WA State Project to Prevent Prescription Drug/Opioid Overdose
Final Report on Naloxone Distribution, Sept. 1, 2016 – August 31, 2021

ADAI ADDICTIONS, DRUG & ALCOHOL INSTITUTE

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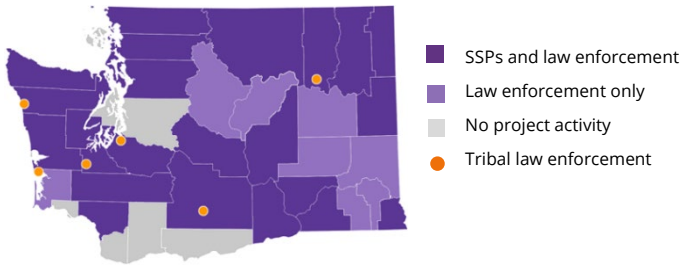
The **Washington State Project to Prevent Prescription Drug/Opioid Overdose** (WA-PDO) was a five-year project supported by the WA State Health Care Authority/Division of Behavioral Health and Recovery with funds from the Substance Abuse and Mental Health Services Administration. **The goal of the project was to prevent opioid overdose in WA State by building a statewide network for overdose prevention and response training and naloxone distribution**. The project was implemented by the University of Washington Addictions, Drug & Alcohol Institute (ADAI) in partnership with five organizations who served as regional coordinators for project activities:

- Blue Mountain Heart to Heart, *Walla Walla*
- Dave Purchase Project, *Tacoma*
- Grays Harbor County Public Health & Social Services, *Aberdeen*
- Phoenix Recovery/Pioneer Human Services, *Mt Vernon*
- Spokane Regional Health District, *Spokane*

Overdose prevention and response training and naloxone distribution took place in **32 counties** through **24 syringe service programs** (SSPs) to reach lay first responders (people who use opioids, their friends and family, and social service providers) in addition to officers in **107 law enforcement units**, including **6 tribal police units**.



This report describes the results of WA-PDO's naloxone distribution efforts, with a particular emphasis on naloxone distribution among people who use opioids (PWUO) and law enforcement, and includes the following sections:

1. Executive summary of naloxone distribution, overdose reversals, and key conclusions.
2. People who use opioids at receiving initial naloxone kit
3. People who use opioids, 30 days after receiving initial naloxone kit
4. People who use opioids and overdose reports
5. People who use opioids and experience with professional first responders
6. Law enforcement training and naloxone
7. Law enforcement naloxone administrations

PROJECT AT A GLANCE

5 YEARS OF DISTRIBUTION

55,155 NALOXONE KITS	16,214 RECIPIENTS TRAINED	9,526 OVERDOSE REVERSALS
50,730 Lay responders	14,677 Lay responders	9,240 Lay responders
4,425 Law enforcement	1,537 Law enforcement	286 Law enforcement
11,031/year avg	3,243/year avg	5 reversals per day avg

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ACKNOWLEDGEMENTS

UW ADAI would like to thank the **extraordinary staff and volunteers** of our 24 partner syringe service programs across the state who tirelessly provided overdose response and naloxone training from their offices, out of vans, on street corners, in good weather and dismal weather, during Covid, and just about anywhere their participants needed, literally *meeting people where they're at*. For five years, these unsung heroes administered baseline and refill surveys – over and over again - and tediously entered results into electronic databases, occasionally on their own time, to document this important work.

We also want to gratefully acknowledge the willingness of over 10,000 **SSP participants** to share their personal information in project surveys, pass along their training and naloxone kits to others, and, ultimately, save the lives of friends and complete strangers, often more than a few times. Theirs is the real effort that rarely gets the public recognition and appreciation it deserves.

And for those whose lives we could not save, this work continues in your memory.

