# POLICE STIGMA TOWARD PEOPLE WITH OPIOID USE DISORDER: A STUDY OF ILLINOIS OFFICERS



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Abstract: Fatal opioid overdoses continue to break historical records. Stigma toward people with opioid use disorder (OUD) can negatively impact treatment access, retention, and recovery. Attitudes and beliefs of police officers can profoundly shape key discretionary decisions. Therefore, we examined police officer views indicating stigma toward those with OUD. We administered an online survey to select Illinois police departments using a stratified random sampling strategy with a final sample of 248 officers from 27 police departments. We asked officers questions measuring stigmatizing attitudes toward people with OUD including distrust, blame, shame, and fear. We found officers held somewhat stigmatizing views with a mean score of 4.0 on a scale of 1 (least stigmatic) to 6 (most stigmatic). Regression results showed certain officer characteristics were associated with more stigmatizing attitudes of blaming and distrust of those with OUD, including gender, education, race, years in policing, and department size. Since most officers in the sample held at least some stigmatizing views toward people with OUD, this may impede the feasibility and acceptability of criminal justice interventions meant to improve behavioral health, such as police deflection programs that link people who use drugs to treatment in lieu of arrest. Departments should offer officer training and education on substance use disorders, treatment for addiction, and the potential for a person's recovery. Training should allow officers to hear directly from, or learn about, personal experiences of people who use drugs and have been in recovery, as this type of interaction has been shown to reduce stigma.

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## Introduction

In 2020, 40.3 million people aged 12 or older had a substance use disorder (SUD) of some kind in the past year<sup>1</sup> and more than 800,000 Americans have died of drug overdose since 1999,<sup>2</sup> with recent overdose rates breaking historical records.<sup>3</sup> One impediment of access to treatment, retention in treatment, and eventual recovery, is stigma toward people who use drugs (PWUD).<sup>4</sup> Stigma refers to a social process in which a perceived personal attribute, such as substance misuse, leads to an individual to be devalued in society, or to be fundamentally compromised and discredited in some way, and thereby subject to negative judgments and behaviors both at the individual level and through systemic processes.<sup>5</sup> Kruis et al. outlined four dimensions of social stigma—blame, fatalism, dangerousness, and social distance—based on extant research.<sup>6</sup> In terms of stigma for substance use disorder, blame indicates a belief that people cause, or exacerbate, their condition; fatalism concludes that a condition is inevitable and irreversible; dangerousness implies persons with a condition are a threat to themselves or others; and social distance is a desire to avoid persons, and not be associated with them, due to their condition.

Members of society may react to stigmatized individuals through negative stereotypes, judgments, reactions, and discrimination.<sup>7</sup> Stigma may impact an individual's employment, relationships, health, and treatment, as their capabilities, needs, desires, and potentials are discounted, ignored, or presumed to be false or compromised.<sup>8</sup> In the context of substance use, this may reduce the likelihood of policymakers to allocate the resources necessary to provide PWUD with access to treatment and harm reduction services.<sup>9</sup> Generally, the American public holds stigmatizing views that PWUD are violent, dangerous, and unpredictable;<sup>10</sup> incapable of making appropriate personal life decisions and are to be blamed for their own condition.<sup>11</sup> Levels of stigma toward people with substance use disorder (SUD) have been found to be higher than stigma toward mental illness.<sup>12</sup>

The behaviors of PWUD, from drug possession and use to the subsistence crimes associated with addiction, put this population in frequent contact with police. In the United States in 2019, police had 61.5 million contacts with the public<sup>13</sup> and made 10.85 million arrests.<sup>14</sup> Of those, 1.63 million, or 15%, were for drug violations,<sup>15</sup> and over 75% of these arrests were for misdemeanor charges.<sup>16</sup> Even as drug possession is gradually decriminalized in certain jurisdictions, the subsistence crimes such as theft associated with addiction—as well as outcomes such as homelessness—will continue to provide the basis for PWUD to have encounters with the police.<sup>17</sup> These interactions impact the health of PWUD and heighten the risks people take to continue to ingest substances, from sharing needles, to using drugs alone or in isolation.<sup>18</sup> During these encounters police have wide discretion over the outcomes, including their decision to arrest or not,<sup>19</sup> or to link PWUD to treatment and harm reduction resources. Officers' attitudes and beliefs, including stigmatizing ones, can heavily influence these decisions.<sup>20</sup> In addition, the interaction between police and PWUD may impact subsequent drug use; Baron & Macdonald<sup>21</sup> found police contact and procedural injustice were associated with higher rates of drug use following police contact. Perhaps most critically, to the extent that police contact yields arrest and the possibility of incarceration, PWUD who spend time in jail or prison are at an acutely

elevated risk of fatal overdose upon release, which is one of the most hazardous periods in a person's substance use trajectory.<sup>22</sup>

Given these risks and outcomes, it is important to note that arrest is not the only option for police who encounter PWUD. As an alternative to arrest, police have the discretion to refer individuals to treatment, especially for those involved in nonviolent misdemeanors who comprise the majority of drug-related charges, a practice commonly referred to as "diversion" or "deflection."<sup>23</sup> Officers who view substance use disorders (SUDs) and their sequelae as a public health issue are less likely to arrest PWUD, and more likely to refer them to treatment.<sup>24</sup> These police deflection or pre-arrest diversion programs have the potential to reduce recidivism and decrease drug use.<sup>25</sup> Despite their promise as an effective, non-punitive, upstream health intervention for PWUD, diversion and deflection most often rely on a police officer's use of discretionary judgment to determine if treatment will be offered to them or not, which can be biased by stigma.<sup>26</sup> Further, stigma can be a barrier to deflection program implementation by negatively influencing overall support for such programs from the officer level up through the senior leadership ranks.<sup>27</sup> Therefore, it is important to examine the beliefs and attitudes of officers, including stigmatizing views toward PWUD, and the extent to which those views impact individuals and communities. In addition, stigma is pervasive throughout the criminal justice system, which has a cumulative negative effect on the health of PWUD,<sup>28</sup> so understanding and addressing it at one of its earliest points-the time of an initial police contact-is crucial.

Although it is limited in scope and breadth, prior research has found police officers often hold stigmatizing attitudes about PWUD that generally track with those of the population at large. These include blaming individuals for poor life choices,<sup>29</sup> seeing PWUD as untruthful<sup>30</sup> or dangerous;<sup>31</sup> believing they only care about getting high;<sup>32</sup> and desiring to maintain a social distance from PWUD.<sup>33</sup> Research has shown that generally, police officers favor punitive responses to illicit substance use over public health responses,<sup>34</sup> despite the fact that such responses do little to address addiction-related crime and mortality. Despite a growing understanding of the urgency of the problem and the need to address it, research on stigma toward PWUD is an emerging field with a nascent research agenda,<sup>35</sup> and the study of police stigma toward PWUD is no exception.<sup>36</sup> This study, which surveys and explores the attitudes of a sample of Illinois police officers toward PWUD, can therefore contribute to what we know about police stigma by setting a baseline and helping to frame the direction of future research, policies, and interventions.

#### Methods

#### Sample

The sample used for this study included 248 officers from Illinois police departments recruited with permission and assistance from their police departments' chiefs of police. The departments who consented to participate had a range of 2 to 298 full-time sworn officers (M = 9.95). Table 1 indicates the demographics of respondents. A majority were White, males, had earned a bachelor's degree or higher, and had worked eight or more years in policing. We had a small number of female respondents; however, a minority of all sworn, full-time, police officers in

Illinois are female, 21.2% in 2020.<sup>37</sup> About half of the sample were at the rank of police officer, and over half were assigned to patrol. We attempted to recruit 48 police departments, and 20 agreed to participate—a 41.7% participation rate among agencies. Officer participation from each agency varied from over half of officers (55.6%) to less than 1% (0.03%) (M = 24.4%); therefore, many officers may not have been provided the opportunity to take the survey from their department's leadership. Police participation in survey research varies widely,<sup>38</sup> but the volume and rate of participation in this study marginally exceeds that of prior statewide studies of police stigma toward PWUD.<sup>39</sup>

#### Table 1

#### Demographics of Respondents

Demographics of Kespondenis		
	п	%
Gender		
Female	31	12.5
Male	209	84.3
Other/ prefer not to say	8	3.2
Race/ethnicity		
Asian	2	0.8
Black	13	5.2
Latinx	10	4.0
White	205	82.7
Other or multiple race/ethnicity	16	6.5
Unknown	2	0.8
Highest level of education		
High school	5	2.0
Some college	35	14.1
Associate degree	30	12.1
Bachelor's degree	150	60.5
Master's degree or higher	28	11.3
Rank		
Captain/equivalent or above	16	6.5
Lieutenant	10	4.0
Sergeant	42	16.9
Detective	46	18.6
Police officer	126	50.8
Non-sworn employee	7	2.8
Unknown	1	0.4
Years in policing		
0-3 years (new)	24	9.7
4-7 years (early career)	32	12.9
8-15 years (mid-career)	52	21.0
16-25 years (veteran)	100	40.3
More than 25 years	40	16.1
Primary assignment	-	
Administration	22	8.9
Community affairs/outreach	14	5.6
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Detective (investigatory)	45	18.1
Narcotics	11	4.4
Patrol	137	55.2
Other/unknown	19	7.7
Overdose responses		
0-5	31	12.5
6-10	39	15.7
11-25	58	23.4
26-50	45	18.1
>50	75	30.2
Someone you care about is/was		
addicted to opioids		
Yes	72	29.0
No	146	58.9
Don't know	30	12.1
Someone you care about died of		
opioid overdose		
Yes	34	13.7
No	214	86.3

*Note*. N = 248. Percentages may not equal 100% due to rounding. Race and gender were self-identified.

