

# Harm Reduction Strategies for Patients with Opioid Use Disorder

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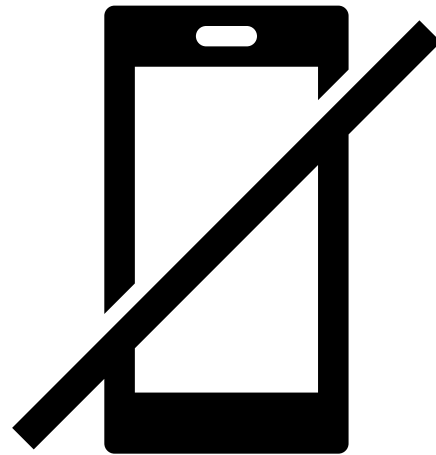
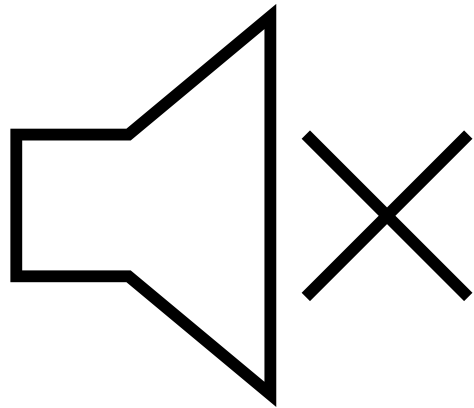
# Learning Objectives

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1. Appreciate the scope of the opioid abuse crisis
2. Understand the basic concepts of harm reduction
3. Become familiar with the principles of opioid replacement therapy

# Community agreements

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# Conflict of Interest

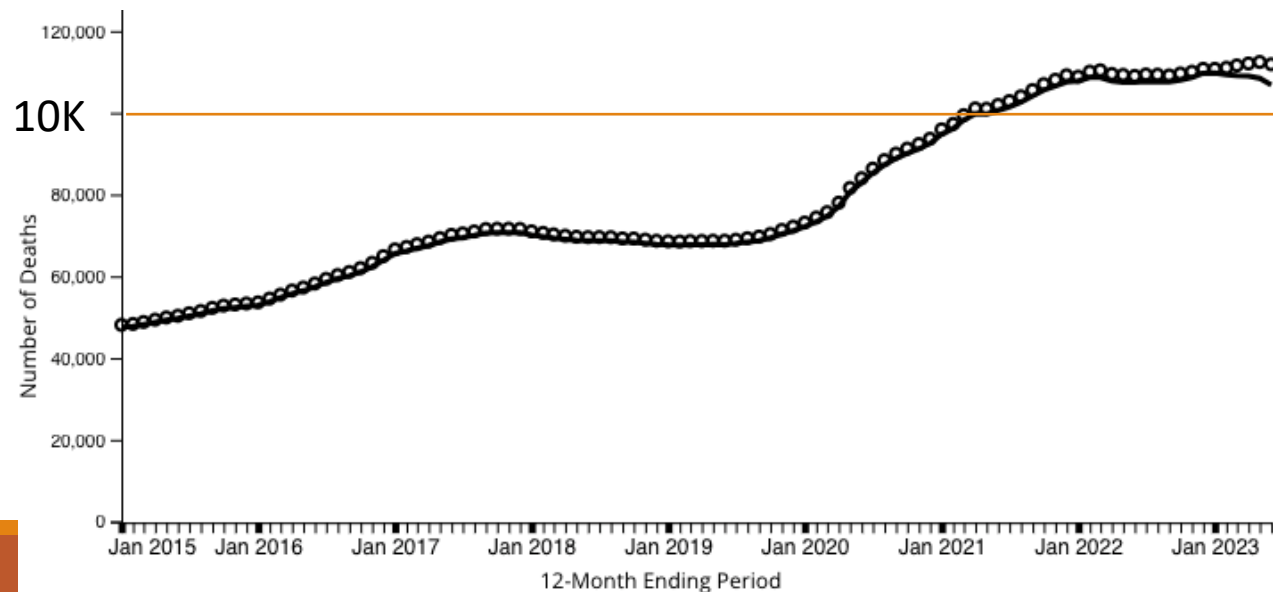
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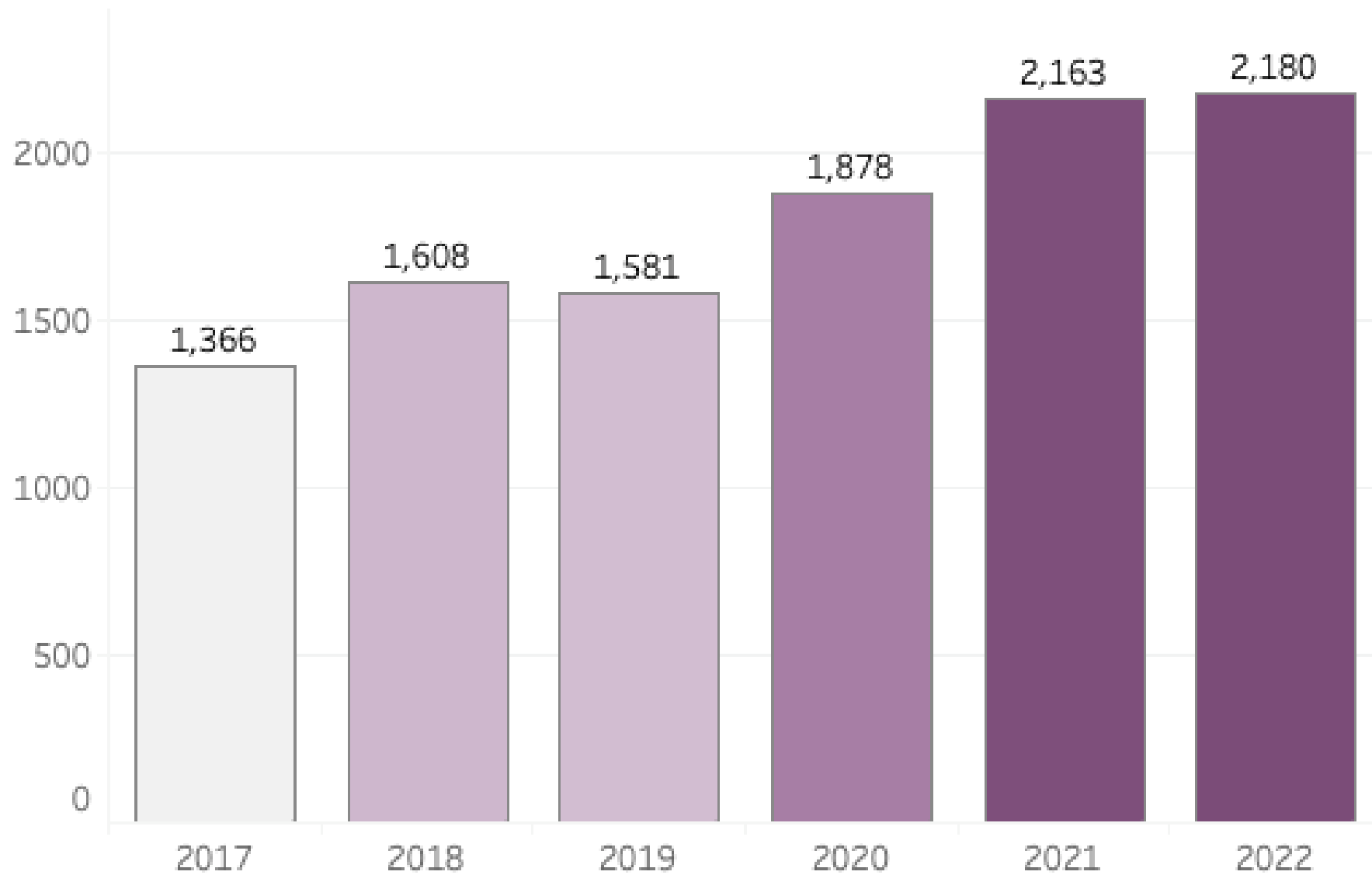
# Epidemiology

