

Medication Assisted Treatment For Opioid Use Disorder

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LA SBIRT Network

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Disclosure of Relevant Financial Relationships

Name	Commercial Interests	Relevant Financial Relationships: What Was Received	Relevant Financial Relationships: For What Role	No Relevant Financial Relationships with Any Commercial Interests
Indivior		Honorarium	Speaker's Bureau	
Constellation Health		Research Grant	Research	

Objectives

1. Describe the mechanisms, side effects, and treatment goals of FDA-approved medications for opioid use disorder
2. Discuss at least two advantages and disadvantages of employing medicines in a recovery treatment program
3. Explain at least three administrative protocols and processes that are required to implement medication-assisted treatment into a variety of healthcare settings.

What is Medication Assisted Treatment (MAT)?

- MAT is the use of FDA-approved medications, in **combination** with counseling and behavioral therapies, to provide a whole-person approach to the treatment of addictive disorders.
- Research shows that medication **and** behavioral therapies works best!
- MAT is clinically driven with a focus on individualized client care

SAMHSA TIP for MAT



Key Components to MAT

- 1) pharmacological therapy
- 2) psychosocial services
- 3) integration of care
- 4) education and outreach

Expectations of Medications

- Manage detoxification
- Target urges / cravings
- Increase likelihood of abstinence
- Reduce harm from addictive behavior
- Lay the groundwork to do recovery

History of MAT

- 1972: Methadone approved
- 1980s: War on Drugs
- 1990s: “Addiction as a brain disease”
 - Advances in genetic, neuroimaging, animal models, slow medication development
- 2000s: Buprenorphine approved
- 2010s: Steadier Growth of Meds

History of Physicians and MAT

- 1990-2000
 - MDs had limited choices, trainings to prescribe MAT from office-based settings
- 2000 – present
 - DATA 2000 opens doors but capacity low
 - Addiction Psychiatrists
 - Addition Medicine (FP, IM)
 - MDs usually separated from SUD/MH providers

My Own Experience With MAT

- 1998: Graduate Medical School
- 2002: Graduate Residency
- 2003: Complete Addiction Fellowship
- 2004: Obtain “Bup Waiver”
- 2004 – Present: Office-based MAT

Overarching Principle of MAT

“Drugs are substances that change body’s functioning. Medications are drugs that restore normal functioning”

MAT Advantages

- Uses power of science to improve treatment outcomes
- Uses biopsychosocial approach
- Improve treatment retention
- Target symptoms that were previously not reachable by counseling / therapy

MAT Disadvantages

- “Magic Pills”
- May de-emphasize recovery process
 - Home, health, purpose, community
- Expensive, time consuming
- Long-term impact not fully known
- Deepens the “generational gap” among those in recovery

Recovery

- “ A voluntarily maintained lifestyle characterized by sobriety, personal health and citizenship”
- J.Substance Abuse Treatment 2008

What are the FDA-approved medications for opioid use disorders?

FDA-Approved Medications for OUD

Opioid Use Disorder	Generic Name
Partial Agonist	Buprenorphine/Naloxone (sl) Buprenorphine (sl) Buprenorphine (implant)
Full Agonists	Methadone (liquid)
Antagonists	Naltrexone (oral)
	Naltrexone (monthly injection)

