Addressing Vaping

STRATEGIES FOR YOUTH PREVENTION AND CESSATION

Youth Vaping Prevention Steering Committee of Metrowest

Contents

Contributors

Special thanks go to Colin Gallant, Hudson Health Department and Amy Turncliff, Decisions At Every Turn Coalition for producing this resource. This guide is a project of the Youth Vaping Prevention Steering Committee of Metrowest, convened by the MetroWest Health Foundation.

How to Use This Guide

We recognize that school districts across Massachusetts are very concerned about the vaping epidemic, which has consumed, and continues to consume, a significant amount of school resources and jeopardizes the health (both behavioral and physical) and academic achievement of many students. Adolescent Health Survey data from Massachusetts and across the Nation, show that while the majority of students are choosing not to use alcohol or other drugs, the number of students reporting that they have vaped nicotine and/or delta-9-tetrahydrocannabinol (THC; the psychoactive component of marijuana) has increased at an alarming rate. Student-reported use varies, with an increasing percentage of students reporting lifetime, past month, or daily use.

This guide provides information for school administrators, faculty, and staff regarding strategies that can be used in the school environment to reduce student vaping. All the programs and interventions listed in this guide are shown to be effective (all are research based, and some are evidence-based) at either:

***Preventing*** the use of vaping, or the use of other nicotine products.

Supporting students and equipping them with skills aimed at moving youth towards cessation.

Additionally, in the beginning of this guide we have provided some statistics around vaping in MetroWest from the 2018 MetroWest Adolescent Health Survey. This information is provided to help give you a sense of the prevalence of the problem in the area, and how urgent it is that everyone in all of our communities takes steps to reduce youth vaping.

While there are steps different sectors and stakeholders can take to reduce substance use, this guide only discusses those which can be done in within the school. It is important to remember that while vaping, nicotine and THC, is the current youth substance use crisis receiving the most attention, a multi-sector approach to preventing and reducing youth substance use overall without addressing substances in silos is critical to long-term prevention and reduction of youth substance use. In other words, we must move from being reactive to the current youth substance use crisis in the moment, to being proactive by following a comprehensive strategic plan to prevent and reduce all youth substance use. We can do this via a research-based process to promote youth behavioral health and prevent youth substance use.

Vaping in MetroWest

In 2018, the rate of youth vaping soared across the region. Lifetime use of electronic vapor products increased from 28% in 2016 to 41% in 2018, and use in the past 30-days nearly doubled (15%-28%) in the same two-year period.[i] When broken down by age, we find that vaping is even prevalent in the early years of high school, with nearly 1 in 4 9th graders reporting having tried a vape. Lifetime use doubles to 56% by the time these students are seniors. One in twenty (5%) of youth reported using vapes daily in the past 30 days. Among seniors, that number becomes closer to one in twenty (9%).

Figure 1. Trends in Smoking and Vaping 2006-2018 High School MWAHS
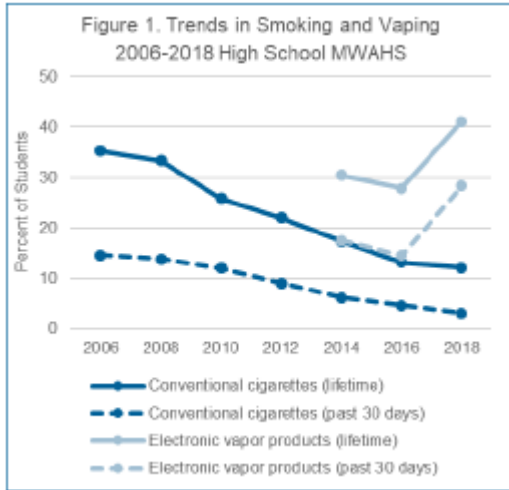
While there are substantial increases in vape use from 2016 to 2019 among both males and females, vape use rose more among females over the two-year period. For example, lifetime use increased from 31% to 40% among males, and nearly doubled (24-42%) among females.

Lastly, 12% of high school youth have used vapes on school property in the past 30 days, reminding us that vaping continues to be an issue that schools face.

