

Addressing Tobacco in Dental Settings

A Resource for Dental Professionals

Dental professionals play an important role in protecting children and families from tobacco use and exposure. Pediatric and adult dental care visits offer an opportunity to identify tobacco use and exposure, support cessation attempts, and help smokers protect their children and families from harmful exposure. Dental professionals should screen for tobacco use and exposure during dental visits and provide appropriate counseling and resources to tobacco users. Screening and counseling can be delivered in as little as 1-3 minutes, minimizing the impact on patient flow.



Why Address Tobacco?

Tobacco use and exposure have significant impacts on oral health. Tobacco users are at higher risk of oral cancers, periodontal disease, and tooth loss. Children exposed to tobacco smoke have higher rates of dental caries. The dental visit is an important opportunity to screen for tobacco use and exposure and deliver a consistent message about cessation and protecting children and families from tobacco exposure.

How to Address Tobacco Use

The [U.S. Preventive Services Task Force](#) recommends the [Five Major Steps to Intervention](#) (5As) method of addressing tobacco in clinical settings. This intervention takes 1-3 minutes and can be incorporated into a standard patient visit.

ASK. Screen for use of tobacco products, including electronic cigarettes, during each visit.

ADVISE. In a clear, strong and personalized manner, explain the importance of quitting tobacco.

ASSESS. Determine the tobacco user's readiness to make a quit attempt.

ASSIST. If a tobacco user is willing to make a quit attempt, work with them to set a quit date. Then, discuss strategies for success, including social support and use of FDA-approved Nicotine Replacement Therapy (NRT), and connect the user with local resources and the state tobacco quit line (1-800-QUIT-NOW).

ARRANGE. Arrange a follow-up contact (by phone or in person), preferably within one week of the quit date.

If necessary, the 5As can be shortened to the "Ask-Advise-Refer" method.

ASK. Screen for use of tobacco products, including electronic cigarettes, during each visit.

ADVISE. In a clear, strong and personalized manner, explain the importance of quitting tobacco.

REFER. Refer the tobacco user to cessation services (1-800-QUIT-NOW or community/internet quit resources).

How to Address Tobacco Exposure

All dental patients should be screened for tobacco smoke exposure. Families with a tobacco user should be advised about the negative health effects of tobacco smoke exposure and counseled about the importance of keeping a 100% smoke-free home and car. If the tobacco user is present at the visit, offer cessation resources.

Electronic Cigarettes

Providers should screen for electronic cigarette (e-cigarette) use, including high-nicotine products like JUUL. Questions can be as simple as "Have you ever used any kind of tobacco (like cigarettes or dip), or electronic vaping devices (like e-cigarettes, vape pens, or JUUL)?"

Teens

E-cigarettes are the most common tobacco product used by teens. During each visit, teen patients should be advised not to use e-cigarettes, as they are particularly susceptible to nicotine addiction. Teen e-cigarette users are more likely than their peers to progress to use of traditional cigarettes.

Providers should not recommend electronic cigarettes (e-cigarettes) as a cessation device.

E-cigarettes have not demonstrated effectiveness as a cessation device, and many studies have found that they prolong nicotine addiction. Providers should only recommend [FDA-approved cessation supports](#), such as Nicotine Replacement Therapy. For more information and tools on counseling about smoking cessation, please visit the AAP Julius B. Richmond Center of Excellence [website](#).

Tobacco and Oral Health Facts

Tobacco is the leading cause of death in the United States, killing 480,000 users each year. Over 15% of adults and nearly 20% of youth in the US are current tobacco users, and 2 in 5 children are regularly exposed to tobacco smoke. Smoking, use of smokeless tobacco products, and exposure to secondhand smoke all have significant impacts on oral health.

