Pennsylvania's Stigma Reduction Opioid Behavior Change Campaign

Public Web Survey: 18-Month Campaign Evaluation

Report of Methods

Submitted to:

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INTRODUCTION

Pennsylvania's Stigma Reduction Opioid Behavior Change Campaign: 18-Month Public Survey (18-Month) was a web survey lead by the Douglas W. Pollock Center for Addiction and Outreach with support from the Center for Survey Research (CSR) at Penn State Harrisburg. CSR's standard Lion Poll methodology was used to guide data collection. This survey was conducted as a follow-up to the Baseline survey conducted in June – July 2020, the 6-Month survey conducted in February – March 2021, and the 12-Month survey conducted in September – November 2021. In addition to comparing results to the other surveys, this survey also assessed familiarity and interactions with the Life Unites Us stigma reduction campaign.

A total of 1,028 web surveys were completed by adult Pennsylvanians between March 31 and May 10, 2022. The 18-Month survey used a quota-based invitation system to produce a final dataset that is representative of Pennsylvania's population by region and, separately, by age/sex combined categories. Project activity was directed by Dr. Weston Kensinger, Primary Investigator and Director of the Douglas W. Pollock Center for Addiction and Outreach at Penn State Harrisburg.

The 18-Month survey was part of a larger study to better understand stigma associated with opioid and substance use disorders in Pennsylvanians. The 18-Month survey examined Pennsylvanians':

- General attitudes towards opioid and substance use disorders,
- Attitudes towards policy related to opioid and substance use disorders,
- Attitudes towards public stigma related to opioid and substance use disorders,
- Attitudes towards self-stigma related to opioid use disorder, and
- Familiarity and interactions with the Life Unites Us stigma reduction campaign.

Data Analysis Notes

The following notes should be taken into account when reviewing the final dataset:

- 1. Rake weighting was employed to ensure representativeness by gender, age, race/ethnicity, educational attainment, PA Department of Health region, and urban/rural status.
- 2. Percentages may not total to 100% due to the exclusion of 'Don't know' responses.
- 3. See Appendix A of the report for a map and list of the Pennsylvania regions used for establishing Census quotas.
- 4. See Appendix B for the survey questions and demographics used in data collection.

METHODOLOGY

Instrument Development

In addition to using the questions from the 12-Month survey, the Penn State project team worked in consultation with other research team members to add questions exploring differences in stigma pertaining to various substances. In addition, questions that were deemed to be no longer necessary were removed.

The instrument was programmed using Qualtrics web survey software. Qualtrics' online survey platform allows for complex question patterns and automatic skipping when appropriate to create a seamless flow from one question to the next for respondents.

Institutional Review Board

The study protocol and survey instrument that were previously submitted to and approved by Penn State University's Office for Research Protections as exempt research under study number 00014476 were re-submitted as a modified protocol. These modifications were approved as exempt research under submission number 28978.

Respondent Recruitment

CSR utilized Marketing Systems Group (MSG) of Horsham, Pennsylvania to recruit respondents who had previously signed up to participate in a variety of web survey panels in exchange for nominal compensation. These web survey panels were constructed utilizing a double opt-in recruitment technique. In a double opt-in system, the potential respondents provide their email address to indicate interest in participating in the panel. An automated email is then sent to the email address provided to ensure that the owner of the email address is aware of the intended use. Once the email owner confirms their interest in participating, the individual becomes part of the panel. After providing information on a wide variety of demographic topics to establish a panelist profile, the panelist is eligible to participate in future surveys. A double opt-in system guarantees that all respondents have provided explicit consent to be contacted for marketing and/or research purposes in compliance with all applicable federal laws.

MSG sent emails to potential respondents that included a customized link with a respondent identifier. This link took the potential respondent directly to the web survey programmed in CSR's

Qualtrics account. Upon successful completion of the survey, CSR re-directed the respondent to the appropriate panel provider via a customized link that included the unique respondent identifier. As a result of this setup, only members of the CSR project team had access to the survey results and no one from the research team ever had access to any personally identifiable information of any of the survey respondents. Identifiers were destroyed immediately upon data collection completion.

In addition, CSR recruited respondents via public posts on social media sites Facebook and Instagram. This was done to ensure representation of respondents 45 and older. The social media sites never had access to any respondent data, and CSR never learned the respondents' identities because respondents were directed to the survey via anonymous links. Social media respondents were not compensated for their participation.

Response Quality

Regular panel maintenance was performed to ensure that high-quality respondents were being utilized in the survey. First, answers to demographic questions were periodically checked to make sure that they matched with the initial panel profile established by respondents. CSR also asked screening questions in such a way that the potential respondents did not know what characteristics were required for participation. Since panelists are paid for their participation, this decreases the chance of the respondent fabricating answers to gain access to the study.

CSR also embedded attention check questions into the survey to confirm that respondents were carefully reading and responding to questions. If a respondent answered an attention check question incorrectly, their survey was immediately terminated, and their response was removed from the final dataset. In addition, CSR identifies these responses as "low-quality," and panelists are excluded from participation in future surveys after three low-quality responses. The final dataset was also checked for duplicate responses using key demographic indicators. Finally, CSR reviewed responses for other quality measures, such as survey duration (outlying surveys that were completed very quickly were removed) and open-ended response quality to prevent automated (bot) responses from being included in the final dataset.

