

2019



Monroe County, MI

Opioid Assessment

Commissioned by:

The Monroe County Opioid Task Force

Foreword

Dear Community Member,

The Monroe County Opioid Task Force, as a subcommittee of the Monroe County Substance Abuse Coalition and chaired by Monroe County Health Department in partnership with multiple community agencies, is pleased to present the 2019 Monroe County Opioid Assessment Report. The information contained in this report will be utilized by the Opioid Task Force as well as other community health partners throughout Monroe County as we prioritize the information and incorporate it into a Strategic Action Plan with the primary goal of improving the health of Monroe County residents.

The information in this report is based on data obtained from responses to surveys that were collected in October 2019 from adults ages 19 and older. Members of the Monroe County Opioid Task Force provided input for the content of the assessment tool (surveys). Active members of the partnership are listed in the acknowledgement on the following page.

In order to maintain complete objectivity throughout the survey process, the Monroe County Opioid Task Force contracted with the Hospital Council of Northwest Ohio to administer the survey and compile the results. We appreciate every person who returned a survey for this important project.

We encourage you to use this report in your planning processes and collaborative efforts to address substance abuse and misuse. We hope it will prove a valuable resource in your efforts to improve the overall health of Monroe County.

Sincerely,

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Acknowledgements

This report has been funded by:

This project is supported by a grant from the Michigan Department of Health and Human Services. The intent of the funding is to address the opioid epidemic related to misuse and abuse in the community.

This report has been commissioned by:

Monroe County Substance Abuse Coalition - Executive Committee

Mark Cochran – Chairperson, City of Monroe
Wendy Klinski – Vice Chairperson, Catholic Charities of Southeast Michigan
Trooper Don Stewart – Secretary, Michigan State Police
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Faith Sector:

- Catholic Charities of Southeast Michigan
- Salvation Army Harbor Light
- St. Paul’s United Methodist Church
- First Church of God

Health Care Sector:

- Family Medical Center
- Rehabilitation Specialists of Monroe
- Monroe Community Ambulance Services
- Monroe Medical Associates

Behavioral Health Sector:

- ProMedica Monroe Regional Hospital
- Monroe Community Mental Health Authority

Non-Profit Sector:

- United Way of Monroe/Lenawee Counties

Education Sector:

- Monroe County Intermediate School District
- Monroe County Community College
- Wayne State University
- University of Toledo

Government Sector:

- Monroe County Board of Commissioners
- City of Monroe
- Dundee Village Council

Law Enforcement Sector:

- Monroe County Sheriff’s Office
- Michigan State Police
- Monroe County Prosecutor’s Office
- Monroe County Probation Division
- Monroe City Police

Business Sector

- Delaney Counseling Services, PLLC
- Michigan Works

Family/Parent Sector:

- Family/Parent community

Treatment/Recovery Sector:

- Catholic Charities of Southeast Michigan
- Salvation Army Harbor Light
- Michigan Opioid Collaborative
- Unified
- Paula’s House
- AA Corrections
- Recovery Community

Project Management, Secondary Data, Data Collection, and Report Development Hospital Council of Northwest Ohio

The Hospital Council of Northwest Ohio (HCNO) is a 501(c)3 non-profit regional hospital association located in Toledo, Ohio. They facilitate community health needs assessments and planning processes in 40+ counties in Ohio, Michigan, and Oregon. Since 2004, they have used a process that can be replicated in any county that allows for comparisons from county to county, within the region, the state, and the nation. HCNO works with coalitions in each county to ensure a collaborative approach to community health improvement that includes multiple key stakeholders. All HCNO project staff have their master's degree in public health, with emphasis on epidemiology and health education.

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The 2019 Monroe County Opioid Assessment is available on the following websites:

Monroe County Health Department

<http://www.healthymonroecounty.com>

Hospital Council of Northwest Ohio

<http://www.hcno.org/community-services/community-health-assessments/>

Monroe County Substance Abuse Coalition

<https://www.knowmoremonroe.com/>

United Way of Monroe/Lenawee Counties

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Executive Summary

This executive summary provides an overview of opioid-related data for Monroe County adults (ages 19 and older) who participated in a county-wide assessment survey from August 2019 through October 2019. The findings are based on self-administered surveys using a structured questionnaire. The questions were modeled after survey instruments used by the Substance Abuse and Mental Health Services Administration (SAMHSA) for their National Survey on Drug Use and Health (NSDUH). The Hospital Council of Northwest Ohio (HCNO) collected the data, guided the assessment process, and integrated sources of primary and secondary data into the final report.

Primary Data Collection Methods

DESIGN

This community assessment was cross-sectional in nature and included a written survey of adults within Monroe County. From the beginning, community leaders were actively engaged in the planning process and helped define the content, scope, and sequence of the study. Active engagement of community members throughout the planning process is regarded as an important step in completing a valid needs assessment.

INSTRUMENT DEVELOPMENT

One survey instrument was designed, and pilot tested for this study. As a first step in the design process, health education researchers from the University of Toledo and staff members from HCNO met to discuss potential sources of valid and reliable survey items that would be appropriate for assessing opioid-related topics and issues. The investigators decided to derive the majority of the adult survey items from the NSDUH. This decision was based on being able to compare local data with national data.

The project coordinator from HCNO conducted a series of meetings with the Monroe County Opioid Task Force. During these meetings, HCNO and the Monroe County Opioid Task Force reviewed and discussed banks of potential survey questions from the NSDUH. Based on input from the Monroe County Opioid Task Force, the project coordinator composed a draft of survey containing 37 items. Health education researchers from the University of Toledo reviewed and approved the draft.

SAMPLING

The sampling frame for the survey consisted of adults ages 19 and older living in Monroe County. There were 113,125 persons ages 19 and older living in Monroe County. The random sample of mailing addresses of adults from Monroe County was obtained from Melissa Global Intelligence in Rancho Santa Margarita, California.

PROCEDURE

Prior to mailing the survey, the project team mailed an advance letter to 1,500 adults in Monroe County. This advance letter was personalized; printed on Monroe County Opioid Task Force letterhead; and signed by Kim Comerzan, MSN, RN, CNS, Health Officer, Monroe County Health Department and Vicky Loveland, LMSW, Development Coordinator, Monroe County Substance Abuse Coalition. The letter introduced the county assessment and informed the readers that they may be randomly selected to receive the survey. The letter also explained that the respondents' anonymity would be protected and encouraged the readers to complete and return the survey promptly if they were selected.

Three weeks following the advance letter, a two-wave mailing procedure was implemented to maximize the survey return rate. The initial mailing included a personalized hand signed cover letter describing the purpose of the study, a questionnaire printed on white paper, a self-addressed stamped return envelope, and a \$2 incentive. Approximately three weeks after the first mailing, a second wave mailing included another personalized cover letter encouraging the participants to reply, another copy of the questionnaire on white paper, and another reply envelope. Surveys returned as undeliverable were not replaced with another potential respondent.

The response rate for the mailing was 25% (n=346: CI=± 5.26).

DATA ANALYSIS

Individual responses were anonymous. Only group data was available. All data was analyzed by health education researchers at the University of Toledo using SPSS 24.0. Crosstabs were used to calculate descriptive statistics for the data presented in this report. To be representative of Monroe County, the adult data collected was weighted by age, gender, race, and income using Census data. Multiple weightings were created based on this information to account for different types of analyses. For more information on how the weightings were created and applied, see Appendix III.

LIMITATIONS

As with all county assessments, it is important to consider the findings in light of all possible limitations. If any important differences existed between the respondents and the non-respondents regarding the questions asked, this would represent a threat to the external validity of the results (the generalizability of the results to the population of Monroe County). If there were little to no differences between respondents and non-respondents, then this would not be a limitation.

Next, it is important to note that although several questions were asked using the same wording as the NSDUH questionnaire, the adult data collection method differed. NSDUH data is collected using a set of questions from the total question bank, and residents are asked the questions through face-to-face interviews rather than via a mail survey.

Lastly, caution should be used when interpreting subgroup results, as the margin of error for any subgroup is higher than that of the overall survey.

Secondary Data Collection Methods

HCNO collected secondary data from multiple sites, including county-level data, wherever possible. HCNO utilized sites, such as the Michigan Department of Health and Human Services (MDHHS), numerous CDC sites, U.S. Census data, etc. All data is included in the section of the report it corresponds with. All primary data collected in this report is from the 2019 Monroe County Opioid Assessment. All other data will be sourced accordingly.

Impact of the Opioid Crisis

Overview of the Opioid Crisis

Every day, more than 130 people in the United States die after overdosing on opioids. The misuse of and addiction to opioids— including prescription pain relievers, heroin, and synthetic opioids such as fentanyl— is a serious national crisis that affects public health as well as social and economic welfare.

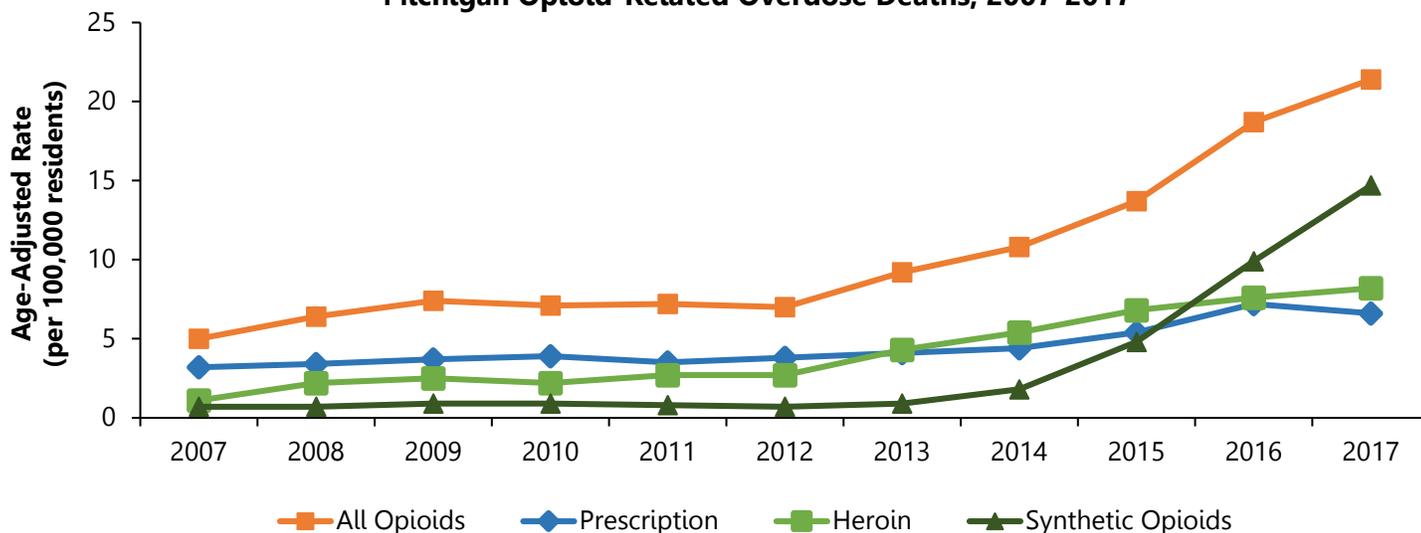
The Centers for Disease Control and Prevention (CDC) estimates that the total “economic burden” of prescription opioid misuse alone in the United States is \$78.5 billion per year, including the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement.

In 2017, more than 47,000 Americans died as a result of an opioid overdose, including prescription opioids, heroin, and illicitly manufactured fentanyl, a powerful synthetic opioid. The same year, an estimated 1.7 million people in the United States suffered from substance use disorder related to prescription opioid pain relievers, and 652,000 suffered from a heroin use disorder (not mutually exclusive) (Source: National Institute on Drug Abuse (NIDA), *Opioid Overdose Crisis*).

In 2017, there were 2,033 overdose deaths involving opioids in Michigan- an age-adjusted rate of 21.2 deaths per 100,000 persons, compared to the national rate of 14.6 deaths per 100,000 persons. Increases were related to synthetic opioids, mainly fentanyl. From 2012 to 2017, deaths involving fentanyl rose from 72 to 1,368 deaths and those involving heroin grew from 263 to 783. Prescription opioid-related overdose deaths also rose between 2012 and 2016, from 378 to 678 deaths in 2016, but decreased in 2017 to 633 deaths. (Source: NIDA, *Michigan Opioid Summary*).

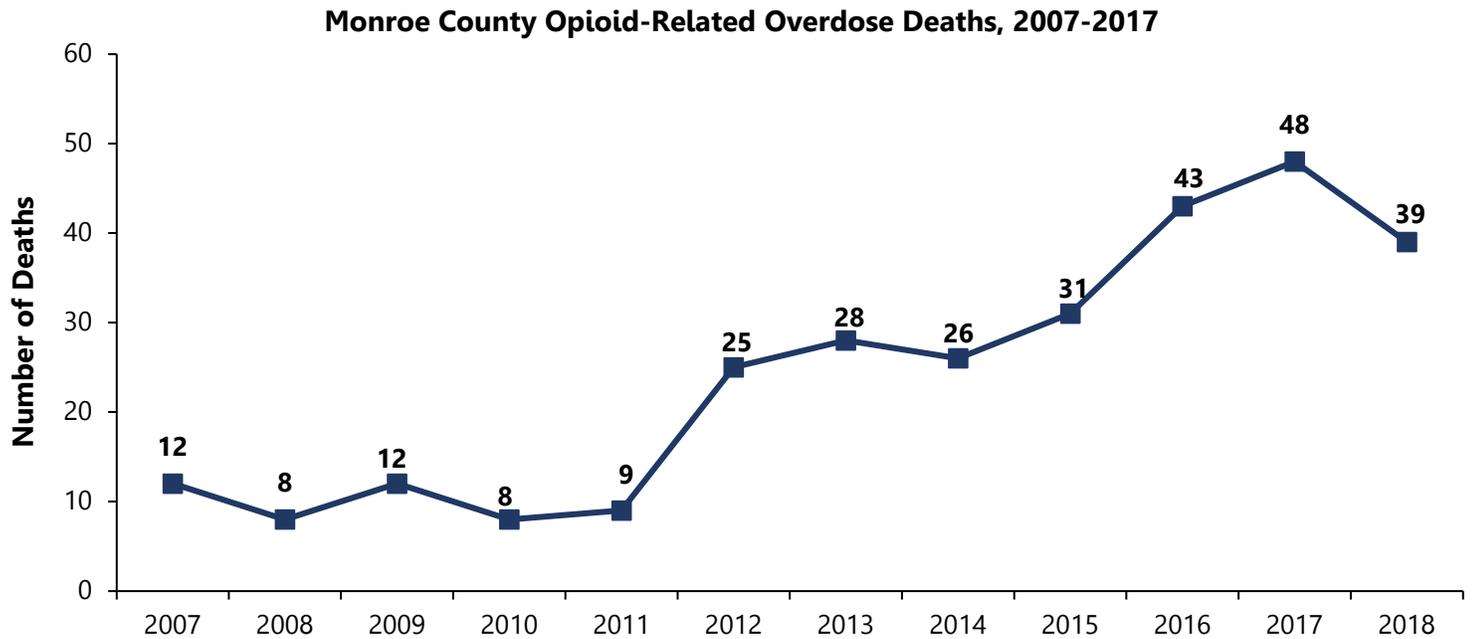
The following graph shows the age-adjusted rate of opioid-related overdose deaths, by substance, in Michigan from 2007 to 2017. The graph shows that opioid-related overdose deaths have fluctuated over the 10-year period. However, overall opioid-related overdose deaths increased significantly from 2012 to 2017.

Michigan Opioid-Related Overdose Deaths, 2007-2017



Overview of the Opioid Crisis, Continued

The following graph shows the number of opioid-related overdose deaths in Monroe County from 2007 to 2017. There were 250 opioid-related overdose deaths in Monroe County from 2007-2017.



