Overdose Prevention in HCH Settings

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The primary principle of harm reduction is to accept, without judgment, the fact that people do engage in high-risk behaviors and to commit to helping these people reduce the harm associated with their behavior.

Outline

Part I:

- The Overdose Epidemic
- Introduction to Naloxone
- Community Based Naloxone Distribution Programs

Part II:

- Implementing Overdose Prevention Education Programs in a Clinic Setting

Goal:

- Our hope is that you walk away with an understanding of the opioid overdose problem in America and ideas for creating overdose prevention programs at your own clinics.

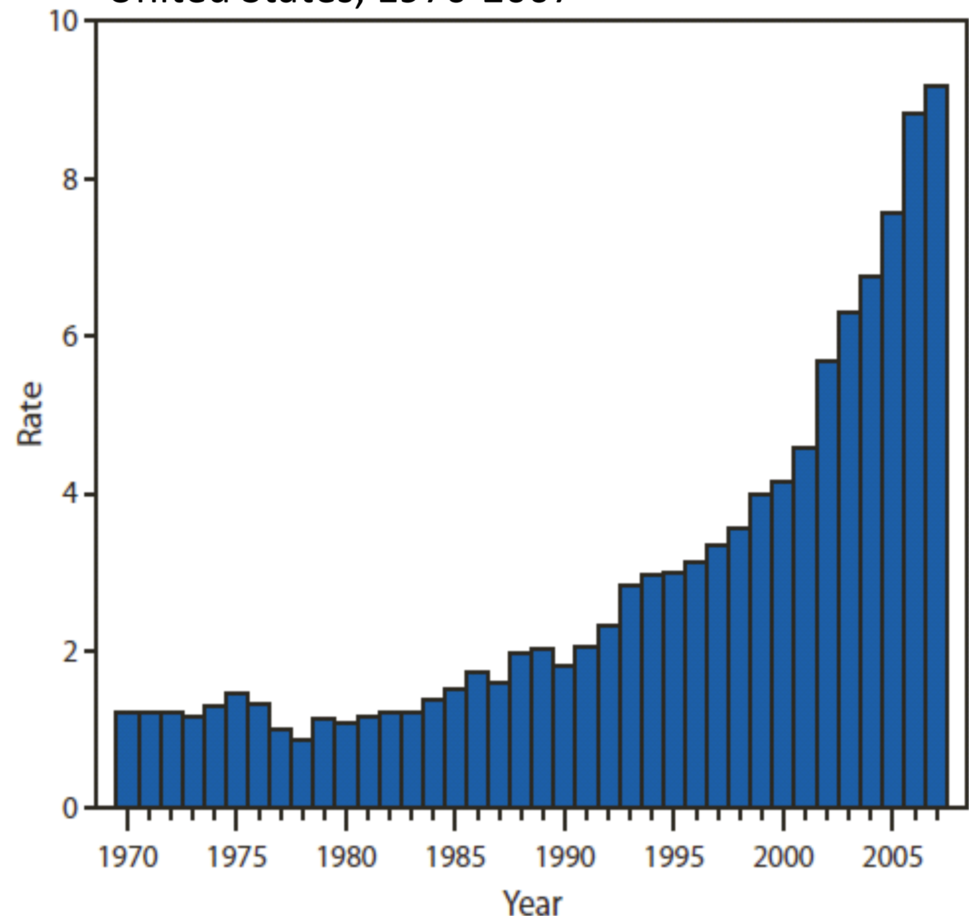
Overdose Basics

- What is an overdose?
- Mechanism of an opioid overdose
- Certain combinations of drugs are more lethal than others, opioids are particularly dangerous.
- Naloxone can reverse the effects of an *opioid* overdose