Helping You Towards Action

Unfortunately, there is no one answer regarding how best to prevent vaping among students, either in or out of school. The correct answer is largely dependent on your available resources, including funding, class time, and student involvement. The best answer for you is perhaps most related to where you are seeing the biggest problem. Perhaps if you have been noticing a high level of nicotine addiction, you'd be most interested in vaping cessation programs, which aims to help students quit. Or, perhaps your resources would be best devoted to preventing students from getting addicted in the first place.

It can be a complicated decision, but we have provided a flow chart to help make the decision easier:
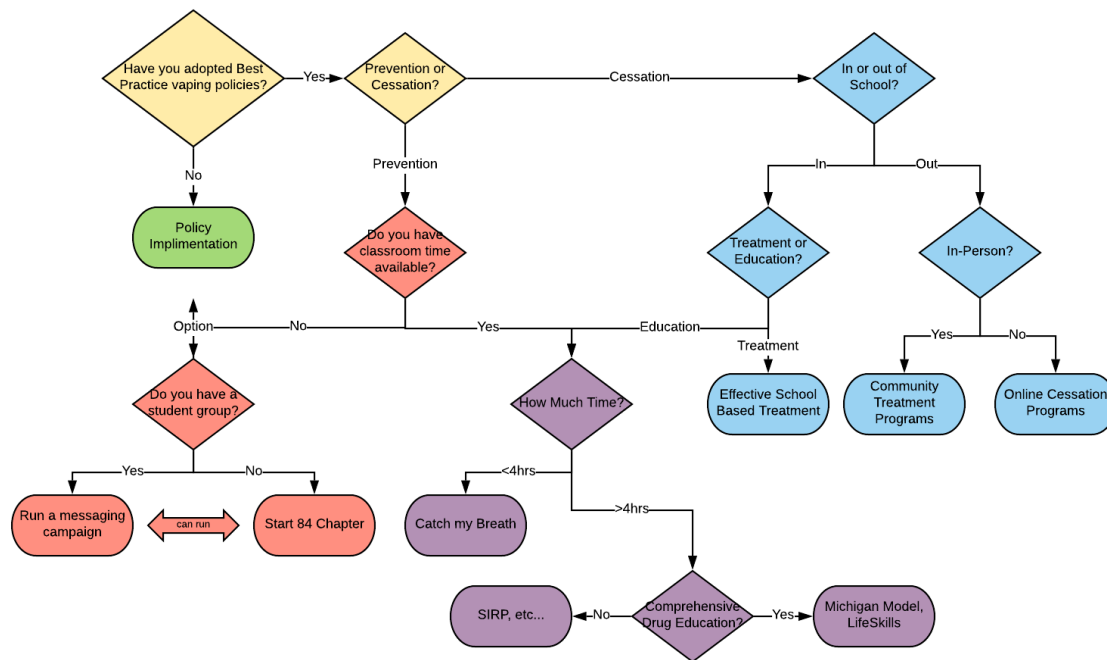
The yellow boxes represent best-practice, effective strategies for prevention or cessation. Each box includes a page number for this guide, directing you to more information. The remainder of this guide will be a description of these programs.

Policy Implementation

Elements of effective vaping policy

Taking a clear stance as a school can be extremely effective at reducing youth vaping. In fact, a 2018 study from the journal *Tobacco Induced Diseases* showed that schools which implemented policies specifically banning the use of e-cigarettes at school resulted in a statistically significant reduction in youth e-cigarette use.[ii]

The Massachusetts Association of Health Boards (MAHB) suggests that school's amend their current policies prohibiting tobacco use in schools, on school grounds and at school-sponsored activities to include e-cigarette use by updating the definition of tobacco products to include e-cigarettes.[iii] In fact, guidance from Minnesota's Public Health Law Center suggests that the definition of tobacco products be written in such a way as to include current and future tobacco products.[iv]

MAHB suggests breaking your policy into several sections.

To Whom Does the Policy Apply

This section details exactly who the policy impacts, as well as when. As mentioned above, it is suggested that policy prohibit use on school grounds, school facilities, even when school is not in session, or school sponsored events. This should explicitly include athletic fields, parking lots, and the vehicles within the parking lots.[v] MAHB suggests that a description of these areas be provided in policies.

