Youth Tobacco Cessation: Considerations for Clinicians
Foreword:
Pediatric tobacco use and nicotine dependence are significant health concerns. Despite declines in cigarette use, youth still use tobacco products—including e-cigarettes—at high rates. Adolescents and young adults are uniquely vulnerable to nicotine dependence, and the majority of adults who smoke initiate use during adolescence. Effective strategies to promote youth tobacco cessation are urgently needed.

The evidence base for youth tobacco cessation is limited and research is needed to fill gaps in the literature. In the meantime, clinicians can leverage existing literature and promising practices to support cessation in young people.

This resource is intended to support youth cessation of all commercial tobacco products, including (but not limited to) those below:

<table>
<thead>
<tr>
<th>Electronic Tobacco Products</th>
<th>Combustible Tobacco Products</th>
<th>Non-Combustible Tobacco Products</th>
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<tr>
<td>E-Cigarettes, Vaping Devices</td>
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<td>Heated Tobacco Products</td>
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<td>Hookah</td>
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The American Academy of Pediatrics (AAP) has a long history of addressing tobacco use among youth via education, clinical policy, public policy, and advocacy. This resource is intended to support all pediatric health clinicians in helping young patients quit tobacco use. Please note that this resource does not serve as official policy of the AAP, or as a clinical guideline. Rather, this resource is designed to provide practical advice and considerations for addressing tobacco cessation in youth.
To ensure brevity in this document, we have made the following language choices throughout:

- **Tobacco**: References to “tobacco” throughout this resource are intended to include all commercial tobacco products, including – but not limited to – combustible tobacco (eg, cigarettes, cigarillos, hookah), electronic tobacco products (eg, e-cigarettes and vaping devices, heated tobacco products), and smokeless tobacco (eg, chewing tobacco, snuff). When we reference tobacco, we are referring to commercial tobacco, and not the sacred and traditional use of tobacco by some Native American communities.

- **Youth**: References to “youth” are intended to include all adolescents and young adults whose brains are still developing, from approximately age 11 through the mid-20s.

- **Parents**: References to “parents” are intended to include anyone who serves a parental role in a young person’s life, including (but not limited to) adoptive parents, biological parents, foster parents, grandparents, stepparents, and designated guardians/caretakers.

- **Pediatric health clinicians**: References to “pediatric health clinicians” are intended to include all physicians and non-physician clinicians who provide care to youth and young adults, including (but not limited to) pediatricians, pediatric medical subspecialists, pediatric surgical subspecialists, family physicians, subspecialists, behavioral health professionals, nurses, nurse practitioners, medical assistants, dentists, and pharmacists.

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Background

Youth Tobacco Use is an Urgent Clinical Concern

- Youth tobacco use is an immediate health concern
  - Tobacco use is not benign experimentation
    - Many youth who try tobacco products are beginning the trajectory of addiction
    - E-cigarette use among youth may increase the risk of future cigarette smoking
    - Most adults who use tobacco initiated use during adolescence
  - Youth are uniquely susceptible to nicotine because their brains are still developing
    - Youth show signs of dependence quickly, sometimes before onset of regular or daily use
    - The popularity of pod-based e-cigarettes is particularly concerning, as they can expose youth to higher levels of nicotine than other types of tobacco products
  - Tobacco use harms the health of youth and their family/friends who are exposed to secondhand smoke.
    - Tobacco use is a leading cause of chronic disease and death
    - Exposure to secondhand smoke from tobacco use is associated with chronic disease and death
    - E-cigarette aerosol can contain harmful and potentially harmful substances, including nicotine, ultrafine particles, volatile organic compounds, carcinogens, and heavy metals
  - Youth use of all tobacco products, including e-cigarettes, is unsafe
    - Nicotine can harm the developing brain, including the parts of the brain that control attention, learning, mood, and impulse control
    - Tobacco use disorder is a DSM-5 diagnosable substance use disorder
    - There are additional health concerns with co-use of tobacco and other substances (eg, marijuana)