Sample Representation

The sample frame for the survey consisted of two groups of adult Pennsylvanians: Individuals who signed up to participate in an opt-in panel and individuals who had the capacity to view CSR's social media posts. Potential respondents were invited from the universe of all available panelists on the basis of the Pennsylvania county, age, and gender indicated in their panelist profile. These questions were also asked as screener questions at the beginning of the survey to guarantee that the respondent matched the expected profile. Adult Pennsylvanians who viewed CSR's social media posts were also include in the sample. Potential respondents did not have to belong to a social media site in order to view the public posts or participate in the survey; however, paid advertisements were used to target users of Facebook and Instagram who were 45 and older. County, zip code, age, and gender were also asked as screener questions at the beginning of the survey to guarantee that respondents matched expected profiles and were qualified to participate in the survey.

To ensure that the results of the survey were not biased toward any particular location, age, or sex, CSR programmed quotas into the Qualtrics web survey platform to guarantee that the final dataset would be representative of Pennsylvania's known population by region and, separately, by age/sex combined categories. Region quotas were developed by totaling Pennsylvania's population by county and then determining what proportion of the state's residents lived in the counties represented by each region.

Tables 1 through 3 display the proportions of respondents in the final dataset by age/sex category, region, and sample source. The data source used to establish quotas was the July 1, 2020 State Population Estimates, U.S. Census Bureau, Population Division. For a map and list of the Pennsylvania regions by county, please see Appendix A.

Table 1. Final Responses by Age and Gender

	Interviewed	Census %
Man		
18-34 years	147	14.3%
35-64 years	241	23.4%
65 years and over	110	10.7%
Woman		
18-34 years	142	13.8%
35-64 years	251	24.4%
65 years and over	137	13.3%

Table 2. Final Responses by Region

	Interviewed	Census %
Northern	73	7.1%
Central	94	9.1%
Northeast	170	16.5%
Southwest	207	20.1%
South Central	155	15.1%
Southeast	329	32.0%

Table 3. Final Responses by Source

	Interviewed	Percent
Survey panel	1,021	99.3%
Social media	7	0.7%

It should be noted that respondents were not selected from the general population at random; rather, only respondents who opted to participate in a paid web survey panel or who had seen public social media posts on Facebook or Instagram were included in the sampling frame. In addition, as with all public opinion surveys, the results are representative only of those who chose to participate. As a result, certain biases exist that might prevent a direct comparison to Pennsylvania's general population. Namely, results may be biased against those who are less likely to participate in web survey panels or view social media (sample frame bias) and those panelists or social media users who chose not to participate in this survey (non-response bias). In addition, although respondents who do not have access to the internet at home are less likely to sign up for web survey panels or use social media, they are not excluded from participating, and may do so through the use of public internet access, mobile phones, or internet at their place of employment. Finally, panel respondents received a small incentive to participate, although this is considered to be negligible in terms of overall survey bias.

To minimize these potential biases, key demographic responses were monitored and compared to Census data to ensure that the final sample was reflective of characteristics that are known to potentially bias responses. Rigorous efforts were employed to ensure that the characteristics of the respondents in the final dataset are representative of Pennsylvania's diverse population, despite the non-probability-based sampling method employed. Although the survey is considered to be a non-probability-based sampling method, the quotas utilized resulted in a final dataset that is representative of Pennsylvania's population by region, age, and sex.

Data Collection

Surveys were self-administered through Qualtrics Online Survey Platform. As mentioned previously, rigorous strategies were employed to ensure high-quality survey responses from trusted panel and social media respondents. A 'soft launch' was performed where a working draft of the survey instrument was pre-tested with a small sample of respondents before full survey distribution began. The pre-test process ensured that the skipping patterns of the programmed survey instrument were functioning as intended. Pre-testing also increases the likelihood that the questions provide accurate data while decreasing the likelihood of collecting unusable data; therefore, it is an integral component of questionnaire design. The pre-test findings were reviewed, found to be error-free, and incorporated into the final dataset.

Survey responses were collected through CSR's Qualtrics web survey account between March 31 and May 10, 2022. Waves of survey invitations were sent by Marketing Systems Group's panel partners to potential survey respondents based on the panelists' profile characteristics and the remaining region and age/sex quota needs. CSR also recruited participants via public social media posts targeted toward individuals over 45 years of age. Respondents who indicated that they were at least 18 years of age and lived in Pennsylvania were deemed eligible to participate. Survey collection ended when CSR received 1,028 responses.

Data Preparation and Analysis Notes

All survey data were recorded in Qualtrics and stored on a secure server that required two-factor authentication for access. Data were then extracted from Qualtrics into Statistical Package for the Social Sciences (SPSS) software to process and document the dataset. Blank records were removed, and data were verified for accuracy of variable coding by running frequency distributions to check for out-of-range values. All final data were reviewed by the senior staff on the research team. A final survey dataset was created in SPSS for Windows version 28.0.

The following notes should be taken into account when reviewing the final dataset:

1. Quotas were used to ensure that the final dataset was representative of Pennsylvania's population by region and, separately, by age/sex combined categories. Rake weighting was also employed to ensure representativeness by gender, age, race/ethnicity, educational attainment, PA Department of Health region, and urban/rural status.

- 2. Percentages may not total to 100% due to the exclusion of 'Don't know' responses.
- 3. See Appendix A of the report for a map and list of the Pennsylvania regions used for establishing Census quotas. Although the survey was designed around custom Pennsylvania regions, the final dataset includes both standard and Pennsylvania Department of Health regions.
- 4. See Appendix B for the survey questions and demographics that were used in data collection.