Types of products included (definitions)

It may be helpful to consider that vapes do not contain tobacco: they contain nicotine only, or some other chemical (e.g. marijuana). It is for this reason the clarity, in the form of clear definitions, may be helpful.

Policy Prohibitions

Policies should prohibit both the use and possession of tobacco products, and should allow for the confiscation of these devices.

Enforcement

Policies should detail the consequences students would face if in violation. Response to student vaping should include referral to a guidance counselor, school nurse, or other health or counseling service for health information, counseling, and referral.[vi] This could potentially serve as an opportunity for cessation counseling or prevention education.

Effective date

Policies should include the date the policy is in place.

Additional Things to Include

Guidance from the Minnesota Public Health Law Center suggests that school policies around tobacco usage should also prohibit the accepting of any donations or curriculum from any tobacco-related industry, due to the obvious potential for conflict of interest.

Policy in the Community

A good place to check in regarding policy is your local health department. The health director or agent may be involved in efforts to change the landscape of the community and make it more difficult for

youth under the age of 21 to access vape and vape products. This may include prohibiting sales of vape products to 21+ stores, or restricting the sale of flavors. Connect with your health department and inquire about ways you can work together!

Additional Information

MAHB Guidance Document
https://www.mahb.org/wp-content/uploads/2018/03/Final-of-School-Policy-Guidance-2.15.18.pdf

American Lung Association Guidance Document
https://www.lung.org/assets/documents/asthma/tobacco-free-school-campus.pdf

The Association for Nonsmokers- Minnesota Policy Assessment and Guidance Document
http://www.ansrmn.org/wp-content/uploads/2018/04/K-12-Schools-Policy-Guide.pdf

Research Paper on Effectiveness of E-Cig Control Policies
https://pdfs.semanticscholar.org/a323/e983078d36c2c403fdd4515bcc60a80e8a36.pdf?_ga=2.2444393 65.1913645441.1558725858-1656797351.1558725858

Classroom-based Programs

There are many different health education resources available these days. When determining what type of curriculum might work best, consider the following:

Onetime events aren't sufficient - While there is great value in students hearing from people in recovery, one-off/one-time speakers tend to be ineffective unless coupled with longer-term programming.

Peer Leadership Programs are for the leaders - Peer-to-Peer education, in the form of peer leadership programs, have shown extremely positive results for the students *involved*. That is to say, students involved in peer leadership programs tend to engage in less risky behaviors. A school's approach to prevention education cannot rely solely on peer leadership. More information about effective peer leadership strategies can be found later in this document.

Not all health education programs are created equal – It is important to consider whether or not the program you are considering has been proven effective. In the 1990s, Drug Abuse Resistance Education (DARE) was a commonly used health education program, but when it was finally evaluated[1], it actually showed that DARE was ineffective and that students who received DARE were *more* likely to use substances than peers who did not, suggesting the program had a negative effect.   Further down in this section is a link to SAMHSA's catalogue of effective health education programs, and we have also provided a few examples here as well. Your local substance use prevention coalition will also be able to support you in this, as well as the Massachusetts Department of Public Health Bureau of Substance Addiction Services (BSAS).

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[1] Project D.A.R.E. Outcome Effectiveness Revisited; Steven L. West and Keri K. O'Neal. Am J Public Health. 2004 June; 94(6): 1027–1029.

Follow the Funding - Again, it is important to consider where the funding and support for health education curriculums come from. Curriculums supported by the tobacco or vaping industry may have misleading evaluations. Your local substance use prevention coalition will be able to support you in this.

Comprehensive vs. Drug-specific - While many health education programs are designed to target specific substances, some are designed to address multiple substances by addressing shared risk factors. For example, an anti-vaping curriculum might provide education around nicotine and its effects on the body and rely on that information alone to deter youth use. Comprehensive drug education might include refusal skill-building, self-esteem building, and other life skills as a means of addressing root causes of substance use.