I. EXECUTIVE SUMMARY

In the WA-PDO project, overdose training and naloxone distribution was targeted primarily to lay first responders, particularly people who use opioids (PWUO) who are the most likely to witness and/or experience an opioid overdose, followed by friends and family of PWUO and professionals likely to witness an opioid overdose in settings such as social service agencies, libraries, businesses, substance use treatment agencies, and other public venues. **People who use opioids accounted for 70% of layperson recipients and submitted 94% of naloxone administration reports among laypersons.**

LAYPERSON DISTRIBUTION	# Recipients	INITIAL Kits	REFILL Kits	TOTAL Kits*	REFILL EPISODES	Naloxone administrations
	14,677	**19,168**	**31,562**	**50,730**	**26,241**	**9,240**
People who use opioids	**70%** 10,283	**73%** 14,054	**92%** 29,037	**85%** 43,091	**92%** 24,089	**94%** 8,711
Friends and family	**22%** 3,220	**20%** 3,773	**6%** 1,894	**11%** 5,667	**7%** 1,782	**5%** 499
Professionals**	**8%** 1,174	**7%** 1,341	**2%** 631	**4%** 1,972	**1%** 370	**<1%** 30

*Multiple kits given at some episodes

**Professional settings:
- 50% Social service agencies
- 17% Libraries, businesses, public venues
- 18% Other (e.g., criminal justice, health care, university)
- 15% Substance use treatment agencies

KEY LEARNING on LAYPERSON NALOXONE:

- Concentrating naloxone distribution through syringe service 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.
- People who use opioids readily share their learning with peers and actively promote diffusion of overdose prevention messages and skills building within their communities.
- Distributing naloxone to people who use drugs yields high rates of naloxone use in overdoses, making this a worthwhile investment of public health resources.

In the WA-PDO project, syringe service programs were positioned to train law enforcement in their area and to supply naloxone to these units. This intentional strategy helped establish and encourage collaborative relationships between SSPs and police. **SSP partners provided training and naloxone to 1,537 officers from 107 law enforcement units.**

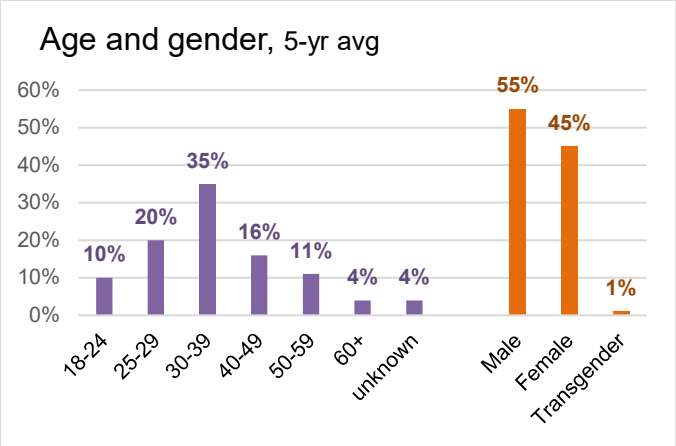
LAW ENFORCEMENT DISTRIBUTION	Officers Trained	INITIAL Kits	REFILL Kits	TOTAL Kits	Naloxone administrations
	1,537	**2,305**	**2,120**	**4,425**	**286**
Type of units, n=107	City/municipal: 69	County sheriffs: 26	Tribal police: 6	Other: 6	

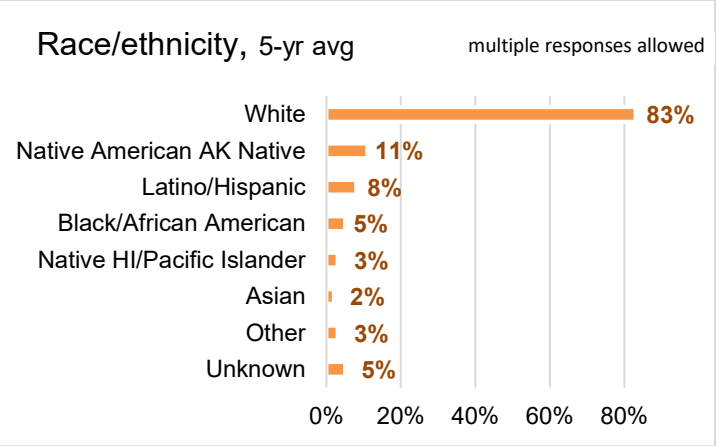
KEY LEARNING on LAW ENFORCEMENT NALOXONE:

