



CLEARING THE AIR

*A toolkit to address youth vaping for
Primary Care Practices*



Vermont Child Health Improvement Program
UNIVERSITY OF VERMONT LARNER COLLEGE OF MEDICINE

Disclaimer:

The information provided in this toolkit is current as of January 2021. As the impact of vaping on youth health continues to evolve, we recommend that you use this toolkit as an informational resource and not as explicit medical advice.

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INTRODUCTION

Electronic cigarettes, also referred to as JUULs, vapes, e-cigarettes, and mods, are nicotine delivery systems that are highly addictive and affecting our youth at alarming rates. If you are reading this, you are probably concerned about the prevalence of vaping among youth in your practice or community. You are right to be concerned. Tobacco companies have targeted youth and created aggressive marketing campaigns, often under the radar of adults, to hook our youth on these highly addictive products. Once hooked, youth may become users for an extended time, even a lifetime. The health implications of this is enormous. As a primary care provider, one of the best ways to address youth vaping is to engage youth during in person visits.

This toolkit is a compilation of the latest evidence based strategies, tools, and resources designed to help primary care providers address youth vaping in their practices. Use this as a guide to help engage your youth at all visits, create action plans for those who are currently using, and empower youth to prevent tobacco use. This guide also suggests ways to inform and engage parents/caregivers.

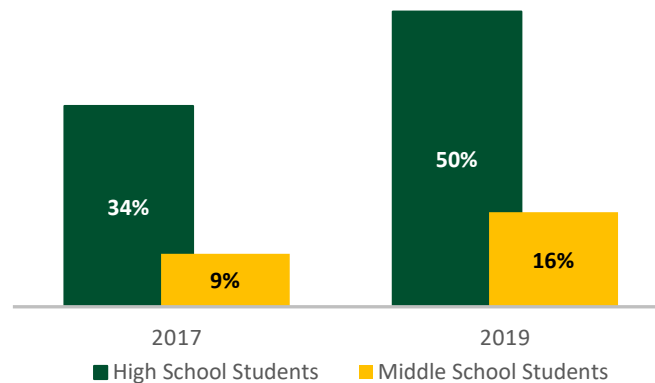
Note that youth are also vaping cannabis at high rates. Although it is beyond the scope of this Toolkit to deal with this issue, it is important to clarify what a patient is vaping (nicotine product, cannabis, or other).

Youth Vaping in Vermont

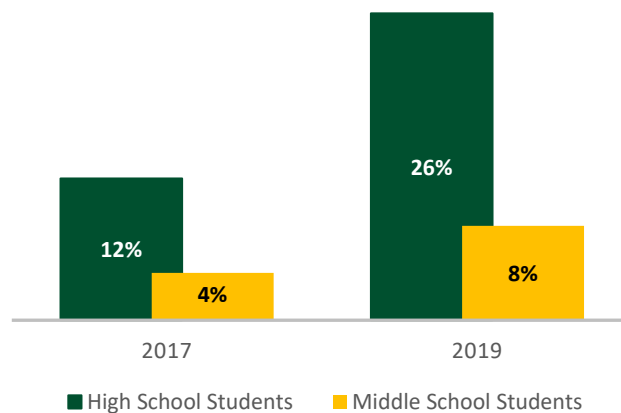
Evidence suggests that youth are using e-cigarettes at an alarming rate, even as combustible cigarette use has declined. While e-cigarettes and non-combustible tobacco products are not new, the rate at which youth use of these products has increased substantially over the past 3-5 years, most notably when JUUL brand entered the market in 2015. JUUL brand became popular with youth, in part due to the aggressive marketing campaigns targeted at youth through social media. With an emphasis on sweet flavors, youth may be unaware that products contain nicotine, or that the nicotine concentration is much higher than that which is found in traditional tobacco products. Nicotine salts in JUUL brand pods deliver nicotine in higher concentrations than more traditional type tobacco products. With high tech designs that are appealing to youth, the JUUL products are also easier to use and produce less “vape”, making them easier to conceal. These factors lay the foundation for increased use and addiction. In fact, youth who use electronic cigarettes (versus never users) are at a threefold higher risk of later daily cigarette smoking. Sadly, this recent rapid growth in youth vaping will lead to increased daily cigarette smoking in US young adults.

The [2019 Vermont Youth Risk Behavior Survey \(YRBS\)](#) indicates that current use of vaping products doubled from 2017-2019. In 2019, half of high school and 16% of middle school students ever tried an electronic vaping product, and 26% of high school and 8% of middle school students were current users (defined as having used in the past 30 days). More details can be found on the VDH website, including data by county.

Lifetime Use of Electronic Vapor Products (EVP)



Current Electronic Vapor Product (EVP) Use (past 30 days)



Source: 2019 Vermont Youth Risk Behavior Survey (YRBS). Retrieved from <https://www.healthvermont.gov/health-statistics-vital-records/population-health-surveys-data/youth-risk-behavior-survey-yrbs>

The current COVID 19 pandemic has created tremendous stress and disruptions to our youth. While we may not know the long-term impact on youth substance use, we do have some preliminary data. [Policy and Communication Evaluation \(PACE\) Vermont](#), has been collecting data quarterly on tobacco, alcohol, and substance use beliefs and behaviors from a self-selected sample of VT youth (aged 12-17) and young adults (aged 18-25). Data from the most recent wave of collection, compared to data collected before the pandemic, may help us understand some trends that signal that substance use, including vaping, has increased during the pandemic. These data continue to support that now, more than ever, screening youth for mental health symptoms and substance use in Vermont is key to understanding current trends and responding in real-time.

Definitions and Terms



Electronic vapor products (EVP) is the general term that refers to a variety of products including, electronic cigarettes, e-cigarettes, or e-cigs, e-hookahs, mods, pod mods, vapes, vape pens, tank systems, and electronic nicotine delivery systems. These [devices](#) are battery operated and work by heating liquids within the device, producing an aerosol, which a user inhales. Most liquids contain nicotine, along with a variety of [harmful substances](#) including heavy metals such as lead, volatile organic compounds and cancer causing chemicals. Some devices are also used to inhale cannabis or other dangerous compounds.

As vaping continues to grow in popularity, and as products and devices enter the market, new terms and slang increases. The Truth Initiative created this [list](#) of popular words, phrases, products and general language used to refer to vaping/e-cigarette use.

Adolescent Brain Development


Initiating nicotine use in the adolescent years is a big deal, even though many youth and even some parents may feel that it is a much “lesser evil” than other things adolescents could be doing. This is because of the changes taking place in their brains. Adolescents are often put off when told their brain is “underdeveloped,” and we need a better way to discuss with them and their parents exactly what is happening. Adolescence is a highly functional, adaptive period, and the brain is uniquely designed to do what needs to be done – move beyond the immediate family and get ready for the world! Adolescents are more influenced by their peers, and seek novelty in order to learn new things.

Between approximately ages 12 through 25, the adolescent brain goes through a total re-wiring “upgrade”. Brain pathways used the most become stronger, and others are “pruned” to make the brain faster and more sophisticated. The adolescent brain is also very sensitive to dopamine, which fires reward/pleasure circuits that aid in learning patterns and making decisions. Nicotine “hacks” those reward circuits by imitating a natural chemical that releases dopamine. Vaping is a quick and powerful way to release dopamine and feel pleasure, so many adolescents will continue to do it. The brain learns to expect reward/pleasure through an easy, quick way, rather than working harder for it (making and eating a tasty meal, learning a sport, working towards good grades). The brain pathways that support a quick and easy dopamine release are strengthened, and those behaviors are reinforced. Once the brain becomes dependent on nicotine, it will continue to seek other quick and easy forms of reward/pleasure. This leads to increased risk for drug addiction, including other forms of nicotine, such as combustible cigarettes, as well as other addictive substances or drugs. Other long-term impacts include impairments in attention capacity and working memory as well as increased risk for mood disorders and poor impulse control.

For sample language on addressing how nicotine effects the brain, see the S2BI script in [Appendix D](#).

The adolescent brain should be working on building strengths and resilience. You can read more about Adolescent Strengths [here](#). Checking in with youth around their strengths can be very helpful, especially if they are struggling with substance use. Reflecting on strengths is a good way to build rapport, and can be a starting point for discussing needed behavior changes.

Vermont State Statutes



16 V.S.A. § 140 states that it is prohibited to use tobacco and tobacco substitute products, including electronic vapor products, on public school grounds and school-sponsored events.

Act 108, Vermont’s Clean Indoor Air Act, prohibits the use of tobacco and tobacco substitutes in indoor places of public access. This includes private and independent schools that are not covered under 16 V.S.A. § 140.

7 V.S.A. § 1003 was amended in 2019 to change the legal age for buying and using cigarettes, electronic cigarettes and other tobacco products from 18 to 21 years of age.

V.S.A. § 1002 was amended in 2019 to prohibit anyone from selling electronic cigarettes, liquids containing nicotine, or other tobacco substitutes without a Vermont tobacco seller license. This effectively prohibits the online sales of such products.

32 V.S.A. § 7702 now subjects electronic cigarettes to the wholesale tax on “other tobacco products”.

We know that public health measures such as legislation are helpful in curbing tobacco use among youth. Probably the most influential legislation is the Tobacco 21 Law, (which is now also a federal law), as that will work to keep tobacco products out of the hands of high school aged youth (there are extremely few high school students who are 21 or older, and especially younger high school students are less likely to have friendship groups that include young adults over age 21). We know that many will find a way around these laws, but it’s a good baseline to work from.

We also know that the multitude of flavors that are available in vaping devices are one of the main reasons that youth start vaping. The FDA ban on flavors in cartridge-based vaping devices (such as JUUL) went into effect in 2019. This flavor ban does NOT include menthol and tobacco flavors, which are the only flavors that are currently available for JUUL. The ban also did not include disposable or refillable products, and dozens of these products are still available in hundreds of flavors. VT is currently working on a statewide ban of these other vape products in flavors, but there is pressure to exempt menthol from this ban.

SCREENING AND ASSESSMENT

When to Screen and Ask About Tobacco Use

When screening for other risky behaviors, ask about tobacco and nicotine use when you see youth in your practice. It is recommended that screening take place at least annually, and for those who screen positive or who have identified other high risk behaviors, more frequent screening is recommended. Since many adolescents, especially higher risk adolescents, do not come in for annual well visits, consider screening at any opportunity. Like other routine screening, use language and questions that youth will understand, keeping in mind that many youth may not think that e-cigarettes are tobacco products.

Once you have screened and determine that a youth is a current user of a nicotine product, it is important to ASSESS whether they have nicotine dependence (as defined in [DSM-5](#)), and to ASSESS whether there are other contributing factors that may have led to the behavior, such as anxiety or depression, that need to be treated along with the nicotine dependence.

Recommended Tools

If you are using the Car, Relax, Alone, Friends/Family, Forget Trouble (CRAFFT) screening tool, remember that it does not ask about tobacco products. We recommend using the [CRAFFT+N \(or CRAFFT 2.1+N\)](#), which does ask about nicotine/tobacco use.

Other tools that screen broadly for various substances including nicotine are Screening to Brief Intervention (S2BI) or Brief Screener for Tobacco, Alcohol and other Drugs (BSTAD). These two screening tools consist of frequency of use questions to categorize substance use by adolescent patients into different risk categories. They include accompanying information that assists clinicians in providing patient feedback and resources for follow-up. However, they are only available electronically.






For youth who answer positive to screening questions, considering following up with a more comprehensive tool to assess the severity of use, and the presence of nicotine dependence or nicotine addiction. There is currently no tool that easily assesses the extent of nicotine dependence/addiction in youth. However, we recommend using the [“Hooked on Nicotine Checklist” \(HONC\)](#) due to its sensitivity in detecting youth with even low levels of nicotine dependence, and its usefulness in demonstrating to youth their loss of autonomy due to nicotine dependence.

If your practice does not currently use a universal screening tool that asks about nicotine, or if you decide to explore tobacco use for a patient during a non-well visit encounter, consider asking these questions and administer the HONC if positive.

- Have you used any tobacco products in the last month, like cigarettes, chewing tobacco, or hookah? Have you used them in the last year?
- Have you used any vaping products in the last month, like e-cigarettes or JUUL? Have you used them in the last year?

This chart provides an overview of several tools that are available free of charge that can be used to assess nicotine use and/or the presence of nicotine dependence or nicotine addiction. We recommend initially using the CRAFFT 2.1 + N or S2BI for initial screening, which screen for various substance and risky behaviors, including nicotine use. Then, add one of the other tools, such as HONC, to assess nicotine dependence.

Selected Tools to Assess Nicotine Use & Dependence

CRAFFT 2.1+N	Screening to Brief Intervention (S2BI)	Hooked on Nicotine Checklist (HONC)	E-Cigarette Dependence Scale for Assessing Adolescent E-Cigarette Nicotine Dependence	Modified Version of the Fagerstrom Tolerance Questionnaire (mFTQ)
 <p>Self-reported, short assessment tool that screens for substance related risks in adolescents.</p>	 <p>Online tool that asks about frequency of past year substance use, and categorizes into one of three levels of substance use disorder risk.</p>	 <p>Self-reported, short assessment tool used to determine level of addiction to e-cigarettes.</p>	 <p>Four item, self-reported tool used to assess e-cigarette nicotine dependence.</p>	 <p>Self-reported tool that assesses the level of nicotine dependence in adolescents.</p>

Remember: substance use is often accompanied by anxiety or depression. Assessment of nicotine dependence/addiction should include screening for these problems also. Examples can be found in [Appendix A](#).

Nicotine Dependence and Nicotine Addiction

When working with youth, words matter and can have a tremendous impact on how or when they access resources and support. It is worth defining the difference between nicotine dependence and nicotine addiction, so youth understand the difference. However, there is some inconsistency in the terms used: DSM-5 uses the term “Tobacco Use Disorder”, and the ICD-10 codes are for “Nicotine dependence”. Be sure to use the correct terms in each context.

Nicotine is a highly addictive substance. Nicotine dependence is characterized by physical tolerance to nicotine and signs of withdrawal during periods of time without use. Some symptoms of withdrawal include craving for cigarettes, depressed mood, anxiety, irritability, difficulty concentrating, difficulty sleeping, and increased appetite. Another sign of nicotine dependence is the need to smoke or vape within an hour of waking up in the morning. Nicotine dependence can appear faster (within days) with casual e-cigarette use when compared to combustible cigarettes, partly due to the higher concentrations of nicotine delivered by e-cigarettes. Nicotine addiction usually accompanies or follows dependence and these words are sometimes used interchangeably; addiction highlights some of the maladaptive psychological behaviors such as continued use despite negative consequences, while dependence highlights the physical effects. Whether you choose to discuss “nicotine addiction” or “nicotine dependence” may depend on your patient’s particular clinical and social background. Many

youth are interested in and benefit from an explanation of the way nicotine creates dependence in their brains.

Once you have made the diagnosis of nicotine dependence (see [DSM-5 criteria](#)) be sure to add the code to the visit.

For sample language on addressing youth nicotine use, see the S2BI script in [Appendix D](#).

