



# 2019

# Illinois



## Methamphetamine

## Study



# ICJIA

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This publication is a statewide study of methamphetamine in Illinois.

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## Executive Summary

U.S. Attorney's Office, Central District of Illinois assesses Methamphetamine (meth) use in Illinois likely<sup>a</sup> increased between 250 and 300 percent from 2014 to 2018 posing an emerging threat to rural communities. U.S. Attorney's Office makes this assessment with high confidence<sup>b</sup> using statistical information of arrest rates for meth-related offenses, drug threat surveys, and seizure data provided by federal, state, and local law enforcement, and open source reporting. While most of the United States has turned its attention to the opioid crisis, Illinois has seen a resurgence in meth misuse and related offending, particularly in rural areas. The arrest rate for methamphetamine-related offenses more than tripled between 2010 and 2017 in Illinois and the number of individuals in Illinois prisons for methamphetamine offenses increased 67 percent between 2012 and 2018. Further, treatment admissions for methamphetamine increased five-fold between 2000 and 2017.<sup>1</sup>

The areas affected most by the increased meth use are primarily concentrated in Central and Southern Illinois and other rural areas of the state. These areas, unlike more urban areas, are ill equipped to handle rising meth use, as they do not have the necessary resources to effectively mitigate the threat.

For the next three to five years, Illinois will likely continue to see a statewide growth in meth use, as there are no known signs indicating an eventual collapse or reduction in use. Rising amounts of high-purity, high-potency meth will continue to keep prices low while providing desirable products. Increasing meth use will further stress law enforcement, the judicial system, and social services agencies. In addition, as meth use continues to expand into urban areas, a number of heroin users may switch to meth due to its perceived safety over heroin, and the crisis will continue to broaden.

Tackling drug abuse in Illinois is a broad issue and requires the support of more than just law enforcement, social services, and prosecutors. Meth abuse tears at the entire community, instead of just the user, and endangers the lives of Illinois' children and families. Increasing meth use needs to be addressed and everyone has a stake in keeping our community meth-free.

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### Overview

The growth of meth use in Illinois is interconnect to global trends. Growth in international production and seizures indicates an expanding market. Mexican cartels and other meth producers will attempt to capitalize on rising demand by continuing to boost production, resulting in increased availability and lower international prices. As Mexican cartels seek to find new markets, their escalating meth production will likely result in rising amounts of meth trafficked to Illinois.

Meth's flexible nature makes it difficult to detect meth trafficked to Illinois compared to other drugs according to law enforcement reporting. Investigations reveal the high purity and flexible nature of meth, as compared to other

traditional drugs, makes it easier for traffickers to conceal contraband and circumvent law enforcement detection during transportation and storage. Smaller quantities and the ability to transport meth as a solid or liquid allows meth traffickers to utilize concealment methods considered unsuitable for other traditional drugs.

Non-gang affiliated Caucasian traffickers combined with gang members of various races are responsible for the majority of meth trafficked into Illinois. Law enforcement reporting indicates the predominant urban meth traffickers are Hispanic or Asian gang members, while non-gang affiliated Caucasian traffickers supply rural parts of the state. Multiple scientific studies have identified women, school-age children, and homosexual men as groups who have an increased potential for initiating meth use.

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<sup>a</sup> See Appendix A for an explanation of probability language.

<sup>b</sup> See Appendix B for confidence levels in assessments and judgments.

Even though Illinois does not annually seize a large number of clandestine meth labs, the discovery of meth labs in Illinois communities is of great concern due to the toxic chemicals associated with meth manufacturing. Even though Mexico is the primary producer of Illinois' meth, clandestine meth labs still affect Illinois communities. "One pot" or "shake and bake" methods for making meth have not only simplified the process, but also increased the potential for injury, exposure, or death. The removal of precursor materials from stores has helped reduce the number of clandestine meth labs, but has not completely eradicated them.

Users often identify the hardware stores or pharmacies that sell precursor materials and do not use electronic logbooks. Lastly, the high cost associated with properly remediating homes and apartments after exposure to meth labs or extensive meth smoking may leave future tenants and children at risk of becoming sick.

Meth-related criminal activity is increasing due to rising meth use statewide but particularly in central and southern Illinois. These crimes extend far beyond simple possession and distribution to include armed robbery, battery, child endangerment, domestic disturbance, burglary, sexual assault, prostitution, traffic violations, identity theft, property crime, and operating while intoxicated (OWI). As Illinois meth use continues to increase, more meth-related crimes will begin to occur in other communities.

Meth's psychological and physiological side effects increase public health consequences. From a pharmacological standpoint, the *d*-isomer of meth is far more dangerous than the *l*-isomer due to its higher potency and intensified side effects. Similar to other meth users across the country, Illinois meth users prefer to smoke or intravenously inject meth. Of particular concern is the number of chronic health conditions meth users may develop from prolonged use. Multiple clinical studies identified meth users as having increased risks for coronary heart disease, cardiomyopathy, liver disease, psychosis, Parkinson's disease, and tooth decay. Additional side effects include increased risk of sexually transmitted diseases from high-risk sexual activity, intravenous drug use, and possible loss of employment.

Lastly, while meth's withdrawal symptoms are not as severe as heroin, meth's prolonged use has a dramatic impact on the brain's production and release of dopamine and can impact the body's production of dopamine for up to a year or longer.

Law enforcement, scientific studies, and interviews with Illinois meth users identified previous abuse of alcohol, marijuana, prescription pills (opioids and ATS), heroin, and untreated psychological issues, or looking for a "safer" alternative to heroin as potential reasons for beginning meth use. Meth use also begins as a way to balance out a drug user from the effects of other drugs.

Illinois individuals who knowingly and frequently abuse Adderall® are susceptible to abusing similar drugs, such as meth, in the future. While strong arguments exist for and against this claim, the rate of Adderall® abuse is rising nationwide. Similar to the 2010 OxyContin® reformulation's documented increase in heroin use, a similar Adderall® disruption may lead an abuser to switch meth, a readily available substitute.

An increase in Illinois parental meth smoking has demonstrated an increasingly negative effect on the lives of Illinois' children compared to other illegal drugs. Increasing meth use directly affects the lives of Illinois' children, which in many instances exposes them to unsafe living conditions. Parents either knowingly or unknowingly expose their children to meth when smoking in the home, this leads to an increase in children testing positive for meth ingestion even though they have never physically taken the drug. Further, living in a home with meth-addicted parents exposes children to sexual situations, abuse, and abandonment.

Due to an inability of Illinois meth users to receive and successfully complete drug treatment programs, they will continue using meth, leading to continued growth in meth use statewide. Meth treatment programs currently cannot maintain treatment over the length of time necessary for users to recover adequate levels of dopamine, which leads to frequent relapses. Additionally, many users relapse due to untreated underlying causes of their meth use. Many meth users do not seek treatment because of program costs and availability. Problems obtaining treatment may prevent a meth user from receiving assistance without a court order.

## Scope Note

This intelligence study is the first comprehensive statewide strategic product by the U.S. Attorney's Office, Central District of Illinois, with assistance from Drug Enforcement Administration (DEA), Illinois State Police, and the Illinois Criminal Justice Information Authority Center to examine and address the growth and use of methamphetamine (meth) within the state of Illinois between 2010 and 2018. Responding to requests from multiple federal, state, and local law enforcement agencies the study is intended to provide a baseline understanding of the threat. The intent of this study is not to pinpoint or identify major meth traffickers, but instead examines long-term and recent developments related to meth in Illinois. This was achieved through an examination of the history, global and national trends, concealment and delivery techniques, demographics of user and traffickers, meth laboratories, criminal activity, pharmacology and public health consequences, gateways to use, abuse of attention deficit hyperactivity disorder (ADHD) medication, drug endangered children, treatment, community awareness, and challenges to law enforcement.

### Key Intelligence Questions

What areas of Illinois are experiencing rising meth use?

How is meth trafficked into Illinois and what groups are responsible for trafficking meth? What groups of Illinois citizens may be susceptible to meth use?

What is the color, price, purity, and potency of meth in Illinois and how has it changed over a seven-year period?

How is meth concealed when it is trafficked?

Are home meth labs fueling the growth in/of meth use in Illinois?

What criminal activity is associated with meth use?

What are the long-term public health consequences of meth use?

What drugs or psychological situations could possibly lead to meth use?

Does rising use of amphetamine-like stimulants lead to future meth use?

How does rising meth use affect Illinois' youth?

What treatment options are available for meth users?

What challenges does law enforcement face in attempting to mitigate rising meth use?

What is the outlook for meth use in Illinois?



## Source Summary Statement

The judgments in the meth study were based on information derived from a variety of sources, including reporting from federal, state, and local law enforcement; county social service agencies; the DEA Methamphetamine Profiling Program; the United Nations 2019 World Drug Report; the DEA 2018 National Drug Threat Assessment; Illinois Criminal Justice Information Authority (ICJIA); Illinois Department of Public Health; the U.S. Intelligence Community; scholarly peer-reviewed journals and articles; interviews; and open source reporting. Collection occurred between May 1, 2018, and September 30, 2019. The authors consider this information a reliable basis for developing a strategic, macro-level study of Illinois' meth growth.

This study relies heavily on information obtained from Illinois Uniform Crime Reporting Program (I-UCR) from 2010 to 2017 and analysis of Criminal History Record Information data.

Open source articles identified as having a possible bias were included and identified as such within the study.

The collection of additional meth-related data would only serve to strengthen the judgments presented within this study and not alter the overall conclusions.

The reporting is current as of September 30, 2019.

## Explanatory Notes

Due to scientific and legal ambiguity about the distinctions between “meth use”, “meth misuse”, and “meth abuse”, the neutral term “meth use” is used in this study.

References to calendar year (CY) are from January 1 to December 31.

A U.S. federal government fiscal year (FY) is from October 1 to September 30.

Illinois’ State fiscal year (SFY) is from July 1 through June 30

References to dollars (\$) are to U.S. dollars, unless otherwise stated.

References to tons are to metric tons, unless otherwise stated, and one metric ton is the equivalent of 2,204.62 pounds.

Population data used in this study is from the U.S. Census Bureau American FactFinder.

The term “we” refers to the US Attorney’s Office and ICJIA researchers and analysts who drafted this study.

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The present report uses the following abbreviations:

**ADHD** Attention Deficit Hyperactivity Disorder

**ATS** Amphetamine-type stimulant

**AOR** Area of responsibility

**CBP** Customs and Border Protection

**CDC** Centers for Disease Control and Prevention

**CLEAR** Methamphetamine Clandestine Lab Enforcement and Response

**CSA** Controlled Substances Act

**DEA** Drug Enforcement Administration

**DTO** Drug trafficking organization

**EPIC** El Paso Intelligence Center

**FBI** Federal Bureau of Investigation

**FDA** Food and Drug Administration

**HIDTA** High Intensity Drug Trafficking Area

**IDPH** Illinois Department of Public Health

**IDOC** Illinois Department of Corrections

**ISP** Illinois State Police

**I-UCR** Illinois Uniform Crime Report

**Meth** Methamphetamine

**MPP** Meth Profiling Program

**NDIC** National Drug Intelligence Center

**NDTS** National Drug Threat Survey

**NIMH** National Institute of Mental Health

**NSDUH** National Survey on Drug Use and Health

**NSS** National Seizure System

**OWI** Operating While Intoxicated

**PDMP** Prescription Drug Monitoring Program

**SAMHSA** Substance Abuse and Mental Health Services Administration

**STIC** Illinois Statewide Terrorism & Intelligence Center

**TEDS** Treatment Episode Data Set

**USAO** US Attorney’s Office

**UNODC** United Nations Office on Drugs and Crime

**USBP** U.S. Border Patrol

**USDOJ** United States Department of Justice

## Acknowledgements

The U.S. Attorney’s Office, Central District of Illinois produced the Illinois Methamphetamine Study. The authors would like to thank and acknowledge the FBI Milwaukee Field Office, Wisconsin Statewide Intelligence Center (WSIC), and the Southeast Wisconsin Threat Analysis Center (STAC) who published Wisconsin Joint Methamphetamine Study, for allowing their study to be used as a guide. The authors would also like to thank the following agencies and organizations for their participation and contributions to this study:

Chicago High Intensity Drug Trafficking Area	Illinois State Police	U.S. Drug Enforcement Administration
El Paso Intelligence Center	National Gang Intelligence Center	U.S. Customs and Border Patrol – Office of Intelligence
Illinois Criminal Justice Information Authority (ICJIA)	National Institute on Drug Abuse	U.S. Marshals Service
Illinois Department of Corrections	U.S. Attorney’s Office – Southern District of Illinois	FBI Springfield Division
Illinois Department of Public Health	U.S. Department of Homeland Security – Homeland Security Investigations	
Illinois Department of Human Services		

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## History of Meth

The origin of the current methamphetamine (meth) epidemic can be certainly traced back to abuse of legal amphetamine-type stimulants (ATS).<sup>c</sup> This assessment is made with high confidence, using law enforcement reporting and accredited institution studies. ATS use and abuse grew from the first synthesis of ephedrine and of meth until the passage of the Controlled Substances Act of 1970. ATS users who could no longer legally obtain ATS turned to meth as an illegally manufactured substitute.

### Origins through 1930s

In 1893, Japanese chemist Nagai Nagayoshi developed the first process for synthesizing meth while researching how to extract ephedrine from the man huang plant.<sup>2 3</sup> His method of extraction, known as the “Nagai” method, became the first known instance of meth synthesis.<sup>4</sup> A student of Nagayoshi further refined the process and in 1919 produced the first crystal meth.<sup>5</sup>

In 1929, U.S. biochemist Gordon Alles was searching for a decongestant substitute for ephedrine when he discovered amphetamine, which received a patent in 1932.<sup>6</sup> While the drug did not affect his congestive symptoms, it did make him cheerful, talkative, and inconveniently alert throughout the night.<sup>7</sup>

In 1934, Alles sold his patent to Smith Kline and French (SKF)<sup>d</sup> because he was unsure how to market his discovery.<sup>8 9</sup> SKF conducted extensive clinical trials on Alles amphetamine for a host of diseases and ailments including bed-wetting, menstrual distress, muscular dystrophy, narcolepsy, and postencephalitic Parkinsonism.<sup>10 11</sup> The SKF-manufactured amphetamine known as Benzedrine first found success as an antidepressant medication and advocated by psychiatrists.<sup>12 13</sup>

### World War II through 1960s

Methamphetamine went into wide use during World War II, when both sides used it to keep troops awake. High doses were given to Japanese Kamikaze pilots before their suicide missions.<sup>14</sup> The British and American armies supplied soldiers with Benzedrine tablets, the armies’ own ATS, as it made soldiers more confident, reduced fatigue, and suppressed appetite. Benzedrine received credit for Allied victories at El Alamein and Tarawa.<sup>15</sup>

In the 1950s, methamphetamine was prescribed for diet aid and to fight depression. Increased ATS advertising as a psychological-adjustment aid resulted in having enough pharmaceutical ATS production to distribute 40 pills annually to every U.S. man, woman, and child. Advertising targeted successful businessmen beset by worry and doubt, single women, middle-aged women disenchanted with being housewives, and older men overly invested in their careers.<sup>16</sup> Easily available, it was abused as a nonmedical stimulant by college students, truck drivers and athletes and abuse of the drug spread.<sup>17</sup> This pattern changed markedly in the 1960s with the increased availability of injectable methamphetamine, worsening the abuse.<sup>18</sup>

The serious medical and psychiatric consequences that followed increased ATS use prompted the 1965 preventative slogan “*speed kills.*”<sup>e</sup> The preventative slogan heightened awareness of the dangers associated with ATS use resulting in a reduction of ATS availability and use in the U.S.<sup>19</sup> However, declining ATS availability likely caused the first amateur clandestine meth labs in the San Francisco bay area where it was considered fashionable to inject meth, leading to a significant rise in use.<sup>20 21</sup>

### 1970s through 1990s

In 1970, the Comprehensive Drug Abuse Prevention and Control Act<sup>f</sup> listed meth as a Schedule II<sup>g</sup> drug and greatly reduced ATS by limiting its accepted medical

<sup>c</sup> See glossary for definition of ATS.

<sup>d</sup> Today known as GlaxoSmithKline.

<sup>e</sup> See glossary for definition of “speed.”

<sup>f</sup> Also known as the Controlled Substances Act.

