

# RCORP Wilson County, TN

Provider and Community Stigma Report



CENTER FOR HEALTH AND HUMAN SERVICES



Public Health

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*Overdose deaths and the availability of increasingly lethal opioids are a national crisis. In many cities and states, fatal drug overdoses, particularly from opioids, can outnumber homicides, car accidents, suicides, and a variety of other causes of death. The average life expectancy for Americans shortened by over seven months last year, according to new data from the Centers for Disease Control and Prevention, primarily due to COVID-19 and drug overdoses.*

*In 2021, there were 63 overdose deaths in Wilson County. In the entire state of Tennessee, that number was 3,814 deaths due to overdoses in 2021, which is up from 3,032 in 2020. Law enforcement officers carry naloxone to treat individuals they encounter that may be experiencing an opioid overdose. Law enforcement officers are in a unique position to save lives by administering a drug that reverses the effects of opioids. In addition to getting trained on the use of Naloxone, there are some things our citizens can do in our community as well.*

*Stigma can have a negative impact on the emotional, mental, and physical health of stigmatized populations as well as the communities in which they live. Individuals who are stigmatized may experience isolation, depression, anxiety, or public embarrassment. Stopping stigma is a critical step for a safer and healthier community. We have made progress in educating our citizens on substance use and misuse. These statistics validate the important work being done in Wilson County. While stigma is a pervasive issue throughout the nation, it is commendable to see progress being made on stigma as well. We appreciate DrugFree WilCo and our many partners in the community who have helped us. With your continued support, we can reduce the stigma even further in 2023.*

*Sincerely,*

*Captain Scott Moore*

# Acknowledgments

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This report is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$1,000,000 with 0% percentage financed with non-governmental sources. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS, or the U.S. Government. For more information, please visit [HRSA.gov](https://www.hrsa.gov).

## Overview of the RCORP Project

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The Center for Health and Human Services of Middle Tennessee State University, in collaboration with DrugFree WilCo, the Department of Health and Human Performance, and the MTSU Data Science Institute, is a comprehensive planning effort to address opioid usage to prevent overdoses within Wilson County, TN. The Rural Communities Opioid Response Program (RCORP) funded through the Health Resources and Services Administration (HRSA) has funded the project to work in Wilson County with a step-by-step plan to address opioid use and misuse across the county, with the intent of reducing fatalities due to overdose and the associated economic burden related to misuse. The RCORP project involves a broad array of stakeholders from the Wilson County community, centrally through the DrugFree WilCo coalition building a consortium of partners each with MOUs and MOAs to carry out the work of the project. There are four core areas of the project:

1. Prevention
2. Treatment
3. Recovery
4. Site-specific initiatives

In each core area, an element of stigma reduction is woven into activities. For example, one of the treatment objectives, states that RCORP will work to “improve the number of Law Enforcement and First Responder trainees to increase sensitivity and decrease stigma in the workforce.” A list of objectives set by the RCORP program can be found at [RCORP Wilson County Final Draft022321.pdf - Google Drive](#)

# Overview of Stigma

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Stigma is the unfavorable perception of an individual as contaminated or discredited based on characteristics such as mental illness, ethnicity, substance use, or physical disability<sup>1</sup> (Goffman, 1963). Social stigmas may also be associated with other traits such as gender, sexual orientation, ethnicity, religion, and culture. There is no denying that stigmatized individuals suffer significantly unfavorable social, political, economic, and psychological effects as a result of such discrimination<sup>2</sup> (Dovidio et al, 2000). They may be apprehensive about how 'normal' people would perceive or recognize them, being continuously self-conscious and calculative regarding their impression. Stigmatization has been linked to profound health consequences, mainly by worsening or exacerbating the illness or creating barriers to treatment or care for the existing illness<sup>3</sup>. Those with HIV, poor mental health, or obesity experience the effects of stigma<sup>3</sup>. Those that use substances, including opioids, are no less stigmatized. Understanding the level or amount of stigma that exists in the community can inform drug overdose prevention, treatment, and recovery efforts.

Stigma is often measured through surveying individuals who are stigmatized to understand the perceived and felt stigmatization through quantitative (questionnaires) and qualitative methods (interviews), as well as those who are part of the nonstigmatized group. In questionnaires and surveys, people are asked a series of questions that get “under the hood” of people’s perceived beliefs and their reality towards the stigmatized or vice-versa.

## Stigma in Opioid Use Disorder

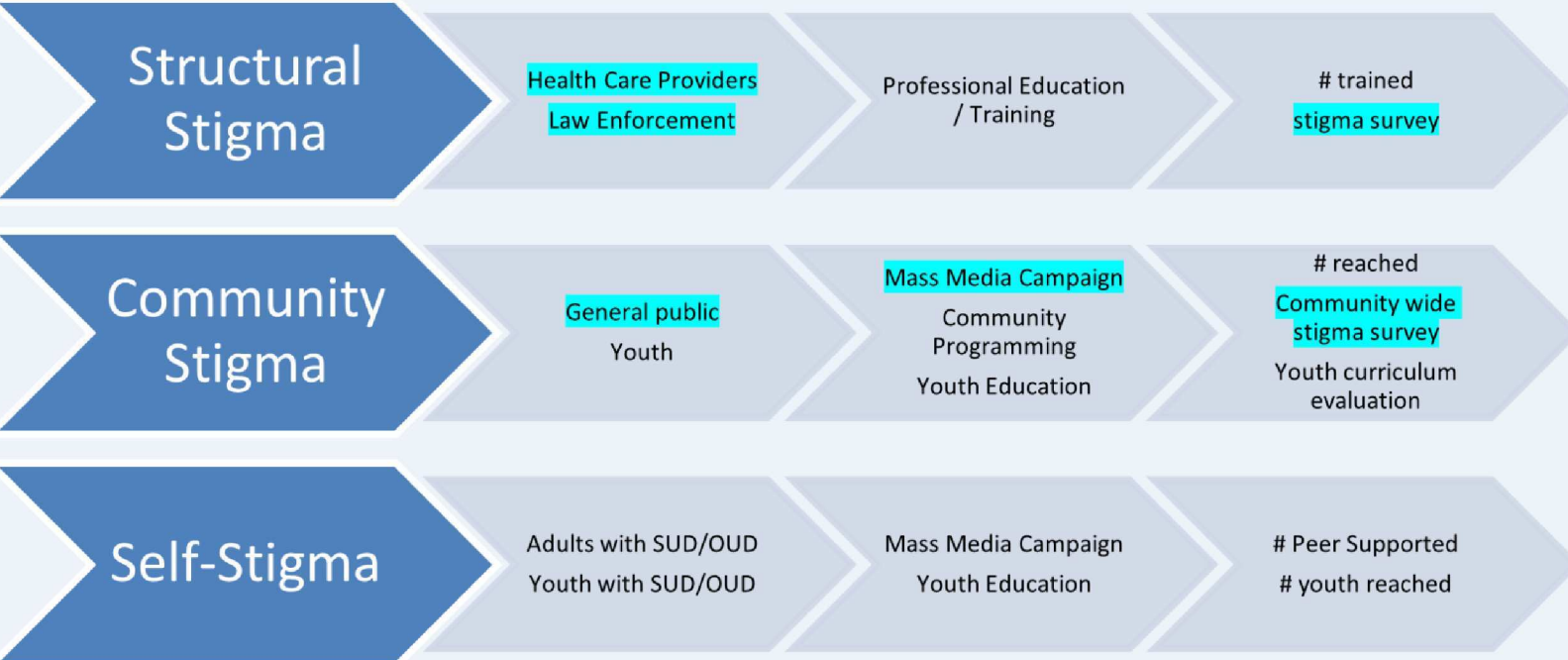
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The United States' opioid crisis is a major public health problem. The sales of prescription opioids have almost quadrupled since 1999 . So did the number of overdose deaths from prescription opioids. According to the CDC, in 2020, 91,799 drug overdose deaths occurred in the United States . Increased prescription opioid usage, rising heroin use, and the use of new synthetic opioids such as fentanyl have been the three major reasons that contributed to the rise in overdose deaths. In Tennessee in 2021, there were 3,814 overdose deaths and 7,063 nonfatal inpatient overdoses . Wilson County, Tennessee saw 63 overdose deaths and 411 nonfatal overdoses in the same time period. While the number of fatal and nonfatal overdoses from drugs is hazardously high, understanding how stigma plays a role in preventing or perpetuating overdoses is important for interventions. The evidence is mounting that stigma is arguably the largest barrier to preventing overdoses .

