



A review of the US Public Health Service–sponsored Clinical Guideline *Treating Tobacco Use and Dependence: 2008 Update*

Joel Kase, DO, MPH,^a Angela Cole Westhoff, MA^b

From the ^aUniversity of New England College of Osteopathic Medicine, Biddeford, ME; and

^bMaine Osteopathic Association, Manchester, ME.

KEYWORDS:

Smoking;
Tobacco use;
Tobacco dependence;
Smoking cessation
guidelines 2008;
Smoking cessation
treatment guidelines;
Clinical practice
guidelines smoking

Tobacco dependence is a chronic disease that deserves treatment. Effective strategies have now been identified and should be used with every current and former smoker. The Quick Reference Guide for Clinicians provides point of care access and the tools necessary to effectively identify and assess tobacco use, and to treat tobacco users willing to quit; those who are currently unwilling to quit; and those who are former tobacco users. The experience of the past four decades has culminated in a transformed culture that maintains as its social norm a plethora of public, private and nonprofit venues of anti-tobacco infrastructure. Moreover, there is likely no clinical treatment available today that has the potential to reduce illness, prevent death, and increase quality of life more profoundly than the tobacco treatment interventions outlined in the US Public Health Service Clinical Practice Guideline for Treating Tobacco Use and Dependence.

© 2009 Published by Elsevier Inc.

A generation of transformation

This year President Obama signed into law historic legislation¹ to allow FDA regulation of tobacco. The bipartisan support of this legislation echoes the paradigm shift in our approach to treating tobacco use, highlighting the cultural transformation that has swept our nation in the last generation with regard to our perception of tobacco use and dependence. This review is presented in conjunction with the American Cancer Society's Great American Smokeout, which in 2009 celebrates its 34th Anniversary. Held annually on the third Thursday in November, this year the Smokeout is planned for November 19, 2009. The initial purpose of the event was to set aside a day to help smokers quit using both cigarettes and other tobacco products for at least one day, with the hope that they

would eventually become motivated to quit completely. Transformed over time, the overall goal of this event is to broaden Americans' collective consciousness about the broad and critical campaign to support those afflicted by this addiction in their effort to quit using tobacco products. Not only does the event challenge people to stop using tobacco, it helps to raise awareness about the multifaceted dangers of smoking and the many effective means currently available to quit smoking permanently.

How it started: A simple concept

In 1971, Arthur Mullaney, a Massachusetts resident, asked people to give up smoking for a day and to donate the money they would have spent on tobacco to a local high school. Then in Minnesota, Lynn Smith, editor of the *Monticello Times*, led the charge to create the state's first D-Day,

Corresponding author: Angela Cole Westhoff, Maine Osteopathic Association, 693 Western Ave., #1, Manchester, ME 04274.

E-mail address: awesthoff@mainedo.org.

simply called “Don’t Smoke Day”. The idea gained momentum, and the California chapter of the American Cancer Society encouraged nearly one million smokers to quit for the day on November 18, 1976.²

The Great American Smokeout was inaugurated in 1976 to inspire and encourage smokers to quit for one day. Now, 39.8% of the 43.4 million Americans who smoke have attempted to quit for at least one day in the past year,³ and the Great American Smokeout remains a meaningful opportunity to encourage people to commit to making a long-term plan to quit for good.

Contemporary approaches

The experience of the past four decades has culminated in a transformed culture that maintains as its social norm a plethora of public, private, and nonprofit venues of antitobacco infrastructure. Current data suggest that smokers are most successful in kicking the habit when they have some means of support, whether it is nicotine replacement products to curb cravings, counseling, prescription medicine, guide books, or the encouragement of friends and family members.⁴ The health benefits of quitting tobacco have been well documented and are now well publicized and readily available to clinicians and patients. Figure 1 outlines the health benefits of quitting over time.

When Smokers Quit—The Health Benefits Over Time

20 minutes after quitting: Your heart rate and blood pressure drops. (Effect of Smoking on Arterial Stiffness and Pulse Pressure Amplification, Mahmud, A, Feely, J. 2003. *Hypertension*:41:183.)

