

## HOW TO IMPLEMENT A S.M.A.R.T. MOMS PROGRAM IN YOUR COMMUNITY OR STATE

- Obtain data on smoking during pregnancy, preterm births, and low birthweight for your community and/or state.
- Use data to obtain funding to implement program components.
- Secure partners who will participate in carrying out program activities.
- Begin a planning process for implementation of the program including setting time lines, ordering materials, planning for promoting the program, and developing an evaluation component. Use materials, forms, and information included in this kit as a guide.
- Train providers who will be participating in the activities, using the 5 A's method. Training materials available from American College of Obstetricians and Gynecologists (ACOG) and other sources are included in the Supplemental Materials section of this kit.

## TIPS FOR PROVIDERS WHO WILL COUNSEL PREGNANT SMOKERS

- Review the tools provided in this packet; print the 5 A's and 5 R's as a quick reference guide.
- Display appropriate materials in the waiting room and in examination rooms so that patients can get information while they are waiting to be seen.
- Implement the 5 A's, screening every patient for tobacco use.
- Provide resources (personalized quit plan, ACOG cessation guide, quit line, and other local resources).
- Record the smoking status of every patient at every visit.
- Track quit rates to evaluate the effectiveness of interventions.

**A woman's health care provider is a powerful tool in preventing smoking during pregnancy! Talk to your patients today!**



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## RECOMMENDED INTERVENTION STEPS (THE 5 A'S)

Evidenced-based recommended steps for health care providers to intervene with smokers (from *Treating Tobacco Use and Dependence: A Clinical Practice Guideline*, Agency for Healthcare Research and Quality, U.S. Department of Health and Human Services):

- **Step 1: Ask.** Ask the patient about her smoking status.
- **Step 2: Advise (1 minute).** Provide clear, strong advice to quit with personalized messages about the impact of smoking and quitting on mother and fetus.
- **Step 3: Assess.** Each pregnant smoker should be asked if she is willing to make a quit attempt within the next 30 days. One approach to this assessment is: "Quitting smoking is one of the most important things you can do for your health and your baby's health. If we can give you some help, are you willing to give it a try?" If she is willing to make a quit attempt at this time, move to Step 4. For patients who are unwilling to attempt cessation, quitting advice, assessment, and assistance can be offered in future visits.
- **Step 4: Assist (3 minutes +).** Provide pregnancy-specific, self-help smoking cessation materials; suggest and encourage the use of problem-solving methods and skills for cessation; arrange social support in the smoker's environment; and provide social support as part of the treatment.
- **Step 5: Arrange (1 minute +).** Periodically assess smoking status and, if she is a continuing smoker, encourage cessation.

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# S.M.A.R.T. Moms –

Smart Mothers Are Resisting Tobacco



## EXECUTIVE SUMMARY

### SMOKING DURING PREGNANCY

- According to the Office of the U.S. Surgeon General, smoking is the most important modifiable cause of poor health for women. The office specifically notes poor pregnancy outcomes and poor reproductive health.
- Recent estimates suggest that quitting smoking during pregnancy could reduce the number of low birthweight babies by 20 percent in the U.S. (Windsor, *American Journal of Public Health*).
- In fact, low birthweight is a factor in 60 percent of infant deaths (March of Dimes "Fact Sheet").

Recent Gallup Poll focus group studies of women of childbearing age indicate the advice of a health care provider is most frequently accepted over health-related information obtained from the media. Thus, health care providers have a real opportunity to convey the importance of smoking cessation to a receptive audience.

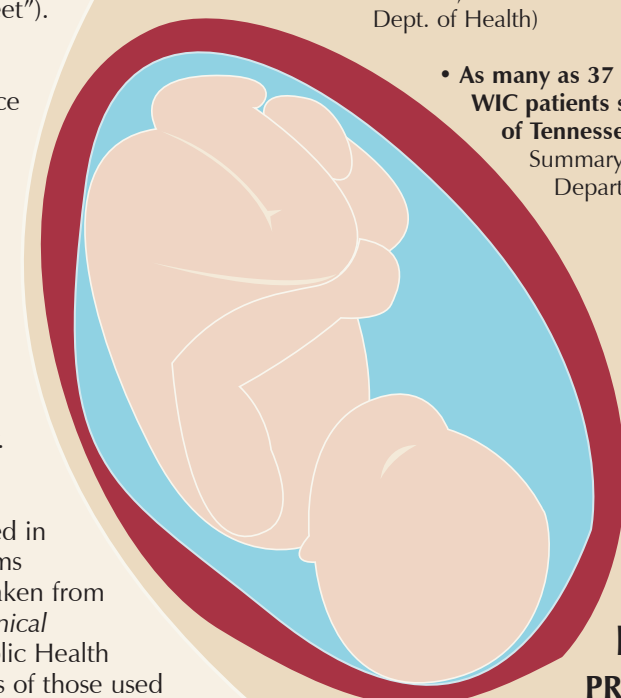
The information included in this kit can be used by those interested in implementing a prenatal smoking cessation project similar to S.M.A.R.T. Moms in their state or community. The 5 A's approach to smoking cessation—Asking, Assessing, Advising, Assisting, and Arranging—is an evidence-based method used in many programs including the S.M.A.R.T. Moms project. The 5 A's, described in this kit, are taken from *Treating Tobacco Use and Dependence: A Clinical Practice Guideline*, produced by the U.S. Public Health Service. The materials in this kit are examples of those used in S.M.A.R.T. Moms and are presented for planning purposes only. Readers should consult individual authors/organizations for use of specific pieces of program materials.

