

WA State Syringe Exchange Health Survey: 2019 Results

ADAI

ALCOHOL &
DRUG ABUSE
INSTITUTE

Caleb Banta-Green, PhD, MPH, MSW; Alison Newman, MPH; Susan Kingston; Sara Glick, PhD, MPH; Joe Tinsley; Sarah Deutsch, MPH

Key Findings

- More respondents had used methamphetamine than had used heroin in the past three months (78% versus 72%) and in the past week (84% versus 78%). However, high frequency use of heroin (5-7 days in the past week) was more common than high frequency use of methamphetamine (59% versus 49%).
- The majority (82%) of people who reported using heroin as their main drug were interested in reducing or stopping their opioid use.
- About half (48%) of people who reported using methamphetamine as their main drug were interested in reducing or stopping their stimulant use.
- Interest in treatment for hepatitis C (HCV) was high. About two thirds (68%) of those diagnosed with HCV were interested in HCV treatment among those who remained untreated.
- Naloxone ownership has increased substantially among people who use opioids with 79% of respondents in King County and 78% outside of King County reporting they had owned a naloxone kit in the last 3 months, compared to 47% and 24% respectively in 2015.

Survey Overview

Since 2015, the University of Washington's Alcohol & Drug Abuse Institute (ADAI) has collaborated with Public Health-Seattle & King County (PHSKC) and the statewide network of syringe services programs (SSP) to conduct the biennial WA State Syringe Exchange Health Survey to profile health behaviors and health care needs, access, and preferences of people who inject drugs (PWID) in WA State (see past survey results here: [2017 report](#), [2015 report](#)).

SSP staff and volunteers administer the voluntary, face-to-face questionnaire to individuals who come in for syringe exchange services. The survey explores topics such as:

- Client demographics.
- Drug use and injection practices.
- Utilization of syringe exchange and other health care services.
- Prevalence of opioid overdose, overdose risks, and naloxone.
- Prevalence of acute physical and psychiatric consequences of methamphetamine use.
- Interest in reducing or stopping drug use.
- Interest in specific services to help reduce or stop drug use.

In 2019 there were over 30 fixed site and/or mobile outreach SSPs operating in WA State through local health departments, community-based organizations, grassroots volunteer groups, or tribal entities. A complete list can be found here: [WA State Department of Health](#).

A description of SSP operational models in WA State can be found here: [Overview of Syringe Exchange Programs in WA State](#).

PHSKC uses a slightly modified version of the survey at its SSP sites to accommodate data needs particular to King County; therefore, some data presented here do not include responses from King County.

Twenty-one organizations participated in the project and collectively completed surveys from 1,269 syringe services program participants across 23 counties (Table 1). A map showing survey responses by county is in the Appendix.

Table 1. Number of surveys collected by county of SSP location

Benton	28	King	432	Snohomish	37
Clallam	75	Kitsap	15	Spokane	92
Clark	24	Kittitas	9	Stevens	3
Cowlitz	39	Mason	18	Thurston	82
Grant	16	Okanogan	10	Walla Walla	26
Grays Harbor	68	Pend Oreille	2	Whatcom	12
Island	37	Pierce	100	Yakima	51
Jefferson	18	Skagit	75	Total	1,269

Survey Results

Demographics of respondents

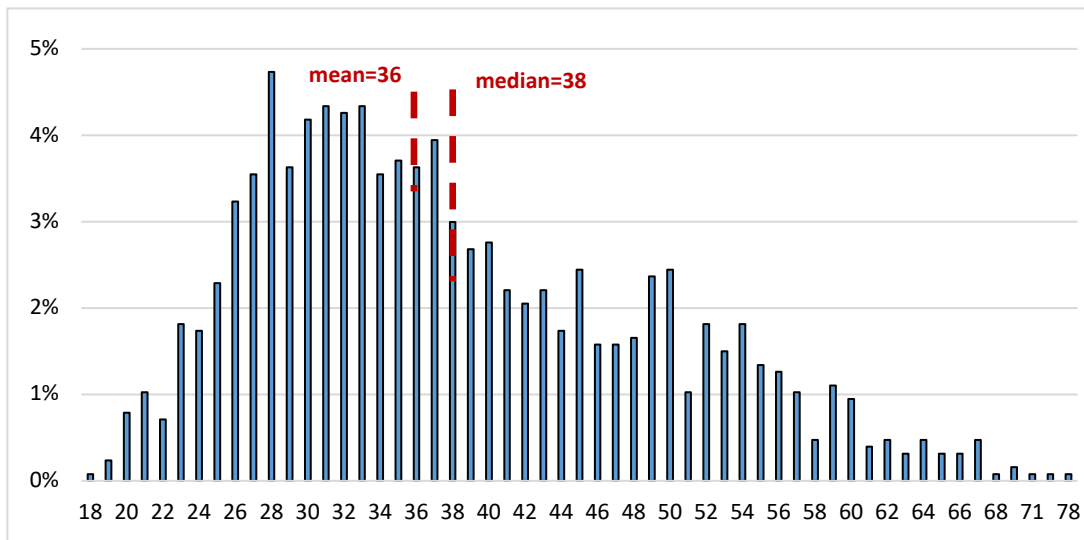
Respondents were majority male, with a substantial minority female and 1% identifying as transgender or other (Table 2). Across a broad range of ages, the mean age was 36 years with a median age of 38 (Figure 1). Most respondents self-identified as White with the proportion of other race/ethnicity categories varying by county. A disproportionately high percentage self-identified as American Indian/Alaska Native, 11% compared to 2% of the population in Washington State (Office of Financial Management, 2019). This is notable given that in Washington State, American Indians/Alaska Natives have a significantly elevated rate of fatal drug overdoses compared to other race/ethnicity groups.

Two thirds of respondents (69%) reported having unstable or no housing at all and over half of non-King County respondents (57%) had no legal monthly income. Over a third of respondents had been incarcerated in the past 12 months; interruptions in opioid tolerance caused by incarceration are a known risk for overdose.