- Pediatric health visits provide a critical opportunity to intervene and prevent initial use and/or life-long dependence.
  - Youth are uniquely susceptible to nicotine addiction because their brains are still developing
  - Early intervention is critical because nicotine addiction happens more quickly in youth than in adults

- Tobacco use exacerbates health disparities
  - The tobacco industry has a long history of targeted marketing to specific populations including (but not limited to) racial/ethnic groups, LGBTQ+ communities, and young people (eg, promoting menthol cigarettes to Black communities, making tobacco seem cool or attractive to youth, and promoting products through direct marketing and social media promotion)

- Clinical implications for pediatric health clinicians:
  - Systematically screen all patients for tobacco use and exposure
  - Counsel about tobacco prevention and cessation with youth and their parents
  - Provide recommended tobacco prevention and cessation treatment to all pediatric patients
  - Be mindful of inherent biases and ensure equitable provision of care to all patients

Pediatric Health Clinicians are a Trusted Resource for Youth and Families

- Pediatric health clinicians:
  - Play a pivotal role in a family’s life
  - Support health across the trajectory of childhood, adolescence, and transition into adulthood
  - Are a source of expertise, support, guidance
  - Can use their vital, trusted role to educate youth about health harms, encourage quitting, and provide cessation support
  - Can show an investment in a young patient’s health and future by supporting tobacco cessation

Structural Forces Impact Tobacco Use:

- Targeted marketing by the tobacco industry
- Geographic distribution of tobacco retail outlets
- Industry development of novel tobacco products that appeal to youth
- Lack of enforcement of age-of-sale laws
- Disparities in health insurance, care, and cessation services
- Socioeconomic stressors
Youth Need Support in Quitting Tobacco

- Pediatric health clinicians should encourage and support cessation in all youth who use tobacco products
- Cessation treatment should be tailored to a patient’s level of tobacco use, dependence, and readiness for change
- Despite a limited evidence base for youth cessation, promising practices exist to help youth quit
- Youth interact with medical professionals in many types of care settings—outpatient, inpatient and behavioral health care settings all provide important opportunities for intervention

Considerations for Clinical Care

- Cessation treatment should be provided to youth confidentially, in the context of a trusting relationship between the patient and their pediatric health clinician
  - For more information on providing confidential, adolescent-supportive care, see these AAP resources:
    - Investing in Adolescent and Young Adult Health; Adolescent Health Consortium
- Pediatric health clinicians should encourage youth to engage their parents in cessation treatment but should respect the youth's wishes if this is not desired
- As pediatric health clinicians continue to strive toward health equity, they should remain aware of any personal biases and/or and structural imbalances and work to ensure that they are providing quality care that is inclusive, equitable, culturally sensitive, and age-appropriate
- Pediatric health clinicians should provide cessation support in their practice, and link to treatment extenders for cessation support outside of the clinical visit

Making it Easy to Do the Right Thing

- Barriers exist in addressing youth tobacco cessation
  - Pediatric health clinicians are expected to address many competing priorities in the context of adolescent care
  - Pediatric health clinicians work under significant time constraints including navigating changes to their health systems, patient workflows, quality metrics, and documentation processes
  - Pediatric health clinicians may be reluctant to ask questions about youth tobacco use if they are uncertain about how to manage a positive screen
  - The tobacco product landscape is constantly changing, and it can be hard to keep up with new products to screen and counsel patients accordingly
- This resource has been designed to help mitigate those barriers
  - We have created this resource to minimize the burden on clinician workload and patient flow
  - Standard universal screening questions, and electronic health record (EHR) tools can help expedite the provision of youth cessation support in clinical practice
  - Payment for services can help sustain practice change
    - For more information, see this AAP resource on coding and payment for tobacco services
- Tobacco cessation is a process, and outside supports are critical
  - Tobacco use is a chronic, relapsing condition that often requires repeated intervention and longer-term support to help patients quit
  - Behavioral and pharmacologic supports exist to help youth quit tobacco use
  - Most of the ongoing, long-term support in helping youth quit occurs outside the clinical encounter
    - Treatment extenders, such as web-based quit supports, text-message cessation programs, and telephone quitlines have the expertise and capacity to provide youth who use tobacco with ongoing support throughout their quit attempt
    - Pediatric health clinicians can connect youth with these resources, follow-up about youth's progress and provide additional support as needed
  - Pediatric health clinicians can best support youth with a simple, 3-step intervention, repeated at each visit:
    - Ask youth about tobacco use
    - Counsel youth about cessation
    - Treat youth by linking them to appropriate behavioral resources, prescribing pharmacologic support when indicated, and following up to provide long-term support
Call to Action

