



Behavioral Health &
Wellness Program

University of Colorado Anschutz Medical Campus
School of Medicine

DIMENSIONS: Tobacco Free Toolkit for Healthcare Providers

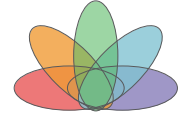
SUPPLEMENT

Priority Populations: Young Adults



Behavioral Health & Wellness Program

University of Colorado Anschutz Medical Campus • School of Medicine



The DIMENSIONS: Tobacco Free Toolkit for Healthcare Providers Supplement
Priority Populations: Young Adults was developed by the
University of Colorado Anschutz Medical Campus, School of Medicine,
Behavioral Health and Wellness Program
March 2014

Chad D. Morris, PhD, Director
Cynthia W. Morris, PsyD, Clinical Director
Rebecca M. Richey, PsyD

For further information about this toolkit, please contact:

Behavioral Health and Wellness Program
University of Colorado Anschutz Medical Campus
School of Medicine
1784 Racine Street
Mail Stop F478
Aurora, Colorado 80045

Phone: 303.724.3713

Fax: 303.724.3717

Email: bh.wellness@ucdenver.edu

Website: www.bhwellness.org

Acknowledgements:

This project was made possible through funding provided by the Colorado Department of Public Health and Environment (CDPHE).





Priority Populations: Young Adults

1. Why Focus on Young Adults?
2. Tobacco Use and Health
3. Consequences of Young Adult Tobacco Use
4. Contributing Factors
5. The Role of the Healthcare Provider
6. Treatment
7. Targeted Programming

Why Focus on Young Adults?

Young adult tobacco use has become an epidemic over the past decade. Currently, 34.2% of young adults use some form of tobacco.¹ Young adults use more tobacco than all other age groups.² Of the 31 million young adults in the U.S., 11.7 million are current cigarette smokers and 14.7 million have smoked a cigarette in the past year.³ Most young adults who use tobacco begin “social smoking” during adolescence and progress to daily tobacco use by the time they are 26.⁴ Young adults and adolescents who use tobacco socially are considered to be at a high risk for becoming daily tobacco users due to the addictive nature of tobacco.⁵ Seventy-two percent of young adults who use tobacco, either socially or daily, become tobacco-dependent adults.⁶

Since stopping tobacco use during young adulthood offers significant benefits, it is important to empower young adults to quit. Those who stop using tobacco by the time they are 30 years old will be able to undo much of the physical damage caused by their tobacco use and will decrease their chances of dying from a tobacco-related disease by 90%. They will also save more money, have fewer wrinkles, be able to reproduce easier, and become more employable.⁷

Young adults do want to stop using tobacco. Up to two-thirds of young adults who currently use tobacco say they want to quit. Sixty-two percent of young adult tobacco users report making a quit attempt within the last year.⁸ However, many of these quit attempts are unsuccessful due to the fact that young adults are less likely to get advice and support to quit from their healthcare providers. Young adults are also less likely than older tobacco users to use tobacco cessation counseling or medications.⁹ This may be related to the high rates of uninsured young adults or overall negative attitudes about cessation interventions.¹⁰ Among young adults who report

About This Toolkit

This supplemental toolkit provides guidance for healthcare providers who want to provide evidence-based treatment for tobacco cessation to young adults. Tobacco cessation for the young adult population is very similar to evidence-based strategies for the general population. However, young adults have unique characteristics and needs to take into consideration when providing treatment.

This supplement provides information about this population and how to partner with patients to help them reach their health goals. It is designed to be used in conjunction with the [DIMENSIONS: Tobacco Free Toolkit for Healthcare Providers](#), which contains evidence-based information about assessment, skills building, and interventions to provide support and resources to patients around tobacco cessation.

making quit attempts, those with the following characteristics were less likely to be successful:

- Higher addiction levels;
- Lower age of first use;
- Less education;
- Minority status;
- Friendships with other tobacco users.¹¹

Overall, young adulthood is a critical time when individuals decide whether tobacco use will become a life-long behavior or if they will turn towards healthier, tobacco-free behaviors.

