

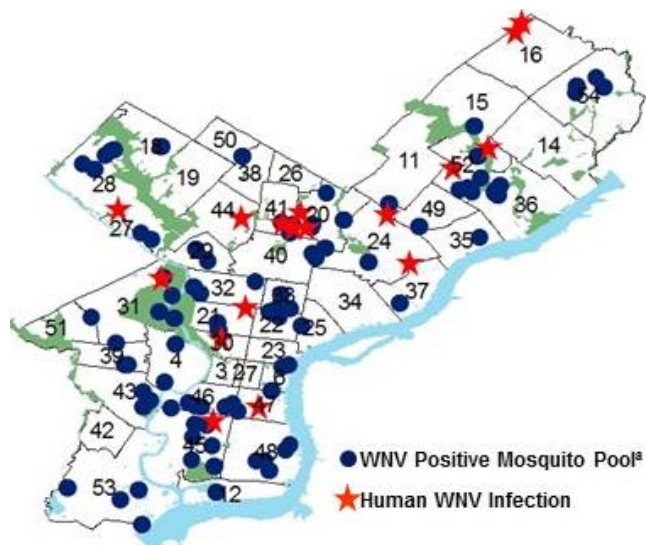
## 2018 Philadelphia West Nile Virus Activity Report

April 17, 2019

In 2018, 17 human West Nile virus (WNV) cases (14 neuroinvasive, two fever, and one asymptomatic viremic donor) occurred in Philadelphia. Eleven neuroinvasive cases were residents >50 years of age, and the remaining three were an immunocompromised 49 year-old, and two otherwise healthy individuals aged 35 and 22 years old. All symptomatic cases were hospitalized and three neuroinvasive cases were fatal. The first fatal case was a 50-year-old with end-stage renal disease, diabetes, and hypertension. The second fatal case had a history of kidney disease and a brain aneurysm. The last fatality was a 49 year-old who had a history of cancer, stroke, and years prior to their infection with WNV, had been an organ transplant recipient.

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 implementing control measures (eliminating breeding sites, larviciding catch basins, ground spraying, etc.) at 212 locations across Philadelphia. The cumulative WNV mosquito pool positivity rate was 38% in 2018, the highest recorded since surveillance began in 2001. The next highest positivity rate was 24% in 2012, and the median historic rate from past seasons (2001-2017) is 3.1%.

### West Nile Virus Mosquito and Human Case Surveillance, Philadelphia PA, Cumulative 2018 Season Update



\*66 locations had 2- 27 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.

	2018 Season (5/1–10/31)
Mosquito Pools Tested <sup>ab</sup>	1255
WNV Positive Pools <sup>b</sup>	477
Humans Tested <sup>c</sup>	26
Human WNV Cases	17
Neuroinvasive WNV	14
WNV Fever	2
Viremic Donor	1

<sup>a</sup>1255 mosquito pools at 220 different mosquito trapping sites

<sup>b</sup> Testing among case reports received by PDPH only

State and National WNV Activity Reports

- [Pennsylvania Department of Health](http://www.pahhs.org/)
- [Centers for Disease Control and Prevention](http://www.cdc.gov/)

#### 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.