West Nile Virus Surveillance Report

Center for Acute Disease Epidemiology | Acute Disease Prevention and Emergency Response | West Nile Virus Website

Date Issued: November 4, 2013

Overview:

Forty-two human cases of West Nile Virus have been reported in Iowa in 2013 and additional cases are being investigated. Eleven positive blood donors have been reported so far this year. Fifteen sentinel chickens, sixty-six mosquito pools and eleven horses have also tested positive for West Nile Virus. In 2012, there were 31 human cases of West Nile Virus reported.

Human / Sentinel Chicken / Mosquito Surveillance, 2013 Positive Samples

					Mosquito Pools	
County	**Human**	**Blood Donor**	**Horses**	**Sentinel Chickens**	***Culex pipiens* Complex**	***Culex tarsalis***
Audubon	1	0	0	N/A	N/A	N/A
Cass	1	0	0	N/A	N/A	N/A
Cerro Gordo	0	0	1	N/A	N/A	N/A
Crawford	1	0	0	N/A	N/A	N/A
Dallas	1	0	1	N/A	N/A	N/A
Davis	0	0	1	N/A	N/A	N/A
Dickinson	1	0	0	N/A	N/A	N/A
Fayette	1	0	0	N/A	N/A	N/A
Fremont	1	0	0	N/A	N/A	N/A
Grundy	0	0	1	N/A	N/A	N/A
Hamilton	1	0	0	N/A	N/A	N/A
Harrison	1	0	0	N/A	N/A	N/A
Humboldt	2	0	0	N/A	N/A	N/A
Ida	1	0	0	N/A	N/A	N/A
Jackson	0	0	2	N/A	N/A	N/A
Jasper	1	0	1	N/A	N/A	N/A
Kossuth	1	0	0	N/A	N/A	N/A
Linn	1	0	0	N/A	N/A	N/A
Lyon	2	0	0	N/A	N/A	N/A
Monona	4	0	0	N/A	N/A	N/A
Monroe	1	0	0	N/A	N/A	N/A
Montgomery	2	0	0	N/A	N/A	N/A
Plymouth	1	0	0	N/A	N/A	N/A
Polk	1	3	2	1	21	0
Pottawattamie	4	1	0	8	1	1
Ringgold	1	1	0	N/A	N/A	N/A
Scott	1	0	0	4	0	0
Shelby	1	3	0	N/A	N/A	N/A
Story	0	0	0	0	28	1
Union	0	0	1	N/A	N/A	N/A
Van Buren	1	0	1	N/A	N/A	N/A
Webster	0	1	0	N/A	N/A	N/A
Woodbury	8	2	0	2	13	1
Total	***42***	***11***	***11***	***15***	***63***	***3***

