

Disclosures

- No financial conflict of interest
- Off-label route of naloxone administration may be discussed (IN)

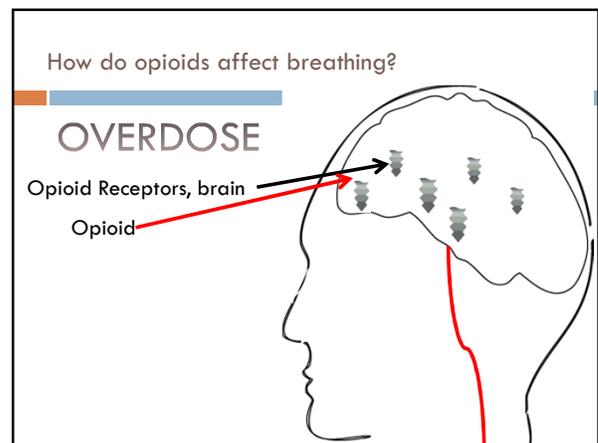
Agenda

- Orientation to naloxone
- Overdose education & Naloxone Distribution (OEND) programs
- Best practices & lessons learned
- Models, considerations, coalitions & collaborations
- Prescribe To Prevent
- RPC's role in naloxone initiative

Naloxone orientation

Opioids

Natural	Semi-synthetic	Fully synthetic
 Morphine Codeine	 Heroin Oxycodone	 Fentanyl Methadone Buprenorphine



How does naloxone affect overdose?

Restores breathing

- 1961 - invented; 1971 - FDA; WHO's essential medicines
- Reverses opioid-related sedation & respiratory depression = opioid antagonist
- Not psychoactive, no abuse-potential
- May cause withdrawal symptoms
- May be administered
 - IV = intravenous (inject in vein)
 - IM = intramuscular (inject in muscle)
 - SC = subcutaneous (inject under skin)
 - IN = intranasal (spray in nose)
- Acts within 2 to 8 minutes
- Lasts 30 -90 minutes, OD may return
- Dosing may be repeated
- Shelf life = about 18-24 months
- Narcan® = naloxone***