Buprenorphine

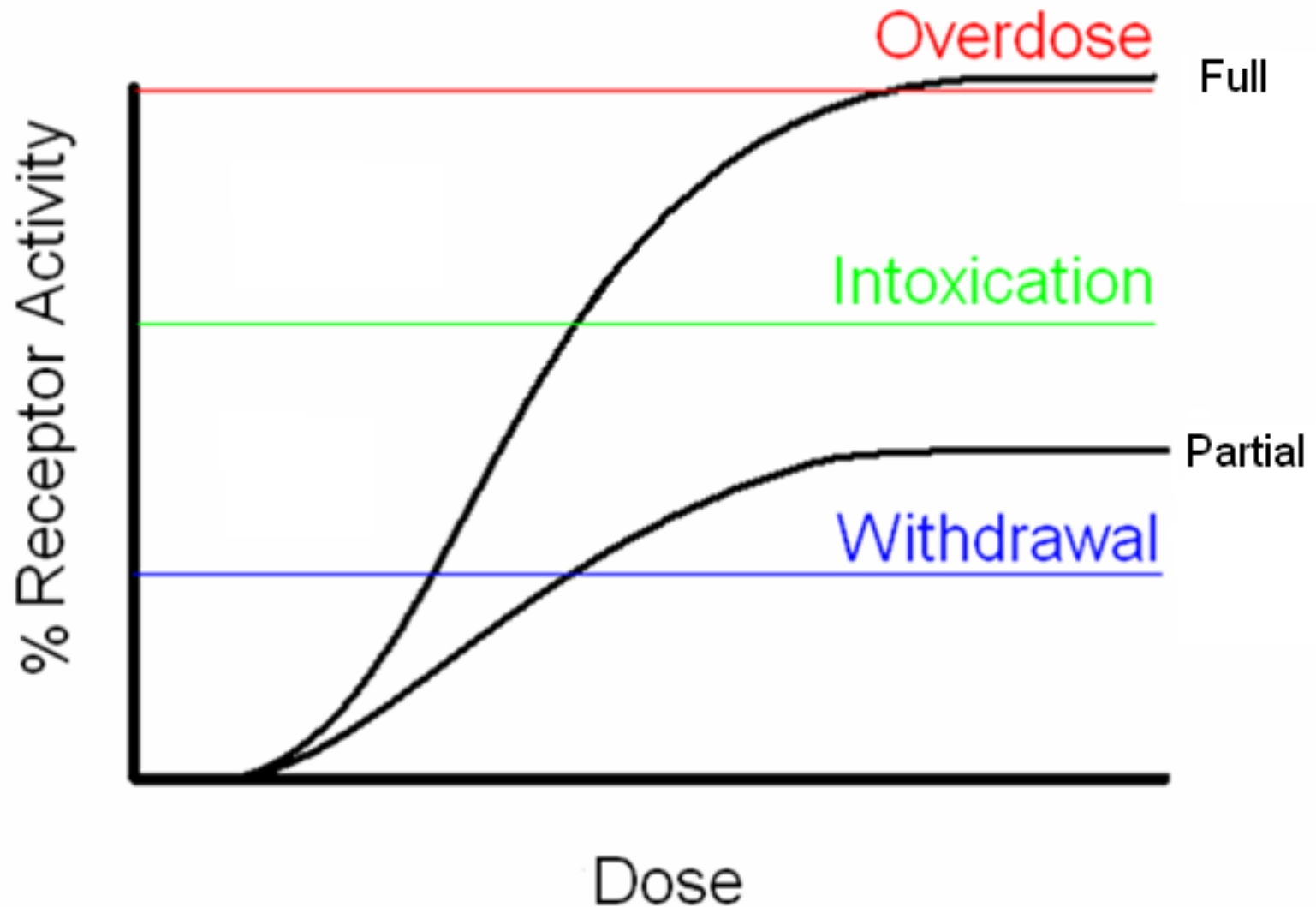
How it Works

- Office-based treatment
- Physicians prescribing must have certification from DEA (100 pt. Limit)
- Manages withdrawal
- Used as a maintenance therapy
- Limited abuse potential

Pharmacology

- Semi-synthetic morphine alkaloid
- Partial agonist at mu receptor
 - Ceiling effects
- Antagonist at kappa receptor
- Schedule III
- Over 20 years of research

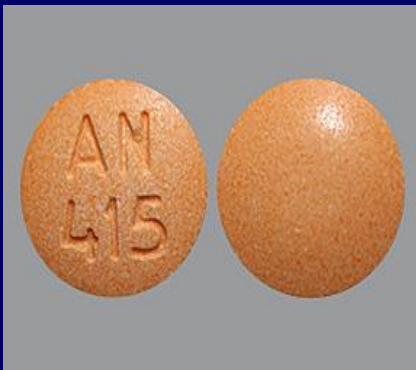
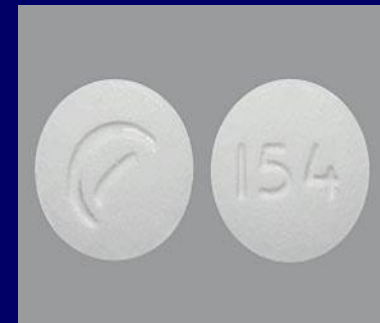
Full vs. Partial Agonist



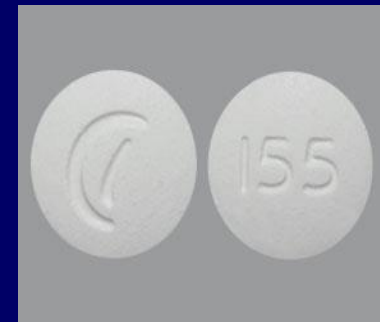
Buprenorphine/Naloxone Tablets



2mg/0.5mg



8mg/2mg



SUBOXONE Film

2 mg buprenorphine/
0.5 mg naloxone



4 mg buprenorphine/
1 mg naloxone



8 mg buprenorphine/
2 mg naloxone

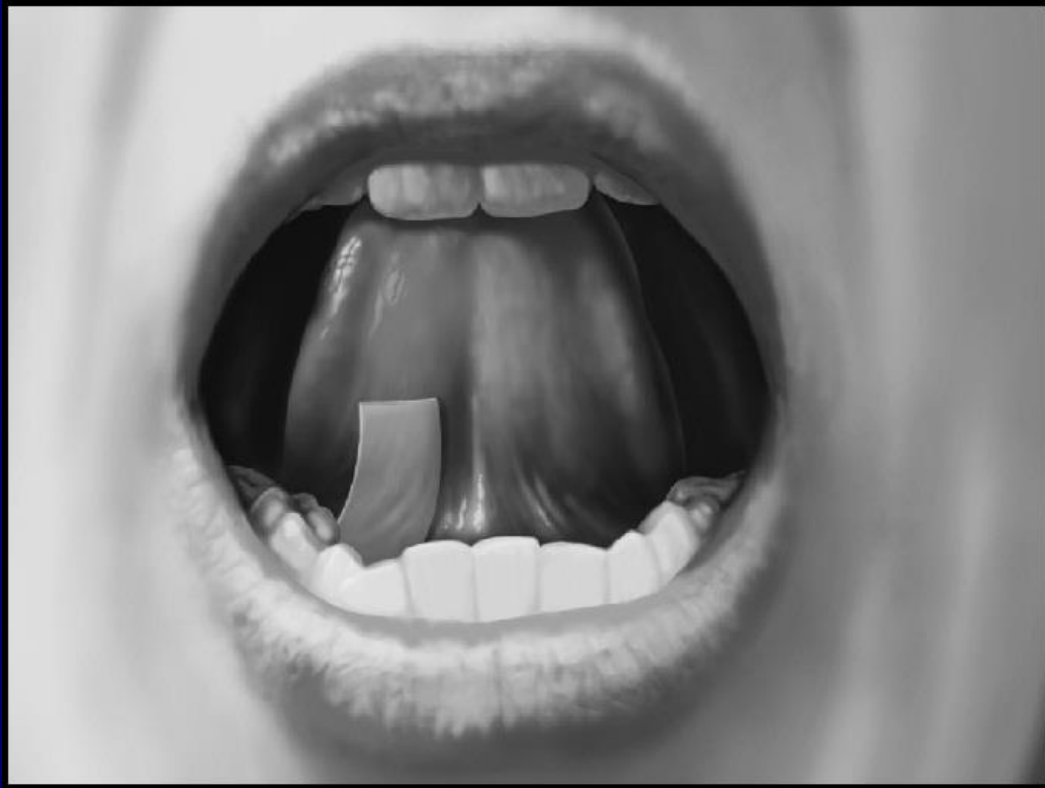


12 mg buprenorphine/
3 mg naloxone



For complete Prescribing Information, visit suboxone.com.

SUBOXONE® Sublingual Film is a registered trademark of Reckitt Benckiser (UK) Ltd.



