

PREGNANCY RISK ASSESSMENT MONITORING SYSTEM
A survey for healthier babies in New Jersey

Smoking and Pregnancy In New Jersey

Cigarette smoking increases the risk for infertility, preterm delivery, stillbirth, low birth weight, and sudden infant death syndrome (SIDS). Surveys of the general population in New Jersey indicate that about 24% of women of childbearing age are smokers. Funds from the state excise tax and other sources are earmarked for tobacco prevention and cessation programs. New Jersey's PRAMS survey makes it possible to learn about the prevalence of smoking and changes in smoking status related to pregnancy. Although under-reporting has been found to occur in virtually all settings where smoking behavior is self-reported, PRAMS data is better defined and has been found to be more fully reported than other sources, such as birth certificates. (See *Contact PRAMS* to obtain more information). This data brief focuses on the basic epidemiology of pregnancy-related smoking. A companion brief explores issues of attempted and successful cessation in more detail.

Figure 1 presents a summary. Overall, PRAMS estimates that among all women who had children in 2002

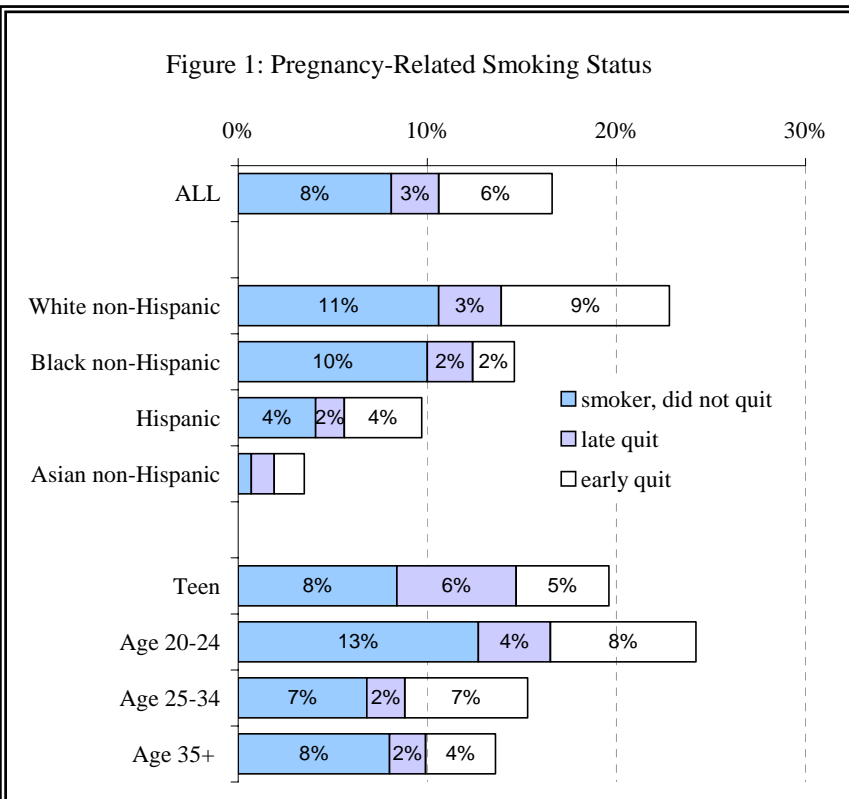
NJ-PRAMS is a joint project of the New Jersey Department of Health and Senior Services and the Centers for Disease Control and Prevention (CDC). Information from PRAMS is used to help plan better health programs for New Jersey mothers and infants—such as improving access to high quality prenatal care, reducing smoking, and encouraging breastfeeding. □ One out of every 33 mothers are surveyed each month, when newborns are 2-6 months old. Survey questions address their feelings and experiences before, during and after their pregnancy. □ In 2002 and 2003, 3,121 mothers were interviewed with a 72% response rate. (For more information about PRAMS and its operations, see Contact PRAMS below.)

and 2003, 6.0% smoked three months before pregnancy but quit before they found out they were pregnant (labelled “early quit”), 2.5% quit after they found out (“late quit”), and 8.1% smoked throughout their pregnancy. In other words, a total of 16.6% of women reported smoking immediately before their pregnancies, and 51.2% of them reported quitting by the last trimester of pregnancy. Women who smoked throughout pregnancy averaged 15.0 cigarettes per day before pregnancy and 7.7 per day in the last three months (data not shown).

Considering all pregnancy-related smoking statuses, prevalence was highest for non-Hispanic white women—8.9% quit early, 3.3% quit after learning they were pregnant, and 10.6% smoked throughout. By age, women 20-24 had the highest rates of pregnancy-related smoking—7.7% quit early, 3.8% quit later, and 12.7% smoked throughout. These high prevalence groups had roughly average proportions of quitters. By contrast, the lowest ratios of quitters to continuous smokers were for non-Hispanic black women (4.6% who quit versus 10.0% who did not) and women 35 or older (5.6% versus 8.0%).

Figure 2 considers selected social characteristics. Higher rates of pregnancy-related smoking were associated with lower education,

Figure 1: Pregnancy-Related Smoking Status



mistimed or unwanted pregnancy, being unmarried at the time of birth, and low income (as measured by Medicaid or welfare participation). Women with more than two children had lower pregnancy-related smoking overall but were least likely to quit.

