WA State Project to Prevent Prescription Drug/Opioid Overdose (WA-PDO)

Report on Overdose Education and Naloxone Distribution, Year 1

UNIVERSITY of WASHINGTON
ADAI | ALCOHOL & DRUG ABUSE INSTITUTE

Caleb Banta-Green, Susan Kingston

November, 2017

PROJECT OVERVIEW

The Washington State Project to Prevent Prescription Drug/Opioid Overdose (WA-PDO) is a five-year project funded by the Substance Abuse and Mental Health Services Administration (SAMHSA) to prevent overdose deaths from prescription opioids, heroin and other illicit opioids. The project is administered in partnership by the Washington State Department of Social and Health Services/Division of Behavioral Health and Recovery and the University of Washington Alcohol & Drug Abuse Institute.

WA-PDO activities are concentrated in, but not limited to, four high-need areas (HNA) of Washington State (see Figure 1). In the WA-PDO model, training and naloxone are provided primarily through syringe exchange programs to lay first responders (people who use opioids, their friends and family, and social service providers) and professional first responders, primarily law enforcement officers. Overdose education and naloxone to lay responders began in January, 2017 and to law enforcement in August, 2017.

Data on naloxone distribution and overdose reversals are collected through:

- Baseline surveys completed when a naloxone kit is issued to a new recipient. Lay responders receive a non-personally-identifiable Participant ID code at baseline.
- Follow up surveys completed by lay responders approximately 30 days after baseline.
- Refill surveys completed whenever a replacement kit is issued (e.g., due to expiration, use in an overdose).

Among lay responder recipients,[1] nearly one-third (31%, n=417) completed a 30-day follow up survey, 321 (24%) completed a refill survey, and 235 (18%) completed both a follow up and a refill survey.

This report outlines the progress and outcomes of overdose education and naloxone distribution in Year 1 (ending August, 2017) of the WA-PDO project.

[1] Among 1,333 lay responders getting new kits from WA-PDO and not refilling old kits from other funding sources.

NALOXONE DISTRIBUTION

VOLUME TOTALS

Between January 1 and August 31, 2017, **WA-PDO syringe exchange partners distributed 2,728 naloxone kits (1,910 new and 818 refill kits) to 1,814 individuals, including 349 professional first responders and 1,465 lay responders**. Naloxone distribution to lay responders across the four HNAs of the state is detailed in Figure 1:

Figure 1. Naloxone distribution to lay responders by HNA

	Baseline kits *n = 1,561*	Refill kits *n = 818*	Total kits *n = 2,379*
South Sound	624	321	**945**
North Sound	391	183	**574**
Southwest WA	277	224	**501**
Southeast WA	269	90	**359**

PROFESSIONAL FIRST RESPONDERS

The 349 law enforcement officers trained in overdose response and naloxone administration represented nine sheriffs and police units in four counties (Lewis, Benton, Douglas, and Chelan). Officers were primarily male (93%) and white (91%); worked in patrol (71%); and ranged in years of service from less than one year to over 20 years. Prior to WA-PDO training, **over half (55%) reported being at the scene of at least one overdose in the last 12 months**, yet none had been equipped with naloxone at the time.[2]

LAY RESPONDERS

At baseline, **ninety-one percent (91%, n=1,333) of lay responders were first-time naloxone recipients from the program**, while 9% (n=132) were obtaining a refill kit subsequent to obtaining naloxone from another funding source.[3] Lay responders overall were closely divided in gender (51% male, 49% female, <1% transgender) and ranged in age from 18 to 90 with a mean age of 37 years. One half (50%) were under the age of 34. Lay responders were primarily white, with other race/ethnicities also reported at baseline (Table 1).