Table 2. Demographics of syringe exchange survey respondents n=1,269

Gender			Race/ethnicity (more than one may be selected)		
Male	720	57%	White	1,037	82%
Female	540	43%	American Indian/Alaska Native	142	11%
Transgender	6	<1%	Latinx/Hispanic	84	7%
Other	3	<1%	Black/African American	60	5%
Age			Asian/South Asian	29	2%
18-21	27	2%	Native Hawaiian/Pacific Islander	21	2%
22-25	83	7%	Other	18	1%
26-29	192	15%	Housing status		
30-39	477	38%	Homeless	501	40%
40-49	261	21%	Unstable/temporary	371	29%
50-59	175	14%	Permanent	396	31%
60+	53	4%	In jail/prison in past year	470	37%
Legal monthly income = \$0*	477	57%	<i>*not asked in King County</i>		

Figure 1. Age of survey respondents n=1,268



Substance use patterns

Respondents were asked to list any use of a substance in the past three months and to identify which drug or drug combination was their “main” drug as they defined it. Any use of methamphetamine and/or heroin was reported by a majority of respondents (Table 3). Almost a third (31%) reported using methadone or buprenorphine, followed by alcohol (29%), which was included for the first time in the 2019 survey. A smaller proportion reported using fentanyl (by itself or mixed in something), benzodiazepines, other opiate medications (the common term *opiate* used as an equivalent to *opioid*) and cocaine in its different forms or in combination with heroin.

While a slightly higher proportion reported any methamphetamine use in the past three months (84%) than any heroin use (78%), a much higher percentage identified heroin as their main drug (57%) compared to methamphetamine (26%). Use of methamphetamine and heroin combined (i.e., “goofball”) was also common.

Table 3. Substance use in past 3 months and “main drug” n=1,269

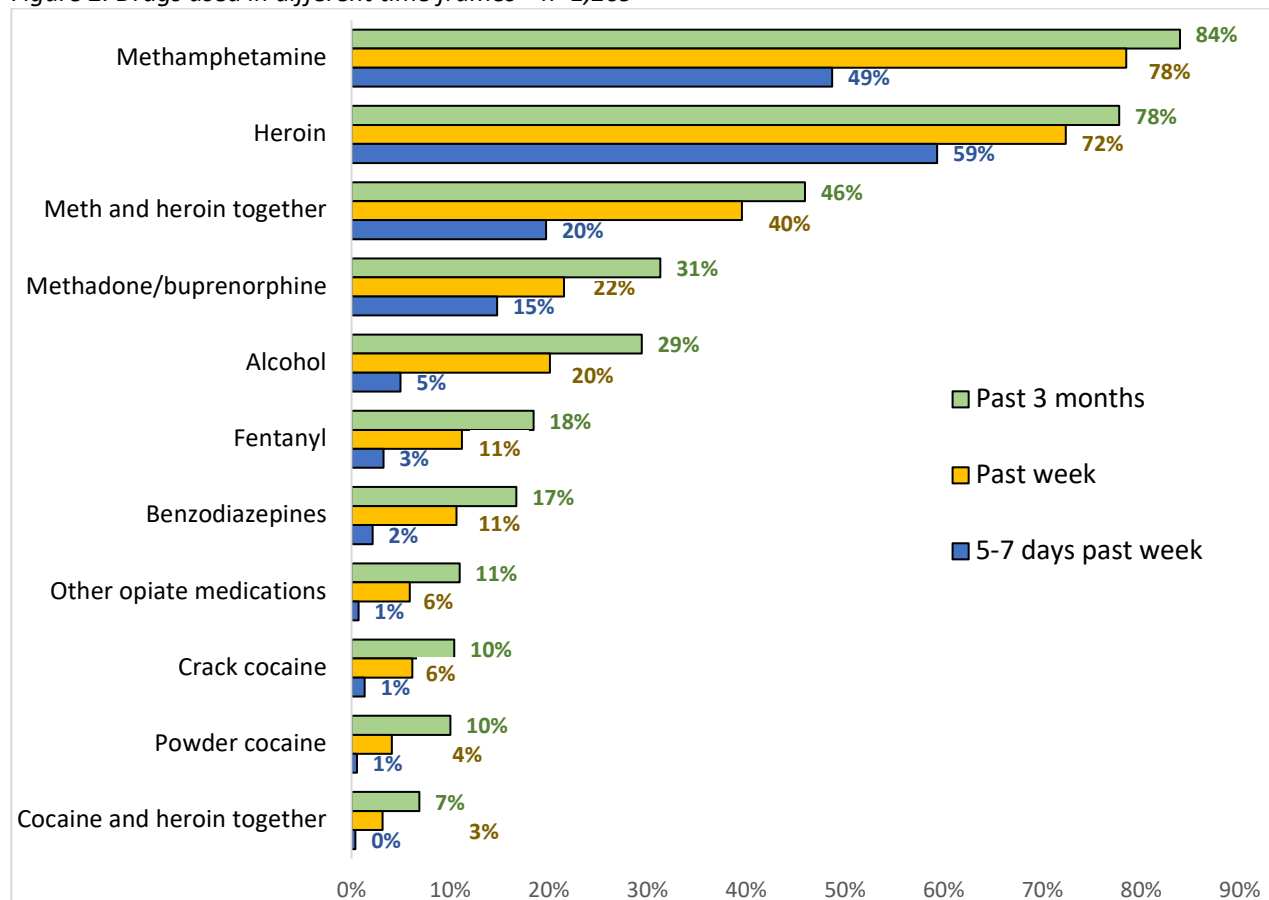
	Used in the past 3 months				Identified as “main” drug
	n	%	Injected	Smoked	
Methamphetamine by itself	1,065	84%	73%	79%	26%
Heroin by itself	987	78%	96%	51%	57%
Methamphetamine and heroin together (goofball)	583	46%	96%	29%	8%
Methadone or buprenorphine	397	31%	7%	1%	2%
Alcohol	373	29%	n/a	n/a	2%
Fentanyl, by itself or mixed in something	234	18%	84%	36%	0%
Benzodiazepines	212	17%	5%	2%	0%
Other opiate medications	139	11%	18%	17%	1%
Crack cocaine	132	10%	24%	87%	1%
Powder cocaine	127	10%	46%	20%	0%
Cocaine and heroin together (speedball)	87	7%	95%	14%	1%

Although surveying at SSPs specifically targets PWID (97% had injected a drug in the past three months), a sizable percentage reported also smoking drugs. A slightly higher percentage reported smoking methamphetamine than injecting it, 79% versus 73% respectively. While virtually all those who had used heroin did so by injection, half had also smoked it, a notable change from a decade ago when smoking heroin was uncommon in Washington State.