Overdose education & Naloxone Distribution (OEND) programs

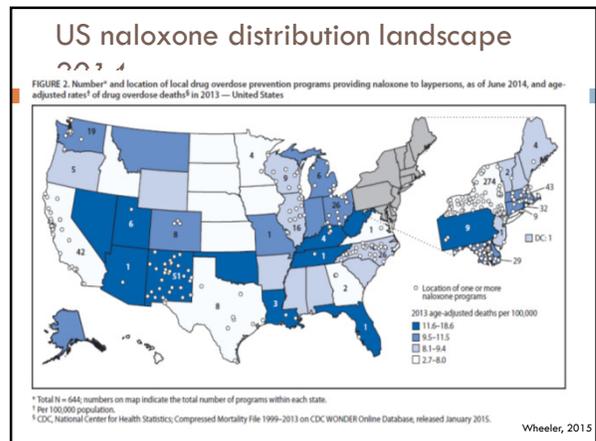
Little bit of history

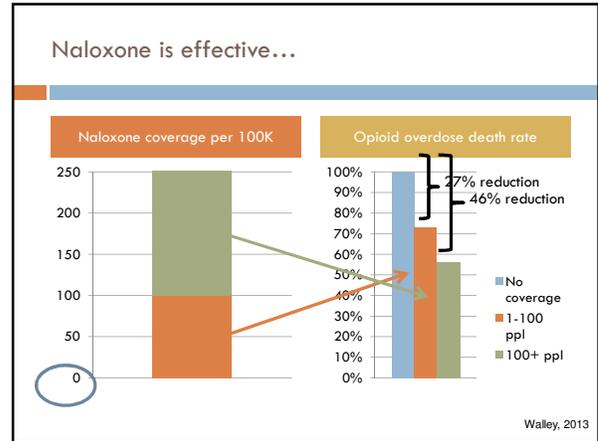
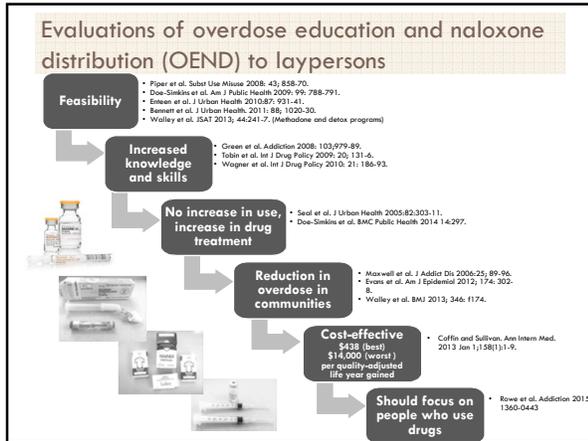
- Chicago 1996: Chicago Recovery Alliance, inspired by over-the-counter naloxone in Italy, began distributing naloxone to syringe exchange program (SEP) participants
- San Francisco 2001: clinical trial at a syringe exchange program leading to ongoing services under SF Department of Public Health in 2003
- New Mexico 2001: passed legislation to target people who use drugs
- Multiple sites across the country setting up services legally and underground (New York State, Boston 2006)
- Oklahoma 2014: Tulsa PD trained & OD prev launched

Bigg & Maxwell, 2002; Seal et al., 2005; Boca 2005, Clark

Today...

- The American Medical Association has endorsed the distribution of naloxone to anyone at risk for having or witnessing an opioid overdose
- There are about **644 sites** across **30 states** that prescribe or distribute naloxone
- Since 1996, naloxone has been distributed to over **150,000 people** and more than **26,000 overdose rescues** have been reported





...and cost-effective¹⁴

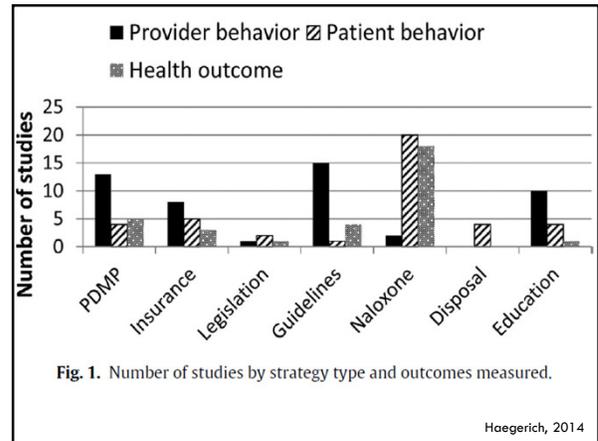
A manuscript in the *Annals of Internal Medicine* indicated that providing naloxone to heroin users is robustly cost-effective and possibly cost-saving. Investigators believe similar results apply to other opioid users.

Cost: \$421 per quality-adjusted life-year gained

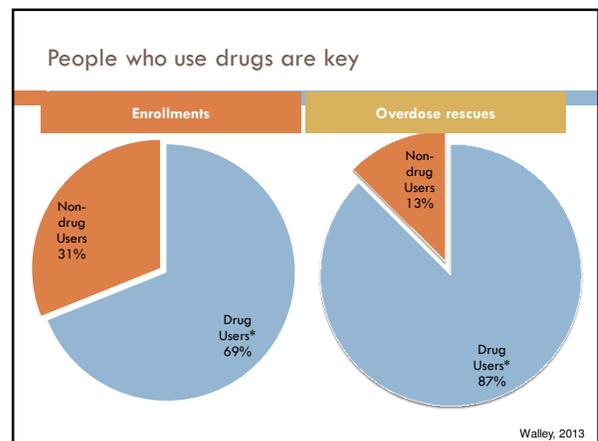
Benefit: 164 naloxone scripts = 1 prevented death

