

2019



Lenawee County

Opioid Assessment

Commissioned by:

The Lenawee County Substance Abuse
Prevention Coalition

Foreword

Dear Community Member,

The Lenawee Substance Abuse Prevention Coalition, chaired by Lenawee County Health Department and staffed by Lenawee Community Mental Health Authority, is pleased to present the 2019 Lenawee County Opioid Assessment. The information contained in this report will be invaluable not only to us, but also to our community health partners throughout Lenawee County. Together we will prioritize this information and incorporate it into action plans and strategies to improve the health of Lenawee 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 Lenawee Substance Abuse Prevention Coalition 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 Lenawee Substance Abuse Prevention Coalition engaged the services of 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 Lenawee County.

Sincerely,

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Health Officer
Lenawee County Health Department
Chairperson
Lenawee Substance Abuse Prevention Coalition

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This report has been commissioned by:

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Media Sector: Lenawee Broadcasting/WLEN

Behavioral Health Sector: Parkside Family Counseling LLC, Lenawee Community Mental Health Authority, ProMedica Herrick Outpatient Mental Health, McCullough Vargas & Associates

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

Lenawee County Substance Abuse Prevention Coalition

<https://drugpreventionlenawee.com/>

Hospital Council of Northwest Ohio

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

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Executive Summary

This executive summary provides an overview of opioid-related data for Lenawee County adults (ages 19 and older) who participated in a county-wide assessment survey from September 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 opioid assessment was cross-sectional in nature and included an online survey of adults within Lenawee 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 through Survey Monkey. 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 Lenawee County Substance Abuse Prevention Coalition. During these meetings, HCNO and the Lenawee County Substance Abuse Prevention Coalition reviewed and discussed banks of potential survey questions from NSDUH. Based on input from the Lenawee County Substance Abuse Prevention Coalition, the project coordinator composed a draft of survey containing 34 items. Health education researchers from the University of Toledo reviewed and approved the draft.

PROCEDURE

Committee members were asked to distribute the community survey link via social media and send out to their email list serves and post to their websites. The committee was provided with instructional language to use as a template prior to distributing both survey links. The survey generated 394 completed surveys. Although this was a good response, data is not generalizable due to the survey methodology not being a true random sample.

DATA ANALYSIS

Individual responses were anonymous. Only group data is available. All data was analyzed by HCNO staff. Crosstabs were used to calculate descriptive statistics for the data presented in this report.

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 Lenawee 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 an online 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 websites, including county-level data, whenever possible. HCNO utilized sites such as the Michigan Department of Health and Human Services (MDHHS), numerous CDC sites, U.S. Census data, and the U.S. Food & Drug Administration, among other sources. All data is included as a citation in the section of the report with which it corresponds, and the URLs are available in the references at the end of this report. All primary data collected in this report is from the 2019 Lenawee County Opiate Health Assessment. All other data is cited 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.

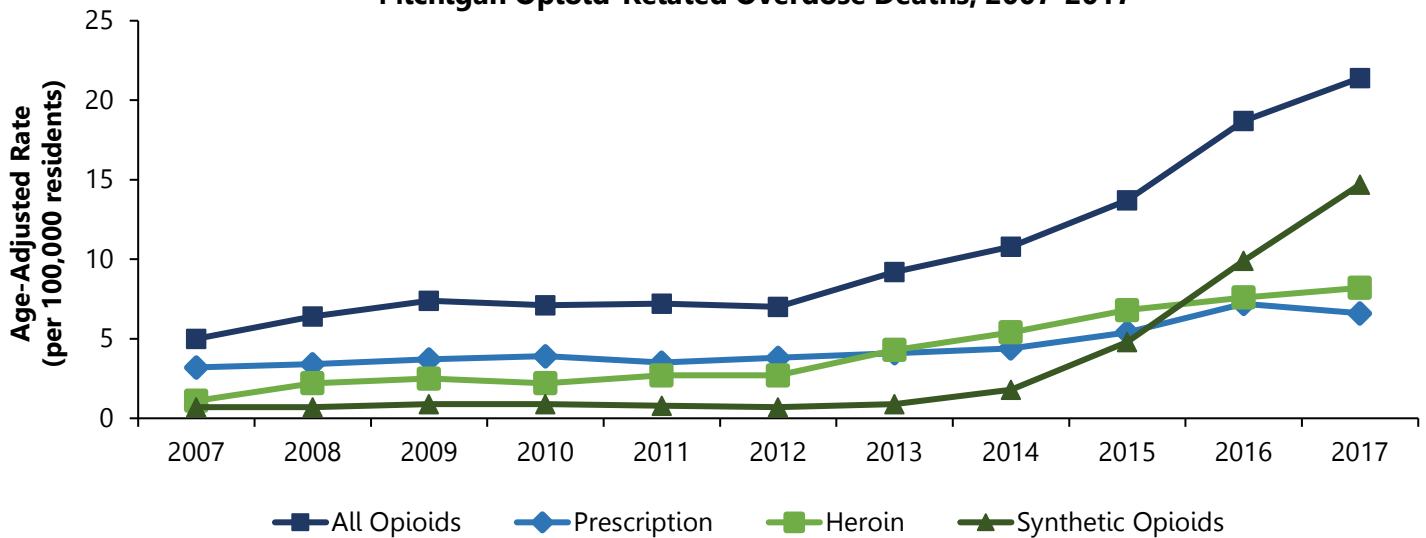
The Centers for Disease Control and Prevention (CDC) estimates that the total “economic burden” of prescription opioid misuse alone in the United States is \$78.5 billion per year, including the costs of healthcare, lost productivity, addiction treatment, and criminal justice involvement.

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



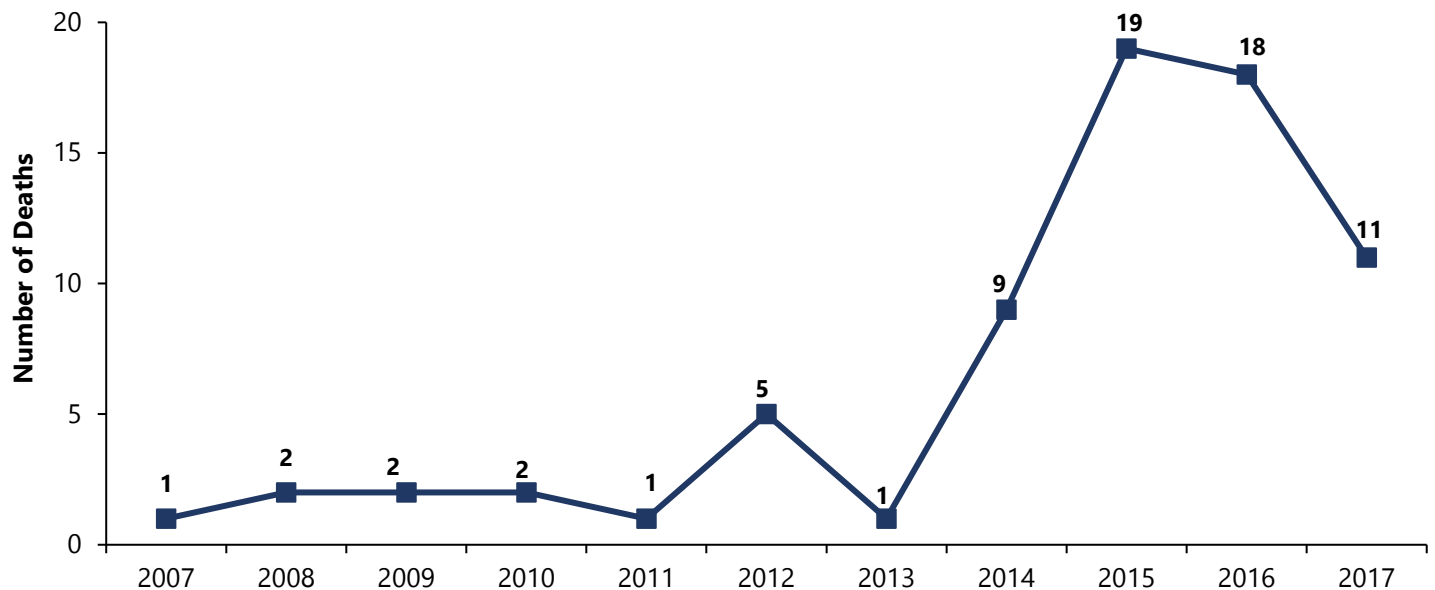
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
All Opioids	5.0	6.4	7.4	7.1	7.2	7.0	9.2	10.8	13.7	18.7	21.4
Prescriptions	3.2	3.4	3.7	3.9	3.5	3.8	4.1	4.4	5.4	7.2	6.6
Heroin	1.1	2.2	2.5	2.2	2.7	2.7	4.3	5.4	6.8	7.6	8.2
Synthetic Opioids	0.7	0.7	0.9	0.9	0.8	0.7	0.9	1.8	4.8	9.9	14.7

(Source: Michigan Department of Health & Human Services, *Age-adjusted Opioid Drug Overdoses Mortality Rates by Sex, Michigan Residents, Michigan Death Files 2000-2017*)

Overview of the Opioid Crisis, Continued

The following graph shows the number of opioid-related overdose deaths in Lenawee County from 2007 to 2017. From 2007 to 2017 there were 71 opioid-related overdose deaths in Lenawee County.

