

### 4.3 Drug Misuse and Addiction

The prevalence of drug misuse and addiction throughout Clinton County was raised at the first Core Planning Committee meeting on June 18, 2020. This section will detail the issue, along with how it impacts the County. Stakeholders in Clinton County opted to include this section in the report to stimulate conversation regarding the negative impacts associated with drug misuse and addiction on the County and its communities. While there is often widespread awareness and concern among policymakers and the public about substance use, there may not be an awareness of the evidence-based prevention and treatment strategies currently available. To effectively aid in the prevention of drug misuse, policymakers should remain up to date on the evidence-based prevention and treatment strategies that are available in the County and nearby.

Furthermore, it is important to note the personal nature of drug misuse and addiction. As such, government experts and civil society must recognize strategies and develop policies incorporating the most effective ways to support and deliver evidence-based substance use prevention and treatment services. (Source: INCB, 2019).

#### 4.3.1 Description

A drug is a substance that affects the way the body functions. If a drug is classified as “illegal,” this means that it is forbidden by law. Different drugs have different effects on people and these effects are influenced by many factors. This makes illegal use of drugs unpredictable and dangerous. The following circumstances can impact the effect of a drug:

- The type of drug;
- How much of the drug is consumed;
- Where the person is when the drug is being used;
- What the person is doing while using the drug;
- Individual characteristics such as body size and health vulnerabilities; and,
- How many different drugs are taken at one time.

The World Health Organization (WHO) defines drug misuse as “the use of a substance for a purpose not consistent with legal or medical guidelines.” While many misused substances are illegal, some substances, such as many common opioids, are legally prescribed. **Table 4.3.1** describes commonly misused drugs, including those that are outright illegal and those whose improper use makes them illegal. Drug misuse can have a negative impact on health or functioning and may take the form of drug dependence or may be part of a wider spectrum of problematic or harmful behavior (Source: UK Department of Health, 2006).

**Table 4.3.1: Commonly Misused Drugs**

Drug Name	Description
Cocaine	A powerfully addictive stimulant drug made from the leaves of the coca plant native to South America.
Heroin	An opioid drug made from morphine; a natural substance extracted from the seed pod of the various opium poppy plant.
Benzodiazepines	A type of prescription sedative commonly prescribed for anxiety or to help with insomnia. These types of drugs work to calm to sedate a person by raising the level of inhibitory neurotransmitter GABA in the brain.