PROJECT STATISTICS

The final dataset includes responses from 1,028 adult Pennsylvania residents. The average length of a completed survey was approximately 16 minutes. A total of 31,019 different individuals were invited to participate in the survey via web panels (25,901) and social media (5,118) during the data collection period. The survey's participation rate was calculated using the American Association of Public Opinion Research's Response Rate 3 (RR3) formula. RR3 is obtained by dividing the number of completed interviews by the sum of the numbers of completed interviews, partially completed interviews, refusals, and non-contacts. The participation rate is then adjusted by estimating the proportion of cases of unknown eligibility based on the known proportion of eligible cases of all cases for which eligibility was determined. This is a conservative estimate that ultimately underestimates the true participation rate. AAPOR sets an industry standard for consistent reporting among survey researchers. For more information, see AAPOR's "Standard Definitions report" at http://www.aapor.org/Standards-Ethics/Standard-Definitions-(1).aspx.

The final survey participation rate was 4.1%. It should be noted that this rate estimates for eligibility based on eligibility screening criteria (i.e., age and geography) and the utilization of quotas. The rate does not estimate eligibility based on the validity of a respondent's email address; therefore, the functional participation rate is much higher than the reported rate. The participation rate is largely influenced by the quotas employed to ensure that the final dataset is representative of Pennsylvanians by age and sex category and, separately, by region.

Margin of Error

The margin of error for this survey is +/- 3.0 percentage points with the conventional 95% degree of desired confidence. This means that in a sample of 1,000 respondents where the distribution of responses is within the vicinity of 50%, there is a 95% chance that if the survey were repeated, the results would not differ from the survey findings by more than 3.0 percentage points. A more extreme distribution of question responses has a smaller error range. Suppose that 80% of the respondents answer "Yes" and 20% answer "No;" then the sampling error in this case is 2.4 percentage points. That is, each percentage has a sampling error of +/- 2.4 percentage points.

DEMOGRAPHIC PROFILE OF SURVEY RESPONDENTS

The following table displays the unweighted frequencies and percentages of survey respondents by key demographic characteristics.

Table 4. Demographic Profile of Respondents¹

D Cilic	ograpmic Prome of Respondents	Number	Percent
Gend	er		
	Male	498	48.4%
	Female	530	51.6%
Age C	Category		
	18-34 years	289	28.1%
	35-64 years	492	47.9%
1	65 years of age or older	247	24.0%
Race	/Ethnicity		
	Hispanic	40	3.9%
7	White, non-Hispanic	890	86.9%
1	Black - African American, non-Hispanic	63	6.2%
	Some other race (includes 2+ races), non-Hispanic	31	3.0%
Marit	al Status		
	Single / Never married	297	28.9%
	Married / Living with partner	540	52.6%
,	Widowed / Divorced / Separated	190	18.5%
Educational Attainment			
-	High school diploma/GED or less	290	28.2%
(Some college (including 2-year/technical degree)	391	38.1%
	Four-year college degree	253	24.6%
	Graduate work	93	9.1%
Hous	ehold Income		
	Less than \$25,000	211	20.5%
	\$25,000 to \$49,999	258	25.1%
	\$50,000 to \$74,999	207	20.1%
	\$75,000 to \$99,999	130	12.6%
	\$100,000 or more	176	17.1%
Empl	oyment Status		
	Employed (full-time, part-time, self-employed)	546	53.1%
	Out of work and looking for work	61	5.9%
	Other (not looking for work, homemaker, student, military, retired, disabled)	421	41.0%

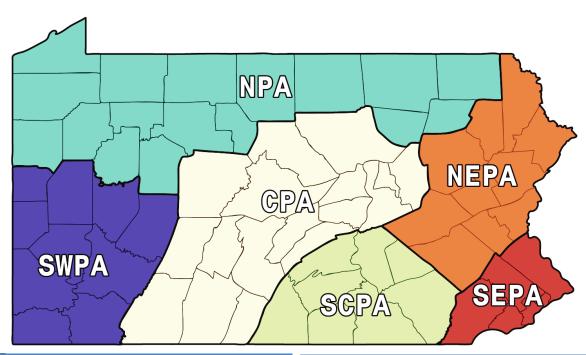
¹ Numbers may not add up to 1,028 due to rounding and the exclusion of "don't know" responses.

Table 3 (Continued). Demographic Profile of Respondents²

3 (Continued). Demographic Profile of Respondents ²	Number	Percent
Veteran Status		
Veteran	82	8.0%
Not a veteran	946	92.0%
Pennsylvania Region		
Northern	73	7.1%
Central	94	9.1%
Northeast	170	16.5%
Southwest	207	20.1%
South Central	155	15.1%
Southeast	329	32.0%
PA Department of Health Region		
Northwest	76	7.4%
Northcentral	49	4.8%
Northeast	137	13.3%
Southwest	227	22.1%
Southcentral	142	13.8%
Southeast	397	38.6%
County Density		
Urban	768	74.7%
Rural	260	25.3%
Voter Registration		
Registered to vote	867	85.2%
Not registered to vote	151	14.8%
Political Affiliation		
Republican	337	39.8%
Democrat	374	44.2%
Other (incl. Independent, Libertarian, & No Affiliation)	135	16.0%
Political Ideology		
Conservative	312	33.1%
Moderate	329	34.9%
Liberal	301	32.0%
Child Status		
Minor children living in household	228	28.0%
No minor children living in household	740	72.0%
Household Size	Mean	
Total household size	2.61	
Number of adults living in household	2.12	
Number of minor children living in household	0.49	

² Numbers may not add up to 1,028 due to rounding, as well as the exclusion of "don't know" responses.

