

Substance Misuse and Educators Role in Harm Reduction



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The Developing Brain

https://vimeo.com/145188894?embedded=true&source=vimeo_logo&owner=45670850



What is Addiction and Substance Use Disorder?



<https://www.youtube.com/watch?v=Tazgw599Gyg>



Recognize the Signs

Mood changes (e.g., flare-ups of temper, irritability, defensiveness)

Poor class attendance, low grades, and/ or behavior problems

Disregard for school rules

Memory lapses, poor concentration, bloodshot eyes, lack of coordination, or slurred speech

Switching friends and a reluctance to allow parents to meet new friends



Healthy Kids Colorado Survey



HEALTHY KIDS
COLORADO SURVEY

23.6% of HS
students who had
one drink or more
in the last 30 days

13.3% of HS
students who had
used marijuana in
the last 30 days

12.2% of HS used
(other drugs) to
experimented or to
see how it felt in the
last 12 months

- <https://cdphe.colorado.gov/healthy-kids-colorado-survey-dashboard>



Rise Above Colorado Youth Survey



Most often used:
Alcohol 45%
Vaping 30%
Marijuana 25%

NORTHEAST DATA:

- 31% agree experimenting is part of being a teen
- 30% drugs can help manage stress
- 17% prescription drugs (stimulants) is safe
- 51% live with someone with a SUD or addiction
- 24% offered drugs not prescribed to them
- 42% offered marijuana

SCHOOL EDUCATION:

- 58% Prescription not prescribed to you
- 69% Alcohol
- 58% Marijuana
- 80% Vaping

- <https://www.riseaboveco.org/images/2022%20Rise%20Above%20CO%20Youth%20Survey%20Results.pdf>





Rise Above Colorado Youth Survey

Mental Health and Substance Use Connection

NE Respondents:

Poor Mental Health Days/Month

- 39% reported 3-5 days
- 23% reported 6-13 days

Both increased since 2020

% Used Recently (Past 30 Days)	Number of Poor Mental Health Days			
	None	One to Two	Three to Five	Six or more
	(n=116)	(n=175)	(n=239)	(n=172)
Marijuana	2% ↓	14%	15%	20% ↑
Pain Reliever	--	1%	5%	3%
Stimulant	1% ↓	5%	8% ↑	5%
Anti-Anxiety	1%	1%	4%	4%
Alcohol	11% ↓	21%	22%	20%
Vaping	6% ↓	18%	19%	22%



COMMON EMOJI CODES

FAKE PRESCRIPTION DRUGS

PERCOCET & OXYCODONE



XANAX



ADDERALL



OTHER DRUGS

METH



HEROIN



COCAINE



MDMA & MOLLIES



MUSHROOMS



COUGH SYRUP



MARIJUANA



DEALER SIGNALS

DEALER ADVERTISING



HIGH POTENCY



UNIVERSAL FOR DRUGS



LARGE BATCH



Disclaimer: These emojis reflect common examples found in DEA investigations. This list is not all-inclusive, and the images above are a representative sample.





1 hospitalized, 4 treated after suspected drug overdose at JFK High School

Twenty-nine kids between the ages of 10 and 18 died as a result of fentanyl during the 2021-2022 school year, according to the state health department.

El Paso County lost more youth to fentanyl overdose than suicide.

Fentanyl kills Mitchell High student, dealer arrested

Accidental fentanyl overdose investigated in 13-year-old's death
Less than a day after starting the 8th grade at Aurora Hills Middle School, his family says Jose was found dead from an accidental fentanyl overdose.