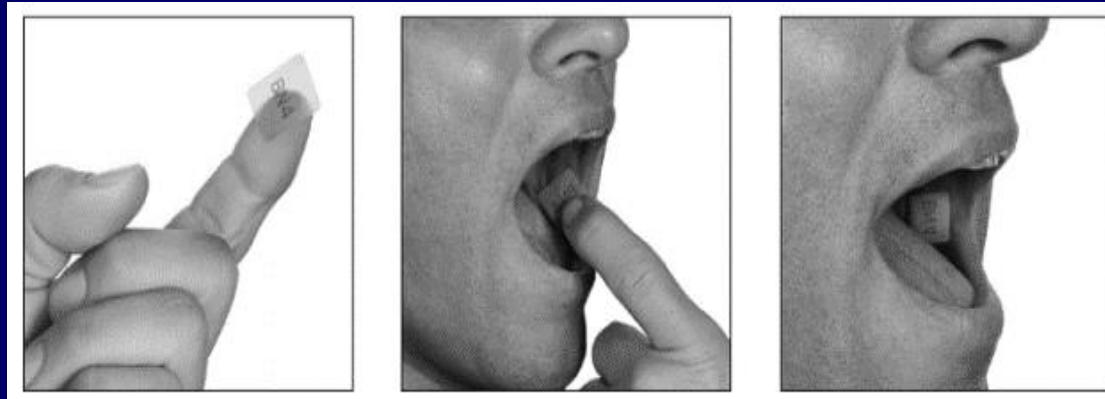
Zubsolv Sublingual Tablets



Available doses (BUP/NX): 1.4 mg / 0.36 mg; 5.7 mg / 1.4 mg

Recommended maintenance dose: 11.4 mg/ 2.8 mg

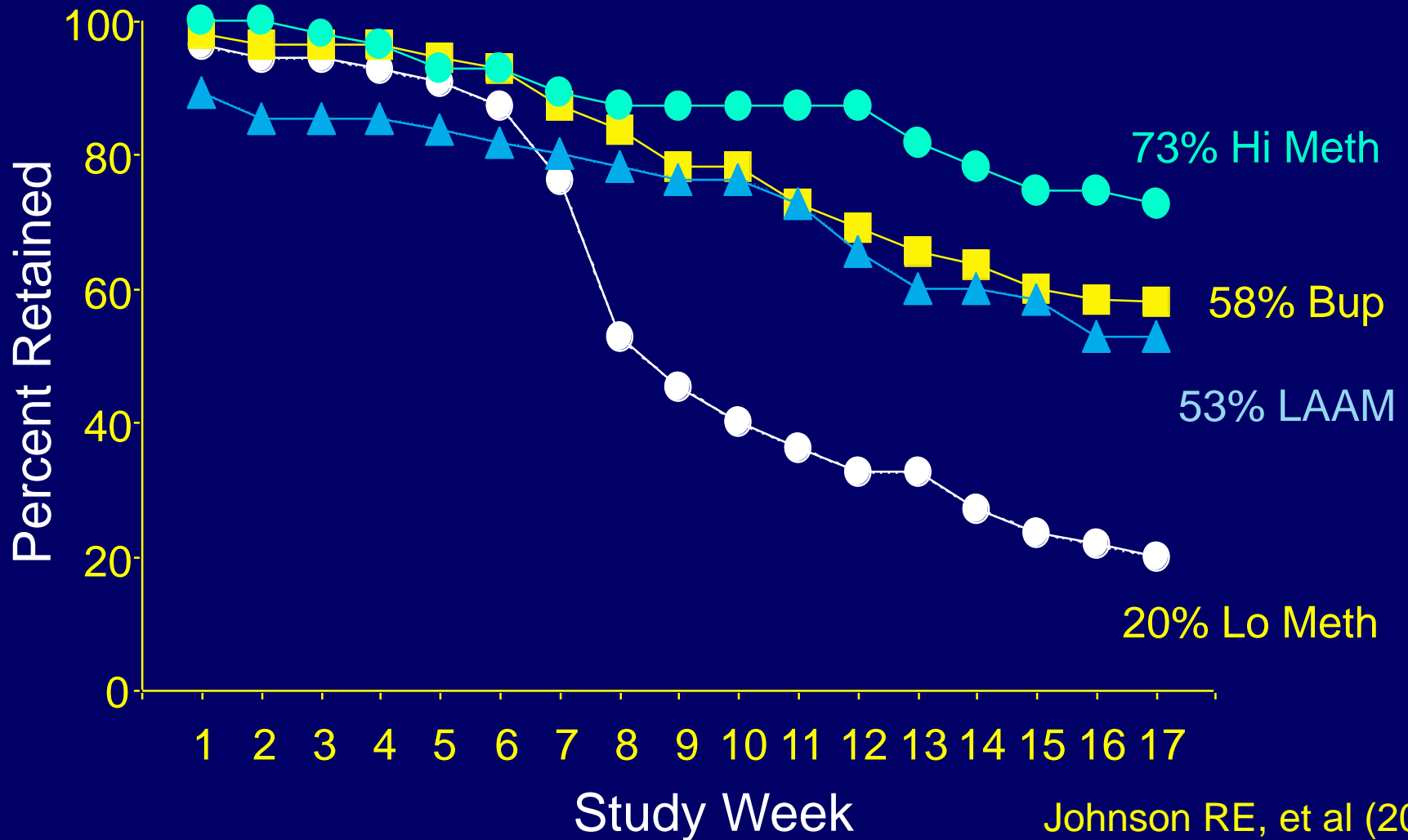
Bunavail Buccal Film



Available dosages (BUP/NX): 2.1 mg / 0.3 mg; 4.2 mg/0.7 mg; 6.3 mg/ 1.0mg

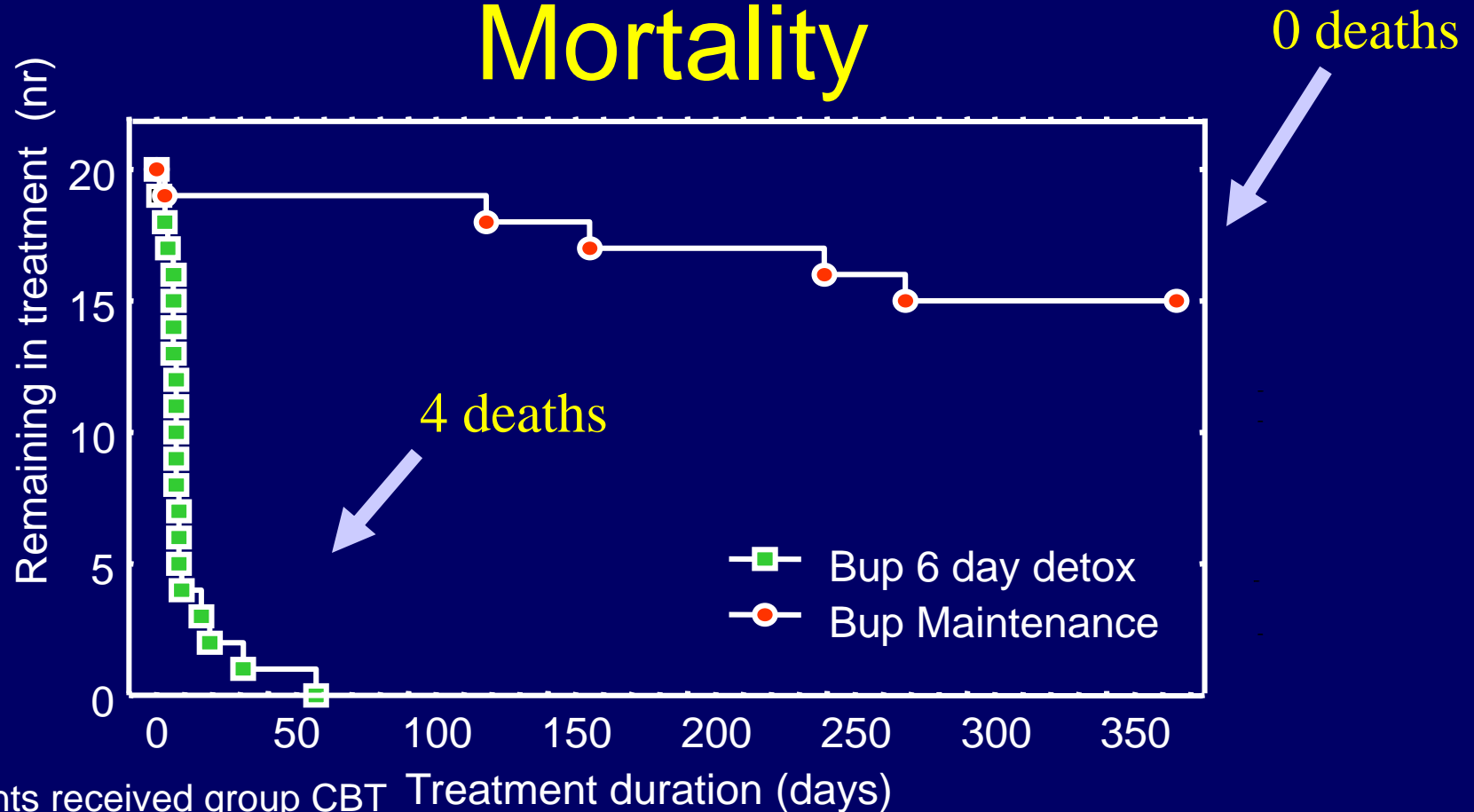
Recommended maintenance dose: 8.4mg / 1.4mg

Buprenorphine, Methadone, LAAM: Treatment Retention



Johnson RE, et al (2000)

Buprenorphine: Retention and Mortality



All Patients received group CBT
Relapse Prevention, Weekly
Individual Counseling, 3x Weekly
Urine Screens. n=20 per group

Most often heard quotes with Buprenorphine

