PREGNANCY RISK ASSESSMENT MONITORING SYSTEM

A survey for healthier babies in New Jersey

NJ.gov/health/fhs/professional/PRAMS.shtml

Smoking Cessation and Relapse (2014)

Cigarette smoking among women 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 15% of adult women are smokers (the national rate is 17%). 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.

Figure 1 presents trends since 2004 (when PRAMS adopted the current question format). Smokers were classified according to whether they reported smoking throughout their pregnancy, reported quitting after finding out they were pregnant (quit late), or reported smoking three months before pregnancy but quitting before knowing they were pregnant (quit early). Overall pre-pregnancy smoking (the sum of all three categories) declined from 2004 through 2007, but has since rebounded—peaking at 19% in 2009. Cessation has also fluctuated, so that the prevalence of smoking throughout pregnancy hovers around 7%.

Figure 2 shows that recent prevalence of all pregnancy-related smoking was just over 16%: 1.4% quit early, 8.4% quit after learning they were pregnant, and 6.3% smoked throughout pregnancy. Mothers who reported their pregnancies were unwanted or mistimed had higher rates of smoking before and throughout pregnancy. NJ FamilyCare participants (Medicaid plus SCHIP) smoked more than those with privately paid health insurance. Women who had a partner or other person who smoked in their house had by far the highest prevalence of smoking throughout their pregnancy. Non-Hispanic White mothers had higher prevalence

NJ-PRAMS is a joint project of the New Jersey Department of Health 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 quality prenatal care, reducing smoking, and encouraging breast-feeding. ▫ One out of every 50 mothers are sampled each month, when newborns are 2-6 months old. Survey questions address their feelings and experiences before, during and after their pregnancy. ▫ From 2002 to 2011, over 17,000 mothers were interviewed with a 72% response rate.

