

**NDEWS Naloxone Substudy: Baltimore, Maryland**

**Characterizing Knowledge, Attitudes, Behaviors, and Practices  
Related to Bystander Naloxone**

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## INTRODUCTION

Dr. Annabelle Belcher and her study team at the University of Maryland Drug Treatment Center (UMDTC) in Baltimore, Maryland, piloted the Naloxone Perceptions and Attitudes Questionnaire developed by a National Drug Early Warning System (NDEWS) workgroup. The study team added several questions that addressed participants' basic demographics, drug use methods, and harm reduction behaviors. Additionally, one study team member (A.P.) implemented a model to identify incremental gaps in access to treatment. This framework ("Cascade of Care"), borne out of the HIV research field, allows for the identification of specific steps to achieving optimal health outcomes, and it was considered a useful framework for the public health dilemma of lack of naloxone use and carry. The topics that provided the framework for all questions are listed as follows, and a copy of the questionnaire is attached as Appendix 1.

*Question themes:*

1. Knowledge about Naloxone
2. Access to Naloxone
3. Experience with Naloxone
4. Perceptions and Attitudes Toward Naloxone
5. Influence of the Availability of Naloxone on Drug Use Behaviors
6. Analysis of Naloxone Perceptions and Attitudes Through the "Cascade of Care" Scope

The data collected are summarized in this report.

## METHOD

### Study Design

Between May and December 2018, the NDEWS Coordinating Center worked with the National Institute on Drug Abuse (NIDA) to convene an advisory workgroup of researchers to develop a *Naloxone Perceptions Survey*. The survey involves a mixed-methods approach (quantitative [binomial] and qualitative [open-ended] structured interview questions) as a means of assessing the experiences, perceptions, and attitudes that opioid users have toward the use of naloxone (Narcan<sup>®</sup>). UMDTC is one of three collaborating sites collecting this survey information. Data from all sites will be combined to assess the first five themes identified earlier. Participation was voluntary, and no identifying information was recorded during any part of the study procedures. The study was approved by the University of Maryland, Baltimore's institutional review board (IRB) as minimal risk, and a waiver of informed consent was granted (HRPO IRB Protocol No. HP-00084360).

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### **Eligibility Criteria and Procedures**

The target population for this study was treatment-seeking, opioid-use-disorder–diagnosed individuals. Inclusion criteria included males and females older than 18 years of age who were enrolled in medication-based treatment at the UMDTC. Participants were asked to complete the 29-item semi-structured interview survey. Participants met with a research team member for one meeting, and survey administration took approximately 20 to 25 minutes. Each participant received a cash payment of \$5 as remuneration for time and effort. Data collection for the 20 participants took four days.

### **Recruitment**

Participants were recruited directly from the UMDTC. The treatment center is a certified Maryland Department of Health and Mental Hygiene opioid treatment program that provides Level I (outpatient) treatment services to more than 500 patients. For this survey, 20 participants were recruited via convenience sampling from the treatment center drop-in area, a space designated for participants to socialize and obtain social support from clinical staff and other participants. Participants were approached by a study team member and were asked whether they were interested in responding to a brief, one-time, anonymous survey. If the individual expressed interest, the study team member escorted him or her to a private office dedicated for research activities. Participants provided verbal consent and were informed again that any responses given would be anonymous. They were also informed that any decision related to their participation in the study would have no impact on their current treatment in the clinic. Two members of the study team (A.B. and Z.K.) conducted all participant interviews for this project.

### **Data Analysis**

Quantitative frequency data were analyzed using SPSS™ v25, and qualitative data were analyzed using Dedoose™ Version 8.0.35, a Web-based application used to manage, analyze, and present qualitative and mixed-methods data to code thematically written qualitative responses. A double verification process was used to ensure the data integrity of the quantitative responses. Written qualitative responses were transcribed and then thematically coded. The research team discussed the data findings to ensure agreement on thematic codes and analysis.

