

## Prime

- hook attention and set the frame.
- 1. Acknowledge and validate their doubts. You've probably heard this all before and I'm going to tell you a lot of stuff that you already know. Maybe you think it's silly to be here because you don't vape or have more immediate concerns, you might think this is boring, futile, a distraction. I hear you, you're reasonable, and in a lot of ways I agree.

I'm here because this is important, we learn more about how brains develop every day, and you deserve to have the most recent information available and an opportunity to process, talk about, and decide how new information will influence your decisions going forward. And regardless of where you are right now with vaping, whether you've never tried or you use occasionally or you enjoy it or are looking for resources to help you stop, the most important thing to me today is that you have the facts so you can make healthy choices.

- 2. Breathing exercise - some deep breaths together. If you have space, stand up and/or add in arm movements: Reach down to each side, spread your fingers wide, and then breathe in while you float them above your head until your hands are touching. As you exhale, bring your hands down to center. Repeat.
- 3. Anchor activity - find learners where they are and root there.
  - a. Trivia - adolescents' perspectives on vaping and drugs will be all over the map, from disgust and avoidance to curiosity and enjoyment, and sometimes misuse and addiction. For that reason, we stick to the facts and this activity will level-set. Go quickly - ask/show the question and have folks speak out the answers. (If you can avoid the urge to control or order their responses, they will be less suspicious that this presentation is designed to control or order their decisions.)

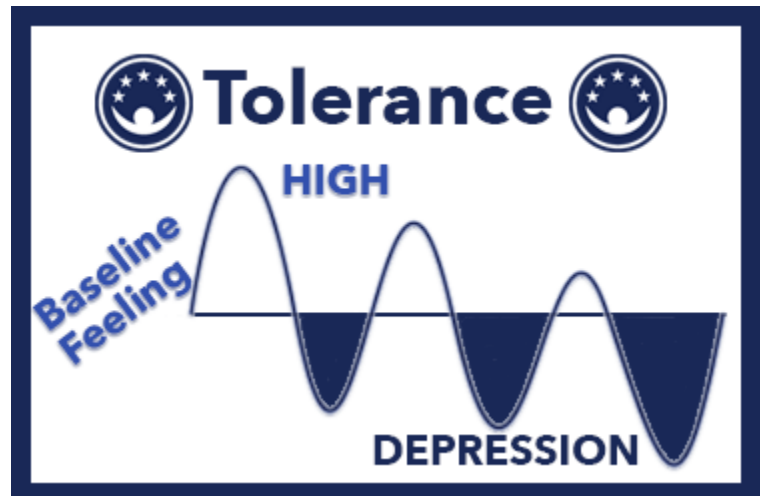
When does a human brain finish developing?	Around 25 years old.
From first puff to public policy, how long did it take for humans to recognize the ill-effects of tobacco and implement systems to protect the public?	Around 7,000 years.
How long does nicotine affect a developing brain?	Forever.
How long have vapes been around?	Less than 20 years.
What process in the brain is behind addiction?	The A/B Process

If no one knows this, tell them it is an interesting process you're excited to tell them about because it will change the way they think about brains! If someone guesses, have them give a synopsis of the A/B process and tell them we're going to take a deeper dive today.

## Inform

- offer the science behind addiction
  - age-appropriate design and lots of facts
1. Provide detailed information - Show [this video](#) from Dr. Craig Facey - an Australian psychologist and the only person on the internet to have made a digestible, teen-appropriate video about opponent process theory. (Thank you, Craig!)
    - a. The opponent process theory is also called the A-B Process and its goal is homeostasis.
    - b. Just like physics when for every action there is an equal and opposite reaction, our brains counteract chemicals that act on them. The A process is the drug effect and the B process is the opponent, our body trying to find balance or homeostasis.
    - c. The A process will increase our mood when we first use a drug and, in response, the B process will decrease our mood so that, in the end, we feel about even because that's what our body does - keeps us even. And that central tendency is called homeostasis. But it takes longer for our B process to return to a normal level than it does for the A process, the drug, to wear off. That part, where the drug has worn off but our body hasn't returned to its baseline, is called the crash or the hangover.

- d. Addiction happens when our body craves the drug during that crash because our brain feels bad without it. Then, we take the drug again and if we do it before we get back to baseline, the drug seems to have less of an effect because our mood was lower when we started. The truth is that the drug raised our mood the same amount as the first time, but because we felt bad before, we don't reach the same "high". Taking more leads to tolerance.