The Overdose Epidemic

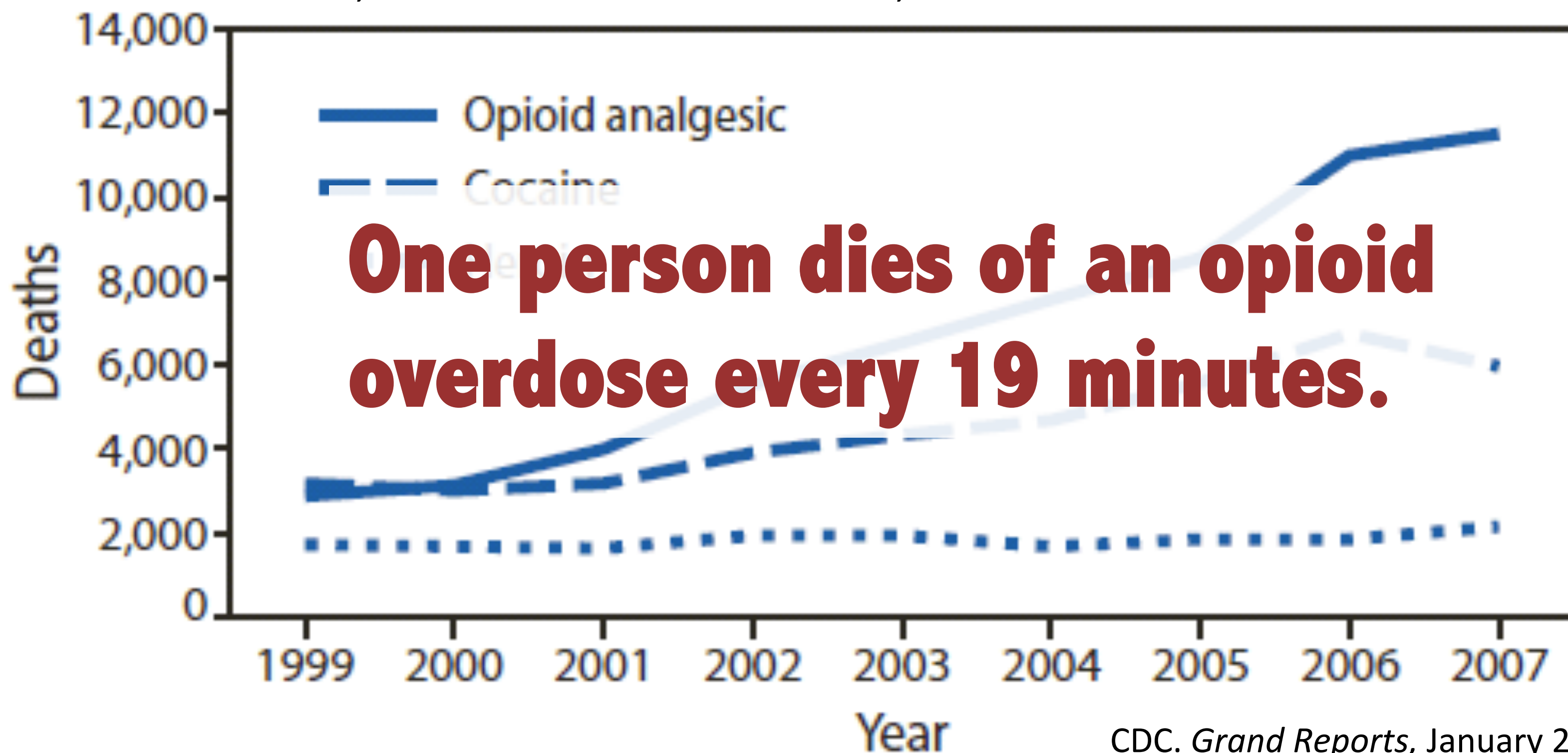
- Over the last three decades, the number of drug poisoning deaths have increased dramatically
- As of 2008, poisoning overtook car accidents as the number one cause of accidental death in the United States