## **DEMOGRAPHICS (N = 20)**

### **Baseline Demographics**

Gender: 55% male

Race: 50% (10) African American; 45% (9) White; 5% (1) Native American Age: mean (+ standard deviation [SD]) = 50.5 (+11.3) years old, median = 51 years old (wide and near-even distribution within age range of 33–70)

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***Other Findings***

1. Approximately 2/3 of participants surveyed were high-school graduates and 1/3 had attended at least some college.
2. 2/3 of the participants were from Baltimore City.
3. Most participants (90%) were not currently working and were divided evenly between unemployed (45%) and retired/disabled (45%).
4. 80% reported no spouse or significant other; 85% had at least one child; 55% had two or more children.

**Drug Use/Treatment Demographics**

Mean ( $\pm$ SD) number of years of heroin or opioid use: 16.7 ( $\pm$ 9.7; median and mode = 15)

Treatment medication modality: Methadone: 95% (19)

Buprenorphine: 5% (1)

Most recent reported route of drug administration: Injection: 50%

Intranasal: 50%

***Other Findings***

1. 60% endorsed past or current engagement in harm reduction behaviors (e.g., test shots, fentanyl strips, or observing peers with greater tolerance doing a shot prior to their use).
2. Most participants (85%) had been in treatment for drug or alcohol use at some point prior to their current treatment episode.
3. Most participants (60%) had at some point visited a hospital or an emergency room in relation to drug use, and among those who did, the majority (83%) had done so more than once.
4. 40% of participants reported ever having overdosed on opioids, and most of those individuals (63%) reported more than one prior overdose.
5. Two participants reported overdose events within the past month.

**SUMMARY OF FINDINGS**

**1. Knowledge About Naloxone**

- A. All (100%) survey participants had heard of naloxone and its use.
- B. A slight majority (55%) reported currently having a naloxone kit in their possession.
- C. Most participants (65%) had received training on how to use naloxone.
- D. Less than half who had received training reported carrying the kit with them (36%).

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Some participants *offered open-ended comments that addressed the question of naloxone knowledge* as it relates to consistent possession of naloxone. The most common statements about this topic suggested that lack of specific awareness of where to obtain kits (e.g., “knowing where to get Narcan is a big problem”) and thoughts that someone could “get in trouble” (i.e., with police) for having naloxone in their possession were major barriers to naloxone possession.

**2. Access to Naloxone**

- A. Nearly all participants (85%) thought that naloxone was available and easy to get.
- B. Most participants (65%) knew where to get naloxone.

Although participants were not asked to provide specific suggestions on how to expand access to naloxone, *several of them provided comments when probed about the UMDTC clinic’s potential role in expanding access*. Notably, 10 participants (50% of the total surveyed) offered statements suggesting that the UMDTC could be doing more to provide naloxone access (e.g., “the clinic should be spreading the word on availability and use”).

**3. Experience with Naloxone**

*Experience witnessing naloxone use for overdose reversal:*

- A. Most survey participants (70%) had witnessed another person being given naloxone to reverse an overdose.
  - Mean ( $\pm$ SD) number of overdose reversals witnessed: 4.3 ( $\pm$ 2.1).
  - Median: 4.5; range: 2–9.
- B. Nearly half (42%) of participants who had witnessed an overdose reversal had done so within the past month.

*Experience being revived:*

- C. Of the eight survey participants (40%) who reported a prior opioid overdose, five (63%) reported ever being revived from an overdose with naloxone:
  - Restated, of the total sample, 25% reported ever being administered naloxone for an opioid overdose:
    - Mean (+SD) number of times receiving naloxone to reverse an overdose: 1.6 (+0.9).
    - Median: 1; range: 1–3.

*Experience reviving others:*

- D. More than half of participants (55%) reported ever administering naloxone to someone else to reverse an overdose:
  - Less than half of those contacted 911 after the reversal (45%).

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- No one in the study reported administering naloxone on themselves:
  - “I’m in an area with lots of IV drug users. I call 911 and use Narcan. I brought back four people.”
  - “I used it this morning to reverse overdose.”
- E. Based on open-ended comments in this section of the survey, participants expressed favorable experiences of administering naloxone.

