



Methamphetamine Reporting Act Michigan State Police Methamphetamine Investigation Team and Michigan Intelligence Operations Center

Introduction

Under the Public Health Code (1978 PA 368, Part 72)¹ methamphetamine is a Schedule II substance, which means the drug has a high potential for abuse, minimal medical use, and can lead to serious psychological and physical dependence. Methamphetamine is a synthetically produced central nervous system stimulant that produces long-lasting effects including heightened senses of alertness and euphoria as well as increases in heart rate, blood pressure, respiration, and body temperature. Side effects from prolonged abuse can include agitation, tremors, hypertension, memory loss, hallucinations, psychotic episodes, paranoid delusions, and violent behavior.

Pursuant to the Methamphetamine Reporting Act (2006 PA 262)², the Michigan State Police (MSP) is required to report to the Michigan Legislature current methamphetamine trends. Accordingly, this report will address trends and statistics in methamphetamine manufacturing, use, and distribution, as well as provide recommendations of possible solutions to methamphetamine problems.

Overview of Methamphetamine in Michigan

Methamphetamine has been seized as a powder, in solution, and in crystal form. The crystal form is also known as “crystal meth” and “ice” due to the large, ice-like crystals that form during a conversion process. MSP reporting notes a significant rise in the popularity of crystal methamphetamine throughout the state over the past few years. While powder methamphetamine, which is locally manufactured utilizing the “one-pot” method, still exists throughout the state, it has become less prevalent than crystal methamphetamine.

Reporting from experience in the field identified two different logic patterns for the preference of methamphetamine. One pattern indicates that many heroin users now prefer methamphetamine because chances of a fatal overdose decrease when compared to heroin that is cut with synthetic fentanyl analogues. The second pattern indicates that many heroin users purchase heroin and methamphetamine to be ingested simultaneously in what is commonly referred to as a “speedball.” Methamphetamine is used to counteract effects on heart rate and respiration, which are both lowered by heroin. The intent of the mix is to allow the user to experience the high from heroin and prevent the heart rate and respiration from dropping so drastically it results in death.

A demand for methamphetamine in Michigan created a market for crystal methamphetamine that is primarily manufactured in Mexico and trafficked into Michigan. As a result, crystal methamphetamine has become readily available and inexpensive. The use of crystal methamphetamine provides users with the same methamphetamine high without the risks associated with purchasing components and manufacturing methamphetamine in a clandestine laboratory.

To strategically track and combat the emergence of crystal methamphetamine in Michigan, Michigan Incident Crime Reporting (MICR) arrest codes were created in 2018 specifically for the use, possession, distribution, and manufacturing of the substance. Prior to 2018, MICR reporting did not delineate between crystal methamphetamine and powder methamphetamine. It should be noted that it will take up to two years of gathering data under the new MICR code in order to identify and analyze statistical trends specific to crystal methamphetamine.

Methamphetamine Manufacturing in Michigan

Powder (“one-pot”) Methamphetamine

Many different chemicals commonly found in the household can be used in the production of methamphetamine. Some of these chemicals are ether, lithium (batteries), alcohol, sodium hydroxide (lye/drain opener), iodine, ammonia, salt, red phosphorous (match books and flares), toluene (brake fluid), and hydrochloric acid. Additional items that can be used to aid in the production method include coffee filters, funnels, blenders, and aluminum foil. There are no regulations on the sale of these ingredients making it difficult to associate purchases with the production of methamphetamine. The precursor, ephedrine/pseudoephedrine, is one common ingredient in most methamphetamine manufacturing methods. Instead of regulating all household chemicals, the decision was made to track the precursor used in the most common manufacturing methods.

The most common method used in 2018 was the “one-pot” method of manufacture, in which pseudoephedrine, ammonium nitrate, sodium hydroxide, lithium metal, a non-polar solvent, and water are combined in one reaction vessel resulting in the production of methamphetamine. The ease of manufacturing methamphetamine with the one-pot method, the reduced reaction time, and the fact that all components are commercially available, resulted in the one-pot method replacing the other methods and caused a decrease in other types of methamphetamine lab seizures. The one-pot method poses additional dangers due to the increased possibility of fire from volatile component materials combined in one container.



One-Pot lab. Photo Courtesy of the Ionia County Sheriff's Department

Since 2005, Michigan has restricted the sale of medications containing pseudoephedrine through the federal Combat Methamphetamine Epidemic Act of 2005³. This initiative mandated that pharmacies secure these medications either behind the counter or in a locked case, requiring customers to ask for assistance from pharmacy staff. In addition, anti-theft devices were placed inside packaging containing ephedrine and/or pseudoephedrine. Pharmacies were also required to keep a log of customers who purchased this type of medication and maintain it for a minimum of six months. The customer logs were available to law enforcement upon request.

Initially, this approach showed signs of success as local methamphetamine production dropped slightly through 2008. However, the success was short-lived as determined methamphetamine producers found workarounds by applying techniques such as “smurfing” rings. “Smurfing” is the term used to describe individuals who make multiple purchases of products containing pseudoephedrine from multiple retailers and then either sell that product to the methamphetamine cook or trade it for drugs. Requiring customers to present identification and sign a pharmacy logbook at the point of purchase are both ways to deter smurfing. However, this deterrent method has not been as effective in recent years as individuals continue to use false identification and work in larger groups to obtain excess amounts of pseudoephedrine.

In 2012, in accordance with 2011 PA 84 (MCL 333.7340a)⁴, Michigan pharmacies and drug retailers were required to track the sale of any medication containing pseudoephedrine. The purchase of medicine containing pseudoephedrine from a participating retailer requires gathering of identifying information at the point of sale and that information is submitted to the National Precursor Log Exchange (NPLEx). This is a real-time electronic logging system used to track the sales of the methamphetamine precursor pseudoephedrine in the United States. The system cross-references the sale to other pseudoephedrine purchases to determine if it is within the lawful limit. The sale may be blocked for exceeding the limit, and the block is recorded in the database. By utilizing NPLEx, law enforcement can identify individuals with patterns of pseudoephedrine purchases that are consistent with purchase patterns for the manufacturing of methamphetamine. This information is then used to identify methamphetamine manufacturers and build criminal cases.

During calendar year (CY)18, there were 435 registered users in Michigan across 230 law enforcement agencies, narcotics teams, corrections departments, and parole/probation offices actively utilizing NPLEx. Using the system, those agencies conducted 41,271 searches, ran 15,937 queries, and had 9,078 active watch hits.

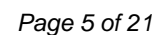
Figure 1 represents sales information for pseudoephedrine. Of note, sales of pseudoephedrine have steadily decreased over the past five years and blocked purchases have steadily decreased over the past three years. This is likely attributable to the increased demand for crystal methamphetamine, as well as one-pot methamphetamine cooks and their smurfs being familiar with the laws for pseudoephedrine purchase limits.

