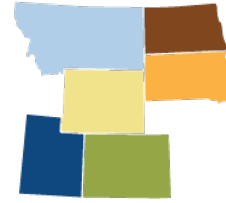




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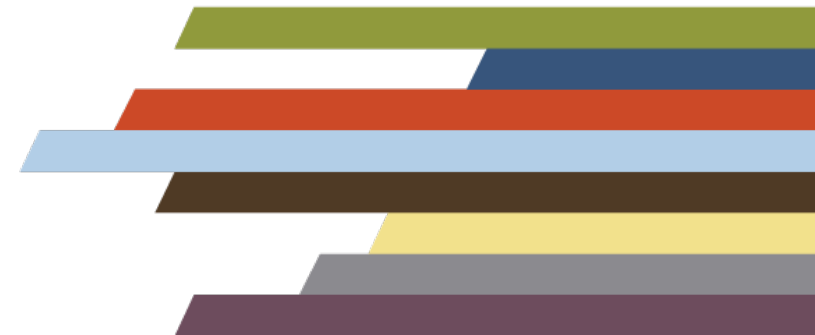
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Slide Decks

F O R Y O U

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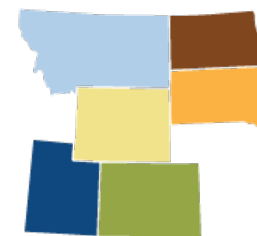




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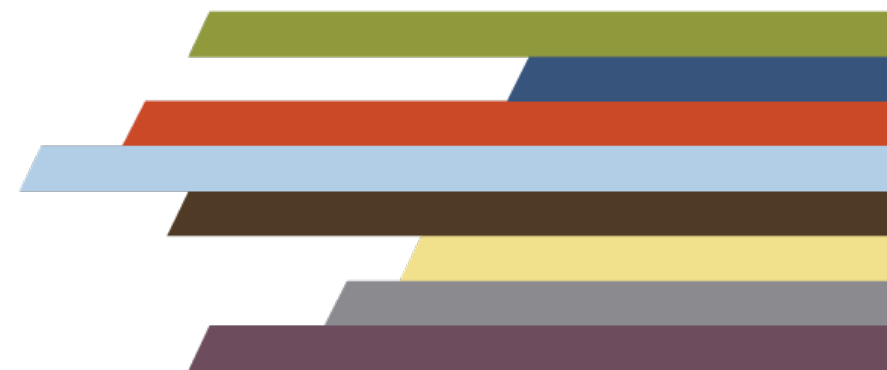
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Substance Use Disorder: A Chronic, Relapsing Brain Disease

Prepared by
Mountain Plains ATTC
University of North Dakota
Grand Forks, ND 58202
701-777-4520



Objectives:

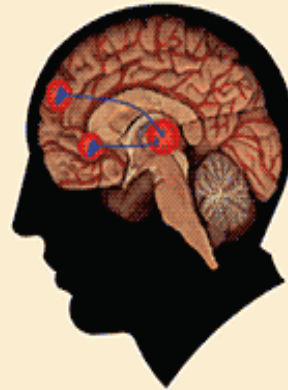
After completing this presentation, participants will:

- Reflect on their own thoughts/biases related to addiction.
- Review the brain reward system associated with addiction
- Acknowledge that addiction is a chronic, relapsing disease

Drugs Affect the Reward Pathway to the Brain

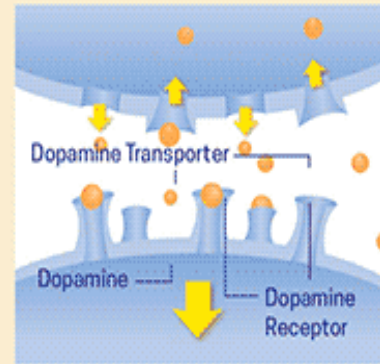
Some drugs target the brain's pleasure center

Brain reward (dopamine pathways)



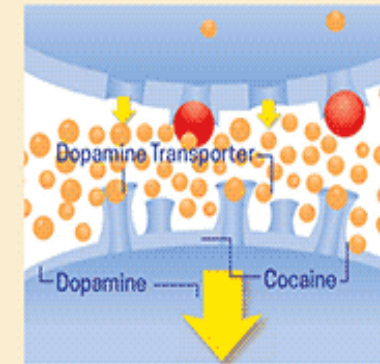
These brain circuits are important for natural rewards such as food, music, and sex.

