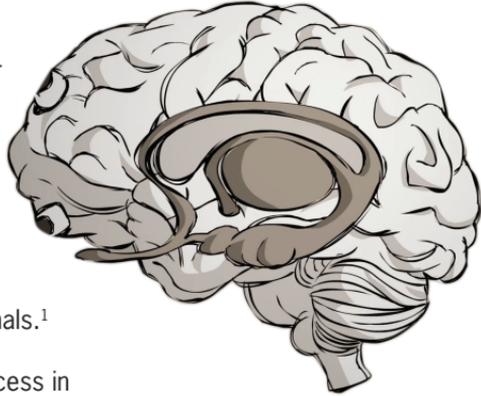


The Hijacker

Substance use disorders (SUDs) affect tissue function in two main parts of the brain:

- The **limbic system** is responsible for our basic survival instincts, and rewards us when we do essential things to stay alive like eat, drink, find shelter, have sex, or care for our young.
- The **prefrontal cortex** is where decision-making and impulse control live—the things that separate us from other animals.¹



Substance use activates the dopamine process in the survival center much more powerfully than natural rewards like food or sex. When repeated it can **hijack** the brain, making it think that the substance is the most important thing for survival.

Over time, more and more of the substance is needed to activate the same level of reward, causing the brain's circuits to become **increasingly imbalanced**—eroding a person's self-control and ability to make sound decisions, while producing intense impulses to seek and use the substance.



This is what it means when scientists say that addiction is a **brain disease**.

The good news – **SUDs are preventable and treatable**.^{2, 3} Advancements have been made in assessments, treatment, recovery supports, and medications to treat addiction, and brain scans show that once an individual is in recovery, brain tissue can get better.

Whirlpools of Risk

Not everyone who uses alcohol or drugs develops a substance use disorder (SUD)—why is that?

People have different risk factors that make them more vulnerable to developing SUDs that are entirely unique to them. These can be environmental—such as poverty or exposure to trauma—or individual—such as genetics or the age of first use.¹

The escalation from first use of a substance to developing a SUD follows a pathway that begins with initiation and progresses to regular use—problem and risky use—to SUD and addiction.



But not everyone goes down the full path.² Drug and alcohol use can escalate to a disorder rapidly or slowly based on a person's risk factors, as well as the risk of the substances they are using.

Over **70%** of heroin users will develop a heroin use disorder.

56% of tobacco users.

9% of alcohol users.

11% of marijuana users.

51% of methamphetamine users.

When multiple substances are used at the same time, the risks get even higher.³

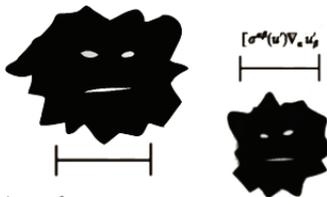
Understanding personal risk factors as well as the risk of specific substances is critical to empowering people to prevent drug and alcohol use from progressing toward SUD and addiction.

Understanding Severity

Like other chronic illnesses, addiction tends to get worse over time.¹ As a substance use disorder (SUD) progresses, mental and physical health problems tend to get worse and overall quality of life goes down.² Most importantly, the risk of death increases as the disorder progresses, which is why starting treatment as soon as possible is key.

There are 3 levels of severity:

mild,
moderate,
and **severe**—also known as an addiction.



Severity level is determined based on 3 categories of symptoms:

- 1 - symptoms related to how much control you have over your substance use, such as:
 - using more of a substance or more often than you intend to;
 - wanting to cut down or stop using but not being able to.
- 2 - symptoms related to how your substance use affects your life, such as:
 - neglecting responsibilities and relationships;
 - giving up activities you used to care about because of your substance use.
- 3 - symptoms related to your level of physical dependence on the substance, such as:
 - needing more of the substance to get the same effect (also known as tolerance);
 - having withdrawal symptoms when you don't use.

Knowing the severity level of your SUD helps your doctor understand the status of your illness and your risk for serious events (like overdose) in order to plan the best course of treatment.³ The more severe the disorder, the more intense the level of treatment is needed.

As you move through treatment, you should step down to less intensive levels of care. Your doctor should monitor your progress and adjust your plan as needed. Remember, more treatment isn't necessarily better if it's the wrong kind. This is why understanding severity is so important.