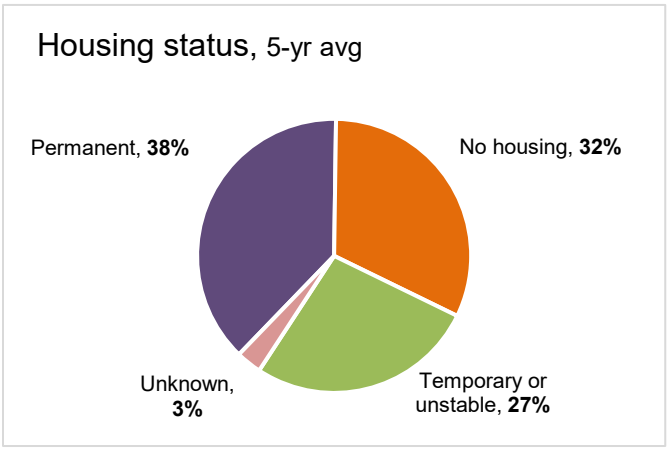
- Overdose training and naloxone distribution can leverage and support collaborative relationships between harm reduction programs and law enforcement.
- Law enforcement resistance or ambivalence about their role in overdose response and in addressing opioid use in the community can soften with appropriate training, resources, and administrative and leadership support.

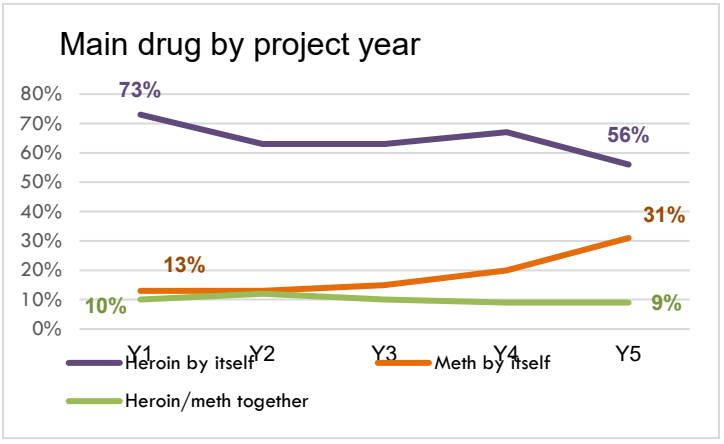
2. PEOPLE WHO USE OPIOIDS at RECEIVING INITIAL NALOXONE KIT n=10,082

While the demographic profile of people who use opioids (PWUO) remained consistent each year of the project, there was a notable increase in self-reported methamphetamine use among PWUO and in the proportion who reported their "main" drug as methamphetamine rather than an opioid (Note: Because baseline surveys did not include fentanyl as a response option, we do not have specific data on fentanyl use in this time period.)





