

2024 Arboviral Seasonal Summary for Pennsylvania

West Nile virus

- 60 total human WNV cases from 20 counties*
- 40 M/20 F; avg age 61 yo (range 18 to 92 yo)
- 47 neuroinvasive cases/13 febrile cases
- 7 deaths from Montgomery (3), Lancaster (2), Dauphin (1), and Delaware (1)
- Philadelphia (9) and Montgomery (8) had the most cases
- 9 Presumed viremic donors from 6 counties; Berks (1), Bucks (1), Chester (1), Northampton (1), Philadelphia (3), York (2)
- 29 Equine cases were reported (Chester, Cumberland, Dauphin, Juniata, Lackawanna, Lancaster, Mifflin, Montour, Northumberland, Union, and Washington Counties)
- 3,035 positive mosquito samples were detected from 52 counties. York County reported the most with 444.

Jamestown Canyon virus

- 22 positive mosquito samples were detected from 6 counties. Luzerne reported the most with 9.
- 1 positive horse from Chester County

Other locally transmitted arboviruses in Pennsylvania

- One human Powassan neuroinvasive case from Allegheny County
- One equine with Eastern Equine encephalitis (EEE) from Lackawanna County and one wild turkey with EEE from Luzerne County
- One Lacrosse encephalitis mosquito sample from Franklin County

Travel related human cases of arboviruses in Pennsylvania

- 65 Dengue cases; 6 of those are severe cases
- 9 Chikungunya cases
- 1 Zika cases

*human illness statistics are preliminary

Seasonal Observations of WNV Vectors, Risk, and Illness

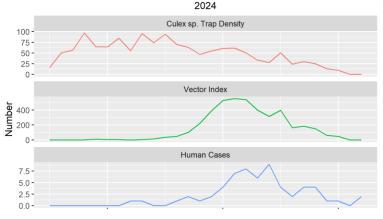


Figure 1. A representation of the 2024 West Nile Virus Season by Epidemiological (EPI) Week. The top graph represents trap density of *Culex restuans* and *Culex pipiens* collected in gravid traps throughout the surveillance season. Adult surveillance efforts began in April (EPI Week 15) and concluded in October (EPI Week 42). The middle graph represents the statewide vector index, a quantitative method that calculates risk of human illness. The bottom graph represents human cases reported by the Department of Health by onset week.

2003-2024 West Nile Virus Human Illness Density

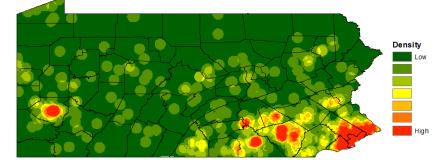


Figure 2. Historic West Nile virus human illness density. Map was constructed using ArcMap, point density, 0.08 radius, bilinear interpolation, and 0.25 standard deviation. The radius was increased as to not give away any sensitive information.

2024 Arboviral Statistics by County

WNV Mosquito Mosquito WNV JCV Mosquito											
COUNTY	#POS	Rank	WNV Bird #POS	Equine	WNV Human	#POS	JCV Equine				
Adams	20	21	0	0	0	0	0				
Allegheny	158	6	0	0	4	0	0				
Armstrong	1	36	0	0	0	0	0				
Beaver	91	12	0	0	0	0	0				
Bedford	5	32	0	0	1	0	0				
Berks	85	13	0	0	2	0	0				
Blair	14	26	1	0	0	0	0				
Bradford	2	35	0	0	0	0	0				
Bucks	183	5	4	0	6	0	0				
Butler	1	36	0	0	1	0	0				
Cambria	22	20	0	0	1	0	0				
Cameron	1	36	0	0	0	0	0				
Carbon	0	37	0	0	0	0	0				
Centre	7	30	1	0	0	0	0				
Chester	70	14	6	4	5	0	1				
Clarion	0	37	0	0	0	0	0				
Clearfield	0	37	0	0	0	0	0				
Clinton	0	37	0	0	0	1	0				
Columbia	17	23	0	0	0	0	0				
Crawford	0	37	1	0	0	4	0				
Cumberland	209	4	2	3	0	0	0				
Dauphin	41	17	0	1	1	0	0				
Delaware	130	8	0	0	5	0	0				
Elk	0	37	0	0	0	0	0				
Erie	11	26	3	0	0	3	0				
Fayette	12	27	0	0	0	0	0				
Forest	0	37	0	0	0	0	0				
Franklin	28	18	0	0	0	0	0				
Fulton	3	34	0	0	0	0	0				
Greene	6	31	0	0	0	0	0				
Huntingdon	15	25	0	0	0	0	0				
Indiana	12	27	0	0	0	0	0				
Jefferson	0	37	1	0	0	0	0				
Juniata	5	32	0	3	0	0	0				
Lackawanna	32	19	0	0	1	0	0				
Lancaster	144	7	0	12	5	0	0				
Lawrence	18	22	0	0	0	0	0				
Lebanon	114	9	1	0	1	0	0				
Lehigh	264	3	0	0	3	0	0				
Luzerne	103	10	0	0	2	9	0				
Lycoming	43	16	0	0	0	0	0				

COUNTY	WNV Mosquito #POS	Mosquito Rank	WNV Bird #POS	WNV Equine	WNV Human	JCV Mosquito #POS	JCV Equine
McKean	0	37	0	0	0	0	0
Mercer	3	34	0	0	0	0	0
Mifflin	2	35	0	1	0	0	0
Monroe	22	20	0	0	0	0	0
Montgomery	94	11	1	0	8	0	0
Montour	8	29	0	2	0	0	0
Northampton	60	15	1	0	0	0	0
Northumberland	12	27	0	1	0	0	0
Perry	3	34	0	0	1	0	0
Philadelphia	430	2	0	0	9	0	0
Pike	2	35	0	0	0	0	0
Potter	0	37	0	0	0	0	0
Schuylkill	17	23	0	0	1	0	0
Snyder	11	28	0	0	0	0	0
Somerset	0	37	0	0	0	0	0
Sullivan	0	37	0	0	0	0	0
Susquehanna	0	37	0	0	0	0	0
Tioga	1	36	1	0	0	0	0
Union	16	24	0	1	1	0	0
Venango	0	37	0	0	0	0	0
Warren	1	36	0	0	0	4	0
Washington	20	21	0	1	0	0	0
Wayne	7	30	0	0	0	0	0
Westmoreland	15	24	0	0	0	1	0
Wyoming	0	37	0	0	0	0	0
York	444	1	0	0	2	0	0
Total	3035		23	29	60	22	1