Tobacco Use and Health

With the highest rates of use, all young adults are at risk of starting to use tobacco. However, there are several factors that increase a young adult's risk.

- **Being male:** 38.1% of young adult males use tobacco, whereas females only use tobacco at 30.3%.
- **Being white:** Young adults who are white have the highest prevalence of tobacco use, at 39.1%. Hispanic young adults use at a rate of 27.4%, and Black young adults use at a rate of 26.3%.^{12,13}
- **Not attending college:** Tobacco use is highest among non-college educated young adults and blue-collar or service workers. Use in these groups is twice that of college-educated and white-collar workers.¹⁴
- **Those who use other drugs on a regular basis:** 41.9% of young adults who use tobacco report using marijuana as well. Tobacco users in this age group also reported using cocaine at 9.5%, whereas young adults who do not use tobacco reported using cocaine at 0.5%.¹⁵
- **Those who drink alcohol regularly:** Young adults who abuse alcohol are more likely to use tobacco as well. According to Jiang and Ling (2013), alcohol use impedes tobacco cessation attempts.¹⁶
- **Those who are friends with other tobacco users:** This result is universal—young adults who report having friends who use tobacco are much more likely to use themselves.¹⁷
- **Those with parents or caregivers that use tobacco:** This is especially true when parents or caregivers allow young adults to use tobacco inside the home.¹⁸
- **Those who believe that smoking facilitates weight loss:** Although smoking does not facilitate weight loss for young adults,¹⁹ some believe that it does. These young adults are more likely to use tobacco.²⁰
- **Those who identify as lesbian, gay, bisexual or transgendered:** Regardless of race, individuals who self-identify as LGBT are more likely to use tobacco.²¹

Special Population: Straight-to-work

More than any other factor, income and education level play a significant part in young adults' tobacco use. Young adults who do not attend college and go directly into the work force, called the straight-to-work population, are more likely to earn less and live under the federal guidelines for poverty. While many young adults use tobacco, those who live in poverty use at alarmingly higher levels than those who do not. Overall, the more money young adults make, the less likely they are to use tobacco. Young adults in poverty also start using tobacco earlier. In addition, they are less likely to have made a quit attempt in the last year. Also, individuals with less education smoke more across ethnicity, gender, annual income, occupation and employment status. In fact, one study found that young adults who did not attend college were twice as likely to smoke as young adults who went to college.²² *For more on information on tobacco use in low-income populations, refer to the [DIMENSIONS: Tobacco Free Toolkit for Healthcare Providers Supplement, Priority Populations: Low-Income](#).*

Consequences of Young Adult Tobacco Use

Young adulthood is a time where many enjoy peak levels of physical health and ability. Tobacco use can destroy the good health that usually accompanies young adulthood. There are several negative health effects of using tobacco, including:

- Impaired lung growth
- Lung function decline
- Coughing, wheezing, production of phlegm
- Asthma-related symptoms
- Lowered sperm quality
- Reduced fertility
- Vascular injury
- Early heart disease
- Damage to blood vessels
- Atherosclerosis²³
- Increased risk of cancer²⁴

Special Topic: Young Adults and E-Cigarettes

E-cigarettes have become increasingly popular among young adults over the past few years. While many young adults report using the e-cigarette to help them quit smoking cigarettes, the reality is that not much is known about the effectiveness of e-cigarettes for tobacco cessation. In contrast, research shows that nicotine replacement therapy along with behavioral interventions are highly effective, even for the young adult population. Therefore, it is important that young adults be encouraged to use these tobacco cessation medications and strategies, instead of e-cigarettes.