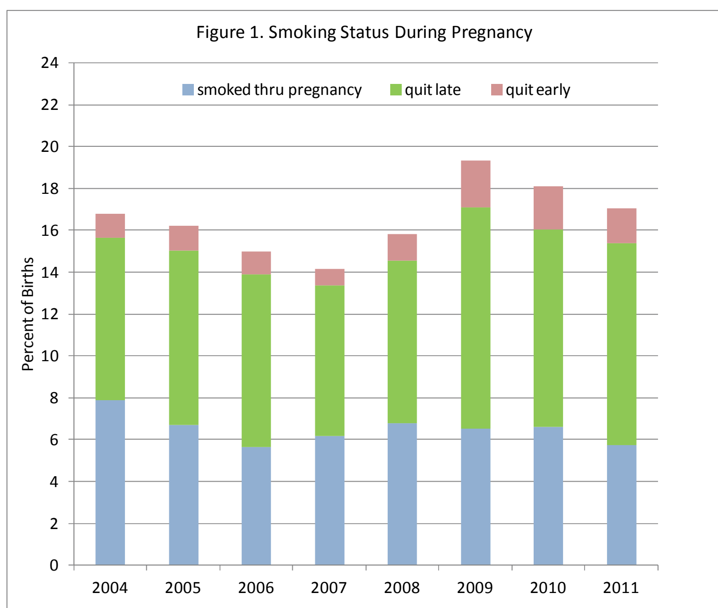


Figure 1. Smoking Status During Pregnancy

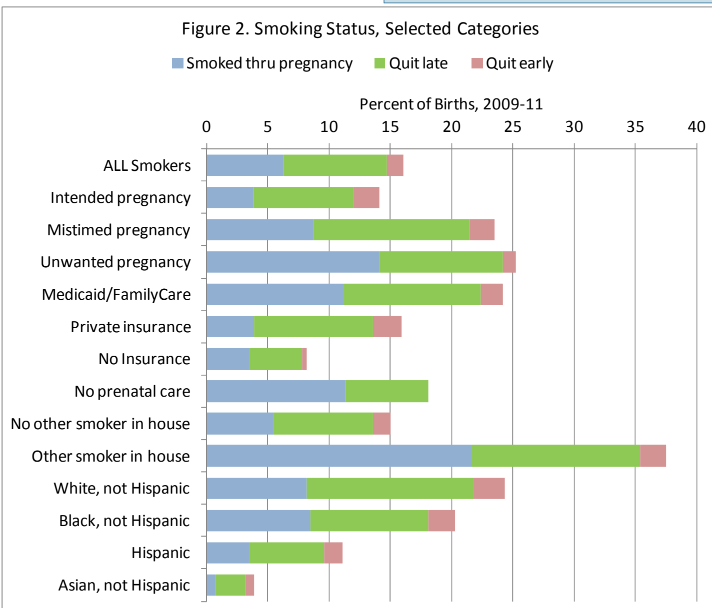
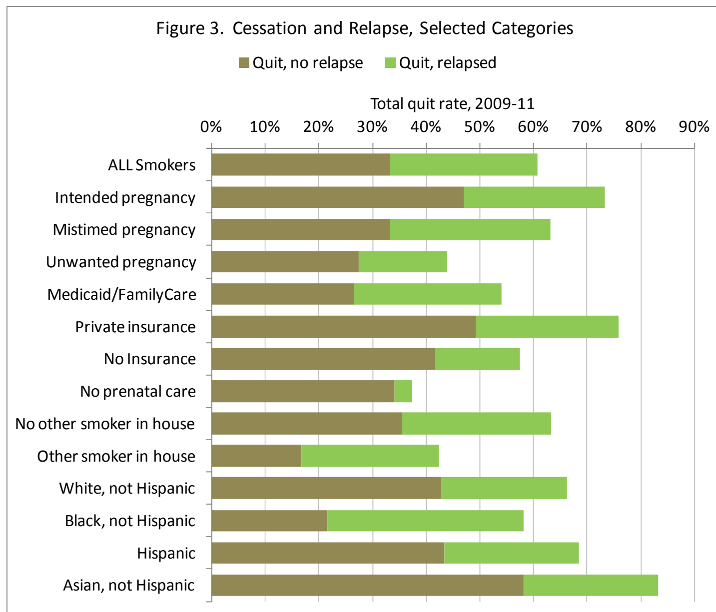


Figure 2. Smoking Status, Selected Categories



of smoking before pregnancy than other groups.

Figure 3 presents quitting and relapse among all pre-pregnancy smokers. Overall, 61% quit smoking, including 27% of initial smokers who relapsed by the PRAMS interview (typically completed 10-20 weeks after delivery). Sustained quitting without relapse was most prevalent among smoking mothers with private health insurance, intended pregnancy, or who were non-Hispanic Asians.

