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 providers.

**What is a fever?**

Fever refers to a temporary rise in body temperature, usually due to an illness. A person’s typical body temperature is around 98.6°F (37°C). In pregnancy, a body temperature over 101°F (38.3°C) can be of concern, especially if it lasts for a long period of time in very early pregnancy.

**What can cause a fever?**

Infection is one of the most common causes of fever. Autoimmune conditions, some cancers and allergic reactions can also cause fever.

**What is hyperthermia?**

Hyperthermia refers to heat-related conditions/symptoms due to an abnormal rise in body temperature when the body absorbs more heat than it releases (overheating).

**What can cause hyperthermia?**

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 exposure longer than 10 minutes to heat sources such as hot tubs or saunas might also cause hyperthermia.

**I have a fever. Can it make it harder for me to get pregnant?**

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

**Does having a fever increase the chance for miscarriage?**

This is not known. Some studies suggested that there might be an increased chance for miscarriage with fever in pregnancy. A more recent study did not find an increased chance for a miscarriage with fever up to 16 weeks gestation.

**Does having a fever 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 in humans and animals have reported a small increased chance for birth defects called neural tube defects (NTD) in babies of people who had fevers early in pregnancy. Neural tube defects occur when the spinal cord or brain does not form properly.

A few studies have reported a small increased chance for heart defects, abdominal wall defects (organs such as intestines or stomach still work but do not form in their correct spots), or an oral cleft (lip and or roof of mouth do not form correctly) when a fever occurs in early pregnancy, especially if the fever is untreated. However, there are also studies that have not found these results.

Fevers are often due to infections. The small risks being looked at could be due to the illness / infection, medications used to treat the illness, the fever itself, or a combination of all of these factors. If you are pregnant and have a fever, contact your healthcare provider right away. Your health care provider can determine if the illness causing your fever needs to be treated. Your healthcare providers can also talk with you about screening options for birth defects if there is a concern related to a fever or hyperthermia.

**I had a fever in the second trimester. Could this have caused a neural tube defect?**

The neural tube (which forms the spinal cord) is formed by the beginning of your 6th week of pregnancy (dating from the first day of your last menstrual period). After the neural tube has closed (finished forming), a neural tube defect
cannot occur. So, if your high temperature occurs after the 6th week of pregnancy, then your pregnancy is not at an increased risk for this birth defect due to the hyperthermia.

**I have been using the hot tub and sauna. Is there an increased chance for birth defects or pregnancy complications?**

Hot tub or sauna use during pregnancy should be limited in a pregnancy. This is because it can take only 10 to 20 minutes to raise body temperature to 102°F (38.9°C). Some people may not feel uncomfortable at this temperature, while others might. Although hot tub or sauna use alone has not been as strongly associated with an increased chance for neural tube defects, if you were in a hot tub or sauna for a long period of time early in pregnancy, talk with your healthcare provider about available screening tests for neural tube defects.

**Does having a fever cause other pregnancy complications?**

It is not known if having a fever, itself, can cause other pregnancy complications. Talk with your healthcare providers to learn if a fever from an infection or illness needs to be treated.

**Will having a fever during pregnancy cause long-term problems in behavior or learning for the baby?**

Studies have not found that fever in a pregnancy could affect learning or behavior. Some forms of neural tube defects can affect learning.

**Can I breastfeed if I have a fever?**

It is unlikely that a person needs to stop breastfeeding due to hyperthermia/fever or illness. There are antibodies in the breast milk to help prevent the baby from getting sick. Be sure to wash your hands frequently and wear a mask or try not to breathe directly on the baby’s face while nursing. It is important to treat a fever with a medication that has been approved for use while nursing. Contact your healthcare provider as well your baby’s health care provider to discuss the best treatment of your fever or illness while breastfeeding. Talk with your breastfeeding questions.

**Males: Can having a fever make it harder for me to get my 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, mostly from occupational heat exposure, have found lower sperm production, which might make it harder to get a partner pregnant. Fever has not been directly associated with this chance, but it could possibly lower sperm production. Fever in males at the time of conception or in early pregnancy has not been associated with an increased chance for a birth defect. 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.