

# Medications for Opioid Use Disorders: A Brief Introduction

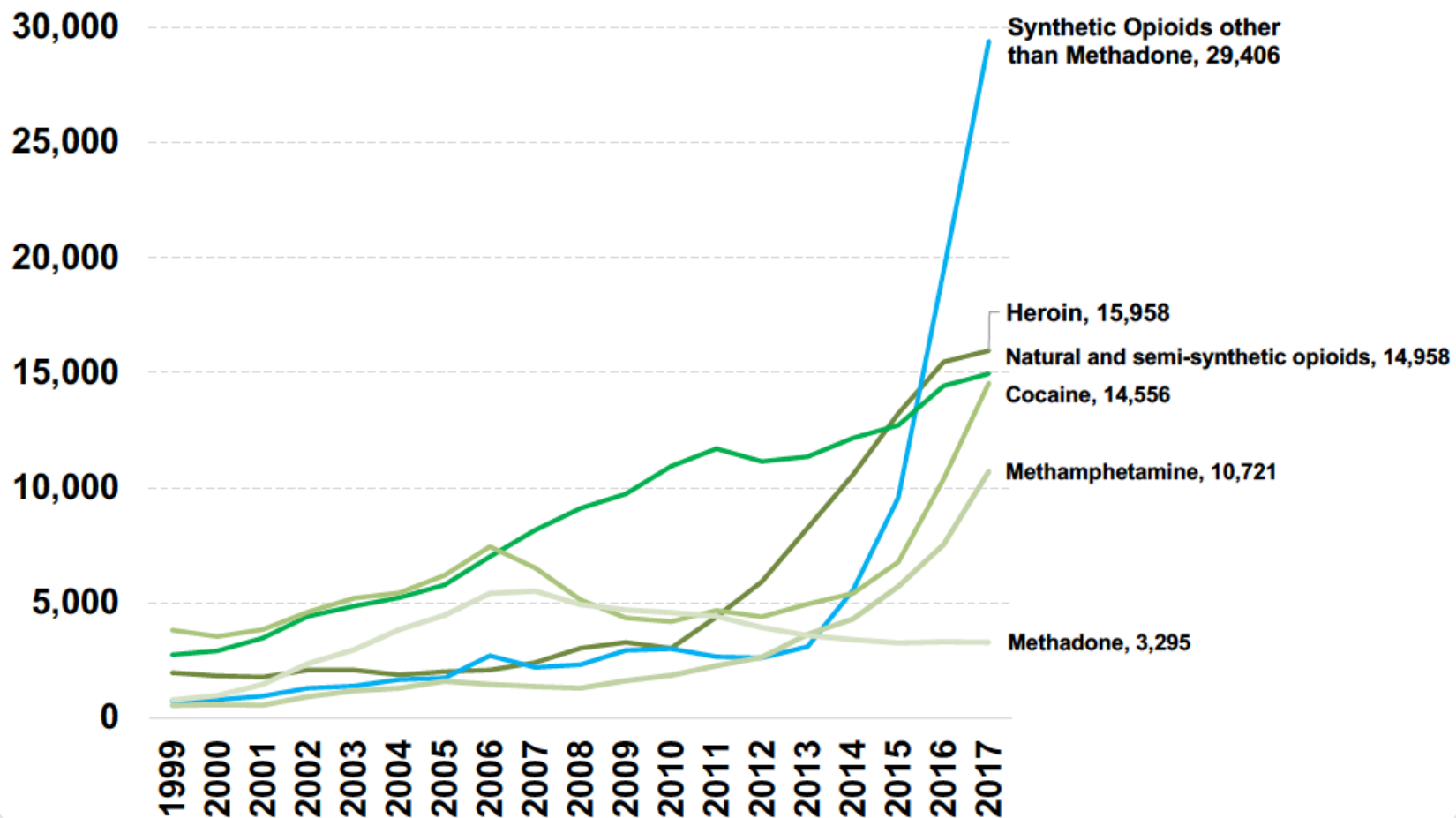
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## Drugs Involved in U.S. Overdose Deaths, 1999 to 2017



# Medication for Treatment of Opioid Use Disorders

## Opioids

- Agonist Treatments

- Methadone
- Buprenorphine

### Modalities

- Detoxification
- Maintenance
- Antagonist Treatment
  - Naltrexone



# Goals of Medication for OUD

- Stabilize neurochemical imbalances
  - Relieve symptoms of abstinence syndromes
  - Decrease craving
- Prevent intoxication and overdose
- Facilitate neural repair/restructuring
- Improve engagement and retention in other addiction treatment modalities
  - Effective tools, not definitive cures
  - Designed to be used with other treatment modalities

# Methadone: Opioid Agonist

## Pros

- Relieves opioid withdrawal symptoms
- Reduces cravings
- Reduces drug use, IV use and overdose
- Highly structured with daily check in
- Once daily dosing
- Slow controlled taper
- Regular drug testing
- Psychosocial services