Figure 1

	2014		2015		2016		2017		2018	
	Purchases	Blocks	Purchases	Blocks	Purchases	Blocks	Purchases	Blocks	Purchases	Blocks
Sales	2,329,715	46,311	2,249,083	59,076	2,197,326	65,632	2,122,815	53,535	1,880,592	46,694
Grams	4,972,677	153,919	4,894,039	199,045	4,798,247	219,458	4,631,321	187,541	4,172,267	173,629
Boxes	2,408,783	58,986	2,331,899	74,084	2,274,764	83,548	2,196,857	70,389	1,949,575	64,367

Source: NPLeX

Figure 2



Powder methamphetamine continues to remain available throughout the state. In CY18, according to MICR data, there were a total of 94 arrests in the state for methamphetamine manufacturing, a 56% decrease compared to CY17. This significant decrease is likely attributed to the significant increase in availability of crystal methamphetamine throughout the state. As a direct result, diversion and investigative efforts also shifted away from traditional one-pot laboratories and focused more on crystal methamphetamine investigations.

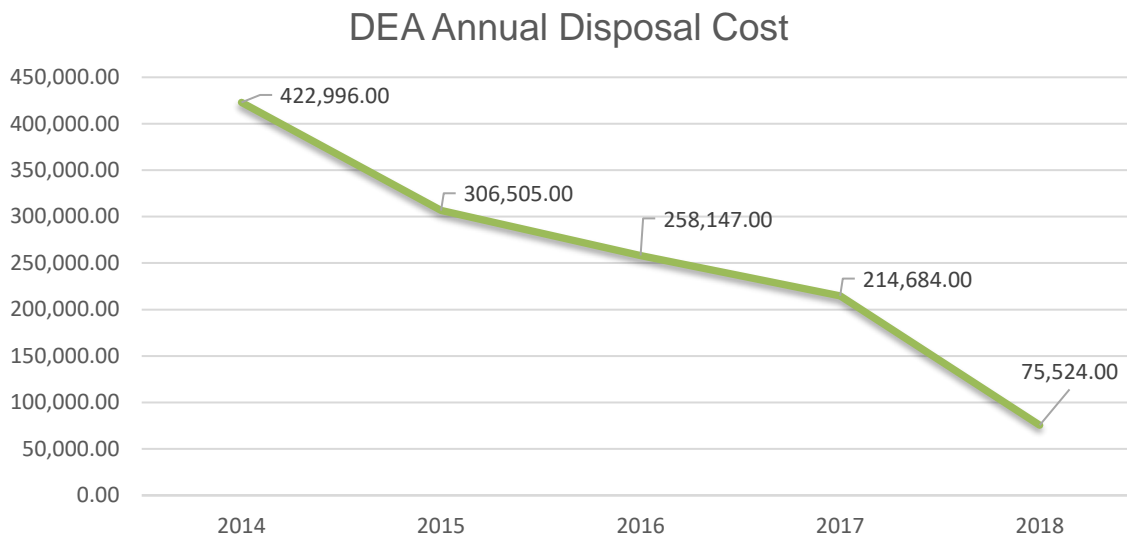
When law enforcement officials seize a clandestine drug laboratory site such as a methamphetamine lab, the agency seizing the laboratory becomes the hazardous waste generator under federal law and is required to provide the materials for the hazardous waste clean-up. The clean-up must be conducted by certified law enforcement hazardous material specialists.

In 2011, Michigan implemented the Authorized Central Storage (ACS) Program provided by the Drug Enforcement Administration (DEA). The program allows state and local law enforcement to remove chemicals and waste from small labs and temporarily store the chemicals/waste in a safe and secure location pending final removal by a DEA hazardous waste vendor. This system reduced the costs of the clean-up.

During CY18, Michigan's ACS program processed 194 labs/dumpsites/chemical component seizures, a 65% decrease from CY17. The waste generated in CY18 totaled over 3,400 pounds. The DEA paid \$75,524 for disposal of the ACS waste on behalf of Michigan's container program, a decrease of \$139,160 from CY17 (Figure 3).



ACS waste container. Photo courtesy of the DEA.

Figure 3

Source: DEA

In CY18, there were 194 methamphetamine-related incidents requiring hazardous material clean-up by law enforcement (Figure 4). This is a decrease of 65% compared to 560 incidents in CY17. Tracked methamphetamine-related incidents include those that require hazardous waste material clean-up, such as laboratory dump sites and chemical/glassware component seizures as well as active labs.

Figure 4

	CY15	CY16	CY17	CY18
BRIDGEPORT	176	115	82	40
COLDWATER	65	55	46	12
HOUGHTON LAKE	89	64	66	29
IONIA	94	84	73	16
JACKSON	80	87	61	13
KALAMAZOO	296	157	45	12
LANSING	124	79	39	8
NEGAUNEE	86	66	34	34
PAW PAW	157	122	65	19
ST. CLAIR	N/A	27	33	7
TAYLOR	5	7	14	4
DEA DIRECT	2	3	2	0
	1174	866	560	194

Source: ACS

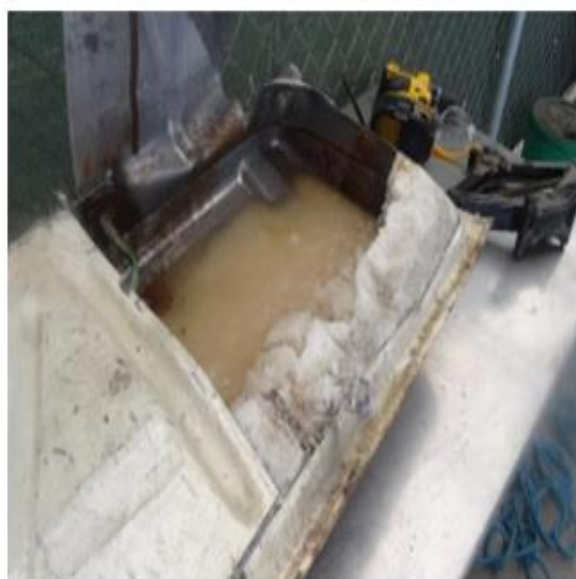
Crystal Methamphetamine

Mexican Drug Trafficking Organizations (MDTO's) mass produce crystal methamphetamine utilizing the Phenyl-2-Propanone (P2P) method. The P2P method does not require the use of pseudoephedrine, which is banned in Mexico, to manufacture methamphetamine. MDTO's continue to increase the potency and production of crystal methamphetamine, with most methamphetamine seized at the southern border of the United States being 90%+ pure. Due to a high demand, MDTO's continue to expand in virtually every region of the United States.

MDTO's have discovered innovative methods of smuggling methamphetamine, with the most common being methamphetamine in solution. Methamphetamine in solution is finished methamphetamine that is dissolved into a solvent for ease of concealment to cross the border into the United States. The most common solvents used for dissolving methamphetamine are acetone, water, or methanol. Once dissolved, the most common method of concealment is in fuel tanks of commercial vehicles. This is since commercial tanks have a large gallon capacity and diesel fuel is lighter than the methamphetamine solution, meaning the solution will separate and rest below the diesel. Other common concealment methods include laundry detergent containers, beverage bottles, and in large drums.



Methamphetamine in solution.
Photo courtesy of CBP.



