

First Responder Substance Use Stigma Measures Toolkit

The National Association of County and City Health Officials represents over 3,300 local health departments nationwide, providing leading professional resources and programs. Our mission is to improve the health of communities by strengthening and advocating for local health departments.

The Overdose, Injury, & Violence Prevention Team addresses the overdose crisis with a community- centered, equitable, and evidence-based approach. We support local health departments and their partners with funding, technical assistance, mutual learning opportunities, and resource development.

This toolkit was developed in collaboration with Dr. Lawrence Yang, Stigma Lab, LLC.



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Introduction

The measures presented in this toolkit assess first responders' attitudes, including stigma, toward individuals with opioid use disorders (OUD). They have been used and some validated among various responder populations including police officers/law enforcement, emergency medical services/technicians (EMS/EMT), and fire personnel. This toolkit has been divided into 3 sections of constructs that demonstrate negative or stigmatizing attitudes (Section 1) or are closely related to stigma and can be of utility in measuring stigma (Sections 2 & 3). The sections include:

1. Stigma and Negative Attitudes Toward OUD
2. Preparedness in Treating OUD
3. Harm Reduction

Section 1 includes measures that assess first responders' attitudes towards individuals with OUD as well as opioid treatment and policy. Section 2 covers measures related to actual and perceived preparedness of first responders in providing harm reduction services, such as naloxone. Section 3 includes measures that assess first responders' attitudes toward harm reduction services and medication-assisted treatment (MAT).

This toolkit can be used to develop new stigma assessments or a [template stigma assessment](#) is included at the end of this toolkit and can be used as a reference. Each scale includes a link to the original study, background information, reliability, and response scales. A [complementary toolkit with information on stigma data collection and data analysis](#) is available.

Notes on possible adjustments:

- Some original versions of these measures used stigmatizing language. NACCHO has made minor edits to ensure the language is as non-stigmatizing as possible while maintaining the integrity of the original measure. Changes are provided in italics and the original versions of the measures can be found in the referenced study.
- Most response scales utilize a 5-point Likert scale but a 4-point Likert scale that excludes the neutral option may be used instead. This requires the respondents to form an opinion and was used in the [template assessment](#).

Section 1: Stigma and Negative Attitudes Toward OUD

Stigma

Kruis et al. 2021

This scale originally measures provider-based stigma held towards individuals with OUD; however, it has been used with law enforcement officers in a study by Kruis et al. (2021; N=208). The scale has also been used with a student population, many of whom were active EMTs or who had previously worked with local EMT service providers (N=162).

The measure has four subscales (i.e., dangerousness, blame, social distance, and fatalism). The dangerousness subscale has 6 items measuring the perceived threat of individuals with OUD, and it has shown good internal consistency (Cronbach's alpha= 0.763). The blame subscale has 3 items, which measures the amount of blame attributed to the individual with OUD for their condition. This subscale has also shown good reliability (Cronbach's alpha= 0.726). The social distance subscale has 6 items, all of which except for item #6 are reverse coded. This subscale measures stigma through the degree of distance preferred from persons with OUD, and it has shown good reliability (Cronbach's alpha= 0.790). The fatalism subscale has 5 items, measuring the perception of permanence of a person with OUD's condition. This subscale has also shown good reliability (Cronbach's alpha= 0.727). All responses to the items follow a 5-point Likert scale (1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree, 5= Strongly Disagree).

Dangerousness:

1. If I knew that a *person who uses drugs* lived nearby, I would not allow my children to play alone outside. *
2. One important thing about a person addicted to *drugs* is that you cannot tell what they will do from 1 minute to the next. *
3. If I knew a person had used *drugs*, I would be less likely to trust *them*.
4. People who use *drugs* are a threat to the safety of our community. *
5. The main purpose of opioid treatment facilities should be to protect the general public from *people who use drugs*. *
6. Although *people who use drugs* may seem all right, it is dangerous to forget that they *use drugs*. *

Blame:

1. Persons addicted to *drugs* are usually responsible for their own condition. *
2. Those who become addicted to *drugs* are those who lack the work ethic needed to get “clean.” *
3. Those addicted to *drugs* are self-harming persons who exacerbate (make worse) their own condition. *

Social Distance:

1. If I knew someone was addicted to *drugs* I would try to avoid them. *
2. It would bother me to live near a person who used *drugs*. *
3. It would be difficult for me to develop a friendship with someone who uses *drugs*. *
4. I would not feel comfortable letting someone who has a history of *drug* use be the caretaker of my child for a couple hours. *
5. If I could, I would prefer not to work with someone who was a known *person who uses drugs*. *
6. I would be fine letting someone who had a history of *drug* use marry into my family.