#### Measures

There is presently no set of validated questions developed specifically to measure police stigma toward people with OUD as relevant to their role responsibilities and prerogatives, such as the ones developed to measure role-relevant stigma exhibited by physicians and other health care providers.<sup>40</sup> Therefore, the survey instrument was composed of demographic questions used in prior stigma research and police survey work generally, along with questions either commonly used to assess stigma in the general population,<sup>41</sup> or embodying the attitudes and beliefs inherent in stigma. Our survey items utilize the established social stigma dimensions of blame; distrust, (or fatalism); fear (or dangerousness); and shame (or social distance).<sup>42</sup> With the exception of questions about a person's propensity to lie and the ability of a police officer undergoing addiction treatment to return to full duty, all items were derived from a previously administered general stigma survey. We utilized an 11-item scale (Cronbach's  $\alpha = .70$ ) adapted from prior stigma survey research.<sup>43</sup> In total, 64 items were included in the survey, which took between 15-20 min for most participants to complete.

## Police Officers' Stigma Attitudes and Beliefs

Items asked for agreement to statements that may denote stigmatizing attitudes and beliefs of persons addicted to opioids which included distrust (4 items), blame for their condition (5 items), fear (1 item), and shame (1 item). The statements asked about persons with a current addiction, person in recovery from addiction, and persons in treatment for addiction.<sup>44 45 46</sup> Respondents rated their agreement with each statement on a six-point Likert-type scale (1 = Strongly disagree, 2 = Disagree, 3 = Somewhat disagree, 4 = Somewhat agree, 5 = Agree, and 6 = Strongly agree).

Three items on this scale were reverse coded. A higher score on our stigma scale reflected greater stigma attitudes.

## Experience with Overdose and Substance Use Disorders

We used three items to measure officer's personal experiences. We asked about the number of overdoses encountered in their career, providing five categorical responses (0-5, 6-10, 11-25, 26-50, and more than 50). We asked if someone you care about is presently or has been addicted to opioids (Yes or No) and we asked if someone you care about died of an opioid overdose (Yes or No).

## **Background Factors**

Data were collected on the sociodemographic characteristics of the respondents, including age, gender, race/ethnicity, academic education, years in policing, police department, current rank, and primary assignment.

## **Procedures**

We used a stratified sampling strategy to recruit municipal Illinois police departments for our survey, so different subgroups of police departments would be adequately represented in the full sample population. There were five strata by police department type categorized by rurality (urban or rural) and department size based on the number of full-time sworn officers (small, medium, and large) (Table 2). We designated police departments as rural or urban based on the classifications of the U.S. Census Bureau.<sup>47</sup> We excluded non-municipal police departments such as the state police, county sheriffs, college/university, park/forest preserve, and railroad police departments due to the heterogeneity of their roles. Police department headcounts were ascertained from Illinois State Police records. <sup>48</sup> Rural/small police departments had less than 15 full-time sworn officers; rural/ large police departments had 15 or more officers; urban/ small police departments had 1-100 officers; urban/medium police departments had 101-249 officers; and urban/large police departments had more than 250 officers.

Police	Departments	Police	Police	Police	Response	Officer
department	in the state	departments	lepartments departments departmen		rate by	sample
strata		recruited	in study	not in study	department	
					%	n
Rural, small	85	20	5	15	25.0	14
Rural, large	11	5	0	5	0.0	0
Urban, small	340	8	5	3	62.5	33
Urban, medium	19	10	6	4	60.0	98
Urban, large	8	5	4	1	80.0	54
Unknown strata						49
Total	463	48	20	28	41.7	248

## Table 2

ת יו ת . . ,· · ,· 1 04 *Note*: The police departments "not in study" includes those who did not respond to recruitment efforts or declined to participate. The rural/urban designation was from 2010 U.S. Census Bureau data and based on county of the police department. The department size was based on the number of full-time sworn officers from the Illinois State Police.

Once police departments were randomly selected from a strata, we contacted their police chiefs *via* email to explain the purpose of our research and ask for their department's participation in our online survey. If the police chief agreed, we sent them a brief study description to share with officers, and a link to the consent form and the survey. The survey was administered via Qualtrics, a web-based software suite for online surveys and data collection. If police chiefs did not respond to the initial email request to participate in our study, we would follow-up again by email or phone up to four times. The data collection period was February to October 2021.

Using the name of the police department and checking state police records, we were able to code the agency as an urban or rural agency and determine the size of the department based on the number of officers (small, medium, and large). Since several respondents declined to enter the name of their police department, we employed a strategy to impute that variable for 46 subjects. We used the latitude and longitude coordinates provided by Qualtrics and performed an online look up to find the municipality concerned. Qualtrics uses survey respondents' Internet Protocol (IP) address to estimate their location and offers the associated latitude and longitude of the address. We used this data to imputed location, a method that is recognized as a way to obtain geographical locations;<sup>49</sup> however, it can only suggest the location where the respondent took the survey, which may not accurately reflect their work location. However, we only utilized a result if the latitude and longitude coordinates of municipalities matched the police departments that agreed to participate, as well as the known dates of their participation. A total of 49 survey responses did not have latitude and longitude provided by Qualtrics, nor did the respondent indicate their police department; therefore, their police department, urban/rural designation, and department size could not be determined. We performed a sensitivity analysis to examine differences in results based on the imputing police departments. We found similar results with the officer responses when analyzing the data using the imputed department size and rurality.

#### **Analytic Strategy**

We analyzed the data using IBM SPSS 23 (Statistical Package for the Social Sciences) using descriptive statistics, bivariate analyses (chi-square tests), and regression analyses. For the regression analyses, we examined a blame subscale made of five items, which had acceptable internal validity, and four separate distrust items. We used Ordinary Least Square (OLS) regression and treated the blame score as a continuous dependent variable and ordinal regression for the separate distrust items. We dichotomized variables of officer characteristics including race (White, Other race), highest academic education (less than bachelors, bachelor's degree or more), years in policing including all ranks and assignments (early career = 0-7 years, late career = 7 or more years), rank at time of survey (line officer = officer or detective, supervisor = lieutenant, captain, or above), number fatal and nonfatal drug overdoses encountered in career (0-25 overdoses or 26 or more overdoses), someone I care about is or was addicted to opioids (yes, no) and someone I care about died of an opioid overdose (yes, no). We organized

department size into three categories (small = 0-100 officers, medium = 101-249 officers, and large = 250 or more officers). The study was evaluated by the IRBs of the Illinois Criminal Justice Information Authority and Lifespan and was designated as exempt.

## Results

## **Experience with Overdose and Substance Use Disorders**

Of the officers surveyed, a large majority had responded to an overdose in the course of their work, with 87.5% reporting responding to six or more drug overdoses and 48.3% responding to 26 or more drug overdoses. However, 71.0% officers said they did not personally know someone addicted to opioids and 86.3% did not have someone they cared about die of an overdose.

## Police Officers' Stigma Attitudes and Beliefs

Many police officers appeared to hold stigmatizing attitudes toward PWUD with a mean score of 4.0 of 1-6 on a summed stigma scale of 11 items (Table 3). A score of 4.0 indicated somewhat of an agreement with stigmatizing attitudes. A large majority (92%) at least somewhat agreed that they need to be on guard for what an addicted person might do, and 92% would not want a person in treatment for addiction taking care of their family's children for a few hours. Most officers indicated they would not be fine with someone in recovery marrying into their family, and shared views that addicted people are responsible for, and can be blamed for, their own condition. A majority of officers expressed the belief that PWUD act in ways that make their own condition worse and will not hesitate to lie if it benefits their addiction.

