

**MAT TRAINING**

**PROVIDERS' CLINICAL SUPPORT SYSTEM**  
**For Medication Assisted Treatment**

# Prescribing Naloxone to Patients for Overdose Reversal

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## Disclosures

- Julie Kmiec, DO, has no financial relationships to disclose.

*The contents of this activity may include discussion of off label or investigative drug uses. The faculty is aware that is their responsibility to disclose this information.*

# Stephen A. Wyatt, DO

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# Accreditation and Designation Statement

- The AOAAM is accredited by the American Osteopathic Association to provide osteopathic continuing medical education for physicians.
- The American Osteopathic Academy of Addiction Medicine (AOAAM) designates this educational activity for a maximum of **1 (one) Category 2B Credit by the AOA CCME** and will report CME and specialty credits commensurate with the extent of the physician's participation in this activity.

Released Date: August 9, 2016

Expiration Date: August 9, 2019

# System Requirements

- In order to complete this online module you will need Adobe Reader. To install for free click the link below:
  - <http://get.adobe.com/reader/>

# Target Audience

- 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, and pain management settings.

# Educational Objectives

At the conclusion of this activity participants should be able to:

- Discuss how the opioid prescribing epidemic is associated with the overdose epidemic
- Discuss opioid overdose risk factors
- Describe the basic pharmacology of naloxone
- Describe studies demonstrating the efficacy of naloxone in bystander overdose
- Name the four different forms of naloxone available for bystander reversal of overdose and discuss to prescribe it



# Overview

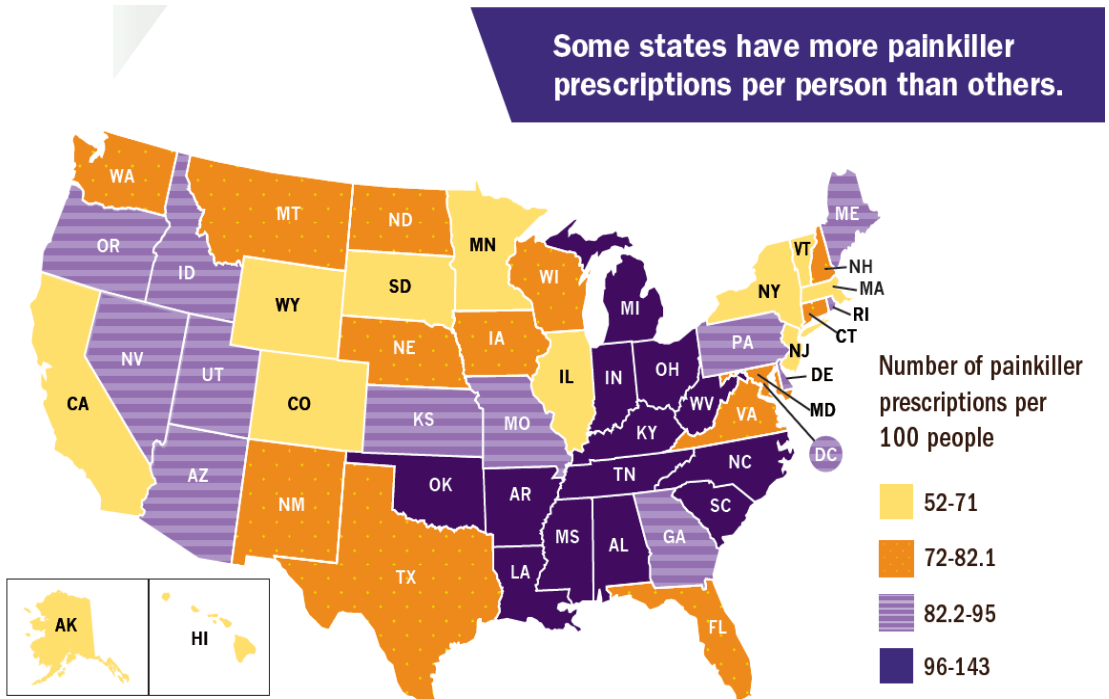
- Opioid epidemic
- Overdose epidemic
- Overdose risk factors
- Naloxone
- Opioid overdose prevention programs
- How you can prescribe naloxone

# OPIOID EPIDEMIC

# Opioid Epidemic

- From 1999 to 2008, the number of opioids prescribed in the US quadrupled (CDC, 2011)
  - Consensus statement from American Pain society and American Academy of Pain Medicine in 1997
    - Little risk of addiction and overdose in pain patients
    - Less than 1% of patients become addicted to opioids
  - Greater emphasis in assessing and treating pain (TJC; Berry & Dahl, 2000), 5th vital sign (APS, VHA)

# Opioid Prescribing



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SOURCE: IMS, National Prescription Audit (NPA™), 2012.

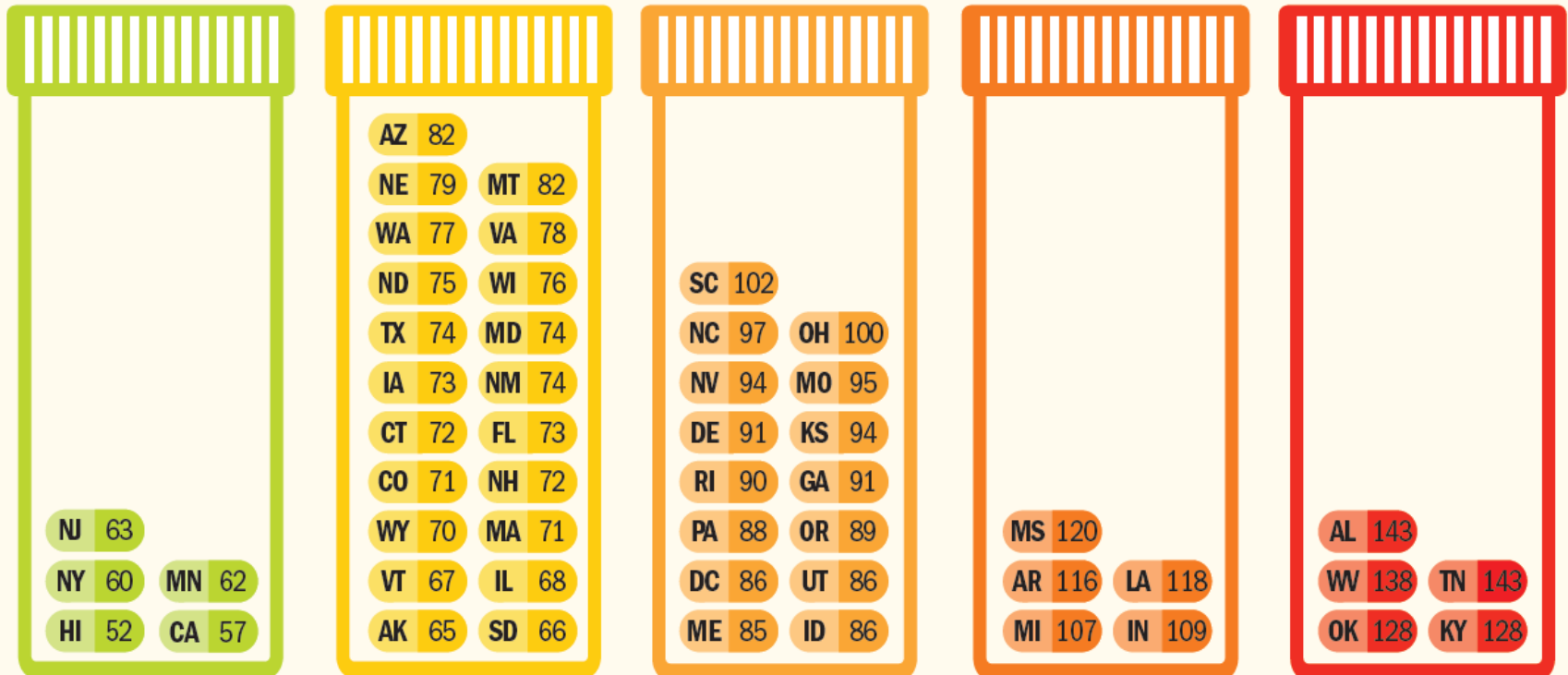
<http://www.cdc.gov/vitalsigns/pdf/2014-07-vitalsigns.pdf>