#### 4. Perceptions and Attitudes Toward Naloxone

- A. Most participants (60%) indicated that naloxone has changed the way that they and others think about overdose.
- B. Many respondents (85%) did not believe that people who had been revived with naloxone were thought of any differently by others.
- C. Most participants (80%) did not see any barriers to using naloxone to revive another person.
- D. Many participants (80%) reported knowing other people who carry naloxone.
- E. Among this group, participants most commonly estimated that approximately half of the people they know carry naloxone.

The “Perception and Attitudes” section of the survey prompted participants to provide open-ended responses related to several of the questions. Some themes identified are as follows:

- The most common factors identified by participants as *barriers to reviving others from an overdose* were:
  - The individual’s reaction once he or she regained consciousness:
    - “Scared of the [overdosed] OD’ed individual’s reaction to being reversed. Saving lives, yes. But the experience is so awful that they might not want to put them through that.”
    - “Scared of getting hit/yelled at by angry person who OD’ed.”
    - “People might be afraid of the overdosed individual’s reaction to the reversal. It’s not pleasant.”
  - Fear of violence after the OD reversal and the possibility of being involved with the legal system after reversal also limited people from using naloxone:
    - “Would use it only on people I knew. Don’t wanna get in caught up in this s\*\*t. If the police come, they’ll think I’m involved.”

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- Some participants' responses revealed that there may be stigma in their perceptions of other drug users' reluctance to obtain and/or administer naloxone:
  - Several participants expressed views that other drug users would not obtain naloxone because of "laziness."
    - "People don't care about their own lives, let alone others. It's great to have this life-saving drug, but I'm not sure that people care to use it."
- Several patients perceived naloxone as a valuable tool for increasing *safety* associated with opioid use
  - "I feel safer."
  - "I'm not as scared."

**5. Influence of the Availability of Naloxone on Drug Use Behavior**

- A. Participants were asked a series of questions using a Likert-type scale to assess the influence of naloxone availability on drug use behavior. The proportional distribution of those responses is displayed in Table I.
- B. Participants offered a range of open-ended comments related to the influence of naloxone availability on drug use behaviors:
  - "People who have naloxone kits are more likely to use opioids safely."
  - "Narcan is good but doesn't change anything. Doesn't change how much [drug users] use."
  - "People might be more open to treatment because of Narcan."
- C. Some participants provided answers that belied a stigmatizing "othering" quality to their notions of how naloxone availability may change others' drug use behaviors.
  - "People are more bold with their use."
  - "It makes them more careless. People know that Narcan is going to save them."

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**Table I. Percentage of Participants Endorsing Likert-Type Scale Responses to Various Statements Regarding Naloxone Influences on Drug Use Behaviors (N = 20)**

N=20	Strongly Disagree				Strongly Agree
	1	2	3	4	5
People who have naloxone kits are more likely to take opioids (for example: heroin, fentanyl, oxycodone, codeine, Roxicet, Percocet).	20%	5%	45%	10%	20%
People who have naloxone kits are <b>more</b> likely to take bigger doses of opioids than they would if they didn't have the kit.	35%	5%	15%	15%	30%
People who have naloxone kits are <b>less</b> likely to take bigger doses of opioids than they would if they didn't have the kit.	40%	20%	15%	10%	15%
People who have naloxone kits are more likely to use opioids safely.	35%	5%	25%	10%	25%
If I know that there is a naloxone kit nearby, I feel safer when I use opioids.	10%	0%	10%	20%	60%
When I have naloxone available, I am more likely to use opioids.	40%	15%	20%	20%	5%
When I have naloxone available, I am more likely to take bigger doses of opioids.	35%	30%	15%	5%	15%
When I use opioids by myself and have naloxone, I feel more confident about my safety.	30%	15%	10%	10%	35%
If I used too much of an opioid, I would be able to administer naloxone to myself before I lost consciousness.	40%	5%	25%	5%	25%