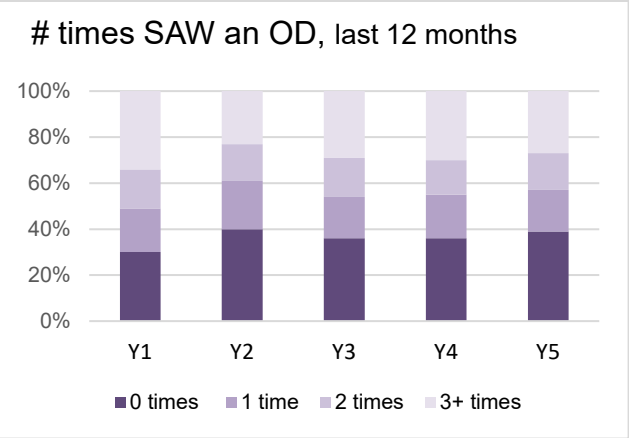


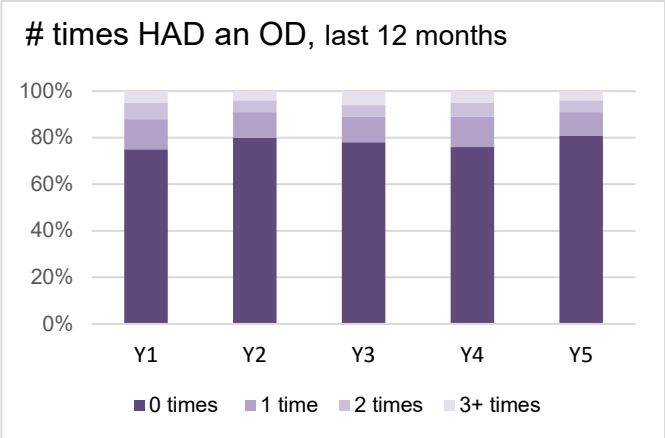


DRUGS USED IN LAST 3 MONTHS	Y1 2016/17*	Y2 2017/18	Y3 2018/19	Y4 2019/20	Y5 2020/21
Heroin by itself	**85%**	**79%**	**80%**	**84%**	**74%**
Methamphetamine by itself	**67%**	**65%**	**66%**	**72%**	**75%**
Meth/heroin together	57%	54%	54%	51%	41%
Alcohol	20%	20%	20%	16%	10%
Benzodiazepines	20%	16%	16%	10%	7%
Methadone/buprenorphine	16%	25%	26%	14%	10%
Other prescription opioids	15%	15%	14%	10%	10%
Powder cocaine by itself	10%	10%	10%	9%	6%
Cocaine/heroin together	7%	8%	7%	6%	4%
Crack cocaine	5%	6%	5%	6%	4%

**Project years are September 1 through August 31 of the following year.*

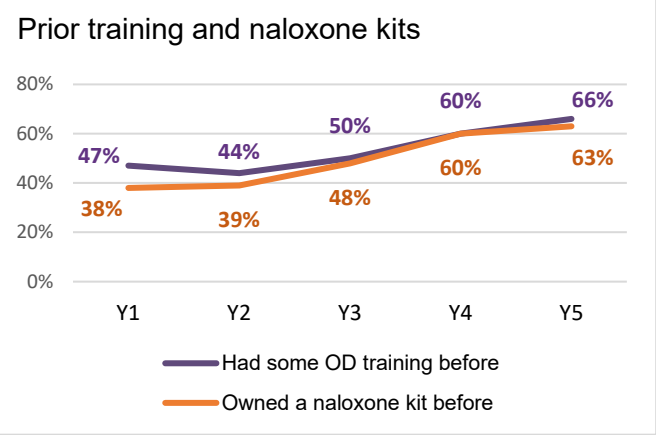
At their initial WA-PDO kit, PWUO were asked how many times they had seen and had an opioid overdose in the last 12 months. While responses did not change much from year to year, overdose training and naloxone ownership among PWUO did become more prevalent over the five years. That training and/or naloxone may have come from another program, a friend, another WA-PDO recipient, a healthcare provider or some other source.





SAW an OD	Y1	Y2	Y3	Y4	Y5
0 times	30%	40%	36%	36%	39%
1 time	19%	21%	18%	19%	18%
2 times	17%	16%	17%	15%	16%
3+ times	35%	23%	29%	30%	27%

HAD an OD	Y1	Y2	Y3	Y4	Y5
0 times	75%	80%	78%	76%	81%
1 time	13%	11%	11%	13%	10%
2 times	7%	5%	5%	6%	5%
3+ times	6%	4%	6%	5%	4%



3. PEOPLE WHO USE OPIOIDS, 30 DAYS AFTER RECEIVING INITIAL KIT n=942

In Years 1 and 2, syringe service programs administered follow-up surveys to people who use opioids approximately 30 days after they had received their initial naloxone kit from WA-PDO (n=942, 21% of PWUO in that time period). Results show that **people who use opioids quickly and frequently shared information and skills** they received in their initial overdose/naloxone training within their social and drug-using networks.