12 hours after quitting: The carbon monoxide level in your blood drops to normal. (*US Surgeon General's Report*, 1988, p. 202)

2 weeks to 3 months after quitting: Your circulation improves and your lung function increases. (*US Surgeon General's Report*, 1990, pp.193, 194,196, 285, 323)

1 to 9 months after quitting: Coughing and shortness of breath decrease; cilia regain normal function in the lungs, increasing the ability to handle mucus, clean the lungs, and reduce the risk of infection. (*US Surgeon General's Report*, 1990, pp. 285-287, 304)

1 year after quitting: The excess risk of coronary heart disease is half that of a smoker's. (*US Surgeon General's Report*, 1990, p. vi)

5 years after quitting: Your stroke risk is reduced to that of a nonsmoker 5 to 15 years after quitting. (*US Surgeon General's Report*, 1990, p. vi)

10 years after quitting: The lung cancer death rate is about half that of a continuing smoker's. The risk of cancer of the mouth, throat, esophagus, bladder, cervix, and pancreas decrease. (*US Surgeon General's Report*, 1990, pp. vi, 131, 148, 152, 155, 164,166)

15 years after quitting: The risk of heart disease is the same as a non-smoker's. (*US Surgeon General's Report*, 1990, p. vi)

Figure 1 The health benefits of quitting smoking over time.

Popular online social networks such as Facebook⁵ are also becoming support channels for people who want to quit, and American Cancer Society Smokeout–related downloadable desktop applications are available on these networks to help people quit or join the fight against tobacco.

Epidemiology

Tobacco is the single greatest cause of disease and premature death in the United States and is responsible for more than 435,000 deaths annually.⁶ Approximately 20% of adult Americans currently smoke,⁷ and 4000 children and adolescents smoke their first cigarette each day.⁸

The financial cost of tobacco-related death and disease approaches \$96 billion annually in medical expenses and \$97 billion in lost productivity.⁹ However, more than 70% of all current smokers express a desire to quit.¹⁰ There are many short-term benefits and long-term health improvements that will result from quitting smoking, and clinicians play a vital role in helping smokers quit.

The Surgeon General: Advocating for the public's health

The Office of the Surgeon General has a long history of advocating on behalf of the public by exposing the risks of tobacco use. In 1964, Surgeon General Luther Terry issued the groundbreaking report on smoking and health.¹¹ The primary responsibility of the Surgeon General is to protect and maintain the health of the American people, and Surgeon General Terry recognized that to meet that obligation, he would have to call for a fundamental change in how our country viewed tobacco use. Dr. Terry also knew that by issuing the results of the research available to him at the time—data that demonstrated causality between smoking and three diseases: lung cancer, atherosclerotic heart disease, and cerebrovascular disease—he was taking aim at one of the pervasive symbols of American life, the cigarette.

In 1964, more than 42% of Americans smoked.¹² In fact, until he started work on his smoking Report, the Surgeon General was himself a smoker.

Since that time, the culture of tobacco use in the United States has been transformed dramatically. Smoking, once the accepted norm, even in hospitals and doctor's offices, is now unlawful in many public places,¹³ which in some states like Maine and California includes bars, restaurants, state parks, and public beaches.¹⁴

Recently, the US Department of Health and Human Services, in partnership with the US Public Health Service, updated the Clinical Practice Guideline *Treating Tobacco Use and Dependence* to further assist practicing clinicians in addressing tobacco use with their patients.

Explicit evidence-based methodology and expert clinical judgment were combined to develop the recommendations on treating tobacco use and dependence. The Guideline is based on an exhaustive systematic review and analysis of the extant scientific literature from 1975 to 2007, incorporating the results of more than 50 meta-analyses.

Treating Tobacco Use and Dependence: 2008 Update

Several authorities with recognized policy statements addressing tobacco use continue to support the evidence-based approach of the US Public Health Service's Guideline, including the American College of Preventive Medicine (ACPM), American Academy of Family Physicians (AAFP), and the United States Preventive Services Task Force (USPSTF). Although not yet updated with the 2008 data, the ACPM clinical recommendations on tobacco cessation and counseling can be viewed at http://www.acpm.org/polstmt_tobacco.pdf. The recently updated AAFP policy statement on tobacco and smoking can be viewed at <http://www.aafp.org/online/en/home/policy/policies/t/tobacco.html>.

