

2023 Philadelphia West Nile Virus Activity Report

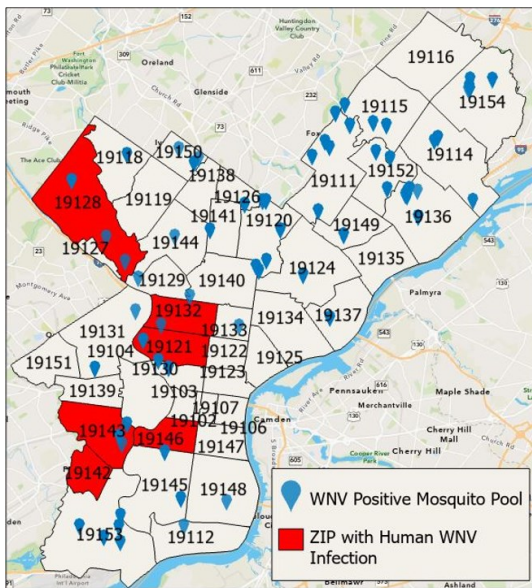
October 20, 2023

During the 2023 season, the Philadelphia Department of Public Health (PDPH) has identified 4 neuroinvasive West Nile virus (WNV) infections. All 4 cases occurred in adults ≥ 50 years of age who were hospitalized. One case had a significant underlying medical history and was fatal. One adult with WNV fever and 2 presumptive viremic blood donors also were reported in 2023.

The WNV mosquito pool positivity in 2023 is higher than the year-to-date historic median rate (29% vs 8%) but lower than rates observed in 2018, 2021, and 2022 (34–43%), peak WNV activity seasons in Philadelphia. Increased risk for human infection will continue in Philadelphia until the first hard frost occurs.

From May through October, PDPH, in collaboration with the PA Department of Environmental Protection, conducts mosquito management activities throughout Philadelphia, which entails surveillance and identification of mosquito pools, testing pools for WNV, and control activities (eliminating breeding sites, larviciding catch basins, ground spraying, etc.). Since May 2023, 30 locations in Philadelphia were treated to control adult mosquito populations.

West Nile Virus Mosquito and Human Case Surveillance, Philadelphia PA, Morbidity Week 40 and Cumulative 2023 Season Update



^a51 locations had 2–9 mosquito pools test positive

	Week 40 (10/1–10/7)	2023 Season (5/1–10/7)
Mosquito Pools Tested ^a	1	821
WNV Positive Pools	1	242
Human WNV Cases	1	5
Neuroinvasive WNV	1	4
WNV Fever	0	1
Human WNV Deaths	0	1
Presumptive Viremic Donors	0	2

^a821 mosquito pools at 94 different mosquito trapping sites
State and National WNV Activity Reports

- [Pennsylvania Department of Health](https://www.pah.pa.gov/)
- [Centers for Disease Control and Prevention](https://www.cdc.gov/)

WNV Testing and Reporting Requirements for Human Surveillance in Philadelphia:

- Collect serum (3–8 days after onset) and CSF for patients with unexplained encephalitis or meningitis. Absence of detectable antibodies in serum within 8 days does not exclude possible WNV.
- Report suspected and confirmed WNV infections and encephalitis cases to PDPH by telephone at 215-685-6741 (215-686-4514 after hours) or fax at 215-238-6947.

Advise your patients to:

- Use repellent with DEET ($\geq 20\%$ to also prevent tick bites), Picaridin, or oil of lemon eucalyptus when outdoors.
- Regularly check and remove standing water outside their home (e.g., unused pools, tires).
- Keep well-fitted screens on windows and doors.
- Report mosquito problems and dead bird sightings to the PDPH Vector Control Program's Mosquito Complaint hotline at 215-685-9000.