Drug Use & Harm Reduction: Public Health Policy and Criminal Law

Kirsten Leloudis & Phil Dixon

UNC School of Government

Roadmap

Substance Use Disorder (SUD) Basics

- What is a SUD?
- SUD treatments
- Data trends

Key Things to Know for Defenders

- SUD as a medical condition
- Fentanyl and other newer drugs
- Post-incarceration overdose deaths
- Opioid settlement funds

Resources

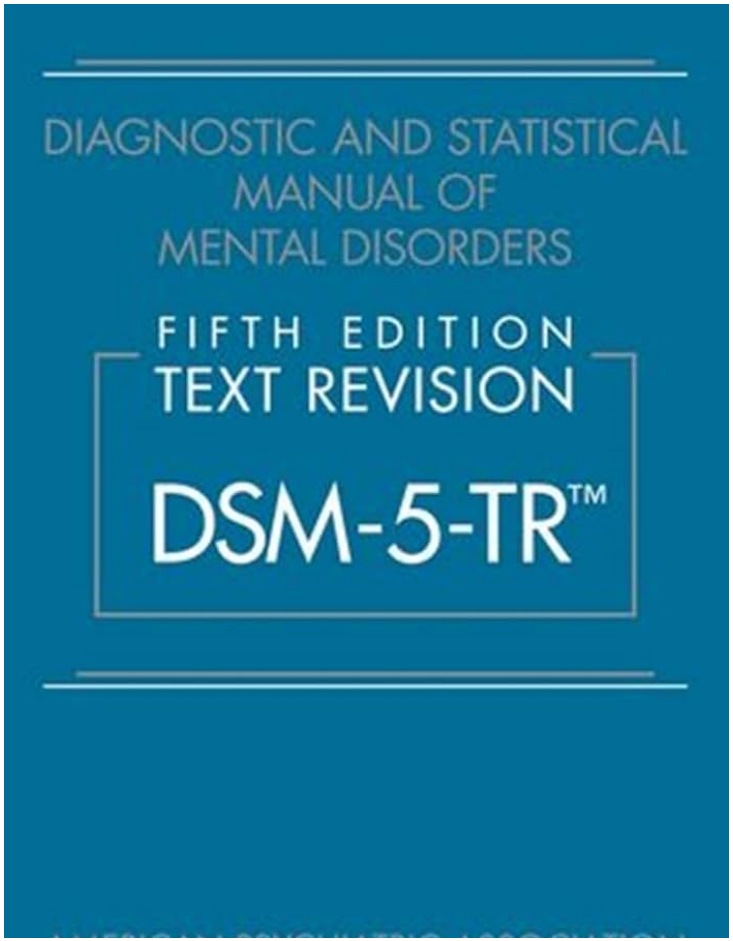
A Quick Note

Focusing on **opioids** because…

- They are involved in the majority of all overdose deaths (76% in 2022)
- Opioids pose particular risk for addiction and death
- Opioid crisis is unprecedented in terms of its origins and scope; poses unique challenges

Examples of opioids:

- Morphine, oxycodone, hydrocodone, fentanyl, heroin



What is Substance Use Disorder (SUD)?

- Nowadays, understood to be a disease
- 11 criteria for assessment
- SUD can be diagnosed as mild, moderate, or severe depending on how many of the 11 criteria are met
- "Substance" in "SUD" can be alcohol, cannabis, hallucinogens, inhalants, opioids (Rx and illegal), stimulants, tobacco, and others
  - OUD = opioid use disorder

SUD is Common

- 2024 SAMHSA study results:
  - 16.8% of people age 12+ (**aka 48.4 million, or 1 in 6 people**) with SUD in the past year
  - 46% of adults with a SUD also have a mental illness
- Risk factors for SUD include genetics (est. 50%), environment, and development (ex., adolescents)
  - But ultimately: anyone can experience addiction
  - Including lawyers!
    - *See* "The Prevalence of Substance Use and Other Mental Health Concerns Among American Attorneys," Journal of Addiction Medicine, 2016.

SUD Treatments

In-patient rehabilitation, outpatient therapy/counseling, medication, and more

- Stigma, cost, insurance coverage, and service availability are barriers

Medication treatment for OUD:

- Buprenorphine, suboxone (buprenorphine/naloxone) methadone, naltrexone

What is an Overdose?

Toxic level of a drug in the body that may make it hard for the body to carry out basic functions, like breathing or temperature regulation.

Often diagnosed using "**clinical diagnosis**"- look at symptoms, patient history, and other information

- Opioid overdose symptoms: breathing issues, unresponsiveness, altered mental status, pinpoint pupils, clammy or blue skin, etc.

Drug use does not always result in an overdose, and overdose does not always result in death.

When Does (Opioid) Overdose Cause Death?

Death can occur when opioid slows down breathing too much

- Happens because opioid drugs bind to receptors in the central nervous system that regulate breathing
- Insufficient breathing means not enough oxygen being circulated throughout the body- can cause blue appearance, especially on lips, fingers, feet
- Lack of oxygen causes organ damage, including to the brain

Death not usually immediate

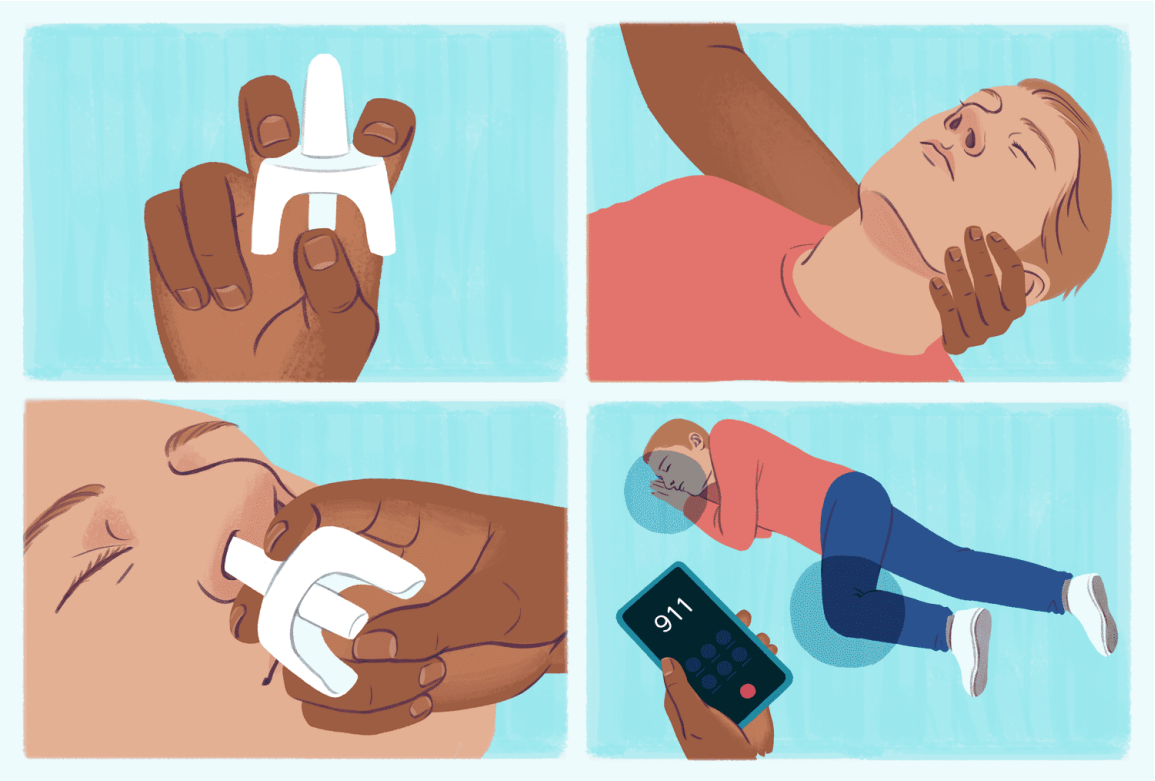
- Often time (from minutes to a few hours) to intervene

Overdose death is one of the top causes of injury-related death in the U.S.

Naloxone

- Trade name “Narcan”
- Reverses effects of opioids
- Spray and injectable

- In NC, a statewide standing order makes naloxone available *without a prescription* to anyone who is:
  - At risk of overdose
  - Friend/family/in a position to help someone overdosing



What is Harm Reduction?

"Harm reduction is a way of preventing disease and promoting health that 'meets people where they are' rather than making judgments about where they should be in terms of their personal health and lifestyle. **Accepting that not everyone is ready or able to stop risky or illegal behavior, harm reduction focuses on promoting scientifically proven ways of mitigating health risks associated with drug use** […]."

