



For more information about the Organization of Teratology Information Specialists or to find a service in your area, call (866) 626-6847 or visit us online at: [www.OTISpregnancy.org](http://www.OTISpregnancy.org).

## Tetracycline and Pregnancy

This sheet talks about the risks that exposure to tetracycline 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 tetracycline?***

Tetracycline is an antibiotic used to treat conditions including acne and respiratory infections. It belongs to a group of antibiotics that includes minocycline, oxytetracycline, doxycycline, and other related antibiotics. In general, the concerns stated in this fact sheet apply to tetracycline and these related antibiotics. Tetracycline is usually taken orally (by mouth).

### ***I am taking tetracycline during the first month of my pregnancy. Is there a risk for birth defects?***

Researchers have studied the outcome of pregnancies when women took tetracycline during the first trimester (the first 12 weeks), which is the period when all the body organs are forming. These studies have not shown an increased risk for major birth defects in children exposed to tetracycline in the first trimester of pregnancy.

There may be a small increased risk for minor birth defects such as an inguinal hernia, but the number of reports is too small to be sure this risk exists. Once you know that you are pregnant, it is a good idea to talk to your health care provider about continuing the use of tetracycline for the remainder of your pregnancy.

### ***Is there a risk for other problems if I take tetracycline at any time during pregnancy?***

Yes. If you take tetracycline after the fourth month of pregnancy, there is a risk for discoloration (graying) of the "baby" teeth. The discoloration of the baby teeth is due to

calcification (hardening) of the teeth, which starts at about four months. This problem appears to be only cosmetic, and does not appear to affect the development of the enamel or the chance of getting cavities. We do not know what percentage of exposed babies will have discoloration of the teeth. For this reason, the use of tetracycline should be avoided after four months of pregnancy unless there is a special condition requiring the doctor to prescribe this type of antibiotic.

### ***I have heard that tetracycline also affects the bones of developing babies, in addition to the teeth. Is this true?***

Tetracycline appears to affect the calcification (hardening) of the bones and teeth, and it also appears to cause reduced growth of some bones while the baby is being exposed to the medication. Yet, while the tooth discoloration is permanent, the bone growth seems to return to normal after the tetracycline exposure ends.

### ***I am 14 weeks pregnant and I am taking tetracycline. If I stop taking it now, how long will tetracycline stay in my body?***

It takes less than 5 days for tetracycline to be cleared from the body of most people. If you stop taking the medication now, your baby will not be exposed to tetracycline after one week. As with any medication, you should speak with your health care provider before you stop taking tetracycline.

***What if I am taking one of the other medications in this group such as minocycline, oxytetracycline, or doxycycline instead of tetracycline? Does that still put my baby at risk?***

Since these antibiotics are similar to tetracycline, it is possible that they could also affect a baby's teeth and bones in the same way if taken in the second and third trimesters of pregnancy. There are some reports of babies with dental discoloration after similar exposures, and for that reason, it is best to use the same precautions with these related medications.

***I am pregnant and I often get upper respiratory infections for which my doctor prescribes tetracycline. If I get one of these infections after I am five months pregnant, what should I do?***

Talk to your doctor about your concerns regarding tetracycline. Your doctor may consider a different medication to treat your infection.

***I am breastfeeding and thinking about taking tetracycline. Can it still affect my baby?***

In a baby, the bones and teeth continue to harden until one year of age. Therefore, if a baby is exposed to tetracycline in breast milk, theoretically it could cause tooth discoloration and delayed bone growth. Yet, since only very low levels of tetracycline enter into the breast milk, no problems have been reported in nursing babies.

The American Academy of Pediatrics has rated tetracycline as usually compatible with breastfeeding. Also, the WHO Working Group on Human Lactation states that when the antibiotic is used for seven to 10 days while nursing, the risk to the infant appears to be low. Other types of antibiotics may be preferable for long term use while breastfeeding. If you have any concerns about breastfeeding while taking these types of antibiotics, talk to your health care provider.

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

There is currently no information to suggest that use of tetracycline by the father would negatively affect the sperm or increase the risk for birth defects. For more information about a father's exposures and pregnancy, please see the OTIS fact sheet [Paternal Exposures and Pregnancy](#).

July 2010.

Copyright by OTIS.

Reproduced by permission.



**References:**

Briggs GG, et al. 1998. [Drugs in Pregnancy and Lactation](#). Fifth Edition. Baltimore, MD: Williams & Wilkins.

Committee on Drugs, American Academy of Pediatrics 2001. The transfer of drugs and other chemicals into human breast milk. *Pediatrics*. 108:776-789.

Egerman, et al. 1992. The tetracyclines. *Obstet Gynecol Clin NA*. 19(3):551-561.

Genot MT, et al. 1970. Effect of administration of tetracycline on teeth. *J Oral Med*. 25:75-79.

Kline, et al. 1964. Transplacental effect of tetracycline on teeth. *JAMA*. 188:178.

Kutscher, et al. 1966. Discoloration of deciduous teeth induced by administration of tetracycline antepartum. *Am J Obstet Gynecol*. 96:291-292.

The WHO Working Group, Bennet, PN (ed). 1988. [Drugs and Human Lactation](#). New York: Elsevier.

Gilman AG, et al. (Eds). 1985. Goodman and Gilman's [The Pharmacological Basis of Therapeutics](#). Seventh Edition. Macmillan, New York.

O'Rahilly R and Mueller F. 1992. [Human Embryology & Teratology](#). New York: Wiley-Liss.

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