

Overdose risk characteristics of opioid users enrolled in an overdose prevention trial in an emergency department

CPDD

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Caleb Banta-Green PhD MPH MSW

Senior Research Scientist- Alcohol and Drug Abuse Institute

Affiliate Associate Professor- School of Public Health

Affiliate Faculty- Harborview Injury Prevention & Research Center

[University of Washington](#)

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Disclosure

- The use of naloxone intra-nasally is an off-label route of administration
- An FDA IND was obtained for this study

Outline

- Background and Motivation
- Study Overview
- Baseline data acute care sample

Harborview Medical Center- Seattle, WA



SEATTLE FIRE DEPT.
MEDIC ONE

MOVE RIGHT
SIRENS & LIGHTS

85439

WATCH THE STEP

M28

WASHINGTON
47982D

Study Team

Caleb Banta-Green, PhD, MSW, MPH	Principal Investigator Senior Research Scientist	Alcohol and Drug Abuse Institute, UW
Joseph Merrill, MD MPH	Associate Professor	UW School of Medicine
Dennis Donovan, PhD	Professor	Alcohol and Drug Abuse Institute, UW
Phillip Coffin, MD MIA	Director of Substance Use Research	San Francisco Department of Public Health
Christopher Dunn, PhD	Associate Professor	Psychiatry and Behavioral Sciences, UW
Norbert Yanez, PhD	Associate Professor	Public Health & Preventive Medicine Oregon Health Sciences Univ.
Jeanne Sears, PhD RN	Research Associate Professor	Dept. of Health Services, UW
Lauren Whiteside, MD MS	Acting Asst. Professor	Division of Emergency Medicine, UW
Anthony Floyd, PhD, CIP	Project Director	Alcohol and Drug Abuse Institute, UW

Study Overview

Aims are to test whether those who receive the intervention compared to standard care have:

Primary Aims

- 1) Lower rates of opioid non-fatal and fatal overdose
- 2) Reduce drug use, inappropriate medication use, and other overdose risk behaviors

Secondary Aims

- 3) More appropriate health care utilization (e.g. fewer emergency department visits and admissions to inpatient care)
- 4) Lower total health care costs
- 5) Determine the prevalence of HIV risk behaviors among heroin and pharmaceutical opioid users at risk for overdose and whether the intervention impacts these behaviors.

Inclusion for all subjects:

Meets study definition of elevated risk of future opioid overdose

- Reason for **visit is opioid overdose** (regardless of frequency of use), or
- Use of **pharmaceutical opioids not prescribed** to the patient 2 or more times in the prior month, or
- **Use of other** opioids, alcohol, benzodiazepines or stimulants **within two hours** of using opioids 2 or more times in the prior month, or
- Average daily **dose** of prescribed opioids consumed is greater than 10 mg morphine equivalent analgesic dose or higher for 15 or more days in the last 30.
- Enrolled in **opioid substitution program** (e.g. methadone or suboxone) and receiving doses.

Inclusion for heroin users:

Use of heroin through any route of administration **at least 2 times** in the last 30 days (or if institutionalized recently, in the most recent month they were not institutionalized) with or without other risks being present.

Inclusion for prescription-type opioid users:

Use of pharmaceutical opioids **at least 2 times** in the last 30 days (or if institutionalized recently, in the most recent month they were not institutionalized) **with other risks being present.**

Exclusion criteria

- 1) Unwilling to allow further **access** to medical or drug treatment **records**.
- 2) Inability to communicate in **English**.
- 3) Current active **suicidal** ideation.
- 4) Significant cognitive or psychiatric **impairment** (per judgment of clinical staff)
- 5) Inability to provide adequate **contact information** to assist with follow-up.
- 6) Under **age** 18 or over age 70 at time of recruitment.
- 7) Not currently living in **Washington State** or planning to move from Washington State within the following year.
- 8) Receiving treatment for **sexual assault**.
- 9) **Have** non-expired take-home **naloxone** at home, on their person, or in their possessions.
- 10) Participation in the study is not appropriate for subjects under care for **terminal illness**.

Overdose Risk Intervention

Overdose Risk Assessment

Drug/medication
use behaviors

Supportive
mechanisms for
behavior change

Overdose Education

Review factors
that increase risk

Provide
information/tools
to decrease risk

Overdose Feedback

Discuss what's
going well and
what needs
improvement

Make a plan for
behavioral change
to reduce risk

Educational Flier for Intervention and Comparison groups

Where to get Take-Home Naloxone

The opiate overdose antidote (Narcan®) is covered by Medicaid and some insurance.