Methamphetamine in solution found in fuel tank.
Photo courtesy of CBP.

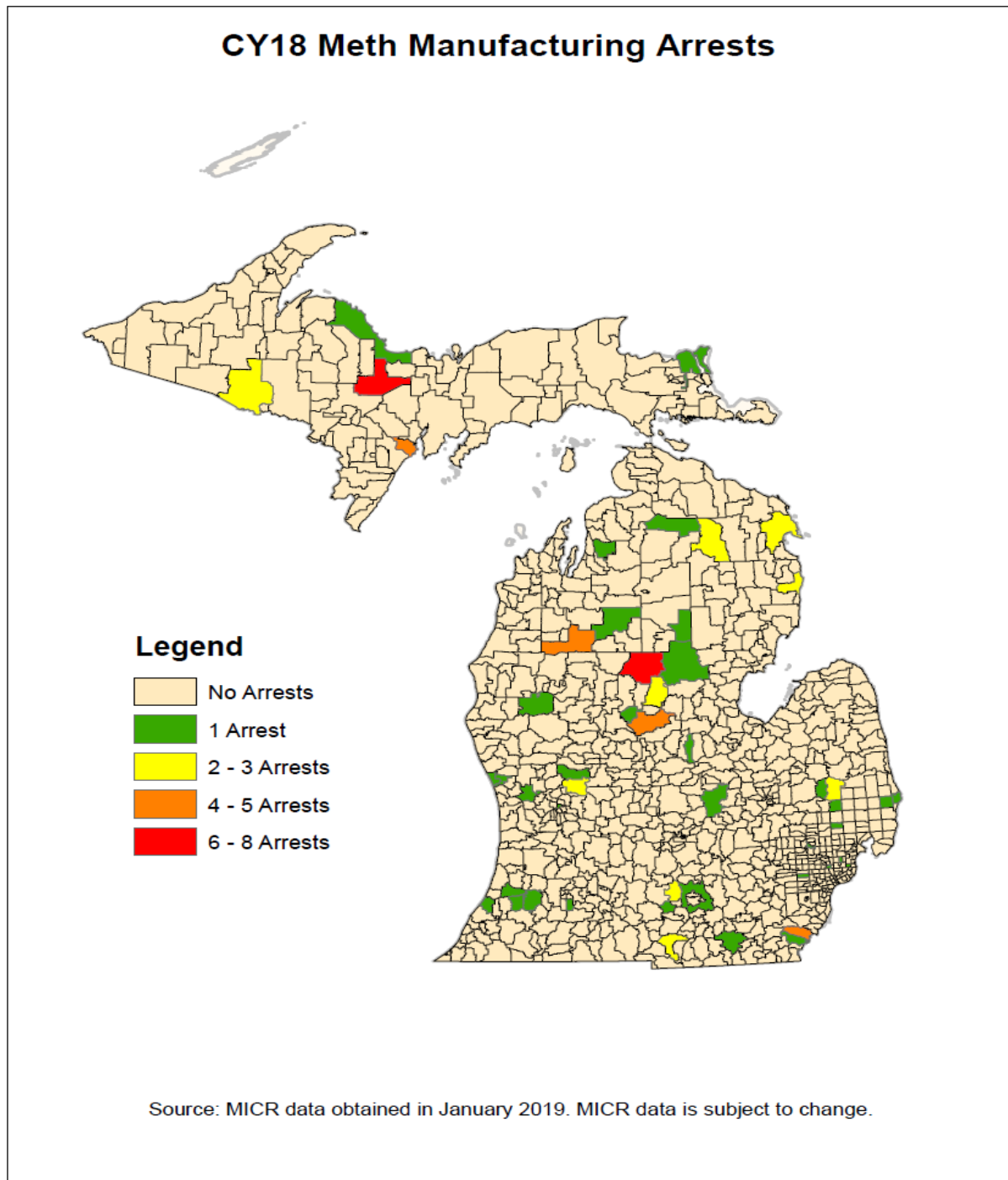
Once smuggled inside the United States, the methamphetamine is converted into crystal methamphetamine. The most common method involves adding acetone to the solution and adding heat until the solution boils. Crystals form as the solvent evaporates and slowing the evaporation process results in formation of larger crystals. It is common to place containers in a refrigerator, freezer, or use air conditioning units to the lower room temperature. In some instances, heating sources and/or fans are used to speed up the process of evaporation. These methods typically produce smaller "shards" than the natural evaporation process. The smaller shards are usually less desirable by users and dealers, however in certain circumstances, it is necessary for dealers to use these methods to keep up with the demand for their product. To date, there have been no known conversion labs found in Michigan. Most of the conversion labs seized in the United States have been in California, Arizona, and Georgia.



***Crystal methamphetamine conversion labs.
Photos courtesy of CBP.***

Figure 5 depicts locations of methamphetamine manufacturing arrests during CY18. The number of arrests is geographically depicted by zip code.

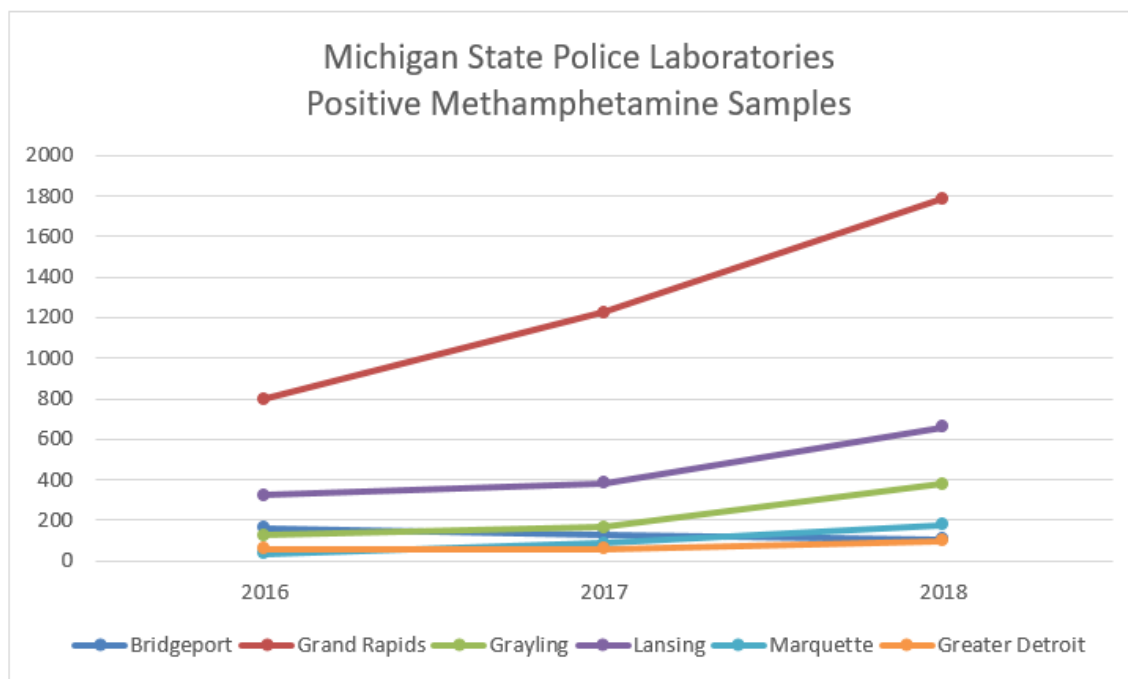
Figure 5



The MSP, along with several other city and county law enforcement agencies across the state, utilize one of eight MSP labs. These labs are strategically located throughout the state in order to

best serve partnering law enforcement agencies. Once evidence is submitted for testing, toxicology is conducted on the evidence and the results are returned to investigators to further aid in investigation and prosecution. Figure 6 depicts the number of samples that tested positive for methamphetamine at each individual lab (Greater Detroit consists of three separate labs in the metro Detroit area).