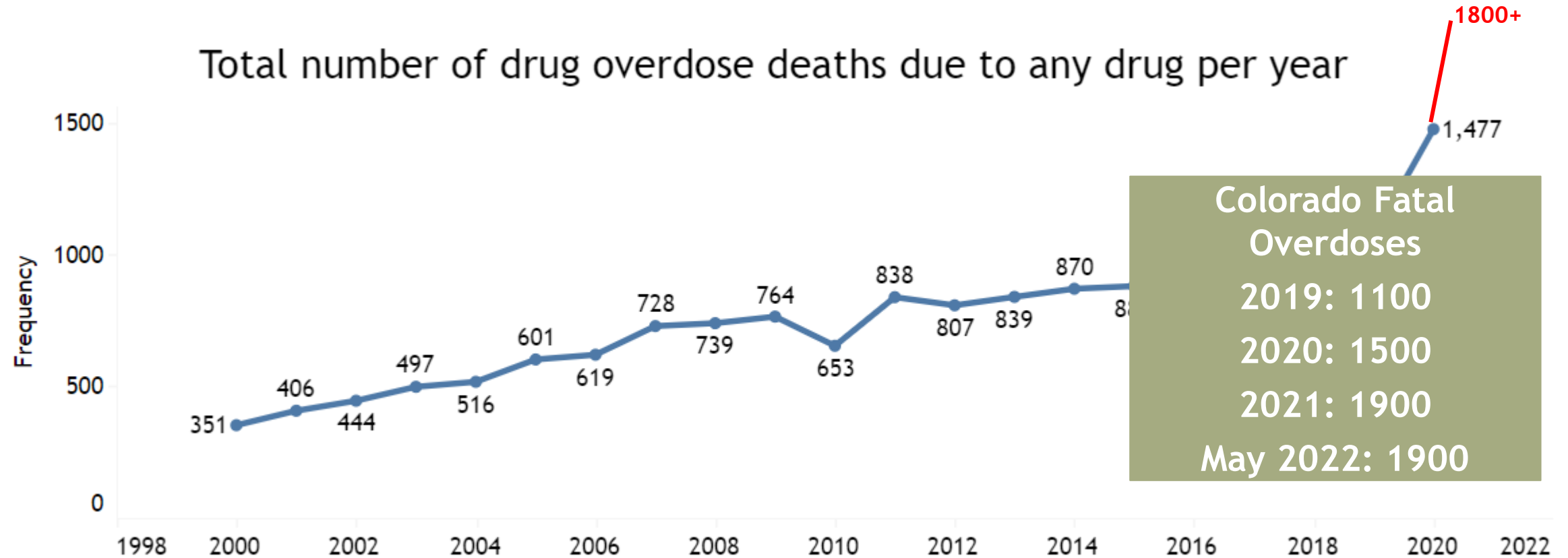
AUG 11, 2022

Two Colorado teens die of apparent overdoses





Total number of drug overdose deaths due to any drug per year



<https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

More Numbers

Hospital Admissions for Overdose
Ages 15 - 24 years
largest group at 22%

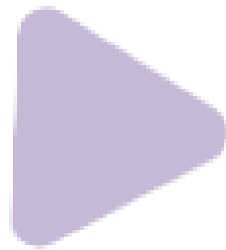


WELD
21 deaths
= ages 15 -
24 years

Weld County
experienced a 47%
Increase in
Overdose Deaths
from 2020 to 2021

53

Overdose deaths
in Weld in 2020



100

Overdose deaths
in Weld in 2021

[CDPHE Drug Overdose Dashboard](#)





Illicit Fentanyl (Opioid)



Oxy M30 “Blues”

Authentic



Counterfeit



DEA: 2 out of every 5 pills contain a potentially lethal dose

Synthetic opioid 80-100 times stronger than morphine, 50 times stronger than heroin



Harm Reduction Toolbox



Rise Above Colorado
Not Prescribed
60-minute Standards
Based Lesson designed
for Teens



Colorado Consortium
Naloxone for Schools
Google Drive with Process
of Getting Naloxone in
Schools



SAMSHA
Talk. They Hear You.
Student Assistance
Webinar Series
Fact Sheet

Natural High
Substance Use Prevention
Program Using Storytelling



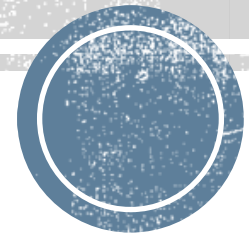
Naloxone Training
Narcan
CAHEC offers Narcan
Training and
Supplies



NCHA
Co-SLAW
Access to treatment
and peer support



OVERDOSE AND NALOXONE TRAINING





What are Opioids?