Kelley-Ross Pharmacy at the Polyclinic
7th & Madison
Pharmacists prescribe and provide take home naloxone and training. (Costs \$)
904 7th Ave, Suite 103 Seattle, WA 98104
206-324-6990
www.krrph.com

Robert Clewis Center
Belltown 4th & Blanchard
Naloxone & overdose prevention education. Run by Public Health - Seattle & King County (No charge)
2124 4th Ave Seattle, WA 98121
206-296-4649
www.kingcounty.gov

The People's Harm Reduction Alliance
U-District NE 43rd & University Way NE
(table in the alley behind Post Office)
Naloxone kits (No charge)
206-330-5777
www.peoplesharmreductionalliance.org

Take-home Naloxone Locator
Updated regularly and includes locations outside of King County
www.hopeandrecovery.org/resources

For more information visit
www.StopOverdose.org

Adapted from Public Health-Seattle & King County materials 10/10/2014. Cover photo by Anthony Floyd.

Signs of Opiate Overdose

- ▶ Can't be woken up by noise or pain
- ▶ Blue or gray lips and fingernails
- ▶ Slow, shallow, or no breathing (less than 1 breath every 5 seconds)
- ▶ Gasping, gurgling, or snoring

What NOT to Do if Someone Overdoses

- ✘ **DO NOT** try to give them coffee or stimulant medications/drugs. It won't help.
- ✘ **DO NOT** put the person in an ice cold bath. It won't help and it could hurt them.

Resources for Help

Medication Safety - WA Dept. of Health
<http://tinyurl.com/wa-doh-tad>

Washington Poison Center
www.wapc.org
1-800-222-1222

Washington Recovery Help Line
24-hr help & treatment referrals for substance use, gambling & mental health
www.WARecoveryHelpLine.org
1-866-789-1511

Suboxone®/buprenorphine Treatment Locator
<http://tinyurl.com/locate-bup>

Treatment Locator
www.findtreatment.samhsa.gov

Overdose Risks

- ❑ **Prior overdose**
If you have overdosed before, you are more likely to overdose again. Keep naloxone near you.
- ❑ **Loss of tolerance**
If you have been off opiates for a while (detox, hospital, illness, etc.), your body can't handle the same amount it did before. Start with a smaller amount.
- ❑ **Mixing Drugs**
Mixing opiates with downers like benzos or alcohol can be deadly. Uppers and downers do not cancel each other out.
- ❑ **Dose/Strength**
Be careful when you use a new opiate; follow your medical provider's directions.
- ❑ **Using alone**
When you use opiates alone or behind a locked door, nobody can help you if you overdose.
- ❑ **Someone else giving you your opiates.**
Be in control, know what you are using.

My Plan

Contact Project OOPEN
206-543-0937
oopen@adai.uw.edu

Opiate Safety Education



Just In Case

Step 1. Sternal Rub

Try to wake the person up.

- ▶ Yell their name
- ▶ Rake your knuckles into their breastbone.

Step 2. Call 911

- ▶ Tell them exactly where you are. If you're outside, use the nearest intersection or landmark. If you can, send someone out to the street to wait for the ambulance.
- ▶ Phone tips: **Stay calm.** Quiet the scene. Tell the 911 operator someone is **NOT RESPONDING** and **NOT BREATHING**.
- ▶ When medics arrive, tell them what medications/drugs the person was taking and if you administered naloxone.
- ▶ If someone else is present, tell them to call 911 while you start rescue breathing and giving naloxone.
- ▶ Long acting opiates, like methadone, Oxy-Contin & MS Contin, last much longer than naloxone. A person who has an overdose involving long acting opiates has a higher chance of going back into an overdose after the naloxone wears off. Calling 911 is always important even if a person wakes up after being given naloxone.

911 Good Samaritan & Naloxone Law

Per Washington law, if you think someone is **OVERDOSING** & you **SEEK MEDICAL HELP** for the victim, neither of you will be charged for **POSSESSING** or **USING** a **SMALL AMOUNT** of **MEDICATIONS OR DRUGS**. The law does **NOT** protect you from any other crimes.

Also, anyone at risk for having or witnessing an opiate overdose can **OBTAIN NALOXONE, CARRY IT & ADMINISTER IT**. This is similar to how family members of an allergic person can possess & administer an "Epi-Pen".

Step 3. Rescue Breathing

Check **A&B: Airway & Breathing**

- ▶ Make sure nothing is blocking the airway.
- ▶ Put your cheek near their nose and mouth to watch and feel for breathing.

If not breathing:

- ▶ Carefully place the person on their back.
- ▶ Tip their head back. Put one of your hands under the person's neck.
- ▶ Use your other hand to pinch their nose closed.
- ▶ Make a seal over their mouth with your mouth. Use a mask if you have one.
- ▶ Give the person 2 breaths.
- ▶ Watch their chest rise as the breaths go in.
- ▶ If they don't start breathing, administer naloxone, if you don't have naloxone continue rescue breathing.