Figure 6



Methamphetamine Use, Possession, and Delivery in Michigan

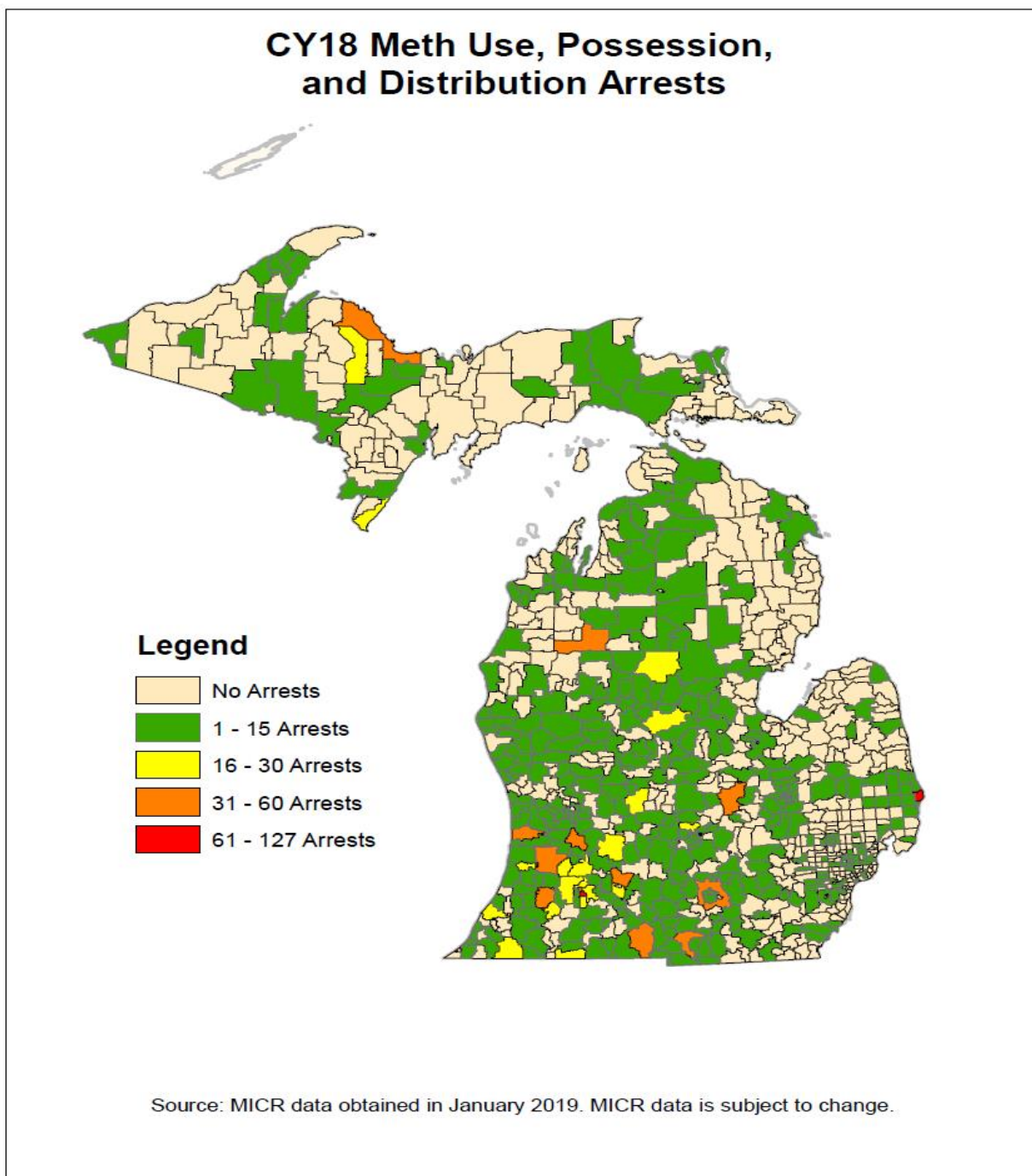
The Criminal Justice Information Center (CJIC) maintains records of arrest codes in the MICR system. When a subject is arrested for a drug crime, the crime is assigned a code designating the type of crime charged. There are specific charges for methamphetamine (both in powder and crystal forms) crimes including methamphetamine delivery, methamphetamine possession, methamphetamine manufacturing, operating/maintaining a methamphetamine lab, operating/maintaining a methamphetamine lab involving hazardous waste, operating/maintaining a methamphetamine lab in the presence of a minor, and operating/maintaining a methamphetamine lab near a specified place, such as a church or school.

Methamphetamine use data is the most difficult reporting category to quantify since proof of use requires either individual drug testing or the witness of drug use by law enforcement personnel. The MICR system arrest codes for methamphetamine use are seldom utilized since use is difficult to prove in court. Most potential use charges are filed as possession in order to assure prosecution. Thus, MICR data is an unreliable indicator of use trends in Michigan.

Figure 7 depicts locations of methamphetamine (both powder and crystal) use, possession, and delivery arrests by Michigan law enforcement (state and local) during CY18. The number of arrests is geographically depicted by zip code. MICR data shows that 2,364

methamphetamine use, possession, and delivery arrests occurred during CY18. This is a 49% increase from CY17 arrests.