Opioids can be:

- Natural or synthetic
- Prescription medications or illegal drugs
- Pills, capsules, powder, dermal patches, or liquid
- Swallowed, smoked, snorted, or injected

Overtime, opioid use changes both the amount and sensitivity of dopamine receptors causing users to need a continuous supply of opioids to feel “normal.”

The Limbic System

Opioids can create feelings of pleasure, relaxation and contentment

The Spinal Cord

Opioids decrease feelings of pain, even after serious injuries

The Brainstem


Opioids can slow breathing, stop coughing and reduce feelings of pain





Generic Name	Brand Name
Oxycodone	Oxycontin [®] , Percocet [®] , Roxicodone [®]
Oxymorphone	Opana [®]
Hydrocodone	Vicodin [®] , Lorcet [®] , Zohydro [®] , Zortab [®]
Hydromorphone	Dilaudid [®]
Morphine	
Meperidene	Demerol [®]
Codeine	Tylenol [®] 3 & 4
Buprenorphine	Suboxone [®] , Subutex [®] , Zubsolv [®]
Methadone	
Fentanyl	Duragesic [®]

Illicitly manufactured fentanyl (IMF)

- Pill form packaged to look like prescription medications
 - Powder form looks like heroin, cocaine, meth
 - May be hundreds of times more potent than heroin
 - Counterfeit Pills (Opioids, Stimulants, Benzo)
- 

