

Utilizing Naloxone and Other Harm Reduction Strategies for Substance Use Providers

Substance Abuse Prevention and Control Los Angeles County Department of Public Health

Learning Objectives



Discuss

two (2) risk factors associated with increased risk of an opioid overdose and ways of utilizing harm reduction to decrease this risk.

Develop

three (3) skills to effectively recognize and respond to individuals who may have overdosed on opioid substances with Naloxone.

Evaluate

three (3) harm reduction strategies and include appropriate resources that are available to youth, transitional age youth, adults, and substance use treatment providers in Los Angeles County.

Identify

three (3) methods of engagement with individuals who are considered at risk for developing substance use disorders, specifically those using opioids and using opioids intravenously.

History of Opioid Epidemic



Increased attention to untreated pain due to the HIV epidemic.

An expert opinion article that is paid by pharmaceutical companies stating that "addiction is rare for patients treated with narcotics".

1980

The American Pain Society declared pain as the 5th vital sign

1996

The Joint Commission published standards for pain management assessment and intervention requirements

2000

1990

Increased publication on the undertreatment of pain

1998

Manufacturer of oxytocin released a huge marketing push

History of Opioid Epidemic (con't)

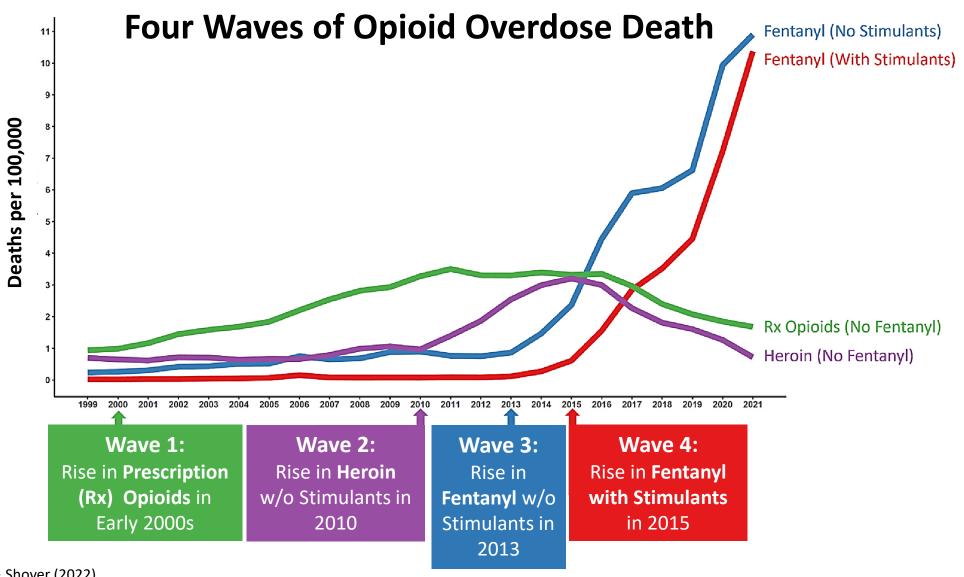


The Oxycotin manufacturer was New guidelines on prescribing found guilty of criminal charges opioids was created due to misleading the public and healthcare workers on the More funding for substance use 64,000 people die from addictive properties of Oxycotin treatment opioid overdose 2007 2016 2022-Now 2010 2017 17% of Americans have at least one Continued increase in opioid prescription. prescription opioids use Average prescription length continued to increase to 18 days. 11.4 million of people aged 12 and

older misused opioids.