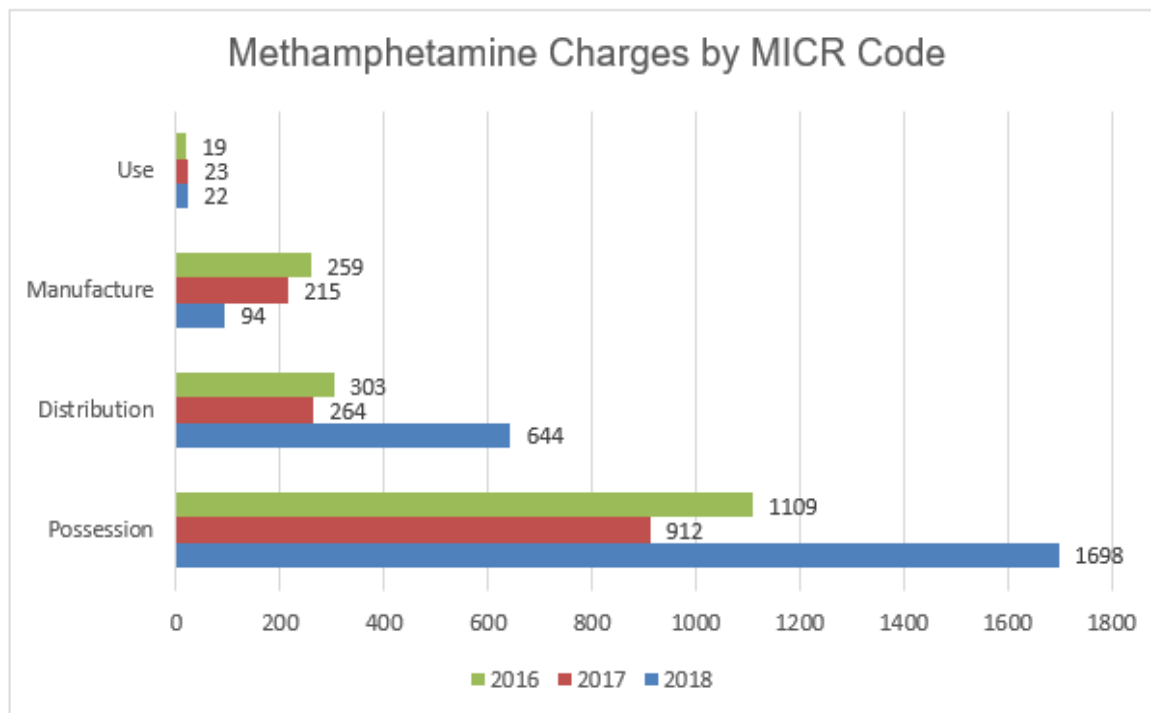
Figure 7



Virtually any of these arrests may include the presence of methamphetamine at the crime scene, and it is possible that methamphetamine possession charges may be included under manufacturing charges. Figure 8 shows MICR methamphetamine use, possession, manufacturing, and distribution arrest data for CY16-18. As previously mentioned, methamphetamine manufacturing charges

decreased 56% from CY17 to CY18. Another interesting trend to note, which again is likely attributed to the increase in demand for crystal methamphetamine, is the increase from CY17 to CY18 in distribution and possession charges, which were 59% and 46% respectively.

Figure 8



Distribution methods vary throughout the state. In the case of powder methamphetamine, most cooks typically use their own product, usually at their residence, at an associate's residence, at a motel/hotel, or in their vehicle. As such, distribution methods typically do not exist, and when they do, they are usually done locally hand-to-hand.

On the contrary, distribution of crystal methamphetamine is quite different. Since crystal methamphetamine is not produced in-state, manufacturers rely on alternate methods to introduce it into Michigan. According to MICR data and information obtained from law enforcement officials, the two most common methods of transporting crystal methamphetamine into Michigan observed in CY18 were through the postal service and by vehicle.

Utilizing the postal service manufacturers and high-level dealers from the southwestern United States ship large quantities of crystal methamphetamine through the mail either to dealers in larger Midwestern cities, or directly to the user. Many of these deals/transactions are organized through social media messaging platforms, or through the dark web utilizing virtual currency such as Bitcoin®. It is estimated that between 50-75% of all crystal methamphetamine seized in Michigan came into the state through the postal service.

Transporting crystal methamphetamine into Michigan by vehicle is commonly done using personal and commercial vehicles along the I-75 and I-94 corridors. In CY18, many seizures were conducted as a result of users/dealers driving to larger cities outside the state, often in the Midwest or Southwest, to pick up large quantities of crystal methamphetamine and drive it back to Michigan.

Other methods observed include utilizing passenger busses and commercial tractor/trailers.



*Crystal methamphetamine seized from a postal delivery.
Photo courtesy of MSP.*



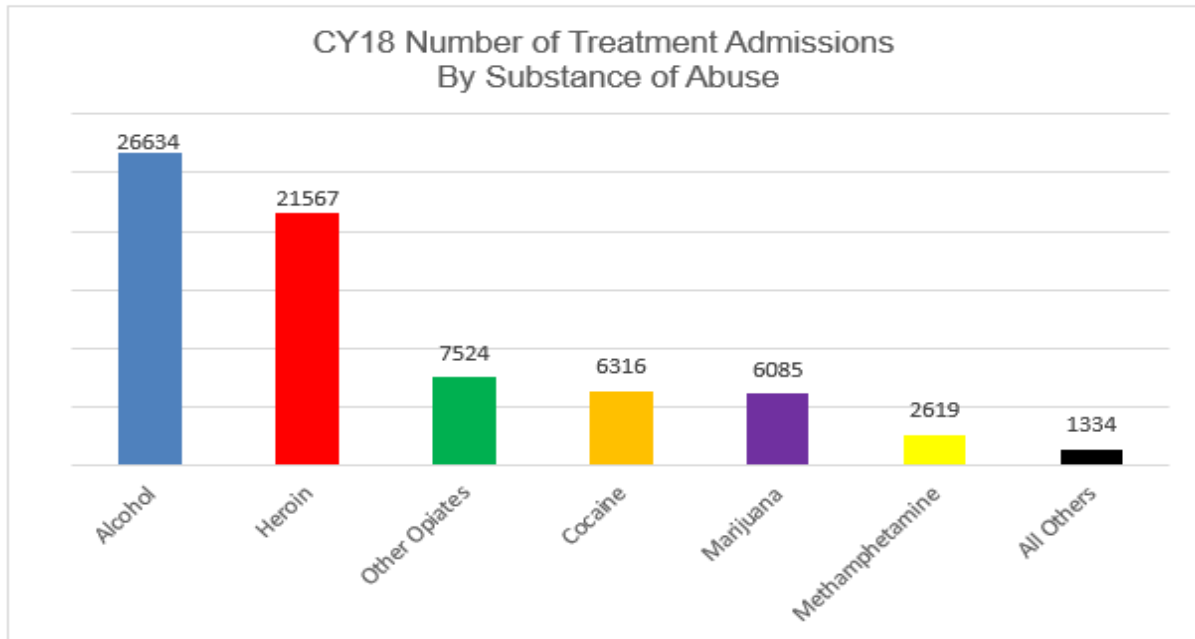
*Crystal methamphetamine seized from a vehicle delivery.
Photo courtesy of MSP.*

Treatment Admissions

Individual drug testing only occurs among specific populations which are not always a good indicator of abuse trends among the general population. Many abusers only seek treatment when ordered to do so after arrest and sentencing. A large percentage of the abuser population seeks treatment in privately funded drug abuse treatment facilities. Michigan drug abuse treatment facilities that are privately funded are not required to report statistics on treatment admissions, however, publicly funded treatment facilities keep and report admission data to the Michigan Department of Health and Human Services (MDHHS).

