Smoking Cessation During Pregnancy

Brought to you by:
The Florida Department of Health and
The Florida AHEC Network

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A Clinician’s Guide to Helping Pregnant Women Quit Smoking

The American College of Obstetricians and Gynecologists

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Call to Action

• Smoking is the most modifiable risk factor for poor birth outcomes
• Successful treatment of tobacco dependence can achieve:
  – 20% reduction in low-birth-weight babies
  – 17% decrease in preterm births
  – Average increase in birth weight of 28 g
Smoking Risks in Pregnancy

- Ectopic pregnancy
- Intrauterine growth restriction
- Placenta previa
- Abruptio placentae
- PROM
- Spontaneous abortion
- Preterm delivery
- Eclampsia and Pre-Eclampsia

Maternal Smoking During Pregnancy Increases Risk of Offspring Behavior Problems

- 1-2 day old infants have elevated scores on measures of stress and excitability.
- Toddlers are at increased risk for aggressive behavior, negativity and hyper activity if mother smoked during pregnancy.
- Teenage offspring of mothers who smoke during pregnancy are at risk for memory problems and other cognitive difficulties.
- Maternal smoking during pregnancy predicts an increase in offspring risk for cigarette addiction during adolescence.

Annual Smoking-Related Child Morbidity and Mortality
Timing of Health Benefits

<table>
<thead>
<tr>
<th>Timeframe</th>
<th>Health Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>30 minutes</td>
<td>Blood pressure, heart rate return to normal</td>
</tr>
<tr>
<td>6 hours</td>
<td>O₂ level returns to normal; nicotine and CO levels reduced by half</td>
</tr>
<tr>
<td>24 hours</td>
<td>CO is eliminated from body; lungs begin to eliminate mucus, debris</td>
</tr>
<tr>
<td>48 hours</td>
<td>Nicotine eliminated from body; taste and smell improve</td>
</tr>
<tr>
<td>72 hours</td>
<td>Breathing is easier; bronchial tubes relax; energy levels increase</td>
</tr>
<tr>
<td>2 to 12 weeks</td>
<td>Circulation improves</td>
</tr>
<tr>
<td>3 to 6 minutes</td>
<td>Lung function increases by up to 10%; coughing, wheezing, breathing problems reduced</td>
</tr>
<tr>
<td>1 year</td>
<td>Heart attack risk halved</td>
</tr>
<tr>
<td>15 years</td>
<td>Lung cancer risk halved</td>
</tr>
<tr>
<td>10 years</td>
<td>Heart attack risk same as for someone who never smoked</td>
</tr>
</tbody>
</table>

Prevalence of Smoking During Pregnancy, Birth Certificate

<table>
<thead>
<tr>
<th>Year</th>
<th>Prevalence</th>
</tr>
</thead>
<tbody>
<tr>
<td>1993</td>
<td>16.2</td>
</tr>
<tr>
<td>1994</td>
<td>15.8</td>
</tr>
<tr>
<td>1995</td>
<td>15.2</td>
</tr>
<tr>
<td>1996</td>
<td>14.9</td>
</tr>
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<td>1997</td>
<td>14.1</td>
</tr>
<tr>
<td>1998</td>
<td>12.4</td>
</tr>
<tr>
<td>1999</td>
<td>11.2</td>
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<tr>
<td>2000</td>
<td>10.2</td>
</tr>
<tr>
<td>2001</td>
<td>9.5</td>
</tr>
<tr>
<td>2002</td>
<td>9.1</td>
</tr>
<tr>
<td>2003</td>
<td>8.6</td>
</tr>
<tr>
<td>2004</td>
<td>8.1</td>
</tr>
<tr>
<td>2005</td>
<td>9.6</td>
</tr>
<tr>
<td>2006</td>
<td>9.4</td>
</tr>
</tbody>
</table>

Effects of Maternal Smoking During & After Pregnancy-SIDS

Smoking’s Causal Relationship to Sudden Infant Death Syndrome (SIDS):

- Maternal Smoking, Prone Sleeping Position and lack of breastfeeding where associated with 79% of SIDS.
- Risk of SIDS after pregnancy and postpartum smoke exposure 2.9 to 4 times higher (odds ratios)
- Risk of SIDS with post-partum exposure only 2 time higher (odds ratio).