Since I received my naloxone kit about 30 days ago, I have:	
Told someone I have naloxone	94%
Told someone how to get naloxone	93%
Taught someone what to do in an overdose	84%
Told someone what can cause an overdose	81%
Taught someone how to use naloxone	81%
Told someone where I keep my naloxone	79%
Taught someone about the Good Samaritan law	72%

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

- **49%** had witnessed an overdose.
- **7%** had overdosed themselves.
- **29%** had administered at least one dose from their 2-dose naloxone kit in an overdose.
- **23%** had shared at least one dose from their 2-dose naloxone kit with someone else.

4. PEOPLE WHO USE OPIOIDS at REFILL EPISODES n=24,089

Ninety-two percent (92%) of all refill episodes (i.e., replacing naloxone kits) among laypersons came from people who use opioids. Most often, PWUO needed to replace their naloxone kit because they had given their naloxone kit to someone else or had used their naloxone in an overdose.

REASONS FOR REFILL n=refill episodes*	Y1 n=842	Y2 n=4045	Y3 n=5,907	Y4 n=5,535	Y5 n=7760	TOTAL project n=24,089
Gave away	47%	48%	52%	54%	57%	55%
Used in an overdose	46%	36%	38%	37%	33%	35%
Stolen	24%	13%	14%	10%	6%	9%
Lost	13%	11%	16%	15%	14%	15%
Taken by police	5%	1%	2%	2%	<1%	1%
Expired or broke	2%	2%	2%	2%	2%	2%

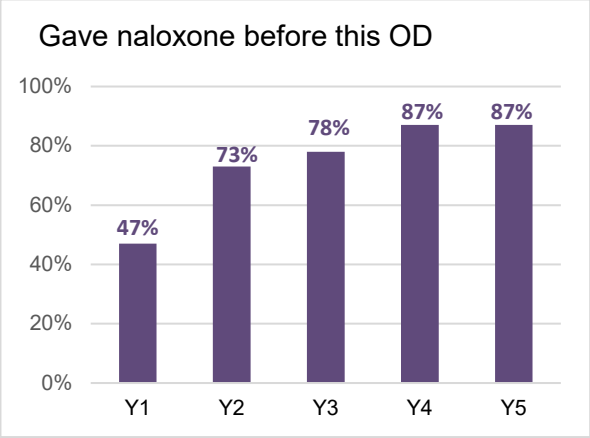
**Reasons were asked for each dose of a 2-dose kit, so totals >100%. Individuals could have multiple refill episodes in the project period.*

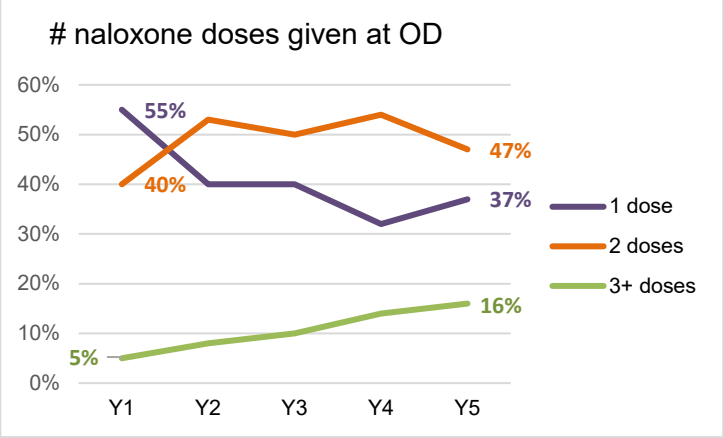
5. PEOPLE WHO USE OPIOIDS and OVERDOSE REPORTS n=8,711

Over the five-year project, **people who use opioids provided 94% of the overdose response reports** received from laypersons in which they had used naloxone in an overdose. This represents a **naloxone utilization rate of 20%**, **the highest among any recipient type in the project** *(8,711 naloxone administrations from 43,091 kits distributed to PWUO)*. The context of these overdoses did not vary significantly by project year (5-year averages shown below).

