

Dengue

This sheet is about having dengue in a pregnancy or while breastfeeding. This information is based on available published literature. It should not take the place of medical care and advice from your healthcare provider.

What is dengue?

Dengue is a viral disease caused by 4 related viruses called: dengue-1, dengue-2, dengue-3, and dengue-4. Most people are exposed to a dengue virus through being bitten by an infected mosquito. Less common exposures can come from blood transfusions, organ transplants, or needlestick injuries. Dengue transmission through sexual intercourse has not been confirmed.

Dengue symptoms can range from mild to severe. Symptoms reported with mild dengue include fever (temporary rise in body temperature over 101°F [38.3°C]), severe headache, pain behind the eyes, muscle and joint pain, nausea, vomiting, swollen glands, and rash. Mild symptoms usually start 4 to 10 days after infection and can last for 2 to 7 days. A severe case of dengue can become fatal. Symptoms of severe dengue can include severe abdominal pain, persistent vomiting, rapid breathing, bleeding from gums and nose, fatigue (being very tired), restlessness, blood in vomit or stool, being very thirsty, pallor (changes in skin tone, such as becoming pale, ashen, gray or yellowish in color), cold skin, and feeling weak. If you think you have any of the severe symptoms, please seek care from a healthcare provider right away.

I've had dengue once. Can I get it again?

Dengue can be caused by 4 different viruses. If you have had dengue, your body may develop protection (immunity) to the strain of virus that you had, so you should not be able to get dengue from that strain again. For example, if you have been exposed to dengue-1 virus, it is unlikely you would get sick from exposure to dengue-1 virus again in the future. However, you could be infected by another strain. People who have already had dengue and then get dengue again have a higher chance of developing severe symptoms.

How can I protect my pregnancy from dengue?

Information to plan for travel can be found here: https://www.cdc.gov/dengue/prevention/index.html. If you travel to an area or live in an area with a chance of dengue, prevent mosquito bites by using insect repellent and taking other steps as recommended by the Centers for Disease Control and Prevention (CDC) at

https://www.cdc.gov/mosquitoes/prevention/preventing-mosquito-bites-while-traveling.html. MotherToBaby has fact sheets for Insect Repellents at https://mothertobaby.org/fact-sheets/insect-repellents/ and for DEET at https://mothertobaby.org/fact-sheets/deet-nn-ethyl-m-toluamide-pregnancy/.

After returning from an area with risk of dengue, prevent mosquito bites for 3 weeks so dengue is not spread to local mosquitoes to reduce the chance of spreading the virus to other people: https://www.cdc.gov/mosquitoes/prevention/index.html.

A dengue vaccine is approved for use in children aged 9 to 16 years old who meet certain criteria. However, the vaccine is not approved for use in U.S. travelers who are visiting but not living in an area where dengue is common. More information can be found here: https://www.cdc.gov/dengue/vaccine/index.html.

I have dengue. Can it make it harder for me to get pregnant?

It is not known if dengue can make it harder to get pregnant.

Dengue can be passed to a fetus during pregnancy. There are no official recommendations to wait to try and conceive after having dengue. However, if you travel to an area with a risk of dengue, talk with your healthcare provider about your travel and your plans to try and get pregnant.

Does having dengue increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. It is not known if dengue can increase the chance of miscarriage. Some studies suggest that having dengue can increase the chance of miscarriage, while other studies do not. As there can be many causes of miscarriage, it is hard to know if the infection, the

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medications used to treat the infection, or other factors are the cause of a miscarriage.

Does having dengue increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. It is not known if having a dengue infection increases the chance for birth defects above the background risk.

Most studies do not suggest that having an active dengue infection increases the chance of birth defects above the background risk. One report suggested cerebral malformations (changes in the way the brain is formed during pregnancy) in babies born to women who had an active dengue infection during pregnancy. It is not clear what kind of cerebral malformations were seen, and three cases are not enough to know if there is an increased chance of birth defects. Also, this study did not report if the researchers looked at other factors (such as fever, other infections, age of the pregnant woman, medications, or substance use). It is not possible to say whether dengue infection caused the birth defects in this report.

Fever is a possible symptom of dengue. A high fever in the first trimester can increase the chance of certain birth defects. Acetaminophen is usually recommended to reduce fever in pregnancy. If you have dengue and develop a fever, talk with your healthcare provider to confirm that taking acetaminophen is the best way to lower it. For more information about fever and pregnancy, see the MotherToBaby fact sheet about hyperthermia at https://mothertobaby.org/fact-sheets/hyperthermia-pregnancy/.

Does having dengue increase the chance of other pregnancy related problems?

Some studies suggest that dengue can increase the chance of preterm delivery (birth before week 37) and low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth). Other complications, such as post-partum hemorrhage (bleeding after delivery), kidney problems, respiratory distress syndrome, liver failure, pre-eclampsia (high blood pressure and problems with organs, such as the kidneys, which can lead to seizures [called eclampsia]), stillbirth, and death have been reported when a woman is infected with dengue during pregnancy.

Can the virus that causes dengue pass to the baby during pregnancy or at the time of delivery?

When a pregnant woman passes an infection to the fetus, it is called vertical transmission. Vertical transmission has been reported with dengue infection in pregnancy.

Vertical transmission can happen at any time in pregnancy but is more likely to happen when a woman gets the infection close to delivery. The chance of passing dengue to the fetus can vary depending on many factors, including the area of the world where the infection occurred, and the strains of dengue virus the pregnant person was infected with. When a pregnant woman has severe dengue, or there is a lot of the virus present in the body, the chance of vertical transmission might be higher.

Most newborns who get a dengue infection are asymptomatic (do not show symptoms) but can develop symptoms within 14 days of birth (most commonly within the first week). Symptoms in infants can range from mild to severe. Rash and bleeding problems have been reported in newborns. Breathing issues have been less commonly reported.

Not all pregnant women who have dengue will have these issues. Talk with your healthcare team if you have or think you have dengue, so you and your pregnancy can be monitored as appropriate.

Does having dengue in pregnancy affect future behavior or learning for the child?

It is not known if a dengue infection during pregnancy can affect future learning or behavior for the child. Children born before 37 weeks of delivery (preterm) can have an increased chance of issues related to learning and development. This makes it hard to know if the infection itself, a complication from the infection, or other factors are increasing the chance of these issues.

Breastfeeding and dengue:

Dengue virus has been found in breast milk. Transmission of dengue virus through breast milk is not well studied. There is one report of an infant having dengue symptoms (fever and bleeding) after being breastfed by their mother, who had an active dengue infection. Due to the benefits of breastfeeding, women are encouraged to breastfeed even if dengue infection is suspected.

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If you suspect the baby has any symptoms (fever or a low temperature [less than 36°C or 96.8°F], sleepiness, irritability, rash, bleeding of the gums or nose, bruising, or vomiting) contact the child's healthcare provider. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a man has dengue, can it affect his fertility or increase the chance of birth defects?

One study looking at 10 men with dengue found a decrease in the amount of sperm made 30 days after the start of symptoms. The low sperm count was temporary. Having a low sperm count can make it harder to get a woman pregnant. Studies have not been done to see if dengue could increase the chance of birth defects. In general, exposures that fathers or sperm donors have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/.

Please click here for references.

Questions? Call 866.626.6847 | Text 855.999.3525 | Email or Chat at MotherToBaby.org.

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