

CHERYL BETTIGOLE, MD, MPH Acting Health Commissioner COLEMAN TERRELL Acting Director, Division of Disease Control

2021 Philadelphia West Nile Virus Activity Report January 31, 2022

In 2021, ten human West Nile Virus (WNV) infections occurred in Philadelphia. Eight adult residents developed neuroinvasive disease and two developed febrile illness. Of these, eight required hospitalization and all were discharged in improved condition. The cases consisted of six males and four females, with an age range of 42-82. The first case of the season was detected on 8/13/2021 and the last case on 10/16/2021. Cases were identified in six ZIP codes across the city, half of them being in the Northeast.

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, 55 locations in Philadelphia were treated to control adult mosquito populations.

West Nile Virus Mosquito and Human Case Surveillance, Philadelphia PA, Cumulative 2021 Season Update

	2021 Season (5/1–10/31)
WNV Positive Pools	224
Humans Tested ^a	18
Human WNV Cases	10

^aTesting among case reports received by PDPH only State and National WNV Activity Reports

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

^a42 locations had 2-9 mosquito pools test positive

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.