Number of painkiller prescriptions per 100 people

Lowest

Average

Highest



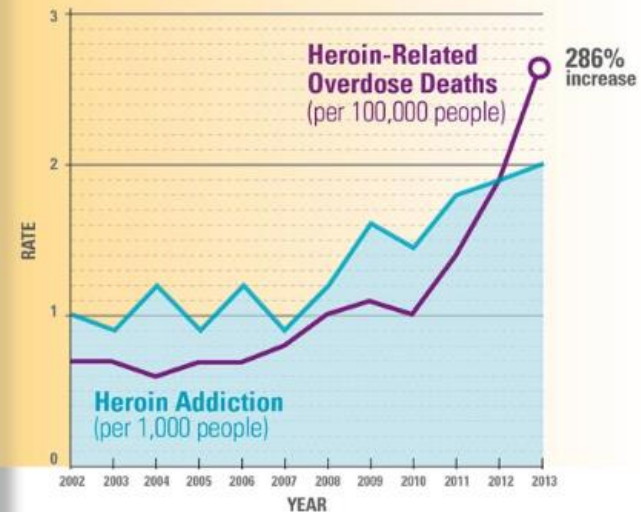
<http://www.cdc.gov/vitalsigns/pdf/2014-07-vitalsigns.pdf>

# Heroin Use

## Heroin Use Has INCREASED Among Most Demographic Groups

	2002-2004*	2011-2013*	% CHANGE
<b>SEX</b>			
Male	2.4	3.6	50%
Female	0.8	1.6	100%
<b>AGE, YEARS</b>			
12-17	1.8	1.6	--
18-25	3.5	7.3	109%
26 or older	1.2	1.9	58%
<b>RACE/ETHNICITY</b>			
Non-Hispanic white	1.4	3	114%
Other	2	1.7	--
<b>ANNUAL HOUSEHOLD INCOME</b>			
Less than \$20,000	3.4	5.5	62%
\$20,000-\$49,999	1.3	2.3	77%
\$50,000 or more	1	1.6	60%
<b>HEALTH INSURANCE COVERAGE</b>			
None	4.2	6.7	60%
Medicaid	4.3	4.7	--
Private or other	0.8	1.3	63%

## Heroin Addiction and Overdose Deaths are Climbing



SOURCES: National Survey on Drug Use and Health (NSDUH), 2002-2013.  
National Vital Statistics System, 2002-2013.

<http://www.cdc.gov/drugoverdose/data/heroin.html>

# OVERDOSE EPIDEMIC

## 6 Leading Causes of Unintentional Injury Deaths, United States 1999, All Races, Both Sexes

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Unintentional Suffocation 472	Unintentional MV Traffic 564	Unintentional MV Traffic 751	Unintentional MV Traffic 904	Unintentional MV Traffic 9,893	Unintentional MV Traffic 6,602	Unintentional MV Traffic 6,533	Unintentional MV Traffic 4,799	Unintentional MV Traffic 3,242	Unintentional Fall 10,097	Unintentional MV Traffic 40,965
2	Unintentional MV Traffic 179	Unintentional Drowning 490	Unintentional Drowning 192	Unintentional Drowning 177	Unintentional Poisoning 964	Unintentional Poisoning 2,355	Unintentional Poisoning 4,549	Unintentional Poisoning 2,844	Unintentional Fall 887	Unintentional MV Traffic 7,468	Unintentional Fall 13,162
3	Unintentional Drowning 68	Unintentional Fire/burn 308	Unintentional Fire/burn 171	Unintentional Fire/burn 92	Unintentional Drowning 647	Unintentional Drowning 446	Unintentional Fall 645	Unintentional Fall 824	Unintentional Poisoning 668	Unintentional Unspecified 6,054	Unintentional Poisoning 12,186
4	Unintentional Fire/burn 44	Unintentional Suffocation 162	Unintentional Suffocation 54	Unintentional Suffocation 78	Unintentional Other Land Transport 386	Unintentional Fall 343	Unintentional Drowning 475	Unintentional Fire/burn 377	Unintentional Unspecified 386	Unintentional Suffocation 3,396	Unintentional Unspecified 7,459
5	Unintentional Unspecified 24	Unintentional Pedestrian, Other 100	Unintentional Other Land Transport 50	Unintentional Other Land Transport 73	Unintentional Firearm 251	Unintentional Fire/burn 288	Unintentional Fire/burn 430	Unintentional Suffocation 374	Unintentional Suffocation 348	Unintentional Fire/burn 1,220	Unintentional Suffocation 5,503
6	Unintentional Natural/Environment 14	Unintentional Fall 55	Unintentional Pedestrian, Other 49	Unintentional Firearm 57	Unintentional Fall 242	Unintentional Other Land Transport 279	Unintentional Pedestrian, Other 308	Unintentional Drowning 370	Unintentional Fire/burn 334	Unintentional Natural/Environment 954	Unintentional Drowning 3,529

**WISQARS™** Produced By: Office of Statistics and Programming, National Center for Injury Prevention and Control, Centers for Disease Control and Prevention

Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System

ov/cgi-bin/broker.exe

CDC WISQARS

[http://www.cdc.gov/injury/wisqars/leading\\_causes\\_death.html](http://www.cdc.gov/injury/wisqars/leading_causes_death.html)