“Doc, I feel normal”

“I wake up not sick”

“I have my life back”

- **Treatment in normal medical settings:**
 - Encourages continuity of medical/specialty care
 - Encourages relationship building with clinicians
 - Legitimize opioid dependence as a normal, treatable, chronic illness



Naltrexone

Revia[®] or Depade[®]

Opioid Antagonist: Naltrexone

Opioid Blockade

FDA Approved for Alcohol and Opioid
Use Disorder

Prevents relapse

Strong Anti-Craving

Minimized overdose risk; especially after
detox

Naltrexone

- Oral: 50 mg tablet
- Injectable: 380 mg IM every four weeks
- Implants: NOT FDA-approved

Extended-Release Naltrexone

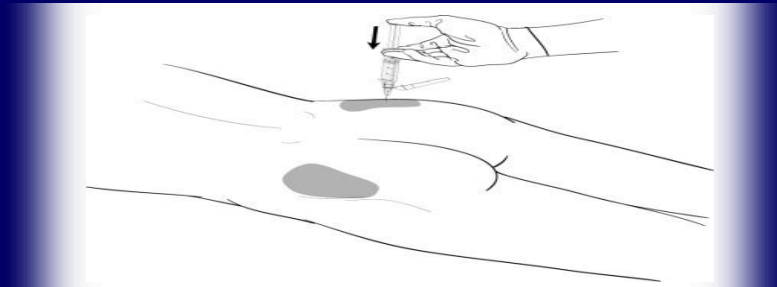
Dosing:

