

Dengue Virus

DENV

DENV is a risk group 2 virus. It is considered a **reproductive pathogen** as it can be transmitted to a fetus during pregnancy. Some studies suggest that DENV infection during pregnancy can increase the chance of preterm delivery and low birth weight among other complications.

How can I be exposed to DENV?

- Exposure occurs via mosquito vectors (primarily *Aedes aegypti* and *Aedes albopictus*)
- Laboratory workers may be exposed by parenteral inoculation and bites from infected mosquitoes.
- Vertical transmission can occur during pregnancy via the placenta

How can I protect myself from exposure?

- Avoid direct skin contact by wearing protective clothing and gloves.
- Avoid mucous membrane exposure by using eye/face protection for procedures that may produce splashes.
- Avoid respiratory exposure by using a biosafety cabinet or other primary containment device and wearing a respirator for procedures that may produce aerosols.
- The use of needles, syringes, and other sharp objects should be strictly limited, and additional precautions should be taken when working with animals and mosquitoes.

What should I do if I think I've been exposed to DENV?

Wash the affected area immediately for 15 minutes with soap and water and seek medical attention.

What symptoms should I look for after a potential exposure?

DENV infection can cause Dengue fever, Dengue hemorrhagic fever, and Dengue shock syndrome, typically including flu-like symptoms, fever, rash, and pain in the muscles and joints. Secondary infections carry higher risk of more severe symptoms.

How long does it take for symptoms to develop?

Symptoms develop between 4 to 7 days.

Is there a treatment or vaccine?

Treatment usually involves supportive care. The vaccine, Dengvaxia is approved for children 9-16 years old who have a laboratory-confirmed previous DENV infection, however this vaccine has been discontinued due to lack of demand.

Can I transmit it to other people?

No, individuals are infected by mosquitoes, needlestick, and transmission from mother to fetus.

Can I transmit it to my pets?

No, DENV can only infect other animals and humans through the mosquito vector.

Can it survive on surfaces?

DENV can survive on surfaces for up to 72 hours and in dried blood for up to 9 weeks at room temperature.

See *Pathogen Safety Data Sheet* for More Information