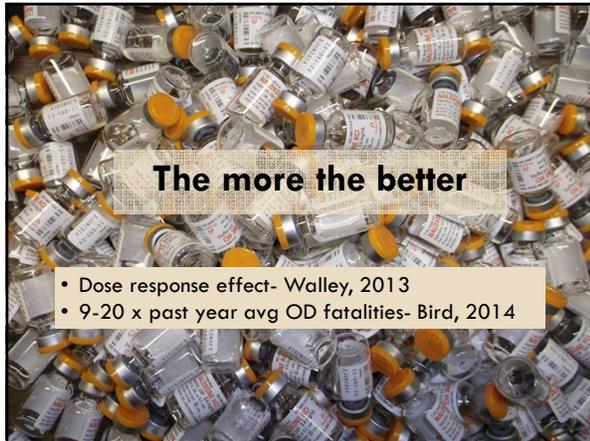
Emerging data suggests that providing naloxone may encourage patients to be safer with their opioid use. If this is the case, the intervention would be cost-saving and 36 prescriptions would prevent one death.

Slide courtesy of Phillip Coffin & Emily Behar



Best practices & lessons learned

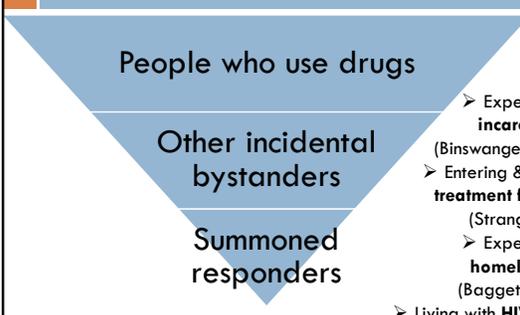




The more the better

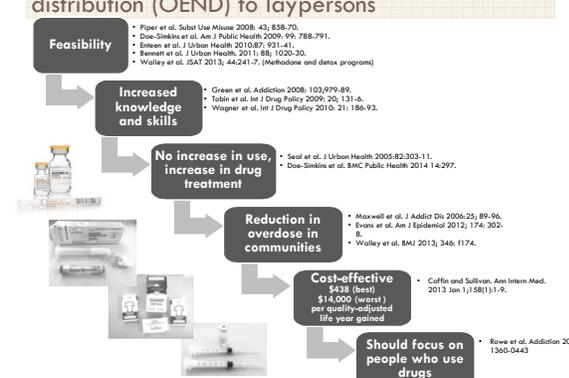
- Dose response effect- Walley, 2013
- 9-20 x past year avg OD fatalities- Bird, 2014

Finite resources, must prioritize?



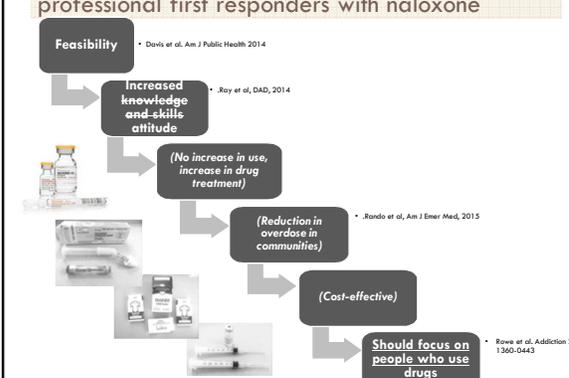
- Experiencing **incarceration** (Binswanger, 2013)
- Entering & exiting **treatment for OUD** (Strang, 2003)
- Experiencing **homelessness** (Baggett, 2012)
- Living with **HIV/ AIDS** (Green, 2012)