In the realm of social stigma (the real beliefs and actions of non-stigmatized persons towards the stigmatized), there is a public and provider-based stigma. Four key concepts have emerged from the literature: dangerousness, blame, social distance, and fatalism<sup>11-14</sup>. Dangerousness is the idea that those that carry a stigmatized label such as “drug user” are a threat to the safety of the individual or the community. This area of stigma has been shown to be present in the community and in providers (healthcare and law enforcement). Blame is the view that those who use drugs or are addicts are responsible for their lot. Social distance is the desire to be metaphorically and literally distance and unassociated with those whom carry a stigmatized label. Fatalism is similar to hopelessness but is tied to the stigmatization of those who use drugs. If fatalism is strong, then the idea that “it's not worth it to help this person” prevails.

# How RCORP is Measuring Stigma in Wilson County, TN

Stigma reduction is a critical strategy in multiple cores (overarching program strategies) of the RCORP project. Through marketing and education of the community and providers, it is pertinent to evaluate the levels of stigma in Wilson County and the roles of specific stigma reduction activities in the overarching goal of reducing stigma. This report comprises structural stigma results from law enforcement personnel and community-level level stigma, both highlighted below. Other methods for measuring related forms of stigma are ongoing with the RCORP project.



# Law Enforcement

## Law Enforcement Training

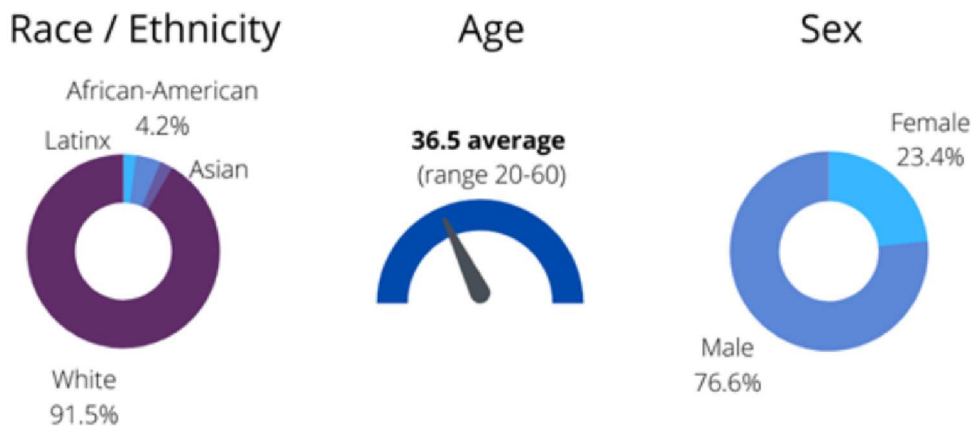
Six virtual (held via Zoom) peer-led harm reduction model presentations were delivered over two days in January 2022, for local law enforcement officers in Wilson County. A total of 172 officers were trained via Zoom and YouTube. These interactive training opportunities were a collaborative effort between the MTSU Center for Health and Human Services and DrugFreeWilCo. These presentations were interactive and led by former NYPD detective Ron Martin. Mr. Martin used his prior work experiences to empathize with officers about the additional stress that substance use and misuse bring to their roles.

## Training Format and Pre/Post Stigma Tool Used

Trainees (N=112) from various roles in law enforcement attended the virtual training and were provided lunch. Participants were asked to complete a pre-and post-training questionnaire to capture several items related to knowledge of substance use disorder, the effectiveness of the training, and indicators of provider-level stigma. The questionnaire was adapted from existing literature, and prior surveys were used to assess provider-level stigma (Appendix A). The survey and data collection procedures were approved by the Human Subjects Institutional Review Board at MTSU under protocol: 22-1072 1q.

# Results

Of the 112 law enforcement personnel trained, a portion (N=52) agreed to participate in the pre-training survey, and fewer (N=18) in the post-training survey. Because of this, limited analyses were conducted to look at changes pre/post-training. Regardless, those filling out the pre-training provide descriptive statistics on beliefs and stigma associated with substance use. Of those participating, 91% were white, 77% male, and were an average age of 36.5 (Figure 1).



**Figure 1. Law Enforcement Training Participant Demographics**



# Results Continue

Participants were asked about the demographics of a ‘typical’ drug user in their mind. Less than a quarter of participants believed a typical drug user was male and belonged to the lower class, three-quarters to be any race, and less than half were employed (Figure 2).

## Beliefs about a typical user (%)

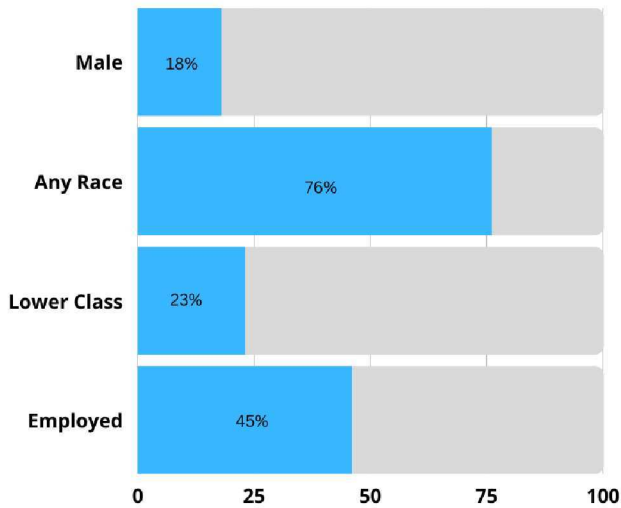
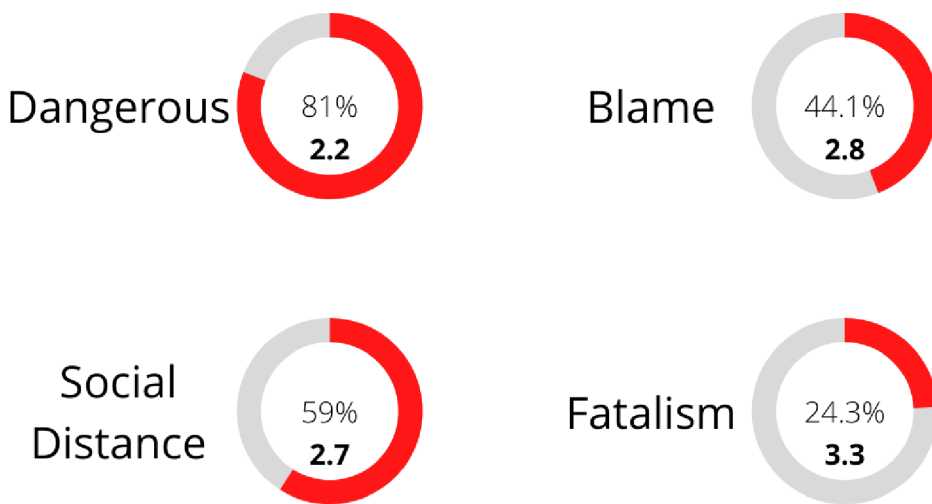


Figure 2. Beliefs about a typical drug user (%)

When examining different domains of the stigma associated with substance use disorder, dangerousness and blame were the most prominent, where social distance and fatalism had mixed levels of stigma. Dangerousness was the strongest form of stigma indicated by the individual-level statements, whereas fatalism was the weakest form of stigma present (Figure 3).



