

Addiction, Overdose, Suicide, and the Gray Areas in Between

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Disclosure Information

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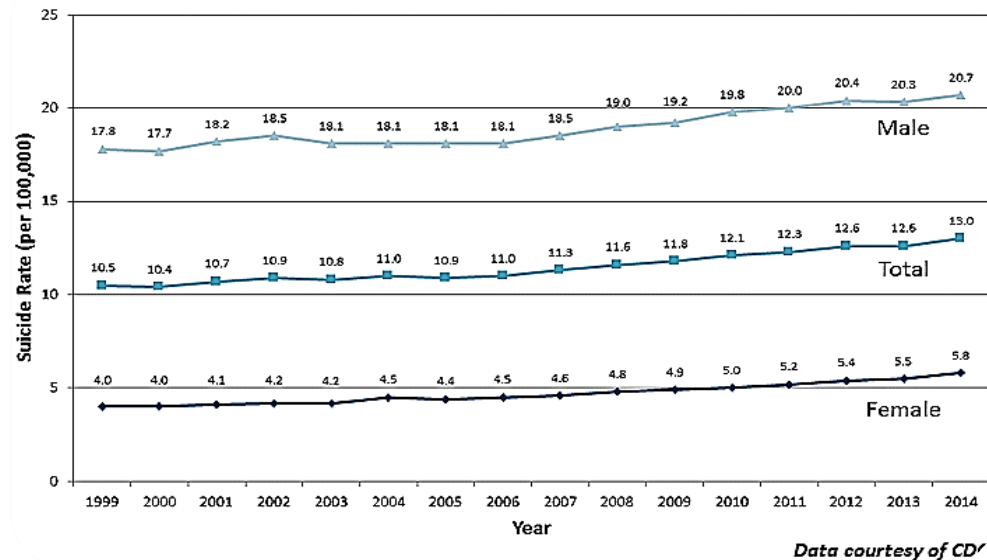
- No Commercial Links
- NIH grants on
 - Preventing Addiction Related Suicide (PARS)– NIDA– J
 - Ries AMA Open April 2022
 - Treatment of Severe Alcohol Dep with Injectable Naltrexone and Harm Reduction Therapy (NIAAA)- ()Collins S Lancet 2018
 - Treatment of Native American Indian Alcohol Dep with Contingency Management
- SAMHSA
 - Expanding MAT for Opioids into Primary Care.
- UW Dept of Psychiatry
 - Garvey Foundations – Developing PARS-Web training
 - UW Psychiatry and Addictions Case Conference (UWPAC) Psychiatric Consultation Line (PCL)