No need to reinvent the wheel- As you will see in the next section, there are many vaping prevention curricula available at no cost to school districts. It may take some time to determine which modules fit your capacity, time and staffing, but there is no need for staff to create vaping prevention materials and curriculum. Using available research-based/evidence-based curricula ensures that best practices based on research are being included in teaching materials.

In general, we reviewed the following curriculums, which have been shown to be effective against in preventing vaping among students who have not yet started, or helping with the cessation of vaping as well as other substances.

Vaping-specific programs
The programs presented below provide health information specifically around vaping.

Botvin Life Skills-- Vaping/Drug Prevention
Basic Information
- Developed by Dr. Gilbert Botvin
- Target Audience: Youth, Gr. K-6
- Tier: 1
- Length: Variable; lesson plans include newly developed material and new material integrated into Botvin's full curriculum
- Cost: $280
- More Information: https://www.lifeskillstraining.com/botvin-health-connections-addressing-the-e-cigarette-and-vaping-epidemic/

CATCH My Breath
Basic Information
- Developed by University of Texas Health Center
- Target Audience: Youth, grades 5-12. Various versions for different age groups.
- Length: 4 sessions, 30-40 minutes each.
- More Information: https://catchinfo.org/modules/e-cigarettes/

Project Here (Curriculum and Games)
Basic Information
- Developed by Massachusetts Office of the Attorney General in collaboration with GE Foundation, 2018
- Target Audience: Youth, Gr. 6-8

- Tier: 1
- Length: 3 sessions, 50 minutes each
- Cost: FREE
- More Information: https://projecttherema.org/

SmokeSCREEN (Game with evaluation component)

Basic Information
- Developed a collaboration between the play2PREVENT Lab, Yale and USC Tobacco Centers of Regulatory Science (TCORS), and 1st Playable Productions
- Target Audience: Youth, ages 10-16
- Tier: 1
- Length: Variable; pre/post test approx. 10-15min each
- Cost: FREE
- More Information: https://www.smokescreengame.org/

Student Intervention Reintegration Program (SIRP)

Basic Information
- Developed by Maine CDC
- Target Audience: Youth, 13-18 years old youth who are *currently engaged in substance use*.
- Length: 12-hour class over 2-4 days
- More Information: http://sirp.adcareme.org/

The Real Cost of Vaping

Basic Information
- Developed by the FDA/Scholastic, 2019
- Target Audience: Youth, Gr. 6-12
- Tier: 1
- Length: 3 sessions, 50 minutes each
- Cost: Free
- More Information: http://www.scholastic.com/youthvapingrisks/

Tobacco Prevention Toolkit – E-Cigarettes

Basic Information
- Developed by Stanford University
- Target Audience: Youth, all
- Length: 6 sessions, 1 hour each
- More Information: https://med.stanford.edu/tobaccopreventiontoolkit/E-Cigs.html

Comprehensive Drug Education

Both Lifeskills Training and Michigan Model for Health are multi-session health education curriculums that focus more on root causes of substance use. Less time will be spent on the specific health effects of vaping, but will spend entire lessons focused on refusal skills, problem solving, goal setting, and promoting other assets (or lifeskills) that are seen as protective factors against youth substance use.

More information on these, and other comprehensive drug education programs, can be found by contacting the Department of Public Health Bureau of Substance Addiction Services (BSAS).

LifeSkills Training

Basic Information

- Developed by Dr. Gilbert Botvin
- Target Audience: Youth, different units for elementary, middle, and high school, as well as youth transitioning from high school to the workforce.
- Tier: 1
- Length: Varies depending on target audience.
    - Elementary: 8, 45-minute-long sessions
    - Middle School: 15-18, 45-minute-long sessions
    - High School: 10, 45-minute-long sessions.
    - Transitions: 6, 45-minute-long sessions.
- More Information: https://www.lifeskillstraining.com/

Note: While there is evidence suggesting the effectiveness of LifeSkills, the program has a history of support from the tobacco industry, particularly in the initial testing of the program when evaluations yielded less impressive results.