However, there were items in which a majority of officers did not display stigmatizing attitudes. These included an agreement that a police officer in treatment for addiction could one day return to full duty, and that addiction is not due to poor parenting. In addition, most officers noted they would be okay with colleagues knowing a relative of theirs was addicted to opioids.

# Table 3

## Police Officer Responses to Stigma Items

Survey item		ongly agree	Dis	agree	Somewhat disagree		Somewhat agree		Agree		Strongly agree		Mean score
	$\frac{uis}{n}$	<u>agree</u> %	п	%	n	<u>agree</u> %	n n	%	п	%	n n	%	3001
1. People with an opioid addiction are usually responsible for their own condition. (blame)	3	1.4	12	5.6	35	16.4	89	41.8	53	24.9	21	9.9	4.
2. People addicted to opioids because they lack the willpower to stop before it's too late. (blame)	17	8.0	49	23.0	53	24.9	63	29.6	21	9.9	10	4.7	3.2
3. People who are addicted to opioids choose to act in ways that make their own condition worse. (blame)	2	0.9	10	4.7	36	16.9	80	37.6	62	29.1	23	10.8	4.2
4. People who become addicted to opioids can't be blamed for condition. (blame) R	1	0.5	7	3.3	21	9.9	66	31.0	84	39.4	34	16.0	4.5
5. When a young person is addicted to opioids, you have to wonder if they had good parents. (blame)	25	11.7	53	24.9	53	24.9	52	24.4	22	10.3	8	3.8	3.0
6. If I knew someone was in recovery for addiction to opioids, I would be fine with them marrying into my family. (distrust) R	4	2.3	10	5.6	42	23.7	64	36.2	57	32.2	0	0.0	3.
7. People who are addicted to opioids won't hesitate to lie. (distrust)	0	0.0	5	2.3	23	10.8	47	22.1	79	37.1	59	27.7	4.7
8. When a person with an opioid addiction is in your life, you need to be on guard for what they might do. (distrust)	0	0.0	2	0.9	14	6.6	58	27.2	91	42.7	48	22.5	4.7
9. A police officer in treatment for addiction to opioids could one day return to full duty. (distrust) R	11	5.2	73	34.3	66	31.0	39	18.3	19	8.9	5	2.3	2.9
10. I would worry about a person in treatment for opioid addiction taking care of my family's children for a few hours.		5.2		0 110	00		27	10.0	.,	0.9	10	2.5	2.9
(fear)	2	0.9	6	2.8	10	4.7	23	10.8	67	31.5	5	49.3	5.1
11. I wouldn't want to let my colleagues know if a relative of mine was addicted to opioids. (shame)	19	8.9	62	29.1	54	25.4	37	17.4	33	15.5	8	3.8	3.1

*Note.* n = 213, except Item 1 was n = 177. R indicates reverse coding on items 1, 6, and 9.

#### **Differences in Officer Attitudes and Beliefs**

Regression analyses were performed to examine differences in responses to stigma items on the survey by respondent characteristics (Table 4). The overall regression model was statistically significant ( $R^2 = .196$ , F(11, 146) = 3.239, p = .001). We found education was associated with attitudes toward PWUD. Respondents with a bachelor's degree were more likely to blame people addicted to opioids for their condition than those with less education ( $\beta = -0.535$ , p < .01). However, the odds of officers with less education agreeing that those with OUD are more likely to lie was 1.480 times that those with more education, Wald  $\chi 2(1) = 5.999$ , p = .014.

#### Table 4

Demographics	Some addic	eone ca ted	re abo	Someone cared about died of overdose					
	Yes		Yes						
	N	%	n	%	п	%	п	%	
Gender									
Female	12	44.4	15	55.6	3	9.7	28	90.3	
Male	59	31.7	127	68.3	28	13.4	181	86.6	
Race/ethnicity									
White	59	32.6	122	67.4	26	12.7	179	87.3	
Other race	13	35.1	24	64.9	8	18.6	35	81.4	
Highest level of education									
Less than bachelor's degree	21	35.6	38	64.4	11	15.7	59	84.3	
Bachelor's degree or higher	51	32.1	108	67.9	23	12.9	155	87.1	
Rank									
Officer or detective	43	28.3	109	71.7	23	13.4	149	86.6	
Supervisor	27*	45.0	33	55.0	9	13.2	59	86.8	
Years in policing									
Early career (0-7 years)	18	36.0	32	64.0	6	10.7	50	89.3	
Mid- to late-career (8+ years)	54	32.1	114	67.9	28	14.6	164	85.4	
Rurality									
Rural	59	34.5	112	65.5	1	6.7	14	93.3	
Urban	4	33.3	8	66.7	26	13.2	171	86.8	

Officer Demographics and Personal Addiction and Overdose Experience

*Note.* Statistical significance based on chi-square test.

\*p < .05. \*\*p < .01.

Results of the linear regression indicated that there was a significant association between gender with blaming those with OUD for their condition. Officers who were male were less likely to agree with items blaming those with OUD for their condition than female officers ( $\beta$ = -0.382, *p* < .05). We found the odds of White officers agreeing that those with OUD are more likely to lie was 2.255 times that of officers of other races, Wald  $\chi 2(1) = 7.836$ , *p* = .005.

Officers in small police departments were 64.1% less likely to agree that you need to be on guard for those with OUD, than officers in medium or large police departments, Wald  $\chi 2(1) = 4.349$ , p = .037. We found officers in medium or large departments were 1.485 times more likely to agree

that they would distrust someone with opioid addiction marrying into their family. We found officers with less time in policing were less likely to blame people addicted to opioids for their condition than those with more time in policing ( $\beta$ = -0.192 *p* = .018). Officers with a higher rank were less likely to agree that a police officer in treatment for addiction to opioids could one day return to full duty than officers with a lower rank, Wald  $\chi 2(1) = 6.250$ , *p* = .012. Those in higher rank were also less likely to agree that they would distrust a person with opioid addiction marrying into their family than officers with a lower rank, Wald  $\chi 2(1) = 3.999$ , *p* = .046 (Table 5).

# Table 5

		Blame Distrust- marrying into Distrust- lie					Dis	trust- on g	guard	Distrust- return to duty RC							
D		CE	0	050/ 0		ily RC	050/ 01		0.11	050/ 0	r	0.11	050/ 0	T	0.11	050/ /	OT.
Demographics	В	SE	β	95% C	1	Odds ratios	95% CI		Odds ratios	95% C	1	Odds ratios	95% C	1	Odds ratios	95% (	
				LL	UL		LL	UL		LL	UL	Tatios	LL	UL		LL	UL
Gender (1=male)	382*	.192	153	762	002	2.301	.857	6.182	1.463	.574	3.726	1.534	.596	3.947	1.179	.462	3.012
Race (1=White)	096	.168	043	427	.235	1.241	.498	3.091	3.255**	1.425	7.437	1.204	.528	2.749	2.001	.873	4.588
Education (1=less	535**	.146	303	823	247	.584	.269	1.266	2.480*	1.129	5.128	2.040	.986	4.221	.985	.487	1.993
than bachelor)			.202	.023	.2.17		.20)	1.200	2.100	1.177	0.120	2.010	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1.221	.,,05		1.775
Rank (1=officer or	.175	.142	.102	105	.456	.442*	.198	.984	1.370	.685	2.739	.938	.466	1.888	.412*	.205	.826
detective)																	
Years in policing	371*	.155	192	678	064	.584	.258	1.322	.921	.432	1.964	.783	.365	1.680	2.127	.997	4.538
(1=0-7 years)																	
Department rurality	.455	.278	.137	106	.995	.496	.109	2.260	.599	.152	2.361	.277	.069	1.118	.323	.084	1.240
(1=urban)																	
Small department	.182	.193	.100	106	.995	1.037	.375	2.871	.592	.230	1.528	.359*	.137	.940	.723	.284	1.843
size (0=not small)																	
Medium department	.159	.155	.100	147	.465	2.485*	1.072	5.758	.894	.419	1.906	.791	.368	1.701	.726	.343	1.537
size (0=not med)																	
Overdose responses	.229	.136	.145	039	.498	.722	.344	1.516	1.156	.596	2.243	1.085	.555	2.119	.728	.376	1.408
(1=0-25 overdoses)																	
Someone you care	.079	.138	.047	194	.351	.574	.272	1.210	1.360	.691	2.676	1.142	.579	2.254	.691	.353	1.351
about is/was																	
addicted to opioids																	
(1=yes)																	
Know died overdose	.201	.198	.082	190	.592	.741	.259	2.123	.516	.197	1.356	1.123	.423	2.981	.950	.363	2.485
(1=yes)						C 11		177 01	C' 1								

Regression of Officer Demographics and Blame and Distrust Items

*Note*. Sample size was 213, except Distrust-marrying into family was n = 177. CI = confidence interval; LL = lower limit; UL = upper limit.