## 6 Leading Causes of Unintentional Injury Deaths, United States 2014, All Races, Both Sexes

	Age Groups										
Rank	<1	1-4	5-9	10-14	15-24	25-34	35-44	45-54	55-64	65+	All Ages
1	Unintentional Suffocation 991	Unintentional Drowning 388	Unintentional MV Traffic 345	Unintentional MV Traffic 384	Unintentional MV Traffic 6,531	Unintentional Poisoning 9,334	Unintentional Poisoning 9,116	Unintentional Poisoning 11,009	Unintentional Poisoning 7,013	Unintentional Fall 27,044	Unintentional Poisoning 42,032
2	Unintentional MV Traffic 61	Unintentional MV Traffic 293	Unintentional Drowning 125	Unintentional Drowning 105	Unintentional Poisoning 3,492	Unintentional MV Traffic 5,856	Unintentional MV Traffic 4,308	Unintentional MV Traffic 5,024	Unintentional MV Traffic 4,554	Unintentional MV Traffic 6,373	Unintentional MV Traffic 33,736
3	Unintentional Drowning 29	Unintentional Suffocation 120	Unintentional Fire/burn 68	Unintentional Fire/burn 49	Unintentional Drowning 507	Unintentional Drowning 399	Unintentional Fall 504	Unintentional Fall 1,340	Unintentional Fall 2,558	Unintentional Unspecified 4,590	Unintentional Fall 31,959
4	Unintentional Natural/Environment 17	Unintentional Fire/burn 117	Unintentional Other Land Transport 36	Unintentional Other Land Transport 49	Unintentional Other Land Transport 177	Unintentional Fall 285	Unintentional Drowning 363	Unintentional Suffocation 452	Unintentional Suffocation 698	Unintentional Suffocation 3,692	Unintentional Suffocation 6,580
5	Unintentional Fire/burn 15	Unintentional Pedestrian, Other 107	Unintentional Suffocation 34	Unintentional Suffocation 33	Unintentional Fall 174	Unintentional Suffocation 194	Unintentional Suffocation 259	Unintentional Drowning 442	Unintentional Unspecified 530	Unintentional Poisoning 1,993	Unintentional Unspecified 5,848
6	Unintentional Unspecified 12	Unintentional Struck by or Against 38	Unintentional Natural/Environment 22	Unintentional Poisoning 22	Unintentional Firearm 148	Unintentional Fire/burn 187	Unintentional Other Spec., classifiable 210	Unintentional Fire/burn 363	Unintentional Fire/burn 517	Unintentional Fire/burn 1,151	Unintentional Drowning 3,406

**WISQARS™** Produced By: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention

Data Source: National Center for Health Statistics (NCHS), National Vital Statistics System

CDC WISQARS [http://www.cdc.gov/injury/wisqars/leading\\_causes\\_death.html](http://www.cdc.gov/injury/wisqars/leading_causes_death.html)

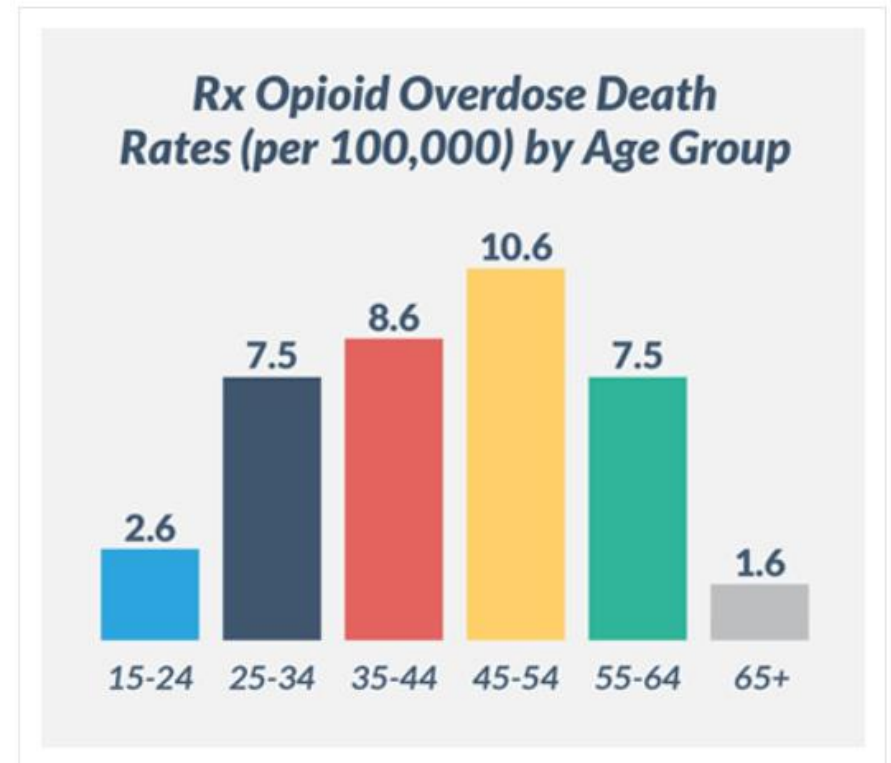
# Overdose Deaths

- Since 2000, there has been a 200% increase in deaths involving opioids
- In 2014, there were approximately 1.5x more drug overdose deaths than deaths from motor vehicle crashes

Rudd et al., 2016

# Prescription Opioid Overdoses

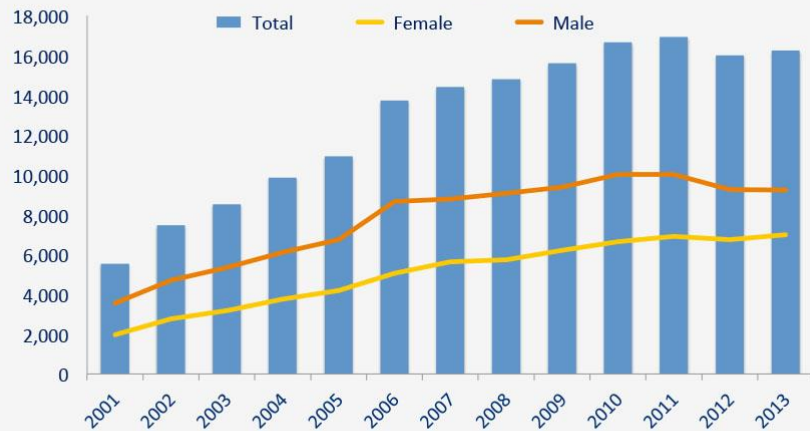
- Every day 46 people die from prescription opioid overdose



<http://www.cdc.gov/vitalsigns/pdf/2014-07-vitalsigns.pdf>

## National Overdose Deaths

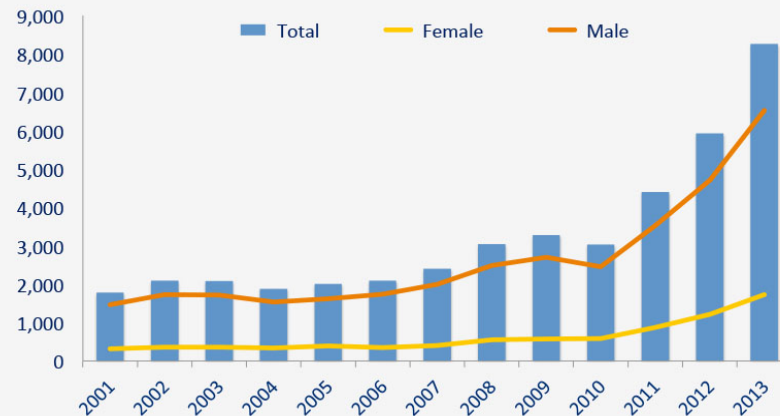
### Number of Deaths from Rx Opioid Pain Relievers



