

**HIGH  
SCHOOL**

# **VIRTUAL FIELD TRIP EDUCATOR GUIDE**

**An Ounce of Prevention**



# AN OUNCE OF PREVENTION

## OVERVIEW

In this virtual field trip lesson, students begin by rotating through information stations to learn about the origins and dangers of fentanyl, the fake pills they are being found in, and the ways that these drugs are finding their way into the hands of young people at an alarming rate. After viewing the virtual field trip, they will work in groups to use the information they have learned about fentanyl to design and create a prototype paper app that could be downloaded and used by teens for education, prevention, and support to combat the fentanyl crisis we are facing in the United States.

## USING THIS GUIDE

This supplemental guide will provide you with three optional activities to enhance your use of the Virtual Field Trip in your classroom. Use of the Virtual Field Trip is flexible—it can be watched as a stand-alone resource, or you can facilitate one or more of the included activities. The “Before the Field Trip” activity should be completed before watching, and it will provide an opportunity for you to engage your students in the topics they will learn during the video. The “During the Field Trip” activity consists of a graphic organizer that students can use to keep track of their learning while they are watching the Virtual Field Trip. Finally, the “After the Field Trip” activity will provide students with a way to apply their learning or will challenge them to think about how this topic impacts their local and global community after they watch the video.

## TARGET AUDIENCE

Grades 9–12

## OBJECTIVES

Students will:

- Discover important information about the prevalence and danger of the rise of fentanyl in the US.
- Identify ways that fentanyl is being obtained and taken unknowingly by people through fake pills.

- Design and create a prototype paper app that could be used to help teens who are at risk from the dangers of fentanyl-laced pills.
- Discuss how knowledge about the dangers of counterfeit drugs can empower students to make safe choices and fight back against the fentanyl crisis.

## BACKGROUND

In February of 2023, the US Drug Enforcement Administration reported that fentanyl, a deadly synthetic opioid, has now been seized by agents in all 50 states and has become the “deadliest drug threat our country has ever faced.”

Fentanyl is a man-made drug that is approved for use for pain relief in hospitals and other very limited settings and is one hundred times more potent than morphine. The illegal use of fentanyl has become a leading cause in drug overdoses throughout the U.S. and is often taken unknowingly because it is widely added to drugs such as heroin and cocaine and is found in fake pills that mimic authentic medications, such as oxycodone. The DEA has found that 6 in every 10 fentanyl-laced pills that are seized contain a fatal dose, as just two milligrams can be lethal. The DEA and other organizations are fighting back against the use and sale of illicit fentanyl and fentanyl-laced fake pills through education, social media campaigns, and the promotion of Fentanyl Awareness Days with the aim of amplifying awareness and decreasing the demand for fentanyl and counterfeit drugs.

The importance of teens understanding the dangers of fentanyl contained in both illegal and counterfeit prescription drugs has become a matter of life and death. In 2022, it was reported by the CDC that 67% of the 107,375 overdose deaths were due to synthetic opioids like fentanyl or drugs laced with fentanyl, yet a mere 40% of young people ages 13–24 were knowledgeable about fentanyl, and only 48% (36% of teens) were aware of fentanyl in fake pills. Coping with stress and anxiety is a leading reason for young people to misuse prescription medication and obtain

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opioids illegally, such as through social media or on the internet. By providing information as well as alternative, healthy coping mechanisms for teens who struggle with these issues, it is hoped that the fentanyl crisis can be stopped before more young lives are lost.