Signs of an Opioid Overdose



Blue lips or nails



Dizziness and confusion



Can't be woken up



Choking, gurgling or
snoring sounds



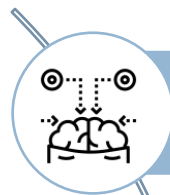
Slow, weak
or no breathing



Drowsiness or
difficulty staying awake



Responding to an Overdose



Shake and wake



Call 911



Give naloxone



Rescue breathing/recovery position

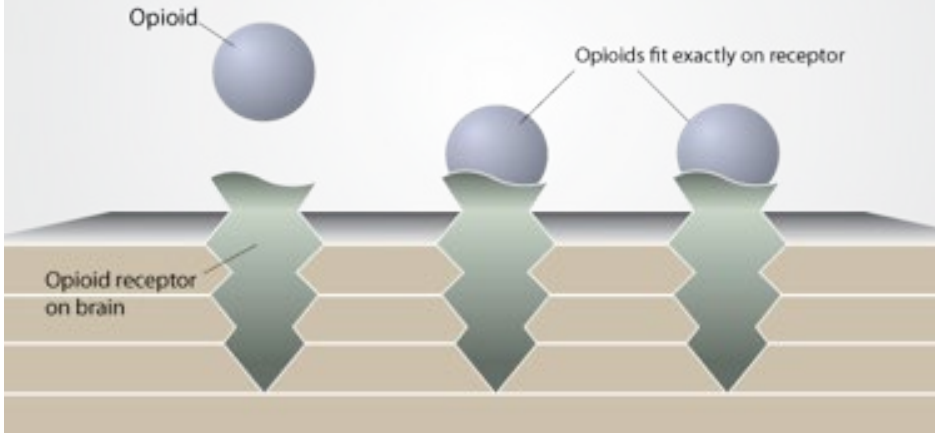


Care for the person



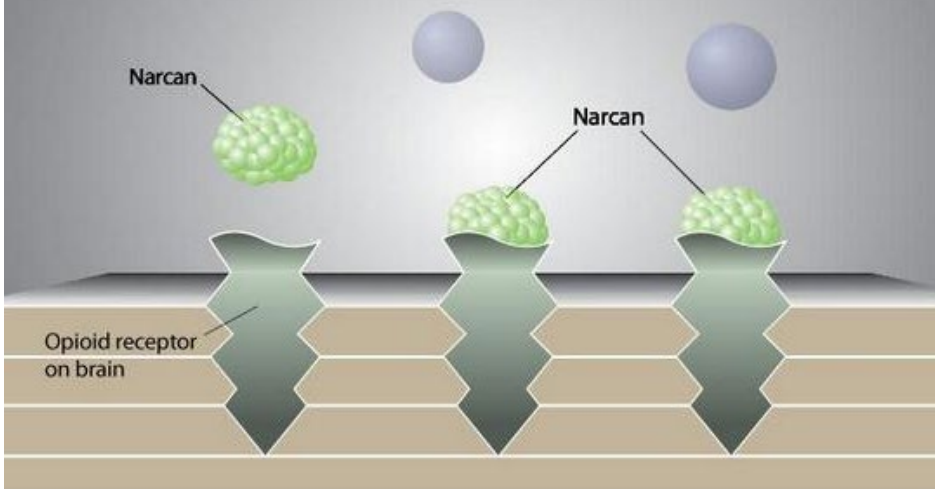
What is an opioid overdose ?

The brain has many, many receptors for opioids. An overdose occurs when too much of any opioid, like heroin or Oxycontin, fits in too many receptors slowing and then stopping the breathing.



Narcan reversing an overdose

Narcan has a stronger affinity to the opioid receptors than opioids like heroin or Percocet, so it knocks the opioids off the receptors for a short time. This allows the person to breathe again and reverses the overdose.



What is naloxone (Narcan)?

- The brain has many receptors for opioids. When too much of an opioid fits on too many receptors, an overdose occurs.
- Narcan knocks opioids off opioid receptors and binds to receptors for a short time.
- This blocks the opioids' effects, quickly restoring breathing.



What is naloxone (Narcan)?

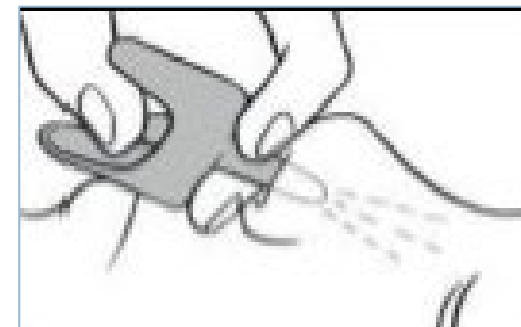
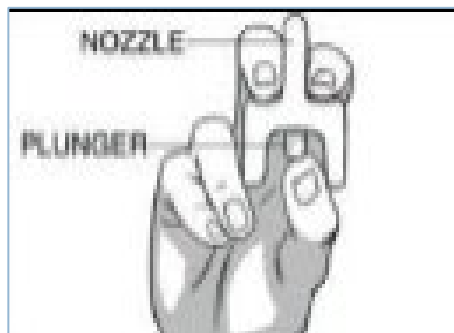
- Intranasal
- **Wears off in 30-90 minutes**
- No significant side effects
- No potential for misuse or getting high
- Safe for children, pregnant women, and pets
- Only effective in reversing **opioid** overdoses
- No effect on someone who hasn't taken opioids





NARCAN[®] Nasal Spray





1

Remove NARCAN® nasal spray from box. **Peel** back tab with circle to open

2

Place NARCAN® nasal spray with your thumb on the bottom of the plunger and your first and middle fingers on either side of the nozzle.

3

Tilt person's head back and support person under neck.

4

Gently insert tip of nozzle into a nostril until your fingers on either side of the nozzle are against the bottom of the nose.

5

Press plunger firmly to administer.



Allow 2 to 3 minutes for the naloxone to work. Continue resuscitation, as necessary.



If breathing is not restored after 2 or 3 minutes, give **another dose** of naloxone. Continue resuscitation, as necessary.