Opioid Involved Overdose Deaths



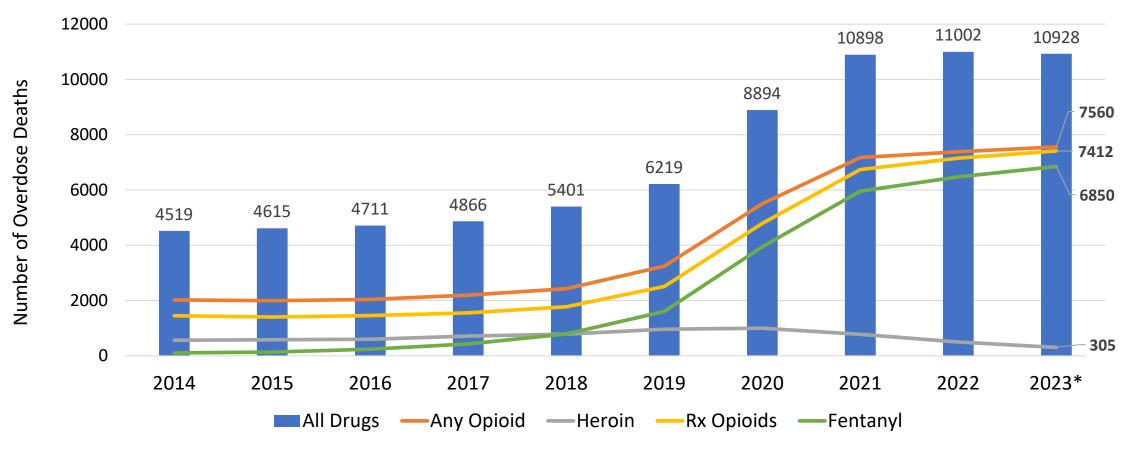


Friedman & Shover (2022)

Overdose Deaths in California



California Overdose Deaths 2013-2022



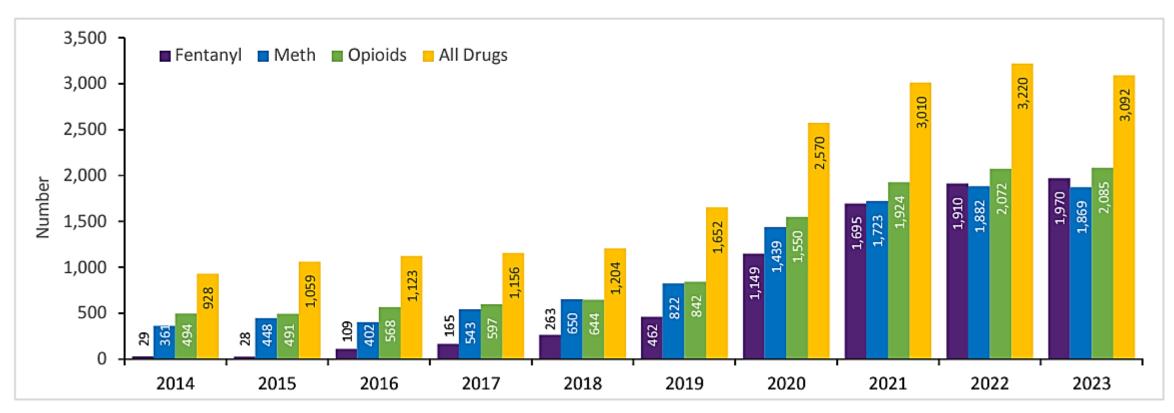
*Preliminary data

Overdose in Los Angeles County



Drug Overdose Deaths by Drug in Los Angeles County, 2014-2023

Figure 1. Drug Overdose Death Counts by Drug, LAC, 2014-2023



^{*}Notes: All drug overdose deaths in this report are due to accidental drug overdose, excluding intentional overdose such as suicide. Opioids refers to accidental overdose deaths involving all opioids, including fentanyl and heroin. Meth refers to methamphetamine. All drugs refer to all accidental overdose deaths involving alcohol and/or drugs, including fentanyl, meth, and opioids.

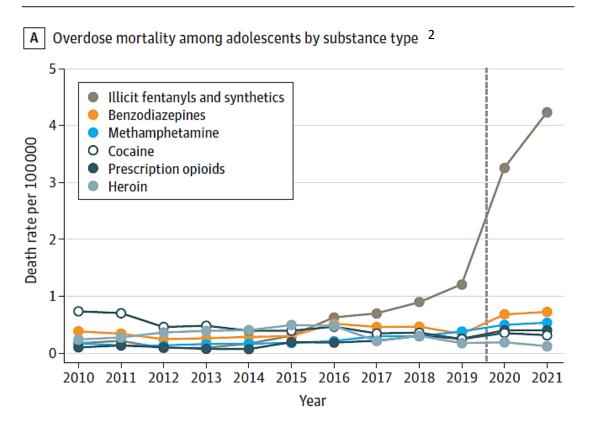
Overdose Death Among Youth



"Every week in 2022, the equivalent of a high school classroom's worth of students – an average of 22 adolescent died of drug overdoses in the U.S."