As published this spring in *Annals of Internal Medicine*, the USPSTF reviewed the new evidence in the 2008 Updated Guideline and has determined that the net benefits of screening and tobacco cessation interventions in adults and pregnant women remain well established.¹⁵

The following recommendations are taken directly from the US Public Health Service's updated Guideline, which can be found on the US Surgeon General's website.¹⁶

Key findings

The *Treating Tobacco Use and Dependence* guideline highlights a number of key findings that clinicians should consider in their practice:

1. Tobacco dependence is a chronic disease that often requires repeated intervention and multiple attempts to quit. Effective treatments exist, however, that can significantly increase rates of long-term abstinence.
2. It is essential that clinicians and health care delivery systems consistently identify and document tobacco use status and treat every tobacco user seen in a health care setting.
3. Tobacco dependence treatments are effective across a broad range of populations. Clinicians should encourage every patient willing to make a quit attempt to use the recommended counseling treatments and medications in the Guideline.
4. Brief tobacco dependence treatment is effective. Clinicians should offer every patient who uses tobacco at least the brief treatments shown to be effective in the Guideline.

5. Individual, group and telephone counseling are effective and their effectiveness increases with treatment intensity. Two components of counseling are especially effective and clinicians should use these when counseling patients making a quit attempt:
 - Practical counseling (problem-solving/skills training).
 - Social support delivered as part of treatment.
6. There are numerous effective medications for tobacco dependence and clinicians should encourage their use by all patients attempting to quit smoking, except when medically contraindicated or with specific populations for which there is insufficient evidence of effectiveness (i.e., pregnant women, smokeless tobacco users, light smokers and adolescents). See [Figure 2](#) for the clinical use of medication for tobacco dependence treatment.
 - Seven first-line medications (5 nicotine, 2 non-nicotine) reliably increase long-term smoking abstinence rates:
 - Bupropion SR
 - Nicotine gum
 - Nicotine inhaler
 - Nicotine lozenge
 - Nicotine nasal spray
 - Nicotine patch
 - Varenicline
 - Clinicians should also consider the use of certain combinations of medications identified as effective in the Guideline.
7. Counseling and medication are effective when used by themselves for treating tobacco dependence. However, the combination of counseling and medication is more effective than either alone. Thus, clinicians should encourage all individuals making a quit attempt to use both counseling and medication.
8. Telephone quitline counseling is effective with diverse populations and has broad reach. Therefore, clinicians and health care delivery systems should both ensure patient access to quitlines and promote quitline use.
9. If a tobacco user is currently unwilling to make a quit attempt, clinicians should use the motivational treatments shown in the Guideline to be effective in increasing future quit attempts.
10. Tobacco dependence treatments are both clinically effective and highly cost-effective relative to interventions for other clinical disorders. Providing coverage for these treatments increases quit rates. Insurers and purchasers should ensure that all insurance plans include the counseling and medication identified as effective in the Guideline as covered benefits.

Tobacco dependence as a chronic health condition

Tobacco dependence is a chronic health condition that often requires multiple, discrete interventions by a clinician or

