

ELEMENTARY  
AND MIDDLE  
SCHOOL

# TOPIC SERIES EDUCATOR GUIDE



# INTRODUCTION MULTI-DRUG TOPIC SERIES

This video topic series was developed to directly address the negative impacts that drugs like stimulants, hallucinogens, depressants, steroids, marijuana, and inhalants have on the adolescent brain and body. The goal of the series is to use engaging and informative instruction to address the impacts of drugs on the brain and body. Students will build their understanding by learning more about the science behind specific drugs, and strategies they can use to help avoid drug use.

## ACTIVITIES

The activities that accompany each video are designed for grades 3–8 (upper elementary and middle school) with a primary focus on Health and English Language Arts courses. Each activity has an expected duration of about 45 minutes and includes an overview, learning objectives, materials, procedure, and capture sheets. Each activity pairs with a video to continue conversations into the classroom with standards-aligned outcomes that promote collaboration, content-specific language, and evidenced-based literacy strategies.

Modifications can be made to the activities based on your learning environment. For example, all handouts can be shared virtually or even recreated by students at home. If in-person or online discussions are not possible, activities that include brainstorming, discussions, or group work can also be completed using a shared virtual document.

## BEFORE YOU START

All of the videos and activities found in this series take students for a deeper look into the anatomy and function of the brain. While the lessons are designed around literacy strategies to support this work, it may be useful to scaffold the activities by reviewing with students the important parts and functions of the brain. One resource that can help with this is the National Institute on Drug Abuse [“The Human Brain: Major Structures and Functions”](#) video. This short video provides an overview of key vocabulary used in the lessons along with visuals and could serve as a refresher or introduction before beginning instruction.



## Super Dopey

### Overview:

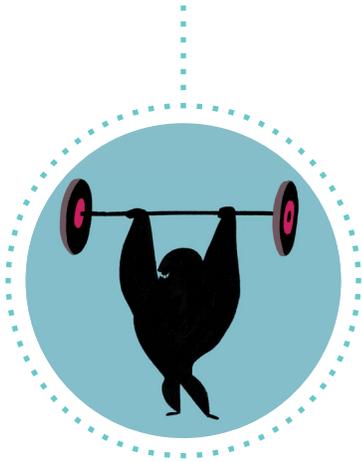
During this activity, students will build their understanding of how marijuana impacts the adolescent brain and the body. Students will view the **Super Dopey** video and then use activity cards to investigate the impact delta-9-tetrahydrocannabinol (THC) has on the different parts of the brain. After reading their cards, students will work in groups to align the impact on the brain and the body.

### Key Outcomes:

- Students will analyze the impact of marijuana by using informational text to chart how THC affects the brain.
- Students will create their questions about the impact of marijuana on the brain and the body to drive engagement.

### Key Takeaways:

- Marijuana is not a harmless drug. The human brain does not fully develop until approximately the age of 25; regularly using marijuana before then can have negative and long-lasting impacts on the brain and the body.
- THC—the main active ingredient in marijuana impacts normal brain functions by attaching itself to receptors in the brain.
- Ingesting marijuana can lead to altered senses and mood. Long-term use can increase the risk of memory loss and mental health problems, and potentially trigger the early onset of schizophrenia.



# Bigger and Stronger

### Overview:

During this activity, students will view the **Bigger and Stronger** video and use their reporter's notebook to separate fact from feeling. After viewing the video, they will debrief what they discovered and then use sources to further their investigation on the impact of steroids on the brain and the body. Students will use this information to finalize their reporter's notebook to create a newspaper article highlighting the effects of steroids.

### Key Outcomes:

- Students will evaluate the impact of steroids on the brain and the body by investigating current information and recording it in their reporter's notebook.
- Students will use informational text to write an editorial on the impact of steroids on the brain and body.

### Key Takeaways:

- Health care providers can prescribe steroids for certain medical conditions. However, some steroids are often misused to increase muscle mass and athletic performance.
- Though they do not cause a "high," steroids can have negative impacts on the brain and the body. Impacts on the brain include extreme mood swings and paranoia.
- Steroids change the body in a variety of ways, including increased acne; yellowing of skin; and increased potential for infections. Both males and females can see physical changes to reproductive organs with long term use.

## TOPIC 3 HALLUCINOGENS



# A Bad Trip

### Overview:

Students will watch a brief video on the role hallucinogens play in impacting the brain and the body. After the video, the teacher will provide some deeper guiding information on hallucinogens and their different types. Students will identify a hallucinogen and use guided research to create an infographic poster that explains the effects of the drug on the brain and the body.