Rate of unintentional drug overdose deaths—United States, 1970-2007



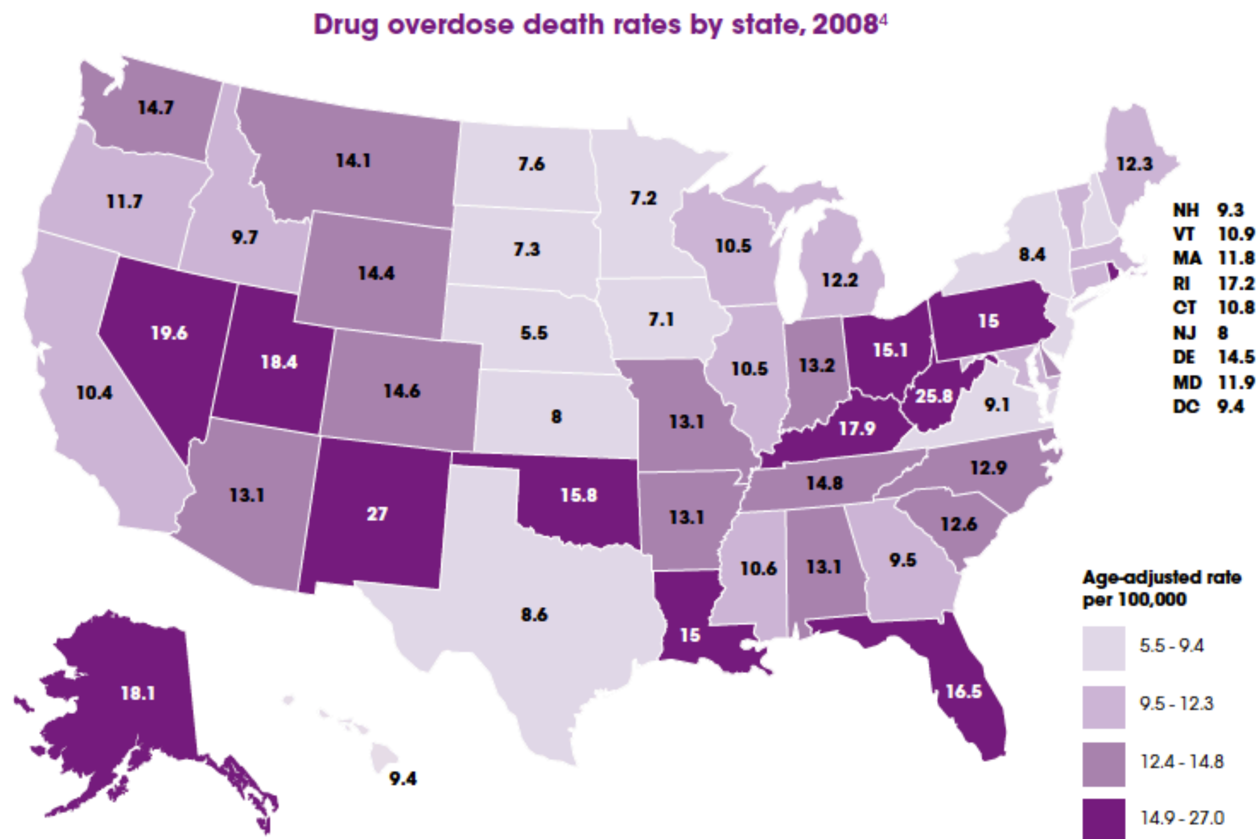
Opioid Overdose

Number of unintentional drug overdose deaths involving opiod analgesics, cocaine, and heroin—United States, 1999-2007.



CDC. *Grand Reports,* January 2012

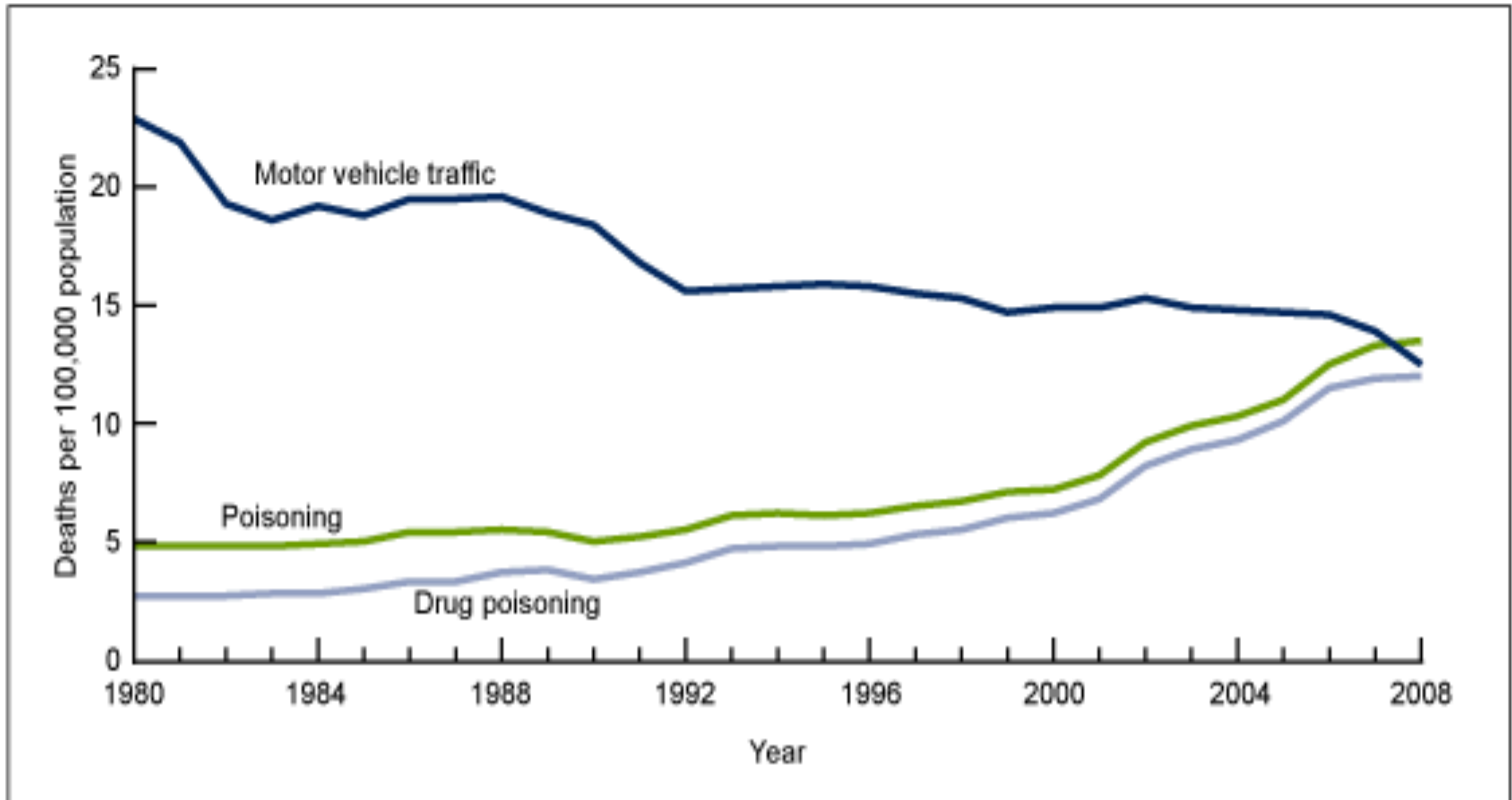
Drug Overdose Death Rates by State



Source: Center for Disease and Control. *Policy Impact: Prescription Painkiller Overdoses.* November 2011. Available at http://www.cdc.gov/homeandrecreationalsafety/rxbrief/index.html.