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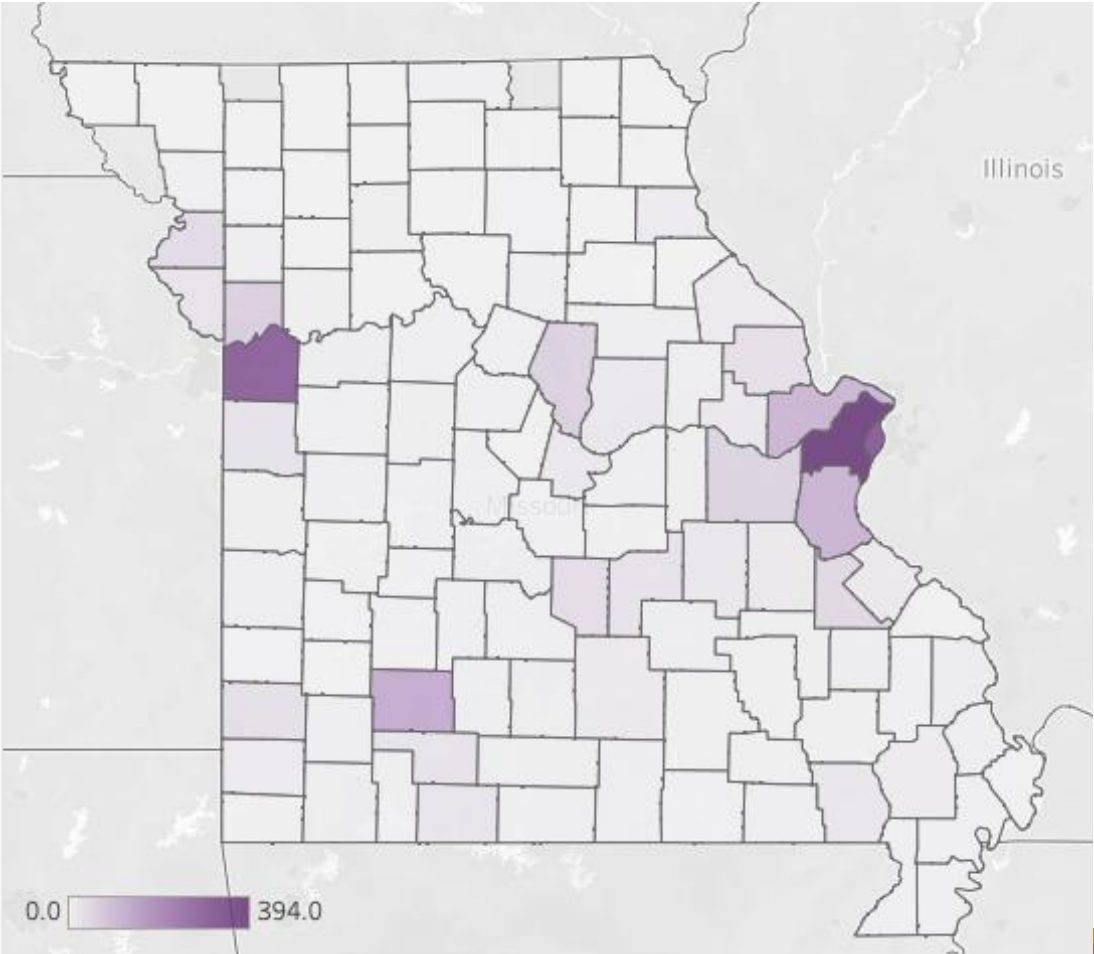
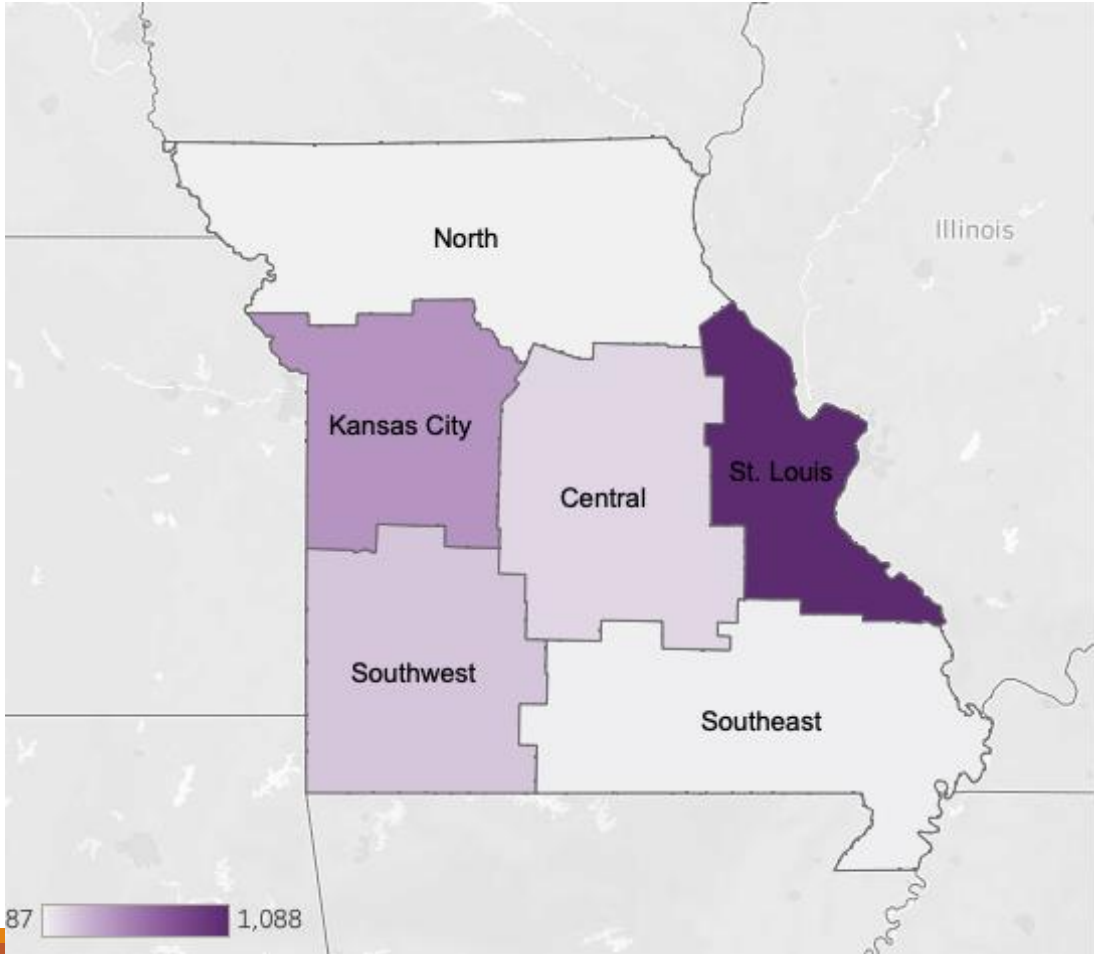
- In the United States:
  - 5.6 million people (aged 12 or older) in 2021
  - Predicted number of deaths (July 2022-June 2023): 111,877