Where overdose happened		**Who administered naloxone**	
Inside residence	63%	Myself	70%
Outside	27%	Someone else	30%
Inside hotel/motel	6%	**Other actions taken**	
Inside business	1%	Called 911	35%
Inside other/Don't know	3%	Sternum rub to wake up	34%
Who overdosed		Rescue breathing	34%
Friend/acquaintance	72%	Chest compressions	29%
Stranger	9%	**Outcomes**	
Myself	9%	Person lived	99%
Spouse/partner	5%	Person taken to ER	23%
Family member	4%	Person admitted to hospital	8%
Other	1%	Deaths	<1% n=52
In 96% of these overdose events, the naloxone used was obtained at a syringe service program.			

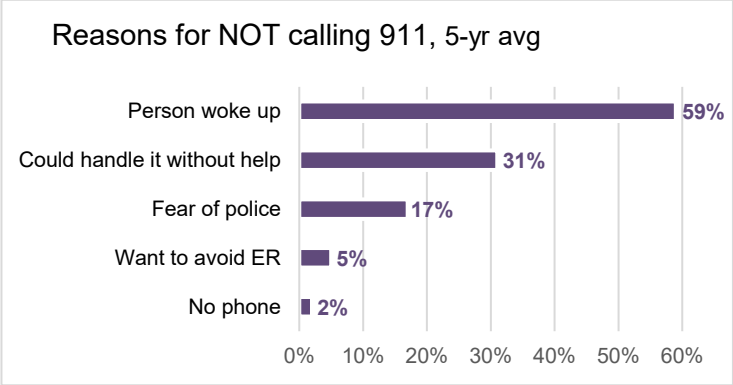
When reporting these naloxone administrations, most PWUO also reported they had experience giving naloxone prior to this overdose event. Over the course of the project, there was also a **notable increase in the number of naloxone doses PWUO administered at overdose events**. Because we did not track self-reported fentanyl use or involvement (as it emerged in WA State after the project started) we cannot determine if the increase in doses is due to actual or perceived fentanyl involvement in the overdose.





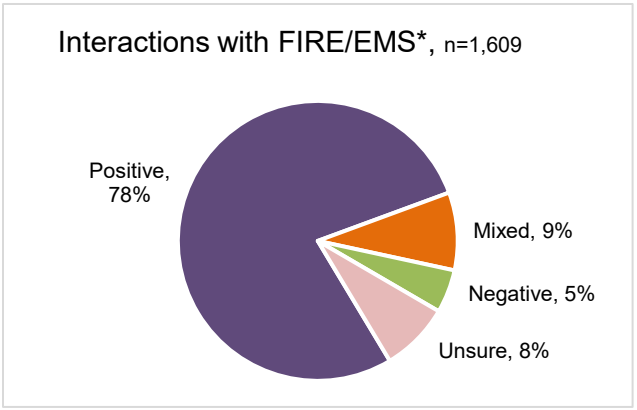
6. PEOPLE WHO USE OPIOIDS and EXPERIENCE WITH FIRST RESPONDERS

In the majority (65%) of the 8,711 overdoses reported by PWUO, lay responders at the scene did not call 911 for assistance. This proportion remained consistent each of the five years of the project. In most of these cases, lay responders felt that additional assistance was not needed. Desire to avoid involvement with law enforcement or emergency departments played a less significant role in the decisions to call 911.



PWUO who reported that they did call 911 were asked to describe their interactions with the professional first responders who arrived at the scene. The majority of interactions were described as "positive," although more so with fire/EMS than with police (5-year averages shown below).

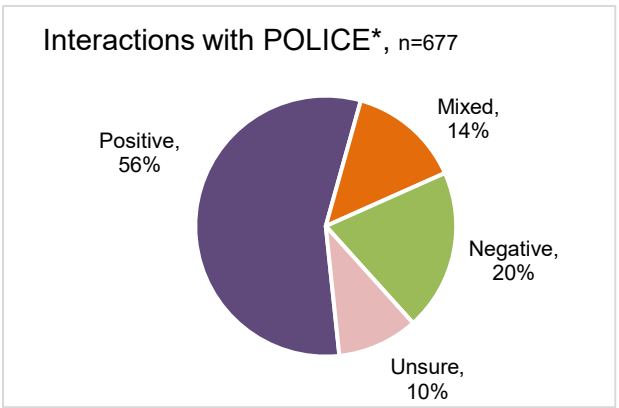
In the cases where PWUO described their interactions with professional first responders as "negative," most said it was because they had felt disrespected, stigmatized, or judged negatively because of their drug use.