### REASONS NOT TO SMOKE DURING PREGNANCY

- Ectopic pregnancy
- Miscarriage
- Premature birth
- Cancer-causing agents in infant's blood
- Respiratory disorders during childhood
- Asthma, eye problems, childhood leukemia
- Greater risk of SIDS (Sudden Infant Death Syndrome)
- Stillbirth
- Low birthweight
- Abnormal blood pressure in infants

### SMOKING IN TENNESSEE

- **24.1 percent of all women in Tennessee smoke.** (2003, Behavior Risk Factor Survey, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention)
- **16 percent of women in Tennessee smoke throughout pregnancy.** (2004, Office on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control)
- **In 2003, 12,943 babies in Tennessee were born to women who smoked.** (2003, Office of Health Statistics, Bureau of Health Informatics, Tennessee Dept. of Health)
- **As many as 37 percent of pregnant WIC patients smoke in some regions of Tennessee.** (2004, Neonatal Summary Report, Tennessee Department of Health)



### HOW CAN PROVIDERS MAKE A DIFFERENCE?

As a health care provider, you can make a tremendous impact on your patients' health.

"A brief cessation counseling session of 5–15 minutes, when delivered by a trained provider with the provision of pregnancy-specific self-help materials, significantly increases rates of cessation among pregnant smokers."

—(*Tobacco Control* 2000; Vol. 9, Suppl. 3:iii80-iii84, September 2000. BMJ Publishing Group Ltd)

## OVERVIEW OF S.M.A.R.T. MOMS

The S.M.A.R.T. Moms (Smart Mothers Are Resisting Tobacco) Project was implemented in Tennessee in 2002 and continues to date. A collaborative project between the March of Dimes, Middle Tennessee State University's Center for Health and Human Services, and the Tennessee Department of Health, the S.M.A.R.T. Moms project has trained providers in "best practices" smoking cessation techniques (the 5 A's) for pregnant women and has counseled over 13,000 women as of early 2006.

Though the target audience is primarily WIC (Women, Infants, and Children) providers and their patients, who have very high rates of smoking compared to the general population of pregnant women in the state (37 percent vs. 16 percent), private providers are also made aware of the program and have access to the training and patient materials. Initially, a targeted training video was developed through Middle Tennessee State University's Audio/Visual Services, and training was implemented at the regional level. A new videoconferencing system of training was offered in 2005 to train new employees and provide updates for others. Currently, American College of Obstetricians and Gynecologists (ACOG) materials are used for training. Sample training and participant materials are included in this kit including the Tobacco Consultation Record, which forms the basis of patient data collection. This form was developed in consultation with WIC field staff. Billboards, fliers, and various other means have been used to promote the project. S.M.A.R.T. Moms also introduces the Smoking Quitline of the National Cancer Institute to all of its participants.

The first three years of the project were funded by the Mission Investment Opportunities Program (MIOP) of the March of Dimes, and the fourth year was funded by the March of Dimes Tennessee Chapter Community Grants Program with significant in-kind support from MTSU's Center for Health and Human Services and the Tennessee Department of Health. As of April 2006, the Tennessee Department of Health has fully adopted and will continue the program through its existing operations.

The S.M.A.R.T. Moms project has recently been honored with two awards. The National Dr. Audrey Manley Award, never before presented and named for the former U.S. Surgeon General and National March of Dimes Board of Trustees member, was presented to the S.M.A.R.T. Moms project in October of 2005. This award recognizes an "exemplary program" addressing the needs of mothers and babies. The Tennessee Chapter of the March of Dimes was awarded the 2004 Chapter of the Year Award based on the S.M.A.R.T. Moms project, which was highlighted in the award application. The Tennessee Chapter competed with numerous other state chapters nationwide for this prestigious award.

# SMART MOTHERS ARE RESISTING TOBACCO

## S.M.A.R.T. MOMS OUTCOMES

Since the inception of the project in 2002, **over 13,000 pregnant women have been** counseled by trained providers using "best practices": 5 A's-based counseling.