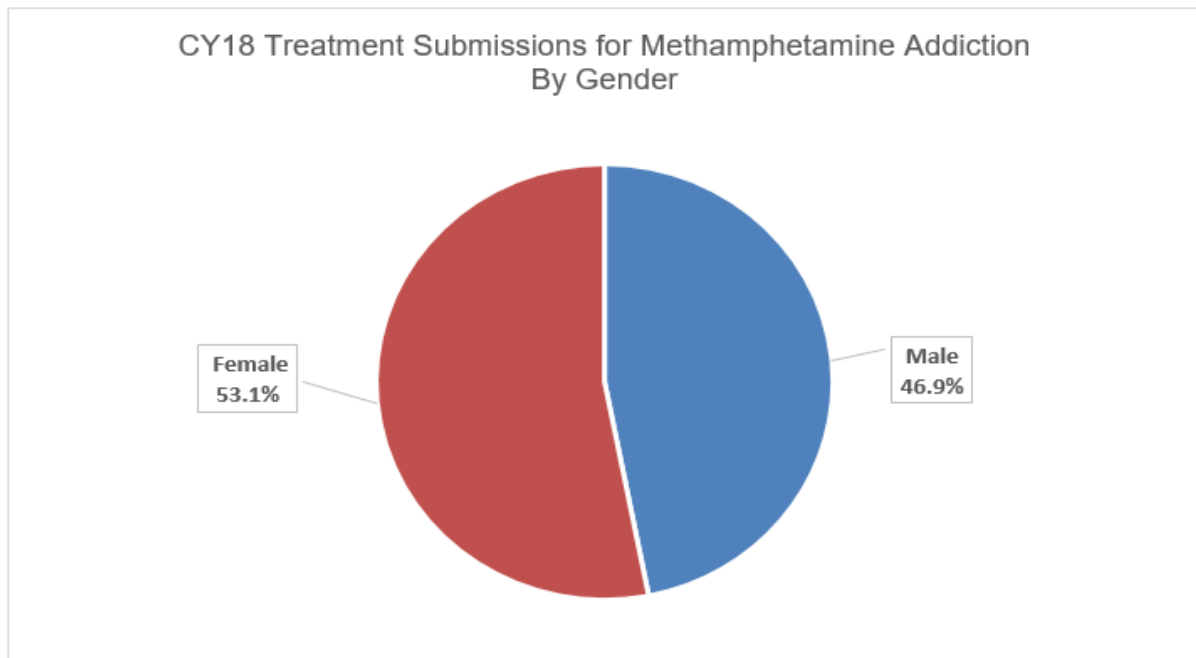
Public drug abuse treatment statistics show that methamphetamine abuse treatment admissions fall behind other drugs of abuse including alcohol, cocaine, heroin, other opiates, and marijuana. Methamphetamine users are less likely to seek out treatment for addiction.

According to the MDHHS, methamphetamine admissions increased 34% from CY17 to CY18. Figure 9 shows CY18 publicly-funded drug treatment admissions by primary drug of abuse.

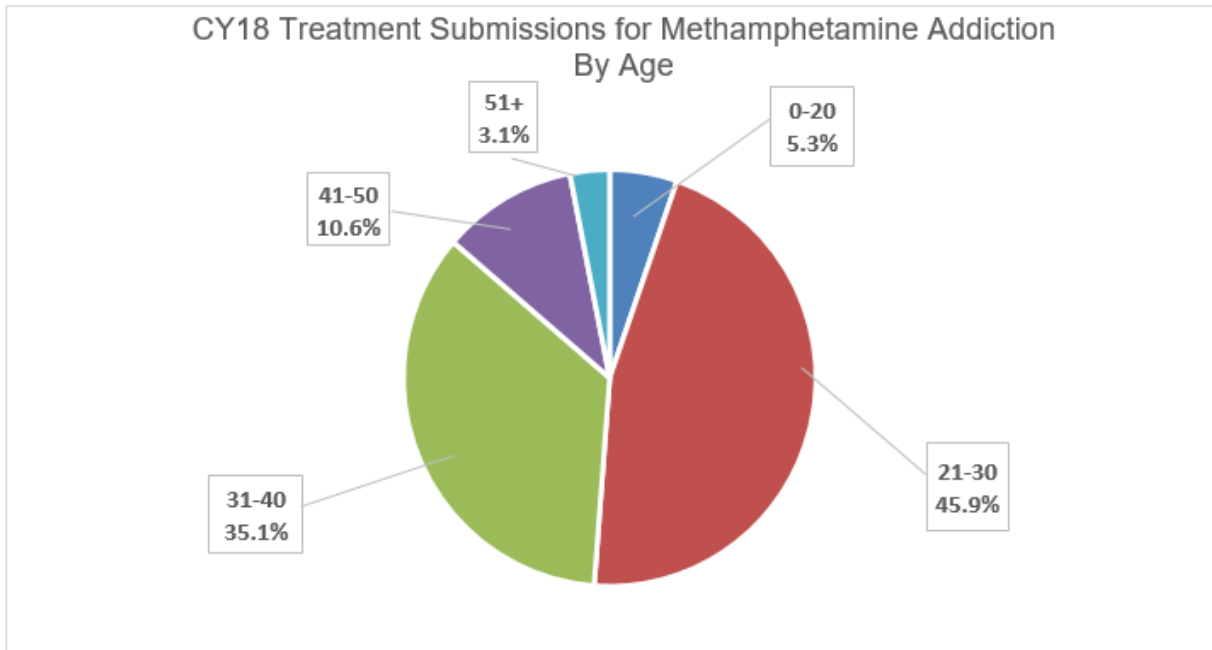
Figure 9

Source: MDHHS

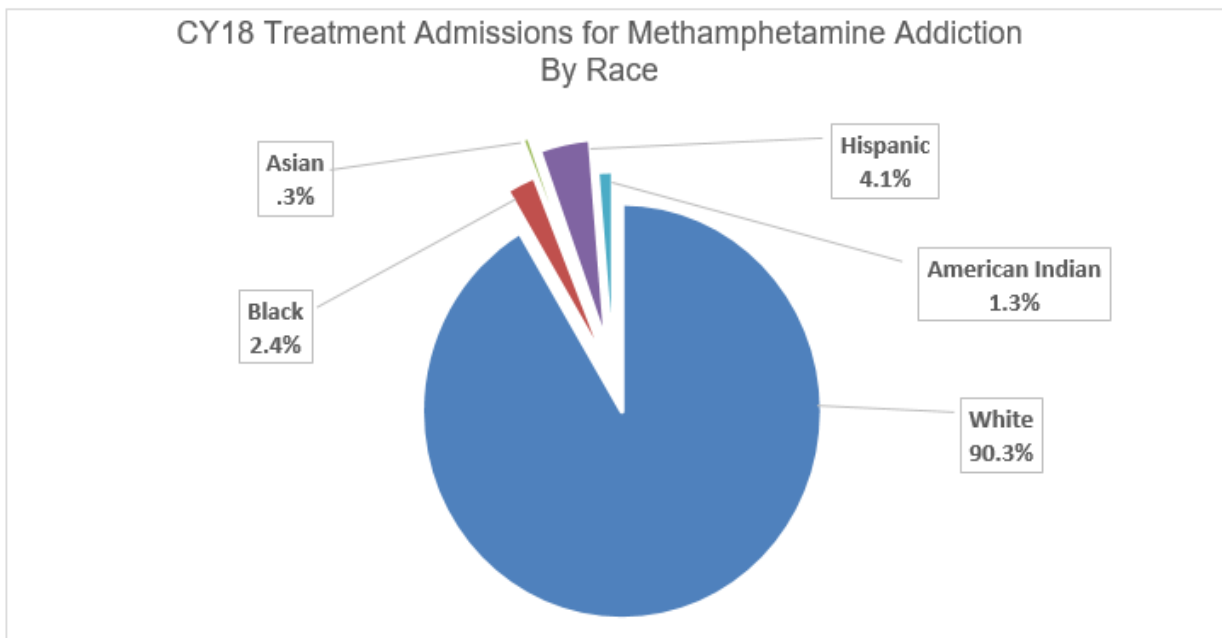
Additionally, Figures 10 through 12 breaks down CY18 methamphetamine admissions by demographics.