Data on adolescent cigarette smokers indicate:

- Dependence is more severe if tobacco use begins in adolescence
- If tobacco use begins during adolescence, the user is more likely to become dependent, use for more years, and use more heavily
- Adolescents are uniquely vulnerable to nicotine addiction because their brains are still developing
- Addiction/dependence is characterized by loss of autonomy: compulsive drug craving, seeking, and use that persists even in the face of negative consequences

COUNSELING IN PRIMARY CARE

Provide clear, personalized guidance about the negative health impacts of tobacco and nicotine. Consider messages that resonate with youth, including sports performance, health, or appearance. Other topics included EVALI, COVID, and financial impact of using these products. Remember that this becomes an on-going process: initially you will be helping a patient who is not ready to quit start exploring why they are vaping, and how it may be negatively affecting them. You may be able to encourage them to engage with one of the on-line quitting platforms, and even make a quit attempt. Youth who are more severely nicotine dependent and unable to quit on their own can benefit from Nicotine Replacement Therapy (NRT), which requires counseling and close follow-up. Some follow-up visits may be short, and appropriate as virtual visits. Youth with other identified problems such as anxiety or depression may find it more difficult to quit, and may benefit from additional counseling in your office or with a mental health professional.

If you spend a significant amount of time (greater than 3 minutes) during a visit providing counseling for someone who is nicotine dependent, remember to [code and bill](#) for it!

Evidence-Based Strategies

There are several ways to structure behavior change discussions with patients. Choose the one that you are most comfortable with. Consider using motivational interviewing or other evidence based methods for assessing readiness to change and ability to develop a quitting plan.

5 A's Model of Tobacco Smoking Behavior Change Counseling

ASK	Ask about tobacco and other nicotine product use at every visit and, given the wide variety of tobacco/nicotine products being used today, clarify the specific types of products that are being used (e.g., smoked, smokeless, e-cigarettes, hookah, etc.).
ADVISE	Advise all users to cease using tobacco and nicotine products clearly and directly; personalize the risks of tobacco and the benefits of quitting.
ASSESS	Assess level of dependence, willingness to make a quit attempt, and confidence in ability to quit or initiate treatment. Assess for co-morbid conditions such as anxiety and depression.
ASSIST	Assist in quitting by providing resources, treatment, and ongoing support, customized to level of addiction and willingness to quit. This may include counseling involving motivational enhancement therapy interventions and/or pharmacological treatment (nicotine replacement therapies). Reinforce self-efficacy by expressing confidence in the adolescent's ability to stop using tobacco products.
ARRANGE	Arrange short- and long-term follow-up contact and support for both those intending to attempt to quit and for those who are not yet ready to do so.

The 5 R's Motivational Counseling for Adolescents Not Ready to Make a Quit Attempt

RELEVANCE	Encourage the adolescent to talk about why quitting is personally important to him or her.
RISKS	Ask the adolescent to identify potential negative consequences of continued tobacco use, particularly more immediate risks that are most relevant to the individual, such as bad breath and smell, impaired sports performance, cough, dry hair and brittle nails, yellow teeth, premature aging, increased respiratory infections, and manipulation by the tobacco industry.
REWARDS	Ask the adolescent to identify potential benefits of quitting most relevant to him or her, such as saving money, improved appearance, performing better in physical activities, better smelling hair, breath, and clothing, and feeling better about herself or himself.
ROADBLOCKS	Ask the adolescent to identify barriers to quitting, such as withdrawal symptoms, being around other tobacco users, weight gain, lack of support, uncertainty regarding how to quit, and problem solve strategies to address the barriers.
REPETITION	Repeat each time the adolescent visits the clinical setting the importance of stopping tobacco use, reassuring him or her that most tobacco users make repeated quit attempts before being successful. Don't quit trying to quit!

Another evidence-based semi-structured way to talk with youth about behavior change is the [Brief Negotiated Interview](#). This uses Motivational Interview techniques to help youth think through their substance use and consider change. It is part of S2BI and SBIRT.

Engaging Youth in Developing a Follow-up Plan



Once identified, youth who are dependent on nicotine will need support and resources to successfully quit nicotine. For most youth, they will need an array of techniques and may benefit from [pharmacologic therapy](#). Working with youth to identify quitting goals and follow up care will support them along their journey.

Here are some [tips](#) from the American Academy of Pediatrics to help develop a plan for success and work with youth to anticipate challenges:



Middle and high school students often look up to slightly older youth and young adults and see them as credible sources of information on vaping. A mature youth or young adult who has had personal experience with vaping, and has quit (or is trying to quit) can be a powerful messenger. Click [here](#) to view a video of two Vermont college students who vape and are trying to quit. Decide if this is something to share with youth in your practice who are struggling with quitting. The platform “[My Life, My Quit](#)” has information about why quitting is important from a youth perspective.

[Here](#) are some resources from CDC for youth.

Engaging Parents



Parents and caregivers remain one of the biggest influencers for youth. Encourage parents of youth to engage, early and often, in conversations with youth about the dangers of tobacco use. Providing parents with information to help increase their own knowledge and awareness of tobacco and vape related products is key to effective discussions.

[Here](#) are some resources from the CDC for parents and caregivers. These can be reproduced as handouts or made into posters for your office. Many of the on-line platforms that encourage youth to quit vaping also have great information for parents (see [Cessation Support & Tools](#)).

SUPPORTING TREATMENT IN PRIMARY CARE

Privacy and Confidentiality

Ensuring privacy and confidentiality is an important factor to consider when working with youth. Youth are entitled to some confidentiality protections under state and federal laws (English, 2018). In some cases, youth can consent to their own care in specific situations or for specific services. Protecting confidentiality encourages youth to seek necessary care on a timely basis and to provide a complete health history when they do so. Despite work in this area, providers should be aware that challenges persist around protecting confidentiality. Namely, insurance EOBs and electronic health records may be potential sources for inadvertently disclosing information related to accessing confidential services. Providers must consider this when working with youth and engage in discussions around these issues to help ensure youth access services they need.

The resource, [Adolescent & Young Adult Health Care in Vermont: A Guide to Understanding Consent and Confidentiality Laws](#) provides a detailed review of Vermont specific confidentiality laws.

Cessation Support & Tools

Several modes of support are available, meeting youth where they are at along their quitting journey. We have highlighted our top 3 resources below, but feel free to explore and find others. We recommend that you go online and become familiar with these resources, so you can tailor your recommendation to a particular patient's personality and needs. Some youth may need more encouragement - consider visiting a website with your patient, and even encourage them to sign up right then for the type of help with quitting they think would work for them. And don't forget to follow-up with your patients after making this recommendation, to see if they actually made a quit attempt, and keep them motivated.



<https://802quits.org/>
<https://vt.mylifemyquit.org/index>

- Offers free tools and support for anyone aged 13 and older.
- 3 main options: online, phone, and in person (only available for those ≥ 18). These are more oriented towards adults who are cigarette smokers.
- **For youth who are vaping**, the more appealing option is [My Life, My Quit](#)
 - Free and confidential service for 13-17 year olds who want to quit any form of nicotine, including vaping. Available by phone or text.

- Access to Tobacco Cessation Coaches with specialized training in adolescent tobacco prevention.
- Five one-on-one coaching sessions: help develop a quit plan; identify triggers; practice refusal skills; receive ongoing support for changing behavior.
- Free Swag!
- **Participants can access free NRT** (patches, gum and lozenges) if they are ≥ 18 .
- **For Providers:** both the My Life, My Quit and the 802 QUITs websites have a separate section with a toolkit of Cessation Resources, including talking points to use with patients.



Text **VTVapeFree** or **DITCHJUUL** to **88709**

<https://truthinitiative.org/thisisquitting>

- Provides a text-messaging based platform that incorporates messages from other young people who have attempted to, or have successfully quit, e-cigarettes. Using “VTVapeFree” allows state-specific tracking but identical access to resources as “DITCHJUUL”.
- Provides both scheduled and instant support.
- Messages are tailored based on age and aimed at 13-24 year old patients.
- Shows the “real side of quitting, both the good and the bad.”
- Youth can enroll even if not yet ready to quit, and will receive messages that focus on building skills and confidence.
- Parent platform available to help support youth who are trying to quit.



National Cancer Institute's (NCI) Smokefree Teen

<https://teen.smokefree.gov/>

- The website is appealing to youth and easy to navigate. It is an evidence based online quit smoking aid that has a separate section specifically aimed at vaping and includes:
 - How to Quit Vaping
 - Your First Day without Vaping
 - Deal with Vape Cravings
 - Understand your Vaping Triggers
 - Vaping Addiction and Nicotine Withdrawal
 - Anxiety, Stress and Vaping
 - Depression and Vaping
- [Practice Quit](#) – walk youth through 1, 3, 5 days of not using
- [Vaping Quit Plan](#) – consider filling this out with the youth in your office.

Pharmacotherapy and Nicotine Replacement Therapy

The American Academy of Pediatrics recently provided guidance on [Nicotine Replacement Therapy \(NRT\) and Adolescent Patients](#). For youth who are struggling with quitting, NRT may be an important tool. The aforementioned document provides pediatricians with information to help make informed decisions about using NRT with youth who wish to quit smoking or vaping.

NRT (patches, gum, lozenges, nasal spray, and inhalers) are available over the counter. However, the cost may be prohibitive for some youth and families. Patches, gum, and lozenges are covered by prescription for patients insured by **Medicaid** (nasal spray and inhalers are generally less accepted by youth and young adults). Covered brands vary, and can be found on the DVHA [website](#) (click on Over-the-Counter (OTC) link - once in the document, press Control F and type in “Smoking” to get to the correct page). We recommend writing a generic prescription for the desired product. For more specific questions about NRT coverage by Medicaid, the physician or pharmacist can call Change Healthcare with any questions (844-679-5363, after hours 844-679-5366).

For any patient 18 or older, NRT can be obtained free of charge, mailed to their home, through 802 QUITs.

Nicotine Replacement Therapy (NRT)

- NRT addresses nicotine withdrawal symptoms by providing the user with a controlled amount of nicotine, thus helping reduce the urge to smoke or vape
- NRT is safe and effective in helping adult tobacco users quit, and works best when paired with behavioral counseling interventions
- NRT comes in several forms, including the nicotine patch, gum, lozenge, inhaler, and nasal spray
- NRT is safer than cigarettes, e-cigarettes, and other tobacco products because it delivers nicotine to the user without exposing them to the toxic chemicals and carcinogens in tobacco and e-cigarette products

Can Youth Use NRT?

- FDA has not approved NRT for youth under 18 years old
- There is no evidence that NRT is effective in helping youth quit successfully. Data are limited due to a lack of adequately-powered studies
- There is no evidence of serious harm from using NRT in adolescents
- Given the effectiveness of NRT for adults and the severe harms of tobacco dependence, AAP policy recommends that pediatricians consider recommending off-label NRT for youth who are moderately or severely addicted to nicotine and are motivated to quit
- Youth under 18 years old need a prescription to access all forms of NRT

For a summary of Mayo Clinic recommended quit-smoking products, please click [here](#).

OTHER QUITTING AND REFERRAL RESOURCES

During an office visit, you may provide youth with information about Quit Vaping resources that youth can use or share with friends and family.

Community

You are not alone! It is good to know what is happening in your region. The Health Department's statewide network of 12 local health offices work together with tobacco coalitions, hospitals, local businesses and other health organizations to support and connect the communities they serve to resources that help reduce tobacco use. Local health staff help ensure local tobacco control and prevention resources are promoted and accessible. To find out what is happening in your area, go to <https://www.healthvermont.gov/wellness/tobacco/state-and-community-partners> and click on "Find More Resources".

Check with your local middle schools and high schools (school nurses, guidance counselors, health educators, and/or principals) to find out what is happening as far as education, services, and school policy. If your practices chooses to offer enhanced services for nicotine dependent youth, be sure that all the school nurses in your area are aware, so they can refer students to you who have been identified as having problems at school.

Center for Behavioral Health Integration

Spectrum Youth and Family Services received a youth and young adult statewide grant from the Center for Substance Abuse treatment called Youth Screening Brief Intervention and Referral to Treatment (YSBIRT). The primary goal of the grant is to identify and help any 12- 25 year old Vermonters struggling with mental health needs or substance misuse in medical, school and community settings. To date, over 5,000 young adults have received services. You can join this collaboration to increase access to the grant funded youth based digital screening tools and innovative interventions. The goal is to offer programs and youth innovative digital screening and smartphone based resources that are easy to use. Examples of smartphone based resources include [VTVapeFree](#) and [DynamiCare](#). For additional information, please visit [C4BHI.com](#).

Follow-up Care

Support youth by checking in regularly to offer support or guidance on next steps. Consider utilizing your electronic health record portal, texting, or a simple phone call, keeping in mind privacy and confidentiality concerns. Quitting can be an incredibly difficult process and often is met with relapse. Reassure youth that this is common and support them with additional resources or referrals to other healthcare professionals as needed.

CODING AND PAYMENT

Time spent discussing tobacco and nicotine addiction may be eligible for compensation. For up to date information on coding for all nicotine products, see the [AAP Tobacco Coding Fact Sheet](#).

Coding Tips for Diagnosing and Treating Nicotine Dependence Secondary to Vaping

This is a simplified list of codes to use for diagnosing and treating nicotine dependence in adolescents and young adults secondary to vaping. For a more comprehensive list, including case examples, and coding for tobacco exposure due to parent/caregiver use, refer to the AAP:

[Tobacco/E-Cigarettes Use/Exposure Coding Fact Sheet for Primary Care Pediatricians](#)

These are suggestions. We recommend that you discuss these codes with your own [coding and billing](#) experts before using them, in case they would recommend an alternate approach.

ICD-10-CM Codes:

- F17.290 - Nicotine dependence, other tobacco products, uncomplicated (this includes Electronic nicotine delivery systems (ENDS), e-cigarettes, vaping)
- F17.291 – Nicotine dependence, other tobacco products, in remission
- F17.293 – Nicotine dependence, other tobacco products, with withdrawal
- Z71.6 - Tobacco abuse counseling

Physician Evaluation & Management (E&M) Codes:

- 99406: Smoking and tobacco use cessation counseling, intermediate, 3-10 minutes
- 99407: Intensive, greater than 10 minutes

There are 3 types of encounters where the identification of nicotine dependence secondary to vaping, along with counseling, and possible prescribing of NRT would commonly happen:

- **Health Supervision Visit**, when screening for substance use routinely happens.
 - Code the health supervision visit based on age (e.g., 99394 for ages 12-17; and 99395 for age 18 and over, for established patient). If nicotine dependence is identified, use Z00.121 (Encounter for routine health examination with abnormal findings) and the appropriate F code
 - Code an additional 99406/99407 based on the time spent if specific counseling was performed (use the appropriate F code, along with Z71.6). Make sure to include a time statement for the 99406/07 codes
- **Acute Visit** (such as a respiratory problem, a mental health visit for anxiety or depression, or any visit with an adolescent who hasn't been screened in the recent past) when the patient is

also screened for substance/tobacco use and counseled about quitting vaping/prescribed NRT if nicotine dependent

- Code the office visit based on time or elements for any problems managed during the visit (e.g., 99213: low to moderate severity problem, 15 min; 99214: moderate severity, 25 min; etc.), along with appropriate diagnosis code
 - Code an additional 99406/99407 based on the time spent on the tobacco abuse counseling. Use the appropriate F code, along with Z71.6. Make sure to include a separate time statement for the 99406/07 codes.
- **Problem Office Visit** specifically devoted to more extensive counseling, NRT prescription, or follow up for a patient being followed for nicotine dependence.
 - Code for time (99213, 99214, etc.), use the appropriate F code, along with Z71.6. Make sure to include a separate time statement.

