Naloxone Use Among Delawareans

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Table of Contents

Introduction

The Office of Health Crisis Response (OHCR) within the Delaware Department of Health and Social Services (DHSS), Division of Public Health (DPH), worked with Inciter to examine naloxone preferences among community members in order to strengthen the Community-Based Naloxone Access Program (CBNAP). This report was funded by the Centers for Disease Control and Prevention (CDC) with Overdose Data to Action funding that builds upon previous CDC programs focused on opioid overdose and injury prevention.

Naloxone is an opioid antagonist medication used to reverse the effects of an overdose by attaching to and blocking opioid receptors. This study primarily examines two varieties of intranasal naloxone. One is unbranded naloxone with an atomizer, which is not regulated by the U.S. Food & Drug Administration (FDA) and requires assembly. The other variety is Narcan®, an FDA-approved medication that comes in pre-filled spray bottles. There is some debate within the emergency management and medical fields regarding whether Narcan®, which provides its nasal spray at 4 milligrams per unit, is too high a dose and can more easily lead to adverse patient reactions such as combativeness and unwillingness to be transported to treatment or emergency departments. Currently, the CBNAP within DPH distributes and provides training to community members on the use of unbranded naloxone with a nasal-spray atomizer, which includes two sprays of 2 milligrams each. It also provides naloxone kits to police departments, fire departments, and state-sponsored groups such as Community Response Teams (CRTs).

This report aims to inform OHCR about preferred methods among community members who have administered naloxone with an atomizer and Narcan®. It also includes other issues such as adverse effects of naloxone administration to people who are overdosing. Inciter staff interviewed people who have administered naloxone to their friends and family members, as well as those who work directly with opioid users in the areas of harm reduction or treatment. This content may be used to guide discussions about which method of naloxone is a better choice for public distribution and provide further insight into additional issues surrounding naloxone training to community members, its distribution, and use.

Background

For decades, emergency service providers have used naloxone to reverse opioid overdoses. Opioid overdose prevention programs have distributed naloxone to family members and friends of opioid users since 1996. A community-driven momentum for the provision of naloxone for public use started in the early 2010s when the opioid epidemic became both more entrenched and well-known. At the time, the only available overdose intervention was an intramuscular shot, which was usually injected into the thigh. The most popular brand of intramuscular injector is Evzio, a pre-filled auto-injector approved by the FDA in 2014. The medication works quickly to reverse an overdose and the product itself talks the user through the process via a voice recording. However, the product's voice feature is only available in English and French, and at one point, the price of a single dose climbed to more than $4,000 (Alltucker, 2018), compared to about $150 per Narcan® kit and $50 to $100 per nasal atomizer kit. Furthermore, Evzio's method of administration using the needle-like auto-injector makes some people feel uncomfortable, in addition to fearing the possibility of blood-borne infection transmission.

By the mid-2010s, opioid overdose prevention programs were distributing intranasal naloxone, administered through an atomizer that the rescuer assembles at the time of a rescue. Use of intranasal

naloxone by family members, friends, and other community members increased rapidly after Narcan® was approved by the FDA for public use in 2015. Prescriptions for naloxone doubled between 2017 and 2018 (Guy GP, et. al., 2019). Narcan® is so popular, in fact, that most people call naloxone by its branded name, rather than the generic medication name.

While many studies have confirmed that providing community members with naloxone saves lives (e.g., Giglio et. al., 2015; McDonald & Strang, 2016), only a limited number have considered the differences among the leading methods of naloxone administration. Yousefifard et. al. (2019) revealed no significant differences in the length of time to revive or in side effects between intramuscular and intranasal administration methods. The systematic literature review and meta-analysis noted that the odds of a patient requiring a second "rescue" dose of naloxone was 2.17 times higher with intranasal applications than with intramuscular interventions (Yousefifard et. al., 2019). These data were further supported by a double-blind, double-dummy longitudinal study of naloxone administration approaches in Australia (Dietze et. al., 2019).