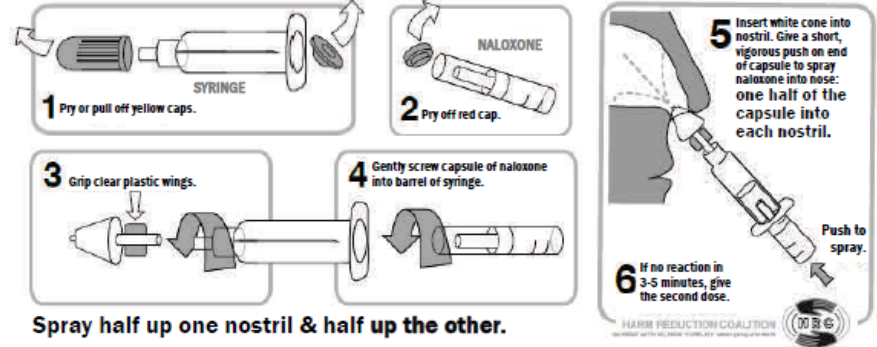
Give 1 slow breath every 5 seconds.

Count outloud:

One-one-thousand . . .
Two-one-thousand . . .
Three-one-thousand . . .
Four-one-thousand . . .
BREATHE.

Rescue breathing is very important. It can determine whether someone lives or dies. Only a few minutes without oxygen can result in brain damage.

Step 4. Naloxone



Spray half up one nostril & half up the other.

Step 5. Continue Rescue Breathing 3-5 Minutes

If the person does not respond, give a second dose of Naloxone.

- ▶ Naloxone wears off in 30-90 minutes.
- ▶ Comfort the person. They may be in withdrawal from the naloxone. But the overdose can come back once the naloxone wears off or if they use too soon.
- ▶ Do not let the person use again too soon!

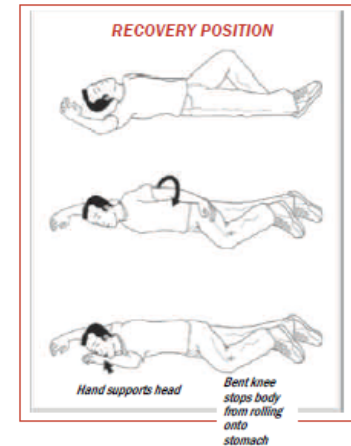
After the person comes to and starts to breathe:

- ▶ Stay with them.
- ▶ Monitor their breathing.

They can still slip back into an overdose.

The Naloxone will wear off sooner than the opiate!

If you have to leave the person, put the person in the **RECOVERY POSITION**. This way, they won't choke if they vomit.





StopOverdose.org

Opioid overdoses can be prevented and reversed!

Home / Opioid OD Education

Where to Get Naloxone / FAQ

Sources for Help

Law Enforcement

Evaluation of WA Law

Pharmacy/Prescribers

Other Drugs and Overdose

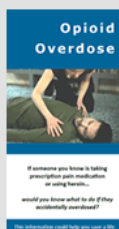
Resources

News

Center for Opioid Safety Education (COSE) **new!**



Download & share!



Opioid Overdose Prevention Education

Learn how you can save a life:
WATCH a video, **REVIEW** the steps, then **TAKE A QUIZ**.



A **community health worker** explains overdose prevention and demonstrates how to administer intra-nasal naloxone (Narcan™) in an overdose. Also in [Spanish](#) and [Russian](#). Alternate version shows use of [intra-muscular naloxone](#). Produced by New York City Department of Health.



A **doctor** teaches patients, their families and friends, what to do in case of overdose from prescription opioids, including how to administer the opioid antidote naloxone (Narcan™). Produced by Project Lazarus.

Review: Overdose and Good Samaritan Law

1. Check for signs of opioid overdose.

- Slow or no breathing
- Gurgling, gasping or snoring
- Clammy, cool skin
- Blue lips or nails

2. Try to wake them up.

Rub your knuckles hard over their chest bone. If they don't



Follow up/Outcome assessment

Interviews at 3, 6, 12 months.

- Phone for most, in-person if identified in care setting.

