Cigarette Smoke

This sheet is about exposure to cigarette smoke in pregnancy and while breastfeeding. This information is based on available published literature. It should not take the place of medical care and advice from your healthcare provider.

What is in cigarette smoke?

Cigarette smoke is made of gases and tiny particles that are released when cigarettes are burned. It has over 4,000 chemicals including nicotine, arsenic, lead, and carbon monoxide. When you breathe cigarette smoke into your lungs, the gases and particles get into your blood and organs. Some of these chemicals can cross the placenta and lower the amount of oxygen and food available to a developing fetus. You can be exposed to cigarette smoke or some of the particles by smoking a cigarette and through secondhand smoke. Secondhand smoke is breathing in the cigarette smoke of another person that is smoking near you.

It is recommended not to smoke cigarettes at all during pregnancy. If you are smoking, it is best to completely stop smoking as early in pregnancy as possible. Even a few cigarettes a day can lower the amount of oxygen and nutrients the fetus gets. If you cannot stop smoking, reducing the number of cigarettes a day that you smoke could help.

Quitting is more successful with professional and family/friend support. For free advice and referrals, call the Smoker’s Quitline at 1-800-QUIT-NOW (1-800-784-8669) from anywhere in the U.S. There are also online resources to help you quit smoking such as https://www.cdc.gov/tobacco/campaign/tips/quit-smoking/index.html. You can also go over your options for quitting with your healthcare provider.

Can cigarette smoke make it harder for me to get pregnant?

Some studies have found that exposure to cigarette smoke can make it harder to get pregnant compared to people who are not exposed to cigarette smoke. People who smoke more than 10 cigarettes a day might have a higher chance of problems with getting pregnant (infertility). A person’s ability to get pregnant might improve once they stop smoking. Cigarette smoke can also increase the chance of an ectopic pregnancy (when a fertilized egg grows outside of the uterus).

Does cigarette smoke increase the chance of miscarriage?

Miscarriage is common and can occur in any pregnancy for many different reasons. The chance of miscarriage is higher for people who are exposed to cigarette smoke.

Does cigarette smoke increase the chance of birth defects?

Every pregnancy starts out with a 3-5% chance of having a birth defect. This is called the background risk. Some studies suggest that exposure to cigarette smoke during pregnancy might increase the chance of certain birth defects, including cleft lip and/or palate (an opening in the upper lip or the roof of the mouth), heart defects, and problems with the respiratory system and digestive system.

Does cigarette smoke increase the chance of other pregnancy-related problems?

Cigarette smoke is linked with a higher chance of preterm delivery (birth before week 37) and low birth weight (weighing less than 5 pounds, 8 ounces [about 2500 grams] at birth). The more exposure to cigarette smoke that a person has during pregnancy, the greater the chance for preterm delivery. A baby born preterm has a higher chance for health problems and may need to stay in the hospital longer. Low birth weight can also make it harder for the baby to recover from serious health problems.

Cigarette smoke is also linked to serious problems with the placenta (the organ that grows in the uterus during pregnancy). The placenta delivers nutrients and oxygen to the fetus. Placental problems can include placenta previa (placenta blocks the birth canal) and placental abruption (placenta breaks away from the uterine wall early). These conditions can cause vaginal bleeding and can be life threatening to the person who is pregnant and/or result in loss of the pregnancy. Cigarette smoke has also been associated with an increased chance of stillbirth and sudden infant death syndrome (SIDS).

If I smoke cigarettes near the end of my pregnancy, will it cause withdrawal symptoms in my baby after
Smoking cigarettes near the end of pregnancy can cause temporary symptoms in newborns soon after birth. These symptoms are sometimes referred to as withdrawal. Symptoms such as irritability, increased muscle tone (stiff muscles) and muscle tremors have been seen in newborns exposed to cigarette smoking during the last weeks of pregnancy. These symptoms are usually short-term and can be treated, if needed. Not all babies exposed to cigarette smoke will have these symptoms. It is important that your healthcare providers know your history of exposure to cigarette smoke so that if symptoms occur your baby can get the care that is best for them.

Can exposure to cigarette smoke during pregnancy affect future behavior or learning for the child?

Several studies have found a link between cigarette smoke exposure in pregnancy and learning and behavior problems in the exposed children.

I am 28 weeks pregnant, and I have been smoking cigarettes throughout my pregnancy. Is it too late to quit?

It is never too late to quit smoking. If you stop smoking, you stop the exposure to your pregnancy. Stopping at any time during pregnancy can help to improve the growth and development of your pregnancy. Stopping will also help your newborn by not exposing them to secondhand smoke after they are born. Secondhand smoke can affect the health of children after they are born if people smoke around them or in the home.

Breastfeeding and cigarette smoke:

It is recommended to not smoke while breastfeeding and to avoid exposure to secondhand smoke. Nicotine and other chemicals can get into breast milk. However, the benefits of breastfeeding might outweigh the risks of cigarette smoking. If you cannot stop smoking completely, lower amount you smoke as much as possible, and do not smoke in the house or when you are near the baby. Ask others not to smoke around you or in your home.

For free advice and referrals for quitting, call the Smoker’s Quitline at 1-800-QUIT-NOW (1-800-784-8669) or visit https://www.cdc.gov/tobacco/campaign/tips/quit-smoking/index.html. Be sure to talk to your healthcare provider about all your breastfeeding questions.

If a male smokes cigarettes, could it affect fertility or increase the chance of birth defects?

Exposure to cigarette smoke might affect a male’s ability to have sex (erectile function). It can also affect sperm counts, as well as the shape and movement of sperm. This might affect male fertility (ability to get a partner pregnant). Studies have not been done in males to see if cigarette smoke could increase the chance of birth defects above the background risk. It is recommended to stop smoking or not smoke around a person who is pregnant (including in their house or car) because exposure to secondhand smoke can increase the chance of pregnancy complications. For more information on paternal exposures, please see the MotherToBaby fact sheet Paternal Exposures at https://mothertobaby.org/fact-sheets/paternal-exposures-pregnancy/

Please click here for references.