

Tobacco 101- Mental Health and Nicotine

Nicotine, the drug present in commercial tobacco products, can have detrimental effects on mental health, especially for young people. After today's lesson, students will understand the effects of nicotine on their brains. Students will also learn how to care for their own mental health after learning this important, but sometimes draining information.



Learning Objectives

After this lesson, students will be able to:

- Summarize the effects of nicotine on developing brains; and
- Identify healthy habits that can promote a positive state of mental health.

Materials Needed:

- Computer with internet access or computer with USB drive that contains the two videos used in this chapter
- Copies of Nicotine and Mental Health factsheet
- Copies of the newspaper article
- Paper
- Writing utensils
- Whiteboard markers

Overview of Lesson

- Warm-up and Introduction: 15 minutes
- Video & Discussion: 20 minutes
- Factsheet & Discussion: 10 minutes
- 'Sleep Hygiene' Activity: 15 minutes
- Exit Ticket: 5 minutes

Total Time: 65
minutes

Before the Lesson

- Prepare the warm-up question to be ready for the students as they walk into class.
- Double-check the sound for the video. If streaming the video from YouTube, ensure you have a working internet connection.
- Have the discussion questions posted on the board.

Warm-Up Activity and Introduction

Total Time: 15 minutes

Before the students arrive, have the following questions projected on the board:

- What effect do you think nicotine has on mental health?
- What have you heard about nicotine/vaping and mental health?

Before engaging students in conversation, start with mindful movement stretching to feel comfortable in the space.

- “Mindful Movement for Any Room: Hallway”
www.youtube.com/watch?v=M-uTD1mdlv4 (7:02)

After stretching, ask for three student volunteers to share.

Notes

[illegible]

Total Time: 20 minutes

Before playing the videos, ask the students to listen for things that surprise them.

- After each video finishes, have students discuss the following questions with people at their table or in groups:

- ## Notes

[illegible]

Factsheet and Discussion

Total Time: 10 minutes

Have a student pass out the Vaping and Mental Health factsheet (next page).

Ask students to read through the factsheet.

After students have finished reading the document, ask them to turn and tell their neighbor one thing they learned from the factsheet that surprised them. Allow two minutes for this mini-discussion.

Call students back together and ask for volunteers to share what they learned with the larger group.

If students aren't volunteering responses, ask the following questions to prompt responses. Give students some time to think before you jump in with a response.

- What surprised you most from the factsheet?
- How do you feel about the misinformation from the tobacco industry that nicotine can improve mental health and wellbeing?





AT WHAT COST?

VAPING AND MENTAL HEALTH

YOUNG PEOPLE ARE FACING TWO RELATED CRISES

The 2022 National Youth Tobacco Survey shows that about 1 in 10 middle and high school students use e-cigarettes, and more than 1 in 4 who use e-cigarettes vape daily.¹ At the same time, symptoms of anxiety and depression in young people have doubled from pre-pandemic levels.²

These two crises are not isolated. Though more research is needed about the connections between vaping nicotine and mental health, numerous studies expose the worrying connections between them.

THE “STRESS RELIEF” ILLUSION

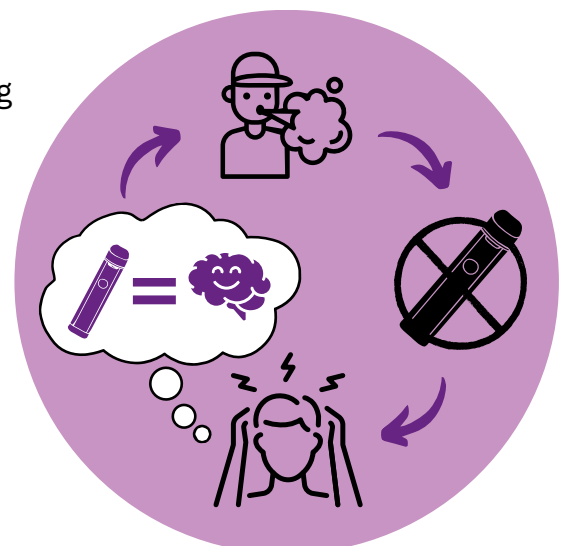
Many young people start and continue to vape because they think vaping will relieve their mental health symptoms. The most common reason youth give for continuing to use e-cigarettes after their first use is “I am feeling anxious, stressed, or depressed.”³ The illusion that vaping improves mental health was created by the tobacco industry and pushed through marketing, preying on those looking for relief.