## 4 | HAZARD RISK ASSESSMENT

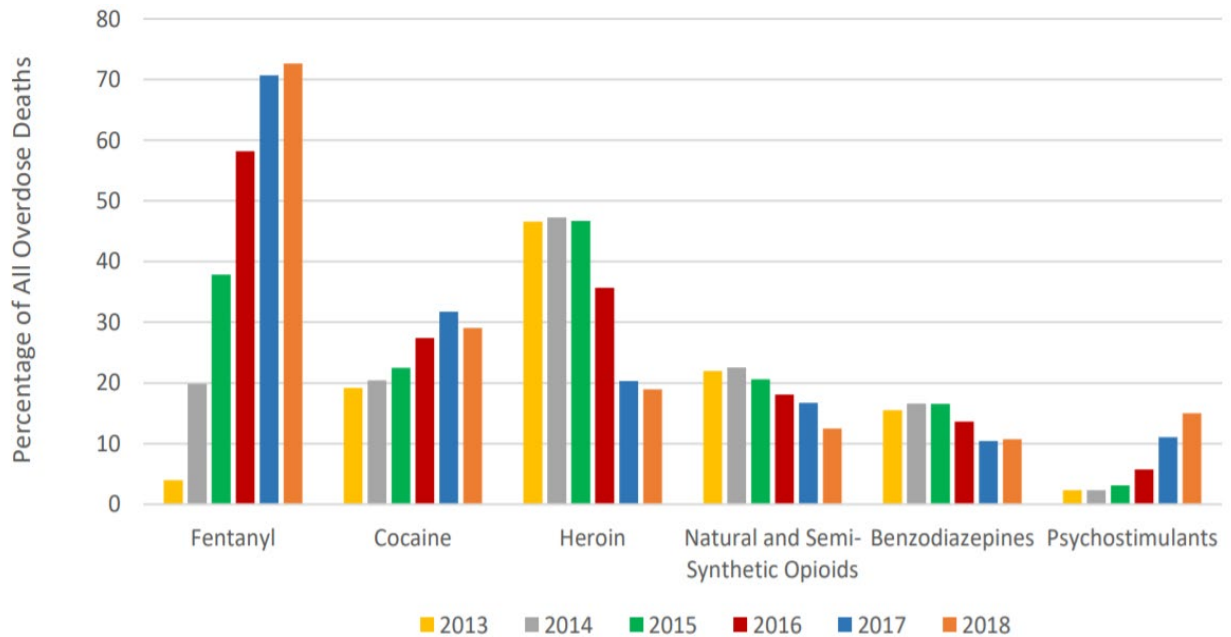
Drug Name	Description
Prescription Opioids	Pain relievers with an origin similar to that of heroin. Opioids can cause euphoria and are often used nonmedically, leading to overdose deaths. Pain relievers with an origin similar to that of heroin. Opioids can cause euphoria and are often used nonmedically, leading to overdose deaths. Examples of prescription opioids include hydrocodone, oxycodone, morphine, codeine, and fentanyl.
Prescription Stimulants	Medications that increase alertness, attention, energy, blood pressure, heart rate, and breathing rate. (Amphetamine and Methylphenidate)
Inhalants	Solvents, aerosols, and gases found in household products such as spray paints, markers, glues, and cleaning fluids; also, nitrites (e.g., amyl nitrite), which are prescription medications for chest pain
LSD	A hallucinogen manufactured from lysergic acid, which is found in ergot, a fungus that grows on rye and other grains. LSD is an abbreviation of the scientific name lysergic acid diethylamide
GHB	Gamma-hydroxybutyrate (GHB) is a depressant approved for use in the treatment of narcolepsy, a disorder that causes daytime "sleep attacks".
MDMA (Ecstasy/Molly)	A synthetic, psychoactive drug that has similarities to both the stimulant amphetamine and the hallucinogen mescaline. MDMA is an abbreviation of the scientific name 3,4-methylenedioxymethamphetamine.
Methamphetamine	An extremely addictive stimulant amphetamine drug.
PCP	A dissociative drug developed as an intravenous anesthetic that has been discontinued due to serious adverse effects. Dissociative drugs are hallucinogens that cause the user to feel detached from reality. PCP is an abbreviation of the scientific name, phencyclidine.
Synthetic Cannabinoids	A wide variety of herbal mixtures containing man-made cannabinoid chemicals related to THC in marijuana but often much stronger and more dangerous. Sometimes misleadingly called "synthetic marijuana" and marketed as a "natural," "safe," legal alternative to marijuana.
Synthetic Cathinones ("Bath Salts")	An emerging family of drugs containing one or more synthetic chemicals related to cathinone, a stimulant found naturally in the khat plant. Examples of such chemicals include mephedrone, methylone, and 3,4-methylenedioxypyrovalerone (MDPV).
Ketamine	A dissociative drug used as an anesthetic in veterinary practice. Dissociative drugs are hallucinogens that cause the user to feel detached from reality.

Source: National Institute on Drug Abuse

Drug addiction, as described by the American Psychiatric Association (APA), is a complex condition "that is manifested by compulsive substance use despite harmful consequence." Drug addiction can also be called substance use disorder. The Substance Abuse and Mental Health Services Administration (SAMHSA) defines substance use disorder as occurring "when the recurrent use of alcohol and/or drugs causes clinically significant impairment, including health problems, disability, and failure to meet major responsibilities at work, school, or home." A person with substance use disorder may also experience mental and physical health issues.

**Figure 4.3.1** shows the percentage of unintentional drug overdose deaths involving certain drugs from 2013-2018 in Ohio. The image shows that the percentage of all overdose deaths from fentanyl, a type of prescription opioid, has increased from 2013 to 2018. Fentanyl is also responsible for the greatest percentage of all overdose deaths in Ohio.

Figure 4.3.1: Percentage of Unintentional Drug Overdose Deaths in Ohio by Drug, 2013-2018



Source: ODH

### 4.3.2 Location

Drug misuse and addiction has a countywide impact on Clinton County. The extent of these impacts is discussed in the next section. The Ohio Substance Abuse Monitoring Network (OSAM) released a “Surveillance of Drug Abuse Trends in the State of Ohio” report in January of 2017. For the purposes of this report, Clinton County was identified as part of the Cincinnati Region, which was assessed as a whole.

### 4.3.3 Extent

According to the National Drug Intelligence Center (NDIC), drug misuse can impact individuals as well as communities. At the individual level, users can experience overdoses, adverse reactions, psychotic episodes, and symptoms of infectious disease that can be transmitted through sharing of needles, including diseases such as hepatitis B and C, HIV/AIDS, and tuberculosis.