380mg injection in deep gluteal muscle every 4 weeks

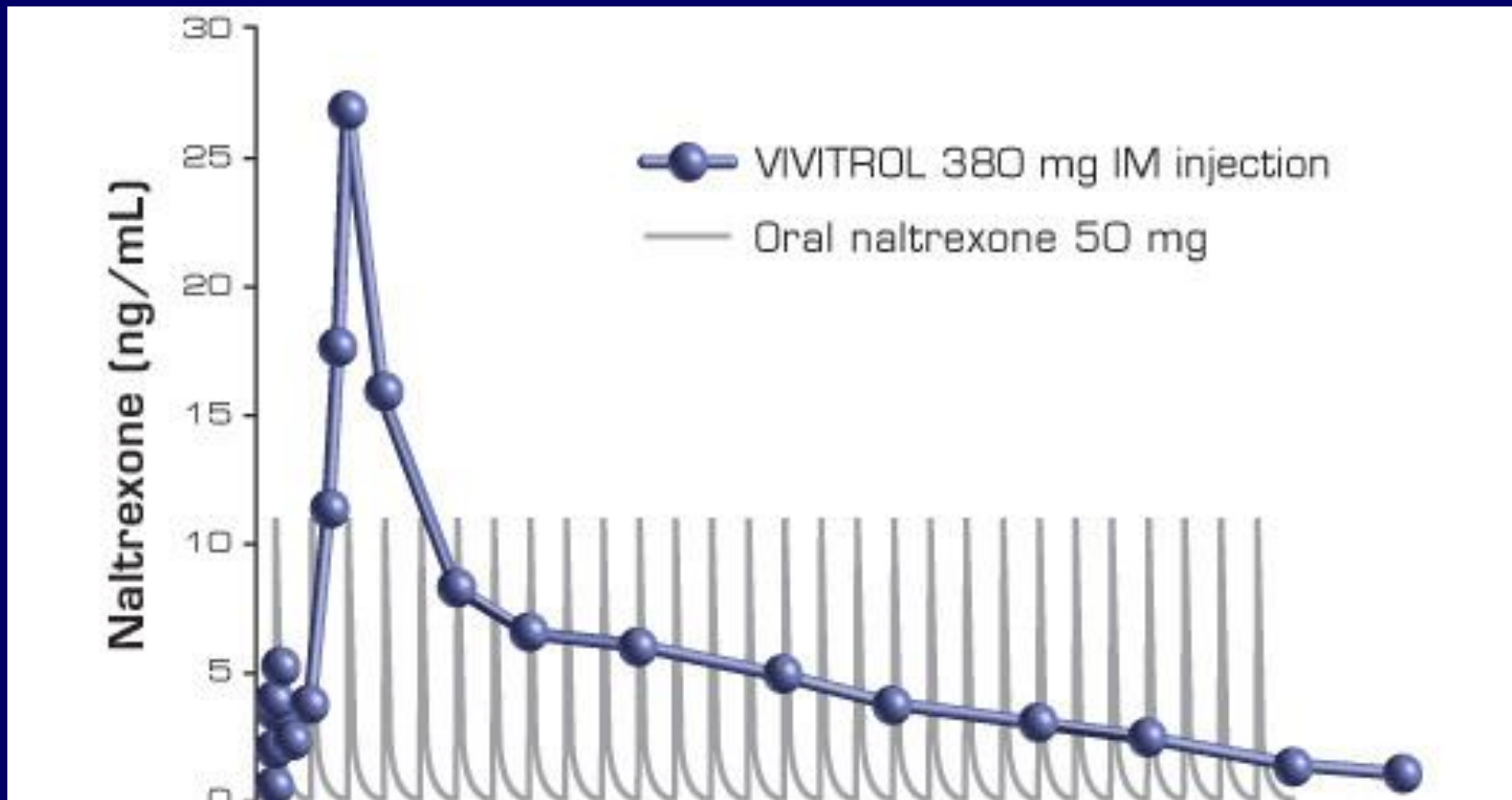
Must be administered by a healthcare professional and should alternate sides each month.

Blocks opioid receptors for **one entire month** compared to approximately 28 doses of oral naltrexone.

It is **not possible to remove** it from the body once extended-release naltrexone has been injected. Large doses of opioids may be required to override the blockade in a medically monitored setting



Injectable NTX Provides a Sustained-Release of Medication



IM Naltrexone Eliminates Daily Adherence Decisions¹

- Naltrexone utilizes a delivery system that
 - Provides a month of medication in a single dose
- Adherence to any treatment program is essential for successful outcomes
- Administration by a healthcare provider ensures that the patient receives the medication as directed

“...addressing patient adherence systematically will maximize the effectiveness of these medications.”²

–Updated NIAAA Clinician’s Guide

1. Dean RL. *Front Biosci*. 2005;10:643-655.

2. NIAAA. 2007. NIH publication 07-3769.

Research About Extended-Release Naltrexone for Opioid Use Disorder

When compared to placebo, those receiving extended release naltrexone for 6 months:

- Had fewer opioid positive urines
- Stayed in treatment longer (improved retention)
- Had fewer cravings
- Showed greater improvement in the mental component of quality of life and overall health status
- Generally tolerated the medication without significant adverse effects

Research About Extended-Release Naltrexone Cont'd

- Importantly, there were no attempts to override the blockade with large doses of opioids
- No accidental or intentional overdoses during or post-treatment
- No increase in rates of non-opioid drug use
 - Consistent with other studies demonstrating reduced use of other drugs when heroin use

Comer et al., 2006

Methadone



NDC 0019-0527-05

METHADOSE®
(METHADONE HYDROCHLORIDE
ORAL CONCENTRATE USP)

Each milliliter contains:
Methadone Hydrochloride 10 mg.

WARNING: May be habit forming

CAUTION: Federal (U.S.A.) law prohibits dispensing without prescription.

USUAL DOSE: To be determined by the physician; to be diluted with water to 90 ml. (3 fl. oz.) or more before oral administration.

Store and dispense in tightly closed containers protected from light. Store at controlled room temperature (15°-30°C.) (59°-86°F.)

Mallinckrodt

1 QUART (946 ml.)

MALLINCKRODT, INC. ST. LOUIS, MISSOURI 63134

H-229088 Printed in U.S.A.

