

# Highlights: Overview of Findings Regarding Reproductive Health

Men and women who are planning to have children should not smoke. Health professionals and research scientists have long known that cigarette smoking and exposure to tobacco smoke are harmful to reproductive health, affecting fertility and development of the fetus and reducing the chances of a healthy pregnancy and delivery. Tobacco smoke contains thousands of harmful chemicals, some of which are known to be toxic to reproductive health.

## Smoking Affects Fertility in Women

Earlier studies linked smoking with reduced fertility in women. Current studies suggest that smoking affects estrogen and other hormones and could make it more difficult for women to become pregnant.

Scientific studies link smoking during pregnancy to problems in the fallopian tubes that eggs travel through to reach the womb. Exposure to tobacco smoke reduces effective functioning of these tubes and could decrease fertility. Evidence suggests that smoking may lead to an increased risk for ectopic pregnancy, a condition in which the fertilized egg attaches to the wall of the fallopian tube or elsewhere outside the womb and begins to develop but cannot survive. Ectopic pregnancy poses a serious risk to the health of the mother.

## Tobacco Smoke Jeopardizes a Healthy Pregnancy

Studies also suggest a relationship between tobacco and miscarriage. Tobacco smoke contains carbon monoxide that deprives the fetus of oxygen. Tobacco smoke also contains other chemicals that could have toxic effects on the developing fetus.

There is consistent evidence that mothers who smoke are more likely to deliver their babies early. Preterm delivery is a leading cause of death, disability, and disease among newborns.

One in every five babies born to mothers who smoke during pregnancy has low birth weight. Babies born too small or too early are not as healthy. Babies whose mothers smoke are also about three times as likely to die from SIDS (crib death).

Maternal smoking is also known to cause tissue damage in the fetus, particularly in the lung and brain, and some evidence suggests a link between maternal smoking and cleft lip.

## Smoking Affects Men's Reproductive Health

The effects of tobacco use on reproductive health are not limited to women. Researchers have also found that smoking might damage the DNA in men's sperm. This DNA damage might decrease fertility or lead to miscarriage.

**Disclaimer:** Data and findings provided on this page reflect the content of the 2010 Surgeon General's Report (*How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease: A Report of the Surgeon General*). More recent information may exist elsewhere on the Smoking & Tobacco Use Web site (for example, in fact sheets, frequently asked questions, or other materials that are reviewed on a regular basis and updated accordingly).