81%

of young people ages 15-24 who had used e-cigarettes said they started vaping to decrease stress, anxiety or depression.²

THE NICOTINE WITHDRAWAL CYCLE

Part of the illusion comes down to biology. When someone hasn't vaped in a while, it doesn't take long for symptoms of nicotine withdrawal like irritability, anxiety, depression and insomnia to begin. Vaping gives the illusion of relief from these symptoms, because consuming nicotine stops feelings of withdrawal. The cycle of symptoms followed by relief can create the false perception that vaping benefits mental health overall, even though it only curbs temporary withdrawal symptoms.² It is a difficult cycle to break and Big Tobacco knows it.





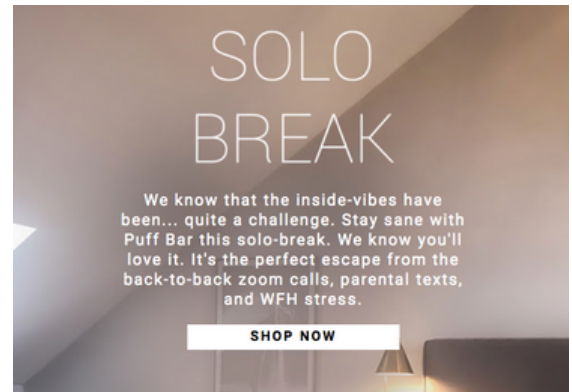
AT WHAT COST?

VAPING AND MENTAL HEALTH

BIG TOBACCO LINKS VAPING & MENTAL HEALTH

The tobacco industry's marketing campaigns try to link e-cigarette use to relaxation, pleasure and stress relief. Below are some of the ad slogans and flavors that the tobacco industry uses to convince customers of this connection:

- "Stay sane"
- "Perfect escape"
- "Relaxed and enjoyable"
- Bliss
- Soothe
- Chillax
- Zen



A Puff Bar ad connects vaping to stress relief

This marketing strategy, combined with the experience of the nicotine withdrawal cycle, seems to reinforce the connection between vaping and coping with poor mental health for those that vape. This thinking adds to the stress relief illusion. 45% of those who vape frequently agree it is OK to vape to relieve stress, while only 20% of non-vapers agree.²

THE REAL COST OF VAPING, POOR MENTAL HEALTH

Young people who vape frequently are

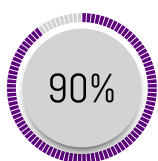
2.4X

more likely to be diagnosed with depression than their non-vaping peers.²

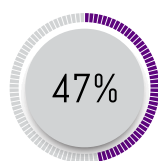
- Young people who vape report more days of poor mental health than those who don't.²
- Vaping nicotine can make existing mental health conditions worse.⁴
- Using e-cigarettes is associated with difficulty concentrating, remembering and making decisions.²

QUITTING IS THE BEST STRESS RELIEVER

Of young people who quit vaping...



felt less stressed, anxious and depressed²



felt more in control²

Quitting vaping can relieve mental health symptoms and improve quality of life. Visit www.flavorshookkidsmn.org to learn more about tobacco industry targeting and how to take action.

'Sleep Hygiene' Activity

Total Time: 15 minutes

Supply a copy of the blog post "Sleep and Mental Health: 15+ Helpful Tips to Get a Better Night's Sleep"

www.namiberkspa.org/sleep-and-mental-health/

Have students pass out copies of the blog post and highlighters.