## Sources

U.S. Department of Health and Human Services. (2023, March 3). Fentanyl drug facts. National Institutes of Health. Retrieved from <https://nida.nih.gov/publications/drugfacts/fentanyl>

Home | dea.gov. (2022, December). Retrieved from [https://www.dea.gov/sites/default/files/2021-12/DEA-OPCK\\_FactSheet\\_December%202021.pdf](https://www.dea.gov/sites/default/files/2021-12/DEA-OPCK_FactSheet_December%202021.pdf)

Song for Charlie. (2022, October). Current Data. Song For Charlie. Retrieved from <https://www.songforcharlie.org/data>

Fake Pills Fact Sheet. (2022, December). Retrieved from [https://www.dea.gov/sites/default/files/2022-12/DEA-OPCK\\_FactSheet\\_December\\_2022.pdf](https://www.dea.gov/sites/default/files/2022-12/DEA-OPCK_FactSheet_December_2022.pdf)

# BEFORE

## Consensogram and Fentanyl Discovery Stations (4–50 min)

### MATERIALS

- Sticky notes (four per student)
- Student Sheet: Fentanyl Facts Discovery Stations (one per student)
- Stations Sheets (six)—see Teacher Preparation note below

### TEACHER PREPARATION

Before beginning the consensogram activity, the teacher should prepare a large chart on the front board or on poster board with the following questions and columns:

### GEN Z KNOWLEDGE ABOUT FENTANYL

Would you describe yourself as knowledgeable about fentanyl?		Are you aware that there can be fentanyl in fake pills?		Would you describe fentanyl as dangerous?	
YES	NO	YES	NO	YES	NO

Before beginning the discovery stations activity, teachers can use the links below to print 1-2 copies of each of the information sheets. The sheets can be used on a digital device or placed as hard copies at each station.

**Station 1:** What is Fentanyl and Why is it So Dangerous?

**Link:** [Drug Fact Sheet: Fentanyl](#)

**Station 2:** Where is Fentanyl Coming From?

**Link:** [Fentanyl Flow to the United States](#)

**Station 3:** What are Counterfeit Drugs?

**Link:** [https://www.dea.gov/sites/default/files/2022-12/DEA-OPCK\\_FactSheet\\_December\\_2022.pdf](https://www.dea.gov/sites/default/files/2022-12/DEA-OPCK_FactSheet_December_2022.pdf)

**Station 4:** Social Media and Counterfeit Drugs

**Link:** [SOCIAL MEDIA—Drug Trafficking Threat](#)

**Station 5:** Fentanyl Facts

**Link:** <https://www.cdc.gov/stopoverdose/fentanyl/index.html>

**Station 6:** Naloxone—How to Save a Life

**Link:** [REVERSING OPIOID OVERDOSES WITH LIFESAVING NALOXONE](#)

# BEFORE

## PROCEDURE

To begin the lesson, the teacher will direct students' attention to the "Gen Z Knowledge About Fentanyl" chart. Hand each student three sticky notes and have them read the three questions about fentanyl at the top of each column.

Ask students to visit the chart and place a sticky note in the column that best represents their honest answer to the questions at the top of each column. When students have placed their sticky notes, ask them to reflect on how they answered. Ask students to volunteer to calculate class percentages of YES and NO answers for each of the questions and write these at the bottom of each column.

Next, display the "Gen Z Knowledge Gap (Ages 13-24)" data on the overhead screen for students to view (Link: [Current Data](#) | [Song for Charlie](#)). Ask students to analyze the data and compare the percentages in the class to this national data.

Allow students to share their reactions about the

data and comparisons between the class and national percentages with the whole group.

Tell students that they will be introduced to fentanyl and its connection to fake pills in the next activity. Ask students to form groups of four and begin at one of the six discovery stations where the information sheets are placed.

Students can read through the information sheet for that station and add information that stands out to them from each station on their Fentanyl Facts Student Sheet, as well as any questions they have based on what they learned at that station. Students will have 5-6 minutes at each station, then rotate to the next station when the instructor calls time.

When students have rotated through each of the stations, the class will gather as a whole group for reflection. Give students the opportunity to share the important facts they took from each station and to ask questions on topics they would like to know more about.