Slide Source: Smoke Free Families
**SIDS Reduction**

- If woman continues to smoke, advise about the impact on both the unborn and newborn child. Advise her
  - Not smoke in her home
  - Not smoke in car

- Stress impact of secondhand smoke exposure on immediate problems with child
  - ear infections
  - Bronchitis
  - asthma

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**In 2001, the percent of births under 2500 grams (Low birth weight) for mothers who reported smoking on the birth certificate was 11.8%**

Compared to 7.8% for mothers who reported Not smoking

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**Approximately 500 premature births could be avoided annually if all women who gave birth did not smoke**

Source: Analysis completed by the Florida Department of Health, Maternal and Child Health Evaluation team
Figure 6. Discussion on Smoking Occurred During Prenatal Care, by Age Group
FL PRAMS 2000–2003

Intervention Makes a Difference

• Smoking cessation intervention by clinicians improves quit rates.
• Brief counseling (5 to 15 minutes total) is enough to help some pregnant smokers quit.
• A woman is more likely to quit smoking during pregnancy than at any other time in her life.
• Follow-up is essential to ensure continued abstinence from smoking.

Key to Intervention…Listening!

• Each patient has a unique reason for smoking onset and continued smoking.
• Many patients have already tried to quit.
• Most smokers report that they want to quit smoking.
• Most smokers require several attempts before they succeed.
Key to Intervention…Listening!

• Even a failed attempt is a valuable learning experience.
• Each physician intervention can promote quitting and continued abstinence.
• The physician must listen carefully to understand each smoker's motivations and respond specifically to her situation.

Conclusions from Behavioral Intervention Studies

• Pregnancy is a good time to intervene
• Brief counseling works better than simple advice to quit
• Counseling with self-help materials offered by a trained clinician can improve cessation rates by 30% to 70%
• Intervention works best for moderate (<20 cigarettes/day) smokers

Reimbursement Coding

• ICD-9-CM code 305.1 (tobacco use disorder, tobacco dependence)
  AND
• CPT code 99401 (15-minute physician-provided counseling)
  – with modifier 25 as part of regular prenatal visit
  OR
• CPT code 99211 (nurse counseling)
5 A’s Approach to Smoking Cessation

- A 5-step smoking intervention proven effective for pregnant women
- Consistent with strategies developed by the National Cancer Institute, the American Medical Association, and others
- Adapted for pregnant women by ACOG

The 5 A’s

1. **Ask** about tobacco use
2. **Advise** to quit
3. **Assess** willingness to make a quit attempt
4. **Assist** in quit attempt
5. **Arrange** follow-up

Step 1: Ask—1 Minute

Which of the following statements best describes your cigarette smoking?

- I have never smoked (choose this one or any option listed above)
- I stopped smoking before finding out I was pregnant and am not smoking now
- I stopped smoking after finding out I was pregnant and am not smoking now
- I smoke some now but have cut down since I found out I am pregnant
- I smoke about the same amount now as I did before I found out I was pregnant

Congratulations [patient]
The TEQ

Tobacco Exposure Questionnaire

See Packet for Questionnaire

Step 2: Advise—1 Minute

- Clear, strong, personalized advice to quit
  - Clear: “My best advice for you and your baby is for you to quit smoking.”
  - Strong: “As your clinician, I need you to know that quitting smoking is the most important thing you can do to protect your baby and your own health.”
  - Personalized: Impact of smoking on the baby, the family, and the patient’s well being

Step 3: Assess—1 Minute

- Assess the patient’s willingness to quit within the next 30 days.
- If a patient responds that she would like to try to quit within the next 30 days, move on to the Assist step.
- If the patient does not want to try to quit, use the 5 R’s to try to increase her motivation.
Step 4: Assist—3+ Minutes

- Suggest and encourage the use of problem-solving methods and skills for smoking cessation
- Provide social support as part of the treatment
- Arrange social support in the smoker’s environment
- Provide pregnancy-specific self-help smoking cessation materials

Strategies that Some Women Find Helpful

- Set quit date within 30 days and sign a contract
- Develop approaches to manage withdrawal symptoms
- Remove all tobacco products from her home
- Decide what to do in situations in which she usually smokes

Step 5: Arrange—1+ Minute

- Follow up to monitor progress and provide support
- Encourage the patient
- Express willingness to help
- Ask about concerns or difficulties
- Invite her to talk about her success
Pharmacologic Intervention

- Behavioral intervention is first-line treatment in pregnant women
- Pharmacotherapy has not been sufficiently tested for efficacy or safety in pregnant patients
- It may be necessary for heavy smokers (>1 pack/day)

Pharmacotherapy and Pregnancy

- First-line medications for smokers include varenicline, bupropion (sustained-release bupropion), nicotine gum, nicotine inhaler, nicotine nasal spray, and nicotine patch.
- Second-line medications for smokers include clonidine.
- The safety and efficacy of these treatments for pregnant smokers remain unknown.
- Pharmacotherapy should be considered when a pregnant woman is otherwise unable to quit, and when the likelihood of quitting, with its potential benefits, outweighs the risks of the pharmacotherapy and potential continued smoking.