APPENDIX A

Tools for Screening and Assessment

Car, Relax, Alone, Friends/Family, Forget, Trouble (CRAFTT)

CRAFTT+N 2.1 Provider Manual (version: September 30, 2020)

Other considerations: Number of days in the past 12 months.

For detailed steps to using CRAFTT, please click [here](#) or review the provider manual.

The CRAFTT+N Questionnaire

To be completed by patient

Please answer all questions **honestly**; your answers will be kept **confidential**.

During the PAST 12 MONTHS, on how many days did you:

1. Drink more than a few sips of beer, wine, or any drink containing **alcohol**? Put "0" if none. # of days
2. Use any **marijuana** (cannabis, weed, oil, wax, or hash by smoking, vaping, dabbing, or in edibles) or **"synthetic marijuana"** (like "K2," "Spice")? Put "0" if none. # of days
3. Use **anything else to get high** (like other illegal drugs, pills, prescription or over-the-counter medications, and things that you sniff, huff, vape, or inject)? Put "0" if none. # of days
4. Use a **vaping device*** containing **nicotine and/or flavors**, or use any **tobacco products†**? Put "0" if none. # of days

*Such as e-cigs, mods, pod devices like JUUL, disposable vapes like Puff Bar, vape pens, or e-hookahs. †Cigarettes, cigars, cigarillos, hookahs, chewing tobacco, snuff, snus, dissolvables, or nicotine pouches.

READ THESE INSTRUCTIONS

- If you put "0" in ALL 4 questions, STOP.
- If you put "1" or more in 1 or 2 questions, ask 1 question in Part B below.
- If you put "1" or more in 3 or 4 questions, ask all 6 questions in Part B below.

The CRAFTT+N Interview

To be verbally administered by the clinician

Begin: "I'm going to ask you a few questions that I ask all my patients. Please be honest. I will keep your answers confidential."

Part A

During the PAST 12 MONTHS, on how many days did you:

1. Drink more than a few sips of beer, wine, or any drink containing **alcohol**? Say "0" if none. # of days
2. Use any **marijuana** (cannabis, weed, oil, wax, or hash by smoking, vaping, dabbing, or in edibles) or **"synthetic marijuana"** (like "K2," "Spice")? Say "0" if none. # of days
3. Use **anything else to get high** (like other illegal drugs, pills, prescription or over-the-counter medications, and things that you sniff, huff, vape, or inject)? Say "0" if none. # of days
4. Use a **vaping device*** containing **nicotine or flavors**, or use any **tobacco products†**? Say "0" if none. # of days

*Such as e-cigs, mods, pod devices like JUUL, disposable vapes like Puff Bar, vape pens, or e-hookahs. †Cigarettes, cigars, cigarillos, hookahs, chewing tobacco, snuff, snus, dissolvables, or nicotine pouches.

If the patient answered...

"0" for all questions in Part A

↓

Ask 1st question only in Part B below, then STOP

"1" or more for Q. 1, 2, or 3

↓

Ask all 6 questions in Part B below

"1" or more for Q. 4

↓

Ask all 10 questions in Part C on next page

Teen health screen (CRAFT 2.1+N)

We ask all our teen patients about alcohol, drugs, and mood because these factors can affect your health. Please ask your doctor if you have any questions. Your answers on this form will remain confidential.

During the PAST 12 months , on how many days did you:	Number of days
1. Drink more than a few sips of beer, wine, or any drink containing alcohol ? Put “0” if none.	
2. Use any marijuana (weed, oil, or hash by smoking, vaping, or in food) or “synthetic marijuana” (like “K2,” “Spice”)? Put “0” if none.	
3. Use anything else to get high (like other illegal drugs, prescription or over-the-counter medications, and things that you sniff, huff, or vape)? Put “0” if none.	
4. Use any tobacco or nicotine products (for example, cigarettes, e-cigarettes, hookahs or smokeless tobacco)? Say “0” if none.	

If you put “0” in **ALL** of the boxes above, ANSWER QUESTION 5, THEN STOP.

If you put “1” or **higher** in **ANY** of the boxes above, ANSWER QUESTIONS 5-10.

	No	Yes
5. Have you ever ridden in a car driven by someone (including yourself) who was “high” or had been using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
6. Do you ever use alcohol or drugs to relax, feel better about yourself, or fit in?	<input type="checkbox"/>	<input type="checkbox"/>
7. Do you ever use alcohol or drugs while you are by yourself, or alone?	<input type="checkbox"/>	<input type="checkbox"/>
8. Do you ever forget things you did while using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>
9. Do your family or friends ever tell you that you should cut down on your drinking or drug use?	<input type="checkbox"/>	<input type="checkbox"/>
10. Have you ever gotten into trouble while you were using alcohol or drugs?	<input type="checkbox"/>	<input type="checkbox"/>

NOTICE TO CLINIC STAFF AND MEDICAL RECORDS:

The information on this page is protected by special federal confidentiality rules (42 CFR Part 2), which prohibit disclosure of this information unless authorized by specific written consent. A general authorization for release of medical information is NOT sufficient.

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For more information, contact crafft@childrens.harvard.edu

PHQ-9 Modified for Teens:

How often have you been bothered by each of the following symptoms during the past TWO WEEKS ?	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Feeling down, depressed, irritable, or hopeless?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If you answered “Not at all” to both questions above, you are finished answering questions. Otherwise, please continue answering all the questions below.

3. Trouble falling asleep, staying asleep, or sleeping too much?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Feeling tired, or having little energy?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Poor appetite, weight loss, or overeating?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Feeling bad about yourself – or feeling that you are a failure, or that you have let yourself or your family down?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Trouble concentrating on things like school work, reading, or watching TV?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Moving or speaking so slowly that other people could have noticed? Or the opposite – being so fidgety or restless that you were moving around a lot more than usual?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
9. Thoughts that you would be better off dead, or of hurting yourself in some way?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	0	1	2	3

In the PAST YEAR , have you felt depressed or sad most days, even if you felt okay sometimes?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
<p>If you are experiencing any of the problems on this form, how difficult have these problems made it for you to do your work, take care of things at home or get along with other people?</p> <p><input type="checkbox"/> Not difficult at all <input type="checkbox"/> Somewhat difficult <input type="checkbox"/> Very difficult <input type="checkbox"/> Extremely difficult</p>		
Has there been a time in the past month when you have had serious thoughts about ending your life?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
Have you EVER , in your WHOLE LIFE , tried to kill yourself or made a suicide attempt?	<input type="checkbox"/> Yes	<input type="checkbox"/> No

For the health professional:

Interpreting the CRAFFT 2.1+N*

Any “Yes” responses for questions 5-10 are given one point.

Answers	Risk	Action
“No” to questions 1-4	No risk	Positive reinforcement
“Yes” to Car question	Riding risk	Discuss alternatives to riding with impaired drivers (Contract for Life)
CRAFFT score = 0	Low risk	Brief education
CRAFFT score = 1	Medium risk	Brief intervention
CRAFFT score ≥ 2	High risk	Brief intervention (offer options that include treatment)

Interpreting the PHQ-9 Modified for Teens**

Answers to questions #1-9 each receive 0-3 points (point values found at the bottom of each answer column).

Points are added for a total score.

Score	Depression severity	Proposed action
0 - 4	None - minimal	None.
5 - 9	Mild	Watchful waiting, repeat depression screening at follow-up.
10 - 14	Moderate	Create treatment plan, consider counseling and/or pharmacotherapy or another follow-up visit.
15 - 19	Moderately severe	Active treatment with pharmacotherapy and/or psychotherapy.
20 - 27	Severe	Immediate initiation of pharmacotherapy and if severe impairment or poor response to therapy, expedited referral to mental health specialist.
“Yes” answer on any suicide question		Immediate follow up

* Mitchell SG, Kelly SM, Gryczynski J, Myers CP, O’Grady KE, Kirk AS, & Schwartz RP. (2014). The CRAFFT cut-points and DSM-5 criteria for alcohol and other drugs: a reevaluation and reexamination. *Substance Abuse*, 35(4), 376–80.

**Richardson L, McCauley E, Grossman DC, McCarty CA, Richards J, Russo JE, Rockhill C, Katon W. Evaluation of the Patient Health Questionnaire-9 Item for Detecting Major Depression Among Adolescents. *Pediatrics*. 2010;126(6).

Generalized Anxiety Disorder 7-item (GAD-7) scale

Over the last 2 weeks, how often have you been bothered by the following problems?	Not at all sure	Several days	Over half the days	Nearly every day
1. Feeling nervous, anxious, or on edge	0	1	2	3
2. Not being able to stop or control worrying	0	1	2	3
3. Worrying too much about different things	0	1	2	3
4. Trouble relaxing	0	1	2	3
5. Being so restless that it's hard to sit still	0	1	2	3
6. Becoming easily annoyed or irritable	0	1	2	3
7. Feeling afraid as if something awful might happen	0	1	2	3
<i>Add the score for each column</i>	+	+	+	
Total Score (<i>add your column scores</i>) =				

If you checked off any problems, how difficult have these made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all _____

Somewhat difficult _____

Very difficult _____

Extremely difficult _____

Source: Spitzer RL, Kroenke K, Williams JBW, Lowe B. A brief measure for assessing generalized anxiety disorder. *Arch Intern Med.* 2006;166:1092-1097.

GAD-7 Scoring Instructions

The GAD-7 score is calculated by assigning scores of 0, 1, 2, and 3, to the response categories of 'not at all', 'several days', 'more than half the days', and 'nearly every day', respectively, and adding together the scores for the seven questions.

Scores of 5, 10, and 15 are taken as the cut-off points for mild, moderate and severe anxiety, respectively. When used as a screening tool, further evaluation is recommended when the score is 10 or greater.

Using the threshold score of 10, the GAD-7 has a sensitivity of 89% and a specificity of 82% for GAD. It is moderately good at screening three other common anxiety disorders - panic disorder (sensitivity 74%, specificity 81%), social anxiety disorder (sensitivity 72%, specificity 80%) and post-traumatic stress disorder (sensitivity 66%, specificity 81%)

Score	Risk Level	Treatment Plan
0-4	Minimal	None
5-9	Low	Assess - F/U
10-14	Moderate	Immediate - F/U
15-21	High	Immediate - Refer

Screening to Brief Intervention (SB2I)

Other considerations: Online tool, asks people to classify past YEAR use (e.g. number of days). Does not currently specify e-cigarette use (tobacco products).

Screening to Brief Intervention (S2BI)

This screening tool consists of frequency of use questions to categorize substance use by adolescent patients into different risk categories. The accompanying resources assist clinicians in providing patient feedback and resources for follow-up.

Screening Tool Cutoffs and Scoring Thresholds: ▼

Intended use: This screening tool is meant to be used under a medical provider's supervision and is not intended to guide self-assessment or take the place of a healthcare provider's clinical judgment.

This tool may be administered by either the patient or the clinician. Please indicate the mode of administration:

I AM THE PATIENT

I AM THE CLINICIAN



National Institutes of Health – Turning Discovery into Health

Link to SB2I: <https://www.drugabuse.gov/ast/s2bi/#/>

Hooked on Nicotine Checklist (HONC)

Other considerations: Useful in demonstrating to youth loss of control, autonomy. Useful for shared decision making. In a study of adult smokers, was more effective than Fagerstrom in identifying low levels of dependence (Wellman 2006). Those who used NRT or pharmacotherapy had mean HONC score of 8.

The Hooked on Nicotine Checklist

	Yes	No
1. Have you ever tried to stop vaping, but couldn't?		
2. Do you vape now because it is really hard to quit?		
3. Have you ever felt like you were addicted to vaping?		
4. Do you ever have strong cravings to vape?		
5. Have you ever felt like you really needed to vape?		
6. Is it hard to keep from vaping in places where you are not supposed to, like school?		
<i>When you tried to stop vaping...(or, when you haven't vaped for awhile...)</i>		
7. Did you find it hard to concentrate because you couldn't vape?		
8. Did you feel more irritable because you couldn't vape?		
9. Did you feel a strong need or urge to vape?		
10. Did you feel nervous, restless or anxious because you couldn't vape?		

Scoring the HONC

The HONC is scored by counting the number of YES responses.

Dichotomous Scoring- The HONC as an indicator of diminished autonomy.

Individuals who score a zero on the HONC by answering NO to all ten questions enjoy full autonomy over their use of tobacco.

Because each of the ten symptoms measured by the HONC has face validity as an indicator of diminished autonomy, a smoker has lost full autonomy if any symptom is endorsed.

In schools and clinics, smokers who have scores above zero can be told that they are already hooked. Many youths become hooked before they even consider themselves to be smokers, because they don't smoke every day.

In research, a dichotomous scoring is helpful when the HONC is used to predict the trajectory of smoking.

Continuous Scoring- The HONC as a measure of severity of diminished autonomy

The number of symptoms a person endorses serves as a measure of the extent to which autonomy has been lost.

Some researchers prefer to provide multiple response options for questionnaire items, e.g., never, sometimes, most of the time, always. In certain situations, this can improve the statistical properties of a survey. When this has been done with the HONC, its performance was not improved (O'Loughlin et al., 2002). Having more response options complicates the scoring because the total score does not coincide with the number of individual symptoms. Therefore we recommend the Yes/No response format.

Researchers who wish to measure frequency or severity of symptoms may do so by adding to the yes/no format additional questions about any item endorsed by a smoker. Here is an example:

Have you ever felt like you were addicted to tobacco? A smoker who checked "yes" would then respond to:

How often have you felt addicted? *Rarely, Occasionally, Often, Very Often*

On a scale from 1 (*hardly at all*) to 10 (*extremely*), how addicted have you felt?

E-Cigarette Dependence Scale for Assessing Adolescent E-Cigarette Nicotine Dependence

Other considerations: 4 questions, more positive suggests higher level of dependence.

Modified from the PROMIS Item Bank v1.0 – Smoking: Nicotine Dependence for All Smokers and adapted for adolescent e-cigarette use. This measure is used to determine an adolescent’s level of dependence on e-cigarettes.

E-Cigarette Dependence Scale

Instructions: Please respond to each question marking one box per row.	(0) Never	(1) Rarely	(2) Sometimes	(3) Often	(4) Almost Always
I find myself reaching for my e-cigarette without thinking about it.					
I drop everything to go out and get e-cigarettes or e-juice.					
I vape more before going into a situation where vaping is not allowed.					
When I haven't been able to vape for a few hours, the craving gets intolerable.					

To score the measure, take the mean of the item scores.

Modified Version of the Fagerstrom Tolerance Questionnaire (mFTQ)

Other considerations: 4 questions, more positive suggests higher level of dependence.

Modified Version of the Fagerstrom Tolerance Questionnaire (mFTQ)

(Scoring guidelines in parentheses; remove these from instrument prior to use).