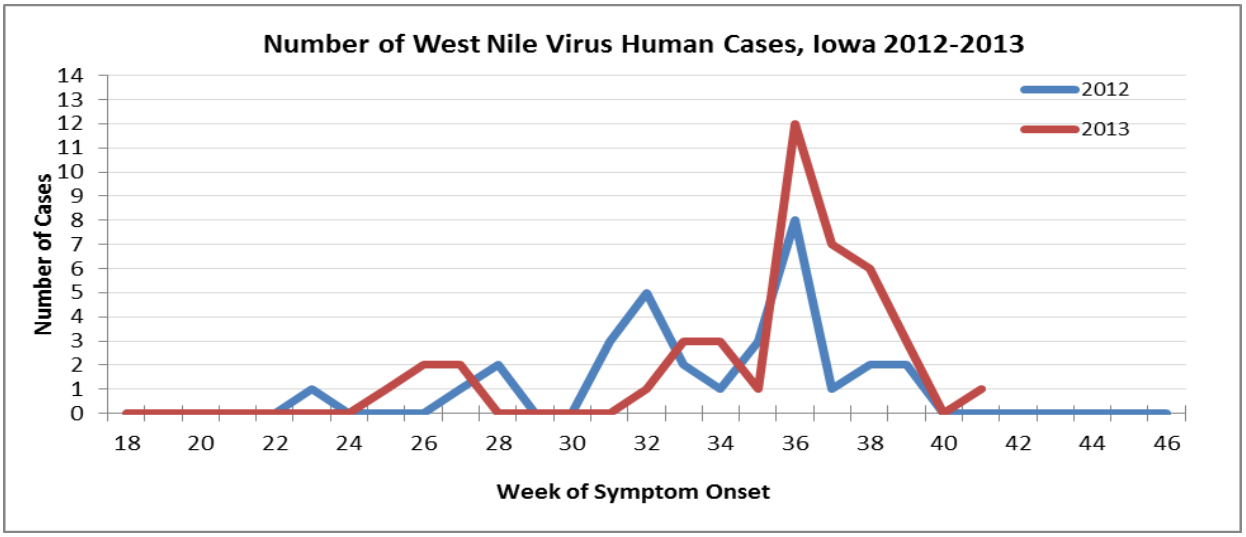

Figure 1. Number of West Nile Virus Human Cases – Iowa, 2012-2013

West Nile Virus is endemic in Iowa and activity usually peaks in late summer and early fall. Local partners collect mosquitoes and maintain sentinel chicken flocks across the state. Iowa State University Medical Entomology monitors the levels of *Culex pipiens* and *Culex tarsalis* mosquitoes (the primary vectors of WNV) statewide and the State Hygienic Laboratory (SHL) tests the mosquitoes to determine whether they are infected with West Nile Virus or other arboviruses. SHL also tests the blood drawn from sentinel chickens weekly to determine whether they have been infected with West Nile virus or other arboviruses.

For additional on Iowa West Nile Virus activity, visit:
www.idph.state.ia.us/Cade/DiseaseIndex.aspx?disease=West Nile Virus.

National WNV Activity:
As of October 29th, 1,154 counties in 48 states and the District of Columbia have reported WNV activity to ArboNET for 2013, including 46 states with reported WNV human infections (i.e., disease cases or viremic blood donors) and two additional states with reported WNV activity in non-human species only (i.e., veterinary cases, mosquito pools, dead birds, or sentinel animals).

To date, a total of 2,059 human cases of WNV disease have been reported from 46 states. Of all WNV disease cases reported, 1015 (49%) were classified as neuroinvasive disease (e.g., meningitis, encephalitis, acute flaccid paralysis) and 1044 (51%) as non-neuroinvasive disease. Dates of illness onset for disease cases ranged from January-October

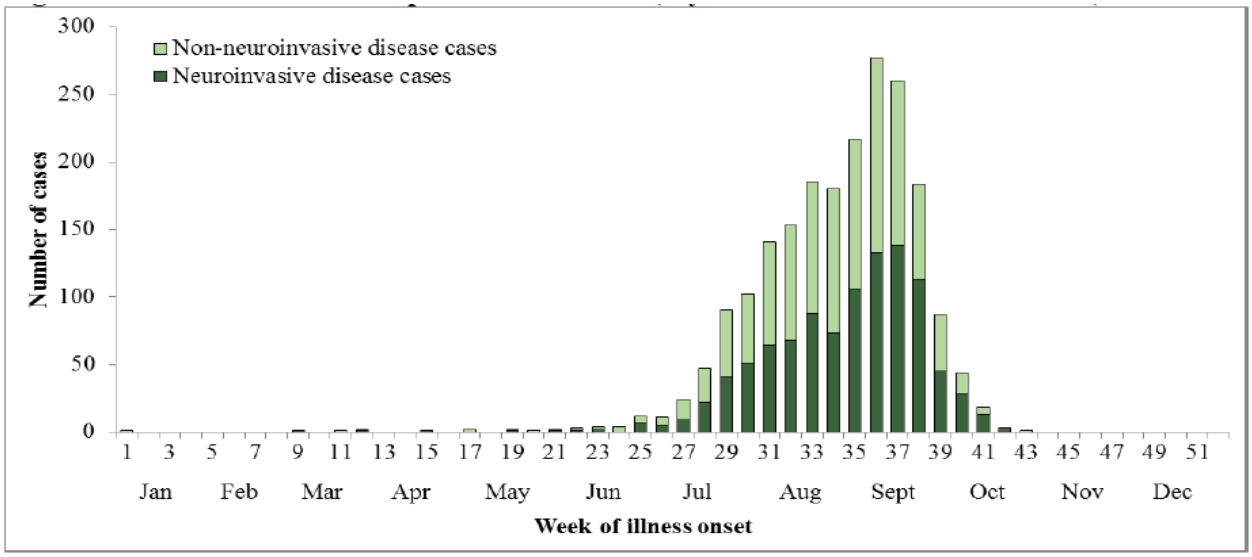

Figure 2. WNV disease cases reported to ArboNET, by week of onset – United States, 2013