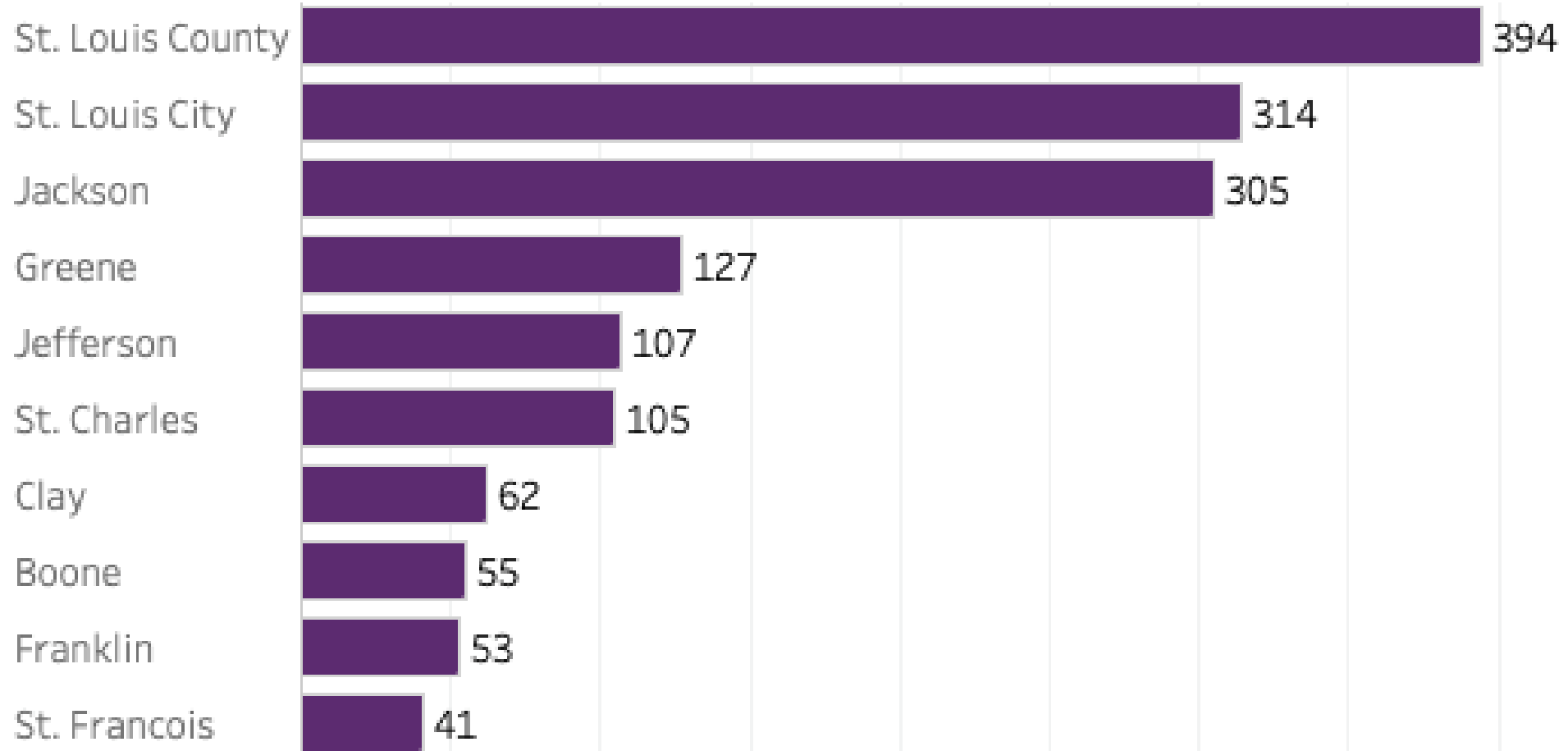
# Missouri Resident All Drug Overdose Deaths