Table 1. Demographics of lay responders *n=1,333*

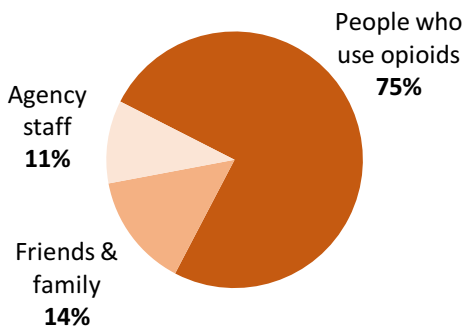
White	1115	84%
American Indian/Alaskan Native	119	9%
Hispanic/Latino	103	8%
Black	51	4%
Native Hawaiian/Pacific Islander	27	2%
Other	27	2%
Asian	21	2%

**Multiple responses allowed*

[2] This does not mean that they were the first to arrive at the scene or that medics were not present.
[3] Data on these 132 lay responders have been excluded from this analysis.

As seen in Figure 2, **three quarters (75%, n=999) of these 1,333 lay responders were people who had used opioids (PUO) in the prior three months** (heroin, prescription opioids, and/or other illicit opioids). The remaining lay recipients included 191 (14%) "friends and family" of someone who uses opioids and 139 (11%) professionals who received naloxone kits to respond to workplace overdoses, primarily from social service organizations (75%), drug treatment agencies (9%) and public entities such as libraries, community centers and transit stations (11%).

Figure 2. Lay recipients of naloxone kits



Use of other substances in the prior three months, methamphetamine in particular, was also commonly reported by PUO (Table 2). Using other substances around the same time as opioids greatly increases the risk of overdose. Two-thirds of PUO also reported experiencing **housing instability**: 29% (n=291) described their housing as temporary and 37% (n=364) reported no housing at all.

Table 2. Drugs used and main drug among people who used opioids in last 3 months *n=999*

Drugs Used in Last 3 Months			**Main Drug**		
Heroin by itself	845	85%	Heroin by itself	724	73%
Methamphetamine by itself	666	67%	Methamphetamine by itself	125	13%
Methamphetamine/heroin together	566	57%	Methamphetamine/heroin together	95	10%
Benzodiazepines	199	20%	Methadone or buprenorphine*	13	1%
Alcohol	198	20%	Other prescription opioids	11	1%
Methadone or buprenorphine*	159	16%	Alcohol	9	1%
Other prescription opioids	151	15%	Powder cocaine, crack cocaine, cocaine/heroin together, benzodiazepines	<1% each	
Powder cocaine by itself	100	10%			
Cocaine/heroin together	68	7%			
Crack cocaine	52	5%			

** in treatment or illicitly*

Baseline data also indicated that **despite frequent exposure to opioid overdose, most PUO had no prior access to overdose training or naloxone**:

- 70% had witnessed an overdose in the last 12 months.
- 35% had witnessed at least 3 overdoses in the last 12 months.
- 25% had themselves overdosed in the last 12 months.

- 62% had no prior naloxone kit.
- 53% had no prior overdose response training.

OUTCOMES OF OVERDOSE RESPONSE AND NALOXONE TRAINING

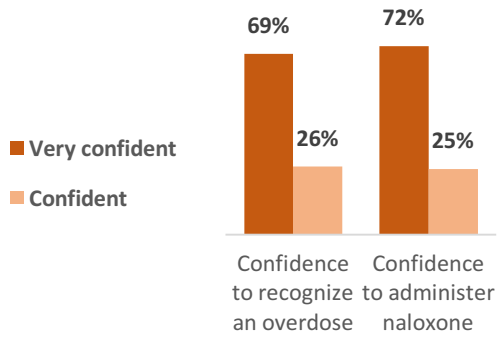
Most lay responders reported learning something new in their initial training (Table 3).[4]

Table 3. What did you learn today that was new? *n=1333*

How to administer naloxone	53%	How to do rescue breathing	29%
Good Samaritan law	41%	Signs of an overdose	28%
How to do a sternum rub	39%	www.stopoverdose.org	22%
Steps to help in an overdose	38%	Risks for an overdose	20%
What is naloxone	31%	Community resources	15%
What to do after reversing an overdose	31%	Nothing new	19%

The vast majority also **reported high levels of confidence to recognize an opioid overdose and correctly administer naloxone** (Figure 3).