- Friedman & Hadland¹

Figure. Adolescent Overdose Deaths, 2010-2021



CDC WONDER Database as cited in Friedman et al.²

 US adolescent overdose deaths (death rates per 100k) involving illicit fentanyl and synthetics

2010: 38 (0.18) 2019: 253 (1.21) 2020: 680 (3.26) 2021: 884 (4.23)

Fentanyl in Adolescent Overdose Deaths

- 2020-2022: Fentanyl identified in 75% of adolescent overdose deaths nationwide.¹
- 2021: Fentanyl identified in 92% of adolescent overdose deaths in LA County.³

^{1.}Friedman & Hadland (2024)

^{2.} Friedman, Godvin, Shover, et al. (2022)

^{3.} Health Outcomes and Data Analytics Division (2023)

CDC Data: Youth Drug Use and Overdose Deaths



Approximately "12% high school students reported misusing prescription opioids at least once in their lifetime" (CDC, 2023)

Demographic and Prescription Opioid Misuse (POM)

- Black and Hispanic students are more likely engaged in POM than white students
- Students identified as lesbian, gay, or bisexual, or unsure were more likely to report lifetime POM than those
 who identified as heterosexual (21.5% and 18.6% vs. 9.4%)

Substance Use	Male	Female
Lifetime Heroin Use	1.6%	0.8%
Lifetime Injection Drug Use	1.7%	0.9%
Current Prescription Opioid Misuse	4.0%	8.0%
Lifetime Prescription Opioid Misuse	9.5%	14.8%

History of Opioid Epidemic: Systemic Bias



"We knew we couldn't make it illegal to be either against the war or black, but by getting the public to associate the hippies with marijuana and blacks with heroin, and then criminalizing both heavily, we could disrupt those communities. We could arrest their leaders, raid their homes, break up their meetings, and vilify them night after night on the evening news. Did we know we were lying about the drugs? Of course, we did."

-John Ehrlichman,
President Nixon's Domestic Policy Chief



Opioid Substances

Graphic Content Warning:

Pictures of Opioid and Other Substances on the next 11 slides

Opioids









Natural Opiates

- Alkaloids, nitrogencontaining base chemical compounds that occur in plants such as the opium poppy.
- Examples: morphine, codeine, etc.

Semi-synthetic Opioids

- Created in labs from natural opiates.
- **Examples:** Hydrocodone, oxycodone, heroin (which is made from morphine).

Fully Synthetic Opioids

- Made entirely in a lab, void of natural opiates.
- Examples: Fentanyl and methadone.

U.S. Department of Health and Human Services (2022) Photo credits: DEA

Fentanyl and Fentanyl Analogs



 Potent synthetic opioid approved by the FDA for pain management that is 50-100x more potent than morphine

2 Types of Fentanyl

- Pharmaceutical Fentanyl
- Illicitly Manufactured Fentanyl
 - linked to most cases of fentanyl-related overdoses

Methods of Use

- IV/IM injection, oral pills/tablets, snorting/sniffing, smoking, patches and spiked onto blotter paper
- Sold alone or mixed into heroin and other substances

Overdose Risk Factors

- Readily vaporized ("smoked")
- Short acting
- May cause more rapid respiratory depression & chest wall rigidity
- Relatively high mu-receptor affinity (less than naloxone/bup.)
- Lipophilic (crosses blood-brain barrier quickly)

Additional Training Video on Fentanyl:







Emerging Trend in LA County-Xylazine



What Is Xylazine?

- Aka "tranq", "tranq dope", "zombie drug"
- Sedative used in veterinary medicine and NOT FDA approved for human use
- Currently found in counterfeit pills, fentanyl and other illicit (either in liquid or powder form)
- Causes respiratory depression (lowers blood pressure, heart rate and breathing rate)
- Symptoms of overdose last 8-72 hours
- No medication or antidote







SAPC (2023)
ThinkstockPhotos-494661528
Photo courtesy of Substance Abuse Prevention and Control (SAPC)

What can be done if you suspect someone is overdosing from Xylazine?

- Administer Naloxone & Call 911 !!!
- If someone is overdosing, still use naloxone!
- Xylazine is often mixed with an opioid and the naloxone will still help reverse the opioid's contribution to an overdose.



Picture of Xylazine that is used in veterinary medicine.





Risk Factors for Overdose

Overdose Risk Factors



- Reduced tolerance to a type of opioid
- Taking high dosages of prescription opioids
- Unfamiliar supply/changes in quality
- Mode of administration
- Mixing substances
- Medical conditions
- Age greater than 65 years old



Take a guess...





← Can you tell the difference?
Which set of pills are authentic?

(click on the picture that shows the authentic pills)

17

Overdose Risk Factors: Quality



Purity of drugs is highly variable possibly due to

Adulterants:

Refers to pharmacologically active ingredients that are deliberately added to enhance or mimic a pharmacological effect.

