

What is Flaviviridae?

The *Flaviviridae* are a family of viruses whose members are generally associated with mosquito and or tick-transmitted diseases in humans. Viruses in this group can cause mild to severe illnesses including the following:

- Mosquito associated diseases:

- Yellow fever (see [Yellow Fever fact sheet](#))
- Dengue fever (see [Dengue fever fact sheet](#))
- Japanese encephalitis
- West Nile virus (see [West Nile fact sheet](#))
- Zika virus

- Tickborne diseases:

- Tick-borne Encephalitis (TBE),
- Kyasanur Forest Disease (KFD)
- Alkhurma disease
- Omsk hemorrhagic fever

Who is at risk for Flaviviridae?

This will be dependent on the virus but typically, groups at risk for disease are laboratory workers who work with the viruses and people in areas where the diseases are present.

What are the symptoms of Flaviviridae?

General symptoms include fever, body aches, headache, and joint pain. Some of these illness may also cause vomiting and diarrhea. The diseases caused by *Flaviviridae* viruses can be fatal. For signs and symptoms specific to diseases in this classification, visit www.cdc.gov/vhf/virus-families/flaviviridae.html.

How soon do symptoms appear?

Depending on the illness, the incubation period can range from 2 – 15 days.

How is Flaviviridae spread?

This will depend on the type of illness but in general human infection occurs individuals are bitten by infected mosquitoes or ticks. With some of these diseases, the mishandling of infected animals, blood and other fluids may also put people at risk of infection.

Person-to-person transmission of these diseases is uncommon but reports have shown that in some cases it can be passed via blood transfusions or in rare cases from infected mother to fetus.

When and for how long is a person able to spread the disease?

In most cases these diseases are not spread from person to person.

How is a person diagnosed?

Several tests can be used to detect antibodies. These tests are typically done on blood or cerebral spinal fluid samples.

What is the treatment?

There is no specific treatment for these illnesses. Supportive therapy may help reduce mortality.

Does past infection make a person immune?

Yes. Depending on the disease, infection with some of the *Flaviviridae* viruses show immunity, but for viruses such as Dengue, being immune to one of the viruses does not provide immunity to the other. Additionally, if traveling to an endemic areas, there is a vaccine available for Yellow fever and Japanese encephalitis.

Should children or others be excluded from child care, school, work or other activities if they have Flaviviridae?

No, infants, toddlers and school-aged children should not be excluded unless the staff determines the child is unwilling or unable to participate in activities or the staff determines that they cannot care for the child without compromising their ability to care for the health and safety of the other children in the group.

All others can attend work and other functions as long as they are well enough to do so.

What can be done to prevent the spread of Flaviviridae?

When traveling to areas with these diseases, make sure you are vaccinated, if applicable.

Additionally, mosquito and/or tick bites also should be avoided. Some ways to protect yourself include:

- Using nets with insecticide on them while sleeping.
- Remaining in areas that are screened to prevent mosquitoes from entering.
- Wearing long pants and long-sleeved shirts.
- Doing a thorough tick check after being outside especially in areas with tall grass and trees
- Using a repellent that contains DEET.

If you are traveling, visit www.cdc.gov/travel/ to find recommendations for the areas you are choosing to visit.

Additional Information:

Additional information is available by calling the North Dakota Department of Health at 800.472.2180.

This disease is a reportable condition. As mandated by North Dakota law, any incidence of this disease shall be reported to the North Dakota Department of Health.

Resources:

1. Centers for Disease Control and Prevention, 2014: www.cdc.gov/vhf/virus-families/flaviviridae.html
2. *Red Book: 2015 Report of the Committee on Infectious Diseases*. 30th ed. [Children in Out-Of-Home Care]. Kimberlin, DW; Brady, MT; Jackson, MA; Long, SS. American Academy of Pediatrics. 2015: 132-151.