<sup>g</sup> See Appendix C for information on drug scheduling.

uses.<sup>22 23</sup> By the end of the decade, non- medical ATS use was limited to a few areas in California and Oregon where motorcycle gangs controlled meth’s illicit manufacture.<sup>24 25</sup> The gangs, who had a practice of carrying meth in the crankcases of their motorcycles, led to the slang term “crank.”<sup>26</sup>

During the 1980s, the rise of crack cocaine overshadowed meth use.<sup>27</sup> Motorcycle gangs used law enforcement’s decreased attention to increase meth production levels and expand their meth customer base in southern California and Oregon.<sup>28 29</sup> During this same time, meth users in Hawaii imported a new highly pure, smokable meth form called “ice”<sup>h</sup> or “crystal” from the Philippines and Southeast Asia.<sup>30</sup> The introduction of a smokable form of meth quickly led to inhalation as the primary mechanism of meth consumption.<sup>i 31</sup> The increased purity and potency of ice led to an increase in deaths, which were previously rare.<sup>32</sup>

As the popularity of ice grew, few people knew how to manufacture crystal meth until the mid-1980s, when Wisconsin chemist Steve Preisler, also known as “Uncle Fester,” published “Secrets of Methamphetamine Manufacture.” In his book, Preisler outlined six different recipes for making meth from only legal ingredients.<sup>33</sup> In response to growing home manufacturing, the U.S. government listed phenylacetone, a main meth precursor substance, as a Schedule II substance, which changed meth’s main precursor substances to ephedrine or pseudoephedrine.<sup>34</sup>

In the 1990s, cocaine’s waning popularity allowed meth to expand throughout the West Coast, Oklahoma, Missouri, and the Rocky Mountain states, due to low prices and high availability from expanding home meth manufacturing.<sup>35 36</sup> Additionally, the first “super labs”<sup>j</sup> controlled by Mexican drug trafficking groups started to appear in California and northern Mexico.<sup>37</sup>

In response to expanding meth use, federal regulations emphasized large-scale ephedrine and pseudoephedrine diversion in 1989, 1995, and 1997 and small-scale diversion in 1996 and 2001.<sup>38</sup> In addition, the Drug Enforcement Administration (DEA) and the High Intensity Drug Trafficking Area (HIDTA) program targeted meth operations in the Southwest.<sup>39</sup> During this time, according to treatment admissions data, meth use doubled in the U.S. from 1983 to 1988, doubled again from 1988 to 1992, and then quintupled from 1992 to 2002.<sup>40</sup>

### 2000s to Current

By 2000, meth use had spread across most of the U.S. except for the Northeast.<sup>41</sup> In 2004, many states began passing laws limiting the availability of over-the-counter pseudoephedrine in an effort to curb home meth production.<sup>42 43</sup>

In 2005, Congress passed the Combat Methamphetamine Epidemic Act, which federally regulated the sale of pseudoephedrine products reduced its availability for use in meth manufacturing.<sup>44</sup> In the same year, Canada, a main supplier of pseudoephedrine for Mexico, followed the U.S by enacting legislation to control its pseudoephedrine distribution.<sup>45</sup>

These efforts briefly curbed meth manufacturing, but by 2008, meth manufacturers developed ways to circumvent legislation and obtain the ingredients needed to produce meth.<sup>46</sup> In 2010, the DEA discovered around 11,000 meth labs in the U.S., an increase from 7,530 in 2009.<sup>47</sup>

However, the new restrictions on precursor materials forced meth manufacturers to look for new processes and some relocated to Mexico. The new processes produced a more potent form of meth. Due to the upsurge in potency, today’s users consume meth that is over 1,000 times the dose once taken by soldiers in World War II.<sup>48</sup>

<sup>h</sup> See glossary for definition of “ice.”

<sup>i</sup> See Pharmacology and Public Health Consequences on page 32.

<sup>j</sup> See Clandestine Mexican super labs on page 28.

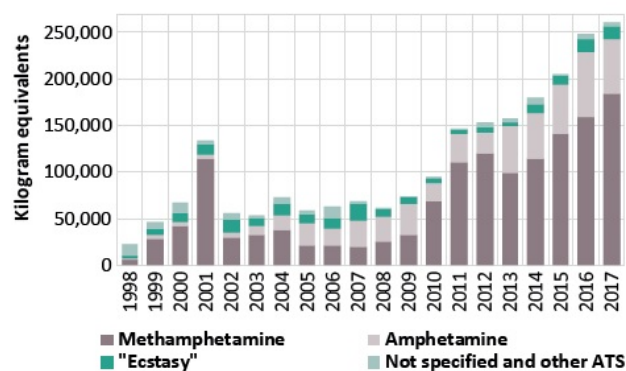
## Global and National Trends

Abuse of meth in Illinois is certainly connected to rising global and national use. This assessment is made with high confidence using law enforcement data and studies by accredited institutions. The growth of meth use in Illinois is tied to global trends. Growth in international production and seizures indicates an expanding market. Mexican cartels and other meth producers continue to capitalize on rising demand by continuing to boost production, resulting in increased availability and lower international prices. As Mexican cartels seek to find new markets, their escalating meth production will likely result in rising amounts of meth trafficked to Illinois.

### Global Meth Trends

According to the United Nations Office on Drugs and Crime's (UNODC) 2019 World Drug Report, Meth trafficking continues to increase but remains mainly concentrated in North America and East and South-East Asia. In the past two decades, meth has mainly been seized in North America, which respectively accounted for 49 percent and East and South-East Asia 42 percent of global quantities of meth seized over the period 2013–2017.<sup>49</sup>

**Figure 1.**  
Global quantity of amphetamine-type stimulants seized, 1998–2017



Source: UNODC, responses to the annual report questionnaire.

Indicators related to interdiction show two divergent trends in both of those sub regions, however: the number of dismantled laboratories and quantities of seized precursors have been on the decline in East and South-

East Asia and in North America, while quantities of seizures have been increasing sharply in both sub regions. Recent numbers indicate the global quantity of meth seized grew from 88 tons in 2013 to 140 tons in 2017 (Figure 1).<sup>50</sup>

Global meth suppliers are located primarily in Mexico, Thailand, Myanmar, and China; however, all regions of the world produce some form of meth or ATS variants.<sup>51</sup> A complex international trafficking pattern for crystal meth has developed in recent years. While Mexico continues to produce the majority of crystal meth, Africa and Western Asia are increasing their production and trafficking. Mexican produced crystal meth has been seized in a number of countries around the Pacific Ocean including Australia, South Korea, the Philippines, and Japan.<sup>52</sup>

### Asia and Oceania

Quantities of methamphetamine seized in East and South-East Asia increased more than eightfold over the period 2007–2017 at 82 tons. Preliminary data for 2018 indicate a further sharp increase of around 42 percent from the previous year, to 116 tons, in quantities of methamphetamine seized in East and South-East Asia.<sup>53</sup>

The quantities of methamphetamine seized in Oceania showed a marked upward trend over the period 2009–2014, followed by a decline over the period 2014–2016 and an increase in 2017. Australia accounted for 93 percent of all quantities seized in the region over the period 2013–2017 and New Zealand for 7 percent.<sup>54</sup>

### Europe, Africa, and Middle East

The quantity of methamphetamine intercepted in Europe is comparatively limited. The region accounted for around 1 percent of the global quantity seized in the period 2013–2017, with Western and Central Europe accounting for just over half of the quantity, South-Eastern Europe accounting for a quarter, and Eastern Europe for a fifth. However, the situation changed in 2017, when quantities of methamphetamine seized increased dramatically in both Eastern and South-Eastern Europe, taking methamphetamine seizures in

Europe to a record high of 2.6 tons that year – a threefold increase from 2016.<sup>55</sup>

That increase was the result of record quantities intercepted in both the Russian Federation and Turkey, which clearly exceeded seizures reported by France, Germany and Czech Republic, the three countries that reported the largest quantities of methamphetamine seized in Western and Central Europe in 2017.<sup>56</sup>

### The Americas

The overall past-year prevalence of use of amphetamines in countries in South and Central America remains low, at around 0.2 percent of the population aged 15–64 in 2017. In many countries in the two sub regions, among those that reported recent survey data, the non-medical use of pharmaceutical stimulants is the most prevalent issue related to ATS use.<sup>57</sup>

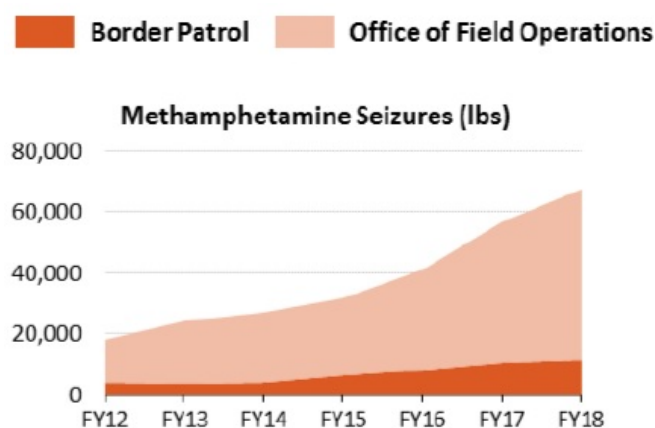
### United States Meth Trends

Methamphetamine remains prevalent and widely available, with most of the meth available in the United States, produced in Mexico and smuggled across the Southwest Border (SWB).<sup>58</sup> According to the National Seizure System (NSS) maintained by the El Paso Intelligence Center (EPIC),<sup>k</sup> seizures of meth by authorities have spiked, rising 142% between 2017 and 2018.<sup>59</sup> In 2018, authorities seized 67,676 kilograms of meth (Figure 2). The greatest availability is in the West and Midwest regions of the United States. In recent years, however, meth has increasing prevalence in areas that have, historically, not been major markets for the drug, particularly the Northeast.<sup>60</sup>

The majority of U.S. Drug Enforcement Administration (DEA) Field Divisions indicated meth availability was high throughout the United States. In 2017, 13 of 21 DEA Field Divisions surveyed reported meth availability was high and four reported meth availability was moderate. Domestic production occurs at much lower levels than in Mexico, and seizures of domestic meth laboratories have declined steadily for many years.<sup>61</sup>

<sup>k</sup> See Appendix E for information on EPIC and the NSS.

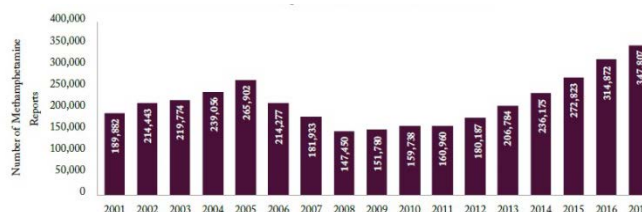
**Figure 2.**  
**CBP Drug Seizures by the Border Patrol and Office of Field Operations of Field Operations FY 2012-2018**



Source: CBP enforcement statistics.

Meth reported to the National Forensic Laboratory Information System (NFLIS) increased 7.48 percent between 2015 (272,823 reports) and 2016 (314,872). From 2001 to 2017, national annual estimates of reports of meth increased 83%, from 189,882 reports to 347,807 reports, (Figure 3) based on the NEAR approach (National Estimates Based on All Reports). In addition, from 2011 to 2017, reports of meth increased between 10% and 16% annually.<sup>62 63</sup>

**Figure 3.**  
**National annual estimates for meth in NFLIS, 2001–2017**



Includes meth reports submitted to laboratories from January 1, 2001, through December 31, 2017, and analyzed within three months of each calendar year reporting period.

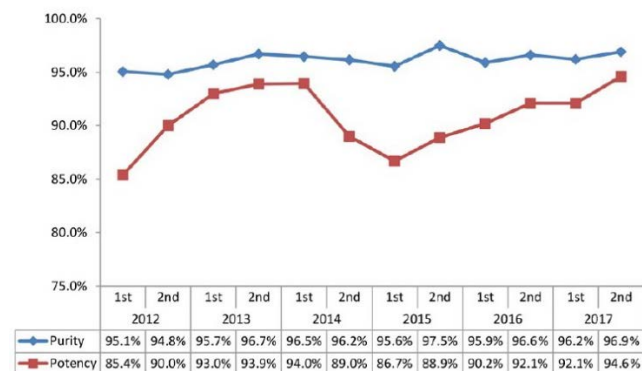
In addition, meth reports increased significantly — 174.9 percent — since 2009 (134,891 reports). NFLIS data also indicates meth exhibits have continued to represent a larger portion of the total number of all drug

exhibits reported. Meth exhibits have grown from representing eight percent of all exhibits submitted in 2009 to 20.3 percent of all exhibits submitted in 2016.<sup>64</sup>

Almost Thirty percent of respondents to the 2017 National Drug Threat Survey (NDTS) indicated they believed meth was the greatest drug threat in their community, second only to heroin. According to this law enforcement survey, heroin and meth are the two drugs most likely to be involved with violent and property crimes. Meth commonly reported as contributing most to violent crime, at 36.3 percent, followed by heroin with 25.8 percent, and cocaine at 10.5 percent. Heroin commonly reported as contributing most to property crime, at 38.5 percent, followed by meth at 31.9 percent, and by controlled prescription drugs at 9.5 percent.<sup>65</sup>

DEA estimates Mexico produces 90 percent of all meth consumed in the U.S.<sup>66</sup> Purity,<sup>l</sup> potency,<sup>m</sup> and price data indicate meth availability is increasing in the United States. Through September 2016, DEA reported meth per-gram purity levels averaged above 90 percent, while prices remained low and stable. Additionally, seizures sampled through the DEA Methamphetamine Profiling Program (MPP) continue to have high purity and potency, indicating high availability of methamphetamine.<sup>67</sup>

**Figure 4. Meth Purity and Potency.**



Source: DEA Meth Profiling Program.

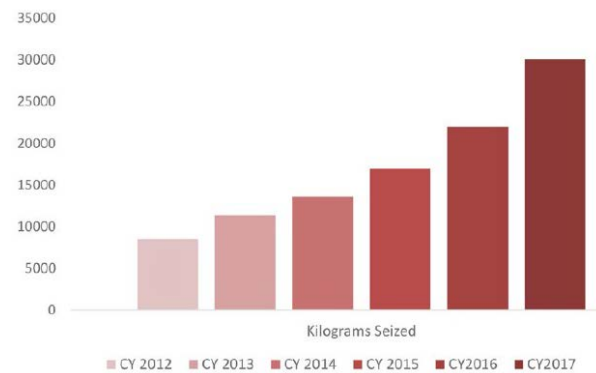
<sup>l</sup> Purity is defined as a measure of the amount of an illicit substance present in a sample compared to other substances in the sample such as adulterants, diluents, or solvents.

Methamphetamine sampled through the MPP in the second half of 2017-averaged 96.9 percent purity and 94.6 percent potency (Figure 4). Analysis of domestic meth purchases from January 2012 through March 2017 indicates the price per pure gram of meth decreased 13.6 percent— from \$81 to \$70— while the purity increased six percent— from 87.9 percent to 93.2 percent.<sup>68</sup>

The high purity and low cost of Mexican-produced meth is driving increased demand from U.S. heroin consumers as a second drug of choice, as well as a perceived 'safer' alternative to heroin. Almost 90 percent of the meth smuggled into the United States is from large-scale laboratories in Mexico.<sup>69</sup>

Meth seizures occur in every state across the United States. Mexican TCOs control wholesale meth distribution, while both Mexican and Caucasian criminal groups typically control retail distribution in the United States. The SWB remains the main entry point for the majority of meth entering the United States. According to CBP, 97 percent of meth seizures occur at or near the SWB and meth seizures continue to increase along the SWB. Meth seizures along the SWB increased 255 percent from CY 2012 (8,460 kilograms) to CY 2017 (30,081 kilograms) (Figure 5).<sup>70 71</sup>

**Figure 5. CBP Southwest Border Meth Seizures CY 2012-2017 (Kilograms)**



Source: U.S. Customs and Border Protection.

<sup>m</sup> Potency is defined as the measure of drug activity in terms of the dosage required to exert an effect on the body and is measured by the amount of the highly potent d-isomer present in the drug substance.