Suicide and Overdose Rates Increasing Each Year

2017 about 50,000 deaths each
2021 OD = 100,000 Suicide 50,000

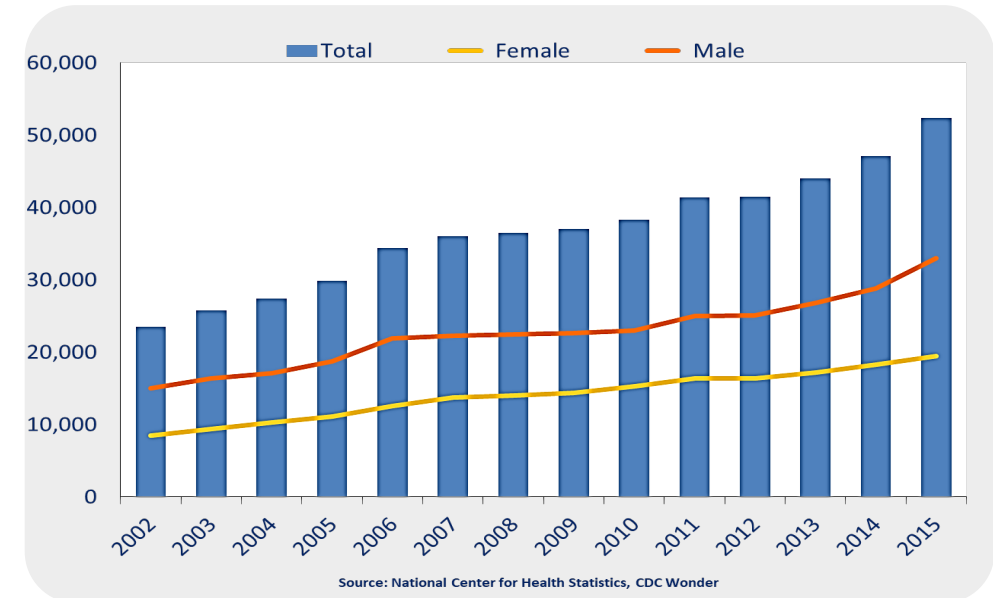
Suicide Trends

Figure 1. Age-Adjusted Suicide Rates in the United States (1999-2014)



- More females attempt
- More males die by gun

Opioid OD Trends



- More males lethally OD
- More males die



Suicide and Addiction

Compared to general public:

- Alcohol risk for suicide
 - Dependence is at 5-10 times risk for suicide
 - Same for acute intoxication regardless of dependence
- Opioids Risk for Suicide
 - 14 times the risk for suicide (heroin, prescription opioids)
 - Fentanyl is probably same or higher
- Methamphetamine
 - Increased to 5-10 times the risk (but in flux due to dramatic increase dose/ freq.)
 - Often combined with opioids, BZP, and other drugs

Opioid Related Death

- Opioids have the highest death rate of any psychoactive illicit-substance.
- The 2010 CDC report, *Unintentional Drug Poisoning in the United States*, cites heroin and prescription painkillers as the two leading causes of overdose death in the US.
- The suicide rate of opioid users is 14 times that of general population.
- 46% to 70% of opioid users experience one or more non-lethal overdoses during their lifetime.
- Opiate users who were recently released from prison were at higher risk of overdose.

Prevalence of Suicide Risk Factors in Opiate Use Disorder Adults

While the risk factors for suicide in opiate users are similar to those of the general population, the prevalence of these risk factors is especially high in opiate abusing adults.

- ↑ Increased rates of personality disorders (ASPD, estimates of 50% or greater)
- ↑ Increased rates of depression (between 25% and 33%)
- ↑ Increased rates of social isolation and homelessness
- ↑ Increased rates of poly-substance abuse and history of overdose



Determining Intent

Why Differentiate Intent?