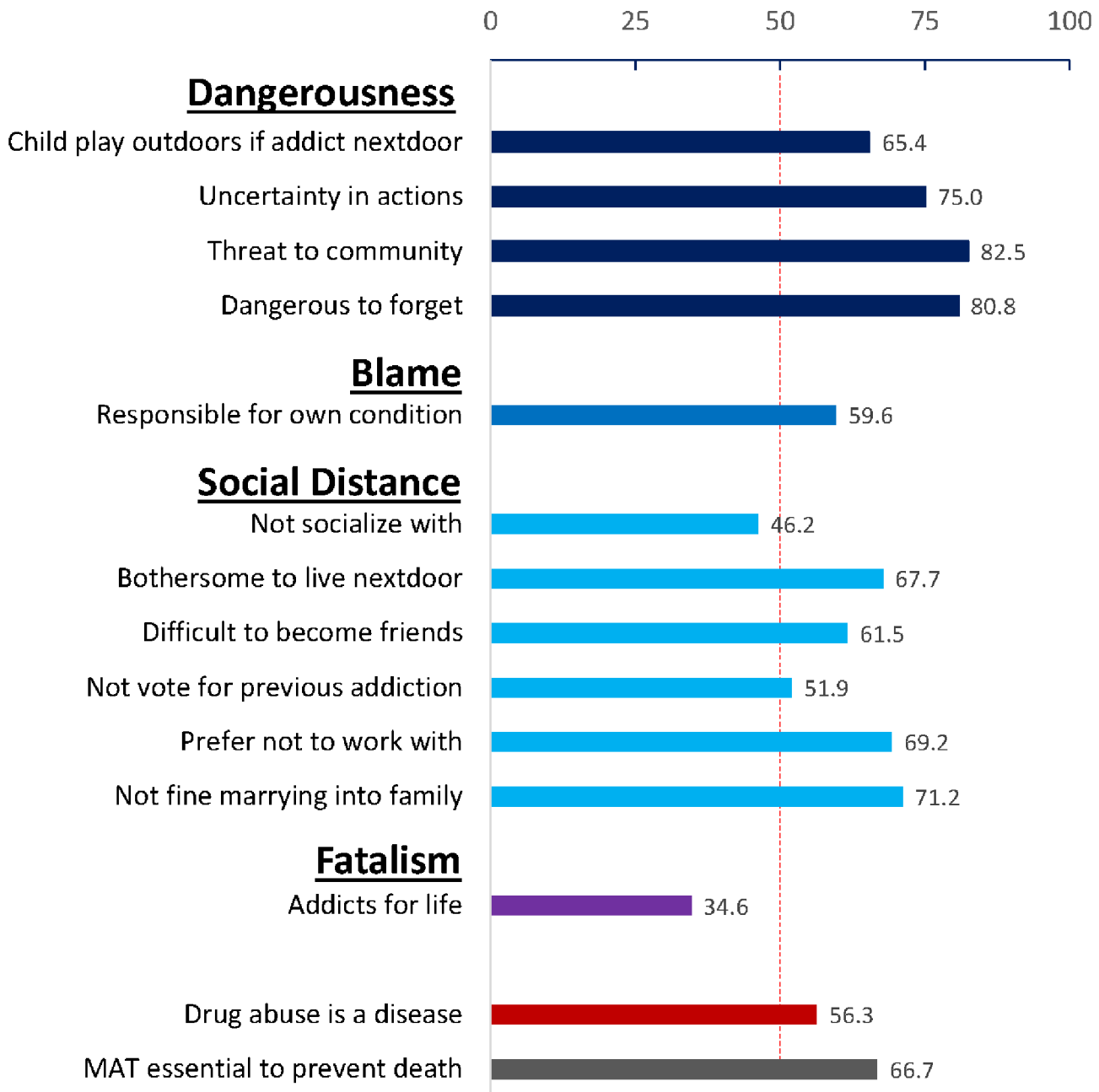
On a scale of 1= Strongly Agree to 5=Strongly Disagree

Figure 3. Average scores per stigma domain among law enforcement personnel.



# Results Continue

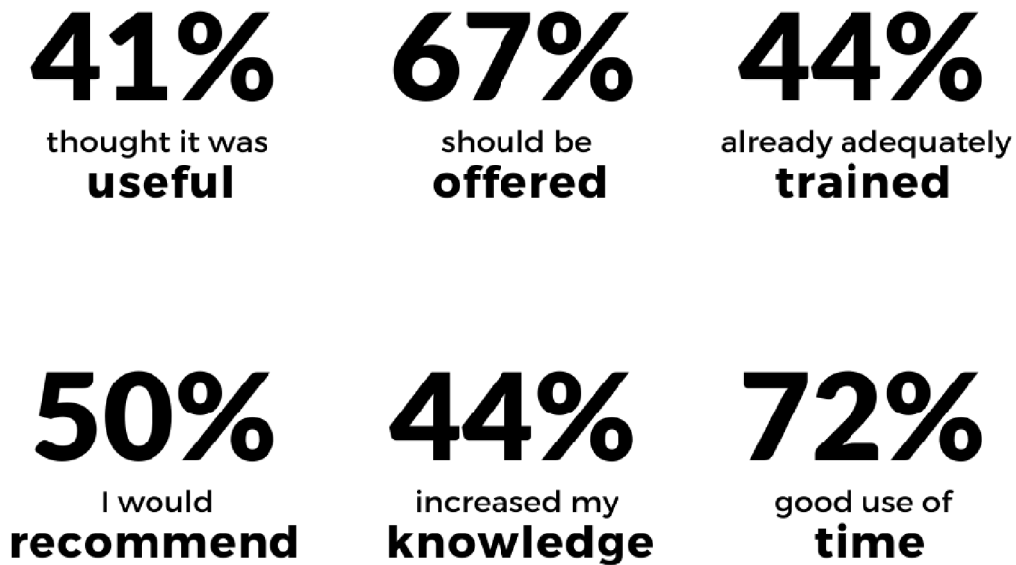
Over 56% of law enforcement personnel agreed that addiction is a disease and 67% thought medically assisted treatment (the use of prescription drugs to manage addiction) was an effective tool for opioid use disorder (Figure 4).



**Figure 4. What law enforcement personnel think of drug users in specific situations.**

# Results Continue

There were no significant differences in pre-post training items, likely due to the low number of participants and probably bias associated with those who were willing to fill out the survey twice. Of those that did complete the post-training survey, there were favorable responses when asked about the training itself (Figure 5). The majority of trainees thought the training was a good use of time (72%), that it should be offered again (67%), and would recommend it to other law enforcement personnel (50%).



**Figure 5. The proportion of law enforcement reactions to the training.**

## **These data points outline that:**

Provider-level stigma is measurably present in Law Enforcement Opportunities for further training

The survey also included an open-ended question for participants to include any comment about the training. The following quote was taken from the results:

“We all work in this field with a bias already and with the right information and tools the next generation of LEO learning from us, and I saw a lot of LEO leaders in this group, we could definitely get the wheels moving so that the newer guys do not wind up with the same biases we hold.”