# DURING

## Virtual Field Trip (45-50 minutes, including the video)

## MATERIALS

- Student Sheet—An Ounce of Prevention Graphic Organizer (one per student)
- "An Ounce of Prevention" Virtual Field Trip

## PROCEDURE

- Explain to students that now that they have learned more about fentanyl in the discovery stations activity, they are ready to take a virtual field trip that will take a deep look into the connection between fentanyl, fake pills, and ways in which organizations, communities, and individuals are fighting back.
- Give each student a copy of the "An Ounce of Prevention Graphic Organizer" student sheet. Ask students to add notes to each section of

the graphic organizer as they watch the video. Their notes should answer the questions that head each section.

- Students will view the virtual field trip and complete their graphic organizer. The instructor can pause the virtual field trip to discuss student notes for each segment, or after the conclusion of the video.
- Students can share their notes and reactions to the content that they learned about fake pills, their dangers, and ways that groups and individuals are taking action to create awareness. One way to do this is having students compile a list of questions they created as a class and use these as opportunities to explore more information during class and beyond.

# AFTER

## Paper App Prototype Modeling (45–50 minutes)

### MATERIALS

- Markers/colored pencils
- 5" x 8" Index cards (6–8 per student group)
- Student Sheet—Prototype Paper App (one per group of 3–4)
- Large white paper or poster board
- Tape or glue
- Student devices with internet access

### PROCEDURE

- Now that students have learned about how groups and individuals are combating the fentanyl crisis, they will be playing the role of an app developer who is working for a group looking to increase the awareness of the dangers of fake pills for young people.
- Tell students that they will be working in teams to design and create a prototype app that teens could download on their phones or iPads. The app should give them information about fentanyl-laced pills and provide resources for support for teens struggling with some of the risk factors that lead to the intentional or accidental use of fentanyl, such as anxiety, stress, and depression.
- Assign or ask students to form groups of three, and give each group a copy of the Student Sheet: Paper App Prototyping. Tell students that they can use their notes from the discovery stations in the pre-viewing activity

and the graphic organizer from the virtual field trip, along with information from the “Helpful Websites” list on the student sheet, to begin brainstorming the mission of their app.

- The app mission should relate to the fake pills crisis in the U.S. Students can discuss what information would be most effective or helpful for teens to be included in their app design and content.
- Give students 10 minutes to complete the brainstorming sections of the student sheet, step 1. When time is up, ask the groups to take five minutes to join another group to share the important content ideas they wrote down. This will give groups a chance to get and give feedback to each other on what might be the content and information that would be most important for teens to know or have.
- Next, instruct students to begin step 2 (10 minutes) and start narrowing down and organizing the content for their app. They can complete the table and assign group members specific content to oversee when making the prototype.
- When students are ready to begin steps 3 and 4, they will take index cards, markers/colored pencils, large paper/poster board, and tape. Then, they will follow the instructions on the student sheets to complete the screens (index cards) and organize them to show the navigation of their app. Steps 3 and 4 should take the final 20–25 minutes of the lesson.

## EXTENSION

As an extension of this lesson, student groups can present and pitch their paper app prototypes to the class either through a live presentation, pre-recorded video, or gallery walk. This will give students the opportunity to practice presentation skills, and to get feedback on the content, navigation, and teen interest in their apps.

To further enhance the activity, consider student interests and level of understanding of technology by inviting students to either create an app or something similar with accessible features useful for students.

# NATIONAL STANDARDS

This lesson plan has been developed based on the following national standards:

## Next Generation Science Standards

- HS-ETS1-1 Engineering Design—Analyze a major global challenge to specify qualitative and quantitative criteria and constraints for solutions that account for societal needs and wants.
- HS-ETS1-2 Engineering Design—Design a solution to a complex real-world problem by breaking it down into smaller, more manageable problems that can be solved through engineering.
- LS1.A: Structure and Function—Feedback mechanisms maintain a living system’s internal conditions within certain limits and mediate behaviors, allowing it to remain alive and functional even as external conditions change within some range. Feedback mechanisms can encourage (through positive feedback) or discourage (negative feedback) what is going on inside the living system.