Leading Causes of Accidental Death

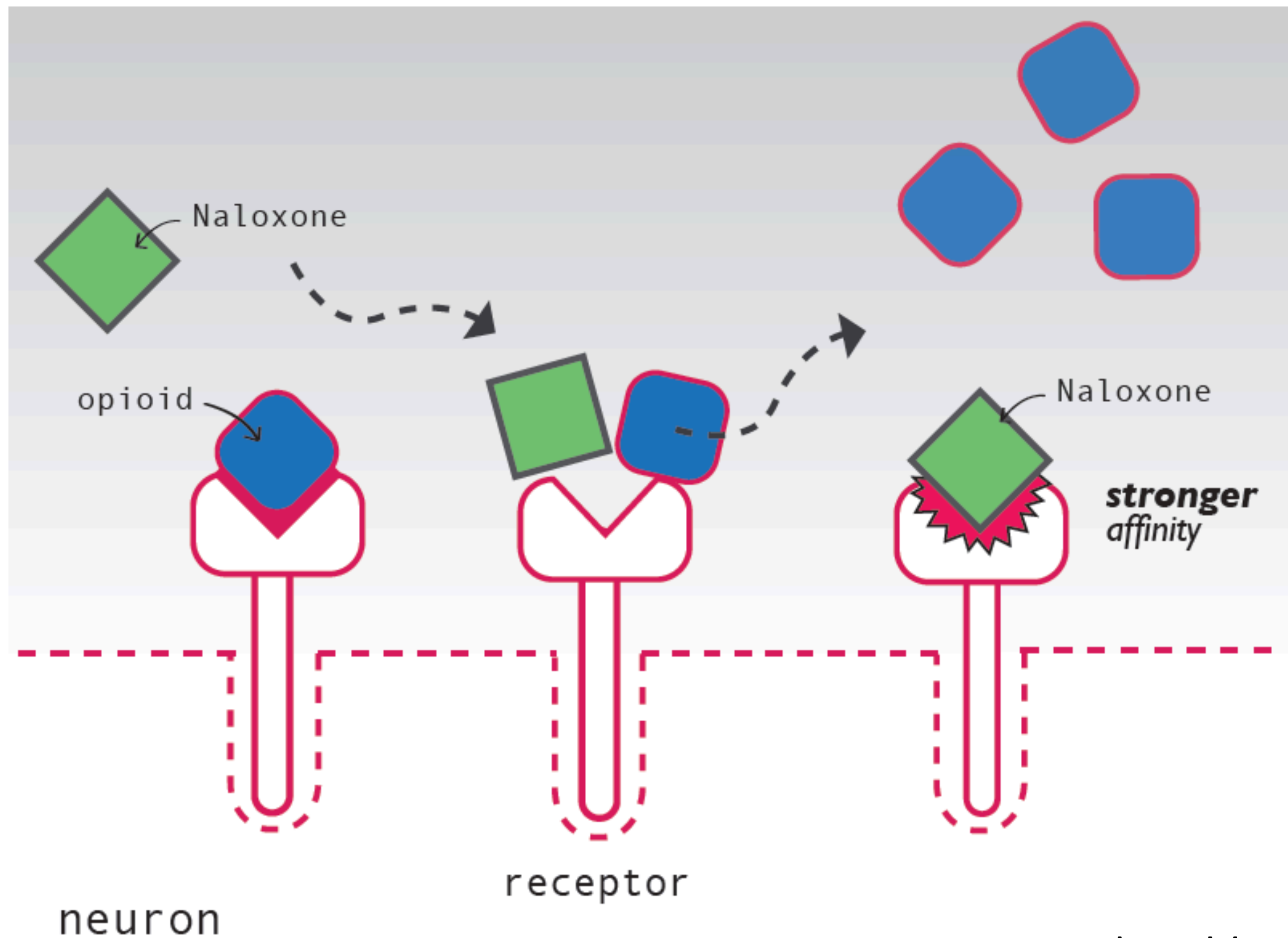
Motor vehicle traffic, poisoning, and drug poising death rates: United States, 1980-2008



Addressing the problem

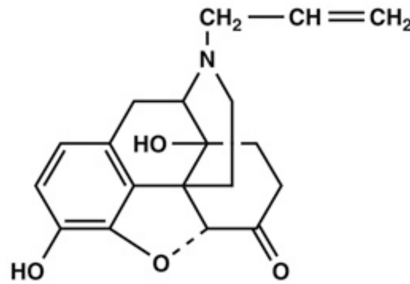
- Increasing access to drug treatment programs
- Tracking opioid prescriptions
- Basic overdose education
- Naloxone distribution

Naloxone in the brain



Sarah Dobbins

Naloxone



Emergency medical personnel begin using naloxone in cases of opioid OD.

