Iowa’s Evolving Drug Trends
& Public Safety Implications

September 2020
Iowa Office of Drug Control Policy
Emerging Drug Issues: Overview

**PRODUCT DIFFUSION**
- Delivery/Consumption Systems: Vaping (Nicotine, THC, Heroin, etc.), smoking, oral ingestion, IV
- Forms: THC & CBD oils, waxes, edibles; Smokable hemp; Synthetics; “Ice”
- Mixtures: Heroin + Fentanyl &/or Meth &/or Marijuana; Other cocktails
- Distribution: Mail & Shipping Services

**POTENCY ESCALATION**
- Alcohol: Concentrations (craft beers)
- Nicotine: Levels (vaping pods)
- THC: Concentrations (hash oils, waxes & edibles)
- Meth: Purities (nearly 100% “ice”)
- Fentanyl, et al.: Extremely lethal

**POLICY CHANGE**
- LAWS: Medical & legal marijuana (THC &/or CBD); Hemp; Psychedelic Mushrooms (psilocybin) & Ecstasy (MDMA); Opioids; Smoking & Vaping...
SEVERAL POTENTIALLY ADDICTIVE SUBSTANCES IN IOWA ARE MUCH STRONGER TODAY VERSUS A FEW YEARS AGO. MANY OF THESE PRODUCTS ARE NOW AVAILABLE IN DIFFERENT FORMS AND INCREASINGLY HIGHER POTENCIES.

**Potency on the Rise**

**Medicines**
- Carfentanyl: 10,000x
- Fentanyl: 100x
- Heroin: 2x
- Morphine: 1x

**Illicit Synthetic Opioid Potency**
- Often mixed with heroin, illicit synthetic opioids—in tiny amounts—can be much more lethal vs. heroin.

**Iowa Opioid Related Overdose Deaths**
- Heroin, Rx Methadone, Other Opioids, and Other Synthetic Narcotics

**Iowa Meth Purity**
- Crime lab fiscal year averages

**Iowa Binge Drinking**
- Percentages of adult Iowans who report heavy and binge drinking have remained steadily higher than national averages.

**Iowa Alcohol-Related Mortality**
- Rates have risen steadily in recent years.

**Marijuana**
- Colorado’s average THC levels
- National average THC levels
- 12.7%
- 68.6%
- 19.6%

**Marijuana’s Increasing THC Potency**
- Seized in U.S.
- 1972: 1%
- 1995: 3.75%
- 2016: 12.7%

**Nicotine Salts**
- Along with nicotine concentration, the use of nicotine salts increases the efficiency of e-cigarette nicotine delivery. Nicotine salts allow for high levels of nicotine to be delivered more easily and with less irritation.
Rates of U.S. Illicit Drug Use, by States
Map: 12+ Current (Past Month) Use

Iowa ranks:
41st in overall illicit drug use (9.39% vs. 11.43% US),
47th in marijuana use (7.04% vs. 9.83% US),
37th in heroin use (yearly) (0.26% vs. 0.31% US),
16th in pain reliever misuse (yearly) (4.13% vs. 3.85% US),
48th in the rate of drug OD deaths (9.6 vs. 20.7 US per 100,000),
17th in tobacco use (25.51% vs. 21.96% US),
10th in binge alcohol drinking (28.53% vs. 24.49% US),
19th in meth use (yearly) (0.86% vs. 0.64% US),
(8th highest rate of meth treatment).

National Survey on Drug Use & Health, 2017-2018; CDC, 2018; & Treatment Episode Data Set, 2017

National Survey on Drug Use & Health, 2017/2018
Iowa has one of the lowest overall rates of drug OD deaths (48th in 2018) in the U.S., but one of the highest rates of increase of drug OD deaths (4th in 2019).

CDC, 2020

Iowa opioid OD deaths through June 2020 are on pace to exceed 2019’s total by 126%.

Provisional IDPH, 2020

Legend for Percent Change in Drug Overdose Deaths Between 12-Month Ending Periods

CDC, 2020
Source: U.S. Centers for Disease Control (CDC), 2020

In 2019, U.S. drug OD deaths reversed 2018’s historic decline & increased 4.6% to 70,980, claiming over 194 lives per day.