Michigan Model for Health

Basic Information

- Developed by Michigan Department of Public Health
- Target Audience: 7 – 8th, and also 9-12th versions available.
- Tier: 1
- Length: 10 lessons
- More Information: http://www.michigan.gov/MMH

Positive Action

Basic Information

- Developed by EVERFI with support from major sponsors
- Target Audience: Youth, Gr. K-12
- Tier: 1
- Length: prepackaged kits for everything with all materials needed; can be purchased as single lessons
- More Information: https://www.positiveaction.net/

EVERFI

Basic Information

- Developed by EVERFI with support from major sponsors
- Target Audience: Youth,
- Tier: 1
- Length: variable; content of modules extends to STEM; AlcoholEDU and Prescription Drug Safety are the only dedicated drug safety modules; some SEL modules available—interesting model to make content free—sponsors include Patriots and Bruins and other MA sponsors.
- Cost: FREE
- More Information: https://everfi.com/

Student-led Strategies

The 84 Movement

General Information
- Developed by the Massachusetts Department of Public Health and Health Resources in Action
- Target Audience: Youth
- Encourages peer education and advocacy
- More Information: https://the84.org/

What is the 84 Movement?
From the 84 Movement's Website: The 84 is a statewide movement of youth fighting tobacco in Massachusetts. The 84 represents the 84% of Massachusetts youth who did NOT smoke when the movement began. Now, 93.4% of youth do NOT smoke. Youth groups in a high school or community organization who want to fight against the tobacco and vaping industries sign up to become an 84 Chapter and be a part of the movement.

What do The 84 Chapters do?

- Educate their peers and adults about the tobacco and vaping industries' marketing tactics
- Help to create change locally and statewide to reduce the influence of tobacco in their communities
- Survey youth and adults about their perception of the prices and availability of other tobacco products
- Promote social norms messaging around youth tobacco use

More information about the 84 Movement can be found at: https://the84.org/take-action/interested-groups/join-the-84/

How to Start an 84 Chapter
A group of students affiliated with a Massachusetts school or community-based organization can start their own chapter of the 84 Movement. The application form asks for two adult advisors and two youth leaders to be identified, an expected number of youth in the group, and a 3-5 sentence description of the group. Forms should be completed by one of the adult advisors, who is required to provide an electronic signature. Schools must also verify that they received approval from the school's principal. The registration form can be found here: https://www.emailmeform.com/builder/form/QdclLczfeS30

Mass Media Strategies

Mass Media strategies are messaging campaigns focused on either (1) raising awareness around the harms of certain behaviors, or (2) correcting perceptions around the how common certain behaviors are. These messages are disseminated using posters, ads, social media, or other forms of mass media.

Examples of effective media strategies

The Truth Initiative

Basic Information
- Developed out of the Master Settlement Agreement of 1998 between the major tobacco companies and many of the states and territories of the United States.

- Target Audience: Teenagers
- https://truthinitiative.org/

The core idea behind the Truth Initiative is to bring awareness to industry tactics used to get young people addicted to nicotine and tobacco products. Primarily, these campaigns focus on the use of flavors to make tobacco products more appealing to youth, as well as the inherent racial inequities behind tobacco advertising.

Recently developed vaping media campaigns

Get Outraged

Basic Information

- Developed by Mass Department of Public Health
- Target Audience: Parents and Educators
- More Information: http://makesmokinghistory.org/dangers-of-vaping/

The Real Cost

Basic Information

- Developed by the Food and Drug Administration (FDA)
- Target Audience: Youth, 12-17
- https://www.fda.gov/tobacco-products/public-health-education/real-cost-campaign

The Real Cost is a campaign with a majority of different types of messages run through the FDA. It was recently evaluated, and "final results from the first study indicate that exposure to "The Real Cost" from 2014-2016 was associated with a 30% decrease in the risk for smoking initiation, preventing an estimated 350,000 US youth ages 11-18 from smoking."