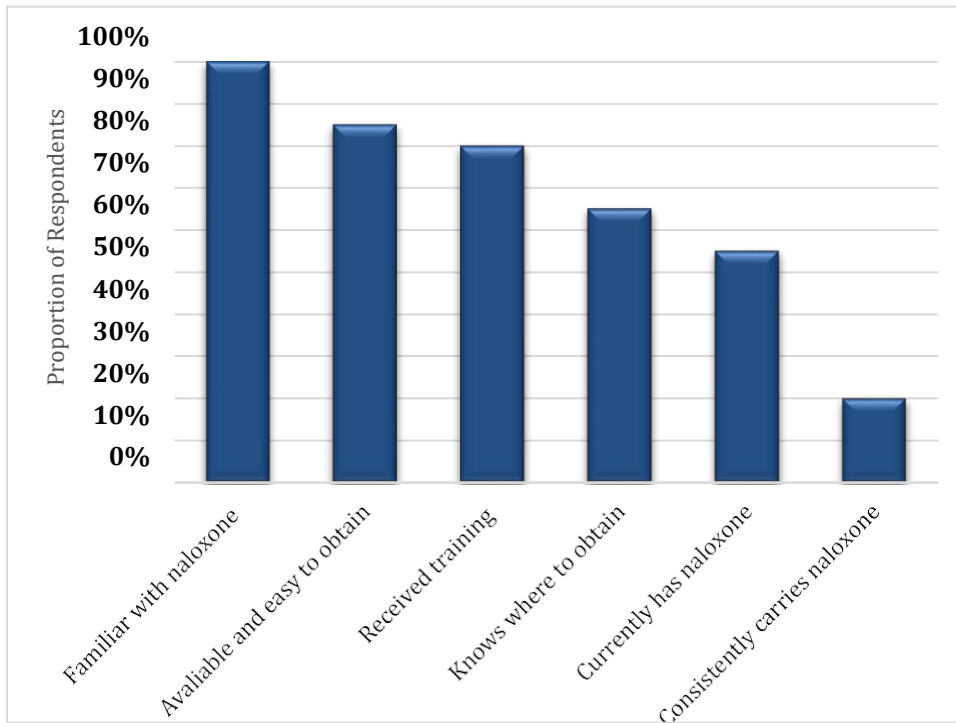
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**6. Analysis of Naloxone Perceptions and Attitudes Through the “Cascade of Care” Scope**

In summarizing the survey findings, in particular pertaining to naloxone “Knowledge” and “Access”, we propose an alternative presentation of our findings using the “Cascade of Care” model applied to naloxone possession. “Cascade of Care” is a conceptual framework used to highlight specific steps needed to achieve an optimal health outcome. This approach has recently been applied as a useful lens to understand better the factors needed for achieving the end goal of consistent naloxone possession for bystander use at the time of overdose (Tobin, Clyde, Davey-Rothwell, & Latkin, 2018). We include a third category of naloxone “Possession” in the following summary.

**Naloxone Knowledge – Access – Possession “Cascade of Care” (Figure 1)**

- 100% of survey participants were familiar with naloxone and its use
- 85% considered naloxone to be readily available and easy to obtain
- 80% had ever received training on how to use naloxone
- 65% reported knowledge of where they could obtain naloxone
- 55% reported currently having a naloxone kit
- 20% reported consistently physically carrying naloxone with them



**Figure 1. “Cascade of Care” framework applied to understand gaps in naloxone carry and use**

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**Findings on Using the Naloxone Likert Questionnaire, Recommendations, and Modifications**

1. Our survey did not include a follow-up question or allow for open-ended responses to probe further for factors influencing whether participants consistently carried their naloxone with them.
2. The findings provided in this report are similar to those obtained by recent surveys (Khatiwoda, Proeschold-Bell, Meade, Park, & Proescholdbell, 2018; Tobin et al., 2018), which included similar opioid use disorder patient populations.
3. Gaps were identified in the following areas:
  - A. High levels of general awareness and perceived access to naloxone versus lower levels of practical access (i.e., knowing where to obtain a kit).
  - B. Considerably lower levels of consistent carrying of naloxone even among those who have obtained a kit.
  - C. A discrepancy in participants' estimated percentage of peers who physically carry naloxone (50% estimated) versus those who reported carrying naloxone (20%).
4. Further targeted study is needed to understand better the factors that contribute to these stepwise gaps.

