

### **Understanding and Combating the Heroin Epidemic**

Kelly Dunn, Ph.D.

Assistant Professor; Johns Hopkins School of Medicine Department of Psychiatry and Behavioral Sciences

### Talk Outline



- What is causing the heroin epidemic?
- How does that impact opioid overdose?
- What can be done?

### Talk Outline

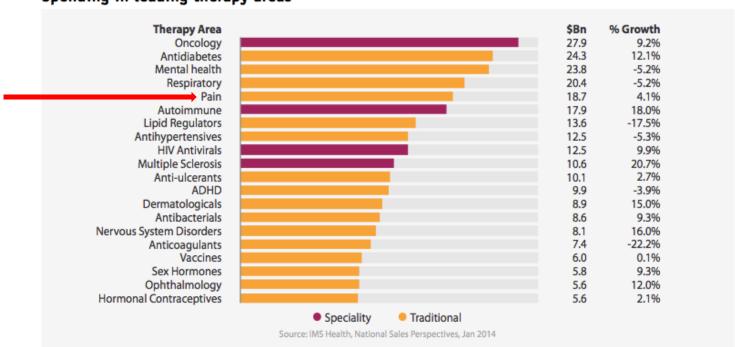


- What is causing the heroin epidemic?
- How does that impact opioid overdose?
- What can be done?

### Treatment of Pain is a Billion Dollar Industry

# Over one-third of spending is concentrated in the top 5 therapies

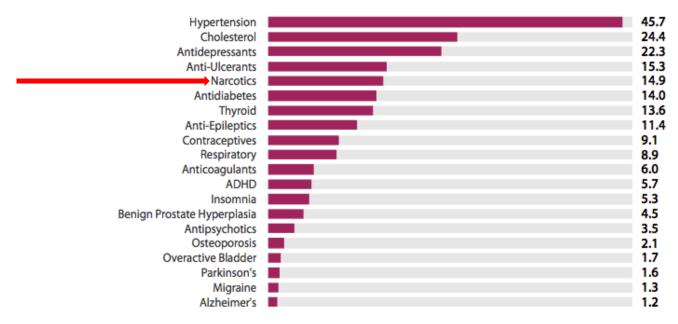
#### Spending in leading therapy areas



# Narcotics are Among the Top 5 Prescribed Medications

### On-therapy patients - 2013

#### Treated patients in selected therapies, millions

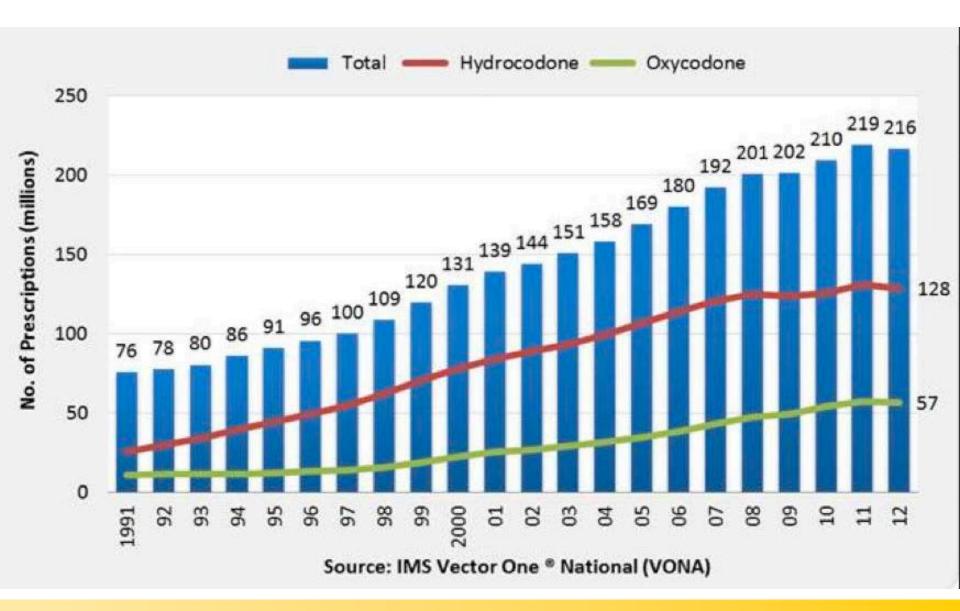


Source: IMS Health, NPA Market Dynamics, Jan 2014

### Top Generic Prescriptions (2010)

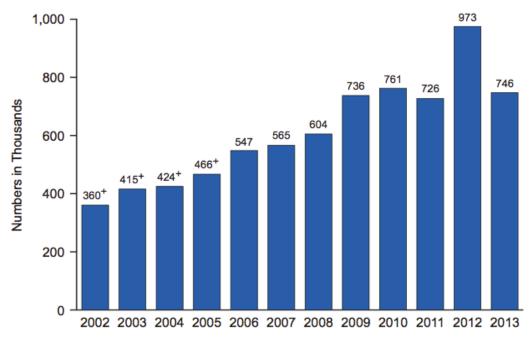
- 1. <u>Hydrocodone + acetaminophen [Vicodin]</u> (n=122,806,850)
- 18. Oxycodone + acetaminophen [Percocet] (n=28,705,243)
- 46. Propoxyphene + acetaminophen [Darvon] (n=14,274,354)
- 51. Oxycodone [OxyContin] (n=12,652,375)
- 114. Fentanyl patch (n=4,914,785)
- 121. Methadone (n=4,558,532)
- 170. Morphine (n=2,740,358)
- 192. Hydromorphone [Dilaudid] (n=2,272,481)

### Opioid Prescriptions Dispensed



### Drug Availability Corresponds to Drug Use

Figure 7.9 Received Most Recent Treatment in the Past Year for the Use of Pain Relievers among Persons Aged 12 or Older: 2002-2013



<sup>&</sup>lt;sup>+</sup> Difference between this estimate and the 2013 estimate is statistically significant at the .05 level.

### FDA Response to Opioid Abuse and Diversion

# Risk Evaluation and Mitigation Strategy (REMS) for Extended-Release and Long-Acting Opioids

On July 9, 2012, FDA approved a risk evaluation and mitigation strategy (REMS) for extended-release (ER) and long-acting (LA) opioid medications.

