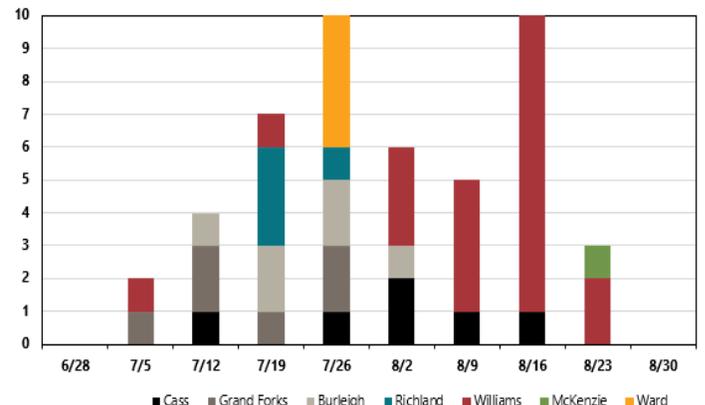


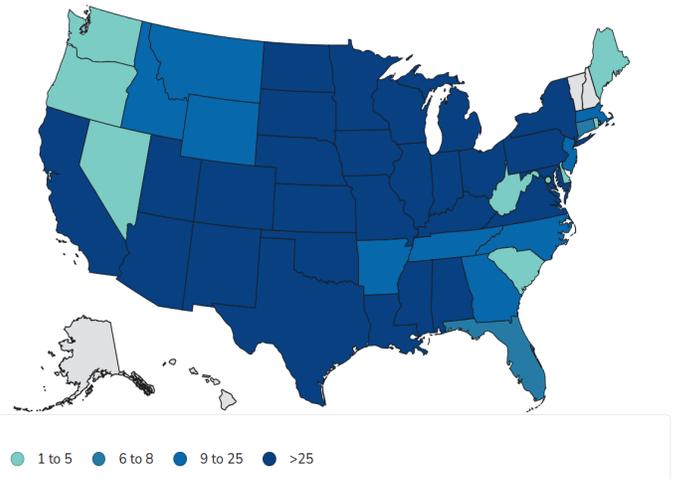
Table 2. WNV Activity by County, 2025

County	Bird	Veterinary	Positive Mosquito Pools
Adams			
Barnes			
Benson			
Billings		1	
Bottineau			
Bowman			
Burke			
Burleigh		1	6
Cass	5		6
Cavalier			
Dickey			
Divide			
Dunn			
Eddy			
Emmons			
Foster			
Golden Valley			6
Grand Forks	1		
Grant			
Griggs			
Hettinger			
Kidder			
LaMoure			
Logan			
McHenry			
McIntosh			
McKenzie			1
McLean		1	
Mercer			
Morton			
Mountrail			
Nelson			
Oliver			
Pembina			
Pierce			
Ramsey			
Ransom			
Renville			
Richland			4
Rolette		1	
Sargent			
Sheridan			
Sioux			
Slope			
Stark			
Steele			
Stutsman			
Towner			
Trail			
Walsh			
Ward			4
Wells			
Williams			20

The North Dakota Veterinary Diagnostic Laboratory (NDVDL) in Fargo, ND, tests various animals for WNV. In 2025 four animals tested positive for WNV (Table 2).

Dead bird testing focused primarily on birds in the Corvidae family, which includes crows, jays, magpies, and ravens. In 2025 six birds tested positive for WNV (Table 2).

**West Nile Virus In the United States, 2025
(results as of January 14th, 2025)**



West Nile Virus in the United States

As of January 13th, 2026, 2,076 human cases of WNV have been reported in 47 states and the District of Columbia for 2025. Of these reported cases, 1,434 (69%) met the case definition of neuroinvasive disease. There have been 156 reported deaths due to WNV and 373 presumptive viremic blood donors.