Frequently Asked Questions About Maternal Smoking During Pregnancy

How many mothers smoke during pregnancy?
- 27% of women are smokers during their childbearing years

How many mothers who smoke are able to quit during their pregnancy?
- In the National Health Interview Survey done in 1990, only 27% of the women quit immediately after being told that they were pregnant and an additional 12% quit by the 3rd trimester

7% of women are smokers during their childbearing years

How does cigarette smoke harm an unborn baby?
- Tobacco smoke has over 3,800 products in it with carbon monoxide and nicotine being the two largest components of the smoke. Cigarette smoke may harm a fetus by reducing blood flow or flow of oxygen to the fetus, by reducing the nutrients that reach the fetus, and by direct action to the fetus.

Does maternal smoking during pregnancy result in smaller babies?
- The most consistent finding associated with maternal smoking during pregnancy is lower birthweight. Most studies find a difference of 200-250 grams between babies of mothers who smoke and those who do not. In addition, the incidence of intrauterine growth retardation has been found to be higher among women who smoked during their pregnancy.

Does maternal smoking during pregnancy result in premature babies?
- The length of the pregnancy has been found to be lower among women who smoked during the pregnancy but the average decrease is typically 1-2 days. Studies assessing the incidence of prematurity have found mixed results, with some finding a significant increase and others not.

Does prenatal exposure to tobacco smoke cause Sudden Infant Death Syndrome (SIDS)?
- Studies examining the incidence of SIDS among women who smoke during pregnancy have also been mixed with some finding significant effects and others not. Parental smoking during early development has also been linked to an increased incidence of SIDS as a result of environmental tobacco smoke on a young respiratory system.

Does maternal smoking during pregnancy cause birth defects?
- A few studies have been suggestive of birth defects. One study found a 17-fold increase in the incidence of anencephaly (no forebrain or cerebrum) associated with maternal smoking and another found an increased incidence of congenital heart disease. However, there have been no consistent findings of a pattern of birth defects associated with maternal smoking. Additional studies that control for other important factors that may impact fetal development are needed.
What are the long-term effects on the growth of children exposed to tobacco smoke during pregnancy?

- The results from the British National Child Development Study on children’s growth and development suggested that children of women who smoked during their pregnancy continued to be shorter (an average of 1.0 cm) at seven and 11 years of age than children of women who did not smoke during pregnancy.

What are the other long-term effects of tobacco smoke during pregnancy?

- The respiratory systems of children whose mothers smoke during pregnancy may be impaired. Children of women who smoke at least 10 cigarettes a day have a higher incidence of asthma than children of women who do not smoke. Postnatal exposure to tobacco smoke also has been linked to increased incidence and increased severity of asthma symptoms.

What are the long-term effects on the neurological development of children being exposed to tobacco smoke during pregnancy?

- Evidence for a general learning deficit being associated with maternal smoking has been inconsistent; some studies found small differences and others found no differences at all. More consistently, children of smokers have been found to have added hearing difficulties. Studies have identified this deficit in newborns and in children as old as 12 years of age. Deficits in this area may interfere with a child’s learning to speak and later in learning to read. Finally, some studies suggest that children of women who smoke may have problems staying focused, more conduct problems, and an increased probability of being diagnosed with Attention Deficit Disorder.

Does maternal passive exposure to environmental tobacco smoke (ETS) harm the unborn child?

- Prenatal and postnatal tobacco smoke tend to be related, making it difficult to assess the relative contributions of the different methods of exposure. The available evidence suggests that ETS can contribute to similar effects associated with active maternal smoking. However, the size of the effects tend to be smaller.

Where To Go For Help and Resources

Nicotine Anonymous 1-415-750-0328 www.nicotine-anonymous.org
American College of Obstetrics & Gynecology 1-202-638-5577 www.acog.org
National Women’s Health Information Center 1-800-994-WOMAN www.4woman.org
American Cancer Society 1-800-ACS-2345 or www.cancer.org
American Lung Association 1-800-586-4872 or www.lungusa.org
National Cancer Institute 1-800-4-CANCER or www.nci.gov

For additional information on tobacco use, visit our website at www.emory.edu/MSACD or the Center for Disease Control and Prevention website at www.cdc.gov/tobacco/index.html. The Maternal Substance Abuse and Child Development Project is funded by the Georgia Department of Human Resources Division of Mental Health, Developmental Disabilities and Addictive Diseases.