Work Plan & Methodology

Inciter proposed that a study of naloxone preference and other issues be conducted for OHCR in four steps: (1) review of academic research; (2) development of questionnaires and recruitment methods; (3) implementation of surveys of two stakeholder groups; and (4) review and analysis of the data. At the beginning of the project, Inciter became familiar with DHSS programs and their approaches to delivering naloxone and associated training. Inciter collaborated with OHCR personnel to create the research study, including the design, methodology, timing, and anticipated deliverables.

In collaboration with OHCR, Inciter developed three primary research questions:

1. How easy or difficult is naloxone to administer, depending on the means of administration? Are there any additional considerations related to ease of use?

2. What, if any, adverse reactions to naloxone administration for overdose reversal have people who administer naloxone, or who have had naloxone administered to them, noticed?

3. Which product is preferred by members of the public who have used naloxone to reverse an overdose, and why?

Inciter approached these questions by designing and implementing three data collection methods: (1) a secondary research review; (2) interviews with stakeholders who have administered naloxone in Delaware; and (3) interviews with individuals in Delaware and surrounding states who provide training on how to revive someone with naloxone or regularly work alongside stakeholders who supply naloxone. After data collection, Inciter triangulated data informed by their three methods with additional data supplied from the Report a Rescue survey built into the OpiRescueDE phone application (https://www.helpisherede.com/Get-Help/OpiRescue-App). The Report a Rescue survey was designed to gather data on incident and victim demographics, aspects of the rescue itself, and outcomes. Survey data used in this report were collected between September 1, 2019 and July 15, 2020.

Inciter interviewed five community members (people who have administered naloxone on friends or family members) and 10 key informants (people who work with people who use or have used opioids, or

volunteer in harm-reduction organizations) between May 28, 2020 and August 15, 2020 (Table 1). For each stakeholder group, Inciter staff asked questions about their ease of access to naloxone; their naloxone training; their experience administering naloxone, including items addressing the ease of use; outcomes of the intervention; adverse effects; and other related challenges.

Table 1: Number of participants by stakeholder group
Naloxone Study, Delaware, May 28, 2020 – August 15, 2020

Stakeholder Group	Number of Participants
Key Informants	10
Community Members	5
OpiRescue Respondents	19
Total	34

Source: 2020 Naloxone Study, Inciter

Key Informant Interviews

Key informants were recruited via e-mail from a list of contacts provided by OHCR. Inciter developed a protocol to guide the key informants (Appendix B). Following each interview, the research team made further efforts to engage candidates by asking interviewees if they knew anyone else who might be willing to participate in this research. In all, Inciter contacted 19 candidates in May and June, 2020, and ten stakeholders agreed to be interviewed. Because the questions were regarding their paid or volunteer work, they were not offered monetary incentives. Key informant interviews took approximately 20 minutes to complete.

A primary qualification for the interview was for the key informant to work, either formally or informally, with people who may need to administer or use naloxone. Nine interviewees work in Delaware and one works in a nearby state. The informants all regularly work with agencies to prevent opioid overdoses in their respective state. Half of the 10 key informants are professionals in the field of addiction treatment. Seven key informants' paid work involves working with individuals in active addiction or recovery, while three work with these communities in their off-hours. Three key informants are CRT members.

Community Member Interviews

Inciter worked with OHCR staff to recruit Delaware community members with experience in administering naloxone. OHCR created a "clickable" banner header on the HelpIsHereDE website (https://www.helpisherede.com/) that provided information about this research project and how to be contacted by researchers if they were interested in participating. Respondents supplied their contact information through an online form linked to an Inciter online survey account. This information was stored securely and was reviewed by the research team several times weekly to gather new responses and contact informants.

Additionally, OHCR reached out to community groups and organizations involved in Delaware's harm reduction and addiction treatment communities about the interview opportunity. During recruitment in June, July, and August 2020, nine candidates indicated they were interested in being contacted for an

interview. One volunteer did not qualify because they could not be considered a community member, and three were not able to be reached following efforts to contact them. In total, five community members' interviews contributed to the findings in this report.