# Community

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## Setting

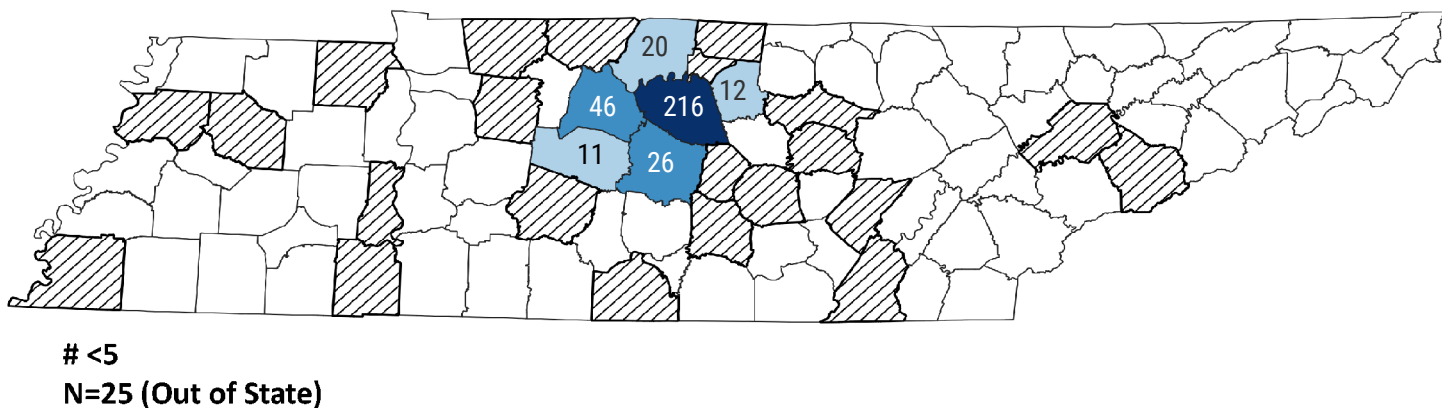
To capture community thoughts and perceptions about those who use drugs, the RCORP team targeted a mass community event to survey residents, the Wilson County- Tennessee State Fair. The fair took place in Wilson County from August 18 – 27, 2022, with 776,195 visitors. Each year, DrugFree WilCo operates a booth at the fair, passing out SUD/ODU resources and providing training for Naloxone. To leverage DrugFree WilCo’s participation in the Fair and its audience, the RCORP team coordinated to collect surveys from willing participants.

## Data Collection and Cleaning

RCORP staff and MTSU student volunteers attended that fair and administered the previously used questionnaire, which included minor adaptations and additions (Appendix B) to survey attendees about their perceptions and beliefs of those that use drugs. We asked fair attendees about their memory of seeing RCORP/Drug Free WilCo billboard signs around the county and how frequently. The survey instrument took approximately five minutes to complete. Data collection teams attended the fair on four dates spread out throughout the duration of the fair to limit selection bias: Saturday, August 20, Sunday, August 21, Thursday evening, August 25, and Saturday, August 27. Interviewers approached any adult they encountered at the fair, provided information about the survey and project, and asked the adult to complete the survey using a hard copy paper form or an electronic version using a QR code linked to an online Qualtrics Survey. After four days of data collection, 413 surveys were at least partially filled out with the majority being paper based (79%). Surveys that were mostly incomplete, lacked informed consent or were missing an entire section were dropped from the final analysis. We used Stata Version 17 (College Station, TX) and QGIS 3.26 (Boston, MA) to perform all analyses for this report. The survey and data collection procedures were approved by the Human Subjects Institutional Review Board at MTSU under protocol: 22-1072 1q.

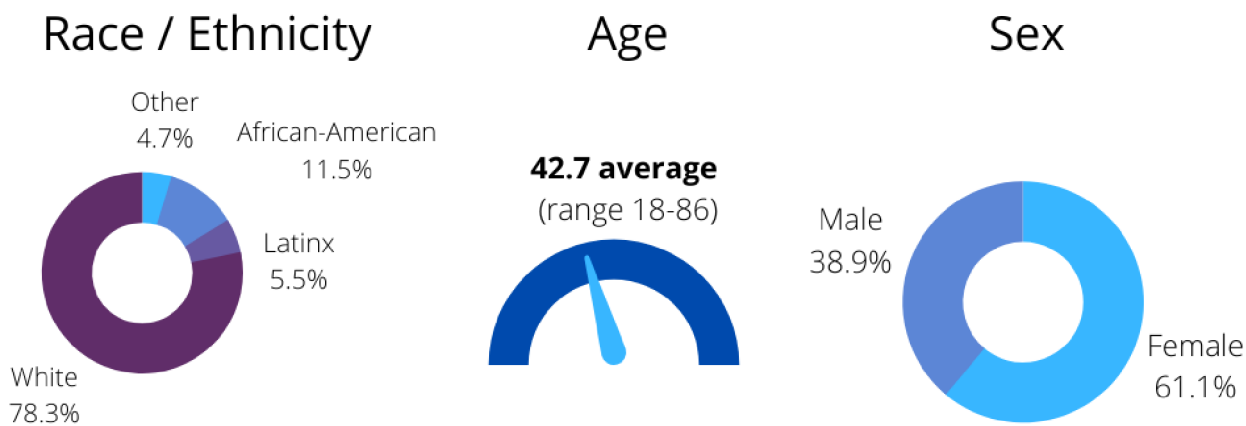
# Results

After 26 hours of surveying fair attendees over four days and cleaning the data, 393 completed surveys were obtained (online N=76; paper N=326). The majority of surveys were completed by Wilson County residents N=216 (55%). When Wilson County and the direct neighboring counties are counted together, 83% of surveys came from the region (Figure 6).



**Figure 6. Map of where respondents reside.**

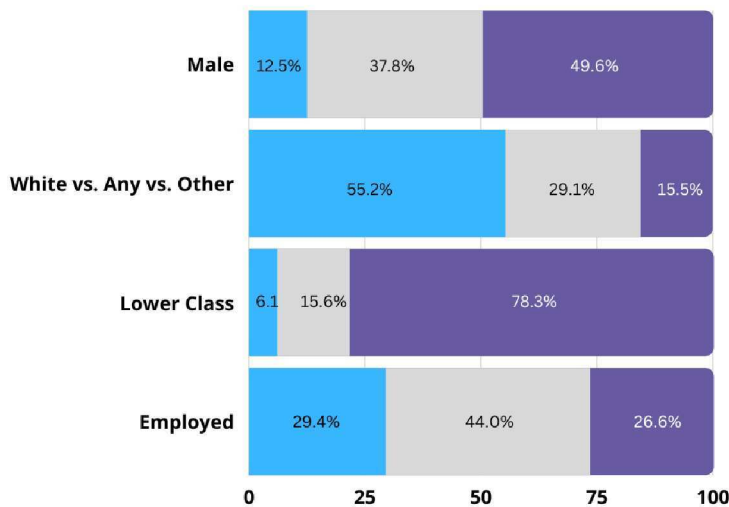
Among those filling out the survey, 78% were white, 39% male, and were an average age of 43 (Figure 4). These community member demographics are in sharp contrast to the law enforcement personnel participants, but gender and age align closer to the census estimates for Wilson County, TN where the proportion of males is 49% and the median age is 40<sup>16</sup>.