Fatalism:

1. Treating persons addicted to *drugs* seems futile (incapable of producing any useful result). *
2. Full recovery from *opioid use disorder* is impossible. *
3. Most people who become addicted to *drugs will be* addicted for life. *

*Reverse coded

Attitudes Toward Drug Treatment/Policy

Murphy & Russell 2020

This scale measures police officer attitudes about drug treatment and policy. It was utilized with police officers from 21 counties in Pennsylvania (N= 618). All responses were recorded on a 4-point Likert scale (1= Strongly Disagree, 2= Disagree, 3= Agree, 4= Strongly Agree). Reliability was not calculated.

1. Tax dollars should pay for drug treatment.
2. Police officers should have an active role in referring someone who overdoses into a drug treatment program.
3. Drug treatment programs are not effective at stopping drug someone's use.

Modified Perceived Dangerousness Scale

Murphy & Russell 2020

The Modified Perceived Dangerousness Scale measures negative attitudes towards people who use opioids, and it has been used with police officers (N= 618). Statements are related to issues of trust and fear of people addicted to opioids, and it has shown acceptable internal reliability (Cronbach's alpha= 0.62). Responses were coded on a 7-point scale from 1= Strongly Disagree to 7= Strongly Agree.

1. One important thing about people addicted to heroin or other opioids is that you can't tell what they will do from one minute to the next.
2. If I know a person has been addicted to heroin or other opioids, I will be less likely to trust them.
3. Although some individuals addicted to heroin or other opioids may seem alright, it is dangerous to forget for a moment that they are mentally ill.
4. If a group of individuals formerly addicted to heroin or other opioids lived near me, I would not allow my children to walk in the neighborhood alone.
5. The main purpose of opioid treatment programs should be to protect the public from individuals that are addicted to heroin or other opioids.

Modified Opioid Overdose and Attitudes Scale (OOAS): Attitudes towards individuals with OUD

Bascou et al. 2022

This is a candidate stigma measure for first responders, though it has only been used with providers to date. This scale includes 6 items from the original OOAS that assess attitudes and knowledge of naloxone and overdose. The full OOAS is included in [Section 3](#). Five additional questions were created in order to evaluate stigma and attitudes toward people with OUD (shown below). All five questions are scored on a 5-point Likert scale (1= Completely Disagree, 2= Disagree, 3= Unsure, 4= Agree, 5= Completely Agree).

1. It is understandable why those who use drugs and experience withdrawal symptoms may use drugs daily.
2. We need to provide ways to keep people alive and minimize the harms associated with drug use to effectively deal with the *overdose* epidemic.
3. People often start using opioids and find it hard to quit due to a lack of willpower and discipline.
4. It is understandable that many people are not ready, willing, or able to get treatment for substance use disorder.
5. My attitude towards people who use drugs, and how I think and talk about them, has nothing to do with their ability to seek or receive help.

Section 2: Preparedness in Treating OUD

Anticipated Help

Kruis et al. 2020

The Anticipated Help scale measures the amount of help officers were willing to offer to individuals who experience an overdose. It was used with a sample of 208 police officers. Anticipated help referred to an officer's likelihood of providing a wide range of services to such persons. Response categories followed a 5-point Likert scale (1= Very Likely, 2= Likely, 3= Neutral, 4= Unlikely, 5= Very Unlikely). Responses were reverse coded and summed to create a measure of anticipated help with higher scores indicative of more help. Analysis of Cronbach's alpha showed an acceptable measure of internal consistency (Cronbach's alpha= 0.647).

If you were on-duty and encountered an overdose victim, how likely would you be to...

- a) Administer naloxone.
- b) Accompany the person to the hospital/urgent care facility.
- c) Identify the person and notify a family member.
- d) Refer the person to a drug treatment program.

Addiction Training and Understanding

Kruis et al. 2021

This measure was used to assess participants' experiences with substance use and addiction training. It was utilized by Kruis et al. (2021) with law enforcement officers (N=208) as well as a student population, many of whom were active EMTs or who had previously worked with local EMT service providers (N=162). Response categories were a dichotomous 1 = Yes or 0 = No. It also included items to capture participants' support for the disease model of addiction. Response categories followed a 5-point Likert scale (1= Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree, 5= Strongly Disagree). The reliability for this measure was acceptable but slightly low (Cronbach's alpha= 0.601).

1. Have you completed any training courses or programs on substance use? *
2. Drug *use* is a disease.
3. Some people are genetically predisposed to become *addicted to drugs*.