- NC Harm Reduction Coalition, quoting, in part, Human Rights Watch - https://www.nchrc.org/about-2/harm-reduction/

Examples of Harm Reduction

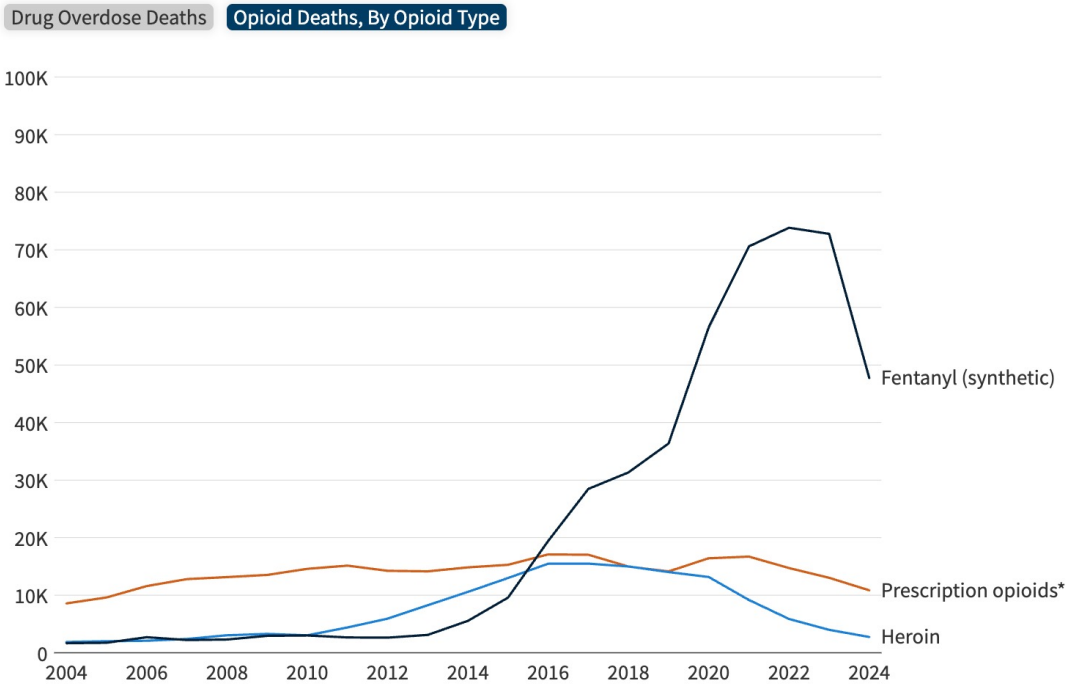
- Syringe exchange/syringe services programs
- Provision of other clean drug use supplies (cotton balls, alcohol swabs, etc.)
- Provision of wound care supplies (ex., for xylazine wounds)
- Naloxone distribution
- Medication assisted treatment (MAT) with buprenorphine, suboxone, etc.
- Education, “never use alone” campaigns
- Good Samaritan laws

The Numbers, Nationally

Figure 1

Opioid Overdose Deaths Fell Sharply in 2024, Nearing Pre-Pandemic Levels but Remaining Above 2019

Number of total opioid deaths by opioid type, 2004-2024



Note: More than one opioid can be involved in a single death, so opioid subcategories do not equal the total opioid deaths. Drug overdose deaths were identified using the International Classification of Disease, Tenth Revision (ICD-10), based on the ICD-10 underlying cause-of-death codes X40-44, X60-64, X85, Y10-14 and multiple cause of death codes T40.0-T40.4, T40.6 (any opioid), T40.2, T40.3 (natural and semi-synthetic and methadone (prescription or methadone), T40.4 (synthetic opioids, other than methadone), and T40.1 (heroin). Deaths from illegally-made fentanyl cannot be distinguished from pharmaceutical fentanyl in the data source *semi-synthetic/natural or methadone opioids are considered a prescription.

Source: KFF analysis of CDC WONDER final multiple causes of death files • Get the data • Download PNG

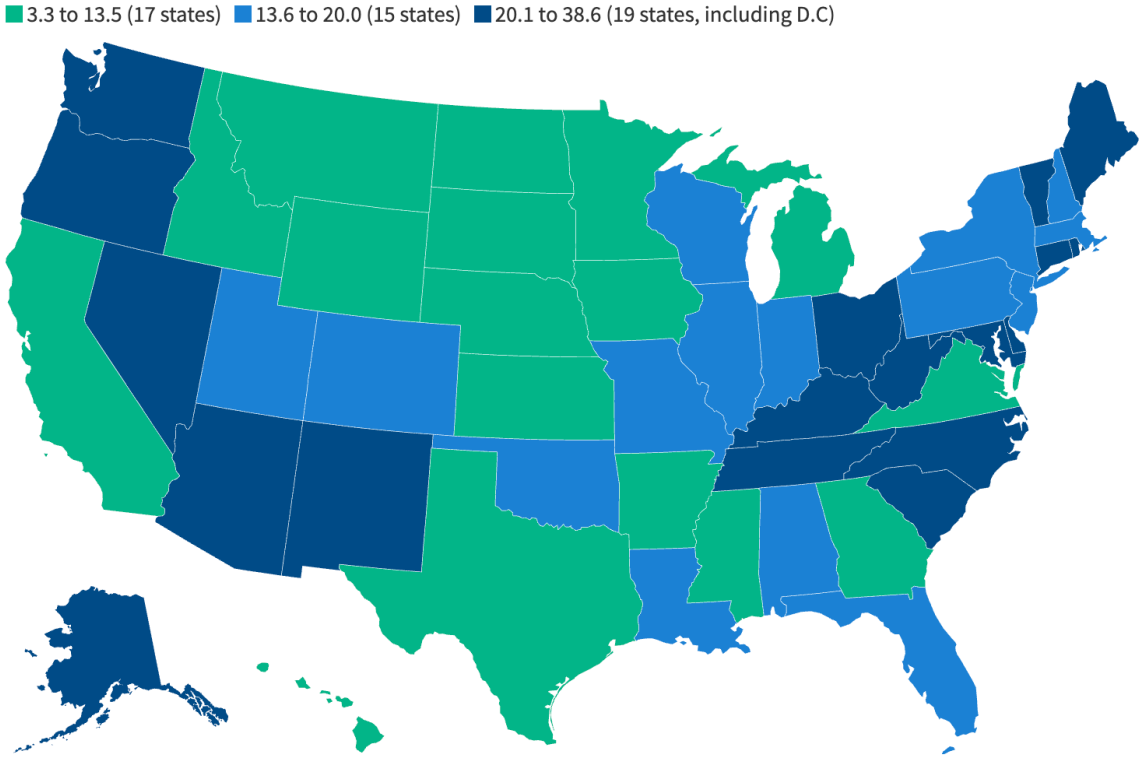
KFF

Link: https://www.kff.org/mental-health/opioid-overdose-deaths-national-trends-and-variation-by-demographics-and-states/

Figure 4

Opioid overdose death rates vary widely across states, 2024

Opioid overdose death rate per 100,000, 2024



Note: Opioid overdose deaths were identified using the International Classification of Disease, Tenth Revision (ICD-10), based on the ICD-10 underlying cause-of-death codes X40-44, X60-64, X85, Y10-14, T40.0-40.4, T40.6.