In this survey, 18% reported any use of fentanyl, by itself or believed to be mixed in with another drug, in the prior 3 months, with only one person reporting it as their main drug. However, the situation with fentanyl is unclear in Washington State in terms of the prevalence, appearance, sources, and which specific fentanyl compounds are involved. The most common appearance of fentanyl reported was “mixed with heroin or meth(amphetamine),” which contrasts with the relatively high prevalence of fentanyl in bogus pharmaceutical pills in some regions and police evidence testing results from the Washington State Patrol. Conflicting information likely reflects a wide range of community perceptions and differing perspectives provided by numerous data sources.

Figure 2 below compares drug use across time periods. Methamphetamine use in the prior week was reported by 78% of respondents, with nearly half (49%) of all respondents using 5-7 days in the past week. Conversely, a slightly smaller proportion (72%) reported any heroin use in the past week yet a higher proportion (59%) used heroin 5-7 days in the past week. Daily or near-daily use is more common for heroin than methamphetamine given heroin’s shorter-acting effects and its rapid onset of physical dependence.

Figure 2. Drugs used in different time frames n=1,269



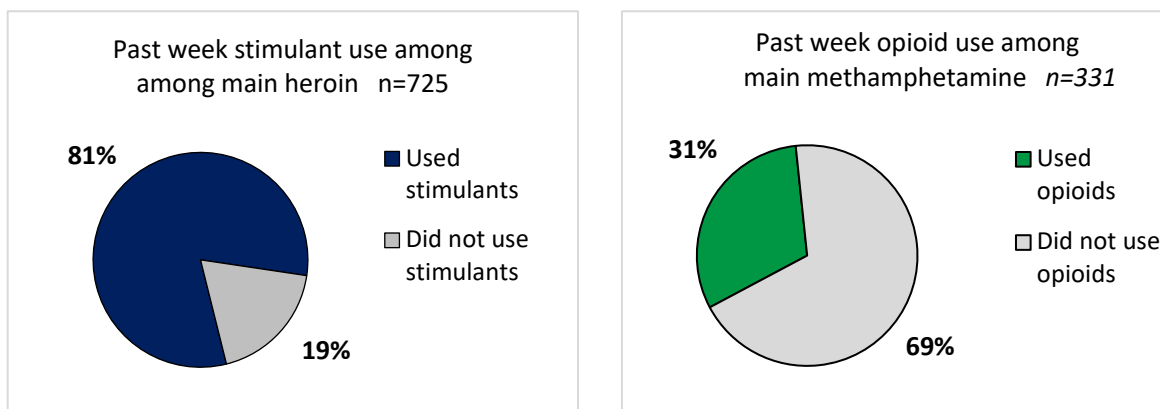
Polysubstance use was reported by the vast majority of participants. Table 4 below shows the variety of substances used in the past week by either heroin or methamphetamine as main drug. Past week use of a drug other than the “main” drug was nearly twice as likely among those whose main drug was heroin (91%) than those whose main drug was methamphetamine (48%). This pattern corresponds to long term trends for heroin and methamphetamine seen in multiple data sources for Washington State including fatal drug overdose data that indicate most heroin overdose deaths involve other substances compared to only about half of methamphetamine-related overdose deaths (data available at [ADAI Interactive Drug Data](#)).

Table 4. Polysubstance use in past week by main drug

	Main HEROIN <i>n</i> =724	Main METH <i>n</i> =331
Used main drug in past week	97%	98%
Used another substance in the past week	91%	48%
Other substances used:		
Heroin	--	22%
Methamphetamine	75%	--
Meth and heroin mixed together (goofball)	47%	13%
Buprenorphine or methadone	22%	10%
Alcohol	16%	24%
Fentanyl, by itself or mixed in something	15%	4%
Benzodiazepines	12%	2%
Other opiate medications	6%	4%
Crack cocaine	5%	3%
Powder cocaine	4%	2%
Cocaine and heroin mixed together (speedball)	3%	1%

Looking specifically at use of both opioids and stimulants in the past week, Figure 3 below shows that most main heroin users had also used stimulants (methamphetamine and/or cocaine), yet, conversely, most main methamphetamine users had not used opioids. In 2018 ADAI conducted qualitative interviews with SSP participants to explore motivations and patterns of concurrent methamphetamine and opioid use and produced this summary report: [2018 Qualitative Interviews with Syringe Exchange Participants](#).

Figure 3. Use of both opioids and stimulants in past week



Syringe exchange utilization and injection practices

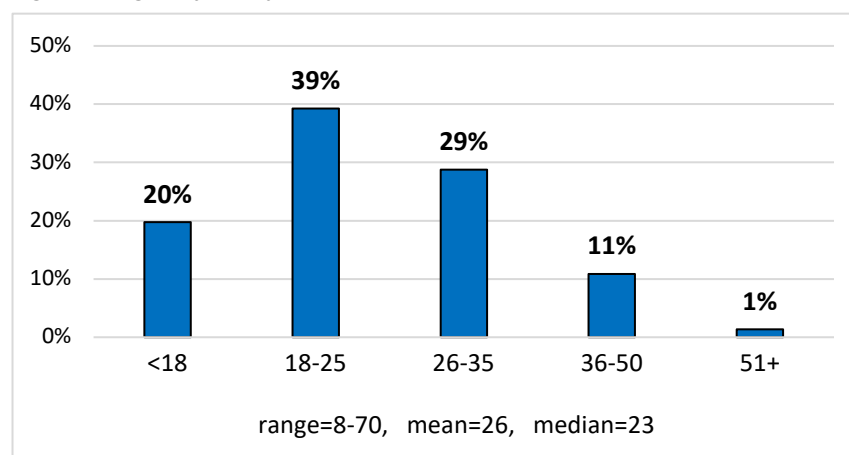
On the day they were surveyed, two thirds reported they were exchanging syringes for other people (i.e., “secondary exchange”) as well as themselves and for an average of two additional people (Table 5). The majority also reported using an SSP more than once in the past month, with an average of three times per month. Frequency of SSP utilization is closely tied to the number of hours and days each SSP can operate and, along with rates of secondary exchange, indicate the potential reach of SSPs into the drug use and social networks of those individuals who access services in person.