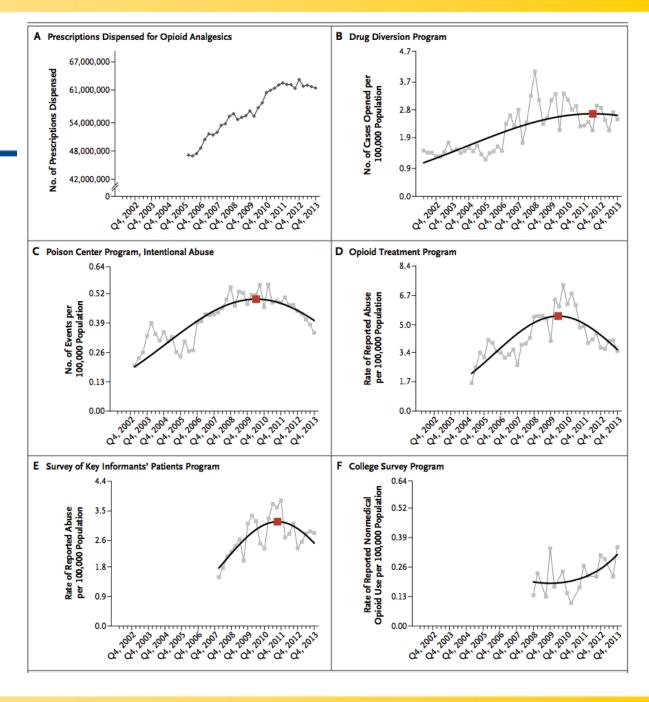
ER/LA opioids are highly potent drugs that are approved to treat moderate to severe persistent pain for serious and chronic conditions (list of ER/LA opioid products). The misuse and abuse of these drugs have resulted in a serious public health crisis of addiction, overdose, and death.

The REMS is part of a multi-agency Federal effort to address the growing problem of prescription drug abuse and misuse. The REMS introduces new safety measures to reduce risks



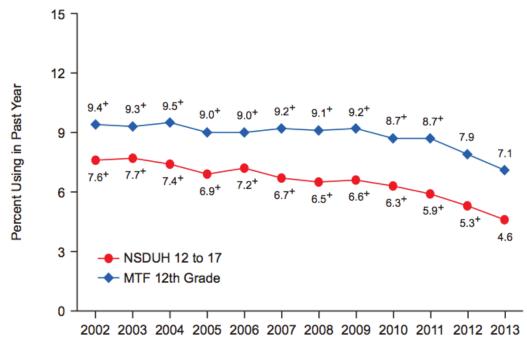
and improve safe use of ER/LA opioids while continuing to provide access to these medications for patients in pain.

# Efforts to reduce prescription opioid abuse are working



### Drug Availability Corresponds to Drug Use

Figure 8.5 Past Year Nonmedical Pain Reliever Use among Youths in NSDUH and MTF: 2002-2013

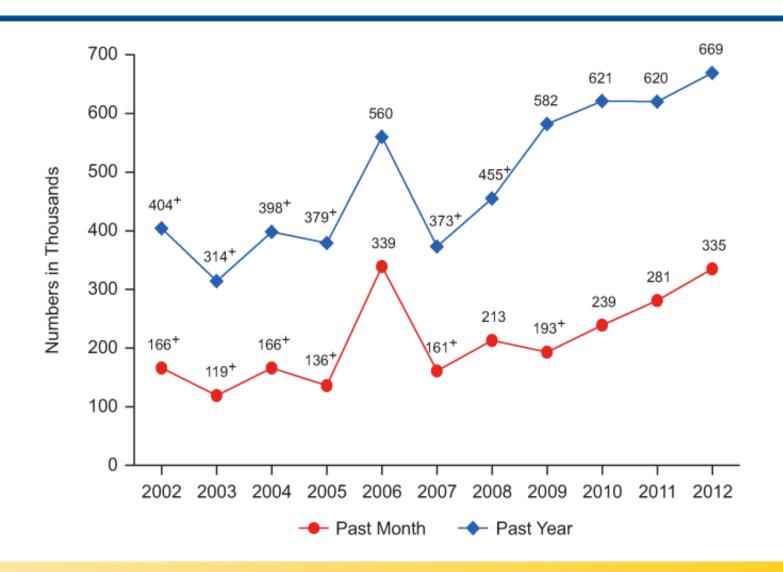


MTF = Monitoring the Future; NSDUH = National Survey on Drug Use and Health.

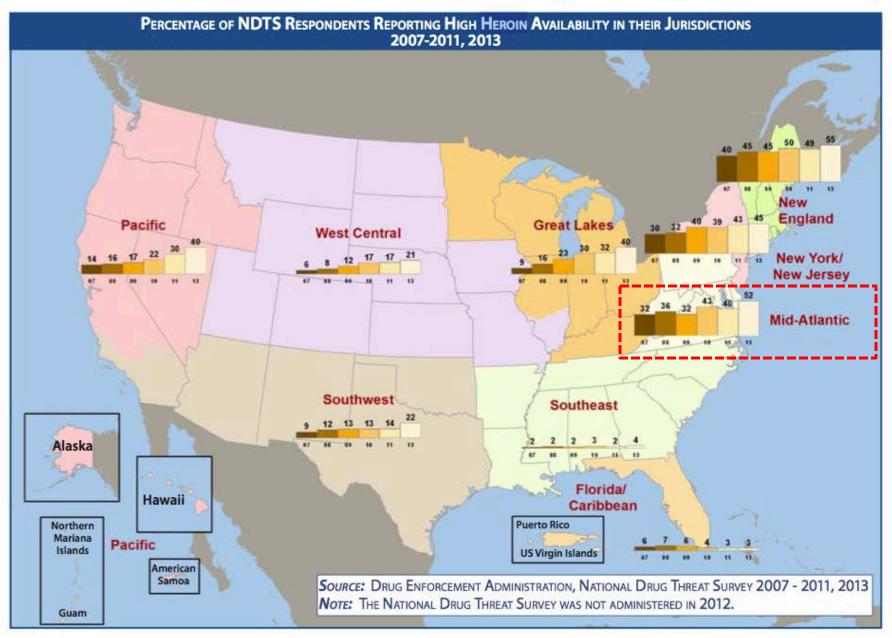
Note: Data for MTF are for "narcotics other than heroin."

<sup>&</sup>lt;sup>+</sup> Difference between this estimate and the 2013 estimate is statistically significant at the .05 level.

### So Why is Heroin Use Increasing?



### 2013 National Drug Threat Assessment Summary



### Why is Heroin Use Increasing?

In correspondence dated August 10, 2010, Purdue notified FDA that it had ceased shipment of original OxyContin, and FDA subsequently moved original OxyContin to the "Discontinued Drug Product List" section of the Orange Book. In a letter to FDA dated March 19, 2013,

### **Original Tablet**





#### **Reformulated Tablet**





### How Does Route of Drug Administration Play A Role?

- Change in OxyContin formulation means that pill was being used orally instead of IV/IN
  - May require much larger quantities of oral OxyContin to meet demands for physiological tolerance in IV drug users
  - There are very few (if any?) prescription opioid substitutes for OxyContin IV use because most others are compounded with NSAIDs (acetaminophen, aspirin)

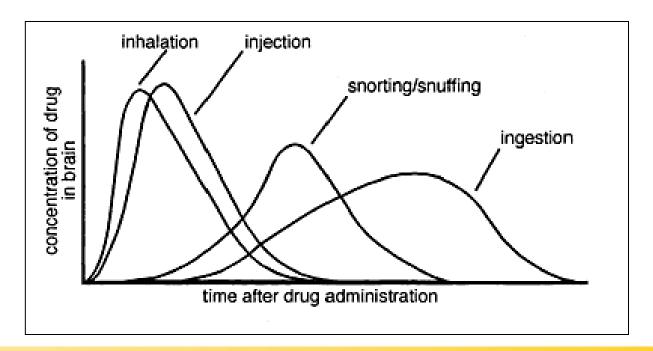


Figure 1. Respondents Who Endorsed Past-Month Use of OxyContin or Heroin Before and After the Introduction of an Abuse-Deterrent Formulation (ADF)