RC = Reverse Coded. \*p < .05. \*\*p < .01.

#### Discussion

We explored officer responses to items indicative of stigma against PWUD and officers held somewhat stigmatizing attitudes and beliefs with a mean score of 4.0 on a stigma scale of 1-6. Survey responses indicated a majority of officers expressed sentiments of fear, distrust, and blame toward PWUD. In addition, linear regression analyses showed certain officer characteristics were associated with more stigmatizing attitudes. Female officers with more education and those with less time in policing were more likely to blame persons addicted to opioids for their condition. Officers who were White with less education were more likely to distrust persons addicted to opioids by agreeing that they will not hesitate to lie. Finally, officers from large police department were more likely to distrust persons addicted to opioids by agreeing that you had to be on guard around them.

#### **Stigma and Fellow Officers**

Interestingly, a majority of officers (71%) showed less stigma on one survey item—supporting a return to full duty for an officer after treatment for addiction. However, officers with a lower rank rather than higher rank were less likely to agree that an officer could return to duty after treatment. In policing, there is a noted "insider culture" or an "us versus them" mentality in which officers are loyal and take care of their own.<sup>50</sup> Officers often depend on, and support, one another in a stressful, and at times potentially dangerous, job. Therefore, officers may hold general distrust toward PWUD but make an exception for fellow officers and support their return to the job after treatment.

#### **Officer Education and Stigma**

In terms of education, impacting stigma of PWUD, we had mixed results. We found police officers with more formal education were less likely to view persons addicted to opioids as not hesitating to lie, but more likely to blame them for their own condition compared to those with less formal education. The finding that those with more education would possess more stigma by assigning blame is contrary to studies of the general public that found persons with more formal education hold less stigma against those with SUDs,<sup>51</sup> alcohol use disorders,<sup>52</sup> and mental illness.<sup>53</sup> However, there may be some additional factors contributing to officer differences by formal education.<sup>54</sup> A bachelor's degree may not necessarily solely predict more tolerant attitudes or actions or reduced stigma. Prior research found officers' formal education has no association with stigma against persons with mental illness<sup>55</sup> or whether officers would search or arrest or search a suspect.<sup>56</sup> In this study, we were limited in what we knew about their formal education and asked only highest level of education. Similar to prior studies of officers<sup>57</sup>, we were unable to take into account other factors such as college major, military experience, and other employment experiences apart from policing. More research is needed to see if this result prevails in other settings, while controlling for additional independent variables. If so, we need to understand why officers with more education would hold more stigmatizing views against PWUD than those with less education, and why this is a fairly unique feature of the police role. In addition, students in college settings could be offered educational sessions on drug addiction and stigma, which has been found to increase knowledge and reduce stigma.<sup>58</sup>

These findings underscore the need to provide training to all officers, even those that have more formal education.<sup>59</sup> Police training can increase support for harm reduction<sup>60</sup> and the likelihood an officer will refer PWUD to treatment.<sup>61</sup> Officer training on stigma for mental health problems has been found to be effective in changing attitudes, improving mental health knowledge and intentional behavior.<sup>62</sup> Crisis Intervention Team (CIT) trainings are another example of police training that can officer knowledge and attitudes toward persons with mental health issues.<sup>63</sup> A systematic review and meta-analysis of CIT found a positive effect on officer perceptions and officer behavior<sup>64</sup> and a study found CIT training that improved officers' perceptions of efficacy in making mental health referrals increased their intentions to do so.<sup>65</sup> This suggests training efforts related to PWUD, SUDs, and recovery may reduce officer stigma toward PWUD. However, there are significant gaps in the literature surrounding training to reduce stigma and increase other positive outcomes.<sup>66</sup>

## **Department Size and Stigma**

Officers in small police departments were 64.1% less likely to agree that you need to be on guard for those with OUD, than officers in medium or large police departments. Prior studies on police department size has found larger departments may have advantages for individual officers, such as better pay, working conditions, and job satisfaction.<sup>67</sup> However, Cordner noted structural characteristics, such as agency size, may be a by-product of high crime and disorder and contribute to the police culture.<sup>68</sup> Therefore, larger departments may have unique characteristics leading to more stigmatizing attitudes toward persons with opioid use disorder. More research is warranted to understand the interplay between department size, culture, and attitudes.

## **Study Limitations**

There are some limitations of this study to note. First, the study measures stigma among police using well-accepted dimensions of social stigma using general questions. It does so to frame the problem and present its contours, but we cannot use our measures of stigma to predict behavior. The study could therefore benefit from additional data about its respondents, especially concerning their actual behaviors toward PWUD. Future research should expand on the limited studies of how stigma impacts officer actions.<sup>69</sup> Also, there are limitations to all self-reported survey data; stigma-related questions may foster answers that are perceived to be socially desirable rather than true beliefs.

The majority of the sample was White and male. We were unable to obtain the relevant demographics for Illinois police and could not be certain if the data provided by some departments was representative of our ultimate sample, but this broadly conforms to the demographics of U.S. police officers. Relatedly, we did not capture respondents' ages; however, years in policing may serve as a proxy for age and be a more useful measure in its own right, especially if attitudes and beliefs vary with job experience. For example, one study found a positive relationship between seniority and support for alternatives to arrest among patrol officers in Baltimore.<sup>70</sup> Given our findings that higher education indicated more stigmatized attitudes, what was asked about education warrants more detail, including academic major, as

well as information on military experience, which can influence attitudes about policing and public safety.

We offered 11 items to attempt to measure blame (5 items), distrust (4 items), shame (1 item), and fear (1 item). Future administrations could add more detailed items to measure shame and fear, as well as use vignettes to determine how officers would act in certain situations. These limitations suggest the need for a set of questions specifically designed to measure stigma as it pertains to the police role, the decisions police must make, and their exercise of discretionary power. For example, there are several scales that exist to measure health care provider stigma toward people with mental illness that concentrate on domains and items specifically relevant to their clinical interactions,<sup>71</sup> and researchers have highlighted the need to move beyond HIV stigma scales for the general population to ones that operationalize stigma-related variables specific to health care provider roles.<sup>72</sup> Likewise, we argue the same need exists for a rolespecific stigma scale for police, given the unique character of their professional interactions, which hinge on evaluating witness and victim testimony, assessing people's motivations, ascribing criminal suspicion, and frequently involve physical contact and use of force. The generalized items used in prior studies<sup>73</sup> provide the foundation for such a tailored scale. Finally, our study captures perspectives from one state in the Midwest, so while we utilized a stratified sampling strategy within the state, we do not have a representative sample that is more generalizable to all U.S. police officers or other regions of the nation.

#### Conclusion

In the United States, the persistent criminalization of PWUD has been accompanied by stigma toward them by police and the general public.<sup>74</sup> In the case of police, stigma can negatively influence decisions that will have a critical influence on the health of PWUD. Officers have wide discretion making decisions that that may include linkage to harm reduction (e.g., naloxone, referral pamphlets) and a warm handoff to treatment, or make arrest and detention in jail. U.S. police departments are realizing, with support from research, that a public health approach rather than a punitive or law and order one can both improve public safety and save lives.<sup>75</sup> Police deflection and pre-arrest diversion programs are proliferating,<sup>76</sup> but continued stigmatizing views of PWUD held by officers may impede the effective implementation and utilization of such efforts. Based on our findings of the high proportion of officers expressing stigmatizing views on our survey, there is an urgent need to better measure and address this problem. Training and education, particularly for supervisors and educated officers, on addiction, treatment, and recovery that offer personal experiences of PWUD may be successful in reducing stigma. A validated survey instrument is needed to accurately measure police stigma toward PWUD that captures police role and officer perceptions of PWUD including truthfulness, motivations to engage in treatment, and reliability as a victim or witness. Such research efforts are critical to better measure and understand views held by police officers in order to reduce stigma and better prepare officers to address America's current substance use crisis.