APPENDIX A - MAP AND LIST OF SURVEY REGIONS



Northern	Central	Northeast
Bradford	Bedford	Berks
Cameron	Blair	Carbon
Clarion	Cambria	Lackawanna
Crawford	Centre	Lehigh
Elk	Clearfield	Luzerne
Erie	Clinton	Monroe
Forest	Columbia	Northampton
Jefferson	Fulton	Pike
McKean	Huntingdon	Schuylkill
Mercer	Juniata	Wayne
Potter	Lycoming	
Sullivan	Mifflin	
Susquehanna	Montour	
Tioga	Northumberland	
Venango	Snyder	
Warren	Somerset	
Wyoming	Union	

Southwest	South Central	Southeast
Allegheny	Adams	Bucks
Armstrong	Cumberland	Chester
Beaver	Dauphin	Delaware
Butler	Franklin	Montgomery
Fayette	Lancaster	Philadelphia
Greene	Lebanon	
Indiana	Perry	
Lawrence	York	
Washington		
Westmoreland		

APPENDIX B - SURVEY INSTRUMENT

Intro.

You are invited to participate in a survey that is being conducted by the Douglas W. Pollock Center for Addiction Outreach and Research with assistance from the Center for Survey Research at Penn State Harrisburg. The Opioid and Substance Use Disorder Stigma Survey will help researchers at Penn State to better understand public knowledge, attitudes, and beliefs about Opioid and Substance Use Disorders.

Please click ">>" to tell us a bit about yourself.

State. In what state do you live?

- Connecticut (1)
- Delaware (2)
- Maryland (3)
- New Jersey (4)
- New York (5)
- Ohio (6)
- Pennsylvania (7)
- Virginia (8)
- Some other state (9)

County. In what county do you live? Programming note: Include both standard PA and PA DOH regions.

- I do not live in Pennsylvania (777)
- I don't know what county I live in (888)
- List of Pennsylvania counties (1 133, FIPS codes)

Zip. What is your zip code?

Gender. Which of the following best describes your gender?

- Man (1)
- Woman (2)

Age. What is your age?

Programming Note: If the respondent lives in Pennsylvania, provides their county, provides a valid Pennsylvania zip code, and is 18 years of age or older, they proceed to the survey. Otherwise, they are not eligible.

Inform. Thank you for your interest in the Pennsylvania Opioid and Substance Use Disorder Stigma Survey. You are eligible to participate! Participating in this survey will help us to better understand Pennsylvanians' knowledge, attitudes, and beliefs about Opioid and Substance Use Disorders. This research is funded by the Pennsylvania Department of Drug and Alcohol Programs.

Please read the following information carefully and indicate whether you agree to participate in the survey below.

Title of Project: Pennsylvania's Stigma Reduction Opioid and Substance Behavior Change Campaign

Principal Investigator: Weston Kensinger, Ph.D, CHES

Telephone Number: 1-(717) 948-6682

You are being invited to volunteer to participate in a research study. This summary explains information about this research.

- The purpose of this study is to better understand stigma associated with substance use disorder in Pennsylvanians. Specifically, the study seeks to uncover:
 - o General attitudes towards substance use disorder
 - o Attitudes towards policy related to substance use disorder
 - o Attitudes towards public stigma related to substance use disorder
 - O Attitudes towards self-stigma related to substance use disorder
- If you agree to participate, you will be asked to complete a web-based survey. The goal of the survey is to gather the attitudes of adults on stigma related to substance use disorder. The survey should take approximately 10-15 minutes to complete.
- There is a risk of loss of confidentiality if your information or your identity is obtained by someone other than the investigators, but precautions will be taken to prevent this from happening. The confidentiality of your electronic data created by you or by the researchers will be maintained as required by applicable law and to the degree permitted by the technology used. Absolute confidentiality cannot be guaranteed.
- The link you used to access this survey contains an identifier that is stored in Qualtrics web survey software. Upon completion of the survey, the list of identifiers that successfully completed the survey is sent to the panel provider. However, no one on the Penn State research team ever has access to any information that links your identity to your identifier. The identity of the respondents is only known to the panel provider, and the panel provider is never granted access to any survey data. This identifier is only temporary, it is not

- exported or included in the data set available to the researchers, and it is automatically destroyed immediately after data collection.
- Information collected in this project may be shared with other researchers, but we will not share any information that could identify you.
- We will use and disclose your research records only when we are required to do so by law. Your research records can be opened by court order. Your records also may be provided in response to a subpoena or a legal request for the production of documents.
- The data will be stored electronically on password protected computers that can be accessed only by members of the study team.
- There will be no more risk of harm than you would normally experience in daily life, however there may be a sense of discomfort when answering sensitive questions.
- If participating in this research caused you to feel concerns beyond normal daily living, please contact the Pennsylvania Get Help Now Hotline at 1-800-662-HELP (4357) or visit the Pennsylvania Get Help Now website at https://apps.ddap.pa.gov/gethelpnow/CareProvider.aspx for assistance.

If you have questions, complaints, or concerns about the research, you should contact Weston Kensinger, Ph.D, CHES at 1-(717)-948-6682 or StigmaReduction@psu.edu. If you have questions regarding your rights as a research subject or concerns regarding your privacy, you may contact the Office for Research Protections at 814-865-1775.