Treatment

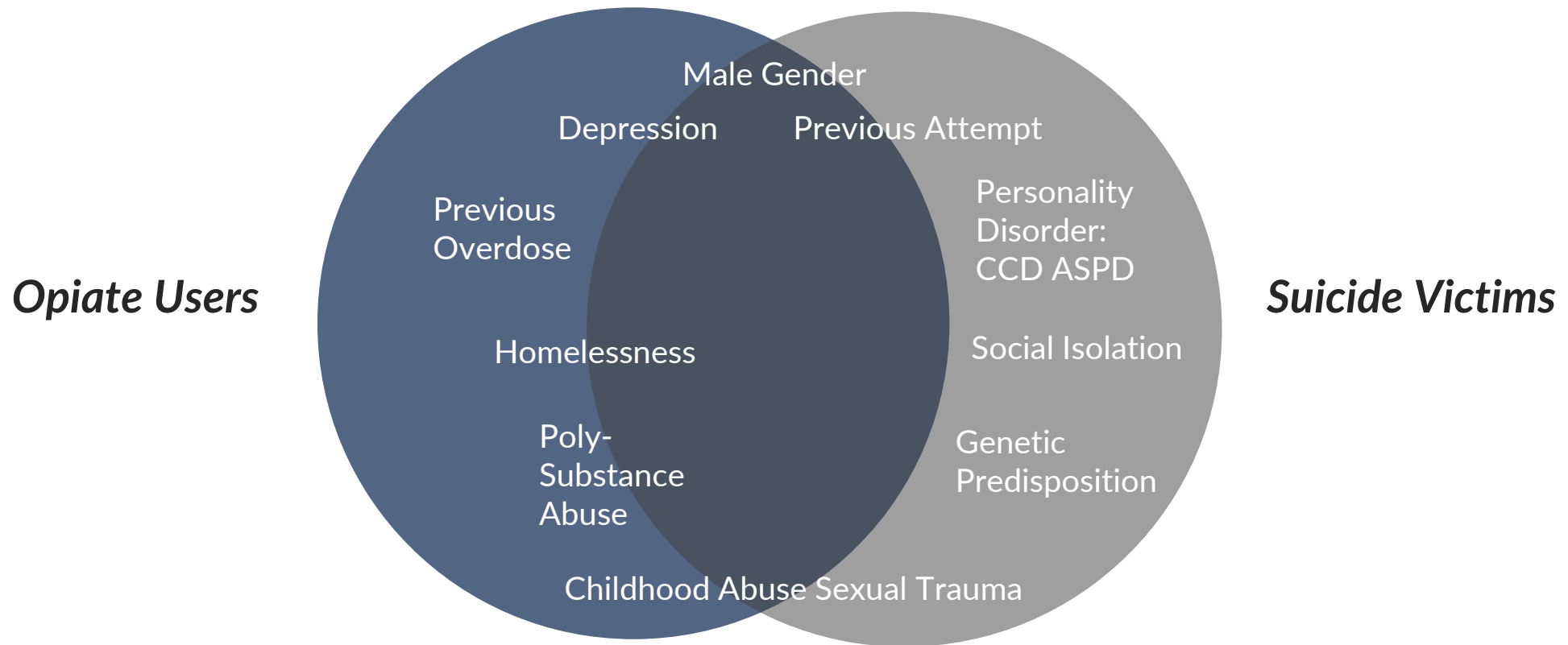
- Suicide intervention?
- Substance use intervention?
- Co-occurring disorder intervention?
- OD prevention?
- OD reversal?

Research

- How to define intent?
- What if they have both?

Shared Risk Factors

Risk factors for suicide in opiate users parallel risk factor or suicide in the general population.



Accidental Overdose, Planned Heavy Use or Planned Lethality?

Fully Accidental

Just Blot Out Worries

Who Cares If I Wake Up?

Lethal Plan

Suicidal Motivations Among Opioid Overdose Survivors: Replication And Extension

N = 60 Opioid Overdose Survivors

- 45% reported desire to die
- 20% reporting intention to die
-
- 40% of the sample perceived no risk of future overdose

** What would this data be in those who died?*

Discerning Suicide in Drug Intoxication Deaths: Paucity and Primacy of Suicide Notes and Psychiatric History

- A suicide note, prior suicide attempt, or affective disorder was documented in less than one-third of suicides and one-quarter of undetermined deaths.
- The prevalence gaps were larger among drug intoxication cases than gunshot/hanging cases. [OR]= 41.14
-
- Without psychological/psychiatric evidence contributing to manner of death classification, suicide by drug intoxication in the US is likely profoundly under-reported.

Opioid Overdoses: Determining Intent

Comparative Toxicology of Intentional and Unintentional Overdose

Results of 977 autopsies between 1998 and 2008 conducted at Department of Forensic Medicine in Sydney, Australia.

Median concentrations of blood morphine levels were higher in intentional overdose deaths than in accidental deaths, this difference is particularly apparent at higher dosages.