Cutting Agents and/or "Diluent":

Substances used to dilute illegal drugs such as heroin and cocaine.

Contaminants:

Refers to by-products of the manufacturing process.

Nontoxic Adulterants and Cutting Agents:

Caffeine

Paracetamol (common painkiller, typically over the counter i.e., Tylenol, Excedrin, Calpol, etc.)

Procaine (local anesthetic, commonly used in dental procedures)

Sugars (sucrose, lactose, dextrose, mannitol)



Authentic oxycodone M30 tablets



*Counterfeit oxycodone M30 tablets containing fentanyl

Overall: Illicit substances are more commonly adulterated with benign substances.

Toxic Adulterants:

Fentanyl

Overdose Risk Factors: Modes of Administration





Oral

- Absorbed through the lining of the stomach and intestines, and then into the bloodstream.
- Slowest onset of effects



Smoke

- Absorbed through the internal lining of the lungs into the bloodstream.
- Faster onset compared to drugs that are taken orally.
- Also results in short-term and long-term damage to the lungs including but not limited to pneumonia, cancer, etc.



Insufflate (Snort)

- Absorbed through the nasal lining which allows tiny blood vessels to absorb the drug directly into the bloodstream.
- One of the faster methods to produce effects.



Inject

- Absorbed directly into the bloodstream. Any watersoluble drug can be injected into the veins or under the skin.
- The fastest method to produce effects.

Overdose Risk Factors: Mixing Substances



Mixing Stimulants



"Uppers" – Increases heart rate and blood pressure

- Brain Injury
- Liver Damage
- Heart Attack
- Stroke

Examples:
Ecstasy (MDMA),
cocaine,
methamphetamine,
amphetamines (speed)

Mixing Depressants



"Downers" – Decreases rate of breathing.
Combining depressants can increase risk of:

- Damage to the brain
- Overdose
- Death

Examples:
Opioids (i.e heroin,
morphine, oxycodone,
hydrocodone, fentanyl)
& benzodiazepines

Mixing Stimulants & Depressants



"Speedballing" (Mixing heroin and cocaine)
High Risk for overdose:

 The stimulant causes increase use of oxygen while the depressant reduces breathing rate.

Does not result in "canceling out" effects.

Drinking Alcohol & Using Other Drugs



Can increase risk of the following:

- Overdose
- Damage to the brain
- Damage to the heart and other organs.

Alcohol is a depressant with similar effects as "downers", especially during withdrawal. Detox is dangerous due to risk of seizure and high blood pressure.

Overdose Question



When compared with the general population, do younger people have a higher chance of repeated overdose than older people?



A) Yes

B) No

Getty Image: 601116128

Answer: Yes



In two research studies published in 2020:



- Younger individuals (18-34) were more likely to have a repeat OD than older (45-64) individuals.¹
- Youth with incident heroin overdose (OD) were at 7x higher risk of recurrent OD than youth with OD involving other opioids, and at 471x higher risk than general population.²
- After the OD episode,
 - 29.3% received behavioral treatment
 - 1.9% received pharmacotherapy (alone or with behavioral treatment).
 - 68.9% received no treatment.

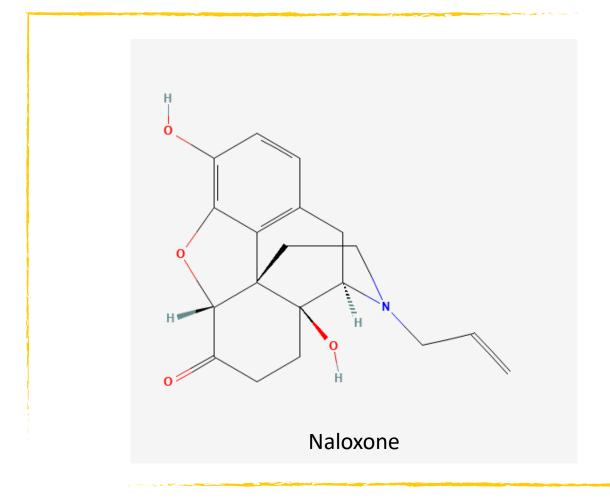
^{1.} Suffoletto and Zeigler (2020)

^{2.} Alinsky et al. (2020) Getty Image 832155888

Module 1 Review







What is Naloxone & How Does It Work?