**CAVEATS AND LIMITATIONS**

**Interpretation of Survey Results**

Certain limitations with the study findings should be noted. First, all participants in the survey were clients of the UMDTC and, thus, actively engaged in treatment for opioid use disorder (all but one was receiving medication-based treatment with methadone). These findings may not be representative of those from a wider range of opioid users and their networks impacted by opioid overdose. Of note, it is unclear how treatment engagement affects perceptual differences around naloxone use for overdose reversal.

Second, as one of three sites to pilot the NDEWS Naloxone Perceptions Survey, the study sample size was small by design, and it was intended for aggregation with a larger data set from other participating sites. The small sample size limits the statistical power and generalizability of the results as stand-alone findings beyond those specific to this clinic's patient population.

Finally, although open-ended and qualitative responses were used in support of the presented survey data, the survey instrument was not designed for the systematic collection of qualitative responses. In some categories, the survey team identified areas in which additional open-ended follow-up prompts could have been used to gain a more nuanced understanding of participants' attitudes and beliefs regarding naloxone.

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### Using the Naloxone Questionnaire

Some participants experienced difficulty understanding structured questions, especially those presented using the Likert-type scale responses. The conceptualization of inverse responses was difficult for some participants to follow and comprehend. For example, Q2 in the table, “People who have naloxone kits are **more** likely to take bigger doses of opioids” versus Q3, “People who have naloxone kits are **less** likely to take bigger doses of opioids.” At best, these two questions were confusing, and at worst, they were perceived as “gotcha” questioning. In this example and in other cases, the questions required multiple reiterations to obtain an accurate response from participants. It is suggested that future modifications of this questionnaire simplify the wording of questions and avoid repetition.

Similarly, limiting the scope of some questions is recommended. For example, one question asked, “how do people who use opioids think about naloxone?” While intended as an open-ended question, separating personal and general perceptions of naloxone would be useful in the data analysis process. Research team members also felt that questions lacked ecological validity. One question in particular, “If I used too much opioids, I would be able to administer naloxone on myself before I lose consciousness,” troubled research team members in that someone experiencing an overdose would not have the capacity to administer naloxone to themselves. In addition to its lack of relevance, the question, as posed, made the research team seem naïve (several respondents laughed when they were asked that particular question). Additionally, the inclusion of a question regarding knowledge of (or participation in) “naloxone parties” was troubling, considering the prevalence of stigmatizing myths surrounding naloxone use and access.

### SUMMARY AND CONCLUSION

1. This report provides a small, albeit impactful demonstration that although individuals are aware of the life-saving opioid reversal drug naloxone, regular use and possession is a target area for improvement.
2. This report provides a useful glimpse into a population of in-treatment individuals with opioid use disorder about their perceptions of naloxone utilization. Collecting primary data from individuals who are traditionally difficult to capture is a crucial step to understanding the successes and pitfalls of current public health interventions designed to temper the wave of opioid overdoses.
3. The report demonstrated that this treatment-seeking population has been extensively impacted by opioid overdose—both personally (40%) or from having observed an overdose (70%).
4. Participants’ responses to the various sections of this survey revealed that they held mainly favorable views regarding naloxone utilization, as well as some stigmatizing beliefs.

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5. Gathering such data also provides opportunities for institutional and social buy-in for expanding naloxone distribution within the networks that are accessible to these individuals.
6. The Cascade of Care framework that we applied to this survey data revealed that large gaps exist between overall knowledge about and perceived access to naloxone, as well as consistent possession and use of naloxone. This model could be useful for future endeavors to identify specific necessary steps for closed-loop naloxone access and delivery.

**REFERENCES**

Khatiwoda, P., Proeschold-Bell, R. J., Meade, C. S., Park, L. P., & Proescholdbell, S. (2018). Facilitators and barriers to naloxone kit use among opioid-dependent patients enrolled in medication assisted therapy clinics in North Carolina. *North Carolina Medical Journal*, 79(3), 149–155.

Tobin, K., Clyde, C., Davey-Rothwell, M.A., & Latkin, C.A. (2018). Awareness and access to naloxone necessary but not sufficient: Examining gaps in the naloxone cascade. *The International Journal on Drug Policy*, 59, 94–97.