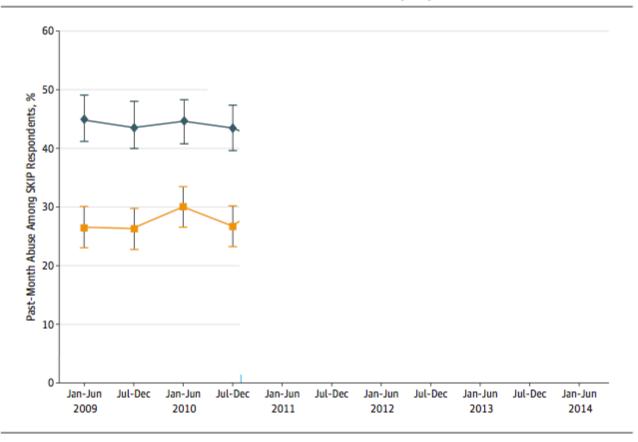
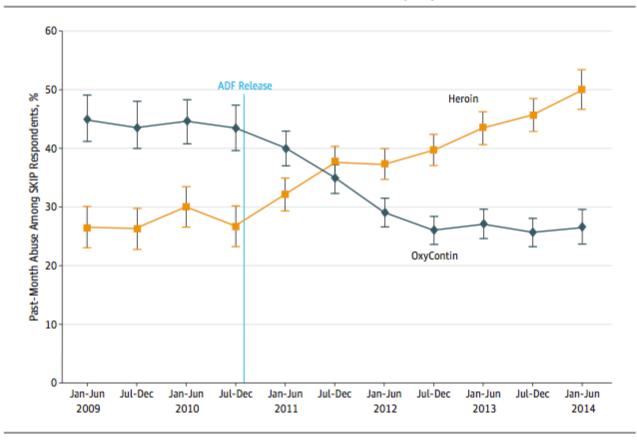


Figure 1. Respondents Who Endorsed Past-Month Use of OxyContin or Heroin Before and After the Introduction of an Abuse-Deterrent Formulation (ADF)



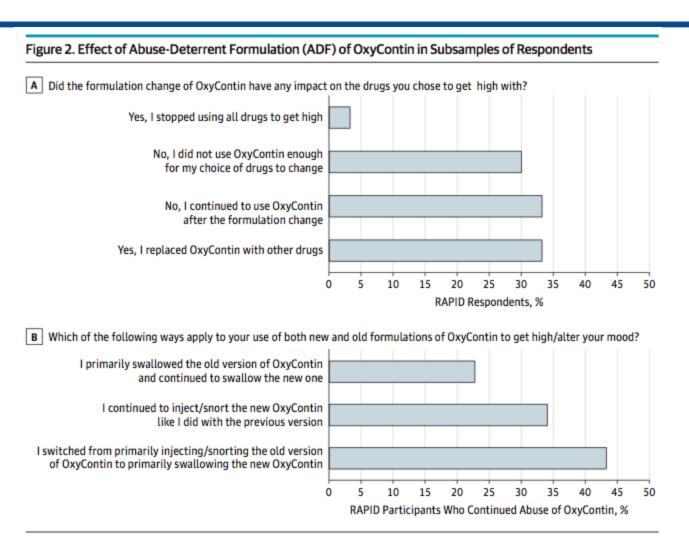
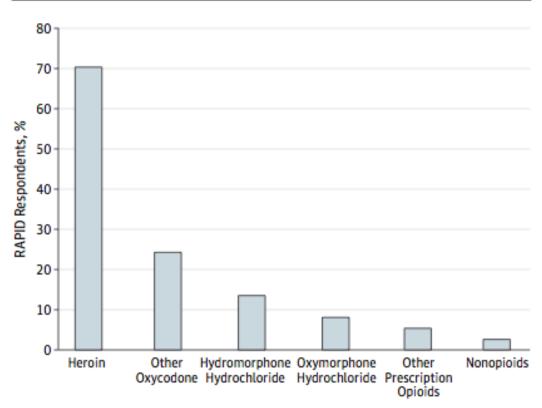
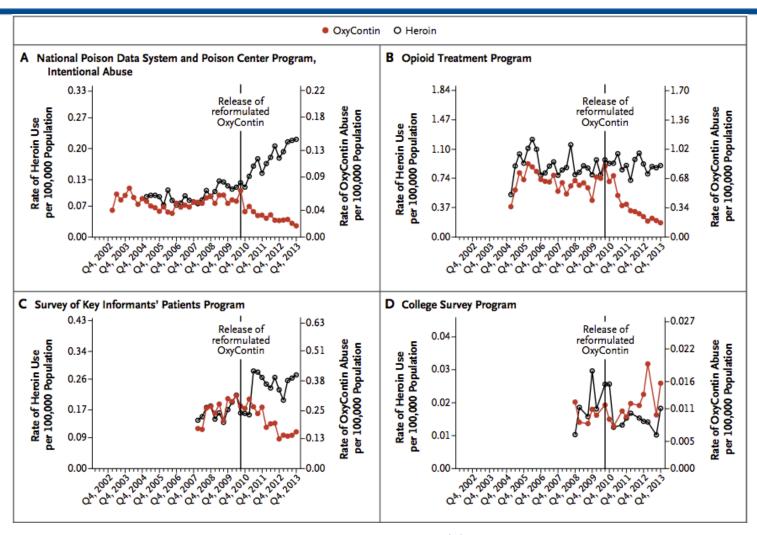


Figure 3.Drugs Used to Replace OxyContin After the Introduction of the Abuse-Deterrent Formulation (ADF)



Drugs Selected to Replace OxyContin



## Reminder that opioid use disorder is A JOHNS HOPKINS a chronic, relapsing disease



### Drug Dependence, a Chronic Medical Illness

Implications for Treatment, Insurance, and Outcomes Evaluation

A. Thomas McLellan, PhD

David C. Lewis, MD

Charles P. O'Brien, MD, PhD

Herbert D. Kleber, MD

ANY EXPENSIVE AND DISturbing social problems can be traced directly to drug dependence. Recent studies1-4 estimated that drug dependence costs the United States approximately \$67 billion annually in crime, lost work productivity, foster care, and other social problems.24 These expensive effects of drugs on all social systems have been important in shaping the public view that drug dependence is primarily a social problem that requires interdiction and law enforce-