Figure 10

Source: MDHHS

Figure 11

Source: MDHHS

Figure 12

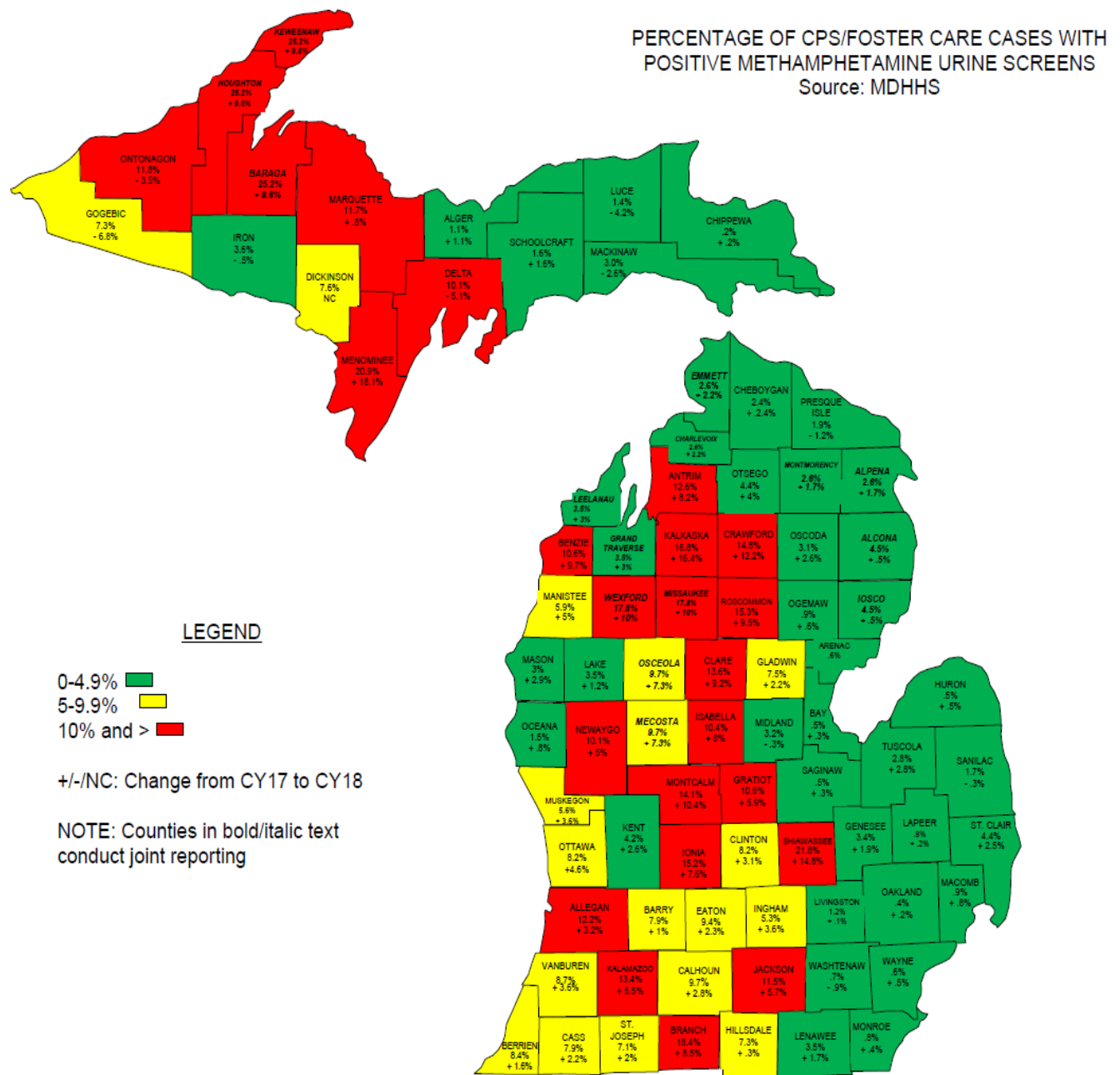
Source: MDHHS

Drug Endangered Children

Drug Endangered Children (DEC) are children under the age of 18 found in homes: (a) with caregivers who are manufacturing controlled substances in/around the home (methamphetamine labs), or (b) where caregivers are dealing/using controlled substances and the children are exposed to the drug or drug residue (methamphetamine homes and/or drug homes).

The most critical issue with the production of methamphetamine by small labs is the harm it causes to the numerous DEC throughout the state. The production of methamphetamine poses significant hazards such as toxic waste, fires, and exposure to chemicals that can result in serious harm or death. The children affected and/or injured are required by law (P.A. 266 of 2006)⁵ to endure decontamination and medical evaluations including drug testing, forensic interviewing, and photographs. The children's personal items that were at the scene of the methamphetamine lab are considered contaminated and the items will not be returned to the children. The residence is tagged as a site of illegal drug manufacturing, and a state or local health department decides whether the residence needs to be remediated. If remediation is determined possible, a qualified company conducts the costly remediation at the responsibility of the homeowner.

Figure 13 on the following page shows by county percentages of positive urine screenings for methamphetamine in Child Protective Services (CPS) and/or foster care cases. It is important to note that in some individual cases, the subjects may be subjected to testing on more than one occasion. Therefore, that subject may test positive more than once. MDHHS does not report positive screenings by individual, rather they report by total samples tested throughout the year.

