



# Tobacco Use and Reproductive Outcomes

## SMOKING AND REPRODUCTIVE OUTCOMES

- Women smokers, like men smokers, are at increased risk of cancer, cardiovascular disease, and pulmonary disease, but women smokers also experience unique risks related to menstrual and reproductive function.
- Women who smoke have increased risk for conception delay and for primary and secondary infertility.
- Women who smoke may have a modest increase in risks for ectopic pregnancy and spontaneous abortion.
- Smoking during pregnancy is associated with increased risk for premature rupture of membranes, abruption placentae (placenta separation from the uterus), and placenta previa (abnormal location of the placenta), which can cause massive hemorrhaging during delivery; smoking is also associated with a modest increase in risk for pre-term delivery.
- Infants born to women who smoke during pregnancy have a lower average birth weight and are more likely to be small for gestational age than infants born to women who do not smoke. Low birth weight is associated with increased risk for neonatal, perinatal, and infant morbidity and mortality. The longer the mother smokes during pregnancy, the greater the effect on the infant's birth weight.
- The risk for perinatal mortality, both stillbirths and neonatal deaths, and the risk for sudden infant death syndrome (SIDS) are higher for the offspring of women who smoke during pregnancy.
- Women who smoke are less likely to breast-feed their infants than are women who do not.

during pregnancy appears to have decreased from 1989 through 1998.

- Eliminating maternal smoking may lead to a 10% reduction in all infant deaths and a 12% reduction in deaths from perinatal conditions.
- Women who quit smoking before or during pregnancy reduce the risk for adverse reproductive outcomes, including difficulties in becoming pregnant, infertility, premature rupture of membranes, preterm delivery, and low birth weight.
- Most relevant studies suggest that infants of women who stop smoking by the first trimester have weight and body measurements comparable with those of nonsmokers' infants. Studies also suggest that smoking in the third trimester is particularly detrimental.
- Women are more likely to stop smoking during pregnancy, both spontaneously and with assistance, than at other times in their lives. Using pregnancy-specific programs can increase smoking cessation rates, which benefits infant health and is cost effective. However, only one-third of women who stop smoking during pregnancy are still abstinent 1 year after the delivery.
- Programs that encourage women to stop smoking before, during, and after pregnancy – and not to take up smoking ever again – deserve high priority for two reasons: during pregnancy women are highly motivated to stop smoking, and they still have many remaining years of potential life.

## ENVIRONMENTAL TOBACCO SMOKE AND REPRODUCTIVE OUTCOMES

- Infants born to women who are exposed to environmental tobacco smoke (ETS) during pregnancy may have a small decrement in birth weight and a slightly increased risk for intrauterine growth retardation than infants born to women who are not exposed to ETS.

## SMOKING PREVALENCE AND SMOKING CESSATION DURING PREGNANCY

- Despite increased knowledge of the adverse health effects of smoking during pregnancy, estimates of women smoking during pregnancy range from 12% (based on birth certificate data) up to 22% (based on survey data). However, smoking