Records 2 years prior and up to 10 years post

- Health care utilization
- Drug treatment- publicly funded
- Buprenorphine via Medicaid
- EMS utilization
- Mortality

Contamination

- Overdose education and THN available in the community (wasn't when grant written)
 - We are providing comparison and intervention groups with a list of community resources
- Dilution/modification of study impact
 - Assess prior exposure at baseline
 - Assess exposure to OD ed. and THN throughout study
 - Post hoc analyses to examine these issues

Enrollment

Assessed for eligibility (n=430)

Excluded (n=174)

- ◆ Not meeting inclusion criteria (n=114)
 - Naloxone in possession (n=50)
 - Low MED (n=15)
 - Suicidal ideation (n=11)
 - Other criteria (n=38)
- ◆ Declined to participate (n=60)

Randomized (n=256)

Allocation

Allocated to intervention (n=125)

- ◆ Received allocated intervention (n=125)
- ◆ Did not receive allocated intervention (give reasons) (n=0)

Allocated to control group (n=131)

- ◆ Received allocated intervention (n=131)
- ◆ Did not receive allocated intervention (give reasons) (n=0)

Follow-Up

Treatment Location

	#	%
HMC ED	155	60.5
HMC Hospital	52	20.3
UWMC ED	8	3.1
UWMC Hospital	4	1.6
Respite Care	37	14.5
Total	256	100.0

Participant Characteristics

- Age Mean 41.2 Median 40.0 Range 19-67
- 71% Male
- 53% White 13% Black 5% Am.Indian 16% Multiple
- 15% Hispanic/Latino
- 30% <High School 34% H.S. 36% Some college+
- 52% out of work < 1 year 19% out of work >year
13% unable to work 9% working
- 87% Straight 3% Gay 7% Bisexual
- 50% homeless 18% temporary 31% permanent

Overdose History

- 61% Ever had overdose
- 32% overdose past year
- 20% overdose past 3 months

- 77% Ever witnessed an overdose
- 22% Witnessed overdose past month
- 13% current visit related to opioid overdose

Opioid use past 30 days

Opioid types

- 59.8% Heroin and pharmaceutical
- 17.6% Heroin only
- 22.7% Pharmaceutical only

Source/Motivation

- 44% used Rx-type opioid's not prescribed
- 28% in methadone program (1 buprenorphine)
- 20% used rx-type opioids only as prescribed- not including MMT