Other characteristics of these high dosage suicide victims include: 1) Presence of Methadone, 2) Presence of anti-depressants, & 3) Lack of alcohol

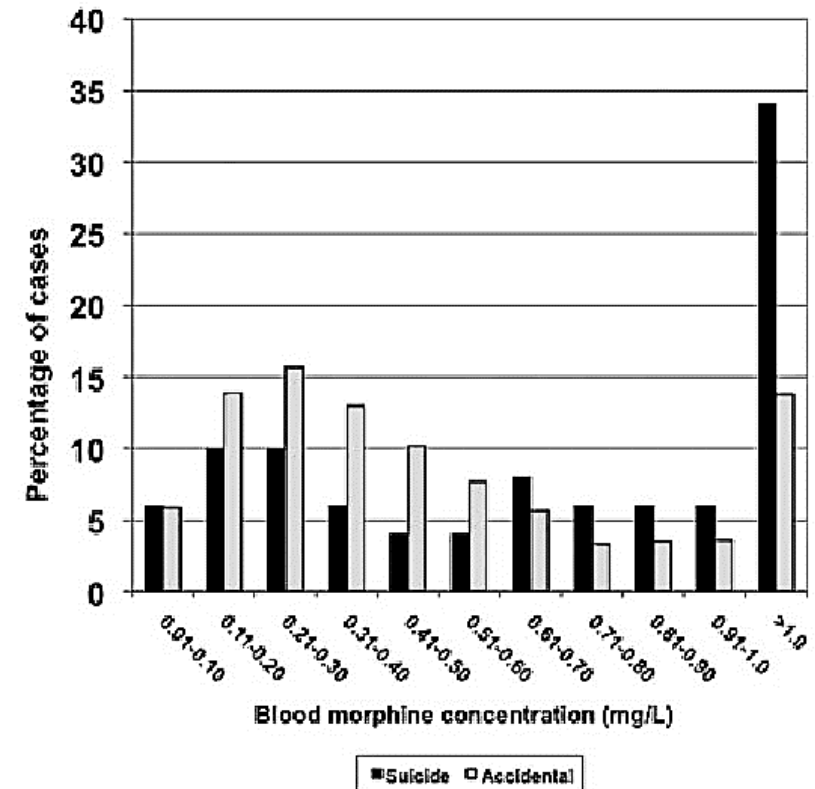
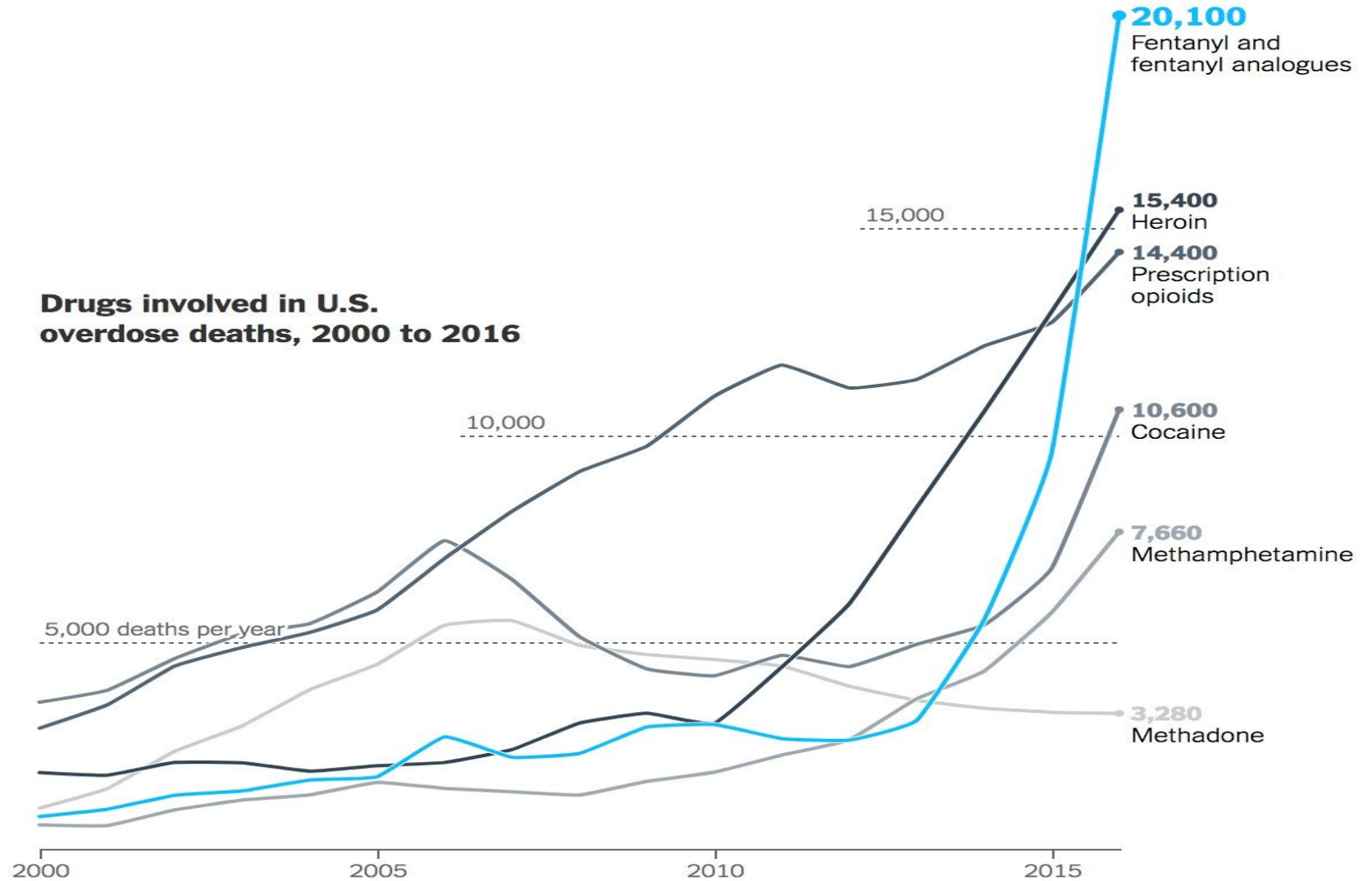


