

Vaping and Smoking Cessation

The Quick and Dirty Guide for Clinicians

Wednesday, August 24th

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Tobacco Cessation → Teen Cessation

5 A's Model

- Ask
- Advise
- Assess
- Assist
- Arrange

4 A's Model

- Ask
- Assess
- Advise
- Act



Ask → Assess → Advise → Act

- Screening!!!! Do it! Either use a screening form where the adolescent can fill it out privately, or just ask them.
- Other ways of asking teens can be direct or indirect
 - Do you vape? Smoke?
 - Have any of your friends vaped? Have you ever been offered a vape? Did you try it?
- What other ways do you ask your teens about vaping?
- Screening forms include the CRAFFT (add-on your office's version of checking for vaping), or you can use the [Hooked on Nicotine Checklist](#) or [E-cigarette Dependence Scale](#) both of which are validated for this purpose and both can be accessed through the MaineHealth CTI website or the national AAP site.

Ask → **Assess** → Advise → Act

- Assess the teen's motivations: What makes them vape? Where are they right now in the path to quitting? Do they recognize an addiction?
- Assess their medical addiction: How much nicotine are they actually consuming? Often with teens it's quite variable as they don't always have consistent access to devices. However, understanding how much nicotine daily they use can even surprise the teen themselves, and can help direct treatment

Ask → **Assess** → Advise → Act

- Nicotine consumption – easy calculations!
- You need to know two pieces of information:
 - 1) What type of vape do they use?
 - 2) What is the nicotine concentration of the e-liquid?

Nicotine calculations

- **What type of vape:** the teen will tell you the name. The real information you need is if it's cartridge-based (most are) like Juul, and how much liquid the cartridge contains.
 - For example, Vuse is a popular model right now. The Vuse disposable cartridges contain 2 ml of liquid
 - If it's a refillable mod, find out how much liquid the tank contains
- **What's the nicotine percentage in the liquid:** the teen can usually tell you this too (if not, a quick Google can help you since most cartridges are fixed concentrations).
 - For example, the teen may tell you 3% nicotine for their Vuse vape



Nicotine calculations

- To put it together, multiply the nicotine percentage by 10 to get concentration in mg/mL
 - So, 3% nicotine $\times 10 = 30$ mg/mL
- Multiply the concentration by the amount of liquid in the cartridge/pod
 - Vuse uses a 2 mL pod, so $2 \text{ mL} \times 30 \text{ mg/mL} = 60$ mg nicotine in one pod
- A pack of cigarettes contains roughly 20 mg of nicotine. You can assess the teen's dependence by finding out how long it takes them to go through one cartridge/pod
 - If the teen can go through a pod in 3 days, they are using about a pack/day of nicotine

Ask → Assess → Advise → Act

- Make a clear, personal recommendation to quit
- When the teen is ready, develop a plan to quit together.
 1. Encourage communication and help from parents, friends, partners
 2. Utilize an online quitting resource
 3. Decide if nicotine replacement therapy is warranted
 4. Close follow up!!!
- When feasible, utilize behavioral health resources for all patients with addiction

Ask → Assess → Advise → **Act: Online Resources**

- 1) My Life My Quit – Maine
 - Excellent overall resource focused on quitting vaping
 - Maine QuitLink
- 2) Smokefree Teen
 - **Build My Vaping Quit Plan** → Teen.smokefree.gov
 - National Cancer Institute
- 3) This is Quitting
 - Well established text-based service focused on quitting vaping
 - Truth Initiative



NOT IN MAINE? GENERAL SITE.



#MYLIFEMYQUIT
FREE HELP,
JUST FOR TEENS.

START MY QUIT

Live Chat

My Life My Quit - Maine

- Excellent regional support for teens, easier to navigate than QuitLink
- Tailored to ages 13-17 yrs
- Free, confidential, easy online enrollment
- Text-based services, online chat, or directly call for support
- Text “Start My Quit” to 36072
- Call 855-891-9989
- Personalized, geared towards providing teens and parents with useful information



BECOME A SMOKEFREE TEEN

Today is a great day to quit.