Allow students to independently read the blog post.

Once students have completed reading, ask the students to summarize the blog post.

At this point, the goal is for the facilitator to let the students talk as much as possible. Ask the following questions to keep the discussion moving:

- Have you heard of the term "sleep hygiene"?
- What healthy sleep habit do you think is the hardest for you?
- What healthy sleep habit do you think is the easiest for you?
- What steps could you take to improve your sleep habits?
- What do you think are the biggest challenges to healthy sleep habits that young people face today?

Sleep and Mental Health: 15+ Helpful Tips to Get a Better Nights Sleep

When I looked at the March calendar and saw that not only is this Sleep Awareness Week, but this week also includes National Napping Day and World Sleep Day, I knew that I needed to write about sleep. So, I started to research to find the best information to share. Ironically, I did my research and writing while yawning and fighting heavy eyelids.

Whoa- there is a lot of information out there: the science behind sleep, sleep cycles, sleep disorders, and a lot of scientific words that I'm not sure that I can pronounce. Since this is a NAMI Berks County blog, I decided to whittle the topic of Sleep down to just Mental Health and Sleep (although this is a huge topic in itself- so I will just cover the basics and share a bunch of ideas.)

Sleep: A Summary

Sleep is often considered an underappreciated aspect of our lives, but it is so important that we spend 1/3 of our lives sleeping. Sleep is a state of rest when our bodies disconnect from our senses to stop processing outside information and consciousness is suspended so we are not aware of what is happening around us. This all occurs while the body still performs essential biological activities.



Why Do We Sleep?

Sleep is a necessary activity for us to function at our best while awake. When we sleep, we conserve our energy to restore it and increase alertness in wakefulness. Our bodies also grow and develop in sleep and our immune system scans for illness and damage and then starts to fight it. Sleep also strengthens our learning and memory as well as helps us process emotional information.

When we do not get enough sleep, we feel fatigued, and our attention is reduced. Our productivity decreases and the likelihood of errors and accidents increases. Lack of sleep is linked to greater risk for illness such as heart disease and stroke. The reduced functions caused by lack of sleep have been compared with the impairment associated with alcohol. A person who does not sleep for 24 hours has impaired cognitive ability to the same extent as a person with a blood alcohol level of 0.10% (well above the legal limit to drive.)

RECOMMENDED SLEEP

CHILDREN

Total: 10-14 hours
depending on age



TEENS

Total: 8-10 hours



ADULTS

Total: 7-9 hours



OLDER ADULTS

Total: 7-8 hours



What Is “Good” Sleep?

During sleep, our bodies progress through 4 stages of sleep and we continue through multiple cycles of these stages. The stages and cycles vary in length. Each stage of sleep is important and getting the right amount of each is essentially “good sleep.”

In stages 1 and 2, the body and the brain slow and prepare us for sleep. In stage 3, Deep Sleep, our muscles relax, and our brain waves slow. This stage is believed to be the most important for the recoupment of our body, thinking, and memory. In stage 4, REM Sleep, the activity in the brain increases but the body- except for the eyes and breathing muscles- is temporarily paralyzed. People experience their most intense dreams during this stage, and it is the stage when we process emotional information.

Sleep And Mental Health

Most of us feel better after a good night’s sleep and terrible after a night of poor sleep. Sleep and mental health are closely connected- sleep deprivation affects both your psychological state and mental health. People with mental health problems are more likely to have sleep problems. Poor sleep is connected to depression and can affect emotional responses and social interactions.

Our brain- including our cognitive skills- is restored during sleep. When we sleep poorly it is much more difficult to deal with minor stressors and can even impact our ability to perceive the world accurately. Sleep deprivation studies have found that “healthy” people experience increased

anxiety following poor sleep. People with mental health disorders are more likely to experience sleep problems and sleep problems often exacerbate the symptoms of a mental health condition.