How drugs can increase dopamine



While eating food

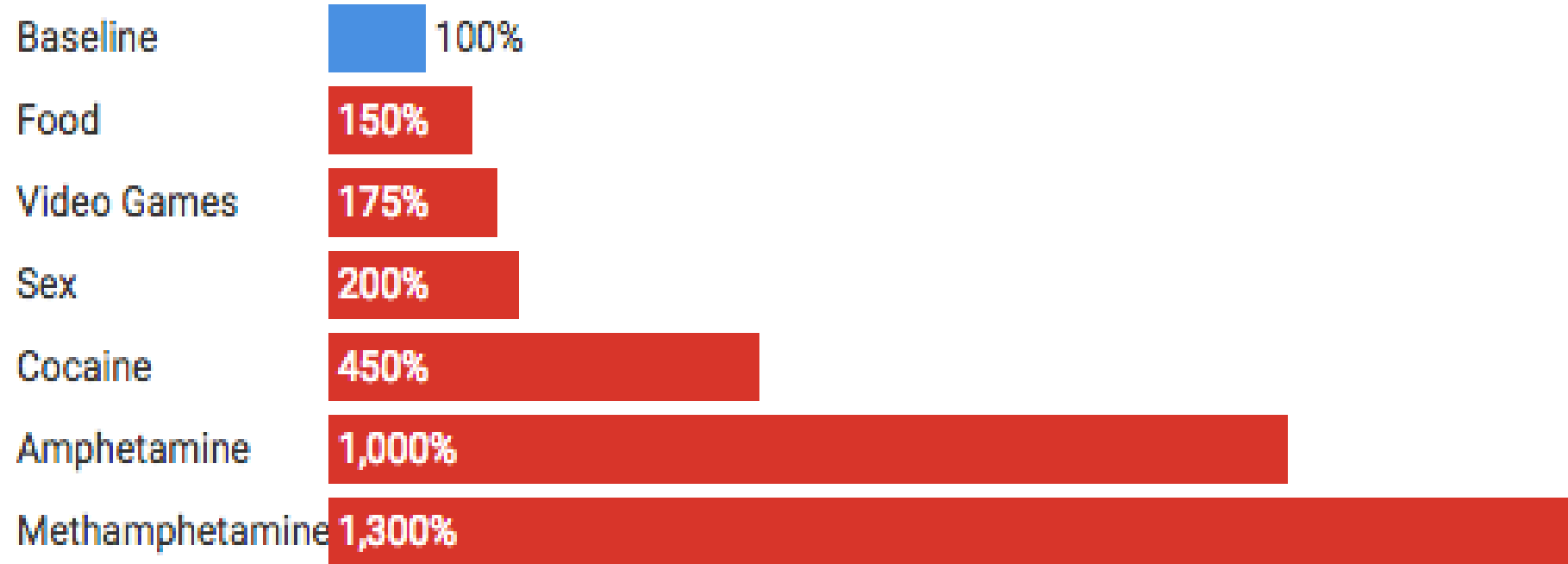
Typically, dopamine increases in response to natural rewards such as food. When cocaine is taken, dopamine increases are exaggerated, and communication is denied.



While using cocaine

National Institute on Drug Abuse, 2018

Comparisons of Dopamine Release



Ferguson, 2018

Change in Brain Chemistry

“..persons with addiction often become less motivated by everyday stimuli (e.g. relationships and activities) that they had previously found to be motivating and rewarding.

“Again, it is important to note that these changes become deeply ingrained and cannot be immediately reversed through the simple termination of drug use (e.g., detoxification).”

(Volkow, Koob & McLellan, 2018)

“Every day feels like the second Tuesday in February.”

Addiction

“Chronic, relapsing disorder characterized by compulsive drug seeking, continued use despite harmful consequences, and long-lasting changes in the brain. It is considered both a complex brain disorder and a mental illness.