Lenawee County Opioid-Related Overdose Deaths, 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, November 7, 2018)

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*).

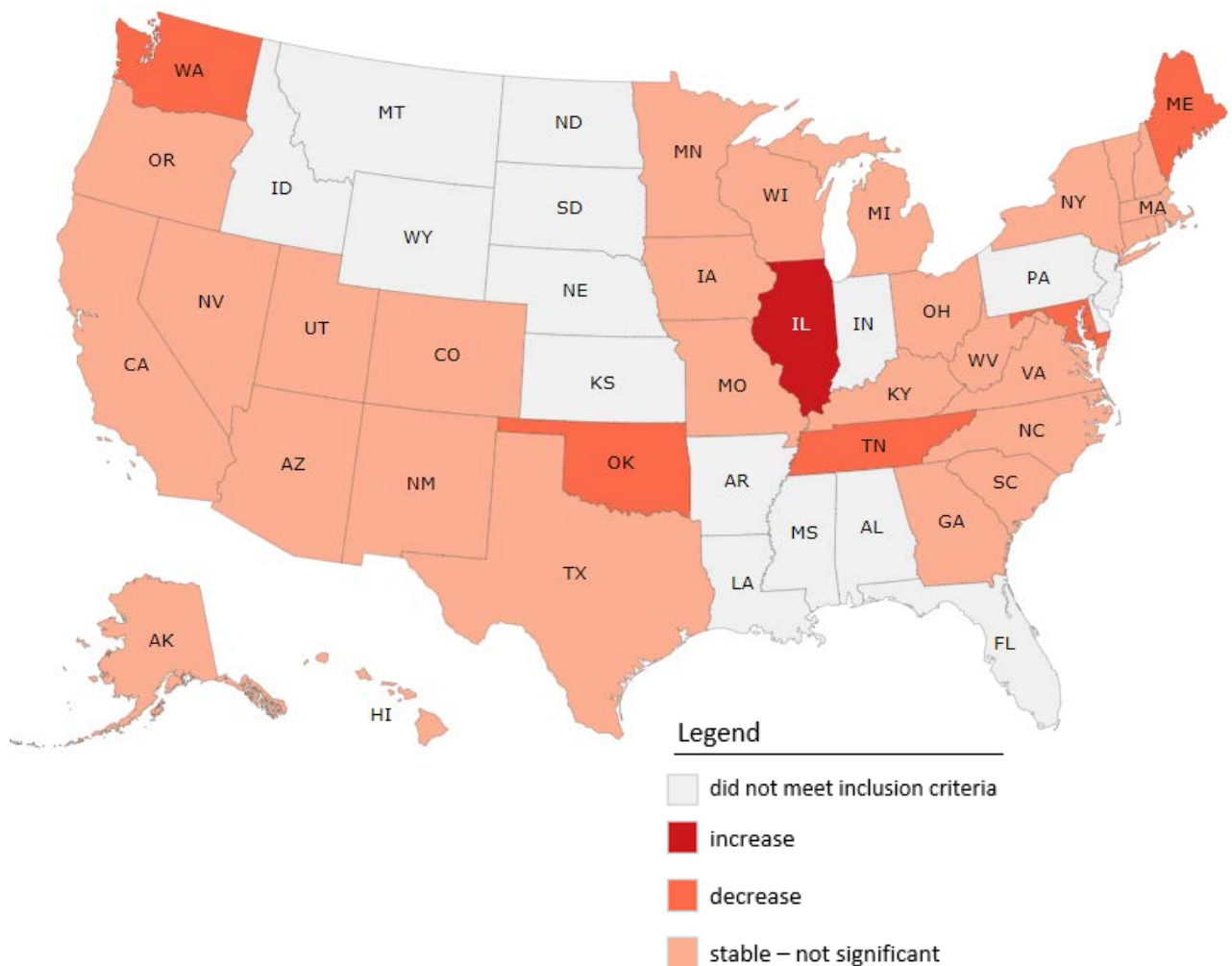
The most common drugs involved in prescription opioid overdose deaths include:

- 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



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

Synthetic Opioid Data

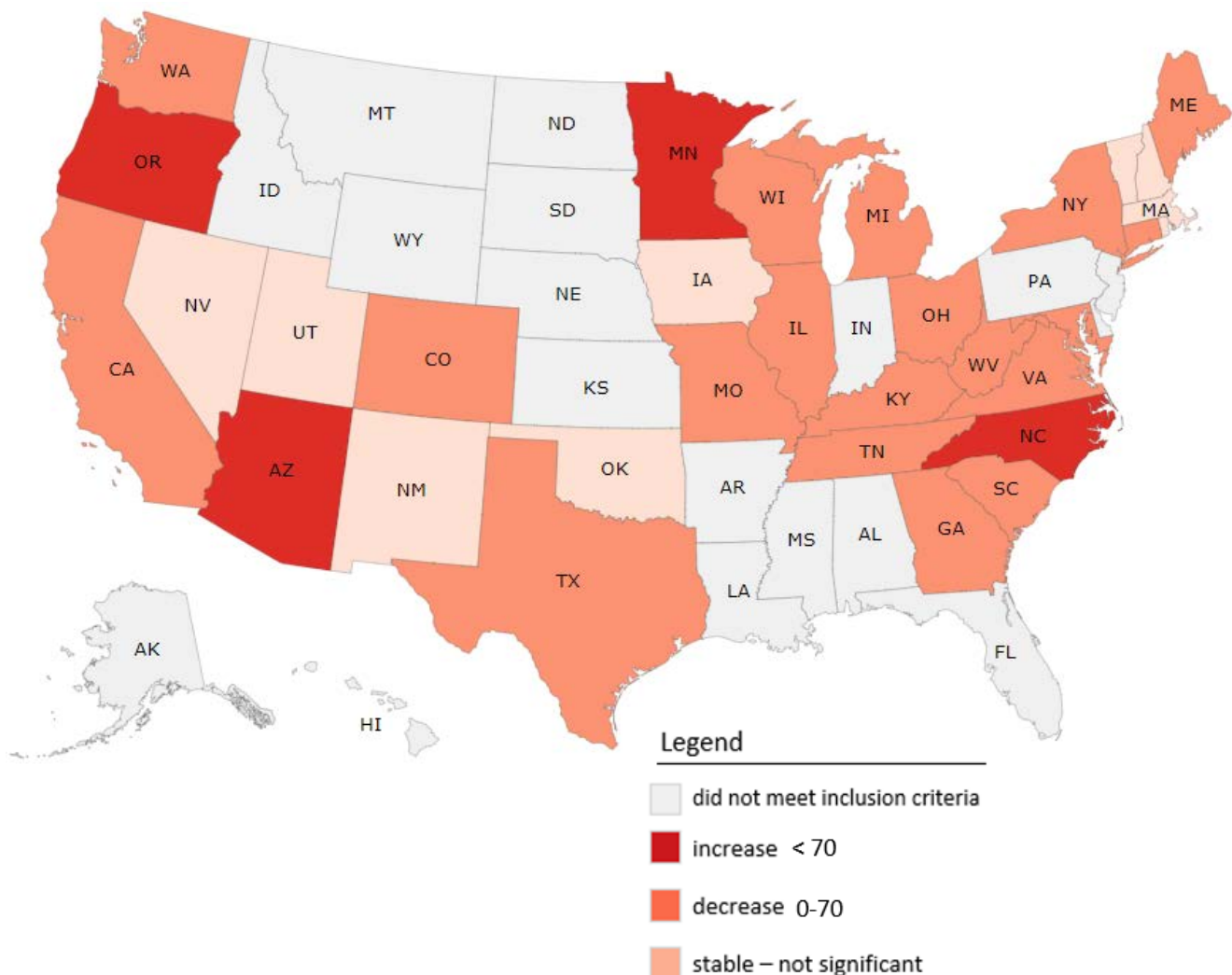
Synthetic Opioid Overdose Deaths

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.