Your participation is voluntary and you may decide to stop at any time. You do not have to answer any questions that you do not want to answer.

Your participation implies your voluntary consent to participate in the research. Are you willing to participate?
O Yes, I am willing to participate (1) Continue to survey
O No, I am not willing to participate (2) End survey
O Don't know / Not sure (9) End survey

T_00. Thank you for agreeing to participate! This survey will ask a variety of questions related to your opinions and perceptions of substance and opioid use.

Programming note: Randomly select one of the following three questions to show each respondent.

Open_Addiction. When you hear the word "addiction," what comes to mind?

Open_OUD. When you hear the phrase "opioid use disorder," what comes to mind?

Open_SUD. When you hear the phrase "substance use disorder," what comes to mind?

T_01. Next, please indicate your level of agreement with a variety of statements related to your opinions and perceptions of **opioid use**.

Opioids are a type of drug that includes pain medications like Percocet, OxyContin, Vicodin, codeine, and morphine, and other illicit drugs such as heroin and synthetic opioids (fentanyl, carfentanil, etc.).

Programming note: Rotate Public blocks 1, 2, 3, 4, and 5.

Public_1. Please indicate whether you Agree strongly, Agree slightly, Disagree slightly, or Disagree strongly with each of the following statements about opioids.

Programming note: Response options: Agree strongly, Agree slightly, Neither agree nor disagree, Disagree slightly, Disagree strongly, Don't know / Not sure, Prefer to not say Programming note: Rotate statements. Each grouping will be a grid of statements along the side, with response options along the top, presented in random order. The question stem will appear at the beginning of each block.

- There are effective treatments for people who are addicted to opioids.
- Most people with opioid use disorder will, with effective treatment, get well and return to productive lives.
- Those who are addicted to opioids should not be given any responsibility.
- Methadone is an effective treatment for opioid use disorder.
- Buprenorphine (also called Suboxone, Subutex, or Sublocade) is an effective treatment for opioid use disorder.
- Injectable extended-release naltrexone (also called Vivitrol) is an effective treatment for opioid use disorder.
- Please select Prefer not to say to continue with the survey.

Public 2.

- I would be willing to have a person with opioid use disorder start working closely with me on a job.
- I would be willing to have a person with opioid use disorder as a neighbor.
- I would be willing to live with someone who was addicted to opioids and is now in recovery.

Public 3.

- The opioid epidemic is a serious problem in my community.
- Prescription opioids can be a problem for anyone young or old, rich or poor.
- People addicted to opioids should be able to stop using them on their own.
- People who are addicted to opioids are junkies.

Public 4.

- People who have recovered from opioid addiction still can't be trusted.
- A lack of moral strength plays a large part in opioid addiction.
- Most people with opioid addiction will never get better and become productive people.
- People who are addicted to opioids are just like anyone else.
- People in recovery from opioid use disorder can be good parents.

Public_5.

- I would be willing to purchase or obtain naloxone, a medication that can quickly help a person experiencing a life-threatening drug overdose.
- I would be willing to provide naloxone, a medication that can quickly help a person experiencing a life-threatening drug overdose, to friends or family members of people with an opioid use disorder.
- It is not my responsibility to help my community address the opioid epidemic.
- The media is unfair in their portrayals of people addicted to opioids.
- The media makes people who are addicted to opioids seem like criminals.
- I would prefer that opioid treatment centers not be located near my home.
- Most people who are addicted to opioids don't have the willpower to stop.
- Please select Don't know to continue with the survey.

Work_1. Please indicate whether you Agree strongly, Agree slightly, Disagree slightly, or Disagree strongly with each of the following statements about employers and opioids.

Programming note: Response options: Agree strongly, Agree slightly, Neither agree nor disagree, Disagree slightly, Disagree strongly, Don't know / Not sure, Prefer to not say Programming note: Rotate statements. Each grouping will be a grid of statements along the side, with response options along the top, presented in random order. The question stem will appear at the beginning of each block.

- Employers should be allowed to deny employment to a person taking medication to treat opioid use disorder.
- Most people who are in recovery from opioid addiction are not trustworthy enough to employ

Policy_1. Please indicate whether you Agree strongly, Agree slightly, Disagree slightly, or Disagree strongly with each of the following statements about public policies related to opioids.

Programming note: Response options: Agree strongly, Agree slightly, Neither agree nor disagree, Disagree slightly, Disagree strongly, Don't know / Not sure, Prefer to not say Programming note: Rotate statements. Each grouping will be a grid of statements along the side, with response options along the top, presented in random order. The question stem will appear at the beginning of each block.

- Those who are addicted to opioids and haven't committed a felony should go into treatment, not the criminal justice system.
- Policies should be created that provide equal access to treatment for opioid addiction.
- It doesn't matter how strict policies are, people who want to abuse opioids will get them any way they can.
- There should be strong punishments for people who are addicted to opioids.
- My local government has strong policies to support people who are addicted to opioids.
- My community has programs to help people who are addicted to opioids.
- Please select Don't know to continue with the survey.

Policy_2

- Safe injection sites should be available as a harm reduction strategy in Pennsylvania.
- Needle exchange programs should be available as a harm reduction strategy in Pennsylvania.
- Fentanyl test strips should be available as a harm reduction strategy in Pennsylvania.
- Naloxone distribution should be available as a harm reduction strategy in Pennsylvania.