“Addiction is the most severe form of a full spectrum of substance use disorders, and is a medical illness caused by repeated misuse of a substance or substances.” (NIDA, 2018)

Trauma

- Emotional abuse
- Physical abuse
- Sexual abuse
- Mother treated violently
- Household substance abuse
- Person struggling with mental health disorder
- Parental separation or divorce
- Criminal household member
- Emotional neglect
- Physical neglect

<https://attcnetwork.org/centers/mountain-plains-attc/trauma-informed-care>

ACES Effects

ACES can have lasting effects on....



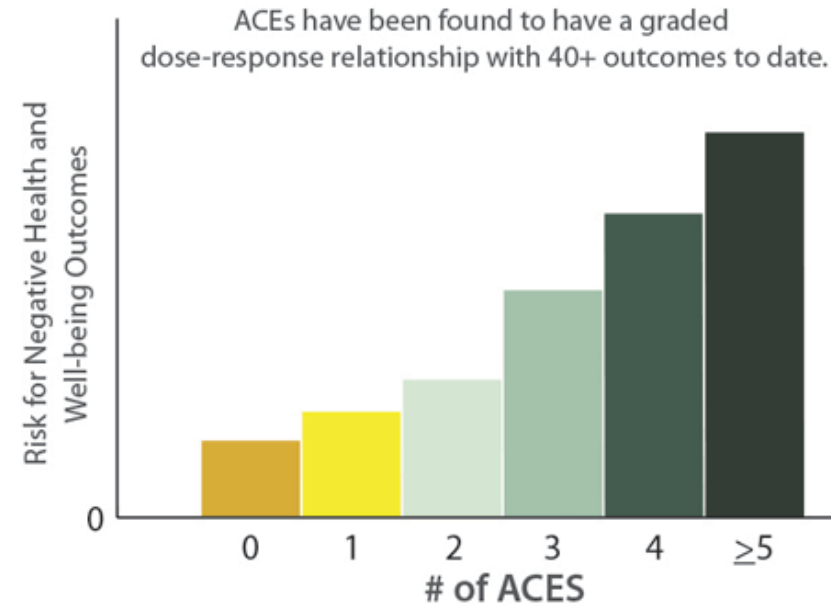
Health (obesity, diabetes, depression, suicide attempts, STDs, heart disease, cancer, stroke, COPD, broken bones)



Behaviors (smoking, alcoholism, drug use)



Life Potential (graduation rates, academic achievement, lost time from work)



*This pattern holds for the 40+ outcomes, but the exact risk values vary depending on the outcome.

The Centers for Disease Control and Prevention, 2016



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Disease

- A condition characterized by specific signs and symptoms
- Caused by a combination of biologic, behavioral, and environmental factors
- Results in damage or change in function to body systems
- If untreated, can lead to loss of function or death
- Control versus cure

Chronic Disease and Addiction

CHRONIC DISEASE	ADDICTION
Specific signs and symptoms	Compulsive drug seeking and continued use despite harmful consequences
Cause is a combination of behavioral, environmental and biological factors	Repeated use (behavioral), trauma (environmental), genetic predisposition (biological)
Changes function/causes damage	Causes long-lasting changes in the brain
If left untreated can be disabling or life threatening	If left untreated can be disabling or life threatening
Control versus cure	Control versus cure

“Awareness without action is worthless.”

- Person centered language

<https://www.communitycatalyst.org/resources/2017-alerts/6-22/Guide-to-non-stigmatizing-languageFINAL.pdf>

- Avoid “shame and blame”
- Screen for substance use and trauma
- Talk to people in recovery
- Know your referral sources

A Powerful Message from Family



Madelyn Linsenmeier
1988 - 2018

<https://www.sevendaysvt.com/vermont/madelyn-linsenmeir-1988-2018/Content?oid=21797604&fbclid=IwAR2fjyDwHDDuJTyrtruJHqaoeSCAgDLiWkU9HvHdXVeLhVVEe7zch-3V1hgw>



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Volkow, N.D., Koob, G.F. & McLellan, T. (2016) Neurobiologic Advances from the Brain Disease Model of Addiction *New England Journal of Medicine* 374:363-317.