Source: National Center for Health Statistics, CDC Wonder

## National Overdose Deaths

### Number of Deaths from Heroin



Source: National Center for Health Statistics, CDC Wonder

<http://www.drugabuse.gov/related-topics/trends-statistics/overdose-death-rates>

# US Pharmaceutical OD Deaths

- *JAMA* research letter (Jones et al., 2013)
- Reviewed National Vital Statistics System for cause of death in 2010 – drug overdose deaths
- In 2010, there were 38,329 drug overdose deaths, 22,134 (57.7%) involved pharmaceuticals
- Of the pharmaceutical deaths
  - 74.3% were unintentional
  - 17.1% were suicides
  - 8.4% were undetermined intent

# Drugs Involved in OD Deaths in 2010

**Table.** Specific Drug Involvement in Pharmaceutical Overdose Deaths, United States, 2010

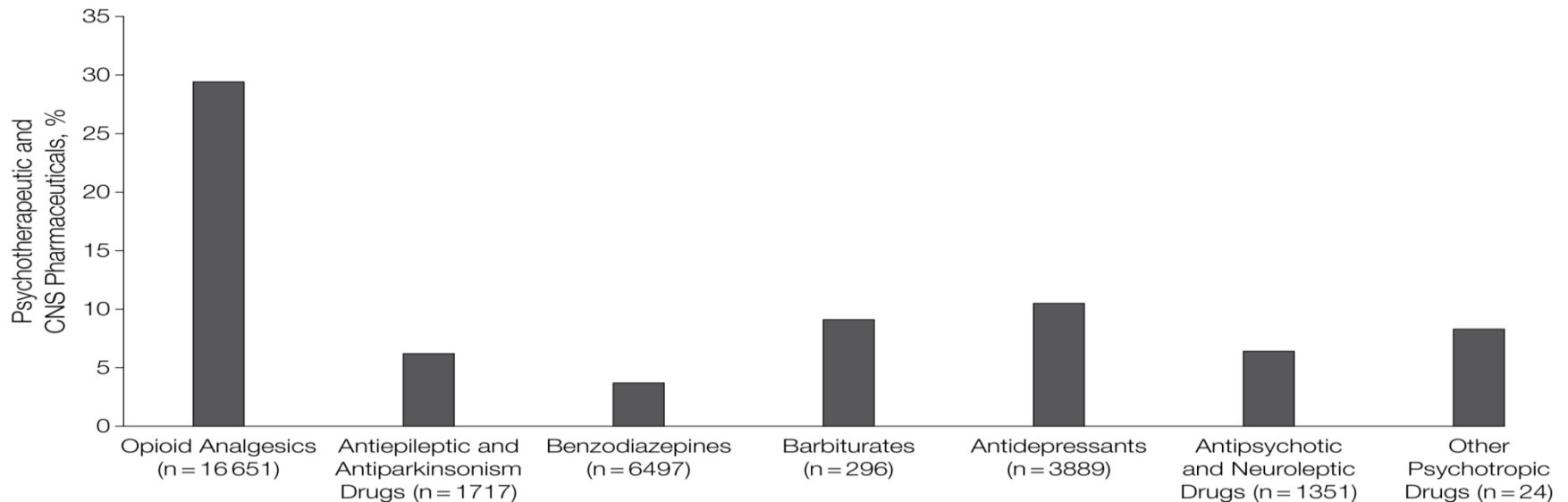
Drug or Drug Class	No. (%) <sup>a</sup>		Opioid Analgesic Involvement in Deaths for Specific Drugs, No./Total (%)
	Drug Involvement in Pharmaceutical Overdose Deaths	Specific Drug Involvement in Opioid Analgesic-Related Overdose Deaths	
All pharmaceuticals (T36-T39, T40.2-T40.4, T41-T43.5, T43.8-T50.8)	22 134 (100.0)	NA	16 651/22 134 (75.2)
Opioid analgesics (T40.2-T40.4)	16 651 (75.2)	16 651 (100.0)	16 651/16 651 (100.0)
Benzodiazepines (T42.4)	6 497 (29.4)	5 017 (30.1)	5 017/6 497 (77.2)
Antidepressants (T43.0-T43.2)	3 889 (17.6)	2 239 (13.4)	2 239/3 889 (57.6)
Antiepileptic and antiparkinsonism drugs (T42.0-T42.2, T42.5-T42.8)	1 717 (7.8)	1 125 (6.8)	1 125/1 717 (65.5)
Systemic and hematological drugs (T45)	1 591 (7.2)	699 (4.2)	699/1 591 (43.9)
Antipsychotic and neuroleptic drugs (T43.3-T43.5)	1 351 (6.1)	783 (4.7)	783/1 351 (58.0)
Acetaminophen (T39.1)	881 (4.0)	405 (2.4)	405/881 (46.0)
Respiratory drugs (T48.3-T48.7)	487 (2.2)	143 (0.9)	143/487 (29.4)
Cardiovascular drugs (T46)	354 (1.6)	57 (0.3)	57/354 (16.1)
Barbiturates (T42.3)	296 (1.3)	148 (0.9)	148/296 (50.0)
Autonomic nervous system drugs (T44)	263 (1.2)	110 (0.7)	110/263 (41.8)
Nonsteroidal anti-inflammatory drugs (T39.0, T39.2, T39.3)	228 (1.0)	53 (0.3)	53/228 (23.2)
Anesthetics and therapeutic gases (T41)	195 (0.9)	49 (0.3)	49/195 (25.1)
Hormones, insulins, glucocorticoids (T38)	147 (0.7)	10 (0.1)	10/147 (6.8)
Anti-infectives (T36-T37)	114 (0.5)	44 (0.3)	44/114 (38.6)
Diuretics and other drugs, medicaments, and biological substances (T50.0-T50.8)	56 (0.3)	27 (0.2)	27/56 (48.2)
Topical drugs (T49)	34 (0.2)	6 (0.04)	6/34 (17.6)
Other psychotropic drugs (T43.8, T43.9)	24 (0.1)	13 (0.1)	13/24 (54.2)
Muscle relaxants (T48.0-T48.2)	24 (0.1)	4 (0.02)	4/24 (16.7)
Other analgesics, antipyretics, antirheumatics (T39.4, T39.8, T39.9)	23 (0.1)	13 (0.1)	13/23 (56.5)
Gastrointestinal drugs (T47)	6 (0.03)	2 (0.01)	2/6 (33.3)

Abbreviation: NA, data not applicable.

<sup>a</sup>Deaths are not mutually exclusive. Deaths involving more than 1 drug or drug class are counted multiple times.

Jones et al., 2013

# OD Deaths in 2010 Involving a Single Class of Drug



*Jones et al., 2013*

# OVERDOSE RISK FACTORS



# Overdose Risk Factors

- Using more than 100 mg of oral morphine equivalents daily (Bohnert et al., 2011; Dunn et al., 2010)
- Recent release from controlled environment
  - Incarceration (Binswanger et al., 2013; Binswanger et al., 2007)
  - Treatment (Strang et al., 2003)
- Mixing opioids with benzos, alcohol, other drugs (Powis et al., 1999)
- Medical conditions (renal, hepatic, pulmonary diseases, HIV)

# Opioid Overdose

- Opioids bind to mu receptors in the brain causing respiratory depression
  - Less than 12 breaths per min
- Decreased oxygenation of brain and heart leads to
  - Unresponsiveness
  - Anoxia, cyanosis
  - Death
- Respiratory depression can last 1-3 hours, is reversible with naloxone

Boyer, 2012

# Possible Complications of Non-fatal Overdoses

- Anoxic brain injury
- Pulmonary edema
- Acute respiratory distress syndrome
- Hypothermia
- Renal failure
- Compartment syndrome
- Liver failure
- Seizures (depending on substance ingested)

Boyer, 2012

# Case of Steve

- Steve is a 50 year old SWM with a history of heroin addiction
- MH: chronic pain, migraine headaches, depression, tobacco use disorder, h/o suicide attempt by OD on heroin
- Meds: sertraline 200 mg daily; quetiapine 300 mg qhs; propranolol ER 80 mg daily; buprenorphine/naloxone 8/2 mg BID

# Case of Steve (2)

- Steve has been on buprenorphine/naloxone for >5 years. He attends all of his appointments and urine drug testing indicates he is taking buprenorphine and not using other substances
- He denies use of all other substances
- Does Steve need naloxone?