1. How many cigarettes a day do you smoke?
 - a. Over 26 cigarettes a day (2)
 - b. About 16-25 cigarettes a day (1)
 - c. About 1-15 cigarettes a day (0)
 - d. Less than 1 a day (0)
2. Do you inhale?
 - a. Always (2)
 - b. Quite often (1)
 - c. Seldom (1)
 - d. Never (0)
3. How soon after you wake up do you smoke your first cigarette?
 - a. Within the first 30 minutes (1)
 - b. More than 30 minutes after waking but before noon (0)
 - c. In the afternoon (0)
 - d. In the evening (0)
4. Which cigarette would you hate to give up?
 - a. First cigarette in the morning (1)
 - b. Any other cigarette before noon (0)
 - c. Any other cigarette afternoon (0)
 - d. Any other cigarette in the evening (0)
5. Do you find it difficult to refrain from smoking in places where it is forbidden (church, library, movies, etc.)?
 - a. Yes, very difficult (1)
 - b. Yes, somewhat difficult (1)
 - c. No, not usually difficult (0)
 - d. No, not at all difficult (0)
6. Do you smoke if you are so ill that you are in bed most of the day?
 - a. Yes, always (1)
 - b. Yes, quite often (1)
 - c. No, not usually (0)
 - d. No, never (0)
7. Do you smoke more during the first 2 hours than during the rest of the day?
 - a. Yes (1)
 - b. No (1)

Diagnostic and Statistical Manual, Fifth Edition (DSM-5)

Nicotine addiction is now referred to as tobacco use disorder in the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-5)*.

There are 11 possible criteria, of which at least 2 must be present in the last 12 months:

1. Tobacco taken in larger amounts or over longer periods of time
2. Persistent desire or unsuccessful efforts to cut down or control use
3. A great deal of time is spent on activities necessary to obtain or use tobacco
4. Craving or a strong desire or urge to use tobacco
5. Recurrent tobacco use resulting in a failure to fulfill major role obligations at work, school, or home
6. Continued tobacco use despite having persistent or recurrent social or interpersonal problems caused or exacerbated by effects of tobacco (e.g., arguments with others about tobacco use)
7. Important social, occupational, or recreational activities are given up or reduced because of tobacco use
8. Recurrent tobacco use in situations in which it is physically hazardous (e.g., smoking in bed)
9. Tobacco use is continued despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by tobacco
10. Tolerance, as defined by either the need for markedly increased amounts of tobacco to achieve the desired effect or a markedly diminished effect with continued use of the same amount of tobacco.
11. Withdrawal, as manifested by either the characteristic withdrawal syndrome or the use of tobacco to relieve or avoid withdrawal symptoms.

Symptoms of withdrawal include difficulty concentrating, nervousness, headaches, weight gain due to increased appetite, decreased heart rate, insomnia, irritability, and depression. These symptoms peak in the first few days but eventually disappear within a month.

Symptoms of nicotine toxicity, otherwise known as acute nicotine poisoning, include nausea, vomiting, salivation, pallor, abdominal pain, diarrhea, and cold sweat.

A previous history of depression, use of antidepressants in the past, and onset of depression during previous attempts to quit smoking should be obtained.

The time to first cigarette and total cigarettes per day are the 2 strongest predictors of nicotine addiction.

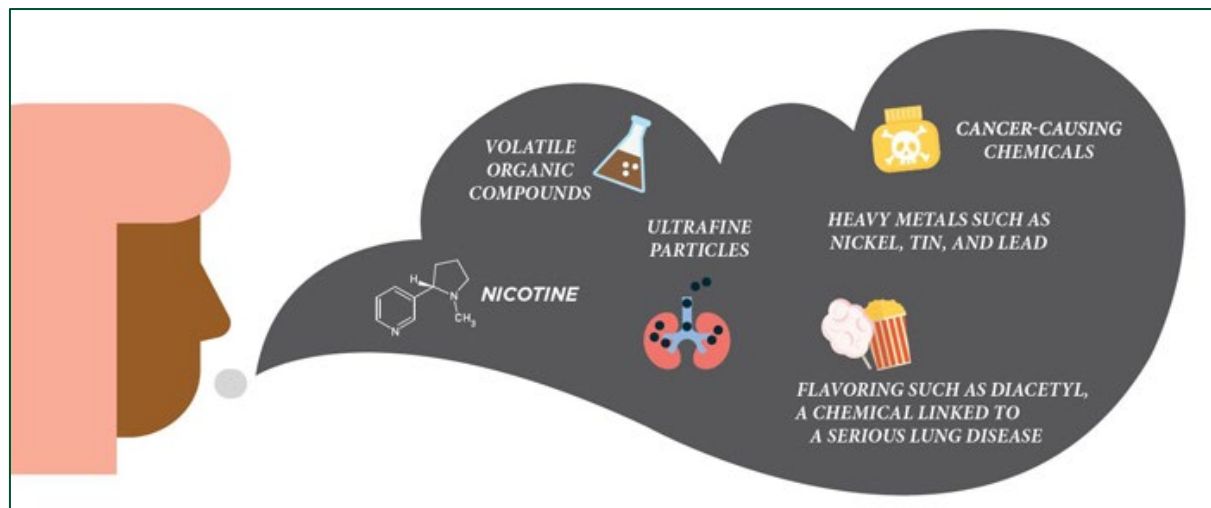
APPENDIX B

CDC Resources

Types of e-cigarettes



E-cigarette Aerosol



Fact Sheets (CDC)

Below are some CDC fact sheets we found to be helpful. Please click [here](#) for additional CDC resources.

E-cigarettes and Youth: What Health Care Providers Need to Know



WHAT ARE E-CIGARETTES?

Electronic cigarettes (e-cigarettes) are battery-powered devices that deliver nicotine, flavorings, and other ingredients to the user. Using e-cigarettes is sometimes called “vaping.” E-cigarettes do not create harmless “water vapor” – they create an aerosol that can contain harmful chemicals.

HOW MANY YOUTH ARE USING E-CIGARETTES?

- E-cigarettes have been the most commonly used tobacco product among U.S. youth since 2014.
- In 2020, CDC and FDA data showed that at least 3.6 million U.S. youth, including about 1 in 5 high school students and about 1 in 20 middle school students, used e-cigarettes in the past 30 days.

WHAT ARE THE RISKS FOR YOUTH?

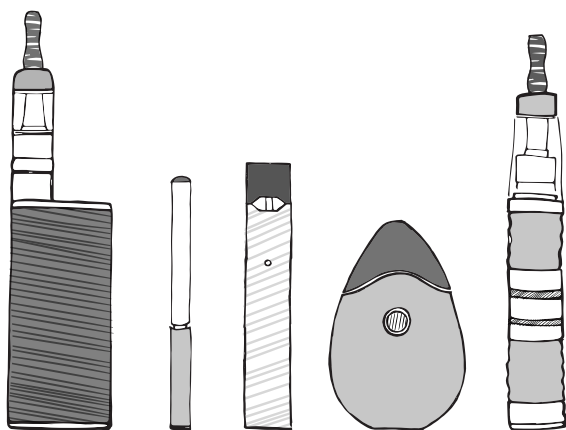
- Most e-cigarettes contain nicotine, which is highly addictive. Nicotine exposure during adolescence can:
 - » Harm brain development, which continues until about age 25.
 - » Impact learning, memory, and attention.
 - » Increase risk for future addiction to other drugs.
- Young people who use e-cigarettes may be more likely to go on to use regular cigarettes.
- Many e-cigarettes come in kid-friendly flavors – including mango, fruit, and crème – which make e-cigarettes more appealing to young people.
- E-cigarette aerosol is not harmless. It can contain harmful substances, including:
 - » Nicotine
 - » Cancer-causing chemicals
 - » Volatile organic compounds
 - » Ultrafine particles
 - » Flavorings that have been linked to lung disease
 - » Heavy metals such as nickel, tin, and lead





WHAT DO E-CIGARETTES LOOK LIKE?

- E-cigarettes come in many shapes and sizes. Some look like regular cigarettes, cigars, or pipes. Larger e-cigarettes such as tank systems – or “mods” – do not look like other tobacco products.
- Some e-cigarettes look like other items commonly used by youth, such as pens and other everyday items. New e-cigarettes shaped like USB flash drives are popular among youth, including JUUL and the PAX Era, which looks like JUUL and delivers marijuana.



WHAT CAN YOU DO AS A HEALTH CARE PROVIDER?

As a health care provider, you have an important role in addressing this epidemic among youth.

- Ask about e-cigarettes and vaping – including discreet devices such as JUUL – when screening patients for tobacco product use.
- Educate patients about the risks of tobacco product use, including e-cigarettes for young people, and counsel youth and young adults to quit.
- Learn about the different shapes and types of e-cigarettes and the risks of e-cigarette use for young people at [CDC.gov/e-cigarettes](https://www.cdc.gov/e-cigarettes).

ABOUT USB FLASH DRIVE-SHAPED E-CIGARETTES

As a health care provider, you may have heard about the use of USB flash drive-shaped e-cigarettes, including JUUL (pronounced “jewel”). JUUL is the top-selling e-cigarette brand in the United States.

JUUL is being used by students in schools, including in classrooms and bathrooms. JUUL’s nicotine liquid refills are called “pods.” According to the manufacturer, a single JUUL pod can contain as much nicotine as a pack of 20 regular cigarettes.

JUUL delivers nicotine in a new form called “nicotine salts,” which can make it less harsh on the throat and easier to use by youth. JUUL also comes in flavors that can appeal to youth.



E-cigarettes and Youth: What Parents Need to Know



WHAT ARE E-CIGARETTES?

Electronic cigarettes (e-cigarettes) are battery-powered devices that deliver nicotine, flavorings, and other ingredients to the user. Using e-cigarettes is sometimes called “vaping.” E-cigarettes do not create harmless “water vapor” – they create an aerosol that can contain harmful chemicals.

HOW MANY YOUTH ARE USING E-CIGARETTES?

- E-cigarettes have been the most commonly used tobacco product among U.S. youth since 2014.
- In 2018, CDC and FDA data showed that more than 3.6 million U.S. youth, including 1 in 5 high school students and 1 in 20 middle school students, were past-month e-cigarette users.
- During 2017 and 2018, e-cigarette use skyrocketed among youth, leading the U.S. Surgeon General to call the use of these products among youth an epidemic in the United States.

WHAT ARE THE RISKS FOR YOUTH?

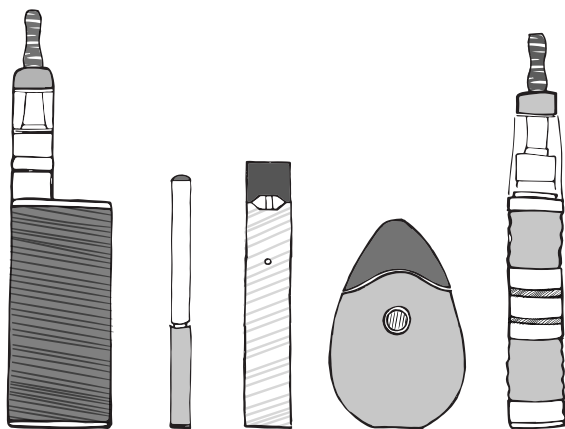
- Most e-cigarettes contain nicotine, which is highly addictive. Nicotine exposure during adolescence can:
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 - » Impact learning, memory, and attention.
 - » Increase risk for future addiction to other drugs.
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 - » Cancer-causing chemicals
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- Some e-cigarettes look like other items commonly used by youth, such as pens and other everyday items. New e-cigarettes shaped like USB flash drives are popular among youth, including JUUL and the PAX Era, which looks like JUUL and delivers marijuana.



WHAT CAN YOU DO AS A PARENT OR CAREGIVER?

As a parent or caregiver, you have an important role in protecting children from e-cigarettes.

- » Talk to your child or teen about why e-cigarettes are harmful for them. It's never too late.
- » Set a good example by being tobacco-free.
- » Learn about the different shapes and types of e-cigarettes and the risks of e-cigarette use for young people at www.CDC.gov/e-cigarettes.

ABOUT USB FLASH DRIVE-SHAPED E-CIGARETTES

As a parent or caregiver, you may have heard about the use of USB flash drive-shaped e-cigarettes, including JUUL (pronounced “jewel”). JUUL is the top-selling e-cigarette brand in the United States.

JUUL is being used by students in schools, including in classrooms and bathrooms. JUUL's nicotine liquid refills are called “pods.” According to the manufacturer, a single JUUL pod can contain as much nicotine as a pack of 20 regular cigarettes.

JUUL delivers nicotine in a new form called “nicotine salts,” which can make it less harsh on the throat and easier to use by youth. JUUL also comes in flavors that can appeal to youth.





Talk with Your Teen About E-cigarettes: A Tip Sheet for Parents



BEFORE THE TALK

Know the facts.

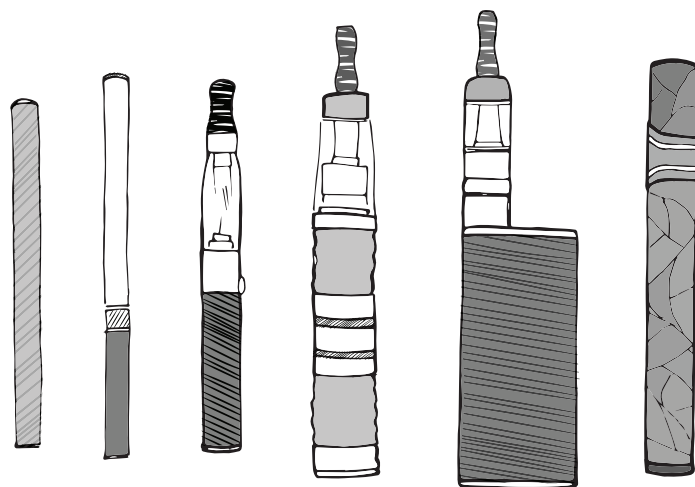
- Get credible information about e-cigarettes and young people at E-cigarettes.SurgeonGeneral.gov.

Be patient and ready to listen.

- Avoid criticism and encourage an open dialogue.
- Remember, your goal is to have a conversation, not to deliver a lecture.
- It's OK for your conversation to take place over time, in bits and pieces.

Set a positive example by being tobacco-free.

- If you use tobacco, it's never too late to quit. For free help, visit smokefree.gov or call **1-800-QUIT-NOW**.



START THE CONVERSATION

Find the right moment.

- A more natural discussion will increase the likelihood that your teen will listen. Rather than saying “we need to talk,” you might ask your teen what he or she thinks about a situation you witness together, such as:
 - » Seeing someone use an e-cigarette in person or in a video.
 - » Passing an e-cigarette shop when you are walking or driving.
 - » Seeing an e-cigarette advertisement in a store or magazine or on the internet.



Ask for support.

- Not sure where to begin? Ask your health care provider to talk to your teen about the risks of e-cigarettes.
- You might also suggest that your teen talk with other trusted adults, such as relatives, teachers, faith leaders, coaches, or counselors whom you know are aware of the risks of e-cigarettes.
- These supportive adults can help reinforce your message as a parent.

ANSWER THEIR QUESTIONS

Here are some questions and comments you might get from your teen about e-cigarettes and some ideas about how you can answer them.

Why don't you want me to use e-cigarettes?

- Science shows that e-cigarettes contain ingredients that are addictive and could harm different parts of your body.
- Right now, your brain is still developing, which means you are more vulnerable to addiction. Many e-cigarettes contain nicotine, and using nicotine can change your brain to make you crave more nicotine. It can also affect your memory and concentration. I don't want that for you!
- E-cigarettes contain chemicals that are harmful. When people use e-cigarettes, they breathe in tiny particles that can harm their lungs.