Table 5. Utilization of syringe service programs

How many other people are you getting syringes for today, not including yourself? <i>n=1,215</i>		
No one else	478	39%
1 person	315	26%
2 people	160	13%
3+ people	262	22%
Mean = 1.9 people		
Including today, how many times did you get syringes from an exchange in the last 30 days? <i>n=1,216</i>		
1 time	491	40%
2 times	276	23%
3+ times	449	37%
Mean = 2.9 times		

The median age of first injecting any drug was 23, with over half (59%) injecting for the first time before the age of 26 (Figure 4).

Figure 4. Age at first injection *n=1,231*



The majority (78%) of people injected 5-7 days in the last week with most injecting every day (Table 6). The average number of injections per day was 3.5, and 65% of respondents reported that they typically use a syringe only once before disposing of it. While one-time use of syringes is promoted at SSPs to minimize vein damage and skin infections, one-time use may be difficult in areas where inadequate funding for SSPs limits syringe supply or the number of days an SSP can provide services each week.

Eighty-five percent (85%) reported that they had not shared a syringe with another person in the last three months, and 60% reported that they had not shared other drug injection materials (e.g., cottons, cookers, water) in the last three months. Because sharing injection materials can transmit infectious diseases like HIV and hepatitis C, SSPs provide these materials in addition to exchanging used syringes for new syringes.

Table 6. Drug injection practices

In the last 7 days, on how many days did you inject any drug? <i>n=1,216</i>		
0 days	42	3%
1-4 days	223	18%
5-7 days	951	78%
<i>90% (n=859) inject every day</i>		
Mean = 6 days		
On an average injecting day, how many times do you inject? <i>n=1,216</i>		
1 time	127	10%
2 times	314	26%
3-5 times	648	53%
6+ times	127	10%
Mean = 3.5 times		
On average, about how many times do you use a syringe before you get rid of it? <i>n=1,215</i>		
1 time	794	65%
2 times	232	19%
3+ times	189	16%
Mean = 1.8 times		
In the last 3 months, how many different people did you share a syringe with - either you used it first or they did? <i>n=1,214</i>		
No one else	1,032	85%
1+ people	182	15%
Mean = 0.2 people		
In the last 3 months, how many different people did you share cookers, cotton, water, or backload with? <i>n=1,209</i>		
No one else	727	60%
1+ people	228	40%
Mean = 1.4 people		

Health care needs and utilization

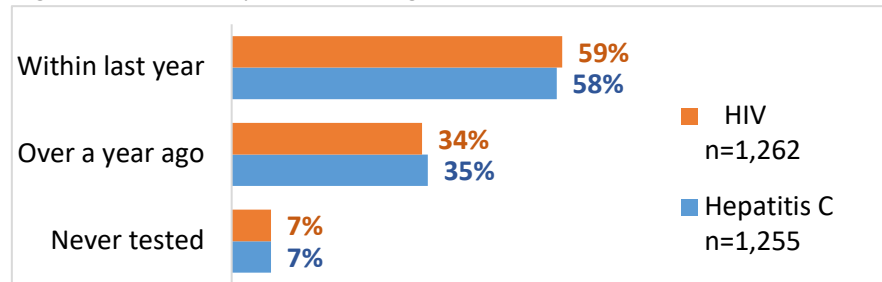
Nearly half (42%) reported having an abscess or skin infection in the last 12 months while other drug injection-related conditions (e.g., blood clots, blood infections, endocarditis) and sexually transmitted infections were less common (Table 7). Few women reported being pregnant in the prior year.

Table 7. Health conditions, last 12 months *n=1,257*

Injection-related infections	n	%	Reproductive health	n	%
Abscess, skin infection/cellulitis	516	42%	Sexually transmitted infection	83	7%
Blood clot or blood infection	100	8%	Pregnancy (<i>women only</i>)	33	6%
Endocarditis	23	2%			

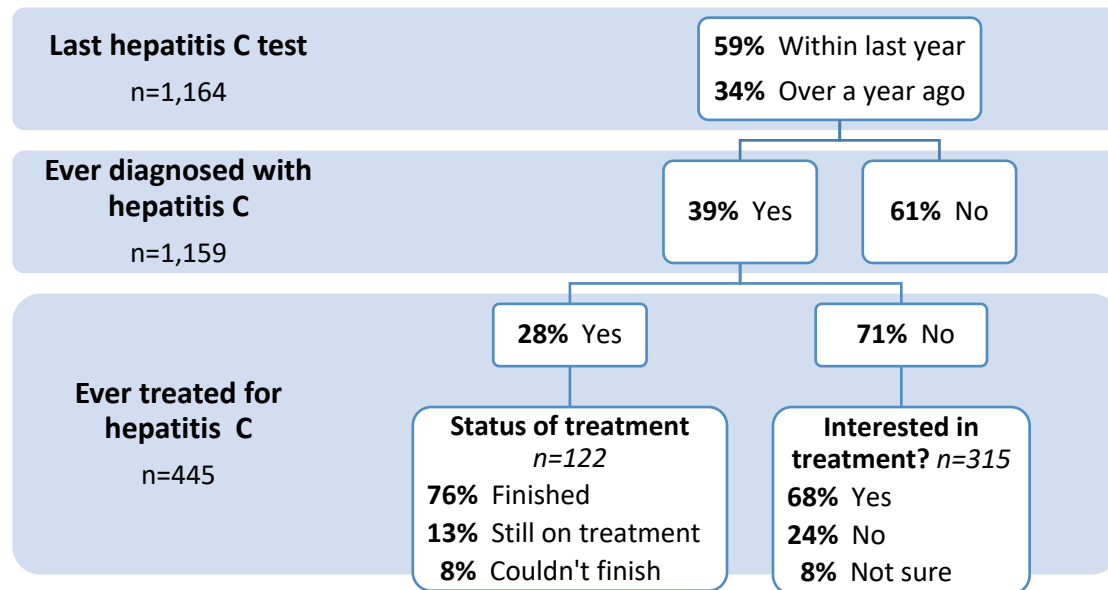
The same proportion (93%) of respondents had ever been tested for HIV or hepatitis C, over half within the last year (Figure 5).