Don't Wait for "Rock Bottom"

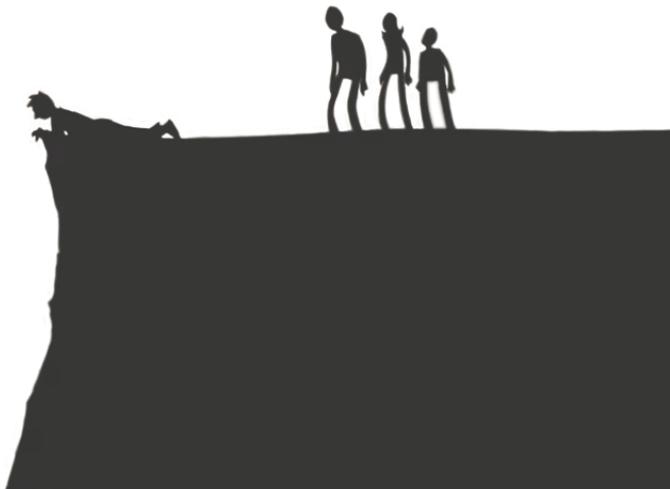
The idea of "rock bottom" can help people describe their experience of recovery from substance use disorder (SUD) by turning it into a narrative with a clear event that helped turn their life around. But the idea that we should wait for the disease to get worse before seeking treatment is dangerous.

Belief in this "rock bottom" can keep people who are struggling from reaching out for help. It can also keep family, friends, and care providers from addressing the issue when they have been wrongly told that the disease has to "run its course" and that they should practice "tough love" until a person hits bottom—when they will be ready and willing to engage in treatment.

But these ideas aren't backed by science, and not everyone survives the fall.¹

You shouldn't wait for the worst to happen—or a profound moment of awakening—before seeking treatment or helping a loved one, even if they don't feel "ready." Decades of research has proven that the earlier someone is treated, the better their outcomes²—and that treatment works just as well for patients who are compelled to start treatment by outside forces as it does for those who are self-motivated to enter treatment.³

SUDs get worse over time. The earlier treatment starts the better the chances for long-term recovery. If you or a loved one is struggling, don't wait—reach out for help.⁴



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“The Hijacker” is the first episode of *ADDICTION*, a new animated video series from the Addiction Policy Forum that turns the science on substance use disorders (SUDs) and addiction into stories that stick. The series aims to expand public understanding about SUDs and replace the myths and misinformation that have kept this disease from being treated like a medical condition.

The content of each episode is the result of close collaboration between scientists, patients, and families impacted by addiction.

To watch the entire series, visit addictionpolicy.org/addiction-series-main

Sources

¹ NIDA. (2018). *Drugs, Brains, and Behavior: The Science of Addiction*. Retrieved from <https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction/preface>.

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The **ADDICTION** Series

“Whirlpools of Risk” is the second episode of *ADDICTION*, a new animated video series from the Addiction Policy Forum that turns the science on substance use disorders (SUDs) and addiction into stories that stick. The series aims to expand public understanding about SUDs and replace the myths and misinformation that have kept this disease from being treated like a medical condition.

The content of each episode is the result of close collaboration between scientists, patients, and families impacted by addiction.

To watch the entire series, visit addictionpolicy.org/addiction-series-main

Sources

¹ NIDA. (2016, March 9). Principles of Substance Abuse Prevention for Early Childhood. Retrieved from <https://www.drugabuse.gov/publications/principles-substance-abuse-prevention-early-childhood> on 2018, July 23

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“Understanding Severity” is the third episode of *ADDICTION*, a new animated video series from the Addiction Policy Forum that turns the science on substance use disorders (SUDs) and addiction into stories that stick. The series aims to expand public understanding about SUDs and replace the myths and misinformation that have kept this disease from being treated like a medical condition.

The content of each episode is the result of close collaboration between scientists, patients, and families impacted by addiction.

To watch the entire series, visit addictionpolicy.org/addiction-series-main

Sources

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³ Dennis, M., & Scott, C. K. (2007). Managing Addiction as a Chronic Condition. *Addiction Science & Clinical Practice*, 4(1), 45–55.



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“Don’t Wait for ‘Rock Bottom’” is the fourth episode of *ADDICTION*, a new animated video series from the Addiction Policy Forum that turns the science on substance use disorders (SUDs) and addiction into stories that stick. The series aims to expand public understanding about SUDs and replace the myths and misinformation that have kept this disease from being treated like a medical condition.

The content of each episode is the result of close collaboration between scientists, patients, and families impacted by addiction.

To watch the entire series, visit addictionpolicy.org/addiction-series-main

Sources

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