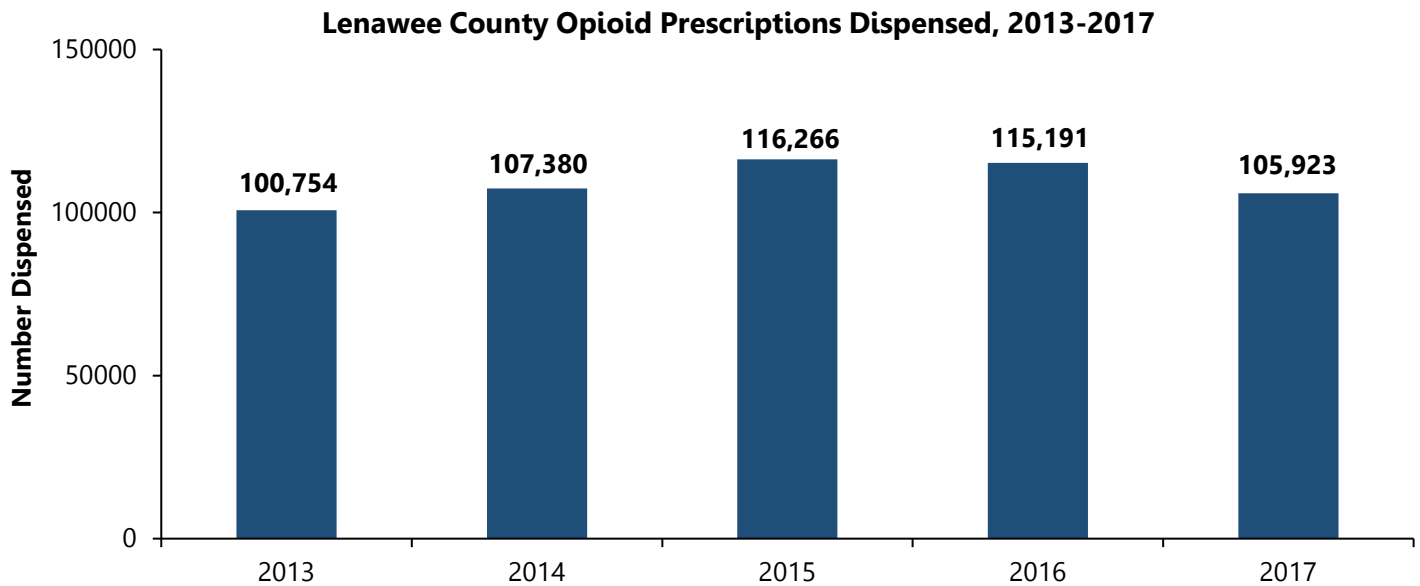
Statistically Significant Changes in Synthetic Opioid Deaths from 2016 to 2017



(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 Lenawee County from 2013 to 2017.



(Source for graphs: Michigan Automated Prescription System (MAPS), as compiled by The Substance Use Disorder Data Repository, Opioid prescriptions dispensed by county, 2013-2017)

Michigan Automated Prescription System (MAPS)

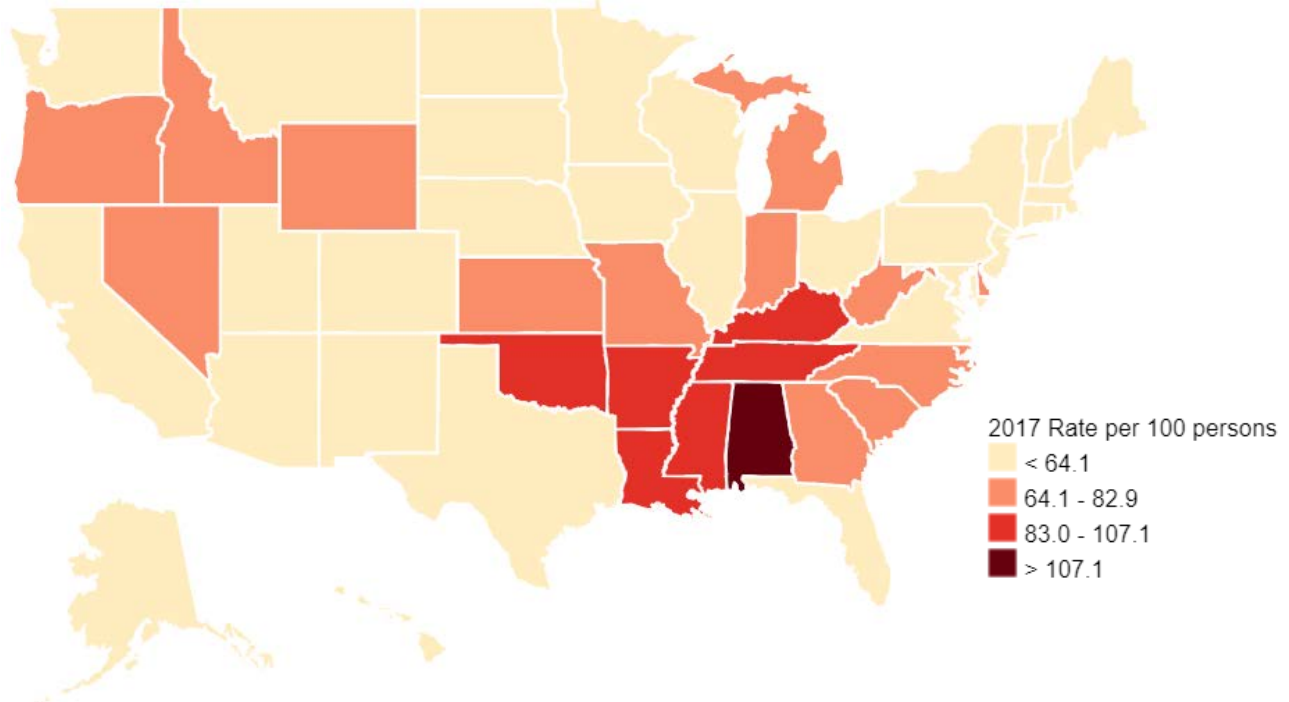
- The Michigan Automated Prescription System (MAPS) is the State's controlled substance prescription monitoring program within the Bureau of Professional Licensing (BPL), Michigan Department of Licensing and Regulatory Affairs (LARA). Board of Pharmacy Administrative Rules 338.3162b and 338.3162d state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

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

Opioid Prescribing Rates

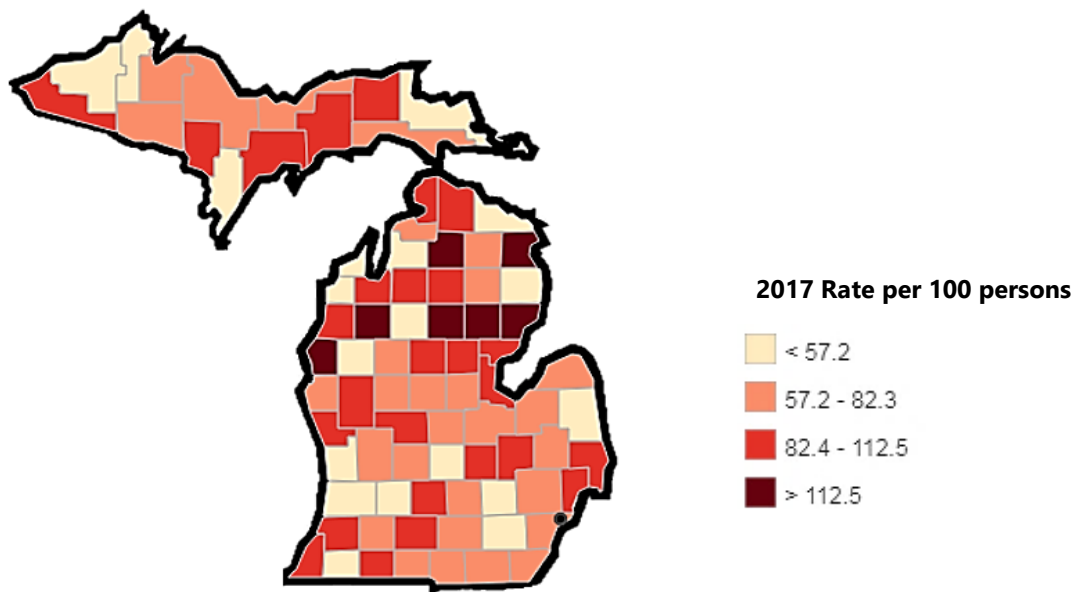
The following map shows the estimated rate of opioid prescriptions dispensed per 100 U.S. residents, by state, in 2017. The U.S. prescribing rate per 100 persons was 58.7 and Michigan had a rate of 74.2 opioid prescriptions dispensed per 100 residents.

U.S. State Opioid Prescribing Rates, 2017



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 Lenawee County had a rate of 81.7 in 2017.

Michigan Opioid Prescribing Rates, 2017



(Source for maps: CDC, Opioid Overdose, U.S. State and U.S. County Opioid Prescribing Rate Maps, 2017, retrieved October 2019)

Opioid Assessment: Community Awareness and Perceptions

Key Findings

About one-fifth (17%) of Lenawee County adults were not aware of any medication disposal sites in their community.