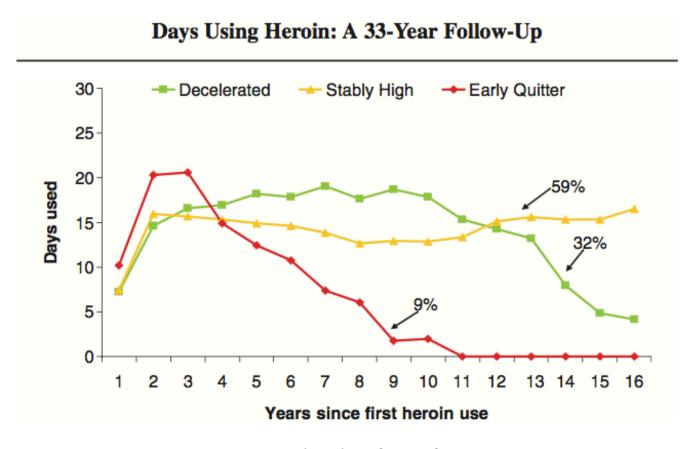
The effects of drug dependence on social systems has helped shape the generally held view that drug dependence is primarily a social problem, not a health problem. In turn, medical approaches to prevention and treatment are lacking. We examined evidence that drug (including alcohol) dependence is a chronic medical illness. A literature review compared the diagnoses, heritability, etiology (genetic and environmental factors), pathophysiology, and response to treatments (adherence and relapse) of drug dependence vs type 2 diabetes mellitus, hypertension, and asthma. Genetic heritability, personal choice, and environmental factors are comparably involved in the etiology and course of all of these disorders. Drug dependence produces significant and lasting changes in brain chemistry and function. Effective medications are available for treating nicotine, alcohol, and opiate dependence but not stimulant or marijuana dependence. Medication adherence and relapse rates are similar across these illnesses. Drug dependence generally has been treated as if it were an acute illness. Review results suggest that long-term care strategies of medication management and continued monitoring produce lasting benefits. Drug dependence should be insured, treated, and evaluated like other chronic illnesses.

JAMA. 2000;284;1689-1695

www.jama.com

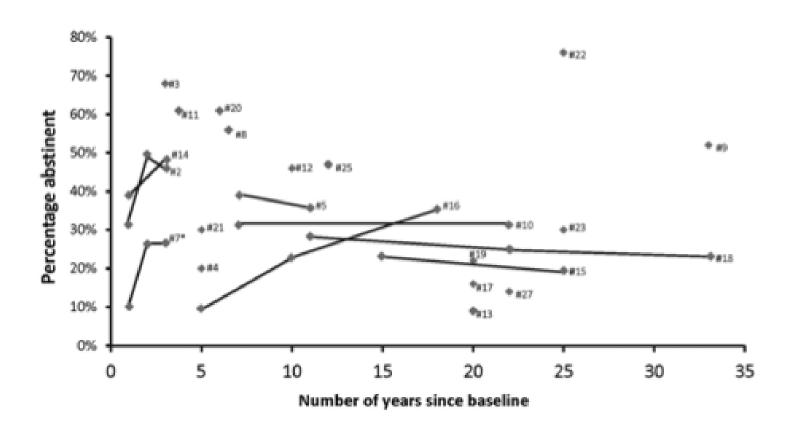
# Opioid Users Require Extensive Treatment Experience Before Abstaining

 Opioid users enter treatment an average of 8 times before staying abstinent.



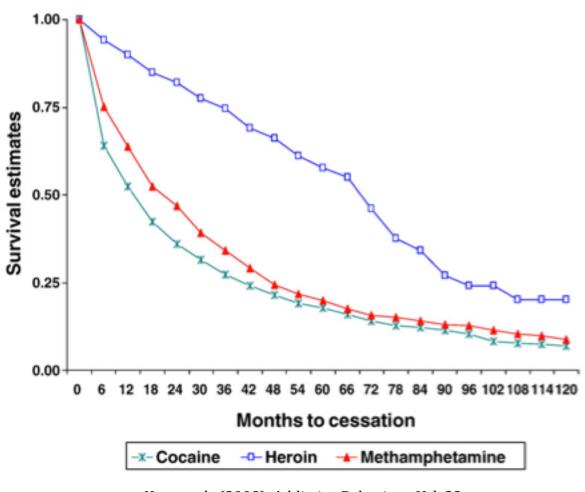
Hser (2007). Eval Rev, Vol. 31

# Current Long-term Prognosis is not Very Promising



Hser et al., 2015, Harv Rev Psychiatry, Vol. 23 (2), pp 76-89.

## Opioid Users Require Extensive Treatment Experience Before Abstaining



Hser et al., (2008). Addictive Behaviors, Vol. 33

### Talk Outline



- What is causing the heroin epidemic?
- How does that impact opioid overdose?
- What is being done nationally and in research to reduce the epidemic?

### Opioid-related Overdose is Increasing

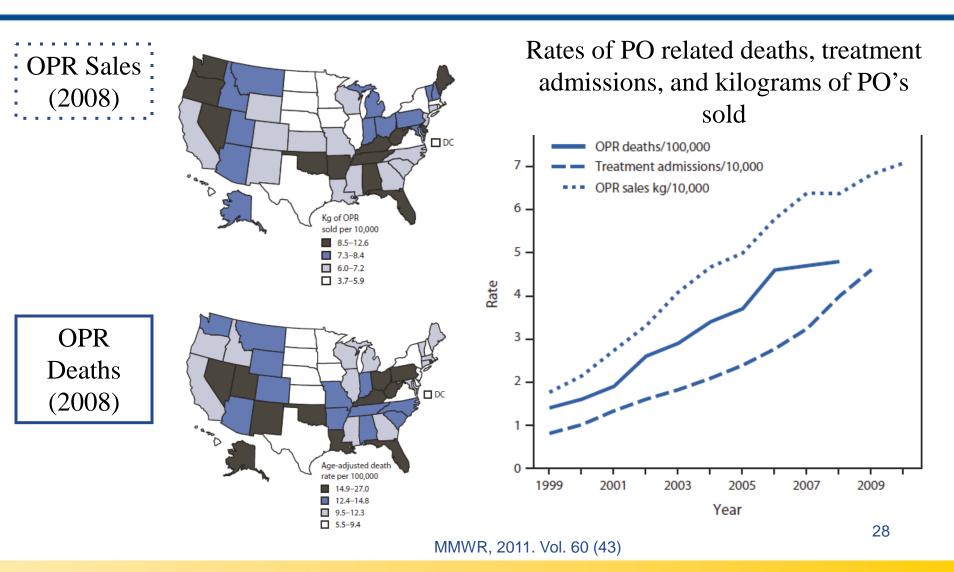
- Opioid OD has increased in all segments of society:
  - Drug users
  - Chronic pain patients
  - Elderly
  - Children
  - Women
  - Adolescents
  - Homeless Individuals

- Significantly more likely to occur following change in tolerance
  - Detoxification
  - Leaving jail or prison
  - Induction onto methadone treatment