Patients Who Decline to Quit: Using the 5 R’s

- Relevance
- Risks
- Rewards
- Roadblocks
- Repetition
5 R’s: Relevance

- Ask patient to identify why quitting might be personally relevant, such as:
  - children in her home
  - need for money
  - history of smoking-related illness

5 R’s: Risks

- Ask, “What have you heard about smoking during pregnancy?”
- Reiterate benefits for her unborn baby and her other children
- Tell her that a previous trouble-free pregnancy is no guarantee that this pregnancy will be the same

5 R’s: Rewards

- Your baby will get more oxygen after just 1 day
- Your clothes and hair will smell better
- You will have more money
- Food will taste better
- You will have more energy
5 R’s: Roadblocks

• Negative moods
• Being around other smokers
• Triggers and cravings
• Time pressures

Overcoming Roadblocks: Negative Moods

• Suck on hard candy
• Engage in physical activity
• Express yourself (write, talk)
• Relax
• Think about pleasant, positive things
• Ask others for support

Overcoming Roadblocks: Other Smokers

• Ask a friend or relative to quit with you
• Ask others not to smoke around you
• Assign nonsmoking areas
• Leave the room when others smoke
• Keep hands and mouth busy
Overcoming Roadblocks: Triggers and Cravings

- Cravings will lessen within a few weeks
- Anticipate “triggers”: coffee breaks, social gatherings, being on the phone, waking up
- Change routine—for example, brush your teeth immediately after eating
- Distract yourself with pleasant activities: garden, listen to music

Overcoming Roadblocks: Time Pressures

- Change your lifestyle to reduce stress
- Increase physical activity

Implementing a Smoking Cessation Program

- **Step 1.** Develop administrative commitment
- **Step 2.** Involve staff early
- **Step 3.** Assign one coordinator
- **Step 4.** Provide training
- **Step 5.** Adapt procedures to your setting
- **Step 6.** Monitor and provide feedback
Step 1: Develop Administrative Commitment
- Include all staff who are responsible for patient care, records, materials, or other aspects of implementation
- Review health consequences of smoking
- Explain the 5 A’s
- Note cost-effectiveness

Step 2: Involve Staff Early
- Invite participation
- Address concerns
- Anticipate problems or barriers
- Schedule regular meetings
- Offer intervention to staff who smoke

Step 3: Assign One Coordinator
- One person should oversee implementation to ensure that tasks are not overlooked
- The coordinator can
  - answer questions
  - troubleshoot problems
  - arrange for training
  - monitor implementation
Step 4: Provide Training

- 5 A’s approach to quitting
- 5 R’s (when patients don’t want to quit)
- Provider and patient resources

Step 5: Adapt Procedures to Your Setting

- Assign specific tasks
- Assignments depend on size of practice
- Additional support and follow-up beyond the 5 A’s depends on staff availability

Assigning Tasks

<table>
<thead>
<tr>
<th>Tasks</th>
<th>Who</th>
<th>Where</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ask</td>
<td>Ask patient about smoking</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Document status</td>
<td></td>
</tr>
<tr>
<td>Advise</td>
<td>Advise patient to quit</td>
<td></td>
</tr>
<tr>
<td>Assess</td>
<td>Assess interest in quitting</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assess previous quit attempts</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Assess barriers to quitting (5 R’s)</td>
<td></td>
</tr>
<tr>
<td>Assist</td>
<td>Help patient set a quit date</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide self-help materials</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Provide problem-solving information</td>
<td></td>
</tr>
<tr>
<td>Arrange</td>
<td>Document status for checking at next visit</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Follow up by telephone (optional)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Send congratulatory letters (optional)</td>
<td></td>
</tr>
<tr>
<td>Administrative support</td>
<td>Order and keep materials stocked</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Compile follow-up results</td>
<td></td>
</tr>
</tbody>
</table>
Step 6: Monitor, Provide Feedback

- Are procedures working as intended?
- Is staff completing assigned tasks?
- Is staff adequately trained?
- Is documentation complete and accurate?
- Are materials available and being used appropriately?

An Analysis completed by the Department of Health Maternal and Child Health evaluation team concluded that:

- Approximately 500 premature births could be avoided annually if all women who gave birth did not smoke
- An additional 500 premature births could be avoided if all women received early and continuous prenatal care

Healthy Start

For families
- To reduce the incidence of prenatal and post-partum tobacco use
- To reduce the incidence of tobacco use by all household members
- To reduce exposure of the pregnant woman, fetus and infant to environmental tobacco smoke (ETS)
Who is Eligible for Healthy Start Smoking Cessation Services?