Intoxication vs. Overdose







Impaired/Intoxicated	Overdose
Relaxed muscles	Limp body, minimal to no movement
Slowed or slurred speech	Slow, weak or no breathing
Fatigue/Sleep	Heartrate is slow, erratic
Slight nod	Deep nod-Loss of consciousness
Responsive to stimulation like sternal rub	Cold and/or clammy skin
Some snoring but can be roused	Choking or gurgling sounds

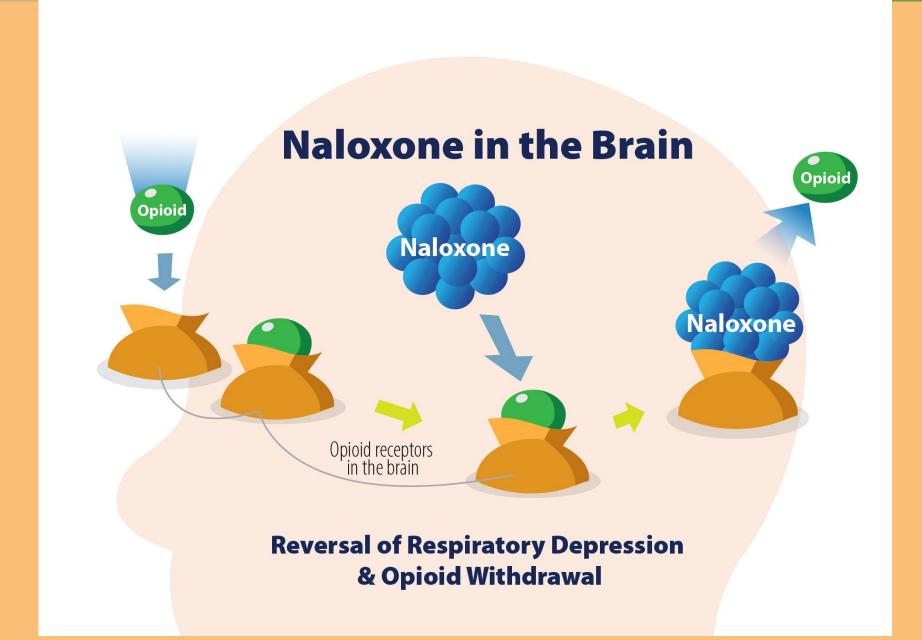
California Department of Public Health (2024)

Naloxone & How it Works (SAMHSA Video)



Naloxone & How it Works (con't)





Three Steps of Responding to an Overdose with Naloxone





Responding to an Overdose with Naloxone:

- 1. Give Naloxone
- 2. Call 911
- Recovery Position

Image: DPH-SAPC Image Overdose Bag

Responding with Naloxone- Step 1: Give Naloxone





Responding with Naloxone- Step 1: Give Naloxone



1st Step- Give Naloxone!

 Naloxone is a safe antidote to opioid overdose that has no risk of abuse or dependency

Note: You may need to give more than one dose of naloxone if large amount of opioids and/or more potent opioids were used by the person who is experiencing an overdose.



Image: DPH-SAPC Image Overdose Bag

Naloxone Nasal Spray Instructions



PEEL



Peel back the package to remove the device.

PLACE



Place and hold the tip of the nozzle in either nostril until your fingers touch the bottom of the patient's nose.

PRESS



Press the plunger firmly to release the dose into the patient's nose.

Image: SAPC

Responding with Naloxone- Step 2: Call 911



2nd Step- Call 911

- Call 911 ASAP- time is critical!
- If a second person is available, have them call 911 & wait for paramedics to arrive.

EMERGENCY PARAMEDIC

AMBULANCE

Getty Image: 1046187562

- When you call 911, tell dispatcher:
 - > Exactly where you and the person overdosing is with as much information as possible
 - > Describe what you see with the person (i.e. Not breathing, turning blue, unconscious, non-responsive)
 - When paramedics arrive inform them of what you know about what substances were used and if Naloxone had been used.
- Stay with the person until help arrives

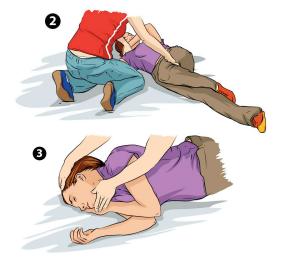
Responding with Naloxone- Step 3: Recovery Position



3rd Step- Recovery Position

- If you must leave the person for any reason (to call for help or to get naloxone), put the person in recovery position. This will help keep their airway open and help to prevent them from choking.
- Recommended recovery position is left side if it is possible
- Stay with the person until help arrives.
- When the person wakes up, encourage the person to seek medical attention







Singletary, E. M. et al. (2015) Getty Image: 525589101

Additional Steps: Rescue Breathing & Chest Compression





Rescue Breathing:

- An opioid overdose represses a person's ability to breathe.
- ➤ Since the person cannot breathe on their own, you may need to help them breathe



Getty Image: 491309410

Open Airway:

- ➤ Make sure that the person's airway isn't blocked.
- > Do this by tilting their head back, to make a clear path for the person to breathe.