### 10 Leading Causes of Injury Deaths by Age Group Highlighting Unintentional Injury Deaths, United States – 2011

	Age Groups										L
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	Total
1	Unintentional Suffocation 896	Unintentional Drowning 438	Unintentional MV Traffic 350	Unintentional MV Traffic 437	Unintentional MV Traffic 6,926	Unintentional Poisoning 7,652	Unintentional Poisoning 8,075	Unintentional Poisoning 10,379	Unintentional Poisoning 5,048	Unintentional Fall 22,901	Unintentional Poisoning 36,280
2	Homicide Unspecified 142	Unintentional MV Traffic 330	Unintentional Drowning 128	Suicide Suffocation 177	Homicide Firearm 3,825	Unintentional MV Traffic 5,569	Unintentional MV Traffic 4,425	Unintentional MV Traffic 5,240	Unintentional MV Traffic 4,184	Unintentional MV Traffic 6,225	Unintentional MV Traffic 33,783
3	Unintentional MV Traffic 93	Homicide Unspecified 181	Unintentional Fire/Burn 81	Homicide Firearm 107	Unintentional Poisoning 3,440	Homicide Firearm 3,271	Suicide Firearm 2,837	Suicide Firearm 4,100	Suicide Firearm 3,522	Unintentional Unspecified 4,630	Unintentional Fall 27,483
4	Homicide Other Spec., Classifiable 82	Unintentional Suffocation 144	Homicide Firearm 55	Unintentional Drowning 107	Suicide Firearm 2,168	Suicide Firearm 2,740	Suicide Suffocation 1,959	Suicide Suffocation 2,062	Unintentional Fall 2,141	Suicide Firearm 4,526	Suicide Firearm 19,990
5	Unintentional Drowning 52	Unintentional Fire/Burn 130	Unintentional Suffocation 34	Suicide Firearm 91	Suicide Suffocation 1,898	Suicide Suffocation 2,055	Homicide Firearm 1,718	Suicide Poisoning 1,946	Suicide Poisoning 1,411	Unintentional Suffocation 3,402	Homicide Firearm 11,068
6	Undetermined Suffocation 40	Homicide Other Spec., Classifiable 92	Unintentional Other Land Transport 31	Unintentional Other Land Transport 47	Unintentional Drowning 543	Suicide Poisoning 816	Suicide Poisoning 1,280	Unintentional Fall 1,368	Suicide Suffocation 1,107	Adverse Effects 1,628	Suicide Suffocation 9,913
7	Unintentional Unspecified 28	Unintentional Pedestrian, Other 88	Unintentional Natural/ Environment 28	Unintentional Suffocation 43	Homicide Cut/Pierce 395	Undetermined Poisoning 594	Undetermined Poisoning 655	Homicide Firearm 1,147	Unintentional Suffocation 644	Unintentional Poisoning 1,581	Suicide Poisoning 6,564
8	Unintentional Fire/Burn 24	Unintentional Struck by or Against 56	Unintentional Firearm 16	Unintentional Fire/Burn 42	Suicide Poisoning 349	Homicide Cut/Pierce 447	Unintentional Fall 524	Undetermined Poisoning 952	Homicide Firearm 546	Unintentional Fire/Burn 1,073	Unintentional Suffocation 6,242
9	Homicide Suffocation 23	Homicide Firearm 48	Unintentional Pedestrian, Other 16	Unintentional Poisoning 35	Undetermined Poisoning 252	Unintentional Drowning 442	Unintentional Drowning 414	Unintentional Suffocation 536	Unintentional Fire/Burn 522	Unintentional Natural/ Environment 825	Unintentional Unspecified 5,871
10	Unintentional Natural/ Environment 21	Unintentional Natural/ Environment 40	Two Tied* 15	Unintentional Other Transport 32	Unintentional Fall 205	Unintentional Fall 279	Homicide Cut/Pierce 317	Unintentional Drowning 479	Unintentional Unspecified 496	Suicide Poisoning 751	Unintentional Drowning 3,556

# Opioid OD Rates Increase as a Function of Drug Availability



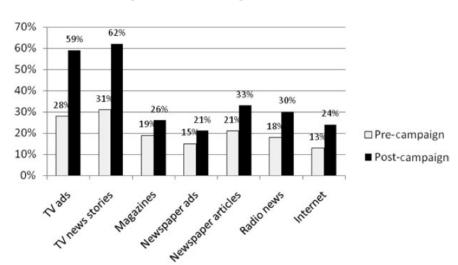
### Talk Outline



- What is causing the heroin epidemic?
- How does that impact opioid overdose?
- What can be done?

### What can be done?

- 1. Increase patient and public education
  - Prescription opioid use is perceived as safer and less risky than other drugs
  - Utah Prescription Safety
     Program is a good model



# Prescription Pain Medication What you need to know.

Last year, unintentional prescription pain medication overdoses were the number one cause of injury deaths in Utah, even more than motor vehicle crashes.

#### How you can prevent death from overdose:

- Never take prescription pain medication that is not prescribed to you
- Never adjust your own doses
- 3. Never mix with alcohol
- Taking sleep aids or anti-anxiety medica tions together with prescription pain medication can be dangerous
- Always tell your healthcare provider about all medications you are taking from any source
- 6. Keep track of when you take all medications
- Keep your medications locked in a safe place
- 8. Dispose of any unused medications

#### Signs of abuse/misuse:

- · Experimenting with medications recreationally
- · Sharing prescriptions with others
- Taking too much medication to try to control pain
- Mixing prescription pain medications with alcohol, street drugs, or other prescription medications

#### Signs of addiction (the 4 C's):

- · Impaired control over drug use
- · Compulsive use
- Continued use despite physical, mental, or social harm
- Craving

#### Signs of when to seek medical help:

Call 911 immediately if a person demonstrates any of the following signs while on prescription pain medication:

- · Snores heavily and cannot be awakened
- · Has trouble breathing
- Exhibits extreme drowsiness and slow breathing
- Has slow, shallow breathing with little chest movement
- · Has a speeded up or slowed heartbeat
- Feels faint, very dizzy, confused or has heart palpitations

An antidote is available which can reverse the overdose, if medical help is contacted immediately.

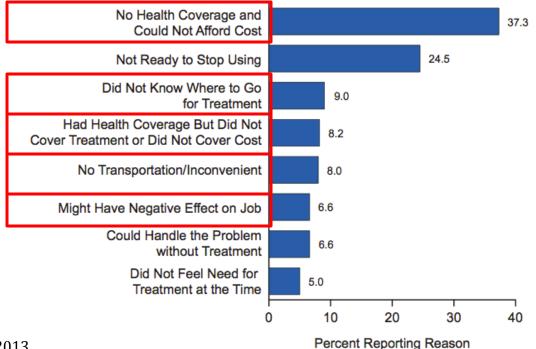


www.useonlyasdirected.org

Copyright O Utah Department of Health

### 2. Increase Access to Treatment (Reduce Barriers):

Figure 7.11 Reasons for Not Receiving Substance Use Treatment among Persons Aged 12 or Older Who Needed and Made an Effort to Get Treatment But Did Not Receive Treatment and Felt They Needed Treatment: 2010-2013 Combined



