

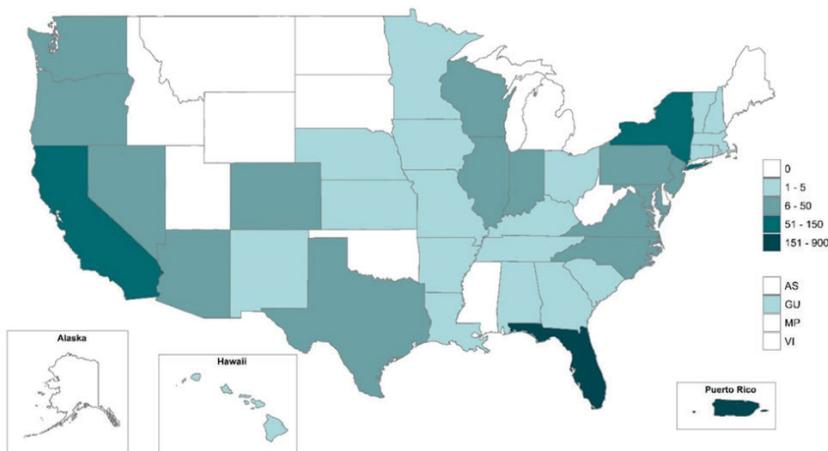
# DENGUE

## Mosquito-borne diseases information sheet

Dengue (DEN) is one of the fastest spreading vector-borne diseases in the world causing either classic dengue fever or dengue shock syndrome. DEN virus is caused by four closely related serotypes called dengue 1, 2, 3, 4. Although considered a tropical disease, DEN has caused numerous outbreaks in the United States. Major U.S. epidemics occurred in 1779, 1879, and during the early 1930s in parts of Florida. Recently, dengue has expanded its range with transmission reported in Hawaii and parts of Southern Florida. Moreover, border states such as Texas, Arizona, and California are particularly vulnerable due to the presence of *Aedes aegypti* and a large migrant population.

## 2022 HUMAN CASE COUNT

States and territories reporting dengue cases – United States, 2022 (as of January 4, 2023)



\*CDC reports provisional dengue case counts reported to ArboNET for the United States and its territories on the first Thursday of each month.

## DISEASE TRANSMISSION

- Dengue is primarily transmitted by *Aedes aegypti*, although a number of *Aedes* species in the subgenus *Stegomyia* have shown to transmit the virus, this includes the common invasive Asian Tiger mosquito, *Aedes albopictus*.



- Dengue cases typically peak in the summer months.
- There are 4 known dengue serotypes. Humans build immunity to each serotype once infected, but subsequent infections by another serotype can cause serious medical issues including dengue shock syndrome.
- Dengue can be transmitted to marsupials, dogs, horses, birds, and other animals.



## CHART/GRAPH OF CDC CASE COUNTS

| Year | Total Cases | Travel Associated | Locally Acquired | Deaths |
|------|-------------|-------------------|------------------|--------|
| 2018 | 482         | 479               | 3                | >1%    |
| 2019 | 1,475       | 1,452             | 23               | >1%    |
| 2020 | 435         | 352               | 83               | >1%    |
| 2021 | 117         | 117               | 0                | >1%    |
| 2022 | 1,073       | 1,026             | 47               | >1%    |

## SIGNS AND SYMPTOMS IN HUMANS

- Symptoms occur 3-7 days following exposure, and are characterized by a very high fever (104°F), rash, severe headache, and excruciating pain in the muscles and joints commonly known as “break-bone fever.”
- 1 in 20 infected people will develop severe dengue hemorrhagic fever, which can result in internal bleeding, continued vomiting, and in rare cases (>1%), death.
- Travelers to known endemic areas should consult with their physician immediately if they exhibit any of these symptoms.
- There is no cure for dengue fever, but vaccines are currently in development.

## TIPS TO REDUCE YOUR RISK OF INFECTION

- Use insect repellent.
- Be aware of peak mosquito biting and feeding hours. Unlike many other mosquito species, *Aedes aegypti* and *Aedes albopictus* are day-time feeders.
- Wear clothing to protect yourself.
- Empty standing water from outside containers, especially those containing organic matter.
- Install and repair window screens.

## HOW VDCI CAN HELP

VDCI offers comprehensive services that support government entities and businesses with education and reducing the risk of mosquito-borne disease. Visit [vdc.net](http://vdc.net) for more details on Integrated Mosquito Management (IMM) programs.



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Contact our experts at [admin@vdc.net](mailto:admin@vdc.net) or call **866.403.4111** so that they can help you develop a custom IMM program to meet your workplace’s needs.