*Response options are 1= Yes and 0 = No

[Opioid Overdose Knowledge Scale \(OOKS\)](#)

Williams et al. 2013

The OOKS measures knowledge of take-home naloxone training for friends and family members of people who use opioids. There are 45 items and four subscales (i.e., risks, signs, actions, and naloxone use).

Variations of this scale have been used with first responder populations, including patrol/law enforcement officers and EMTs. The most common variations include five items from the full measure (i.e., B, D, G, H, and I). One study with EMT participants included the following questions in addition to the previous items:

- a. What is the adult dosage for intramuscular (IM) administration of naloxone? (Correct answer: 0.4 mg to 2 mg)
- b. What is the half-life of naloxone? (Correct answer: 20 minutes to 1 hour)

The OOKS has been shown to be internally reliable (Cronbach's alpha= 0.83). Retest was completed by 33 participants after 14 (SD 7) days (OOKS, ICC= 0.90) with sub-scale item sets from each measure falling within the fair-to-excellent range (ICC= 0.53–0.92). The OOKS total score was positively correlated with the BORRA's Overdose Recognition ($r= 0.5, P < 0.01$) and Naloxone Indication sub-scales ($r= 0.44, P < 0.05$).

| A. Which of the following factors increase the risk of an overdose? | Tick each correct answer |
|--|------------------------------|
| 1. Taking larger than usual doses or heroin | <input type="checkbox"/> (T) |
| 2. Switching from smoking to injecting heroin | <input type="checkbox"/> (T) |
| 3. Using heroin with other substances, such as alcohol or sleeping pills | <input type="checkbox"/> (T) |
| 4. Increase in heroin purity | <input type="checkbox"/> (T) |
| 5. Using heroin again after not having used for a while | <input type="checkbox"/> (T) |

| | |
|--|------------------------------|
| 6. Using heroin when no one else is present around | <input type="checkbox"/> (T) |
| 7. A long history of heroin use | <input type="checkbox"/> (T) |
| 8. Using heroin again soon after release from prison | <input type="checkbox"/> (T) |
| 9. Using heroin again after a detoxification treatment | <input type="checkbox"/> (T) |

| | |
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| B. Which of the following are indicators of an opioid overdose? | |
| 1. Having blood-shot eyes | <input type="checkbox"/> (F) |
| 2. Slow or shallow breathing | <input type="checkbox"/> (T) |
| 3. Lips, hands, or feet turning blue | <input type="checkbox"/> (T) |
| 4. Loss of consciousness | <input type="checkbox"/> (T) |
| 5. Unresponsive | <input type="checkbox"/> (T) |
| 6. Fitting | <input type="checkbox"/> (F) |
| 7. Deep snoring | <input type="checkbox"/> (T) |
| 8. Very small pupils | <input type="checkbox"/> (T) |
| 9. Agitated behavior | <input type="checkbox"/> (F) |
| 10. Rapid heartbeat | <input type="checkbox"/> (F) |

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| C. Which of the following should be done when managing an overdose? | |
| 1. Call an ambulance | <input type="checkbox"/> (T) |
| 2. Stay with the person until an ambulance arrives | <input type="checkbox"/> (T) |
| 3. Inject the person with salt solution or milk | <input type="checkbox"/> (F) |
| 4. Give mouth to mouth resuscitation | <input type="checkbox"/> (T) |
| 5. Give stimulants (e.g. cocaine or black coffee) | <input type="checkbox"/> (F) |
| 6. Place the person in the recovery position (on their side with mouth clear) | <input type="checkbox"/> (T) |
| 7. Give naloxone (opioid overdose antidote) | <input type="checkbox"/> (T) |
| 8. Put the person in a bath of cold water | <input type="checkbox"/> (F) |
| 9. Check for breathing | <input type="checkbox"/> (T) |
| 10. Check for blocked airways (nose and mouth) | <input type="checkbox"/> (T) |
| 11. Put the person in bed to sleep it off | <input type="checkbox"/> (F) |

| | |
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| D. What is naloxone used for? | |
| 1. To reverse the effects of an opioid overdose (e.g. heroin, fentanyl) | <input type="checkbox"/> (T) |
| 2. To reverse the effects of an amphetamine overdose | <input type="checkbox"/> (F) |
| 3. To reverse the effects of a cocaine overdose | <input type="checkbox"/> (F) |
| 4. To reverse the effects of any overdose | <input type="checkbox"/> (F) |