**Figure 7. Participant demographics.**

# Results

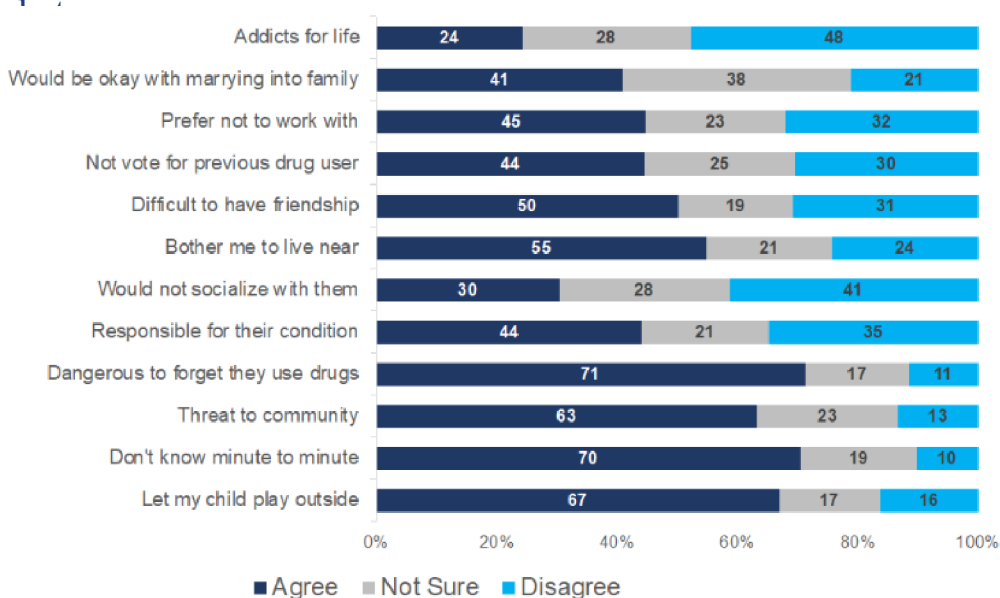
When we asked participants of particular beliefs about those that use drugs, several areas emerged as potential education targets. According to the Tennessee Department of Health Overdose Data<sup>6</sup>, in 2021, 66% of overdose deaths were among men, and 78% among whites. Income and education have also long been linked with nonfatal and fatal overdoses<sup>17-18</sup>. In our sample, respondents agreed with the statement that a typical drug user was male (12.5%), white (55%), low-income (6.1%), and unemployed (29.4%). Large proportions were unsure of who a typical drug user was as well (Figure 8). These are areas for education emphasis.



**Figure 8. Beliefs about a typical drug user**

**Note: Blue = Agree; Grey = Unsure; Purple = Disagree**

When asked whether or not they agreed with a particular statement, respondents reported varying levels of associated stigma around dangerousness, blame, social distance, and fatalism (Figure 9). Of note, 52% agree or are unsure that an addict is addicted for life, a common indicator question to the drug-disease framework of prevention and control of

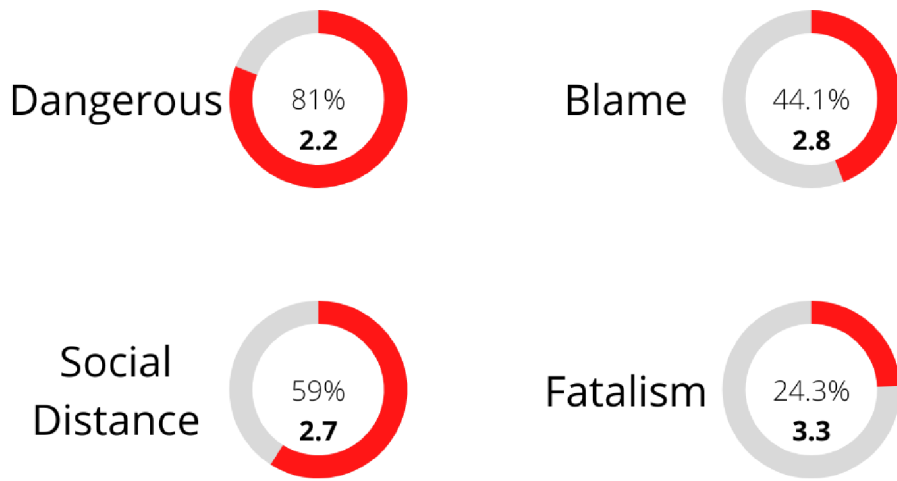


**Figure 9. What people think of drug users in different situations.**

**Participants were asked whether they agreed or disagreed to the statements.**

# Results

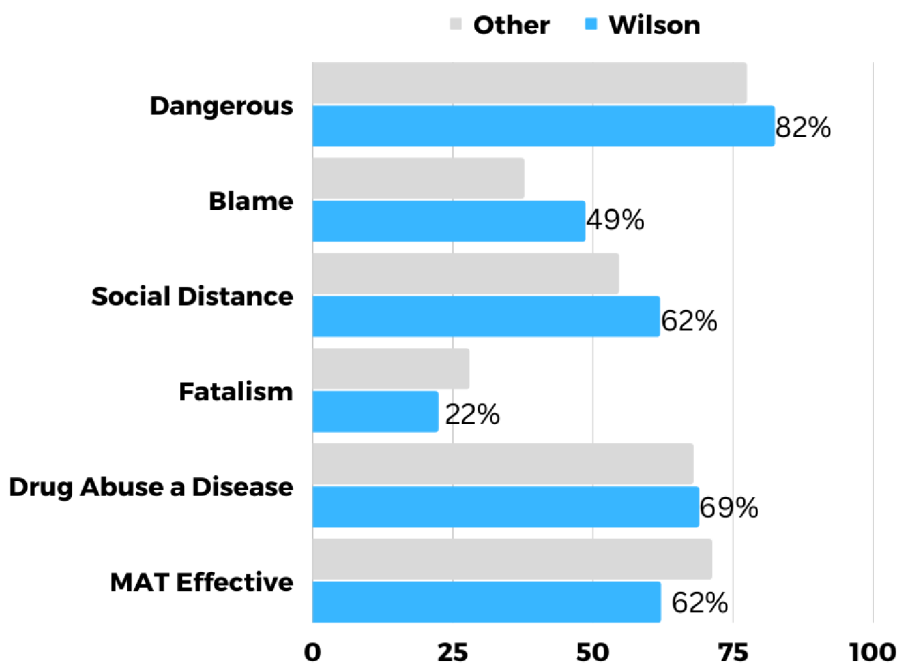
The strongest component of stigma found was dangerousness and the weakest component was fatalism (Figure 10).



**Figure 10. Average score of stigma domain.**

On a scale of 1= Strongly Agree to 5=Strongly Disagree

The lower the score, the stronger the stigma in the domain. Note: 1=Strongly agree, 5=Strongly disagree. % = the proportion of respondents who showed some level of agreement to the domain. When comparing stigma-related questions from Wilson County respondents to those outside the county, no statistical differences were noted (Figure 11).