- The cloud that people exhale from e-cigarettes can expose you to chemicals that are not safe to breathe.

What's the big deal about nicotine?

- Your brain is still developing until about age 25. The Surgeon General reported that nicotine is addictive and can harm your brain development.
- Using nicotine at your age may make it harder for you to concentrate, learn, or control your impulses.
- Nicotine can even train your brain to be more easily addicted to other drugs like meth and cocaine.

- I don't say this to scare you, but I want you to have the facts because nothing is more important to me than your health and safety.

Aren't e-cigarettes safer than conventional cigarettes?

- Because your brain is still developing, scientific studies show that it isn't safe for you to use any tobacco product that contains nicotine, including e-cigarettes.
- Whether you get nicotine from an e-cigarette or a cigarette, it's still risky.
- Some e-cigarette batteries have even exploded and hurt people.

I thought e-cigarettes didn't have nicotine — just water and flavoring?

- I used to think that too. But many e-cigarettes have nicotine. There are also other chemicals in them that can be harmful.
- Let's look at the Surgeon General's website on e-cigarettes (E-cigarettes.SurgeonGeneral.gov) together so you can see for yourself.

I (or my friends) have tried e-cigarettes and it was no big deal.

- I appreciate your honesty. In the future, I hope you (or your friends) will stay away from e-cigarettes and other tobacco products, including cigarettes. Science shows that e-cigarettes contain ingredients that are addictive and could harm different parts of your body.
- Next time we go to the doctor, let's ask about the risks of nicotine, e-cigarettes, and other tobacco products.

You used tobacco, so why shouldn't I?

- If I could live my life over again, I never would have started smoking. I learned that people who smoke cigarettes are much more likely to develop, and die from, certain diseases than people who don't smoke. This was really scary, so I quit smoking.
- Quitting was really hard, and I don't want you to go through that. The best thing is to not start at all.



KEEP THE CONVERSATION GOING

Many parents find that texting is a great way to reach their teens. Here are some suggestions for text messages that might catch your teen's attention. And, you can easily share pages of the website (E-cigarettes.SurgeonGeneral.gov) with your teen.



Share this page

Look for this symbol, click it, type in the message you want or use the message provided, and share with your teen via Facebook, Twitter, or email.

Connect and encourage.

- You always liked science. Check out the science about e-cigarettes and young people: **E-cigarettes.SurgeonGeneral.gov**
- Getting off nicotine is hard but I'm so happy I quit. Don't make that mistake and get addicted. Smoking and tobacco use, including using e-cigarettes, are unsafe for young people.

Remind and repeat.

- Most teenagers don't use e-cigarettes. E-cigarettes with nicotine can mess with your brain, and your brain is still developing until you are at least 25.
- You might be tempted by e-cigarette flavors, but inhaling certain flavorings that have been found in some e-cigarettes can be harmful.

Share facts and resources.

- Just learned that many e-cigarettes have nicotine in them. That's the drug that makes cigarettes so addictive. Nicotine can also mess with your brain development.
- Just saw a report from the Surgeon General that e-cigarettes can mess with how your brain develops and might even affect your mood and focus. Please don't use any products that contain nicotine.
- Hope none of your friends use e-cigarettes around you. Even breathing the cloud they exhale can expose you to nicotine and chemicals that can be dangerous to your health.



Centers for Disease
Control and Prevention
Office on Smoking
and Health



APPENDIX C

American Academy of Pediatrics (AAP) Resources

The below resources were found at this link: <https://www.aap.org/en-us/advocacy-and-policy/aap-health-initiatives/Richmond-Center/Pages/Fact-Sheets.aspx>

Supporting Youth who are addicted to Nicotine: Advice for Pediatricians

Note: Please click on the title to download PDF. This version was last updated in October 2019 and is also included in the following pages for reference.

Nicotine Replacement Therapy and Adolescent Patients: Information for Pediatricians

Note: Please click on the title to download PDF. This version was last updated in November 2019 and is also included in the following pages for reference.

Tobacco/E-Cigarettes Use/Exposure Coding Fact Sheet for Primary Care Pediatrics

Note: Please click on the title to download PDF. This version was last updated on June 1, 2020 and is also included in the following pages for reference.

E-Cigarette Clinical Poster - Teen

Supporting Youth who are Addicted to Nicotine: Advice for Pediatricians

Ask the Right Questions:

- Ask about tobacco and nicotine use in the context of routine screening, using language that youth will understand. Sample screening questions include:
 - “Do you use any tobacco products, like cigarettes, chewing tobacco, or hookah? Have you used them in the last year?”
 - “Do you use any vaping products, like e-cigarettes or JUUL? Have you used them in the last year?”

Talk with Youth About Quitting:

- Provide [clear, personalized guidance](#) about the negative health impacts of tobacco use and vaping.
- Consider using [motivational interviewing](#) to guide a conversation about quitting.
- Messages that may resonate with youth include the impact of tobacco and vaping on breathing, athletic performance, health, or appearance. Other relevant messages may include the outbreak of vaping-related lung injuries, the expense of tobacco products, or the Tobacco Industry’s deceitful marketing practices that recruit youth to become life-long tobacco users.
- Consider using a practice tool to assess level of addiction to nicotine. Some options are the Hooked On Nicotine Checklist (tailored for [cigarettes](#) or [vaping](#)), the [E-Cigarette Dependence Scale](#), or the [Modified Fagerstrom Tolerance Questionnaire](#).

Help Youth make a Successful Quit Plan:

- Assess youth’s desire to quit and help them set a quit date within 2 weeks. Try to avoid stressful times, such as final exams.
- Develop a plan for success and anticipate challenges:
 - Quit completely: on the quit date, stop use of all tobacco and vaping products.
 - Triggers: identify people or situations that may cause youth to want to use tobacco or vape.
 - Withdrawal Symptoms: discuss the symptoms of nicotine withdrawal and develop strategies to manage them.
 - Social Support: identify friends and family who can encourage success. When appropriate, speak with youth and parent(s) together about the importance of a supportive social network.
 - Self-Care: consider support strategies such as healthy eating, exercise, mindfulness, or meditation.
- Utilize cessation support services:
 - [SmokefreeTeen.gov](#) (tobacco and vaping cessation support from the National Institutes of Health)
 - [This Is Quitting](#) (text-based tobacco and vaping cessation support service from Truth Initiative®)
 - 1-800-QUIT-NOW (national tobacco quitline)
 - Behavioral counseling or cognitive-behavioral therapy
- Consider pharmacotherapy for youth who are moderately or severely addicted:
 - FDA-approved tobacco dependence medications for adults include nicotine replacement therapy (eg, nicotine gum or patch), bupropion, and varenicline. At present, these medications have not been approved for youth under 18.
 - Limited research studies on pharmacotherapy for youth tobacco cessation have not demonstrated efficacy. However, there is no evidence of harm related to using nicotine replacement therapy in youth under 18.
 - Given the effectiveness of pharmacotherapy for adults and the severe harms of tobacco dependence, [AAP policy](#) recommends that pediatricians consider off-label pharmacotherapy for youth who are moderately or severely addicted.
 - In order for youth under 18 to access pharmacotherapy (including over-the-counter options), they need a prescription.
- Offer encouragement and assure youth that you are here to help them succeed.
- If the youth is not ready to quit completely, discuss strategies for cutting back and revisit the topic at their next visit.

Follow Up:

- Check in with the patient electronically or in-person to find out how the quit attempt is going.
- If the patient reports a relapse, talk with them about the circumstances surrounding the relapse, and help them learn from the experience. Encourage youth to use the cessation-support strategies above until they quit successfully.
- Tobacco cessation is a difficult process, and relapse is common. Additional support from a pediatrician or other healthcare provider can help the teen learn from their experiences and quit successfully.

Coding and Payment:

- Ensure that you and your office staff are compensated for the time you spend discussing tobacco and nicotine addiction during patient visits. For up-to-date information on coding, see the [AAP Tobacco Coding Fact Sheet](#).

Nicotine Replacement Therapy and Adolescent Patients: Information for Pediatricians

Nicotine Replacement Therapy (NRT) can be an important tool for treating nicotine dependence in youth. Many pediatricians are uncertain about how to use this medication with adolescents, especially those who are under 18 years old. This document is intended to help pediatricians make informed decisions about using NRT with patients who wish to quit smoking or vaping.

What is Nicotine Replacement Therapy (NRT)?

- NRT is a medication that addresses nicotine withdrawal symptoms by providing a controlled amount of nicotine, thus helping reduce the urge to smoke or vape.¹
- NRT is safe and effective in helping adults quit tobacco use.¹
- NRT works best when paired with behavioral counseling interventions.²
- NRT comes in five forms, including gum, patch, lozenge, nasal spray, and inhaler.
- Three forms of NRT (gum, patch, lozenge) are available over-the-counter for adults 18+.



NRT gum, patch, and lozenge

Can Adolescents Use NRT?

- At present, the US Food and Drug Administration (FDA) has not approved NRT for youth under 18 years old.
- Research on the effectiveness of NRT for helping youth quit successfully is limited due to a lack of adequately-powered studies. Overall efficacy findings have been mixed, with generally more modest outcomes than in comparable adult trials. There is no evidence of serious harm from using NRT in adolescents under 18 years old.^{3,4}
- Given the effectiveness of NRT for adults and the severe harms of tobacco dependence, AAP policy recommends that pediatricians consider off-label NRT for youth who are moderately or severely addicted to nicotine and motivated to quit.⁵
- Youth under 18 years old need a prescription from a healthcare provider to access all forms of NRT.
- Non-adherence and relapse after cessation of therapy is common, and close follow-up is recommended.

Is NRT safe?

- NRT is safer than cigarettes, e-cigarettes, and other tobacco products because it delivers nicotine without the toxic chemicals and carcinogens in tobacco and e-cigarette products.
- NRT has low potential for misuse because the nicotine is absorbed slowly.

What are the contraindications to NRT use?

- The only contraindication to NRT use is hypersensitivity to nicotine or any component of the medication. In addition, patients who are allergic to soya should not use the nicotine lozenge.⁶
- Pediatricians should be aware of disease-related cautions when prescribing NRT, including cardiovascular disease, diabetes, and hyperthyroidism. However, it is important to note that these cautions are relative, not absolute: NRT is safer than continued tobacco use.
- Pediatricians should review full clinical drug information in a professional prescribing reference to address individual concerns about prescribing. The decision to prescribe a drug is the responsibility of the medical provider, who must weigh the risks and benefits of using the drug for a specific situation.

What does an NRT treatment plan look like?

- Pediatricians and other health care providers should inform patients of the benefits and drawbacks of the five NRT medications, screen for relative contraindications, and instruct patients in how to use the product appropriately.
- The choice of NRT medication for an individual patient should be based on preference, availability, and the patient's experience of potential side effects.¹
- For best results, patients should be advised to pair a long-acting form of NRT (eg, nicotine patch) with a shorter-acting form (eg, gum, lozenge, spray, or inhaler). This combination therapy allows the patient to keep a steady level of nicotine in their bloodstream throughout the day, while also responding to cravings. In addition, patients should be advised that NRT works best when paired with behavioral counseling interventions.²
- The table below provides treatment information for nicotine gum, patch, and lozenge. All three products are available over-the-counter for adults and by prescription for youth under 18 years old. There is also a nicotine nasal spray and a nicotine inhaler, which are available by prescription only within the adult population and are used far less frequently.

Types of NRT:

<p>Nicotine Transdermal Patch (OTC for 18+ Rx for <18)</p> <p>Cost: Over-the-counter retail cost ranges from \$25-\$70 for 28 patches.</p> <p>Out-of-pocket prescription costs will vary by insurance plan.</p>	<p>Dosage:</p> <ul style="list-style-type: none"> • 21mg, 14mg, 7mg <p>Use Instructions:</p> <ul style="list-style-type: none"> • Apply patch to clean skin, change patch every 24 hours • 8-10 week treatment regimen: <ul style="list-style-type: none"> ○ Use first dose for 6 weeks, then “step down” to lower dose ○ Use lower dose for 2 weeks, then “step down” to lowest dose for 2 more weeks • See package for full details <p>Side Effects:</p> <ul style="list-style-type: none"> • Skin Irritation, sleep disturbance <p>Advantages:</p> <ul style="list-style-type: none"> • Sustained blood levels of nicotine, compliance is relatively easy
<p>Nicotine Gum (OTC for 18+ Rx for <18)</p> <p>Cost: Over-the-counter retail cost ranges from \$17-\$50 for 100 pieces of gum.</p> <p>Out-of-pocket prescription costs will vary by insurance plan.</p>	<p>Dosage:</p> <ul style="list-style-type: none"> • 4mg, 2mg <p>Use Instructions:</p> <ul style="list-style-type: none"> • “Chew and park” method: <ul style="list-style-type: none"> ○ Place the gum in your mouth and chew until you feel a tingling sensation ○ Stop chewing and “park” the gum between cheek and gums ○ After about a minute, start chewing again, until you feel a tingling sensation ○ Stop chewing and “park” the gum again ○ Repeating for about 30 minutes • 12-week treatment regimen: <ul style="list-style-type: none"> ○ Chew 1 piece every 1-2 hours for first 6 weeks ○ Chew 1 piece every 2-4 hours for 3 additional weeks ○ Chew 1 piece every 4-8 hours for 3 additional weeks • See package for full details <p>Side Effects:</p> <ul style="list-style-type: none"> • Jaw soreness, mouth irritation, indigestion, nausea, hiccups <p>Advantages:</p> <ul style="list-style-type: none"> • Flexible dosing, rapid delivery of nicotine into blood stream
<p>Nicotine Lozenge (OTC for 18+ Rx for <18)</p> <p>Cost: Over-the-counter retail cost ranges from \$15-\$50 for 100 lozenges.</p> <p>Out-of-pocket prescription costs will vary by insurance plan.</p>	<p>Dosage:</p> <ul style="list-style-type: none"> • 4mg, 2mg <p>Use Instructions:</p> <ul style="list-style-type: none"> • Dissolving method: <ul style="list-style-type: none"> ○ Place lozenge in your mouth, occasionally moving from side-to-side ○ Allow lozenge to slowly dissolve, do not chew or swallow the lozenge ○ Do not use more than 1 lozenge at a time • 12-week treatment regimen: <ul style="list-style-type: none"> ○ Use 1 lozenge every 1-2 hours for first 6 weeks ○ Use 1 lozenge every 2-4 hours for 3 additional weeks ○ Use 1 lozenge every 4-8 hours for 3 additional weeks • See package for full details <p>Side Effects:</p> <ul style="list-style-type: none"> • Oral irritation, nausea, hiccups <p>Advantages:</p> <ul style="list-style-type: none"> • Flexible dosing, rapid delivery of nicotine into blood stream, no chewing (discrete)

Dosing Guidelines:

Patients who are motivated to quit should use as much safe, FDA-approved NRT as needed to avoid smoking or vaping.