| | |
|--------------------------------------|------------------------------|
| E. How can naloxone be administered? | |
| 1. Into a muscle (intramuscular) | <input type="checkbox"/> (T) |
| 2. Into a vein (intravenous) | <input type="checkbox"/> (T) |
| 3. Under the skin (subcutaneous) | <input type="checkbox"/> (T) |
| 4. <i>Into nostrils (intranasal)</i> | <input type="checkbox"/> (T) |
| 5. Swallowing- liquid | <input type="checkbox"/> (F) |
| 6. Swallowing- tablet | <input type="checkbox"/> (F) |
| 7. Don't know | <input type="checkbox"/> |

| | |
|--|------------------------------|
| F. Where is the most recommended place for non-experts to administer naloxone? | |
| 1. Outside the thighs or upper arms | <input type="checkbox"/> (T) |
| 2. Any vein | <input type="checkbox"/> (F) |
| 3. Heart | <input type="checkbox"/> (F) |
| 4. <i>Nose</i> | <input type="checkbox"/> (T) |
| 5. Mouth | <input type="checkbox"/> (F) |
| 6. Don't know | <input type="checkbox"/> |

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| G. How long does naloxone take to start having an effect? | |
| 1. 2-5 minutes | <input type="checkbox"/> (T) |
| 2. 6-10 minutes | <input type="checkbox"/> (F) |
| 3. 11-20 minutes | <input type="checkbox"/> (F) |
| 4. 21-40 minutes | <input type="checkbox"/> (F) |
| 5. Don't know | <input type="checkbox"/> |

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| H. How long do the effects of naloxone last for? | |
| 1. Less than 20 minutes | <input type="checkbox"/> (F) |
| 2. About 1 hour | <input type="checkbox"/> (T) |
| 3. 1 to 6 hours | <input type="checkbox"/> (F) |
| 4. 6 to 12 hours | <input type="checkbox"/> (F) |
| 5. Don't know | <input type="checkbox"/> |

| | |
|--|------------------------------|
| I. Please tick each correct statement. | |
| 1. If the first dose of naloxone has no effect a second dose can be given. | <input type="checkbox"/> (T) |
| 2. There is no need to call for an ambulance if I know how to manage an overdose. | <input type="checkbox"/> (F) |
| 3. Someone can overdose again after having received naloxone. | <input type="checkbox"/> (T) |
| 4. The effect of naloxone is shorter than the effect of heroin <i>or fentanyl</i> . | <input type="checkbox"/> (T) |
| 5. After recovering from an opioid overdose, the person must not take any heroin, but it is okay for them to drink alcohol or take sleeping tablets. | <input type="checkbox"/> (F) |
| 6. <i>Over-administration</i> of naloxone can provoke withdrawal symptoms. | <input type="checkbox"/> (T) |

Knowledge, Perception, and Confidence in Administering Naloxone

Crocker et al. 2019

The measurement was used to assess first responder perception and confidence in administering naloxone. The perception and confidence outcomes were measured with a series of questions with a Likert scale: (1= Strongly Disagree, 2= Disagree, 3= Neither Agree or Disagree, 4= Agree, 5= Strongly Agree). The survey was administered to 57 first responders, including firefighters and law enforcement officers. Reliability was not calculated.

Perception:

1. I believe as a first responder, I have an important role in helping combat opioid overdose.
2. I believe our rural geographic area hinders the ability of EMS to respond quickly to opioid overdose emergencies.
3. As a first responder in this community, I believe I can provide life-saving assistance to citizens with a possible opioid overdose while waiting on EMS to arrive.
4. I believe that documentation and department paperwork will be too significant to provide this life saving medical assistance to citizens with a possible opioid overdose.
5. I believe that further training is needed for me to provide life-saving medical assistance to citizens with a possible opioid overdose.

Confidence:

1. I feel confident in my ability to recognize the signs and symptoms of a possible opioid overdose.
2. I feel confident in my ability to correctly administer naloxone when warranted.
3. A refresher course offered in 3 months would be needed to remain informed on this subject.

Knowledge of Naloxone

Dahlem et al. 2017

This scale measures knowledge of naloxone as well as opioid overdose and the benefits of overdose prevention. It was administered to law enforcement officers (N=114). Items are measured on a 5-point Likert scale, with 1= Least Knowledge and 5= Most Knowledge (Note: no further details are available regarding the response set). Reliability was not calculated.

1. Recognizing the signs, symptoms and risk factors of an opioid overdose.
2. Identifying the benefits of overdose prevention as it applies to law enforcement personnel and the community.
3. Understanding what naloxone is and how it reverses an overdose.
4. How to assemble and prepare the intranasal naloxone.
5. How to administer naloxone to a subject having an overdose.
6. Familiarity with [*local jurisdiction*]'s procedural guideline related to naloxone (administration, storage, replacement).