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## SUGGESTED CITATION

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<sup>&</sup>lt;sup>1</sup> Substance Abuse and Mental Health Services Administration. (2021). *Key substance use and mental health indicators in the United States: Results from the 2020 National Survey on Drug Use and Health* (HHS Publication No. PEP21-07-01-003, NSDUH Series H-56). Center for Behavioral Health Statistics and Quality, Substance Abuse and Mental Health Services Administration. <u>https://www.samhsa.gov/data/</u><sup>2</sup> Centers for Disease Control and Prevention. (2020). Wide-ranging online data for epidemiologic research (WONDER). <u>https://wonder.cdc.gov/</u>

<sup>&</sup>lt;sup>3</sup> Centers for Disease Control and Prevention. (2022). Provisional drug overdose death counts. https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm

<sup>&</sup>lt;sup>4</sup> Mak, W. W., Chan, R. C., Wong, S. Y., Lau, J. T., Tang, W. K., Tang, A. K., Chiang, T. P., Cheng, S. K., Chan, F., Cheung, F. M., Woo, J., & Lee, D. T. (2017). A cross-diagnostic investigation of the differential impact of discrimination on clinical and personal recovery. *Psychiatric Services (Washington, D.C.)*, 68(2), 159–166. <u>https://doi.org/10.1176/appi.ps.201500339</u>; McCallum, S. L., Mikocka-Walus, A. A., Gaughwin, M. D., Andrews, J. M., & Turnbull, D. A. (2016). I'm a sick person, not a bad person': Patient experiences of treatments for alcohol use disorders. Health Expectations : An International Journal of Public Participation in Health Care and Health Policy, 19(4), 828–841.

https://doi.org/10.1111/hex.12379; Radcliffe, P., & Stevens, A. (2008). Are drug treatment services only for 'thieving junkie scumbags'? Drug users and the management of stigmatized identities. *Social Science & Medicine (1982)*, 67(7), 1065–1073. https://doi.org/10.1016/j.socscimed.2008.06.004; Volkow, N. D. (2020). Stigma and the toll of addiction. The New England Journal of Medicine, 382(14), 1289–1290. https://doi.org/10.1056/NEJMp1917360

<sup>&</sup>lt;sup>5</sup> Friedman, S. R., Williams, L. D., Guarino, H., Mateu-Gelabert, P., Krawczyk, N., Hamilton, L., Walters, S. M., Ezell, J. M., Khan, M., Di Iorio, J., Yang, L. H., & Earnshaw, V. A. (2022). The stigma system: How sociopolitical domination, scapegoating, and stigma shape public health. *Journal of Community Psychology*, *50*(1), 385–408. <u>https://doi.org/10.1002/jcop.22581</u>; Goffman, E. Stigma. (1963). Notes on the Management of Spoiled Identity. Penguin Books; Luoma, J. B., O'Hair, A. K., Kohlenberg, B. S., Hayes, S. C., & Fletcher, L. (2010). The development and psychometric properties of a new measure of perceived stigma toward substance users. *Substance Use & Misuse*, *45*(1-2), 47–57. https://doi.org/10.3109/10826080902864712

<sup>&</sup>lt;sup>6</sup> Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406. https://doi.org/10.1177/1461355720962524

<sup>&</sup>lt;sup>7</sup> Crapanzano, K. A., Hammarlund, R., Ahmad, B., Hunsinger, N., & Kullar, R. (2019). The association between perceived stigma and substance use disorder treatment outcomes: A review. *Substance Abuse and Rehabilitation*, *10*, 1–12. <u>https://doi.org/10.2147/SAR. S183252</u>; Yang, L. H., Wong, L. Y., Grivel, M. M., & Hasin, D. S. (2017). Stigma and substance use disorders: An international phenomenon. Current Opinion in Psychiatry, 30(5), 378–388. <u>https://doi.org/10.1097/YCO.000000000000351</u>

<sup>8</sup> Ahern, J., Stuber, J., & Galea, S. (2007). Stigma, discrimination and the health of illicit drug users. *Drug and Alcohol Dependence*, 88(2-3), 188–196. <u>https://doi.org/10.1016/j.drugalcdep.2006.10.014</u>; Crapanzano, K. A., Hammarlund, R., Ahmad, B., Hunsinger, N., & Kullar, R. (2019). The association between perceived stigma and substance use disorder treatment outcomes: A review. *Substance Abuse and Rehabilitation*, *10*, 1–12. <u>https://doi.org/10.2147/SAR. S183252</u>; Drumm, R. D., McBride, D. C., Metsch, L., Page, J. B., Dickerson, K., & Jones, B. (2003). "The rock always comes first": Drug users'

accounts about using formal health care. Journal of Psychoactive Drugs, 35(4), 461–469.

https://doi.org/10.1080/02791072.2003.10400493; Skinner, N., Feather, N. T., Freeman, T., & Roche, A. (2007). Stigma and discrimination in health-care provision to drug users: The role of values, affect, and deservingness judgments. *Journal of Applied Social Psychology*, *37*(1), 163–186.

https://doi.org/10.1111/j.0021-9029.2007.00154.x; Yang, L. H., Wong, L. Y., Grivel, M. M., & Hasin, D. S. (2017). Stigma and substance use disorders: An international phenomenon. *Current Opinion in Psychiatry*, *30*(5), 378–388. https://doi.org/10.1097/YCO.00000000000351

<sup>9</sup> Dackis, C., & O'Brien, C. (2005). Neurobiology of addiction: Treatment and public policy ramifications. *Nature Neuroscience*, 8(11), 1431–1436. <u>https://doi.org/10.1038/nn1105-1431</u>; Yang, L. H., Wong, L. Y., Grivel, M. M., & Hasin, D. S. (2017). Stigma and substance use disorders: An international phenomenon. *Current Opinion in Psychiatry*, 30(5), 378–388.

https://doi.org/10.1097/YCO.000000000000351

<sup>10</sup> Pescosolido, B. A., Martin, J. K., Long, J. S., Medina, T. R., Phelan, J. C., & Link, B. G. (2010). "A disease like any other"? A decade of change in public reactions to schizophrenia, depression, and alcohol dependence. *The American Journal of Psychiatry*, *167*(11), 1321–1330.

https://doi.org/10.1176/appi.ajp.2010.09121743; Schomerus, G., Lucht, M., Holzinger, A., Matschinger, H., Carta, M. G., & Angermeyer, M. C. (2011). The stigma of alcohol dependence compared with other mental disorders: A review of population studies. *Alcohol and Alcoholism (Oxford, Oxfordshire)*, 46(2), 105–112. https://doi.org/10.1093/alcalc/agq089

<sup>11</sup> Yang, L. H., Wong, L. Y., Grivel, M. M., & Hasin, D. S. (2017). Stigma and substance use disorders: An international phenomenon. *Current Opinion in Psychiatry*, *30*(5), 378–388. https://doi.org/10.1097/YCO.00000000000351

<sup>12</sup> Barry, C. L., McGinty, E. E., Pescosolido, B. A., & Goldman, H. H. (2014). Stigma, discrimination, treatment effectiveness, and policy: Public views about drug addiction and mental illness. *Psychiatric Services (Washington, D.C.)*, *65*(10), 1269–1272. <u>https://doi.org/10.1176/appi.ps.201400140</u>; Corrigan, P. W., Kuwabara, S. A., & O'Shaughnessy, J. (2009). The public stigma of mental illness and drug addiction: Findings from a stratified random sample. *Journal of Social Work*, *9*(2), 139–147. <a href="https://doi.org/10.1177/1468017308101818">https://doi.org/10.1177/1468017308101818</a>; Volkow, N. D. (2020). Stigma and the toll of addiction. *The New England Journal of Medicine*, *382*(14), 1289–1290. <a href="https://doi.org/10.1056/NEJMp1917360">https://doi.org/10.1056/NEJMp1917360</a>; Yang, L. H., Wong, L. Y., Grivel, M. M., & Hasin, D. S. (2017). Stigma and substance use disorders: An international phenomenon. *Current Opinion in Psychiatry*, *30*(5), 378–388. <a href="https://doi.org/10.1097/YCO.00000000000351">https://doi.org/10.1097/YCO.00000000000351</a>

<sup>13</sup> Harrell, E., & Davis, E. (2020). Contacts between police and the public, 2018 – Statistical tables. U.S. Department of Justice, Office of Justice Programs, Bureau of Justice Statistics. https://bjs.ojp.gov/content/pub/pdf/cbpp18st.pdf

<sup>14</sup> Federal Bureau of Investigation. (2020). *Crime in the United States 2019*. <u>https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-29/table-29.xls</u>

<sup>15</sup> Federal Bureau of Investigation. (2020). *Crime in the United States 2019*. <u>https://ucr.fbi.gov/crime-in-the-u.s/2019/crime-in-the-u.s.-2019/tables/table-29/table-29.xls</u>