Tobacco and Oral Health Facts

Smoking Tobacco

- Smokers are 5 to 9 times more likely to develop esophageal, laryngeal and pharyngeal cancers, as well as cancers of the cheek, lip, and gum.¹
- Smoking is one of the most substantial risk factors linked to the development of periodontal disease.²
- Smoking is a common cause of dry mouth, bad breath, and can reduce the sense of taste and smell.^{3,4}
- Smokers are twice as likely to lose their teeth compared to non-smokers.⁵
- Smoking can lead to leukoplakia, a precancerous condition where thickened white patches develop on the gums and other parts of the mouth.⁷
- E-cigarettes expose mouth tissues and the respiratory tract to compounds formed by heating the vegetable glycerin, propylene glycol, and nicotine aromas in e-cigarette liquid. This may affect cell function and result in oral disease.⁶

Smokeless Tobacco

- E-cigarettes, cigars, cigarillos, hookah, and chew tobacco are not safer than cigarettes. All tobacco products contain chemicals that cause cancer and other serious health problems.
- Smokeless tobacco increases the chances of dental and root decay.⁸
- Smokeless tobacco can lead to leukoplakia.⁷
- Smokeless tobacco, especially the use of snuff, can lead to gingival recession.⁹
- Smokeless tobacco products contain at least 28 chemicals found to cause cancer.¹⁰

Tobacco Smoke Exposure

- There is no safe level of exposure to secondhand smoke.¹¹
- Approximately 600,000 people worldwide die each year due to health complications caused by exposure to secondhand smoke.¹²
- Children who are exposed to secondhand smoke are at an increased risk of dental caries.¹³
- Children who are exposed to secondhand smoke are at increased risk for other negative health effects, including ear infections, severe asthma attacks, respiratory infection, and sudden infant death syndrome (SIDS).¹⁴

Additional Resources for Providers

- [American Academy of Pediatrics Julius B. Richmond Center of Excellence](#)
- [American Academy of Pediatrics Section on Tobacco Control Policies, Technical Report, & Issue Briefs](#)
- [American Academy of Pediatric Dentistry Policy on Tobacco Use](#)
- [American Academy of Pediatric Dentistry Policy on Electronic Cigarettes](#)
- [American Dental Association Policies and Recommendations on Tobacco Use](#)
- [American Dental Association: Smoking and Tobacco Cessation](#)
- [Centers for Disease Control and Prevention: Dental Professionals: Help Your Patients Quit Smoking](#)
- [Office of the US Surgeon General: Know the Risks: E-cigarettes and Young People](#)
- [National Institutes of Health: Smokefree.gov for Health Professionals](#)