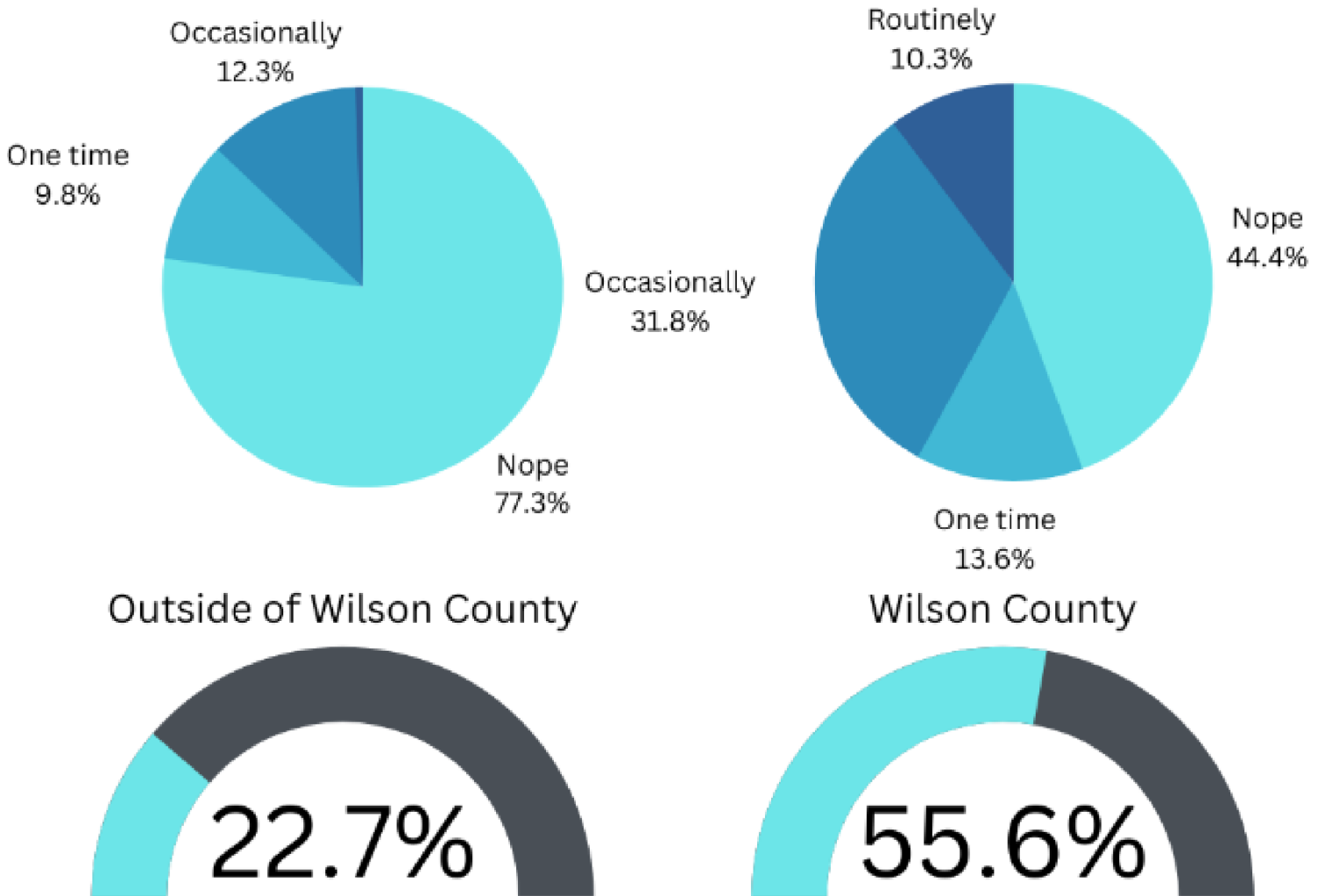


**Figure 11. Stigma domains and Wilson County status.**

# Results

Billboards were reasonably and noticeably more effective in reaching Wilson County residents (Figure 12). The majority of Wilson County residents said they had seen a billboard at least once. Of note, the billboards ran from March 2022 to December 2022, before being asked in August 2022. In addition to the far reach of the billboards in Wilson County (55.6%), even respondents who did not reside in Wilson County reported seeing a billboard at least once (22.7%). These data highlight the excellent reach and placement of the billboards, an important step in reducing stigma in the community.

## Have you seen any of the billboards?



**Figure 12. Billboard viewing frequency by Wilson County status.**



# Community-based work

The CHHS RCORP team, in collaboration with M.P.H. students at MTSU, developed a questionnaire to measure components of stigma based on previous research. Students and staff attended the Wilson County and State Fair of Tennessee on four days between August 18–27, 2022, and collected over 400 completed questionnaires (N=407) from 41 Tennessee counties. The majority (54%) of the questionnaires were from adults in Wilson County. The data analysis is currently underway looking at stigma and different associations.





# References:

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1. Goffman, E. (2009). *Stigma: Notes on the management of spoiled identity*. Simon and Schuster.
2. Dovidio, J. F., Major, B., Crocker, J., Heatherton, T. F., Kleck, R. E., Hebl, M. R., & Hull, J. G. (2000). The social psychology of stigma. *Stigma: Introduction and overview*, 1-28.
3. Stangl, A. L., Earnshaw, V. A., Logie, C. H., van Brakel, W., C. Simbayi, L., Barré, I., & Dovidio, J. F. (2019). The Health Stigma and Discrimination Framework: A global, crosscutting framework to inform research, intervention development, and policy on health-related stigmas. *BMC Medicine*, 17(1), 31. <https://doi.org/10.1186/s12916-019-1271-3>
4. Frenk SM, Porter KS, Paulozzi LJ, 2015. Prescription opioid analgesic use among adults: United States, 1999–2012.
5. Wide-ranging online data for epidemiologic research (WONDER). Atlanta, GA: CDC, National Center for Health Statistics; 2021.
6. TDH Drug Overdose Data Dashboard. Tennessee State Government - TN.gov, <https://www.tn.gov/health/health-program-areas/pdo/pdo/data-dashboard.html>.
7. Buchman DZ, Leece P and Orkin A (2017) The epidemic as stigma: the bioethics of opioids. *Journal of Law, Medicine & Ethics* 45(4): 607–620.
8. Kennedy-Hendricks A, Barry CL, Gollust SE, Ensminger ME, Chisolm MS and McGinty EE (2017) Social stigma toward persons with prescription opioid use disorder: associations with public support for punitive and public health-oriented policies. *Psychiatric Services* 68(5): 462–469.
9. Kruis NE and Choi J (2020) Exploring social stigma toward opioid and heroin users among students enrolled in criminology, nursing, and EMT/paramedic courses. *Journal of Criminal Justice Education* 31: 319–340.
10. McGinty EE, Stone EM, Kennedy-Hendricks A and Barry CL (2019) Stigmatizing language in news media coverage of the opioid epidemic: implications for public health. *Preventive Medicine* 124: 110–114.
11. Barry CL, McGinty EE, Pescosolido BA, and Goldman HH (2014) Stigma, discrimination, treatment effectiveness, and policy: public views about drug addiction and mental illness. *Psychiatric Services* 65(10): 1269–1272.
12. Brown SA (2011) Standardized measures for substance use stigma. *Drug and Alcohol Dependence* 116(1): 137–141.
13. Ding L, Landon BE, Wilson IB, Wong MD, Shapiro MF, and Cleary PD (2005) Predictors and consequences of negative physician attitudes toward HIV-infected injection drug users. *Archives of Internal Medicine* 165(6): 618–623.
14. Link BG, Phelan JC, Bresnahan M, Stueve A and Pescosolido BA (1999) Public conceptions of mental illness: labels, causes, dangerousness, and social distance. *American Journal of Public Health* 89(9): 1328–1333.
15. Humbles, A. (n.d.). 2022 Wilson County Fair – Tennessee State Fair breaks this record: “We’re ahead.” *The Tennessean*. Retrieved December 7, 2022, from <https://www.tennessean.com/story/news/local/wilson/2022/08/30/whats-next-wilson-county-tennessee-fair-after-record-attendance/7888139001/>
16. U.S. Census Bureau. *Census.gov*, 4 Dec. 2022, <https://www.census.gov/>.
17. Altekruise, S. F., Cosgrove, C. M., Altekruise, W. C., Jenkins, R. A., & Blanco, C. (2020). Socioeconomic risk factors for fatal opioid overdoses in the United States: Findings from the Mortality Disparities in American Communities Study (MDAC). *PLoS ONE*, 15(1), e0227966. <https://doi.org/10.1371/journal.pone.0227966>
18. Martins, S. S., Kim, J. H., Chen, L.-Y., Levin, D., Keyes, K. M., Cerdá, M., & Storr, C. L. (2015). Nonmedical prescription drug use among US young adults by educational attainment. *Social Psychiatry and Psychiatric Epidemiology*, 50(5), 713–724. <https://doi.org/10.1007/s00127-014-0980-3>

# Appendix A

## RCORP Professional Development and Training Activities: Pre-Test

Start of Block: Consent Questions

Q1 Informed Consent - Rural Communities Opioid Response Program (RCORP) - Professional Development and Training Activities

Thank you for agreeing to participate in this evaluation as a participant in one of the Wilson County RCORP Law Enforcement or Substance Use Provider training program sessions.