Getty image: 538916357

Rescue Breathing & Chest Compression (con't)





Chest Compressions



Getty Image: 538916357

- Chest compressions Adults: Place the heel of your hand on the center of the person's chest, between the nipple line, then place the other hand on top and press down by 5-6cm (1-2.5 inches) at a steady rate of 100 compressions per minute.
- > After every **30 chest compressions**, give two rescue breaths
- Don't stop until person shows signs of life or help/paramedics arrive
- You will know it's working because you will see their chest rising and falling and color will begin to return to their lips

After Providing Naloxone





When person wakes up, they will likely be disoriented.

Explain what happened and tell them they were given Naloxone.



After receiving Naloxone, the person may experience:

- headache
- nausea
- vomiting
- dry mouth



These symptoms will wear off. The person may begin to experience other withdrawal symptoms after waking up.

After Providing Naloxone (con't)



Discourage the person from taking more drugs. They might want to use again right away to lessen the withdrawal symptoms.

Taking more drugs may cause the overdose to return.



The effects of opioids can last longer than the effects of Naloxone.

This means when the Naloxone wears off in 30-90 minutes, the person may again feel the drugs' effects.

Encourage the person to seek medical assistance immediately.



Do's and Don'ts When Responding to Opioid Overdose

What to DO:

Start chest compressions until you see the person start to breathe on their own.

Wait 2-3 minutes to give naloxone a chance to work.

If no response after 2-3 minutes, give a second dose of naloxone and begin chest compressions again.

Stay with the person at all times. In the event you must leave them unattended, put them in the "recovery position" on their side.

Encourage the person to seek medical assistance ASAP after naloxone administration.

What NOT to do:

Don't slap or forcefully try to stimulate the person.

Don't put the person into a cold bath or shower.

Don't inject the person with any substance (e.g., saltwater, stimulants, etc.).

Don't try to make the person vomit drugs they have swallowed.

Naloxone Storage & Disposal



Storage:

- Do not open package until ready to use the device.
- Store naloxone in original package at room temperature; avoid exposure to light.
- Keep in a safe place away from children & pets, but easy to access in case of emergency.

Expiration:

- Naloxone loses its effectiveness over time.
- Check expiration date on label.
- Naloxone seems to be stable for 10+ years: "expired naloxone is better than no naloxone".

Disposal:

- Unused and expired naloxone can be discarded at a local pharmacy or a medicine take-back program
- Used naloxone: discard nasal spray in solid waste trash; discard injectable in a sharps disposal bin.

The Good Samaritan Law



AB 472-The Good Samaritan Law

"it shall not be a crime for a person who experiences a drug-related overdose and who is in need of medical assistance to be under the influence of, or to possess for personal use, a controlled substance, controlled substance analog, or drug paraphernalia, if the person or one or more other persons at the scene of the overdose, in good faith, seek medical assistance for the person experiencing the overdose..."

Health and Safety Code (HSC) 1799.102

- acted in good faith (no bad intention)
- acted not for compensation
- provided emergency medical or nonmedical care
- provided the care at the scene of an emergency *
- > you cannot be liable for any civil damages from providing emergency care
- *Note that "the scene of an emergency" does not include places where medical care is usually provided (e.g., Emergency Room).



Naloxone is Available at These Locations





Local Pharmacies



Connecting to Opportunities for Recovery and Engagement (CORE) Center



ph.lacounty.gov/sapc/public/corecenter



Los Angeles County Department of Health Services (DHS)

https://www.laodprevention.org





Engagement and Overdose Prevention Hubs (EOP)(aka Syringe Exchange Programs)

http://publichealth.lacounty.gov/sapc/docs/public/overdose-prevention/EOP%20Hub%20Schedule.pdf





