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## Echinacea preparations and Pregnancy

This sheet talks about the risks that exposure to echinacea preparations can have during pregnancy. With each pregnancy, all women have a 3% to 5% chance of having a baby with a birth defect. 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. This herbal medication has many components including glycoproteins, alkamides, polyacetylene flavonoids, and caffeic acid derivatives. The concentration of the active ingredients depends on the type of echinacea and part of the plant used. The type and amount of active ingredients may vary widely. When administered as a tincture, the product may contain significant concentrations 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 and do not have set standards for preparation, safety, or degree of effectiveness.

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

Echinacea is most commonly taken orally to stimulate the immune system and in treatment of colds and other upper respiratory infections. However, recent evaluations of all published studies have concluded that it has no clear benefits in preventing cold when used alone, and that only some parts of the plant might be useful to shorten the duration or decrease the severity of symptoms of cold. Results of these studies are controversial.

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

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

The most common adverse reaction in adults is allergic reactions in people sensitive to plants belonging to the daisy family. 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?***

Although echinacea has been used for many years, there is only one published study regarding use of echinacea in pregnancy. Researchers followed 206 women who took different echinacea preparations at some point in their pregnancy, 112 of whom took it during the first trimester. No increases in miscarriage or birth defects in offspring were seen.

While this information is reassuring, the limited number of cases limits our ability to determine whether there is an increased risk for birth defects or other problems associated with use of echinacea in pregnancy. Also, lack of

standardization of echinacea preparations makes it difficult to apply these results to other echinacea products available on the market.

Consumption of large amounts of the alcohol-containing tincture may result in birth defects or other alcohol-related problems.

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

There are no studies regarding echinacea and pregnancy complications, problems in the newborn period, or the child's behavior or development. Some preparations have been found to be contaminated by lead, and high maternal lead levels during pregnancy can adversely affect 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?***

Despite its good safety profile and reassuring data during pregnancy, it is clear that more research is needed regarding the impact of echinacea on the developing baby. Given the unclear benefits of echinacea, other better studied cold and flu remedies and frequent hand washing might be preferred during pregnancy.

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

There is no information regarding the transfer of echinacea into human milk or impact of a mother's use of this herbal medication on her breastfed infant. 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. Please contact your health care provider if you wish to take echinacea while breastfeeding.

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

One study found that high concentrations of echinacea added directly to semen decreased sperm movement. It is not known if this would affect a couple's fertility.

A father does not share a direct blood connection with a developing baby so a father's use of echinacea would be unlikely to cause a birth defect. For more information about a father's exposures, please see the OTIS fact sheet [Paternal Exposures and Pregnancy](#).

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*If you have questions about the information on this fact sheet or other exposures during pregnancy, call OTIS at 1-866-626-6847.*