<sup>16</sup> Cadoff, B., Chauhan, P., & Bond, E. (2020). Misdemeanor enforcement trends across seven U.S. jurisdictions. John Jay College of Criminal Justice. <u>https://datacollaborativeforjustice.org/wp-content/uploads/2020/10/2020\_20\_10\_Crosssite-Draft-Final.pdf</u>

<sup>17</sup> Goulka, J., del Pozo, B., & Beletsky, L. (2021). From public safety to public health: Re-envisioning the goals and methods of policing. *Journal of Community Safety and Well-Being*, *6*(1), 22–27. https://doi.org/10.35502/jcswb.184

<sup>18</sup> del Pozo, B., Sightes, E., Goulka, J., Ray, B., Wood, C. A., Siddiqui, S., & Beletsky, L. A. (2021). Police discretion in encounters with people who use drugs: Operationalizing the theory of planned behavior. *Harm Reduction Journal*, *18*(1), 1–12. <u>https://doi.org/10.1186/s12954-021-00583-4</u>

<sup>19</sup> Durieux, J., Curtis, A., Mirka, M., Jefferis, E., Felix, C., & Essel, B. (2022). An exploration of Narcan as a harm reduction strategy and user's attitudes toward law enforcement involvement in overdose cases. *International Journal of Environmental Research and Public Health*, *19*(6), 3149. https://doi.org/10.3390/ijerph19063149

<sup>20</sup> Beletsky, L., Macalino, G. E., & Burris, S. (2005). Attitudes of police officers towards syringe access, occupational needle-sticks, and drug use: A qualitative study of one city police department in the United States. *International Journal of Drug Policy*, *16*(4), 267–274. https://doi.org/10.1016/j.drugpo.2005.01.009

<sup>21</sup> Baron, S. W., & Macdonald, S. (2020). Police Contact, Procedural Injustice, and Drug Use. Canadian Journal of Criminology and Criminal Justice, 62(1), 1–25. https://doi.org/10.3138/cjccj.2019-0028 <sup>22</sup> Binswanger, I. A., Blatchford, P. J., Lindsay, R. G., & Stern, M. F. (2011). Risk factors for all-cause, overdose and early deaths after release from prison in Washington state. Drug and Alcohol Dependence, 117(1), 1-6. https://doi.org/10.1016/j.drugalcdep.2010.11.029; Binswanger, I. A., Stern, M. F., Deyo, R. A., Heagerty, P. J., Cheadle, A., Elmore, J. G., & Koepsell, T. D. (2007). Release from prison-A high risk of death for former inmates. The New England Journal of Medicine, 356(2), 157-165. https://doi.org/10.1056/NEJMsa064115; Green, T. C., Clarke, J., Brinkley-Rubinstein, L., Marshall, B. D. L., Alexander-Scott, N., Boss, R., & Rich, J. D. (2018). Postincarceration fatal overdoses after implementing medications for addiction treatment in a statewide correctional system. JAMA Psychiatry, 75(4), 405–407. https://doi.org/10.1001/jamapsychiatry.2017.4614; Joudrey, P. J., Khan, M. R., Wang, E. A., Scheidell, J. D., Edelman, E. J., McInnes, D. K., & Fox, A. D. (2019). A conceptual model for understanding post-release opioid-related overdose risk. Addiction Science & Clinical Practice, 14(1), 17. https://doi.org/10.1186/s13722-019-0145-5; Ranapurwala, S. I., Shanahan, M. E., Alexandridis, A. A., Proescholdbell, S. K., Naumann, R. B., Edwards, D., & Marshall, S. W. (2018). Opioid overdose mortality among rormer North Carolina inmates: 2000–2015. American Journal of Public Health, 108(9), 1207-1213. https://doi.org/10.2105/AJPH.2018.304514

<sup>23</sup> Charlier, J. A., & Reichert, J. (2020). Introduction: Deflection— Police-led responses to behavioral health challenges. *Journal of Advancing Justice*, *3*, 1–13. <u>https://www.nadcp.org/wp-content/uploads/2020/10/Journal-for-Advancing-Justice-Volume-III\_final.pdf</u>; Lindquist-Grantz, R., Mallow, P., Dean, L., Lydenberg, M., & Chubinski, J. (2021). Diversion programs for individuals who use substances: A review of the literature. *Journal of Drug Issues*, *51*(3), 483–503. https://doi.org/10.1177/00220426211000330

<sup>24</sup> Cepeda, J. A., Strathdee, S. A., Arredondo, J., Mittal, M. L., Rocha, T., Morales, M., Clairgue, E., Bustamante, E., Abramovitz, D., Artamonova, I., Bañuelos, A., Kerr, T., Magis-Rodriguez, C. L., & Beletsky, L. (2017). Assessing police officers' attitudes and legal knowledge on behaviors that impact HIV transmission among people who inject drugs. *The International Journal on Drug Policy*, *50*, 56–63. <u>https://doi.org/10.1016/j.drugpo.2017.09.009</u>; del Pozo, B., Sightes, E., Goulka, J., Ray, B., Wood, C. A., Siddiqui, S., & Beletsky, L. A. (2021). Police discretion in encounters with people who use drugs: Operationalizing the theory of planned behavior. *Harm Reduction Journal*, *18*(1), 1–12. <u>https://doi.org/10.1186/s12954-021-00583-4</u>

<sup>25</sup> Blais, E., Brisson, J., Gagnon, F., & Lemay, S. A. (2022). Diverting people who use drugs from the criminal justice system: A systematic review of police-based diversion measures. *The International Journal on Drug Policy*, *105*, 103697. <u>https://doi.org/10.1016/j.drugpo.2022.103697</u>; Lindquist-Grantz, R., Mallow, P., Dean, L., Lydenberg, M., & Chubinski, J. (2021). Diversion programs for individuals who

use substances: A review of the literature. *Journal of Drug Issues*, *51*(3), 483–503. https://doi.org/10.1177/00220426211000330

<sup>26</sup> Belenko, S. (2000). The challenges of integrating drug treatment into the criminal justice process. *Albany Law Review*, 63(3), 833.

<sup>27</sup> Labriola, M. M., Peterson, S., Taylor, J., Sobol, D., Reichert, J., Ross, J., Charlier, J., & Juarez, S. (2023). A multi-site evaluation of law enforcement deflection in the United States. *RAND Corporation*, <u>https://doi.org/10.7249/RRA2491-1</u>

<sup>28</sup> Kunkel, T. (2021). The stimatization of justice-involved individuals with substance use disorders: Perspectives from criminal justice practitioners and those with lived experience. Legislative Analysis and Public Policy Association. <u>http://www.legislativeanalysis.org/wp-content/uploads/2022/03/The-</u> <u>Stigmatization-of-Justice-involved-Individuals-with-Substance-Use-Disorders.pdf</u>

<sup>29</sup> Beletsky, L., Macalino, G. E., & Burris, S. (2005). Attitudes of police officers towards syringe access, occupational needle-sticks, and drug use: A qualitative study of one city police department in the United States. *International Journal of Drug Policy*, *16*(4), 267–274.

https://doi.org/10.1016/j.drugpo.2005.01.009; Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406. https://doi.org/10.1177/1461355720962524

<sup>30</sup> del Pozo, B., Sightes, E., Goulka, J., Ray, B., Wood, C. A., Siddiqui, S., & Beletsky, L. A. (2021). Police discretion in encounters with people who use drugs: Operationalizing the theory of planned behavior. *Harm Reduction Journal*, *18*(1), 1–12. https://doi.org/10.1186/s12954-021-00583-4

<sup>31</sup> Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406. https://doi.org/10.1177/1461355720962524

<sup>32</sup> Watson, T. M., Bayoumi, A., Kolla, G., Penn, R., Fischer, B., Luce, J., & Strike, C. (2012). Police perceptions of supervised consumption sites (SCSs): A qualitative study. *Substance Use & Misuse*, 47(4), 364–374. <u>https://doi.org/10.3109/10826084.2011.645104</u>.

