

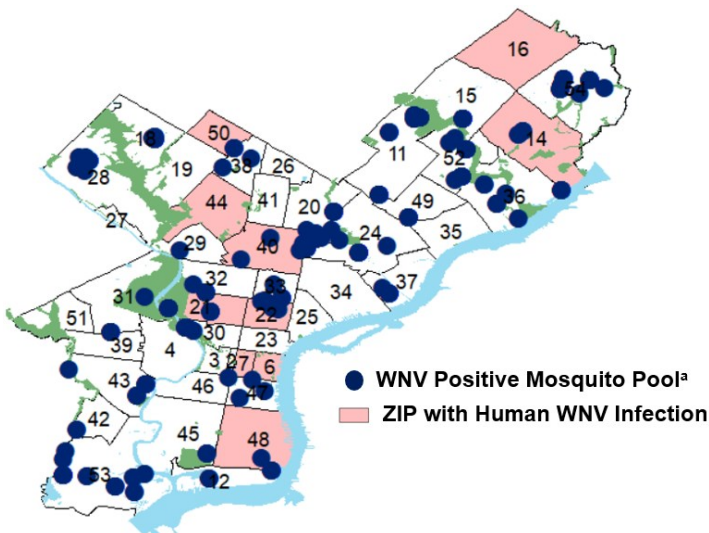
2022 Philadelphia West Nile Virus Activity Report

April 3, 2023

In 2022, 11 human West Nile Virus (WNV) infections occurred in Philadelphia. Seven adult residents developed neuroinvasive disease, four developed febrile illness. All required hospitalization and one neuroinvasive case was fatal. The cases consisted of seven females and four males, six identifying as African American and five as White, all non-Hispanic, with an age range of 35-77 years. The first case of the season was detected on 6/22/2022 and the last case on 9/21/2022. Cases were identified in ten ZIP codes across the city. An asymptomatic viremic blood donor was also identified.

From May through October, the Philadelphia Department of Public Health (PDPH), in collaboration with the PA Department of Environmental Protection, conducted mosquito management activities throughout Philadelphia, which entailed surveillance and identification of mosquito pools, testing pools for WNV, and control activities (eliminating breeding sites, larviciding catch basins, ground spraying, etc.). Throughout the season, 49 locations in Philadelphia were treated to control adult mosquito populations. The WNV pool positivity in 2022 was higher than the historic median rate (43% vs 7%), and higher than rates observed in 2010, 2018 and 2021 (24-38%), peak WNV activity seasons in Philadelphia.

West Nile Virus Mosquito and Human Case Surveillance, Philadelphia PA, Cumulative 2022 Season Update



^a51 locations had 2-22 mosquito pools test positive

	2022 Season
Mosquito Pools Tested ^a	906
WNV Positive Pools	391
Humans Tested ^b	25
Human WNV Cases	11
Neuroinvasive WNV	7
WNV Fever	4
Human WNV Deaths	1
Presumptive Viremic Donors	1

^a906 mosquito pools at 179 different mosquito trapping sites

^bTesting among case reports received by PDPH only

State and National WNV Activity Reports

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

WNV Testing and Reporting Requirements for Human Surveillance in Philadelphia:

- Collect CSF (from symptom onset–day 8) and serum (day 8–14) from patients with unexplained encephalitis or meningitis for WNV IgM testing.
- Report suspected and confirmed WNV infections (neuroinvasive or non-neuroinvasive illness) and encephalitis cases to PDPH by telephone at 215-685-6742 (or 215-686-4514 after hours). Reports also may be faxed to 215-238-6947.

Advise your patients to:

- Use repellent with DEET (≥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.