Evaluations of overdose education and naloxone distribution (OEND) to laypersons



- Feasibility**
 - Piper et al. *Subst Use Misuse* 2008; 43: 888-70.
 - Doe-Simko et al. *Am J Public Health* 2009; 99: 788-791.
 - Emswiler et al. *J Urban Health* 2010; 87: 931-41.
 - Bennett et al. *J Urban Health* 2011; 88: 1020-30.
 - Walley et al. *JGIM* 2013; 28: 241-7. (Methadone and detox programs)
- Increased knowledge and skills**
 - Green et al. *Addiction* 2008; 103: 979-89.
 - Tobin et al. *Int J Drug Policy* 2009; 20: 131-6.
 - Wagner et al. *Int J Drug Policy* 2010; 21: 186-93.
- No increase in use, increase in drug treatment**
 - Seal et al. *J Urban Health* 2005; 82: 303-11.
 - Doe-Simko et al. *BMC Public Health* 2014; 14: e297.
- Reduction in overdoses in communities**
 - Maxwell et al. *J Addict Dis* 2004; 23: 89-96.
 - Evans et al. *Am J Epidemiol* 2012; 174: 302-8.
 - Walley et al. *BMJ* 2013; 346: 1174.
- Cost-effective**
 - Coffin and Sullivan. *Ann Intern Med*. 2013 Jun 1;158(11):9-1360-0443
- Should focus on people who use drugs**
 - Rowe et al. *Addiction* 2015; 1360-0443

Evaluations of OD prevention by equipping professional first responders with naloxone



- Feasibility**
 - Davis et al. *Am J Public Health* 2014
- Increased knowledge and skills attitude**
 - Roy et al. *DAD*, 2014
- (No increase in use, increase in drug treatment)**
- (Reduction in overdoses in communities)**
 - Rando et al. *Am J Emerg Med*, 2015
- (Cost-effective)**
- Should focus on people who use drugs**
 - Rowe et al. *Addiction* 2015; 1360-0443

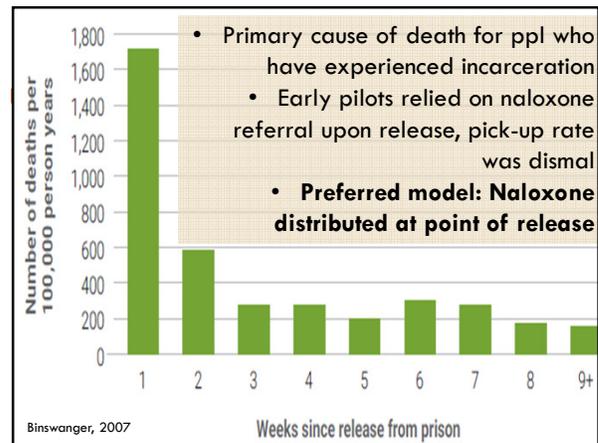
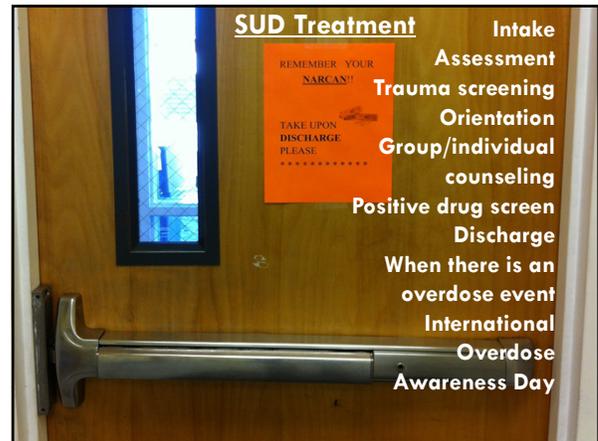
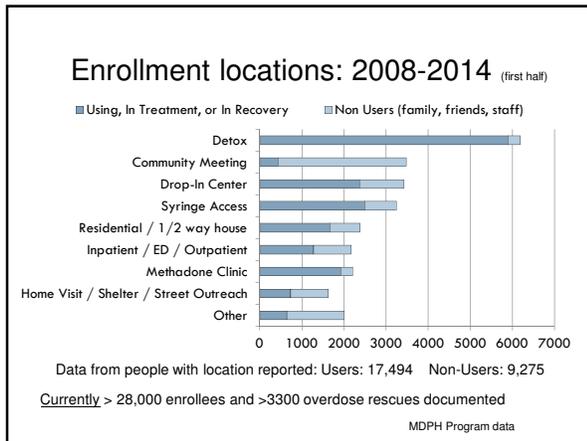
US Spotlight: Quincy PD, MA
Most Successful US Law Enforcement Naloxone Program



- Data Period 10/1/2010-6/11/2015
- First Naloxone Rescue: Nov 2010
- 419 Naloxone Administrations
- 402 Rescues