- This resource introduces the “Ask- Counsel- Treat” (ACT) model to minimize time and burden on the pediatric health clinician and maximize the patient’s chances of a successful quit
- Pediatric health clinicians have a collective responsibility to ACT to identify youth who use tobacco and connect them with the resources they need for a successful quit

### A.C.T. to Address Youth Cessation:

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<th>TREAT</th>
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<td>Screen for tobacco use with all youth, during every clinical encounter.</td>
<td>Advise all youth who use tobacco to quit and have them set a quit date within two weeks.</td>
<td>Link youth to behavioral treatment extenders and prescribe pharmacologic support when indicated. After the visit, follow-up to assess progress and offer support.</td>
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**ASK**

**Goal:** Beginning at age 11, screen for tobacco use with every patient, during every clinical encounter

- Screening should ask about all tobacco products, including e-cigarette, or vaping, products.
- Universal screening helps counteract bias in care delivery by ensuring that every patient is asked about tobacco, not just those who are presumed to be at risk of use.
- Workflow may differ across care settings, but screening questions should be standard across the health system.

**How to Implement:** Ask the Right Questions

- Ask the patient about use of any tobacco products, using specific language that they will understand
  - There are many types of tobacco products, so be sure to use an inclusive question
  - Youth may report tobacco use more accurately when asked about specific product names

**SAMPLE SCREENING QUESTIONS**

- “Do you use any tobacco or vaping products, like cigarettes, e-cigarettes, or dip?”
  - Note: Customize these examples to products that are common in your community (eg, consider cigarillos or hookah)
- Useful follow-up questions include:
  - “Do your friends or family use tobacco or vaping products?”
  - “Have you ever tried a tobacco or vaping product? Which one(s)?”
  - “How many times have you used [name of product]?”

**Tips:**

- Consider a self-administered screening questionnaire (paper or electronic)
  - Self-administered screeners, such as the CRAFFT 2.1+N or S2BI, can save time during the clinical visit, especially when completed ahead of time
  - Self-administered screening may be more effective in promoting adolescent disclosure
  - Use specific terms in the screener and list all types of tobacco products. Pictures or photos can help: see Types of Tobacco Products resource for more information
  - Create a more specific screener by finding out what products are most common in your community and asking about these products specifically. To do this, try asking your patients about the products they see at school

- Incorporate tobacco questions into routine screening for other health behaviors
  - To save time and increase adherence, consider incorporating into existing measures (eg, S2BI, CRAFFT)

- Set yourself up for successful screening
  - Youth may not view vaping as “tobacco use”—ask a question that’s inclusive of tobacco and nicotine products.
  - Structure the environment to support confidentiality and encourage accurate disclosure
  - Discuss tobacco use during one-on-one time when parent is not in the exam room
  - “Open the door” to the conversation by asking first about use among friends, family, or peers. Then, ask the youth whether it is okay to talk about their own tobacco use

- Harness the electronic health record (EHR) system to support confidential and efficient screening:
  - Consider administering pre-visit web-based screeners to youth
  - Customize the EHR system to include standard tobacco screening questions at all health supervision visits
COUNSEL

Goal: Counsel all patients who use tobacco products about quitting, regardless of level of use or dependence

- Youth are uniquely susceptible to nicotine because their brains are still developing\(^2\)
- Nicotine can harm the developing brain, including the parts of the brain that control attention, learning, mood, and impulse control\(^4\)
- Youth show signs of dependence quickly, sometimes before onset of regular or daily use\(^5,6\)
- The popularity of pod-based e-cigarettes is particularly concerning, as they can expose youth to higher levels of nicotine than other types of tobacco products\(^7\)