37 states report a rise in 2019 drug OD deaths vs. 2018 (Iowa +26%).

From 2012-2018, U.S. psychostimulant (e.g., meth) involved OD deaths increased nearly 5-fold.
In 2019, Iowa psychostimulant/meth OD deaths surpassed rising opioid deaths, 157 vs. 156.
(2019 Iowa alcohol-involved deaths increased to 662.)
Iowa Youth Substance Abuse
6th, 8th and 11th Grade Users, Last 30-Days

Iowa Youth Survey, 2018
Iowans’ Most Common Drugs of Abuse
Primary Substance Cited by Iowans in Treatment

- Alcohol: 42.7%
- Marijuana: 25.4%
- Meth: 22.8%
- Other: 4.9%
- Heroin: 2.7%
- Cocaine: 1.5%
Drugged driving deaths up in Iowa after nearby states legalize marijuana

Drug-related crashes up in Iowa, while the number of alcohol-related crashes fall

Drugged Driving Deaths Spike With Spread of Legal Marijuana, Opioid Abuse

'Drugged driving' surpasses drunken driving among drivers killed in crashes, report finds

Drugged driving on the rise as marijuana, opioid use puts motorists at risk, study finds

Why It’s Difficult to Develop a Roadside Test for Marijuana

Growing number of fatal car crashes linked to drug use

Police in Colorado and California are using tests to see if drivers are high on marijuana. But more exact testing is needed as more states legalize the drug.
U.S. drug-impaired fatal crashes outnumber alcohol-impaired fatalities (44% vs. 38%). In 2016, marijuana was the most-cited drug detected in fatal crashes: 41.1% in U.S. & 51% in Iowa.

After marijuana legalization, 26% of Canadians aged 18-34 admit to recently driving or riding with a driver under the influence of cannabis.

The number of U.S. drivers under the influence of marijuana rose 47% from 2014-2018, to 12 million.

Colorado, Washington & Oregon experienced a 5.2% higher police-reported crash rate overall than would have been expected had they not legalized marijuana.
Iowa Drug-Related Traffic Fatalities
2018 by Drug Type (not including alcohol-only)

Drugged driving is more complicated than drunk driving.

<table>
<thead>
<tr>
<th>DRUGGED DRIVING</th>
<th>DRUNK DRIVING</th>
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<tbody>
<tr>
<td>Number:</td>
<td>Hundreds of drugs</td>
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<td>Use by Drivers, Presence in Crashes:</td>
<td>Limited Data</td>
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<td>Use by Drivers:</td>
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<td>Impairment:</td>
<td>Varies by type</td>
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<tr>
<td>Crash Risk:</td>
<td>Varies by type</td>
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<tr>
<td>Beliefs &amp; Attitudes:</td>
<td>No strong attitudes – public indifferent</td>
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</table>

Some cases involve multiple substances

Iowa Department of Transportation 2019
Iowa *Driving-Related Blood Screens
DCI Lab Positive Results on Cases from Law Enforcement

2019 cases screened (*most driving/OWI related) up 51% vs. 2018.

2019 Iowa Drug Recognition Expert Roadside Evaluations:
53.35% Cannabis, 35.5% Stimulants, 13.75% Depressants,
7.9% Narcotics, 1.49% Other.
(not including alcohol, some tested + for more than 1 drug)
Iowa DPS/GTSB, 2020

Blood Positive Screens by Drug Category

(2020 YTD through June)
Iowa “Drug-Related” Prison Admissions

Primary Drug Involved

- **All Drugs** (+31% vs. 2009)
- **Meth** (+103% vs. 2009)
- **Marijuana** (-19% vs. 2009)
- **Cocaine/Crack**
- **Rx Heroin**
- **Other**

58% of state prisoners & 63% of jail inmates in the U.S. abused drugs vs. 5% of the general population.