Knowledge of Opioid Overdose Prevention

Ashrafioun et al. 2017

This scale measures participants' knowledge of opioid overdose prevention, including knowledge of naloxone. Confidence in overdose prevention was measured using a modified version of the Perceived Confidence Scale. This subscale has been positively correlated with other measures that assess similar constructs (Williams & Deci, 1996). The scale has been administered to first responders, family/friends, and providers. There are 7 true/false knowledge items and 4 perceived confidence items scored on 7-point Likert scale, with 1= Not True at All, 4= Somewhat True, and 7= Very True (Note: no further details are available regarding the response set).

Knowledge:

1. In an opioid overdose, the individual becomes sedated and gradually loses the urge to breathe.
2. Most opioid overdose deaths occur very quickly (within 1 hour).
3. Most opioid overdoses occur when individuals are using alone.
4. Opioid overdose is most common among *people new to using drugs*.
5. In order to safely administer naloxone in an overdose prevention situation, one needs to have advanced medical training.
6. Naloxone works by blocking *opioids* in the brain for 24 hours.
7. The 911 Good Samaritan Law provides significant legal protection against criminal charges and prosecution for possession of controlled substances in overdose prevention situations.

Perceived Competence:

1. I feel confident in my ability to recognize an opioid overdose and respond in a safe and effective manner.
2. I am capable of recognizing and responding to an opioid overdose.
3. I am able to recognize and respond to an opioid overdose.
4. I feel able to meet the challenge of recognizing and responding to an opioid overdose.

Section 3: Harm Reduction

Attitudes Toward MAT

Kruis et al. 2021

The Attitudes toward MAT scale measures attitudes toward MAT. This measure was created by combining responses to five statements listed below. Responses to these statements follow a 5-point Likert scale (1 = Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree, 5 = Strongly Disagree). Items 1, 2, and 5 are reverse coded, added with items 3 and 4, and then averaged to create a scale-variable with higher numbers indicative of more positive perceptions of the use of MAT. An exploratory factor analysis (e.g., Principal Axis Factor Analysis) suggested that all items loaded onto one latent construct and estimates of internal consistency indicated that the measure was internally reliable (Cronbach's alpha= 0.855).

A panel of four experts (i.e., criminologists with PhD's) in the field reviewed this survey. Further, measures of key concepts (e.g., stigma) were modified from existing scales when available, and one police officer and a former substance use treatment clinician with experience working with MAT reviewed them to help improve validity. The research team then pretested both surveys using a sample of college students (N= 30). The scale was then administered to a sample of law enforcement officers (N= 208) and a student population, many of whom were active EMTs or who had previously worked with local EMT service providers (N= 162).

1. *MOUD* is effective at reducing overdoses. *
2. *MOUD* is effective at reducing future crime. *
3. *MOUD* puts more drugs on the streets.
4. Persons who use *drugs* do not need to use *MOUD* to get “clean”.
5. *MOUD* is a good investment for society. *

*Reverse coded

Beliefs About Help

Kruis et al. 2020

This measure assesses the level of agreement that an officer should provide a variety of help-related services to persons who experience an opioid overdose. It was administered to a sample of 208 police officers. Response categories followed a 5-point Likert scale (1 = Strongly Agree, 2= Agree, 3= Neutral, 4= Disagree, 5 = Strongly Disagree). Responses were reverse coded to create the beliefs about help scale variable with higher scores indicative of more help. Exploratory factor analyses supported the construction of this scale and reliability test results showed good internal consistency (Cronbach's alpha= 0.711).

An on-duty officer who encounters an overdose should...

- a. Administer naloxone
- b. Accompany the person to the hospital/urgent care facility
- c. Identify the person and notify a family member
- d. Refer the person to a drug treatment program

Attitudes Toward Use of Naloxone/Narcan

Murphy & Russell 2020

This scale measures officer attitudes toward the use of naloxone/Narcan. It was administered to police officers from 21 counties in Pennsylvania (N= 618). All responses were recorded on a 4-point Likert scale (1= Strongly Disagree, 2= Disagree, 3= Agree, and 4= Strongly Agree). Reliability was not calculated.

1. Increasing access and utilization of *naloxone* is a good solution to the *overdose* problem.
2. Increasing access and utilization of *naloxone* provides individuals with a substance use disorder an excuse to continue their drug use.
3. There should be a limit on how often someone who overdoses be administered *naloxone*.