Substance_Compare. Now, you will be asked to indicate your level of agreement with a variety of statements related to different substances, including opioids, alcohol, cocaine, and methamphetamine.

Please indicate whether you Agree strongly, Agree slightly, Disagree slightly, or Disagree strongly with each of the following statements about [opioids, alcohol, cocaine, and methamphetamine.]

Programming note: Include applicable items on each page:

Opioids are a type of drug that includes pain medications like Percocet, OxyContin, Vicodin, codeine, and morphine, and other illicit drugs such as heroin and synthetic opioids (fentanyl, carfentanil, etc.)

Alcohol includes any type of alcoholic beverage, including beer, wine, spirits, etc.

Cocaine includes all forms of the substance, including coke, crack, etc.

Methamphetamine may also be known as meth, crystal, speed, tina, shake, or crank.

Programming note: Randomize order of substances and items.

- Long term recovery from opioid use disorder is probable.
- Virtually anyone can become addicted to opioids.
- Opioid addiction is a medical illness like diabetes, arthritis, or heart disease.
- Most people who are in recovery from opioid addiction are not reliable enough to employ
- I would be willing to continue a relationship with a friend who is addicted to opioids.
- I would be willing to live with someone who is addicted to opioids.

T_Campaign. Please note: You have already qualified for this survey. How you answer the remaining questions will not affect your participation. Please answer each to the best of your knowledge.

Campaign. Have you ever heard of Pennsylvania's substance use stigma reduction campaign, Life Unites Us? Yes/No/DK

Logo. In the past 6 months, have you seen the logo shown below on any social media or web sites? Yes/No/DK



Media_Image. Have you seen a quote or image on social media about substance addiction, like the ones below?



Media_Video. Have you watched a video on social media of a person from Pennsylvania talking about substance addiction, like the ones below?



If "yes" to Campaign, Logo, Media_Image, or Media_Video, ask LUU_Substances

LUU_Substances. Which of the following substances have you seen or heard in messages from the Life Unites Us substance use stigma reduction campaign? *Programming note: Rotate responses. Select all that apply.*

- Opioids
- Alcohol
- Marijuana
- Cocaine
- Methamphetamine
- Another substance
- None of the above I have not heard or seen any messaging from the campaign
- Don't remember / Not sure

If "yes" to Campaign, Logo, Media_Image, or Media_Video, ask Share. Rotate questions

Share. The previous images and logo are from the Life Unites Us campaign. Have you done any of the following with, or as a result of, images, videos, or stories from the Life Unites Us campaign on social media? Yes/No/DK/Prefer not to say

- Like. Liked an image, video, story, or post from the campaign
- Comment. Commented on an image, video, story, or post from the campaign
- Share. Shared an image, video, story, or post from the campaign
- LookedUp. Looked up information to learn more about content you saw
- Talked. Talked to someone else about content you've seen from the campaign

If "yes" to Campaign, Logo, Media_Image, or Media_Video, ask the following. Rotate questions.

Campaign_Use. Please indicate whether you Agree strongly, Agree slightly, Disagree slightly, or Disagree strongly with each of the following statements about the Life Unites Us campaign. [Strongly agree, somewhat agree, neither agree nor disagree, somewhat disagree, strongly disagree, DK, Prefer not to say]

- **Campaign_Useful.** The Life Unites Us campaign provided me with useful information.
- Campaign_MoreAware. The Life Unites Us campaign made me more aware of stigma against substance use.
- **Campaign_Prepare.** As a result of the Life Unites Us campaign, I feel more prepared to talk with others about stigma against substance use disorder.

Ask of everyone. Rotate questions.

6Month. Now, we would like to ask about things you may have seen that are **not related** to the Life Unites Us campaign. In the past 6 months, have you seen the following: (yes/no/DK)

- **6Month_Ad.** An advertisement for Pennsylvania's Get Help Now hotline (1-800-662-HELP)
- 6Month_News_OD. News stories about overdoses and/or substance use disorder
- **6Month_News_MentalHealth.** News stories about mental health
- **6Month_Resources.** Resources or messages regarding substance use disorder and/or mental health

SUD. In the past 6 months, have you done any of the following:

If yes to any of the 6 Month questions, ask SharedNews:

• SharedNews. Liked, shared, or commented on advertisements, news stories, or resources related to substance use disorder or mental health on social media

Ask of everyone:

- LookedUpInfo. Looked up additional information about substance use disorder or mental health news or resources on your own
- TalkedSUD. Talked to someone else about substance use disorder or mental health news or resources

T_02. The next questions ask about your experiences related to various substances. Remember, all of your answers will remain anonymous and confidential.

Prescribe. Have you, yourself, ever been prescribed an opioid, such as Percocet, OxyContin, or Vicodin?

- Yes, and I took it
- Yes, but I did not take it
- No, I have never been prescribed an opioid
- Don't know / Not sure
- Prefer not to say

Substance_Self. Have you, yourself, ever had a problem with substance abuse, substance dependency, or substance use disorder, **including alcohol, opioids, stimulants, or other substances**?

- Yes
- No
- Don't know / Not sure
- Prefer not to say

If "Yes" to SUBSTANCE SELF, ask TREATMENT TYPES:

Substance_Self_Types. What substances have you had a problem with at any point, whether currently or in the past? *Programming note:* Yes/No/DK/Decline for each. Rotate questions.