# Drug Overdose Mortality Counts



# Top 10 Counties with the overdose mortality





# Should we treat OUD?

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- We already see many of these patients in our practice.
- We have prescribed opioids for acute and chronic pain.
- According to a [JAMA Psychiatry study](#) by Cicero (2014),  
*75% of those who began their opioid misuse in the 2000s reported that their first regular opioid was a prescription drug<sup>1</sup>*

<sup>1</sup> Cicero, 2014

<sup>2</sup> Canfield, 2010

<sup>3</sup> Bawor, 2015

**...So, why should we treat OUD?**

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**Treating OUD SAVES LIVES!**

# Why Opioid Replacement Therapy?

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- **Harm Reduction!** - The use of the opioid agonists methadone and buprenorphine reduces:<sup>1,2</sup>

Overdose

Illicit drug use

Transmission of  
infectious  
diseases

- Those receiving medications as part of their treatment are **75% less likely to die** due to their substance use disorder than those not receiving medication<sup>2</sup>

<sup>1</sup>NIDA 2018

<sup>2</sup>ASAM 2013

<sup>3</sup>NIDA, 2019

# Treating OUD Reduces Crime!

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Every **\$1** invested in substance use treatment returns a yield of **\$4-7** in reducing drug-related crimes, criminal justice, and theft