Figure 5. HIV and hepatitis C testing



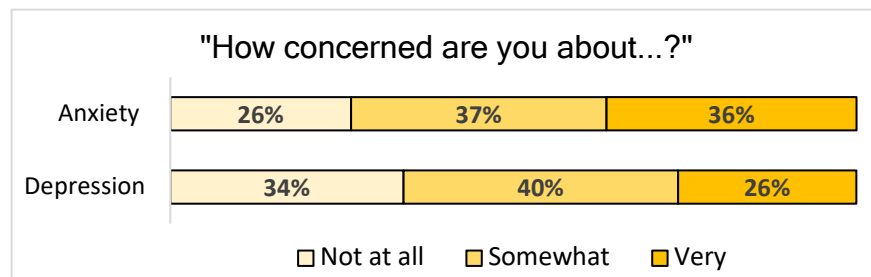
Only 28% of those diagnosed with HCV had completed, or at least started, HCV treatment (Figure 6). Among people who had been diagnosed with but *not* treated for HCV, the majority (68%) were interested in hepatitis C treatment, which is important given that most respondents have Medicaid coverage that, as of 2019, pays for HCV treatment.

Figure 6. Hepatitis C diagnosis and treatment



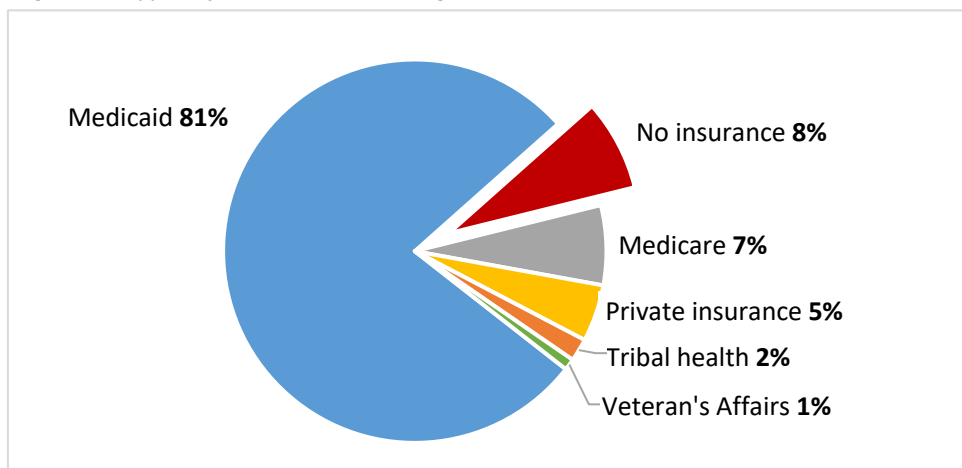
Substantial majorities expressed some level of concern about either depression or anxiety (Figure 7). Twenty percent (20%) of respondents said they were “very concerned” about *both* depression and anxiety while a similar proportion (19%) had no concerns at all about either.

Figure 7. Mental health concerns n=1,257



Only 8% reported having no health care coverage, with most reporting some form of public insurance, most commonly Medicaid (Figure 8).

Figure 8. Types of health care coverage n=1,257



Most respondents accessed medical care in the past 12 months through a number of settings such as medical offices/clinics, syringe exchanges, jails and mobile medical clinics (Figure 9). Nearly a quarter (23%) of respondents had been admitted to a hospital, and just over half (56%) had used an emergency department, with about one third reporting multiple visits in the last 12 months (Figure 10).

Figure 9. Places used for medical care in past 12 months n=1,269

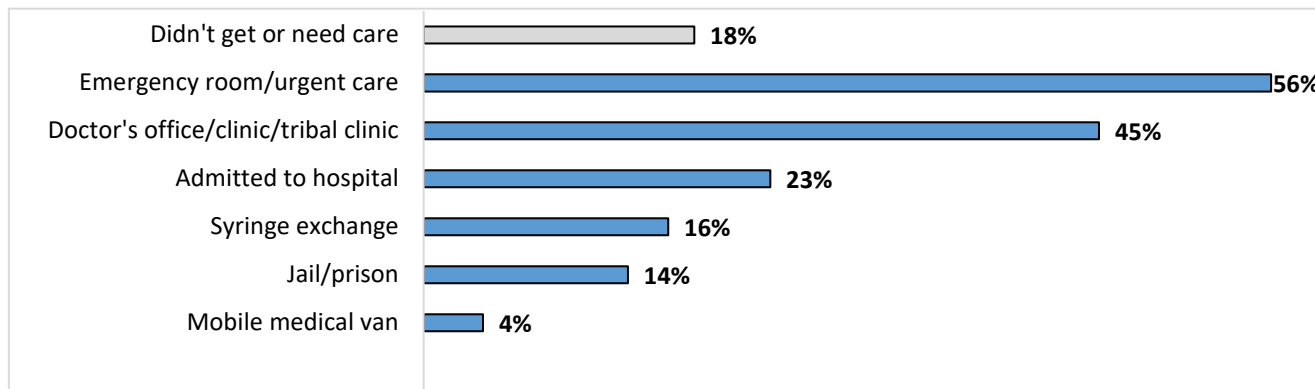
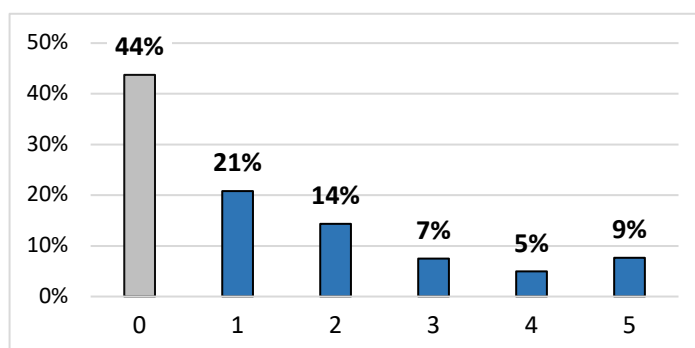


Figure 10. Number of times to emergency room/urgent care in past 12 months n=1,269



Opioid overdose and acute consequences of methamphetamine use

Among people who had used opioids, 22% had experienced at least one opioid overdose (defined in the survey as “when breathing slows down or stops and a person can’t be woken up”) in the past 12 months (Figure 11).

Over half (59%) of all respondents had witnessed at least one opioid overdose (Figure 12). Many survey respondents had experienced or had witnessed multiple opioid overdoses.