In addition, e-cigarettes can cause young adults who would not otherwise use tobacco to become dependent on nicotine. One study found that almost 70% of young adults were aware of e-cigarettes. Among these young adults, 7.0% had used an e-cigarette and 1.2% had used an e-cigarette in the past 30 days.²⁵ Men, current and former smokers, and participants who had at least one close friend who smoked were more likely to be aware of and to have used e-cigarettes. Another study found that 21.6% of current smokers, 11.9% of former smokers, and 2.9% of nonsmokers reported using an e-cigarette within the last year.²⁶

Since e-cigarettes come in candy and fruit flavors and can be used in many places, they are appealing and convenient. Young adults may also have inaccurate information about e-cigarettes. Among young adults who were aware of e-cigarettes, 44.5% thought that e-cigarettes can help people quit smoking, 52.8% felt that e-cigarettes are less harmful than cigarettes, and 26.3% agreed e-cigarettes are less addictive than cigarettes.²⁷

Contributing Factors

Young adults are influenced by many sources, including friends, family, the media, and educational institutions. These influences impact the development of their beliefs, attitudes, and preferences, which can have a long-term effect on their health.

Social Influences

Social influences have the most impact by far. Young adults who have friends who use tobacco are at higher risk for tobacco use themselves.²⁸ Tobacco can also play a role in identity development. Young adults may perceive tobacco use as a defining characteristic that makes them appear rebellious or unique. They may use tobacco to try on a new image in their process of self-exploration and self-expression. Furthermore, if young adults have parents who use tobacco, they are more likely to use tobacco as well.²⁹ Having parents and friends who use tobacco can lead to a perception that tobacco use is normal and not dangerous.

Media Influence

Through exposure to films, television, popular music and various other forms of media, including advertisement, broadcast, electronic, print and social media, young adults receive a barrage of messaging about tobacco. When young adults watch celebrities and other role models in the media using tobacco, whether fictional or in real life, they may internalize the message that tobacco use can help them emulate these people or the characters they play. Young adults are vulnerable to such influence as they may be at a place in their lives where they do not

feel particularly attractive, powerful or desirable. While the use of tobacco products in the media has decreased recently, they are still present and problematic. In 2010, almost one-third of movies targeted at young audiences contained images of tobacco products or use.³⁰



Tobacco Marketing

If an individual has not used tobacco by the age of 26, it is most likely that they will never use tobacco. Tobacco companies know this fact and, thus, aggressively target young adults. Young adults are prime targets since they are old enough to buy tobacco products and are at the stage in life where they do not have a fixed identity, making them more susceptible to marketing and outside influence. Tobacco marketing displays images of young adults who are attractive, risk-taking, fun-loving, and rebellious. These are often desirable traits for young adults, and they may feel they will become more like the individuals in the advertisements by using tobacco. These images can be found in retail stores, magazines, at bus and rail stations, and in bars.³¹

Tobacco companies have found creative ways to market their products to get around the laws that limit tobacco advertising. In addition to advertising, tobacco companies influence young adults to use by:

- **Using promotions and other cost-lowering techniques**—In 2008, over 85% of the \$10 billion spent on marketing by tobacco companies was used to fund price cuts, free samples and coupons.

- **Making products that appeal specifically to young adults**—While flavored cigarettes are banned, tobacco companies still make candy flavored cigars, smokeless tobacco, and e-cigarettes.
- **Encouraging the myth that using tobacco can help with weight loss**—Young women sometimes believe that using tobacco can help them lose weight or maintain slimness. While this is not true, tobacco companies promote this myth by advertising only slim women as well as branding that uses names for cigarettes that suggest thinness.³²