1 ASAM 2017

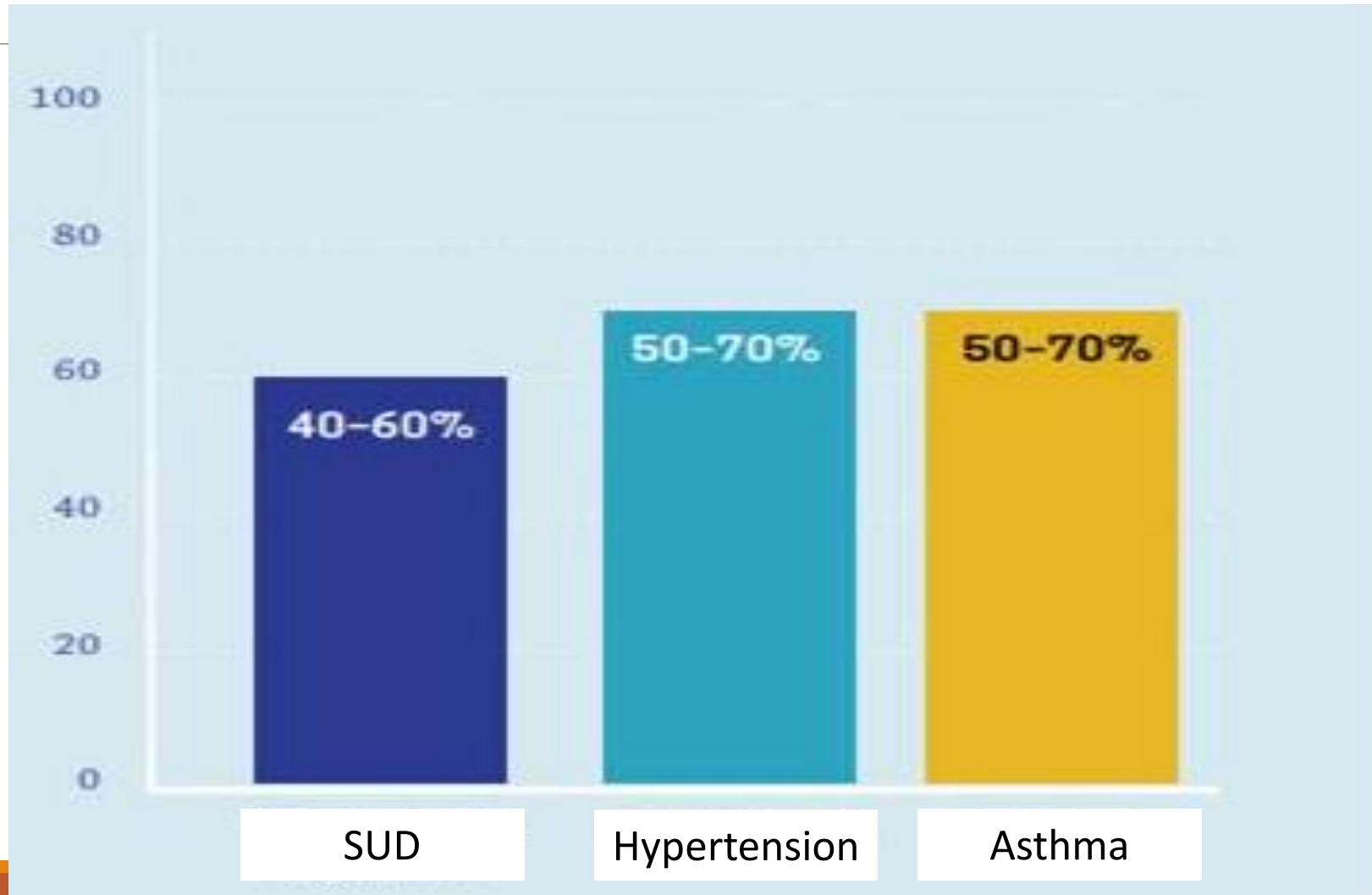
2 NIDA 2019

# Treatment of OUD

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- Medication Assisted Treatment (MAT) vs **Medications for OUD (MOUD)**
- Medication: help stabilize the brain (reduce w/d and cravings)
- Patients can
  - Learn healthy coping and life skills
  - Acquire jobs
  - Take care of their family
  - Engage in medical and recovery care

# SUD is a Chronic Disease!



# Opioid Use Disorder is a Chronic Disease

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Everyone is susceptible to develop OUD

Yes, there are predisposing risk factors

But it can happen to anyone

Treating OUD reduces disease spread.

