Cigarette Smoke

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

What is in cigarette smoke?

Cigarette smoking produces smoke. Cigarette smoke is made of gases and tiny particles that are released when cigarettes are burned. It has over 4,000 compounds including nicotine, tar, 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 cross the placenta and lower the amount of oxygen and food available for a developing baby. 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.

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 do not have exposure to cigarette smoke. Problems with getting pregnant may be higher for people who smoke more than 10 cigarettes a day. A person’s ability to get pregnant might improve once they stop smoking.

Does cigarette smoke increase the chance for 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. There might also be a higher chance of ectopic pregnancy (where the developing embryo grows outside of the uterus).

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 cigarette smoke exposure during pregnancy might increase the chance of certain birth defects, including oral clefts (when the lip or palate [roof of the mouth] does not fully close during development), heart defects, 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 and the earlier the baby could be born. A baby born too early 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. Those who stop smoking early in pregnancy can lower their chance of having a baby with low birth weight.

Cigarette smoke is also linked to serious problems with the placenta (the organ that grows in the uterus during pregnancy). The placenta delivers nutrients (food) and oxygen to the growing baby. 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 for stillbirth and sudden infant death syndrome (SIDS).

A higher chance of asthma, bronchitis and respiratory infections during childhood has also been found in children exposed to cigarette smoke during pregnancy.

If I smoke cigarettes near the end of my pregnancy, will it cause withdrawal symptoms in my baby after birth?

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 by the healthcare team. It is not known how often this might happen.

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. For example, there is a possible association with a higher chance of attention deficit hyperactivity disorder (ADHD).

I don’t smoke many cigarettes in a day. Is this still a problem?

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 lowers the amount of oxygen and nutrients the baby gets. The less you smoke, and/or the less exposure to secondhand smoke you have, the less you and your baby are at risk of having problems. If you cannot stop smoking, reducing the number of cigarettes a day that you smoke could help.

I am 28 weeks pregnant and I have been smoking cigarettes for all of 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 baby. 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.

Are there any resources or medical treatments available to help me to quit smoking?

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. If it does not seem possible to stop smoking without medical treatment, discuss your options with your healthcare provider.

Breastfeeding and cigarette smoke:

It is recommended to not smoke while breastfeeding and to avoid exposure to second hand smoke. Nicotine can get into breast milk and could affect your baby. Your baby may also be exposed to other unhealthy chemicals from cigarettes that could cross into the breast milk. Despite these risks, the benefits of breastfeeding might outweigh the risks of cigarette smoking for most babies. If you cannot stop smoking completely, reduce the number you smoke as much as possible, and do not smoke in the house or when you are near the baby. Also ask others not to smoke around you or in your home. Be sure to talk to your healthcare provider about all of your breastfeeding questions.

If a male smokes cigarettes, could it affect fertility (ability to get partner pregnant) or increase the chance of birth defects?

Studies have not been done in males to see if cigarette smoke could increase the chance of birth defects above the background risk. 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 make it harder to get a partner pregnant. If your partner is already pregnant, it is recommended to stop smoking or not smoke around the person who is pregnant (including in their house or car) because exposure to second hand smoke can cause 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.