<sup>33</sup> Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406. https://doi.org/10.1177/1461355720962524

<sup>34</sup> Murphy, J., & Russell, B. (2021). Police officers' addiction frameworks and policy attitudes. *Addictive Behaviors*, *122*, 107007. <u>https://doi.org/10.1016/j.addbeh.2021.107007</u>; Petrocelli, M., Oberweis, T., Swith M. P., & Patrocelli, I. (2014). Accessing police attitudes toward dwas and dwas

Smith, M. R., & Petrocelli, J. (2014). Assessing police attitudes toward drugs and drug enforcement. *American Journal of Criminal Justice*, *39*(1), 22–40. <u>https://doi.org/10.1007/s12103-013-9200-z</u>

<sup>35</sup> McGinty, E. E., & Barry, C. L. (2020). Stigma reduction to combat the addiction crisis—developing an evidence base. *The New England Journal of Medicine*, *382*(14), 1291–1292.

https://doi.org/10.1056/NEJMp2000227; Volkow, N. D. (2020). Stigma and the toll of addiction. The New England Journal of Medicine, 382(14), 1289–1290. https://doi.org/10.1056/NEJMp1917360;

<sup>36</sup> Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406. https://doi.org/10.1177/1461355720962524

<sup>37</sup> Illinois State Police. (n.d.-b). Crime in Illinois, 2020. Annual Uniform Crime Report. https://isp.illinois.gov/CrimeReporting/Cii2020

<sup>38</sup> Nix, J., Pickett, J. T., Baek, H., & Alpert, G. P. (2019). Police research, officer surveys, and response rates. *Policing and Society*, 29(5), 530–550. <u>https://doi.org/10.1080/10439463.2017.1394300</u>

<sup>39</sup> Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406.

https://doi.org/10.1177/1461355720962524; Kruis, N. E., McLean, K., & Perry, P. (2021). Exploring first responders' perceptions of medication for addiction treatment: Does stigma influence attitudes? *Journal of Substance Abuse Treatment*, *131*, 108485. https://doi.org/10.1016/j.jsat.2021.108485; Kruis, N. E., &

Merlo, A. V. (2021). A preliminary assessment of stigma in law enforcement officers' responses to opioid overdoses. *Journal of Drug Issues*, *51*(2), 301–322. <u>https://doi.org/10.1177/00220426 20974076</u>

<sup>40</sup> Charles, J. L. K., & Bentley, K. J. (2018). Measuring mental health provider-based stigma: Development and initial psychometric testing of a self-assessment instrument. *Community Mental Health Journal*, *54*(1), 33–48. <u>https://doi.org/10.1007/s10597-017-0137-4</u>; Sastre-Rus, M., García-Lorenzo, A., Lluch-Canut, M. T., Tomás-Sábado, J., & Zabaleta-Del-Olmo, E. (2019). Instruments to assess mental health-related stigma among health professionals and students in health sciences: A systematic psychometric review. *Journal of Advanced Nursing*, *75*(9), 1838–1853. <u>https://doi.org/10.1111/jan.13960</u>

<sup>41</sup> Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406.

https://doi.org/10.1177/1461355720962524; Kruis, N. E., McLean, K., & Perry, P. (2021). Exploring first responders' perceptions of medication for addiction treatment: Does stigma influence attitudes? *Journal of Substance Abuse Treatment*, *131*, 108485. https://doi.org/10.1016/j.jsat.2021.108485; Kruis, N. E., & Merlo, A. V. (2021). A preliminary assessment of stigma in law enforcement officers' responses to opioid overdoses. *Journal of Drug Issues*, *51*(2), 301–322. https://doi.org/10.1177/00220426 20974076

<sup>42</sup> Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406. https://doi.org/10.1177/1461355720962524

<sup>43</sup> Kennedy-Hendricks, A., Barry, C. L., Gollust, S. E., Ensminger, M. E., Chisolm, M. S., & McGinty, E. E. (2017). Social stigma toward persons with prescription opioid use disorder: Associations with public

support for punitive and public health–oriented policies. *Psychiatric Services (Washington, D.C.)*, 68(5), 462–469. <u>https://doi.org/10.1176/appi.ps.201600056</u>; Yang, L. H., Grivel, M. M., Anderson, B., Bailey, G. L., Opler, M., Wong, L. Y., & Stein, M. D. (2019). A new brief opioid stigma scale to assess perceived public attitudes and internalized stigma: Evidence for construct validity. *Journal of Substance Abuse Treatment*, 99, 44–51. <u>https://doi.org/10.1016/j.jsat.2019.01.005</u>

<sup>44</sup> In the survey items, we chose to use the term opioid "addiction" rather than opioid "use disorder" which is the clinical diagnosis from the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) because it is likely the more commonly understood term among a lay audience. Throughout this article, we use the two terms interchangeably, with a preference first-person, non-stigmatizing language. See Kelly, J. F., Saitz, R., & Wakeman, S. (2016). Language, substance use disorders, and policy: The need to reach consensus on an "addiction-ary. *Alcoholism Treatment Quarterly*, *34*(1), 116–123. https://doi.org/10.1080/07347324.2016.1113103.

<sup>45</sup> American Psychiatric Association. (2013). Diagnostic and statistical manual of mental disorders. (5th ed.). <u>https://doi.org/10.1176/appi.books.9780890425596</u>

<sup>46</sup> Kelly, J. F., Saitz, R., & Wakeman, S. (2016). Language, substance use disorders, and policy: The need to reach consensus on an "addiction-ary. *Alcoholism Treatment Quarterly*, *34*(1), 116–123. https://doi.org/10.1080/07347324.2016.1113103

<sup>47</sup> U.S. Census Bureau. (n.d). 2010 Census urban and rural classification and urban area criteria. https://www.census.gov/programs-surveys/geography/guidance/geo-areas/urban-rural/2010-urbanrural.html

<sup>48</sup> Illinois State Police. (n.d.-a). Crime in Illinois 2019 Annual Uniform Crime Report. <u>https://isp.illinois.gov/CrimeReporting/Cii2019</u>

<sup>49</sup> Wang, H., & Reiter, J. P. (2012). Multiple imputation for sharing precise geographies in public use data. *The Annals of Applied Statistics*, 6(1), 229–252. <u>https://doi.org/10.1214/11-AOAS506</u>

<sup>50</sup> Paoline, E. A. (2003). Taking stock: Toward a richer understanding of police culture. *Journal of Criminal Justice*, *31*(3), 199–214. <u>https://doi.org/10.1016/S0047-2352(03)00002-3</u>; Westmarland, L., & Conway, S. (2020). Police ethics and integrity: Keeping the 'blue code' of silence. *International Journal of Police Science & Management*, *22*(4), 378–392. <u>https://doi.org/10.1177/1461 355720947762</u>;

<sup>51</sup> Corrigan, P. W., & Watson, A. C. (2007). The stigma of psychiatric disorders and the gender, ethnicity, and education of the perceiver. *Community Mental Health Journal*, *43*(5), 439–458.

<sup>52</sup> Keyes, K. M., Hatzenbuehler, M. L., McLaughlin, K. A., Link, B., Olfson, M., Grant, B. F., & Hasin, D. (2010). Stigma and treatment for alcohol disorders in the United States. *American Journal of Epidemiology*, *172*(12), 1364–1372. https://doi.org/10.1093/aje/kwq304

<sup>53</sup> Corrigan, P. W., & Watson, A. C. (2007). The stigma of psychiatric disorders and the gender, ethnicity, and education of the perceiver. *Community Mental Health Journal*, *43*(5), 439–458. https://doi.org/10.1007/s10597-007-9084-9

<sup>54</sup> Room, R. (2005). Stigma, social inequality and alcohol and drug use. *Drug and Alcohol Review*, 24(2), 143–155. <u>https://doi.org/10.1080/09595230500102434</u>

<sup>55</sup> Soomro, S., & Yanos, P. T. (2019). Predictors of mental health stigma among police officers: The role of trauma and PTSD. *Journal of Police and Criminal Psychology*, *34*(2), 175–183. https://doi.org/10.1007/s11896-018-9285-x

<sup>56</sup> Rydberg, J., & Terrill, W. (2010). The effect of higher education on police behavior. *Police Quarterly*, *13*(1), 92–120. <u>https://doi.org/10.1177/1098611109357325</u>

<sup>57</sup> Paoline, E. A., Terrill, W., & Rossler, M. T. (2015). Higher education, college degree major, and police occupational attitudes. *Journal of Criminal Justice Education*, *26*(1), 49–73. https://doi.org/10.1080/10511253.2014.923010

<sup>58</sup> Murphy, J., & Russell, B. (2021). Police officers' addiction frameworks and policy attitudes. *Addictive Behaviors*, *122*, 107007. <u>https://doi.org/10.1016/j.addbeh.2021.107007</u>

<sup>59</sup> Barberi, D., & Taxman, F. (2019). Diversion and alternatives to arrest: A qualitative understanding of police and substance users' perspectives. *Journal of Drug Issues*, *49*(4), 703–717.