Traffickers employ various methods and techniques in the concealment of meth, such as human couriers, commercial flights, parcel services, and commercial buses. Commonly, traffickers transport small, multi-kilogram shipments of meth in POVs.<sup>72</sup>

Meth can be dissolved in a variety of liquids, including vehicle fluids, water, and alcoholic beverages. Meth in solution seizures have increased in the last five years. These seizures, however, continue to account for only a small percentage of all meth seizures.<sup>73</sup>

Methamphetamine conversion laboratories are not used for production, but are instead used to convert either powder meth into crystal meth or to recrystallize meth in solution back into crystal meth. Each year since 2000, the majority of conversion laboratory seizures have occurred in California. In 2017, conversion laboratories seized in California accounted for 50 percent of all conversion laboratories seized nationwide. Although most conversion laboratories located in California or other SWB states, there have been laboratories seized in states farther from the border. In 2017, there were conversion laboratories seized in Georgia and Kansas.<sup>74</sup>

In October and November 2017, DEA Dallas Field Division and Texoma HIDTA personnel seized 182 kilograms of meth in two separate investigations in the Dallas-Fort Worth area. In both instances, large quantities of meth in solution hidden inside vehicle gas tanks and eventually recrystallized into crystal meth using turkey fryers. A DTO in Michoacán, Mexico was identified as the source of supply.<sup>75</sup>

Conversion laboratories require little to no sophisticated equipment and utilize items commonly available at large retail stores. Seizures also illustrate the ease of establishing or moving conversion laboratories.<sup>76</sup>

The 2016 National Survey on Drug Use and Health (NSDUH) report indicates approximately 1.7 million people aged 12 or older were current misusers of prescription stimulants. Of those, approximately 92,000, or 5.4 percent of this population, were aged 12 to 17. The prescription stimulant category includes prescribed amphetamine and methylphenidate products that are for

the treatment of attention deficit hyperactivity disorder (ADHD) among other conditions. These schedule II products include the brand names Adderall, Dextrostat, Vyvanse, Ritalin and Dexedrine. This survey data coincides with the popular reputation of nonmedical use of amphetamines on campuses as study-aids to improve concentration, rather than something harmful or addictive.<sup>77</sup>

The percentage of positive workplace drug tests for amphetamines (to include meth) in the workforce increased nine percent from 1.11 percent in 2015 to 1.20 percent in 2016. Amphetamine positivity has increased steadily since 2012, climbing 33 percent.<sup>78</sup>

Positive testing for meth has skyrocketed in the South and Midwest in the past five years. Between 2013 and 2017, positive drug tests for meth increased by 167 percent in the region that includes Illinois, Indiana, Michigan, Ohio and Wisconsin and 160 percent in Alabama, Kentucky, Mississippi and Tennessee. Rates were also high in the Northeast and South Atlantic regions according to a 2018 Quest Diagnostics press release.<sup>79</sup> In the manufacturing sector meth use rose by more than 27%, between 2015 and 2017.<sup>80</sup>

According to the CDC, methamphetamine drug poisoning deaths are included under the broader “psychostimulant with abuse potential” category. The number of deaths in the category psychostimulants with abuse potential continues to increase significantly with overdose deaths involving meth and other psychostimulants rising — by 21% (to 12,987 from 10,749 in 2017) — last year according to provisional data from the Centers for Disease Control and Prevention.<sup>81</sup> Deaths from cocaine and fentanyl were also up. Half of the people who died after a meth overdose in 2017 also had an opioid in their system, according to an analysis that the Centers for Disease Control and Prevention.<sup>82</sup> Overdose deaths overall, have dropped because of a decline in the number of fatalities tied to pain pills.<sup>83</sup>

# Meth in Illinois

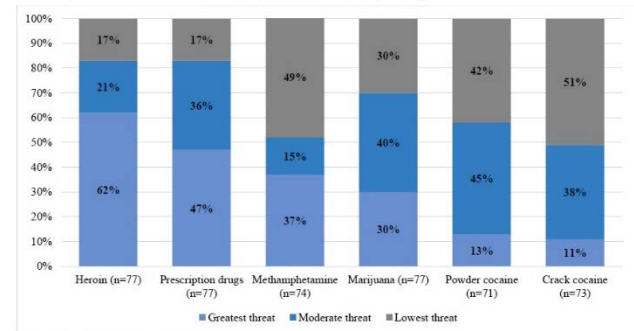
Meth availability and use has almost certainly increased across Illinois. This assessment is made with high confidence. Analysis of meth-related arrests, cases, charges, and seizure statistics provided by local law enforcement, state government agencies, and open source reporting indicates meth availability in Illinois jumped between 250 and 300 percent since 2014.

## Illinois law enforcement reports growing meth problem

While much of the country and state has focused its attention on the opioid crisis, many communities have experienced a simultaneous increase in opioid overdoses and methamphetamine misuse (and related offending). These increases seem to indicate a relationship, yet the nuances of the relationship are unclear.<sup>84</sup> It is common for drug users to use multiple drugs, sometimes concurrently (or polysubstance use), so an increase in meth use alongside an increase in opioid overdoses is conceivable.<sup>85</sup> Federal meth cases have increased substantially and, in 2017, made up the largest portion of drug offenders in the federal criminal justice system (35 percent).<sup>86</sup>

In the 2017 National Drug Threat Assessment Survey (NDTAS), almost 30 percent of responding law enforcement agencies reported methamphetamine as the greatest drug threat, second to heroin (almost 45 percent).<sup>87</sup> An Illinois Drug Threat Assessment survey conducted by the Illinois Criminal Justice Information Authority (ICJIA) in 2017, also found that heroin, prescription drugs, and meth were the top drug threats (Figure 6) in the state.<sup>88</sup> Specifically, 37 percent of responding Illinois police department heads reported that meth was the greatest drug threat to their community.<sup>89</sup> **In the Central and Southern regions, meth is identified as the greatest drug threat** (Table 1). Eighty-six percent of the total meth arrests come from the central and southern regions of Illinois.<sup>90</sup>

**Figure 6.**  
**Drug threat rankings by drug type**



Data source: ICJIA Illinois Drug Threat Assessment survey, 2016  
Note: On scale of Greatest threat=1 to Lowest threat=6. Greatest threat=responses of 1 or 2, moderate

**Table 1.**  
**Law enforcement responses to greatest drug threat overall and by region (N=83)**

Region	Greatest Drug Threat	Second Greatest Drug Threat	Third Greatest Drug Threat
Cook County	Heroin	Marijuana	Prescription drugs
Northern Region	Heroin	Prescription drugs	Marijuana
Central Region	Methamphetamine	Heroin	Prescription drugs
Southern Region	Methamphetamine	Heroin	Prescription drugs
Overall	Heroin	Prescription drugs	Methamphetamine

Data source: ICJIA Illinois Drug Threat Assessment survey, 2016

## Statewide Data

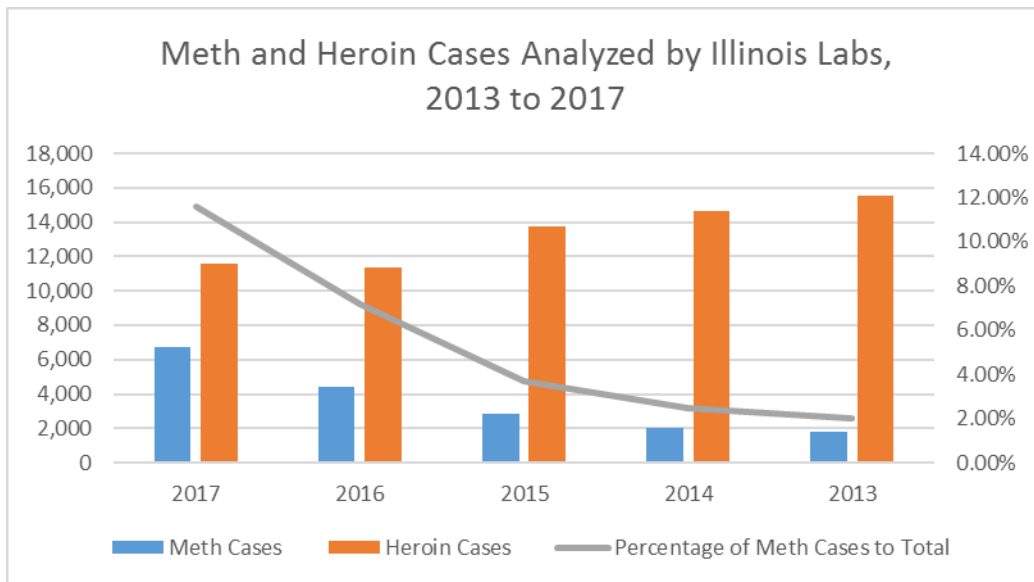
Passed in 2005, the Illinois Methamphetamine Control and Community Protection Act (720 ILCS 646)<sup>n</sup> created possession, manufacture/delivery, and the trafficking of methamphetamine as a separate criminal offense from the Illinois Controlled Substance Act. The Illinois Uniform Crime Reporting Program (I-UCR) began collecting data on arrests under this Act in 2010.<sup>91</sup>

## Illinois State Crime Laboratory

The best statewide optic on the growth of meth-related cases is from six Illinois State Police sites, DuPage County Forensic Science Center (Wheaton), and Northern Illinois Police Crime Laboratory (Chicago). Between 2007 and 2017, meth cases analyzed by Illinois crime labs increased 250 percent. In comparison, during the same period, heroin cases have risen 74 percent, peaking in 2013, but by 2017 have declined back to similar numbers as in 2007 (Figure 7 and 8).<sup>92</sup>

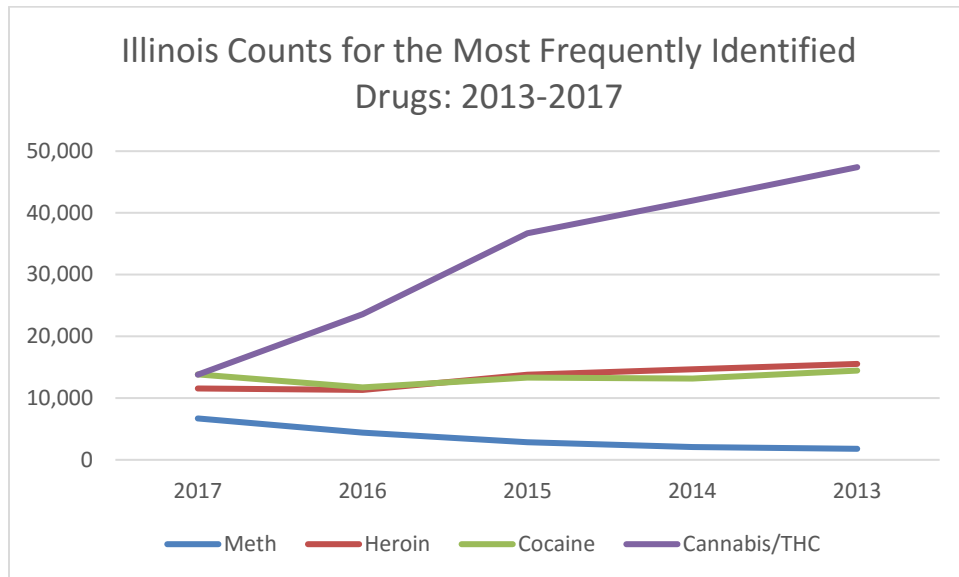
<sup>n</sup> See Appendix F: Illinois Drug Statutes

**Figure 7.**  
**Percentage of heroin and meth cases analyzed by the Illinois State Crime Lab: 2013-2017**



Source: DEA NFLIS Web Tables 2013-2017

**Figure 8.**  
**Illinois Counts for the Most Frequently Identified Drugs: 2013-2017**



Source: DEA NFLIS Web Tables 2013-2017

**Meth Seizure Statistics**

Chicago HIDTA seizures of methamphetamine increased from 51 kilograms in 2017 to 64 kilograms in 2018. Statewide, Illinois had a total of 154 kilograms of methamphetamine seized in 2017 and

407 kilograms seized in 2018, mirroring the increasing trend of seizures seen in the Chicago HIDTA region.<sup>93</sup> The Illinois State Police (I-UCR) reported from 2013 to 2017, the number of meth-related arrests increased

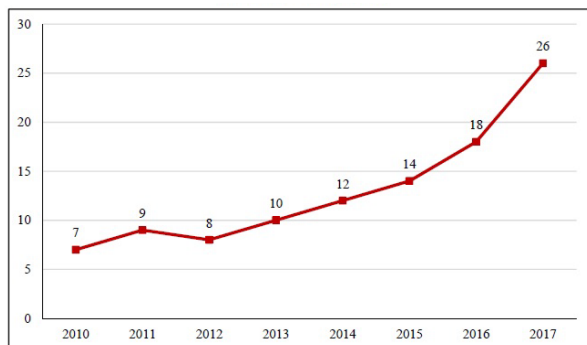
373 percent.<sup>94</sup> The Illinois State Police is tasked with patrolling the interstates and spotting potential meth traffickers.<sup>95</sup>

While the quantity of meth seized has increased across the state, it is generally not a reliable optic for meth availability, as large seizures are often the result of advanced knowledge by law enforcement. The rate at which meth traffickers are able to sell meth complicates this effort, making large seizures relatively rare. It is common for meth traffickers to sell pounds of meth within hours of arriving at their destination.<sup>96</sup>

### Arrests Data

Illinois UCR data collected from 2010 to 2017 show the arrest rate for meth-related offenses was consistently lower than arrest rates for other drugs. However, the data indicates a 289-percent increase in the number of meth-related arrests between 2010 (863) and 2017 (3,362). Further, the meth-related arrest rate more than tripled between 2010 and 2017, increasing from seven to 26 arrests per 100,000 residents (Figure 9). In 2017, arrests for meth-related offenses comprised 6 percent of all drug offense arrests in Illinois, up from almost one percent in 2010.<sup>97</sup>

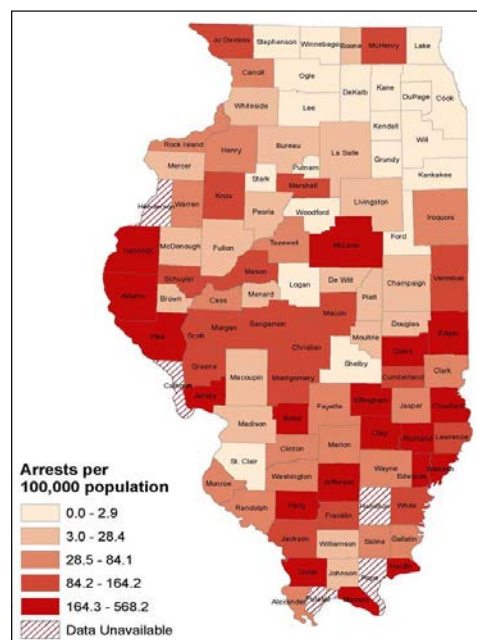
**Figure 9.**  
**Illinois Methamphetamine Arrest Rate, 2010-2017**  
(Per 100,000 Residents)



Source: ICJIA analysis of Illinois State Police Uniform Crime Report data

Arrest rates for methamphetamine were higher in Southern and Central Illinois (Map 1).<sup>98</sup> In 2017, the arrest rate for methamphetamine was 99 arrests per 100,000 residents in Southern Illinois and 69 arrests per 100,000 residents in the Central region.<sup>99</sup> For comparison, the arrest rate in Northern Illinois was three arrests per 100,000 residents. The data is consistent with 2017 Illinois Drug Assessment Survey findings; law enforcement representatives in the central and southern regions reported methamphetamine as the greatest drug threat to their communities.<sup>100</sup>

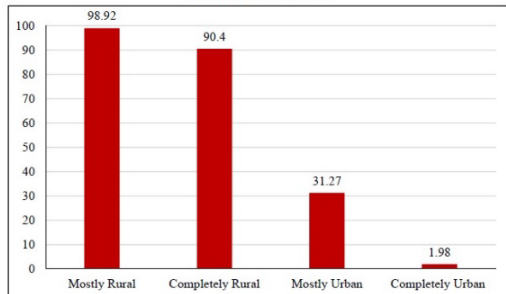
**Map 1.**  
**Illinois Methamphetamine Arrest Rate by County, 2017**



Source: ICJIA analysis of Illinois State Police UCR data.

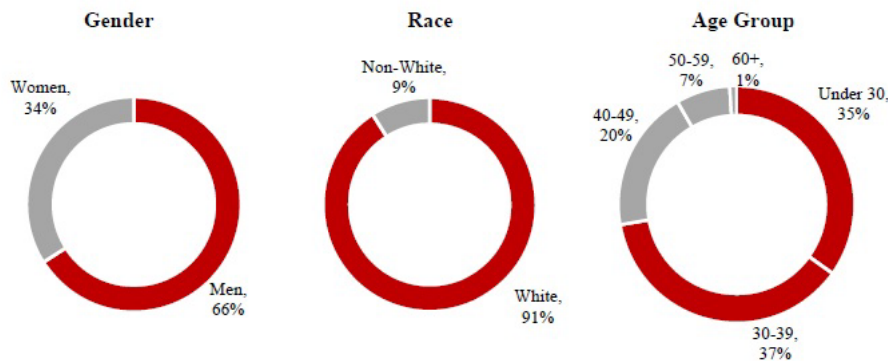
Rural counties in Illinois had the highest methamphetamine arrest rate in 2017, suggesting that rural communities are more directly impacted by methamphetamine (Figure 10).<sup>101</sup>

**Figure 10.**  
**Illinois Methamphetamine Arrest Rate by Rural and Urban Designation, 2017**  
 (Per 100,000 Residents)



Source: ICJIA analysis of Illinois State Police UCR data.

**Figure 11.**  
**Illinois Methamphetamine Arrestee Demographics, 2018**



Source: ICJIA analysis of Criminal History Record Information data, pulled May 14, 2019, N=6,064

**Note:** Arrests for a methamphetamine-related possession or manufacture/delivery charge was found, for which valid demographics were reported. Totals from CHRI do not match UCR data as UCR includes all methamphetamine related charges.