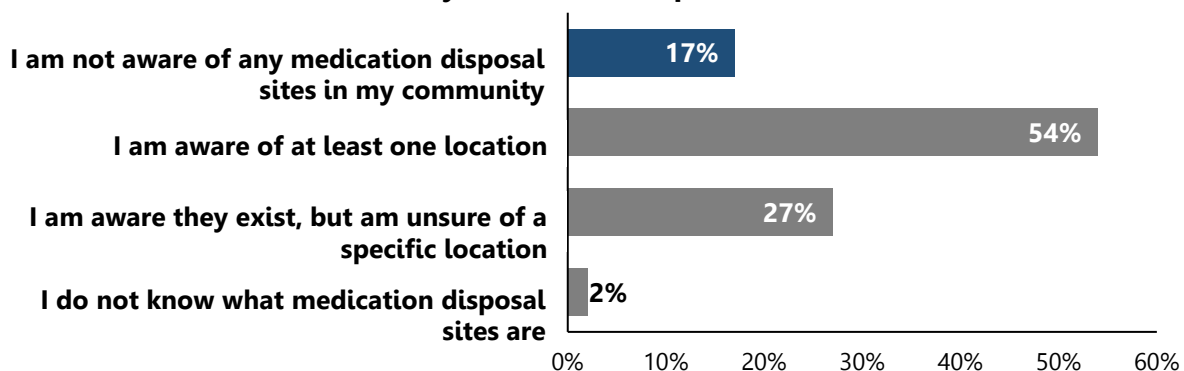
Community Perceptions

- Seventy-nine percent (79%) of Lenawee County adults strongly agreed (48%) or agreed (31%) that drug and alcohol addiction are diseases.
- Ninety-nine percent (99%) of adults strongly agreed (78%) or agreed (21%) that an individual can become addicted to prescription pain medications.
- Eighty-nine percent (89%) of adults disagreed (37%) or strongly disagreed (52%) that it is acceptable to share prescription pain medications with family and/or friends if they need it.
- Seventy percent (70%) of adults disagreed (39%) or strongly disagreed (31%) that it is acceptable to keep unused prescription medications that they no longer need to take.
- Eighty-seven percent (87%) of adults disagreed (29%) or strongly disagreed (58%) that it is safer to get high on prescription medications than illegal street drugs.

Community Perceptions	Strongly Agree	Agree	Disagree	Strongly Disagree
Drug and alcohol addiction are diseases	48%	31%	16%	5%
An individual can become addicted to prescription pain medications	78%	21%	1%	<1%
It is acceptable to share prescription pain medications with family/friends if they need it	2%	9%	37%	52%
It is acceptable to keep unused prescription medication(s) they no longer use	5%	25%	39%	31%
It is safer to get high on prescription medications than illegal street drugs	2%	11%	29%	58%

- Lenawee County adults reported they knew the following about medications disposal sites in their community:
 - Aware of at least one medication disposal location (54%)
 - Aware that medication disposal sites exist, but were unsure of a specific location (27%)
 - Not aware of any medication disposal sites in their community (17%)
 - Did not know what a medication disposal site is (2%)

Lenawee County Medication Disposal Site Awareness



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 medication collection box**
 - Lenawee County has a collection box located at the Lenawee County Sheriff's Department, Adrian Police Department, Hudson Police Department, Tecumseh Police Department, and Raisin Township Public Safety Department.
 - **Take medicines to a Drug Enforcement Administration (DEA) authorized collection site**
 - Lenawee County's public controlled substance disposal locations include Emma L Bixby Medical Center (818 Riverside Ave.).
 - **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.
 - Law enforcement agencies may also sponsor medicine take-back events 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)

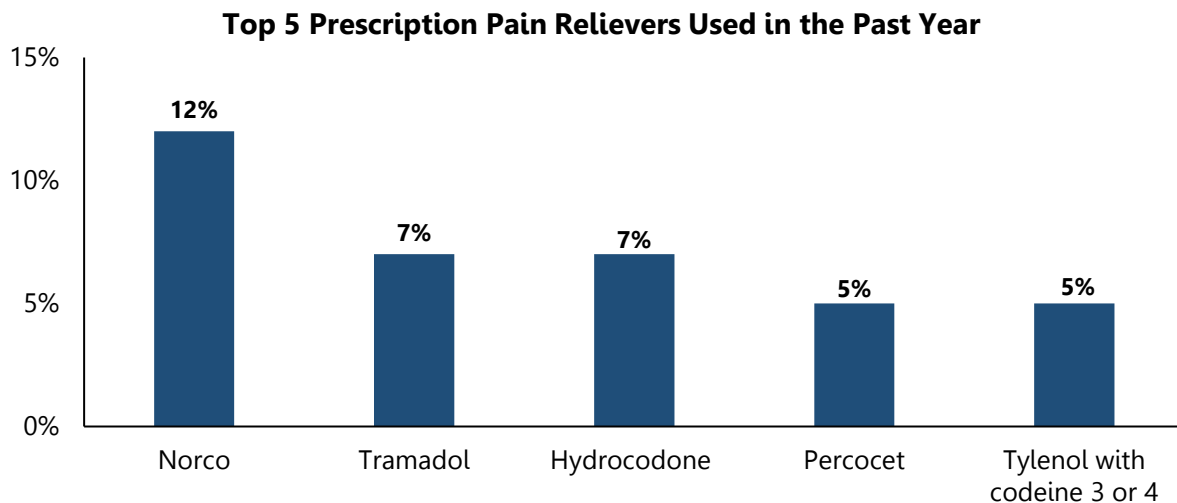
Opioid Assessment: Prescription Pain Medication Use

Key Findings

Twenty-two percent (22%) of Lenawee County adults reported they kept their unused prescription medications. Thirteen percent (13%) of adults reported they took their unused prescription medications to a medication collection program.

Prescription Pain Medication Use

- Lenawee County adults reported using the following prescription pain relievers in the past year:
 - Norco (12%)
 - Tramadol (generic) (7%)
 - Hydrocodone (generic) (7%)
 - Percocet (5%)
 - Tylenol with codeine 3 or 4 (NOT over-the-counter Tylenol) (5%)
 - Vicodin (4%)
 - Oxycodone (generic) (4%)
 - OxyContin (generic) (3%)
 - Morphine (generic) (3%)
 - Dilaudid or hydromorphone (2%)
 - Suboxone (2%)
 - Fentanyl (generic) (1%)
 - Codeine pills (generic) (1%)
 - Buprenorphine (generic) (1%)
 - Buprenorphine plus naloxone (generic) (1%)
 - Extended-release tramadol (generic) (1%)
 - MS Contin (1%)
 - Extended-release morphine (generic) (1%)
 - Lortab (1%)
 - Roxycodone (1%)
 - Ultram (1%)
 - Ultram ER (1%)
 - Oxymorphone (generic) (1%)
 - Percodan (<1%)
 - Opana (<1%)
 - Demerol (<1%)
 - Extended-release oxymorphone (generic) (<1%)



- Among adults who used prescription pain medications in the past year, 9% of adults reported they experienced problems with their emotions, nerves, or mental health and 6% experienced physical health problems that were probably caused or made worse by their use of prescription pain relievers.
- Three percent (3%) of Lenawee County adults reported they repeatedly got in trouble with the law in the past year as a result of using prescription pain relievers.

- During the past year, Lenawee 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 (8%)
 - Doing fun things such as hobbies or sports (6%)
 - Going to work (3%)
 - Going to school (1%)
 - Taking care of children (1%)
- Among adults who took prescription pain medications in the past year, 25% of adults wanted to, tried to cut down or stop using prescription pain relievers. Seventy-two percent (72%) of adults were able to cut down or stop using prescription pain relievers every time they wanted to or tried to.
- Lenawee 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 (14%); had cramps or muscle aches (10%); felt kind of blue or down (7%); felt sweaty, had enlarged eye pupils, or had body hair standing up on their skin (5%); diarrhea (4%); had teary eyes or a runny nose (3%); vomited or felt nauseous (2%); yawning (2%); and fever (0%).
- Among adults who had used prescription pain medication in the past year, 4% reported they needed treatment or counseling for their use of prescription pain medications. Five percent (5%) of adults were currently receiving treatment or counseling for their use of prescription pain medications. The last time adults needed treatment, 90% of adults reported they did not receive treatment or counseling for their use of prescription pain medications.
- As a result of using prescription pain relievers, 4% of adults reported they regularly failed to fulfill obligation at work or home, 4% had been placed in dangerous situations, 4% had experienced legal problems, 3% had failed a drug test, 2% had overdosed and required EMS/hospitalization, 2% had administered Narcan or nasal naloxone, and 2% had received Narcan or nasal naloxone.
- As a result of using prescription pain relievers, 13% of adults reported their family member regularly failed to fulfill obligation at work or home, 13% had been placed in dangerous situations, 12% had experienced legal problems, 11% had failed a drug test, 10% had overdosed and required EMS/hospitalization, 4% had received Narcan or nasal naloxone, and 2% had administered Narcan or nasal naloxone.
- In the past year, 6% of Lenawee County adults misused prescription pain relievers (used in any way a doctor did not direct them to use it).
- Adults obtained the prescription pain relievers they misused in the following ways:
 - From a friend or relative for free (47%)
 - From just one doctor (42%)
 - From more than one doctor (11%)
 - Bought them from a drug dealer or other stranger (5%)
 - Got them some other way (5%)
 - Took them from a friend or relative without asking (5%)
 - Bought them from a friend or relative (0%)
 - Stole them from a doctor's office, clinic, hospital, or pharmacy (0%)
 - From a dentist (0%)
- Lenawee County 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 (80%)
 - Relax or relieve tension (30%)
 - Help with their feeling or emotions (25%)
 - Help with their sleep (20%)
 - Feel good or get high (10%)
 - Because they were "hooked" or had to have them (10%)
 - Increase or decrease the effect(s) of some other drugs (5%)
 - Some other reason (5%)
 - Experiment or to see what they're like (0%)