1971

Approved by the FDA and categorized as a prescription medication.

1995

Programs in Europe begin dispensing naloxone to IDUs

The Chicago Recovery Alliance begins to make naloxone available to IDUs.

1998-2001

2001

New Mexico's Department of Health initiates a naloxone distribution program.

The San Francisco DPH sanctions a naloxone prescription program in SF

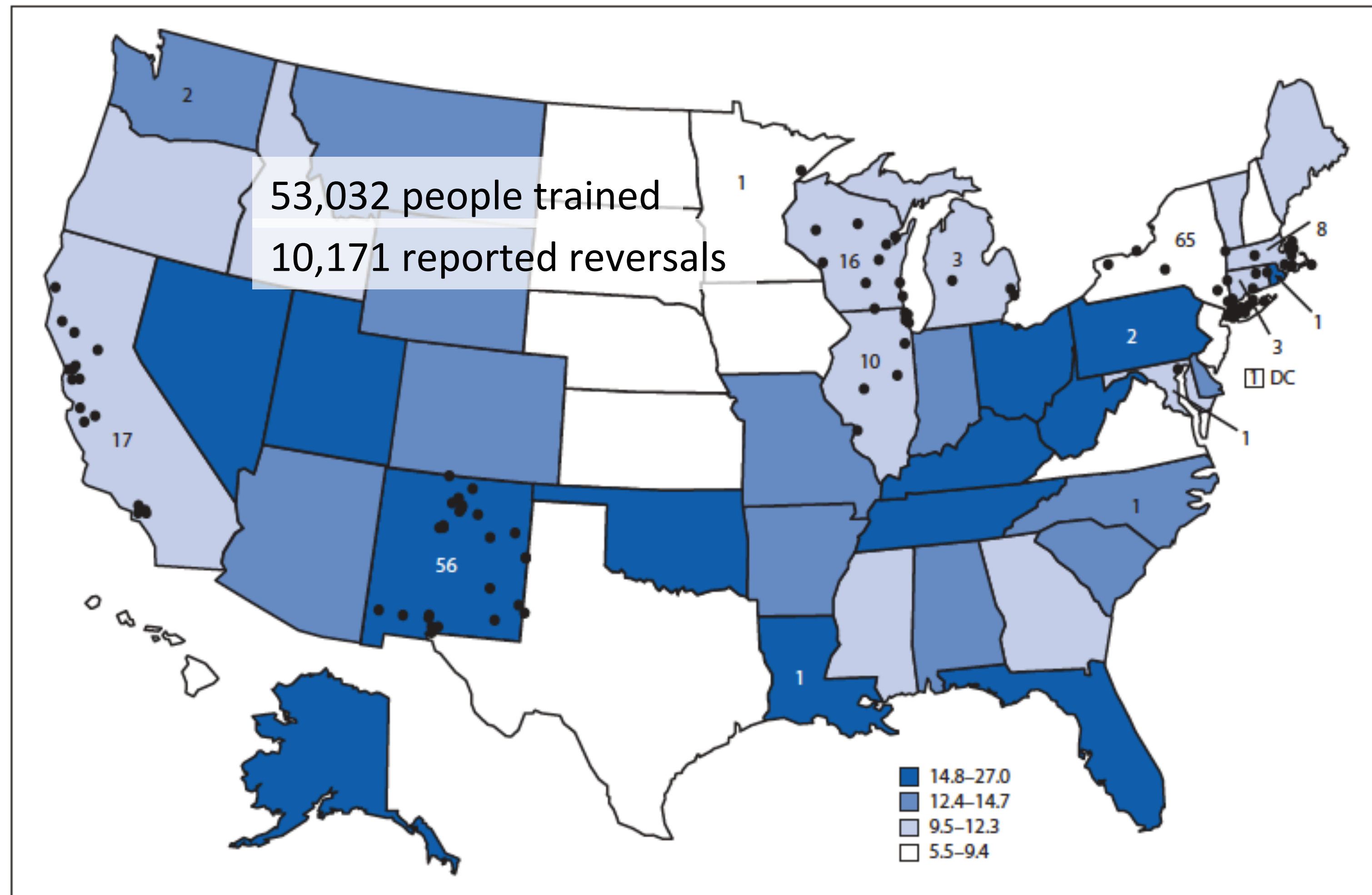
2003

2005-6

NY and MA initiate a naloxone distribution program

Can lay people use Naloxone effectively?

Number (N=188) and location of local drug overdose prevention programs providing naloxone in 2010 and age-adjusted rates of drug overdose deaths in 2008-United States.



* Not shown in states with fewer than three local programs.
† Per 100,000 population.
§ Source: National Vital Statistics System. Available at http://www.cdc.gov/nchs/nvss.htm. Includes intentional, unintentional, and undetermined.