At a community scale, drug misuse and addiction can have a significant impact on the environment, as well as the economy. Environmental impacts include significant environmental contamination from precursor chemicals required for the manufacturing of drugs and pharmaceuticals. Disposal of these chemicals results in the introduction of those substances into the environment in sewage, from where they can enter sediment, surface and ground water, and the tissues of vegetation and aquatic organisms (Source: INCB, 2013).

Furthermore, illicit drug cultivation and manufacturing in residential areas has the potential to reduce quality of life for residents, as well as contribute to neighborhood decay and property damage.

In 2011, the National Drug Intelligence Center (NDIC) completed a National Drug Threat Assessment, which detailed the impact of drugs on society in the United States. The report stated that, in 2007,

## 4 | HAZARD RISK ASSESSMENT

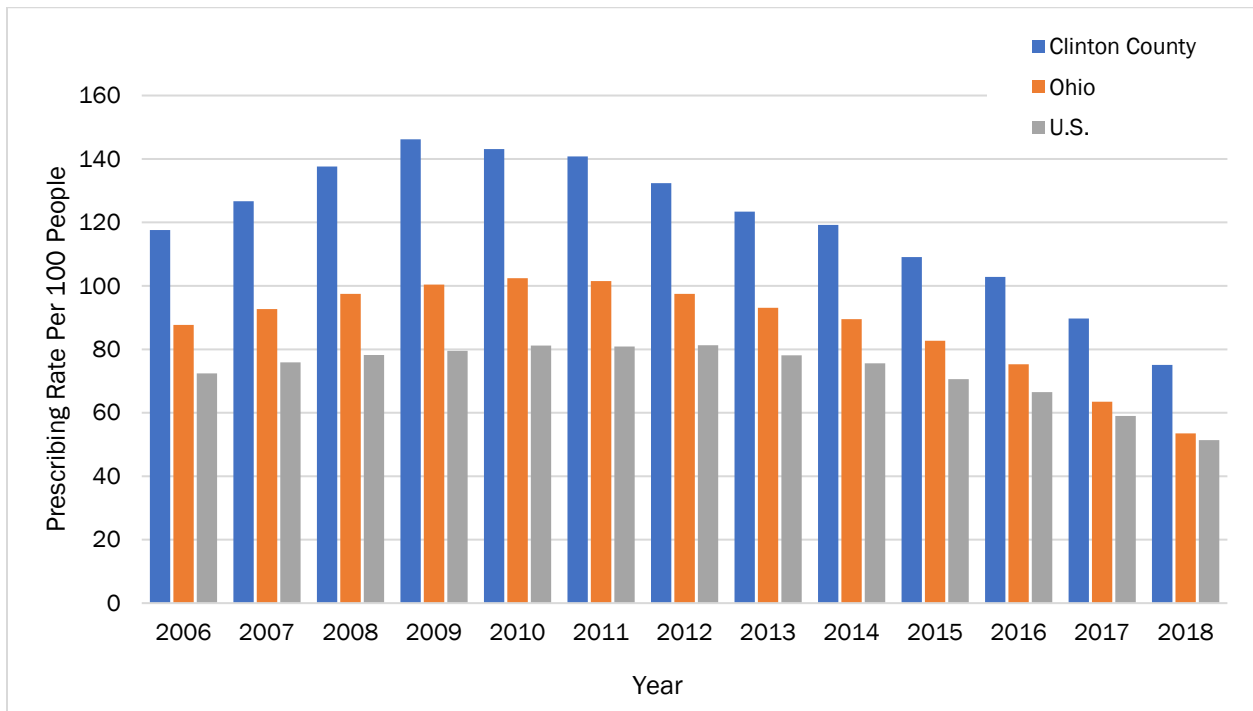
the estimated cost of illicit drug use to society was \$193 billion, including direct and indirect public costs related to crime, health, and productivity. The largest portion of these costs were attributed to a loss of productivity, which amounted to \$120 billion per year. Additionally, the NDIC estimated that yearly drug-related healthcare costs were more than \$11 billion in 2007, including both direct and indirect costs related to medical intervention such as emergency services, in-patient drug treatment and drug use prevention, and treatment research.

While numbers like this are available at the national scale, it is more difficult to calculate these numbers at a local scale.

### 4.3.4 History

**Figure 4.3.2** displays the prescribing rate of opioids, per 100 people, from 2006 through 2018 at the county, state, and national levels. Clinton County's prescribing rate remained consistently higher than the average rate for Ohio and the United States. Between 2006 and 2016, Clinton County's prescribing rate was greater than 100, meaning enough opioids were dispensed for every person in the County to have one.