https://doi.org/10.1177/0022042619861273; Branson, K. (2016, December). Training police to deal with addiction. *Rutgers Today*. https://www.rutgers.edu/news/training-police-deal-addiction; Livingston, J. D., Milne, T., Fang, M. L., & Amari, E. (2012). The effectiveness of interventions for reducing stigma related to substance use disorders: A systematic review. *Addiction (Abingdon, England)*, *107*(1), 39–50. https://doi.org/10.1111/j.1360-0443.2011.03601.x

<sup>60</sup> Khorasheh, T., Naraine, R., Watson, T. M., Wright, A., Kallio, N., & Strike, C. (2019). A scoping review of harm reduction training for police officers. *Drug and Alcohol Review*, *38*(2), 131–150. https://doi.org/10.1111/dar.12904

<sup>61</sup> Schaible, L., Gant, L., & Ames, S. (2021). The impact of police attitudes towards offenders on lawenforcement assisted diversion decisions. *Police Quarterly*, 24(2), 205–232. https://doi.org/10.1177/1098611120960714

<sup>62</sup> Hansson, L., & Markström, U. (2014). The effectiveness of an anti-stigma intervention in a basic police officer training programme: A controlled study. *BMC Psychiatry*, *14*(1), 55. <u>https://doi.org/10.1186/1471-244X-14-55</u>; Pinfold, V., Huxley, P., Thornicroft, G., Farmer, P., Toulmin, H., & Graham, T. (2003). Reducing psychiatric stigma and discrimination. *Social Psychiatry and Psychiatric Epidemiology*, *38*(6), 337–344. <u>https://doi.org/10.1007/s00127-003-0641-4</u>

<sup>63</sup> Watson, A. C., Compton, M. T., & Draine, J. N. (2017). The crisis intervention team (CIT) model: An evidence-based policing practice? *Behavioral Sciences & the Law*, *35*(5-6), 431–441. <u>https://doi.org/10.1002/bs1.2304</u>

<sup>64</sup> Seo, C., Kim, B., & Kruis, N. E. (2021). Variation across police response models for handling encounters with people with mental illnesses: A systematic review and meta-analysis. *Journal of Criminal Justice*, *72*, 101752. <u>https://doi.org/10.1016/j.jcrimjus.2020.101752</u>

<sup>65</sup> Compton, M. T., Krishan, S., Broussard, B., Bakeman, R., Fleischmann, M. H., Hankerson-Dyson, D., Husbands, L., Stewart, T., D'Orio, B., del Pozo, B., & Watson, A. C. (2022). Using the theory of planned behavior to understand how Crisis Intervention Team (CIT) training facilitates police officers' mental

https://doi.org/10.1007/s10597-007-9084-9; Sattler, S., Escande, A., Racine, E., & Göritz, A. S. (2017). Public stigma toward people with drug addiction: A factorial survey. *Journal of Studies on Alcohol and Drugs*, 78(3), 415–425. https://doi.org/10.15288/jsad.2017.78.415

health referrals. *Community Mental Health Journal*, 58(6), 1112–1120. <u>https://doi.org/10.1007/s10597-021-00920-8</u>

<sup>66</sup> Khorasheh, T., Naraine, R., Watson, T. M., Wright, A., Kallio, N., & Strike, C. (2019). A scoping review of harm reduction training for police officers. *Drug and Alcohol Review*, *38*(2), 131–150. <u>https://doi.org/10.1111/dar.12904</u>; Reichert, J., Otto, H. D., & Adams, S. (2023). *Evaluation of the TASC deflection academy: Training for law enforcement deflection program staff*. Illinois Criminal Justice Information Authority.

<sup>67</sup> Alderden, M., Farrell, A., & McCarty, W. P. (2017). Effects of police agency diversification on officer attitudes. *Policing: An International Journal of Police Strategies & Management*, 40(1), 42–56. <u>https://doi.org/10.1108/PIJPSM-07-2016-0111</u>; Johnson, R. R. (2012). Police officer job satisfaction: A multidimensional analysis. *Police Quarterly*, 15(2), 157–176. <u>https://doi.org/10.1177/1098611112442809</u>

<sup>68</sup> Cordner, G. (2017). Police culture: Individual and organizational differences in police officer perspectives. *Policing: An International Journal of Police Strategies & Management*, 40(1), 11–25. https://doi.org/10.1108/PIJPSM-07-2016-0116

<sup>69</sup> Kruis, N. E., & Merlo, A. V. (2021). A preliminary assessment of stigma in law enforcement officers' responses to opioid overdoses. *Journal of Drug Issues*, *51*(2), 301–322. <u>https://doi.org/10.1177/00220426</u> 20974076; Kruis, N. E., McLean, K., & Perry, P. (2021). Exploring first responders' perceptions of medication for addiction treatment: Does stigma influence attitudes? *Journal of Substance Abuse Treatment*, *131*, 108485. <u>https://doi.org/10.1016/j.jsat.2021.108485</u>

<sup>70</sup> Rouhani, S., Gudlavalleti, R., Atzmon, D., Park, J. N., Olson, S. P., & Sherman, S. G. (2019). Police attitudes towards pre-booking diversion in Baltimore. *The International Journal on Drug Policy*, *65*, 78–85. <u>https://doi.org/10.1016/j.drugpo.2018.11.012</u>

<sup>71</sup> Charles, J. L. K., & Bentley, K. J. (2018). Measuring mental health provider-based stigma: Development and initial psychometric testing of a self-assessment instrument. *Community Mental Health Journal*, *54*(1), 33–48. <u>https://doi.org/10.1007/s10597-017-0137-4</u>; Sastre-Rus, M., García-Lorenzo, A., Lluch-Canut, M. T., Tomás-Sábado, J., & Zabaleta-Del-Olmo, E. (2019). Instruments to assess mental health-related stigma among health professionals and students in health sciences: A systematic psychometric review. *Journal of Advanced Nursing*, *75*(9), 1838–1853. <u>https://doi.org/10.1111/jan.13960</u>

<sup>72</sup> Marshall, S. A., Brewington, K. M., Kathryn Allison, M., Haynes, T. F., & Zaller, N. D. (2017). Measuring HIV-related stigma among healthcare providers: A systematic review. *AIDS Care*, 29(11), 1337–1345. <u>https://doi.org/10.1080/09540121.2017.1338654</u>

<sup>73</sup> Kruis, N. E., Choi, J., & Donohue, R. H. (2020). Police officers, stigma, and the opioid epidemic. *International Journal of Police Science & Management*, 22(4), 393–406.

https://doi.org/10.1177/1461355720962524; Kruis, N. E., McLean, K., & Perry, P. (2021). Exploring first responders' perceptions of medication for addiction treatment: Does stigma influence attitudes? *Journal of Substance Abuse Treatment*, *131*, 108485. https://doi.org/10.1016/j.jsat.2021.108485; Kruis, N. E., & Merlo, A. V. (2021). A preliminary assessment of stigma in law enforcement officers' responses to opioid overdoses. *Journal of Drug Issues*, *51*(2), 301–322. https://doi.org/10.1177/00220426 20974076

<sup>74</sup> Chandler, R. K., Fletcher, B. W., & Volkow, N. D. (2009). Treating drug abuse and addiction in the criminal justice system: Improving public health and safety. *JAMA*, *301*(2), 183–190. https://doi.org/10.1001/jama.2008.976

<sup>75</sup> Wood, J. D., Taylor, C. J., Groff, E. R., & Ratcliffe, J. H. (2015). Aligning policing and public health promotion: Insights from the world of foot patrol. *Police Practice & Research : An International Journal*, *16*(3), 211–223. <u>https://doi.org/10.1080/15614263.2013.846982</u>

<sup>76</sup> Blais, E., Brisson, J., Gagnon, F., & Lemay, S. A. (2022). Diverting people who use drugs from the criminal justice system: A systematic review of police-based diversion measures. *The International Journal on Drug Policy*, *105*, 103697. <u>https://doi.org/10.1016/j.drugpo.2022.103697</u>; Charlier, J. A., & Reichert, J. (2020). Introduction: Deflection— Police-led responses to behavioral health challenges. *Journal of Advancing Justice*, *3*, 1–13. <u>https://www.nadcp.org/wp-content/uploads/2020/10/Journal-for-Advancing-Justice-Volume-III\_final.pdf</u>; Lindquist-Grantz, R., Mallow, P., Dean, L., Lydenberg, M., &

Chubinski, J. (2021). Diversion programs for individuals who use substances: A review of the literature. *Journal of Drug Issues*, *51*(3), 483–503. <u>https://doi.org/10.1177/00220426211000330</u>