FIG. 1—Blood morphine concentrations of intentional and accidental fatal heroin overdose.

Fentanyl: Dancing With the Devil

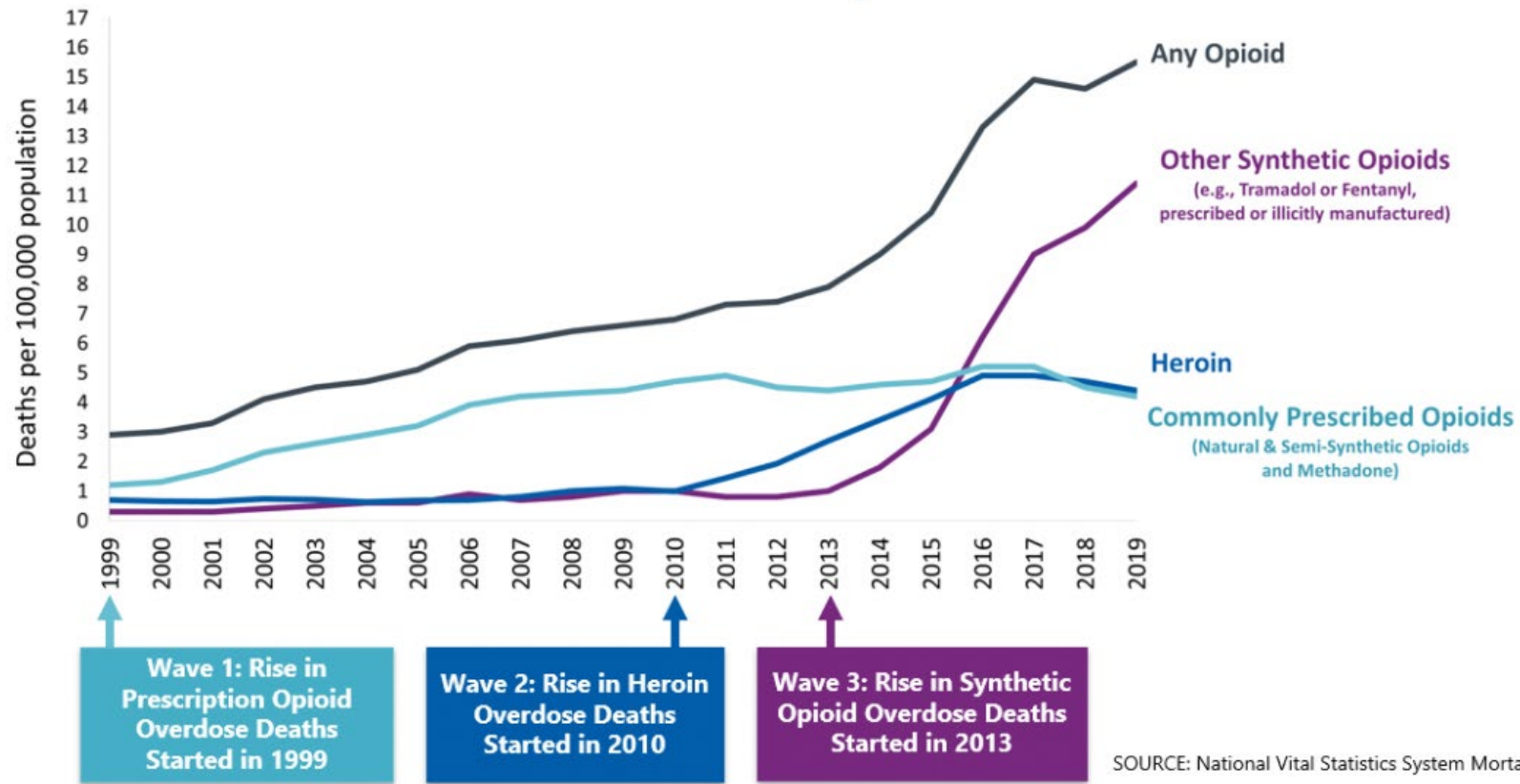
Deaths
2004-2015

2021=80,000



Opioid Overdose Deaths

Three Waves of the Rise in Opioid Overdose Deaths



Mortality Risk During and After Opioid Substitution Treatment: Systematic Review and Meta-Analysis of Cohort Studies

There were 19 eligible cohorts, following 122,885 people treated with methadone over 1.3-13.9 years and 15,831 people treated with buprenorphine over 1.1-4.5 years

(per 1000 person years)