Tools & Tips

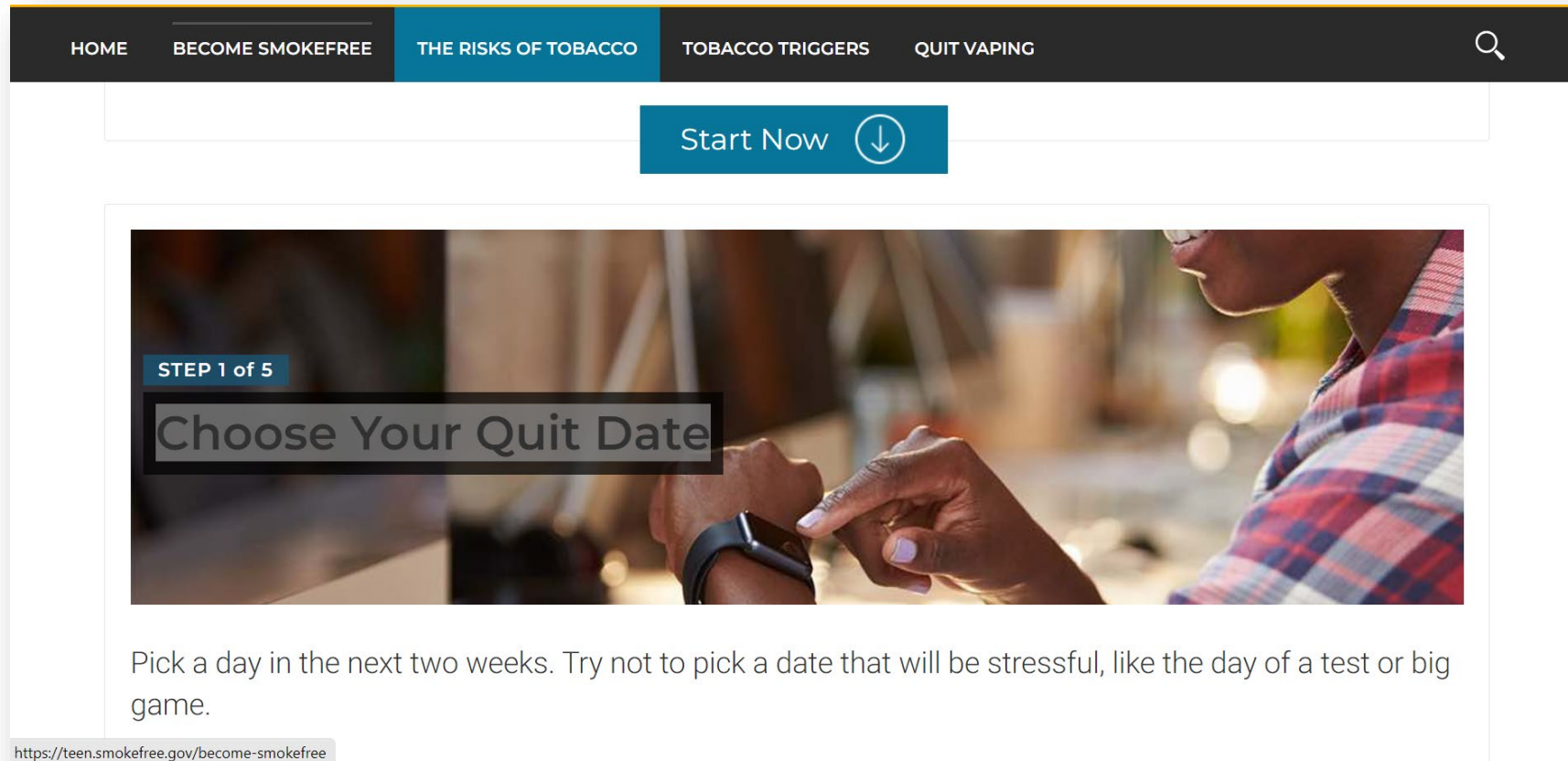
Smokefree Teen

- **Build My Vaping Quit Plan**
- Tailored to ages 13-17 yrs
- Text-based services, online chatting, phone call
- Text “QUIT” to 47848*
- Smartphone App for quitting (“quitSTART App”*)
 - *App is listed as appropriate for 17+ yrs*
- Instagram