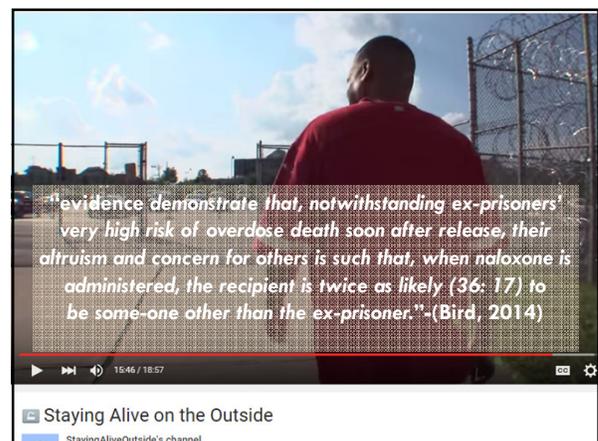
Lt. Det. Pat Glynn, Quincy PD, speaking at a law enforcement summit in North Carolina

Models, considerations, coalitions & collaborations



Department of Corrections & Community Supervision: NY example

- DOCCS is committed to training soon to be released inmates at all 54 prisons
- Piloting now at 3 state prisons in New York City; over 700 soon to be released inmates have been trained; 200 have been released with kits
- Standing order for nursing staff in all prisons
- Community Supervision (parole) is supportive
 - Carrying a kit is not a parole violation despite implication of being near people who use drugs
 - Using a kit is not a parole violation, the circumstances are important







REACH FOR ME

FIGHTING TO END THE AMERICAN DRUG OVERDOSE EPIDEMIC

“ Providing naloxone to opioid users is harm reduction on a really intimate, yet grand scale because every OD death that is prevented is hundreds if not thousands of people prevented from grieving. With each OD death prevented, it’s all that sorry, grief, and loss prevented.”



Considerations for families & loved ones

- Referrals
- People behind the data
- Fear, anger, sorrow, regret, shame
- Overdose-SUD context
- Living @ home
- Advocacy & stories
- People who have lost someone are different than people who have loved ones currently struggling




Teaching families- examples

- ▣ NYS- twelve 28 day programs provide community trainings
- ▣ IL- SUD Tx programs offering training to community (ROSC enhancing!)
- ▣ Learn to Cope: MA parent groups training parents
- ▣ Training visitors to inmates at Riker’s Island
- ▣ Community Supervision to offer kits to families of people on parole
- ▣ Tupperware party style among affected people





REACH FOR ME

FIGHTING TO END THE AMERICAN DRUG OVERDOSE EPIDEMIC

“ Naloxone matters because it’s about saving a life. It’s about helping someone. It’s about sticking together as a family.”

ELIZABETH OWENS
VOCAL - NY





- ▣ Google alerts & LTEs
- ▣ Put up posters about preventing/responding to OD
- ▣ Provide materials (brochures, fact sheets)
- ▣ Ask people if they have witnessed/survived/lost someone to an OD
- ▣ Talk about naloxone availability & offer referrals where ppl can get naloxone
- ▣ Talk about what to do if someone is overdosing
- ▣ Memory board/shrine



International Overdose Awareness Day: Wauconda, IL fire department

ODAwarenessDay.org

Sat. August 15, 9-11 AM
Beverly Middle Central, Elk Grove Village

FREE TO ATTEND

Music
Food
Resources

Connect with colleagues

- Emerging Opioid Overdose Surveillance Group (SAMHSA- every 2 wks)
- Opioid Safety & Naloxone Network
- Learn To Cope
- GRASP- Grief Recovery After a Substance Passing
- [North Carolina Harm Reduction Coalition](#)
- International Overdose Awareness Day

Models for prescribing naloxone

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Prescriber writes prescription
Patient fills at pharmacy

- Setting: clinic with insured patients
- Pharmacies alerted to prescribing plans
- May need to have atomizers on-site for intranasal formulation
- Consider providing informational brochure