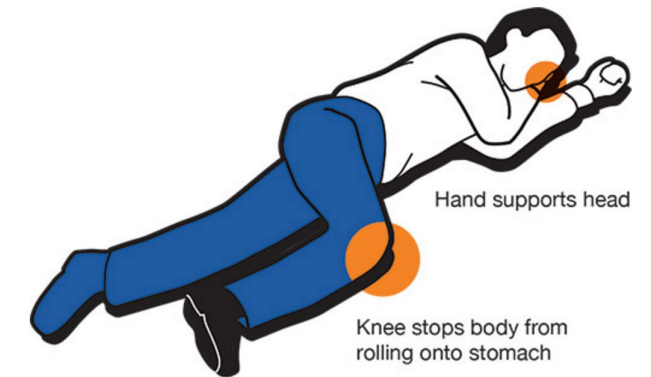
Stay with the person and provide care as directed until medical help arrives.

After receiving naloxone, a person may:

- Feel physically ill or vomit
- Feel withdrawal symptoms
 - unpleasant but not life-threatening
- Become agitated and upset
- Have a seizure (this is rare)
- Overdose again

The Recovery Position

Keep the Airway Clear



Stay with person. If you must leave them alone at any point, or if they are unconscious, put them in this position to keep airway clear and prevent choking.





Rescue Breathing

Open the airway

To effectively give rescue breaths, it's essential that the person's airway is open and clear. To open a person's airway, do the following:

1. Place your hand on their forehead.
2. Gently tilt their head back.
3. Use the fingers of your other hand to carefully lift their chin upward.

Give rescue breaths

Now that the airway is open, you can proceed to give rescue breaths. To do this:

1. Use the fingers of one hand to pinch the person's nostrils shut. This helps to prevent air from escaping through their nose.
2. Cover their mouth with yours, forming a seal so that air doesn't escape.
3. Give rescue breaths by gently breathing into their mouth. A rescue breath should last about 1 second. Aim to give a rescue breath every 5 to 6 seconds. This is about 10 to 12 breaths per minute.



Myth

I am at risk overdose on Fentanyl if I help someone.

Naloxone enables substance use.

You can get in trouble for using drugs if you call 911 when responding to an overdose.*

Fact

No documented fentanyl overdoses due to Narcan administration.

The only thing naloxone enables is breathing.

The Good Samaritan Law is designed to protect anyone acting in good faith.



Exposure?

- Overdose by contact has been a persistent myth about fentanyl
- Fentanyl is only dangerous when it enters the bloodstream – by ingesting, snorting it, injecting.
- The American College of Medical Toxicology published a position statement finding that “it is very unlikely that small, unintentional skin exposures to tablets or powder would cause significant opioid toxicity



Feldman © 2022 Prehospital and Disaster Medicine

Figure 1. Hand and Wrist Visibly Soiled with Fentanyl.
Note: Larger liquid volumes appear more visible, however nearly full surface area was exposed. Arrow shows laceration.



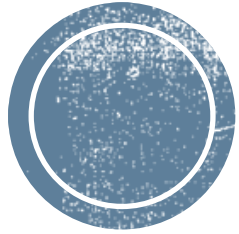
Enabling?

- No abuse potential for naloxone
- Multiple studies have looked at the impact of naloxone availability among prescription opioid and heroin users - no evidence for increased drug use
 - “5,000 Massachusetts opioid users given naloxone and found ‘no clear evidence of increased heroin use’.” (BMC Public Health, 2014)
 - Retrospective cohort study (2014) of nearly 5000 substance users found NO increase in opioid use after being provided access to naloxone ([BMC Public Health](#))
- 2016 study in [Addiction](#) concluded, “There is no empirical evidence to support the concern that take-home naloxone programmes might encourage heroin use.”

Colorado Fentanyl Legislation

- 2012 the Good Samaritan Law was passed that provided legal immunity for individuals calling 911 in response to overdose
- **2022 New Colorado Fentanyl Bill**
 - Current law grants immunity for individuals who report an emergency drug overdose. The bill extends this exemption to individuals whose provision of fentanyl is a proximate cause for death
 - If the DA prosecutes a person who sought emergency assistance for an overdose of drugs or alcohol, including fentanyl, the DA shall prepare a report detailing why the immunity provision DID NOT APPLY





RESOURCES and SLIDES