# NALOXONE

# Naloxone

- Naloxone is opioid antagonist
  - High affinity for mu receptor
  - Displaces bound agonist
  - Prevents other agonists from binding
  - Works within minutes
  - Lasts 20-90 mins
  - FDA approved for IV, SC, IM use
    - Recent FDA approved intranasal naloxone; also off-label intranasal use of naloxone for injection
- Naloxone has been used for opioid reversal for 40 years in hospitals
- Naloxone has been used for overdose in ED and by paramedics for years
- Since mid-1990s, provision for use outside medical setting for people at risk of overdose

Boyer, 2012

# Possible Adverse Effects of Naloxone

- If administered to someone not using opioids, there is no adverse effect
- Tachycardia
- Hypertension
- Hypotension
- Seizure – due to anoxia
- Nausea, vomiting
- Diaphoresis
- Other opioid withdrawal symptoms
- Severe symptoms listed in prescribing info were seen in post-op reversals

Naloxone prescribing information



# Naloxone IM vs. IN (1)

- Kelly et al. (2005), prospective randomized trial comparing naloxone 2 mg IM to naloxone 2 mg/5 mL given IN with MAD
- 182 patients enrolled, 155 had evaluable data
- IM group had faster time to >10 respirations ( $p=0.006$ )
  - 6 mins for IM
  - 8 mins for IN
- Needed rescue naloxone ( $p=0.0558$ )
  - 13% for IM
  - 26% for IN
- This was dilute naloxone – should not use more than 1 mL per nostril; it was the only preparation done at time of study

# Naloxone IM vs IN (2)

- Kerr et al. (2009)
- Concentrated naloxone 2 mg/1 mL IM vs. IN randomized, controlled, open-label trial
- 172 patients with suspected overdose treated by EMS
  - 83 received 1 mg/0.5 mL in each nostril
  - 89 received 2 mg/1 mL IM
- 129 had adequate response within 10 mins (95% CI -18.2, 7.7%)
  - 60 in IN group (72.3%)
  - 69 in IM group (77.5%)
- Adverse events were similar between groups
- Mean response time was similar between groups, about 8 mins

# Refusing Medical Treatment After Naloxone

- Retrospective review of San Diego EMS database and medical examiner's database
- Looked at paramedic data, who received naloxone and who signed AMA form (n = 998)
- Looked at ME data, who died of heroin OD (n=601)
- Cross-referenced lists, no one released AMA had died of OD within 12 hours

Vilke et al., 2003

# OPIOID OVERDOSE PREVENTION PROGRAMS

# Opioid Overdose Prevention Programs (OOPP)

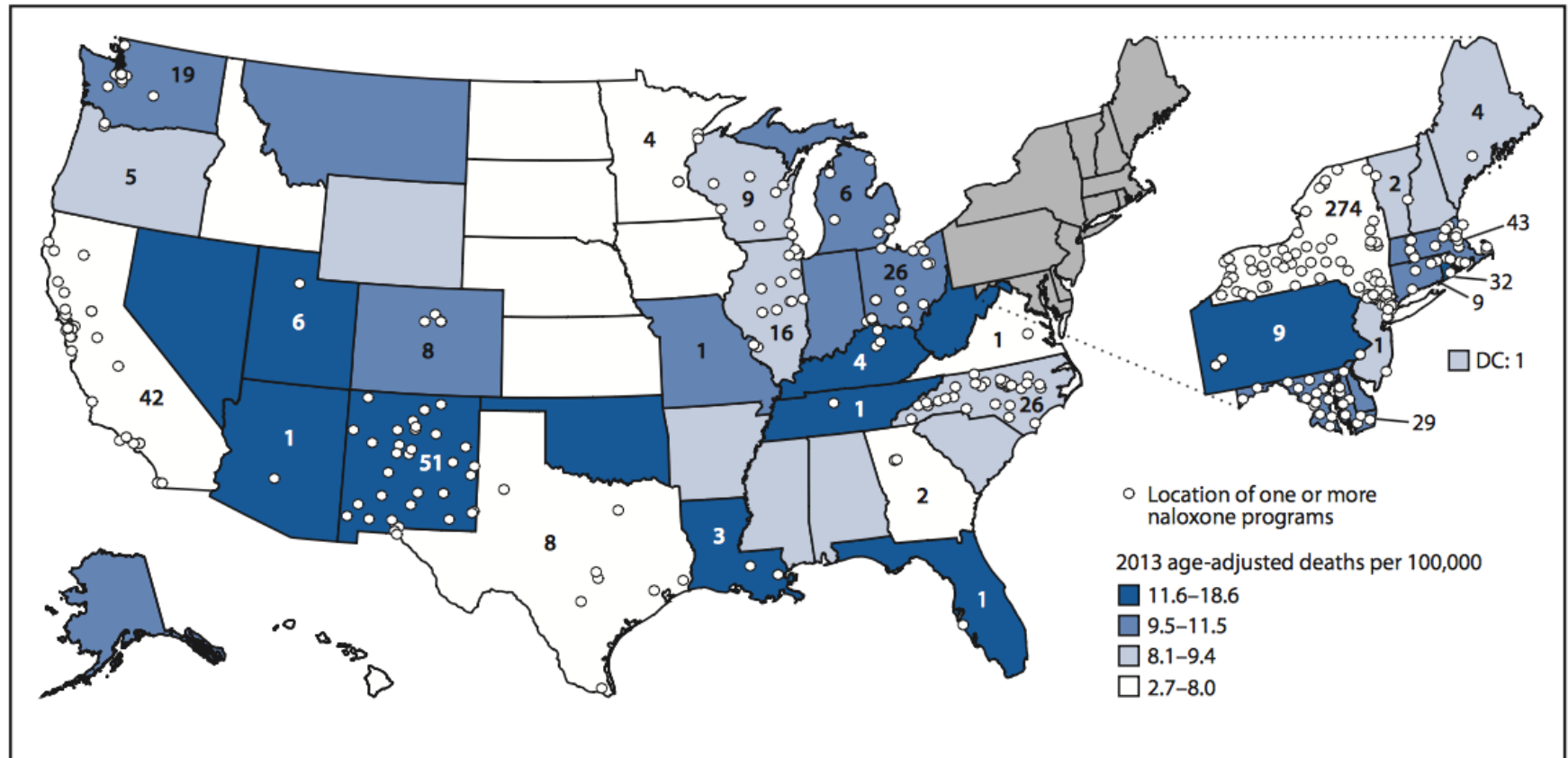
- Started 1996, first program in Chicago
- Started in harm prevention programs
- OOPP train people at risk for overdose how to prevent overdose as well as how to recognize and respond to overdose
- Participants are trained to seek help (call 911), rescue breath, administer naloxone IN or IM, and stay with the person who has overdosed

# OOPP Providing Naloxone, 2014

	2010	2014	% increase
Number of sites providing naloxone	188	644	243%
Number of persons provided kits	53,032	152,283	187%
Number of reversals reported	10,171	26,463	160%
Number of states with OOPP	16	30	94%

Wheeler et al., 2015

**FIGURE 2. Number\* and location of local drug overdose prevention programs providing naloxone to laypersons, as of June 2014, and age-adjusted rates† of drug overdose deaths§ in 2013 — United States**



\* Total N = 644; numbers on map indicate the total number of programs within each state.