When assessing a patient's current level of nicotine use, it may be helpful to understand that using one JUUL pod per day is equivalent to one pack of cigarettes per day. However, there is variation in nicotine content across e-cigarette products, and variation in use-patterns across individuals. For example, there is a marked difference in nicotine delivery among e-cigarette products that use salt-based nicotine solutions (eg, JUUL) and other brands that use freebase nicotine. Salt-based nicotine solutions deliver dramatically higher levels of nicotine without creating harsh, unpalatable effects.⁷

Pediatricians and other healthcare providers should work with each patient to determine a starting dosage of NRT that is most likely to help them quit successfully. Dosing is based on the patient's level of nicotine dependence, which can be measured using a screening tool. Some options are the Hooked On Nicotine Checklist (tailored for [cigarettes](#) or [vaping](#)), the [F-Cigarette Dependence Scale](#), or the [Modified Fagerstrom Tolerance Questionnaire](#) (see Appendix for full measures). If a lower dose is prescribed but doesn't seem to be working, pediatricians should assess adherence and move the patient to a higher dose or consider a longer schedule for use and weaning/stepping down.

Pediatrician and patients should work together to wean NRT over time, when the patient feels that s/he is no longer at risk of returning to tobacco or nicotine use.

Form of NRT	Level of Dependence		Link to full drug information
	Moderately Addicted	Severely Addicted	
Nicotine Gum	2mg	4mg	https://medlineplus.gov/druginfo/meds/a684056.html
Nicotine Patch	Start with 14mg patch, then step down	Start with 21mg patch, then step down	https://medlineplus.gov/druginfo/meds/a601084.html
Nicotine Lozenge	2mg	4mg	https://medlineplus.gov/druginfo/meds/a606019.html

References:

1. CDC TobaccoFree. Learn About Nicotine Replacement Therapy. Centers for Disease Control and Prevention. <https://www.cdc.gov/tobacco/campaign/tips/quit-smoking/guide/explore-medications.html>. Published June 4, 2019. Accessed October 2, 2019.
2. US Preventive Services Task Force. Final Recommendation Statement: Tobacco Smoking Cessation in Adults, Including Pregnant Women: Behavioral and Pharmacotherapy Interventions. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/tobacco-use-in-adults-and-pregnant-women-counseling-and-interventions1>. Accessed January 25, 2019.
3. US Preventive Services Task Force. Final Recommendation Statement: Tobacco Use in Children and Adolescents: Primary Care Interventions. <https://www.uspreventiveservicestaskforce.org/Page/Document/RecommendationStatementFinal/tobacco-use-in-children-and-adolescents-primary-care-interventions>. Accessed November 20, 2018.
4. US Preventive Services Task Force. Draft Recommendation Statement: Prevention and Cessation of Tobacco Use in Children and Adolescents: Primary Care Interventions. <https://www.uspreventiveservicestaskforce.org/Page/Document/draft-recommendation-statement/tobacco-and-nicotine-use-prevention-in-children-and-adolescents-primary-care-interventions>. Accessed October 14, 2019.
5. AAP Section on Tobacco Control. Clinical Practice Policy to Protect Children From Tobacco, Nicotine, and Tobacco Smoke. *Pediatrics*. 2015;136(5):1008-1017. doi:10.1542/peds.2015-3108
6. Nicotine (Professional Patient Advice). Drugs.com. <https://www.drugs.com/ppa/nicotine.html>. Accessed October 17, 2019.
7. Duell AK, Pankow JF, Peyton DH. Free-Base Nicotine Determination in Electronic Cigarette Liquids by 1H NMR Spectroscopy. *Chem Res Toxicol*. 2018;31(6):431-434. doi:10.1021/acs.chemrestox.8b00097

Appendix

The Hooked on Nicotine Checklist (HONC)

The Hooked On Nicotine Checklist is scored by tallying the number of yes responses, from 0-10. Any score greater than zero indicates that the youth has lost some autonomy over their smoking/vaping. This indicates that nicotine addiction has begun.

HONC—Smoking

	YES		NO
1) Have you ever tried to quit, but couldn't?			
2) Do you smoke <u>now</u> because it is really hard to quit?			
3) Have you ever felt like you were addicted to tobacco?			
4) Do you ever have strong cravings to smoke?			
5) Have you ever felt like you really needed a cigarette?			
6) Is it hard to keep from smoking in places where you are not supposed to, like school?			

When you tried to stop smoking... (or, when you haven't used tobacco for a while...)

7) did you find it hard to concentrate because you couldn't smoke?			
8) did you feel more irritable because you couldn't smoke?			
9) did you feel a strong need or urge to smoke?			
10) did you feel nervous, restless or anxious because you couldn't smoke?			

HONC—Vaping

	YES		NO
1) Have you ever tried to stop vaping, but couldn't?			
2) Do you vape <u>now</u> because it is really hard to quit?			
3) Have you ever felt like you were addicted to vaping?			
4) Do you ever have strong cravings to vape?			
5) Have you ever felt like you really needed to vape?			
6) Is it hard to keep from vaping in places where you are not supposed to, like school?			

When you tried to stop vaping...(or, when you haven't vaped for a while...)

7) did you find it hard to concentrate because you couldn't vape?			
8) did you feel more irritable because you couldn't vape?			
9) did you feel a strong need or urge to vape?			
10) did you feel nervous, restless or anxious because you couldn't vape?			

The Four-Item E-cigarette Dependence Scale for Assessing Adolescent E-cigarette Nicotine Dependence

To score the measure, take the mean of the item scores. Higher scores indicate higher levels of dependence.

Instructions:	Never (0)	Rarely (1)	Sometimes (2)	Often (3)	Almost Always (4)
Please respond to each question marking one box per row.					
I find myself reaching for my e-cigarette without thinking about it.					
I drop everything to go out and get e-cigarettes or e-juice.					
I vape more before going into a situation where vaping is not allowed.					
When I haven't been able to vape for a few hours, the craving gets intolerable.					

Modified Version of the Fagerstrom Tolerance Questionnaire (mFTQ)

Scoring guidelines in parentheses; remove these from instrument prior to use. Total scores are obtained by summing the raw scores for each item. Scores indicate level of dependence:

0-2 = no dependence
3-5 = moderate dependence
6-9 = substantial dependence

1. How many cigarettes a day do you smoke?
 - a. Over 26 cigarettes a day (2)
 - b. About 16-25 cigarettes a day (1)
 - c. About 1-15 cigarettes a day (0)
 - d. Less than 1 a day (0)

 2. Do you inhale?
 - a. Always (2)
 - b. Quite often (1)
 - c. Seldom (1)
 - d. Never (0)

 3. How soon after you wake up do you smoke your first cigarette?
 - a. Within the first 30 minutes (1)
 - b. More than 30 minutes after waking but before noon (0)
 - c. In the afternoon (0)
 - d. In the evening (0)

 4. Which cigarette would you hate to give up?
 - a. First cigarette in the morning (1)
 - b. Any other cigarette before noon (0)
 - c. Any other cigarette afternoon (0)
 - d. Any other cigarette in the evening (0)

 5. Do you find it difficult to refrain from smoking in places where it is forbidden (church, library, movies, etc.)?
 - a. Yes, very difficult (1)
 - b. Yes, somewhat difficult (1)
 - c. No, not usually difficult (0)
 - d. No, not at all difficult (0)

 6. Do you smoke if you are so ill that you are in bed most of the day?
 - a. Yes, always (1)
 - b. Yes, quite often (1)
 - c. No, not usually (0)
 - d. No, never (0)

 7. Do you smoke more during the first 2 hours than during the rest of the day?
 - a. Yes (1)
 - b. No (1)
-



Tobacco/E-Cigarettes Use/Exposure Coding Fact Sheet for Primary Care Pediatrics

Physician Evaluation & Management Services

Outpatient

★99201 Office or other outpatient visit, *new* patient; self limited or minor problem, 10 min.

★99202 low to moderate severity problem, 20 min.

★99203 moderate severity problem, 30 min.

★99204 moderate to high severity problem, 45 min.

★99205 high severity problem, 60 min.

A new patient is one who has not received any professional services face-to-face services rendered by physicians and other qualified health care professionals who may report evaluation and management services reported by a specific CPT code(s) from the physician/qualified health care professional or another physician/qualified health care professional of the exact same specialty and subspecialty who belongs to the same group practice, within the past three years.

★99211 Office or other outpatient visit, *established* patient; minimal problem, 5 min.

★99212 self limited or minor problem, 10 min.

★99213 low to moderate severity problem, 15 min.

★99214 moderate severity problem, 25 min.

★99215 moderate to high severity problem, 40 min.

★+99354 Prolonged physician services in office or other outpatient setting, with direct patient contact; first hour
(*use in conjunction with time-based codes 99201-99215, 99241-99245, 99301-99350*)

★+99355 each additional 30 min. (*use in conjunction with 99354*)

- Used when a physician provides prolonged services beyond the usual service (ie, beyond the typical time).
- Time spent does not have to be continuous.
- Prolonged service of less than 15 minutes beyond the first hour or less than 15 minutes beyond the final 30 minutes is not reported separately.

Smoking and tobacco use cessation

★99406 Smoking and tobacco use cessation counseling visit; intermediate, greater than 3 minutes up to 10 minutes

★99407 intensive, greater than 10 minutes

Note you cannot report tobacco cessation codes (99406-99407) under the child when counseling the parent. The codes cannot be reported under the pediatric patient if a parent or guardian is counseled on smoking cessation. Time spent counseling the parent or guardian falls under the E/M service time unless billing under the parent or guardian's name and ID.

Inpatient

99221 Initial hospital care, per day: admitting problem of low severity, 30 min.

99222 admitting problem of moderate severity, 50 min.

99223 admitting problem of high severity, 70 min.

+ Codes are add-on codes, meaning they are reported separately in addition to the appropriate code for the service provided

★ Allowed to be reported as a telemedicine service per CPT

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- 99231** Subsequent hospital care, per day, also used for follow-up inpatient consultation services; patient is stable, recovering or improving, 15 min.
- 99232** patient is responding inadequately to therapy or has developed minor complication, 25 min.
- 99233** patient is unstable or has developed a significant complication or new problem, 35 min.
- 99218** Initial observation care, per day: admitting problem of low severity, 30 min,
- 99219** admitting problem of moderate severity, 50 min,
- 99220** admitting problem of high severity, 70 min.
- 99224** Subsequent observation care, per day: patient is stable, recovering or improving, 15 min.
- 99225** patient is responding inadequately to therapy or has developed a minor complication, 25 min.
- 99226** patient is unstable or has developed a significant new problem, 35 min.
- +99356** Prolonged services in the inpatient/observation setting; first hour
(use in conjunction with time-based codes 99221-99233, 99218-99220, 99224-99226)
- +99357** each additional 30 min. (use in conjunction with 99356)
- 99238** Hospital discharge day management; 30 min.
- 99239** more than 30 min

Reporting E/M services using "Time"

- Only pertains to E/M codes with a typical time. For purposes of this fact sheet, this refers only to codes 99201-99215, 99218-99220, 99221-99226, 99231-99233).
- When counseling or coordination of care dominates (more than 50%) the physician/patient or family encounter (face-to-face time in the office or other outpatient setting or floor/unit time in the hospital or nursing facility), then **time shall** be considered the key or controlling factor to qualify for a particular level of E/M services.
- This includes time spent with parties who have assumed responsibility for the care of the patient or decision making whether or not they are family members (eg, foster parents, person acting in loco parentis, legal guardian). The extent of counseling and/or coordination of care must be documented in the medical record.
- For coding purposes, face-to-face time for **outpatient** services (eg, office) is defined as only that time that the physician spends face-to-face with the patient and/or family. This includes the time in which the physician performs such tasks as obtaining a history, performing an examination, and counseling the patient. For reporting purposes, intraservice time for **inpatient** (eg, hospital care) services is defined as unit/floor time, which includes the time present on the patient's hospital unit and at the bedside rendering services for that patient. This includes the time to establish and/or review the patient's chart, examine the patient, write notes, and communicate with other professionals and the patient's family. In the hospital, pre- and post-time includes time spent off the patient's floor performing such tasks as reviewing pathology and radiology findings in another part of the hospital.
- When codes are ranked in sequential typical times (such as for the office-based E/M services or consultation codes) and the actual time is between 2 typical times, the code with the typical time closest to the actual time is used.
- Prolonged services can only be added to codes with listed typical times such as the ones listed above. In order to report physician or other qualified health care professional prolonged services the reporting provider must spend a minimum of 30 minutes beyond the typical time listed in the code level being reported. When reporting outpatient prolonged services only count face-to-face time with the reporting provider. When reporting inpatient or

+ Codes are add-on codes, meaning they are reported separately in addition to the appropriate code for the service provided

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observation prolonged services you can count face-to-face time, as well as unit/floor time spent on the patient's care. However, if the reporting provider is reporting their service based on time (ie, counseling/coordinating care dominate) and not key components, then prolonged services cannot be reported unless the provider reaches 30 minutes beyond the listed typical time in the highest code in the set (eg, 99205, 99226, 99223). It is important that time is clearly noted in the patient's chart. For clinical staff prolonged services refer to CPT codes 99415-99416 in the CPT manual.

Non-Physician Provider (NPP) Services

- 99366** Medical team conference with interdisciplinary team of healthcare professionals, face-to-face with patient and/or family, 30 minutes or more, participation by a nonphysician qualified healthcare professional
- 99368** Medical team conference with interdisciplinary team of healthcare professionals, patient and/or family not present, 30 minutes or more, participation by a nonphysician qualified healthcare professional
- 96156** Health behavior assessment, or re-assessment (ie, health-focused clinical interview, behavioral observations, clinical decision making)
- 96158** Health behavior intervention (HBI), individual, face-to-face; initial 30 minutes
- 96159** each additional 15 minutes (Report with 96158)
- 96164** HBI, group (2 or more patients), face-to-face; initial 30 minutes
- 96165** each additional 15 minutes (Report with 96164)
- 96167** HBI, family (with the patient present), face-to-face; initial 30 minutes
- 96168** each additional 15 minutes (Report with 96167)
- 96170** HBI, family (without the patient present), face-to-face; initial 30 minutes
- 96171** each additional 15 minutes (Report with 96170)

*Report the family HBI codes only when the intervention is centered around the family. Do not report if the parent is present because of the age of the patient, but they not involved in the intervention. Refer to the individual or group codes instead.

Miscellaneous Services

- 99071** Educational supplies, such as books, tapes or pamphlets, provided by the physician for the patient's education at cost to the physician

International Classification of Diseases, 10th Revision, Clinical Modification (ICD-10-CM) Codes

- Use as many diagnosis codes that apply to document the patient's complexity and report the patient's symptoms and/or adverse environmental circumstances.
- Once a definitive diagnosis is established, report the appropriate definitive diagnosis code(s) as the primary code, plus any other symptoms that the patient is exhibiting as secondary diagnoses that are not part of the usual disease course or are considered incidental.