Approximately **77 percent** of women who received the self-help guide and counseling **agreed to attempt smoking cessation.**

Statewide, **24 percent** of those who received counseling, the cessation guide, and for whom complete data on smoking cessation was available **quit smoking.**

Statewide, **21 percent** of those who did not receive the guide but were counseled AND who had complete data records on smoking cessation **quit smoking.**

Among WIC mothers, beginning prenatal care in the first trimester of pregnancy significantly reduced the chance of a low birth weight infant (6.4 percent who quit smoking in the first trimester had low birth weight babies compared to 18.6 percent who quit in the second trimester and 18.7 percent who quit in the third trimester).

In most high-risk regions of Tennessee, more than 80 percent of pregnant women who smoked received the self-help guide and counseling.

In high-risk regions of Tennessee, pregnant smokers who received the self-help guide and counseling were more likely to quit smoking than those who did not receive the guide (25 percent vs. 16 percent), especially in Hamilton County where 35 percent of those receiving the guide quit smoking vs. 20 percent of those who quit but did not receive the guide (information not available from Davidson and Shelby counties).



## HOW DO THESE RESULTS COMPARE WITH SIMILAR PROGRAMS, AND HOW DOES THIS TRANSLATE INTO DOLLARS?

The program results detailed above exceeded the 14 percent success rate found in similar settings, (Windsor, R. 2002). The difference in the 24 percent who received counseling and the self-help guide and the 21 percent who received only counseling and who did quit smoking represents 43 women and their babies. What is important to note is that even women not using the guide were counseled. How many would have stopped smoking without being offered counseling or the guide is unknown. The costs associated with smoking for 43 mothers and babies can only be estimated.

Costs for a premature infant, which is only one possible negative outcome of smoking during pregnancy, are estimated to be fifteen times higher than the average delivery (\$41,610 vs. \$2,830—a difference of \$38,730 per baby).\* Hypothetically, for 43 babies that equates to \$1,665,390. These figures **do not** include costs for other lifelong health issues for both mother or child due to smoking, or intangible costs such as lost productivity, quality of life, etc.

\*March of Dimes, "Impact on Business," 2005, [www.marchofdimes.com](http://www.marchofdimes.com).

## PROVIDER/PROFESSIONAL EDUCATION

While the patient data above is important, equally important is the change in provider behavior. Completed patient records submitted have consistently increased since the start of the project, indicating changes in provider behavior, an important overall goal of the project. Since the project's inception in 2002, approximately 17,924 professionals and 676,995 consumers have been reached about prenatal smoking and cessation through various educational venues.

## S.M.A.R.T. MOMS IS MAKING A DIFFERENCE!

**Eliminating health disparities.** The rates of pregnant women who smoke and use WIC clinics are significantly higher than those of the general population (up to 37 percent in some regions of Tennessee versus 16 percent for all pregnant women in Tennessee). These women are poor, uneducated, and without access to some services available to the general population. Health disparities are being reduced as a direct result of this project.

**Producing culturally competent health professionals and increasing diversity of the health professional workforce.** Almost 18,000 health care professionals have been educated on effective "best practices" smoking cessation interventions for pregnant women as a result of this project. A low estimate of 327 providers receiving in-depth training in counseling procedures was established in 2004. Since that time, countless numbers of clinicians have received in-depth training on counseling techniques as part of the orientation process for new employees. Training on addressing the needs of diverse groups of patients is addressed at the community level.

**Advancing economic, social, and environmental justice.** All babies have a right to be born in a healthy and smoke-free environment regardless of a mother's social or economic background. S.M.A.R.T. Moms is available to ALL women in Tennessee and is committed to advancing economic, social, and environmental justice.

**Providers are counseling pregnant smokers with evidence-based techniques, and patients are quitting smoking.** Over 24 percent of patients agreeing to attempt cessation were successful in their cessation efforts, a rate that betters those achieved in similar programs (14 percent, Windsor, R. 2002). Regular reporting by providers shows increased commitments to smoking cessation counseling.

**Premature births and related costs may have been reduced.** Costs for a premature infant, which is only one possible negative outcome of smoking during pregnancy, are estimated to be fifteen times higher than the average delivery (\$41,610 vs. \$2,830—a difference of \$38,730 per baby)\* These figures **do not** include costs for other lifelong health issues for both mother or child due to smoking, or "intangible" costs such as lost productivity, quality of life, etc.

It is unknown how many of the 13,000+ women participating in S.M.A.R.T. Moms might have avoided a preterm birth due to smoking. Even one preterm birth prevented would equal \$38,730 of costs avoided.

\*March of Dimes, "Impact on Business," 2005, [www.marchofdimes.com](http://www.marchofdimes.com).