Note: Opioid Overdose Deaths Include: Number of people died of a drug overdose and has opioids (including opium, heroin, natural/semi-synthetic opioids, methadone, synthetic opioids other than methadone, or unspecified opioids) as a contributing cause. The ICD-10 codes for opioids are: T40.0 (opium), T40.1 (heroin), T40.2 (natural/semi-synthetic opioids), T40.3 (methadone), T40.4 (synthetic opioids other than methadone), T40.6 (Unspecified opioids).

(Source: Michigan Death Certificates, Division for Vital Records and Health Statistics/MDHHS, as compiled by The Substance Use Disorder Data Repository, 2007-2017)

Drug Overdose in Rural America

- Drug use and drug overdoses continue to be a critical public health issue across the United States. Drug overdose is now the leading cause of injury death.
- Rates of drug overdose deaths are rising in rural areas, surpassing rates in urban areas.
- Although the rate of drug use is lower in rural areas than in urban areas, the fatal overdose rate in rural areas continues to rise.
- In 2015, the rural overdose death rate has been higher than the urban rate since 2006.
- Most overdose deaths in rural areas occurred in homes where rescue efforts may fall to relatives who have limited knowledge of or access to naloxone and overdose follow-up care.
- The rate of opioid overdoses in rural areas is affected by several factors including the number of people exposed to opioids, how many of those people become addicted, and what, if any, treatment is available.
- Understanding differences in illicit drug use, illicit drug use disorders, and drug overdose deaths in urban and rural areas can help public health professionals to identify, monitor, and prioritize responses.

(Source: CDC: Drug Overdose in Rural America & Rural Health Policy Brief, Preventing Opioid Overdoses in Rural America)

Prescription Opioid Data

Prescription Opioid Overdose Deaths

Approximately 46 Americans die every day from overdoses involving prescription opioids. In 2017, prescription opioids were involved in more than 35% of all opioid overdose deaths (47,600) in 2017 (Source: CDC, *Prescription Opioid Overdose Deaths*).

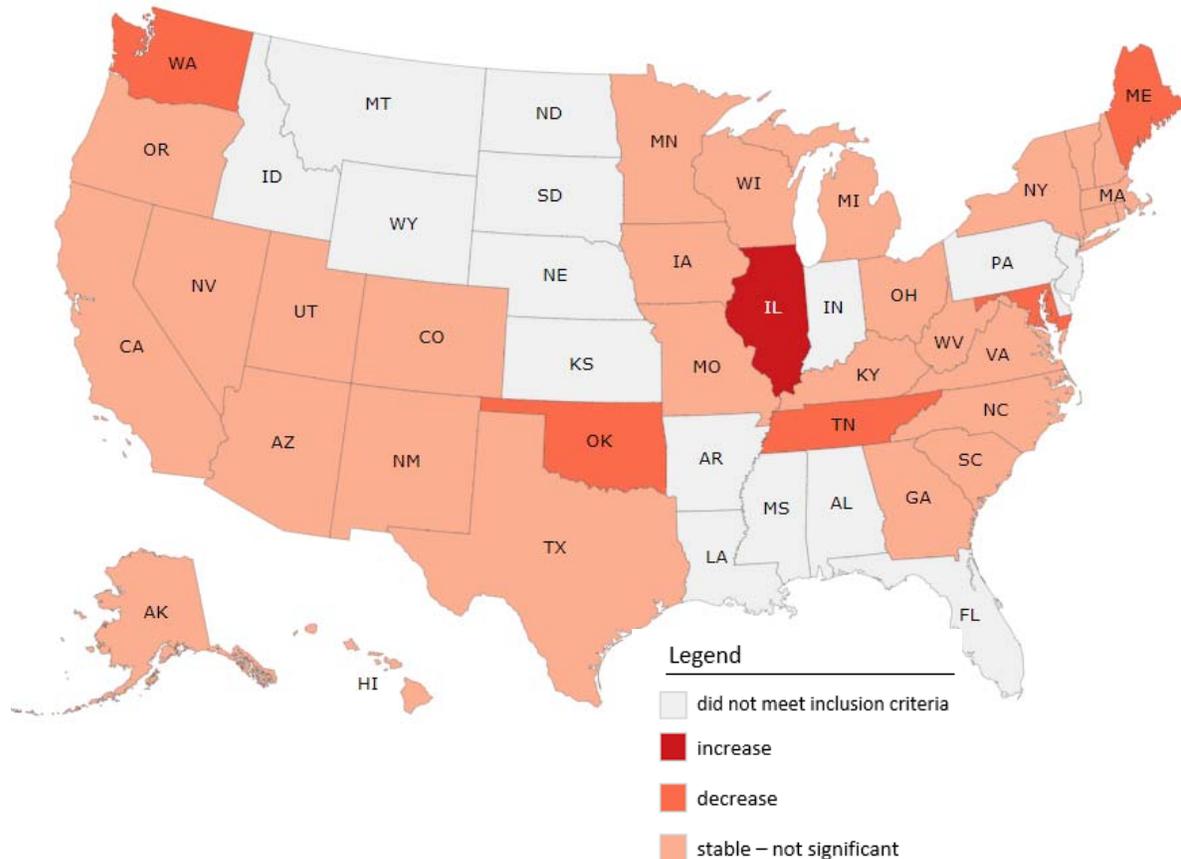
The most common drugs involved in prescription opioid overdose deaths include:

- Methadone
- Oxycodone (such as OxyContin®)
- Hydrocodone (such as Vicodin®)

(Source: CDC, *Prescription Opioid Overdose Deaths*).

The following map shows statistically significant changes in drug overdose death rates involving prescription opioids by select states from 2016 to 2017. The map shows that Michigan's prescription opioid overdose death rate remained stable from 2016 to 2017.

Statistically Significant Changes in Prescription Opioid Deaths from 2016 to 2017



Note: Drug overdose deaths, as defined, that have natural and semi-synthetic opioids (T40.2) and methadone (T40.3) as contributing causes. Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10). Drug overdose deaths are identified using underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14.

*(Source for map: CDC, *Prescription Opioids, Overdose Map*, retrieved October 2019)*

Synthetic Opioid Data

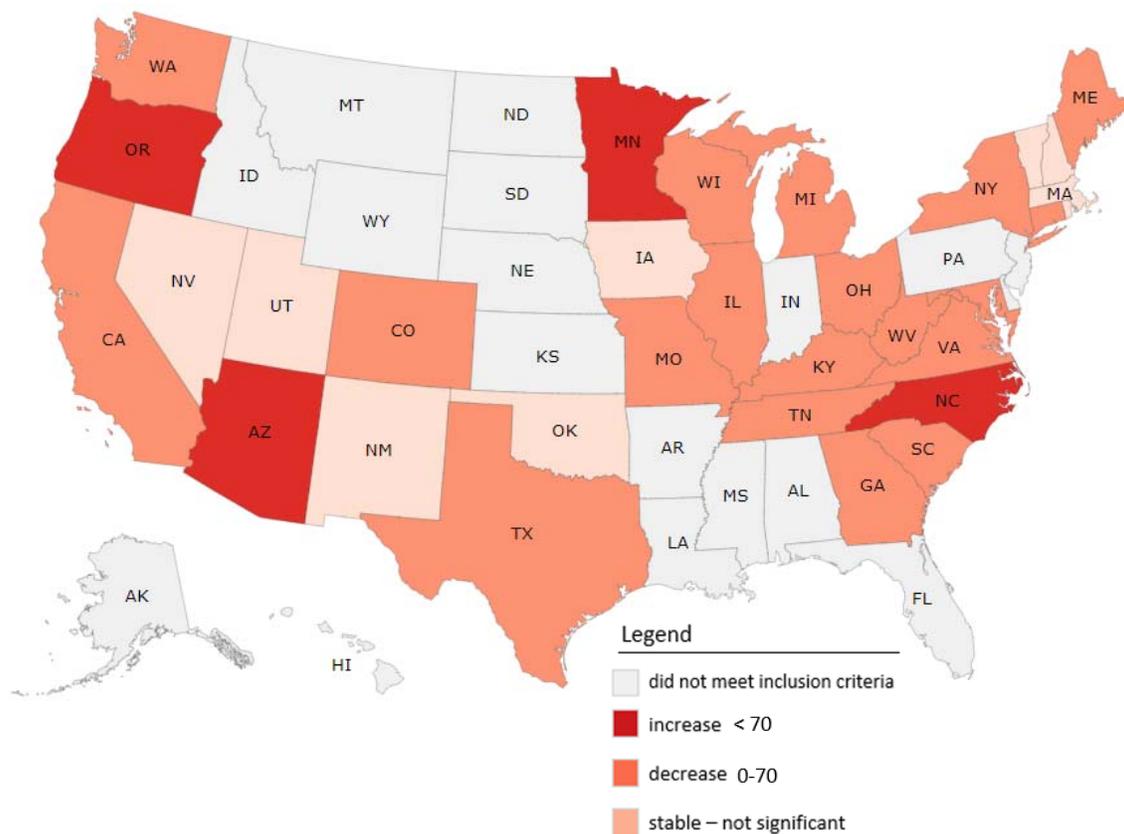
Synthetic Opioid Overdose Deaths

Synthetic opioids are a class of drugs that are designed to provide pain relief, mimicking naturally occurring opioids such as codeine and morphine. They include drugs such as tramadol and fentanyl.

In 2017, more than 28,000 deaths involving synthetic opioids (other than methadone) occurred in the United States, which is more deaths than from any other type of opioid (Source: CDC, *Synthetic Opioid Overdose, Key Messages*).

The following map shows statistically significant changes in drug overdose death rates involving synthetic opioids by select states from 2016 to 2017. The map shows that Michigan experienced a decrease in synthetic opioid deaths from 2016 to 2017.

Statistically Significant Changes in Synthetic Opioid Deaths from 2016 to 2017

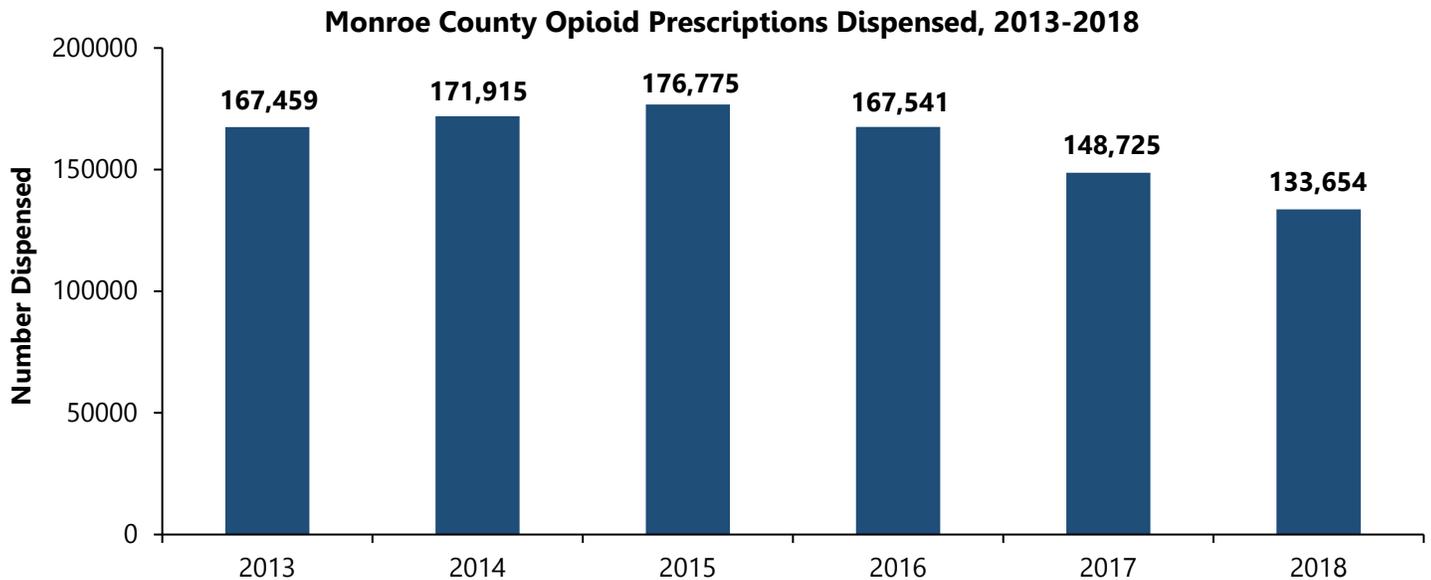


Note: Drug overdose deaths, as defined, that have synthetic opioids other than methadone (T40.4) as contributing causes. Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10). Drug overdose deaths are identified using underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14.

(Source for map: CDC, Synthetic Opioid Overdose, Overdose Map, retrieved October 2019)

Prescribing and Dispensing Opioids in Michigan

The Michigan Automated Prescription System (MAPS) is Michigan's prescription monitoring program. MAPS is used to track controlled substances. The chart below shows the number of opioid prescriptions dispensed in Monroe County from 2013 to 2018.



(Source for graphs: Michigan Automated Prescription System (MAPS), as compiled by The Substance Use Disorder Data Repository, Opioid prescriptions dispensed by county, 2013-2018)

Michigan Automated Prescription System (MAPS)

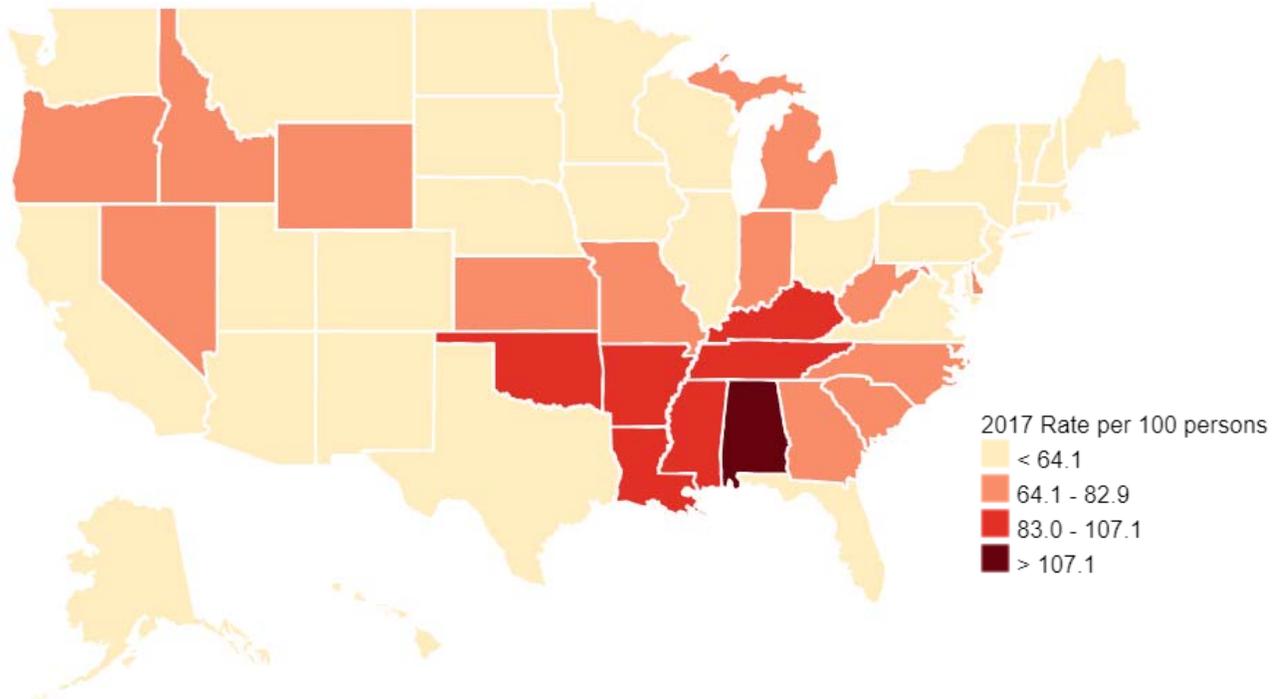
- The Michigan Automated Prescription System (MAPS) is the State's controlled substance prescription monitoring program within the Bureau of Professional Licensing (BPL), Michigan Department of Licensing and Regulatory Affairs (LARA). Board of Pharmacy Administrative Rules 338.3162b and 338.3162d state all pharmacies, dispensing practitioners and veterinarians who dispense controlled substances, Schedules 2-5, are required to electronically report this prescription data to MAPS on a daily basis.