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I. Diagnosed Respiratory Conditions Related to Tobacco/Vaping Use/Exposure

J06.9 Acute upper respiratory infection, unspecified

For J44 codes

Code also type of asthma, if applicable (**J45.-**)

For J44 and J45 codes use additional code to identify:

exposure to environmental tobacco smoke (**Z77.22**)

history of tobacco use (**Z87.891**)

occupational exposure to environmental tobacco smoke (**Z57.31**)

tobacco dependence (**F17.-**)

tobacco use (**Z72.0**)

J44.0 Chronic obstructive pulmonary disease with acute lower respiratory infection (use additional code to identify the infection)

J44.1 Chronic obstructive pulmonary disease with (acute) exacerbation

J44.9 Chronic obstructive pulmonary disease, unspecified (Chronic obstructive airway disease NOS)

J45.20 Mild intermittent asthma, uncomplicated (NOS)

J45.21 Mild intermittent asthma with (acute) exacerbation

J45.22 Mild intermittent asthma with status asthmaticus

J45.30 Mild persistent asthma, uncomplicated (NOS)

J45.31 Mild persistent asthma with (acute) exacerbation

J45.32 Mild persistent asthma with status asthmaticus

J45.40 Moderate persistent asthma, uncomplicated (NOS)

J45.41 Moderate persistent asthma with (acute) exacerbation

J45.42 Moderate persistent asthma with status asthmaticus

J45.50 Severe persistent asthma, uncomplicated (NOS)

J45.51 Severe persistent asthma with (acute) exacerbation

J45.52 Severe persistent asthma with status asthmaticus

J45.901 Unspecified asthma with (acute) exacerbation

J45.902 Unspecified asthma with status asthmaticus

J45.909 Unspecified asthma, uncomplicated (NOS)

J45.990 Exercise induced bronchospasm

J45.991 Cough variant asthma

J45.998 Other asthma

J68.0 Bronchitis and pneumonitis due to chemicals, gases, fumes and vapors; includes chemical pneumonitis

J69.1 Pneumonitis due to inhalation of oils and essences; includes lipid pneumonia

J80 Acute respiratory distress syndrome

J82 Pulmonary eosinophilia, not elsewhere classified

J84.114 Acute interstitial pneumonitis

J84.89 Other specified interstitial pulmonary disease

R06.02 Shortness of breath

R06.2 Wheezing

Z77.22 Exposure to environmental tobacco smoke

Z77.29 Contact with and (suspected) exposure to other hazardous substances (e-cigarette/vaping exposure)

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II. Substance-Related and Addictive Disorders:

If a provider documents multiple patterns of use, only one should be reported. Use the following hierarchy: use–abuse–dependence (eg, if use and dependence are documented, only code for dependence).

When a minus symbol (-) is included in codes **F10–F17**, a last digit is required. Be sure to include the last digit from the following list:

- 0** anxiety disorder
- 2** sleep disorder
- 8** other disorder
- 9** unspecified disorder

[C]Nicotine (eg, Cigarettes)

- F17.200** Nicotine dependence, unspecified, uncomplicated
- F17.201** Nicotine dependence, unspecified, in remission
- F17.203** Nicotine dependence unspecified, with withdrawal
- F17.210** Nicotine dependence, cigarettes, uncomplicated
- F17.211** Nicotine dependence, cigarettes, in remission
- F17.213** Nicotine dependence, cigarettes, with withdrawal
- F17.218** Nicotine dependence, cigarettes, with
- F17.290** Nicotine dependence, other tobacco products, uncomplicated (This includes Electronic nicotine delivery systems (ENDS), e-cigarettes, vaping)

[C]Cannabis

- F12.10** Cannabis abuse, uncomplicated
- F12.180** Cannabis abuse with cannabis-induced anxiety disorder
- F12.19** Cannabis abuse with unspecified cannabis-induced disorder
- F12.20** Cannabis dependence, uncomplicated
- F12.21** Cannabis dependence, in remission
- F12.280** Cannabis dependence with cannabis-induced anxiety disorder
- F12.29** Cannabis dependence with unspecified cannabis-induced disorder
- F12.90** Cannabis use, unspecified, uncomplicated
- F12.980** Cannabis use, unspecified with anxiety disorder
- F12.99** Cannabis use, unspecified with unspecified cannabis-induced disorder

[C]Alcohol

- F10.10** Alcohol abuse, uncomplicated
- F10.14** Alcohol abuse with alcohol-induced mood disorder
- F10.159** Alcohol abuse with alcohol-induced psychotic disorder, unspecified
- F10.18-** Alcohol abuse with alcohol-induced
- F10.19** Alcohol abuse with unspecified alcohol-induced disorder
- F10.20** Alcohol dependence, uncomplicated
- F10.21** Alcohol dependence, in remission
- F10.24** Alcohol dependence with alcohol-induced mood disorder
- F10.259** Alcohol dependence with alcohol-induced psychotic disorder, unspecified
- F10.28-** Alcohol dependence with alcohol-induced
- F10.29** Alcohol dependence with unspecified alcohol-induced disorder
- F10.94** Alcohol use, unspecified with alcohol-induced mood disorder
- F10.959** Alcohol use, unspecified with alcohol-induced psychotic disorder, unspecified
- F10.98-** Alcohol use, unspecified with alcohol-induced

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F10.99 Alcohol use, unspecified with unspecified alcohol-induced disorder

[C]Sedatives

F13.10 Sedative, hypnotic or anxiolytic abuse, uncomplicated

F13.129 Sedative, hypnotic or anxiolytic abuse with intoxication, unspecified

F13.14 Sedative, hypnotic or anxiolytic abuse w sedative, hypnotic or anxiolytic-induced mood disorder

F13.18- Sedative, hypnotic or anxiolytic abuse with sedative, hypnotic or anxiolytic-induced

F13.21 Sedative, hypnotic or anxiolytic dependence, in remission

F13.90 Sedative, hypnotic, or anxiolytic use, unspecified, uncomplicated

F13.94 Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced mood disorder

F13.98- Sedative, hypnotic or anxiolytic use, unspecified with sedative, hypnotic or anxiolytic-induced

F13.99 Sedative, hypnotic or anxiolytic use, unspecified with unspecified sedative, hypnotic or anxiolytic- induced disorder

[C]Stimulants (eg, Caffeine, Amphetamines)

F15.10 Other stimulant (amphetamine-related disorders or caffeine) abuse, uncomplicated

F15.14 Other stimulant (amphetamine-related disorders or caffeine) abuse with stimulant-induced mood disorder

F15.18- Other stimulant (amphetamine-related disorders or caffeine) abuse with stimulant-induced

F15.19 Other stimulant (amphetamine-related disorders or caffeine) abuse with unspecified stimulant-induced disorder

F15.20 Other stimulant (amphetamine-related disorders or caffeine) dependence, uncomplicated

F15.21 Other stimulant (amphetamine-related disorders or caffeine) dependence, in remission

F15.24 Other stimulant (amphetamine-related disorders or caffeine) dependence with stimulant-induced mood disorder

F15.28- Other stimulant (amphetamine-related disorders or caffeine) dependence with stimulant-induced

F15.29 Other stimulant (amphetamine-related disorders or caffeine) dependence with unspecified stimulant-induced disorder

F15.90 Other stimulant (amphetamine-related disorders or caffeine) use, unspecified, uncomplicated

F15.94 Other stimulant (amphetamine-related disorders or caffeine) use, unspecified with stimulant-induced mood disorder

F15.98- Other stimulant (amphetamine-related disorders or caffeine) use, unspecified with stimulant-induced

F15.99 Other stimulant (amphetamine-related disorders or caffeine) use, unspecified with unspecified stimulant-induced disorder

III. Poisoning and Adverse Effects

For codes **T40 – T65** use the following as the 5th or 6th digit to define the poisoning or adverse effect

- 1** Accidental (unintentional)
- 2** Intentional self-harm
- 3** Assault
- 4** Undetermined
- 5** Adverse effect

Codes **T40 – T65** require a 7th digit to define the encounter.

- A** Initial encounter
- D** Subsequent encounter
- S** Sequela

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- T40.0X-** Opium
- T40.1X-** Heroin
- T40.2X-** Opoids (other)
- T40.3X-** Methadone
- T40.5X-** Cocaine
- T40.60-** Narcotics, unspecified
- T40.7X-** Cannabis (derivatives) (use also for acute tetrahydrocannabinol (THC) toxicity)
- T40.8X-** Lysergide (LSD)
- T40.90-** Hallucinogens, unspecified
- T42.3X-** Barbiturates
- T42.7-** Sedative-hypnotics, unspecified (need to add a 6th digit placeholder X)
- T43.60-** Psychostimulants, unspecified
- T43.9-** Psychotropic drugs, unspecified (need to add a 6th digit placeholder X)
- T65.22-** Toxic effect of tobacco cigarettes
- T65.29-** Toxic effect of other nicotine and tobacco, accidental (also use for poisoning as a result of swallowing, breathing, or absorbing e-cigarette liquid through skin or eyes)

IV. Co-Morbid Mental/Behavioral Health Conditions

Depressive Disorders

- F30-** Report for bipolar disorder, single manic episode
- F30.10** Manic episode without psychotic symptoms, unspecified
- F30.11** Manic episode without psychotic symptoms, mild
- F30.12** Manic episode without psychotic symptoms, moderate
- F30.13** Manic episode, severe, without psychotic symptoms
- F30.2** Manic episode, severe with psychotic symptoms
- F30.3** Manic episode in partial remission
- F30.4** Manic episode in full remission
- F30.8** Other manic episodes
- F30.9** Manic episode, unspecified
- F31.0** Bipolar disorder, current episode hypomanic
- F31.10** Bipolar disorder, current episode manic without psychotic features, unspecified
- F31.11** Bipolar disorder, current episode manic without psychotic features, mild
- F31.12** Bipolar disorder, current episode manic without psychotic features, moderate
- F31.13** Bipolar disorder, current episode manic without psychotic features, severe
- F31.2** Bipolar disorder, current episode manic severe with psychotic features
- F31.30** Bipolar disorder, current episode depressed, mild or moderate severity, unspecified
- F31.31** Bipolar disorder, current episode depressed, mild
- F31.32** Bipolar disorder, current episode depressed, moderate
- F31.4** Bipolar disorder, current episode depressed, severe, without psychotic features
- F31.5** Bipolar disorder, current episode depressed, severe, with psychotic features
- F31.60** Bipolar disorder, current episode mixed, unspecified
- F31.61** Bipolar disorder, current episode mixed, mild
- F31.62** Bipolar disorder, current episode mixed, moderate
- F31.63** Bipolar disorder, current episode mixed, severe, without psychotic features
- F31.64** Bipolar disorder, current episode mixed, severe, with psychotic features
- F31.70** Bipolar disorder, currently in remission, most recent episode unspecified
- F31.71** Bipolar disorder, in partial remission, most recent episode hypomanic
- F31.72** Bipolar disorder, in full remission, most recent episode hypomanic

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- F31.73** Bipolar disorder, in partial remission, most recent episode manic
- F31.74** Bipolar disorder, in full remission, most recent episode manic
- F31.75** Bipolar disorder, in partial remission, most recent episode depressed
- F31.76** Bipolar disorder, in full remission, most recent episode depressed
- F31.77** Bipolar disorder, in partial remission, most recent episode mixed
- F31.78** Bipolar disorder, in full remission, most recent episode mixed
- F31.81** Bipolar II disorder
- F31.89** Other bipolar disorder (Recurrent manic episodes NOS)
- F31.9** Bipolar disorder, unspecified
- F34.1** Dysthymic disorder (depressive personality disorder, dysthymia neurotic depression)

Anxiety Disorders

- F40.10** Social phobia, unspecified
- F40.11** Social phobia, generalized
- F40.8** Phobic anxiety disorders, other (phobic anxiety disorder of childhood)
- F40.9** Phobic anxiety disorder, unspecified
- F41.1** Generalized anxiety disorder

Behavioral/Emotional Disorders

- F90.0** Attention-deficit hyperactivity disorder, predominantly inattentive type
- F90.1** Attention-deficit hyperactivity disorder, predominantly hyperactive type
- F90.8** Attention-deficit hyperactivity disorder, other type
- F90.9** Attention-deficit hyperactivity disorder, unspecified type
- F91.1** Conduct disorder, childhood-onset type
- F91.2** Conduct disorder, adolescent-onset type
- F91.3** Oppositional defiant disorder
- F91.9** Conduct disorder, unspecified

Neurodevelopmental/Other Developmental Disorders

- F81.0** Specific reading disorder
- F81.2** Mathematics disorder
- F81.89** Other developmental disorders of scholastic skills
- F81.9** Developmental disorder of scholastic skills, unspecified

Other

- R45.851** Suicidal ideations
- R48.0** Alexia/dyslexia, NOS

V. Signs and symptoms

For patients presenting with any signs/symptoms (such as fever, etc.) and where a definitive diagnosis has not been established, assign the appropriate code(s) for each of the presenting signs and symptoms such as:

- M79.10** Myalgia, unspecified site
- R06.00** Dyspnea, unspecified
- R06.02** Shortness of breath
- R06.2** Wheezing
- R06.82** Tachypnea, not elsewhere classified
- R07.9** Chest pain, unspecified
- R09.02** Hypoxemia

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R09.89 Other specified symptoms and signs involving the circulatory and respiratory systems (includes chest congestion)

R10.84 Generalized abdominal pain

R10.9 Unspecified abdominal pain

R11.10 Vomiting, unspecified

R11.11 Vomiting without nausea

R11.2 Nausea with vomiting, unspecified

R19.7 Diarrhea, unspecified

R50.- Fever of other and unknown origin

R53.83 Other fatigue

R61 Generalized hyperhidrosis (night sweats)

R63.4 Abnormal weight loss

R68.83 Chills (without fever)

VI. Z Codes

Z codes represent reasons for encounters. Categories **Z00–Z99** are provided for occasions when circumstances other than a disease, injury, or external cause classifiable to categories **A00–Y89** are recorded as 'diagnoses' or 'problems'. This can arise in 2 main ways.

- (a) When a person who may or may not be sick encounters the health services for some specific purpose, such as to receive limited care or service for a current condition, to donate an organ or tissue, to receive prophylactic vaccination (immunization), or to discuss a problem is in itself not a disease or injury.
- (b) When some circumstance or problem is present which influences the person's health status but is not in itself a current illness or injury.
- (c) When a personal or family history or a social determinant of health impacts the encounter and is documented
- (d) Many codes may be used to report social determinants of health and should be used when the issue complicates the encounter or is addresses.

