



MotherToBaby

Medications & More During Pregnancy & Breastfeeding  
Ask The Experts

Fact Sheet

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

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## Echinacea Preparations

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 echinacea 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 echinacea?***

Echinacea is an herbal medication obtained from the roots, stem, and leaves of the perennial plant *Echinacea purpurea* (Purple coneflower). Dried roots of *Echinacea angustifolia* and *Echinacea pallida* are also used. The type of active ingredients can vary widely. The concentration (amount) of the active ingredients depends on the type of echinacea and part of the plant used. When given as a tincture, the product might have a significant amount of alcohol.

In the United States and other countries, including Canada, herbal remedies such as echinacea preparations are not evaluated according to the same criteria as pharmaceuticals (medications) and do not have set standards for preparation, safety, or degree of effectiveness. For more information on herbal products in general, please see our fact sheet at: <https://mothertobaby.org/fact-sheets/herbal-products-pregnancy/pdf/>.

### ***What is echinacea used for?***

Echinacea is most commonly taken by mouth to help the immune system. Some people use it when they have a cold or upper respiratory infection. Reviews of published studies have not shown clear benefits in preventing colds when used alone. Some parts of the plant might be useful to shorten the number of days one is sick or to decrease the severity of symptoms.

Echinacea has also been used to stimulate the immune system following chemotherapy, to treat other conditions such as infections of the urinary tract, and has been applied topically for wounds and burns. There is not enough information to say whether echinacea is effective for these indications.

### ***What are the side effects associated with echinacea?***

The most common adverse effect in adults is an allergic reaction. Other side effects include possible activation of autoimmune disorders such as multiple sclerosis and collagen disease. Prolonged use of the agent (more than 8 weeks) is not recommended and may cause immune suppression or liver problems.

### ***Can taking echinacea during my pregnancy cause birth defects?***

There have been two studies looking at exposure to echinacea during pregnancy. No increase in birth defects was seen in these studies involving 569 women who reported taking echinacea while pregnant. The exact timing of the exposure was not specified in the majority of women but many reported use early in pregnancy.

While this information is reassuring, further studies are needed to know if there is an increased chance for birth defects or other problems associated with use of echinacea in pregnancy. Herbal products are presently not monitored for contaminants such as metals, pesticides, chemicals, microorganisms, or other ingredients not listed on the label. These contaminants may have their own adverse effects on a pregnancy. Some echinacea preparations contain alcohol. Using large amounts of an alcohol-containing tincture could result in birth defects or other alcohol-related problems. Alcohol from any source should be avoided in pregnancy.

### ***Can taking echinacea during my pregnancy cause other kinds of problems?***

There are no studies looking at echinacea and pregnancy complications or effects to the child's behavior or development. Some preparations have been found to be contaminated by heavy metals like lead. High blood lead levels

during pregnancy can harm a baby's brain development. Again, the lack of standards for preparation and safety should be considered when choosing to use a herbal remedy during pregnancy.

***Should I stop taking echinacea during my pregnancy?***

More research is needed regarding the impact of echinacea on a developing baby. Given the unclear benefits of echinacea, other better studied cold and flu remedies and frequent hand washing are preferred during pregnancy.

***Can I take echinacea while breastfeeding?***

It is not known if echinacea gets into milk. The impact of a mother's use of this herbal product on her breastfed infant is unknown. Children seem to be particularly sensitive to rash when exposed directly to echinacea. Because of regulatory concerns and lack of standards for preparation, avoidance of herbal remedies is usually preferred during breastfeeding. Be sure to talk to your health care provider about all of your breastfeeding questions.

***What if the father of the baby takes echinacea?***

A father's use of echinacea would be unlikely to cause a birth defect. 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:**

- Chow G, et al. 2006. Dietary echinacea purpurea during murine pregnancy: Effect on maternal hemopoiesis and fetal growth. *Biol Neonate*; 89: 133-138.
- Gallo M, et al. 2000. Pregnancy outcome following gestational exposure to echinacea. *Arch Intern Med*. 160:3141-3143.
- Heitmann K, et al. 2016. Pregnancy outcome after prenatal exposure to echinacea: The Norwegian Mother and Child Cohort Study. *Eur J Clin Pharmacol*. 72: 623-630.
- Huntley AL, et al. 2005. The safety of herbal medicinal products derived from *Echinacea* *Drug Saf* 28(5):387-400.
- Linde K, et al. 2009. Echinacea for preventing and treating the common cold. *Cochrane Database of Systematic Reviews*, Issue 4. Art. No.: CD000530. DOI: 10.1002/14651858.CD000530.pub2.
- Natural Standard (Ed). *Herbs & Supplements – Echinacea (E. angustifolia DC, E. pallida, E. purpurea)*. Nature Medicine Quality Standard. [Retrieved on November 2014]. [www.naturalstandard.com](http://www.naturalstandard.com)
- Ondrizek RR, et al. 1999. Inhibition of human sperm motility by specific herbs used in alternative medicine. *J Assist Reprod Genet*. 16(2):87-91.
- Perri D, et al. 2006. Safety and efficacy of echinacea (*Echinacea angustifolia*, *E. purpurea* and *E. pallida*) during pregnancy and lactation. *Can J Clin Pharmacol* 13(3):e261-7.

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