The Role of the Healthcare Provider

Young adults view healthcare providers as a primary source of information about tobacco use and cessation. Given this, it is important that healthcare providers talk with every young adult about tobacco. However, effectively communicating with young adults about stopping their tobacco use can be a challenge. There are several contributing factors. First, many users in this age range do not use tobacco every day and think they can quit whenever they want to. This misperception may allow young adults to believe that their tobacco use is not dangerous for them. Another factor involves a perception of immortality. Many young adults believe that they are unique and that, despite knowledge that tobacco is harmful, they will not suffer the consequences. Additionally, at this developmental stage, individuals have a difficult time connecting with messaging about long-term health risks. This can be compounded by the fact that they may not currently experience any negative effects related to their tobacco use. Here are some guidelines:

Tips for Talking with Young Adults About Tobacco Use

- **Start the conversation:** It is unlikely that young adults will bring up their tobacco use, so you should initiate the conversation.
- **Talk about the benefits of stopping tobacco use:** Instead of talking about increased risk of cancer or other long-term health problems, talk about the benefits of living tobacco-free that appeal to young adults, such as increased spending money, improved personal hygiene or sexual performance.
- **Use examples from their lives:** If you know of a family member or friend who has experienced negative consequences from tobacco use, point this out.
- **Be a role model:** If you choose to live tobacco-free, your message about tobacco cessation will receive more respect.
- **Create a “No” plan:** Even if the young adult has been able to say, “No” to tobacco in the past, they are still at risk for using tobacco. Help them to practice how to say, “No” to tobacco in different situations.
- **Make a list of pros and cons:** This activity can help clarify the reasons they may choose to use or stop using tobacco.³³



Tips for Talking with Young Adults About Tobacco Use

- **Use the 5 A's:** Go through the entire 5 A's process—many healthcare providers do not go beyond the first A (asking), with less than three quarters of young adults who admitted to using tobacco being asked details about their use.



- **Ask about their exposure to tobacco:** Inquire about whether tobacco use occurs in their home and speak with them about the dangers of second- and third-hand smoke.
- **Support them to live tobacco-free:** When asking about tobacco use, encourage those who do not use to stay tobacco-free and talk about tobacco cessation medications and strategies with those who do.
- **Follow up:** Less than 40% of healthcare providers who talk to young adults about tobacco use follow through by providing cessation materials or referrals.
- **Create a tobacco-free workplace:** Set an example for young adults who visit. Hire tobacco-free staff, display messages that communicate the health risks of tobacco use

THE 5 A'S: ASK, ADVISE, ASSIST, ASSESS, ARRANGE

National guidelines recommend that all people entering a healthcare setting should be asked about their tobacco use status and that this status should be documented. Providers should advise all tobacco users to quit and then assess their willingness to make a quit attempt. Persons who are ready to make a quit attempt should be assisted in the effort. Follow-up should then be arranged to determine the success of quit attempts. The full 5 A's model is most appropriate for agencies and organizations that have tobacco cessation medications and/or counseling and behavioral interventions available. In particular, settings providing integrated care (primary care and behavioral health) services are ideal as they have the expertise necessary for combined cessation treatment approaches.³⁴

and the benefits of quitting, restrict reading materials with tobacco advertisements in the waiting room, provide tobacco cessation materials and handouts, and make your facility tobacco-free. For more information about making your organization tobacco-free, access the [DIMENSIONS: Tobacco Free Policy Toolkit](#).

- **Offer free tobacco cessation services:** It is no surprise that young adults who do not have health insurance are also those who are most likely to use tobacco. Consider offering tobacco cessation services, materials and referrals to this population at no additional cost.³⁵

Treatment

Today's young adults were born into a world that is technologically-driven. Because of this, most young adults are tech-savvy and depend on technology daily. Also, young adults are far less likely to utilize formal tobacco cessation interventions, including tobacco cessation medications. In 2010, only 16% of young adult smokers had used tobacco cessation counseling or medication to quit.³⁶ While young adults do respond to interventions aimed at older adults,³⁷ interventions are most likely to be effective with the young adult population, if:

- They are technologically-based. Interventions used through email, websites, texting and social media are the most effective. One study found that almost half of the young adults who used web-based cessation services quit successfully.³⁸
- They are individually tailored to the population they target. Straight-to-work young adults may respond differently to a specific intervention than college-bound young adults. In general, web-based interventions may be more difficult for straight-to-work youth due to limited access to technology.
- They are free and/or offer financial incentives.³⁹
- They involve the family and friends of the young adult. It is clear that tobacco use in young adulthood has a social aspect. If family members and friends support the young adult in stopping their tobacco use, they are much more likely to be successful.⁴⁰
- They are provided by former tobacco users.
- They are recommended by a friend.
- They are advertised in several ways, such as on social media sites, radio, websites, and use Quick Response codes (publicly posted codes that can be scanned with a smart phone which direct the user to a website).⁴¹
- They are brief in terms of contact with cessation support but offer extended support via web-based interventions.⁴²



Targeted Programming

Several types of programming targeted at young adults who are overweight or obese are being developed. The following chart outlines some key programs for this population:

Name of Program	Description and Resources
CO Quit Mobile: BACCHUS Network	<p>CO Quit Mobile is an evidence-based tobacco cessation system focused on helping young adults. It utilizes text messaging, an online expert system, and a smart phone application that are tailored to the user’s unique tobacco habits and barriers. It aims to help young adults set a quit date, cope with cravings and relapse, and increase quit rates.</p> <p>www.coquitmobile.org</p>
Quit Lines	<p>Every state in America has it’s own quitline, which is a telephone-based tobacco cessation service that helps tobacco users quit.</p> <p>www.naquitline.org</p>
QuitSTART App	<p>A free smartphone app that allow users to track cravings and moods, monitor progress toward achieving smoke-free milestones, identify smoking triggers, and upload personalized “pick me ups” and reminders to use during challenging times.</p> <p>www.teen.smokefree.gov</p>
Break It Off	<p>An interactive website that offers a free downloadable app called Break It Off Mobile as well as access to a Quit Coach.</p> <p>www.breakitoff.ca</p>
DIMENSIONS: Tobacco Free Program	<p>A comprehensive, structured and manualized wellness program focused on tobacco cessation geared at individuals within the young adult population. This model can be utilized by healthcare providers, behavioral health providers, and/or trained peers working in collaboration.</p> <p>www.bhwellness.org</p>