- Adults reported they did the following with unused prescription pain relievers: kept them (22%); took as prescribed (13%); took them to the Medication Collection program (13%); threw them in the trash (8%); took them to the sheriff's office (8%); flushed them down the toilet (7%); kept them in a locked cabinet (6%); took them in on National Drug Take Back Day(s) (5%); their medications were stolen (1%); gave them away (1%); used drug deactivation pouches (i.e., Detera) (1%); traded them (1%); mailed back to the pharmacy (<1%); sold them (<1%); and other methods (3%).
- Lenawee County adults reported they tried the following alternative treatment methods instead of prescription pain relievers for pain management: lotions, rubs, or patches (47%); exercise (45%); chiropractic (41%); physical therapy (39%); massage therapy (35%); herbal or natural supplements (30%); yoga, Pilates, or meditation (20%); medical marijuana (14%); acupuncture (5%); osteopathic manipulation (3%); and other alternative therapies (5%). Sixteen percent (16%) of adults did not use any alternative treatment methods.
- Adults reported the following barriers to trying, using, or continuing alternative therapies: cost (30%), insurance does not cover alternative therapies (28%), cannot get time off from work (6%), do not know much about alternative therapies (5%), taking prescription pain medicine is easier (5%), alternative therapies are not available in my area (4%), too much of a time commitment (4%), lack of transportation (4%), do not believe alternative therapies work (3%), not sure what alternative therapies are available to me (3%), difficult to get an appointment (3%), had not thought of it (1%), and other barriers (8%).

Adult Comparisons	Lenawee County 2019	U.S. NSDUH 2017
Got prescription pain relievers from a friend or relative for free	47%	39%
Got prescription pain relievers from just one doctor	42%	35%
Got prescription pain relievers from more than one doctor	11%	1%
Misused prescription pain relievers in the past 12 months	6%	4%
Bought prescription pain relievers from a drug dealer or other stranger	5%	6%
Got prescription pain relievers some other way	5%	5%
Bought prescription pain relievers from a friend or relative	0%	11%
Stole prescription pain relievers from a doctor's office, clinic, hospital, or pharmacy	0%	1%

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

Note: 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.

2019 Lenawee County Opioid Assessment: Treatment Responses

- As part of the 2019 Lenawee County Opioid Assessment data collection process the online survey link was sent to treatment providers. The treatment specific survey link generated 11 completed surveys. The data is not generalizable and was not integrated in the full report. Here are some interesting facts and trends from the 11 completed surveys:
 - Ninety-one percent (91%) of adults strongly agreed or agreed that drug and alcohol addiction are diseases, compared to 79% of those who responded to the general survey.
 - Eighteen percent (18%) of adults were not aware of any medication disposal sites in their community, compared to 17% of those who responded to the general survey.
 - The top three prescription pain relievers adults used in the past year were Norco (20%), Tylenol with codeine 3 or 4 (not over-the-counter Tylenol) (20%), and Oxycodone (generic) (20%).
 - Half (50%) of adults wanted to or tried to cut down or stop using prescription pain relievers in the past year.
 - One-third (33%) of adults reported they needed treatment or counseling for their use of prescription pain relievers in the past year.
 - Sixty-seven percent (67%) of adults indicated they were receiving treatment or counseling for their use of prescription pain relievers.
 - One-hundred percent (100%) of adults reported the last time they used prescription pain relievers in anyway a doctor did not direct them to use them they took the prescription pain relievers from a friend or relative without asking.
 - Ninety-one percent (91%) of adults reported they had tried alternative treatment methods instead of prescription pain relievers in their lifetime.
 - Cost (36%) was identified as the number one barrier to trying, using, or continuing alternative therapies.
 - Twenty percent (20%) of adults had used cannabidiol (CBD) oil in the past year, compared to 19% of those who responded to the general survey).

(Source: 2019 Lenawee County Opioid Assessment)

Opioid Assessment: Other Drug Use

Key Findings

About one-fifth (19%) of Lenawee County adults used cannabidiol (CBD) oil in the past year.

Other Drug Use

- Lenawee County adults reported they had tried the following in the past 12 months:
 - Cannabidiol (CBD) oil (19%)
 - Marijuana for medicinal purposes (11%)
 - Recreational marijuana or hashish (9%)
 - Wax, oil with THC, or edibles (9%)
 - Inappropriate use of over-the-counter medications, such as cold or cough medicine (1%)
 - Amphetamines/methamphetamines/speed (1%)
 - Bath salts (used illegally) (<1%)
 - Cocaine, crack, or coca leaves (1%)
 - Ecstasy or E, or GHB (<1%)
 - Synthetic marijuana/K2 (<1%)
 - LSD, mescaline, peyote, psilocybin, DMT, or mushrooms (<1%)
 - Heroin/Fentanyl (0%)
 - Inhalants such as glue, toluene, gasoline, duster or paint (0%)
 - Other (1%)

The table below indicates correlations between adults who misused and did not misuse prescription pain relievers in the past year. An example of how to interpret the information includes: 28% of adults who misused prescription pain relievers in the past year used cannabidiol (CBD) oil compared to 19% of adult who did not misuse prescription pain relievers.

Drugs Used in Past Year	Did Not Misuse Prescription Pain Relievers in the Past Year	Misused Prescription Pain Relievers in the Past Year
Cannabidiol (CBD) oil	19%	28%
Wax, oil with THC, or edibles	8%	28%
Recreational marijuana or hashish	9%	17%
Marijuana for medicinal purposes	11%	11%
Amphetamines/methamphetamines/speed	1%	6%
Cocaine, crack, or coca leaves	<1%	6%
Synthetic marijuana/K2	0%	6%
Bath salts (used illegally)	<1%	0%
Ecstasy or E, or GHB	<1%	0%
Inappropriate use of over-the-counter medications, such as cold or cough medicine	1%	0%
LSD, mescaline, peyote, psilocybin, DMT, or mushrooms	<1%	0%

Note: 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.

- Three percent (3%) of Lenawee County adults had used marijuana in the past 6 months, increasing to 11% of those under the age of 30. *(Source: 2017 Lenawee County Community Health Assessment).*
- Five percent (5%) of Lenawee County adults reported using other recreational drugs in the past 6 months such as cocaine, synthetic marijuana/K2, heroin, LSD, inhalants, Ecstasy, bath salts, and methamphetamines. *(Source: 2017 Lenawee County Community Health Assessment).*
- When asked about their frequency of marijuana and other recreational drug use in the past 6 months, 35% of Lenawee County adults who used drugs did so almost every day, and 35% did so less than once a month. *(Source: 2017 Lenawee County Community Health Assessment).*
- Six percent (6%) of adults had used medication not prescribed for them or they took more than prescribed to feel good or high and/or more active or alert during the past 6 months, increasing to 12% of those with incomes less than \$25,000. *(Source: 2017 Lenawee County Community Health Assessment).*
- When asked about their frequency of medication misuse in the past 6 months, 60% of Lenawee County adults who used these drugs did so almost every day, and 15% did so less than once a month. *(Source: 2017 Lenawee County Community Health Assessment).*
- Lenawee County adults took the following over-the-counter drugs in a way not intended in the past 6 months: cough and cold medicine (11%), sleeping pills (3%), weight loss or diet pills (1%), and motion sickness pills (<1%). *(Source: 2017 Lenawee County Community Health Assessment).*