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HIV incidence ↓

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Hepatitis C incidence ↓

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Endocarditis incidence ↓

1 Gowing 2012

2 Peles, Schreiber, Rados, Adelson 2011

3 Barocas, Morgan, Wang, McLoone, Wurvel, Stein 2020



# Stigma and Bias: Barriers to treating SUDS?

## Four factors leading to MOUD stigma<sup>1</sup>

Framing of SUDs as a 'willful choice,' not a disease

Separation of SUDs treatment from primary care

Stigmatizing language associated with SUDs

Justice system's lack of recognition for MOUD as an option for medical treatment for individuals with SUD

<sup>1</sup>Wakeman S, Rich J 2017

# What is “Harm Reduction”?

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# Harm Reduction

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SAMHSA defines harm reduction as

“a **practical and transformative** approach that incorporates community-driven public health strategies – including prevention, risk reduction, and health promotion – to **empower** PWUD and their families with the choice to live **healthy, self-directed, and purpose-filled lives**. Harm reduction centers the lived and living experience of PWUD, especially those in underserved communities, in **these strategies and the practices that flow from them.**”



# Supporting Principles

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What can we do to practice  
harm reduction?

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# Practical Actions/Tips

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- Motivational Interviewing
- Narcan
- Syringe exchange program
- Discussion – Plan A/B/C
- Overdose Detection App

# Website

## Resources for Safer Injection and Substance Use



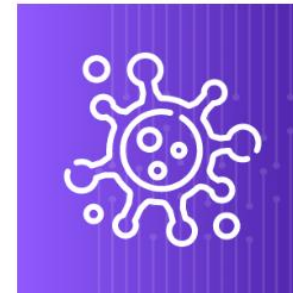
Safer Injection



Alternatives to Injection



Heart Infections (Infective Endocarditis)



Other Health Complications From Injection



Overdose Prevention



Treatment Resources and Harm Reduction Resources



Medication for Opioid Use Disorder



For Clinicians



# OUD Treatment Options

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- Simple **detoxification** and no other treatment
- **Counseling** and/or **peer support** with/without MAT
- Partial Agonist (**Buprenorphine**) at the mu-receptor – OBOT/OTP
- Agonist (**Methadone**) at the mu-receptor - OTP
- Antagonists (**Naltrexone**) at the mu-receptor
- Referral to short or long term **residential** treatment

Federations of State Medical Boards 2013

# OUD Treatment Approaches & Rates of Adherence

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Buprenorphine	• ~46-54% <sup>1-3</sup>
Methadone	• ~43-53% <sup>3-4</sup>
Naltrexone	• ~35% <sup>5</sup>
Detox then abstinence	• ~7-13% <sup>1,6</sup>

<sup>1</sup>Weiss R, Rao V 2017

<sup>2</sup>Mintzer II, Eisenberg M, Terra M, et al. 2007

<sup>3</sup>Potter J, Marino E, Hillhouse M, et al. 2013

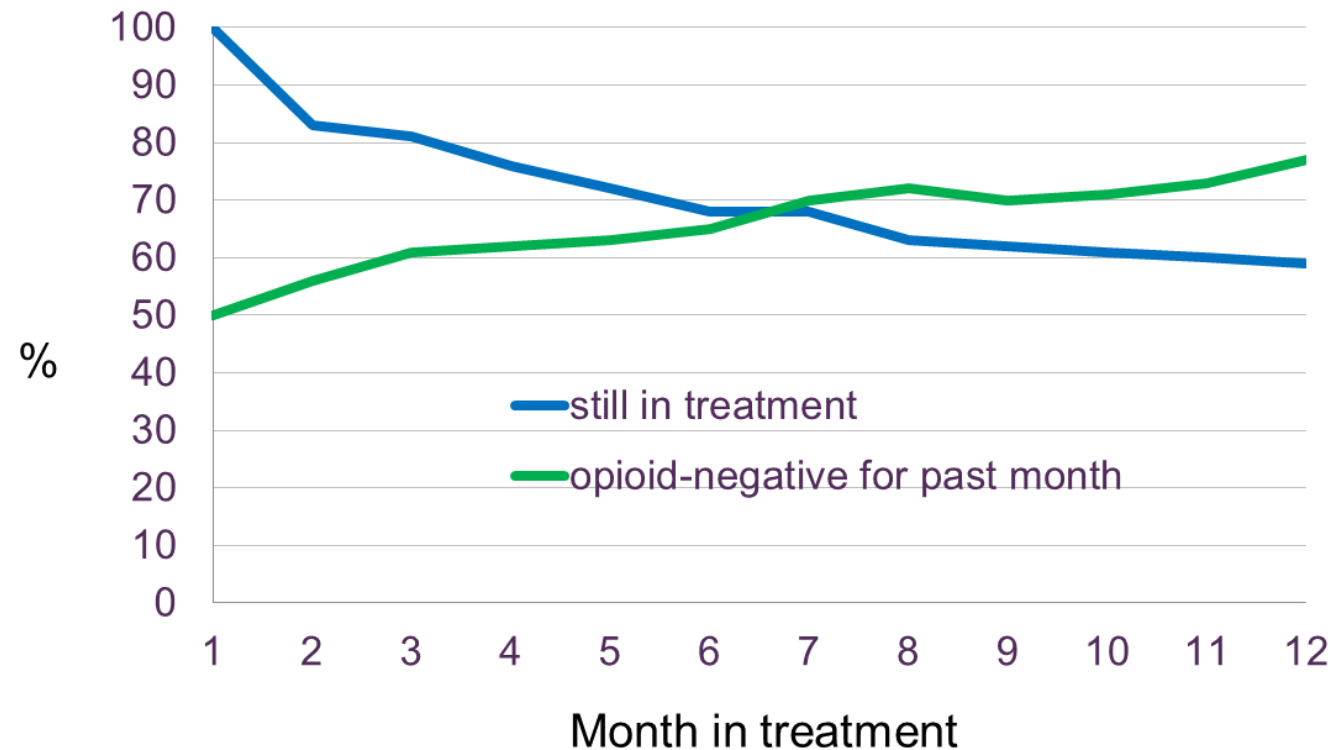
<sup>4</sup>Strain E, Stitzer M, Leebson I 1993