## Cons

- Daily attendance
- Transportation
- Limited availability
- Physical dependence
- Risk of diversion
- Risk by association...
- Limited insurance coverage
- Abrupt loss of tx when incarcerated

# Buprenorphine: Opioid Partial Agonist

## Pros

- Relieves opioid withdrawal symptoms
- Reduces cravings
- Reduces drug use, IV use and overdose
- Flexible tx structure
  - Integrated with other services, office-based
- Flexible daily dosing
- Multiple formulations
  - Tab, film, IM, implant

## Cons

- Limited availability
- Physical dependence
- Risk of diversion
- Lower levels tx structure/monitoring
- Limited insurance coverage
- Limited doses/strengths
- Self-managed taper
- Abrupt loss of tx when incarcerated

# Comparing Methadone to Buprenorphine

## Methadone

- More potent, better for bigger habits
- Very structured, daily dosing
- Lower cost for medication but higher treatment cost
- Medication interactions and cardiac effects
- \*Easy to start, but slow ramp up to effective dose

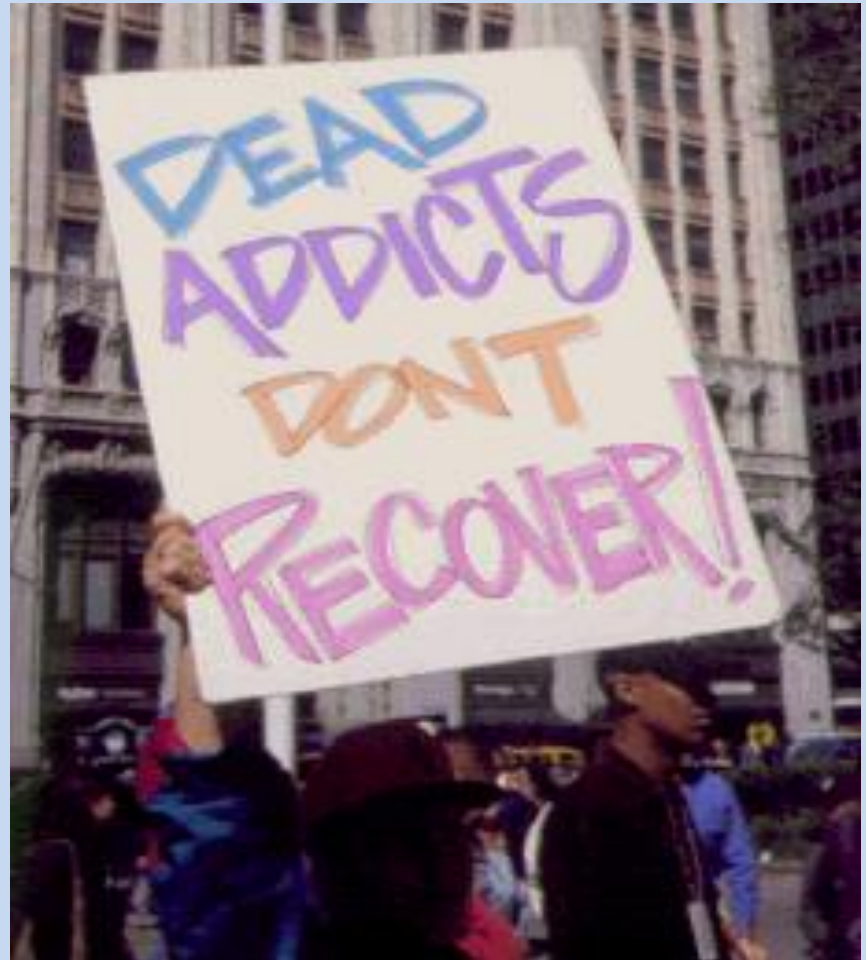
## Buprenorphine

- Less potent, for lower habits, pill only users?
- Lower structure, less monitoring
- Higher cost for meds, lower treatment cost
- Lower overdose risk
- Less med interactions
- Patients control dosing
- \*More difficult to initiate treatment, risk of induced withdrawal,

# Why Opioid Maintenance?

- 80-90% relapse to drug use without it
- Increased treatment retention
- 80% decreases in drug use, crime
- 70% decrease all cause death rate

NIH Consensus Statement  
JAMA 1998





# Naltrexone: Opioid Receptor Blockade

## Pros

- Reduce drug use and increase retention
  - Rates similar to bup tx
    - Lee 2018 Lancet
- Prevent full-relapse in event of a “slip”
- Available as daily pill or month IM injection
- No dependence, no need for taper
- No risk diversion
- Minimal office resources