End Notes

- ¹ Substance Abuse and Mental Health Services Administration. (2011). *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*. NSDUH Series H-41. Rockville (MD): U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. HHS Publication No. (SMA) 11-4658.
- ² U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ³ Substance Abuse and Mental Health Services Administration. (2011). *Results from the 2010 National Survey on Drug Use and Health: Summary of National Findings*. NSDUH Series H-41. Rockville (MD): U.S. Department of Health and Human Services, Substance Abuse and Mental Health Services Administration. HHS Publication No. (SMA) 11-4658.
- ⁴ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ⁵ Smith, M. L., Dickerson, J. B., Sosa, E. T., EL, J. M., & Ory, M. G. (2012). College students' perceived disease risk versus actual prevalence rates. *American Journal of Health Behaviors*, 36(1), 96-106.
- ⁶ Green, M. P., McCausland, K. L., Xiao, H., Duke, J. C., Vallone, D. M., & Heaton, C. G. (2007). A closer look at smoking among young adults: Where tobacco control should focus its attention. *American Journal of Public Health*, 97(8), 1427-1433. doi: AJPH.2006.103945 [pii] 10.2105/AJPH.2006.103945
- ⁷ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ⁸ Centers for Disease Control and Prevention. (2011). Quitting smoking among adults—United States, 2001–2010. *MMWR: Morbidity and Mortality Weekly Report*, 60, 1513–1519. Retrieved from: www.cdc.gov/mmwr/preview/mmwrhtml/mm6044a2.htm?s_cid=mm6044a2_w
- ⁹ Sims, T. H., McAfee, T., Fraser, D. L., Baker, T. B., Fiore, M. C., & Smith, S. S. (2013). Quitline cessation counseling for young adult smokers: A randomized clinical trial. *Nicotine & Tobacco Research*, 15(5), 932-941.
- ¹⁰ Solberg, L. I., Boyle, R. G., McCarty, M., Asche, S. E., & Thoele, M. J. (2007). Young adult smokers: Are they different? *American Journal of Managed Care*, 13(11), 626-632. doi: 6788 [pii].
- ¹¹ Sims, T. H., McAfee, T., Fraser, D. L., Baker, T. B., Fiore, M. C., & Smith, S. S. (2013). Quitline cessation counseling for young adult smokers: a randomized clinical trial. *Nicotine and Tobacco Research*, 15(5), 932-941. doi: 10.1093/ntr/nts227nts227 [pii].
- ¹² Dietz, N. A., Sly, D. F., Lee, D. J., Arheart, K. L., & McClure, L. A. (2013). Correlates of smoking among young adults: The role of lifestyle, attitudes/beliefs, demographics, and exposure to anti-tobacco media messaging. *Drug and Alcohol Dependence*, 130(1-3), 115-121. doi: 10.1016/j.drugalcdep.2012.10.019 S0376-8716(12)00419-X [pii].
- ¹³ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ¹⁴ Green, M. P., McCausland, K. L., Xiao, H., Duke, J. C., Vallone, D. M., & Heaton, C. G. (2007). A closer look at smoking among young adults: Where tobacco control should focus its attention. *American Journal of Public Health*, 97(8), 1427-1433. doi: AJPH.2006.103945 [pii] 10.2105/AJPH.2006.103945
- ¹⁵ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ¹⁶ Solberg, L. I., Boyle, R. G., McCarty, M., Asche, S. E., & Thoele, M. J. (2007). Young adult smokers: Are they different? *American Journal of Managed Care*, 13(11), 626-632. doi: 6788 [pii].
- ¹⁷ Jiang, N., & Ling, P. M. (2013). Impact of alcohol use and bar attendance on smoking and quit attempts among young adult bar patrons. *American Journal of Public Health*, 103(5), e53-61. doi: 10.2105/AJPH.2012.301014

- ¹⁸ Brook, J. S., Marcus, S. E., Zhang, C., Stimmel, M. A., Balka, E. B., & Brook, D. W. (2010). Adolescent attributes and young adult smoking cessation behavior. *Substance Use and Misuse, 45*(13), 2172-2184. doi: 10.3109/10826084.2010.484473
- ¹⁹ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ²⁰ Klein, E. G., Bernat, D. H., Lenk, K. M., & Forster, J. L. (2013). Nondaily smoking patterns in young adulthood. *Addictive Behavior, 38*(7), 2267-2272. doi: 10.1016/j.addbeh.2013.03.005S0306-4603(13)00077-4 [pii].
- ²¹ Blossnich, J. R., Jarrett, T., & Horn, K. (2011). Racial and ethnic differences in current use of cigarettes, cigars, and hookahs among lesbian, gay, and bisexual young adults. *Nicotine Tobacco Research, 13*(6), 487-491. doi: 10.1093/ntr/ntq261Intq261 [pii].
- ²² Green, M. P., McCausland, K. L., Xiao, H., Duke, J. C., Vallone, D. M., & Healton, C. G. (2007). A closer look at smoking among young adults: Where tobacco control should focus its attention. *American Journal of Public Health, 97*(8), 1427-1433. doi: AJPH.2006.103945 [pii] 10.2105/AJPH.2006.103945.
- ²³ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ²⁴ Collins S, Rollason T.P., Young L.S., Woodman C.B. (2010) Cigarette smoking is an independent risk factor for cervical intraepithelial neoplasia in young women: A longitudinal study. *European Journal of Cancer, 46*(2):405-11. doi: 10.1016/j.ejca.2009.09.015.
- ²⁵ Choi, K. & Forster, J. (2013). Characteristics associated with awareness, perceptions, and use of electronic nicotine delivery systems among young U.S. Midwestern adults. *American Journal of Public Health, 103*(3), 556-561.
- ²⁶ Choi, K. & Forester, J. (2014). Beliefs and experimentation with electronic cigarettes: A prospective analysis among young adults. *American Journal of Preventative Medicine, 46*(2), 175-178.
- ²⁷ Choi, K. & Forster, J. (2013). Characteristics associated with awareness, perceptions, and use of electronic nicotine delivery systems among young U.S. Midwestern adults. *American Journal of Public Health, 103*(3), 556-561.
- ²⁸ Klein, E. G., Bernat, D. H., Lenk, K. M., & Forster, J. L. (2013). Nondaily smoking patterns in young adulthood. *Addictive Behavior, 38*(7), 2267-2272. doi: 10.1016/j.addbeh.2013.03.005S0306-4603(13)00077-4 [pii]
- ²⁹ Leonardi-Bee, J., Jere, M.L., & Britton, J. (2011). Exposure to parental and sibling smoking and the risk of smoking uptake in childhood and adolescence: A systematic review and meta-analysis. *Thorax, 66*(10), 847-855.
- ³⁰ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ³¹ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ³² U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ³³ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ³⁴ Fiore, M. C., Jaén, C. R., Baker, T. B., et al. (2009). *Treating tobacco use and dependence: 2008 update*. Clinical Practice Guideline. Rockville, MD: U.S. Department of Health and Human Services. Public Health Service.
- ³⁵ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ³⁶ Asman, K., & O'Halloran, A. (2011). Quitting smoking among adults – United States, 2001-2010. *MMWR: Morbidity and Mortality Weekly Report 60*(44), 1513-1519.