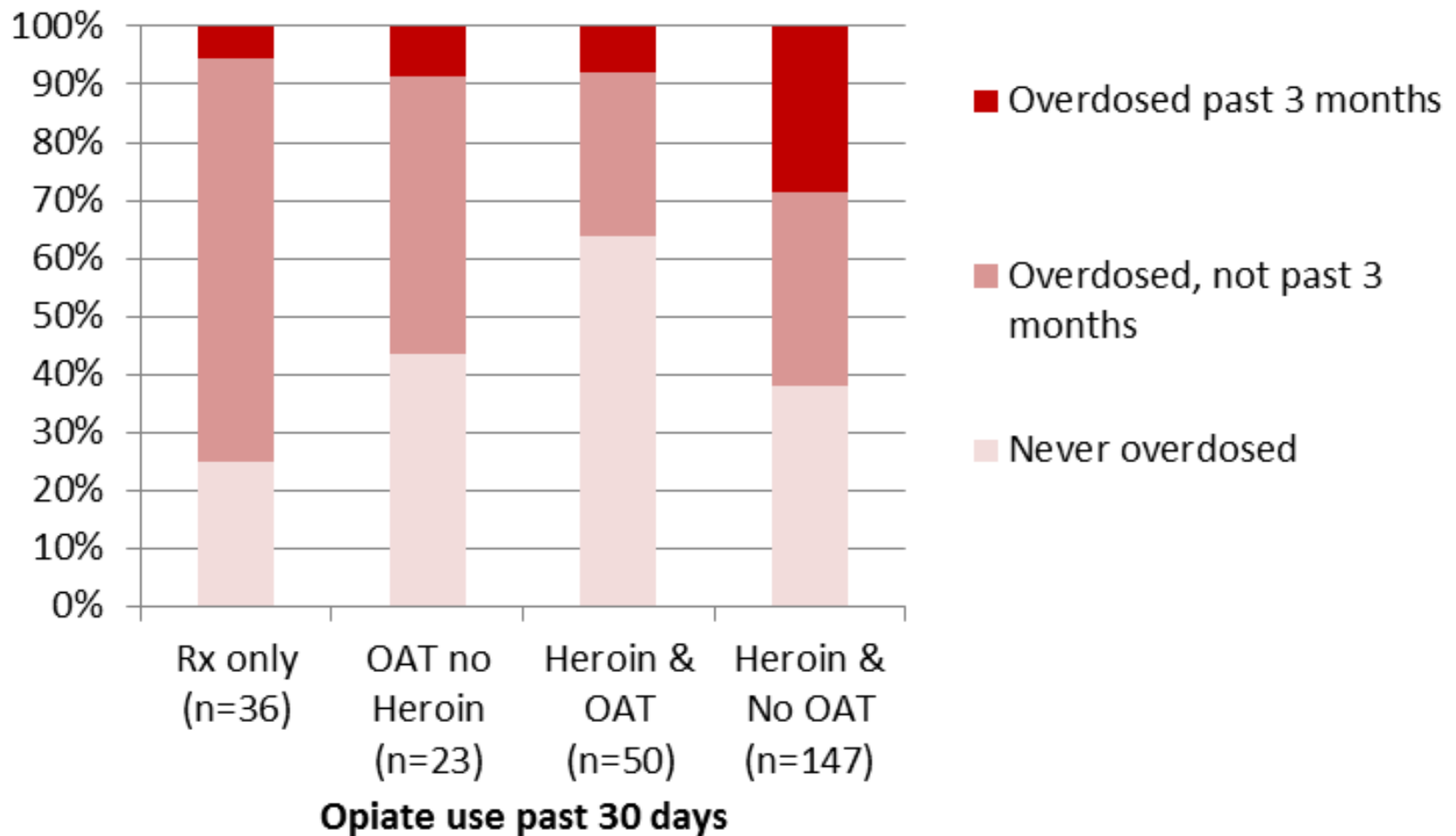
Frequency

- 62% daily opioid use

Opioid use past 30 days

	No Heroin	Heroin	TOTAL
No Opioid Agonist Therapy	36	147	183
Opioid Agonist Therapy	23	50	73
TOTAL	59	197	256