Some posters are designed to be placed in public restrooms:
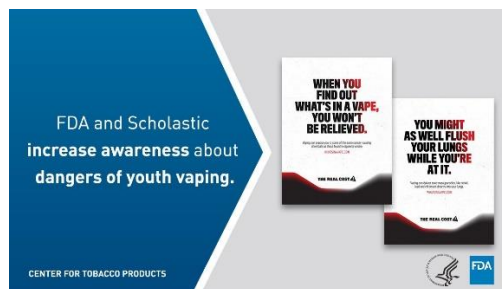
A Note About Self-Designed Poster Campaigns

When designing your own poster campaign for the school, it is incredibly valuable to work with a student group if possible. In general, if you are creating something yourself, focus on short-term and observable consequences that a student can observe. Getting students to think of more immediate consequences (a Juul addiction could cost a student around $1,500 dollars in a year!) are going to be more effective than, say, implying that the student might be a greater risk for cancer.

Teens are wired from an evolutionary perspective to be risk takers, and as a result are neurologically less capable of understanding long term risk than adults. Pre-civilization, this would have been helpful to encourage young humans to take on the risks of the dangerous world, hunt, and reproduce. Therefore,

focusing instead on smaller more immediate consequences like how vaping might alter your physical appearance or result in a costly addiction.

Social Norms Campaigns

Social norms campaigns are based on Social Norms Theory and a body of evidence that suggests that behavior is driven in part by perceived norms, what we think MOST people do. For example, if teens think MOST of their peers are vaping, then they are more likely to vape; however, if the actual norm is that less than 50% of students are vaping, then if we correct the misperception but telling students that MOST of their peers are NOT vaping, more students will choose not to vape. This creates a positive, rather than negative, peer pressure.

There is a science, and art, to social norms campaigns. Social norms data must be collected so that a full understanding of the perceived and actual norms is assessed, before messaging begins. There is a comprehensive process of pilot testing messages and images, before putting a social norms campaign is rolled out. It is suggested that you seek assistance from a professional trained in social norms marketing, before beginning a social norms campaign.

School-based Intervention

What elements do effective treatment programs have?

School-based intervention programs have been used for decades in different forms, to provide an alternative to full suspension for substance use infractions and other non-violent offenses. Effective programs provide an opportunity for education, screening/assessment, intervention, referral for evaluation, and referral to treatment as needed. These programs should have an opportunity for self-referral or referral by parents or other caring adults into the program, in addition to a track for diversion as an alternative option to suspension.

As such, effective education/intervention/diversion programs include some or all of the following components, depending on the needs of the student: research/evidence-based education, assessment, intervention, and treatment/referral to treatment as needed. Increasingly, these programs include a "restorative justice" component, as applicable.

Of course, at a minimum, in all cases of school-based vaping infractions, parents should be notified and a recommendation that the student be taken to their pediatrician or family physician for assessment, should be made.

School-based Treatment

Massachusetts school districts are beginning to partner with treatment and recovery providers as a means for assisting students who need ongoing support to reduce, and ultimately stop, the use of the substance the have become dependent on, most often in recent years nicotine/THC vaping products. These in-school treatment programs for vaping, are being modeled on the tobacco cessation programs of the past. For example, Hopkinton Public Schools and Natick Public Schools are both running pilot programs that include in-school treatment and recovery supports. Hopkinton Public Schools are implementing an MTSS approach to address vaping

among students. This includes primary prevention of first use, and education, assessment, intervention, treatment and recovery support for students with a vaping-related school infraction and/or referred into this school-based program.

School nurses may administer nicotine replacement therapy (NRT), as directed by a student's pediatrician.

Out-of-School Treatment

In-Person Treatment Programs

At a minimum a referral to pediatrician/family physician should be made in every instance of a school-based vaping infraction. The American Academy of Pediatrics Electronic Nicotine Delivery System (ENDS) webpage provides links to information for parents and pediatricians.

For more advanced and serious substance use/abuse/addiction issues referral can be made to:

- Massachusetts General Hospital Addiction Recovery Management Services (ARMS)
- Boston Children's Hospital Adolescent Substance Abuse Program (ASAP)

Online Cessation Examples

Below is a list of online and web-based cessation tools for youth.