How to Implement:

- Advise youth to quit their tobacco use.
  - **Be clear**: Explain to youth that their brains are still developing, leaving them uniquely susceptible to nicotine addiction. Explain that nicotine can hurt their brain as it develops. Ensure youth understand that stopping tobacco is an important way to prevent short- and long-term health problems
  - **Be personalized**: Explain that quitting tobacco might benefit the youth’s other interests. For example, it can improve athletic performance, or allow them to save money to spend on hobbies or other activities
  - **Explain the benefits**: Explain that quitting tobacco is good for health, saves money, and helps avoid things like exposure to toxic chemicals and metals, bad breath, stained teeth, or prematurely wrinkled skin. Explain that quitting gives youth more control over their lives, because they are no longer dependent on nicotine

  **SAMPLE COUNSELING STATEMENTS**

- “Nicotine can harm your brain development.”
- “Vaping/Smoking exposes your family and friends to chemicals that can harm their health.”
- “When you vape, you’re inhaling chemicals and heavy metals: this can injure your lungs.”
- “I know you run cross-country. Quitting smoking can help your lung capacity, which could help you run farther and faster.”
- “Quitting will protect your health, save your money, and increase your independence.”
- “You’ve mentioned symptoms that happen when you haven’t vaped/smoked in a while. These are symptoms of withdrawal, and they tell us that the nicotine is starting to change your brain, and you’re developing an addiction.”

- Have an honest, open conversation
  - **Begin the conversation confidentially**, without a parent present
  - Consider [motivational interviewing](https://www.motivationalinterviewing.org) to guide a conversation about quitting
  - Choose respectful, non-judgmental words, and use a strengths-based perspective
  - Ask why they are using tobacco: young people may use tobacco products to self-medicate for underlying conditions such as anxiety or stress. Talk with youth about healthier ways to manage these conditions
  - Assess youth’s history of tobacco use, past quit attempts, and signs of dependence

  **SAMPLE COUNSELING STATEMENTS**

- “As your doctor, I care about you and I want to help you stay as healthy as possible. Quitting smoking/vaping is an important way to keep you healthy.”
- “Quitting is hard, but I believe you can do it.”
- “It sounds like you’re using smoking/vaping to deal with stress. May I offer some suggestions about other ways to cope with stress?”
- “On a scale of 1-10, how important is it for you to quit smoking/vaping? What made you choose that number? What might it take to get you to a higher number?”
- “Are you interested in quitting today?”
• If the youth is interested in quitting:
  o Help the youth set a quit date within 2 weeks. Avoid major life stressors and events, such as final exams.
  o Explain to the youth that you will connect them with a behavioral support program that will help them develop a plan for success and anticipate challenges.
  o Follow-up with the youth after their quit date to assess progress and provide additional encouragement.

**SAMPLE COUNSELING STATEMENTS**

- “I’m so glad that you’re interested in quitting. Let’s set a quit date in the next 2 weeks.”
- “I’ll connect you with some resources to help make it easier to quit.”

**Tips:**

- Encourage youth to include parents in their quit attempt
  o Talk to the youth and parent together. Help the parent understand that tobacco use is not their child’s fault: nicotine dependence is a medical condition, and you are here to help.
  o If a parent or someone else in the household uses tobacco, talk to them about quitting together, as a family.
  o If the youth does not want to engage their parents, respect their wishes. Ensure that tobacco use is not disclosed via the patient portal or end-of-visit summary.
- If the youth is uncertain about quitting, or only wants to cut down, consider discussing the “5Rs”:
  o Relevance of quitting
  o Risks of not quitting
  o Rewards related to quitting
  o Roadblocks that may arise
  o Repetition: it may take several attempts to succeed.
- If the youth is not ready to quit:
  o Consider the “2-week challenge” (see call-out box)
  o Offer them encouragement and assure them that you’re here to help when they’re ready.
  o Revisit the topic at the next visit.
- For help with coding and billing, use the [AAP Tobacco and E-Cigarette Coding Fact Sheet](#).