Source: KFF Analysis of CDC WONDER multiple causes of death files • Get the data • Download PNG

KFF

Link: https://www.kff.org/mental-health/opioid-overdose-deaths-national-trends-and-variation-by-demographics-and-states/

A Closer Look at the North Carolina Data

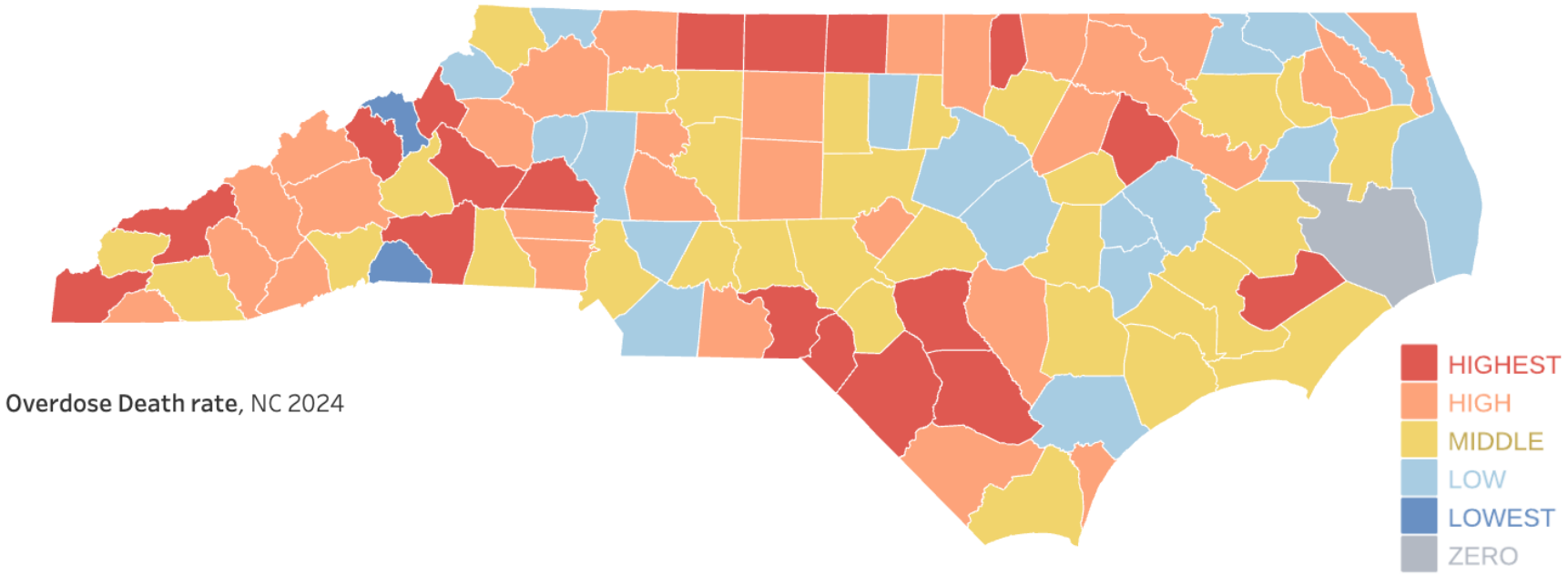
On average, every day in North Carolina, there are…

8	Overdose Deaths
30	Overdose Hospitalizations
34	Overdose Emergency Department (ED) Visits
9	Emergency Medical Services (EMS) Encounters for suspected overdose
45	Overdose reversals^ by a community member administering naloxone

Technical Notes: Medication and drug overdose: X40-X44, X60-X64, Y10-Y14, X85; Limited to NC residents; ED Visits are based on initial encounter, unintentional and undetermined intent cases, for ICD10CM overdose codes of drugs and medications with dependency potential within T40, T42, T43, T50.7, and T50.9, NC residents, ages 15-65 years. ^This number is likely an underestimate of the total overdose reversals done by SSP participants, as many are not reported.
Source: Deaths-NC State Center for Health Statistics, Vital Statistics, 2024; Hospitalizations- North Carolina Healthcare Association, 2024; ED Visits-NC DETECT, 2024; EMS encounters-NC DETECT, 2024; Community naloxone reversals-NC Division of Public Health, Safer Syringe Initiative Annual Report, July 2023-June 2024; Analysis by Injury Epidemiology and Surveillance Unit

Overdose Deaths

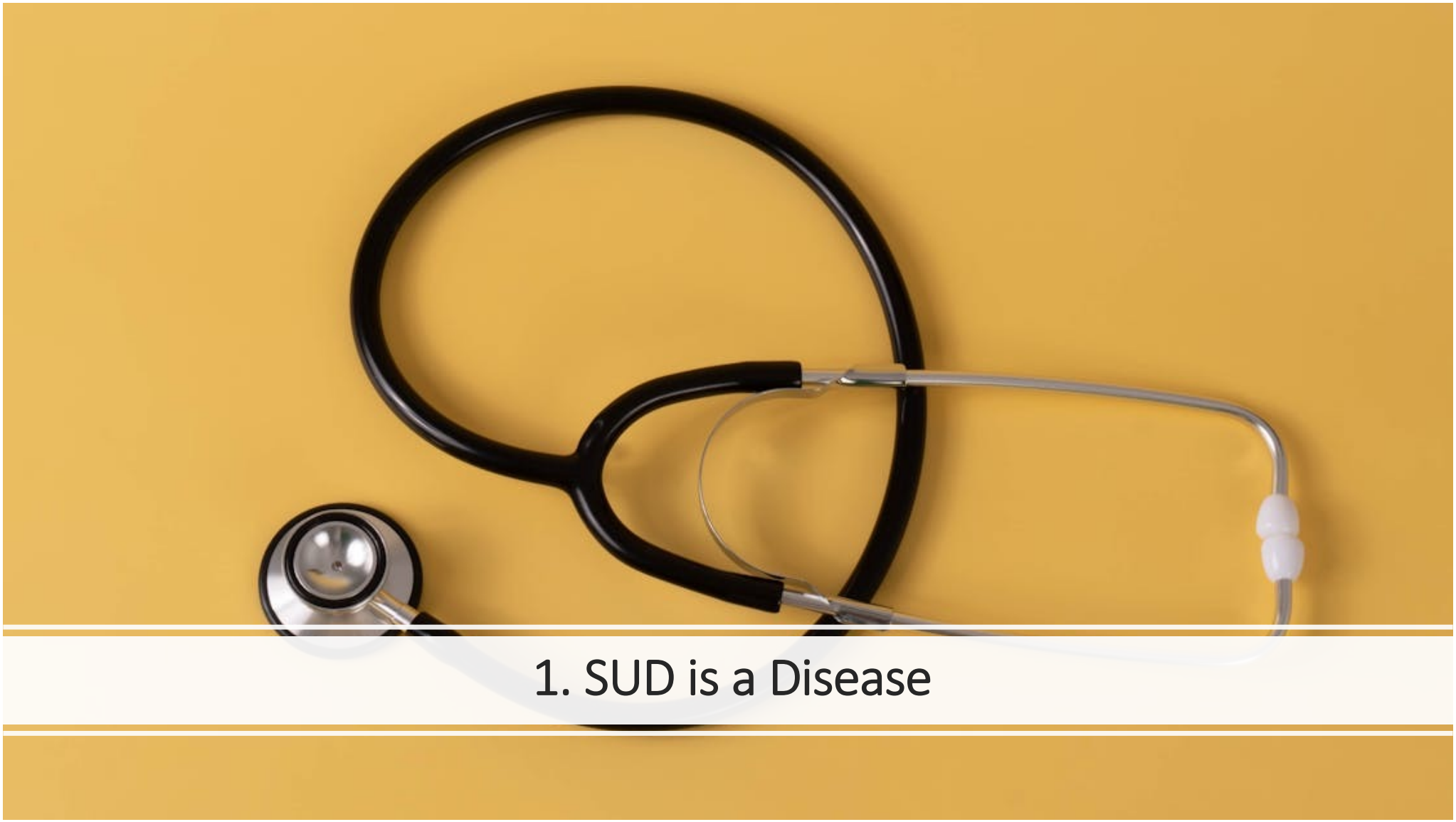
By North Carolina County



Overdose Death rate, NC 2024

Source: https://www.dph.ncdhhs.gov/programs/chronic-disease-and-injury/injury-and-violence-prevention-branch/north-carolina-overdose-epidemic-data

Key Things to Know for Defenders



1. SUD is a Disease

“**Many people mistakenly believe that addiction results from a lack of willpower or moral principles. In reality, addiction is a complex disease that alters the brain**, making it hard to quit even for those who want to stop. However, research has uncovered effective treatments that can help people recover and lead fulfilling lives.

Drug addiction is a chronic disease where people compulsively seek and use drugs despite harmful consequences. Repeated drug use changes the brain, making it hard to resist intense cravings. These changes can persist, which is why addiction is considered a ‘relapsing’ disease—people may return to drug use even after long periods of sobriety. Relapse is common, but doesn’t mean treatment failed. **Like other chronic illnesses, addiction treatment must be ongoing and adapted to fit the person’s needs**.”

- Substance Abuse and Mental Health Services Administration, U.S. DHHS, 2026, https://www.samhsa.gov/substance-use/what-is-sud

Why Does This Matter?