Z13.89 Encounter for screening for other disorder (tobacco/vaping use)

Z57.31 Occupational exposure to environmental tobacco smoke

Z59.5 Extreme poverty

Z59.6 Low income

Z59.7 Insufficient social insurance and welfare support

Z59.8 Other problems related to housing and economic circumstances

Z60.4 Social exclusion and rejection

Z60.8 Other problems related to social environment

Z60.9 Problem related to social environment, unspecified

Z62.0 Inadequate parental supervision and control

Z62.21 Foster care status (child welfare)

Z62.22 Institutional upbringing (child living in orphanage or group home)

Z62.29 Other upbringing away from parents

Z62.6 Inappropriate (excessive) parental pressure

Z62.810 Personal history of physical and sexual abuse in childhood

Z62.811 Personal history of psychological abuse in childhood

Z62.812 Personal history of neglect in childhood

Z62.819 Personal history of unspecified abuse in childhood

Z62.820 Parent-biological child conflict

Z62.821 Parent-adopted child conflict

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- Z62.822** Parent-foster child conflict
- Z63.31** Absence of family member due to military deployment
- Z63.32** Other absence of family member
- Z63.4** Disappearance and death of family member
- Z63.5** Disruption of family by separation and divorce
- Z63.8** Other specified problems related to primary support group
- Z65.3** Problems related to legal circumstances
- Z69.010** Encounter for mental health services for victim of parental child abuse
- Z69.020** Encounter for mental health services for victim of non-parental child abuse
- Z71.6** Tobacco abuse counseling
- Z71.89** Counseling, other specified
- Z72.0** Tobacco use
- Z73.4** Inadequate social skills, not elsewhere classified
- Z77.22** Exposure (suspected) to environmental tobacco smoke
- Z77.29** Exposure (suspected) to other hazardous substances (e-cigarettes/vaping)
- Z81.1** Family history of alcohol abuse and dependence (conditions classifiable to **F10.-**)
- Z81.2** Family history of tobacco abuse and dependence (conditions classifiable to **F17.-**)
- Z81.3** Family history of other psychoactive substance abuse and dependence (conditions classifiable to **F11–F16, F18–F19**)
- Z81.8** Family history of other mental and behavioral disorders
- Z86.69** Personal history of other diseases of the nervous system and sense organs
- Z87.891** Personal history of nicotine dependence (tobacco)

Please note that the National Center for health care Statistics in conjunction with the ICD Cooperating Parties developed official guidance "[ICD-10-CM Official Coding Guidelines – Supplement Coding encounters related to E-cigarette, or Vaping, Product Use](#)" Posted 10/2019

Vignettes

Vignette #1

A mother brings her two-year old child (established patient) in for a well-baby check. In social history, you ask the mother whether she smokes and she admits that she smokes 1 pack a day and has been doing so for the past 10 years. You explain to her that besides the fact that smoking can be detrimental to her health, her child is at increased risk for respiratory problems including asthma, colds, upper respiratory infections and ear infections. You spend 10 minutes face to face explaining to her the serious implications this can have on her child's health. When the parent shows interest in quitting, you discuss various options for smoking cessation, refer her to the state quitline using a fax referral form**, and give her literature on smoking cessation programs available in your area.

How do you code this encounter?

CPT	ICD-10-CM*
99392 Preventive medicine service; 1 -4 years	Z00.129 Encounter for routine child health examination without abnormal findings Z77.22 Exposure to environmental tobacco smoke Z81.2 Family history of tobacco abuse and dependence Z71.89 Counseling, other specified

Teaching Point: Since you are not counseling the patient, you cannot report the smoking cessation codes

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99406-99407. Preventive medicine service codes take into account all preventive medicine counseling. Since the patient is healthy and the smoking cessation counseling is being done to prevent future illness you cannot report a "sick" E/M services based on time spent, in addition to the preventive medicine service.

Vignette #2

A mother brings her 5-year old son in for sudden onset of wheezing. You diagnose an acute exacerbation of his moderate persistent asthma and initiate nebulizer treatment. His mother admits to being a 1.5 pack per day smoker and has tried to quit smoking in the past without success. You explain to the mother that her smoking has contributed to the exacerbation of the asthma. You give her literature on the various options for smoking cessation and explain the various modalities available to her, including local options such as the state quitline**. You then spend 10 additional minutes face to face discussing the relative risks and benefits of each. Overall face-to-face time is 20 minutes. You are at a level 4 office visit given the key components.

How do you code this encounter?

CPT	ICD-10-CM*
99214 (modifier 25)	J45.41 Moderate persistent asthma with (acute) exacerbation Z77.22 Exposure to environmental tobacco smoke Z81.2 Family history of tobacco abuse and dependence Z71.89 Counseling, other specified
94640 Nebulizer treatment	J45.41

Teaching Point: Unless you are going to bill under the mother's name to the insurance for the time spent counseling, the time spent would be subsumed under the E/M service for the patient. Since counseling does take up 50% of the total face-to-face time, you can use it to report your E/M service, however, the 20 minutes would only lead you to a 99213. Since your key components support the higher level, report the 99214.

Vignette #3

You are evaluating a teenager (16 year-old) that has come for a sports physical examination and yearly check-up. On review of systems, she admits to some shortness of breath on exertion. Direct questioning reveals that she smokes 5-6 cigarettes a day and has also experimented with smokeless tobacco. She began smoking when her parents got divorced as it helped her cope with the depression she was feeling at that time. Since then, she has continued to smoke as she has heard that stopping smoking could cause her to gain weight. She is concerned, however, as she knows that smoking is bad for her health and could cause respiratory problems. You confirm that smoking has been shown to be detrimental to general health, and especially to the respiratory system. You briefly discuss options to assist her in stopping smoking. You then refer her to counseling for the depression as well as smoking cessation. Total time spent on smoking cessation counseling is 5 minutes.

How do you code this encounter?

CPT	ICD-10-CM*
99394 Preventive Medicine Service; 12-17 years	Z00.121 Encounter for routine child health examination with abnormal findings
99406 (modifier 25) Smoking cessation counseling; 3-10 mins	F17.210 Nicotine dependence, cigarettes, uncomplicated Z71.6 Tobacco abuse counseling

Teaching Point: You will not report the sports physical separately in ICD-10-CM. The Z00.121 is all that is needed.

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Vignette #4

You see a 15 year-old boy in the after-hours clinic for his third visit in two months for an upper respiratory tract infection. He is an otherwise healthy boy with no chronic medical problems. However, this time, he has developed a persistent cough and shortness of breath when he plays soccer. You ask his parents to leave the room and discover that he has been smoking a pack of cigarettes a day for the past two years. He started when he started a new high school, as he wanted to fit in with the popular boys. A spirometry is performed. You find that his tidal volume is decreased by 15% and he has some rhonchi. A chest X-ray is negative for pneumonia. You explain to the boy that his smoking is making him susceptible to repeated episodes of upper respiratory tract infection. In addition, he is developing reactive airway disease that could make him susceptible to asthma and other problems. You show him literature that describes the various complications of smoking. You also tell him about the various smoking cessation programs available in the county and answer his questions about options that he would be able to obtain without his parents' knowledge. You spend 40 minutes face to face total, with 20 minutes in counseling and 10 minutes strictly discussing smoking cessation options. He is diagnosed with exercise induced bronchospasms.

How do you code this encounter?

CPT	ICD-10-CM*
99214 (modifier 25)	J45.990 Exercise induced bronchospasm
99406 (modifier 25)	F17.210 Nicotine dependence, cigarettes, uncomplicated Z71.6 Tobacco abuse counseling
94010 Spirometry	J45.990 Exercise induced bronchospasm

Teaching Point: While the overall time spent was 40 minutes, 10 minutes of that time will be separately reported under the smoking cessation code so it cannot be counted towards your overall E/M service.

Vignette #5

You are evaluating a male adolescent (15 year old) patient that has come for his yearly routine visit. When asking about substance use, he offers that he experimented with e-cigarettes within the past month. He denies traditional cigarette use, offering that he would never use such a product because he cares about his health. You congratulate that patient for caring about his health and avoiding cigarette use. You then spend 10 minutes informing him of the potential health hazards related to e-cigarettes, focusing on both the highly addictive and toxic nature of nicotine. You emphasize that nicotine addiction could lead to future cigarette use and encourage him to avoid any use of nicotine containing product.

How do you code this encounter?

CPT	ICD-10-CM*
99394 Preventive Medicine Service; 12-17 years	Z00.121
99406 (modifier 25) Smoking cessation counseling; 3-10 mins	F17.210 Nicotine dependence, cigarettes, uncomplicated Z71.6 Tobacco abuse counseling

Vignette #6

While covering the newborn nursery, you discharge a first-time mother who plans to breastfeed. As you routinely do, you ask her about smoking and she admits to smoking 1 pack or more a day for the past 10 years. She decreased this to half a pack while pregnant but could not decrease it any further due to cravings.

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Her husband is a smoker too and smokes 2 packs a day. You explain to the mother that smoking is very harmful, especially to the lungs of a newborn. You spend 15 minutes face to face explaining the various complications of smoking including asthma, recurrent upper respiratory infections, and ear infections. You explain to her that merely smoking outside the baby's room would not eliminate the risk as she would be exposed to nicotine through breast milk which could lead to irritability and decreased sleep. You explain the various options for smoking cessation and give her literature to share with her husband for the same. You offer to refer her to a smoking cessation program in the hospital, as well as the state quitline**. Overall the discharge service takes 35 minutes to complete.

How do you code this encounter?

CPT	ICD-10-CM*
99239 Discharge Service over 30 mins	Z38.00 Single liveborn infant, delivered vaginally Z81.2 Family history of tobacco abuse and dependence Z71.89 Counseling, other specified

Vignette #7

You see an infant admitted in the hospital for his second episode of wheezing in the last three months. He is the only child and does not attend day care. Both parents smoke in the house and in the car. He has had three ear infections in the last six months and is being considered for tube placements by his pediatrician. As part of the management of the infant you discuss the increased risk of ear infections and frequent respiratory symptoms, amongst others, as a consequence of their smoking. You assess their willingness to quit smoking and assist with arranging smoking cessation resources, both available in the hospital and through the state quitline**. This initial hospital encounter takes 80 minutes to complete, including unit/floor time. Of that time 45 minutes is spent in counseling and coordinating care.

How do you code this encounter?

CPT	ICD-10-CM*
99223 Initial hospital care; 70 mins	R06.2 Wheezing Z86.69 Personal history of other diseases of the nervous system and sense organs Z77.22 Exposure to environmental tobacco smoke Z81.2 Family history of tobacco abuse and dependence Z71.89 Counseling, other specified

+ Codes are add-on codes, meaning they are reported separately in addition to the appropriate code for the service provided

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** For more information on your state's quitline, visit <http://map.naquitline.org/>

- Indicates that an additional character is required for the ICD-10-CM code

6 BENEFITS OF BEING VAPE-FREE



TAKE CARE OF
YOUR **HEALTH**



SAVE YOUR
MONEY



CONTROL
YOUR **LIFE**



BE A GOOD
FRIEND



DO YOUR BEST
IN SCHOOL



FEEL GOOD ABOUT
YOURSELF

You probably already know that e-cigarettes contain nicotine. You probably also know that the vapor includes toxic chemicals. What you need to know is that every e-cigarette – no matter the shape and size – is terrible for you. There is no way around it. You are doing real harm to your body every time you use one. If you haven't tried one, don't. And if you do use them, it's time to stop.

Not convinced? Here's something else you should know. Even if you've talked yourself into the idea that you are "just" using e-cigarettes, you are on a path to becoming addicted to nicotine. And damaging your brain. You know, that thing you will need ... for the rest of your life. **We know you probably know all of this. But if you've ever thought about vaping (or if you've tried it or do it regularly) please talk with your doctor today.**

American Academy of Pediatrics

DEDICATED TO THE HEALTH OF ALL CHILDREN®



	<p>Also, <u>you don't have to commit to quit to sign up</u> - you just need to be between 13-24 years old and text "VTBreathes" to 88709. (show the info brochure card or point to a poster)</p> <p>You will receive some questions. You may answer them and then you can set your own quit date. You'll get a bunch of fun and motivating messages and some information once you start. Like this, see...</p> <p><u>Note to staff</u></p> <p>Show them your own phone and the messages you have gotten during the "test" you did. (remember to test, you use the text phrase "TIQtest" and text it to 88709 and be sure to say you're 13-24 years old)</p>
Close	<p>Thank you for taking time to discuss this with me and being so open.</p> <p><u>Note to staff</u></p> <p>Be sure to record the ID and date of screening on the incentive tracking log. This helps us know how many incentives you have given out. It also serves as a record in case any youth come back indicating they didn't get a card or they lost one.</p>

Sample Script

Below is a sample script to consider using to help explain to youth how nicotine affects the brain.

--

Nicotine stimulates the fight-or-flight response in your body, which creates the buzz of energy you feel when you vape. That is epinephrine, which makes the heart beat faster and can make your brain focus. Nicotine also causes the release of dopamine, which is a chemical in your brain that can make you feel happy and relaxed. After you've used nicotine a few times, your body gets used to it being around, causing you to need more nicotine to keep the good feelings going. It gets to the point where your brain tricks you into thinking you need nicotine to feel focused or relaxed – you may feel down, anxious, irritable, and fidgety, and it seems like the only way to feel better is to use your vape and get nicotine into your body. But once you do, you are just telling your brain that it can keep expecting more and more nicotine. The way to break this cycle is to cut down on the amount of nicotine your brain gets and eventually stop taking in any nicotine. Does this information change anything about how you view your e-cigarette use?

APPENDIX E

Additional Resources

For further information, check out the additional resources:

[AAP Julius B. Richmond Center of Excellence](#)

[CDC – Electronic Cigarettes](#)

[SAMHSA Evidence-Based Resource Guide Series: Reducing Vaping Among Youth and Young Adults](#)

[Stanford Tobacco Prevention Toolkit](#)

[Stanford E-Cigarette and Vape Pen Module](#)

REFERENCES

- DiFranza, J. R., Savageau, J. A., Fletcher, K., Ockene, J. K., Rigotti, N. A., McNeill, A. D., Coleman, M., & Wood, C. (2002). Measuring the loss of autonomy over nicotine use in adolescents: the DANDY (Development and Assessment of Nicotine Dependence in Youths) study. *Archives of pediatrics & adolescent medicine*, 156(4), 397–403. <https://doi.org/10.1001/archpedi.156.4.397>
- English, A. (2018). Adolescent & Young Adults Health Care in Vermont: A Guide to Understanding Consent & Confidentiality Laws. San Francisco, CA: Adolescent & Young Adult Health National Resource Center; and Chapel Hill, NC: Center for Adolescent Health & the Law. http://contentmanager.med.uvm.edu/docs/vermont_ayah_confidentiality_guide/vchip-documents/vermont_ayah_confidentiality_guide.pdf?sfvrsn=2
- Levy, S., Weiss, R., Sherritt, L., Ziemnik, R., Spalding, A., Van Hook, S., & Shrier, L. A. (2014). An electronic screen for triaging adolescent substance use by risk levels. *JAMA pediatrics*, 168(9), 822–828. <https://doi.org/10.1001/jamapediatrics.2014.774>
- Modified Version of the Fagerstrom Tolerance Questionnaire (mFTQ). (2020, September 24). Retrieved December 15, 2020, from <https://cancercontrol.cancer.gov/brp/tcrb/measures-guide/fagerstrom-tolerance-questionnaire-modified>
- Pierce, J. P., Chen, R., Leas, E. C., White, M., Kealey, S., Stone, M., Benmarhnia, T., Trinidad, D., Strong, D., & Messer, K. (2021). Use of E-cigarettes and Other Tobacco Products and Progression to Daily Cigarette Smoking. *Pediatrics*. 147(2):e2020025122. <https://doi.org/10.1542/peds.2020-025122>
- Wellman, R. J., Savageau, J. A., Godiwala, S., Savageau, N., Friedman, K., Hazelton, J., & DiFranza, J. R. (2006). A comparison of the Hooked on Nicotine Checklist and the Fagerström Test for Nicotine Dependence in adult smokers. *Nicotine & tobacco research: official journal of the Society for Research on Nicotine and Tobacco*, 8(4), 575–580. <https://doi-org.ezproxy.uvm.edu/10.1080/14622200600789965>
- 2019 Vermont Youth Risk Behavior Survey (YRBS). Retrieved from <https://www.healthvermont.gov/health-statistics-vital-records/population-health-surveys-data/youth-risk-behavior-survey-yrbs>