Vector-Borne Disease

2022 Weekly Surveillance Report

Iowa Department of Public Heath | Center for Acute Disease Epidemiology | West Nile Virus Website

All data presented in this report are provisional and may change as additional reports are received

Date Issued: June 3, 2022

West Nile Virus (WNV)

WNV is endemic in Iowa and activity usually peaks in late summer and early fall. IDPH works in collaboration with Local Public Health (LPH) and other appropriate partners to investigate all reported cases.

In 2021, six human cases were identified. Thus far in 2022, no WNV activity has been detected.

Dengue Fever

Dengue is a disease caused by any one of four related viruses, which are passed by the bite of an infected *Aedes aegypti* or *Aedes albopictus* mosquito. Infection with one of the four viruses does not protect against the others and consecutive infections put people at greater risk of developing dengue hemorrhagic fever (DHF).

Dengue is not found in Iowa. Cases are in travelers and immigrants returning from parts of the world where dengue transmission occurs. One case of dengue has been reported in Iowa, thus far in 2022. In 2021, two cases of dengue were reported to IDPH.

Malaria

Malaria is a serious and sometimes fatal disease caused by a parasite that commonly infects *Anopheles* mosquitoes. Malaria is spread to humans by the bite of the infected female mosquito. Only *Anopheles* mosquitoes can transmit malaria and they must have been infected through a previous blood meal taken from an infected person.

Two cases of malaria have been reported in Iowa. Cases are in travelers and immigrants returning from parts of the world where malaria transmission occurs. In 2021, 17 cases of malaria were reported to IDPH.

Anaplasmosis

Anaplasmosis is a disease caused by the bacterium *Anaplasma phagocytophilum*. *A. phagocytophilum* is transmitted by the bite of an infected blacklegged tick (or deer tick, *Ixodes scapularis*) in Iowa.

One case of anaplasmosis has been reported in Iowa. In 2021, 14 cases of anaplasmosis were reported to IDPH.

Babesiosis

Babesiosis is caused by microscopic parasites that infect red blood cells. Most human cases in the United States are caused by the parasite *Babesia microti*. *Babesia microti* is spread by the blacklegged tick (or deer tick, *Ixodes scapularis*). The parasite typically is spread by the young nymph stage of the tick. They are most common during the warm months of spring and summer in areas with woods, brush, or grass.

One case of babesiosis has been reported in Iowa. In 2021, five case of babesiosis were reported to IDPH.

Lyme

Lyme disease is caused by *Borrelia burgdorferi* and in Iowa is transmitted to humans by the bite of an infected tick, the blacklegged tick (or deer tick, *Ixodes scapularis*). Ticks are most likely to spread the Lyme disease bacterium during their pre-adult stage (nymph). They are most common between May and July and found in tall grasses and brush of wooded areas.

As of June 3rd, 10 confirmed and probable cases of Lyme disease have been reported in Iowa [Figure 1]. In 2021, 356 cases of Lyme disease were reported to IDPH.

Figure 1. 2022 Lyme disease case count and incidence rate by county of residence.