78212

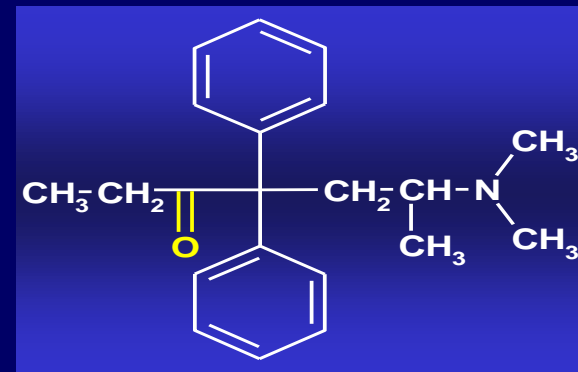
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Methadone

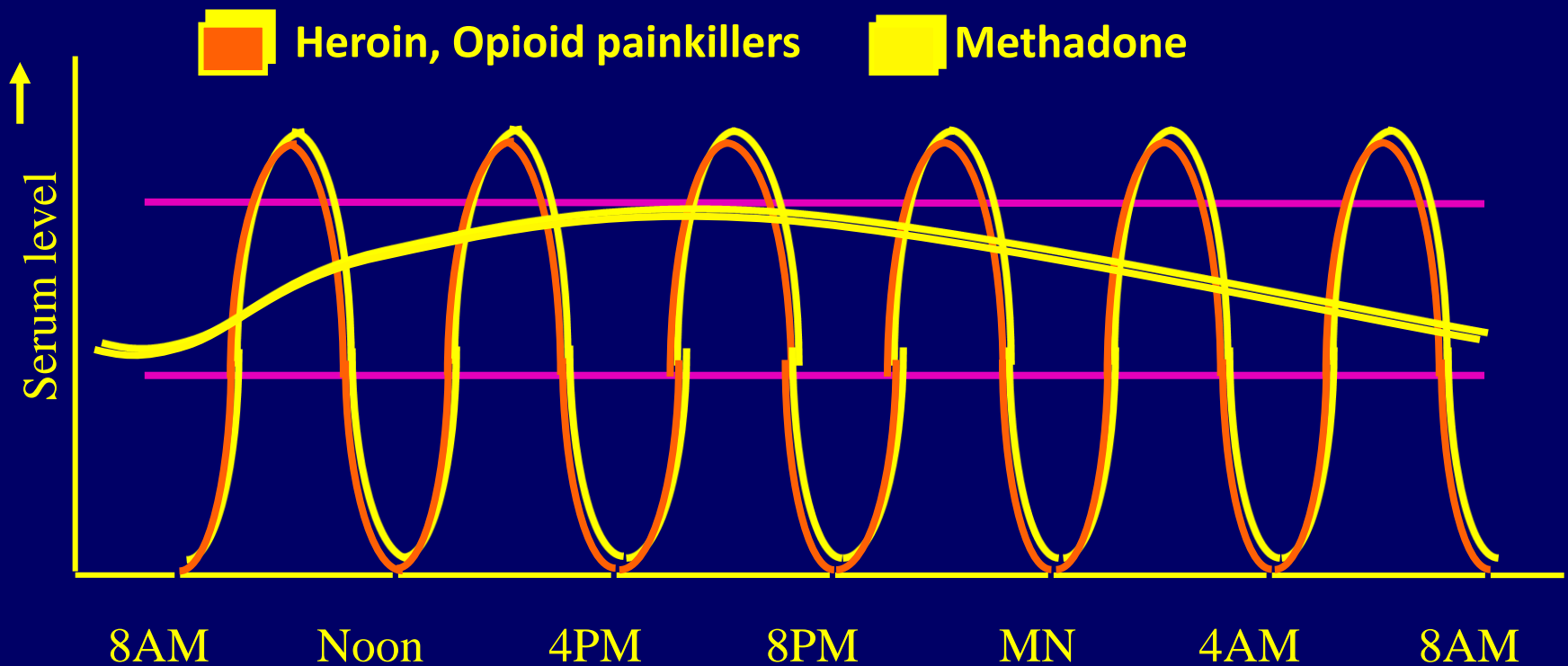
- Alleviates opioid withdrawal and craving (without intoxication)
- Used for opioid detoxification or maintenance therapy; also used as analgesic.
- Also known under brand names:
 - Methadose®
 - Dolophine®
- FDA approved in 1964

Methadone: Clinical Properties

- Orally active synthetic μ agonist
- Action: CNS depressant/ analgesic
- Long half-life, slow elimination
- Effects last 24 hours
- Once daily dosing maintains constant blood level
- Prevents withdrawal, reduces craving and use
- Facilitates rehabilitation
- Clinic dispensing limits availability



Blood levels: methadone vs. short-acting opioids



Treatment Outcome Data: Methadone

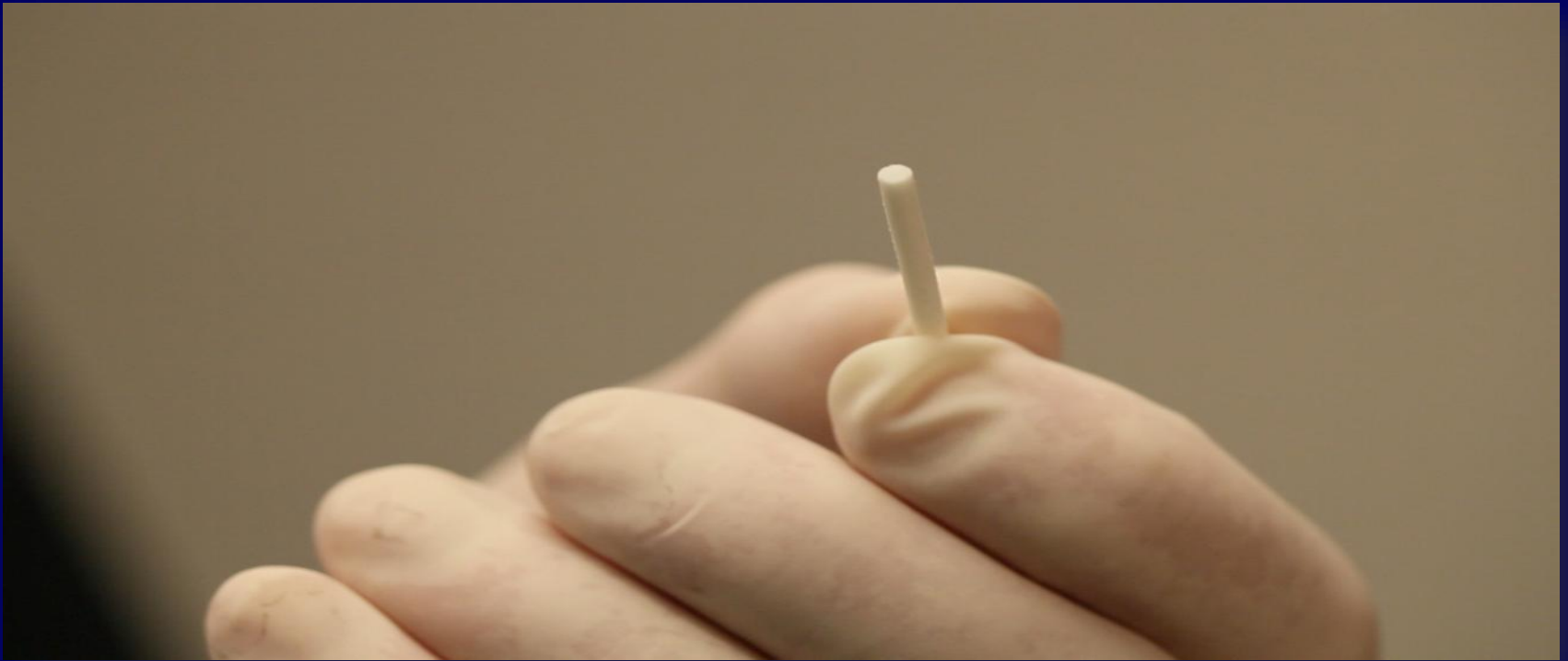
- 8-10 fold reduction in death rate
- Reduction in drug use
- Reduction in criminal activity
- Increased treatment retention
- Engagement in socially productive roles;
improved family and social function
- Increased employment
- Improved physical and mental health
- Reduced spread of infectious disease/HIV