USDOJ, Bureau of Justice Statistics, 2017
Iowa Drug-Related Child Abuse
Confirmed/Founded Cases: Presence of Illegal Drugs in Child’s System

(*Caution advised interpreting trends due to protocol changes in 2014 & 2017)
Iowa Drug & Alcohol-Related ED Visits
Use as Causal or Contributing Factor

(*Reporting methods changed in 2015, resulting in a new baseline in 2016.)

Iowa Department of Public Health, 2019
The workforce drug positivity rate hit a 16-year high in 2019. The Midwest experienced increases in positivity for cocaine, meth & marijuana.

Meth:
Iowa 1.6% vs. US 1.1%
Cocaine:
Iowa 0.16% vs. US 0.26%
Marijuana:
Iowa 1.6% vs. US 2.5%
Opiates:
Iowa 0.2% vs. US 0.22%
Overall:
Iowa: 3.9% vs. US 4.5%

2020 Quest Diagnostics
Substance-Involved Deaths in Iowa
Involving Alcohol, Opioids and Psychostimulants (e.g., Meth)

US deaths from alcohol, drugs & suicide in 2017 hit the highest level on record, 46.6 deaths per 100,000 people.
CDC, 2018

“All drug” OD deaths on pace to reach 410 in 2020.
*IDPH, 2020

*2020 Projections Based on Year-To-Date Data Through June
Iowa Department of Public Health, 2020
Precursors to Substance Use Disorders (SUDs)

Most SUDs are Rooted in Behavior that Begins in Teens

DuPont, et al., 2018
Alcohol & Tobacco/Nicotine
Current Alcohol Use
Last 30-Days

National Survey on Drug Use & Health, 2017/2018
Current Binge Drinking
Last 30-Days

U.S.
Iowa

National Survey on Drug Use & Health, 2017/2018
Current Tobacco Product Use
Last 30-Days

National Survey on Drug Use & Health, 2017/2018
Iowa Youth Cigarette vs. E-Cigarette Use
Last 30-Days

- **25.5%** of US 12th graders report currently vaping *nicotine* in 2019 vs. 11% in 2017.
- **14%** of US 12th graders report currently vaping *marijuana* in 2019 vs. 4.9% in 2017.

Monitoring the Future Survey, 2019

- **Iowa’s Poison Control Center recorded a 139% increase in E-cigarette “exposure” calls in 2019** (91 vs. 38 in 2018).

IPCC, 2020

<table>
<thead>
<tr>
<th>Grade</th>
<th>Cig Use 2016</th>
<th>E-Cig Use 2019</th>
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</thead>
<tbody>
<tr>
<td>6th</td>
<td>1%</td>
<td>2%</td>
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<tr>
<td>8th</td>
<td>3% in 2016</td>
<td>8%</td>
</tr>
<tr>
<td>11th</td>
<td>9% in 2016</td>
<td>22%</td>
</tr>
</tbody>
</table>

Iowa Youth Survey, et al., 2018
Iowa Youth Cigarette vs. E-Cigarette Use
11th Graders “Tobacco” Use in Last 30-Days

Iowa Youth Survey, 2018
Electronic Smoking by Youth
Nicotine & THC

Source of vaping products containing THC among those in the U.S. contracting vaping-related lung injuries in 2019:
- 78%: informal (family, friends, dealers & online),
- 16%: commercial (recreational &/or medical marijuana dispensaries),
- 6%: both informal & commercial sources.

CDC, 2020
Teen Vaping of Nicotine & Marijuana Surges

NICOTINE VAPING
Past month use

25.5%
19.9%
9.6%

2017 2018 2019
8th graders 10th graders 12th graders

THC VAPING
Past month use

14%
12.6%
3.9%

2017 2018 2019
8th graders 10th graders 12th graders

National Institute on Drug Abuse/Monitoring the Future, 2019
Why do Teens Vape?

**TEENS REPORT REASONS FOR VAPING**

- **To experiment – to see what it’s like**
- **Because it tastes good**
- **To have a good time with my friends**
- **To relax or relieve tension* (increased by more than 1/3)**
- **To feel good or get high**
- **Because of boredom – nothing else to do**
- **Because it looks cool**
- **Because I’m “hooked” – I have to have it* (more than doubled)**
- **To help me quit regular cigarettes**
- **Because regular cigarette use is not permitted**

*Up significantly from 2018

National Institute on Drug Abuse/Monitoring the Future, 2019
Marijuana
Potential to Heal or Hurt?