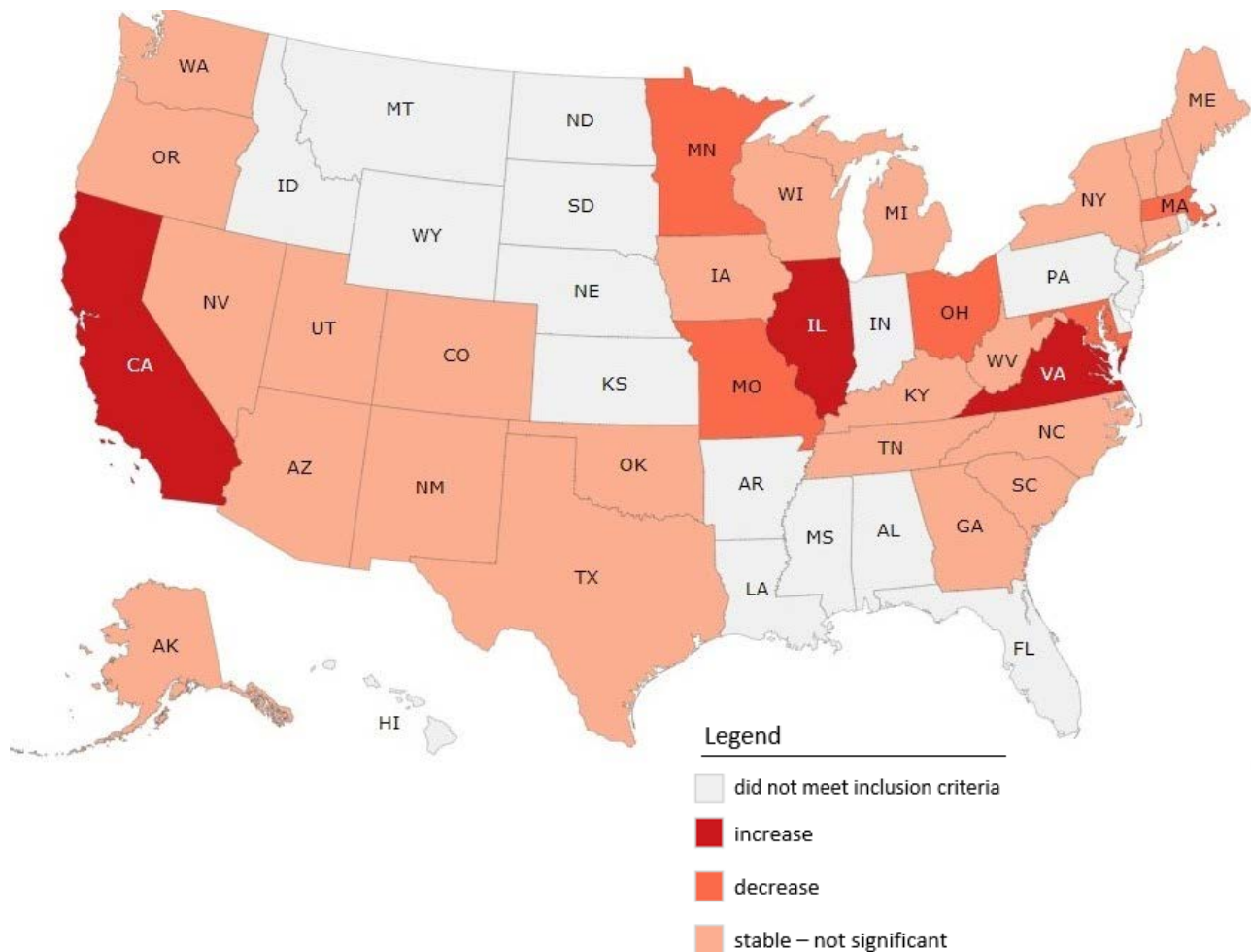
Opioid Assessment: Heroin Use

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 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 from 2016 to 2017.

Statistically Significant Changes in Heroin Overdose Deaths from 2016 to 2017



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

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)

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/
Great Start Collaborative Lenawee County, 2018	<ul style="list-style-type: none"> Big Red Barrel Prescription Drug Collection Program/Disposing of Prescription Medications Properly 	www.lenaweegreatstart.org/news-and-events/news/2014-09-22/big-red-barrel-prescription-drug-collection-program
Michigan Department of Health and Human Services (MDHHS), Substance Use in Michigan, The Substance Use Disorder Data Repository	<ul style="list-style-type: none"> Lenawee County Opioid Prescription Dispensed, 2013-2017 	http://mi-suddr.com/blog/2018/09/26/opioid-prescriptions-written/
	<ul style="list-style-type: none"> Lenawee 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

Appendix II: Acronyms and Terms

Adult	Defined as 19 years of age and older
CDC	C enters 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
MED	M orphine E quivalent D ose
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: Lenawee County Sample Demographic Profile*

Variable	2019 Survey Sample	Lenawee County Census 2017 (1-year estimates)	Michigan Census 2017 (1-year estimates)
Age			
20-29	11.2%	12.2%	13.8%
30-39	15.7%	11.9%	11.9%
40-49	25.5%	12.6%	12.2%
50-59	24.9%	14.8%	14.1%
60 plus	22.5%	24.5%	23.6%
Race/Ethnicity			
White	94.7%	93.2%	78.4%
Black or African American	0.6%	1.8%	13.8%
American Indian and Alaska Native	1.5%	0.8%	0.5%
Asian	0.6%	0.3%	3.1%
Other	2.4%	0.9%	1.1%
Hispanic Origin (may be of any race)	5.3%	8.0%	5.1%
Marital Status†			
Married Couple	58.9%	N/A	48.0%
Never been married/member of an unmarried couple	18.4%	N/A	33.4%
Divorced/Separated	17.8%	N/A	12.7%
Widowed	5.0%	N/A	5.9%
Education†			
Less than High School Diploma	2.1%	7.8%	9.1%
High School Diploma	20.5%	35.5%	28.9%
Some college/ College graduate	77.4%	56.7%	62.0%
Income (Families)			
\$14,999 and less	10.7%	3.7%	6.7%
\$15,000 to \$24,999	11.6%	4.0%	6.6%
\$25,000 to \$49,999	18.7%	26.3%	21.0%
\$50,000 to \$74,999	18.7%	22.2%	19.6%
\$75,000 or more	35.6%	43.6%	46.1%

N/A - data cannot be displayed because the number of sample cases is too small.

* The percents reported are the actual percent within each category who responded to the survey. Percents may not add to 100% due to missing data (non-responses).

† The Michigan and Lenawee 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 IV: Demographics and Household Information

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

Age	Total	Males	Females
Lenawee County	99,892	50,458	49,434
0-4 years	5,689	2,958	2,731
1-4 years	4,619	2,398	2,221
< 1 year	1,070	560	610
1-2 years	2,216	1,142	1,074
3-4 years	2,403	1,256	1,147
5-9 years	6,227	3,182	3,045
5-6 years	2,413	1,228	1,185
7-9 years	3,814	1,954	1,860
10-14 years	6,785	3,458	3,327
10-12 years	4,065	2,116	1,949
13-14 years	2,720	1,342	1,378
12-18 years	10,163	5,326	4,837
15-19 years	7,676	4,088	3,588
15-17 years	4,427	2,370	2,057
18-19 years	3,249	1,718	1,531
20-24 years	6,217	3,324	2,893
25-29 years	5,391	2,935	2,456
30-34 years	5,645	3,016	2,629
35-39 years	6,248	3,240	3,008
40-44 years	6,737	3,513	3,224
45-49 years	7,428	3,787	3,681
50-54 years	7,773	3,989	3,784
55-59 years	7,189	3,557	3,632
60-64 years	6,267	3,100	3,167
65-69 years	4,605	2,212	2,393
70-74 years	3,242	1,541	1,701
75-79 years	2,592	1,094	1,498
80-84 years	2,175	840	1,335
85-89 years	1,331	459	872
90-94 years	502	140	362
95-99 years	116	23	93
100-104 years	15	2	13
105-109 years	1	0	1
110 years & over	1	0	1
Total 85 years and over	1,966	624	1,342
Total 65 years and over	14,580	6,311	8,269
Total 19 years and over	75,137	37,602	37,535

LENAWEE COUNTY PROFILE

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

General Demographic Characteristics

	Number	Percent (%)
Total Population		
2017 Total Population	98,585	100%
Largest City- Adrian		
2017 Total Population	20,743	100%
Population by Race/Ethnicity		
Total Population	98,585	100%
White	91,353	92.7%
Hispanic or Latino (of any race)	7,660	7.8%
African American	2,649	2.7%
Two or more races	2,592	2.6%
American Indian and Alaska Native	449	0.5%
Asian	268	0.3%
Some other race	1,209	1.2%
Population by Age		
Under 5 years	5,321	5.4%
5 to 17 years	16,020	16.3%
18 to 24 years	9,383	9.5%
25 to 44 years	22,967	23.3%
45 to 64 years	27,854	28.3%
65 years and more	17,040	17.3%
Median age (years)	41.6	N/A
Household by Type		
Total households	38,115	100%
Total families	25,130	N/A
Households with children <18 years	9,970	N/A
Married-couple family household	19,161	N/A
Married-couple family household with children <18 years	6,497	N/A
Female householder, no husband present	4,244	N/A
Female householder, no husband present with children <18 years	2,556	N/A
Nonfamily household (single person)	12,985	35.0%
Nonfamily household (single person) living alone	10,977	28.8%
Nonfamily household (single person) 65 years and >	4,155	10.9%
Households with one or more people <18 years	N/A	28.9%
Households with one or more people 60 years and >	N/A	40.9%
Average household size	2.45 people	N/A
Average family size	3.00 people	N/A

General Demographic Characteristics, Continued

<i>Housing Occupancy</i>		
Median value of owner-occupied units	\$124,900	N/A
Median housing units with a mortgage (monthly owner costs)	\$1,157	N/A
Median housing units without a mortgage (monthly owner costs)	\$446	N/A
Median value of occupied units paying rent	\$756	N/A
Median rooms per total housing unit	6.1	N/A
Total occupied housing units	38,115	N/A
No telephone service available	1,005	2.6%
Lacking complete kitchen facilities	206	0.5%
Lacking complete plumbing facilities	44	0.1%