- Tobacco products (cigarettes, chewing tobacco, cigars, etc.)
- Alcoholic beverages (beer, wine, spirits, etc.)
- Cannabis (marijuana, pot, grass, hash, etc.)
- Cocaine (coke, crack, etc.)
- Methamphetamine (meth, crystal meth, etc.)
- Other stimulants (speed, diet pills, ecstasy, etc.)
- Inhalants (nitrous, glue, petrol, paint thinner, etc.)
- Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)
- Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)
- Opioids (heroin, morphine, methadone, codeine, OxyContin, Percocet, etc.)

If "Yes" to SUBSTANCE SELF, ask TREATMENT SELF:

Treatment_Self. Have you ever sought treatment for substance abuse, substance dependency or substance use disorder?

- Yes
- No
- Don't know / Not sure
- Prefer not to say

Other_SubstanceDisorder. Have you ever had a family member or close friend who has had a problem with substance abuse, substance dependency, or substance use disorder, including alcohol, opioids, stimulants, or other substances?

- Yes
- No
- Don't know / Not sure
- Prefer not to say

If "Yes" to Other_SubstanceDisorder, ask Substance_Other_types:

Substance_Other_Types. What substances has your **family member or close friend** had a problem with at any point, whether currently or in the past? If this applies to multiple family members or close friends, answer for the one you're closest to. <u>Programming note: Yes/No/DK/Decline for each. Rotate questions.</u>

- Tobacco products (cigarettes, chewing tobacco, cigars, etc.)
- Alcoholic beverages (beer, wine, spirits, etc.)
- Cannabis (marijuana, pot, grass, hash, etc.)
- Cocaine (coke, crack, etc.)
- Methamphetamine (meth, crystal meth, etc.)
- Other stimulants (speed, diet pills, ecstasy, etc.)
- Inhalants (nitrous, glue, petrol, paint thinner, etc.)
- Sedatives or Sleeping Pills (Valium, Serepax, Rohypnol, etc.)
- Hallucinogens (LSD, acid, mushrooms, PCP, Special K, etc.)
- Opioids (heroin, morphine, methadone, codeine, OxyContin, Percocet, etc.)

If "Yes" to Other_SubstanceDisorder, ask Other_Treatment:

Other_Subs_Treatment. Have they ever sought treatment for substance abuse, substance dependency or substance use disorder? If this applies to multiple family members or close friends, answer for the one you're closest to.

- Yes
- No
- Don't know / Not sure
- Prefer not to say

Ask Disorder_Current if Substance_Self_Types = "Opioids"

Disorder_Current. Do you **currently** have a problem with opioid abuse, opioid dependency, or opioid use disorder, including any kind of opioid, like prescription opioids, heroin, or fentanyl?

- Yes
- No
- Don't know / Not sure
- Prefer not to say

Ask Recovery_Length if Disorder_Current = "No"

Recovery_Length. How long have you been in recovery from opioid use disorder?

- Less than 1 year
- 1-2 years
- 3-5 years
- 6-10 years
- 11 15 years
- 16 20 years
- More than 20 years
- Don't know / Not sure
- Prefer not to say

If Substance_Self_Types = "Opioids", ask the remaining questions. If not, skip to end of survey (demographics).

Counseling. Have you received counseling for your opioid use?

- Yes, currently
- Yes, in the past
- No, never
- Don't know / Not sure
- Prefer to not say

MAT. Have you ever received any of the following Medication for Opioid Use Disorder (MOUD), also known as Medication Assisted Therapies (MAT), for your opioid use?

	Yes, currently	Yes, in the past	No, never	Don't know / Not sure	Prefer not to say
Methadone					
Buprenorphine					
Naltrexone					

Group. Have you ever attended any self-help group or 12-step program for your opioid use?

- Yes
- No
- Don't know / Not sure
- Prefer not to say

Ask if "yes" to Group.

Group_Specify. Which self-help group(s) have you attended? Please select all that apply.

- Alcoholics Anonymous (AA)
- Narcotics Anonymous (NA)
- Overeaters Anonymous/Food Addicts Anonymous (OA / FAA)
- Codependents Anonymous (CODA)
- Sex and Love Addicts Anonymous (SLAA)
- Other, please specify:
- Don't know / Not sure
- Prefer not to say

Ask if "yes" to Group.

Group_Ever_Online. Have you ever attended an **online** self-help group?

- Yes
- No
- Don't know / Not sure
- Prefer not to say

Ask if "yes" to Group.

Group_Likely_Online. Would you be more willing to use an online self-help group due to social distancing recommendations?

- Yes
- No
- Don't know / Not sure
- Prefer not to say

Programming note: Rotate Self blocks 1, 2, and 3.

Self_1. Please indicate whether you Agree strongly, Agree slightly, Disagree slightly, or Disagree strongly with each of the following statements about your opioid use.

Programming note: Response options: Agree strongly, Agree slightly, Neither agree nor disagree, Disagree slightly, Disagree strongly, Don't know / Not sure, Prefer to not say Programming note: Rotate statements. Each grouping will be a grid of statements along the side, with response options along the top, presented in random order. The question stem will appear at the beginning of each block.

- I feel comfortable talking to my employer about my present or past opioid use.
- I feel comfortable talking to my doctor about my present or past opioid use.
- I feel comfortable talking to my friends about my present or past opioid use.
- I feel comfortable talking to my family about my present or past opioid use.
- I feel comfortable getting treatment for my opioid use. Ask if Disorder_Current = "Yes"
- I felt comfortable getting treatment for my opioid use. Ask if Disorder_Current does not = "Yes"

Self_2.