[Naloxone-Related Risk Compensation Beliefs \(NaRRC-B\)](#)

Winograd et al. 2020

The NaRRC-B measures the endorsement of risk compensation beliefs across different types of emergency responders (i.e., police officers [N=803] and emergency medical services/fire personnel [N=137]), and clinical treatment and social service providers. Risk compensation beliefs are the belief that providing individuals who use opioids with naloxone will worsen opioid use. Items were endorsed on a 5-point Likert scale (1= Strongly Disagree, 2=Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree).

Item-level reliability analyses of the NaRRC-B scale confirmed internal reliability at both time points (baseline and posttest). Pairwise comparisons via Pearson correlations were computed, with item correlations ranging from 0.46 to 0.82, indicating sufficient association without redundancy across items. Reliability calculations indicated strong internal reliability at both baseline (Cronbach's alpha= 0.88) and posttest (Cronbach's alpha= 0.91). In the full sample, baseline scores (M= 13.50, S = 4.49) and posttest scores (M= 11.82, SD= 4.75) suggested a moderate level of risk compensation beliefs (possible range: 5–25) in our total sample.

1. *People who use drugs* will use more *drugs* if they know they have access to naloxone.
2. *People who use drugs* will be less likely to seek out treatment if they have access to naloxone.
3. Providing naloxone to *people who overdose* sends the message that I am condoning opioid use.
4. There should be a limit on the number of times one person receives naloxone to reverse an overdose (refers to multiple overdose events, do not count repeated dose administrations during one overdose event).

[Opioid Overdose Attitudes Scale \(OOAS\)](#)

Williams et al. 2013

The OOAS measures attitudes towards opioid overdose in friends and family members of people who use opioids. Responses to the OOAS were scored on a 5-point Likert scale (1= Completely Disagree, 2= Disagree, 3= Unsure, 4= Agree, 5= Completely Agree).

Studies with law enforcement officer populations have used shortened versions of the OOAS, modifying the scale to 11-24 items instead of the full 28 items (Ray et al., 2015; Purviance et al., 2016; White et al., 2021). Wagner et al. (2016) drew from the competencies and concerns subscales to assess law enforcement officers' (N=81) perceived competence and concerns toward delivering naloxone to overdose victims. They also added 4 additional items to assess attitudes and stigma toward individuals who overdose (shown below). These questions are scored on a 5-point Likert scale (1= Completely Disagree, 2= Disagree, 3= Unsure, 4= Agree, 5= Completely Agree).

1. People who overdose need to learn a lesson from it so they will not do it again.
2. People who overdose are to blame for their own overdose.
3. It should not be the job of law enforcement officers to treat drug overdoses.
4. People who overdose need to be referred to drug treatment.

Furthermore, Winograd et al. (2020) utilized Wagner et al.'s version of the OOAS in addition to three items developed by their research team to assess attitudes towards people who overdose (shown below):

1. People who overdose need to be arrested.
2. People who are arrested after an overdose will be motivated to stop using drugs.
3. People who overdose deserve life threatening outcomes as a natural consequence of their actions.

The full version of the OOAS (shown below) demonstrated good internal reliability (Cronbach's alpha= 0.90). The overall test-retest reliability of the OOAS was good (ICC= 0.82), with the competence, concerns and readiness item score totals falling in the fair-to-excellent range for test-retest reliability (ICC= 0.92, 0.55 and 0.65, respectively).

Competencies to manage an overdose:

1. I already have enough information about how to manage an overdose.
2. I am already able to *administer* naloxone into someone who has overdosed.
3. I would be able to check that someone who has overdosed was breathing properly.
4. I am going to need more training before I would feel confident to help someone who has overdosed. *
5. I would be able to perform mouth to mouth resuscitation to someone who has overdosed.
6. I would be able to perform chest compressions to someone who has overdosed.
7. If someone overdoses, I would know what to do to help them.
8. I would be able to place someone who has overdosed in the recovery position.
9. I know very little about how to help someone who has overdosed. *
10. I would be able to deal effectively with an overdose.