Please provide any of the following information below that you feel comfortable sharing. These data will help the evaluation team in assessing the training's effectiveness.

### Information and Disclosure Section

The following information is provided to inform you about the research project in which you have been invited to participate. Please read this disclosure and feel free to ask any questions. The investigators must answer all of your questions and please save this page as a PDF for future reference. Your participation in this research study is voluntary. You are also free to withdraw from this study at any time without loss of any benefits. For additional information on your rights as a participant in this study, please contact the Middle Tennessee State University (MTSU) Office of Compliance (Tel 615-494-8918 or send your emails to [irb\\_information@mtsu.edu](mailto:irb_information@mtsu.edu). (URL: <http://www.mtsu.edu/irb>). Please read the following and respond to the consent questions at the bottom if you wish to enroll in this study.

**Purpose:** This evaluation is designed to help us measure the impact of opioid/substance use disorder training and stigma in Wilson County, TN.

**Description:** This research project consists of completing a pre- and post-training program survey. One professional development training program focusing on opioid use disorder and billing procedures will be conducted for Wilson County, TN substance use treatment providers and six separate professional development training opportunities focusing on opioid use disorder will be conducted for Wilson County, TN law enforcement personnel. Those substance use treatment providers participating in the professional development training program will be given an opportunity to complete a survey that measures changes in knowledge pre- and post-program. Law enforcement personnel participating in the professional development training program will be given an opportunity to complete a survey that measures changes in knowledge pre- and post-program as well as stigma and attitudes about individuals with substance use disorder and opioid use disorder (SUD/OD). These data will provide detailed information to assess the effectiveness of the training program in increasing knowledge in the topic area as well as stigma and attitudes towards SUD/OD. An analysis of these data will inform future education, training, and program implementation efforts in the county.

### IRB Approval Details

Protocol Title: Rural Communities Opioid Response Program - Professional Development and Training Activities>Primary Investigators: Cynthia Chafin, M.Ed., MCHES, and Kahler Stone, DrPH, MPH

PI Department & College: Health and Human Performance / College of Behavioral and Health Sciences

Protocol ID: 22-1072 1q

**Duration:** The whole research activity should take no longer than 15 minutes each, or an estimated total of 30 minutes, for a pre-and post-training online survey. Note that the training program, which is not considered the research study, will take approximately 40 minutes for the law enforcement training or 3 hours for the substance use treatment provider training program.

Here are your rights as a participant:

Your participation in this research is voluntary. You may skip any item that you don't want to answer, and you may stop the experiment at any time (but see the note below) If you leave an item blank by either not clicking or entering a response, you may be warned that you missed one, just in case it was an accident. But you can continue the study without entering a response if you didn't want to answer any questions. Some items may require a response to accurately present the survey.

**Risks & Discomforts:** There is minimal risk to subjects participating in this study which consists of completing a survey before and after an online educational professional development training activity. The potential benefits fully outweigh any potential risks. Risks would be no more than those faced by participants when taking a survey for personal or professional purposes. It is possible that participants might feel emotional distress when discussing the burden of opioid and substance use disorder rates and deaths in Wilson County, but no more than a normal daily conversation might.

**Benefits:** Benefits to you that you may not receive outside this research: Study participants (law enforcement and substance use treatment providers) will not directly benefit by participating in this research activity of completing a pre-and post-program survey, though they may benefit from the associated training program through increased knowledge about substance use and mental health issues and treatment that may be relevant to individuals they serve in their professions and daily work. Some participants (substance use treatment providers) will also gain increased knowledge of billing and administrative procedures which will allow them to do their jobs more effectively as it pertains to new requirements for certain conditions and treatments. Subjects will not have any direct benefits otherwise. Benefits to the field of science or the community: This study will allow researchers to determine if the training program delivered to law enforcement personnel and substance abuse treatment providers are more informed about stigma and perceptions of those with mental health and substance abuse disorders, effective treatments, and billing and administrative procedures (substance abuse treatment providers only). Wilson County residents are ultimately the greatest beneficiaries, as this training program will be used to help plan local education, training, and outreach programs that support the goal of reducing OUD/SUD rates and deaths in the county. Study results will be shared with regional and national networks including other HRSA planning grantees and public health conferences. The results of this research will also be published in research journals that explore needs and gaps in fighting OUD/SUD rates and deaths.

**Identifiable Information:** No personally identifiable information will be collected.

**Compensation:** There is no compensation for participating in this study.

**Confidentiality.** All efforts, within reason, will be made to keep the information provided private, but total privacy cannot be promised. Your information may be shared with MTSU or the government, such as the Middle Tennessee State University Institutional Review Board, Federal Government Office for Human Research Protections, if you or someone else is in danger or if we are required to do so by law.

**Contact Information:** If you should have any questions about this research study or possibly injury, please feel free to contact Cynthia Chafin, at [Cynthia.Chafin@mtsu.edu](mailto:Cynthia.Chafin@mtsu.edu) and 615-898-5493 OR Kahler Stone by telephone at 615-494-7898 or by email at [Kahler.Stone@mtsu.edu](mailto:Kahler.Stone@mtsu.edu). You can also contact the MTSU Office of compliance via telephone (615 494 8918) or by email ([compliance@mtsu.edu](mailto:compliance@mtsu.edu)). This contact information will be presented again at the end of the study.

# Appendix A

**You are not required to do anything further if you decide not to enroll in this study. Just quit your browser. Please complete the response section below if you wish to learn more or you wish to part take in this study.**

Q2 I have read this informed consent document pertaining to the above-identified research

Yes (1)

No (2)

Skip To: End of Survey If I have read this informed consent document pertaining to the above-identified research = No

Q3 The research procedures to be conducted are clear to me

Yes (1)

No (2)

Skip To: End of Survey If The research procedures to be conducted are clear to me = No

Q4, I confirm I am 18 years or older

Yes (1)

No (2)

Skip To: End of Survey If I confirm I am 18 years or older = No

Q5 I am aware of the potential risks of the study

Yes (1)

No (2)

Skip To: End of Survey If I am aware of the potential risks of the study = No

Q6 By clicking below, I affirm that I freely and voluntarily choose to participate in this study. I understand I can withdraw from this study at any time without facing any consequences.

No, I do not consent (1)

Yes, I consent (2)

Skip To: End of Survey If By clicking below, I affirm that I freely and voluntarily choose to participate in this study. ... = NO, I do not consent

End of Block: Consent Questions

Start of Block: Pre-Test Stigma Questions

Display This Question:

If I have read this informed consent document pertaining to the above-identified research = Yes

And The research procedures to be conducted are clear to me = Yes

And I confirm I am 18 years or older = Yes

And I am aware of the potential risks of the study = Yes

And By clicking below, I affirm that I freely and voluntarily choose to participate in this study. ... = Yes, I consent

Thank you for agreeing to participate in this study in either a focus group or key informant interview!