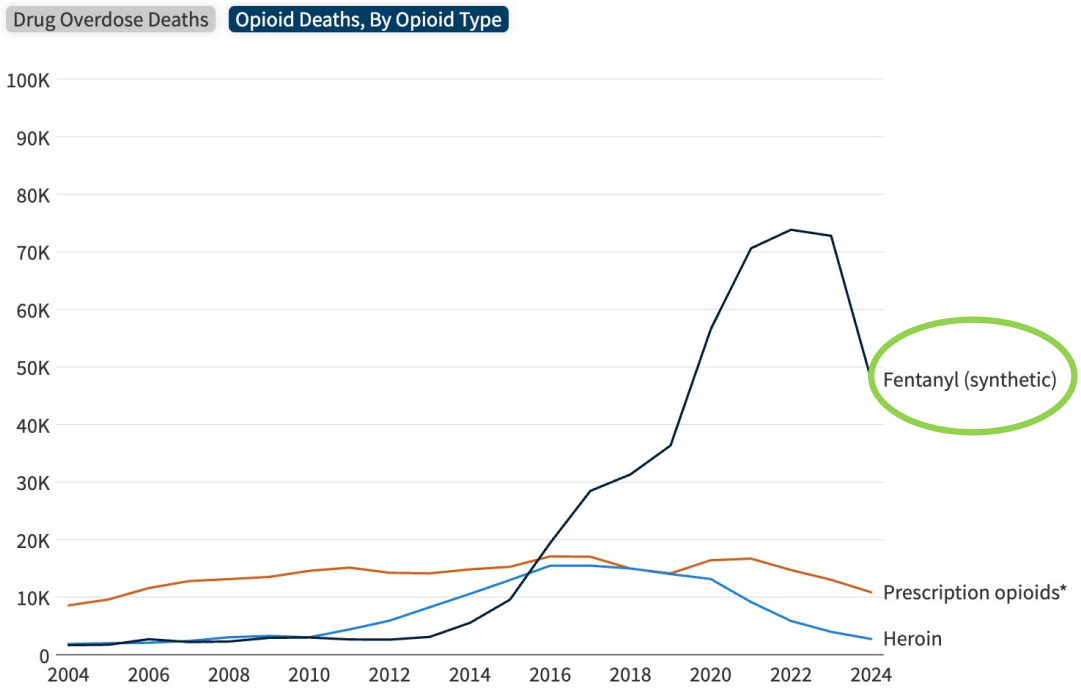
- Empathy, understanding, client connection and trust
- May inform negotiation- what you ask for, what you'll agree to

2. Status of the Street Drug Supply

Figure 1

Opioid Overdose Deaths Fell Sharply in 2024, Nearing Pre-Pandemic Levels but Remaining Above 2019

Number of total opioid deaths by opioid type, 2004-2024

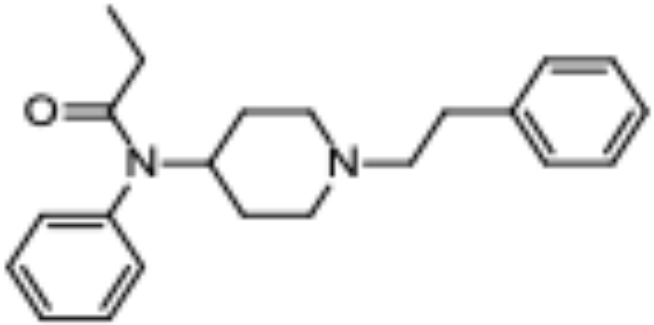


Note: More than one opioid can be involved in a single death, so opioid subcategories do not equal the total opioid deaths. Drug overdose deaths were identified using the International Classification of Disease, Tenth Revision (ICD-10), based on the ICD-10 underlying cause-of-death codes X40-44, X60-64, X85, Y10-14 and multiple cause of death codes T40.0-T40.4, T40.6 (any opioid), T40.2, T40.3 (natural and semi-synthetic and methadone (prescription or methadone), T40.4 (synthetic opioids, other than methadone), and T40.1 (heroin). Deaths from illegally-made fentanyl cannot be distinguished from pharmaceutical fentanyl in the data source *semi-synthetic/natural or methadone opioids are considered a prescription.

Source: KFF analysis of CDC WONDER final multiple causes of death files • Get the data • Download PNG

KFF

Link: https://www.kff.org/mental-health/opioid-overdose-deaths-national-trends-and-variation-by-demographics-and-states/

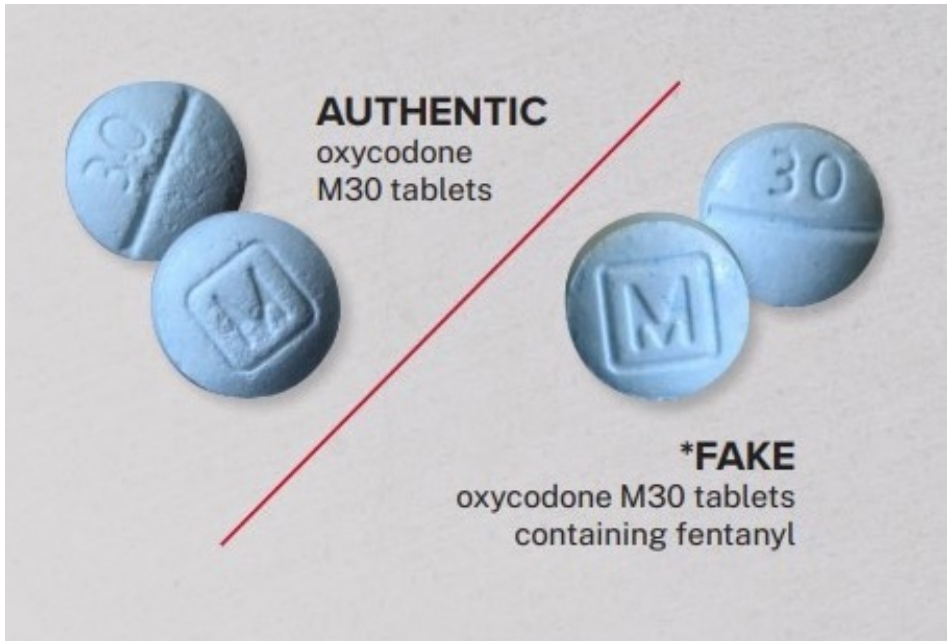


What is fentanyl?

- Synthetic opioid developed in 1959
- FDA approved for use as an intravenous anesthetic in the 1960s
    - Drug trade name was “Sublimaze”

Illicit Manufacture and Use of Fentanyl

- FDA-approved versions of fentanyl are sometimes diverted and misused
  - Ex: misuse of fentanyl patches by ingesting/injecting the patch's gel
- Most illicit fentanyl is produced outside the U.S. and then trafficked by U.S. citizens
  - Often sold/used in pill and powder form



Why is Fentanyl on the Rise?

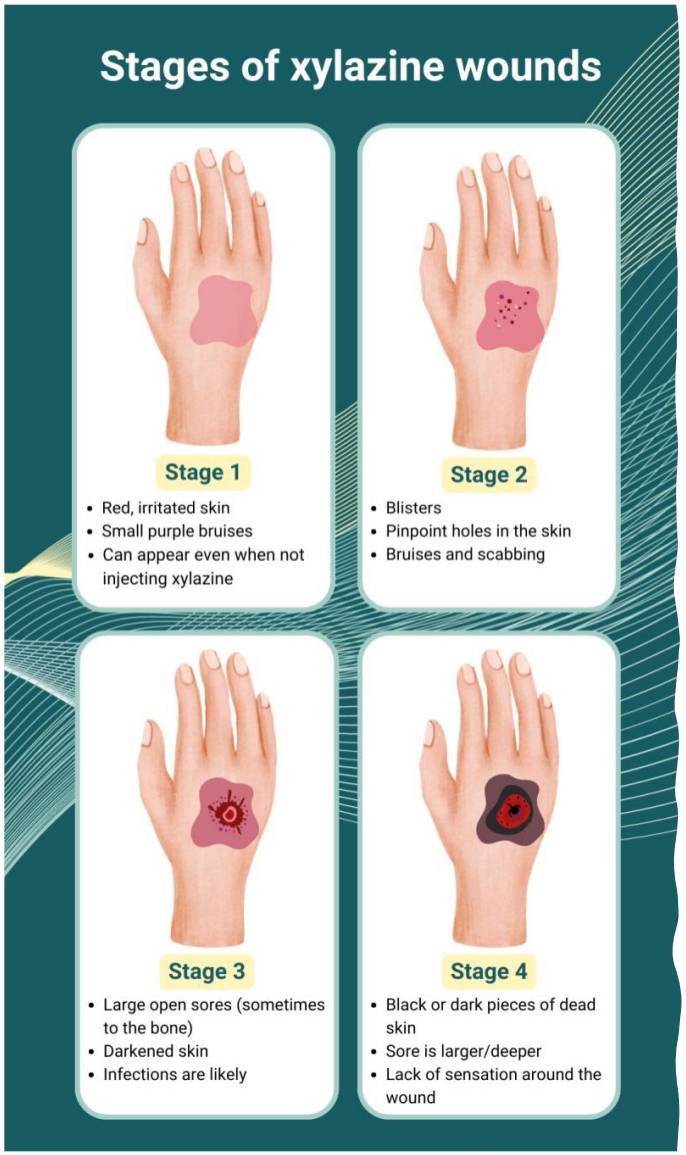
- Increasingly common because it is:
  - Highly potent (100x more potent than morphine, 50x more than heroin)
  - Cheap to make
- Frequently mixed with other drugs (e.g., heroin); also pressed into pills to look like prescription drugs
  - Ex: fake Xanax, Oxycodone, Adderall
  - Easy for someone to not know that what they're taking contains fentanyl

Image source: https://www.army.mil/article/264635/dod_hopes_to_raise_awareness_about_dangers_of_fentanyl

According to the DEA, the amount of fentanyl on the tip of this pencil represents a lethal dose (2 mg)

Lethal Dosage

- 2 mgs considered lethal dose
  - But depends on the person's body size, tolerance, past use, etc.