Concerns about managing an opioid overdose:

1. I would be afraid of giving naloxone in case the person becomes aggressive afterwards. *
2. I would be afraid of doing something wrong in an overdose situation. *
3. I would be reluctant to use naloxone for fear of precipitating withdrawal symptoms. *
4. I would be concerned about calling emergency services *if someone overdosed* in case the police come around. *
5. If I tried to help someone who has overdosed, I might accidentally hurt them. *
6. I would feel safer if I knew that naloxone was around.
7. I would be afraid of suffering a needle stick injury if I had to give someone a naloxone injection. *
8. Needles frighten me and I wouldn't be able to give someone an injection of naloxone. *

Readiness to intervene in an opioid overdose:

1. Everyone at risk of witnessing an overdose should be given a naloxone supply.
2. I couldn't just watch someone overdose, I would have to do something to help.
3. If someone overdoses, I would call an ambulance but I wouldn't be willing to do anything else. *
4. Family and friends of *people who use drugs* should be prepared to deal with an overdose.
5. If I saw an overdose, I would panic and not be able to help. *
6. If I witnessed an overdose, I would call an ambulance straight away.
7. I would stay with the *person who overdosed* until help arrives.
8. If I saw an overdose, I would feel nervous, but I would still take the necessary actions.
9. I will do whatever is necessary to save someone's life in an overdose situation.
10. If someone overdoses, I want to be able to help them.

*Reverse coded

First Responder Substance Use Stigma Assessment Template

[Note: This survey is a template assessment that is designed for online dissemination. It could be adapted into a phone survey or pencil-and-paper survey with some changes. Information in bold is meant to provide guidance to participants. Information provided in italics and brackets is meant to provide further context to the implementor and would not be seen by the participant.]

[The scales used in this template assessment are from the [First Responder Substance Use Stigma Measures Toolkit](#) and the [Public Stigma of Substance Use Measures Toolkit](#) which contain additional information for interpretation of assessment results. A [toolkit for data collection and data analysis](#) is also available.

The measures included in this template assessment do not directly match the original measures. Minor edits were made to ensure language was as non-stigmatizing as possible while maintaining the integrity of the question. Response scales are on a 4-point Likert scale that excludes the neutral option to require respondents to form an opinion.

This template assessment should be used to describe the overall degree or magnitude of substance use related stigma among first responder populations. Unless otherwise noted, participant responses to all questions in each stigma scale should be summed. The sum score can then be used to characterize the level of stigma among the sample of healthcare providers. For example, questions 25-29 are from a scale developed by Stone et al. to assess opioid related attitude and beliefs. The responses to questions 25-29 can be added together to create a summed score. In this case, a higher score would indicate that the responding individual has higher levels of stigmatizing attitudes and beliefs.

Additional notes for analysis, including reverse-coding, are included under questions in italics and square brackets.]

Thank you for your interest in completing this survey to help us better understand what people in your community think about substance use, people who use drugs, and related topics. Follow the instructions below to answer each set of questions. Please remember to answer the questions honestly, and that there is no right or wrong answer. By taking this survey, you agree that the information you provide can be used by [Local Health Department Name]. Your responses will only ever be reported in aggregate and will at all times remain anonymous.

This survey is to be completed by professional first responders. First responders are, for the purposes of this survey, defined as “an employee of the state or a local public agency who provides emergency response services.” While this may encompass other positions, it most commonly refers to law enforcement professionals, firefighters, and emergency response services.

First, we will ask you a few questions about yourself and who you are.

1. What type of first responder are you?
 - Law enforcement
 - Firefighter
 - EMS
 - Other (please specify): _____

2. What is your gender identity?
 - Female
 - Male
 - Transgender Male
 - Transgender Female
 - Nonbinary/Genderqueer
 - Other (please specify): _____

3. Which of the following age ranges do you fall into?
 - 18-24 years old
 - 25-34 years old
 - 35-44 years old
 - 45-54 years old
 - 55-64 years old
 - 65 or more years old

4. How long have you been in your career?
- Less than 5 years
 - 5 to 10 years
 - 10 to 20 years
 - Over 20 years
5. How often do you directly interact with people who use drugs (PWUD)?
- Daily
 - Weekly
 - Monthly
 - Rarely
6. In your life, have you had friends or family members whose substance use has negatively impacted their lives?
- Yes
 - No
7. Have you ever completed any specialized training or courses on addiction and/or overdose prevention?
- Yes, during pre-employment training
 - Yes, as part of Continuing Education
 - Yes, both of the above
 - Yes, Other (please specify): _____
 - No

The following section will ask questions related to your knowledge of immediate overdose response skills.