31

### What treatment(s) should be provided?

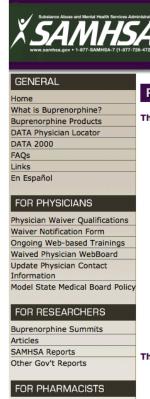
- Agonist replacement (Maintenance)
  - Methadone
    - Schedule II, prescribed from regulated clinic
  - Buprenorphine (Suboxone)
    - Schedule III, can be prescribed from primary care setting
- Antagonist treatment
  - Naltrexone (oral, extended release Vivitrol)
- Detoxification
  - Outpatient vs. Residential

### What treatment(s) should be provided?

- Agonist replacement (Maintenance)
  - Methadone
    - Schedule II, prescribed from regulated clinic
  - Buprenorphine (Suboxone)
    - Schedule III, can be prescribed from primary care setting
- Antagonist treatment
  - Naltrexone (oral, extended release Vivitrol)
- Detoxification
  - Outpatient vs. Residential

# Increase Access to Treatment (Make Treatment More Available):

• 3. Increase number of providers who CAN prescribe buprenorphine



#### **Physician Waiver Qualifications**

#### The Drug Addiction Treatment Act of 2000 (DATA 2000)

This act enables *qualifying physicians* to receive a *waiver* from the special registration requirements in the Controlled Substances Act for the provision of medication-assisted opioid therapy. This waiver allows qualifying physicians to practice medication-assisted opioid addiction therapy with Schedule III, IV, or V narcotic medications specifically approved by the **Food and Drug Administration (FDA)**. On October 8, 2002 buprenorphine products received FDA approval for the treatment of opioid addiction.

Buprenorphine

To receive a waiver to practice opioid addiction therapy with approved Schedule III, IV, or V narcotics a physician must notify the Center for Substance Abuse Treatment (CSAT, a component of the Substance Abuse and Mental Health Services Administration) of his or her intent to begin dispensing or prescribing this treatment. This Notification of Intent must be submitted to CSAT before the initial dispensing or prescribing of opioid therapy. The "waiver notification" section on this Site provides information on how to obtain and submit a Notification of Intent form. The Notification of Intent can be submitted on-line from this Web site, or via ground mail or fax.

The Notification of Intent must contain information on the physician's qualifying credentials (as defined below) and additional certifications including that the physician has the capacity to refer such addiction therapy patients for appropriate counseling and other non-pharmacologic therapies, and that the physician will not have more than 30 patients on such addiction therapy at any one time for the first year. (Note: The 30-patient limit is not affected by the number of a physician's practice locations. One year after the date on which the physician submitted the initial notification, the physician will be able to submit a second notification stating the need and intent to treat up to 100 patients.)

#### The Drug Enforcement Administration (DEA)

The Drug Enforcement Administration (DEA) assigns the physician a special identification number. DEA regulations require this ID number to be included on all buprenorphine prescriptions for opioid addiction therapy, along with the physician's regular DEA registration number.

34

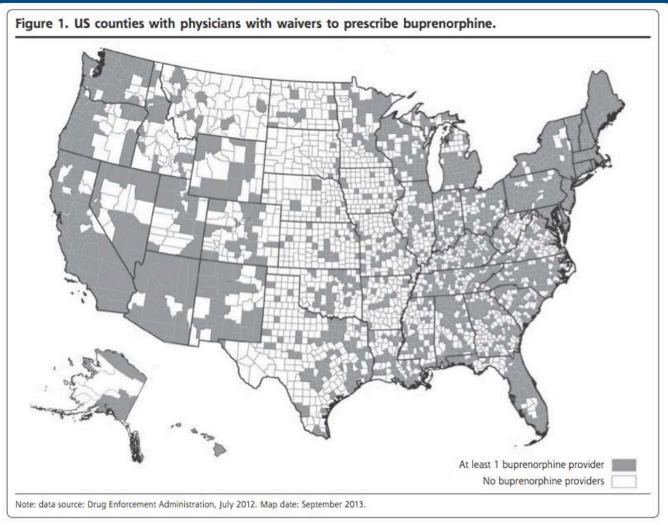
# Increase Access to Treatment (Make Treatment More Available):

- 4. Increase number of waivered physicians who WILL prescribe, and/or the number of people to whom they will prescribe:
  - In a survey of 152 national providers, adoption rates were 17% (buprenorphine), 7.2% (methadone), 9.3% (naltrexone), reaching only 9.2% of patients with opioid use disorder (Knudsen & Roman, 2012).
  - Lack of access to a prescribing physician cited as barrier in 38% (public sector treatments) and 23% (private sector) of cases (Roman et al., 2011).

### 4.a. Develop supportive resources for prescribers

Telehealth, computer-based counseling services for prescribers

# Increase Access to Treatment (Make Treatment More Available):



# Increase Access to Treatment (Make Treatment More Available):

- Treatment options are even more scare in rural areas
  - Study conducted in VT reported:
    - Wait list of 964 people for methadone clinic (a 1.9 year delay in treatment access)
    - Majority of patients travel more than 60 min/day to attend treatment
    - 22% reported that travel directly interfered with their ability to be employed

# 5. Reduce Stigma Associated with Treatment



- Stigma stems from
  - Lack of understanding that opioid use disorder is a chronic, relapsing medical illness
  - Treating opioid use disorder treatment separate from the rest of health care
    - Other needs are frequently not met
  - Language regarding methadone conveys negative associations (both community and patients)



# 6. Inform Providers About The Wide Range of Empirically-Supported Treatment Options Available

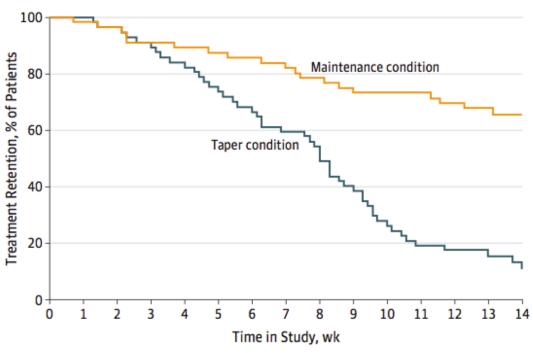
# No Difference in Methadone vs. Buprenorphine Maintenance

- Meta-analysis of 31 randomized, controlled trials (5430 participants) reported equal
  - Retention in treatment
  - Reduction in opioid-positive urine samples
  - Reduction in comorbid drug use
  - \*\* Provided buprenorphine dose was ≥7mg

# Maintenance is more effective than detoxification



Figure 2. Treatment Retention and Mean Buprenorphine Dosage for Patients With Prescription Opioid Dependence



Mean buprenorphine dosage, mg/d

Maintenance condition 14.9 15.1 15.2 15.3 15.3 16.0 15.9 16.2 16.2 16.6 16.8 16.2 16.1 15.8 14.6 Taper condition 15.6 15.4 15.3 14.2 9.7 5.7 3.1 0.6 0.2 0 0 0 0

# Detox may still be preferable in some subgroups:



- Younger individuals
- People with less severe dependencies
- Prescription opioid vs. heroin users
- Rural areas that are lacking maintenance options
- Hospital-based settings