(Sources: Department of Licensing and Regulatory Affairs (LARA), Michigan Automated Prescription System (MAPS), 2019)

Opioid Prescribing Rates

The following map shows the estimated rate of opioid prescriptions dispensed per 100 U.S. residents, by state, in 2017. The U.S. prescribing rate per 100 persons was 58.7 and Michigan had a rate of 74.2 opioid prescriptions dispensed per 100 residents.

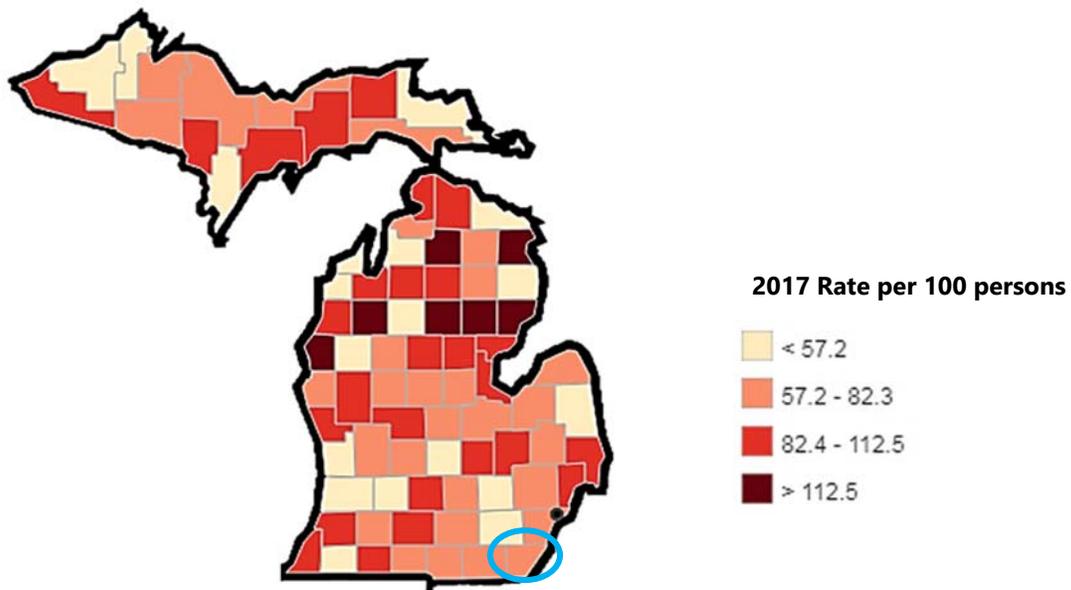
U.S. State Opioid Prescribing Rates, 2017



*Note: ¹Source for all prescribing data: IQVIA Xponent 2006–2017. IQVIA Xponent is based on a sample of approximately 50,000 retail (non-hospital) pharmacies, which dispense nearly 90% of all retail prescriptions in the United States. For this database, a prescription is an initial or refill prescription dispensed at a retail pharmacy in the sample and paid for by commercial insurance, Medicaid, Medicare, or cash or its equivalent. This database does not include mail order pharmacy data. ²For the calculation of prescribing rates, numerators are the total number of opioid prescriptions dispensed in a given year, state, or county, as appropriate. Annual resident population denominator estimates were obtained from the U.S. Census Bureau. ³Opioid prescriptions, including buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, methadone, morphine, oxycodone, oxymorphone, propoxyphene, tapentadol, and tramadol, were identified using the National Drug Code. Cough and cold formulations containing opioids and buprenorphine products typically used to treat opioid use disorder were not included. In addition, methadone dispensed through methadone maintenance treatment programs is not included in the IQVIA Xponent data.
(Source for map: CDC, Opioid Overdose, U.S. State Opioid Prescribing Rate Maps, 2017, retrieved October 2019)*

The following map shows the estimated rate of opioid prescriptions dispensed per 100 Michigan residents, by county, in 2017. Michigan had a rate of 74.2 opioid prescriptions dispensed per 100 residents and Monroe County had a rate of 78.4 in 2017.

Michigan Opioid Prescribing Rates, 2017



Note: ¹Source for all prescribing data: IQVIA Xponent 2006–2017. IQVIA Xponent is based on a sample of approximately 50,000 retail (non-hospital) pharmacies, which dispense nearly 90% of all retail prescriptions in the United States. For this database, a prescription is an initial or refill prescription dispensed at a retail pharmacy in the sample and paid for by commercial insurance, Medicaid, Medicare, or cash or its equivalent. This database does not include mail order pharmacy data. ²For the calculation of prescribing rates, numerators are the total number of opioid prescriptions dispensed in a given year, state, or county, as appropriate. Annual resident population denominator estimates were obtained from the U.S. Census Bureau. ³Opioid prescriptions, including buprenorphine, codeine, fentanyl, hydrocodone, hydromorphone, methadone, morphine, oxycodone, oxymorphone, propoxyphene, tapentadol, and tramadol, were identified using the National Drug Code. Cough and cold formulations containing opioids and buprenorphine products typically used to treat opioid use disorder were not included. In addition, methadone dispensed through methadone maintenance treatment programs is not included in the IQVIA Xponent data. (Source for maps: CDC, Opioid Overdose, U.S. County Opioid Prescribing Rate Maps, 2017, retrieved October 2019)

Opioid Assessment: Community Awareness and Perceptions

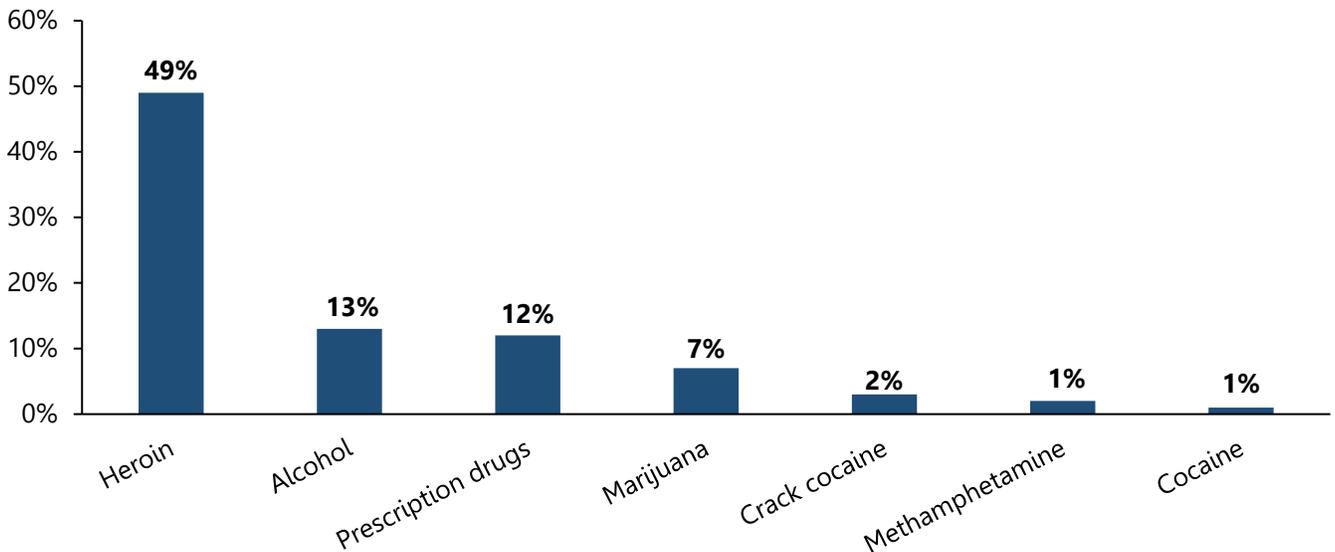
Key Findings

Monroe County adults thought heroin was the most serious drug problem in their community. Sixty-five percent (65%) of adults thought there was a great risk in harming themselves physically or in other ways if they used prescription medications not prescribed to them. Thirty-four percent (34%) of adults thought it was fairly easy to get heroin in Monroe County.

Community Perceptions

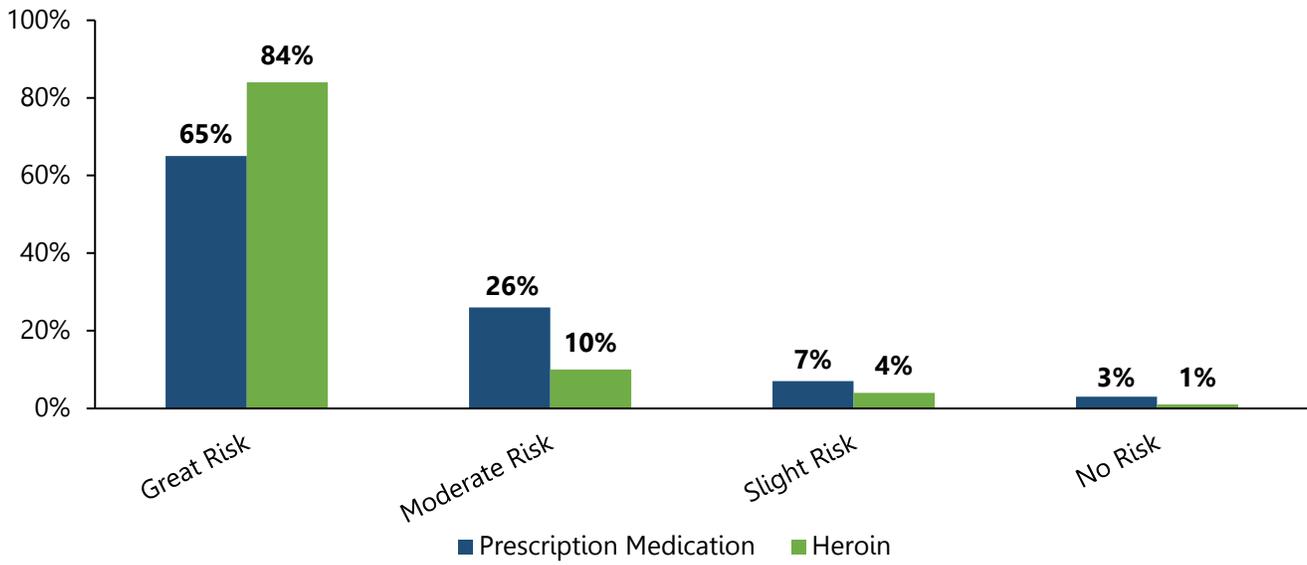
- Monroe County adults thought the following were the most serious drug problems in their community: heroin (49%), alcohol (13%), prescription drugs (12%), marijuana (7%), crack cocaine (3%), methamphetamine (2%), cocaine (1%), and other (1%). Six percent (6%) of adults did not think there was a serious drug problem in the community.

Perceptions of the Most Serious Drug Problems in Monroe County



- When asked, how much do you think people risk harming themselves physically or in other ways if they use prescription medications that are not prescribed to them, Monroe County adults reported the following:
 - Great risk (65%)
 - Moderate risk (26%)
 - Slight risk (7%)
 - No risk (3%)
- When asked, how much do you think people risk harming themselves physically or in other ways if they try heroin once or twice, Monroe County adults reported the following:
 - Great risk (84%)
 - Moderate risk (10%)
 - Slight risk (4%)
 - No risk (1%)

Perceptions of Physical Harm in Monroe County



- Seventy-eight percent (78%) of Monroe County adults agreed that drug and alcohol addiction are diseases.
- Ninety-eight percent (98%) of adults agreed that an individual can become addicted to prescription pain medications.
- Eighty-four percent (84%) of adults disagreed that it is acceptable to share prescription pain medications with family and/or friends if they need it.
- Seventy-two percent (72%) of adults disagreed that it is acceptable to keep unused prescription medications that they no longer need to take.
- Forty-one percent (41%) of Monroe County adults were aware of someone who had misused or abused prescription pain medications in the past year, increasing to 47% of those with incomes less than \$25,000.
- One-fourth (25%) of adults were aware of someone who had used heroin in the past year, increasing to 44% of those under the age of 30.
- When asked, how difficult or easy it would be to get heroin, Monroe County adults reported the following:
 - Probably impossible (18%)
 - Very difficult (16%)
 - Fairly difficult (17%)
 - Fairly easy (34%)
 - Very easy (15%)
- Monroe County adults reported they had been affected by the following:
 - Someone close to them was addicted to prescription pain relievers (33%)
 - Someone in their immediate family was addicted to prescription pain relievers (23%)
 - Someone close to them was addicted to heroin (19%)
 - Someone in their immediate family was addicted to heroin (11%)
 - Someone in their household was addicted to prescription pain relievers (6%)
 - Someone living in their household was addicted to heroin (4%)

- Due to changes in prescribing guidelines, Monroe County adults reported themselves or a family member experienced the following: bought prescription medication from another source (9%), stole prescription pain medication (6%), and resorted to using heroin (4%).
- About one-fifth (19%) of Monroe County adults thought it was safe or acceptable to use prescription pain relievers while driving.
- Ten percent (10%) of Monroe County adults reported they had driven a car or other motor vehicle in the past year while using prescription pain relievers (that advised against operating a car or other motor vehicle when taking the prescription pain relievers as prescribed).

Opioid Assessment: Prescription Pain Medication Use

Key Findings

Five percent (5%) of Monroe County adults misused prescription pain relievers in the past year. Twelve percent (12%) of adults reported using Norco in the past 12 months. Cost was reported as the number one barrier adults had to trying, using or continuing alternative therapies.

Prescription Pain Medication Misuse

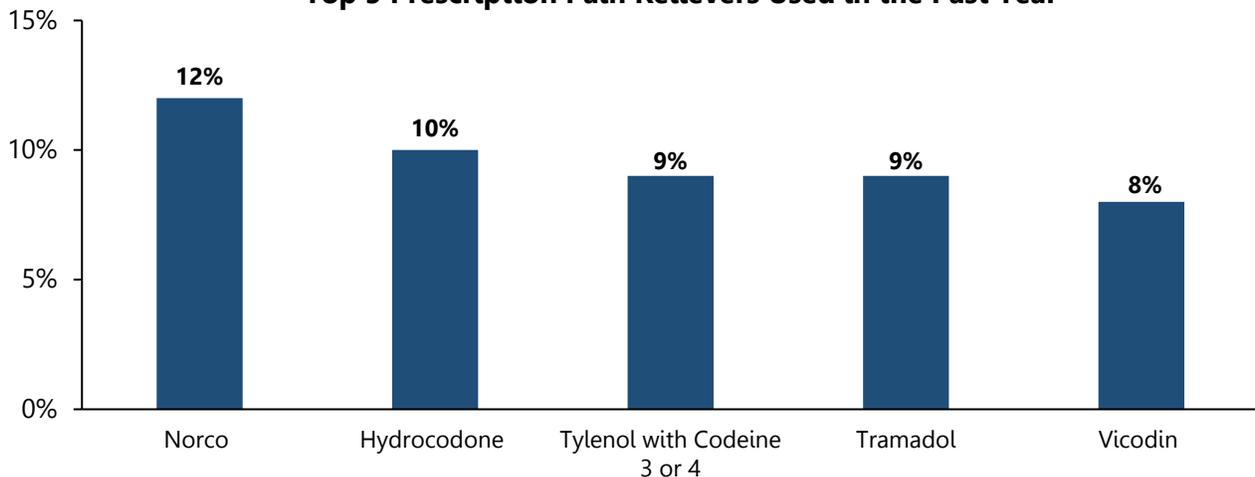
Note: Prescription Pain Medication Misuse was defined as using a prescription pain reliever in anyway a doctor did not direct them to use it including using it without a prescription of their own; using it in greater amounts, more often, or longer than they were told to take it; or using it in any other way a doctor did not direct them to use it.