† Per 100,000 population.

§ CDC, National Center for Health Statistics; Compressed Mortality File 1999–2013 on CDC WONDER Online Database, released January 2015.

# Implementation of OOPP in MA

- Between 2006-2009, 4857 people were enrolled in OOPP programs and 545 naloxone rescue attempts reported
  - Of the 19 communities meeting study criteria, 2912 were enrolled and 327 rescue attempts made
  - 327 rescue attempts were made by 212 individuals
  - 87% were by people who used opioids
  - Most rescue attempts occurred in private settings
  - Rescuer and person who overdosed were usually friends



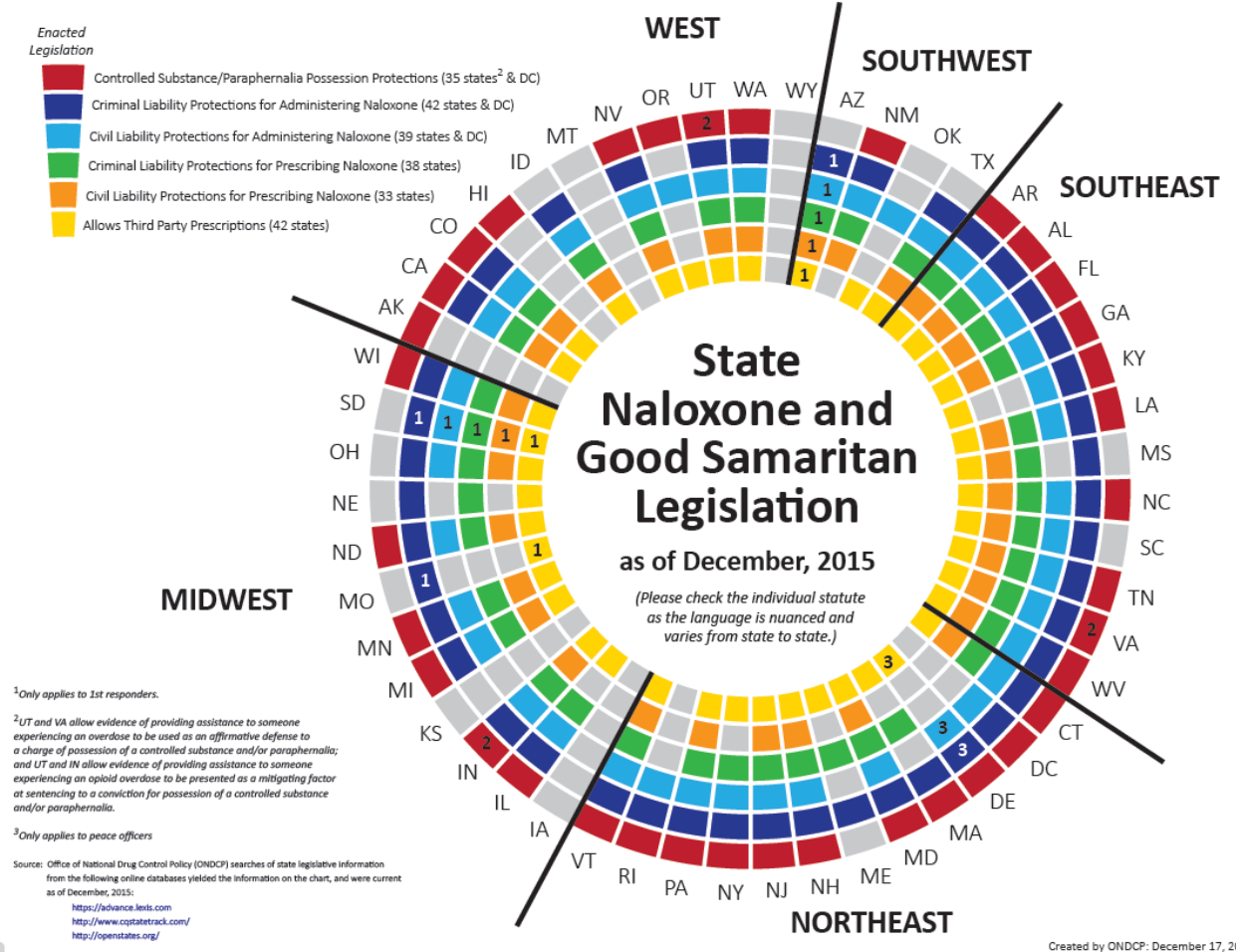
# Implementation of OOPP in MA

- Naloxone was successful in 98% (150/153) of rescue attempts
  - The remaining 3 people received care by medical system and survived
- Reduced death rates in communities that implemented OOPP
  - Low implementers (1-100 enrollments per 100,000) had 27% decrease
  - High implementers (>100 enrollments per 100,000) had 46% decrease

Walley et al., 2013

## Naloxone Laws

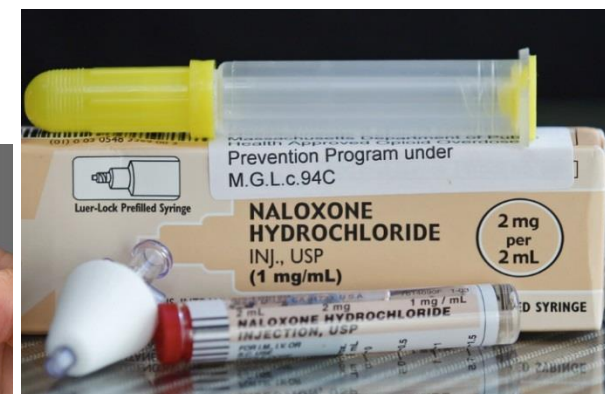
- Controlled substance/paraphernalia protection
- Criminal & civil protection for lay administration
- Prescriber immune from criminal & civil liability
- Third party prescription authorized



[https://www.whitehouse.gov/sites/default/files/ondcp/Blog/naloxonecirclechart\\_january2016.pdf](https://www.whitehouse.gov/sites/default/files/ondcp/Blog/naloxonecirclechart_january2016.pdf)

# Naloxone for bystander administration

- Intramuscular
  - Traditional
  - Auto-injector
- Intranasal
  - With MAD (off-label)
  - NARCAN nasal spray



# What's in a Rescue Kit?

- Two doses of naloxone or devices
- Two syringes or mucosal atomizing devices (MAD)
- Instructions on use
- May also include
  - Alcohol swabs
  - Face shields
  - Gloves

# HOW TO PRESCRIBE NALOXONE TO PATIENTS

# Talk to Patients about Overdose

- Have you ever had an accidental overdose?
  - What were the circumstances, what happened, how did you survive?
- Have you ever witnessed an overdose?
  - What did you do?
- What do you do to protect yourself from overdose?
- What are some risk factors for overdose?
- Have you heard about naloxone/Narcan for reversal of overdose?