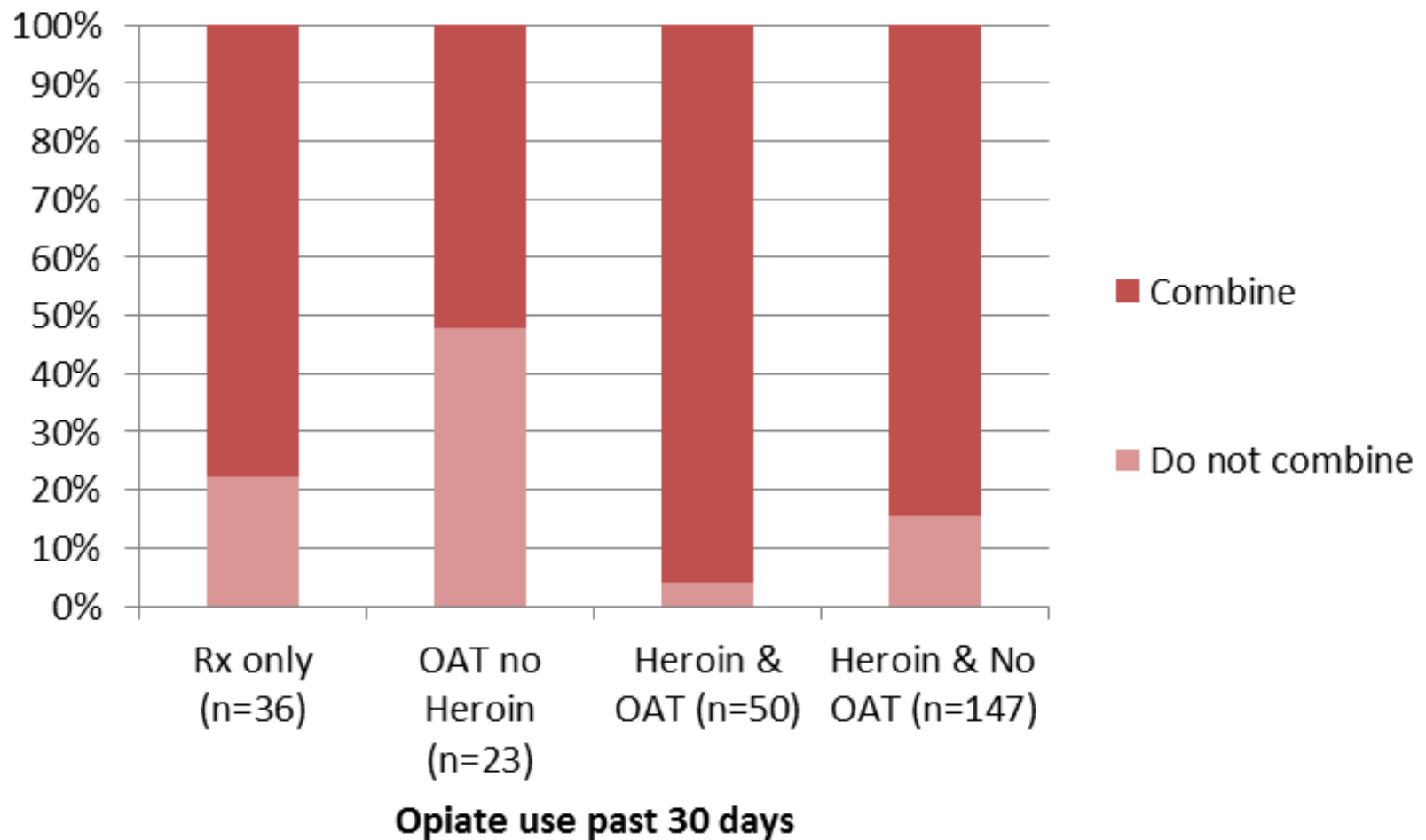
Overdose history & Opiate use type



Overdose risks- combining

- When you use opioids, how often do you use within 2 hours before or after (sometimes/always):
 - Alcohol 36%
 - More than one opioid 45%
 - Uppers (coke, meth, Rx) 52%
 - Downers (Valium, Xanax) 45%
 - **At least one of these 83%**