Display This Question:

If I have read this informed consent document pertaining to the above-identified research = Yes

And The research procedures to be conducted are clear to me = Yes

And I confirm I am 18 years or older = Yes

And I am aware of the potential risks of the study = Yes

And By clicking below, I affirm that I freely and voluntarily choose to participate in this study. ... = Yes, I consent

Q7 All responses are anonymous and confidential. To do that, a unique code for you will be created by answering the next two questions. Please enter:

First 3 letters of your mother's first name (example: Karen = kar): (1) \_\_\_\_\_

Two-digit number of your birth month (example: Jan = 01): (2) \_\_\_\_\_

# Appendix A

Q8 Please indicate how strongly you agree or disagree with the following statements:

	<b>Strongly Agree (1)</b>	<b>Agree (2)</b>	<b>Not sure (3)</b>	<b>Disagree (4)</b>	<b>Strongly Disagree (5)</b>
If I knew that a heroin addict lived nearby, I would not allow my children to play alone outside (4)					
One important thing about people addicted to heroin or opioids is that you cannot tell what they will do from one minute to the next (5)					
People who use heroin or opioids are a threat to the safety of our community (24)					
Although some heroin/opioid users may seem all right it is dangerous to forget that they are drug users (26)					
Persons addicted to heroin and/or opioids are usually responsible for their own condition (10)					
If I knew someone was addicted to heroin or opioids, I would try not to socialize with them (13)					
It would bother me to live near a person who used heroin or opioids (29)					
It would be difficult for me to develop a friendship with someone who uses heroin or opioids (30)					
I would not vote for a politician if I knew they had been addicted to heroin or opioids. (31)					

# Appendix A

Q8 Please indicate how strongly you agree or disagree with the following statements:

	<b>Strongly Agree (1)</b>	<b>Agree (2)</b>	<b>Not sure (3)</b>	<b>Disagree (4)</b>	<b>Strongly Disagree (5)</b>
If I could, I would prefer not to work with someone who was a known user of heroin or opioids (17)					
I would be fine letting someone who had a history of opioid and heroin use marry into my family (32)					
Most people who become addicted to heroin or opioids are addicts for life (34)					
A typical drug user belongs to the lower class (35)					
Males are more likely to be a drug user (36)					
Most drug users are employed (37)					
Drug abuse is a disease (38)					
Medicated assisted treatment (MAT) programs can be an essential tool in aiding in treatment and preventing overdose deaths? (39)					

# Appendix A

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## End of Block: Pre-Test Stigma Questions

### Start of Block: Controls

Q9 From your experiences a typical drug user is which race/ethnicity?

Black or African American (1)

American Indian / Alaskan Native (7)

Asian (3)

Hispanic or Latinx (4)

White (6)

Not Listed (5) \_\_\_\_\_

Q10 What is your age?

▼ 18 (18) ... 95+ (95)

Q11 What is your gender?

Man (1)

Woman (2)

Not Listed (3) \_\_\_\_\_

Q12 What is your Race/ethnicity?

Black or African American (1)

American Indian / Alaskan Native (2)

Asian (3)

Hispanic or Latinx (4)

White (5)

Not Listed (6) \_\_\_\_\_

Q13 Are you a law enforcement officer?

Yes (1)

No (2)

Skip To: Q14 If Are you a law enforcement officer? = Yes

Skip To: Q15 If Are you a law enforcement officer? = No

Q14 If yes, how many years have you been in law enforcement?

▼ 18 (18) ... 95+ (95)

Q15 If no, please type your job title:

\_\_\_\_\_

### End of Block: Controls



# Appendix B

## Opioid Use Disorder Questionnaire — Tennessee State Fair 2022

Date: \_\_\_\_\_



Public Health

MIDDLE TENNESSEE STATE UNIVERSITY

Interviewer initials: \_\_\_\_\_

- I have read this informed consent document pertaining to the above-identified research..... Yes No  
 The research procedures to be conducted are clear to me..... Yes No  
 I confirm I am 18 years or older..... Yes No  
 I am aware of the potential risks of the study..... Yes No

I affirm that I freely and voluntarily choose to participate in this study. I understand I can withdraw from this study at any time without facing any consequences..... Yes No

1(8). Please indicate how strongly you agree or disagree with the following statements:

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree
A If I knew that a heroin addict lived nearby, I would not allow my children to play alone outside	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
B One important thing about people addicted to heroin or opioids is that you cannot tell what they will do from one minute to the next	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
C People who use heroin or opioids are a threat to the safety of our community	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
D Although some heroin/opioid users may seem all right it is dangerous to forget that they are drug users	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
E Persons addicted to heroin and/or opioids are usually responsible for their own condition	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
F If I knew someone was addicted to heroin or opioids, I would try not to socialize with them	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
G It would bother me to live near a person who used heroin or opioids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
H It would be difficult for me to develop a friendship with someone who uses heroin or opioids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
I I would not vote for a politician if I knew they had been addicted to heroin or opioids.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
J If I could, I would prefer not to work with someone who was a known user of heroin or opioids	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
K I would be fine letting someone who had a history of opioid and heroin use marry into my family	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
L Most people who become addicted to heroin or opioids are addicts for life	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
M A typical drug user belongs to the lower class	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# Appendix B

N	Males are more likely to be a drug user	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
O	Most drug users are employed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
P	Drug abuse is a disease	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Q	Medicated assisted treatment (MAT) programs can be an essential tool in aiding in treatment and preventing overdose deaths?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**2(9). From your experiences a typical drug user is which race/ethnicity?**

- Black or African American    American Indian / Alaskan Native    Asian    Hispanic or Latinx    White    Not Listed

**3(10). What is your age (in years)?** \_\_\_\_\_

**4(11). What is your gender?**

- Man    Woman    Not Listed \_\_\_\_\_

**5(12). What is your race/ethnicity?**

- Black or African American    American Indian / Alaskan Native    Asian    Hispanic or Latinx    White    Not Listed

**6(13). Have you seen any of the DrugFree WilCo billboards displayed in Wilson County in the past year?**

- Nope, I haven't seen any of them  
 I saw at least one, but only once  
 I saw one or more occasionally  
 I see/saw them routinely when they were up

**7(14). What County do you reside?**

\_\_\_\_\_ or  Outside of Tennessee

**8(15). Are you willing to be contacted in the future via email for a follow-up telephone interview as part of a qualitative study on substance use in TN?..... Yes   No thanks!**

**9(16). Thank you for completing the survey!**

Please enter your **email address** below to be entered into the drawing for a **\$150 Kroger Gift Card**:

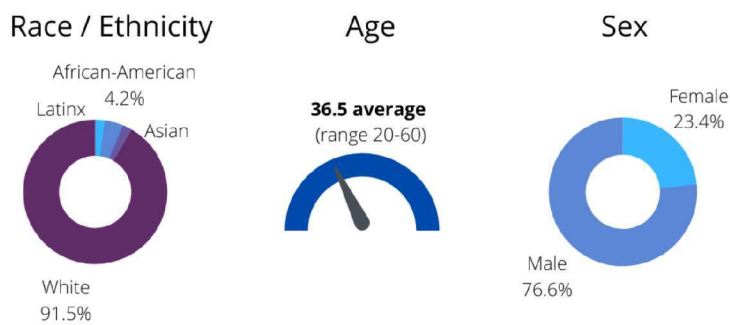
\_\_\_\_\_

***We thank you for your time!***

# Appendix C

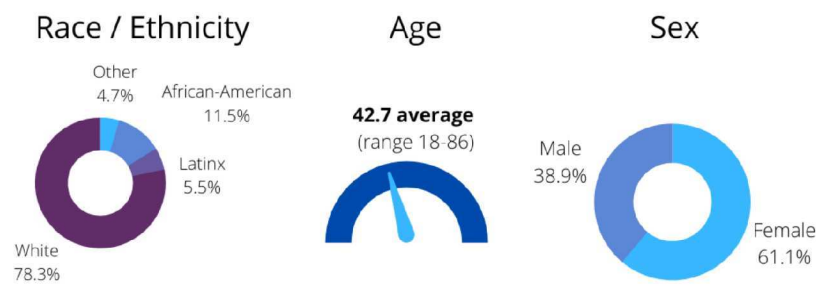
Side-by-side comparison of Law Enforcement and Community samples:

## Law Enforcement Sample



On a scale of 1= Strongly Agree to 5=Strongly Disagree

## Community Sample



On a scale of 1= Strongly Agree to 5=Strongly Disagree