Training Increased Knowledge of Overdose

Knowledge and behavior among study participants (N = 24) before and after the overdose prevention and management program

Knowledge or behavior	At baseline N (%)	At 6 months follow-up N (%)	*P*-value
Knowledge >50% correct responses			
Identifying a heroin overdose	0 (0)	13 (53)	<0.001
Risk factors for heroin overdose	2 (8)	16 (68)	0.003
Heroin overdose prevention strategies	1 (6)	8 (32)	0.040
Correct uses of naloxone	21 (91)	23 (95)	1.000
Number heroin overdoses in past 6 months			
0	19 (83)	21 (88)	0.829
1	3 (13)	3 (12)	—
2	1 (4)	0 (0)	—
Heroin injections during past 30 days.			
None	3 (13)	7 (37)	0.003
1–29	4 (17)	7 (37)	—
30–59	2 (8)	3 (16)	—
60–89	4 (17)	2 (11)	—
90+	11 (46)	0 (0)	—
Drug treatment entry	8 (35)	14 (60)	0.16

Seal et al 2008

All Effective

- Knowledge was significantly greater than untrained individuals
- Knowledge was as good as medical professionals

Overdose and naloxone knowledge scores by training status.

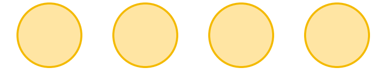
Scores	Trained n = 30 Mean (SD)	Untrained n = 32 Mean (SD)	Test statistic, P-value
Self-rated level of expertise			
Identifying opioid overdose symptoms	3.77 (.94)	3.22 (1.07)	$t_{60} = 2.14$, $P < 0.05$
Identifying when to use naloxone	3.83 (.91)	2.63 (.98)	$t_{60} = 5.03$, $P < 0.0001$
Identifying non-opioid overdose symptoms (e.g. cocaine intoxication)	3.39 (1.13)	3.22 (1.16)	$t_{58} = 0.59$, $P = 0.56$
Overdose symptom recognition			
Correctly identified as opioid overdose (nine items)	7.13 (1.38)	5.18 (2.55)	$t_{60} = -3.76$, $P < 0.001$
Correctly identified as not an overdose/non-opioid overdose (seven items)	4.63 (1.40)	4.28 (1.94)	$t_{60} = -0.81$, $P = 0.42$
Total score (16 items)			
Average percentage correct: recognition of overdose	11.77 (1.92)	9.47 (3.48)	$t_{48.93} = -3.24$, $P < 0.005$
Naloxone indication	85.2%	68.3%	
Correctly indicated for opioid overdose (nine items)	6.93 (1.76)	5.77 (2.30)	$t_{59} = -2.20$, $P < 0.05$
Correctly *not* indicated for opioid overdose (seven items)	6.60 (0.72)	5.32 (1.94)	$t_{38.32} = -3.43$, $P < 0.001$
Total score (16 items)	13.53 (1.96)	11.09 (2.32)	$t_{59} = -4.38$, $P < 0.0001$
Average percentage correct: naloxone indication	84.6%	69.3%	

SD: standard deviation.

Green et al 2008

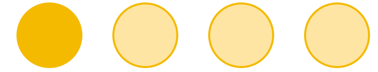
Discussion

- What are your concerns about distributing naloxone?
- What could be objections to this harm reduction practice?



Common Concerns

- Unsafe
- Increased drug use
- Delayed entry into treatment
- People are less likely to call 9-1-1



Common Concerns

- **Unsafe**
  - Causes immediate withdrawal—adverse effects
  - Naloxone has no effect when opioids are absent
  - Lay people can use it safely

Common Concerns

- **Increased Drug Use**
  - Withdrawal feelings that accompany naloxone are unpleasant
  - Training can even decrease drug use
  - Responsibility can be empowering

Knowledge and behavior among study participants (N = 24) before and after the overdose prevention and management program

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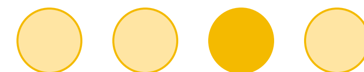
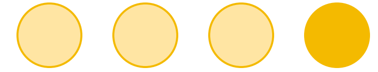
Seal et al 2008



Common Concerns

- **Delayed entry into treatment**
  - No one can start treatment if they are dead
  - Training can connect people to drug treatment resources



Common Concerns

- **People are less likely call 9-1-1**
  - Both trends have been observed
  - Fear of police action exists without naloxone

Naloxone Works

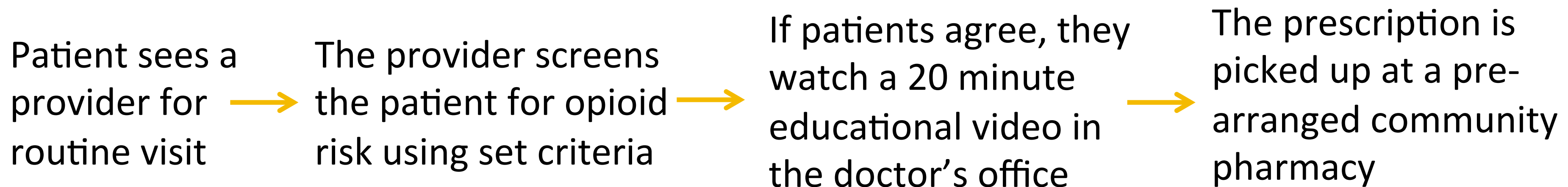
- Saves lives
- People want it
- Very few negative effects
- Empowering