<sup>5</sup>Lee J, Nunes E, Novo P, et al. 2018

<sup>6</sup>Tuten M, DeFulio A, Jones H, et al. 2012

# Treatment Retention and Decreased Illicit Opioid Use on MAT

Buprenorphine promotes **retention**, and those who remain in treatment become more likely over time to **abstain** from other opioids



Kakko et al, 2003  
Soeffing et al., 2009

# Good News - Just In!

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**You no longer need a DEA “X Waiver”  
to prescribe Buprenorphine for OUD**

Consolidated Appropriations Act of Congress Dec 29 2022

# Buprenorphine (w/ or w/o Naloxone)

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- 1) If used correctly, takes care of withdrawal and cravings, but patient does not get high
- 2) Few Drug-Drug interactions
- 3) Average 16mg/day, Rarely up to 24mg/day (**hard stop** at 32mg/day)
- 4) It is safe – overdose extremely unlikely (more with EtOH & Benzos)
- 5) Combo product with naloxone is abuse deterrent (less IVDA)
- 6) Studies show an antidepressant effect (raises serotonin levels)
- 7) Patients do not build up a tolerance

# Buprenorphine also...

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- 5. Is less impairing**
  - Safer in the elderly
- 6. Does not affect the QT interval**
- 7. Safe in renal insufficiency or renal failure**
- 8. Easier to wean than other opioids**

# Buprenorphine Induction

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- There is little science on how to do this
- Most studies show **all** techniques are effective
- Many patients have done this without our help

# Buprenorphine Induction Goals

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- 1. Avoid precipitating withdrawal symptoms**
  - You want patient to begin withdrawal *prior* to induction
- 2. Titrate to dose of buprenorphine at which the patient has:**
  - **No** opioid withdrawal symptoms
  - No or minimal cravings
  - Minimal or no side effects
  - Discontinued or markedly reduced use of other opioids



# Buprenorphine Induction: Administration

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- With patient in withdrawal, give **4mg** (usually) under tongue
- Wait **1-2 hours** and repeat if withdrawal sx's continue
- Usually, maximum **16 mg** on day 1
- Increase to **20-24 mg/d** over the next two days **only if** withdrawal symptoms continue.
- See the patient in **2-7** days.

# How Long Should Patient Be on Buprenorphine?

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- Evidence is variable
  - Studies as long as 16 weeks show **high relapse rates** with medication withdrawal
  - **Improved retention rates** in treatment with extended buprenorphine maintenance
- **Continue maintenance as long as patient is benefitting from treatment**  
(decreased substance use, meeting employment, educational, relationships goals)
  - Note: Provider can have discussions regarding reduction in dose with improving stability or patient preference however: **Caution patients about discontinuing medication too early in treatment**

Kakko et al., 2003  
Weiss et al., 2011

# References 1

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- Substance Abuse and Mental Health Services Administration. Key substance use and mental health indicators in the United States: Results from the 2021 National Survey on Drug Use and Health. Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration.
- Drug Overdose Dashboard – Fatal Overdoses. Missouri Department of Health and Senior Services. <https://health.mo.gov/data/opioids/>
- Wakeman SE, Rich JD. Barriers to Medications for Addiction Treatment: How Stigma Kills. *Substance Use & Misuse*. 2017;53(2):330-333. doi:10.1080/10826084.2017.1363238
- Cicero, Theodore J., Matthew S. Ellis, Hilary L. Surratt, and Steven P. Kurtz. “The Changing Face of Heroin Use in the United States: A Retrospective Analysis of the Past 50 Years.” *JAMA Psychiatry* 71, no. 7 (July 1, 2014): 821–26. <https://doi.org/10.1001/jamapsychiatry.2014.366>.
- Canfield, Marta C., Craig E. Keller, Lynne M. Frydrych, Lisham Ashrafioun, Christopher H. Purdy, and Richard D. Blondell. “Prescription Opioid Use among Patients Seeking Treatment for Opioid Dependence.” *Journal of Addiction Medicine* 4, no. 2 (June 1, 2010): 108–13. <https://doi.org/10.1097/ADM.0b013e3181b5a713>.
- Bawor, Monica, Brittany B. Dennis, Michael Varenbut, Jeff Daiter, David C. Marsh, Carolyn Plater, Andrew Worster, et al. “Sex Differences in Substance Use, Health, and Social Functioning among Opioid Users Receiving Methadone Treatment: A Multicenter Cohort Study.” *Biology of Sex Differences* 6 (November 10, 2015). <https://doi.org/10.1186/s13293-015-0038-6>.
- National Institute on Drug Abuse. Effective Treatments for Opioid Addiction. NIDA. <https://www.drugabuse.gov/publications/effective-treatments-opioid-addiction/effective-treatments-opioid-addiction>. Accessed July 10, 2018.
- American Society of Addiction Medicine, Treatment Research Institute. (2013). FDA Approved Medications for the Treatment of Opiate Dependence: Literature Reviews on Effectiveness and Cost-Effectiveness. Chevy Chase, MD: American Society of Addiction Medicine. Available at [http://www.asam.org/docs/defaultsource/advocacy/aaam\\_implications-for-opioid-addiction-treatment\\_final](http://www.asam.org/docs/defaultsource/advocacy/aaam_implications-for-opioid-addiction-treatment_final). National Institute on Drug Abuse, National Institute of Health. (2007).
- National Institute on Drug Abuse. Cost effectiveness of drug treatment. NIDA. <https://www.drugabuse.gov/publications/teaching-packets/understanding-drug-abuse-addiction/section-iv/6-cost-effectiveness-drug-treatment>. Published February 2016. Accessed December 26, 2019.

