



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).

## Marijuana and Pregnancy

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

Marijuana, also called pot, weed, or cannabis, is a recreational drug that comes from the hemp plant. Parts of the plant are dried and smoked in pipes or cigarettes (joints) or less commonly eaten. It is an illegal substance in the United States, except in some states that allow marijuana use by prescription for medical purposes.

### ***How much is known about the effects of marijuana on a pregnancy?***

Marijuana contains about 400 different chemicals and some marijuana cigarettes may contain other drugs or pesticides. It is very difficult to study the effects of marijuana use during pregnancy because some women who use marijuana may also use alcohol, tobacco, or other substances at the same time. They may also have other factors that can increase pregnancy complications, such as lack of prenatal care. In addition, accurate information on the amount, frequency, and timing of marijuana use is not usually available for study participants. These factors may help explain why we see inconsistent findings in the studies that have been published.

### ***I am trying to become pregnant. Will marijuana use by myself or my partner lower my chance of becoming pregnant?***

In women, long-term use of marijuana may affect the menstrual cycle and lead to a reduction in hormones involved in reproduction

and fertility. In men, an association with reduced sperm count has been documented. These effects do not appear to totally prevent pregnancy, but may lower the chances. The effects on fertility appear to be reversible when marijuana is discontinued.

### ***Will smoking or ingesting marijuana cause birth defects in my baby?***

The frequency of birth defects was not higher than expected in the babies of 1246 women who reported smoking marijuana during pregnancy. However, most of the women in the study smoked only “occasionally.” While this data is reassuring, in the absence of studies where women smoked more heavily, it is best to avoid marijuana during pregnancy.

### ***Can marijuana harm the baby in any other way?***

The main active chemical in marijuana is delta-9-tetrahydrocannabinol (THC), which is known to cross the placenta during pregnancy. This means it gets into the baby’s system, although how THC may impact a developing baby is unclear. Some studies have suggested that for women who smoke marijuana cigarettes regularly, there is an increased risk for premature births and low birth weight, similar to what is seen with cigarette smoking. Premature and low birth-

weight babies have higher rates of infant deaths, learning problems or other disabilities.

***If I smoke marijuana in the third trimester, can it cause my baby to go through withdrawal after birth?***

Some newborns exposed to marijuana have been reported to have temporary withdrawal-like symptoms, such as increased tremors and crying.

***Can my marijuana smoking affect the brain development of the baby?***

Differences in brain activity, behavior, and sleeping patterns of infants and children exposed to marijuana in pregnancy have been reported in some studies. It is believed that these children may have more problems with attention, impulsive behavior, and academic performance. However, the evidence is far from conclusive as many of the studies report conflicting results.

***What happens if I use marijuana when I'm breast-feeding?***

Marijuana can be passed to infants through their mother's breast milk. Marijuana may also affect the quality and quantity of breast milk. Although no consistent effects have been noticed in infants exposed to marijuana through breast milk, the American Academy of Pediatrics advises that breastfeeding mothers avoid the use of marijuana.

**References:**

Briggs, GG, Freeman RK, and Yaffe SJ. 2002. Drugs in Pregnancy & Lactation. Sixth Edition. Lippincott Williams & Wilkins, Philadelphia PA.

Dahl RE, et al. 1995. A longitudinal study of prenatal marijuana use: effects on sleep and arousal at age 3 years. *Arch Pediatr Adolesc Med* 149(2):145-50.

Day N, et al. 1992. The effects of prenatal tobacco and marijuana use on offspring growth from birth through 3 years of age. *Neurotoxicol Teratol* 14(6):407-14.

Fried PA, et al. 1984. Marijuana use during pregnancy and decreased length of gestation. *Am J Obstet Gynecol* 150:23-27.

Goldschmidt L, et al. 2004. Prenatal marijuana and alcohol exposure and academic achievement at age 10. *Neurotoxicol Teratol* 26(4):521-32.

Leech SL, et al. 1999. Prenatal substance exposure: effects on attention and impulsivity of 6-year-olds. *Neurotoxicol Teratol* 21(2):109-18.

Linn S, et al. 1983. The association of marijuana use with the outcome of pregnancy. *Am J Public Health* 73(10):1161-1164.

Liston J. 1998. Breastfeeding and the use of recreational drugs alcohol, caffeine, nicotine and marijuana. *Breastfeed Rev* 6(2):27-30.

O'Connell CM and Freid PA. 1984. An investigation of prenatal cannabis exposure and minor physical anomalies in a low risk population. *Neurobehav Toxicol Teratol* 6:345-50.

Perez-Reyes M. 1982. Presence of delta-9-tetrahydrocannabinol in human milk. *N Engl J Med* 307:819.

Richardson GA, Day NL and McGauhey PJ. 1993. The impact of prenatal marijuana and cocaine use on the infant and child. *Clin Obstet Gynecol* 36:302-18.

Smith AM, et al. 2004. Effects of prenatal marijuana on response inhibition: an MRI study of young adults *Neurotoxicol Teratol* 26(4):533-42.

April 2007.  
Copyright by OTIS.  
Reproduced by permission.



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