



MotherToBaby

Medications & More During Pregnancy & Breastfeeding
Ask The Experts

Fact Sheet

by the **Organization of Teratology Information Specialists (OTIS)**

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Diphenhydramine and Pregnancy

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 diphenhydramine 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 provider.

What is diphenhydramine?

Diphenhydramine is an antihistamine. It is found in many medications, both prescription and over-the-counter. It is commonly used to treat allergy symptoms, and may also be used to treat nausea, vomiting, motion sickness, insomnia, and tremor of Parkinson's disease. Diphenhydramine is sold under the brand names Benadryl®, Unisom®, Dormin®, or Nytol®.

I just found out I am pregnant. Should I stop taking diphenhydramine?

You should always talk with your health care provider before making any changes in your medication. It is important to consider the benefits of treating allergy symptoms and other conditions during pregnancy. Treating allergy symptoms may reduce asthma symptoms and the need for more asthma medicine. Allergy treatment can also result in better sleep and emotional well-being.

Can use of diphenhydramine during pregnancy cause birth defects?

It is unlikely that diphenhydramine would cause an increased chance for birth defects. Most studies show no increased chance of birth defects with the use of diphenhydramine in early pregnancy. While one study suggested an increased chance of several types of birth defects, these findings have not been confirmed.

Can use of diphenhydramine cause other pregnancy complications?

At recommended doses, diphenhydramine has not been shown to cause problems in pregnancy. There are rare reports of problems with the use of diphenhydramine in the third trimester. These reports usually involve using more of the medication than is recommended or long-term / chronic use. High levels of diphenhydramine could cause uterine hyperstimulation (contractions that are too long or too often). Uterine hyperstimulation can affect the developing baby, and can possibly lead to serious complications, including a uterine rupture (tear in the uterus) or placental abruption (when the placenta separates from the wall of the uterus before the baby is born).

Also, there are a few reports of withdrawal symptoms in infants whose mothers took diphenhydramine daily throughout pregnancy.

Is there anyone who should avoid taking diphenhydramine during pregnancy?

A single human report and animal data have suggested that the combination of temazepam (a benzodiazepine) and diphenhydramine may increase the chance for stillbirth or infant death shortly after birth. It is unknown if this interaction will occur with all benzodiazepines. Women taking benzodiazepines should talk with their health care provider before taking diphenhydramine. For more information, see the MotherToBaby fact sheet on [benzodiazepines](https://mothertobaby.org/fact-sheets/benzodiazepines-pregnancy/pdf/) at: <https://mothertobaby.org/fact-sheets/benzodiazepines-pregnancy/pdf/>.

Can I breastfeed while taking diphenhydramine?

Because diphenhydramine can cause sleepiness in adults, it may do the same for the baby. If you need to take an antihistamine regularly, ask your health care provider if a non-sedating one may work on your symptoms.

Antihistamines as a group may lower the amount of milk a woman makes, especially when using long acting antihistamines and when used with decongestants like pseudoephedrine or phenylephrine.

Two studies with women who used an antihistamine (not just diphenhydramine) while breastfeeding reported their babies were irritable, sleepier, and/or slept less.

Be sure to discuss any medications you are taking and your options for breastfeeding with your health care provider as well as the baby's pediatrician.

What if the father of the baby takes diphenhydramine?

There is no evidence that suggests that a man's diphenhydramine use would cause any problems for conceiving or problems during pregnancy. In general, exposures that fathers have are unlikely to increase risks to a pregnancy. For more information, please see the MotherToBaby fact sheet Paternal Exposures and Pregnancy at:

<https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/pdf/>.

Selected References:

- Anderka M, Mitchell AA, Louik C, Werler MM, Hernandez-Diaz S, Rasmussen SA, and the National Birth Defects Prevention Study. Medications used to treat nausea and vomiting of pregnancy and the risk of selected birth defects. *Birth Defects Res (Part A)* 94:22-30, 2012
- Aselton P, Jick H, Milunsky A, Hunter JR, Stergachis A: First-trimester drug use and congenital disorders. *Obstet Gynecol* 65(4):451-455, 1985
- Brost BC, Scardo JA, Newman RB: Diphenhydramine overdose during pregnancy: Lessons from the past. *Am J Obstet Gynecol* 175:1376-7, 1996
- Chiavegatto S, Bernardi MM, de-Souza-Spinosa H: Effects of prenatal diphenhydramine administration on sexual behavior in rats. *Braz J Med Biol Res* 22(6):729-732, 1989
- Chiavegatto S, Oliveira CA, Bernardi MM: Prenatal exposure of rats to diphenhydramine: Effects on physical development, open field, and gonadal hormone levels in adults. *Neurotoxicol Teratol* 19:511-516, 1997.
- Gilboa SM, Strickland MJ, Olshan AF, Werler MM, Correa A; National Birth Defects Prevention Study: Use of antihistamine medications during early pregnancy and isolated major malformations. *Birth Defects Res A Clin Mol Teratol* 85(2):137-150, 2009
- Hara GS, Carter RP, Krantz KE: Dramamine in labor: potential boon or a possible bomb? *J Kans Med Soc* 81(3):134-136, 155, 1980
- Heinonen OP, Slone D, Shapiro S: *Birth Defects and Drugs in Pregnancy*. Littleton, Mass.: John Wright-PSG, 1977; pp 437, 475
- Ito S, Blajchman A, Stephenson M, Eliopoulos C, Koren G: Prospective follow-up of adverse reactions in breast-fed infants exposed to maternal medication. *Am J Obstet Gynecol* 168:1393-9, 1993.
- Jick H, Holmes LB, Hunter JR, Madsen S, Stergachis A: First-trimester drug use and congenital disorders. *JAMA* 246(4):343-346, 1981
- Kargas GA et al: Perinatal mortality due to interaction of diphenhydramine and temazepam. *N Eng J Med* 313:1417-8, 1985.
- Li Q, et al: Assessment of antihistamine use in early pregnancy and birth defects. *J Allergy Clin Immunol Pract.* 1(6):666-74.e1. 2013.
- Moraes AP, Schwarz A, Spinosa HS, Florio JC, Bernardi MM: Maternal exposure to diphenhydramine during the fetal period in rats: effects on physical and neurobehavioral development and on neurochemical parameters. *Neurotoxicol Teratol* 26(5):681-692, 2004
- Moretti ME, Liau-Chu M, Taddio A, Ito S, Koren G: Adverse events in breastfed infants exposed to antihistamines in maternal milk. *Reprod Toxicol* 9: 588, 1995.
- O'Brien TE: Excretion of drugs in human milk. *Am J Hosp Pharm* 31:844-54, 1974.
- Sturman G, Freeman P, Meade HM, Seeley NA, Davies WJ: Factors affecting the extent of fetal fragility induced by histamine H1 antagonists. *Inflamm Res* 46(Suppl 1):S53-S54, 1997.

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