Research is ongoing, but researchers believe that mental health and sleep have a “bidirectional relationship”. Mental health disorders can make it hard to sleep well and poor sleep can be a factor in developing or worsening a mental health condition. Both aspects are complicated, but most believe that improving sleep can have a positive impact on mental health.



SLEEP HYGIENE

Five effective tips to establish a healthy sleeping habits

Stay clear of stimulants late in the day.



avoid beverages and foods that contain caffeine

Do a regular exercise.



regular exercise routine can help contribute to improved sleep.

Stick to a consistent sleep schedule.



going to bed and waking up at the same time every day



Create a relaxing bedtime/pre-bedtime routine.

any relaxing activity about an hour before bed helps creates a smoother transition.

Unplug an hour before bed.

Keep screen use to a minimum, at least an hour before bed,



Keep your room cool and comfortable.

ideal room for sleeping is cool, quiet, and dark.



Avoid foods that can disrupt sleep.

when you lie down right after a big meal, your digestive juices are still cranking.



How To Improve Sleep

How do I improve my sleep? It seems easy to answer- sleep more. But, as we all know, it's not that simple. For many sleep problems, incorporating healthy sleep habits can be enough to improve

sleep. For more chronic problems like insomnia, Cognitive Behavioral Therapy (CBT) which educates about sleep and aims to change sleep-related behaviors, is known to be successful. Optimal treatment for both mental health and sleep problems will vary between individuals.

Adopting healthy sleep habits, or sleep hygiene, can improve sleep. The Sleep Foundation's website has great tips, including explanations for the "why." Visit here:

<https://www.sleepfoundation.org/sleep-habits>



Examples Of Healthy Sleep Habits/Sleep Hygiene:

- Try to keep a consistent sleep schedule, waking up around the same time even on weekends.
- Set a bedtime that is early enough for you to get at least 7 hours of sleep. However, don't go to bed unless you are sleepy.
- If you're having trouble falling asleep, don't lie in bed awake. If you can't get to sleep, get out of bed, and do something relaxing until you feel tired.
- Find ways to wind-down, such as with relaxation techniques, as part of a standard routine before bedtime
- Avoid alcohol, tobacco, and caffeine in the evening.
- Dim lights and put away electronic devices for an hour or more before bed.
- Get regular exercise and natural light exposure during the daytime.
- Maximize comfort and support from your mattress, pillows, and bedding.
- Create a healthy sleep environment– avoid excess light and loud sounds, keep the room at a comfortable cool temperature, and try to limit electronics in your bedroom.
- Finding the best sleep habits that work for you may take some trial and error to determine what works best for you. But when you find what works you will be rewarded by being able to fall asleep quickly, stay asleep and hopefully improve mental health.

Getting healthy sleep has been a recent issue for me. I did a lot of research and tried a lot of things to improve my sleep. I'm also a data nerd and track my sleep with my Smart Watch. Tracking my sleep has helped me figure out what works for me and what does not. These are the things that help me:

- Frequent exercise: I try to get at least 30 minutes of activity every day. I notice that the more physical activity I get, the better I sleep.
- Hydration: I try to drink as much water during the day as possible. It is recommended to drink ½ ounce of water per 1 pound you weigh (if you weigh 100 lbs., you should drink 50 ounces of water.) I also start each day drinking a full glass of water.
- Yoga: I have added a bunch of “Yoga for Sleep” videos to my YouTube library and try to do 10-20 minutes of yoga in the evening. Any type of yoga in general is good for your health.
- Tart Cherry Juice: I'm not completely sold on this yet, but it doesn't hurt. I don't do this every night, usually just when my muscles or joints are sore (I am sold on the fact that tart cherry juice helps with inflammation and recovery after a workout). I drink a small glass of tart cherry juice a few hours before I go to bed.
- Planning: I have found that if I plan out the next day before going to bed, I am less anxious and my mind doesn't race thinking about everything I need to do. If I get everything out of my head and onto paper- I am able to sleep much better
- Journaling: This goes hand-in-hand with planning- getting everything out of my head before going to bed. If you're not a planner, maybe try just journaling.
- Melatonin: I take melatonin gummies before bed. I have noticed that when I do everything else on my list, I don't really need them
- Everything on this list is something I have found to help me with sleep and is honestly part of my overall Self-Care Plan. But these ideas are just that- my ideas and opinions.