- In the past year, 5% of Monroe County adults misused prescription pain relievers (used in any way a doctor did not direct them to use it).
- The average age that Monroe County adults reported they first used a prescription pain reliever in a way a doctor did not direct them to use it was 30.7 years old.

Prescription Pain Medication Use

- Thirty-one percent (31%) of Monroe County adults used at least one form of prescription pain reliever in the past year. Adults reported using the following prescription pain relievers in the past year:
 - Norco (12%)
 - Hydrocodone (generic) (10%)
 - Tylenol with codeine 3 or 4 (NOT over-the counter Tylenol) (9%)
 - Tramadol (generic) (9%)
 - Vicodin (8%)
 - Percocet (5%)
 - Oxycodone (generic) (3%)
 - OxyContin (generic) (3%)
 - Suboxone (3%)
 - Ultram (2%)
 - Buprenorphine plus naloxone (generic) (2%)
 - Morphine (generic) (2%)
 - Dilaudid or hydromorphone (1%)
 - Fentanyl (generic) (1%)
 - Codeine pills (generic) (1%)
 - Extended-release tramadol (generic) (1%)
 - Extended-release morphine (generic) (1%)
 - Lortab (1%)
 - Methadone (1%)
 - Exalgo or extended-release hydromorphone (1%)
 - Extended-release oxymorphone (generic) (1%)
 - Ultram ER (<1%)

Top 5 Prescription Pain Relievers Used in the Past Year



- Two percent (2%) of Monroe County adults reported there was a month or more when they spent a lot of their time getting or using prescription pain relievers.
- In the past year, 2% of Monroe County adults reported they used more prescription pain relievers than they used to get the same effect they wanted.
- One percent (1%) of adults reported they repeatedly got in trouble with the law in the past year as a result of using prescription pain relievers.
- Four percent (4%) of Monroe County adults were currently receiving treatment or counseling for their use of prescription pain relievers
- During the past year, Monroe County adults reported they gave up or spent less time doing the following important activities as a result of using prescription pain relievers: spending time with friends or family (2%), going to work (2%), doing fun things such as hobbies or sports (1%), going to school (1%), and taking care of children (1%).
- Monroe County adults reported they had the following symptoms that lasted longer than a day after they cut back or stopped using prescription pain relievers: trouble sleeping (4%); had cramps or muscle aches (3%); yawning (2%); felt kind of blue or down (2%); felt sweaty, had enlarged eye pupils, or had body hair standing up on their skin (1%); diarrhea (1%); had teary eyes or a runny nose (1%); vomited or felt nauseous (1%); and fever (1%)
- Monroe County adults reported the **last time** they used prescription pain relievers in any way their doctor did not direct them, they obtained the prescription pain relievers they misused in the following ways: from just one doctor (72%); from a friend or relative for free (26%); bought them from a friend or relative (13%); from a dentist (4%); bought them from a drug dealer or other stranger (2%); took them from a friend or relative without asking (2%); from more than one doctor (1%); stole them from a doctor’s office, clinic, hospital, or pharmacy (1%); and got them some other way (0%). *Note: This data was calculated using the number of adults who reported using prescription pain relievers.*

| Comparisons | Monroe County 2019 | U.S. NSDUH 2017 |
|---|--------------------|-----------------|
| Misused prescription pain relievers in the past 12 months[±] | 5% | 4% |
| Got prescription pain relievers from a friend or relative for free* | 26% | 39% |
| Got prescription pain relievers from just one doctor* | 72% | 35% |
| Bought prescription pain relievers from a drug dealer or other stranger* | 2% | 6% |
| Got prescription pain relievers from more than one doctor* | 1% | 1% |
| Bought prescription pain relievers from a friend or relative* | 13% | 11% |
| Stole prescription pain relievers from a doctor’s office, clinic, hospital, or pharmacy* | 1% | 1% |
| Got prescription pain relievers some other way* | 0% | 5% |

Note: NSDUH Data is reported for ages 18 and older.

**This data was calculated using the number of adults who reported using prescription pain relievers.*

± Misuse of prescription pain relievers is defined as use in any way not directed by a doctor, including without a prescription of one’s own; use in greater amounts, more often, or longer than told; or use in any other way not directed by a doctor.

- Adults reported the **last time** they used prescription pain relievers in any way their doctor did not direct them to for the following reasons: relax physical pain (91%), relax or relieve tension (20%), help with their sleep (19%), feel good or get high (7%), help with their feeling or emotions (6%), because they were “hooked” or had to have them (4%), increase or decrease the effect(s) of some other drugs (2%), and some other reason (9%), and experiment or to see what they are like (0%). *Note: This data was calculated using the number of adults who reported using prescription pain relievers.*

- Seven percent (7%) of Monroe County adults had used a program or service to help with addiction problems for themselves or a loved one. Reasons for not using a program or service included: have not thought about it (6%), programs are always full (limited capacity) (4%), cannot afford to go (4%), did not want to miss work (3%), unable to find a program (3%), transportation (3%), did not have any openings (wait-listed) (2%), fear (2%), cannot get to the office or clinic (1%), did not know how to find a program (1%), stigma of seeking services (1%), a program was not available (<1%), and other (16%). Sixty-nine percent (69%) of adults reported a program or service to help with addiction problems for themselves or a loved one was not needed.
- About half (49%) of Monroe County adults reported they tried the following alternative treatment methods instead of prescription pain relievers for pain management: exercise (34%); lotions, rubs, or patches (30%); chiropractic (29%); physical therapy (28%); herbal or natural supplements (16%); yoga, Pilates, or meditation (15%); massage therapy (14%); medicinal marijuana (11%); psychotherapy (3%); acupuncture (2%); osteopathic manipulation (2%); and other alternative therapies (2%). Over one-third (38%) of adults had not tried any alternative treatment methods in their lifetime.
- Adults reported the following barriers to trying, using, or continuing alternative therapies: cost (16%), not interested in trying alternative therapies (16%), insurance does not cover alternative therapies (9%), had not thought of it (8%), do not know much about alternative therapies (4%), taking prescription pain medicine is easier (3%), lack of transportation (3%), not sure what alternative therapies are available (3%), difficult to get an appointment (2%), do not believe alternative therapies work (2%), cannot get time off from work (2%), alternative therapies are not available in their area (1%), too much of a time commitment (1%), and other barriers (32%).

Disposing of Prescription Medications Properly

- Consumers and caregivers should remove expired, unwanted, or unused medicines from their home as quickly as possible to help reduce the chance that others accidentally take or intentionally misuse the unneeded medicine, and to help reduce drugs from entering the environment.
- It should be noted that a small number of medicines have specific directions to immediately flush them down the toilet when they are no longer needed, and a take-back option is not readily available.
- Your best choices for disposal of expired, unwanted, or unused medicines are:
 - **Find a Red Med Box**
 - Michigan State Police – Monroe Post
 - City of Monroe Police Department
 - Bedford Substation – Monroe County Sheriff’s Department
 - Dundee Village Police Department
 - Carleton Police Department
 - Erie Township Police Department
 - **Drop them off during a National Prescription Drug Take Back Day event**
 - The U.S. DEA periodically hosts events where temporary collection sites are set up in communities nationwide for safe disposal of prescription drugs.
 - Please go to <https://takebackday.dea.gov/?src=dea.gov> and scroll down to collection site locator. You can enter in your information to determine when and where unused and expired medication collections sites will be taking place in your community.
 - **Use at-home drug deactivation pouches (e.g., Deterra® Pouches)**
 - Deterra Pouches will deactivate any organic medications including opioids.
 - Deterra works on pills, patches and liquids, allowing them to be absorbed by the activated carbon, rendering them neutralized and non-retrievable.
 - **Disposing medicines in the household trash**
 - If no take-back programs or DEA-authorized collectors are available in your area, and there are no specific disposal instructions, you can follow these steps to dispose of most medicines in the household trash:
 1. Mix medicines (do not crush tablets or capsules) with an unpalatable substance such as dirt, cat litter, or used coffee grounds.
 2. Place the mixture in a container such as a sealed plastic bag.
 3. Throw the container in your household trash.
 4. Delete all personal information on the prescription label of the empty pill bottles or medicine packaging, then dispose of the container.

(Sources: U.S. Food & Drug Administration, Disposal of Unused Medicines: What You Should Know & Deterra drug deactivation system, FAQ)

Opioid Assessment: Heroin Use

Key Findings

One percent (1%) of Monroe County adults used heroin at some time in their lifetime.

Heroin Use

- One percent (1%) of Monroe County adults reported using heroin in their lifetime.
- Less than one percent (<1%) of adults reported using heroin in the past 30 days.

| Adult Comparisons | Monroe County 2019 | U.S. NSDUH 2017 |
|---------------------------------|--------------------|-----------------|
| Used heroin in the past 30 days | <1% | <1% |
| Used heroin in their lifetime | 1% | 2% |

Note: NSDUH Data is reported for ages 18 and older.

Heroin Use

- Heroin is a semi-synthetic, highly addictive opioid that is made from morphine, a substance taken from opium poppy plants, and can produce intense feelings of euphoria.
- The use of heroin has been increasing in recent years among men and women, most age groups, and all income levels.
- Some of the greatest increases have occurred in demographic groups with historically low rates of heroin use: women, the privately insured, and people with higher incomes.
- Heroin-related overdose deaths increased five-fold from 2010 to 2017.
- During 2017, over 15,000 people died from drug overdoses involving heroin in the United States, a rate of almost 5 deaths for every 100,000 Americans.
- In 2017, nearly 494,000 people in the United States (12 years old or older) reported using heroin in the past year, which is an estimated rate of 0.2 per 100 persons.
- Past misuse of prescription opioids is the strongest factor for starting heroin use, especially among people who become dependent upon or abused prescription opioids in the past year. This indicates that widespread opioid exposure and increasing rates of opioid addiction have played a major role in the growth of heroin use.

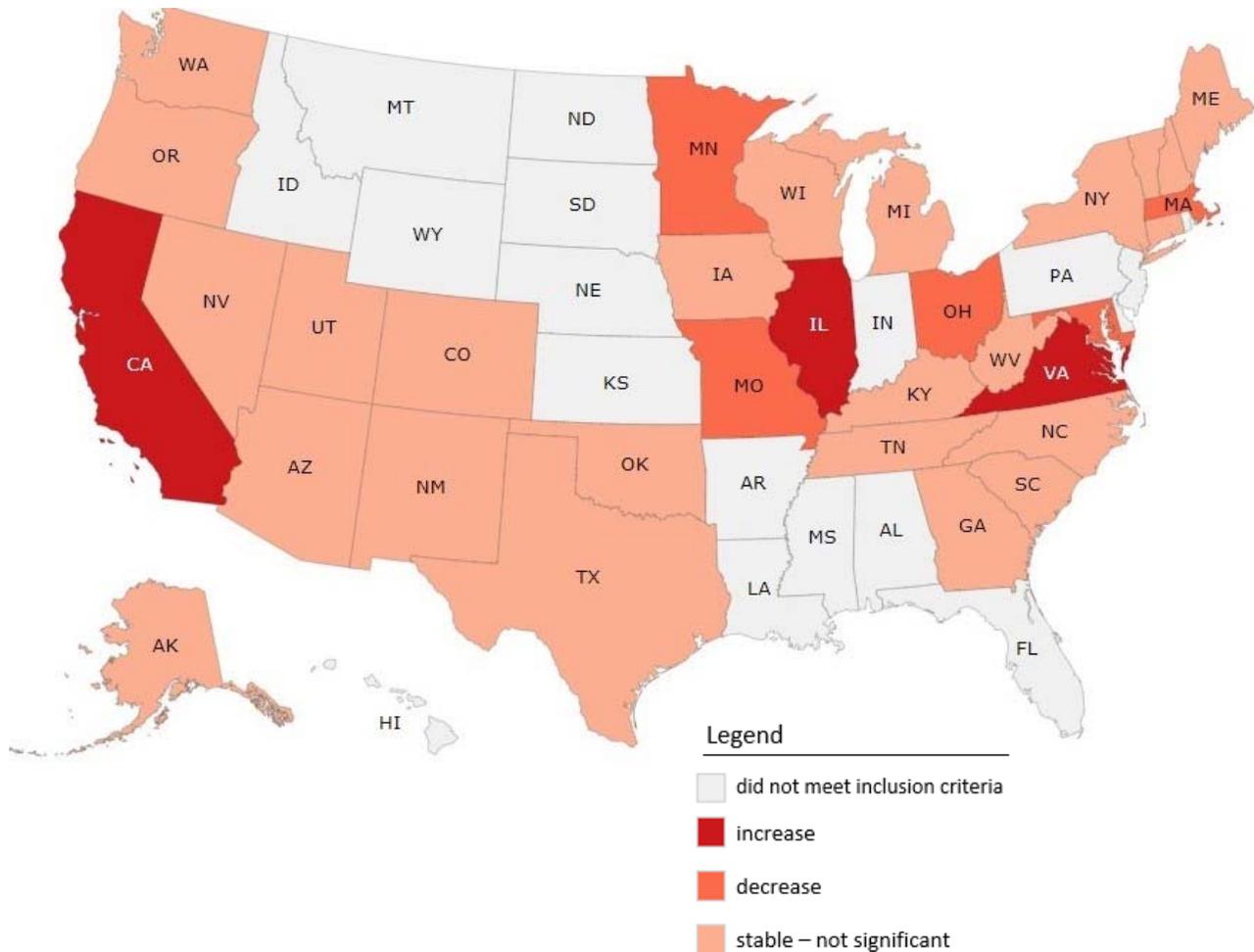
(Source: CDC, Heroin Overdose Data, Updated June 20, 2019)

Heroin-Related Overdose Deaths

During 2017, over 15,000 people died from drug overdoses involving heroin in the United States, a rate of almost 5 deaths for every 100,000 Americans (Source: CDC, Heroin Overdose Data, Overdose Deaths).

The following map shows statistically significant changes in drug overdose death rates involving heroin by select states from 2016 to 2017. This map shows that Michigan's heroin overdose death rate remained stable – not significant from 2016 to 2017.

Statistically Significant Changes in Drug Overdose Death Rates Involving Heroin from 2016 to 2017



¹Deaths are classified using the International Classification of Diseases, Tenth Revision (ICD-10). Drug overdose deaths are identified using underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. ²Rates shown are for the number of deaths per 100,000 population. Age-adjusted death rates were calculated using the direct method and the 2000 standard population. ³Drug overdose deaths, as defined, that have heroin (T40.1) as contributing causes.