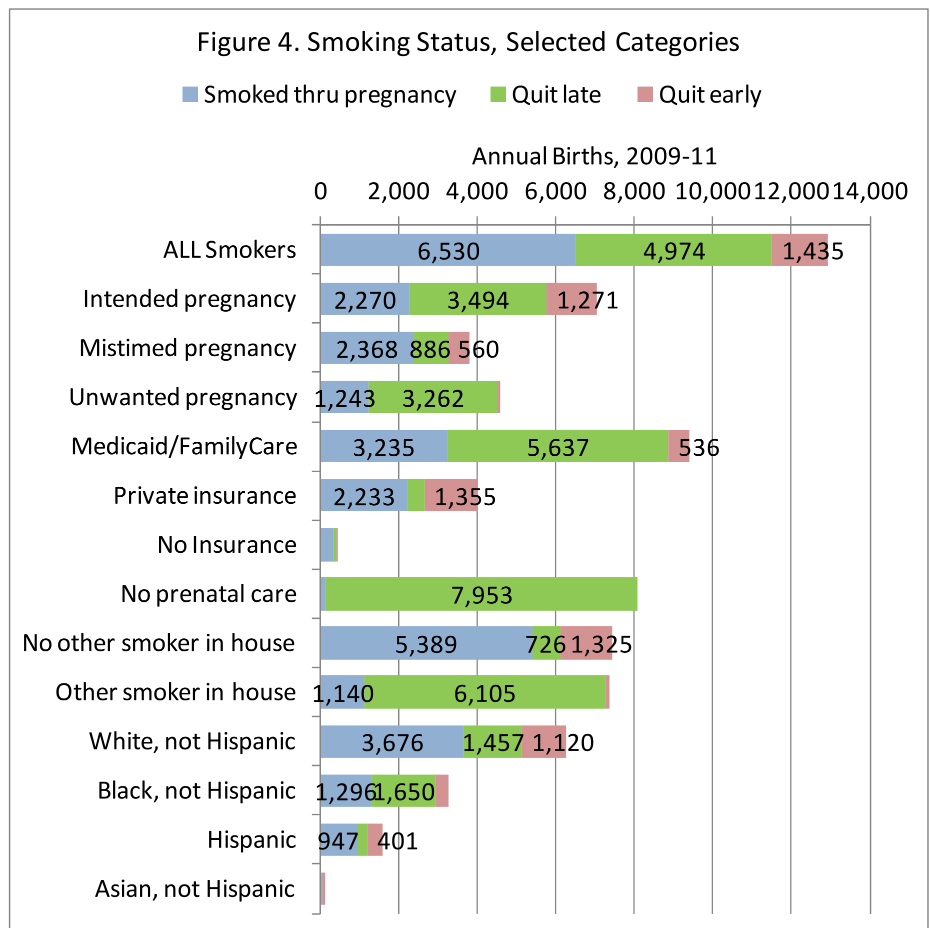
The prevalence of specific smoking behaviors is calculated *within* each risk group. This necessarily obscures the *composition* of smokers and quitters by those same criteria. Figure 4 presents estimates of the annual number of New Jersey mothers in each risk group and smoking status. For example, approximately 3,235 NJFamilyCare participants fail to quit smoking during pregnancy. And while only 5% of new mothers report having another smoker in the house, such households account for more than half of mothers who smoke.

Sustained maternal smoking and post-partum relapse are two pathways which expose newborns to tobacco smoke, which has been linked to childhood respiratory disorders and SIDS. Figure 5 reports the estimated number of exposed infants whose mothers never quit or relapsed after delivery. We estimate that annually 11,000 of New Jersey's new mothers are smoking, including 6,500 who never quit and 4,500 who quit but relapsed. Only 5% of all new mothers report having another smoker in their house, but those households contribute over 1,600 tobacco exposed newborns (15% of the annual total).

Agenda for Action

Prenatal care is the most common venue for tobacco screening [1]. The gold standard for screening and intervention is the Ask-Advise-Assess -Assist-Arrange (5 A's) model. Recognizing the multiple priorities placing extreme pressure on the time spent with patients, an alternative brief intervention is promoted by the New Jersey Department of Health. "Ask, Advise, Refer" (2 A's & R) instructs clinicians to Ask all patients whether they smoke, Advise smokers to quit, and Refer them to other resources. Patient-centered web portals to various cessation programs are listed in **Resources** [2-5], below. Free 2 A's & R training for health providers is supported by Tobacco Free NJ [6].

The US Preventive Services Task Force recommends that clinicians ask all adults about tobacco use and provide tobacco cessation interventions for those who use tobacco products and pregnancy-tailored counseling for pregnant