Even when the mother does not smoke, infants may experience exposure in utero from secondhand smoke. Among mothers who do not smoke, 6.9% had someone else who smoked in their home during their pregnancy (an estimated 6,099 women each year). About 60% of mothers worked during at least part of their pregnancy, and 5.3% of non-smoking women reported that coworkers smoked in work or break areas while they were present (4,695 women each year).

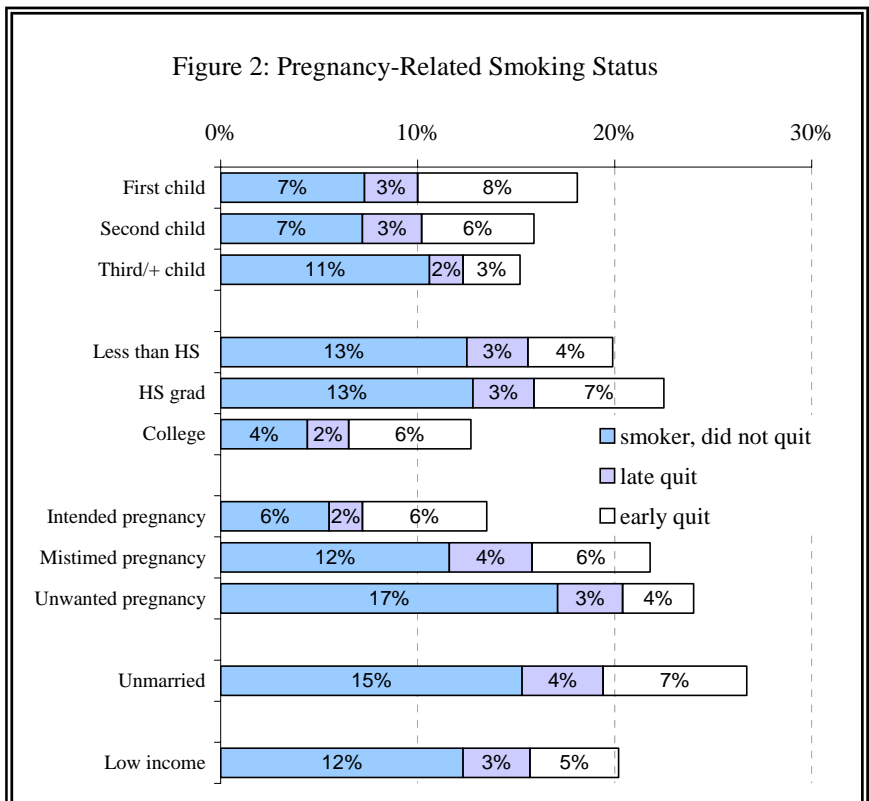
After delivery, newborns continue to be exposed to tobacco smoke, which has been linked to respiratory ailments and SIDS. By the time of the PRAMS interview (starting at ten weeks post-partum), 12.3% of mothers reported smoking. Relapse rates are 49.9% for women who quit smoking early, and 53.7% for later quitters. Overall 18.9% report that someone—they, their spouse and/or others—smokes in their house. (The 2002 New Jersey Adult Tobacco Survey estimates that 84.7% of households with children younger than school age are smoke-free.) Only 3.1% of mothers report that their new baby is ever in the same room while someone is smoking, but this undoubtedly underestimates the risks from residual smoke and normal indoor air circulation.

Agenda for Action

Recording of smoking on the birth certificate, our predominant surveillance tool, has shown a steady decline in smoking during pregnancy. This apparent progress may have been illusory. Comparable PRAMS estimates of pregnancy-related smoking are about 40% higher than the birth certificate, and are more consistent with other reports of prevalence among all women of comparable age.

PRAMS data indicate that pregnancy-related smoking cessation occurs frequently. Prenatal care is the most common venue for interventions, yet PRAMS estimates that only 80% of smoking mothers recall being told in that setting about effects of smoking on the baby, and only

Figure 2: Pregnancy-Related Smoking Status



22% recall any encouragement to quit and/or help arranging a program for cessation. Interventions to screen and counsel women before conception could be more effective; lower prevalence and higher quit rates among women who intended their pregnancies support this assumption. A companion data brief explores cessation behavior and barriers in more detail, but available referral resources are listed below.

Environmental exposures—secondhand smoke—affect newborns in utero and post-partum. In addition to supporting maternal smoking cessation, pregnant women and new mothers need resources to promote smoke-free environments at home and work. Maternal smoking cessation and relapse also depend in part on smoking behavior by spouses and others in the household.

Resources

New Jersey Department of Health and Senior Services, Comprehensive Tobacco Control Program.

www.state.nj.us/health/as/ctcp/index.html

Women and Smoking: A Report of the Surgeon General. 2001. www.cdc.gov/tobacco/sgr/sgr_forwomen/index.htm

CDC. Prenatal Smoking Data Book.

www.cdc.gov/reproductivehealth/PrenatalSmkbk/index.htm

NJ Quitnet: www.nj.quitnet.com

NJ Quitline: 1-866-NJ-STOPS

Summary of Survey Methodology for New Jersey PRAMS. (Contact NJ-PRAMS)

Contact NJ-PRAMS

<http://www.nj.gov/health/fhs/pramsindex.shtml>

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