# Patient Selection (1)

- History of opioid overdose (Silva et al., 2013, Wines et al., 2007)
- Emergency treatment for opioid overdose or intoxication (SAMHSA, 2014 )
- Suspected or known heroin or nonmedical opioid use (SAMHSA, 2014)
- Buprenorphine or methadone maintenance (Paulozzi et al., 2012; Britton et al., 2010)
- Receiving >100 morphine equivalents of opioid per day (Bohnert et al., 2011; Dunn et al., 2010)
- Changing from one opioid to another (incomplete cross-tolerance; SAMHSA, 2014)
- Living in remote location or difficulty accessing EMS
- Request from patient or concerned significant other

# Patient Selection (2)

- Patient receiving opioid prescription and:
  - Smoking, COPD, asthma, sleep apnea, respiratory infection, other respiratory illness (Warner-Smith et al., 2001; Darke et al., 2006)
  - Renal disease, liver disease, cardiac disease, HIV/AIDS (Warner-Smith et al., 2001; Darke et al., 2006; Green et al., 2012)
  - Known or suspected heavy alcohol use (UNODC/WHO, 2013; Häkkinen et al., 2011)
  - Concurrent benzodiazepine or other sedative prescription (Paulozzi et al., 2012; Silva et al., 2013)
  - Concurrent antidepressant prescription (Darke & Ross, 2000)
  - Recently released from incarceration, detoxification, mandatory abstinence program (SAMHSA, 2014)



# Case of Steve (3)

- Is Steve an appropriate candidate for naloxone?
  - Buprenorphine maintenance >5 years
  - Appears to be taking as prescribed, urine is positive for bup/norbup, neg for other substances
  - Denies substance use
  - Has depression, smokes, h/o OD

# Case of Steve (4)

- Steve is an appropriate candidate for naloxone based on
  - h/o heroin addiction
  - Buprenorphine maintenance
  - Smoking
  - Antidepressant prescription
  - h/o overdose

# Educational Videos for Patients

- Chicago Recovery Alliance (~13 mins)
  - [https://www.youtube.com/watch?v=U1frPJoWtkw&feature=player\\_embedded](https://www.youtube.com/watch?v=U1frPJoWtkw&feature=player_embedded)
- Prescribetoprevent.org
  - <http://prescribetoprevent.org/patient-education/videos/>
- Getnaloxonenow.org (~20 mins, interactive)
  - <http://getnaloxonenow.org/signup.aspx>
- Study showed first time recipients of naloxone receiving 5-10 minute education on overdose education and naloxone demonstrated high level of knowledge on Brief Overdose Recognition and Response Assessment (Behar et al., 2015)

# Writing a Prescription for IM Naloxone

Naloxone HCl 0.4 mg/mL (Narcan)

1 x 10 mL as one flip-top vial (NDC 0409-1219-01) OR

2 x 1mL single dose vials (NDC 0409-1215-01)

Refills: \_\_\_\_\_

Intramuscular (IM) syringe, 23 G, 3cc, 1 inch

Qty: \_\_\_\_\_

Refills: \_\_\_\_\_

Sig: For suspected opioid overdose,  
inject 1mL IM in shoulder or thigh.

Repeat after 3 minutes if no or minimal response.

[http://www.prescribtoprevent.org/wp-content/uploads/2012/11/one-pager\\_22.pdf](http://www.prescribtoprevent.org/wp-content/uploads/2012/11/one-pager_22.pdf)

# Writing a Prescription for IN Naloxone

Naloxone HCl 1 mg/mL  
2 x 2 mL as pre-filled Luer-Lock needled syringe  
(NDC 76329-3369-1 )

Refills: \_\_\_\_\_

2 x Intranasal Mucosal Atomizing Device (MAD 300)

Refills: \_\_\_\_\_

For suspected opioid overdose, spray 1mL in each nostril.  
Repeat after 3 minutes if no or minimal response.

Pharmacist: Call 1-800-788-7999 to order MAD 300.

<http://www.prescribetoprevent.org/wp-content/uploads/2012/11/naloxone-one-pager-in-nov-2012.pdf>

# Writing a Prescription for Auto-injector

- Naloxone Auto-Injector 0.4mg/0.4 mL
  - Disp #1 twin pack
  - Use 1 auto-injector upon signs of opioid overdose. Repeat after 3 minutes if minimal or no response.
  - Refills \_\_\_\_\_

# Writing Prescription for NARCAN nasal spray

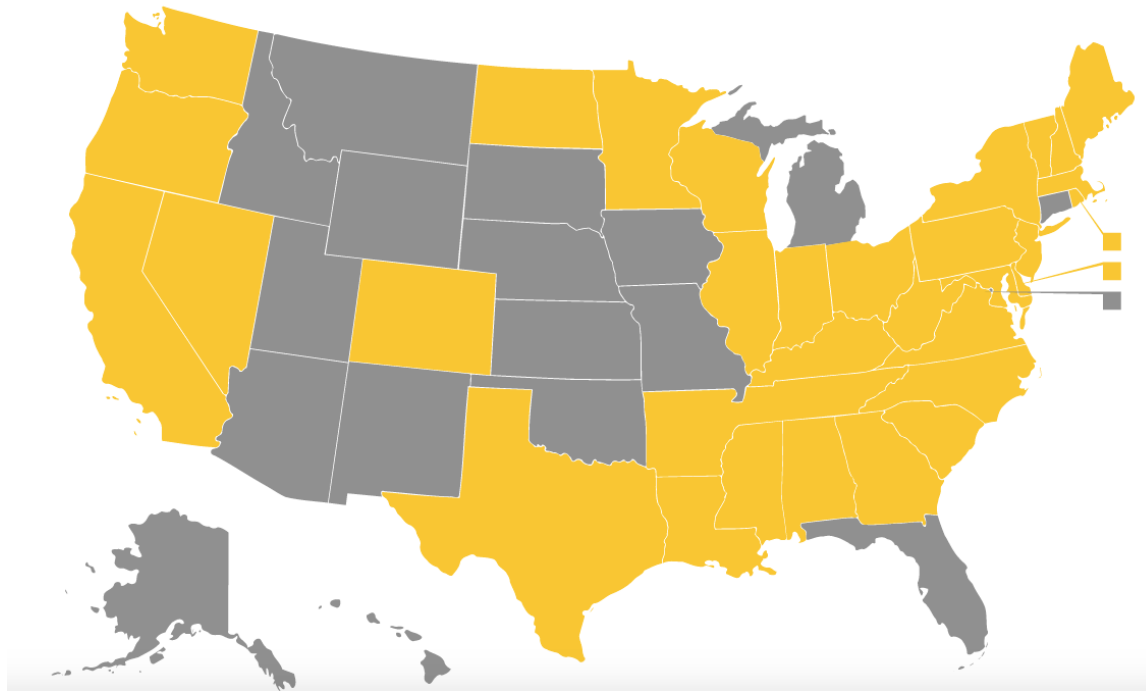
- Narcan nasal spray 4 mg/0.1 mL (1 box, pack of 2)
  - Sig: For suspected overdose, spray in one nostril. May repeat in 3 mins if minimal or no response.
  - Disp: #1 (pack of two)
  - Refills \_\_\_\_\_