**Corrections Data**

In state fiscal year 2018 (SFY18), methamphetamine-related offenses led to 1,017 Illinois Department of Corrections admissions. Methamphetamine-related admissions accounted for 4 percent of all admissions and almost 18 percent of all drug admissions for that year.<sup>103</sup> Most individuals admitted to prison for methamphetamine offenses were white (88 percent) and male (79 percent).<sup>104</sup> **From SFY12 to SFY18, Illinois prisons experienced a 67 percent increase in the number of individuals admitted for**

**Illinois Department of Corrections**

Figure 11 depicts demographics of those arrested in 2018 for methamphetamine-related possession or manufacture/delivery, derived from arrest information recorded in the Illinois State Police Criminal History Record Information (CHRI) System. Data showed most arrestees were white and male. In addition, 72 percent of those arrested were under the age of 39 with a mean age of 42 years old. These demographics were relatively constant from 2015 to 2018.<sup>102</sup>

**methamphetamine offenses, rising from 967 individuals in 2012 to over 1,600 in 2018.**<sup>105</sup>

**Lab Seizures**

According to Illinois State Police, meth lab seizures increased 76 percent from 2007 to 2012 and decreased 8 percent from 2012 to 2015.<sup>106</sup> Despite the drop, the number of lab seizures in 2015 was still over 1.5 times greater than the number of lab seizures in 2007. The rate of seizures and submissions of meth throughout Illinois peaked in 2005 before drastically decreasing through 2007, likely due to the increase in meth trafficked into the United States from Mexico and

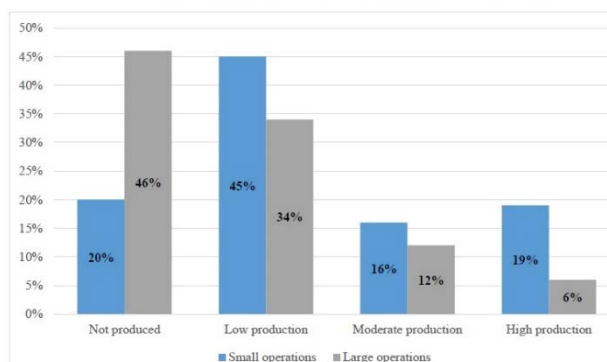
decreased access to over-the-counter ingredients needed to make the drug.<sup>107</sup>

In 2005, the Federal Combat Methamphetamine Epidemic Act was implemented as a means of reducing over-the-counter access to two drugs ephedrine and pseudoephedrine, which are precursors to making meth.<sup>108</sup> Additional efforts to reduce access to those precursor drugs included product placement behind the counter, daily sales limits, 30-day purchase limits, employee training, logbooks of product sales, customer ID verification, self-certification of sellers, and prescription drug monitoring programs.<sup>109</sup>

### Methamphetamine production

The Illinois drug threat assessment survey (2016) asked questions about the level of production of meth both for personal use and larger production for distribution and sale. The survey responses suggest that small meth production for personal use predominately occurs in the central and southern regions of Illinois, with limited production in Chicago and its surrounding suburbs. Most frequently, respondents reported low production of meth from small operations (45 percent) (Figure 12).<sup>110</sup>

**Figure 12.**  
**Percentage of Illinois law enforcement respondents reporting production of methamphetamine (N=83)**



Data source: ICJIA Illinois Drug Threat Assessment survey, 2016

**Note:** Respondents who reported “don’t know” were excluded from this figure.

Thirty-four percent of respondents indicated low production of meth by large operations. Regionally,

the only respondents to report moderate or high production of meth by large operations for sale come from the southern region and central regions. Respondents from the northern region and Cook County most frequently reported no production of meth by large operations for sale (Figure 12).<sup>111</sup>

### Illinois Meth Originates in Mexico

As a synthetic product, meth does not have a single geographic source for production like heroin and cocaine. Instead, clandestine home or super labs produce meth around the world. Law enforcement and open source reporting indicates the majority of meth entering the U.S., and ultimately Illinois, is produced by Mexican drug cartels.<sup>112 113</sup>

### Chicago is a hub and distribution point for narcotics

Chicago is still a major transshipment point for meth destined for other parts of the Midwest. Meth is also trafficked directly into Illinois from the Southwestern border or from California and other western states. Meth is primarily being transported via vehicles and parcels. Couriers transport meth using major highways in the area, with the meth frequently comingled amongst legitimate cargo. Meth purchased online is usually smaller, user-level quantities, and is typically distributed via parcel delivery services including the United States Postal Service (USPS).<sup>114</sup>

### Little to no color variation

There is little to no color variation in meth trafficked in Illinois. Meth generally looks clear, similar to glass shards, or is slightly cloudy. Unlike heroin,



when color is observed in meth, it is attributable to branding efforts by meth dealers and not representative of the production source or purity. Law enforcement reports that they have viewed meth colors of blue, pink, orange, and brown. Meth comes in pill or powder form, and crystal meth takes the form of glass

fragments or shiny blue-white “rocks” of different sizes.<sup>115</sup>

**The price of meth is relatively flat across Illinois**

In the Chicago HIDTA region, one ounce of crystal meth costs approximately \$500 to \$1000 USD, while

one gram of crystal meth costs approximately \$30 to \$50 USD. One kilogram of meth costs approximately \$20,000 USD. Law enforcement and open source reporting indicate the county-to-county meth prices are relatively consistent across Illinois.<sup>116</sup>

## Concealment and Delivery Techniques

Varied meth trafficking techniques in Illinois will likely increase the difficulty detection compared to other drugs. This assessment is made with high confidence. Meth's flexible nature makes it difficult to detect as compared to other drugs. The ability to transport meth as a solid or liquid allows meth traffickers to utilize concealment methods considered unsuitable for other traditional drugs.

### Versatility of meth increases its concealment

The concealment techniques highlighted in this section are not an exhaustive list and are intended only to provide examples.

### Crystal and Powder Meth

Information obtained from Illinois law enforcement indicates meth trafficked in Illinois is primarily solid in either a crystal or powder form.<sup>117 118</sup> In January 2015, the San Diego Union Tribune reported a CBP assistant director stated traffickers have looked for different ways to conceal meth deep inside vehicles such as in engine blocks, batteries, transmissions, or mufflers.<sup>119</sup> To avoid detection by law enforcement, meth is trafficked in smaller quantities similar to heroin.<sup>120</sup>

### Liquid Meth

Meth has the unique ability of being able to be trafficked in a solid or liquid form.<sup>121</sup> Illinois law enforcement has identified liquid meth trafficked into the state. According to the 2018 National Drug Threat Assessment, solutions such as water or alcohol (methanol, ethanol, and isopropanol) can suspend liquid meth. This characteristic presents traffickers with a unique but dangerous concealment method, as liquid meth may be unrecognizable from the parent liquid.<sup>122</sup> A new national trend is to smuggle liquid

meth across the Mexico-U.S. border and turn it into crystal once it reaches its destination.<sup>123</sup>

Liquid meth can be transported in numerous consumer products such as liquor, detergent, water bottles, or other containers that appear to be sealed (Image 1). Areas of a vehicle typically used to hold liquids such as radiators, batteries, windshield washer fluid reservoirs, and fuel tanks are used to conceal liquid meth.<sup>124</sup>

- In January 2014, a teen crossing the U.S. - Mexico border died after drinking the contents of two liquid meth-containing apple juice bottles he was carrying.<sup>125</sup>

**Image 1. Liquid meth concealed in windshield washer bottles**



Source: Press Release; Oklahoma Bureau of Narcotics and Dangerous Drugs Control; "Large Scale Meth Bust Reflects New Trend in Cartel 'Ice' Trafficking"; January 12, 2016.



## Illinois Meth Traffickers, Users, and At-Risk Populations

Non-gang affiliated Caucasian traffickers combined with gang members of various races are likely responsible for the majority of meth trafficked into Illinois. Hispanic, Asian, and Caucasian individuals primarily consume meth in Illinois. Population groups most at risk for developing meth addictions include women, school-aged children, and homosexual men. These assessments are made with medium confidence. Law enforcement reporting indicates the predominant urban meth traffickers are Hispanic or African American gang members, while non-gang affiliated Caucasian traffickers primarily supply rural parts of the state. Multiple scientific studies have identified women, school-age children, and homosexual men as the groups who have an increased potential for initiating meth use.

### Primarily trafficking bulk meth

Mexican Transnational Criminal Organizations (TCOs) continue to control lucrative smuggling corridors, primarily across the SWB, and maintain the greatest drug trafficking influence in the United States, with continued signs of growth. They continue to expand their criminal influence by engaging in business alliances with other TCOs, including independent TCOs, and work in conjunction with Transnational Gangs, US based street gangs, prison gangs, and Asian money laundering organizations. The majority of methamphetamine is smuggled from Mexico, through the same routes used to traffic heroin, cocaine, and marijuana. The drugs are delivered to user markets in the United States through transportation routes and distribution cells that are managed or influenced by Mexican TCOs, and with the cooperation and participation of local street gangs.<sup>126</sup>

U.S.-based Mexican TCO members generally coordinate the transportation and distribution of bulk wholesale quantities of illicit drugs to U.S. markets while retail-level distribution is mainly handled by smaller local groups and street gangs not directly affiliated with Mexican TCOs. In some scenarios, Mexican TCOs collaborate with local criminal groups

and gangs across the United States to distribute and transport drugs at the retail level.<sup>127</sup>

Meth transported to Chicago from the Southwest Border area is usually not consumed in the city but is transshipped to rural areas of Illinois and to other states in the region.<sup>128</sup> Quad Cities Metropolitan Enforcement Group indicated that Mexican cartels are more heavily involved in meth, heroin, and fentanyl distribution in the state due to the decriminalization of marijuana in some states. The increase in domestic production of marijuana is a major factor in the increased availability of meth, heroin, and fentanyl, as the cartels are using these drugs to make up for lost marijuana profits.<sup>129</sup> Illinois meth traffickers have connections to DTOs in multiple Midwest states, California, and traffickers from the Southwest border and Mexico.

### Drug Trafficking Organizations (DTOs)

In 2017, Midwest High Intensity Drug Trafficking Area (HIDTA) enforcement initiatives identified a total of 654 DTOs operating in the region, with 5,246 members and 700 leaders identified.<sup>130</sup> Mexico-based DTOs continue to have the most significant impact in the region. The average identified membership of DTOs operating in the Midwest HIDTA was approximately nine individuals, of which, on average, eight are members and one is a leader. DTOs in the Midwest HIDTA operate in both urban and rural areas and are varied in terms of size, structure, and trafficking activities. Of all DTOs identified as operating in the region, a majority of them (52%) were primarily engaged in trafficking methamphetamine, by far the most for any drug type. The Midwest HIDTA initiative identified 28 DTO in Illinois, with 3 identified as violent DTOs.<sup>131</sup>

### International Drug Trafficking Organizations

A total of 86 international DTOs were identified as operating in the Midwest HIDTA region in 2017, with 97 leaders and 870 other members of international DTOs identified.<sup>132</sup> Office of National Drug Control

Policy (ONDCP) PMP data shows approximately 78% of these international DTOs were identified as having a nexus to Mexico. Similarly, 68% of Midwest HIDTA Threat Assessment Survey (MHTAS) respondents indicated that international DTOs were operating in their AORs, all of which indicated that Mexico is the top country affiliated with those DTOs.<sup>133</sup>

### **Multi-State Drug Trafficking Organizations**

A total of 335 multi-state DTOs were identified as operating in the Midwest HIDTA in 2017.<sup>134</sup> Within those 335 DTOs, initiatives identified 363 leaders and 2,608 other members. Though not tied directly into the cartel hierarchy and therefore not categorized as international DTOs, 56% of MHTAS respondents indicated that multi-state DTOs operating in their AORs are connected with drug cartels.<sup>135</sup>

Multi-state DTOs have been identified as operating in each state of the Midwest HIDTA. 88% of MHTAS respondents indicated that multi-state DTOs were operating in their AORs, with 31% of those respondents naming California (73) as the state most connected to multi-state DTOs. Illinois (43), Texas (43), Arizona (31), and Colorado are the other states most closely tied to multi-state DTOs operating in the region, according to MHTAS respondents.<sup>136</sup>

### **Certain populations are more at risk for initiating meth use**

According to information from Illinois law enforcement, the demographic patterns for meth users differ from other drugs. Caucasians are the primary users followed by Asians and Hispanics with relatively few African-American meth users. The primary users of methamphetamine in Illinois are whites in rural areas of the state. Arrest information recorded in the Illinois State Police Criminal History Record Information (CHRI) System showed most arrestees were white and male. These demographics were relatively constant from 2015 to 2018. Meth sales at the retail level take

place predominantly in rural areas where most consumption takes place.<sup>137</sup>

In 2017, 6.5 percent of admissions to substance use treatment facilities across Illinois resulted from methamphetamine as a primary substance of use, up from less than one percent of admissions in 2000.<sup>138</sup> Further, the rate of admissions to treatment facilities for methamphetamine as a primary substance of use increased from 5 admissions per 100,000 residents in 2000, to 25 admissions per 100,000 residents in 2017.<sup>139</sup>

### **Women**

A 2010 article in the Annual Review of Public Health stated meth appeals equally to men and women. However, many females prefer meth to other types of drugs. Additionally, female youth are more likely to use meth in order to lose weight or cope with depression.<sup>140</sup> Of concern is whether women's meth use for weight loss may exacerbate or trigger the development of an existing eating disorder.<sup>141</sup> One study stated women are likely to become dependent on meth sooner than men due to their primary reasons for initiating use.<sup>o 142</sup>

### **School-aged children**

According to the 2014 Substance Abuse and Mental Health Services Administration's (SAMHSA) National Survey on Drug Use and Health (NSDUH) data, substance use among Illinois youth during the past year (2015) closely reflected Midwest and national rates and alcohol and marijuana was the most frequently used substance in the past year. The 2015 Youth Risk Behavior Surveillance System (YRBS) similarly indicated that Illinois mirrored the patterns measured in national samples. The percent of Illinois high school students reporting ever-using substance by race and ethnicity in 2015 found meth use among White 2%, Black 4% and Hispanic 6%.<sup>143</sup>

### **Homosexual Men**

The Centers for Disease Control and Prevention (CDC) reported homosexual men use meth and other

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<sup>o</sup> See Reasons for Meth Use on page 36.

stimulants at rates approximately nine times higher than the general population.<sup>144</sup> Rising use of meth often facilitates a greater risk of acquiring other communicable diseases.<sup>p 145</sup> According to law enforcement reporting, the use of meth among Illinois gay men is rising.<sup>146</sup> Meth is a popular drug in the

young LGBTQ community because users mistakenly believe it can enhance their experiences and help them have fun. In some parts of the country, this drug caused havoc among the gay population, especially in major metropolitan areas.<sup>147</sup>

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<sup>p</sup> See Long-term meth use can result in multiple chronic health conditions on page 33.

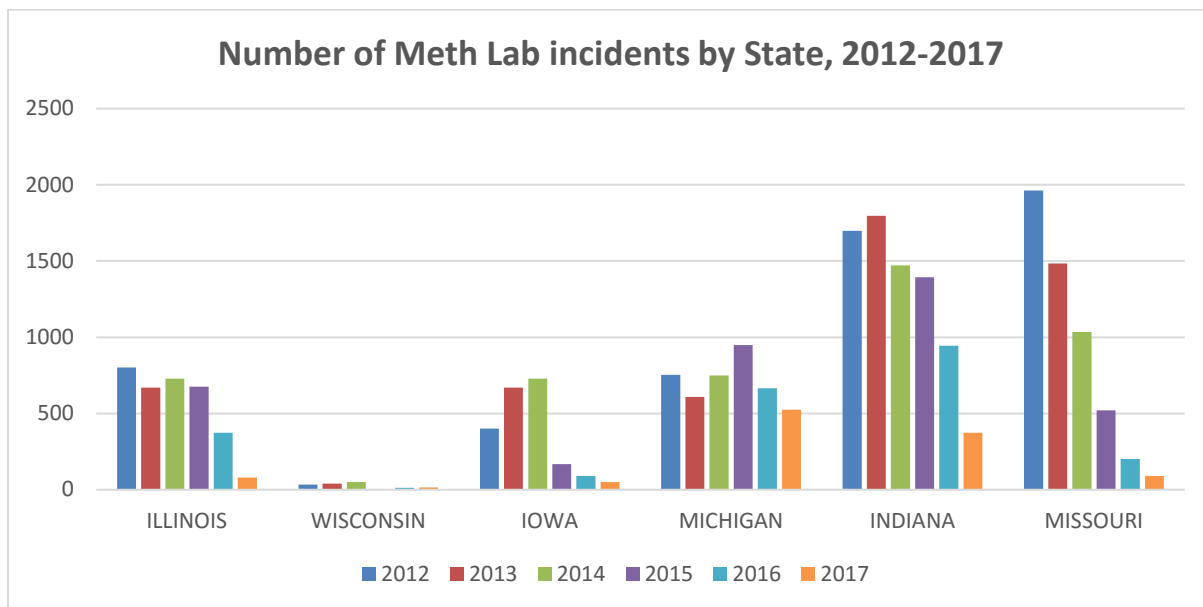
## Meth Labs

Although rapidly declining in number, Illinois meth labs will likely continue to be a concern due to the toxic chemicals associated with meth manufacturing. This assessment is made with high confidence. Calendar year 2017 was the first year in 10 years that there was a significant decrease in the number of meth labs seized in Illinois (Figure 13).<sup>148</sup> This mirrors both national and regional trends. Mexico sourced meth has overtaken local producers of Illinois' meth. Clandestine meth labs, however, still affect local communities. "One pot" or "shake and bake" methods for making meth have not

only simplified the process, but also increased the potential for injury, exposure, or death. The removal of precursor materials from stores has helped reduce the number of clandestine meth labs, but has not completely eradicated them. Lastly, the high cost associated with properly remediating homes and apartments after exposure to meth labs or extensive meth smoking may leave future tenants and children at risk of becoming sick.<sup>149</sup>

**Figure 13.**

### Illinois meth lab incidents compared to surrounding states



Sources: US Government Web site; Drug Enforcement Administration; "Methamphetamine Lab Incidents, 2012-2017"; <http://www.dea.gov/resource-center/meth-lab-maps.shtml>; accessed on September 26, 2019.