Participants were first asked to provide consent and were assured of study confidentiality. Inciter offered community informants $20 Visa gift cards for their participation. The interview protocol included closed and open-ended questions (Appendix A). Interviews were semi-structured, allowing participants to speak about topics that they felt were most pertinent to their experiences. Interviews took approximately 30 minutes to complete.

Report a Rescue Survey Data

Delaware residents can download the OpiRescueDE phone application to help them both reverse an overdose and report the reversal through its Report a Rescue survey, which was updated in May 2020. The new survey (Appendix C) consolidates some questions from the prior survey and also includes a new question about any challenges the person may have had in administering naloxone. Rescue data were downloaded in mid-July by the OpiRescue developer and were cleaned before analysis. In total, 16 rescues were reported via the app between September 6, 2019 and August 13, 2020. Responses from informant interviews contributed an additional three responses. Altogether, these represent a very small proportion of estimated rescues from community members.

Findings

Interviewees in both groups came from a variety of backgrounds and had varying experiences with naloxone. Some key informants work in the field of addiction recovery and treatment. A few interviewees are parents of someone with a substance use disorder and some had never administered naloxone themselves. Some people had been trained, some are trainers, and some were never formally trained. Regardless of their backgrounds, their answers to the ease-of-use and adverse reaction questions were remarkably similar.

Naloxone Training and Administration

Although all of the key informants had been trained on naloxone provision, six of the ten had never administered naloxone themselves. Many of them had been trained multiple times and in different means of naloxone administration. Of the four who indicated they had administered naloxone, two had used Narcan®, and two had used several types of administration. Seven key informants had trained others to use naloxone, whether it be to large groups or one-on-one to others, such as the car-side trainings that have been instituted since the start of the Covid-19 pandemic shut down group face-to-face trainings. The research team found that in this sample of interviews, at least some participants had experience with all three types of naloxone: Evzio intramuscular, Narcan® intranasal, and the intranasal atomizer. Regardless of their experience, all had knowledge about naloxone administration from extensive interaction with people who use drugs and their families.

Of the five community members interviewed, four had administered naloxone at least once. Three informants had administered naloxone multiple times, while one received naloxone several times during active drug use before entering recovery. All community member stakeholders had received training and felt they had been prepared for administering naloxone. One community member described having a

period of time pass from when they were trained to when they administered naloxone, but stated that "my training came right back." Two informants were trained through their job setting, two were trained through community groups, and one was trained while at a treatment facility.

Community members received their naloxone/Narcan® kits in various settings. One received a kit when they were receiving treatment and used it to revive a friend. Another received a prescription from a doctor, and another revived someone at a party using someone else's kit.

Naloxone Ease of Use

Of the nine key informants who provided opinions based on their own experience or knowledge of the opinions of others, all agreed that Narcan® is easier to administer than the atomizer. The few people familiar with Evzio felt that it was easy to administer but too expensive to be a practical resource. Several key informants mentioned that the glass atomizer can break, and they have heard of occasions when it has, even with people in the healthcare field. One person made the point that most overdoses happen at home, and the atomizer can be especially tricky for family members who are experiencing trauma while trying to concentrate on assembling the atomizer. Another related that, "People don't know how they're going to respond [to an overdose situation]. It can feel like a long time to put it together."

"(Administering naloxone) is not so hard. It's the emotional piece around it that makes it so difficult."

Community Member, Kent County

When asked which type of naloxone they prefer, two of the five community members chose Narcan® because they believed it was easier to use. One noted that although they were nervous and physically shaking while reviving someone, they were able to maintain control of the situation while administering Narcan®. One preferred the atomizer because "the push associated with Narcan® doesn't seem like enough compared to the atomizer." Two did not have a preference among the choices.