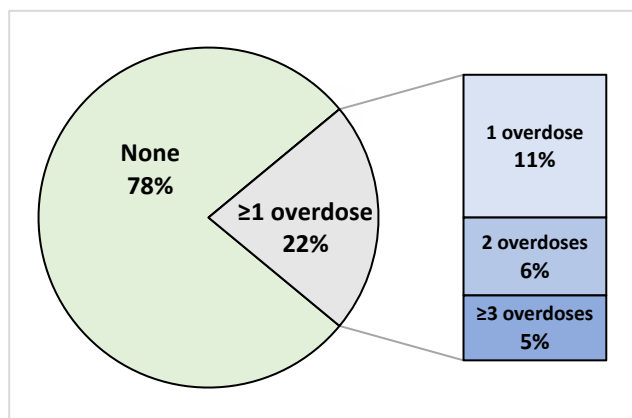


Figure 11. Number of opioid overdoses had in past 12 months, among people who used opioids n=1,044

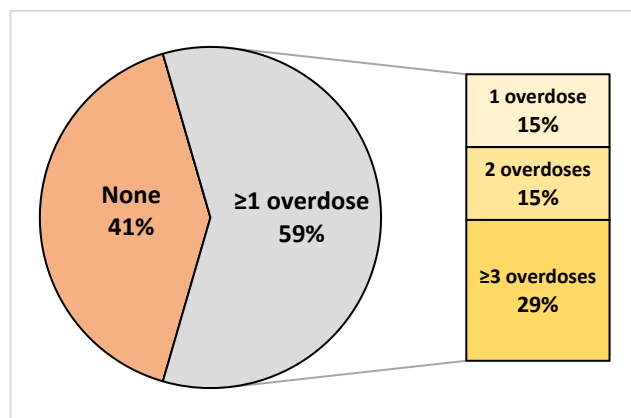
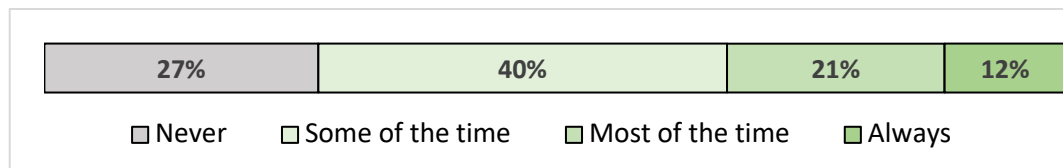


Figure 12. Number of opioid overdoses witnessed in past 12 months, among all respondents n=1,265

About one-third (33%) reported they injected drugs alone most or all of the time, which increases the risk that an overdose could be fatal because bystanders are not available to intervene (Figure 13).

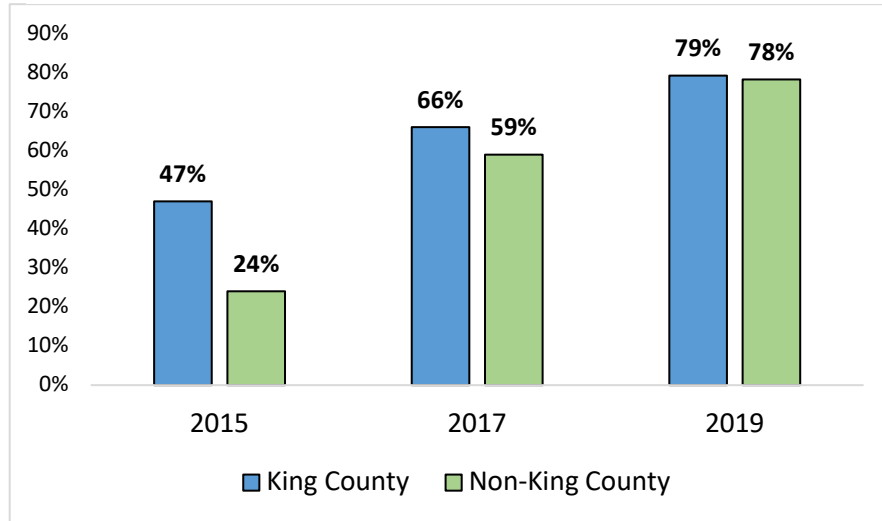
Figure 13. Frequency of injecting alone n=1,212



The substantial majority of those who used opioids reported owning a naloxone kit in the last three months (Figure 14). Distribution of free naloxone kits through SSPs across the state has steadily increased over the past four years, most notably outside King County since 2016 with the implementation of a five-year federal SAMHSA grant¹ to scale-up naloxone distribution in high-need areas of the state. At the time of writing, all SSPs in WA State distribute naloxone to participants at no cost and collectively represent the largest channel of naloxone distribution to laypersons in the state.

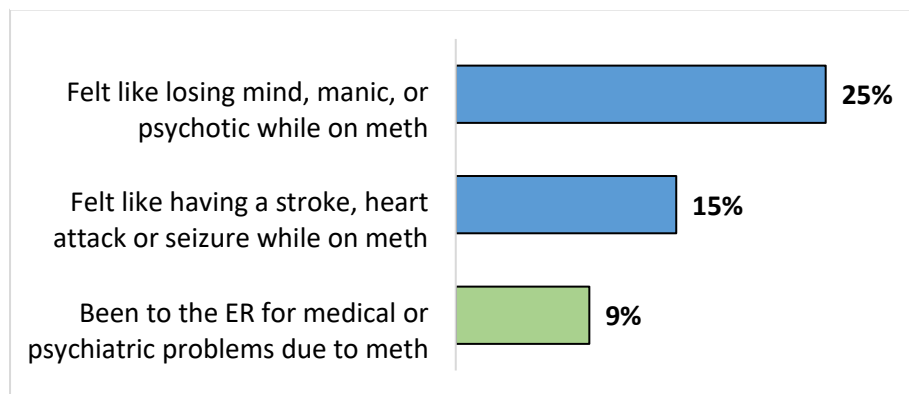
¹ The Washington State Program to Prevent Prescription Drug/Opioid Overdose project grant awarded to WA State Health Care Authority, Division of Behavioral Health and Recovery and implemented under contract by ADAI.