### Clandestine Mexican super labs support growing meth use

Law enforcement and open source reports indicate Mexican meth super labs produce the majority of meth consumed in Illinois. Mexican DTO often control all facets of the traffic, from production to retail distribution, in many areas of the Midwest and that influence is

spreading. This has reduced the need for meth labs in Illinois, as it is easier to purchase high-purity, high-potency meth than it is to make it.<sup>150 151</sup>

The image of sprawling locations where drug cartels produce meth in massive quantities does not match reality. In fact, the overall quantity of meth super labs produce in a single year defines them rather than their

actual size.<sup>152</sup> The DEA defines a “super lab” as one capable of producing 10 pounds or 4.5 kilograms of meth in a single batch.<sup>153</sup> By comparison, the typical home lab can produce roughly three grams from a single pack of cold medicine.<sup>154</sup> Further, according to an interview with a DEA spokesperson in Jane’s Intelligence Review, a large basement would be sufficient and if a meth lab ran several shifts every day or so, and only manufactured a couple of kilograms a day it could still produce a ton of meth in a year.<sup>155</sup>

### **Illinois meth labs are for personal and/or small group consumption, not wide distribution**

Illinois law enforcement reported meth labs are associated with small networks of individuals who are not profit-driven. Instead, these networks seek to create enough meth for their personal use and sell enough to fund the next batch. In Illinois, meth labs are predominately located in central and southern regions, less common in the Chicago area and its surrounding suburbs.<sup>156</sup> The top five counties with the most meth lab seizures between 2006 and 2013 include Madison, Adams, Tazewell, Coles, and Montgomery and Vermilion.<sup>157</sup>

### **Pharmacy logs are not always an effective deterrent to purchasing precursor materials**

Due to the small network structure of many meth labs, many individuals employ a process known as “smurfing” to acquire precursor materials. Smurfing targets local hardware stores and pharmacies with paper logbooks to acquire needed precursor materials in small amounts to avoid suspicion. The paper logs also complicate the process and increase the time needed for law enforcement review the logs.<sup>158</sup>

After Sudafed® was moved behind store counters, many pharmacies instituted a log system in order to track who purchased Sudafed® and the frequency. Illinois was not the only state to institute this policy; a national program

known as the National Precursor Log Exchange (NPLEx) was created to help pharmacies electronically monitor purchases and allow law enforcement to effectively view these records.<sup>159</sup> Across the country, 32 states have passed laws mandating the entry of all pharmacy logs into NPLEx.<sup>160</sup>

### **Convicted Methamphetamine Manufacturer Registry**

This database was created pursuant to Public Act 094-0831 which required that persons convicted under 720 ILCS 646/15, Participation in Methamphetamine Manufacturing, be identified with that information made available to law enforcement and the general public. The information provided in the Illinois Methamphetamine Manufacturer Database is the offender’s name, date of birth, offense or offenses requiring inclusion in the database, and the conviction date and county of each such offense.<sup>161</sup>

### **Remediation of meth labs is costly**

Meth lab cleanups costs can range from \$10,000 to \$30,000, depending on the home’s size and the amount of contamination.<sup>162</sup> Additionally, each pound of meth produced creates five to six pounds of hazardous waste; this waste will be flammable, caustic, and/or toxic.<sup>163</sup> Lab operators routinely dump waste into streams, rivers, fields, back yards, and sewer systems in an attempt to conceal meth production, contributing to increased environmental hazards.<sup>164 165</sup>

The Illinois Department of Public Health (IDPH) has more information regarding proper remediation on their website at [Guidelines for Cleaning Up Former Methamphetamine Labs](#).<sup>166</sup>

## Criminal Activity Associated with Meth

Increasing meth-related property crime, theft, and other criminal activity is very likely correlated to statewide meth use, particularly in rural Illinois. This assessment is made with high confidence. Meth-related criminal activity is increasing due to rising meth use statewide but particularly in Central and Southern Illinois. These crimes extend far beyond simple possession and distribution to include armed robbery, battery, child endangerment, domestic disturbance, burglary, sexual assault, prostitution, traffic violations, identity theft, property crime, and operating while intoxicated (OWI). As Illinois meth use continues increase, more meth-related crimes will begin to occur in other communities.

### **Violence is a key harm associated with meth use**

Meth-related violence is of particular concern to law enforcement and other agencies who work with meth users.<sup>167</sup> The top three greatest contributors to violent crime reported by responding agencies were heroin, meth, and prescription drugs. Thirty-four percent of respondents from the 2016 Illinois Drug Threat Assessment survey reported meth as the greatest contributor to violent crime, followed by heroin (20 percent), which is similar to the DEA findings in the National Drug Threat Assessment. Central and Southern Illinois law enforcement respondents most frequently reported meth as the greatest contributor to violent crime, with heroin emerging as the second greatest contributor to violent crime identified by agency respondents.<sup>168</sup>

In July 2018, homes and businesses on the west side of Mattoon were evacuated while police dealt with man acting irrationally, claiming he had a gun, making threats and leading to an hours-long standoff. Later, police said his erratic behavior that led to a woman reporting her concerns about him was because of his use of meth. Mattoon police Chief Jason Taylor said at the time it was the third drug-related standoff in which officers had to engage in the last few months. Coles County authorities say the renewed prevalence of the drug was the biggest contributor to an increase in

arrests and criminal cases in 2018. A series of thefts the sheriff's office investigated last year were tied to suspects' meth use, an example of the "trickling effect" it can have, he said.<sup>169</sup>

According to a 2014 study published in the journal *Addiction*, violence was a key harm associated with meth use but depended on whether an individual was using at the time. During periods of use, violent behavior was six times more likely to occur versus during periods of non-use. Violent behavior was also dependent on the frequency of use. Low use (< 16 days in the past month) increased the odds of violence 4-fold and heavy use (16+ days in the past month) increased the odds 15-fold.<sup>170</sup>

A 2016 study in Australia found meth users were four times more likely than non-users to report income from crime in the previous 30 days and be detained for property or drug offenses.<sup>171</sup> A study of offenders in Colorado jails found 62 percent of self-reported regular meth users indicated their crime was related to drug use.<sup>172</sup> Further, meth users were more likely than non-users to be charged with drug and property offenses.<sup>173</sup>

### **Property crime is increasing**

Law enforcement and open source often correlate property crime to increasing drug use in Illinois. Illinois Central region law enforcement respondents most frequently reported heroin as the greatest contributor to property crime, with meth a close second. The Southern region agency responses were similar to their violent crime responses, with meth reported as the greatest contributor to property crime, followed by heroin and prescription drugs.<sup>174</sup>

### **Meth use may lead to increased identity theft**

A 2007 U.S. Department of Justice (USDOJ) National Drug Intelligence Center (NDIC) bulletin identified meth users as increasingly engaging in identity theft. Law enforcement reporting also identified meth as the drug most implicated in drug-related identity theft.

Meth users often generate cash by selling stolen personal checks or by using stolen credit cards to purchase merchandise sold or traded for meth. Meth users obtain personal documents from mailboxes,

dumpsters, landfills, and parked cars. Higher-level drug traffickers purchase stolen personally identifiable information (PII) to create fraudulent accounts in furtherance of drug activity.<sup>175</sup>

## Pharmacology and Public Health Consequences

Meth is a highly addictive synthetic drug that has increased public health consequences likely due to its psychological and physiological side effects. This assessment is made with high confidence. Meth's psychological and physiological side effects increase public health consequences. From a pharmacological standpoint, the d-isomer of meth is far more dangerous than the l-isomer due to its higher potency and intensified side effects. Similar to other meth users across the country, Illinois meth users prefer to smoke or intravenously inject meth. Of particular concern is the number of chronic health conditions meth users may develop from prolonged use. Multiple clinical studies identified meth users as having increased risks for coronary heart disease, cardiomyopathy, liver disease, psychosis, Parkinson's disease, and tooth decay. Additional side effects include increased risk of sexually transmitted diseases from high-risk sexual activity, intravenous drug use, and possible loss of employment. Lastly, while meth's withdrawal symptoms are not as severe as heroin, meth's prolonged use has a dramatic impact on the brain's production and release of dopamine and can impact body's production of dopamine for up to a year or longer.

### Pharmacology

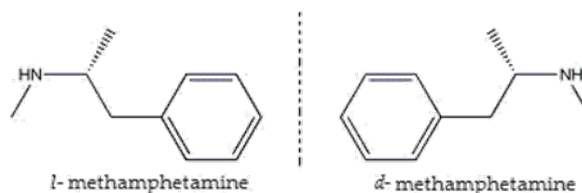
Meth is a central nervous system stimulant and has a chemical structure similar to other ATS. Currently, meth and its similar compounds are Schedule II<sup>q</sup> controlled substances in the U.S. and is produced under the brand name Desoxyn®.<sup>176 177</sup> Numerous countries around the world use meth and other ATS to treat a variety of disorders, including attention-deficit hyperactive disorder (ADHD), narcolepsy, and obesity. People unable to lose weight may use doctor-prescribed meth for a limited period (a few weeks) along with a reduced calorie diet and exercise plan.<sup>178</sup>

Meth is a derivative of the ATS base  $\alpha$ -methylphenethylamine. Meth's chemical name is N-

methyl-1-phenylpropan-2-amine and exists as two enantiomers, the d and l form.<sup>179 180</sup> Crystal meth can be produced from ephedrine or pseudoephedrine by yielding the d-isomer or d-meth.

The form of meth isomer ingested can affect the intensity experienced by the user. A 2011 study from Addictive Behavior identified the d-meth isomer as having increased potent physiologic and behavioral effects and having a higher potential for abuse. Further, individuals injected with d-, dl-, or l-meth rated the effects of l-meth<sup>r</sup> as less desirable due to its weak intoxication effect whereas test subjects had desirable results with ingesting d-meth.<sup>181</sup> Additionally, the DEA MPP considers d-isomer-only samples as 100 percent potent and l-isomer samples as 0 percent potent.<sup>182</sup>

### Image 2. L- and D- methamphetamine



### Detection

When ingested, the liver largely metabolizes meth and meth acts as an indirect antagonist to dopamine. The body excretes approximately 70 percent of a meth dose through urine within 24 hours: 30-50 percent as meth, up to 15 percent as 4-hydroxymeth, and 10 percent as amphetamine.<sup>183</sup> However, meth is detectable in urine samples up to 48 hours after ingestion.<sup>184</sup> The most reliable way to determine an individual's long-term drug history is through hair samples. As hair grows, it incorporates anything circulating in the blood, creating a record of drug use over time.<sup>185</sup>

### Direct Effects

<sup>q</sup> See Appendix C for controlled substance schedules.

<sup>r</sup> See Appendix H for more information on l-meth.



The typical meth user ingests roughly one-quarter of a gram per hit.<sup>186</sup> Meth use increases the brain's release of dopamine, norepinephrine, and serotonin, resulting in higher arousal, reduced fatigue, euphoria, positive mood, accelerated heart rate, elevated blood pressure, pupil dilation, raised body temperature, reduced appetite, behavioral disinhibition, and short-term cognitive improvement.<sup>187</sup> <sup>188</sup> Meth's performance-enhancing benefits at low doses is similar to the benefits ascribed to other ATS pills.<sup>189</sup>

Contrastingly, high doses of meth can result in psychotic symptoms, violent behaviors, agitation, shortness of breath, shivering, chest pain, fever and cardiac, hepatic and/or renal failure.<sup>190</sup>

### Smoking and injection are preferred methods for meth use

Similar to other drugs, meth has multiple ingestion methods, the most common being smoking and injection.<sup>191</sup> User preference is mostly dependent on the person and his or her previous drug history. For example, if a heroin user switches to meth, injection will likely be preferred; if the person has a phobia of needles or a non-extensive drug history, smoking will likely be preferred.<sup>192</sup> Regardless of method, the rapid onset of euphoria provides a strong incentive for repeated use.<sup>193</sup> The University of Wisconsin Health website states smoking meth leaves odorless residue that can be smoked again.<sup>194</sup> However, regardless of method, the biological half-life of meth is approximately 10 to 12 hours.<sup>195</sup> <sup>196</sup>

### Image 3. Meth pipes



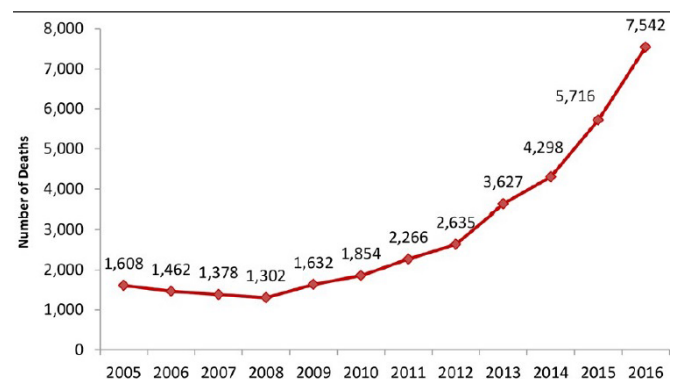
Source: WSIC

## Long-term meth use can result in multiple chronic health conditions

### Overdose Death

The number of deaths in the category psychostimulants with abuse potential continues to increase significantly. According to the CDC, meth drug poisoning deaths are included under the broader “psychostimulant with abuse potential” category. The psychostimulants with abuse potential category includes multiple drugs such as caffeine and phenylethylamines (including MDMA, amphetamine, and meth), and cathinones such as ethylone. Although the value changes from year to year, in recent years (2010 – 2015) approximately 85-90 percent of the drug poisoning deaths that were reported under psychostimulants mentioned meth in the death certificate. According to the CDC, in 2016 there were 7,542 psychostimulant drug poisoning deaths in the United States, representing a 32 percent increase from 2015, and a 387 percent increase since 2005 (Figures 14 & 15).<sup>197</sup>

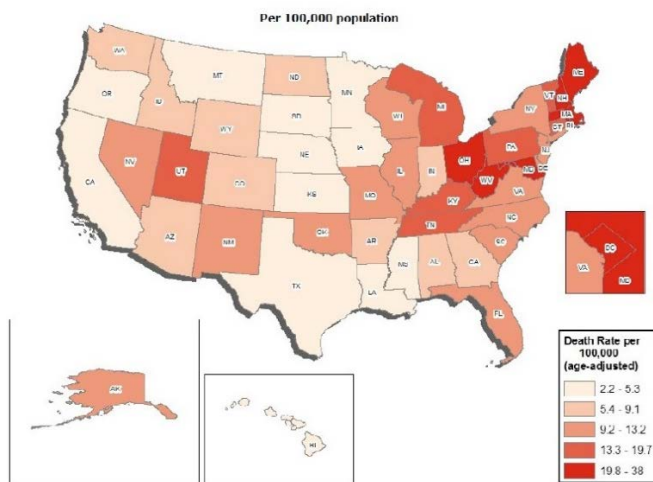
**Figure 14. Psychostimulant-involved Drug Poisoning Deaths, 2005-2016.**



Source: National Center for Health Statistics/Center for Disease Control and Prevention.

Among overdose deaths in 2016 involving meth and one or more drugs, heroin (22%), fentanyl (11%), and cocaine (8%) were the most frequently involved.<sup>198</sup> While overdose deaths directly related to meth use are not common, overdose deaths still occur, usually the result of seizures, cardiac arrhythmia, or respiratory failure.<sup>199</sup> However, a large number of meth-related fatalities are from accidents, suicide, and homicides.<sup>200</sup> <sup>201</sup>

**Figure 15. Methamphetamine-Related Deaths by State, Age-Adjusted Rate, 2017.**



Source: National Center for Health Statistics/Center for Disease Control and Prevention.