CY18

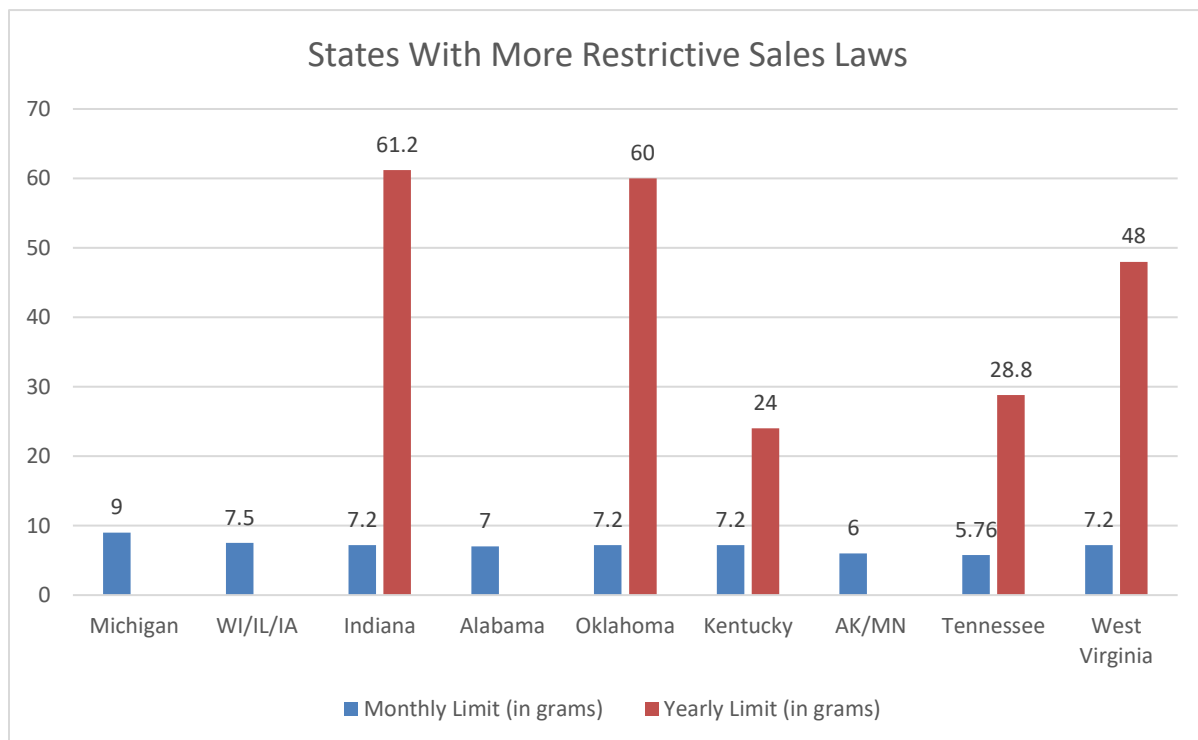
Recommendations

Powder (“one-pot”) Methamphetamine

Early methamphetamine initiatives had a positive effect on older, traditional methods of local methamphetamine production in the state, as evidenced by the significant decrease in the number of anhydrous ammonia style laboratories, near elimination of Red Phosphorous laboratories (once a popular manufacturing method), and the necessity of manufacturers to change production methods and precursor acquisition strategies. Methamphetamine cooks still diversify their efforts to obtain the drug by importing from outside sources due to law enforcement pressure. In addition, methamphetamine manufacturers continue to find ways around pseudoephedrine laws by utilizing smurfs to purchase cold medicine containing pseudoephedrine from multiple pharmacies around the state. This makes real-time electronic tracking of limited use to investigators and does not serve as a deterrent to lab operators.

Federal law (21 CFR Parts 1300, 1309, 1310, 1314)⁶ establishes purchase limits of pseudoephedrine at 3.6 grams per day and 9 grams per month. Individual states can establish more stringent restrictions in order to further combat the manufacturing of methamphetamine. Figure 14 shows a sample of states that have set additional sales limits.⁷

Figure 14



In order to further combat the manufacturing of powder methamphetamine, the following recommendations are made:

- Continue to enforce existing laws established under the Methamphetamine Abuse Reporting 2014 PA 276 (MCL 28.121 et seq.)⁸, and the Public Health Code Act 368 of 1978.
- Continue to target and prosecute offenders who violate purchase limits.

It is also important to address ephedrine abuse in Michigan. Ephedrine sales similarly fall under the same federal restrictions as pseudoephedrine (21 CFR Parts 1300, 1309, 1310, 1314)⁹. While there have been no known instances of ephedrine being used to manufacture methamphetamine, it is still unlawfully abused.

Ephedrine is sold in 6-gram boxes containing 60 dosage units. The most common medical use is for those who suffer from asthma. A large percentage of abuser's purchase, or attempt to purchase, multiple boxes a month, even multiple boxes a week in some cases. It is not uncommon for small networks of individuals to take turns purchasing ephedrine in order to avoid being "blocked" in NPLeX. Ephedrine abusers typically orally ingest the pills or combine them with aspirin and snort them. This produces a short-lived "high," relative to the same effects of methamphetamine.

Crystal Methamphetamine

Crystal Methamphetamine has clearly become the drug of choice for many addicts in the state due to its availability and price. Since crystal methamphetamine is not produced in the state, interdiction presents a unique challenge to law enforcement officials. To combat the epidemic, the following recommendations are made:

- Continue interdiction operations on our interstate system.
- Focus enforcement efforts on mid to high level dealers to eliminate large quantity smuggling into the state.
- Conduct routine postal inspections and interdictions at airports and delivery points/warehouses.

Finally, in order to combat the epidemic, the following recommendations are made:

- Training
 - o Training for law enforcement on how to recognize indicators of methamphetamine production, the use of NPLeX, trafficking methods, and other investigative considerations such as the use of Bitcoin® or other virtual currency, cell phone investigations, and communication via social media platforms.
 - o Training for retail employees to include how to properly utilize NPLeX (pharmacies only), suspicious behaviors, precursor chemicals used in the production of methamphetamine, and how to recognize patterns regarding the purchase/theft of precursor chemicals.
 - o Training for postal service employees to recognize indicators of suspicious packages to include suspicious and/or known origins/destinations and packaging methods.

- Public relations campaign targeting identification of precursor chemicals, clandestine lab identification, identifying suspicious persons/behaviors, and invaluable information on methamphetamine-related issues and the prevalence of the problem.

Methamphetamine abuse is a serious problem across the nation and is particularly prevalent in the West and Midwest, including Michigan. Police officials, the public health sector, policymakers, and the state Legislature will continue to face challenges as the methamphetamine epidemic, especially crystal methamphetamine, continues to intensify. It is important to not only continue to devote resources towards the eradication of methamphetamine, but to increase efforts whenever possible, to include tougher restrictions on the purchase of pseudoephedrine and increased efforts/cooperation between law enforcement, prosecutors, and the general public.

¹ <http://legislature.mi.gov/doc.aspx?mcl-368-1978-7-72>

² <http://legislature.mi.gov/doc.aspx?mcl-Act-262-of-2006>

³ <https://www.deadiversion.usdoj.gov/meth/index.html>

⁴ <http://legislature.mi.gov/doc.aspx?mcl-333-7340a>

⁵ <http://legislature.mi.gov/doc.aspx?mcl-722-626>

⁶ https://www.deadiversion.usdoj.gov/fed_regs/rules/2006/fr0926.htm

⁷ <http://www.namsdl.org/library/80BFE1EC-1C23-D4F9-7483559FA8ED0B56/>

⁸ <http://legislature.mi.gov/doc.aspx?mcl-Act-276-of-2014>

⁹ https://www.deadiversion.usdoj.gov/fed_regs/rules/2006/fr0926.htm