### The 2-Week Challenge: A Strategy for Youth who Aren’t Ready to Quit

If a patient isn’t ready to quit or tells you they can “quit anytime they want,” challenge them to completely stop their tobacco use for 2 weeks.

At the end of the 2 weeks, check in to hear how it went and revisit the conversation about cessation support.

**TIP:** If the patient isn’t ready to stop for 2 weeks, ask them to try for 1-3 days, and check in to see how it went.
TREAT

Goal: Link youth to appropriate behavioral support and prescribe pharmacologic support when indicated

- Appropriate behavioral and pharmacologic supports may increase the odds of quitting successfully
- Tobacco dependence treatment should be tailored to the youth’s level of dependence
- Pediatric health clinicians should link all youth to treatment extenders to provide ongoing, targeted cessation support beyond the scope of the clinical visit
- Pediatric health clinicians should consider prescribing pharmacotherapy when clinically indicated

How to Implement:

- Assess youth’s level of nicotine dependence with a screening tool
  - Youth who are more nicotine dependent may need stronger or more supports
  - Available screening tools include:
    - Hooked on Nicotine Checklist (tailored for cigarettes or vaping; see scoring information here)
    - E-Cigarette Dependence Scale
    - Modified Fagerstrom Tolerance Questionnaire

- Link all youth who use tobacco with Behavioral Cessation Support
  - Behavioral supports can help youth:
    - Develop a plan to quit successfully
    - Develop strategies to deal with cravings and triggers
    - Develop healthy coping strategies for stress and anxiety
    - Provide support throughout quit process
  - Behavioral interventions come in several modalities, including both virtual and in-person options:
    - Telephone quitline
    - Text-message support
    - Web-based interventions
    - Smartphone apps
    - In-person counseling (individual or group)
  - Access a list of available behavioral supports, with program details here
  - If feasible, connect the patient directly during the clinical visit, using their smartphone and/or an eReferral system

Elements of a Successful Quit-Plan

**Quit completely**: on the quit date, youth should stop use of all tobacco and vaping products and throw away all tobacco products and paraphernalia.

**Triggers**: identify people, places, feelings, or situations that may cause youth to want to use tobacco and develop a plan to manage these triggers.

**Withdrawal symptoms**: Discuss symptoms of nicotine withdrawal (eg, cravings, irritability, increase in appetite) and develop strategies to manage them.

**Social support**: Identify friends and family who can encourage success.

**Self-care**: Consider supportive behaviors such as healthy eating, exercise, mindfulness, meditation.

SAMPLE BEHAVIORAL SUPPORT STATEMENTS

- “Quitting is hard, so I’m going to connect you to some help.”
- “Take out your phone and text ‘QUIT’ to 47848. A counselor will follow-up with you to make a quit plan, and help you deal with cravings and triggers.”
- “I’ll follow-up with you in about 2 weeks to see how you’re doing.”
• Consider Pharmacologic Cessation Support for youth who are moderately to severely dependent on nicotine\textsuperscript{11}
  o Nicotine Replacement Therapy (NRT) can be an important adjunct for treating nicotine dependence in youth
    ▪ NRT helps relieve withdrawal symptoms by providing a controlled amount of nicotine to the user\textsuperscript{20}
    ▪ AAP policy recommends that pediatricians consider off-label NRT for youth who are moderately or severely dependent on nicotine\textsuperscript{11}
  o All cessation medications, including those available over the counter, require a prescription for youth under 18
  o Clinicians should assess the individual needs of each patient to determine whether cessation medication might help them quit successfully.
  o Pharmacologic support should be provided to youth in addition to behavioral support
  o Clinicians should be mindful of school medication policies when providing pharmacotherapy that will need to be taken at school (eg, lozenge and gum)