- ³⁷ Suls, J. M., Luger, T. M., Curry, S. J., Mermelstein, R. J., Sporer, A. K., & An, L. C. (2012). Efficacy of smoking-cessation interventions for young adults: A meta-analysis. *American Journal of Preventative Medicine*, *42*(6), 655-662. doi: 10.1016/j.amepre.2012.02.013 S0749-3797(12)00135-3 [pii]
- ³⁸ Brown, J. (2013). A review of the evidence on technology-based interventions for the treatment of tobacco dependence in college health. *Worldviews in Evidence Based Nursing*, *10*(3), 150-162. doi: 10.1111/wvn.12000
- ³⁹ Green, M. P., McCausland, K. L., Xiao, H., Duke, J. C., Vallone, D. M., & Heaton, C. G. (2007). A closer look at smoking among young adults: Where tobacco control should focus its attention. *American Journal of Public Health*, *97*(8), 1427-1433. doi: AJPH.2006.103945 [pii] 10.2105/AJPH.2006.103945
- ⁴⁰ U.S. Department of Health and Human Services. (2012). *Preventing Tobacco Use Among Youth and Young Adults: A Report of the Surgeon General*. 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.
- ⁴¹ Corona Insights. (2013). Focus group report-text message tool: *The BACCHUS network*. Retrieved from BACCHUS Network.
- ⁴² Villanti, A. C., McKay, H. S., Abrams, D. B., Holtgrave, D. R., & Bowie, J. V. (2010). Smoking-cessation interventions for U.S. young adults: A systematic review. *American Journal of Preventive Medicine*, *39*(6), 564-574. doi:10.1016/j.amepre.2010.08.009

The Behavioral Health and Wellness Program's DIMENSIONS: Tobacco Free Program is designed to train peers and providers to assist people to live a tobacco-free life. The DIMENSIONS: Tobacco Free Program Advanced Techniques training supports tobacco cessation through motivational engagement strategies, group process, community referrals, and educational activities. Contact the Behavioral Health and Wellness Program at bh.wellness@ucdenver.edu for more information.



Behavioral Health &
Wellness Program

University of Colorado Anschutz Medical Campus
School of Medicine