Combine with other drugs or alcohol



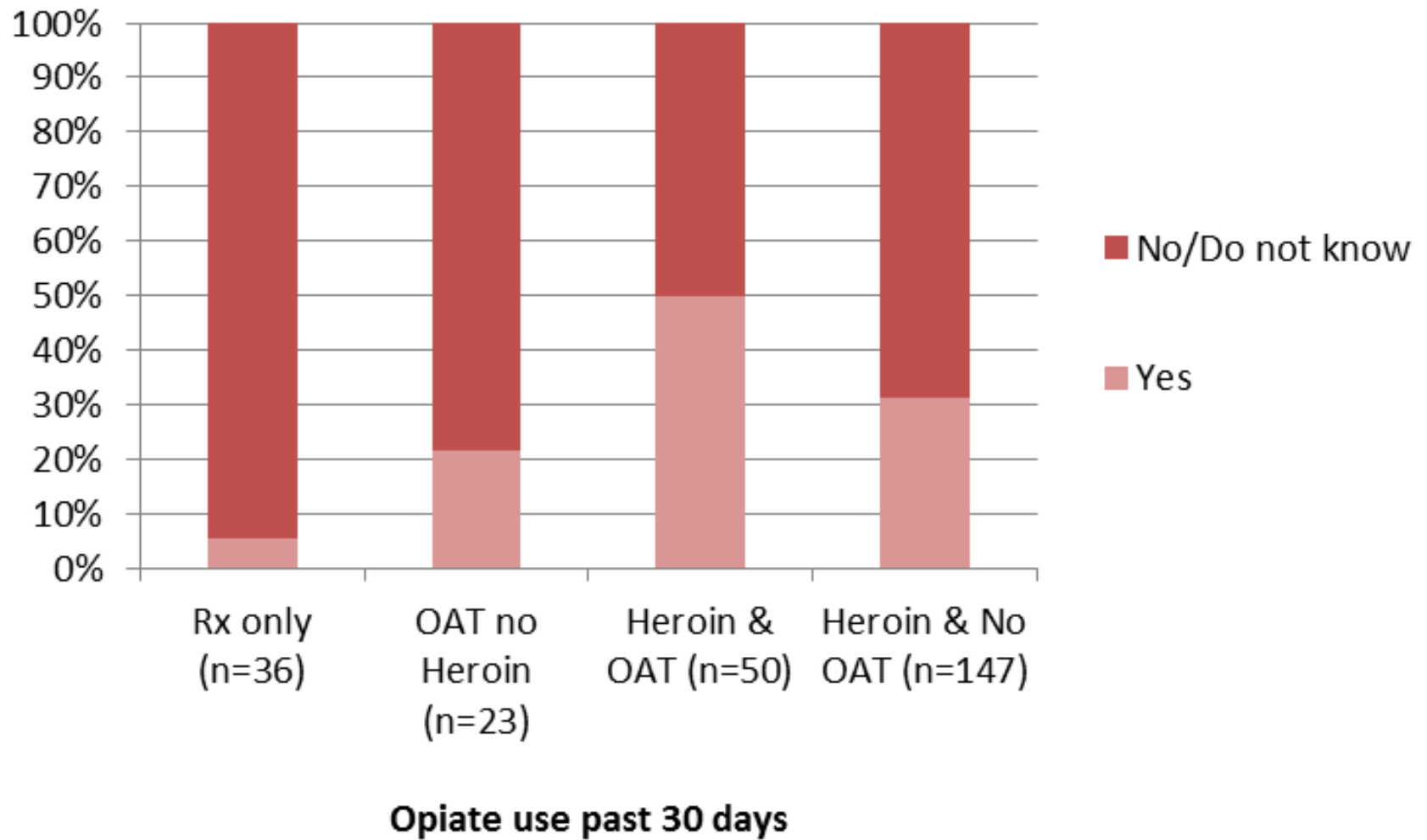
Overdose risks- past month

- 61% increased dose
- 78% used alone

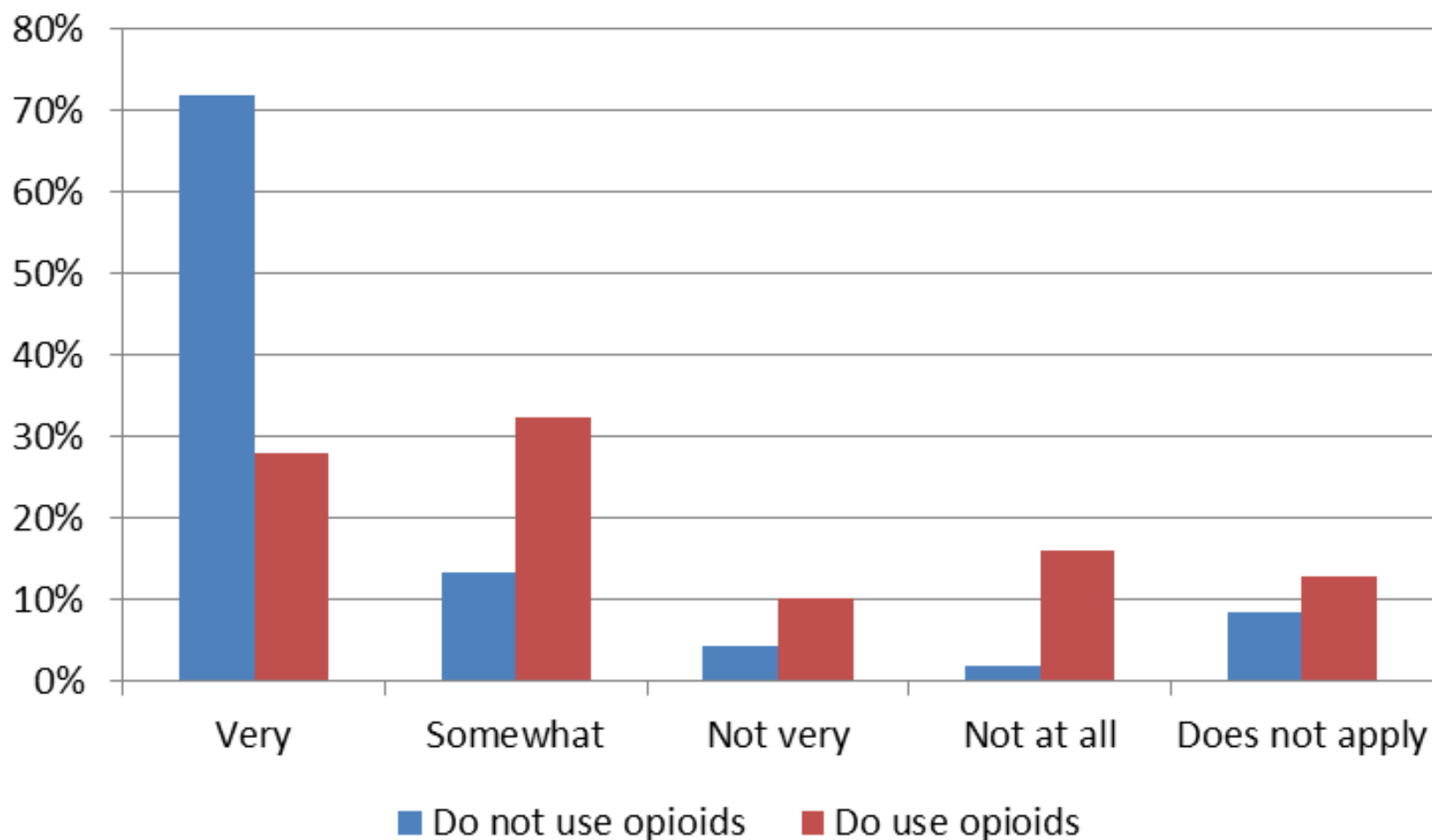
Overdose- Protective factors

- 37.5% ever had OD education of any kind
- 19% had naloxone provided to them in the prior year (exclusion criteria for current possession)
- 45% knew others who had overdose education
- 30% knew others who had naloxone