Why was interaction mixed/negative?

59% Felt disrespected

7% Forced to go to the ER



Why was interaction mixed/negative?

72% Felt disrespected

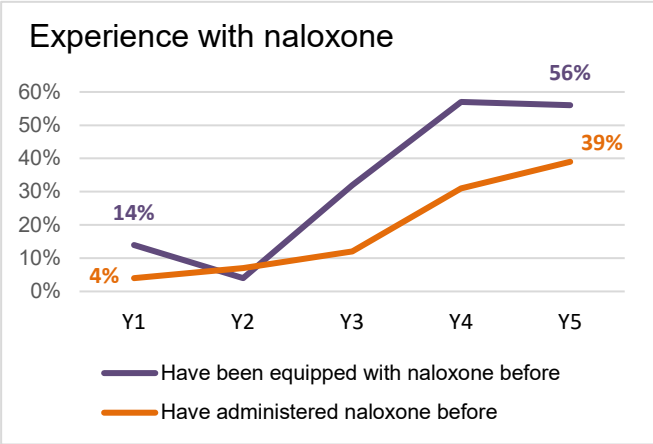
24% Harassed/wrongly accused

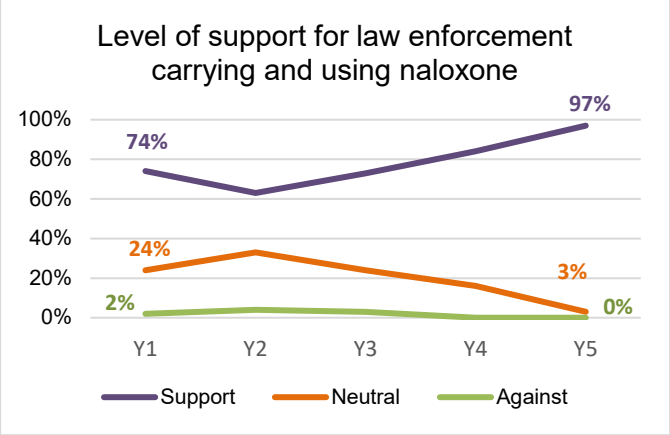
7. LAW ENFORCEMENT TRAINING AND NALOXONE n=1,537

SSP partners supplied naloxone to 107 law enforcement units and directly trained 1,537 law enforcement officers, many of whom became the designated trainers for other local officers and/or incoming officers in their department. Officers were primarily male (90%) and white (92%); worked in patrol (76%); and ranged in years of service from less than one year to over 20 years.

Race/ethnicity		**Gender**		**Years as an officer**	
White	92%	Male	90%	0-5 years	29%
Hispanic/Latino	10%	Female	9%	6-10 years	16%
American Indian/AK Native	4%	Transgender	1%	11-15 years	16%
Asian	3%	**Primary role**		16-20 years	17%
Black/African American	1%	Patrol	76%	21+ years	22%
Hawaiian/Pacific Islander	1%	Investigation	14%		
Other	5%	Command	10%		

While the demographic and professional profiles were consistent among officers trained each year of the project, **experience with naloxone steadily increased** among newly trained officers over the five years of the project. At the same time, **officer support for naloxone also increased**. In WA-PDO trainings, officers being trained and equipped with naloxone stated they supported naloxone as a tool to save lives and to help public safety, especially as they are often on the scene of an overdose before medical responders.