“Medical”
“Extracts”  “CBD & THC”  “Concentrates”
“Recreational”
Marijuana or Cannabis Plant:
Dried leaves, flowers, stems & seeds from the plant, Cannabis sativa.

Concentrates:
High THC marijuana products (e.g., hash oils, waxes & edibles).

Cannabinoids:
Chemical compounds found in marijuana. Scientists say marijuana consists of more than 100 cannabinoids (& over 500 chemicals in total).

Cannabinoid Receptors:
Brain neuron molecules to which cannabinoids attach, disrupting mental & physical functions (memory, coordination, concentration, etc.).

Cannabidiol (CBD):
A non-psychoactive marijuana compound that may have medical value.

Delta-9-tetrahyrdocannabinol (THC):
Marijuana’s main psychoactive compound.

Tetrahydrocannabinolic Acid (THCA):
A cannabis compound that when heated converts to higher levels of THC.
State Marijuana Laws in U.S.

33* Medical (unlimited THC)
14 CBD Only (e.g., Iowa)
11* Personal Adult Use
3 All Illegal
(“Plus DC”)

Illegal Under Federal Law
(Except for Hemp)

14 of 15 states with highest use rates have legalized or decriminalized marijuana.
NCSL/NSDUH, 2019

DEA, 2020
Health Group Positions on Marijuana

• Major public health organizations do not support smoked marijuana.

• The American Academy of Pediatrics “opposes medical marijuana outside the regulatory process of the US FDA. Notwithstanding this opposition to use, the AAP recognizes that marijuana may currently be an option for cannabinoid administration for children with life-limiting or severely debilitating conditions and for whom current therapies are inadequate.”

Marijuana impairs/worsens respiratory systems, heart rate, coordination, judgment, memory, problem-solving & mood. It contributes to auto crashes & can cause severe anxiety & psychosis. National Institute of Drug Abuse, 2018

Between 9 & 30% of those who use may develop some degree of marijuana use disorder. People who begin using before age 18 are 4 to 7 times more likely than adults to develop a disorder. National Institute of Drug Abuse, 2018
Iowans’ *Current* Marijuana Use
Most Iowans are NOT *current* marijuana users (past 30 days)

Iowa Youth 12-17 years old currently using marijuana.

- **Use** 5.36%
- **11th Lowest in U.S.**
- **Do Not Currently Use** 94.64%

Iowans 12 & older currently using marijuana.

- **Use** 7.04%
- **4th Lowest in U.S.**
- **Do Not Currently Use** 92.96%

(Marijuana is primary drug for 77% of Iowa juveniles in treatment.)
Iowa Department of Public Health, 2018

National Survey on Drug Use & Health, 2017/2018
Iowa Marijuana Prison Admissions in 2019
In which Marijuana Violations were the Most Serious Offense

0 for 1st & 2nd Possession
64 for Trafficking & 13 for 3rd+ Possession

3,693 Total Prison Admissions

In 6 Midwest HIDTA states, including Iowa, at least one firearm was found alongside marijuana seized by law enforcement in 7% of cases during the first 8 months of 2020 (vs. 5% in 2019 & 3% in 2018).
Midwest HIDTA, 2020

Iowa ranks 5th in the U.S. for largest racial disparities in arrests for marijuana possession, based on an analysis of 2018 Uniform Crime Reports.
ACLU, 2020
Iowa Youth Attitudes about Marijuana
Lower Perceived Risk Coincides with Higher U.S. Rates of Use

Nearly 1 in 4 Iowa 11th graders perceive no risk smoking marijuana once or more a week, a view shared by 18% of Iowa 6th graders.

