

# Fever/Hyperthermia

This sheet is about fever and hyperthermia in pregnancy and while breastfeeding. This information should not take the place of medical care and advice from your healthcare provider.

#### What is fever and hyperthermia?

A person's typical body temperature is around 98.6°F (37°C). Fever refers to a temporary rise in body temperature over 101°F (38.3°C). Infection is one of the most common causes of fever. Autoimmune conditions, some cancers, and allergic reactions can also cause fever.

Hyperthermia, or overheating, is a rise in body temperature that happens when the body absorbs more heat than it releases. The most common causes of hyperthermia are heat stroke and severe reactions to medications (malignant hyperthermia). Long exposure to hot temperatures on hot days (often described at 86 °F (30 °C) or higher) can also cause hyperthermia. Extreme exercise or use of hot tubs or saunas might also cause hyperthermia.

A raise in body temperature due to fever or hyperthermia can be of concern in early pregnancy, especially if it lasts for a long period of time. Talk with your healthcare providers to learn if a fever from an infection or illness needs to be treated with fever-reducing medications. Your healthcare provider can decide if the illness causing your fever needs to be treated as well. In some cases, hyperthermia may require immediate medical attention.

## I have fever or hyperthermia. Can it make it harder for me to get pregnant?

It is not known if having a fever or hyperthermia could make it harder to get pregnant.

## Does having a fever or hyperthermia increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Some studies suggest there might be an increased chance for miscarriage with increase in body temperature in pregnancy. Other studies have not suggested an increased chance of miscarriage. As there can be many causes of miscarriage, it is hard to know if a fever, hyperthermia, underlying illness causing a fever, or other factors are the cause of a miscarriage.

## Does having a fever or hyperthermia 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. Studies have reported a small increased chance for birth defects called neural tube defects (NTDs) in babies of people who had fevers or hyperthermia before the 6th week of pregnancy. Neural tube defects occur when the spinal cord or brain does not form properly. High temperatures that happen after the 6th week of pregnancy are not expected to increase the chance for NTDs related to the fever or hyperthermia.

A few studies have reported a small increased chance for other birth defects when fever or hyperthermia occurs in early pregnancy, especially if the fever is untreated. These include heart defects, abdominal wall defects (an opening in the abdomen through which organs such as intestines or stomach can stick out), or oral clefts (an opening in the upper lip [cleft lip] and/or the roof of the mouth [cleft palate]). However, there are also studies that have not found these results. As there can be many causes of birth defects, it is hard to know if a fever, hyperthermia, underlying illness causing a fever, or other factors are the cause of birth defects.

#### Does having a fever or hyperthermia increase the chance of other pregnancy-related problems?

It is not known if having a fever or hyperthermia can cause other pregnancy complications. Some underlying illnesses or health conditions that may cause fever could increase the chance for pregnancy-related problems such as preterm delivery (birth before week 37) or low birth weight (weighing less than 5 pounds, 8 ounces [2500 grams] at birth).

#### Does having a fever or hyperthermia in pregnancy affect future behavior or learning for the child?

A few studies have reported a small increased chance for problems such as attention deficit disorder (ADHD) and autism when a person had a fever in pregnancy, especially if the fever is untreated. As there can be many things that affect future behavior and learning for a child, it is hard to know if a fever, underlying infection, underlying medical condition causing a fever or hyperthermia, or other factors are the cause of these problems.



## Does taking medication for fever during pregnancy cause birth defects or other pregnancy complications?

The most common medications used to treat a fever are acetaminophen/paracetamol (Tylenol®) or ibuprofen (Motrin®, Advil®, and Nuprin®). Most healthcare providers consider acetaminophen to be the fever-reducer of choice during pregnancy. It suggested to use only as needed and at the lowest effective dose, unless otherwise directed by your healthcare provider. For more information, please see the MotherToBaby fact sheet on acetaminophen at https://mothertobaby.org/fact-sheets/acetaminophen-pregnancy/.

Ibuprofen is in a class of medications called non-steroidal anti-inflammatory drugs (NSAIDs). It is recommended to avoid the use of ibuprofen and other NSAIDs after week 20 of pregnancy, unless your healthcare provider feels it is necessary. For more information, please see the MotherToBaby fact sheet on ibuprofen at <a href="https://mothertobaby.org/fact-sheets/ibuprofen-pregnancy/">https://mothertobaby.org/fact-sheets/ibuprofen-pregnancy/</a>. Talk to your healthcare provider about the best way to treat your fever. You can also contact MotherToBaby with questions about specific treatments or medications.

#### How do I prevent fever or hyperthermia during pregnancy?

Fever is usually a sign of another underlying illness or infection, including cold and flu. Limiting exposure to infections, washing hands often, and staying up to date on vaccinations are some of the best ways to prevent illness and possible fever. For more information, please see the MotherToBaby fact sheet on vaccines at

https://mothertobaby.org/fact-sheets/vaccines-pregnancy/. Hot tub or sauna use during pregnancy should be limited. If you live in or are visiting a hot climate, be sure you take precautions and limit the amount of time you spend in the heat.

## Breastfeeding while I have a fever or hyperthermia:

Having a fever or hyperthermia does not seem to affect the ability to breastfeed. If your fever is due to an illness, there are antibodies in the breast milk to help lower the chance that the baby will get sick. Be sure to wash your hands often and wear a mask or try not to breathe directly on the baby's face while nursing. For more information about the use of specific medications during breastfeeding, contact a MotherToBaby expert. Be sure to talk to your healthcare provider about all your breastfeeding questions.

## If a male has a fever or hyperthermia, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

Heat can have a negative effect on the process of making sperm (spermatogenesis). Studies looking at high temperature to the testes have found lower sperm production, which might make it harder to get a partner pregnant. Fever in males at the time of conception or in early pregnancy, or a male's use of fever-reducing medication, has not been associated with an increased 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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