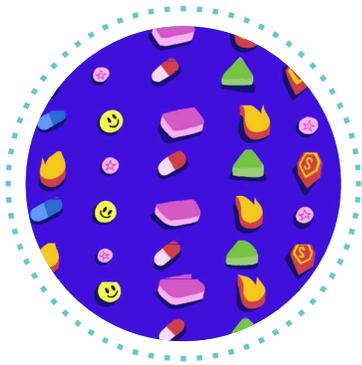
### Key Outcomes:

- Students will research hallucinogens and create an infographic poster highlighting the impact on the brain and the body.
- Students will synthesize informational text by using a strategy called “three close reads”.

### Key Takeaways:

- Hallucinogens are a category of drugs that create distortions in how a person perceives reality. These drugs include LSD, PCP, and ecstasy.
- When ingested, hallucinogens negatively impact the brain by increasing the activity of neurotransmitters. This increase in activity leads to rapid changes in mood, perception, movement, and heart rate.
- Hallucinogens’ impact on the body includes dizziness, nausea, elevated heart rate, and increased blood pressure. Heavy use can result in a higher risk of seizures and irregular heartbeat.

## TOPIC 4 STIMULANTS



# Annoying, Aren't I?

### Overview:

During this activity, students will identify stimulant types and their impact on the brain and the body. To support students in developing confidence in avoiding health risks, students will view the **Annoying, Aren't I?** video and work collaboratively to create refusal skits. Students will research refusal strategies and work with their team to develop skits that highlight specific strategies used to avoid taking part in risky behaviors such as drug use.

### Key Outcomes:

- Students will create refusal skits that highlight strategies for avoiding health risks like the use of stimulants.
- Students will develop questions that help engage in learning about stimulants.

### Key Takeaways:

- Stimulants are a category of drugs that increase the activity in the central nervous system. Specific stimulants include some prescription drugs, methamphetamine, cocaine, and even caffeine and nicotine.
- Prescription stimulants can be used to treat health concerns. Misuse occurs when they are taken by someone who does not have a prescription or when more than the prescribed dose is ingested.
- Stimulants increase the activity of neurotransmitters like dopamine and norepinephrine which reinforce rewarding behaviors in the brain. This changes the normal communication in the brain and, over time, can lead to addiction.

## TOPIC 5 DEPRESSANTS



# Dear Senses...

### Overview:

During this activity, students will learn more about the impact of depressants on the brain and the body by participating in a literacy strategy called “whittle it down”. This strategy provides scaffolding to help students with summarizing complex text. Students will watch the **Dear Senses...** video and then whittle down large chunks of information as a whole group; small group; and then, independently, generate a list of important words from the text. They will then use their final words to create a summary of the impact of depressants on the body and the brain.

### Key Outcomes:

- Students will analyze sources and synthesize information on depressants' impact on the brain and the body.
- Students will create a summary paragraph to explain the effects of depressants on the brain and the body.

### Key Takeaways:

- Depressants are a category of drugs that slow down normal activity that happens in the brain and spinal cord. Depressants include alcohol, barbiturates, and even sleep medications that are prescribed by a doctor. Depressants can be misused when taken by someone who does not have a prescription or when more than the prescribed dose is ingested.
- Depressants increase the activity of the neurotransmitter gamma-aminobutyric acid (GABA) which slows down brain activity. This can lead to negative impacts on the brain and the body.

## TOPIC 6 INHALANTS



# Dear Lungs...

### Overview:

During this activity, students will watch the [Dear Lungs...](#) video on the impact of inhalants on the brain and the body. After watching the video, students will take part in a creative writing exercise. Students will use the writing strategy RAFT (Role, Audience, Format, Topic) to take on a unique perspective and explain how inhalants impact the brain.

### Key Outcomes:

- Students will use creative writing to explain how inhalants impact the brain and the body.
- Students will synthesize information from sources.

### Key Takeaways:

- Inhalants are chemicals found within ordinary household products that, when inhaled, can cause someone to get “high”.
- When chemicals are inhaled, they are absorbed by the lungs where the chemical enters the bloodstream, sending them throughout the brain. Most inhalants slow down the brain activity causing a “high” sensation.
- Inhalants can have a serious impact on body functions, including upset stomach, dizziness, and lack of coordination. Long-term effects include a weakened immune system and potentially death.