Frequently Asked Questions about Maternal Smoking during Pregnancy

How many mothers smoke during pregnancy?

- According to the 2010 Pregnancy Risk Assessment and Monitoring System (PRAMS) data from 27 states:
  - Approximately 10.7% of women reported smoking during the last three months of pregnancy.

How many mothers who smoke are able to quit during their pregnancy?

- Of women who smoked 3 months before pregnancy, 54% quit during pregnancy.
- Among women who quit smoking during pregnancy, 44% relapsed within 6 months after delivery.

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 birth weight. 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?
Smoking during pregnancy can cause a baby to be born with cleft lip and/or cleft palate. There may be a correlation with other birth defects, including congenital heart defects, clubfoot, or gastrochisis. 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 tends 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 tends to be smaller.

Resources
Center for Maternal Substance Abuse and Child Development www.emory.edu/MSACD
National Women’s Health Information Center 1-800-994-WOMAN www.4woman.org
American College of Obstetrics & Gynecology 1-202-638-5577 www.acog.org
The CDC and Prevention cdc.gov/reproductivehealth/TobaccoUsePregnancy
National Cancer Institute 1-800-4-CANCER or http://www.cancer.gov
Nicotine Anonymous 1-415-750-0328 www.nicotine-anonymous.org
American Lung Association 1-800-586-4872 or www.lungusa.org
American Cancer Society 1-800-ACS-2345 or www.cancer.org

Prevention and Community Activities
Maternal High Risk Behaviors and Prenatal Exposure trainings are offered for:
- Individuals, Parents, Families, and Foster/Adoption Groups
- Local, State, and Regional Organizations
- Medical and Behavioral Health Providers
- Community Service Organizations
- Legal Organizations

12 Executive Park Drive NE
Atlanta, GA 30329
404-712-9829

MotherToBaby Georgia Teratogen Information Service
Provides free evidence-based information about medications and other exposures during pregnancy and while breastfeeding.

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