Adverse Effects

Several key informants felt that the general public focuses on the possibility of violent reactions from those who have been administered naloxone. However, only two reported witnessing or having heard about situations in which an individual expressed agitation or anger upon being revived. One key informant who has reversed or witnessed the reversal of many people said, "People hate being 'Narcanned'... they go into a trauma response, they're nauseous and angry. There is a fear that people will be aggressive, but that's usually not the case." Some informants described that the individual receiving the treatment is usually angry about being revived and they may not remember that they even took the drugs causing the overdose, creating another point of confusion. This point is supported by Kahn et. al. (2020), in which people whose overdose had been reversed by naloxone recall waking up confused, disoriented, and experiencing withdrawal symptoms.

Most key informants were aware that naloxone administration can cause headaches, confusion, and/or nausea. These are also common symptoms of opioid withdrawal. Two key informants suggested that effects beyond relatively mild reactions occur primarily when emergency medical technicians revive someone, because they administer higher dosages.

When asked if the individual they were reviving experienced any adverse effects to the naloxone, community members noted confusion, nausea, and vomiting. One reported that the individual being revived started gagging, explaining that "I told her it was a normal reaction, and to slow down and take deep breaths." Two community members reported "belligerence" or "agitation" in some of the people they had rescued.

Effectiveness

No key informants described differences in effectiveness based on the type of naloxone. A few key informants who had an opinion on effectiveness by type of naloxone indicated that the stronger drugs, such as those adulterated with fentanyl, demand more naloxone to revive people. As one person observed about individuals being revived, "They 'wake up' more slowly than they used to." Several interviewees expressed concern that the two doses provided, either through the atomizer or the Narcan device, may not be enough medication to revive someone. One emphasized that for this reason, emergency services should always be called.

Other Challenges

A few key informants emphasized that community members who do not regularly revive people find it difficult and stressful to prepare the atomizer for an overdose victim. Another relayed that naloxone (of any type) must be stored at room temperature, "so you can't keep it in the car."

"I'd like to see more ads in media about naloxone. We see ads for condoms, for drug treatment centers. Why not something like naloxone that can (also) save a life?"

Key Informant, New Castle Countv

Some key informants brought up common misbeliefs they have heard about reacting to an overdose, such as a disbelief in, or misunderstanding of, the Good Samaritan law, making people hesitant to call emergency services. They noted that people have heard of the law, but they don't believe it will actually work as written. Two key informants said there is misinformation in the community about what to do in the event of an overdose; they heard about community members putting overdose victims into cold baths or injecting them with water and baking soda. Two key informants explained that active users sometimes think they will be able to carry out their own reversal, when that is usually not the case. Now more than ever, in the midst of a pandemic, a few participants said that community members simply will not administer rescue breathing. Stigma also plays a role. "People don't want to touch people who use drugs," said one key informant.

"The voice that is missing is the community members, who are reversing (overdoses) in numbers we can't even fathom. They are the true first responders."

Key Informant, Out-of-State

Finally, five key informants addressed the issue of accessibility. A few participants noted the difficulty that community members can have in finding transportation to a Point of Distribution event and promoted distribution at motels and food banks to "go where the people are." Others expressed concern about the difficulty of publicizing distribution events, either because people don't know what "naloxone" is (they only know Narcan®) or getting past the shame or stigma associated with carrying naloxone. One spoke about how they often meet people at distribution events

who are there "too late," meaning that they already witnessed an overdose without having naloxone available.

When asked about challenges related to administering naloxone or if there was anything else that they wanted to add, two people suggested the issue of accessibility of both training and of naloxone. Both advocated independently for the ability to receive naloxone from the police or at police and fire stations. One suggested that training should be provided at high schools and colleges or universities. Two other individuals noted the fear or nervousness that people have of administering naloxone; one said, "People are afraid they might mess up and do something wrong." Two spoke about their experience with the stigma associated with helping people with addiction. One participant elaborated that, "People think, 'Why help when they're just going to use [drugs] again?'"

