

# **Ibuprofen**

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

## What is ibuprofen?

Ibuprofen is a medication that has been used to relieve pain and for the temporary reduction of fever. Some brand names for ibuprofen include Motrin®, Advil®, and Nuprin®. Ibuprofen belongs to the class of medications called non-steroidal anti-inflammatory drugs (NSAIDs).

In October 2020, the U.S. Food and Drug Administration (FDA) made a recommendation to avoid the use of NSAIDs after week 20 of pregnancy, unless your healthcare provider feels it is necessary.

## I take ibuprofen. Can it make it harder for me to get pregnant?

It is not known if ibuprofen can make it harder to get pregnant. A few small studies have suggested using ibuprofen may increase the chance for unruptured follicle syndrome. This is when a follicle (small, fluid-filled sac in the ovary that contains one immature egg) fails to release the egg at the time of ovulation.

## Does taking ibuprofen increase the chance for miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Some studies have suggested that the use of ibuprofen may increase the chance of miscarriage, especially if taken around the time of conception or over a long period of time. However, the reason why a person is taking ibuprofen (such as a medical condition or viral infection) may increase the chance for miscarriage.

# Does taking ibuprofen 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. Based on the studies reviewed, it is not known if ibuprofen increases the chance of birth defects. There are studies that did not report an increased chance of birth defects with ibuprofen use.

A few studies have suggested that using ibuprofen in the first trimester might lead to a small increased chance for gastroschisis (when the intestines stick out of a hole in the stomach wall). These studies suggest that ibuprofen use in the first trimester raises the chance of having a baby with gastroschisis from 1 in 10,000 to between 1 and 4 in 10,000. However, other studies have not supported this association.

A small increased chance for heart defects has been reported in a few studies looking at NSAID prescriptions in early pregnancy. However, the reason the NSAID was prescribed was not available in most of the reported data. This information is important because some illnesses, like viral infections, have been associated with heart defects.

#### Does taking ibuprofen in pregnancy increase the chance of other pregnancy-related problems?

Ibuprofen is not recommended for use after week 20 of pregnancy. There have been some reports that NSAID use in the 2<sup>nd</sup> half of pregnancy might affect the fetal kidneys and the amount of amniotic fluid (fluid that surrounds the fetus in the uterus). If there is not enough amniotic fluid (called oligohydramnios) other pregnancy complications, such as poor lung development and joint contractures (joints can become stiff or unable to move), could happen. Oligohydramnios can also increase the chance that an early delivery is needed through induction of labor or C-section. In some cases, oligohydramnios could cause fetal demise.

Ibuprofen use later in pregnancy might also cause premature closure of the ductus arteriosus (an opening between the two major blood vessels leading from the heart). If the ductus arteriosus closes before it should, it can cause high blood pressure in the fetal lungs (pulmonary hypertension).

Ibuprofen should only be used under a healthcare provider's supervision, particularly in the 2<sup>nd</sup> and 3<sup>rd</sup> trimesters. Your healthcare providers can closely monitor your pregnancy if you need to use ibuprofen after week 20.

# Does taking ibuprofen in pregnancy affect future behavior or learning for the child?

Ibuprofen July 1, 2022



One study found that those who used NSAIDs (including ibuprofen) during pregnancy reported more attention problems in their children at ages 1.5, 3, and 5. However, there was no difference in teacher-reported attention problems at age 6 between children who were exposed to NSAIDs during pregnancy and those who were not.

## Breastfeeding while taking ibuprofen:

Ibuprofen passes into breastmilk in small amounts. The amounts of ibuprofen in breastmilk are less than the doses given to infants directly. Negative effects are not expected in newborns exposed to ibuprofen through breastmilk. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a male takes ibuprofen, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

Based on the studies reviewed, it is not known if ibuprofen could affect male fertility. Studies have not been done to see if ibuprofen could increase the chance of birth defects above the background risk. In general, exposures that fathers or sperm donors have are unlikely to increase the 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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