Selected Social Characteristics

<i>School Enrollment</i>		
Population 3 years and over enrolled in school	23,750	100%
Nursery & preschool	1,345	5.7%
Kindergarten	1,111	4.7%
Elementary School (Grades 1-8)	9,588	40.4%
High School (Grades 9-12)	5,521	23.2%
College or Graduate School	6,185	26.1%
<i>Educational Attainment</i>		
Population 25 years and over	67,861	100%
< 9 th grade education	1,849	2.7%
9 th to 12 th grade, no diploma	4,391	6.5%
High school graduate (includes equivalency)	25,053	36.9%
Some college, no degree	16,798	24.8%
Associate degree	5,846	8.6%
Bachelor's degree	9,067	13.4%
Graduate or professional degree	4,857	7.2%
Percent high school graduate or higher	N/A	90.8%
Percent Bachelor's degree or higher	N/A	13.4%
<i>Marital Status</i>		
Population 15 years and over	81,274	100%
Never married	N/A	30.2%
Now married, excluding separated	N/A	49.9%
Separated	N/A	1.2%
Widowed	N/A	6.0%
Widowed females	N/A	4.7%
Divorced	N/A	12.7%
Divorced females	N/A	6.7%
<i>Veteran Status</i>		
Civilian population 18 years and over	77,182	100%
Veterans 18 years and over	6,822	8.8%

Selected Social Characteristics, Continued

<i>Disability Status of the Civilian Non-Institutionalized Population</i>		
Total civilian noninstitutionalized population	95,362	100%
Civilian with a disability	14,895	15.6%
Under 18 years	21,210	N/A
Under 18 years with a disability	1,385	6.5%
18 to 64 years	57,725	N/A
18 to 64 years with a disability	7,501	13.0%
65 years and over	16,427	N/A
65 years and over with a disability	6,009	36.6%

Selected Economic Characteristics, Continued

<i>Employment Status</i>		
Population 16 years and over	79,966	100%
16 years and over in labor force	47,218	59.0%
16 years and over not in labor force	32,748	41.0%
Females 16 years and over	39,687	100%
Females 16 years and over in labor force	22,306	56.2%
Population living with own children <6 years	6,164	100%
All parents in family in labor force	4,230	68.6%
<i>Class of Worker</i>		
Civilian employed population 16 years and over	44,355	100%
Private wage and salary workers	36,604	82.5%
Government workers	5,308	12.0%
Self-employed workers in own not incorporated business	2,390	5.4%
Unpaid family workers	63	0.1%
<i>Occupations</i>		
Employed civilian population 16 years and over	44,355	100%
Production, transportation, and material moving occupations	8,784	19.8%
Management, business, science, and art occupations	12,615	28.4%
Sales and office occupations	10,400	23.4%
Service occupations	8,200	18.5%
Natural resources, construction, and maintenance occupations	4,356	9.8%
<i>Leading Industries</i>		
Employed civilian population 16 years and over	44,355	100%
Manufacturing	9,298	21.0%
Educational, health and social services	11,252	25.4%
Trade (retail and wholesale)	5,753	13.0%
Arts, entertainment, recreation, accommodation, and food services	3,450	7.8%
Transportation and warehousing, and utilities	1,638	3.7%
Professional, scientific, management, administrative, and waste management services	3,098	7.0%
Construction	2,460	5.5%
Other services (except public administration)	2,289	5.2%
Finance, insurance, real estate and rental and leasing	1,934	4.4%
Public administration	1,701	3.8%
Agriculture, forestry, fishing and hunting, and mining	969	2.2%
Information	513	1.2%

Income In 2017		
Households	38,559	100%
< \$10,000	1,631	5.1%
\$10,000 to \$14,999	1,369	4.9%
\$15,000 to \$24,999	3,172	11.0%
\$25,000 to \$34,999	4,849	11.2%
\$35,000 to \$49,999	5,959	16.5%
\$50,000 to \$74,999	7,765	20.0%
\$75,000 to \$99,999	6,749	14.1%
\$100,000 to \$149,999	5,193	12.1%
\$150,000 to \$199,999	1,156	3.1%
\$200,000 or more	716	2.0%
Median household income	\$56,515	N/A
Income in 2017		
Families	25,834	100%
< \$10,000	423	1.6%
\$10,000 to \$14,999	547	2.1%
\$15,000 to \$24,999	1,036	4.0%
\$25,000 to \$34,999	3,015	11.7%
\$35,000 to \$49,999	3,781	14.6%
\$50,000 to \$74,999	5,741	22.2%
\$75,000 to \$99,999	4,790	18.5%
\$100,000 to \$149,999	4,839	18.7%
\$150,000 to \$199,999	986	3.8%
\$200,000 or more	676	2.6%
Median family income	\$66,187	N/A
Per capita income in 2017	\$26,569	N/A
Poverty Status in 2017		
Families	N/A	5.9%
Individuals	N/A	9.6%

(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	\$38,094	41 st of 83 counties
BEA Per Capita Personal Income 2016	\$36,914	43 rd of 83 counties
BEA Per Capita Personal Income 2015	\$36,225	41 st of 83 counties
BEA Per Capita Personal Income 2014	\$34,254	42 nd of 83 counties
BEA Per Capita Personal Income 2013	\$33,100	41 st 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	Lenawee County	Michigan
Labor Force (August 2019)	47,275	4,984,000
Employed (August 2019)	45,465	4,776,000
Unemployed (August 2019)	1,180	208,000
Unemployment Rate* (August 2019)	3.8	4.2
Unemployment Rate* (July 2019)	5.0	5.1
Unemployment Rate* (August 2018)	4.1	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
Lenawee County				
All ages in poverty	9,679	8,017 to 11,341	10.4%	8.6 to 12.2
Ages 0-17 in poverty	2,900	2,254 to 3,546	14.3%	11.1 to 17.5
Ages 5-17 in families in poverty	2,067	1,580 to 2,554	13.9%	10.6 to 17.2
Median household income	\$56,416	\$53,030 to \$59,802		
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>)

Appendix V: MiPHY Summary

The **Michigan Profile for Healthy Youth** (MiPHY) is an online student health survey offered by the Michigan Departments of Education and Health and Human Services. Youth in grades 7, 9, and 11 in Michigan School districts were used as sampling frame for the youth survey. The results in this report reflect student survey responses from schools that voluntarily participated in your county and may not be representative of all middle and high school students in the county.

MiPHY Variables	Lenawee County 2017-2018 (7 th grade)	Lenawee County 2017-2018 (9 th & 11 th grade)	Michigan YRBS 2017 (9 th -12 th)	U.S. YRBS 2017 (9 th -12 th)
Drug Use				
Ever used marijuana (one or more times during their life)	N/A	30%	41%	36%
Tried marijuana for the first time before age 13 years	N/A	7%	9%	7%
Tried marijuana for the first time before age 11 years	2%	N/A	N/A	N/A
Currently used marijuana (one or more times during the past 30 days)	3%	16%	24%	20%
Ever used synthetic marijuana (one or more times during their life)	8	10%	8%	7%
Ever used cocaine (any form of cocaine, such as powder, crack or freebase, one or more times during their life)	7%	N/A	5%	5%
Currently used cocaine (any form of cocaine, such as powder, crack or freebase, one or more times during the past 30 days)	N/A	1%	N/A	N/A
Currently used inhalants (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high, one or more times during the past 30 days)	5%	1%	N/A	N/A
Currently used heroin (one or more times during the past 30 days)	N/A	<1%	N/A	N/A
Ever used methamphetamines (one or more times during their life)	7%	N/A	3%	3%
Currently used methamphetamines (one or more times during the past 30 days)	N/A	1%	N/A	N/A
Ever took steroids without a doctor's prescription (pills or shots, one or more times during their life)	8%	N/A	4%	3%
Currently took steroids without a doctor's prescription (pills or shots, one or more times during the past 30 days)	N/A	<1%	N/A	N/A
Ever injected any illegal drug (used a needle to inject any illegal drug into their body, one or more times during their life)	7%	N/A	2%	2%
Currently injected any illegal drug (used a needle to inject any illegal drug into their body, one or more times during the past 30 days)	N/A	<1%	N/A	N/A
Took a prescription drug such as Ritalin, Adderall, or Xanax without a doctor's prescription (during the past month)	3%	4%	N/A	N/A
Took painkillers such as OxyContin, Codeine, Vicodin, or Percocet without a doctor's prescription (during the past month)	4%	4%	16%	14%
Were offered, sold, or given an illegal drug on school property (during the past 12 months)	7%	16%	26%	20%

N/A – Not available

MiPHY Variables	Lenawee County 2017-2018 (7 th grade)	Lenawee County 2017-2018 (9 th & 11 th grade)	Michigan YRBS 2017 (9 th -12 th)	U.S. YRBS 2017 (9 th -12 th)
Alcohol Use				
Ever drank alcohol (at least one drink of alcohol, on at least 1 day during their life)	N/A	42%	62%	60%
Had their first drink of alcohol before the age of 13 (other than a few sips)	N/A	12%	16%	16%
Had their first drink of alcohol before the age of 11 (other than a few sips)	5%	N/A	N/A	N/A
Current drinker (at least one drink of alcohol during the past 30 days)	2%	17%	30%	30%
Binge drinker (drank 4 or more drinks of alcohol in a row [for females] or 5 or more drinks of alcohol in a row [for males] within a couple hours during the past 30 days)	1%	11%	13%	14%
Rode in a car or other vehicle driven by someone who had been drinking alcohol (one or more times during the past 30 days)	21%	10%	15%	17%
Drove a car or other vehicle when they had been drinking alcohol (one or more times during the past 30 days)	N/A	1%	4%	6%
Usually got the alcohol they drank by someone giving it to them (of current drinkers)	50%	40%	40%	44%
Tobacco Use				
Ever tried cigarette smoking (even one or two puffs)	N/A	24%	31%	29%
First tried cigarette smoking before the age of 13 (even one or two puffs)	N/A	11%	11%	10%
Currently smoked cigarettes (during the past 30 days)	1%	5%	11%	9%
Currently frequently smoked cigarettes (on 20 or more days during the past 30 days)	<1%	1%	3%	3%
Tried to quit all tobacco products during the past 12 months (of current smokers)	N/A	57%	46%	41%
Used chewing tobacco, snuff, dip, snus, or dissolvable tobacco products (during the past 30 days)	1%	3%	6%	6%
Smoked cigars, cigarillos, or little cigars (during the past 30 days)	1%	3%	9%	8%
Ever been told by a doctor or nurse they had asthma	20%	25%	26%	23%
Used an electronic vapor product during the past month	7%	28%	15%	13%
Usually got their own electronic vapor products by buying them in a store (among students who used electronic vapor products recently)	6%	19%	12%	14%