# Common Issues

- Covered by commercial insurance, Medicaid, Medicare
- Cost of naloxone has gone up in recent years due to increased demand
- MAD may not be covered, typically \$4-8/each
- NARCAN nasal spray may cost \$130, covered by insurance, including Medicaid, may need prior auth
- Auto-injector may cost \$3750, covered by some insurances and Medicaid with prior auth
- Stocked by more and more commercial pharmacies; if not, see if pharmacist will order
- Shelf life 12-24 months



# Standing Orders



[lawaltas.org/preview?dataset=laws-regulating-administration-of-naloxone](http://lawaltas.org/preview?dataset=laws-regulating-administration-of-naloxone)

# Collaborative Pharmacy Practice Agreements (CPA)

- CPA permit pharmacists to work in collaboration with a prescriber on drug therapy management
  - 48 states allow CPA to manage pharmaceutical care under agreement
  - 21 states permit pharmacists to initiate medication under agreement

Green et al., 2015

# CPA and Standing Orders

Monday, March 7, 2016

WOONSOCKET, R.I., March 7, 2016 /PRNewswire/ -- CVS Health (NYSE: CVS) announced today that it will expand access to the opioid overdose-reversal medication naloxone at the end of March at its CVS Pharmacy locations in eight new states: Connecticut, Kentucky, Maryland, North Carolina, New Hampshire, Ohio, Virginia and Vermont. Under a physician-approved protocol permitted by the state, ~~CVS Pharmacy will~~ be able to dispense naloxone to patients in these states without the need for an individual prescription.

"Naloxone is a safe and effective antidote to opioid overdose and by expanding availability of this medication, we can save lives and give more people a chance to get the help they need for recovery," said Tom Davis, RPh, Vice President of Pharmacy Professional Practices at CVS Pharmacy. "By establishing a physician-approved protocol that allows our pharmacies to dispense naloxone to patients without an individual prescription, we strengthen our commitment to help the communities we serve by preventing drug abuse."

Naloxone is already available without a prescription at CVS Pharmacy locations through standing order or collaborative practice agreements in 15 states: Arkansas, California, Indiana, Massachusetts, Minnesota, Mississippi, Montana, New Jersey, New York, North Dakota, Pennsylvania, Rhode Island, Tennessee, Utah and Wisconsin. The company has said it will add a total of 20 states to its naloxone program in 2016 and expects to announce additional states throughout the remainder of the year.

<http://cvshealth.com/newsroom/press-releases/cvs-health-expand-access-opioid-overdose-reversal-medication-cvs-pharmacy>

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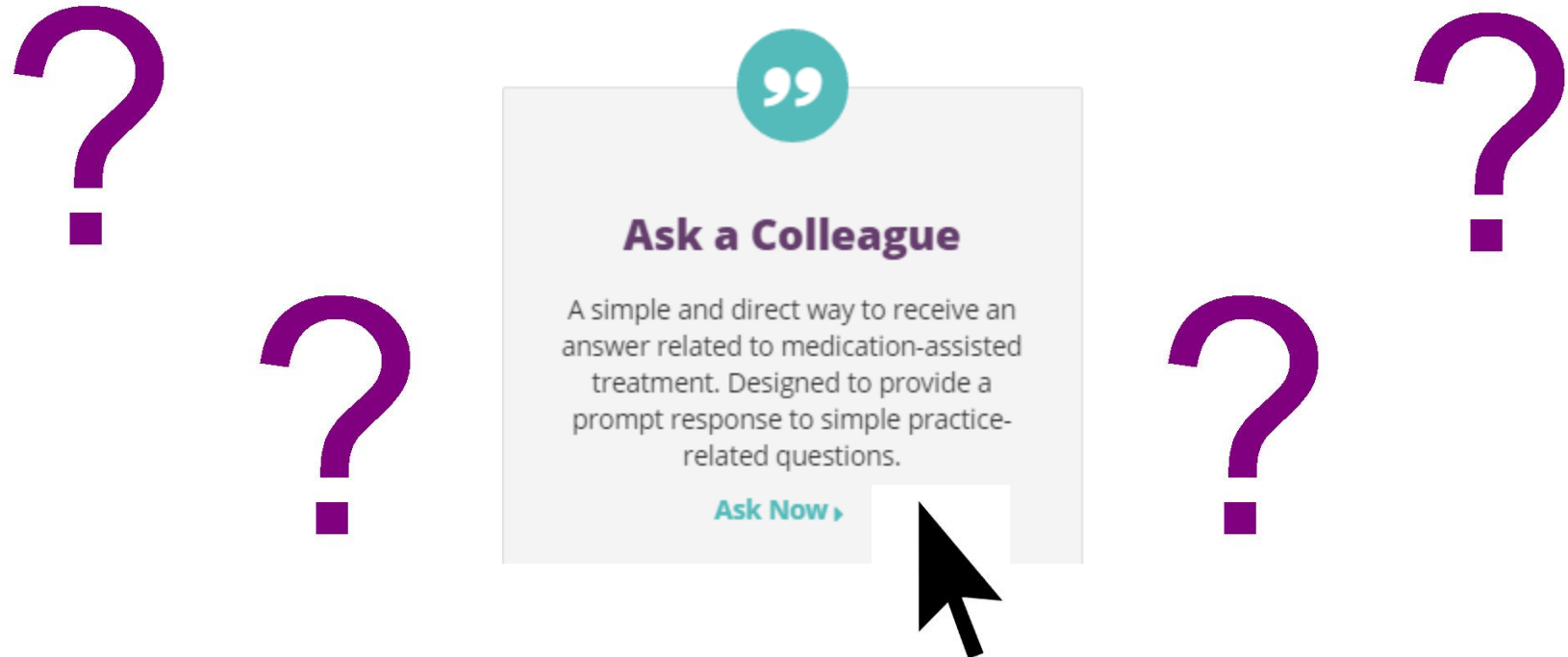
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# PCSS-MAT Listserv

Have a clinical question? Please click the box below!





# PCSS-MAT Mentoring Program

- 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**.
- Our 3-tiered mentoring approach allows every mentor/mentee relationship to be unique and catered to the specific needs of both parties.
- The mentoring program is available, at no cost to providers.

For more information on requesting or becoming a mentor visit:  
[pcssmat.org/mentoring](https://pcssmat.org/mentoring)



# TRAINING



## PROVIDERS' CLINICAL SUPPORT SYSTEM

### For Medication Assisted Treatment

**PCSSMAT** is a collaborative effort led by American Academy of Addiction Psychiatry (AAAP) in partnership with: American Osteopathic Academy of Addiction Medicine (AOAAM), American Psychiatric Association (APA), American Society of Addiction Medicine (ASAM) and Association for Medical Education and Research in Substance Abuse (AMERSA).

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