Xylazine

Aka “tranq”

Veterinary sedative- not for use in humans

Often mixed with fentanyl (unbeknownst to the end user)

Xylazine overdose cannot be reversed with naloxone

→ **But,** if overdose suspected, administer naloxone- may reverse effects of fentanyl, if present

Image source: https://recovered.org/other/xylazine/xylazine-wounds

The CDC issued a health advisory for medetomidine on April 2, 2026.

Link: https://www.cdc.gov/han/php/notices/han00527.html

Medetomidine

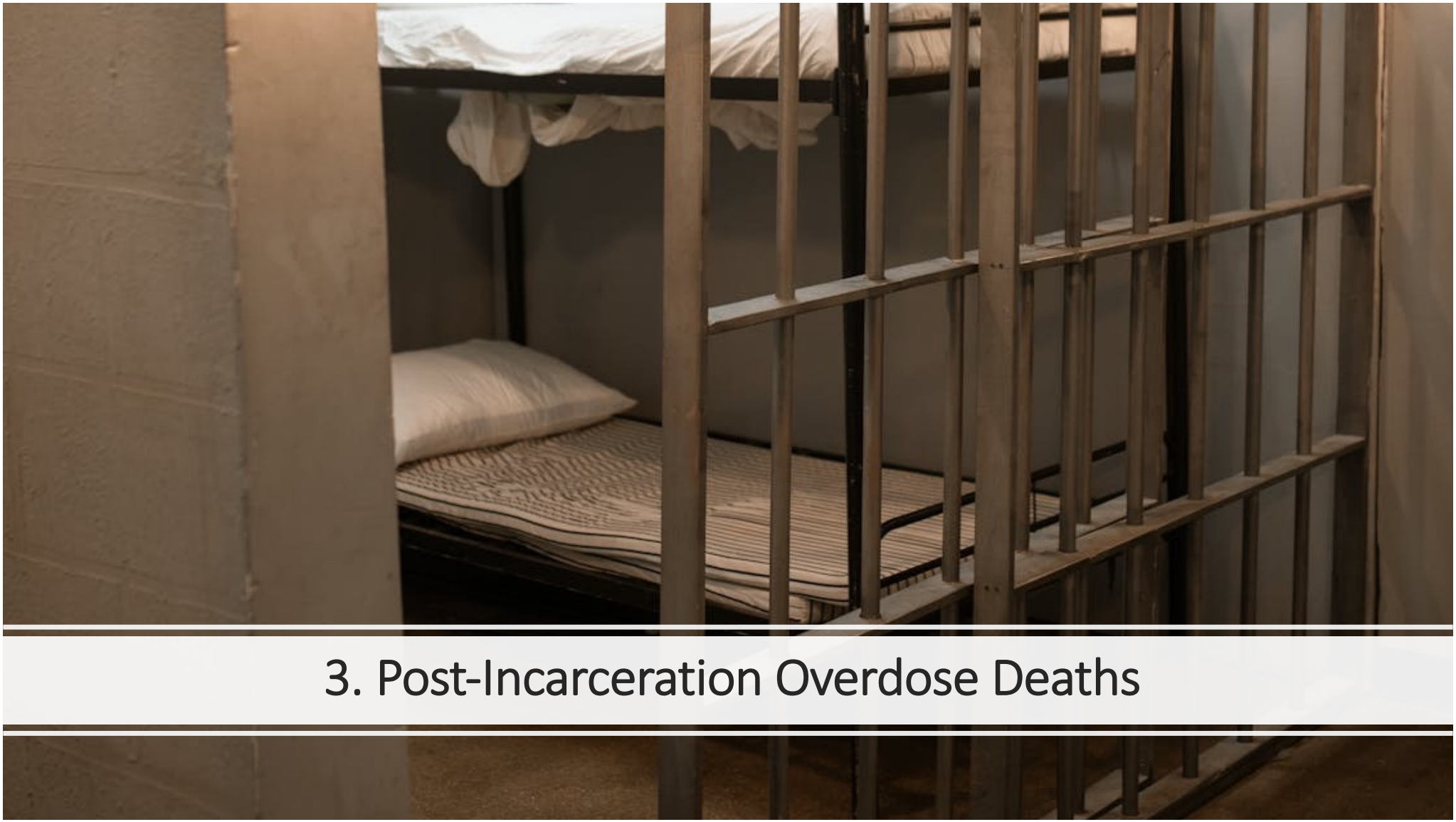
Aka “rhino tranq,” “mede,” and “dex”

Veterinary tranquilizer- not for human use

Currently found throughout U.S. but mostly in northeast

Often mixed with fentanyl (unbeknownst to the end user)

→ If overdose suspected, administer naloxone- may reverse effects of fentanyl, if present

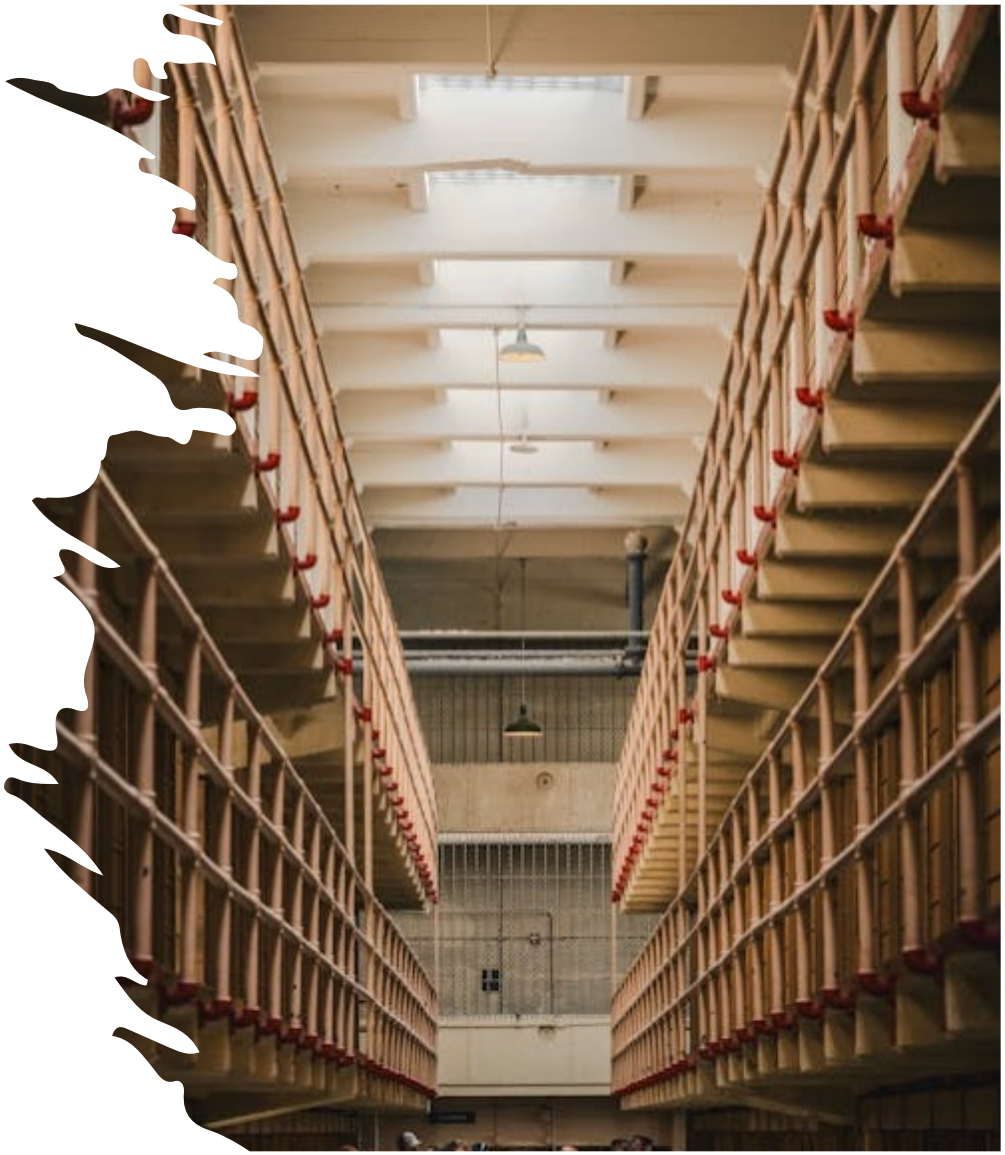


3. Post-Incarceration Overdose Deaths

SUD in Prisons and Jails

- According to National Institute on Drug Abuse, approx. 65% of the U.S. prison population has a SUD