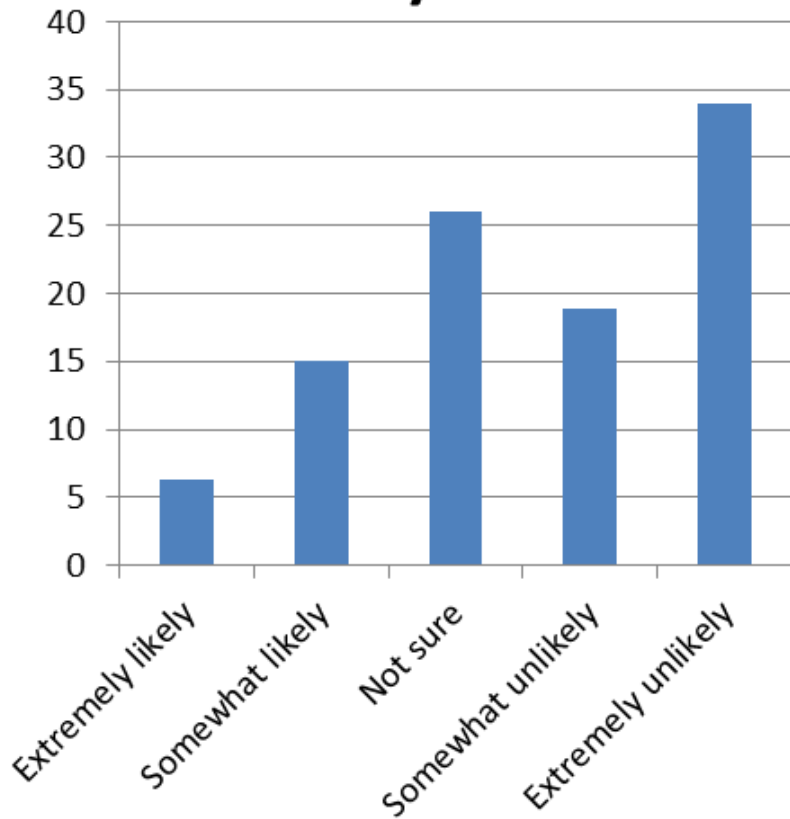
Friends have naloxone



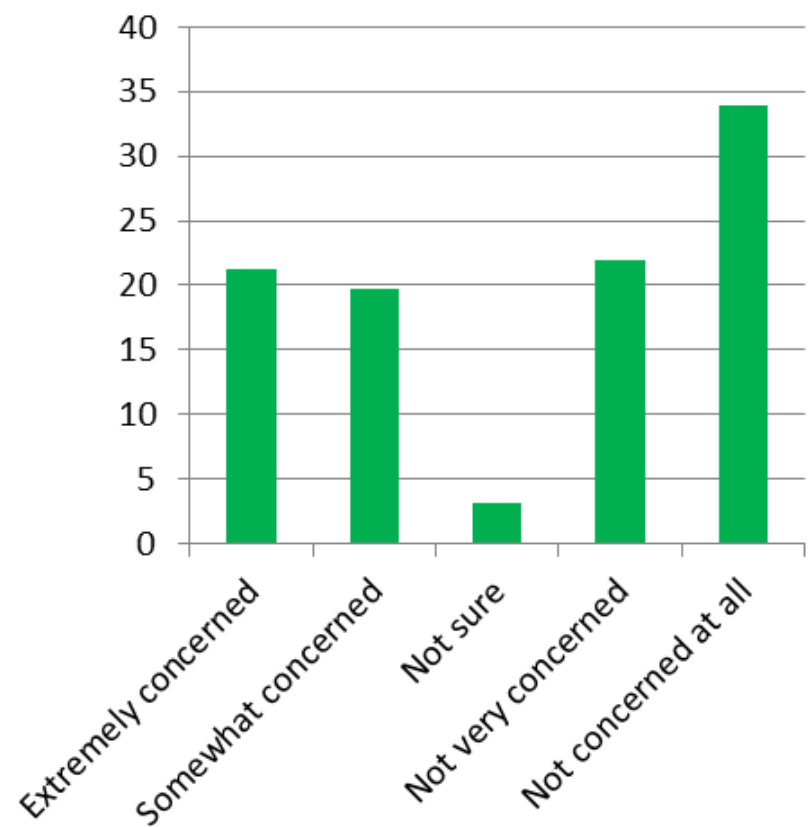
How supportive of decreasing overdose risk would people in your life be who...



How *likely* is it that you will experience an opiate overdose in the next year?



How *concerned* are you about YOU experiencing an overdose?



Conclusions

- Overdose risks are generally high
- Overdose protective factors are modest
- Overdose history, risks and protective factors appear to vary by opiate user type
- Overdose risk perceptions and concerns are very low

Conclusions

- Identifying and enrolling prescription opioid only users (non MAT) was difficult
 - Patient and clinician perceptions
 - Rapid epi change, increasing heroin
- Impact of intervention on overdose occurrence and risk factors will be tested