Methadone Maintenance: Disadvantages

- Withdrawal from methadone can be difficult
- Clinic dispensing: daily travel and time commitment
- Variable duration of action
- Diversion
- Stigma

Probuphine Implant



Probuphine

- **Recently FDA Approved**
- Implantable formulation of buprenorphine HCL (80 mg) for the treatment of opioid dependence following clinical stability on low to moderate doses of sublingual buprenorphine (8mg/day or less)
- Probuphine is inserted subdermally into the inner side of the upper arm in a brief in-office procedure under local anesthetic, and provides sustained release of buprenorphine for **6 months**
 - At the end of each 6-month period, Probuphine is removed in a brief, in-office procedure



OVERDOSE PREVEN
PREVENCION D
EQUIPO DE

Overdose Education and Naloxone Distribution (OEND)

- ~20,000 deaths / yr
- Naloxone (injectable and nasal spray)
 - Reverses opiate overdoses
- In early 2015, California law allows pharmacists to distribute naloxone directly to patients

How to identify an opioid overdose:

Look for these common signs:

- The person won't wake up even if you shake them or say their name
- Breathing slows or even stops
- Lips and fingernails turn blue or gray
- Skin gets pale, clammy

In case of overdose:

1 Call 911 and give naloxone

If no reaction in 3 minutes, give second naloxone dose

2 Do rescue breathing or chest compressions

Follow 911 dispatcher instructions

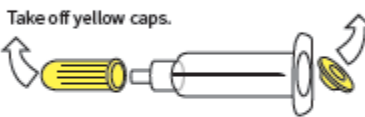
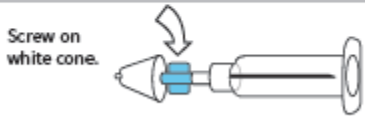
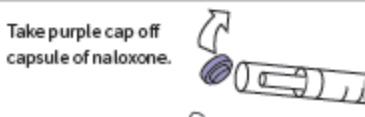


3 After naloxone

Stay with person for at least 3 hours or until help arrives

How to give naloxone:

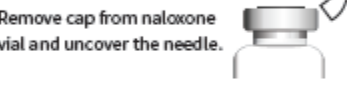
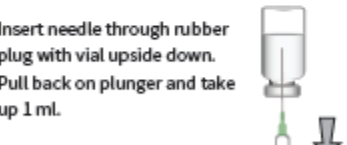
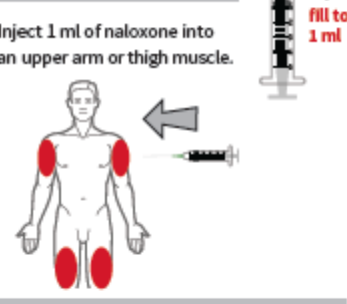
There are 3 ways to give naloxone. Follow the instructions for the type you have.

Nasal spray naloxone

- 1** Take off yellow caps. 
- 2** Screw on white cone. 
- 3** Take purple cap off capsule of naloxone. 
- 4** Gently screw capsule of naloxone into barrel of syringe. 
- 5** Insert white cone into nostril; give a short, strong push on end of capsule to spray naloxone into nose: **ONE HALF OF THE CAPSULE INTO EACH NOSTRIL.** 

Push to spray.
- 6** If no reaction in 3 minutes, give second dose.

Injectable naloxone

- 1** Remove cap from naloxone vial and uncover the needle. 
- 2** Insert needle through rubber plug with vial upside down. Pull back on plunger and take up 1 ml. 
- 3** Inject 1 ml of naloxone into an upper arm or thigh muscle. 

fill to 1 ml
- 4** If no reaction in 3 minutes, give second dose.

Auto-injector

The naloxone auto-injector is FDA approved for use by anyone in the community. It contains a speaker that provides instructions to inject naloxone into the outer thigh, through clothing if needed.

Naloxone Formulations

Generic

Injection Solution: 0.4 MG/1 ML, 1 MG/1 ML

Evzio

Injection Solution: 0.4 MG/0.4 ML

Narcan

Nasal Spray: 4 MG/0.1 ML

Essential Questions of MAT

Aren't I just substituting one
drug for another?

Isn't it better for me to be in
recovery without medications?

How long do I need to
take medication?
Could this be life-long?

My sponsor got sober without medications, so why can't I?

Our treatment program will
never accept MAT.

