

Department of Health Division of Infectious Disease and Epidemiology WNV/Arbovirus Surveillance Report: 2000 – 2010

Purpose: To monitor the epidemiology, incidence and geographic distribution of WNV and other arboviruses in humans, mosquitoes and mammals in Rhode Island with the goal of quantitating human disease threat, and to provide guidance for graded public health actions such as vector control and crafting prevention messages for the public.

Report at a glance:

- All laboratory confirmed human cases, positive mosquito pools and animal specimens have been described for a period of ten years (2000-2010).
- With the exception of 2003 (7 cases), the number of confirmed human cases (WNV/EEE) per year has been in the range of 0-1.
- Of the 12 human cases of arboviral illness, 66% were females and the same proportion of cases was above the age of 50. Neurologic manifestations were noted in 75% of the cases.
- Geographic distribution of WNV/other arboviral activity in mosquito and equine populations is concentrated in the southern part of the state with the towns of South Kingstown and Westerly demonstrating persistent high rates of positive mosquito pools.

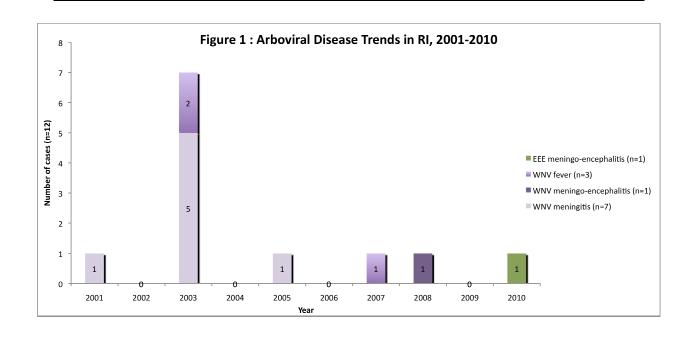


Table 1 : Human Arboviral Cases by Age Group and County, RI, 2000-2010

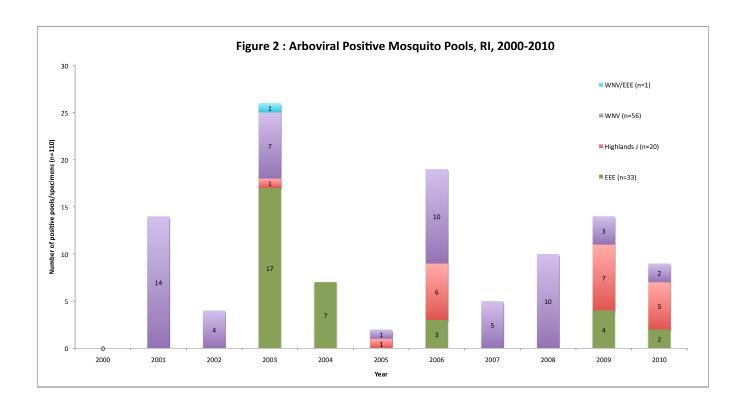
Date of Specimen	County	Classification	Age group	Sex
9/24/01	Providence	WNV meningits	61-70	F
9/5/03	Newport	WNV meningitis	51-60	F
9/11/03	Providence	WNV meningitis	41-50	F
9/12/03	Kent	WNV Fever+	61-70	F
9/15/03	Providence	WNV Fever	41-50	М
10/5/03	Providence	WNV meningitis	71-80	М
10/6/03	Providence	WNV meningitis	71-80	F
10/20/03	Providence	WNV meningitis	51-60	F
8/26/05	Providence	WNV meningitis	61-70	М
8/16/07	Bristol	WNV Fever+	41-50	F
9/18/08	Providence	WNV meningo-encephalitis	61-70	F
8/11/2010^	Newport	EEE meningo-encephalitis	21-30	M

[^]Specimen tested at MDPH

Table 2: Mosquito Surveillance Data, RI, 2000 - 2010

Year	Number of pools tested	Number of positive counties	Total number of positive Pools+	Number of WNV positive pools	Earliest positive date for WNV	Number of EEE positive pools	Earliest positive date for EEE
2000	1113	0	0	0	NA	0	NA
2001	1856	3	14	14	7/16/01	0	NA
2002	1417	2	4	4	8/28/02	0	NA
2003	2383	4	27	7	8/21/03	17	9/10/03
2004	3062	2	7	0	NA	7	7/19/04
2005	1466	2	2	1	9/19/05	0	NA
2006	1382	4	19	10	8/8/06	3	9/17/06
2007	1048	2	5	5	8/20/07	0	NA
2008	1207	2	10	10	8/26/08	0	NA
2009	1138	2	14	3	9/8/09	3	8/24/09
2010*	1621	3	9	2	8/30/10	2	8/23/10

 $^{+ &}quot;Total \ number \ of \ positive \ pools" \ includes \ pools \ positive \ for \ WNV, \ EEE \ and \ HJ \ virus$



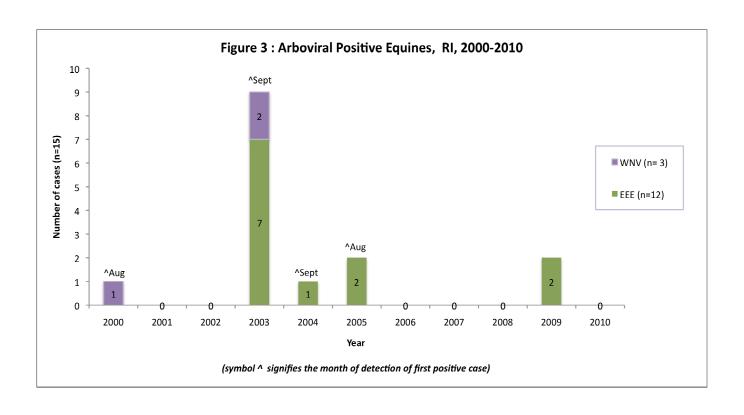


Figure 4 : Arboviral Positives by Geographic Distribution RI, 2000-2010