Part II: Incorporating Overdose Prevention Education into Clinical Settings

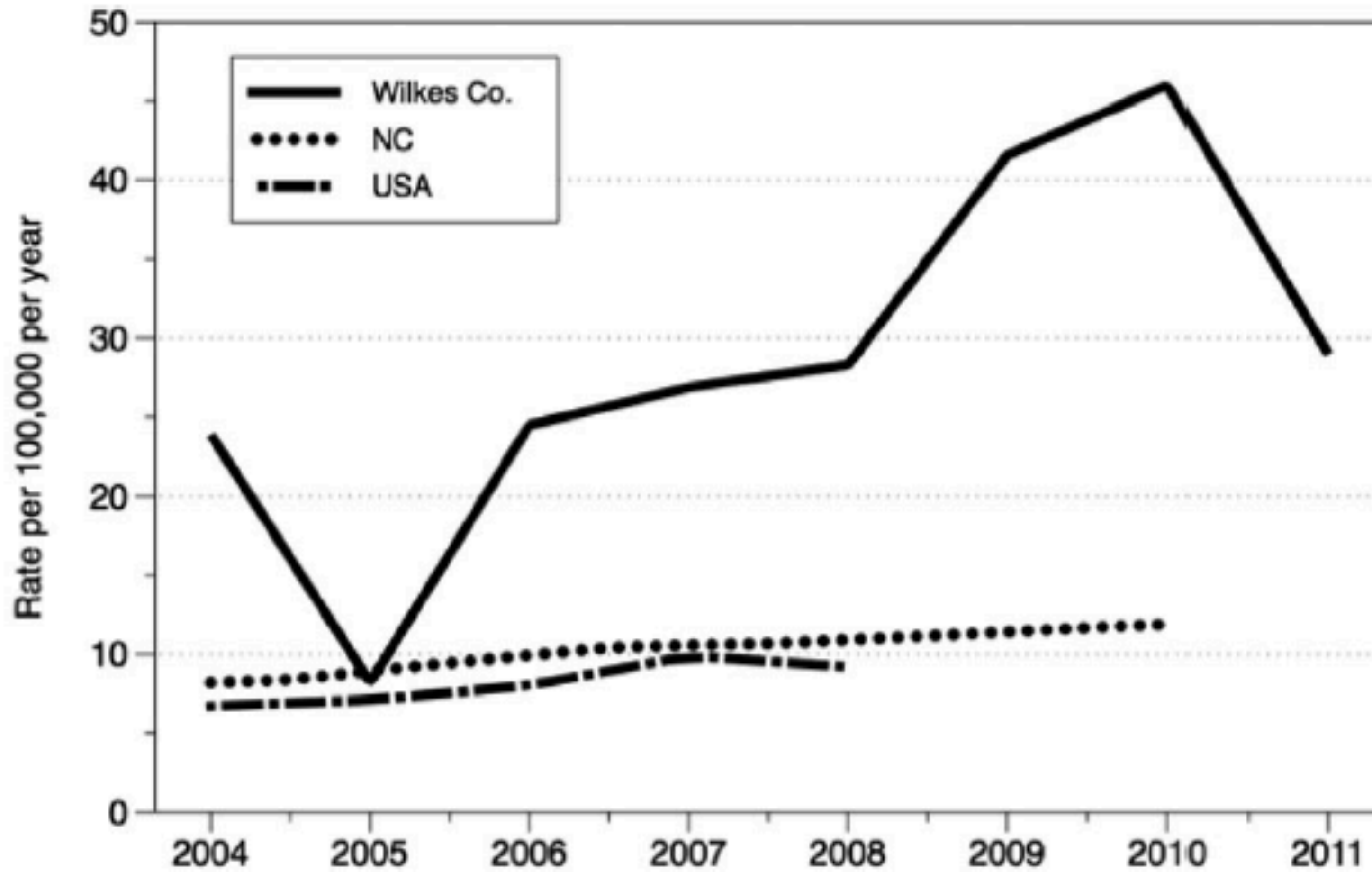
- Introduction to the breadth of overdose programs
- The four P's of creating a naloxone distribution program
- Discussion of barriers to implementation

Project Lazarus

- Rates of overdose deaths in Wilkes County, NC were quadruple the rates of the states in 2009
- Funded through a primary care network and through grants
- Five components to the PL model
- How it works:



Project Lazarus Results



Street Outreach Services

- Began distributing naloxone in 2006
- Collaboration with DOPE project
- Independent standing order and purchasing