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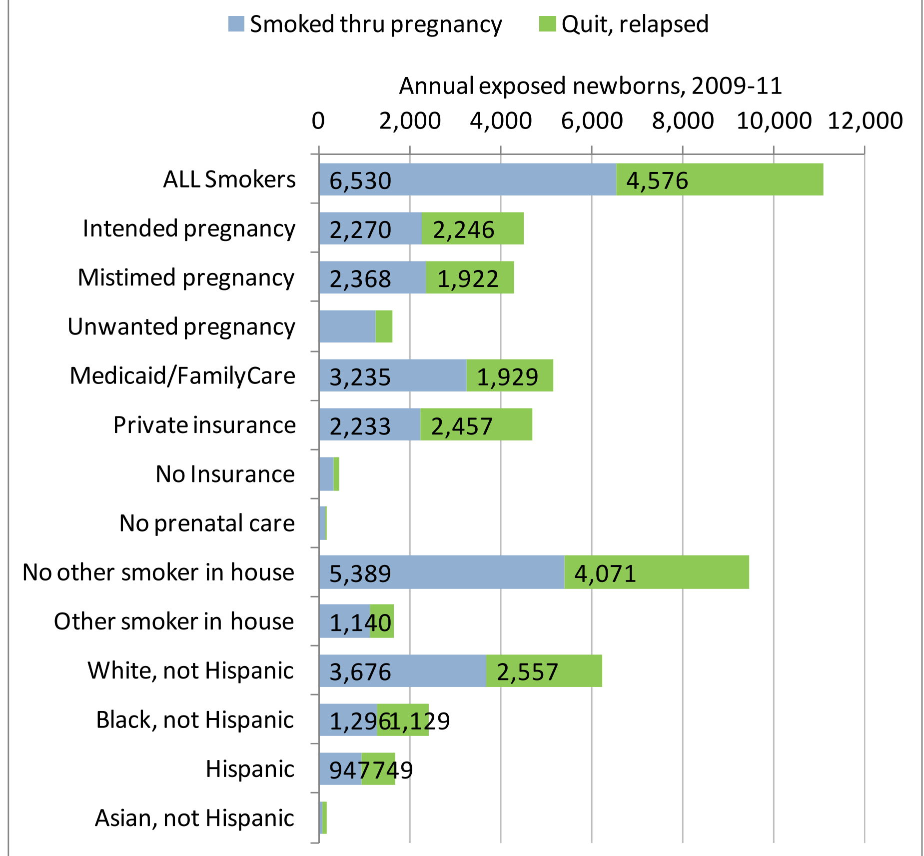
smokers. Due to modest quit rates and high risk of relapse, interventions should be included in preconception care and continue well into the postpartum period, involving obstetric, pediatric and other service providers.[7]

Exposure to secondhand smoke has negative health effects on pregnant women, mothers and children. Smoking by other household members can also make quitting more difficult and increase the chances of relapse. The need for additional resources to promote smoke-free environments at home and work should be considered.

Insurance coverage of tobacco dependence treatments has been shown to increase quit rates. The Affordable Care Act (ACA) requires insurance companies to provide tobacco-cessation services.[8] Research has shown, however, that coverage by private plans varies widely with some insurance contracts containing language that appears to exclude tobacco cessation benefits from coverage or conflicting language that makes the scope of the benefit or cost-sharing unclear. Experts in the healthcare community agree that the tobacco cessation benefits offered under the ACA need to be clarified. [9, 10]



Resources

1. ACOG Prenatal Smoking Clinician's Guide. www.acog.org/About_ACOG/ACOG_Departments/Tobacco__Alcohol__and_Substance_Abuse/Prenatal_Smoking_Clinicians_Guide
2. Tobacco Free for a Healthy New Jersey . www.tobaccofreenj.com/
3. NJ Quitline: 1-866-NJ-STOPS. www.njquitline.org/
4. Mom's Quit Connection. www.snjpc.org/programs/smoking/
5. Be Tobacco Free.gov. betobaccofree.hhs.gov/
6. Free Ask-Advise-Refer training: www.tobaccofreenj.com/ask-advise-refer-training/
7. Agency for Health Care Research and Quality. Treating Tobacco Use and Dependence. www.ahrq.gov/professionals/clinicians-providers/guidelines-recommendations/tobacco/index.html
8. Tobacco Control Legal Consortium. publichealthlawcenter.org/sites/default/files/resources/tclc-fs-aca-&-tobacco-control-2014_0.pdf
9. AAFP Letter to HHS on ACA tobacco coverage. www.aafp.org/news/health-of-the-public/20140331tobacco-cessationltr.html
10. Implementation of tobacco cessation coverage under the Affordable Care Act: Understanding how private health insurance policies cover tobacco cessation treatments. http://www.tobaccofreekids.org/pressoffice/2012/georgetown/coveragereport.pdf