Report a Rescue Survey Data

Of the 19 reported rescues, three took place in 2019 and the rest occurred in 2020 (11 occurred between June and August 2020). Data for three surveys were gathered from community members during telephone interviews and added to the survey data set, when they described rescues that took place within the past year. Two of the reported rescues took place before the new survey was used but the individuals completing the form received the new survey. As shown in Table 2, rescues were reported in all three counties. Narcan® was used in the majority of rescues, and pharmacies provided most of the naloxone; community agencies provided all but one of the atomizer kits.

Table 2: Overdose rescues by county, gender and type and source of naloxone
Naloxone Study, Delaware, May 28, 2020 – August 15, 2020

County of Rescue		Gender of Overdosing Person		Type of Naloxone Used		Source of Naloxone	
New Castle	7	Female	10	Narcan	12	Pharmacy	10
Kent	7	Male	8	Atomizer kit	6	Community agency	6
Sussex	4	Unknown	1	Other	1	Other	3
Unknown	1						

Source: 2020 Delaware Naloxone Study, Inciter

Table 3 provides data indicating that, in addition to providing naloxone, rescuers also were likely to put the overdosing person in a rescue position and/or provide rescue breaths. Seven of the 19 rescuers reported that the person overdosing had no side effects from the naloxone, while six rescuers reported general withdrawal symptoms such as craving. No other side effects were widely noted. Finally, ten of the 14 respondents from the updated survey reported no challenges to administering naloxone. Both rescuers who explained that they were afraid of hurting the overdosing person used an atomizer kit.

Table 3: Rescue actions in addition to naloxone administration, naloxone side effects, and naloxone administration challenges
Naloxone Study, Delaware, May 28, 2020 – August 15, 2020

Additional Rescue Actions[1]		Naloxone Side Effects		Challenges to naloxone administration[2]	
Recovery position	10	None	7	None	10
Rescue breaths	7	Withdrawal/craving	6	Afraid of hurting the overdosing person	2
Sternum rub	5	Nausea/vomiting	4	Didn't have naloxone when needed	1
Chest compressions	3	Anger/Agitation	1	Not sure if it worked the first time or should administer again	1
		Other	3		

[1] Total is 25 instead of 19 because respondents could choose more than one answer
[2] Total equals 14 because this question was added to new version of survey

Source: 2020 Naloxone Study, Inciter

Of the 19 total reported rescue attempts, Emergency Medical Services (EMS) was called for eight, or 42 percent, of them. Of the instances that EMS was called, the overdosing person was transported to the hospital five times. None of the four overdoses in Sussex County were called in to EMS. Additionally, of the 10 women who were rescued overall, EMS was called for only two of them. Finally, it appears that calling EMS may be more likely if the overdosed person experiences an adverse effect of naloxone. Cases in which no adverse effects occurred were called into EMS at a rate of 25 percent; cases with adverse effects were nearly twice as likely (45%) to result in a call for aid.

The OpiRescue Report a Rescue survey is suspected of capturing only a small percentage of actual rescues that take place by community members (see Irvine et. al., 2019; Katzman et. al., 2020). However, the number of rescues reported has increased since the new survey was introduced. With only 19 rescues reported, this is far from a generalizable sample. Nonetheless, it does span all three counties and most of the data are from 2020. In general, most people who reported a rescue through the app used Narcan® and received it from a pharmacy; most also indicated no challenges to using naloxone or side effects from the people who overdosed. Lastly, the newer survey asks whether the rescuer would feel comfortable using naloxone again; 12 of 14 answered yes, only two indicated that they were unsure and none said that they would not administer again.

Conclusion

This study used interviews or survey information from 34 people from all three counties, and with a wide range of experience in and around people with opioid use disorder. While the people we spoke to or who reported rescues are not necessarily a representative sample of people in and around the opioid use community, most agreed that:

1. Community members find Narcan® intuitively easier to use than the atomizer kit.
2. Naloxone reversal generally causes relatively mild reactions; violent reversal reactions are rare.