(Source for map: CDC, Heroin Overdose Data, Overdose Map, Updated October 2019)

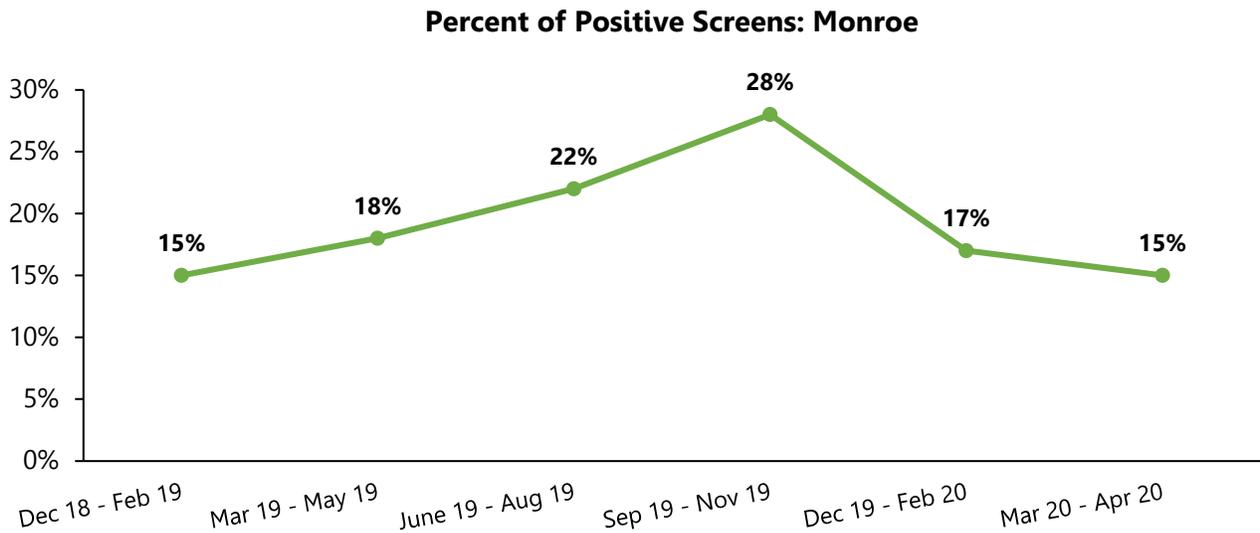
Rapid Opioid Dependence Screen (RODS)

The Bureau of Justice Statistics report that two-thirds (63%) of the sentenced jail population report substance dependence or abuse, compared to just 5% of the general population; with 40% reporting using drugs at the time of the offense (Bronson, Stroop, Zimmer, and Berzofsky, 2017). Jails experience a consistent flow of individuals with issues related to substance misuse. To effectively address the needs of those entering these facilities with an underlying dependence on substances like opioids, it is important to have a valid and reliable diagnostic instrument for identifying this particular population. While such tools are available, many are lengthy and can become an added burden to administer at booking. The Rapid Opioid Dependence Screen (RODS) has been shown to be an effective and efficient screen in criminal/legal settings. The RODS is a brief, 8-item measure aimed at assessing dependence for and use of opioid drugs over the past 12 months. All response options are coded in a dichotomous yes/no format that measures the use of opioids like: heroin, methadone, buprenorphine, morphine, OxyContin/Codone, and other opioid analgesics like morphine and fentanyl. The other questions measure the correlating physiological, behavioral, and cognitive factors associated with opioid use. Screening is a critical process and serve as the primary means by which jail staff can determine which inmates require treatment while in their care. Still, for many facilities, screening is the weak link in service and treatment delivery as it varies considerably from jail to jail- with many not screening all. Monroe County Jail (MCJ) has been a forerunner in the adoption of standardized screens. Being the first jail in the State to add standardized mental health screen as a part of their jail management system, they also led the way with utilization of the RODS screen starting in December of 2018.

Over the past 17 months of RODS administration, MCJ saw steady rise in the number of positive Opioid Use Disorder (OUD) screens within the first 12 months of its implementation. December 2018 through February 2019 reported 15% of the individuals screened were positive for OUD. This rate saw a 3% increase from March through May 2019 (18%) and June through August 2019 (22%). September through November 2019 saw the highest number of positive OUD screens, 28%. However, December 2019 through February 2020 saw a significant decrease in the number of individuals who screened positive in MCJ, 17%. This decrease in the number of positive screens continued into March and April 2020, with 15% of the individuals screened, screening positive for OUD. The drop in the number of positive screens within the facility may be contributed to several factors. Monroe County has taken an aggressive approach to cross-system integration in addressing OUD in their County. The Monroe Community Mental Health Authority (MCHMA) and Sherriff's office work in tandem oversee programming within the jail to address the needs of those entering the facility who screen positive for OUD. Programs like the Michigan Reentry Program (MI-REP) which provides a re-entry treatment plan, facilitate linkages to needed services in the community, and referrals to outpatient mental health and substance abuse treatment providers, work to provide these individuals with the resources needed to continue recovery in the community. Seventy-six percent (76%) of individuals who were previously connected to MCHMA engaged with mental health services after being released from the Monroe County Jail. Sixty (60%) percent of graduates from the MI-REP program received medications for opioid use disorder and reported no drug cravings after release. One-hundred percent (100%) of participants in the MI-REP program who were released engaged with community support services in the community. With the launch of the Opioid Treatment Ecosystem (OTE), MCJ will allow for the continuity of care for individuals entering the facility with a prior script for a medication to treat opioid use disorder, as well as new inductions for those who are in need. The Monroe Opioid Taskforce and the Monroe County Substance Abuse Coalition, in partnership with Monroe County Health Department and multiple community agencies have launched county-wide initiatives to educate the residents around the resources available to them. Lastly, the Proactive Response to Overdose and Appropriate Connections to Treatment initiative (PROACT) aims to link county first responder data to track Narcan administration and the feasibility of referrals to post-overdose treatment. The RODS screen has been a valuable tool for MCJ in not only identifying OUD among those screen within the facility, but perhaps more importantly, their referral to treatment.

Monroe County has focused on Intercepts 0-5 of the Sequential Intercept Model (SIM) by increasing the provision of both mental health and substance use disorder services in the jail; building strong collaboration between the Sheriff's Office, MCHMA, and Monroe County Probation/Parole; automating behavioral health screens; training officers in crisis response; and increasing the provision of re-entry services.

Bronson, Stroop, Zimmer, & Berzofsky. (2017). Drug use, dependence, and abuse among state prisoners and jail inmates, 2007–2009. Washington, DC: United States Department of Justice, Office of Juvenile Justice and Delinquency Prevention. <https://www.bjs.gov/content/pub/pdf/dudaspi0709.pdf>



(Source for graph: Wayne State University, Center for Behavioral Health and Justice, Rapid Opioid Screen in Monroe County Jail, 2020).

Focus Group Qualitative Data

Introduction

In March 2020, the Hospital Council of Northwest Ohio (HCNO) conducted focus groups for Monroe County. Focus groups are useful to find a range of opinions across groups of people and are used to gain insight for community needs. The community health assessment incorporated focus groups to uncover attitudes and factors that influence health behaviors that cannot be fully captured through survey research. The interaction between focus group participants is an important dynamic. Participants can share their thoughts and opinions, and others have a chance to reflect on the statements, offer alternative ideas, or build upon other participants' ideas. The qualitative data collected in these focus groups complement the quantitative data captured in the county health assessment survey. Qualitative data provides a deeper understanding as to why participants from the community feel and act a certain way, while quantitative data identifies the extent of a specific health issue.

Methods

PARTICIPANT RECRUITMENT

HCNO staff advised the Monroe County planning committee on recruitment methods for the focus groups. The planning committee was responsible for identifying the populations they wanted to learn more information from, as well as identifying possible participants for each focus group. The planning committee agreed to conduct three focus groups with different populations that interact with residents with opioid use disorder: peer recovery coaches, first responders, and family members. HCNO provided template recruitment flyers to use for advertising and recruitment. Strategies used to recruit participants included utilizing personal connections with organizations that served the populations of interest and advertising at locations that the populations frequently visited. Potential participants were screened to ensure they lived or worked in Monroe County, identified with the respective populations of interest, were over the age of 18, and were English speaking.

MODERATOR GUIDE

A semi-structured moderator guide was used for the study. Seven key questions were asked with additional probing questions throughout as the moderator felt necessary. The questions asked were related to overall perceptions and experiences with opioid use disorder in the community, and recommendations to address opioid misuse in the community.

PROCEDURE

All materials including the moderator guide, recruitment flyers, consent forms, and procedures were approved by Advarra Institutional Review Board. The planning committee scheduled three focus groups held in one day at the United Way of Monroe/Lenawee Counties. The focus groups each had between four and ten participants. As participants entered the site of the focus groups, HCNO staff informed participants about the details of the study and verbally explained the informed consent forms. At the beginning of each focus group, participants were given time to read and sign the consent forms. During each focus group, there was one moderator and two notetakers. The notetakers' duties were to write down observations based on body language and other nonverbal activity of participants while the moderator kept participants engaged. Each focus group lasted one hour, and at the end, a \$30 cash incentive was offered to all participants as a thank-you for their travel and time, although not every participant took the incentive. After each focus group, the moderator and notetakers had an informal debriefing of the discussions that occurred.

ANALYSIS

Focus groups were recorded using two voice recorders and, after completion of the focus groups, the MP3 recordings were uploaded to a computer. Talk-to-text software was used to prepare a full transcript of each focus group. During transcription, all personal identifiers were excluded from the documents. Notes taken by the notetakers were incorporated into the final transcripts. A staff member who was present at each focus group and

who had experience with thematic coding used Microsoft Word to identify and consolidate themes throughout several rounds of revisions.

LIMITATIONS

As with any research method, there are limitations to consider for focus groups. First, although participants were carefully selected, there may have been selection bias that limited the ability to expand the findings to other populations within the county. Second, while the moderator is trained in facilitating and analyzing focus groups, bias could occur. Steps to limit bias in the findings included having notetakers involved in the analysis, report writing, as well as having a debriefing session after each focus group.

EMPLOYED PEER RECOVERY COACHES FOCUS GROUP

The focus group with employed peer recovery coaches with two or more years in recovery consisted of four participants. The focus group was held at the United Way of Monroe/Lenawee Counties.

PERCEPTION OF OPIOID USE

Participants identified the following as changes they have noticed in the use of opioids over time:

- *Increased Use:* The participants stated, while the use of opioids has been trending downward in recent years, overdoses are occurring more frequently. One participant shared that with a decrease in opioid use, they see an increase in fentanyl poisoning.

“I think that [using opioids] it's a lot more dangerous right now. Like with the decrease of opioids but going into the fentanyl poisoning and stuff. I see, like when I was using, a difference. Like it was about being clean and sober, you know, or clean or dirty. And now... it's Russian roulette. You know because you don't know what you are getting versus, I really didn't know what I was getting before. It's you really just don't know what you're getting now. I think it's more dangerous.”

- *New Drugs:* One participant mentioned that the drug scene is much more dangerous now due to the new creation of drugs that have been containing fentanyl. Some people may believe they are buying one type of drug, but instead receiving a cocktail of multiple chemicals. Another participant stated that they believed methamphetamine was becoming more popular along with alcohol use. They believed this new consumption pattern was due to county law enforcement and the legal sector implementing stricter measures regarding opioids.
- *Location and Cost:* Several participants mentioned that the location and cost of obtaining drugs have changed. The new spot to get drugs has appeared to be in bigger cities such as Toledo and Detroit. This new location was chosen due to Monroe having higher prices for drugs in comparison to larger cities. Places like Detroit provide easier access and are less expensive for users, according to the participants. The “crackdown” in Monroe County regarding drugs pushed users to seek new purchasing locations. A couple of participants shared that their addiction began with a prescription opioid, and once their prescription ran out, they began purchasing it off the streets.

COMMUNITY STRENGTHS

Participants identified the following as strengths within the community that help people seek treatment for opioid use disorder:

- *Peer Recovery Coaches:* Peer recovery coaches are one effective pathway that can help residents seek treatment and help clients through recovery. In recent years, there has been an increase in the number of coaches which has positively benefited the community because they are consistently available and have shown their commitment to helping Monroe County residents.
- *Court System:* Some participants raved that the court system helped a lot with some people due to it forcing them to get clean and seek new lifestyles.
- *Crisis Center:* Participants mentioned that the 24-hour crisis center served as an excellent resource for people due to it being open at all hours of the day and being very accommodating. It has helped with taking the stigma out of people who have drug addictions.
- *Increased Availability and Services:* Most participants stated that what has helped the most is the increase in services for people suffering from addictions. Specifically, the increased availability of Medication Assisted

Treatment in the county was mentioned as this allows individuals to maintain their jobs and continue to live their life without leaving Monroe County. The increase in options covers a broader scope of individuals who are looking to change. One participant mentioned that just a few years ago, facilities in the community had the mentality of “treat them, and street them.” Now, these services are focusing more on follow-up care to ensure that the individual is staying on a healthy track. This continuation of care is imperative when having successful cases.

- *Hospitals:* Hospitals have served as a quality resource for people admitted for drug use, due to the facilities having multiple services and resources available on-site.

“I think you know compared to 2014, 2015 when I was heavily in my addiction, like I knew everywhere to get drugs, but I didn’t know anywhere to get help. You know and the only place that I did know of would be the last place that I would go to. There’s a lot of changes that’s been made...”

PRIORITY POPULATIONS

Participants identified the following people as most affected by opioid misuse:

- *Everyone:* The participants agreed that everyone can be impacted by drug use and that there is no one type of person that can’t become addicted.
- *Lack of Community Activities:* Some participants mentioned that since Monroe County lacks activities, it could be a factor as to why people in the area turned to drugs and alcohol to have fun. This chronic use could then lead to an addiction.

ACCESS TO OPIOIDS

Participants mentioned the following as how and where people got opioids and heroin in their community:

- *Bigger Cities:* Several participants noted that users in the area were turning to bigger cities to get their drugs because it is less expensive and Monroe County has started to crack down more on drugs. Toledo and Detroit were mentioned as common places to travel for cheaper drugs.

COMMUNICATION

Participants described the following as ways to reach people who use opioids or heroin:

- *Word of Mouth:* Word of mouth was stated to be an effective way to reach people who use opioids or heroin.
- *Peer Workforce:* The participants stated that their peer workforce services were one of the best ways to reach people because they have experienced what their clients are going through, and it makes them more relatable and understanding. The clients feel empowered by seeing people who have prevailed through their addiction, and they want to do the same.

SUPPORT FOR TREATMENT

The focus group participants mentioned the following as assisting in seeking treatment:

- *Peer Workforce:* The participants agreed that since they were once in their client’s position, that it made their work more effective with those who struggled with an opioid use disorder. Some clients have even told them, “how do I do that?” regarding how to get clean and stay clean like their peer workforce counterpart. Those with opioid addiction, usually want to make the change, they just do not have any support, and the peer workforce helps support them with real-life experiences.

RECOMMENDATIONS

Focus group participants recommended the following to address the opioid misuse problem in Monroe County:

- *Family and Social Support:* It was stated that having social support is helpful for both the client and their families, especially in situations of overdoses. Grief support was recommended for family members. Another participant said that the county is getting better at removing the stigma from people who are addicted to drugs, but the public conversations must continue to keep destigmatizing the topic. Lastly, some participants brought up the jail system and how inmates who finish their sentence, need a support system and services to help ensure they won't turn to drugs as a source of comfort.
- *Increased Services/Personnel/Facilities:* All the participants stated that an increase in services such as mental health care, detox, and inpatient facilities would be a great help. The ability to access more timely appointments for clients was also mentioned because if clients can't be seen in a few hours, it might be too late to get the person help when they need it the most. One person mentioned that Monroe County is a very spread out population with all the best health care services located in the city of Monroe. This leaves certain cities that are on the outskirts (Temperance, Whiteford, Newport, Carleton) at an unfair disadvantage because it is much harder for them to access health care services, especially with limited public transportation. This is a large barrier to the community members who have been trying to seek help. An increase in services and facilities in various parts of the community would benefit those in need. One participant did mention there are several more options to recovery than there used to be. Specifically, they mentioned that Medication Assisted Treatment was more readily available throughout the county.
- *Continuation of Care:* Some of the participants mentioned the continuation of care among those suffering from addiction is weak and, at times, nonexistent. Those who are working through their addiction cannot go back to their same couch surfing lifestyles, because that could be a triggering environment for them. The participants suggested that there should be some sort of follow-up care or supportive services that help clients find stable housing, support groups, and even follow-up sessions with their doctor. All participants agreed that once someone gets clean, that does not mean they will never use it again. Therefore, continuation of care and follow-ups are imperative to keep those people healthy and on the right track.
- *Involvement in Program Developing:* Employed peer recovery coaches that participated in the focus group agreed that they needed to be invited to the table when it came to creating programs for fighting addictions. Their first-hand experience should be noted and used to develop successful programs to genuinely help people. They have gone through drug abuse, and that gives them an inside look into their client's mind.
- *Housing:* Transitional housing for women needs more attention, especially for women on Medication Assisted Treatment. Also, more transitional housing for people of all demographics was recommended.
- *Peer Recovery Coaches:* Participants thought that peer recovery coaches through the county could benefit from increased access to services too because they sometimes feel like a lot of pressure is on them, and they may also feel forgotten about when it comes to their own recovery. The peer recovery coaches also thought it would be advantageous for the county to use the coaches to help develop more standardized data collection throughout the county to help inform decisions made at the county level.