- I am ashamed of myself because of my opioid use. Ask if Disorder_Current = "Yes"
- I was ashamed of myself because of my past opioid use. Ask if Disorder_Current does not = "Yes"
- I can live a good, fulfilling life, despite my present or past opioid use.
- I am worried that people could find out about my present or past opioid use.
- I would avoid treatment because I don't want people to find out about my present or past opioid use.
- I feel out of place in the world because of my opioid use. Ask if Disorder_Current = "Yes"
- I felt out of place in the world because of my opioid use. Ask if Disorder_Current does not =
 "Yes"
- People think I am worthless if they know about my opioid use history.
- If someone were to find out about my history of opioid use, they would doubt my character.
- People around me will always suspect I have returned to using opioids.
- People will think I have little talent or skill if they know about my opioid use history.

Self_3.

- I'd rather hide my opioid use than get treatment. Ask if Disorder_Current = "Yes"
- I don't think my opioid use is a problem. Ask if Disorder_Current = "Yes"
- I have avoided applying for a job because I worried that someone would stigmatize me because of my opioid use.
- I have avoided meeting new people because of my opioid use.
- Getting treatment to stop using opioids is too expensive.
- I would be afraid to seek help for a relapse because it implies that I have no willpower.

Unfair. Which of the following types of people have treated you unfairly because of your opioid use? Please select all that apply. Programming note: Rotate responses except Other, None of these, Don't know, and Prefer not to say

- Spouse or live-in partner
- Family (not including spouse or live-in partner)
- Friend
- Employer / supervisor / manager
- Co-worker
- School classmate
- Potential employer (e.g., during the interview process)
- Doctor or healthcare provider
- Neighbor
- Landlord
- Law enforcement and / or judges
- Other, please specify: _____
- None of these
- Don't know / Not sure
- Prefer to not say

T_Dem. These last questions are for classification purposes only.

Veteran. Are you a military veteran?

- Yes (1)
- No (2)
- Don't know / Not sure (9)

VoterReg. Are you currently registered to vote?

- Yes (1)
- No (2)
- Don't know / Not sure (9)

If "Yes" to VoterReg, ask Pol_Affil.

Pol_Affil. What is your current registered party affiliation?

- Republican (1)
- Democrat (2)
- Independent / No affiliation (3)
- Constitution (4)
- Green (5)
- Libertarian (6)
- Other (7)
- Don't know / Not sure (9)

Pol_View. How would you best describe your political views?

- Very conservative (1)
- Somewhat conservative (2)
- Moderate (3)
- Somewhat liberal (4)
- Very liberal (5)
- Don't know / Not sure (9)

Ethnicity. Do you consider yourself to be Hispanic or Latino/a/x?

- Yes (1)
- No (2)
- Don't know / Not sure (9)

Race. Which of the following best describe your race? You can select all that apply.

- White (1)
- Black or African American (2)
- Asian (3)
- American Indian or Alaska Native (4)
- Native Hawaiian or Pacific Islander (5)
- Something else (6)
- Don't know / Not sure (9)

HH_Adult. Including yourself, how many adults (18 or older) live in your household? If you live alone, please enter "1".

HH_Child. How many children under the age of 18 live in your household, regardless of whether or not they are related to you? If no children live in your household, enter "0".

MaritalStatus. What is your marital status?

- Married (1)
- Living with partner (2)
- Widowed (3)
- Divorced (4)
- Separated (5)
- Single / Never married (6)
- Don't know / Not sure (9)

Education. Which of the following categories best describes your educational level?

- Less than a high school diploma or GED (1)
- High school diploma or GED (2)
- Some college (3)
- Two-year degree (Associate's) or technical degree (i.e., trade degree) (4)
- Four-year college graduate (5)
- Graduate work (6)
- Don't know / Not sure (9)

Employment. Are you currently...

- Employed full-time for wages
- Employed part-time for wages
- Self-employed
- Out of work and looking for work
- Out of work, but not currently looking for work
- A homemaker
- A student
- Military
- Retired
- Disabled or unable to work
- Don't know / Not sure

Religion_Important. How important is religion in your life?

- Very important
- Somewhat important
- Not too important
- Not at all important
- Don't know / Not sure

Religion_Services. Aside from weddings and funerals, how often do you attend religious services?

- More than once a week
- Once a week
- Once or twice a month
- A few times a year
- Seldom
- Never
- Don't know / Not sure

Income. What is your total annual household income, before taxes?

Under \$10,000 \$10,000 to \$14,999 (1) • \$15,000 to \$19,999 (2)• \$20,000 to \$24,999 (3) \$25,000 to \$29,999 (4) • \$30,000 to \$34,999 (5) • \$35,000 to \$39,999 (6) • \$40,000 to \$44,999 (7)• \$45,000 to \$49,999 (8)• \$50,000 to \$59,999 (9)\$60,000 to \$74,999 (10)• \$75,000 to \$99,999 (11)• \$100,000 to \$124,999 (12)• \$125,000 to \$149,999 (13)• \$150,000 to \$199,999 (14)• \$200,000 or more (15)• Don't know / Not sure (99)

End. Thank you for your participation! If you have any questions about this research, please contact the Principal Investigator, Dr. Weston Kensinger, at StigmaReduction@psu.edu.

Please click ">>" to submit your survey.