Notwithstanding the use of multiple sources of information and multiple methods of data collection, the results of this study are highly consistent. Similar answers came from the stakeholders who have administered naloxone and those who work with those community members. The only difference occurred between the means by which data were gathered. About one-third of those who completed the OpiRescue app's Report a Rescue survey reported no adverse effects in the person being rescued from naloxone administration, while none of the community members who were interviewed and only a few key informants reported no adverse effects. However, the quantitative (OpiRescue) and qualitative (interview) data are difficult to compare in this case, since some interviewees reported on more than one rescue or drew knowledge or understanding from other people with whom they had spoken.

Our findings related to adverse effects concur with academic studies that collected data on adverse effects from naloxone administration. Although there is concern among community members about handling adverse effects associated with overdose reversal, studies have found that the effects are much less, and less dramatic, than is generally feared. Avetian et. al. (2017) studied community groups that distributed Narcan® and reported that 62.2 percent of reversals resulted in no adverse effects. Additionally, withdrawal symptoms such as gagging or nausea, irritability or anger, or symptoms such as grogginess or craving to use are uncommon but not rare (Madah-Amiri D. et al., 2017). Adverse effects also appear to increase with the naloxone dosage (Karensky & Walley, 2017; Purssell et al., 2020).

Studies indicate that when comparing intramuscular to intranasal applications, both community members and people who use opioids prefer the intranasal means (Dunn et al, 2018). The few studies that have tested ease-of-use among the two types of intranasal applications found that administering Narcan® involves fewer steps, with less room for error, as the glass naloxone capsule of the atomizer can break (Tippey et al, 2019; Eggleston et al., 2019). As Tippey (2019) noted, "Each additional step (in assembling the atomizer) opens multiple avenues for failure modes that may result in incomplete assembly of the kit." Few studies compare the unbranded naloxone kit to Narcan®, because the kit is not FDA-approved or regulated.

Appendix 1: Community Member Questionnaire

1. What experience do you have **administering** naloxone?
    a. Have you administered naloxone more than once? Using the same or different types of naloxone? (If multiple times: Tell me about the most recent time you reversed an overdose. If once: Tell me about the time you administered naloxone.)
    b. What type of site did it take place at – somebody's house, a business, a public area? Which county/city? How did you know this person? Ask Report a Rescue questions as appropriate. (Fold in access and training questions as appropriate.)

2. Have you ever received **training** on administering naloxone?
    a. Tell me about the **training** you received. How long ago did you receive the training? Group or one-on-one setting? Rough length of training - less than 10 minutes, an hour? How well do you think the training prepared you to rescue someone who was overdosing? How well did the training prepare you to administer naloxone (if not answered by previous question)? Looking back, are there ways you thought the training could have been improved?

3. Tell me about your experience **getting and carrying** a naloxone kit.
    a. Why did you want to get a naloxone kit? How easy did you think it was to (obtain) a kit? Did you encounter any problems getting a kit and if so, what were they?
    b. Where do you keep your kit? Do you carry it with you, keep it at home, or keep it in the car? Are there certain times you do or don't carry naloxone?

4. In your opinion, which types of naloxone are **easiest** for members of the public like yourself to administer in the event of an overdose, and why?

5. In your experience or from what you've heard from others, what are the most common **adverse effects** of the different types of naloxone for people who have overdosed?

6. What do you think are the biggest **challenges** associated with administering naloxone for community members who have little or no previous experience with naloxone administration?

7. Is there anything else you would like to tell me about administering naloxone that I didn't ask about?

Appendix 2: Key Informant Questionnaire

1. How do (or in what **capacity** do) you interact with people who use opioids?
   a. In your job/volunteer work, do you work on the ground level, or with people who do?
   b. How often does your work put you in contact with people who use opioids? How many people who use opioids do you interact with in a (week/month)?

2. What experience do you have **administering** naloxone, if any?
   a. How many times have you administered naloxone?
   b. What types of naloxone have you administered? (Narcan, generic naloxone with atomizer, injectables)

3. What experience do you have **training** people on administering naloxone, if any?
   a. What types of people? Emergency responders, employees, community members, etc.
   b. What do you cover in the training? How long are the trainings?
   c. Does your organization evaluate the training? If so, how? How has your training changed over time, and why?