Figure 3. Self-reported confidence after initial training *n=1333*



Based on 30-fay follow up survey data, **lay responders quickly and frequently shared information and skills** they received in their initial overdose response/naloxone training within their social, professional and drug-using networks (Table 4).

Table 4. Lay responder actions within 30 days after training *n=417*

Since I received my naloxone kit about 30 days ago, I have:		
Told someone I have naloxone	397	95%
Told someone how to get naloxone	373	90%
Told someone what can cause an overdose	343	83%
Taught someone how to use naloxone	326	78%
Taught someone what to do in an overdose	323	78%
Taught someone where I keep my naloxone	328	79%
Told someone about the Good Samaritan law	300	72%

Many PUO had opportunity to use their newly-acquired overdose response skills soon after receiving their training and naloxone: Within in about 30 days after training:

- 38% had witnessed an overdose.
- 21% had used at least one dose of their naloxone in an overdose.
- 7% had overdosed themselves.

[4] These proportions are likely under-reported because data collection was inconsistent across locations.

OVERDOSE REVERSALS with NALOXONE

392 opioid overdoses were reported by lay responders between January and August 2017; all but one were successfully reversed with naloxone. All of the reversal reports came from PUO; none had been reported by other lay responders or by law enforcement at the time of analysis. This represents a frequency of about **49 reversals reported each month**. Figure 4 shows how these overdose reversals were distributed across the four HNAs. **Over half (59%) of these layperson reversals were performed by individuals who had never before administered naloxone.**

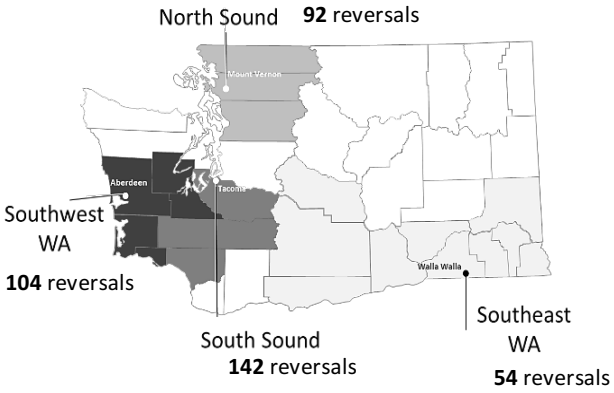
Among the overdoses reported by PUO responders:

- 79% involved a friend or acquaintance; 9% involved a stranger.
- 66% occurred inside a private residence; 28% in an outside space (e.g. park, car, encampment)

PUO responders reported calling 911 in just 39% of overdoses. The most common reasons reported for not calling 911 included:

- being able to handle the situation themselves (50%).
- the overdose victim woke up after naloxone (54%).
- fear of police (30%).

Figure 4. Opioid overdose reversals reported by HNA



In cases in which 911 was called, **three-quarters of overdose victims woke up before a professional first responder arrived at the scene**, which illustrates how **lay responders can successfully use naloxone to save critical minutes** in overdose response.

KEY CONCLUSIONS FROM YEAR 1

- **WA-PDO is effectively reaching new communities and social/drug using networks.**
- **WA-PDO training efforts are increasing knowledge, skills, and confidence within these networks to prevent and intervene in opioid overdose.**
- **Concentrating naloxone distribution through syringe exchange programs is an effective and productive strategy to reach individuals with the highest overdose risk, closest proximity to overdose events, and quickest opportunity to intervene successfully in an overdose.**
- **Lay responders, and people who use opioids in particular, readily share their learning with peers and actively promote diffusion of overdose prevention messages and skills building within their communities.**

Citation: Banta-Green CJ, Kingston S. WA State Project to Prevent Prescription Drug/Opioid Overdose (WA-PDO): Report on Overdose Education and Naloxone Distribution, Year 1. Seattle: Alcohol & Drug Abuse Institute, University of Washington, December 2017. URL: http://adai.uw.edu/pubs/2017WAPDO_Yr1.pdf