Methadone all-cause mortality rates

11.3 in treatment

36.1 out of methadone treatment

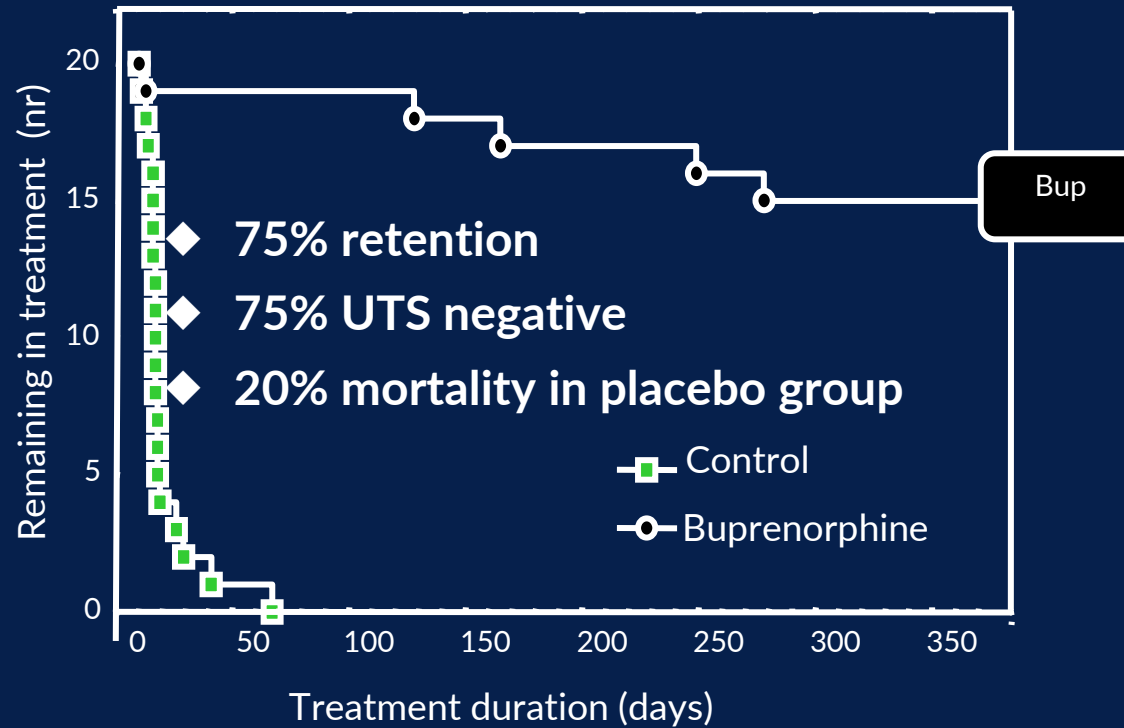
Buprenorphine all-cause mortality rates

4.3 in treatment

9.5 out of buprenorphine treatment

Retention in methadone and buprenorphine treatment is associated with substantial reductions in the risk for all cause and overdose mortality

Treatment Retention & Mortality



Evidence Based Opioid OD Prevention

Methadone

Opioid replacement therapies reduce opiate overdose risk by 30-50 % and suicides by 50%

Buprenorphine/Nx

Decrease by 50%, more recent study support too, 2022

Naloxone

ER administered naloxone, peer administered naloxone (I.M., I.V., S.Q., Intra-nasal)

Medically Supervised Injection Facilities

Report low to no fatal overdose deaths

Educational Programs

Presented at needle exchange programs

Protocols

Limiting police intervention during overdose emergencies

Safety Cards

For suicidal risk issues

Opioid Dose and Risk of Suicide

Abstract

Data were from Veterans Affairs health care system treatment records and the National Death Index. Records analyzed were those of Veterans Affairs patients with chronic pain receiving opioids in fiscal years 2004 to 2005 (N = 123,946). The main outcome measured was suicide death, by any mechanism, and intentional overdose death during 2004 to 2009.

Controlling for demographic and clinical characteristics, higher prescribed opioid doses were associated with elevated suicide risk. Compared with those receiving ≤ 20 milligrams/day (mg/d).

1. 20 - 50 mg/d, = 1.48
2. 50 - <100 mg/d, = 1.69
3. for 100+ mg/d = 2.15

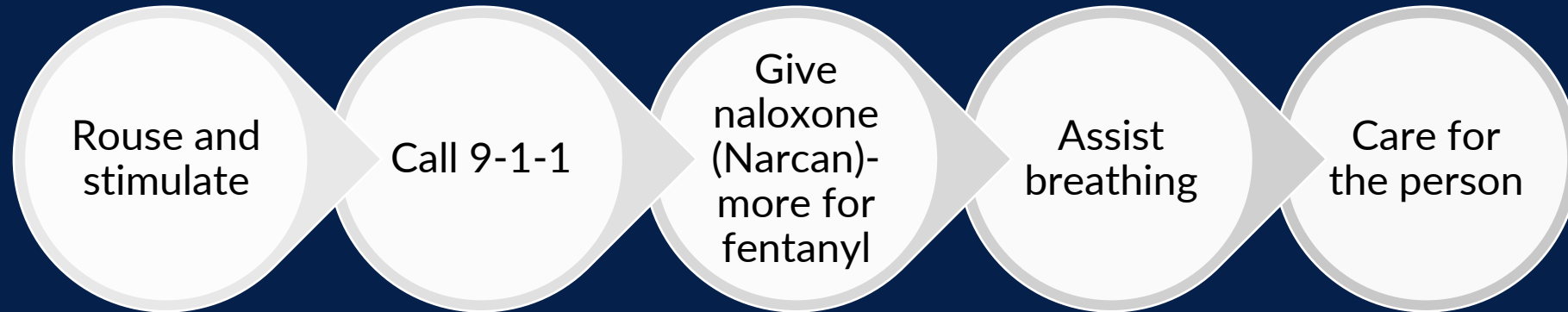
Is this opioid caused? Pt characteristics caused- i.e., higher dose for those doing less well?