FAMILY MEMBERS FOCUS GROUP

The focus group with Monroe County residents with a family member affected by opioid use disorder consisted of ten participants. The focus group was held at the United Way of Monroe/Lenawee Counties.

PERCEPTIONS OF OPIOID USE

Participants identified the following as changes they have noticed in the use of opioids over time:

- *Prescription Pills:* The participants stated that prescription pain killers played a large role in the opioid epidemic. One participant mentioned that after experiencing an injury they were prescribed opioids and later became addicted. The group brought up a physician in the area who was improperly prescribing opioids, which led to people in their community becoming addicted.
- *Stigma:* The participants stated that the community was unaware of how medically assisted treatments worked. As a result, from a lack of understanding, community members looked down on those receiving treatment.
- *Increase in Arrests:* The participants agreed that due to an increase in arrests, it made it harder to purchase heroin and discouraged drug dealers from selling it.
- *New Drugs:* The participants stated that there had been new drug trends occurring in the area. A lot of the drugs had been laced with fentanyl, and users were unintentionally overdosing or dying because of it. They also stated that methamphetamine was increasing in popularity and that they believed it would be the next drug problem.

COMMUNITY STRENGTHS

Participants identified the following as resources that help people seek treatment:

- *The Criminal Justice System:* The participants stated that the court and jail system helped force people to get clean due to its rigidity.
- *Family and Friends:* The participants mentioned that they had experiences with a loved one telling them that they need to get help immediately and that having someone close to them being concerned for their health was a push in the right direction. Participants mentioned that witnessing close friends and families struggling with addiction had pushed them to seek treatment for themselves.
- *Support:* The participants mentioned that support played a large role in individuals seeking treatment; therefore, having a reliable support system within their family and friends was important as well as within the rehabilitation facility.
- *Peer Recovery Workforce:* The participants had wonderful comments to share regarding the Peer Recovery Workforce. They said that they significantly helped people to seek treatment and stay clean, because of their intimate outlook with drug abuse themselves.
- *Willpower:* The participants stated that for someone to seek treatment, they have to genuinely want to get clean. Without their willpower and ambition, it was impossible to complete treatment successfully.

BARRIERS

Focus group participants stated the following as barriers regarding getting loved ones help:

- *Addiction:* The participants all mentioned that one of the most significant barriers to getting their loved one's help was simply that their loved one was addicted and dependent on their drug of choice to feel normal. One participant mentioned that their child was on Suboxone, which helped them a lot, but they were becoming

addicted to that drug as well. The family members rationalized it as the lesser of two evils, and one of the few ways to be able to be productive and live a normal life.

- *Lack of Health Insurance:* The participants mentioned that lack of insurance and cost made it hard for them to pay for their loved ones to go to a rehabilitation facility or receive other services.
- *Lack of Activities:* The participants stated that in Monroe County, there were very few things to do and that the absence of activities led to people turning to drugs for fun. They also mentioned that this posed as a problem for addicts who were in recovery.
- *Lack of Information:* The participants mentioned that a lack of information could be considered a barrier because people who want help are not always able to find it within the county. One participant mentioned that when they were looking for a rehab facility that fit their needs and were unable to find one in Monroe County. They received no help or support in finding a placement.

ACCESS TO OPIOIDS

Participants listed the following as how and where people they knew got opioids or heroin:

- *Physicians:* The participants stated that some doctors in the past had prescribed opioids that led to some using them irresponsibly and turning into an addiction.
- *Larger Cities:* The participants mentioned that people knew to get opioids or heroin from larger cities such as Toledo or Detroit. These bigger cities are conveniently located and have served as a “perfect” drop spot.

INDIVIDUAL EXPERIENCE

Participants identified the following as personal experiences from being a family member of someone with an opioid use disorder:

- *Friends and Family:* The participants mentioned several stories about the struggles of being in a close relationship with someone who abused drugs and how it was hard to rationalize what they were doing to themselves and how to best help them. They also discussed the constant judgement and disapproval they felt from other people when trying to explain their home life situation.
- *Death:* The participants mentioned that they simply had a looming fear of their loved ones dying.
- *Stigma:* The participants stated the stigma that was attached to being a drug addicts, which makes it hard for the general public to sympathize and want to help them. Participants also found it difficult to watch how their family member was treated as a result of stigma. In addition to the stigma from the general community, stigma also came from police officers. There was a perception that police look at people on Suboxone as criminals.

“I don’t think anyone ever grows up saying, That’s my goal; I want to be an addict”, but that’s where it ends up taking you, whether it start off from an injury accident and you start taking it because you medically need it because you have pain. Or you’re using it because you heard other people were using it and for a coping skill to deal with the emotional pain... Whatever the reason is, you don’t start out ever saying “That’s my goal in life. I want to be an addict”. But that’s where it ends up because your body then gets used to it, and your mind gets used to it, and then when you try to not use it anymore because you’ve changed your mind or something else is going on or you have a little motivation to change and then you’re physically sick.”

NALOXONE/NARCAN EXPERIENCES

The following were mentioned as experiences with Naloxone/Narcan:

- *Life-Changing:* Almost all participants had stories of either themselves being saved by Narcan or knowing someone who had been saved by it. Many of them had to be treated with it more than once. One participant said that they overdosed on what they thought was heroin, but it ended up being pure fentanyl. Another participant shared a story about using Narcan to revive his brother on ten different occasions.
- *Access:* Participants stated that a prescription was required to get Narcan and that it has saved countless lives due to its use in the public.
- *Unrealistic Expectations:* The participants stated that due to the nature of Narcan, some users used it as a "safety net" when they decided to do drugs. Some drug addicts seemed to worry less about overdosing because they believed they would be fine as long as someone was there to administer Narcan if needed.

RECOMMENDATIONS

Participants mentioned the following recommendations as ways to address the opioid problem in Monroe County:

- *Increased Education:* The participants all agreed that by providing more education regarding drug abuse and treatment, that it would make getting clean more approachable. They suggested having more classes or educational meetings with the peer recovery members where they shared their stories and presented all the resources available. The participants believed it was very important to have someone who has been in the addicts situation to provide education and support.
- *Increase in Services and Resources:* The participants all agreed that Monroe County needed to increase the services and resources available for people who were suffering from drug abuse. They recommended that there needed to be more options when seeking treatment because the county had a limited amount of services. They also mentioned that the follow-up care for those coming out of jail was non-existent, which has led to people slipping back into their old ways. One participant suggested there be a halfway house for men and possibly their children, for when they lacked options and needed support just as there are services in the county dedicated to women.
- *Community Awareness:* The participants stated that the community should have recognized the drug problem earlier so that resources could have been provided faster. One participant mentioned that a lot of community members may not know about the resources available for them or a loved one, therefore they won't get the help they need. The participants suggested having public events to advocate for their cause and even passing out promotional material to educate the public on available resources.

"I think it shouldn't be a point where this group of politicians can help or that, I think it needs to be more community approached. Granted it starts at the top right? But you know it should be a community thing. Raising awareness... why not have some kind of get together at St. Mary's? You distribute pamphlets. You get words out there, 'Hey if you're struggling, call this number. We'll hook you up with peer recovery.' I have more faith in a peer recovery system than an elected official. A peer coach has time to talk to me; a politician is busy being a politician. This is here. This is not in Lansing and Washington; it needs to be addressed here."

- *Stigma:* The participants mentioned that there was some stigma attached to Medication Assisted Treatments (MAT) such as Suboxone and that this could lead to some people not wanting to get the help they need. Participants felt that the community needed to be more informed of Medication Assisted Treatment and the benefits it can have for individuals seeking recovery from opioids. The thought is that by being transparent, the stigma might slowly fade.

- *Increased Education/Access to Medication Assisted Treatments:* The participants stated that for Medication Assisted Treatments (MAT) to work, education must be provided and easier access for those who need it. They also suggested that counseling plays a significant role in the treatment and that it must be mandatory.
- *Policy:* The participants recommended that there needed to be community members voted into office and elected board officials who reflect the communities' outlook on change within their community. By having people in a position of power who support their issues, more things could get done. Other participants felt that a community organizing approach tackling drug use using education and advocacy in their neighborhoods was necessary.
- *Opportunities for Recreation/Entertainment:* The participants stated that there was not much to do in their county and that some of their public spaces such as their mall was deteriorating. They mentioned that people need something safe and productive to fill their time with so that they don't turn to drugs.
- *Student Education:* The participants recommended that there be anti-drug campaigns administered throughout the schools and through high school. They suggested having a recovered addict conduct the education sessions so that the students get a real look into what drugs could do and the struggle of trying to get clean. This type of education could save young students from a life of pain and hardship. Participants thought educational programs should start in middle school and continue on through high school.

“I feel like people that are in recovery and are clean now, them speaking to the young people... That would have helped me so much. Hearing from experience, someone that's gone through it and what they've been through, and hearing their story...”

- *Improve Rehabilitation Facilities:* The participants stated that the rehabilitation facility within Monroe County needed to be improved on a few levels. Some participants mentioned that they were aware of some patients bringing drugs into the facility, which jeopardized all of the patient's treatment experience. They recommended that there be better surveillance. Another comment was that it was the only rehabilitation option available, and that treatment was not a one size fits all. Therefore, the participants suggested an additional rehabilitation center created or a different formatting of the current program for those who needed it.
- *Improve/Increase Mental Health Care:* The participants stated that mental health care was lacking in their county. They recommended an increase in mental health care services and support because many people engaged in drug use because they were suffering from mental health issues. Therefore, by treating the mental health first, it is a preventative measure against drug abuse.

FIRST RESPONDERS FOCUS GROUP

The focus group with First Responders and Law Enforcement of Monroe County consisted of ten participants. The focus group was held at the United Way of Monroe/Lenawee Counties.

PERCEPTIONS OF OPIOID USE

Participants identified the following as changes they have noticed in the use of opioids over time:

- *Diverse Users:* The participants all agreed that opioids had obvious type of user. There had been people from every background, social status, and age demographic who have started to use and abuse opioids. This epidemic has spread throughout poor and affluent neighborhoods. Some participants shared they had family members who had been directly impacted by opioid abuse.
- *Increased Use:* The participants stated that opioid use had increased in their area due to the county's prescription pill problem. However, participants mentioned the number of overall overdoses recently declined.

COMMUNITY STRENGTHS

Participants identified the following as options that help people seek treatment for opioid use disorder:

- *Medication Assisted Treatment:* Medication Assisted Treatment (MAT) was identified as a viable treatment option for opioid use disorder. One participant noted that Suboxone and Methadone used to be viewed as the medical way to use drugs among law enforcement. While that view has begun to change, there is still some skepticism about using Suboxone and Methadone. One participant mentioned that Vivitrol is offered in jail.
- *Mental Health Services:* The mental health services in the area were mentioned to be helpful when tackling opioid use disorder. This was due to many individuals suffering from poor mental health which could be a factor that led to their substance abuse. Participants mentioned that a recent system had been put in place where a team of people, including a peer support worker, are assigned to individuals who received Narcan with the intent to connect those individuals with mental health services.
- *Resources:* Community resources such as Catholic Charities, peer support workers, and 2-1-1 through the United Way, are available resources that participants recognized as being beneficial to community members to help them seek or remain in treatment. The Office of Community Corrections also has a pamphlet that has a listing of facilities like homeless shelters that has benefited participants. Some participants were not aware of the resources mentioned in the conversation so more awareness of them through first responders might be needed.
- *Jail System:* Participants mentioned that the jail system served as a reason for people to seek treatment because they had to be clean while in jail. While incarcerated, they are more receptive to accept advice and educational material to help sway them towards seeking treatment.
- *Social Support:* Participants stated that family and friends were very important when it came to the success of drug users seeking help or staying clean. Social support is what could push them to go through the programs and reach out to professionals. Having someone who cared about the individual's health increased their chances of individuals wanting to get clean.

PERSONAL CHALLENGES

Participants described the following as challenging experiences of working with people who have or were overdosing:

- *Lack of Time:* The participants stated that one of their biggest challenges was that they only had so much time with the individual who had overdosed; therefore, it was hard to make a lasting impact because they do not take part in any follow-up procedures. Their main goal is to save their life if they are in danger.
- *Narcan/Naloxone:* Participants agreed that Narcan could provide a false sense of security to individuals with limited education about Narcan or how it works. Specifically, participants noted that drug users would use drugs in higher doses or more potent substances because they have access to Narcan. This then leads to a regular amount of Narcan being ineffective when an overdose occurs. A participant shared their experience of providing upwards of 8 milligrams of Narcan to one individual, when 2 milligrams is standard.
- *Hospitalization:* The participants stated that it can be frustrating as a first responder to not be able to require patients who have overdosed to seek additional medical care if the patient refuses care. There are other situations where a first responder can require hospitalization, however in the case of an overdose when a patient does not want more treatment, the first responder must respect the persons decision even though the first responder may want them to receive more care.

PERSONAL SUCCESSES

Participants described the following as successful experiences of working with people who have or were overdosing:

- *Decreased Recidivism:* The participants stated that one of their biggest successes working with people who had overdosed was that if they were arrested, and then released, there was a decrease in their rates of becoming a repeat offender and going back to jail. They believed it was due to the programs they have been implementing in the jails.

INDIVIDUAL EXPERIENCES

The focus group participants who had experience with individuals who had an opioid use disorder mentioned the following:

- *Lack of Time:* The participants stated that their time with people who suffered from overdoses was very short. Their jobs are to get to the initial scene and do what needs to be done to save the user's life: they are not involved with follow-ups or long-term care. Therefore, they believed it was hard for them to make a lasting difference.
- *Decreased Recidivism:* Some participants stated they saw a slight decrease in repeat offenders coming through the criminal justice system due to increased educational services and programs in the county. The number of people using opioids again seems to be decreasing among people who had previously overdosed.

ROLE OF LAW ENFORCEMENT

The following was described as the role law enforcement plays in terms of opioid use disorder, as well as what role the participants think they should have:

- *Medical Assistance:* The participants stated that with the increase of drug use in the area, law enforcement must be prepared to offer medical assistance to those in need, specifically to those who have overdosed. Law enforcement carries Narcan and administers it to people who have overdosed. The participants mentioned that their jobs have drastically changed, and they had to adapt and learn how to help people with drug problems.

- *Lack of Process:* The participants stated that once they had administered Narcan to someone, they take them to the hospital to be assessed. Unfortunately, the hospital does not have a standard process on how to handle overdose cases. They do not want their emergency rooms flooded with overdose cases; therefore, it can be hard for law enforcement to get support from other healthcare systems. Participants also said that after Narcan has revived an individual from an overdose, they are not required to go to the hospital.

“I know in probation, parole supervision... we realized you can’t arrest yourself out of this problem. We used to... somebody would come in and they would drop dirty, it was just a matter of putting them in jail, how long. Now we’re all on board with the Medically Assisted Treatments, where before, we would just look at the Suboxone and Methadone as just another way of using. Just a medical way of using. They still do abuse it in some sense of the word... But we’re having to make really tough decisions like okay, they’re here in our office, they’re already of course on a drug related offense, now they’re dropping dirty, you can’t believe you’re letting them walking out the door. Well we’re letting them walk out the door but we’re sending them in the way of treatment, giving them a lot of options, a lot of tools, a lot of other choices. It’s ultimately up to them to make the right choice. But we have amazing outlets in this community that we didn’t have before. I mean we have the Engagement Center through Catholic Charities. I mean they are just... their 24-hour service operation. You can go right from the hospital where you’ve just been discharged for an overdose and walk over there and they’ll plug you into treatment. And they’ll keep you there until they can get you into treatment. They take down all the barriers...”