- Data that looked at prisons *and* jails estimated that SUD rate was higher in jails- closer to 68%



Post-Release Overdose Deaths

"Drying out" and reduced tolerance

2018 study on inmates released from state prisons in North Carolina:

- In the 2 weeks following release, former inmates were **40x** more likely to die of an opioid overdose than members of the general public

See "Opioid Overdose Mortality Among Former North Carolina Inmates: 2000–2015," American Journal of Public Health, 2018.

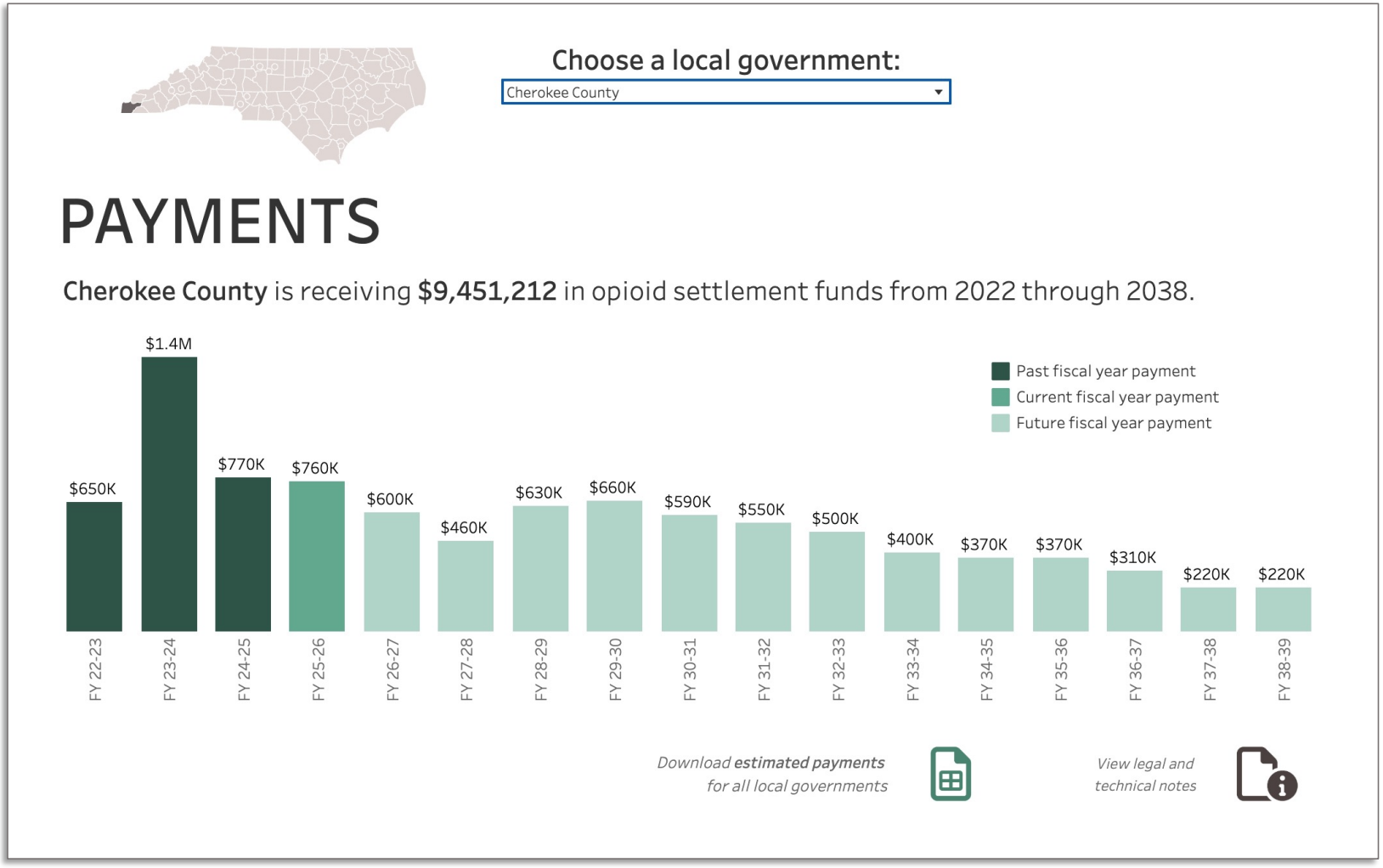
4. Opioid Settlement Funds

What Are Opioid Settlement Funds?

- NC AG's office participated in lawsuits against pharmaceutical companies that were alleged to have knowingly marketed highly-addictive prescription opioids

- NC is receiving **$1.4 billion** from settlements
  - Roughly 85% goes to NC counties, 15% to the state

- Money must be spent on addressing opioid crisis
  - Counties create and get approval for spending plans
  - Can be used for justice-related initiatives, like establishing drug treatment courts, diversion programs, treatment for incarcerated people, re-entry support, and more



Find information about your county: https://ncopioidsettlement.org/trends/local-progress/

Counties Receiving Highest Total Amount of Opioid Settlement Funds

- Guilford - $41 million
- Gaston - $41 million
- Forsyth - $37 million
- Buncombe - $30 million
- Cumberland - $32 million
- Brunswick - $26 million
- Iredell - $26 million
- Catawba - $25 million
- Wilkes - $24 million

Resources

Your Local Health Department

… is often able to provide the following services at no or low cost:

- Naloxone
- Communicable disease (e.g., HIV, Hep C) prevention, testing, treatment
- Behavioral and mental health care, including SUD treatment
- Referrals to other community resources and health care providers

Every NC county is served by a local health department

Additional Resources

Obtaining Naloxone

- List of local health departments that provide naloxone: https://naloxonesaves-nc.org/where-can-i-get-naloxone/north-carolina-health-departments-that-offer-naloxone/ (may be available for free)
- May also be naloxone vending machines and other distribution sites in your county

Syringe Exchange Programs (Needles and Other Supplies)

- List by county: https://www.dph.ncdhhs.gov/programs/chronic-disease-and-injury/injury-and-violence-prevention-branch/north-carolina-safer-syringe-initiative/syringe-services-programs-north-carolina