BecomeAnEx

- Developed by Mayo Clinic
- Format: Email Reminders
- Length: Ongoing
- More Information: https://www.becomeanex.org/

Developed by the Mayo Clinic in collaboration with the Truth Initiative, this resource can help you to create a quit plan, connect with with regular messages of support to quit vaping or traditional cigarettes, and can also connect you to a community of other folks who are trying to quit. The resources that BecomeanEX provides are available online and are free. There are premium services that can be offered for a fee, but if you talk to your doctor, it is possible they could provide you with a referral and insurance can cover the cost of premium services.

Make Smoking History (The Massachusetts Quit Line)

- Developed by MA Department of Public Health
- Format: Online or by Phone
- Length: Unlimited resource access and phone/online support, 4 weeks of NRT)
- More Information: https://ma.quitlogix.org/en-US/

Developed by the Massachusetts Department of Public Health. Participants may enroll either over the phone or online. Members are offered access to a coach, planning materials, and a community of other folks trying to quit. In addition, members are also provided access to nicotine replacement therapies, like gum or patches (at least 4 weeks of patches can be available). This, of course, depends on many different factors that will be determined in some of your initial contact with the service. More information can be found at the website or phone number: 1-800-QUIT-NOW

My Life, My Quit
- Developed by National Jewish Health
- Format: Phone or Text
- Length: Unlimited
- More Information: www.mylifemyquit.com

Youth coach specialists trained to help young people by phone or text. Young people can call or text "Start My Quit" to 855-891-9989 for free and confidential help, or visit www.mylifemyquit.com to sign up online.

QuitSTART
- Developed by the Department of Health and Human Services
- Format: App
- Length: Ongoing
- More Information: https://teen.smokefree.gov/become-smokefree/quitstart-app

A program through the National Institute for Health (NIH). Teens can download an app and access the information and resources as needed. This app provides badges and achievements for success on the path to quitting, which tends to be helpful in the effort to quit. More information can be found here:

SmokefreeTXT
- Developed by the Department of Health and Human Services
- Format: Texts
- Length: 6-8 weeks
- More Information: https://teen.smokefree.gov/become-smokefree/smokefreeteen-signup

Another program through NIH and the Department of Health and Human Services, a young person may complete the form in the link below to sign up for 6-8 weeks of texts alerts to support their efforts to quit. Participants can expect to receive 3-5 messages per day encouraging them to quit.

You can either visit this link or text ""QUIT" to 47848. The service is also available in Spanish. The online form is set up for traditional cigarettes.

This is Quitting
- Developed by the Truth Initiative
- Format: App
- Length: Ongoing
- More Information: http://www.thisisquitting.com/

A program through the Truth Initiative, the organization widely responsible for reducing teen cigarette usage in the mid-2000s. The program is delivered through text, and unlike some of the other text-based options, was specifically designed to help teens quit e-cigarettes and used input from teens and college students in its design.

This service provides 24-7 support, as well as automated messages. Teens can begin getting support by texting "DITCHJUUL" to 887-09

Young Massachusetts residents can also text "VapeFreeMass" to 887-09.

Caring adults who are looking to help young people in their lives to quit can text "QUIT" to (202) 899-7550

Closing

There are many prevention professionals across Massachusetts and the Nation, working to improve youth behavioral health and prevent youth substance use. Working with your local community-based prevention coalition (or starting one, if you don't have one) is a good way to improve the health of your students. Nonetheless, school-wide (vertically aligned K-12) focus and attention on youth behavioral health promotion and substance use prevention is absolutely critical to the health, safety, and academic success of ALL students.

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[i] MWAHS 2018

[ii] https://pdfs.semanticscholar.org/a323/e983078d36c2c403fdd4515bcc60a80e8a36.pdf?_ga=2.244439365.1913645441.1558725858-1656797351.1558725858
[iii] https://www.mahb.org/wp-content/uploads/2018/03/Final-of-School-Policy-Guidance-2.15.18.pdf
[iv] http://www.ansrmn.org/wp-content/uploads/2018/04/K-12-Schools-Policy-Guide.pdf
[v] https://www.lung.org/assets/documents/asthma/tobacco-free-school-campus.pdf
[vi] https://www.lung.org/assets/documents/asthma/tobacco-free-school-campus.pdf