SOCIAL DETERMINANTS OF HEALTH

Participants mentioned the following as factors that contribute to drug use in their community:

- *Family Life:* The participants stated that drug use is being seen throughout families. If the parents are using, then the children are also more likely to go down that path with them.
- *Unhealthy Lifestyles:* The participants mentioned that most drug users use because they are missing something in their life. With proper mental health care, they may be able to successfully help themselves without having to turn to drugs for comfort.
- *Health Care:* The participants stated that doctors who had written excessive prescriptions for pain pills had caused an increase in opioid use and addiction in their county.

RECOMMENDATIONS

Focus group participants recommended the following to address the opioid misused problem in Monroe County:

- *Increased Education:* Participants recommended that the education regarding drug use be increased. They stated that they do not have enough resources to give people who are suffering from opioid use, and that they want to be able to provide more education. Participants also suggested that anti-drug campaigns such as the D.A.R.E program be implemented in schools at earlier ages due to increased drug use in the area.
- *Continuation of Care and Information:* The participants mentioned that the flow of information between their system and other agencies was lacking. It was stated that there wasn’t one specific database or program being used to store all individuals’ information, and therefore led to some people getting lost in the cracks. They suggested that if individuals’ information were more readily accessible between systems, follow-up care would be more efficient and successful.

- *Increased Funding and Personnel:* The participants stated that if they had more personnel, they would be able to take part in more projects and make a more significant impact. Another recommendation was to determine where funding is currently being allocated and then redistribute those funds to programs that would help make a lasting impact. One participant mentioned that they were advocating with government officials to allocate funds to a behavioral health program for inmates. The program could help influence inmates to become successful citizens once released.
- *Community Support:* The participants stated that without the community acknowledging the drug issue, very few changes would be implemented. There is still a lot of community stigma, so for money to be allocated to a drug-related program, community residents needed to have buy-in and vocalize their support for the program.

Appendix I: Sources

| Source | Data Used | Website |
|---|---|---|
| Centers for Disease Control and Prevention | <ul style="list-style-type: none"> U.S. State Opioid Prescribing Rates, 2017 Map | www.cdc.gov/drugoverdose/maps/rxstate2017.html |
| | <ul style="list-style-type: none"> Michigan Opioid Prescribing Rates, 2017 Map | www.cdc.gov/drugoverdose/maps/rxcounty2017.html |
| | <ul style="list-style-type: none"> Statistically Significant Changes in Prescription Opioid Deaths from 2016 to 2017 Map | www.cdc.gov/drugoverdose/data/prescribing.html |
| | <ul style="list-style-type: none"> Statistically Significant Changes in Synthetic Opioid Deaths from 2016-2017 Map | www.cdc.gov/drugoverdose/data/fentanyl.html |
| | <ul style="list-style-type: none"> Statistically Significant Changes in Heroin Overdose Deaths from 2016-2017 | www.cdc.gov/drugoverdose/data/heroin.html#overdose-deaths |
| | <ul style="list-style-type: none"> Heroin Use | www.cdc.gov/drugoverdose/data/heroin.html#overdose-deaths |
| | <ul style="list-style-type: none"> Risk Factors for Prescription Pain Reliever Abuse and Overdose | www.cdc.gov/drugoverdose/opioids/prescribed.html |
| | <ul style="list-style-type: none"> Opioid Overdose in Rural America Data | www.cdc.gov/ruralhealth/drug-overdose/pdf/Policy-Brief_Opioid-Overdoses-H.pdf |
| <ul style="list-style-type: none"> Drug Overdose in Rural America Data | www.cdc.gov/ruralhealth/drug-overdose/index.html | |
| Department of Licensing and Regulatory Affairs (LARA), 2019 | <ul style="list-style-type: none"> Michigan Automated Prescription System (MAPS) | www.michigan.gov/lara/0,4601,7-154-89334_72600_72603_55478---,00.html |
| Deterra® drug deactivation system | <ul style="list-style-type: none"> Deterra Pouch Data | https://deterrasystem.com/faq/ |
| Michigan Department of Health and Human Services (MDHHS), Substance Use in Michigan, The Substance Use Disorder Data Repository | <ul style="list-style-type: none"> Monroe County Opioid Prescription Dispensed, 2013-2017 | http://mi-suddr.com/blog/2018/09/26/opioid-prescriptions-written/ |
| | <ul style="list-style-type: none"> Monroe County Drug Overdose Deaths, 2007-2017 | http://mi-suddr.com/blog/2018/09/26/opioid-heroin-poisonings/ |
| Michigan Department of Health and Human Services (MDHHS), Michigan Death Files, 2000-2017 | <ul style="list-style-type: none"> Michigan Opioid Related Overdose Deaths, 2007-2017 | www.mdch.state.mi.us/pha/osr/Fatal/BH1bRates.asp |
| National Institute on Drug Abuse | <ul style="list-style-type: none"> Opioid Overdose Data | www.drugabuse.gov/drugs-abuse/opioids/opioid-overdose-crisis |
| | <ul style="list-style-type: none"> Michigan Opioid Summary | https://www.drugabuse.gov/opioid-summaries-by-state/Michigan-opioid-summary |
| U.S. Food and Drug Administration | <ul style="list-style-type: none"> Disposal of Unused Medicines | https://www.fda.gov/drugs/safe-disposal-medicines/disposal-unused-medicines-what-you-should-know |
| U. S. Department of Justice | <ul style="list-style-type: none"> Drug Use, Dependence, and Abuse Among State Prisoners and Jail Inmates, 2007-2009 | https://www.bjs.gov/content/pub/pdf/dudaspi0709.pdf |

Appendix II: Acronyms and Terms

| | |
|-----------------------|---|
| Adult | Defined as 19 years of age and older |
| CDC | Centers for D isease C ontrol and P revention |
| DEA | D rug E nforcement A dministration |
| EMS | E mergency M edical S ervices |
| HCNO | H ospital C ouncil of N orthwest O hio |
| MAPS | M ichigan A utomated P rescription S ystem |
| NIDA | N ational I nstitute on D rug A buse |
| NSDUH | N ational S urvey on D rug U se and H ealth |
| Race/Ethnicity | Census 2010: U.S. Census data consider race and Hispanic origin separately. Census 2010 adhered to the standards of the Office of Management and Budget (OMB), which define Hispanic or Latino as “a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or origin regardless of race.” Data are presented as “Hispanic or Latino” and “Not Hispanic or Latino.” Census 2010 reported five race categories including: White, Black or African American, American Indian & Alaska Native, Asian, Native Hawaiian and Other Pacific Islander. Data reported, “White alone” or “Black alone”, means the respondents reported only one race. |
| SAMHSA | S ubstance A buse and M ental H ealth S ervices A dministration |

Appendix III: Methods for Weighting The 2019 Monroe County Assessment Data

Data from sample surveys have the potential for bias if there are different rates of response for different segments of the population. In other words, some subgroups of the population may be more represented in the completed surveys than they are in the population from which those surveys are sampled. If a sample has 25% of its respondents being male and 75% being female, then the sample is biased towards the views of females (if females respond differently than males). This same phenomenon holds true for any possible characteristic that may alter how an individual responds to the survey items.

In some cases, the procedures of the survey methods may purposefully over-sample a segment of the population in order to gain an appropriate number of responses from that subgroup for appropriate data analysis when investigating them separately (this is often done for minority groups). Whether the over-sampling is done inadvertently or purposefully, the data needs to be weighted so that the proportioned characteristics of the sample accurately reflect the proportioned characteristics of the population. In the 2019 Monroe County survey, a weighting was applied prior to the analysis that weighted the survey respondents to reflect the actual distribution of Monroe County based on age, sex, race, and income.

Weightings were created for each category within sex (male, female), race (White, Non-White, Hispanic), Age (7 different age categories), and income (7 different income categories). The numerical value of the weight for each category was calculated by taking the percent of Monroe County within the specific category and dividing that by the percent of the sample within that same specific category. Using sex as an example, the following represents the data from the 2019 Monroe County Survey and the 2013-2017 American Community Survey 5-Year estimates.

| <u>Sex</u> | <u>2019 Monroe Survey</u> | | <u>2013-2017 Census estimates</u> | | <u>Weight</u> |
|------------|---------------------------|----------------|-----------------------------------|----------------|---------------|
| | <u>Number</u> | <u>Percent</u> | <u>Number</u> | <u>Percent</u> | |
| Male | 187 | 55.16224 | 73,905 | 49.39546 | 0.895458 |
| Female | 152 | 44.83776 | 75,714 | 50.60454 | 1.128614 |

In this example, it shows that there was a larger portion of males in the sample compared to the actual portion in Monroe County. The weighting for males was calculated by taking the percent of males in Monroe County (based on Census information) (49.39546%) and dividing that by the percent found in the 2019 Monroe County sample (55.16224%) [$49.39546/55.16224 =$ weighting of 0.895458 for males]. The same was done for females [$50.60454/44.83776 =$ weighting of 1.128614 for females]. Thus, females' responses are weighted heavier by a factor of 1.128614 and males' responses weighted less by a factor of 0.895458.

This same thing was done for each of the 19 specific categories as described above. For example, a respondent who was female, White, in the age category 45-54, and with a household income in the \$50-\$75k category would have an individual weighting of 1.12969 [1.128614 (weight for females) \times 0.98427 (weight for White) \times 1.15217 (weight for age 45-54) \times 0.88264 (weight for income \$50-\$75k)]. Thus, each individual in the 2019 Monroe County sample has their own individual weighting based on their combination of age, race, sex, and income. See next page for each specific weighting and the numbers from which they were calculated.

Multiple sets of weightings were created and used in the statistical software package (SPSS 24.0) when calculating frequencies. For analyses done for the entire sample and analyses done based on subgroups other than age, race, sex, or income – the weightings that were calculated based on the product of the four weighting variables (age, race, sex, income) for each individual. When analyses were done comparing groups within one of the four weighting variables (e.g., prescription pain reliever status by income), that specific variable was not used in the weighting score that was applied in the software package. In the example prescription pain reliever status by income, the weighting score that was applied during analysis included only age, sex, and race. Thus a total of eight weighting scores for each individual were created and applied depending on the analysis conducted. The weight categories were as follows:

1. **Total weight** (product of 4 weights) – for all analyses that did not separate age, race, sex, or income.
2. **Weight without sex** (product of age, race, and income weights) – used when analyzing by sex.
3. **Weight without age** (product of sex, race, and income weights) – used when analyzing by age.
4. **Weight without race** (product of age, sex, and income weights) – used when analyzing by race.
5. **Weight without income** (product of age, race, and sex weights) – used when analyzing by income.
6. **Weight without sex or age** (product of race and income weights) – used when analyzing by sex and age.
7. **Weight without sex or race** (product of age and income weights) – used when analyzing by sex and race.
8. **Weight without sex or income** (product of age and race weights) – used when analyzing by sex and income.

| Category | Monroe Sample | % | 2013-2017 Census* | % | Weighting Value |
|--------------------------|---------------|----------|-------------------|----------|-----------------|
| Sex: | | | | | |
| Male | 187 | 55.16224 | 73,905 | 49.39546 | 0.895458 |
| Female | 152 | 44.83776 | 75,714 | 50.60454 | 1.128614 |
| Age: | | | | | |
| 20 to 34 years | 32 | 9.43953 | 25,650 | 22.69430 | 2.40418 |
| 35 to 44 years | 42 | 12.38938 | 18,022 | 15.94529 | 1.28701 |
| 45 to 54 years | 58 | 17.10914 | 22,280 | 19.71263 | 1.15217 |
| 55 to 59 years | 39 | 11.50442 | 11,866 | 10.49866 | 0.91258 |
| 60 to 64 years | 41 | 12.09440 | 10,861 | 9.60946 | 0.79454 |
| 65 to 74 years | 67 | 19.76401 | 14,220 | 12.58140 | 0.63658 |
| 75 years and over | 60 | 17.69912 | 10,125 | 8.95827 | 1.97573 |
| Race: | | | | | |
| White (non-Hispanic) | 319 | 93.00292 | 136,961 | 91.53984 | 0.98427 |
| Non-White | 24 | 6.99708 | 12,658 | 8.46016 | 1.20910 |
| Household Income: | | | | | |
| Less than \$25,000 | 46 | 14.64968 | 11,058 | 19.41874 | 1.32554 |
| \$25,000 to \$34,999 | 30 | 9.55414 | 5,987 | 10.51365 | 1.10043 |
| \$35,000 to \$49,999 | 31 | 9.87261 | 7,750 | 13.60962 | 1.37852 |
| \$50,000 to \$74,999 | 71 | 22.61146 | 11,365 | 19.95785 | 0.88264 |
| \$75,000 to \$99,999 | 55 | 17.51592 | 8,353 | 14.66854 | 0.83744 |
| \$100,000 to \$149,999 | 52 | 16.56051 | 9,277 | 16.29116 | 0.98374 |
| \$150,000 or more | 29 | 9.23567 | 3,155 | 5.54043 | 0.59990 |

Note: The weighting ratios are calculated by taking the ratio of the proportion of the population of Monroe County in each subcategory by the proportion of the sample in the Monroe County survey for that same category.

*Monroe County population figures taken from the 2013-2017 American Community 5-Year Estimates.

Appendix IV: Monroe County Sample Demographic Profile*

| Variable | 2019 Survey Sample | Monroe County Census 2017 (1-year estimates) | Michigan Census 2017 (1-year estimates) |
|--------------------------------------|--------------------|--|---|
| Age | | | |
| 20-29 | 4.3% | 11.3% | 13.8% |
| 30-39 | 10.1% | 11.7% | 11.9% |
| 40-49 | 15.9% | 13.1% | 12.2% |
| 50-59 | 19.1% | 15.5% | 14.1% |
| 60 plus | 48.6% | 24.8% | 23.6% |
| Race/Ethnicity | | | |
| White | 94.5% | 94.1% | 78.4% |
| Black or African American | 1.4% | 2.3% | 13.8% |
| American Indian and Alaska Native | 0.6% | 0.6% | 0.5% |
| Asian | 0% | 0.7% | 3.1% |
| Other | 2.0% | 0.6% | 1.1% |
| Hispanic Origin (may be of any race) | 2.3% | 3.6% | 5.1% |
| Education† | | | |
| Less than High School Diploma | 3.2% | 8.6% | 9.1% |
| High School Diploma | 24.6% | 37.7% | 28.9% |
| Some college/ College graduate | 71.4% | 53.7% | 62.0% |
| Income (Families) | | | |
| \$14,999 and less | 6.0% | 6.6% | 6.7% |
| \$15,000 to \$24,999 | 7.2% | 5.8% | 6.6% |
| \$25,000 to \$49,999 | 17.7% | 16.5% | 21.0% |
| \$50,000 to \$74,999 | 20.5% | 20.4% | 19.6% |
| \$75,000 or more | 39.3% | 50.7% | 46.1% |

* The percents reported are the actual percent within each category who responded to the survey. The data contained within the report however are based on weighted data (weighted by age, race, sex, and income). Percents may not add to 100% due to missing data (non-responses).

† The Michigan and Monroe County Census percentages are slightly different than the percent who responded to the survey. Marital status is calculated for those individuals 15 years and older. Education is calculated for those 25 years and older.