SUD Treatment/Mental and Behavioral Health Care

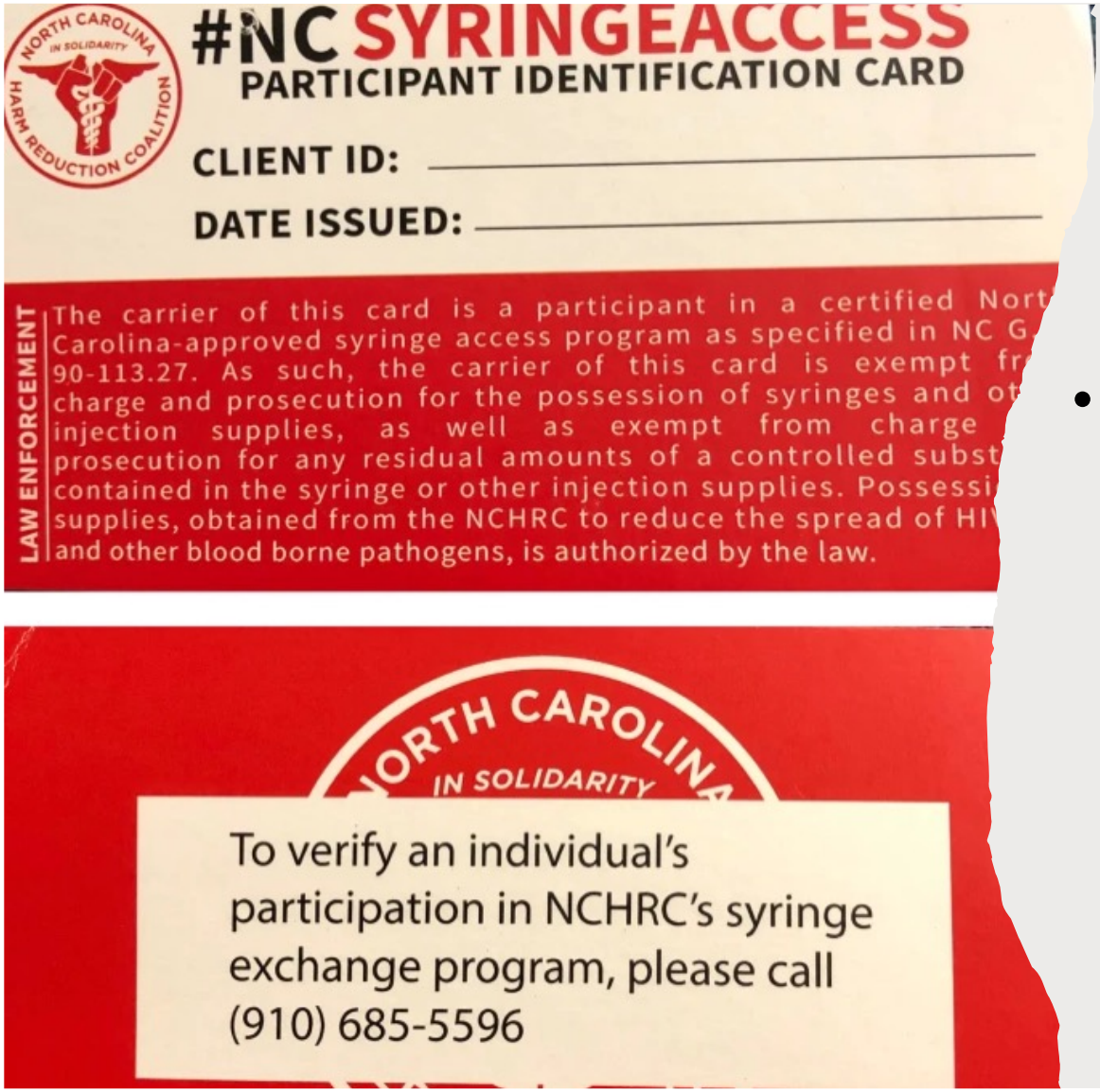
- For anyone, a map of care providers: https://www.ncdhhs.gov/assistance/mental-health-and-substance-use-disorders
- Medicaid recipients can contact the LME/MCO in their area: https://www.ncdhhs.gov/providers/lme-mco-directory

For Attorneys with SUD

- NC Lawyer Assistance Program, https://www.nclap.org/

For Someone Experiencing Crisis

- Call or text 988, the national free crisis support line



NC Harm Reduction Laws

- G.S. 90-113.27
  - Limited immunity for workers, volunteers, and participants in a needle exchange program (a/k/a safe syringe programs or SSPs)

NC SSP Law:

- Any employee, volunteer, or participant in the SSP is immune from charge or prosecution for any drug paraphernalia related to injection supplies and for any residual amounts of drugs in a used needle obtained from or returned to the SSP

- Person claiming immunity must provide written documentation that injection supplies are from the SSP

- Immunity from civil liability for officers who arrest or charge a SSP participant when acting in good faith

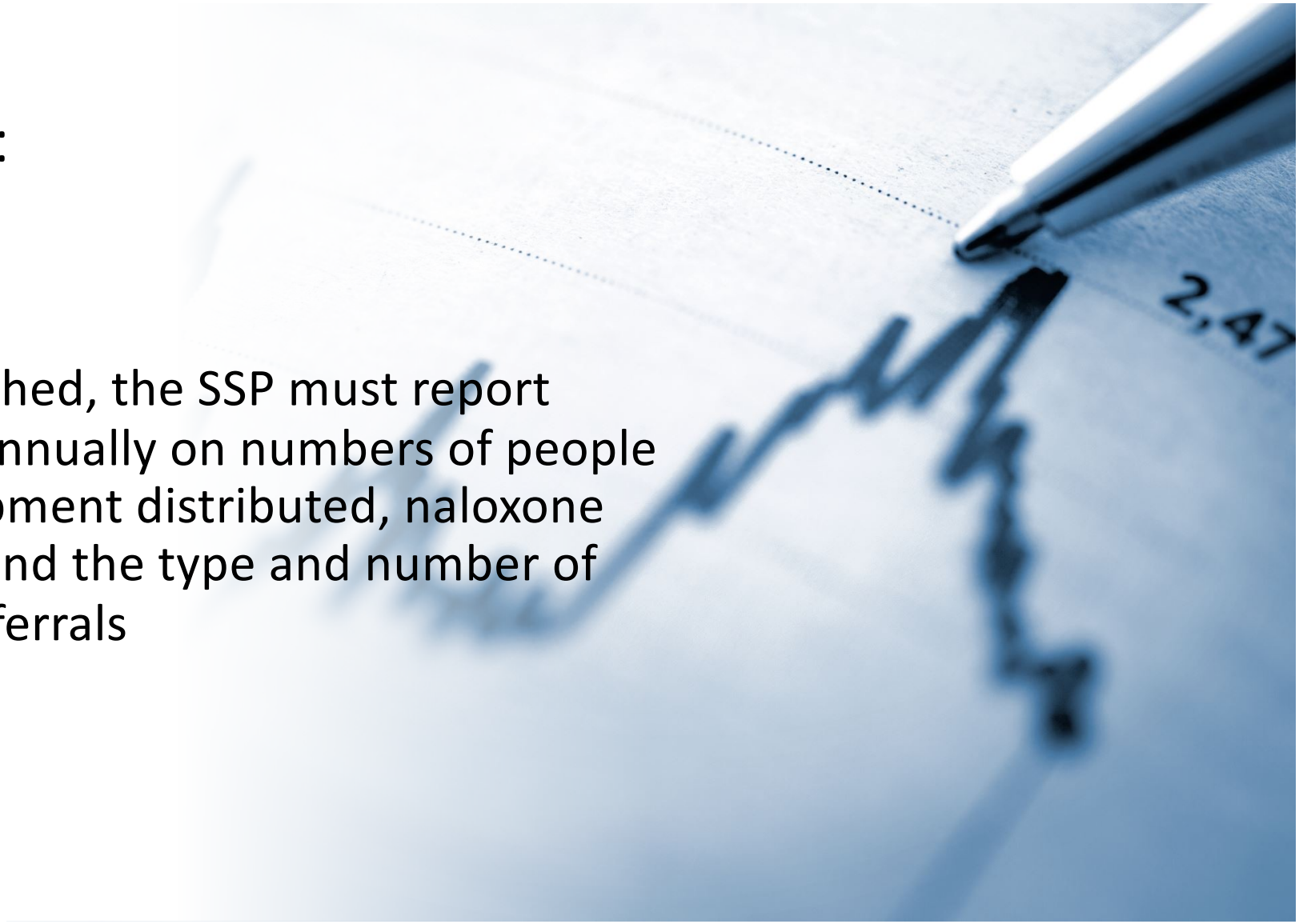
Purposes of SSP

- Reduce HIV, AIDS, hepatitis, and other bloodborne diseases
- Reduce needle stick injuries to officers and other first responders
- Reduce drug overdose deaths
- Encourage drug users to seek treatment

SSP programs must:

Dispose	Dispose of used needles
Distribute	Distribute unused needles and other injection supplies
Supply	Supply educational materials on various health issues, including drug treatment
Provide	Provide access to Naloxone or referrals to programs that provide it
Maintain	Maintain security of program sites, provide plans to local LEOs, and update the plans annually

SSPs must:



- Once established, the SSP must report to NCDHHS annually on numbers of people served, equipment distributed, naloxone distributed, and the type and number of treatment referrals

Harm Reduction Journal

Research | Open Access | Published: 27 September 2022

"They don't go by the law around here": law enforcement interactions after the legalization of syringe services programs in North Carolina

Brandon Morrissey, Tamera Hughes, Bayla Ostrach, Loftin Wilson, Reid Getty, Tonya L. Combs, Jesse Bennett & Jennifer J. Carroll