**Focused on combustible cigarettes*

Smokefree Teen

- [Build My Vaping Quit Plan | Smokefree Teen](#)



The screenshot displays the website's navigation bar with options: HOME, BECOME SMOKEFREE, THE RISKS OF TOBACCO (highlighted), TOBACCO TRIGGERS, and QUIT VAPING. A search icon is visible on the right. Below the navigation is a prominent blue button labeled "Start Now" with a downward arrow icon. The main content area features a video player with a thumbnail image of two people looking at a smartphone. The video title is "STEP 1 of 5 Choose Your Quit Date". Below the video, a text box provides instructions: "Pick a day in the next two weeks. Try not to pick a date that will be stressful, like the day of a test or big game." At the bottom left, the URL <https://teen.smokefree.gov/become-smokefree> is displayed.



Home → **This is Quitting**

THIS IS QUITTING

The first-of-its-kind program to help young people quit vaping, This is Quitting has helped nearly 500,000 youth and young adults on their journey to quit vaping. Learn more about how it works and the additional resources available for parents of young vapers and for adults who want to quit.

Teens and young adults can join for free by texting **DITCHVAPE** to **88709**



This is Quitting

- Tailored to ages 13-24 yrs
- Original vaping cessation online support program
- Offers a focused text-based service with tailored messages daily for at least four weeks
- Text DITCHVAPE or DITCHJUUL to 88709
- Offers text-based support for parents, as well
 - Text QUIT to 847-278-9715

Ask → Assess → Advise → **Act: Pharmacotherapy***

Nicotine Based

1. Gum**
2. Patch**
3. Lozenge**
4. Nasal spray
5. Inhaler

Non-nicotine Based

1. Bupropion (Wellbutrin)
2. Varenicline (Chantix)

**Have not been FDA-approved for < 18 yr olds*

***Available OTC for 18+ yrs old*

Ask → Assess → Advise → **Act: Pharmacotherapy**

- Consider pairing long-acting delivery (e.g. patch) with short-acting (e.g. gum, lozenge, spray or inhaler) medications
- Patch, gum and lozenge can be prescribed to youth < 18 yrs
- Contraindications to NRT
 - Hypersensitivity to nicotine
 - Soya allergy for using the lozenge
- AAP Resource: [Microsoft Word - NRT and Adolescents Pediatrician Guidance factsheet CLEAN \(aap.org\)](#)

UPDATE AND WARNING

- Fairly recent articles have come out in the last several weeks stating that adolescents are now turning to nicotine-containing candies or gum instead of vapes to get the same high as a vape but without having to inhale.
- These are different from NRT lozenge or gum medications because they are packaged like candies and marketed heavily towards youth. In fact, RJ Reynolds company released a Camel Orbs “pellet” that looks really similar to the TicTac but has been removed from the market from what I can see
- These candies each contain between 1-4 gm of nicotine (again, are not FDA regulated)
- I just want to mention this going forward as it likely will influence how we treat nicotine addiction in the future.

Pharmacotherapy

The following slides go through each medical intervention for adolescents
Information is taken from the AAP and Up To Date

1. Gum
2. Patch
3. Lozenge
4. Nasal spray
5. Inhaler
6. Bupropriion (Wellbutrin)
7. Varenicline (Chantix)

[Nicotine Replacement Therapy and Adolescent Patients: Information for Pediatricians \(AAP Source\)](#)

Nicotine Transdermal Patch

OTC for 18+

Rx for < 18

Cost: over-the-counter ranges from \$25-\$70 for 28 patches

- **Dosages**

- 21 mg, 14 mg, 7 mg

- **Use Instructions***

- Apply patch to clean skin, change patch every 24 hours
- 8-10 week treatment regimen:
 - 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