### Chronic Health Conditions

Long-term use of meth can lead to multiple chronic conditions such as increased risk of coronary heart disease, cardiomyopathy, liver disease, pulmonary problems, psychosis, Parkinson’s disease, and tooth decay. A 2009 study published in *Addiction* found meth users had an almost quadrupled risk for cardiomyopathy. Compared to non-users with cardiomyopathy, meth users had more severe left ventricular dysfunction.<sup>202</sup> Furthermore, meth users’ autopsies found liver disease in 40 percent of individuals. Additionally, those who smoked meth had an elevated risk of pulmonary problems such as pneumonia.<sup>203</sup>

Meth-induced psychosis is a frequent condition associated with long-term meth use. Typical symptoms include violent behavior, anxiety, confusion, insomnia, and psychotic episodes with paranoia, aggression, visual and auditory hallucinations, mood disturbances, and delusions. A delusion commonly cited by meth users is the sensation of insects or bugs crawling on or under the skin.<sup>204</sup>

Parkinson’s disease is a neurodegenerative disorder affecting dopamine neurons in the brain. As meth affects dopamine neurons, there have been multiple studies that

seek to identify a link between chronic meth use and an increased risk for Parkinson’s. Most studies have been inclusive; however, one 2006 study found prolonged amphetamine use was associated with an 8-fold increased risk of Parkinson’s with a 27- year average between amphetamine exposure and the onset of Parkinson’s symptoms.<sup>205</sup>

**Image 4. Dental issues associated with suspected meth use**



Source: © Dozenist/Wikimedia Commons/CC-BY-SA- 3.0/GFDL

A well-known side effect of prolonged meth use is tooth decay. Decay occurs rapidly in meth users as meth use enhances dry mouth, leading to increased cavities, teeth grinding, and tooth fractures.<sup>206</sup> However, many other amphetamine-type drugs also produce dry mouth with no similar side effects. It is likely meth-associated dental issues are attributable to poor sleep habits, dental hygiene, and nutrition of meth users.<sup>207 208</sup>

### High Risk Sexual Activity and Blood Borne Illnesses

The CDC states meth use is associated with increased human immunodeficiency virus (HIV) risk and is linked to high-risk sexual activity.<sup>209</sup> Several other studies corroborate this association and found a strong correlation between meth use, HIV, and other sexually transmitted diseases.<sup>210 211</sup>

A number of scientific studies reported meth use enhances sexual pleasure and can lead to a higher number of casual and anonymous sexual partners, increased anal intercourse, decreased condom use, sex trading, group sex, and more frequent and longer episodes of sexual activity.<sup>212</sup> HIV and other diseases can enter the body due to meth drying out areas of the body that may tear during

sexual activity.<sup>213</sup> Research studies, law enforcement, and interviews with meth users indicate the groups at greatest risk to meth's sexual side effects are homosexual men and heterosexual females.<sup>214</sup> One study identified triple HIV rates of homosexual men who used meth compared to homosexual men who did not use meth.<sup>215</sup>

One study found sexual violence and coercion tended to occur more frequently with male meth users because their increased sexual desire led to some men demanding riskier sexual acts or were unwilling to take no for an answer.<sup>216</sup> In addition to increased risks of sexually transmitted diseases, law enforcement reported a number of heroin users also inject meth, which may increase the number of individuals with bloodborne diseases.<sup>217</sup>

### **Loss of Employment**

In 2007, the *Journal of Psychoactive Drugs* stated that 64 percent of men reported full-time employment at the time of meth treatment admission and 10 percent were unemployed.<sup>218</sup> For women, only 24 percent reported full-

time employment and 30 percent were unemployed.<sup>219</sup> Illinois law enforcement reported similar findings and explained that, while individuals are able to work as a new meth user, the addiction often quickly overtakes other aspects of their lives, and the user is often unable to maintain employment.<sup>220</sup>

### **Withdrawal Symptoms**

Meth users tend to use meth repeatedly or binge and crash. If meth use stops abruptly, it can lead to depression, anxiety, paranoia, disturbed sleep, craving, and cognitive impairment, which is also known as "ATS stimulant withdrawal syndrome."<sup>221 222</sup> Withdrawal-associated depression and anxiety can cause suicidal thoughts and panic.<sup>223</sup> Psychiatric symptoms of paranoia, delusions, and hallucinations typically are resolved within a week after cessation, but can vary based on a user's family history.<sup>224</sup> Due to the brain's physical changes from long-term meth use, it may take anywhere from 6 to 12 months for a user to recover. However, abnormalities in a user's brain function may persist for years.<sup>225</sup>

## Reasons for Meth Use

Illinois individuals are likely to use meth after abusing alcohol and other drugs, have untreated psychological issues, or are looking for a “safer” heroin alternative. This assessment is made with high confidence. Law enforcement, scientific studies, and interviews with Illinois meth users identified previous abuse of alcohol, marijuana, prescription pills (opioids and ATS), heroin, and untreated psychological issues, or looking for a “safer” alternative to heroin as potential reasons for beginning meth use. Meth use also begins as a way to balance out the effects of other drugs.

### Signs of Meth Use

According to the U.S. Department of Health and Human Services (HHS) signs of meth use may include:

- Inability to sleep
- Increased sensitivity to noise
- Nervous physical activity, like scratching
- Irritability, dizziness, or confusion
- Extreme anorexia
- Tremors or even convulsions
- Increased heart rate, blood pressure, and risk of stroke
- Presence of inhaling paraphernalia, such as razor blades, mirrors, and straws
- Presence of injecting paraphernalia, such as syringes, heated spoons, or surgical tubing

Source: U.S. Dept. of Health and Human Services, Substance Abuse and Mental Health Services Administration; “Tips for Teens”; 2008.

### Clinical studies indicate meth users consume meth for more energy

The Journal of Psychoactive Drugs found both men and women began using meth with friends in order to have more energy and “good times.”<sup>226</sup> However, females were more likely to initiate meth use for weight loss, housework completion, childcare, depression self-medication, or increased confidence.<sup>227</sup> Men began meth use to get more work done or to have better sex.<sup>228</sup> Another study found some meth users unintentionally began meth use when users thought they were taking a

different drug, usually cocaine. Only after feeling a burning sensation in their nose or experiencing other side effects did users realize they ingested meth.<sup>229</sup>

A Substance Use & Misuse study reported 95 percent of surveyed meth users had a family member with a drinking problem; 89 percent had a family member with a drug problem; and 91 percent reported psychiatric or emotional problems. Additionally, many reported neglect or abuse as children or adults. Females reported higher rates of having felt unloved, sexually mistreated, raped, and physically or emotionally abused.<sup>230</sup>

When asked about other drugs or substances used concurrently with meth, the same study identified alcohol (42 percent), marijuana (38 percent), powder cocaine (20 percent), crack cocaine (19 percent), heroin (19 percent), and alprazolam (18 percent).<sup>231</sup>

### Relationship between Prescription Pills and Meth

In 2012, the Journal of Ethnographic & Qualitative Research researched the relationship between meth and prescription pill abuse. The results found multiple reasons for meth use. In some instances, meth use started as a way to offset the lethargic effects of opioid pills. Meth use also began after the abuse of other ATS pills, such as Adderall®, when an individual did not have access to the ATS.<sup>s</sup> Lastly, the study found meth use began when individuals change social circles and began associating with other meth users.<sup>232</sup> Illinois law enforcement corroborated some of the study’s findings as law enforcement witnessed meth use as a way to balance the downing effects of opioid pills or heroin.<sup>233</sup>

### Heroin users are switching to meth

Public awareness information regarding heroin’s dangers may cause heroin users to switch to meth believing meth is a “safer” alternative.<sup>234 235</sup> Individuals who begin drug treatment for one substance, like opioids, sometimes start to use more of a different drug. Others combine a

<sup>s</sup> See Abuse of Adderall® on page 38 for more information.

downer, like an opioid, and a stimulant, like cocaine or meth. Drugs could also be getting combined or cross-contaminated without the users' knowledge. A 2018 national study published in the *Journal of Drug and*

*Alcohol Dependency* found that 34% of opioid users seeking drug treatment in 2017 had admitted using meth in the last month — an 82% increase from 2011.<sup>236</sup>

## Abuse of Adderall®

Illinois individuals who knowingly and frequently abuse Adderall® are likely susceptible to abusing drugs of a similar nature. This assessment is made with medium confidence. Illinois individuals who knowingly and frequently abuse Adderall® are susceptible to abusing similar drugs, such as meth, in the future. While strong arguments exist for and against this claim, the rate of Adderall® abuse is rising nationwide. Similar to the 2010 OxyContin® reformulation's documented increase in heroin use, a similar Adderall® disruption may lead an abuser to switch meth, a readily available substitute.

### When properly used Adderall® does not trigger future drug use

Current scientific studies and the medical community state when used as intended and under a doctor's supervision, ADHD medication does not typically trigger future drug use despite Adderall® and meth's chemical similarities.<sup>237</sup> In fact, most studies exploring the relationship between ADHD medication and future drug use identify conduct disorder issues as the main factor predicting future drug use, rather than the use of ADHD medication.<sup>238</sup>

According to the National Institute of Mental Health (NIMH), ADHD medications reduce hyperactivity, impulsivity, and improve patients' ability to focus, work, and learn; medication may also improve physical coordination. The NIMH also says prescribing doctors must monitor anyone taking ADHD medication closely and carefully.<sup>239</sup>

### Use of ADHD medication is growing rapidly

Focused attention on Adderall® abuse over other ADHD medications is due to the fact Adderall® is the most prescribed ADHD medication and presents the greatest opportunity for diversion.<sup>†</sup> A 2013 New York Times

article explored the advertisement and promotion of ADHD medication.<sup>‡</sup> The article cited the number of U.S. children prescribed ADHD medication grew from 600,000 in 1990 to 3.5 million in 2013. This resulted in nearly \$9 billion in stimulant medication sales in 2012 compared to \$1.7 billion a decade earlier.<sup>240</sup> A Statnews.com article found 2015 ADHD medication sales were \$12.7 billion and expected to grow to \$17.5 billion by 2020.<sup>241</sup> Most notably, the New York Times quotes Roger Griggs, the executive of the company that introduced Adderall® in 1994, as being opposed to the marketing of stimulants to the public because of stimulants' potential dangers. Griggs said stimulants are "nuclear bombs" and should only be used under extreme circumstances when carefully overseen by a doctor. Lastly, in 2013 the article stated 1 in 7 children received an ADHD diagnosis by age 18 and between 3 to 5 percent of the adult population possibly had ADHD.<sup>242</sup>

In 2014, Express Scripts<sup>‡</sup> reported an 84 percent increase from 2008 to 2012 in adults between 26 and 34 years of age on ADHD medication. The amount spent nationally for ADHD medication during that same period rose 91 percent.<sup>243</sup>

#### FDA Adderall® Warning

The DEA lists Adderall® as a Schedule II drug. The FDA requires the following warning be added to every Adderall® prescription:

"Amphetamines have a high potential for abuse. Administration of amphetamines for prolonged periods of time may lead to drug dependence and must be avoided. Particular attention should be paid to the possibility of subjects obtaining amphetamines for non-therapeutic use of distribution to others, and the drugs should be prescribed or dispensed sparingly".

Source: FDA, NDA 11-522/S-040; Revised March 2007

<sup>†</sup> See glossary for the definition of diversion.

<sup>‡</sup> See Appendix I for current FDA-approved ADHD medication.

<sup>‡</sup> Express Scripts is a prescription-benefit plan provider. Express Scripts handles millions of prescriptions each year through home delivery.

According to multiple annual reports from Express Scripts, Adderall® increased its market share of ADHD medications from 34 percent in 2012 to over 40 percent in 2015. Additionally, Ritalin® did not experience any growth and received roughly 20 percent of the market share.<sup>244 245</sup>

### **Abuse of Adderall® may lead to use of other stimulant drugs**

Individuals who consciously abuse ADHD medications may develop significant drug abuse and addiction risks.<sup>246</sup> According to one individual, who was a previous Adderall® and meth user, when people who are predisposed to addiction problems, abuse of stimulant medication can lead them to additional addictions.<sup>247</sup> A 2016 National Public Radio article further explained national nonmedical use of Adderall® and generic versions increased 67 percent among adults across the nation.<sup>248</sup> Law enforcement reported instances where parents abused their children's ADHD medication, the parents switched to meth when the ADHD medication became unavailable.<sup>249</sup>

A 2016 Johns Hopkins Bloomberg School of Public Health press release identified 60 percent of non-medicinal Adderall® use was among 18 to 25 year olds who tried to improve their college academic performance.<sup>250 251</sup> Addictive Behaviors added 70

percent of individuals who abused ADHD medication received the medication from friends who legitimately obtained a prescription.<sup>252</sup> The John Hopkins press release stated many college students thought stimulants like Adderall® were harmless.<sup>253</sup> However, a 2010 WisconsinWatch.org article explained college students' use of Adderall® for passing tests becomes a destructive cycle that requires further abuse of the drug as students believe they cannot succeed without it.<sup>254</sup>

The Wisconsin Watch article also cited a University of Wisconsin-Eau Claire professor and ADHD expert who said, "The longer you take the drug and the higher the dose, the more side effects and the more troubling outcomes for the people involved." In an experiment to determine how prevalent Adderall® was on the University of Wisconsin-Madison campus, it took two journalism students 56 seconds to find someone willing to sell them Adderall® in the university's library.<sup>255</sup>

In addition to those trying to get an edge in college, women who want to be "supermoms" may be more likely to abuse ADHD medication, according to a 2014 ABC News story. The article highlighted one mother's journey from ADHD medication to meth after failing to persuade her doctor to continue prescribing her pills. Her story is not unique and can be seen in numerous families throughout the county.<sup>256</sup>

## Drug Endangered Children

An increase in Illinois parental meth smoking has likely had an increasingly negative effect on the lives of Illinois' children compared to other illegal drugs. This assessment is made with high confidence. Illinois parental meth smoking has demonstrated an increasingly negative effect on the lives of Illinois' children compared to other illegal drugs. Increasing meth use directly affects the lives of Illinois' children, which in many instances exposes them to unsafe living conditions. Parents either knowingly or unknowingly expose their children to meth when smoking in the home, this leads to an increase in children testing positive for meth ingestion even though they have never physically taken the drug. Further, living in a home with meth-addicted parents exposes children to sexual situations, abuse, and abandonment.

### **Parental meth use can lead to a lifetime of physical, social, or psychological issues in children**

According to a study from the Annual Review of Public Health, parental meth use results in children's out-of-home placement and a higher number of child abuse crimes and homicides. Children of meth users are at risk of social, emotional, developmental, and behavioral problems during adolescence, as well as cognitive, psychological and permanent brain damage or physical impairments.<sup>257 258</sup>

### **Image 5. Inside Meth User's Home**



Source: WSIC

Abuse of drugs or alcohol by parents and other caregivers can have negative effects on the health, safety, and well-being of children. Social workers stated parents who use meth frequently might neglect their families, children, and personal hygiene.<sup>259</sup> Frequent parental meth smoking inside the home causes children to test positive for meth ingestion, because the smoke residue falls and settles on toys and carpets.<sup>260</sup>

A June 2015 Leader-Telegram article reported a Wisconsin law enforcement found shards of meth, needles, and animal feces in meth users' homes; some of the homes had children. In some instances, law enforcement found young children who had to help their siblings get ready for school as their parents are completely consumed by their meth use.<sup>261</sup>

In another instance, two Wisconsin parents admitted to smoking meth in their home with their four children present. The children, ages eight months to six years, all tested positive for meth through hair samples.<sup>w 262</sup>

While high on meth, parents may not be as discrete about sexually explicit material or behaviors or care who is spending time with their children. According to social services, lack of discretion is leading to an increased number of children exposed to pornography or other harmful sexual situations, leading to possible lasting trauma.<sup>263</sup>

Children in homes where meth abuse has overtaken their parents are traumatized by the experience, many times left alone and hungry for days at a time, abused, forced to get high themselves, asked to steal and lie to authorities by the hyper and delusional adults in their lives. In an effort to help kids forced into foster care by their parents' meth abuse, researchers at the University of Illinois at Urbana-

<sup>w</sup> See Pharmacology on page 32 for more information.



Champaign interviewed 18 children, ages 7-14, from 12 families who were involved with the child-welfare system. At the time of the interviews, they had been in foster care from five to 39 months, with 15.6 months the average.<sup>264</sup>

Despite those conditions, when the children were asked about 'sad or scary times,' they talked first or most often about the experience of losing their parents, even months later. Most want desperately to be with their families and feel a great deal of pain and grief over being separated from their parents. Another complication is that some of these children had taken on the role of caring for their parents, as well as younger siblings, when their parents were under the influence. One child asked who would

watch over her mother when she was 'sick.' They also experience emotional harm from the stigma of being the children of meth users, many of whom face years in prison.<sup>265</sup>

### **Meth-using parents are more likely to abandon their children**

Many law enforcement and social workers find some meth-using parents are either relieved or happy when social services removes children from the home as it allows the parents to continue using meth. Social service workers added many parents fail to understand once children are removed from the home, parents are ineligible for many state services, including some alcohol and drug abuse services.<sup>266</sup>

## Meth Treatment Concerns

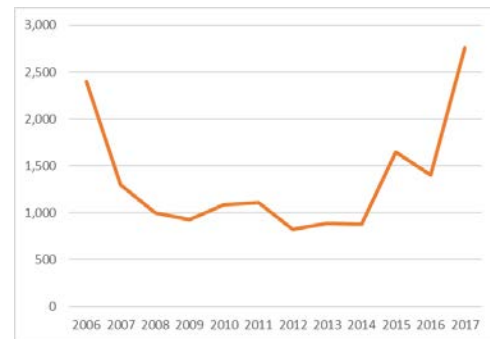
Due to an inability of Illinois meth users to receive and successfully complete drug treatment programs, they will likely continue their meth use, leading to a continued growth in meth use statewide. This assessment is made with high confidence. Current meth treatment programs are not designed to maintain treatment over the length of time necessary for users to recover adequate levels of dopamine, which leads to frequent relapses. Additionally, many users relapse due to untreated underlying causes of their meth use. Many meth users do not seek treatment because of program costs and availability. Problems obtaining treatment may prevent a meth user from receiving assistance without a court order.

### **The number of Illinois individuals seeking treatment is increasing**

From 2012 to 2017, there has been a growth in the number of individuals seeking treatment for methamphetamine and amphetamine (ATS) addiction in Illinois. Meth/ATS admissions include admissions for both substances, but are primarily for meth. In 2017, meth constituted about 96 percent of combined meth/ATS admissions.<sup>267</sup> In 2017, 6.5 percent of admissions to substance use treatment facilities across Illinois resulted from meth as a primary substance of use. The rate of admissions to treatment facilities for meth as a primary substance of use increased from 5 admissions per 100,000 residents in 2000, to 25 admissions per 100,000 residents in 2017 according to the Substance Abuse and Mental Health Services Administration (SAMHSA) Treatment Episode Data Set (TEDS).<sup>x</sup>  
<sup>268</sup> The number of individuals receiving treatment

reported in TEDS<sup>y</sup> (Figure 16) increased 299 percent from 2012-2017.<sup>z</sup> <sup>269</sup>

**Figure 16. Illinois: Primary Methamphetamine/Amphetamine admissions 2006-2017, aged 12 years and older**



Source: Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS), 2006-2017.