2. Make space for questions - answer what you can accurately and offer to follow-up with anything you don't know. Some talking points to come back to:
  - a. Chemicals in vapes and cigarettes can permanently change brain development if they're used in adolescence. The longer you wait to try these things - around age 25

is ideal - the less likely you are to become dependent on a substance. That includes caffeine, alcohol, cigarettes and vapes, and marijuana.

- b. Some people think vaping is less risky than smoking cigarettes. It took us 7,000 years to understand the harms of smoking tobacco and vapes are only a couple decades old - there's still a lot of research to do and long-term health outcomes to observe before we know if chemicals in vapes are less bad than cigarettes. Whether or not vaping is less bad or less risky, it is still both bad for your health and a big risk for dependence and addiction.
- c. Our bodies and brains counteract the effect of drugs, increasing tolerance and leading to misuse, dependence, and then addiction. People along the whole spectrum, from first use to addiction, benefit from knowing how that process happens so they might recognize it earlier and intervene to prevent the worst outcomes.
- d. People take drugs like nicotine to feel better, but in reality, the more of a drug you take, the less good you feel.

### **Incorporate**

- establish peer-based strategies
  - identify support resources
1. The best defense is a good offense. We all have things that make us feel good - what are some of yours? Make a visible list of the broad categories - playing with a pet, gaming with friends, participating in sports, playing an instrument, etc. Let the energy rise during this discussion and, if you have time, imitate some of the things they're saying or welcome them to do so - take a 3-point shot at the end of the game, pew pew the space alien invaders, purse your lips and play a fake tuba, etc.

Teen brains are wired for social connection and a lot of the activities you mentioned can be done with friends. You're also building a multi-faceted identity - you contain multitudes and even if you do smoke, that's only a tiny part of who you are. You always have the option of focusing on building out those other parts.

2. But you still need a defense. No matter how much good stuff you've got going on, you still need to plan for when things aren't great. Pose the question: If people take nicotine - or any drug - to feel better, what are some of the things they might be healing from? What things are causing them to need to feel better? Make a visible list of the broad categories, this will take a lot of turns: physical ailments, mental health, social exclusion/isolation (you might have to prompt this one, but they will relate if you ask about doing things so they fit in), everyday stress, college applications, parental or school expectations, etc.

Connect the dots - could we use any of our offensive strategies to defend ourselves against some of these challenges you just listed? Draw lines connecting the two lists, add to the offense list if they come up with new ideas. Help them see the big picture: social support, trusted adults, and the proper resources can help mitigate stressors. Vaping is another stressor that literally makes it harder for you - mind and body - to feel good. You all have enough on your plates - don't add more.

Ask them if they have any friends who might benefit from more of those offensive strategies.

3. Recognize when a friend is smoking and help them quit. One of my favorite advice columns is [Go Ask Alice](#) from Columbia University, and they have some great information about helping someone stop vaping. If a friend is vaping, you've probably seen them do it, they've talked about it to you, or you've heard it from another friend. If you don't know for sure that the friend you're concerned about is vaping, you can probably just ask! Approach your talk with curiosity and have some resources in your back pocket, in case your friend is interested in quitting. (Although the column below is advice to a mother about her son, it's good advice and could be even more effective coming from a friend.) Ask them how they might talk to a younger sibling or a close friend about smoking.

This [Go Ask Alice](#) column makes some great recommendations about helping someone quit smoking. The column has many other relevant questions and you may point teens to the website as a general resource, as well. They include:

- Share your concerns about their health and that you hope they will quit.
- Ask: Do you see yourself smoking as an adult?
- Ask: What would make you ready to have your last smoke?
- Help them pick a date to quit.
- Practice saying no to friends who smoke, or engage them all in quitting smoking together.
- Ask: What triggers you to smoke? Identify ways to mitigate those triggers.

[Smoke Free Teen](#) is a government website where teens can find many resources to quit smoking including access to an expert, a planning tool, and a downloadable app.

[The Truth Initiative](#) prepares youth to be advocates for their own health and sheds light on tobacco industry advertising.

4. Answer any final questions - Leave them with resources, an idea of who in the school/program can answer questions, and a feeling of having made a good decision.