Los Angeles County Library Naloxone Clinics

lacountylibrary.org/naloxone



Module 2 Review #1



Module 2 Review #2



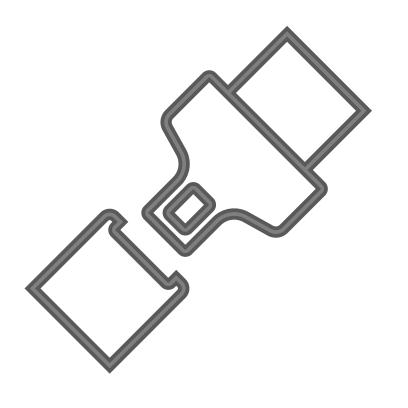


Harm Reduction Strategies for Reducing Overdose Risks



Harm Reduction Strategies in Everyday Life







Seatbelt

Sunscreen

Harm Reduction Approach



Harm Reduction is a **BIG** Shift in the Treatment Approach to Substance Use

Abstinence-Based Approaches	Harm Reduction Approaches
Reduce harm by getting people to stop using substance	Reduce the chances of harm while people are using substances
Success = No substances use	Success = Not doing harm
Spend time motivating people to stop using/injecting substances and enter treatment	Quick solutions and things people can do right away to protect their health even if they still using substances
While we are working to get people into treatment, they can do significant harm by getting a disease from using/injecting substances	Prevent disease and protect health first, with a focus on the person rather than the substance use

Harm Reduction Philosophy



Accepts, for better or worse, that substance use is part of our world and works to minimize its harmful effects rather than ignore or condemn it

Believes all people are capable of change and will do so when they are ready, and circumstances allow

Focuses on keeping people who use substances alive and protecting their health

Recognizes the use of substances does not forfeit a person's right to health care & social services

Honors the dignity & humanity of people who use substances & offers them respect and compassionate support without requiring abstinence as a pre-condition



A Continuum of Substance Use Interventions



Youth Development & Health Promotion

Programs at school- and community-level

Drug Use Prevention

• Universal, selected, and indicated prevention

Harm Reduction → Currently largely serves people who are using drugs and not yet interested in SUD treatment

• Low threshold services proven to reduce morbidity and mortality, including outreach, overdose prevention (naloxone and fentanyl test strip distribution, etc), syringe exchange, peer services, linkages to SUD treatment and other needed services, etc.

SUD Treatment & Recovery → Currently largely serves people who are ready for abstinence

• Involves a spectrum of settings: opioid treatment programs, outpatient, intensive outpatient, residential, inpatient, withdrawal management, Recovery Services, Recovery Bridge Housing, field-based services, care coordination and navigation, etc.

Surveillance of drug use and its community impact

Stages of Change and Harm Reduction Interventions



Stages of Change



Harm Reduction Programs

- Initial engagement
- Harm reduction supplies
- Skills development to reduce risks
- Linkage to health care and social services
- Outreach: street teams
- Low-threshold medications for addiction treatment

Recovery is Possible!

• Of those in the U.S. with a history of substance use disorder, 75% are in recovery.

Harm Reduction is Essential

- Harm reduction is practiced all across health care (diabetes example, lollipops in dental offices, etc)
- In the context of the worst overdose crisis in history, harm reduction reduces mortality risks, increases treatment access and access to other health and social services, and supports recovery.

Treatment Programs

- Biopsychosocial treatment for substance use (including medication services, individual and group therapy)
- Linkage to other medical and social services
- Crisis care

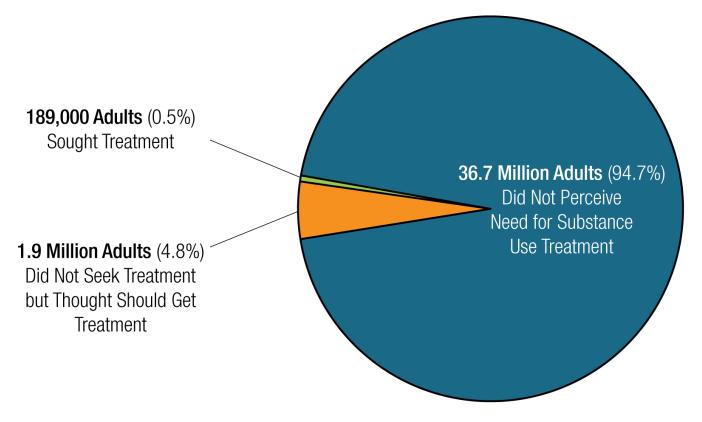
Aligning Services with Readiness is Essential

- Addiction is chronic and recurrent, and not all people are at the same stage of readiness to change.
- Only focusing on individuals in some stages of change as opposed to ALL stages of change limits service reach and impact → We need the widest service net possible

Treatment Perceptions Among Those with SUD



Perceptions of Need for Substance Use Treatment: Among Adults Aged 18 or Older with a Past Year Substance Use Disorder Who Did Not Receive Substance Use Treatment in the Past Year; 2023



39.6 Million Adults with a Substance Use Disorder Who Did Not Receive Substance Use Treatment

Note: Adults with unknown information for perceptions of need for substance use treatment were excluded.