Medication	Cautions/Warnings	Side Effects	Dosage	Use	Availability (check insurance)
Bupropion SR 150	Not for use if you: Currently use monoamine oxidase (MAO) inhibitor Use bupropion in any other form Have a history of seizures Have a history of eating disorders See FDA package insert warning regarding suicidality and antidepressant drugs when used in children, adolescents, and young adults.	Insomnia Dry mouth	Days 1-3: 150 mg each morning Days 4-end: twice daily	Start 1-2 weeks before quit date; use 2 to 6 months	Prescription only Generic Zyban Wellbutrin SR
Nicotine Gum (2 mg or 4 mg)	Caution with dentures Do not eat or drink 15 minutes before or during use	Mouth soreness Stomach ache	1 piece every 1 to 2 hours 6-15 pieces per day If \leq 24 cigs: 2 mg If \geq 25 cigs/day or chewing tobacco: 4 mg	Up to 12 weeks or as needed	OTC only: Generic Nicorette
Nicotine Inhaler	May irritate mouth/ throat at first (but improved with use)	Local irritation of mouth and throat	6-16 cartridges/day Inhale 80 times/cartridge May save partially-used cartridge for next day	Up to 6 months; taper at end	Prescription only: Nicotrol inhaler
Nicotine Lozenge (2 mg or 4 mg)	Do not eat or drink 15 minutes before or during use One lozenge at a time Limit 20 in 24 hours	Hiccups Cough Heartburn	If smoke/chew \geq 30 minutes after waking: 2 mg If smoke chew \leq 30 minutes after waking: 4 mg Weeks 1-6: 1 every 1-2 hrs Wks 7-9: 1 every 2-4 hrs Wks 10-12: 1 every 4-8 hrs	3-6 months	OTC only: Generic Commit
Nicotine Nasal Spray	Not for patients with asthma May irritate nose (improves over time) May cause dependence	Nasal irritation	1 "dose" = 1 squirt per nostril 1 to 2 doses per hour 8 to 40 doses per day Do not inhale	3-6 months; taper at end	Prescription only: Nicotrol NS
Nicotine Patch	Do not use if you have severe eczema or psoriasis	Local skin reaction Insomnia	One patch per day If \geq 10 cigs/day: 21 mg 4 wks, 14 mg 2-4 wks, 7 mg 2-4 wks If $<$ 10/day: 14 mg 4 wks, then 7 mg 4 wks	8-12 weeks	OTC or prescription: Generic Nicoderm CQ Nicotrol
Varenicline	Use with caution in patients: With significant renal impairment With serious psychiatric illness Undergoing dialysis FDA Warning: Varenicline patients have reported depressed mood, agitation, changes in behavior, suicidal ideation, and suicide. Go to www.fda.gov for further updates regarding recommended safe use of Varenicline.	Nausea Insomnia Abnormal, vivid, or strange dreams	Days 1-3: 0.5 mg every morning Days 4-7: 0.5 mg twice daily Day 8-end: 1 mg twice daily	Start 1 week before quit date; use 3-6 months	Prescription only: Chantix
Combinations: Patch + bupropion Patch + gum Patch + lozenge + inhaler	Only patch + bupropion is currently FDA approved Follow instructions for individual medications	Refer to individual medications above.	Refer to individual medications above.	Refer to information provided above.	Refer to information provided above.

^a Based on the 2008 Clinical Practice Guideline: *Treating Tobacco Use and Dependence*, U.S. Public Health Service, May 2008. Refer to the FDA Web site for additional dosing and safety information, including safety protocols.

Figure 2 Suggestions for the clinical use of medication for tobacco dependence treatment.

team of clinicians. The updated Guideline takes a straightforward approach, offering clinicians a practical framework of how to best assess and address patients' needs with regard to tobacco use. First, ask two key questions: "Do you

smoke?" and "Do you want to quit?" Second, offer simple recommendations to assist the patient.

This approach helps to reinforce the conceptualization of tobacco use as a chronic disease, and in doing so helps to

ensure the continuous improvement in recognition and treatment of this pervasive contributor to worldwide morbidity and mortality.

Tobacco dependence often requires repeated interventions and multiple attempts to quit before the patient remains abstinent. Effective treatments do exist and it is critical that health care providers consistently ask and document tobacco use status and treat every tobacco user in the health care setting. Even brief interventions have been shown to be effective.

The first step in this process—identification and assessment of tobacco use status—separates patients into three treatment categories:

1. Tobacco users who are willing to quit should receive interventions to help in their quit attempt.
2. Those who are unwilling to quit now should receive interventions to increase their motivation to quit.
3. Those who recently quit using tobacco should be provided relapse prevention treatment.

