



MotherToBaby

Medications & More During Pregnancy & Breastfeeding  
Ask The Experts

Fact Sheet

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

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## Lithium

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 lithium 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 lithium?***

Lithium is a medication used to treat bipolar disorder, which is also called manic-depression. Lithium may also be used to treat other psychiatric and medical conditions. Lithium is sold under many brand names such as Cibalith-S®, Eskalith®, Lithane®, Lithobid® and Lithonate®.

### ***Should I stop taking lithium before I get pregnant?***

No, you should not stop taking lithium without first talking to your health care provider. Stopping lithium is associated with relapse of symptoms and this risk is even higher when lithium is stopped quickly. Nevertheless, there are some situations in which you and your health care provider may decide to stop lithium during a pregnancy. If you continue on lithium during pregnancy, you will need your blood lithium levels checked often throughout your pregnancy. During pregnancy you may need a higher dose to prevent relapse. At the time of delivery, the dose may have to be reduced to avoid side effects for you and your baby.

### ***How long should I wait to become pregnant after I have stopped taking lithium?***

Studies have shown that the longer an individual has been on lithium, the longer it may take for the body to clear it completely after stopping. In general, the lithium is cleared from the body over three to four days.

### ***Can taking lithium make it more difficult for me to become pregnant?***

No. Studies have not shown that taking lithium makes it more difficult for women to become pregnant.

### ***Does lithium cause an increased chance for miscarriage?***

Although one study showed a slight increase in the chance of miscarriage with lithium use, the study did not account for all the other factors that are associated with miscarriage such as maternal age or history of previous miscarriage.

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

Although some studies have suggested that lithium was associated with a small chance of heart defects, especially a rare heart defect called Ebstein's anomaly, other studies have not shown this association and it cannot be concluded that lithium causes birth defects. Ebstein's anomaly is the abnormal placement of one of the valves that controls blood flow in the heart. This rare heart defect may cause mild medical problems or a severe life-threatening condition.

### ***Will taking lithium during pregnancy have an effect on my baby's behavior and development?***

Studies on children up to seven years of age who were exposed to lithium during pregnancy did not find significant physical, mental, or behavioral problems when compared to children who were not exposed to lithium during pregnancy.

***I need to take lithium throughout my entire pregnancy. Are there any concerns with lithium use in the second or third trimester?***

Yes. There are case reports of lithium use during pregnancy and the development of a goiter (enlarged thyroid gland in the neck) in the mother. This is the result of hypothyroidism (an underactive thyroid gland). If untreated in the mother, hypothyroidism can lead to a goiter in the baby. The mother's thyroid function should be monitored throughout pregnancy, so she can be treated before she or the baby develop any problems.

In addition, there have been case reports of decreased muscle tone (hypotonia), sedation (sleepiness), and difficulty with breathing and feeding in the newborn when lithium was used near delivery, especially if the mother's blood lithium level was high. With careful treatment, the baby should fully recover in two to ten days.

Continuing lithium reduces the risk of relapse of bipolar disorder after delivery. To lower the risk of lithium toxicity in the mother and baby, the dose may need to be reduced at the time of delivery. Postpartum relapses are very serious and can lead to postpartum psychosis which is associated with both suicide and infanticide. You should be sure your health care provider and your baby's health care provider are aware of your lithium use, so that you and the baby can be monitored after delivery.

***I have been taking lithium since early in my pregnancy. Are there any special tests I can have during pregnancy that can tell me about my baby's health?***

Yes. A first trimester ultrasound can be used to measure a pocket of fluid normally found behind the baby's neck. This measurement can be used as a tool to screen for heart defects. If you were taking lithium during the first ten weeks of pregnancy, it is recommended that you also have a level II ultrasound, around the 18th week of pregnancy. This is to examine the baby's growth and development. It is also recommended that you have a fetal echocardiogram, a special ultrasound of the baby's heart, at 21-22 weeks of pregnancy. These three tests are only used for screening and do not pick up all problems. . Based on what is seen, your health care provider may recommend follow-up testing.

***I will be taking lithium after I deliver the baby. Can I take lithium while breastfeeding?***

Lithium passes into the breast milk and is absorbed by the baby. While the amount of lithium found in a nursing baby's blood is a lot less than what is in the mother's blood, it may be of concern. If a woman takes lithium while breastfeeding, she and her health care provider should monitor the baby for any significant changes in behavior. These may include restlessness, low muscle tone, or difficulty feeding. There are a few reports of reversible changes in the baby's thyroid and kidney functions so monitoring the baby's lithium level and thyroid and kidney functions is recommended. Sleep deprivation while caring for a newborn (whether nursing or bottle feeding) increases the risk for postpartum relapse. Take care of yourself and you find time for sleep. Consider having someone help with night feedings. Be sure to talk to your health care provider about all your breastfeeding questions.

***We are trying to become pregnant, and my partner takes lithium. Will his exposure decrease his fertility or cause birth defects in our children?***

One study found that men who were treated with lithium had reduced sperm quality and sperm movement, but there is no evidence that fertility is reduced. Decreased sex drive was reported in another study, but this is a common side effect of depression and may not be due to the lithium use. There are no reports that suggest lithium use in men is associated with an increased risk of birth defects. 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/>.

**References Available Upon Request**

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