Figure 14. Owned a naloxone kit in the last 3 months, among people who used opioids in the past 3 months



Among people who had used methamphetamine by itself or mixed with heroin (i.e., “goofball”) in the last three months, a quarter (25%) reported acute psychiatric conditions related to methamphetamine use in that time period and 15% reported acute physical conditions (Figure 15). A small percentage (9%) reported they had been to the emergency room for acute psychiatric or physiological symptoms related to methamphetamine. ²

Figure 15. Acute consequences of methamphetamine use in past 3 months among those who used any meth n=1,089

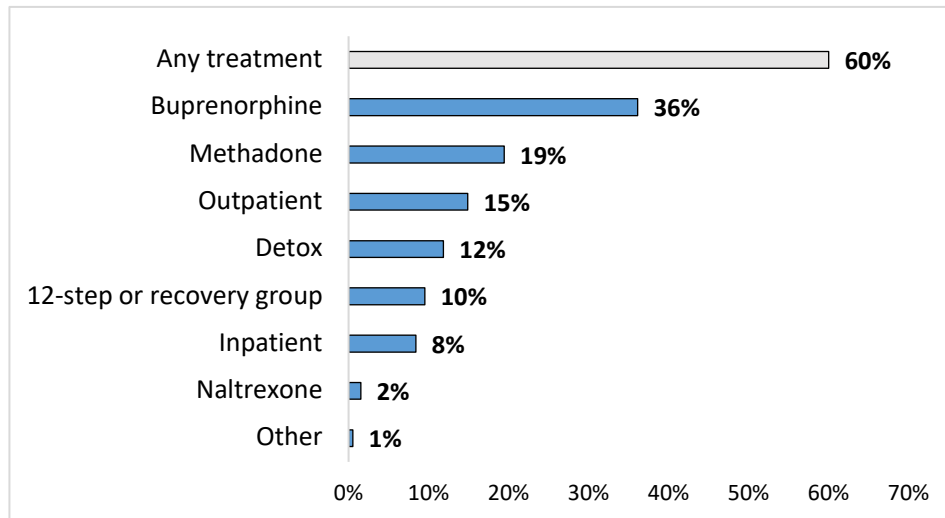


² Overdose related to methamphetamine has been challenging to document in these SSP surveys as the clinical presentation of potentially fatal symptoms is more complex and variable than in opioid overdoses. The 2017 survey asked about experience with “overamping” (defined in the survey as an event that “usually looks like a heart attack, stroke, seizure, intense overheating or really extreme sudden psychosis”) but that definition proved confusing and imprecise for some respondents. The 2019 survey continued to refine this question by focusing on specific symptoms.

Substance use disorder treatment

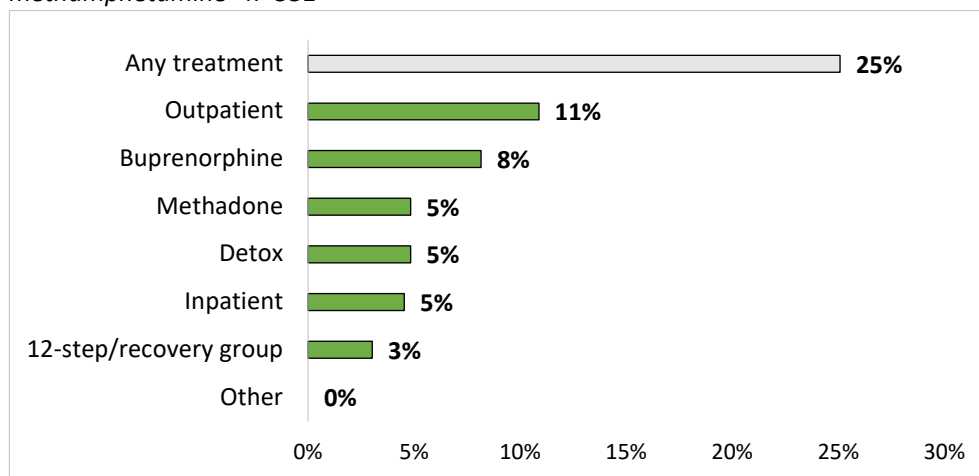
Over half (60%) of people who reported heroin as their main drug reported receiving some kind of substance use treatment, most often buprenorphine and methadone, in the prior year (Figure 16).

Figure 16. Drug treatment received in last 12 months among people who reported main drug heroin
n=725



However, only one in four people (25%) reporting methamphetamine as their main drug reported any type of substance use treatment in the past 12 months (Figure 17). This may reflect the fact that there are not yet treatment medications proven effective for methamphetamine and/or the fact detailed below that people who use methamphetamine reported less interest in stopping or reducing their stimulant use. A minority of people whose main drug was methamphetamine also reported use of medications to treat opioid use disorder.

Figure 17. Drug treatment received in the last 12 months among people who reported main drug methamphetamine n=331



Interest in reducing drug use and related services

Of those whose main drug was heroin and who had used heroin in the past week, 82% said they were “very” or “somewhat” interested in reducing or stopping their opioid use (Figure 18), and these respondents were most interested in treatment medications for opioid use disorder (Figure 19). Other services preferred to help reduce opioid use ranged from specialty addiction treatment services (e.g., detox, inpatient and outpatient treatment), to individual counseling, help navigating services, and mental health medications. “Other” types of help included housing, adequate pain treatment, and employment or education opportunities.

Figure 18. Interest in reducing or stopping opioid use among main drug heroin, not in treatment, and past week heroin use n=514

