Department of Public Health
CITY OF PHILADELPHIA

Philadelphia Department of Public Health
Division of Disease Control

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2022 Philadelphia West Nile Virus Activity Report
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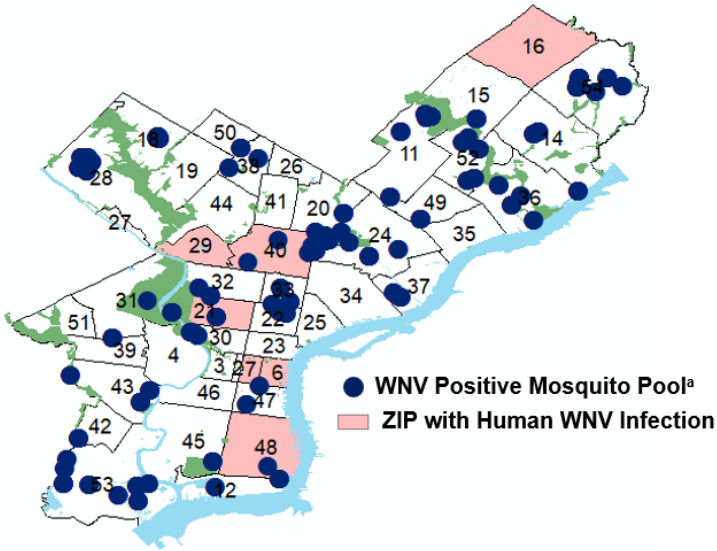
Seven human West Nile Virus (WNV) cases have been identified in Philadelphia during the 2022 season. Four adult residents developed neuroinvasive disease and three developed febrile illness. Six cases were hospitalized and one neuroinvasive case was fatal. A presumptive viremic blood donor was also identified, but did not develop symptoms. Positive mosquito pools continue to be identified across the City. The WNV pool positivity in 2022 is higher than the year-to-date historic median rate (46% vs 7%), and higher than rates observed in 2010, 2018 and 2021 (24-41%), 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, the Philadelphia Department of Public Health (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 2022, 45 locations in Philadelphia have been treated to control adult mosquito populations.

West Nile Virus Mosquito and Human Case Surveillance, Philadelphia PA, Morbidity Week 36 and Cumulative 2022 Season Update

2022 Distribution of Positive Mosquito Pools and Human Cases:



[a]49 locations had 2-21 mosquito pools test positive

	Week 36 (9/4-9/10)	2022 Season (5/1–9/10)
Mosquito Pools Tested[a]	7	808
WNV Positive Pools	3	371
Humans Tested[b]	1	11
Human WNV Cases	0	7
Neuroinvasive WNV	0	4
WNV Fever	0	3
Human WNV Deaths	0	1
Presumptive Viremic Donors	0	1

[a]808 mosquito pools at 163 different mosquito trapping sites
[b]Testing among case reports received by PDPH only

State and National WNV Activity Reports

- Pennsylvania Department of Health
- Centers for Disease Control and Prevention

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.