## National Health Education Standards

- 1.12.7 Compare and contrast the benefits of and barriers to practicing a variety of healthy behaviors.
- 2.12.2 Analyze how the culture supports and challenges health beliefs, practices, and behaviors.
- 2.12.7 Analyze how the perceptions of norms influence healthy and unhealthy behaviors.
- 8.12.1 Utilize accurate peer and societal norms to formulate a health-enhancing message.
- 8.12.2 Demonstrate how to influence and support others to make positive health choices.
- 8.12.3 Work cooperatively as an advocate for improving personal, family, and community health.
- 8.12.4 Adapt health messages and communication techniques to a specific target audience.

# FENTANYL FACTS—DISCOVERY STATIONS

Discovery Station	Notes, Thoughts, and Takeaways
<b>1—Fentanyl Facts</b>	
	Questions this makes me ask:
<b>2—The Path of Fentanyl</b>	
	Questions this makes me ask:
<b>3—Counterfeit Drugs</b>	
	Questions this makes me ask:
<b>4—Selling on Social Media</b>	
	Questions this makes me ask:



# FENTANYL FACTS—DISCOVERY STATIONS

Discovery Station	Notes, Thoughts, and Takeaways
<b>5—The Impact of Fentanyl</b>	
	Questions this makes me ask:
<b>6—Naloxone—How to save a life</b>	
	Questions this makes me ask:

# “AN OUNCE OF PREVENTION” GRAPHIC ORGANIZER

**Directions:**

- In the first column, **connect** things you see from the video to your existing knowledge and ideas.
- In the middle column, **extend** your thinking by considering new ideas or things that you learned from the video.
- In the final column, **challenge** your learning by considering what questions you still have or what made you think differently about the topic.

<b>CONNECT</b> How does this connect to what you already know?	<b>EXTEND</b> What ideas extended your thinking? Any interesting data or perspectives?	<b>CHALLENGE</b> What challenged your thinking? What questions do you have?

# PREVENTION APP PROTOTYPING

## STEP 1: BRAINSTORMING

### Mission/Goal of the App

This app will....

### Possible Titles or Names for the app

### Logo Icon (the image your app will be identified by) ideas or sketches

# PREVENTION APP PROTOTYPING

**Important content the app should contain to teach the user about fentanyl and fake pills  
(make a list of topics)**



# FENTANYL FACTS—DISCOVERY STATIONS

## STEP 2: ORGANIZING YOUR CONTENT

Using the list of content from section 1, identify what and how many screens you will need to design. These will serve as the introduction screen to each content section on your app. In the table below, list each screen title and a brief description of what the screen will include. Assign each team member a screen or screens to design and create.

Title of the Screen	Section Content	Designer

# FENTANYL FACTS—DISCOVERY STATIONS

## STEP 3: DESIGNING AND CREATING THE APP SCREENS

Obtain index cards from the instructor. You will need as many index cards as you have screens for your app, as each card will serve as one screen.

Referring to the information from the student sheets and the internet (see the “Helpful Websites” section below), use markers and colored pencils to create each of the screens for your app on the index cards. Feel free to add text, images, and graphics as you might see on an actual app.

### ADDITIONAL INFORMATION ABOUT FENTANYL AND FAKE PILLS

Helpful Websites:

[One Pill Can Kill](#)

[Natural High](#)

[Song for Charlie](#)

[Fentanyl | Opioids | CDC](#)

[National Fentanyl Awareness Day](#)

[Fentanyl: What You Need To Know—National Coalition Against Prescription Drug Abuse](#)

## STEP 4: APP NAVIGATION

For the final step of the prototyping process, obtain a large piece of white paper or poster board and arrange the index cards (screens) on the paper in an order that represents the intended way for the user to interact with the app.

Using markers or colored pencils, draw arrows between the screens that show how a user would click to move around the app. Add any labels or instructions that make the navigation clearer.

When finished, secure the index cards with tape or glue to complete your paper app prototype!