8. I already have enough information about how to manage an overdose.

Strongly Disagree Disagree Agree Strongly Agree

9. I am already able to administer naloxone to someone who has overdosed.

Strongly Disagree Disagree Agree Strongly Agree

10. I would be able to check that someone who has overdosed was breathing properly.

Strongly Disagree Disagree Agree Strongly Agree

11. I would be able to perform mouth to mouth resuscitation to someone who has overdosed.

Strongly Disagree Disagree Agree Strongly Agree

12. I would be able to perform chest compressions to someone who has overdosed.

Strongly Disagree Disagree Agree Strongly Agree

13. I would be able to place someone who has overdosed in the recovery position.

Strongly Disagree Disagree Agree Strongly Agree

Please tick each correct statement.

| | | |
|--|-----------------------------------|------------------------------------|
| 14. There is no need to call for an ambulance if I know how to manage an overdose. | <input type="checkbox"/> True | <input type="checkbox"/> False [*] |
| 15. Someone can overdose again after having received naloxone. | <input type="checkbox"/> True [*] | <input type="checkbox"/> False |
| 16. The effect of naloxone is shorter than the effect of opioids such as heroin or fentanyl. | <input type="checkbox"/> True [*] | <input type="checkbox"/> False |

| | | |
|--|-----------------------------------|--------------------------------|
| 17. Over-administration of naloxone can provoke withdrawal symptoms. | <input type="checkbox"/> True [*] | <input type="checkbox"/> False |
|--|-----------------------------------|--------------------------------|

*[*correct response]*

The next section will ask questions about your attitudes concerning people who use drugs and overdose response efforts.

18. People who overdose need to learn a lesson from it so they will not do it again.

Strongly Disagree
 Disagree
 Agree
 Strongly Agree

19. People who overdose are to blame for their own overdose.

Strongly Disagree
 Disagree
 Agree
 Strongly Agree

20. It should not be the job of law enforcement officers to treat drug overdoses.

Strongly Disagree
 Disagree
 Agree
 Strongly Agree

21. People who overdose need to be referred to drug treatment.

Strongly Disagree
 Disagree
 Agree
 Strongly Agree

22. People who overdose need to be arrested.

Strongly Disagree
 Disagree
 Agree
 Strongly Agree

23. People who are arrested after an overdose will be motivated to stop using drugs.

Strongly Disagree Disagree Agree Strongly Agree

24. People who overdose deserve life threatening outcomes as a natural consequence of their actions.

Strongly Disagree Disagree Agree Strongly Agree

These questions are about what you think about people with substance use disorder.

25. Individuals with substance use disorder only have themselves to blame for their problem.

Strongly Agree Agree Disagree Strongly Disagree

26. People with substance use disorder have poor moral character.

Strongly Agree Agree Disagree Strongly Disagree

27. How willing would you be to have a person with substance use disorder marry into your family?

Strongly Willing Somewhat Willing Somewhat Unwilling Strongly Unwilling

28. How willing would you be to have a person taking medication treatment for substance use disorder marry into your family?

- Strongly Willing Somewhat Willing Somewhat Unwilling Strongly Unwilling

29. People who need medication treatment to stop using substances lack willpower.

- Strongly Agree Agree Disagree Strongly Disagree

The next questions are about what you think most people think about people who have been treated for substance use.

30. Most people would willingly accept someone who has been treated for substance use disorder as a close friend.

- Strongly Disagree Disagree Agree Strongly Agree

31. Most people believe that someone who has been treated for substance use disorder is just as trustworthy as the average citizen.

- Strongly Disagree Disagree Agree Strongly Agree

32. Most employers will hire someone who has been treated for substance use disorder if they are qualified for the job.

- Strongly Disagree Disagree Agree Strongly Agree

33. Most people would be willing to date someone who has been treated for substance use disorder.

Strongly Disagree Disagree Agree Strongly Agree

This section will ask you questions about your views on the efficacy of naloxone distribution and use.

34. Increasing access and utilization of naloxone is a good solution to the overdose problem.

Strongly Disagree Disagree Agree Strongly Agree

35. Increasing access and utilization of naloxone provides individuals with a substance use disorder an excuse to continue their drug use.

Strongly Disagree Disagree Agree Strongly Agree

36. There should be a limit on how often someone who overdoses be administered naloxone.

Strongly Disagree Disagree Agree Strongly Agree

This section will ask you questions about your views on the efficacy of Medication for Opioid Use Disorder (MOUD).

37. MOUD is effective at reducing overdoses. *[reverse coded]*

Strongly Agree Agree Disagree Strongly Disagree

38. MOUD is effective at reducing future crime. *[reverse coded]*

Strongly Agree Agree Disagree Strongly Disagree

39. MOUD puts more drugs on the streets.

Strongly Agree Agree Disagree Strongly Disagree

40. MOUD is a good investment for society. *[reverse coded]*

Strongly Agree Agree Disagree Strongly Disagree

Thank you for participating in the survey. Your responses will help your community improve its provision of overdose prevention and response services. If you have any questions about the survey, please reach out to _____.

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