The “5 As” of treating tobacco dependence—Ask, Advise, Assess, Assist, and Arrange for follow up—are a useful way to organize any clinician’s approach to tobacco treatment. Although a single clinician can provide all 5 As, it is often more clinically and cost effective to have the 5 As implemented by a team of clinicians and ancillary staff. However, when a team approach is used or when clinician extenders such as quitlines, web-based interventions, and local quit programs are used, the coordination of efforts is essential, with a single clinician retaining overall responsibility for the interventions (Figs. 3 and 4). For a more detailed discussion of implementing the 5 As, please visit the National Library of Medicine’s Health Services/Technology Assessment text website: <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.chapter.28163>.

Ask about tobacco use	Identify and document tobacco use status of every patient at every visit.
Advise to quit	In a clear, strong and personalized manner urge every tobacco user to quit.
Assess	For the current tobacco user, is the tobacco user willing to make a quit attempt at this time? For the ex-tobacco user, how recent did you quit and are there any challenges to remaining abstinent?
Assist	For the patient willing to make a quit attempt, offer medication and provide or refer for counseling or additional behavioral treatment to help the patient quit. For patients unwilling to quit at this time, provide motivational interventions designed to increase future quit attempts. For the recent quitter and any with remaining challenges, provide relapse prevention.
Arrange for follow up	All those receiving the previous A's should receive follow up.

Figure 3 The “5 As” Model for treating tobacco use and dependence.

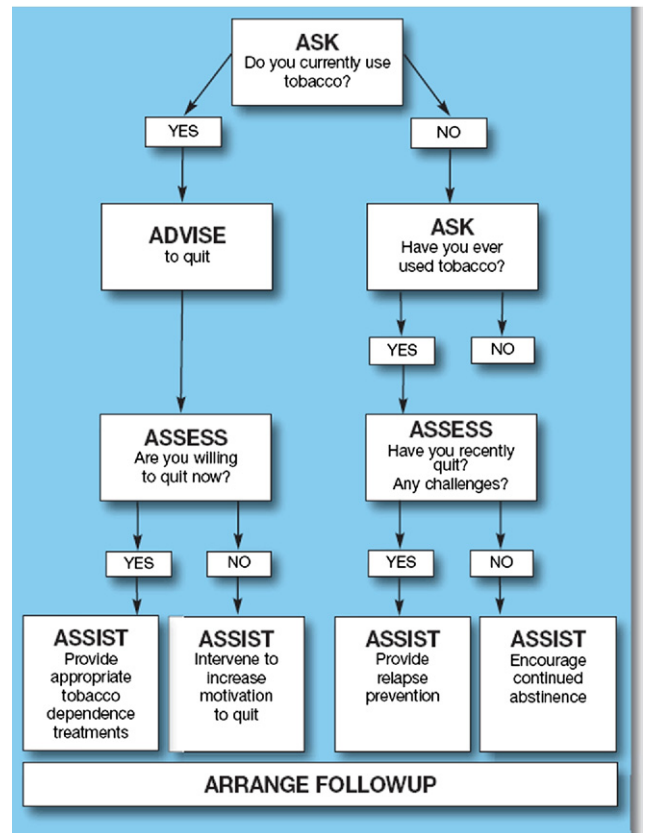


Figure 4 The “5 As”: Treating tobacco dependence as a chronic disease.

Quick Reference Guide for Clinicians

The comprehensive 2008 Guideline includes *The Quick Reference Guide for Clinicians*, which is designed as a user-friendly and readily available resource to enable the practicing clinician to gain point-of care access to the most up-to-date information to assist patients in the clinical setting. *The Quick Reference Guide for Clinicians* is organized conceptually around the 5 As. However, each clinical situation may require that the components be ordered differently or reformatted to fit the unique needs of the patient.

Tobacco users unwilling to quit at this time

Ask, Advise, and Assess every tobacco user at every visit. If the patient is unwilling to make a quit attempt, use the motivational strategies outlined next to increase the likelihood of the patient quitting in the future.

Such interventions might include the “5 Rs”: Relevance, Risk, Rewards, Roadblocks, and Repetition. In these interventions the clinician can introduce the topic of quitting and allow the patient to address the topic in their own words (Fig. 5).