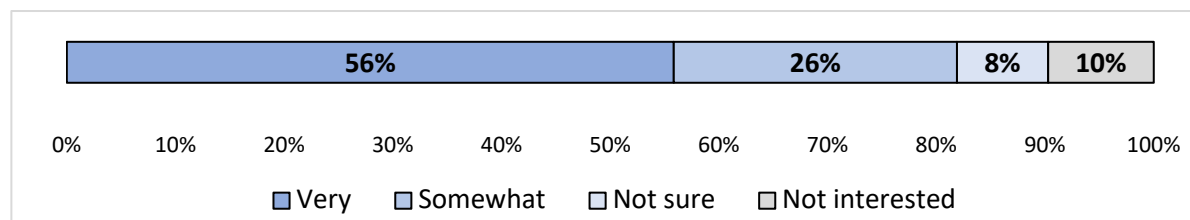
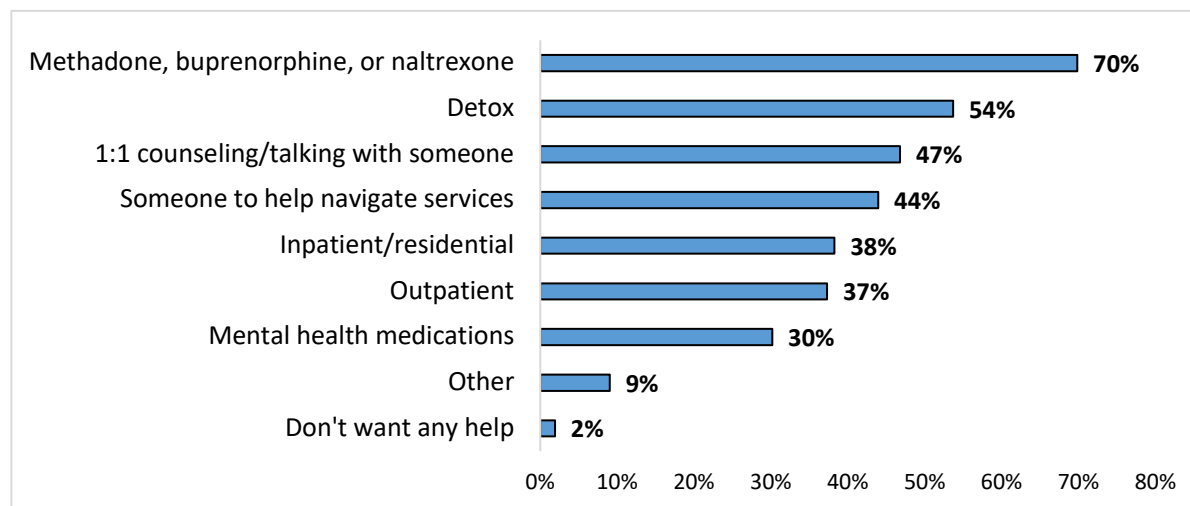


Figure 19. “What types of help would you want if they were easy to get?” among main drug heroin, past week opioid use, and somewhat or very interested in reducing opioid use n=421



Among main methamphetamine users, however, only 48% were very or somewhat interested in reducing their stimulant use (Figure 20), although there was similar interest in a range of services, including interest in any medications that might help reduce stimulant use, counseling, care navigation and other services (Figure 21).³

³ Currently there are no FDA-approved medications proven effective to treat stimulant use disorder. A summary of the evidence on treatment approaches for stimulant use disorder can be found here: <https://adai.uw.edu/pubs/pdf/2018methhtreatment.pdf>.

Figure 20. Interest in reducing or stopping stimulant use among main drug meth, not in treatment, and past week meth use n=281

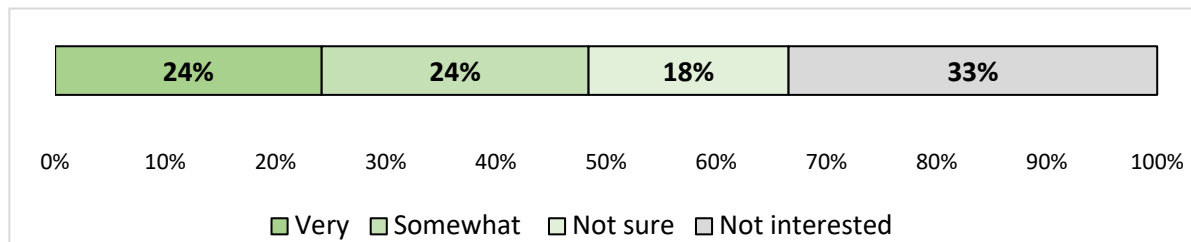
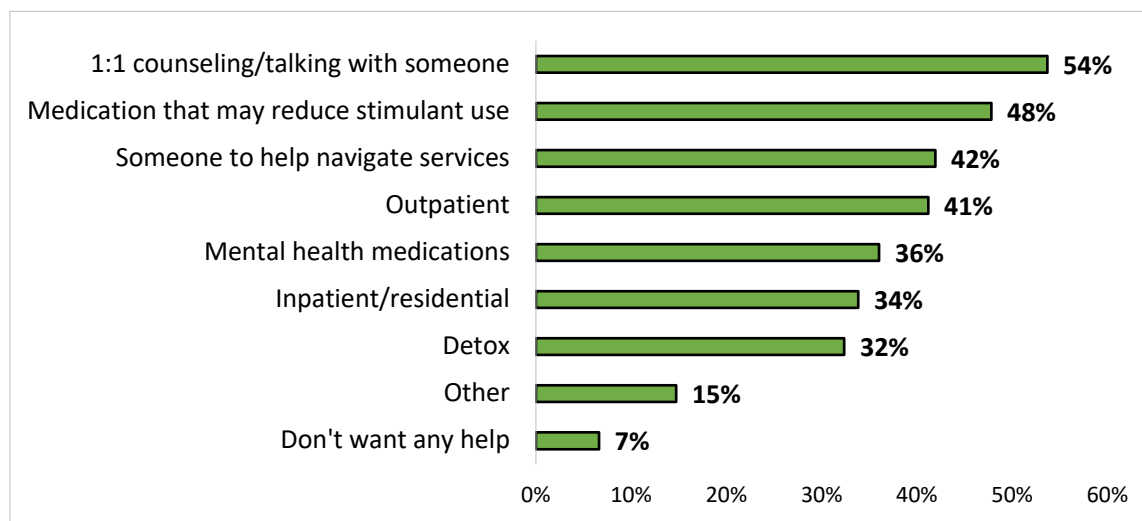


Figure 21. “What types of help would you want if they were easy to get?” among main drug meth, past week meth use, and somewhat or very interested in reducing stimulant use n=136



Citation: Banta-Green, C et al. Washington State Syringe Exchange Health Survey: 2019 Results. March 2020. <https://adai.uw.edu/wa-state-syringe-exchange-health-survey-2019-results/>

This report was produced with financial support from the Washington State Health Care Authority, Division of Behavioral Health and Recovery.

Appendix: Survey respondents by zip code and SSP location

This figure shows the zip codes where participants lived (or had slept the previous night), color coded by the SSP at which they were surveyed.