The Illinois Department of Human Services (IDHS), Division of Substance Use Prevention and Recovery uses Provider Performance and Outcomes Reports, providing admitted Patient/Client Demographics for tracking treatment admissions.<sup>aa</sup> <sup>bb</sup> The Division's Automated Reporting & Tracking System (DARTS) annual reports comply with Illinois' State Fiscal Year (SFY) July 1 through June 30. IDHS meth substance addiction treatment admissions reflect similar upward trend (Figure 17 and 18) increasing 118% from 2,550 admissions in 2016 SFY to 4,698 admissions in 2018 SFY.<sup>270</sup>

<sup>x</sup> See glossary for more information on TEDS.

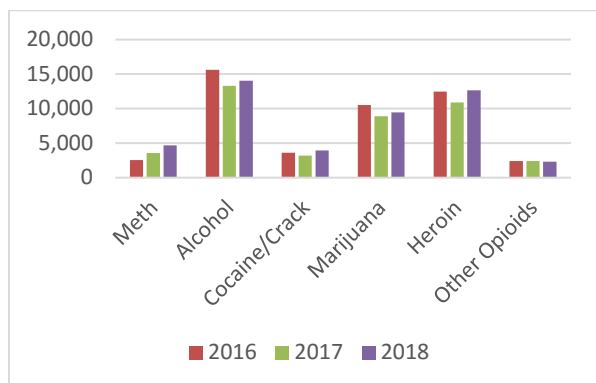
<sup>y</sup> Individuals receiving TEDS treatment are usually mandated by a drug or criminal court sentence.

<sup>z</sup> TEDS admission data refers to the portion of treatment admissions that are publicly funded.

<sup>aa</sup> Data in these reports are from service data submitted into DARTS (Division's Automated Reporting & Tracking System).

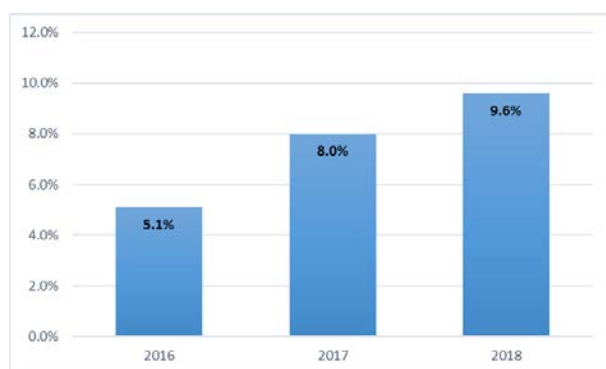
<sup>bb</sup> DARTS only collects data for services reimbursed through SUPR contract and Medicaid fee-for-service (FFS).

**Figure 17. Illinois Primary Substance Treatment Admissions 2016-2018 SFY (July 1 – June 30)**



Source: Illinois Department of Human Services (IDHS), Division of Substance Use Prevention and Recovery, Provider Performance and Outcomes Reports SFY 2016-2018.

**Figure 18. Illinois Meth Substance Treatment Admissions 2016-2018 SFY (July 1 – June 30)**



Source: Illinois Department of Human Services (IDHS), Division of Substance Use Prevention and Recovery, Provider Performance and Outcomes Reports SFY 2016-2018.

### Meth users face a number of challenges

Rural areas in Illinois have historically lacked access to services in their communities, including substance use disorder treatment, and those in need have much further distances to travel for treatment options.<sup>271</sup> Due to the complex and long-term nature of meth treatment, having more treatment facilities utilize the Matrix Model for meth treatment. However, the cost

is roughly two and a half times higher than standard TEDS treatment and may therefore make it cost prohibitive. The inability to enroll in an effective treatment program can lead many meth users to relapse.<sup>272</sup>

Additional challenges faced by meth users include failure to diagnosis underlying issues for initial meth use and “one size fits all” programs. Women relapsed due to a desire to lose weight, have more energy for their children, or because they were no longer pregnant. Men relapsed due to drug availability, meth-using friends, the desire to get high, or the desire to have more sex again.<sup>273</sup> Many service providers may not understand the context of meth use in the homosexual community, as many homosexual male meth users are well educated, in full-time employment, and have stable housing.<sup>274</sup>

### Treatment for Methamphetamine Use Disorders

Recovery for heroin addicts for opioid dependency has, so far, proven to be effective. Due in part to the fact that there are some medications, such as Methadone and Suboxone, which can help with rehabilitation. The Heroin Crisis Act requires that Medicaid cover these medications. Meth however, does not yet have medicine-assisted treatment.<sup>275</sup>

Richard Rawson is a research professor at the Vermont Center on Behavior and Health and an author of The Matrix Model, a prominent treatment approach for addiction to stimulants. “You could invest huge amounts in meth treatment, but the outpatient relapse rates are very high. Keeping people in residential treatment is terribly expensive, and as soon as they walk out the door, the relapse rate is 70 percent in the first 90 days,” he says.<sup>276</sup>

A sample of 350 treatment admissions from a large county substance use disorder (SUD) treatment system was randomly selected found 61% of the sample relapsed to meth use within 1 year after treatment discharge and 14% during years 2–5.<sup>277</sup>

### Ordered treatment has shown success

A 2007 study in the *Journal of Psychoactive Drugs* stated involuntary admission to meth treatment programs may be viewed as positive because involuntary mandate enough treatment for the withdrawal side effects from prolonged meth use to fade away. Involuntary treatment allowed for a more accurate and complete understanding of the problems faced by those in treatment.<sup>278</sup> Law enforcement and social services echoed this statement by adding that, in their experiences, if users are in custody for 60 to 90 days, users may have a better chance at successfully completing treatment.<sup>279</sup> The *Journal of Psychoactive Drugs* study also referred to a 2004 study where researchers observed mandated treatment admissions from drug court had retention and completion rates more than twice as high as non-mandated admissions.<sup>280</sup>

### Community-based treatment: Drug courts

More than 60 drug courts in Illinois aim to divert low-level offenders with substance abuse disorders from a prison term by allowing them to participate in community-based treatment. Teams of probation officers, treatment providers, prosecutors, law enforcement, defense attorneys, and judges monitor offender participation. Most Illinois drug courts require offenders to plead guilty and waive their rights to a trial, but once the offender successfully meets drug court requirements, including regular and frequent drug testing, their charges may be dismissed. The judge may impose a traditional sentence if the requirements are not met. Multiple studies and meta-analyses have concluded that drug court programs reduce recidivism and are cost

effective.<sup>281</sup>

#### Matrix Model of Cognitive Behavioral Therapy

A 2013, an article in the *Journal of Food and Drug Analysis* explained that the Matrix Model incorporates principles of cognitive behavioral therapy (CBT) in individual and group settings, family educations, motivational interviewing, and behavioral therapy that employs CBT principles. This manualized therapy has been proven effective in reducing meth use during a 16-week application of the intervention compared to a “treatment as usual” condition. The Matrix Model has been evaluated as a stand-alone treatment for subgroups of meth abusers and as the behavioral treatment platform in pharmacotherapy trials for meth dependence.

Effective behavioral therapies are available to treat substance use disorders. Cognitive behavioral therapy (CBT) and motivational interviewing techniques have both been found effective in treating SUDs, including those involving meth use disorders.<sup>282</sup> CBT has been effective at reducing crime/criminal behavior, relapse, and substance use/risk of overdose; increasing treatment retention and abstinence; and improving physical and mental health.<sup>283</sup> Pharmacological treatments for meth use disorders continue to be studied through clinical trials. While more research is needed, several treatments appear promising.<sup>284</sup>

Some programs, such as the Safe Passage Program in Illinois, work to connect and transport individuals with a substance use disorder to treatment centers that may be too far away for individuals to access on their own. Additionally, the hub-and-spoke model and teleconferencing technology can offer treatment access to rural residents in need with connections to support and guidance from addiction experts that may be located in urban areas.<sup>285</sup>

## Outlook

Illinois will likely continue to see growth in meth use statewide with the greatest concentration in Central and Southern Illinois but with use in urban areas increasing. Despite increase in urban areas, rural areas will likely continue to be the hardest hit. Unless something alters the trends, meth will be the biggest drug threat in Central and Southern Illinois going forward. The trend of small dealers trafficking in ever greater quantities will also likely continue. Increasing amounts of high-purity, high-potency meth will continue to keep prices low while providing a desirable product to meth users.

### **Criminal Activity Associated with Meth**

Since violence and property crime is associated with meth use and the number of Illinois meth users continues to rise, it is likely both violent crime and property crime correlated, with meth use will continue to rise. It is also likely that the number of domestic abuse cases, child abuse cases, and violent encounters with law enforcement will increase. Meth induced psychosis and paranoia is a particularly troubling side-effect of meth usage especially when said symptoms are combined with firearm possession.

### **Treatment**

Rural areas have historically lacked access to treatment services and those in need have a much further distances to travel for treatment options. Unlike heroin, there is also currently no medicine available to treat meth addiction. Furthermore, at least anecdotally, relapse rates seem higher in rural areas because recovering meth users are more likely to be continually confronted in their day-to-day lives with others they used to use meth with.

Some programs, such as the Safe Passage Program in Illinois, work to connect and transport individuals

with a substance use disorder to treatment centers that may be too far away for individuals to access on their own. Additionally, the hub-and-spoke model and teleconferencing technology can offer treatment access to rural residents in need with connections to support and guidance from addiction experts that may be located in urban areas. Finally, new medications to treat meth use disorders are continuously being researched in the scientific community. Lastly, since lethal fentanyl is sometimes mixed with meth, users should be encouraged to carry naloxone kits, which can prevent overdose deaths.

### **Public Health Consequences**

Increasing meth use across Illinois directly leads to both proximate and more indirect public health challenges. Health-related side effects of meth use have both a personal and societal financial cost and increased pressure on Illinois' health care providers. Many meth users do not have private insurance and rely on public assistance or emergency rooms for the general or specialized health care needed to treat their symptoms and the overall negative health consequences of meth use. Consequently, potential increases in public assistance and non-payment for health care services will likely raise the cost of health care across Illinois. Meth use also leads to child welfare issues, lost jobs, wrecked homes, and directly contributes to the commission of violent and property crimes.

### **Conclusion**

Increasing rates of meth use is a serious and growing problem throughout Illinois and is at crisis levels in parts of rural Illinois. It is a community-wide problem that negatively impacts all facets of society and it requires a combined and coordinated effort to address it by all stakeholders.

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## **Date Supplements and Appendixes**

# Appendix A: Estimative Language

## Expressions of Likelihood (or Probability)

We use phrases such as *we judge*, *we assess*, and *we estimate*—and probabilistic terms such as *probably* and *likely*—to convey analytical assessments and judgments. Such statements are not facts, proof, or knowledge. These assessments and judgments are based on collected information, which often is incomplete or fragmentary. Some assessments are built on previous judgments. In all cases, assessments and judgments are not intended to imply we have “proof” that shows something to be a fact or two items or issues are definitely linked.

In addition to relaying judgments rather than certainty, our estimative language also often conveys 1) our assessed likelihood or probability of an event; and 2) the level of confidence we ascribe to the judgment.

### *Estimates of Likelihood*

Because analytical judgments are not certain, we use probabilistic language to reflect our estimates of the likelihood of developments or events. Terms such as *probably*, *likely*, *very likely*, or *almost certainly* indicate a greater than even chance. The terms *unlikely* and *remote* indicate a less than even chance that an event will occur; they do not imply that an event will not occur. Terms such as *might* or *may* reflect situations in which we are unable to assess the likelihood, generally because relevant information is unavailable, sketchy, or fragmented. Terms such as *we cannot dismiss*, *we cannot rule out*, or *we cannot discount* reflect an unlikely, improbable, or remote event where the consequences are such that it warrants mentioning. The chart below shows the relationship select terms have with each other.

<i>Terms of Likelihood</i>	<b>Almost No Chance</b>	<b>Very Unlikely</b>	<b>Unlikely</b>	<b>Roughly Even Chance</b>	<b>Likely</b>	<b>Very Likely</b>	<b>Almost Certain(ly)</b>
<i>Terms of Probability</i>	<b>Remote</b>	<b>Highly Improbable</b>	<b>Improbable (Improbably)</b>	<b>Roughly Even Odds</b>	<b>Probable (Probably)</b>	<b>Highly Probable</b>	<b>Nearly Certain</b>
	<b>1-5%</b>	<b>5-20%</b>	<b>20-45%</b>	<b>45-55%</b>	<b>55-80%</b>	<b>80-95%</b>	<b>95-99%</b>



## Appendix B: Confidence Statements

### Confidence in Sources Supporting Assessments and Judgments

**Confidence in Assessments.** Our assessments and estimates are supported by information that varies in scope, quality and sourcing. Consequently, we ascribe *high, medium, or low* levels of confidence to our assessments, as follows:

- **High Confidence** generally indicates the judgments are based on high quality information, from multiple sources. High confidence in a judgment does not imply the assessment is a fact or a certainty; such judgments might be wrong. While additional reporting and information sources may change analytical judgments, such changes are most likely to be refinements and not substantial in nature.
- **Medium Confidence** generally means the information is credibly sourced and plausible but not of sufficient quality or corroborated sufficiently to warrant a higher level of confidence. Additional reporting or information sources have the potential to increase the confidence levels or substantively change analytical judgments.
- **Low Confidence** generally means the information's credibility or plausibility is uncertain, the information is too fragmented or poorly corroborated to make solid analytic inferences, or the reliability of the sources is questionable. Absent additional reporting or information sources, analytical judgments should be considered preliminary in nature.

## Appendix C: Title 21 U.S. Code (USC) Controlled Substances Act

### Definition of Controlled Substance Schedules

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Drugs and other substances that are considered controlled substances under the Controlled Substances Act (CSA) are divided into five schedules. An updated and complete list of the schedules is published annually in [Title 21 Code of Federal Regulations \(C.F.R.\)](#). Substances are placed in their respective schedules based on whether they have a currently accepted medical use in treatment in the United States, their relative abuse potential, and the likelihood of causing dependence when abused.

#### **Schedule I Controlled Substances**

Substances in this schedule have no currently accepted medical use in the United States, a lack of accepted safety for use under medical supervision, and a high potential for abuse.

Examples: heroin, lysergic acid diethylamide (LSD), marijuana (cannabis), peyote, methaqualone, and 3,4-methylenedioxymethamphetamine ("Ecstasy").

#### **Schedule II/IIN Controlled Substances (2/2N)**

Substances in this schedule have a high potential for abuse that may lead to severe psychological or physical dependence. Schedule II example narcotics: hydromorphone (Dilaudid®), methadone (Dolophine®), meperidine (Demerol®), oxycodone (OxyContin®, Percocet®), and fentanyl (Sublimaze®, Duragesic®). Other Schedule II narcotics: morphine, opium, codeine, and hydrocodone.

Schedule IIN example stimulants: amphetamine (Dexedrine®, Adderall®), methamphetamine (Desoxyn®), and methylphenidate (Ritalin®). Other Schedule II substances: amobarbital, glutethimide, and pentobarbital.

#### **Schedule III/IIIN Controlled Substances (3/3N)**

Substances in this schedule have a potential for abuse less than substances in Schedules I or II and abuse may lead to moderate or low physical dependence or high psychological dependence. Schedule III example narcotics: products containing not more than 90 milligrams of codeine per dosage unit (Tylenol with Codeine®), and buprenorphine (Suboxone®).

Schedule IIIN example non-narcotics: benzphetamine (Didrex®), phendimetrazine, ketamine, and anabolic steroids such as Depo®-Testosterone.

#### **Schedule IV Controlled Substances**

Substances in this schedule have a low potential for abuse relative to substances in Schedule III.

Examples: alprazolam (Xanax®), carisoprodol (Soma®), clonazepam (Klonopin®), clorazepate (Tranxene®), diazepam (Valium®), lorazepam (Ativan®), midazolam (Versed®), temazepam (Restoril®), and triazolam (Halcion®).

#### **Schedule V Controlled Substances**

Substances in this schedule have a low potential for abuse relative to substances listed in Schedule IV and consist primarily of preparations containing limited quantities of certain narcotics.

Examples: cough preparations containing not more than 200 milligrams of codeine per 100 milliliters or per 100 grams (Robitussin AC®), Phenergan with Codeine®, and ezogabine.

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Source: US Government Web site; Department of Justice, Drug Enforcement Administration, Diversion Control Division; "Controlled Substance Schedules"; <https://www.deadiversion.usdoj.gov/schedules/index.html> accessed on August 30, 2019.