Prescriber writes prescription and dispenses pre-packaged kit

Setting: medical care with resources to have and maintain kits on-site

Pharmacy provides naloxone directly to customer

- Without prescriber contact under a collaborative practice agreement (CPA) or standing order
- Encourage naloxone co-prescribing

Slide courtesy: Alex Walley & Prescribe To Prevent

Conclusions

- OEND is gaining momentum
- The more naloxone in a community, the better
- Wildly adaptable- with a little bit of work!
- People who use drugs- partners in this
- Naloxone- part of the solution
- Join national colleagues

Acknowledgements:
Opioid Safety & Naloxone Network
People who are using naloxone to save lives
Sharon Stancliff, Eliza Wheeler & HRC
Alex Walley & MDPH
Dan Bigg & CRA

Fortune cookies fortell the future. Naloxone means people have one.

Maya doe-simkins
mdoesimkins@gmail.com

Image: Stonetree Harm Reduction

RPC's role in naloxone initiative

Naloxone Initiative & The RPC's Role

- Naloxone in Oklahoma
 - House Bill 1782 (2013)
 - Allows expanded use of naloxone to first responders and others
 - House Bill 2666 (2014)
 - Allows for naloxone to be available for purchase at pharmacies
 - State Board of Medical licensure and Supervision Rule
 - Exempts opioid antagonists from patient-doctor relationship



Naloxone Initiative & The RPC's Role

- Naloxone initiative successes
 - 29 law enforcement agencies implementing naloxone program
 - 15 law enforcement agencies recruited by RPC's
 - RPC bought 1st tribal police department
 - 20 successful administrations since April 2014
 - Naloxone available now in 34 pharmacies
- Partnership with OSHD
 - EMS Naloxone Project



Naloxone Initiative & The RPC's Role

- Getting involved
 - Recruiting law enforcement
 - Contact ODMHSAS about potential interest
 - Steps in assisting law enforcement to implementing naloxone program
 - Connect with ODMHSAS for training availability
 - Memorandum of Understanding (MOU)
 - Set-up training



Naloxone Initiative & The RPC's Role

- Incorporating opioid overdose prevention
 - Work plans
 - Block Grant & PFS Funding
 - Suggestions to find funding support



Naloxone Initiative & The RPC's Role

- Opioid Overdose Prevention
 - Naloxone Initiative
 - Educating the community
 - Educating prescribers
 - Promoting message
 - Safe Use
 - Safe Storage
 - Safe Disposal



Naloxone Initiative & The RPC's Role

Appendix

Do trained rescuers perform differently than untrained rescuers?

	Rescues after training (N=508)	Rescues before training (N=91)
Friend of OD victim	67% (341/508)	69% (63/91)
OD setting: Public	20% (100/498)	29% (26/89)
> 1 naloxone dose used	48% (23/468)	39% (33/85)
911 called or EMS present	23% (119/508)	27% (25/91)
Rescue breathing	47% (166/350)	52% (34/66)
Stayed with victim	89% (445/498)	89% (78/88)
Sternal rub	63% (222/350)	62% (41/66)

Doe-Simkins et al. BMC Public Health 2014

How does drug use change after OEND?

	N=325	Increased	Decreased	No change
Heroin		115 (35%)	122 (38%)	88 (27%)
Methadone		84 (26%)	70 (22%)	171 (52%)
Buprenorphine		73 (22%)	66 (20%)	186 (58%)
Other Opioids		59 (18%)	62 (19%)	205 (63%)
Cocaine		83 (26%)	96 (30%)	146 (44%)
Alcohol		69 (21%)	70 (22%)	186 (57%)
Benzo/Barbiturate		99 (30%)	74 (23%)	152 (47%)*
Number of substances** used		131 (40%)	125 (38%)	69 (21%)

*p < 0.05 - Wilcoxon signed rank test which compares the median difference between two repeated measures among the repeat enrollers

**Participants were asked about use of heroin, methadone, buprenorphine, other opioids, cocaine, alcohol, benzodiazepine/barbiturate, methamphetamine, clonidine, and other substances

Doe-Simkins et al. BMC Public Health 2014