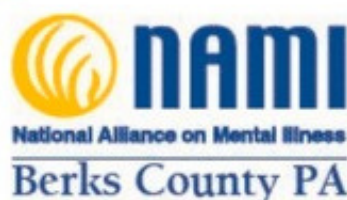
Hopefully you can find some inspiration to find what helps you sleep better.

Nicole

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Like our Community Mental Health Blog? Read about the [Winter Wellness Challenge](#) and our [Essential Mental Health Music Playlist](#)

For more information about sleep visit: <https://www.sleepfoundation.org/> and <https://aasm.org/>

Information Used In This Article Has Been Derived From The Following Sources:

- The Sleep Foundation website <https://www.sleepfoundation.org/>
- How Sleep Deprivation Impacts Mental Health, Interview with [Elizabeth Blake Zakarin](#), March 6, 2021, Columbia University Department of Psychiatry
- Harvard Medical School's Health Publishing Newsletter
- American Academy of Sleep Medicine, <https://aasm.org/> educational articles and videos



Exit Ticket

Total Time: 5 minutes

Post the following question on the board and have students write their answers on a piece of scrap paper and include their name. Have students hand in this paper before they leave for the day.

- What elements that you learned today do you think are most important for your peers to improve their mental health?

Notes

This image shows a single sheet of white paper with horizontal blue or grey ruling lines. The lines are evenly spaced and run across the width of the page, providing a template for handwriting practice or general writing. There are no margins, text, or other markings on the paper.

References

1. **Allina Health.** *Mindful Movement for Any Room: Hallway.* Youtube. Accessed September 5, 2023. <https://www.youtube.com/watch?v=M-uTD1mdl4>
2. **NBC News.** *Former Vapers Explain Why Quitting Improved Their Mental Health.* Youtube. March 11, 2022. Accessed August 23, 2023. <https://www.youtube.com/watch?v=KMnHsQFuj78>.
3. **Allina Health.** *9 Ways to Manage Your Stress.* Youtube. Accessed September 5, 2023. <https://www.youtube.com/watch?v=feR-2ki0nBs>
4. **NAMI Berks County, PA.** *Sleep And Mental Health: 15+ Helpful Tips To Get A Better Night's Sleep.* Accessed September 13, 2023. <https://namiberkspa.org/sleep-and-mental-health/>

At What Cost Factsheet References

1. **Cooper, M. et al.** (2022, October 7). Notes from the field: E-cigarette use among middle and high school students - United States, 2022. Centers for Disease Control and Prevention. <http://dx.doi.org/10.15585/mmwr.mm7140a3>
2. **Truth Initiative.** (2021). Colliding crises: Youth Mental Health and Nicotine Use. <https://truthinitiative.org/research-resources/emerging-tobacco-products/colliding-crisis-youth-mental-health-and-nicotine-use>
3. **Gentzke, A. et al.** (2022, March 11). Tobacco Product Use and Associated Factors Among Middle and High School Students — National Youth Tobacco Survey, United States, 2021. Centers for Disease Control and Prevention. <http://dx.doi.org/10.15585/mmwr.ss7105a1>
4. **Allina Health.** (2022). How Tobacco and Vaping Affect Youth and Young Adults [fact sheet]. <https://account.allinahealth.org/library/download?documentuid=db9214ad-1b23-487c-8aa5-992f957e1216>

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