<table>
<thead>
<tr>
<th>FDA-Approved Medications for Tobacco Cessation in Adults (ages 18+)</th>
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<tr>
<td><strong>Nicotine Replacement Therapy (NRT):</strong></td>
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<tr>
<td>- Patch</td>
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<tr>
<td>- Gum</td>
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<tr>
<td>- Lozenge</td>
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<tr>
<td>- Oral Inhaler</td>
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<td>- Nasal Spray</td>
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<tr>
<td><strong>Non-Nicotine Medications:</strong></td>
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<tr>
<td>- Varenicline</td>
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<td>- Bupropion</td>
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Note: The FDA has not approved tobacco cessation pharmacotherapy for youth under age 18. Use with younger adolescents is considered off-label and requires a prescription.

**Types of Tobacco Cessation Pharmacotherapy**

- **Gum**
- **Oral Inhaler**
- **Patch**
- **Lozenge**
- **Nasal Spray**
- **Varenicline**
- **Bupropion**

**Prescribing NRT to Adolescents**

For full details on prescribing NRT to youth, including contraindications and dosing guidelines, visit this AAP Resource:

**Nicotine Replacement Therapy and Adolescent Patients: Information for Pediatricians**

**Tips:**

- Tailor behavioral supports to patient needs as much as possible:
  o Spanish-language Resources: Smokefree en Español
  o American Indian Commercial Tobacco Program: Cessation Resources for Native American Populations
  o Tailor resources to the specific product used, when possible (see website for available cessation supports)

- Be mindful of personal biases and systemic barriers when connecting youth with cessation services
  o Health disparities exist in cessation services: Hispanic adults, young adults, adults with low income, and adults who are uninsured are less likely to be advised to quit by a healthcare professional.\textsuperscript{21–24} Black adults, Hispanic adults, Asian adults, and adults who are uninsured are less likely to be given NRT \textsuperscript{22,23,25–27}

- Follow-up with youth to provide additional support. Quitting is a process.
  o Successful tobacco cessation often requires repeated intervention and long-term support
  o Relapse is not a failure; it is a learning opportunity

- Use the EHR to prompt you to follow-up with the patient two weeks after their quit date.
Follow up is Essential:

- Follow up with youth after their quit date to assess progress, offer additional support, and make treatment adjustments as needed.
- Following up demonstrates support for the youth as they navigate the cessation process and can provide an opportunity for additional intervention in the event of a relapse.
- How to arrange a follow-up visit:
  - Use the methodology that works best for your clinical workflow: phone, telehealth, or in-person
  - Anyone on the patient care team can handle the follow-up conversation: follow your typical office workflow
- Topics to cover during a follow-up visit:
  - Did the youth stick to their quit date?
  - Are they using the behavioral supports that you connected them with? Is it helpful?
    - If not, suggest another methodology (see website for available cessation supports)
    - Suggest adding additional supports (e.g., if youth started with online support, suggest adding texting support)
  - Are they using the pharmacotherapy that you prescribed? Is it helpful?
    - Ensure that youth are using NRT correctly: for example, if you prescribed NRT gum, ensure that they’re using the “chew and park” method, instead of treating it like regular chewing gum
    - For more information on using NRT correctly, visit Nicotine Replacement Therapy and Adolescent Patients: Information for Pediatricians
  - Has the youth used any tobacco product since their quit date?
    - If no: congratulate them and encourage them to keep going. Remind them that you’re here to help.
    - If yes: let them know that quitting is hard and relapse is common. Ask for more details about when and why they used a tobacco product and help them plan ahead to avoid the next relapse.

**SAMPLE FOLLOW-UP APPOINTMENT STATEMENTS**

- “I know you decided that your quit date would be last Monday. How’s it going so far?”
- “Have you been using the Smokefree Teen website? Do you think it might help to add some additional support from a text-to-quit program?”
- “How’s the nicotine gum working for you? Are you using the ‘chew and park’ method we talked about?”
- “Quitting isn’t easy, but it’s possible. Let’s talk about what led you to vape last week, so that we can figure out how to prevent it next time.”


http://www.ahrq.gov/prevention/guidelines/tobacco/5rs.html