Harm Reduction Journal **19**, Article number: 106 (2022) | Cite this article

Abstract

Background

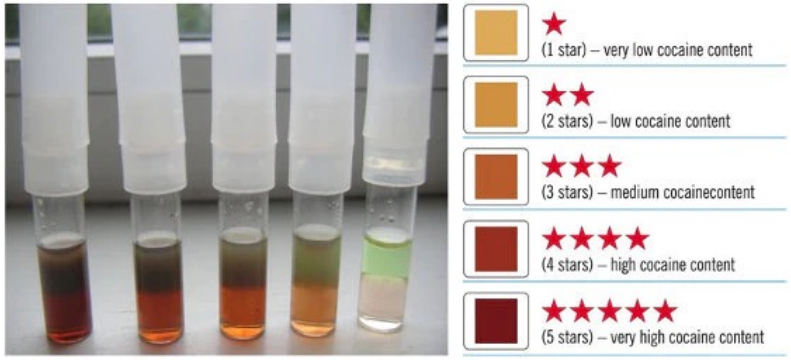
Overdose Treatment Immunity

- Limited immunity for distribution or administration of opioid overdose reversal drugs under G.S. 90-12.7

- Naloxone (such as Narcan) & Nalmefene are available OTC in inhalant and injectable forms

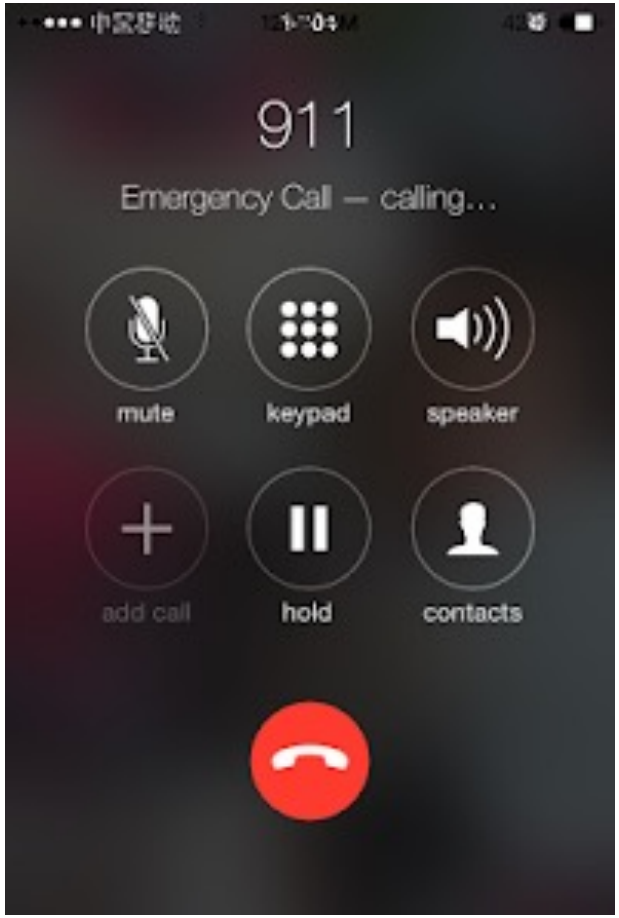
NC Harm Reduction Laws

- G.S. 90-113.22
  - Immunity for disclosing the existence of needles or other sharps prior to search by law enforcement
  - Testing kits to determine drug identity, purity, or strength are no longer considered drug paraphernalia



NC Harm Reduction Laws

- G.S. 90-96.2
  - Immunity for overdosing person and person reporting an overdose in limited situations
  - “Good Samaritan” Law



Good Samaritan Immunity

- A person shall not be prosecuted for covered offenses if:

1) The person sought medical assistance for a person experiencing a drug-related overdose
2) The caller acted in good faith in seeking medical help and reasonably believed they were the first to call for help
3) The person provided their own name to 911 or law enforcement
4) The call is not happening during the execution of an arrest warrant, search warrant, or other lawful search
5) The evidence to support a prosecution was obtained because of the person seeking medical help

“Drug-related Overdose”

- An acute condition, including mania, hysteria, extreme physical illness, coma, or death resulting from the consumption or use of a controlled substance, or another substance with which a controlled substance was combined, and that a layperson would reasonably believe to be a drug-overdose that requires medical assistance. G.S. 90-96.2(a)

PART III. REVISE GOOD SAMARITAN IMMUNITY LAW FOR POSSESSION OF ANY CONTROLLED SUBSTANCE

SECTION 3. G.S. 90-96.2(c3) reads as rewritten:

"(c3) Covered Offenses. – A person shall have limited immunity from prosecution under subsections (b) and (c) of this section for only the following offenses:

(1) A misdemeanor violation of G.S. 90-95(a)(3).

(2) A felony violation of G.S. 90-95(a)(3) for possession of less than one gram of ~~cocaine.~~any controlled substance.

~~(3) A felony violation of G.S. 90-95(a)(3) for possession of less than one gram of heroin.~~

(4) A violation of G.S. 90-113.22."

Good Samaritan Caselaw

Immunity must be asserted by the defendant at trial, or the issue is waived for appellate review. *St. v. Osborne*, 275 N.C. 323 (2020).

Immunity is not jurisdictional; must be raised as a defense. *Id*.

Person asserting immunity has the burden to show one of the conditions in G.S. 90-96.2(a); mere unconsciousness, alone, is not enough. *St. v. Branham*, COA 24-927, ___ N.C. App. ___ (Oct. 1, 2025).

PART I. INCREASE FINE IMPOSED ON PERSONS CONVICTED OF CERTAIN DRUG TRAFFICKING OFFENSES

SECTION 1. G.S. 90-95(h)(4) reads as rewritten:

"(4) Any person who sells, manufactures, delivers, transports, or possesses four grams or more of opium, opiate, or opioid, or any salt, compound, derivative, or preparation of opium, opiate, or opioid (except apomorphine, nalbuphine, analoxone and naltrexone and their respective salts), including heroin, or any mixture containing such substance, shall be guilty of a felony which felony shall be known as "trafficking in opium, opiate, opioid, or heroin" and if the quantity of such controlled substance or mixture involved:

a. Is four grams or more, but less than 14 grams, such person shall be punished as a Class F felon and shall be sentenced to a minimum term of 70 months and a maximum term of 93 months in the State's prison and shall be fined ~~not less than fifty thousand dollars ($50,000);~~as follows:

1. A fine of five hundred thousand dollars ($500,000) if the controlled substance is heroin, fentanyl, or carfentanil, or any salt, compound, derivative, or preparation thereof, or any mixture containing any of these substances.

2. A fine of not less than fifty thousand dollars ($50,000) for any controlled substance described in this subdivision and not

North Carolina Criminal

A UNC School of Government Blog

A Refresher on North Carolina's Needle Exchange Law and Other Harm Reduction Immunities

Posted on Jan. 23, 2023, 10:03 am by Phil Dixon

In response to the opioid crisis, North Carolina passed several protections designed to alleviate some of the legal liability surrounding drug use in the interest of harm reduction and public health. One of those protections authorized needle exchange programs (alternatively known as safe syringes programs). G.S. 90-113.27. A recent study examined how the needle exchange program is working in seven North Carolina counties and found that the law was not consistently applied. Brandon Morrison et al., *"They Don't Go by the Law Around Here": Law Enforcement Interactions After the Legalization of Syringe Services Programs in North Carolina*, vol. 19, Harm Reduction Journal, 106 (Sept. 27, 2022). Considering the study's findings, I thought a refresher on the immunity provisions for syringe exchanges and similar protections would be timely. Read

Home

NC Xylazine

NC Overdoses

NC Stimulants

NC Drug Market

NC Psychedelics & Other

Get Help

UNC Street Drug Analysis Lab

We are a public service of the University of North Carolina at Chapel Hill.

⬅️ 👀 Select a dashboard from the sidebar to see our latest data!

Resources from the UNC Street Drug Analysis Lab

Kit Info (English) | Drug Testing Handout | Drug Testing Poster

Download pdf

Opioid Data Lab

At the Opioid Data Lab we answer the most difficult questions that have the most impact. As state Chapel Hill, the University of Kentucky in Lexington and the University of Florida, we collaborate with

Resources

-
- https://www.opioiddata.org/ - Opioid Data Lab
- https://www.streetsafe.supply/ - UNC Street Drug Analysis Lab
- https://nccriminallaw.sog.unc.edu/ - NC Criminal Law Blog
- https://canons.sog.unc.edu/human-services/ - NC Public Health Blog

Questions?

- Phil Dixon, Jr.
- dixon@sog.unc.edu

Kirsten Leloudis

kirsten@sog.unc.edu