# Residential Detoxification vs. Outpatient Detoxification

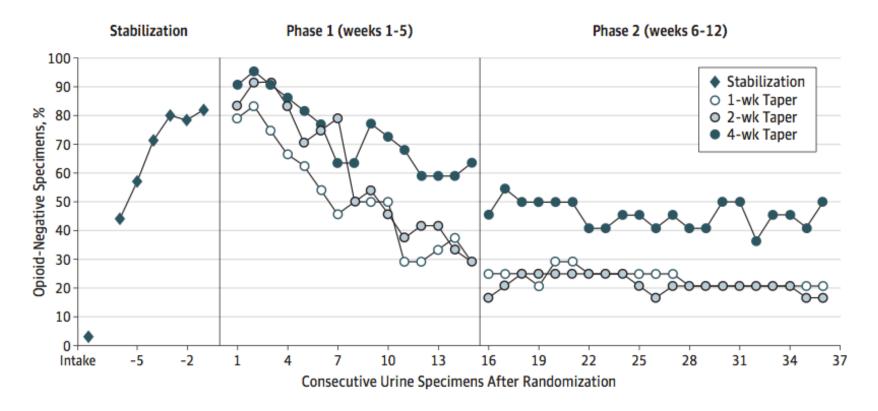


 Residential is more successful than outpatient detoxification but is more costly and has similar relapse rates

	Completion	Taking naltrexone 1 month later	Opioid- free at 1 month	Opioid- free at 6 months
Residential	51.4%	14%	22.9%	22.9%
Outpatient	36.4%	18%	15.1%	9.1%

# Regarding Outpatient: Longer Detoxifications are More Effective Than Shorter Detoxifications

 4-week taper produced greater reductions in opioid-positive UA's and higher likelihood of beginning naltrexone treatment



Sigmon, Dunn et al., (2013). JAMA Psychiatry, Vol. 70 (12)

# Majority of Patients Relapse Following Detox

- Up to 89.9% fail to complete detoxification, and 70% of completers relapse within 30 days of completing a detoxification
- <u>Naltrexone</u> can delay relapse prevention but many providers do not know about and/or prescribe naltrexone
  - 7. Increase prescriber knowledge of naltrexone

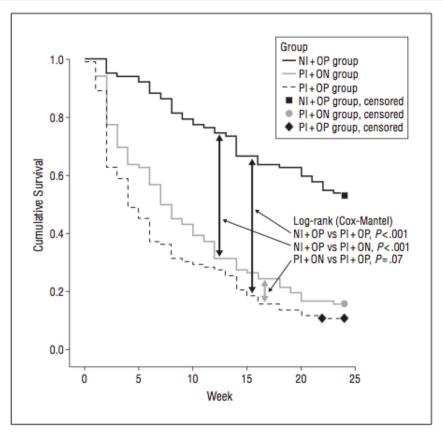
# Oral Naltrexone is Effective At Preventing Relapse



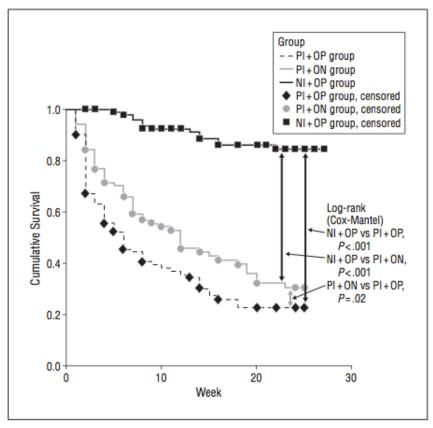
- 30-days of oral naltrexone substantially improves long-term outcomes
- However, patients do not take it
  - Meta-analysis of 13 studies (1158 patients) concluded there is no benefit of ORAL naltrexone except following release from jail/prison
    - May be ideal following incarceration because they have been detoxed already
  - Supportive programs can increase ORAL naltrexone adherence
    - 8. Develop supportive programs to increase naltrexone compliance

# Extended Release Naltrexone (Vivitrol) is More Effective than Oral Naltrexone





**Figure 2.** Kaplan-Meier survival evaluating treatment dropout and relapse. NI+OP indicates 1000-mg naltrexone implant and oral placebo (n=102); PI+NO, placebo implant and 50-mg oral naltrexone hydrochloride (n=102); PI+OP, placebo implant and oral placebo (n=102).



**Figure 3.** Kaplan-Meier survival evaluating verified relapse. NI+OP indicates 1000-mg naltrexone implant and oral placebo (n=102); PI+NO, placebo implant and 50-mg oral naltrexone hydrochloride (n=102); PI+OP, placebo implant and oral placebo (n=102).

### Talk Outline



- What is causing the heroin epidemic?
- How does that impact opioid overdose?
- What is being done nationally to reduce the epidemic?
  - Treatment of opioid use disorder
    - Barriers
    - What do we know?
  - Overdose prevention

### Opioid Overdose Reversal



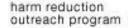
- 9. Make naloxone (Narcan) widely available
  - An antidote to opioid OD
  - Reverses opioid-ODs
    - Not addictive
    - No other side effects
  - Available in IV/IM and IN formulations
    - All formulations reverse OD ~8
      min following administration
    - IN version is not yet FDAapproved





## positive change





outreach site locations + times better vein care safer injection information downloads contribute order materials



## Opiate Overdose Prevention/Intervention

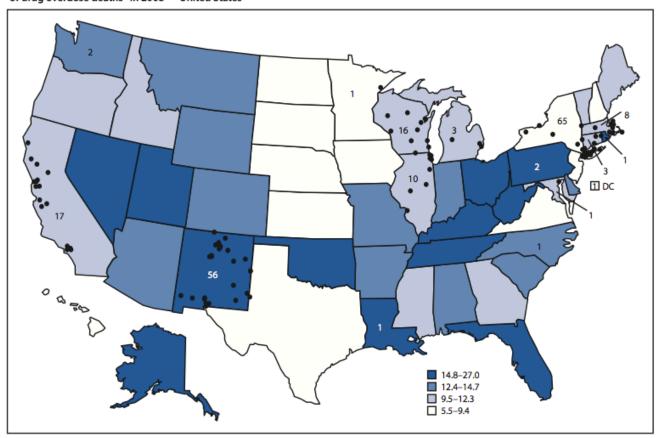




http://www.anypositivechange.org/menu.html

## There are Substantial and Impressive Nationwide Efforts to Train and Distribute Naloxone to Bystanders for OD Intervention

FIGURE 2. Number (N = 188) and location\* of local drug overdose prevention programs providing naloxone in 2010 and age-adjusted rates<sup>†</sup> of drug overdose deaths<sup>§</sup> in 2008 — United States



<sup>\*</sup> Not shown in states with fewer than three local programs.

<sup>†</sup> Per 100,000 population.

<sup>§</sup> Source: National Vital Statistics System. Available at http://www.cdc.gov/nchs/nvss.htm. Includes intentional, unintentional, and undetermined.



