

Smoking During Pregnancy

In the United States more than 20 percent of women smoke. According to the World Health Organization, a similar number of women in other developed countries smoke, and about 9 percent of women in developing countries smoke. Many of these women smoke while they are pregnant. This is a major public health problem because, not only can smoking harm a woman's health, but smoking during pregnancy can lead to pregnancy complications and serious health problems in newborns.

Statistics from the United States are compelling. If all pregnant women in the United States stopped smoking, there would be an estimated 11 percent reduction in stillbirths and a 5 percent reduction in newborn deaths, according to the U.S. Public Health Service.¹ Currently, at least 11 percent of women in the United States smoke during pregnancy.²

Cigarette smoke contains more than 2,500 chemicals. It is not known for certain which of these chemicals are harmful to a developing baby. However, both nicotine and carbon monoxide are believed to play a role in causing adverse pregnancy outcomes.

How can smoking harm the newborn?

Smoking nearly doubles a woman's risk of having a low-birthweight baby. In 2002, 12.2 percent of babies born to smokers in the United States were of low birthweight (less than 5½ pounds), compared to 7.5 percent of babies of nonsmokers.² Low birthweight can result from poor growth before birth, preterm delivery or a combination of both. Smoking has long been known to slow fetal growth. Studies also suggest that smoking increases the risk of preterm delivery (prior to 37 weeks of gestation). Premature and low-birthweight babies face an increased risk of serious health problems during the newborn period, chronic lifelong disabilities (such as cerebral palsy, mental retardation and learning problems) and even death.

The more a pregnant woman smokes, the greater the risk to her baby. However, if a woman stops smoking by the end of her first trimester of pregnancy, she is no more likely to have a low-birthweight baby than a woman who never smoked. Even if a woman has not been able to stop smoking in her first or second trimester, stopping during the third trimester can still improve her baby's growth.

Can smoking cause pregnancy complications?

Smoking has been associated with a number of pregnancy complications. Smoking cigarettes appears to double a woman's risk of developing placental problems.¹ These include placenta previa (low-lying placenta that covers part or all of the opening of the uterus) and placental abruption (in which the placenta peels away, partially or almost completely, from the uterine wall before delivery). Both can result in heavy bleeding during delivery that can endanger mother and baby, although a cesarean delivery can prevent most deaths. Placental problems contribute to the slightly increased risk of stillbirth that is associated with smoking.

Smoking in pregnancy also appears to increase a woman's risk of premature rupture of the membranes (PROM) (when the sac inside the uterus that holds the baby breaks before labor begins).¹ A woman with PROM may experience a trickle or gush of fluid from her vagina when her water breaks. Usually, she will go into labor within a few hours. When PROM occurs before 37 weeks of pregnancy it is called preterm PROM, and it often results in the birth of a premature baby.

Does smoking affect fertility?

Cigarette smoking can cause reproductive problems before a woman even becomes pregnant. Studies show that women who smoke may have more trouble conceiving than nonsmokers.¹ Studies suggest that fertility returns to normal after a woman stops smoking.

Does smoking during pregnancy cause other problems in babies or young children?

A recent study suggests that babies of mothers who smoke during pregnancy may undergo withdrawal-like symptoms similar to those seen in babies of mothers who use some illicit drugs.³ For example, babies of smokers appear to be more jittery and difficult to soothe than babies of non-smokers.

Babies whose mothers smoked during pregnancy are up to three times as likely to die from

sudden infant death syndrome (SIDS) as babies of nonsmokers.¹

Can exposure to second-hand smoke during pregnancy harm the baby?

Studies suggest that babies of women who are regularly exposed to second-hand smoke during pregnancy may have reduced growth and may be more likely to be born with low birthweight. Pregnant women who do not smoke should avoid exposure to other people's smoke.

How can a woman stop smoking?

The March of Dimes recommends that women stop smoking before they become pregnant and remain smoke-free throughout pregnancy and after the baby is born. A woman's health care provider can refer her to a smoking-cessation program that is right for her or suggest other ways to help her quit.

Studies suggest that certain factors make it more likely that a woman will be successful in her efforts to quit smoking during pregnancy. These include: attempting to quit in the past, having a partner who doesn't smoke, getting support from family or other important people in her life and understanding the harmful effects of smoking.

How does exposure to smoke after birth affect a baby?

It is important to stay smoke-free after the baby is born. Both mother and father should refrain from smoking in the home and should ask visitors to do the same. Babies who are exposed to smoke suffer from more lower-respiratory illnesses (such as bronchitis and pneumonia) and ear infections than other babies. Babies who are exposed to their parents' smoke after birth also may face an increased risk of SIDS. A child exposed to smoking at home during the first few years of life also is at increased risk of developing asthma.

Of course, smoking harms a woman's own health: smokers have an increased risk of lung and other cancers, heart disease, stroke and emphysema (a potentially disabling and, sometimes, deadly lung condition). Quitting smoking will make parents healthier—and better role models for their children.

What resources are available for pregnant women, health care providers and employers?

- The National Partnership to Help Pregnant Smokers Quit provides information to help women quit as well as resources for health care professionals. www.helppregnant smokersquit.org
- The American Legacy Foundation helps smokers quit. www.americanlegacy.org
- Smokefree.gov is an online resource for people who want to stop smoking. It is sponsored by the federal government.
- To get help for quitting, smokers may call the toll-free number (800) QUIT-NOW.
- The Tobacco Research and Intervention Program (TRIP) helps women who are pregnant and who have quit smoking to remain smoke-free. For an informational booklet about staying smoke-free, call this toll-free number (877) 954-2548.

Adapted from the March of Dimes website.

For references and more information, visit www.marchofdimes.com or ask your midwife.