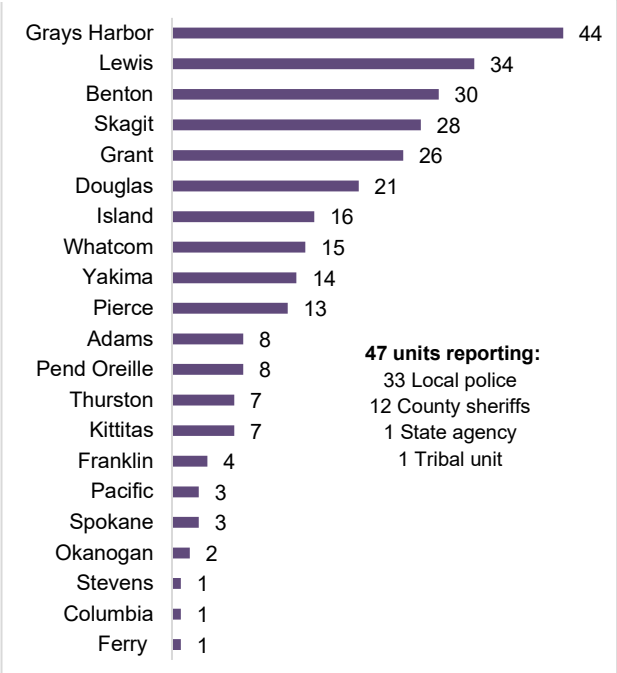


In 2017, when naloxone for law enforcement was still a budding idea in WA State, less than 20 law enforcement units in WA State had protocols for officer administration of naloxone. Five years later, in part due to WA-PDO efforts, **nearly all law enforcement units in WA State are now equipped with naloxone as standard practice.**

8. LAW ENFORCEMENT NALOXONE ADMINISTRATIONS n=286

Law enforcement officers who received naloxone through WA-PDO submitted **286 reports of naloxone administrations** over the five project years; data below are from those overdose events. Naloxone reporting was inconsistent, however, across departments that were issued naloxone, so it is unclear how these numbers represent the actual incidence or location of overdose events in WA State. These numbers are most certainly an underreport of both the number of overdose events attended by law enforcement and the use of naloxone by law enforcement in the WA-PDO project.

Naloxone reports by county

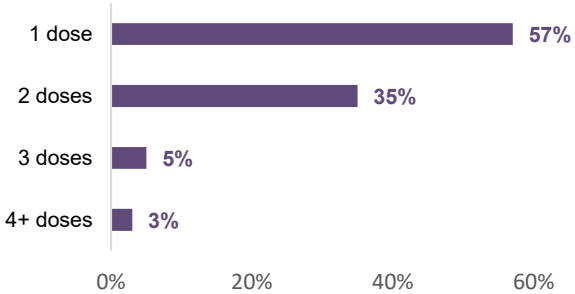
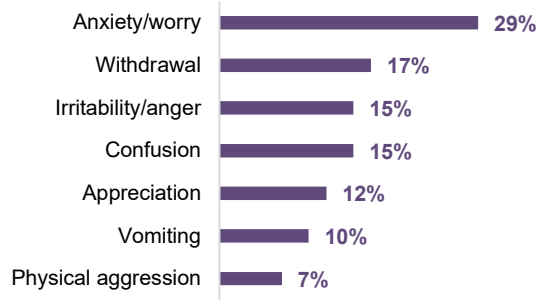


Location of OD		How notified of OD	
Private residence	58%	Dispatched	91%
Outside	23%	Saw person down	7%
Business/hotel/motel	13%	Citizen alert	2%
Police custody (jail,car)	2%	Other/unknown	2%
Other/unknown	4%		
Time of arrival at scene			
Morning 6am -12pm	15%	**93%** arrived before Fire/EMS	
Afternoon 12pm - 6pm	29%		
Evening 6pm - 12am	42%	Average arrival time: **5 minutes before Fire/EMS** (range *<1 to 30 min)*	
Night/early morning 12am - 6am	14%		

- **86%** administered naloxone before fire/EMS arrival
- **60%** were first-time administrations for the officer
- **95%** of victims were revived at the scene

In most overdose cases, officers administered only 1 or 2 doses of naloxone at the scene, although fire/EMS may have administered more doses after their arrival. Contrary to common belief among law enforcement, overdose victims rarely (7%) became physically combative after being revived with naloxone.

Number of doses given, 5-yr avg



Victim reactions after waking up, n=218