

Think you can just quit using everyday items like caffeine and nicotine whenever you want? Current neurological research is proving it's easier to get addicted than you think.

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You wake up early in the morning to get ready for school. While driving, you remember that there's a Starbucks on the right, and you contemplate getting a cup of coffee. As the turn gets closer, you subconsciously make the right turn and get coffee. Even if it were a conscious thought, you couldn't fight the temptation. Have you ever considered the idea that your behavior might be a form of addiction?

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Addiction comes in many forms — It's not just illegal substances. According to Center on Addiction, out of the 16 percent of Americans struggling with a substance problem, illegal substances only make up two percent. Nicotine, on the other hand, makes up nine percent. The FDA recently declared juuling an epidemic, showing the drastic increase of nicotine addictions.

Eric Wood, a Clinical Case Manager and Licensed Clinical Addictions Counselor, says that, "Addiction is a primary, chronic disease of brain reward, motivation, memory and related circuitry." He says that the process changes the brain's wiring, so that an addicted person "... pathologically [pursues] reward and/or relief by substance use and other behaviors."

Michael Rothrock is the AP Psychology teacher at NHS. He points out that "Addiction would be where our body becomes [at some level dependent] to a foreign substance that basically replaces the function of the neurotransmitters that naturally exist within our bodies."

Neurotransmitters are the chemical messengers that relay the message of pain, love, happiness, and sadness. They are what relay these emotions and feelings to our cells. For example, when you touch a hot stove with your hand, your neurotransmitters send the message of pain to your brain and then back to your hand.

"When you start introducing that alternative substance into your body, it mimics the natural neurotransmitters that we have," Rothrock said.

With a dependency on a stimulant, your body begins to need it to function even if you know you should stop.

"Your brain, ironically, is saying, 'I need this chemical desire to be met,' but it's also the same brain that looks in the mirror and goes, 'I need to stop doing this,'" Rothrock said. "It's a 50/50 street that's unfortunately often 51/49."

Stimulants, which are substances like caffeine, cigarettes, vapes — things that are not naturally produced by your body — raise levels of physiological or nervous activity in the body or biological system. They're typically

used to increase energy, happiness, and improve attention

"While you may not like to think of yourself as a drug user, if you have that daily cup of coffee or smoke cigarettes, you are in fact using drugs," researcher Kendra Cherry states in her book *Essentials of Psychology.* "The caffeine in coffee and the nicotine in cigarettes are both stimulants."

Junior Benjamin Hopper drinks around three to four coffees a day.

When trying to stop drinking coffee, "I tend to get tired and angry and irritable and get headaches," Hopper said

He had his first sip at age seven or eight. But he says the addiction came later.

"I've always liked the taste of coffee and I didn't start regularly drinking it until high school," Hopper said. He claims he started drinking it regularly because of "pressure, working hard, [and] staying up late to study."

Hopper is one among many high schoolers that are addicted to caffeine.

Wood has noticed both nicotine and caffeine being extremely popular with high schoolers, particularly nicotine, which has seen a rise in teenagers.

"They are introducing a powerfully addictive chemical at the most vulnerable stage of human development," Wood said.

Starting an addiction at this stage creates complications later down the line, especially once someone becomes an adult still dealing with the same addiction.

"Around 90% of adults being treated for a substance use disorder report starting with addictive substances in adolescence," Wood said.

people 18 years or younger. The answer is marketing: many of the electronic cigarette companies are marketing products towards teenagers since they see them as a easy target to reach.

"Electronic cigarettes are clearly being marketed to teenagers... part of the problem here is teens are learning to lower their threshold of perceived risk," Wood said.

Along with lower perceived risk of addictions,

A common question may be why teenagers are

getting addicted to a substance that is illegal for

Along with lower perceived risk of addictions, a teen's mental health also plays a role. According to reports published in the *Journal of the American Medical Association*, mental health and addictions are closely linked together. Roughly 50 percent of individuals with severe mental disorders are affected by substance abuse, and out of all people diagnosed as mentally ill, 29 percent abuse

either alcohol or drugs.

Rothrock has observed the impact addictions have on mental health.

"It can do anything, from absolutely barely anything to complete one hundred percent destruction," Rothrock said. "In the sense of developing schizophrenia to multiple personality disorders that are borderline untreatable because the damage is

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done artificially."

Addiction may be scary for some people, but it isn't impossible to overcome. With addictions, a person can't just tell themselves to stop; they need help. The biological part of our brains are too strong to overcome on our own. Treatment is necessary for someone to end an addiction. Seeking proper assessment and help is critical towards getting better. Without people looking for help and continuing to spiral deeper into their addiction, "We could be on the doorstep of a far worse era of addiction than anyone thought imaginable," Wood said.

Just because we're on the doorstep doesn't mean we have to open the door.

## Where to find help:

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There are multiple organizations out there whose main goal is to help people suffering from addiction. One such organization is the Substance Abuse and Mental Health Services Administration (SAMHSA). SAMHSA allows one to find treatment facilities that offer advice and help with many different kinds of addictions.

If you are serious about stopping an addiction, visit their website: https://www.findtreatment.samhsa.gov.

Out of the 16% of Americans 12 and up who have a substance abuse problem, 9% of them are addicted to nicotine. The FDA just declared 'Juuling' an epidemic due to the nicotine inside the Juuls.

9%

1% of the 16% of Americans fighting addiction are addicted some form of prescription drugs.

% 7

16% of
Americans are
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drugs.

Holding the

second-highest

percentage of

addicted, alcohol

makes up 7% of

Americans

the 16%

2%

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