## **Naloxone Perceptions Survey**

**24 January 2019**

### **TO BE READ TO THE PARTICIPANT:**

We are conducting a survey to better understand perceptions and awareness of naloxone, or Narcan. Naloxone is used to reverse an opioid overdose from drugs like heroin or fentanyl. This research is being conducted by Dr. Annabelle Belcher at the University of Maryland, School of Medicine. We are inviting you to participate in this research since you have used opioids in the past. This study involves answering questions about your knowledge and experience using naloxone. It will take approximately 20-25 minutes. If you choose to participate, you will be paid \$5 in cash for your time. Your participation in this study is completely voluntary and you may stop your participation at any time. None of this information will be given to the clinic, nor will it have any impact on your current treatment in the clinic.

Some of these questions may be more relevant to you than others depending upon your status in treatment. Your answers are completely anonymous; we will collect some general demographics, such as your gender and age, however your name and other personally-identifying information will not be recorded. Some of the questions asked may address sensitive topics such as your past drug use or overdose which could cause you emotional discomfort. You may skip questions or stop the interview at any time if you are uncomfortable. The data from this study will be collected together with responses from populations of people living in other areas of the country and will be used to inform policy regarding naloxone availability and use.

I will provide you with the contact information for the Principal Investigator of this study and also the University of Maryland, Baltimore's Human Research Protections Office, in the event you have any questions, concerns, complaints or need to report an injury related to the research [this will be provided to the participant before they begin their participation].

Principal Investigator: Annabelle Belcher PhD- (410) 328-6837 or [abelcher@som.umaryland.edu](mailto:abelcher@som.umaryland.edu)

Human Research Protections Office- (410) 706-5037 or [hrpo@umaryland.edu](mailto:hrpo@umaryland.edu)

Before we get started, I want to ask you a few questions to make sure you understand the study:

- 1) Do you understand that this is a research study to learn about people's perceptions of naloxone?
- 2) Do you understand that participation is entirely voluntary and will not affect the services you receive at the clinic?
- 3) Do you have any questions about the study?

### **Knowledge about Naloxone**

1. Have you heard of Narcan or naloxone opioid overdose antidote?  Yes  No  
If NO, please skip to Background and Demographics, Q24
  
2. Do you currently have Narcan/naloxone?  Yes  No
  - a. If yes, do you carry the kit with you?  Yes  No

**Access to Naloxone**

3. Do you think that naloxone is available and easy to get?  Yes  No

4. Has the availability of naloxone changed how opioid users think about their drug use?  Yes  No

If yes, how?

5. Do you know where to get naloxone?  Yes  No

If yes, where?

**Experience with Naloxone**

6. Have you ever received training about how to administer naloxone?  Yes  No

If yes, ask a and b.

a) Did you receive formal training (e.g. complete an agency or community program)?  Yes  No

b) Did you receive informal training (e.g. from a friend or fellow user)?  Yes  No

7. Have you ever seen someone else being given naloxone to reverse an overdose?  Yes  No

If yes, ask a and b.

a) How many times? \_\_\_ \_\_\_ \_\_\_

b) When was the last time you saw this? Enter Approximate Date: \_\_\_/\_\_\_/\_\_\_

8. Have you ever overdosed from using opioids?  Yes  No

If yes, ask a through c.

a) How many times? \_\_\_ \_\_\_ \_\_\_

b) When was the last time you overdosed? Enter Approximate Date: \_\_\_/\_\_\_/\_\_\_

c) Has someone ever administered naloxone to you to revive you from an overdose?  Yes  No

If yes, ask d and e.

d) How many times? \_\_\_ \_\_\_ \_\_\_

e) Did someone call 911?  Yes  No

9. Have you ever administered naloxone to someone else to reverse an overdose?  Yes  No

a) (If yes) Did you call 911?  Yes  No

10. Have you ever administered naloxone to yourself?  Yes  No

a) IF NO: If you used too much of an opioid, do you think that you would be able to administer naloxone to yourself before you lost consciousness?  Yes  No

11. Have you ever had a friend or family member die from an opioid overdose?  Yes  No

**Perceptions and Attitudes about Naloxone**

12. Has naloxone changed how you think about overdose?  Yes  No

If yes, how?

13. Do you think naloxone has changed how other opioid users think about overdose?  Yes  No

If yes, how?