4. Based on your experience, which types of naloxone are **easier** for members of the public to administer in the event of an overdose, and why?

5. Based on your experience, what type of naloxone is most effective, in terms of how quickly and easily it revives the person? How does ease of use balance out against effectiveness?

6. In your experience or from what you've heard from others, what are the most common **adverse effects** of the different types of naloxone for people who have overdosed?

7. What are the biggest **challenges** associated with administering naloxone for community members who have little or no previous experience with naloxone administration?
   a. Do those differ based on the type of naloxone being used?

8. Is there anything else you would like to tell me about administering naloxone that I didn't ask about? Is there anyone else you think I should speak to about this?

Appendix 3: OpiRescue Report a Rescue Questions

Introduction

The State of Delaware collects important data on naloxone use during opioid overdoses through a phone app called OpiRescueDE. If you have reported a rescue through the app, do not complete this survey. This survey collects the same information in a different way to accommodate people who do not have the app or for other reasons. This information is merged with data collected through the app and the State uses it to better understand the nature of the rescues and more efficiently use its resources to improve naloxone distribution and use. Thank you in advance for completing this questionnaire.

Incident and Victim Information

1. What date did the overdose happen? (date)
2. What time did the overdose happen? (time)
3. Where did the overdose happen? (ZIP)
4. Was the person who overdosed…
    a. Male
    b. Female
    c. Non-binary or Genderqueer
    d. I don't know
5. What age was the person who overdosed?
    a. Under 20 years old
    b. 20-29 years old
    c. 30-39 years old
    d. 40-49 years old
    e. 50-59 years old
    f. 60 years old or more
    g. I don't know

Rescue Information

6. What did you do to help the person overdosing? (check all that apply)
    a. Sternal rub
    b. Rescue breathing
    c. Chest compressions
    d. Recovery position
    e. Other _____ (fill in blank)
7. Did you give Naloxone to the person, and if so what type?
    a. No (skip to Q13)
    b. Yes, Generic Naloxone Nasal Kit with Atomizer
    c. Yes, Narcan Nasal Spray
    d. Yes, Evzio Auto-injector
    e. Other _____ (fill in blank)

8. Where did you get the Naloxone kit?
    a. Pharmacy by prescription from my doctor
    b. Pharmacy without doctor's prescription
    c. Hospital emergency department
    d. Treatment program
    e. Community agency or event
    f. Someone or someplace else _____ (fill in blank)
9. How many doses did you give?
    a. 1 dose
    b. 2 doses
    c. More than 2 doses
10. Which of the following challenges did you experience using the naloxone kit, if any? Check all that apply or "None" if you had no challenges.
    a. None (go to Q11)
    b. I didn't have it handy when it was needed
    c. I had trouble assembling the kit while providing assistance
    d. I was afraid I was going to hurt the person overdosing
    e. I didn't know if it worked or if I should give another dose
    f. Other _____ (fill in blank)
11. Which of the following adverse reactions to naloxone did you observe, if any? Check all that apply or "None" if no problems occurred.
    a. None (go to Q12)
    b. Nausea, vomiting, or gagging
    c. Anger, irritability, or hostility
    d. Craving to use opioids again
    e. Other _____ (fill in blank)
12. Would you feel comfortable administering naloxone again?
    a. Yes
    b. No
    c. I'm not sure

Outcome Information

13. Was the person revived without the help of emergency responders?
    a. Yes
    b. No
    c. I don't know
14. Did first responders provide care?
    a. No, first responders weren't called
    b. No, first responders arrived but they didn't provide care
    c. Yes, person was transported to hospital
    d. Yes, but person was not transported to hospital
    e. I don't know

Thank you for reporting a rescue. The information you shared is very useful to the State of Delaware's efforts to reduce overdoses.

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