- **Side effects**

- Skin irritation, sleep disturbance

- **Advantages**

- Sustained blood levels of nicotine, compliance is relatively easy

**See package for full details*

Nicotine Gum

OTC for 18+

Rx for < 18

Cost: over-the counter retail ranges from \$17-\$50 for 100 pieces of gum

- **Dosage**

- 4 mg, 2 mg

- **Use Instructions***

- “Chew and park” method:
 - Place gum in mouth and chew until tingling sensation
 - Stop chewing and “park” the gum between cheek and gums
 - After about a minute, start chewing again, until tingling sensation
 - Stop chewing and “park” the gum again
 - Repeat for about 30 min
- 12-week regimen
 - 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

- **Side effects**

- Jaw soreness, mouth irritation, indigestion, nausea, hiccups

- **Advantages**

- Flexible dosing, rapid delivery of nicotine into blood stream

**See package for full details*

Nicotine Lozenge

OTC for 18+

Rx for < 18

Cost: over-the counter retail ranges from \$15-\$50 for 100 lozenges

- **Dosage**

- 4 mg, 2 mg

- **Use Instructions***

- Dissolving method:
 - Place lozenge in 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 regimen
 - 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

- **Side effects**

- Oral irritation, nausea, hiccups

- **Advantages**

- Flexible dosing, rapid delivery of nicotine into blood stream, no chewing (discrete)

**See package for full details*

Nicotine Nasal Spray

Rx only

- **Dosage**

- 10 mg/mL (10 mL) = 100 mg per bottle

- **Use Instructions***

- Prime pump and blow nose; tilt head back slightly and insert tip into nose.
- Breathe through mouth and spray once in each nostril; wait 2-3 min before blowing nose
- 1-2 doses/hr (each dose is 2 sprays, one in each nostril; each spray is 1 mg) adjust per patient
- Best used initially over 1 month, up to 3 months

- **Side effects**

- Nasal discomfort, oral irritation, throat irritation, cough, headache, rhinitis

- **Advantages**

- Flexible dosing, rapid delivery of nicotine into blood stream, no chewing (discrete)

**See package for full details*

Nicotine Inhaler

Rx only

- **Dosage**

- 10 mg

- **Use Instructions***

- Insert cartridge into inhaler and push until pops into place; replace mouthpiece and twist top and bottom so markings do not line up. Wash mouthpiece after use.
- Best effect with frequent continuous puffing (20 minutes) into back of throat (not lungs)
- At least 6 or at most 16 cartridges/day, up to 12 wks

- **Side effects**

- Nasal discomfort, oral irritation, throat irritation, cough, headache, rhinitis

**See package for full details*

Bupropion (Wellbutrin)

Rx only

Recommended for ≥ 14 yrs

- **General Info**

- Antidepressant, weak inhibitor of neuronal uptake of norepinephrine and dopamine
- Contraindicated in youth with seizures, eating disorders, complex alcohol use

- **Dosage**

- 12-hour sustained release, hydrochloride salt tablets must be taken whole

- **Use Instructions***

- Initial: 150 mg once daily for 3 days
- Increase to 150 mg twice daily
- Should be started prior to quitting and cessation starts in 3rd week
- Best used with counseling

- **Side effects**

- Agitation, insomnia, weight loss, xerostomia, headache, constipation, nausea/vomiting, diaphoresis, dizziness, tremor, blurred vision, nasopharyngitis, tachycardia

**See package for full details*

Varenicline (Chantix)

Rx only, not recommended \leq 16 yrs

- **General Info**

- Partial neuronal nicotinic receptor agonist
- Helps reduce cravings
- Studies show effect in initial cessation

- **Dosage**

- 0.5 mg or 1 mg tablets

- **Use Instructions***

- Days 1-3: oral 0.5 mg once daily
- Days 4-7: oral 0.5 mg twice daily
- Maintenance: oral 1 mg twice daily for 11 weeks
- Check for drug interactions before prescribing

- **Side effects**

- Abnormal dreams, nightmares, nausea, depressed mood, irritability

**See package for full details*