References

1. National Institute on Drug Abuse, [Research Report Series: Tobacco/Nicotine](#). (NIH Publication Number 16-4342). Accessed May 10, 2018.
2. National Institute of Dental and Craniofacial Research, Gum Disease, <https://www.nidcr.nih.gov/health-info/gum-disease/more-info>. Accessed May 10, 2018.
3. Warnakulasuriya, S, Dietrich, T, Bornstein MN, et al., Oral Health Risks of Tobacco Use and Effects of Cessation, *International Dental Journal*. 2010;60:7-30.
4. Department of Health and Human Services, 2004 Surgeon General Report: The Health Consequences of Smoking, http://www.cdc.gov/tobacco/data_statistics/sgr/2004/pdfs/chapter6.pdf. Accessed May 10, 2018.
5. Dietrich, N.N. Maserejian, K.J. Joshipura, E.A. Krall and R.I. Garcia, Tobacco Use and Incidence of Tooth Loss Among US Male Health Professionals. *Journal of Dental Research*. 2007;86(4):373-377.
6. Rouabhia, M., Park, H. J., Semlali, A., Zakrzewski, A., Chmielewski, W. and Chakir, J. E-Cigarette Vapor Induces an Apoptotic Response in Human Gingival Epithelial Cells Through the Caspase-3 Pathway. *Journal of Cellular Physiology*. 2017;232:1539-1547.
7. World Health Organization, [IARC Monographs on the Evaluation of Carcinogenic Risks to Humans. Volume 89: Smokeless Tobacco and Some Tobacco-Specific N-Nitrosamines](#) Lyon (France): World Health Organization, International Agency for Research on Cancer, 2007. Accessed May 10, 2018.
8. Robertson PB, Walsh M, Greene J, Ernster V, Grady D, Hauck W. Periodontal effects associated with the use of smokeless tobacco. *Journal of Periodontology*. 1990;61(7):438-443.
9. Public Affairs. Tobacco Information and Tips for Quitting Smoking. BeTobaccoFree.gov. <https://betobaccofree.hhs.gov/health-effects/smokeless-health/index.html>. Published March 22, 2018. Accessed May 9, 2018.
10. U.S. Department of Health and Human Services. A Report of the Surgeon General: [How Tobacco Smoke Causes Disease: The Biology and Behavioral Basis for Smoking-Attributable Disease](#). Rockville, MD: U.S. Department of Health and Human Services, Office of the Surgeon General, 2010. Accessed May 9, 2018.
11. U.S. Department of Health and Human Services. The Health Consequences of Smoking—50 Years of Progress: A Report of the Surgeon General. Atlanta: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. <https://www.surgeongeneral.gov/library/reports/50-years-of-progress/index.html>. Accessed May 10, 2018.
12. Second-hand smoke. WHO. http://www.who.int/gho/phe/secondhand_smoke/en/. Accessed April 9, 2018
13. Tanaka K, Miyade Y, Arakawa M, et al: Household Smoking and Dental Caries in School Children: the Ryukyus Child Health Study. *BMC Public Health* 2010;10:335. <https://bmcpublichealth.biomedcentral.com/articles/10.1186/1471-2458-10-335>. Accessed May 9, 2018.
14. U.S. Department of Health and Human Services. [Let's Make the Next Generation Tobacco-Free: Your Guide to the 50th Anniversary Surgeon General's Report on Smoking and Health](#). Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health, 2014. Accessed May 9, 2018.

Resources to Help Families Avoid Harmful Tobacco Products

Some behaviors are good, like brushing teeth twice a day. Other behaviors, like smoking, can start a lifetime of addiction. It's just better if we never start.

Smoking hurts everyone. Children and non-smoking family members are exposed to secondhand smoke (the smoke that is exhaled by a smoker or comes off the lit end of a cigarette), and thirdhand smoke (the residual nicotine and chemicals left on clothing, surfaces and walls after the cigarette is extinguished). Breathing in smoke, including secondhand and thirdhand smoke, exposes even non-smokers to harmful chemicals. Family members who live with a smoker are especially vulnerable to the negative effects of secondhand and thirdhand smoke. The best way to protect your family is to keep a 100% smoke-free home and car.

Most people who use tobacco – including cigarettes, e-cigarette (vaping) devices or chewing tobacco – started as teenagers.

That's why it is important to protect children early in life from exposure to tobacco products. Luckily, this is something all of us can do.

Here are links to more information to help you and your family keep kids smoke-free and tobacco-free.



Resources for Families

American Academy of Pediatrics [HealthyChildren.org](https://www.healthychildren.org) Resources

- [Smoking Hurts Everyone](#)
- [Why are Smoke-Free Environments a Big Deal?](#)
- [Tips to Keep a Smoke-Free Home and Car](#)
- [How to Quit: When the Smoker is You](#)
- [Emerging and Alternative Forms of Tobacco are Dangerous](#)

American Dental Association [MouthHealthy.org](https://www.mouthhealthy.org) Resources

- [Smoking, Smokeless Tobacco](#)
- [Smoking, 5 Steps to Quit](#)
- [Smoking and Tobacco](#)
- [Smoking, Non-Cigarette Alternatives](#)

The information contained in this publication should not be used as a substitute for the medical care and advice of your pediatrician. There may be variations in treatment that your pediatrician may recommend based on individual facts and circumstances.

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