Harm Reduction Services





Harm Reduction Supplies Access



Drop-In Centers



Syringe Exchange & Disposal



Housing Services



Naloxone and Test Strips



Pharmacy Access



Medications for Addiction
Treatment (MAT)



Referrals

Harm Reduction Services/Strategies (con't)



Peer Support

Sterile smoking equipment distribution

Drug Checks:

http://www.drugcheckingla.com/ or contact checkingLA@proton.me, or at selected EOP

Routine healthcare

HIV and Hepatitis
C testing and
treatment

Safe Consumption Sites (none in LA County currently)



Harm Reduction Resources

LA County Department of Public Health Substance Abuse Prevention and Control (SAPC)

Harm Reduction

Harm Reduction | Top 5 Myths | Overdose Epidemic | Accessing Naloxone | Finding Services | Resources | FAQ | Contact Us

Harm Reduction and Overdose Prevention Resources

Community-based organizations and individuals may utilize the following resources and information designed by SAPCs Harm Reduction Unit to support efforts to expand access to harm reduction and overdose prevention services.

Fentanyl Resources +

Xylazine Resources +

Naloxone Resources +

Training and Presentations +

Local, State and National Resources +

Scan the QR Code to visit the Harm Reduction Webpage



For more information, resources, and training, please contact the Harm Reduction Unit at HarmReduction@ph.lacounty.gov

Engagement and Overdose Preventions (EOP) Hubs in LA County



TELL CONCUMENT OF THE



Click here or scan QR code to view EOP Hub Program Schedule →	
Asian American Drug Abuse Program	(424) 331-5799
Bienestar Human Services*	(886) 590-6411
Homeless Health Care Los Angeles	(323) 497-3091
Homeless Outreach Program Integrated Care System	(323) 432-4399
L.A. Community Health Project	(323) 380-5469
Tarzana Treatment Center	(818) 342-5897
Venice Family Clinic* (Venice)- Safe Place for Youth: http://www.safeplaceforyouth.org	(310) 314-5480

^{*}May accept youth (age 12-17)

Reducing Overdose Risk



- Don't use alone (or tell someone your plan to use)
 - Never Use Alone Website: https://neverusealone.com/
 - Never Use Alone Phone #: 877-696-1996
- Be cautious about mixing substances
- Know your tolerance level
- Be aware about changes in drug quality

Module 3 Review





Engagement Techniques for Working with Patients and Community Members





How Do I Talk About This?

It's important to talk with Youth about Overdose and Naloxone so they know the dangers

- ✓ Listening without judgement
- ✓ Be a good source of information
- ✓ By being open to the conversation you are showing that you care
- ✓ Showing empathy and unconditional support

Using Motivational Interviewing (MI) with All Age Groups





Emphasize personal responsibility for change

What are their goals? Even if not treatment related.

Provide a menu of change-options

Create a Change Plan

Enhance Self-Efficacy

Ackowledge potential anger/frustration at having to be in treatment

Roll with Resistance

Communicate
Expectations and Be
Consistent

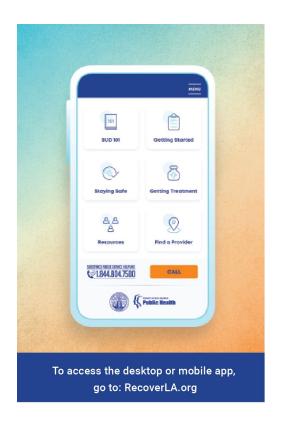
Use Open-Ended Questions







Recover LA Mobile App



- Free mobile app
- Provides education and resources for those seeking substance use services for themselves or others
- Available in 13 languages
- RecoverLA.org

QR code can be used to access the app as well





Summary





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- Risk factors of an overdose: Reduced tolerance, mixing substances, mode of administration, quality of substance.
- Naloxone kicks out opioids from brain receptors and block receptors for 30-90 minutes.
- People cannot overdose from naloxone.
- Seek medical assistance after an overdose.

Harm Reduction Strategies:

- Meet people where they are at
- Recovery looks different for everyone
- Saves lives

*When in doubt, GIVE NALOXONE & CALL 911



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