



## Proton Pump Inhibitors

In every pregnancy, a woman starts out with a 3-5% chance of having a baby with a birth defect. This is called her background risk. This sheet talks about whether exposure to proton pump inhibitors may increase the risk for birth defects over that background risk. This information should not take the place of medical care and advice from your health care professional.

### ***What are proton pump inhibitors??***

Proton pump inhibitors (PPIs) are a group of medicines that treat the symptoms of acid reflux, stomach and intestinal ulcers. Acid reflux occurs when acid from the stomach backs up into the esophagus and causes symptoms commonly known as “heart burn.” Proton pump inhibitors work by decreasing acid production in the stomach, which reduces discomfort. Examples of proton pump inhibitors include: omeprazole (Prilosec®), lansoprazole (Prevacid®), pantoprazole (Protonix®), esomeprazole (Nexium®) and rabeprazole (Aciphex®).

### ***I just found out I am pregnant. Should I stop taking my PPI?***

Always talk with your health care provider before making any changes in your medication. The benefits of treatment for heartburn symptoms or ulcers needs to be considered along with any possible risks from medicines. Your doctor can help you decide what is the best decision for you regarding your medication.

### ***Can taking PPIs increase the risk for miscarriage or other complications?***

Available information suggests no increased risk for miscarriage, low birth weight, or premature delivery with use of PPIs during pregnancy.

### ***Can taking PPIs during pregnancy cause birth defects?***

It is unlikely that proton pump inhibitors would cause an increased risk for birth defects. Omeprazole is the best studied of the proton pump inhibitors. Multiple studies including over 6,610 women exposed to omeprazole, 1,630 exposed to lansoprazole, 560 exposed to pantoprazole, 700 exposed to esomeprazole, and 44 exposed to rabeprazole have shown no increase in risk of birth defects.

### ***Can I breastfeed while taking a PPI?***

Yes. There is limited data on the safety of PPI use while breastfeeding. PPIs do enter the breastmilk but at low levels and are broken down by stomach acid. These medicines are sometimes given directly to infants with reflux making them less likely to be a concern for a breastfeeding infant. Be sure to discuss any medications you are using with your healthcare provider as well as the baby’s pediatrician.

### ***What if the father of my baby takes a PPI?***

There is no evidence to suggest that a father’s use of PPIs causes infertility or birth defects. In general, a father’s exposures are unlikely to increase the risks to a pregnancy. For more information, please see the MotherToBaby fact sheet on Paternal Exposures and Pregnancy at <http://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

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