**Figure 4.3.2: Opioid Prescribing Rates, Per 100 People, 2006-2018**

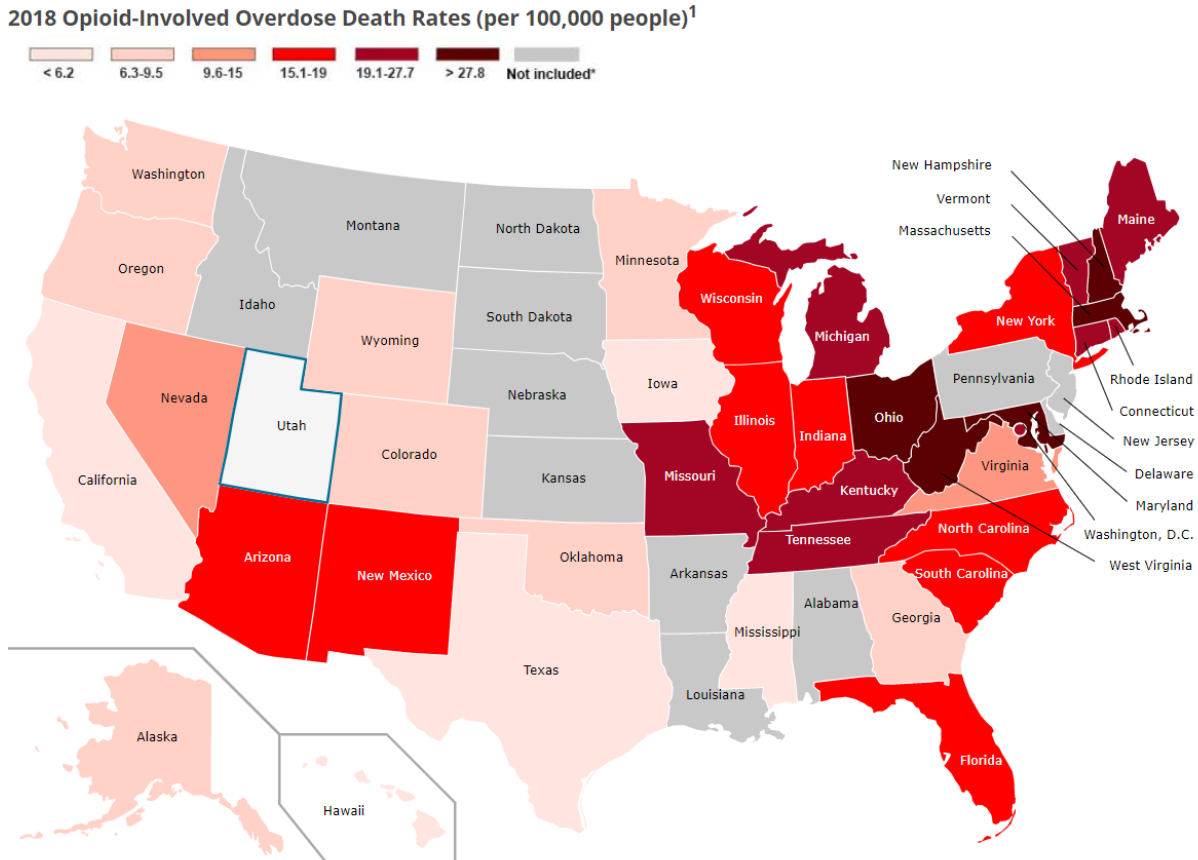


Source: ODH

In the United States, more than 67,300 Americans died from drug-involved overdose in 2018, including illicit drugs and prescription opioids.

In 2018, the State of Ohio had the fourth highest opioid-involved overdose death rate in the U.S., with 29.6 opioid-involved overdose deaths per 100,000 people (Source: CDC, 2018; **Figure 4.3.3**). Additionally, in the same year, Ohio medical providers wrote 53.5 opioid prescriptions for every 100 persons compared to the national average of 51.4 prescriptions.

Figure 4.3.3: Opioid-Involved Overdose Death Rates, 2018



Source: CDC

To combat misuse of prescription opioids and associated deaths, Ohio has made some changes to prescribing rules – with the support of physicians and other prescribers, such as dentists. The Governor’s Cabinet Opiate Action Team (GCOAT) developed opioid prescribing guidelines for emergency departments (EDs) in 2012 and for the management of chronic pain in 2013. These prescribing guidelines are intended to supplement—not replace—clinical judgment (Source: OAFP). Additionally, regulations are in place to limit the quantity of opioids that can be prescribed at one time.