## Appendix D: Penalties for Selected Federal Narcotics Offenses

DRUG	STATUTORY MINIMUM AMOUNTS 21 U.S.C. §§ 841(b) and 960(b)
<b>Cocaine</b>	500 grams - 5 years 5 kilos - 10 years
<b>Cocaine base</b>	28 grams - 5 years 280 grams - 10 years
<b>Heroin</b>	100 grams - 5 years 1,000 grams - 10 years
<b>Marijuana</b>	100 kilos - 5 years 1,000 kilos - 10 years
<b>Methamphetamine</b>	5 grams - 5 years (actual meth) 50 grams - 5 years (mixtures containing meth) 50 grams - 10 years (actual meth) 500 grams - 10 years (mixtures containing meth)
<b>Fentanyl</b>	40 grams - 5 years 400 grams - 10 years
<b>Fentanyl Analogues</b>	10 grams - 5 years 100 grams - 10 years

Prior qualifying convictions for drug trafficking and/or violent felonies generally raise mandatory minimums of 5 years to 10, 10 to 15, and in cases of two qualifying priors can increase the mandatory minimum to 25 years.

Any federal drug trafficking conviction (regardless of drug quantity) may classify a defendant as a career offender and result in a 10+ year sentence with 2 prior drug trafficking convictions.

## Appendix E: El Paso Intelligence Center and the National Seizure System

### Background information

Led by the DEA, the El Paso Intelligence Center (EPIC) is a national tactical intelligence center that focuses its efforts on supporting law enforcement efforts in the Western Hemisphere, with a significant emphasis on the Southwest border. Through its 24-hour watch function, EPIC provides immediate access to its databases to law enforcement agents, investigators, and analysts. This function is critical in the dissemination of relevant information in support of tactical and investigative activities, deconfliction, and officer safety. EPIC also provides significant, direct tactical intelligence support to state and local law enforcement agencies, especially in the areas of clandestine laboratory investigations and highway interdiction efforts.

EPIC's Gatekeeper Project is a comprehensive, multi-source assessment of trafficking organizations involved in and controlling movement of illegal contraband through "entry corridors" along the Southwest border. Gatekeeper analysis not only provides a better understanding of command and control, organizational structure and methods of operations, but also serves as a guide for policymakers to initiate enforcement operations and prioritize operations by U.S. anti-drug elements.

Implementation of License Plate Readers (LPR) along the Southwest border has provided a surveillance method that uses optical character recognition to read vehicle license plates. The LPR Initiative combines existing DEA and other law enforcement database capabilities with new technology to identify and interdict devices being utilized to transport bulk cash, drugs, weapons, as well as other illegal contraband.

The National Seizure System (NSS) consists of seizure information relating to drugs, weapons, currency, chemicals, and clandestine laboratory seizures reported to EPIC by federal, state and local law enforcement agencies from January 1, 2000, to the present. The NSS database contains approximately 400,000 records of seizure events.

In support of the Bulk Currency Program, EPIC established a depository for detailed bulk currency seizure information from both domestic and foreign law enforcement agencies. In addition, EPIC analyzes volumes of bulk currency seizure data and develops various reports which are routinely sent to federal law enforcement agencies throughout the country to provide investigative leads. EPIC also responds to requests for bulk currency seizure data from agents and officers in the field.

The ATF Southwest Border Unit, which also houses the EPIC Gun Desk, serves as the focal point for the collection, analysis, and dissemination of weapons related investigative leads derived from federal, state, local, and international law enforcement agencies.

Source: US Government Web site; Department of Justice; "Fact Sheet: Department of Justice Efforts to Combat Mexican Drug Cartels"; April 2, 2009; <http://www.justice.gov/opa/pr/fact-sheet-department-justice-efforts-combat-mexican-drug-cartels>; accessed on September 20, 2019.

## Appendix F: Illinois Drug Statutes

Explanation of Illinois drug statutes utilized in this study

**Illinois Methamphetamine Control and Community Protection Act (720 ILCS 646)** created possession, manufacture/delivery, and the trafficking of methamphetamine as a separate criminal offense from the Illinois Controlled Substance Act.

### **720 ILCS 646/1 Methamphetamine Control and Community Protection Act**

#### **646/55. Methamphetamine delivery.**

(a) Delivery or possession with intent to deliver methamphetamine or a substance containing methamphetamine.

(1) It is unlawful knowingly to engage in the delivery or possession with intent to deliver methamphetamine or a substance containing methamphetamine.

(2) A person who violates paragraph (1) of this subsection (a) is subject to the following penalties:

(A) A person who delivers or possesses with intent to deliver less than 5 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class 2 felony.

(B) A person who delivers or possesses with intent to deliver 5 or more grams but less than 15 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class 1 felony.

(C) A person who delivers or possesses with intent to deliver 15 or more grams but less than 100 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 6 years and not more than 30 years, and subject to a fine not to exceed \$100,000 or the street value of the methamphetamine, whichever is greater.

(D) A person who delivers or possesses with intent to deliver 100 or more grams but less than 400 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 9 years and not more than 40 years, and subject to a fine not to exceed \$200,000 or the street value of the methamphetamine, whichever is greater.

(E) A person who delivers or possesses with intent to deliver 400 or more grams but less than 900 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 12 years and not more than 50 years, and subject to a fine not to exceed \$300,000 or the street value of the methamphetamine, whichever is greater.

(F) A person who delivers or possesses with intent to deliver 900 or more grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 15 years and not more than 60 years, and subject to a fine not to exceed \$400,000 or the street value of the methamphetamine, whichever is greater.

(b) Aggravated delivery or possession with intent to deliver methamphetamine or a substance containing methamphetamine.

(1) It is unlawful to engage in the aggravated delivery or possession with intent to deliver methamphetamine or a substance containing methamphetamine. A person engages in the aggravated delivery or possession with intent to deliver methamphetamine or a substance containing methamphetamine when the person violates paragraph (1) of subsection (a) of this Section and:

(A) the person is at least 18 years of age and knowingly delivers or possesses with intent to deliver the methamphetamine or substance containing methamphetamine to a person under 18 years of age;

(B) the person is at least 18 years of age and knowingly uses, engages, employs, or causes another person to use, engage, or employ a person under 18 years of age to deliver the methamphetamine or substance containing methamphetamine;

(C) the person knowingly delivers or possesses with intent to deliver the methamphetamine or substance containing methamphetamine in any structure or vehicle protected by one or more firearms, explosive devices, booby traps, alarm systems, surveillance systems, guard dogs, or dangerous animals;

(D) the person knowingly delivers or possesses with intent to deliver the methamphetamine or substance containing methamphetamine in any school, on any real property comprising any school, or in any conveyance owned, leased, or contracted by a school to transport students to or from school or a school-related activity and at the time of the violation persons under the age of 18 are present, the offense is committed during school hours, or the offense is committed at times when persons under the age of 18 are reasonably expected to be present in the school, in the conveyance, or on the real property, such as when after-school activities are occurring;

(E) the person delivers or causes another person to deliver the methamphetamine or substance containing methamphetamine to a woman that the person knows to be pregnant; or

(F) (blank).

(2) A person who violates paragraph (1) of this subsection (b) is subject to the following penalties:

(A) A person who delivers or possesses with intent to deliver less than 5 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class 1 felony.

(B) A person who delivers or possesses with intent to deliver 5 or more grams but less than 15 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 6 years and not more than 30 years, and subject to a fine not to exceed \$100,000 or the street value of the methamphetamine, whichever is greater.

(C) A person who delivers or possesses with intent to deliver 15 or more grams but less than 100 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 8 years and not more than 40 years, and subject to a fine not to exceed \$200,000 or the street value of the methamphetamine, whichever is greater.

(D) A person who delivers or possesses with intent to deliver 100 or more grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 10 years and not more than 50 years, and subject to a fine not to exceed \$300,000 or the street value of the methamphetamine, whichever is greater.

#### **646/56. Methamphetamine trafficking.**

(a) Except for purposes as authorized by this Act, any person who knowingly brings, or causes to be brought, into this State methamphetamine, anhydrous ammonia, or a methamphetamine precursor for the purpose of manufacture or delivery of methamphetamine or with the intent to manufacture or deliver methamphetamine is guilty of methamphetamine trafficking.

(b) A person convicted of methamphetamine trafficking shall be sentenced to a term of imprisonment of not less than twice the minimum term and not more than twice the maximum term of imprisonment based upon the amount of methamphetamine brought or caused to be brought into this State, as provided in subsection

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(a) of Section 55 of this Act.

(c) A person convicted of methamphetamine trafficking based upon a methamphetamine precursor shall be sentenced to a term of imprisonment of not less than twice the minimum term and not more than twice the maximum term of imprisonment based upon the amount of methamphetamine precursor provided in subsection (a) or (b) of Section 20 of this Act brought or caused to be brought into this State.

(d) A person convicted of methamphetamine trafficking based upon anhydrous ammonia under paragraph (1) of subsection (a) of Section 25 of this Act shall be sentenced to a term of imprisonment of not less than twice the minimum term and not more than twice the maximum term of imprisonment provided in paragraph (1) of subsection (a) of Section 25 of this Act.

**646/60. Methamphetamine possession.**

(a) It is unlawful knowingly to possess methamphetamine or a substance containing methamphetamine.

(b) A person who violates subsection (a) is subject to the following penalties:

(1) A person who possesses less than 5 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class 3 felony.

(2) A person who possesses 5 or more grams but less than 15 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class 2 felony.

(3) A person who possesses 15 or more grams but less than 100 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class 1 felony.

(4) A person who possesses 100 or more grams but less than 400 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 6 years and not more than 30 years, and subject to a fine not to exceed \$100,000.

(5) A person who possesses 400 or more grams but less than 900 grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 8 years and not more than 40 years, and subject to a fine not to exceed \$200,000.

(6) A person who possesses 900 or more grams of methamphetamine or a substance containing methamphetamine is guilty of a Class X felony, subject to a term of imprisonment of not less than 10 years and not more than 50 years, and subject to a fine not to exceed \$300,000.

**646/65. Methamphetamine conspiracy.**

(a) It is unlawful to engage in a methamphetamine conspiracy. A person engages in a methamphetamine conspiracy when:

(1) the person intends to violate one or more provisions of this Act;

(2) the person agrees with one or more persons to violate one or more provisions of this Act; and

(3) the person or any party to the agreement commits an act in furtherance of the agreement.

(b) A person convicted of engaging in a methamphetamine conspiracy shall face the penalty for the offense that is the object of the conspiracy and may be held accountable for the cumulative weight of any methamphetamine, substance containing methamphetamine, methamphetamine precursor, or substance containing methamphetamine precursor attributable to the conspiracy for the duration of the conspiracy.

(c) It is not a defense to a methamphetamine conspiracy charge that the person or persons with whom the person charged is alleged to have conspired have not been prosecuted or convicted, have been acquitted, have been convicted of a different offense, are not amenable to justice, or lacked the capacity to commit the offense.

(d) When any person is convicted under this Section of engaging in a methamphetamine conspiracy, the following shall be subject to forfeiture to the State of Illinois: the receipts the person obtained in the conspiracy and any of the person's interests in, claims against, receipts from, or property or rights of any kind affording a source of influence over, the conspiracy. The circuit court may enter such injunctions, restraining orders, directions, or prohibitions, or take such other actions, including the acceptance of satisfactory performance bonds, in connection with any property, claim, receipt, right, or other interest subject to forfeiture under this Section, as it deems proper.

Source: Westlaw © 2019 Thomson Reuters Illinois Code Chapter 720 Criminal Offenses 720 ILCS 646/ Methamphetamine Control and Community Protection Act; accessed on August 19, 2019.



# Appendix G: Illinois Transportation Routes



## Appendix H: L-Meth

### Over-the-counter L-Meth

While the *d*-isomer is available by prescription, unknown to most individuals and physicians, the *l*-isomer is sold over-the-counter and is the active ingredient in Vicks® VaporInhaler (spelled levmetamfetamine by the manufacturer). Results of a 2008 study published in *BMC Clinical Pharmacology* found even at four times the recommended dosage, *l*-methamphetamine was well tolerated, produced minimal pharmacodynamic effects, and had a low potential for abuse.<sup>334</sup>

Even though *l*-meth has a low potential for abuse, when used as directed, it can be abused. An internet search revealed a number of forums where individuals discussed ways to successfully extract *l*-meth from nasal inhalers.

Vicks® removed their VaporInhaler from store shelves, but generic versions still exist and can be found at Wal-Mart, Walgreens, and CVS stores.



Source: FBI Milwaukee



Source: FBI Milwaukee



Source: FBI Milwaukee

## Appendix I: FDA Approved ADHD Medication

Prescribed amphetamines, methamphetamine, and amphetamine-like stimulants

Generic Name	Brand Name	Ingredients	Amphetamine (A), Methamphetamine (M), or Other Prescribed Stimulant (O)	Year of FDA Approval for ADHD Treatment
Methamphetamine	Desoxyn®	Methamphetamine hydrochloride	M	1943
Methylphenidate	Ritalin®	Methylphenidate hydrochloride	O	1955
Mixed amphetamine salts	Adderall®	Amphetamine aspartate, amphetamine sulfate, dextroamphetamine saccharate, dextroamphetamine sulfate	A	1960
Mixed amphetamine salts, extended release	Adderall XR®			2001
Dextroamphetamine	Dexedrine®	Dextroamphetamine sulfate	A	1975
Dextroamphetamine sustained-release capsules	Dexedrine® spansules			1976
Methylphenidate	Ritalin-SR®	Methylphenidate hydrochloride	O	1982
Methylphenidate extended release	Metadate ER®	Methylphenidate hydrochloride	O	1999
Methylphenidate extended-release capsules	Concerta®	Methylphenidate hydrochloride	O	2000
Methylphenidate	Focalin®	Dexmethylphenidate	O	2001
Methylphenidate extended release	Focalin XR®			2005
Methylphenidate long-acting capsules	Ritalin LA®	Methylphenidate hydrochloride	O	2002
Atomoxetine	Strattera®	Atomoxetine hydrochloride	O	2002
Long acting lisdexamfetamine dimesylate	Vyvanse®	Lisdexamfetamine	A	2007
Amphetamine sulfate	Evekeo®	Amphetamine sulfate	A	2012
Methylphenidate extended release	Quillivant XR®	Methylphenidate hydrochloride	O	2012
Amphetamine extended release orally disintegrating tablets	Adzenys XR-ODT®	Amphetamine	A	2016

Source: US Government Web site; Food and Drug Administration; “Drugs@FDA: FDA Approved Drug Products”; <http://www.accessdata.fda.gov/scripts/cder/drugsatfda>; accessed on May 21, 2016.

Created By: FBI Milwaukee

## Appendix J: Glossary

*Amphetamine-type stimulants* – A group of substances composed of synthetic stimulants that were placed under international control in the Convention on Psychotropic Substances of 1971 and are from the group of substances called amphetamines, which includes amphetamine, meth, methcathinone and the “ecstasy”-group substances (3,4-methylenedioxymethamphetamine (MDMA) and its analogues).

*Amphetamines* – A group of amphetamine-type stimulants that includes amphetamine and methamphetamine.

*Bioavailability* – A subcategory of absorption and is the fraction of an administered dose of unchanged drug that enters systemic circulation. By definition, when a drug administered intravenously has 100 percent bioavailability. When a drug is ingested via other routes (such as orally), its bioavailability generally decreases.

*Biological half-life* – The time it takes for a substance to lose half of its pharmacologic, physiologic, or radiologic activity. Typically, this refers to the body’s cleansing function of the kidneys and liver in addition to excretion functions.

*Clandestine laboratory* – Refers to an illicit operation consisting of a sufficient combination of apparatus and chemicals that either has been or could be used in the manufacture or synthesis of controlled substances.

*Conduct disorder* – When a child’s behavior is physically and verbally aggressive toward other people or property. A child with a conduct disorder acts out in a way that is not appropriate for his/her age. The behaviors are repetitive and often start at a young age and worsen over time. It is often accompanied with other mental health conditions, such as depression, ADHD, or learning disabilities.

*Diversion* – A medical and legal concept involving the transfer of any legally prescribed controlled substance from the individual for whom it was prescribed to another person for illicit use.

*Enantiomers* – Molecules that are mirror images of each other and are non-superimposable (not identical). This is similar to the left and right hand, which are the same except for being reversed along one axis.

*Ice* – The street name for crystallized methamphetamine. Also referred to as shabu, crystal, crystal meth, or d-meth, ice is the purest and most potent form of methamphetamine.

*Jail bed days* – The calculated number of each booking, determining the time spent in jail of a particular calendar year. For example, if an individual is booked at 12:00 am on 12/31/14 and released at 12:00am on 1/2/16, their stay accounts for 1 jail bed day in 2014, 365 jail bed days in 2015, and 1 jail bed day in 2016.

*Manualized therapy* – Treatment that is presented in a “manual” format and comes with a series of prescribed goals and techniques to be used during each session/phase of treatment.

*Opioids* – A generic term applied to alkaloids originating from opium poppy (opiates), their synthetic analogues (mainly prescription or pharmaceutical opioids), and compounds synthesized in the body.

*Potency* – The measure of drug dosage required to exert an effect on the body.

*Purity* – The amount of an illicit substance present in a sample compared to other substances in the sample such as adulterants, diluents, or solvents.

*Speed* – Street name for amphetamine sulphate. It also refers generally to other types of amphetamines.

*TEDS* – The Treatment Episode Data Set is a national census data system of annual admissions and discharges to substance abuse treatment facilities. Treatment programs receiving any public funds are required to provide the data on both publicly and privately funded clients. In some states, programs that do not receive public funds are required to provide data as well. TEDS collects this data from the states on all admissions and discharges aged 12 and older.

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