Opioid Overdose Protection

- Sprayed into the nose or inject.
- Reverses opioid overdose.
- Available for free at many pharmacies/needle exchanges.
- Carry some for yourself or others.
- “Good Samaritan” regulations.
- No one will be prosecuted for calling in an overdose.



Responding to an Opioid Overdose



The Best Treatments

- Prevention of Iatrogenic opioid addiction.
- Opioid Medication-Assisted Treatment
 - Methadone
 - Buprenorphine Immediate and Long-acting
 - Long-acting Inj. Naltrexone or Buprenorphine
- Naloxone nasal spray-post Hoc for either accidental or suicidal overdose
- What about Fentanyl?
- Better suicide and overdose screening, COD intervention,
- Other drug/alcohol intervention
- Safety plan co-use and testing

Risks and Lethality of Suicide and Overdose Deaths Overlap

- Risk of attempt
 - Previous attempt
 - Family History of Suicide
 - Psychiatric disorder
 - Alcohol/Drug disorder
 - Alcohol/Drug Intoxication
 - Opioid Use Disorder
 - Loss
 - Hopelessness/end of rope
- Risk of Lethality
 - Male 4/1 over females
 - Guns 70%
 - Access
 - Older >70
 - Opioid Use Disorder
 - How many are suicides?
 - Alone/Loss of support
 - Alcohol + other drugs
 - Serious illness
 - Medical
 - Psychiatric

* Common factors are underlined.

Quick Screening

Ever been seriously suicidal? 0 1 2+

Ever nearly OD'd 0 1 2+

Last time was _____

Ever made a suicide attempt? 0 1 2+

Ever nearly died from OD? 0 1 2+

Last time was _____

Currently having suicidal thoughts? Yes No

Currently at risk for OD? – fentanyl? Yes No

If yes:

Do you have a suicide plan? Yes No

Do you have a using safety plan? Yes No

Safety Card for Yourself or Others

Step 1:

Take warning signs seriously.

- If you are worried about the person's immediate safety, don't leave the person alone.
- Call 911 or go to a local hospital or emergency room.

Step 2:

Tell someone who can help.

- Addiction or mental health counselor.
- Doctor, social worker, or nurse.
- A trusted friend, family member, or sponsor.
- Write down names/phone numbers of people you can call.

Step 3:

Secure the environment.

- Lock up firearms/give them to someone else for safekeeping.
- Secure/monitor medications or pills that may be used to overdose.
- Get rid of drugs and alcohol.
- Naloxone spray.

National Suicide Prevention Lifeline 1-800-273-8255
Washington Poison Center 1-800-222-1222



Thank You!
Questions?

References

Overdose Information:

- <https://www.mentalhealth.va.gov/substance-use/overdose.asp>
- <https://stopoverdose.org/>

Suicide Information:

- <https://afsp.org/suicide-prevention-resources>
- <https://intheforefront.org/>
- Deaths of Despair- JAMA Feb 2 2022
- https://jamanetwork.com/journals/jamapsychiatry/fullarticle/2788767?guestAccessKey=756cd76e-44e7-4256-bfa2-7a64fa22cb6d&utm_source=silverchair&utm_medium=email&utm_campaign=article_alert-jamapsychiatry&utm_term=mostread&utm_content=olf-widget_02092022