Clinicians should also use open-ended questions and reflective listening to discuss the possibility of quitting with

Relevance	Encourage the patient to indicate why quitting is personally relevant, being as specific as possible. Motivational information has the greatest impact if it is relevant to a patient's disease status or risk, family or social situation (e.g., having children in the home), health concerns, age, gender, and other important patient characteristics (e.g., prior quitting experience, personal barriers to cessation).
Risks	The clinician should ask the patient to identify potential negative consequences of tobacco use. The clinician may suggest and highlight those that seem most relevant to the patient. The clinician should emphasize that smoking low-tar/low-nicotine cigarettes or use of other forms of tobacco (e.g., smokeless tobacco, cigars, and pipes) will not eliminate these risks. Examples of risks are: <ul style="list-style-type: none"> <input type="checkbox"/> Acute risks: Shortness of breath, exacerbation of asthma or bronchitis, increased risk of respiratory infections, harm to pregnancy, impotence, infertility. <input type="checkbox"/> Long-term risks: Heart attacks and strokes, lung and other cancers (e.g., larynx, oral cavity, pharynx, esophagus, pancreas, stomach, kidney, bladder, cervix, and acute myelocytic leukemia), chronic obstructive pulmonary diseases (chronic bronchitis and emphysema), osteoporosis, long-term disability, and need for extended care. <input type="checkbox"/> Environmental risks: Increased risk of lung cancer and heart disease in spouses; increased risk for low birth weight, sudden infant death syndrome (SIDS), asthma, middle ear disease, and respiratory infections in children of smokers.
Rewards	The clinician should ask the patient to identify potential benefits of stopping tobacco use. The clinician may suggest and highlight those that seem most relevant to the patient. Examples of rewards follow: <ul style="list-style-type: none"> <input type="checkbox"/> Improved health. <input type="checkbox"/> Food will taste better. <input type="checkbox"/> Improved sense of smell. <input type="checkbox"/> Saving money. <input type="checkbox"/> Feeling better about yourself. <input type="checkbox"/> Home, car, clothing, breath will smell better. <input type="checkbox"/> Setting a good example for children and decreasing the likelihood that they will smoke. <input type="checkbox"/> Have healthier babies and children. <input type="checkbox"/> Feeling better physically. <input type="checkbox"/> Performing better in physical activities. <input type="checkbox"/> Improved appearance including reduced wrinkling/aging of skin and whiter teeth.
Roadblocks	The clinician should ask the patient to identify barriers or impediments to quitting and provide treatment (problem-solving counseling, medication) that could address barriers. Typical barriers might include: <ul style="list-style-type: none"> <input type="checkbox"/> Withdrawal symptoms. <input type="checkbox"/> Fear of failure. <input type="checkbox"/> Weight gain. <input type="checkbox"/> Lack of support. <input type="checkbox"/> Depression. <input type="checkbox"/> Enjoyment of tobacco. <input type="checkbox"/> Being around other tobacco users <input type="checkbox"/> Limited knowledge of effective treatment options.
Repetition	The motivational intervention should be repeated every time an unmotivated patient visits the clinic setting. Tobacco users who have failed in previous quit attempts should be told that most people make repeated quit attempts before they are successful and that you will continue to raise their tobacco use with them.

Figure 5 Enhancing motivation to quit tobacco—the “5 Rs”.

patients. Expressing empathy, asking questions, rolling with resistance, and offering support are all important in creating a culture of safety and support for the patient. More than one motivational intervention may be needed before the tobacco user commits to a quit attempt. It is essential that the patient trying to quit has a scheduled follow-up to discuss what strategies worked well and what the patient might do differently to best move forward.

Tobacco users who have recently quit should also receive counseling from the clinician to determine relapse potential and for encouragement to stay abstinent. Offer congratulations and strong encouragement for the patient to remain tobacco-free. All patients who have recently quit or

still face challenges should receive follow-up care for continued assistance and support.

For a more detailed discussion of implementing the 5 Rs, please visit the National Library of Medicine's Health Services/Technology Assessment text website: <http://www.ncbi.nlm.nih.gov/books/bv.fcgi?rid=hstat2.chapter.28163>.