14. Are people who have been revived with naloxone thought of any differently by other users?  Yes  No

If yes, how?

15. Does anything prevent people from using naloxone to revive someone?  Yes  No

If yes, what?

16. Do you know other people who carry Naloxone?  Yes  No

17. What percentage of people that you know would you estimate carry naloxone?

5%	10%	15%	20%	25%	30%	35%	40%	45%	50%	55%	60%	65%	70%	75%	80%	85%	90%	95%	100%
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**Influence of the Availability of Naloxone on Drug Use Behaviors**

18. Please indicate how much you agree with the following statements on a scale of 1 to 5 with 1 being “Strongly Disagree” and 5 being “Strongly Agree.” Mark an “X” in the box beneath one number for each statement.

	Strongly Disagree		Neutral			Strongly Agree	
	1	2	3	4	5		
People who have naloxone kits are more likely to take opioids (for example: heroin, fentanyl, oxycodone, codeine, Roxicet, Percocet).							
People who have naloxone kits are <b>more</b> likely to take bigger doses of opioids than they would if they didn't have the kit.							
People who have naloxone kits are <b>less</b> likely to take bigger doses of opioids than they would if they didn't have the kit.							
People who have naloxone kits are more likely to use opioids safely.							
If I know that there is a naloxone kit nearby, I feel safer when I use opioids.							

When I have naloxone available, I am more likely to use opioids.					
When I have naloxone available, I am more likely to take bigger doses of opioids.					
When I use opioids by myself and have naloxone, I feel more confident about my safety.					
If I used too much of an opioid, I would be able to administer naloxone to myself before I lost consciousness.					

19. Are you currently in treatment with methadone/buprenorphine/vivitrol?  Yes  No

(If yes, circle medication)

20. What was your most recent route of administration of heroin/opioids? (E.g., injection/intranasal/smoke)

21. # of years of heroin or opioid use \_\_\_\_\_

22. Would you be more likely to use intranasal or intramuscular naloxone? \_\_\_\_\_

23. Are you using any other methods to stay safe during your drug use? (E.g. test shots, fentanyl strips, observing peers with greater tolerance doing a shot prior to your use, etc.)

24. Have you ever heard of a “Narcan party” or “naloxone party?”  Yes  No

a) If yes, have you ever participated in a “Narcan party” or “naloxone party?”  Yes  No

**Closing**

25. Is there anything that you’d like to add before we finish? Anything else about your experiences that you’d like to share? Anything that you think is important that we didn’t ask about? If so, please provide your responses below.



**Background & Demographics**

**26. For what drug(s) are you currently seeking treatment? Check all that apply:**

- Heroin
- Marijuana
- Tobacco/Nicotine
- Fentanyl
- Alcohol
- Prescription opioid painkillers/narcotics
- Other drug(s) (specify): \_\_\_\_\_

**27. Have you ever been in treatment for drug or alcohol related problems before now?  Yes  No**

**28. How many times have you visited an emergency department/hospital because of your drug use?**

- Never
- Once
- 2-5 times
- >5 times

**29. Age:   years**

**30. What race/ethnicity do you identify with?**

- Black or African American
- White
- American Indian or Alaska Native
- Native Hawaiian or Other Pacific Islander
- Asian
- Other (specify): \_\_\_\_\_
- Prefer not to say

**31. Are you Hispanic or Latino/a?  Yes  No**

**32. What is your gender?**

- Female
- Male
- Non-binary/third gender
- Prefer to self-describe
- Prefer not to say

**33. What is the highest level of education you completed?**

- Elementary School
- Middle School
- Some High School
- High School Graduate
- GED
- Some College
- Associate's Degree
- Bachelor's Degree/College Graduate
- Graduate or Professional Degree

**34. Are you from Baltimore City?**

Yes

No

**35. During the past 12 months, which of the following best describes your employment status? (check all that apply):**

Employed part-time

Employed full-time

In military service

A student

Retired/Disabled

Homemaker/family caregiver

Unemployed

Incarcerated

**36. Are you married or do you have a significant other?**

Yes

No

**37. How many children do you have?**

0

1

2

3

More than 3