### Overdose Reversal

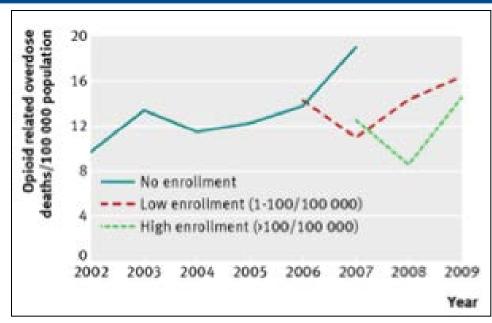


## 10. Develop brief OD education interventions

5-10 min session is effective

## 11. Standing pharmacy orders for Narcan?

 Other states are developing standing pharmacy orders to enable Narcan without personal prescription





### Overdose Reversal



- 12. Increase public and law enforcement acceptance of Narcan
  - Support Good Samaritan Laws for bystander intervention
    - Civil immunity for person calling 911 and for the person overdosing
    - Civil/Criminal immunity for administration of naloxone
  - Educate people that there is NO EVIDENCE that Narcan increases drug use

#### The Maryland Government is Supporting Naloxone

http://adaa.dhmh.maryland.gov/NALOXONE/SitePages/Home.aspx

#### Welcome to the Naloxone (Overdose Response Program - ORP) Site

The Departmentof Health and Mental Hygiene (DHMH) launched Maryland's Overdose Response Program (ORP) in March 2014 to train and certify qualified individuals—e.g. family members, friends and associates of opioid users; treatment program and transitional housing staff; and law enforcement officers—most able to assist someone at risk of dying from an opioid overdose when emergency medical services are not immediately available. Successfully trained individuals will receive a certificate allowing them to obtain and have filled a prescription for naloxone (Narcan®), a life-saving medication that can quickly restore the breathing of a person who has overdosed on heroin or prescription opioid pain medication like oxycodone, hydrocodone, morphine, fentanyl or methadone.

DHMH authorizes private or public entities to conduct educational training programs using a core curriculum that includes information about prescription and non-pharmaceutical opioids and training on how to recognize and respond to an opioid overdose, proper rescue breathing technique, and how to properly administer naloxone and care for the individual until emergency medical help arrives. The training also stresses the importance of calling 911 for the person in distress and reporting the naloxone administration event to the Maryland Poison Center.

## Overdose Response Program Training & Dispensing Statistics\* As of February 28, 2015

- 5,081 individuals trained, including
   2,321 law enforcement officers
- Approximately 4,771 doses of naloxone dispensed
- 64 naloxone administrations reported\*\*
- Training and dispensing statistics are maintained by authorized training entities and reported to DHMH on a monthly basis.
- \*\* Naloxone administration information is voluntarily reported by certificate holders to the Maryland Poison Center or to an authorized training entity and subsequently provided to DHMH on a monthly basis.

## New Naloxone Products in Pipeline

#### FDA approves new hand-held auto-injector to reverse opioid overdose

First naloxone treatment specifically designed to be given by family members or caregivers

The U.S. Food and Drug Administration today approved a prescription treatment that can be used by family members or caregivers to treat a person known or suspected to have had an opioid overdose. Evzio (naloxone hydrochloride injection) rapidly delivers a single dose of the drug naloxone via a hand-held auto-injector that can be carried in a pocket or stored in a medicine cabinet.

It is intended for the emergency treatment of known or suspected opioid overdose, characterized by decreased breathing or heart rates, or loss of consciousness.

#### FDA Fast-Tracks Naloxone Nasal Spray

Ryan Marotta, Assistant Editor

Published Online: Wednesday, February 18, 2015

#### Follow Pharmacy\_Times:







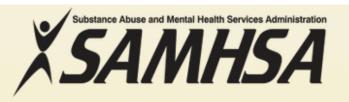






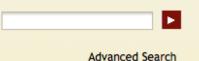
Lightlake Therapeutics recently announced that the FDA has granted Fast Track designation to Adapt Pharma's intranasal naloxone, an opioid overdose reversal agent.

#### http://store.samhsa.gov/product/Opioid-Overdose-Prevention-Toolkit-Updated-2014/SMA14-4742



#### **Publications Ordering**

Sign In | Create an Account | Help



Publicaciones en español



Issues, Conditions & Disorders

Substances

Treatment, Prevention & Recovery

Professional & Research Topics

Location

PRINT

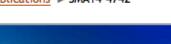
EMAIL

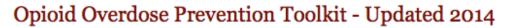
Series

SHARE

Add To Favorites

Publications ► SMA14-4742





Average Rating: 5 out of 59 ratings.



Rate!

Comments

Price: FREE (shipping charges may apply)

Equips communities and local governments with material to develop policies and practices to help prevent opioid-related overdoses and deaths. Addresses issues for first responders, treatment providers, and those recovering from opioid overdose. Updated in 2014.

94 people like this. Sign Up to see what your friends like.



Pub id: SMA14-4742 Publication Date: 8/2014

Popularity: 405 Format: Kit

Audience: Community Coalitions, Law Enforcement, People in Recovery as Audience, Family & Advocates, Professional Care Providers, Prevention Professionals Sign in to access your favorites and other features.

Kit - ELECTRONIC ONLY



Opioid Overdose Prevention Toolkit -Full Document

(PDF, 1 MB)

I. Facts for Community Members

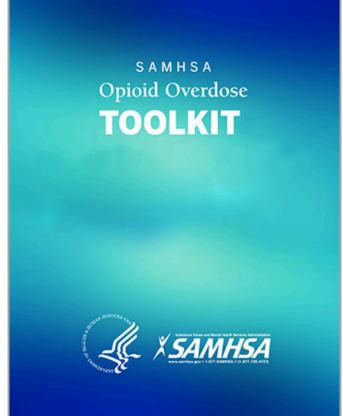
(PDF, 952 KB)

II. Essentials for First Responders

(PDF, 562 KB)

III. Safety Advice for Patients (PDF,

317 KB)



#### Conclusion



- Increased opioid use corresponds to increased number of analgesic prescriptions
  - Heroin epidemic developed from prescription opioid use epidemic
- Once acquired, majority of patients need treatment to abstain
  - May need several courses of treatment
- Good treatment options are available, but need to increase provider acceptance, availability to patients, and reduce stigma regarding treatment
- Overdose can be prevented by addressing risk factors and reversed by prescribing Narcan

### What Can You Do?



- 1. Increase patient and public education
- 2. Increase Access to Treatment (Reduce Barriers)
- 3. Increase number of providers who CAN prescribe buprenorphine
- 4. Increase number of waivered physicians who WILL prescribe, and/or the number of people to whom they will prescribe
  - a. Develop supportive resources for prescribers
- 5. Reduce Stigma Associated with Treatment
- 6. Inform Providers About The Wide Range of Empirically-Supported Treatment Options Available

- 7. Increase prescriber knowledge of naltrexone
- 8. Develop supportive programs to increase naltrexone compliance
- 9. Make naloxone (Narcan) widely available
- 10. Develop brief OD education interventions
- 11. Standing pharmacy orders for Narcan?
- 12. Increase public and law enforcement acceptance of Narcan



## Thank you!

Contact me at:

Kelly Dunn, Ph.D.

kdunn9@jhmi.edu

P: 410-550-2254