

## **Ibuprofen**

This sheet is about exposure to ibuprofen in pregnancy and while breastfeeding. This information is based on published research studies. It should not take the place of medical care and advice from your healthcare providers.

### What is ibuprofen?

Ibuprofen is a medication that has been used to treat pain and 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).

Sometimes when women find out they are pregnant, they think about changing how they take their medication, or stopping their medication altogether. However, it is important to talk with your healthcare providers before making any changes to how you take your medication. Your healthcare providers can talk with you about the benefits of treating your condition and the risks of untreated illness during pregnancy.

The U.S. Food and Drug Administration (FDA) recommends not using NSAIDs after week 20 of pregnancy, unless your healthcare provider specifically recommends it.

#### 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 might increase the chance for unruptured follicle syndrome. This is when a follicle (small, fluid-filled sac in the ovary that holds an egg) does not release the egg at the time of ovulation. Unruptured follicle syndrome might make it harder to get pregnant.

#### Does taking ibuprofen increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. Some studies have suggested that the use of ibuprofen might increase the chance of miscarriage, especially if taken around the time of conception or over a long period of time. As there can be many causes of miscarriage, it is hard to know if a medication, the medical condition being treated, or other factors are the cause of a miscarriage.

#### Does taking ibuprofen increase the chance of birth defects?

Birth defects can happen in any pregnancy for different reasons. Out of all babies born each year, about 3 out of 100 (3%) will have a birth defect. We look at research studies to try to understand if an exposure, like ibuprofen, might increase the chance of birth defects in a pregnancy.

There are studies that have not reported an increased chance of birth defects with ibuprofen use. A few studies have suggested that taking ibuprofen in the first trimester might lead to a small increased chance (less than 1%) for gastroschisis (when the intestines stick out of a hole in the stomach wall). One study is not enough information to make a conclusion about the chance of birth defects.

A small increased chance of 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. Studies based on prescription records cannot tell if a person actually took the medication. This makes it hard to know if the study outcomes are related to the medication or other factors.

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

Ibuprofen is generally 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). One study suggested that the use of NSAIDS in the 1st half of pregnancy might also affect the fetal kidneys and amount of amniotic fluid. If there is not enough amniotic fluid (called oligohydramnios), other pregnancy complications, such as poor lung development and joint contractures (joints are 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).

There are some studies that suggest NSAIDs can increase the chance of other 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. Other studies have not reported these findings.

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 of pregnancy.

**Does taking ibuprofen in pregnancy affect future behavior or learning for the child?** It is not known if ibuprofen can increase the chance of behavior or learning issues for the child.

### **Breastfeeding while taking ibuprofen:**

Ibuprofen gets into breast milk in small amounts. The amount of ibuprofen in breast milk is less than the doses given to infants directly. Side effects are not expected in children exposed to ibuprofen through breast milk. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a man takes ibuprofen, could it affect his fertility or increase the chance of birth defects? It is not known if ibuprofen could affect a man's fertility (ability to get a woman pregnant). Studies have not been done to see if ibuprofen could increase the chance of birth defects. In general, exposures that men 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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