N/A – Not available

MiPHY Variables	Lenawee County 2017-2018 (7 th grade)	Lenawee County 2017-2018 (9 th & 11 th grade)	Michigan YRBS 2017 (9 th -12 th)	U.S. YRBS 2017 (9 th -12 th)
Safety, Bullying, Danger, and Violence				
Carried a weapon (such as a gun knife, or club on at least one day during the past 30 days)	N/A	18%	18%	16%
Ever carried a weapon (such as a gun, knife, or club in their lifetime)	35%	N/A	N/A	N/A
Carried a weapon on school property (such as a gun knife, or club on at least one day during the past 30 days)	N/A	3%	4%	4%
Ever carried a weapon on school property (such as a gun knife, or club in their lifetime)	2%	N/A	N/A	N/A
Did not go to school because they felt unsafe at school or on their way to or from school (on at least 1 day during the past 30 days)	12%	N/A	8%	7%
Threatened or injured with a weapon on school property (such as a gun, knife, or club one or more times during the past 12 months)	N/A	8%	7%	6%
Were in a physical fight (one or more times during the past 12 months)	N/A	16%	24%	24%
Ever in a physical fight (one or more times in their lifetime)	38%	N/A	N/A	N/A
Were in a physical fight on school property (one or more times during the past 12 months)	N/A	7%	8%	9%
Ever in a physical fight on school property (one or more times during their lifetime)	18%	N/A	N/A	N/A
Experienced physical dating violence (physically hurt on purpose by someone they were dating or going out with during the past 12 months)	N/A	11%	9%	8%
Experienced sexual dating violence (forced to do sexual things they did not want to do by someone they were dating or going out with in the past 12 months)	N/A	12%	8%	7%
Mental Health				
Felt sad or hopeless (almost every day for 2 weeks or more in a row so that they stopped doing some usual activities during the past 12 months)	33%	38%	37%	32%
Seriously considered attempting suicide (during the past 12 months)	24%	24%	21%	17%
Made a plan about how they would attempt suicide (during the past 12 months)	16%	19%	18%	14%
Attempted suicide (one or more times during the past 12 months)	N/A	12%	9%	7%
Suicide attempt that resulted in an injury, poisoning, or overdose that had to be treated by a doctor or nurse (during the past 12 months)	3%	4%	3%	2%
Sexual Behavior				
Ever had sexual intercourse	4%	32%	38%	40%
Had sexual intercourse before age 13 (of all youth)	N/A	3%	3%	3%
Had four or more sexual partners (of all youth)	N/A	6%	9%	10%
Used a condom during last sexual intercourse (of sexually active youth)	54%	59%	49%	54%
Used birth control pills during last sexual intercourse (of sexually active youth)	N/A	25%	24%	21%
Drank alcohol or used drugs before last sexual intercourse (of sexually active youth)	15%	20%	20%	19%
Ever physically forced to have sexual intercourse (when they did not to)	N/A	7%	10%	7%

N/A – Not available

MiPHY Variables	Lenawee County 2017-2018 (7 th grade)	Lenawee County 2017-2018 (9 th & 11 th grade)	Michigan YRBS 2017 (9 th -12 th)	U.S. YRBS 2017 (9 th -12 th)
Weight Status and Nutrition				
Obese	18%	21%	17%	15%
Overweight	16%	16%	16%	16%
Described themselves as slightly or very overweight	30%	35%	36%	32%
Tried to lose weight	48%	50%	N/A	N/A
Ate 5 or more servings per day of fruits and vegetables per day (during the past 7 days)	34%	21%	N/A	N/A
Drank three or more glasses of milk per day during the past week	15%	12%	N/A	N/A
Drank a can, bottle, or glass of pop or soda one or more times per day (during the past 7 days)	20%	19%	18%	19%
Had breakfast every day (in the past 7 days)	39%	30%	31%	35%
Did not eat breakfast (in the past 7 days)	12%	12%	16%	14%
Physical Activity				
Physically active at least 60 minutes per day on 5 or more days (in the past 7 days)	60%	57%	46%	47%
Attended physical education (PE) classes on one or more days (in an average week when in school)	77%	51%	28%	52%
Youth who play on any sports team	68%	66%	N/A	54%
Watched 3 or more hours of TV per day (on an average school day)	22%	22%	21%	21%
Played video or computer games or use a computer, not for school work for 3 or more hours per day (on average school day)	41%	45%	43%	43%

N/A – Not available

MiPHY Variables	Lenawee County 2017-2018 (7 th grade)	Lenawee County 2017-2018 (9 th & 11 th grade)	Michigan YRBS 2017 (9 th -12 th)	U.S. YRBS 2017 (9 th -12 th)
Individual and Peer Domain				
Youth who reported smoking one or more packs of cigarettes per day to be a moderate or great risk	77%	82%	N/A	N/A
Youth who reported having five or more drinks of alcohol once or twice each weekend to be a moderate or great risk	65%	70%	N/A	N/A
Youth who reported they thought none of their friends had smoked cigarettes recently	85%	69%	N/A	N/A
Youth who reported they thought none of their friends had been drunk recently	87%	50%	N/A	N/A
Youth who reported they thought none of their friends had used marijuana recently	81%	44%	N/A	N/A
Family Domain				
Youth who reported their parents felt cigarette use to be wrong or very wrong	98%	97%	N/A	N/A
Youth who reported their parents felt marijuana use to be wrong or very wrong	95%	87%	N/A	N/A
Youth whose parents ask whether their homework is done	14%	24%	N/A	N/A
Youth who could ask their mom or dad for help with personal problems	81%	76%	N/A	N/A
Community Domain				
Felt unsafe or very unsafe in their neighborhood	4%	4%	N/A	N/A
Youth who reported sort of easy or very easy to get cigarettes	21%	49%	N/A	N/A
Youth who reported sort of easy or very easy to get alcohol	31%	63%	N/A	N/A
Youth who reported sort of easy or very easy to get marijuana	14%	51%	N/A	N/A
Know adults in the neighborhood they could talk to about something important	53%	48%	N/A	N/A
Neighbors notice when they are doing a good job and let them know	26%	22%	N/A	N/A
Know people in their neighborhood who encourage them to do their best	42%	36%	N/A	N/A
Know people in their neighborhood who are proud when youth do something well	43%	37%	N/A	N/A

N/A – Not available

MiPHY Variables	Lenawee County 2017-2018 (7 th grade)	Lenawee County 2017-2018 (9 th & 11 th grade)	Michigan YRBS 2017 (9 th -12 th)	U.S. YRBS 2017 (9 th -12 th)
School Domain				
Felt unsafe or very unsafe at school	9%	8%	N/A	N/A
Felt assigned school work was never or seldom meaningful and important	22%	36%	N/A	N/A
Youth who often or almost always hated being at school during the past year	40%	46%	N/A	N/A
Youth who never or seldom tried to do their best work at school during the past year	7%	8%	N/A	N/A
Youth who reported not at all or a little true that they do interesting activities at school	46%	61%	N/A	N/A
Youth who reported not at all or a little true that they make a difference at school	63%	70%	N/A	N/A
Had seen students get pushed, hit, or punched one or more times during the past year	67%	46%	N/A	N/A
Heard students get called mean names or get “put down” during the past year	80%	72%	N/A	N/A
Heard rumors or lies being spread about other students during the past year	83%	79%	N/A	N/A
Have seen students left out of activities or games on purpose during the past year	63%	48%	N/A	N/A
Heard students threaten to hurt other students during the past year	56%	53%	N/A	N/A
Have seen students wreck or damage other students’ things during the past year	50%	41%	N/A	N/A
Have read email or website messages that spread rumors about other students during the past year	24%	28%	N/A	N/A
Have read email or website messages that contained threats to other students during the past year	15%	16%	N/A	N/A
Have lots of chances to get involved in sports, clubs, and other school activities outside of class	90%	88%	N/A	N/A
Teachers notice when they are doing a good job and let them know about it	65%	56%	N/A	N/A
Teachers praise them when they work hard in school	53%	42%	N/A	N/A

N/A – Not available