What MAT looks like at UCLA

- Outpatient offices
- Appointments 3 days a week
- Patients / families call
 - 1 week up to 6 week waitlist for appointment
- Must have insurance or ability to self-pay

What MAT looks like at UCLA

- Intake: 60 min with MD
 - Laboratory studies available on site
- Monthly visits (with frequent communications)
- Therapy off-site, usually
- 12-step highly recommended
- Solo Practice, for all intents and purposes

What MAT looks Like at UCLA

- Electronic records
 - Electronic prescriptions
 - Paper prescriptions for buprenorphine
 - Follow-up visits: 30 min
 - Insurance haggling often occurs
- Prior Authorizations, Visits,

Implementing MAT

Implementing MAT

- Many different, empirically tested models of delivery
 - Differs based on staffing, space, provider capacity, payment structures, program philosophies, etc.
- No ONE model is “the best way” of delivering MAT

General Policies of MAT Delivery

- in accordance with Good Clinical Practice Guideline for each medication;
- under the supervision of a medical professional working within his/her scope of practice;
- as part of a **comprehensive** package of services combining the use of medication with
- counseling, behavioral therapies and other supportive services **must be delivered simultaneously. MAT NEVER IN ISOLATION.**

Principles for Implementation

- Licensed prescribers operating within their scope of practice assist the client in clinical decision-making, assuring awareness of all appropriate therapeutic alternatives.
- Informed consent for all pharmacotherapies must be obtained, including discussion about the advantages and disadvantages of MAT, taking into consideration the benefits, side effects, alternatives, cost, availability, and potential for diversion

Review MAT Policies

- Policies are reviewed at least annually to ensure
- a) consistency with current practice standards in behavioral health care and
b) compliance with federal, state, and county regulations, licensure requirements and accreditation standards.

Recent Major Review of MAT

The MAT models of care that were viewed as particularly successful utilized a designated non-physician staff member in the integration/coordination role

Improving MAT Implementation and Outcome

- Education and outreach critical for reducing stigma associated with MAT,
- increasing the pool of prescribing physicians, and increasing uptake, particularly in settings in which stigma is still high.
- Education was also viewed as critical for improving standards and quality of care.

Challenges to MAT

- including methods for measuring quality of care,
- how to assess patients to better individualize care, optimal psychosocial components of
- MAT, effectiveness of mid-level prescribing, enhancing access to and uptake of MAT in primary care settings,
- effectiveness of newer or alternative medications for OUD

Challenges to MAT

- medications dosing strategies, cost and cost-effectiveness, methods for reducing diversion,
- effective implementation methods, optimal methods for coordination and integration of care
- effectiveness of telemedicine approaches

Further Resources

- SAMHSA Treatment Locator
 - <http://findtreatment.samhsa.gov>
 - 1-800-662-HELP
- PCSS – O; PCSS-MAT
- American Academy of Addiction Psychiatry
- American Society of Addiction Medicine

ASAM developed the National Practice Guideline for the Use of Medications in the Treatment of Addiction Involving Opioid Use to provide information on evidence-based treatment of opioid use disorder.



PCSS - MAT

- PCSS-MAT Mentor Program is designed to offer general information to clinicians about evidence-based clinical practices in prescribing medications for opioid addiction.
- PCSS-MAT Mentors comprise a national network of trained providers with expertise in medication-assisted treatment, addictions and clinical education.
- pcssmat.org/mentoring



Providers' Clinical Support System

For Medication Assisted Treatment

LEARN MORE

What We Do

We are a national training and mentoring project developed in response to the prescription opioid misuse epidemic and the availability of pharmacotherapies to address opioid use disorder. The overarching goal of PCSS-MAT is to make available the most effective medication-assisted treatments to serve patients in a variety of settings, including primary care, psychiatric care, substance use disorder treatment, and pain management settings.

NP and PA Information on MAT Waiver Training

If you are a Nurse Practitioner or Physician Assistant interested in completing the required 24 hours of training for your MAT waiver training, you may take the **8-hour waiver training** immediately. **NOTE: The remaining 16 hours of training have been developed and are under review for CE accreditation. We anticipate these courses to be available in early 2017.**

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Rancho Bernardo Inn, San Diego, CA

December 7-10, 2017

The Annual Meeting and Scientific Symposium provides the latest scientific developments in Addiction Psychiatry for physicians and allied health professionals who treat patients with

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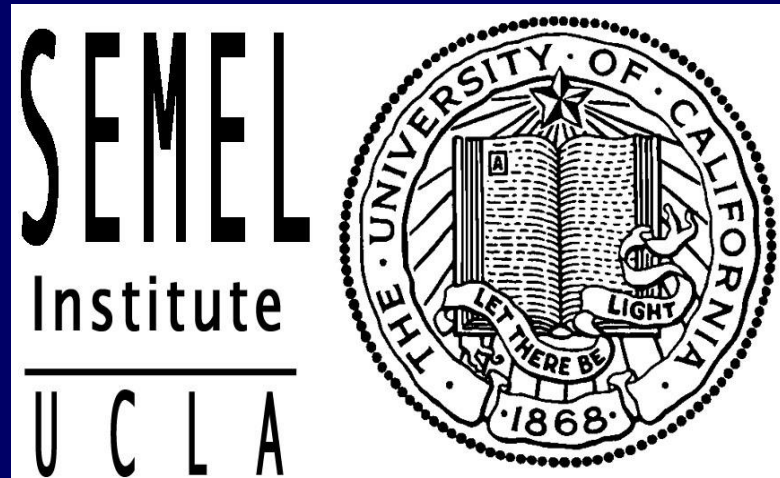
The American Journal
on Addictions

**Obama Administration
Announces Additional
Actions to Address the
Prescription Opioid Abuse
and Heroin Epidemic**

March 28, 2016

Action List: “Turn the Tide”

- Expand access to treatment
- Create MH/SUD Taskforce
- Prevent Overdose Deaths (naloxone)
- SUD Treatment Parity
- Implement Syringe Services Programs
- Medical Schools – Mandated Prescriber Education



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uclagamblingprogram.org