# References 2

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- American Society of Addiction Medicine. *Advancing Access to Addiction Medications*. [http://www.asam.org/docs/default-source/advocacy/aaam\\_implications-for-opioid-addiction-treatment\\_final](http://www.asam.org/docs/default-source/advocacy/aaam_implications-for-opioid-addiction-treatment_final). Accessed May 11, 2017.
- National Institute on Drug Abuse. Cost effectiveness of drug treatment. NIDA. <https://www.drugabuse.gov/publications/teaching-packets/understanding-drug-abuse-addiction/section-iv/6-cost-effectiveness-drug-treatment>. Published February 2016. Accessed December 26, 2019.
- NIDA. Drugs, Brains, and Behavior: The Science of Addiction. National Institute on Drug Abuse website. <https://www.drugabuse.gov/publications/drugs-brains-behavior-science-addiction>. July 20, 2018. Accessed September 4, 2018.
- Ponizovsky AM and Grinshpoon A. 2007. Quality of life among heroin users on buprenorphine versus methadone maintenance. *American Journal of Drug and Alcohol Abuse* 33 631-642.
- Weiss RD, Rao V. The Prescription Opioid Addiction Treatment Study: What have we learned. *Drug Alcohol Depend*. 2017;173 Suppl 1:S48-S54. doi:10.1016/j.drugalcdep.2016.12.001
- Mintzer IL, Eisenberg M, Terra M, MacVane C, Himmelstein DU, Woolhandler S. Treating opioid addiction with buprenorphine-naloxone in community-based primary care settings. *Ann Fam Med*. 2007;5(2):146-50.
- Potter, J. S., Marino, E. N., Hillhouse, M. P., Nielsen, S., Wiest, K., Canamar, C. P., ... Ling, W. (2013). Buprenorphine/naloxone and methadone maintenance treatment outcomes for opioid analgesic, heroin, and combined users: findings from starting treatment with agonist replacement therapies (START). *Journal of Studies on Alcohol and Drugs*, 74(4), 605–13. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/23739025>
- Strain EC, Stitzer ML, Liebson IA, Bigelow GE. Dose-response effects of methadone in the treatment of opioid dependence. *Ann Intern Med*. 1993;119(1):23-27.
- Lee JD, Nunes EV, Novo P, et al. Comparative effectiveness of extended-release naltrexone versus buprenorphine-naloxone for opioid relapse prevention (X:BOT): a multicentre, open-label, randomised controlled trial. *Lancet*. 2018;391(10118):309-318. doi:10.1016/S0140-6736(17)32812-X
- Tuten M, DeFulio A, Jones HE, Stitzer M. Abstinence-contingent recovery housing and reinforcement-based treatment following opioid detoxification. *Addiction*. 2012;107(5):973-982. doi:10.1111/j.1360-0443.2011.03750.x

# Resources

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**AAFP's OUD Treatment Manual:** <https://www.aafp.org/news/health-of-the-public/20210209oudmanual.html>

**STFM Addiction Medicine Curriculum:**  
<https://www.stfm.org/teachingresources/curriculum/nationaladdictioncurriculum/>

**Curbsiders Addiction Medicine Podcast:** <https://thecurbsiders.com/addiction>

**ASAM National Practice Guideline for the Use of Medications in the Treatment of Addictions Involving Opioid Use** [https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-pocketguide.pdf?sfvrsn=35ee6fc2\\_0](https://www.asam.org/docs/default-source/practice-support/guidelines-and-consensus-docs/asam-national-practice-guideline-pocketguide.pdf?sfvrsn=35ee6fc2_0)

**SAMHSA's TIPS 42:** <https://store.samhsa.gov/product/tip-42-substance-use-treatment-persons-co-occurring-disorders/PEP20-02-01-004>

**Resources for Safer Injection and Substance Use:** <https://safersubstanceuse.org>

# Contact information

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