New recommendations for the 2008 guideline

Most, but not all, of the *new* recommendations appearing in the 2008 Update resulted from review of the recent meta-

analyses chosen to be included by the Guideline Expert Panel. For additional information on the safe and effective use of medication, please visit the FDA website: <http://www.fda.gov>.

Formats of psychosocial treatments

Recommendation: Tailored materials, both in print and Web-based, appear to be effective in helping people quit. Therefore, clinicians may choose to provide tailored, self-help materials to their patients who want to quit.

Combining counseling and medication

Recommendation: The combination of counseling and medication is more effective for smoking cessation than either medication or counseling alone. Therefore, whenever feasible and appropriate, both counseling and medication should be provided to patients trying to quit smoking.

Recommendation: There is a strong relationship between the number of sessions of counseling when it is combined with medication and the likelihood of successful smoking abstinence. Therefore, to the extent possible, clinicians should provide multiple counseling sessions, in addition to medication, to their patients who are trying to quit smoking.

For tobacco users not willing to quit now

Recommendation: Motivational intervention techniques appear to be effective in increasing a patient's likelihood of making a future quit attempt. Therefore, clinicians should use motivational techniques to encourage smokers who are not willing to quit to consider making a quit attempt in the future.

Nicotine lozenge

Recommendation: The nicotine lozenge is an effective smoking cessation treatment that patients should be encouraged to use.

Varenicline

Recommendation: Varenicline is an effective smoking cessation treatment that patients should be encouraged to use.

Specific populations

Recommendation: The interventions found to be effective in this Guideline have been shown to be effective in a variety of populations. In addition, many of the studies supporting these interventions comprised diverse samples of tobacco users. Therefore, interventions identified as effective in this Guideline are recommended for all individuals who use tobacco, except when medically contraindicated or with specific populations in which medication has not been shown to be effective (pregnant women, smokeless tobacco users, light [<10 cigarettes/day] smokers, and adolescents).

Light smokers

Recommendation: Light smokers should be identified, strongly urged to quit, and provided counseling treatment interventions.

Resources

In an effort to support clinicians in their use of *Treating Tobacco Use and Dependence: 2008 Update*, the Public Health Service has made the information included in the updated Guideline available in several frameworks:

The Quick Reference Guide for Clinicians
<http://www.ahrq.gov/clinic/tobacco/tobaqrg.htm>

Helping Smokers Quit: A Guide for Clinicians
<http://www.ahrq.gov/clinic/tobacco/clinhlpsmsq.htm>

Additional resources and contact information are listed following the conclusion of this article.

Conclusion

Tobacco dependence is a chronic disease that deserves treatment. Effective treatments have now been identified and should be used with every current and former smoker. *The Quick Reference Guide for Clinicians* provides the tools necessary to effectively identify and assess tobacco use, and to treat:

- tobacco users willing to quit,
- those who are currently unwilling to quit, and
- those who are former tobacco users.

There is likely no clinical treatment available today that has the potential to reduce illness, prevent death, and increase quality of life more profoundly than the tobacco treatment interventions outlined in this Guideline.

As we are about to embrace the broadest health reform measures our nation has ever witnessed, it has become paramount to institute those health care interventions that have proven efficacious and are widely available for patient use. The analyses contained in the 2008 updated Guideline demonstrate that evidence-based treatments for tobacco users exist and should become a part of standard caregiving.

By incorporating these methodologies for the treatment of tobacco use and dependence into daily patient care, the osteopathic family physician has the opportunity to improve the lives of individual patients while positively affecting the overall health of our nation.

By definition, primary care physicians are charged with the task of confronting chronic disease management head-on, with the objective of maintaining the best quality of life possible for our patients. The goal of bringing the 2008 updated Guideline to the attention of the osteopathic family physician community in conjunction with the Great American Smokeout this November is to raise our collective awareness of thinking about tobacco use as a chronic disease, while expanding recognition of the proven clinical strategies available. By

doing so, we more effectively position ourselves to decrease the magnitude of effect of the number one preventable cause of morbidity and mortality.