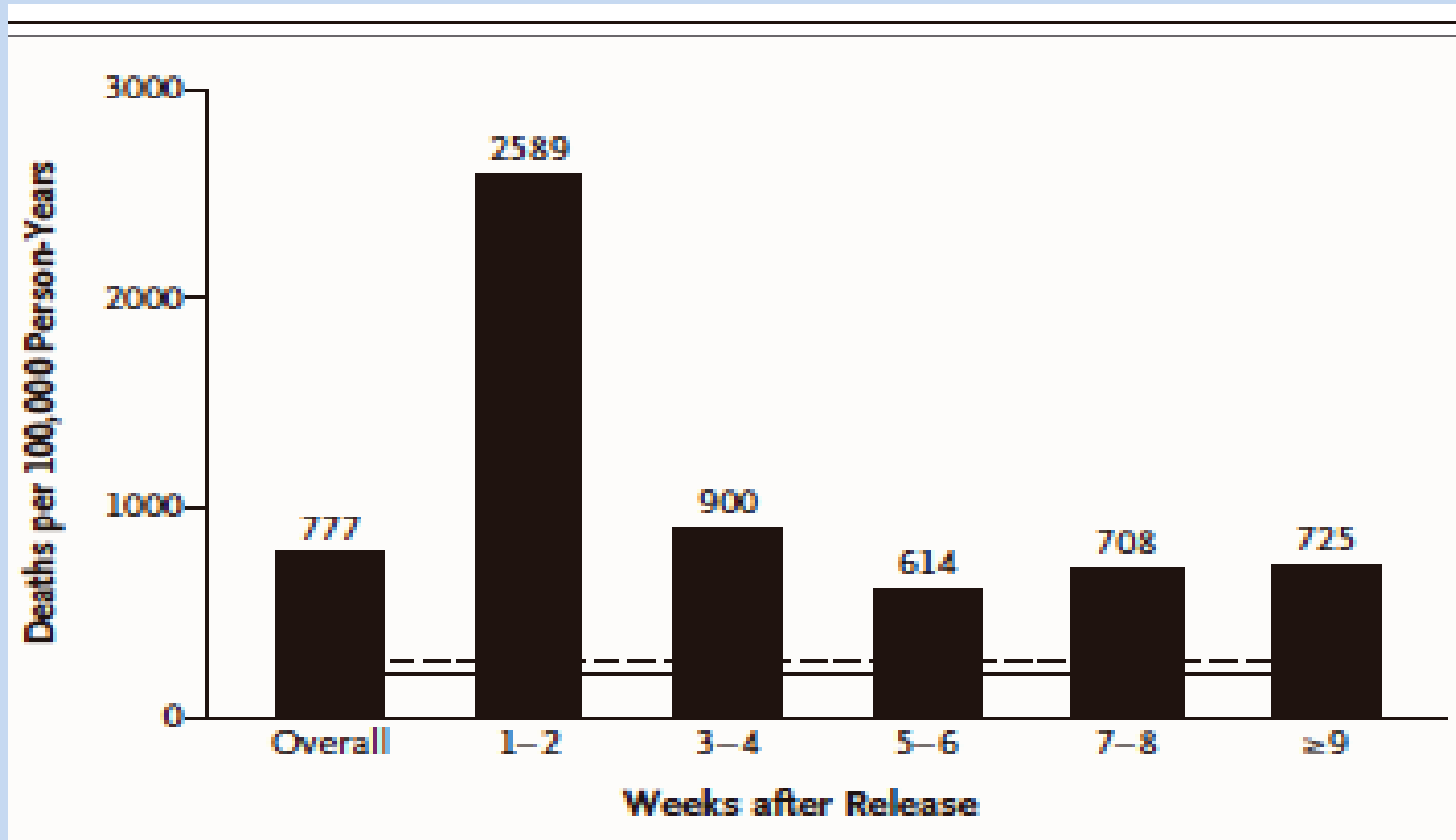
## Cons

- Does not relieve withdrawal symptoms
- Risk of induced withdrawal
- More challenging to initiate
  - 72% vs. 94% in recent study comparing ERIN to bup (Lee 2018 Lancet)
- Risk of depressed mood
- Expensive: 1200\$/shot
- Insurance barriers

# Missed opportunities to prevent overdose death...



# Release from Prison—High Risk of Death



**Figure 1.** Mortality Rates among Former Inmates of the Washington State Department of Corrections during the Study Follow-up (Overall) and According to 2-Week Periods after Release from Prison.

# Risk of Death Former Inmates

compared to general population

	Increased Relative Risk
Overall	3.5
Time since release: 0-2 weeks	12.7
Time since release: 3-4 weeks	4.4
Time since release: $\geq$ 5 weeks	3.2
Drug overdose	12.2
<b><i>Drug overdose first two weeks</i></b>	<b><i>129</i></b>
Homicide	10.4
Liver disease	4.7
Suicide	3.4
Motor Vehicle Accident	3.4
Cardiovascular disease	2.1
Cancer	1.7

# When treating patients with OUD, consider all the tools in the toolbox...



Any approved medication is (much)  
better than no medication...  
AND no one medication is the best for  
all patients or at all times.

**Treat  
Addiction  
Save  
Lives**