Appendix V: Demographics and Household Information

Monroe County Population by Age Groups and Gender 2010 U.S. Census

| Age | Total | Males | Females |
|--------------------------------|----------------|---------------|---------------|
| Monroe County | 152,021 | 75,013 | 77,008 |
| 0-4 years | 8,719 | 4,432 | 4,287 |
| 1-4 years | 6,989 | 3,514 | 3,475 |
| < 1 year | 1,730 | 918 | 812 |
| 1-2 years | 3,400 | 1,706 | 1,694 |
| 3-4 years | 3,589 | 1,808 | 1,781 |
| 5-9 years | 9,841 | 5,009 | 4,832 |
| 5-6 years | 3,804 | 1,932 | 1,872 |
| 7-9 years | 6,037 | 3,077 | 2,960 |
| 10-14 years | 11,053 | 5,622 | 5,431 |
| 10-12 years | 6,531 | 3,400 | 3,131 |
| 13-14 years | 4,522 | 2,222 | 2,300 |
| 12-18 years | 15,972 | 8,166 | 7,806 |
| 15-19 years | 11,219 | 5,807 | 5,412 |
| 15-17 years | 7,067 | 3,638 | 3,428 |
| 18-19 years | 4,155 | 2,171 | 1,984 |
| 20-24 years | 8,608 | 4,424 | 4,184 |
| 25-29 years | 8,146 | 4,059 | 4,087 |
| 30-34 years | 8,371 | 4,134 | 4,237 |
| 35-39 years | 9,464 | 4,675 | 4,789 |
| 40-44 years | 10,727 | 5,313 | 5,414 |
| 45-49 years | 12,491 | 6,168 | 6,323 |
| 50-54 years | 12,744 | 6,417 | 6,327 |
| 55-59 years | 11,237 | 5,637 | 5,600 |
| 60-64 years | 9,009 | 4,491 | 4,518 |
| 65-69 years | 6,493 | 3,171 | 3,322 |
| 70-74 years | 4,678 | 2,172 | 2,506 |
| 75-79 years | 3,540 | 1,496 | 2,044 |
| 80-84 years | 3,072 | 1,203 | 1,869 |
| 85-89 years | 1,753 | 577 | 1,176 |
| 90-94 years | 670 | 173 | 497 |
| 95-99 years | 156 | 27 | 129 |
| 100-104 years | 27 | 5 | 22 |
| 105-109 years | 3 | 1 | 2 |
| 110 years & over | 0 | 0 | 0 |
| Total 85 years and over | 2,609 | 783 | 1,826 |
| Total 65 years and over | 20,392 | 8,825 | 11,567 |
| Total 19 years and over | 113,125 | 55,138 | 57,987 |

MONROE COUNTY PROFILE

(Source: U.S. Census Bureau, 2017)
2013-2017 ACS 5-year estimates

General Demographic Characteristics

| | Number | Percent (%) |
|--|-------------|-------------|
| Total Population | | |
| 2017 Total Population | 149,619 | 100% |
| Largest City- Monroe | | |
| 2017 Total Population | 20,128 | 100% |
| Population by Race/Ethnicity | | |
| Total Population | 149,619 | 100% |
| White | 141,412 | 94.5% |
| Hispanic or Latino (of any race) | 5,162 | 3.5% |
| Two or more races | 2,502 | 1.7% |
| American Indian and Alaska Native | 591 | 0.4% |
| Asian | 946 | 0.6% |
| Some other race | 716 | 0.5% |
| African American | 3,442 | 2.3% |
| Population by Age | | |
| Under 5 years | 7,979 | 5.3% |
| 5 to 17 years | 25,254 | 16.9% |
| 18 to 24 years | 12,381 | 8.3% |
| 25 to 44 years | 34,653 | 23.1% |
| 45 to 64 years | 45,007 | 30.1% |
| 65 years and more | 24,345 | 16.3% |
| Median age (years) | 42.2 | N/A |
| Household by Type | | |
| Total households | 58,652 | 100% |
| Total families | 40,343 | N/A |
| Households with children <18 years | 15,410 | N/A |
| Married-couple family household | 31,209 | N/A |
| Married-couple family household with children <18 years | 10,720 | N/A |
| Female householder, no husband present | 5,986 | N/A |
| Female householder, no husband present with children <18 years | 3,077 | N/A |
| Nonfamily household (single person) | 18,309 | N/A |
| Nonfamily household (single person) living alone | 4,889 | 26.7% |
| Nonfamily household (single person) 65 years and > | 1,983 | 10.8% |
| Households with one or more people <18 years | N/A | 29.5% |
| Households with one or more people 60 years and > | N/A | 40.4% |
| Average household size | 2.53 people | N/A |
| Average family size | 3.04 people | N/A |

(Source: U.S. Census Bureau, 2017)

General Demographic Characteristics, Continued

| Housing Occupancy | | |
|---|-----------|------|
| Median value of owner-occupied units | \$149,500 | N/A |
| Median housing units with a mortgage (monthly owner costs) | \$1,278 | N/A |
| Median housing units without a mortgage (monthly owner costs) | \$454 | N/A |
| Median value of occupied units paying rent | \$790 | N/A |
| Median rooms per total housing unit | 6.1 | N/A |
| Total occupied housing units | 58,652 | N/A |
| No telephone service available | 1,200 | 2.0% |
| Lacking complete kitchen facilities | 408 | 0.7% |
| Lacking complete plumbing facilities | 217 | 0.4% |

(Source: U.S. Census Bureau, 2017)

Selected Social Characteristics

| School Enrollment | | |
|---|---------|-------|
| Population 3 years and over enrolled in school | 35,478 | 100% |
| Nursery & preschool | 2,450 | 6.9% |
| Kindergarten | 1,913 | 5.4% |
| Elementary School (Grades 1-8) | 14,732 | 41.5% |
| High School (Grades 9-12) | 8,635 | 24.3% |
| College or Graduate School | 7,748 | 21.9% |
| | | |
| Educational Attainment | | |
| Population 25 years and over | 104,005 | 100% |
| < 9 th grade education | 2,475 | 2.4% |
| 9 th to 12 th grade, no diploma | 7,450 | 7.2% |
| High school graduate (includes equivalency) | 37,505 | 36.1% |
| Some college, no degree | 25,556 | 24.6% |
| Associate degree | 11,716 | 11.3% |
| Bachelor's degree | 12,881 | 12.4% |
| Graduate or professional degree | 6,422 | 6.2% |
| | | |
| Percent high school graduate or higher | N/A | 90.5% |
| Percent Bachelor's degree or higher | N/A | 18.6% |
| | | |
| Marital Status | | |
| Population 15 years and over | 122,833 | 100% |
| Never married | N/A | 27.1% |
| Now married, excluding separated | N/A | 53.1% |
| Separated | N/A | 1.1% |
| Widowed | N/A | 6.7% |
| Widowed females | N/A | 5.1% |
| Divorced | N/A | 11.9% |
| Divorced females | N/A | 6.4% |
| | | |
| Veteran Status | | |
| Civilian population 18 years and over | 116,306 | 100% |
| Veterans 18 years and over | 10,446 | 9.0% |

(Source: U.S. Census Bureau, 2017)

Selected Social Characteristics, Continued

| <i>Disability Status of the Civilian Non-Institutionalized Population</i> | | |
|--|---------|-------|
| Total civilian noninstitutionalized population | 148,683 | 100% |
| Civilian with a disability | 19,949 | 13.4% |
| Under 18 years | 33,199 | N/A |
| Under 18 years with a disability | 1,641 | 4.9% |
| 18 to 64 years | 91,734 | N/A |
| 18 to 64 years with a disability | 10,711 | 11.7% |
| 65 years and over | 23,750 | N/A |
| 65 years and over with a disability | 7,597 | 32.0% |

(Source: U.S. Census Bureau, 2017)

Selected Economic Characteristics

| <i>Employment Status</i> | | |
|---|---------|-------|
| Population 16 years and over | 121,024 | 100% |
| 16 years and over in labor force | 73,622 | 60.8% |
| 16 years and over not in labor force | 47,402 | 39.2% |
| Females 16 years and over | 61,550 | 100% |
| Females 16 years and over in labor force | 34,135 | 55.5% |
| Population living with own children <6 years | 9,484 | 100% |
| All parents in family in labor force | 6,035 | 63.6% |
| | | |
| <i>Class of Worker</i> | | |
| Civilian employed population 16 years and over | 69,205 | 100% |
| Private wage and salary workers | 60,427 | 87.3% |
| Government workers | 6,009 | 8.7% |
| Self-employed workers in own not incorporated business | 2,707 | 3.9% |
| Unpaid family workers | 62 | 0.1% |
| | | |
| <i>Occupations</i> | | |
| Employed civilian population 16 years and over | 69,205 | 100% |
| Production, transportation, and material moving occupations | 14,354 | 20.7% |
| Management, business, science, and art occupations | 20,965 | 30.3% |
| Sales and office occupations | 14,677 | 21.2% |
| Service occupations | 12,067 | 17.4% |
| Natural resources, construction, and maintenance occupations | 7,142 | 10.3% |
| | | |
| <i>Leading Industries</i> | | |
| Employed civilian population 16 years and over | 69,205 | 100% |
| Manufacturing | 15,042 | 21.7% |
| Educational, health and social services | 16,183 | 23.4% |
| Trade (retail and wholesale) | 5,891 | 8.5% |
| Arts, entertainment, recreation, accommodation, and food services | 5,891 | 8.5% |
| Transportation and warehousing, and utilities | 5,643 | 8.2% |
| Professional, scientific, management, administrative, and waste management services | 4,863 | 7.0% |
| Construction | 4,232 | 6.1% |
| Other services (except public administration) | 2,932 | 4.2% |
| Finance, insurance, real estate and rental and leasing | 2,835 | 4.1% |
| Public administration | 1,630 | 2.4% |
| Agriculture, forestry, fishing and hunting, and mining | 851 | 1.2% |
| Information | 822 | 1.2% |

(Source: U.S. Census Bureau, 2017)

Selected Economic Characteristics, Continued

| Income In 2017 | | |
|----------------------------------|-----------------|--------|
| Households | 59,528 | 100% |
| < \$10,000 | 4,421 | 7.4% |
| \$10,000 to \$14,999 | 2,335 | 3.9% |
| \$15,000 to \$24,999 | 5,218 | 8.8% |
| \$25,000 to \$34,999 | 6,106 | 10.3% |
| \$35,000 to \$49,999 | 6,005 | 10.1% |
| \$50,000 to \$74,999 | 11,421 | 19.2% |
| \$75,000 to \$99,999 | 8,853 | 14.9% |
| \$100,000 to \$149,999 | 9,827 | 16.5% |
| \$150,000 to \$199,999 | 3,657 | 6.1% |
| \$200,000 or more | 1,685 | 2.8% |
| Median household income | \$59,290 | N/A |
| Income in 2017 | | |
| Families | 40,793 | 100% |
| < \$10,000 | 2,091 | 5.10% |
| \$10,000 to \$14,999 | 621 | 1.50% |
| \$15,000 to \$24,999 | 2,374 | 5.80% |
| \$25,000 to \$34,999 | 2,992 | 7.30% |
| \$35,000 to \$49,999 | 3,747 | 9.20% |
| \$50,000 to \$74,999 | 8,310 | 20.40% |
| \$75,000 to \$99,999 | 7,339 | 18.00% |
| \$100,000 to \$149,999 | 8,327 | 20.40% |
| \$150,000 to \$199,999 | 3,582 | 8.80% |
| \$200,000 or more | 1,410 | 3.50% |
| Median family income | \$78,879 | N/A |
| Per capita income in 2017 | \$30,336 | N/A |
| Poverty Status in 2017 | | |
| Families | N/A | 9.3% |
| Individuals | N/A | 13.1% |

(Source: U.S. Census Bureau, 2017)

Bureau of Economic Analysis (BEA) Per Capita Personal Income (PCPI) Figures

| | Income | Rank of Michigan Counties |
|-------------------------------------|---------------|----------------------------------|
| BEA Per Capita Personal Income 2017 | \$45,363 | 13 th of 83 counties |
| BEA Per Capita Personal Income 2016 | \$43,723 | 14 th of 83 counties |
| BEA Per Capita Personal Income 2015 | \$42,214 | 14 th of 83 counties |
| BEA Per Capita Personal Income 2014 | \$39,972 | 16 th of 83 counties |
| BEA Per Capita Personal Income 2013 | \$38,183 | 16 th of 83 counties |

(Source: Bureau of Economic Analysis, https://apps.bea.gov/iTable/index_regional.cfm)

Note: BEA PCPI figures are greater than Census figures for comparable years due to deductions for retirement, Medicaid, Medicare payments, and the value of food stamps, among other things

Employment Statistics

| Category | Monroe County | Michigan |
|----------------------------------|---------------|-----------|
| Labor Force (August 2019) | 75,614 | 4,984,000 |
| Employed (August 2019) | 72,651 | 4,776,000 |
| Unemployed (August 2019) | 2,963 | 208,000 |
| Unemployment Rate* (August 2019) | 3.9 | 4.2 |
| Unemployment Rate* (July 2019) | 5.7 | 5.1 |
| Unemployment Rate* (August 2018) | 4.8 | 4.1 |

*Rate equals unemployment divided by labor force.

(Source: Michigan Department of Technology, Management & Budget, <https://milmi.org/DataSearch/LAUS>)

Estimated Poverty Status in 2017

| Age Groups | Number | 90% Confidence Interval | Percent | 90% Confidence Interval |
|----------------------------------|------------|--------------------------|---------|-------------------------|
| Monroe County | | | | |
| All ages in poverty | 17,416 | 15,347 to 19,485 | 11.7% | 10.3 to 13.1 |
| Ages 0-17 in poverty | 4,543 | 3,718 to 5,368 | 14.4% | 11.8 to 17.0 |
| Ages 5-17 in families in poverty | 2,891 | 2,246 to 3,536 | 12.2% | 9.5 to 14.9 |
| Median household income | \$61,121 | \$57,174 to \$65,068 | | |
| Michigan | | | | |
| All ages in poverty | 1,373,358 | 1,351,618 to 1,395,098 | 14.1% | 13.9 to 14.3 |
| Ages 0-17 in poverty | 416,305 | 404,866 to 427,744 | 19.6% | 19.1 to 20.1 |
| Ages 5-17 in families in poverty | 275,411 | 265,855 to 284,967 | 17.7% | 17.1 to 18.3 |
| Median household income | \$54,840 | \$54,405 to \$55,275 | | |
| United States | | | | |
| All ages in poverty | 42,583,651 | 42,342,619 to 42,824,683 | 13.4% | 13.3 to 13.5 |
| Ages 0-17 in poverty | 13,353,202 | 13,229,339 to 13,477,065 | 18.4% | 18.2 to 18.6 |
| Ages 5-17 in families in poverty | 9,120,503 | 9,033,090 to 9,207,916 | 17.3% | 17.1 to 17.5 |
| Median household income | \$60,336 | \$60,250 to \$60,422 | | |

(Source: U.S. Census Bureau, 2017 Poverty and Median Income Estimates,

<https://www.census.gov/data/datasets/2017/demo/saipe/2017-state-and-county.html>)

**Federal Poverty Thresholds in 2017 by Size of Family
and Number of Related Children Under 18 Years of Age**

| Size of Family Unit | No Children | One Child | Two Children | Three Children | Four Children | Five Children |
|------------------------------------|-------------|-----------|--------------|----------------|---------------|---------------|
| 1 Person <65 years | \$ 12,752 | | | | | |
| 1 Person 65 and > | \$ 11,756 | | | | | |
| 2 people Householder < 65 years | \$ 16,414 | \$16,895 | | | | |
| 2 People Householder 65 and > | \$14,816 | \$16,831 | | | | |
| 3 People | \$19,173 | \$19,730 | \$19,749 | | | |
| 4 People | \$25,283 | \$25,696 | \$24,858 | \$24,944 | | |
| 5 People | \$30,490 | \$30,933 | \$29,986 | \$29,253 | \$28,805 | |
| 6 People | \$35,069 | \$35,208 | \$34,482 | \$33,787 | \$32,753 | \$32,140 |
| 7 People | \$40,351 | \$40,603 | \$39,734 | \$39,129 | \$38,001 | \$36,685 |
| 8 People | \$45,129 | \$45,528 | \$44,708 | \$43,990 | \$42,972 | \$41,678 |
| 9 People or > | \$54,287 | \$54,550 | \$53,825 | \$53,216 | \$52,216 | \$50,840 |

(Source: U. S. Census Bureau, Poverty Thresholds 2017,

<https://www.census.gov/data/tables/time-series/demo/income-poverty/historical-poverty-thresholds.html>)