- Anyone who says they smoked during pregnancy
  - Pregnant woman
  - Parent
- Any smoker in the home of a pregnant woman or child up to age 3

Pregnant women who received Healthy Start smoking cessation services were less likely to have babies born with low birth weights.

During the year 2000, 16.15% of pregnant smokers who did not receive Healthy Start smoking cessation services had babies born with low birth weights compared with 14.11% of those who did receive Healthy Start smoking cessation services.

(Source: Healthy Start Annual Report 2002).

In 2001, the percent of births under 2500 grams (low birth weight) for mothers who reported smoking on the birth certificate was 11.8% compared to 7.8% for mothers who reported not smoking.
Beginning in December 2002, smokers of all ages, wishing to quit can get help by calling the Florida Quit-For-Life Line toll-free at 877-U CAN NOW. The hotline is available in English, Spanish, and TDD for the hearing impaired.

54% of FL Women Smokers Attempted to Quit in 2007

Every Day Smokers quit smoking for ≥1 day

Source: Behavioral Risk Factor Surveillance System

Florida’s Quit-For-Life Line provides smoking cessation services

People wishing to quit can get help by calling the Florida Quit-For-Life Line toll-free at 877-U CAN NOW. The hotline can provide translation services, and TDD for the hearing impaired.
Florida’s Quit-For-Life Line

Research has shown that people who use proactive tobacco cessation quitlines are four times more likely to quit.


Fax Referral Program

• Efficient method for referring patients who smoke to effective cessation services
• Alleviates some of the problems posed by limited time and resources
• Takes the burden of initiating services off of the patient

Florida Quit for Life Line

Referral Form

Complete all of the following:
- Advised no tobacco in pregnancy and postpartum
- Assessed patient work is due in the next 30 days
- Patient Name_________________________________________Date____________________
- Referring Provider____________________________________________________________
- Practice Name________________________________________________________________
- Practice address______________________________________ZipCode_________________
- Telephone___________________________________________Fax_____________________

PATIENT
- Assistance from the Quit for Life Line will increase your chances for success in quitting tobacco.
- The LifeLine provides:
  - Friendly, respectful support
  - Expertise in tobacco and nicotine
  - No-pressure, helpful counseling
  - Ways to boost your confidence
- Best day and time for Quitline staff to call me:
- My signature gives permission for my provider to FAX this form to the Florida Quit for Life Line. I understand that a Quitline specialist will call me within the next week.
- Patient Signature____________________________________________________________

Questions? Call the Florida Quit for Life Line, 1-(877) U CAN NOW
Complete todos los siguientes:

- Se aconsejó ningún consumo de tabaco durante y después del embarazo
- Se evaluó el deseo del paciente de dejarlo en los próximos 30 días
- Se evaluó cuál idioma (Inglés, Español, Criollo)
- Se obtuvo permiso para consultar el Quit
- Se obtuvo permiso para que le avisen y participe en una clase local gratis para dejar de fumar
- Obtuvo permiso para cambiar la práctica
- Nombre del paciente _________________________________________ Fecha ____________________
- Proveedor que le recomienda _____________________________________________________________
- Nombre de la práctica ________________________________________________________________
- Dirección de la práctica ______________________________________ Código postal _________________
- Teléfono ___________________________________________ Fax _____________________
- Paciente
- Ayuda de la Línea Quit por vida aumentará las oportunidades de que logres dejar de fumar
- La Línea Quit proporciona:
  - Apoyo respetuoso y amable
  - Experiencia en el uso de tabaco y la nicotina
  - Asesoría de ayuda sin presiones
  - Modos de fomentar tu confianza en ti misma
- La mejor hora y el día para que el personal de Quit me llame:
  - Día ___________________________________ Hora __________________________________
- Mi firma da permiso al proveedor de enviar por FAX este formulario a la Línea Quit por vida. Sé que un especialista de Quit me llamará dentro de la próxima semana.
- Firma del paciente ______________________________________________________________
- Teléfono del paciente _______________________________________ Código postal ________________
- Resources
  - American College of Obstetricians and Gynecologists (www.acog.org)
  - Smoke-Free Families (www.smokefreefamilies.org)
  - Treating Tobacco Use and Dependence
  - Agency for Healthcare Research and Quality (www.ahrq.gov)
  - Florida Keys AHEC
    www.keystoquitsmoking.com
- Smoking Cessation : Postpartum Maintenance
  - Up to 35% of women who stop smoking during pregnancy remain nonsmokers, benefiting:
    - Woman’s health
    - Next pregnancy
    - Child’s health