**4.3.5 Probability**

Drug misuse and addiction is a hazard that is already impacting Clinton County. In fact, the impacts of this hazard are prevalent enough that community leaders decided on including this hazard in this Plan Update.

In 2018, the prescribing rate for opioids in Clinton County was 75.1, meaning there were enough opioids dispensed in 2018 for approximately 75 out of 100 people to have one.

Globally, the International Narcotics Control Board (INCB) estimates that drug-related deaths account for between 0.5 and 1.3 percent of all-cause mortality for people ages 15-64.

**Table 4.3.2** displays the unintentional drug poisoning (overdose) death rates per 100,000 people along with the age-adjusted overdose death rate per 100,000 people for Clinton County compared to

## 4 | HAZARD RISK ASSESSMENT

the State of Ohio (Source: ODH). According to the Ohio Department of Health (ODH), Unintentional Drug Poisoning Deaths include deaths where the injury leading to death was not intended and the mechanism of harm was "Drug Poisoning". This includes opioid overdoses. The age-adjusted death rate is a death rate that controls for the effects of differences in population age distributions.

The data indicates that, since 2012, Clinton County has maintained a higher death rate from overdose deaths compared to the rest of Ohio. For both the County and the State, overdose deaths peaked in 2017, where they experienced overdose death rates of 71.4 and 41.6 deaths per 100,000 residents, respectively.

**Table 4.3.2: Opioid-Involved Overdoses Deaths in Clinton County**

Death Year	Clinton County			State of Ohio		
	Deaths	Death Rate	Age Adjusted Death Rate	Deaths	Death Rate	Age Adjusted Death Rate
2010	3	7.2	N/A	1,544	13.4	13.7
2011	6	14.3	N/A	1,772	15.3	15.4
2012	13	31.1	32.6	1,914	16.6	17.0
2013	16	38.2	40.4	2,110	18.2	18.7
2014	13	31.1	33.7	2,531	21.8	22.7
2015	20	47.8	51.9	3,050	26.3	27.7
2016	12	28.6	31.2	4,050	34.8	36.8
2017	30	71.4	79.7	4,854	41.6	44.1
2018	13	30.9	30.0	3,764	32.2	34.2
<b>Total</b>	<b>126</b>	<b>33.4</b>	<b>35.8</b>	<b>25,589</b>	<b>24.5</b>	<b>25.6</b>

Source: ODH

### 4.3.6 Vulnerability Assessment

#### *Infrastructure Impact*

There is likely to be little-to-no direct impact to infrastructure from drug misuse and addiction; however, it should be noted that main thoroughfares through Clinton County, such as I-71, can serve as trafficking routes for illicit drugs.

#### *Population Impact*

The population of Clinton County is likely to be significantly impacted, both at an individual level and at a larger community scale. Individuals can experience ill health, sickness, and possibly death (see Loss of Life, below). Individuals who inject drugs have the potential to contract hepatitis, HIV/AIDS, or tuberculosis through needle use. Communities can also be impacted by the rampant misuse of drugs, such as experiencing discarded needles throughout their public space.

#### *Property Damage*

Property damage is possible due to drug misuse and addiction. Operation of motor vehicles while under the influence can lead to accidents resulting in damaged cars and property. Furthermore, property can experience damage in the form of neglect over time, becoming dilapidated and run down.

While many people suffering from drug addiction will not turn to crime to search for drugs, the unpredictable nature of addiction may influence some people to commit acts of theft or break and enter to find more drugs. This can result in property damage to homes or businesses.

### ***Loss of Life***

Loss of life is likely from drug misuse and addiction. Those who misuse drugs may overdose, while others may contract diseases from needles that will ultimately lead to their death.

### ***Economic Losses***

The economic impact of drug misuse can be significant, especially for businesses whose employees misuse drugs. This can be observed through absenteeism, lost productivity, and increased use of medical and insurance benefits by employees who misuse drugs. Locally, several businesses have experienced theft and damage related to drug misuse and addiction.

Economic losses can also be observed at the local, state, and federal government levels. As noted above, the ONDCP estimated that the economic cost of drug abuse to the United States in 2002 was \$193 billion.

### **4.3.7 Land Use and Development Trends**

Land use and development trends can be impacted by drug misuse and addiction. When properties become dilapidated because of neglect over time, property values in the surrounding area may suffer as a result. This is likely to stall or halt development in those areas. Neighborhoods with multiple dilapidated properties can also experience a lack of investment.