References

1. H.R. 1256—111th Congress: Family Smoking Prevention and Tobacco Control Act. (2009). In GovTrack.us (database of federal legislation). <http://www.govtrack.us/congress/bill.xpd?bill=h111-1256>. Accessed Oct 10, 2009
2. American Cancer Society: All About the Great American Smokeout. Available at: http://www.cancer.org/docroot/subsite/greatamericans/content/All_About_Smokeout.asp. Accessed August 19, 2009
3. American Cancer Society: American Cancer Society Marks 33rd Great American Smokeout. Available at: <http://www.cancer.org/docroot/subsite/greatamericans/content/Media.asp>. Accessed August 19, 2009
4. NIH State-of-the-Science Conference Statement on Tobacco Use: Prevention, Cessation, and Control. *Ann Int Med* 145:839-844, 2006
5. Tobacco Free Florida: Facebook site. Available at: <http://www.facebook.com/TobaccoFreeFlorida>. Accessed August 19, 2009
6. Mokdad AH, Marks JS, Stroup DF, Gerberding JL: Actual causes of death in the United States, 2000. *JAMA* 291:1238-1241, 2004
7. Centers for Disease Control and Prevention: Cigarette smoking among adults—United States, 2007. *MMWR* 57:1221-1226, 2008
8. Centers for Disease Control and Prevention: Incidence of initiation of cigarette smoking—United States, 1965-1996. *MMWR* 47:837-840, 1998
9. Centers for Disease Control and Prevention: Tobacco Use: Targeting the Nation's Leading Killer: At a Glance 2009. Available at: <http://www.cdc.gov/nccdphp/publications/aag/osh.htm>. Accessed October 2, 2009
10. Centers for Disease Control and Prevention: Cigarette smoking among adults—United States, 2000. *MMWR* 51:642-645, 2002
11. Centers for Disease Control and Prevention: History of the Surgeon General's Reports on Smoking and Health. Available at: http://www.cdc.gov/tobacco/data_statistics/sgr/history/index.htm. Accessed October 2, 2009
12. Office of the Surgeon General: The Health Consequences of Smoking: A Report of the Surgeon General. 2004. Speech by Vice Admiral Richard H. Carmona, MD, MPH, FACS, United States Surgeon General. Available at: http://www.surgeongeneral.gov/news/speeches/SgrSmoking_05272004.htm. Accessed August 19, 2009
13. Tobacco.org: Reaction mixed to possible anti-smoking bill. Available at: <http://www.tobacco.org/articles/category/outdoors/>. Accessed August 19, 2009
14. WABI News—Maine: Smoking Ban on Beaches. Available at: <http://www.wabi.tv/news/5680/smoking-ban-on-beaches>. Accessed August 19, 2009
15. Counseling and interventions to prevent tobacco use and tobacco-caused disease in adults and pregnant women: U.S. Preventive Services Task Force Reaffirmation Recommendation Statement. *Ann Intern Med* 150:551-555, 2009
16. US Department of Health and Human Services. Office of the Surgeon General: Tobacco Cessation—You Can Quit Smoking Now! Available at: <http://www.surgeongeneral.gov/tobacco/>. Accessed on October 2, 2009

Additional Resources

- Agency for Healthcare Research and Quality (AHRQ)
800-358-9295; www.ahrq.gov
- Centers for Disease Control and Prevention (CDC)
800-CDC-1311; www.cdc.gov
- National Cancer Institute (NCI)
800-4-CANCER; www.cancer.gov
- American Cancer Society (ACS)
800-ACS-2345; www.cancer.org

CME Resource: Osteopathic Family Physician offers 2 hours of 1-B CME

ACOFPP members who read the Osteopathic Family Physician can receive two hours of Category 1-B continuing medical education credit for completing quizzes in the journal. Visit acofpp.org/resources/publications.aspx to access the quizzes.

September/October 2009 CME Quiz Answers:

1.B, 2.A, 3.B, 4.B, 5.C, 6.A, 7.C, 8.A, 9.B, 10.D