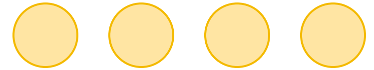
See patients on the van and screen for risk, as appropriate

Conduct one on one 10 minute education session

Distribute naloxone on site

Overdose Prevention Education: What You Can Do Now

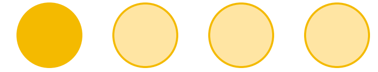
- Prepare your clinic
- Reach out to the community
- Educate



Training Essentials

What all overdose prevention education should include

- Risk factors for overdose
- Recognizing an overdose
- Responding to an overdose
- Aftercare

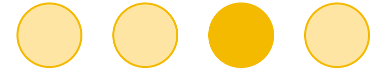


The Essentials of Overdose Education

- **Risk factors for overdose**
  - Mixing drugs
  - Quality and purity
  - Changes in tolerance
  - Health
  - Using alone
  - Previous nonfatal overdose
  - Mode of administration

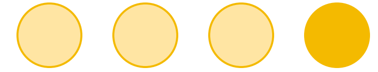
The Essentials of Overdose Education

- **Recognizing an opioid overdose**
  - Talk about the mechanism of an overdose
  - Heavy nodding
  - Raspy breaths
  - Lack of response
    - Sternum rub
    - Yelling
  - Turning blue
  - Not breathing



The Essentials of Overdose Education

- **Responding to an overdose**
  - Call 9-1-1
  - Rescue breathing
  - Administer naloxone
  - Recovery position



The Essentials of Overdose Education

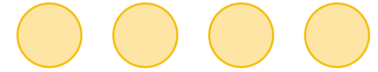
- **Aftercare**
  - Explain what happened
  - Be prepared for withdrawal symptoms
  - Monitor for two hours in case of a second overdose event

4 Ps to Starting a Naloxone Distribution Program

- Prescriber
- Pharmacy
- Payer
- Promotion

Discussion

- What barriers come to mind?
- What could stop you from implementing this in your clinic?
- Success stories or suggestions?



Common Barriers to Implementation

- Liability
- Resources and time
- Agency policies
- Community opposition

- **Liability**
  - Potential legal complications arise because naloxone requires third party administration.
  - Few explicit laws regarding the distribution and use of naloxone.
  - Successful law changes in New York, California, New Mexico, Connecticut and others
  - Prescribing to a person who is not at risk is not explicitly protected by the law, except in Washington.

"Whether any prosecutor would bother to bring such a case is another matter. The breach of the law is beneficial to society and the individual; at the very least, one can confidently say that law enforcement agencies have more important cases to pursue."

Scott Burris, *Temple Law Review* (2008)

Common Barriers to Implementation

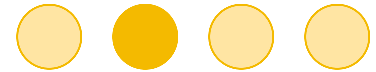
- **Resources and Time**

Funding:

- No specific funding sources for overdose prevention education so programs have to be creative.
- Suggestions:
  - Departments of Public Health-CA, NY, NM, MA
  - Private donations and grants-NC
  - Connect to established programs
  - Medicaid
  - Reallocate current funding

Time:

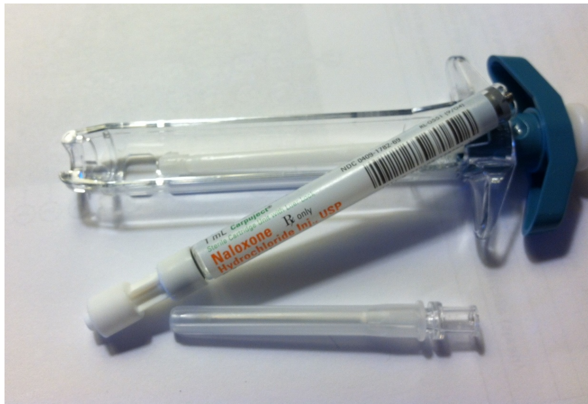
- Conduct health education sessions with non-provider staff
- Create educational materials



Common Barriers to Implementation

- **Resources and Time Continued**

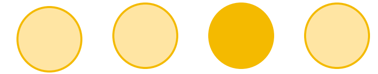
How much does naloxone cost?



Naloxone: $5.60
Accessories: $0.20

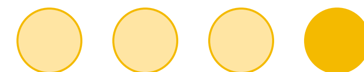
Naloxone: $9.50
Accessories: $0.25

Naloxone: $27.00
Accessories: $3.00



Common Barriers to Implementation

- **Agency Policies**
  - Change takes time
  - Start small
  - Educate colleagues
  - Create an overdose response policy



Common Barriers to Implementation

- **Community Opposition**
  - Find your allies
  - Reach out to community leaders
  - Don’t assume that the problem is well known
  - Expect hesitation and resistance

Take Aways

- You can do it!
- Use the 4Ps as a jumping off point
- Start talking about opioid overdose

Thanks!

Resources

- www.prescribetoprevent.org
- www.harmreduction.org
- www.projectlazarus.org

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Questions?