U.S. high school seniors are now ~3x as likely to report past month marijuana use (22.2%) vs. cigarettes (7.6%).
Monitoring the Future Survey, 2018

33% of U.S. teens think smoking marijuana & driving is legal.
Liberty Mutual Insurance & SADD, 2017
Iowa Marijuana Use
Current Use (Past Month) by Iowans 12+

National Survey on Drug Use & Health, 2017/2018
High rates of co-occurring substance use, especially alcohol & marijuana use, among students currently misusing Rx opioids, highlights the importance of prevention efforts that focus on general substance use risk & protective factors.

CDC Youth Risk Behavior Surveillance System (YRBS), 2020
Marijuana’s Increasing Potency
Average THC & CBD Levels in U.S. Marijuana Samples

THCA is a cannabis precursor that when heated converts to higher levels of THC.
Iowa DCI Lab, 2019

A newly discovered cannabis compound (THCP) shows in a lab to potentially be 30X more potent than THC.
CNN, January 2020

2017 Colorado THC ~ 19.6%-“flower,” 68.6%-“concentrates”
Rocky Mountain HIDTA, 2018

2016 Washington THC ~ 21.6%-“flower,” 71.7%-“concentrates”
Northwest HIDTA, 2017

THC Concentrate
THC Traditional
CBD Concentrate
CBD Traditional

University of Mississippi Marijuana Project, 2020
Concentrates
Less is More…THC

“Green Crack” wax

Hash Oil Capsules

Butane Hash Oil (BHO)

“Budder”

“Diamonds”

“Ear Wax”

“Shatter”

Des Moines area man arrested in Nebraska with hundreds of vape cartridges filled with THC oil
Marijuana from Colorado to Other States

2017 State Destinations for Colorado Marijuana (WA to IA too)

Iowa was the 3rd most frequent state destination for Colorado marijuana seized in highway interdictions. 2018 El Paso Intelligence Center

Rocky Mountain High Intensity Drug Trafficking Area, 2018

Of all Iowa marijuana seizures, ~3.4% are suspected high-THC concentrates (wax, oil, etc.) & over 2,000 were edible items (food, drink, etc.).

2018 Iowa Division of Criminal Investigation Lab
“Medical” Marijuana Derivatives & Extracts

**Marinol, Syndros (Dronabinol) & Cesamet (Nabilone):**
FDA-approved synthetic cannabinoids—containing THC & CBD—legally available as prescription pills to treat cancer chemotherapy nausea & appetite loss.

**Sativex (mouth spray):**
A product with 2 cannabinoids extracted from the cannabis plant failed FDA-authorized tests for cancer pain, but continues undergoing clinical study for spasticity & other treatments.

**Epidiolex (oral liquid):**
Contains the non-psychoactive cannabis extract Cannabidiol (CBD). Recently approved by the FDA & reclassified as a Schedule V controlled substance by the DEA after clinical trials, this Rx product is now available in pharmacies.

**Iowa “Medical Cannabidiol” (mCBD):**
State law authorizes products regulated by the Iowa Department of Public Health to be used by qualified patients for eligible conditions.
Other CBD (Hemp-Based, OTC, Non-Medical)

CBD Goes Mainstream
CR surveyed more than one thousand CBD users nationwide to find out whether it’s changing their lives—and how

Artisanal CBD May Provide Less Seizure Control Than Pharma CBD

Confusion with THC makes CBD a potential gateway to marijuana addiction

The FDA is working to answer questions about the science, safety, and quality of products containing cannabis and cannabis-derived compounds, particularly CBD.
Advisories on Other CBD Products

- “The FDA has approved only one CBD product, a prescription drug product to treat two rare, severe forms of epilepsy.
- It is currently illegal to market CBD by adding it to a food or labeling it as a dietary supplement.
- The FDA has seen only limited data about CBD safety and these data point to real risks that need to be considered before taking CBD for any reason.
- Some CBD products are being marketed with unproven medical claims and are of unknown quality.”

“Now that the Iowa Hemp Act is fully effective, CBD products containing no more than 0.3% THC are no longer controlled substances under Iowa law. This does not mean that all CBD products are now legal…Section 7 of the Act clarifies that hemp derived CBD can only be added to products intended for human consumption to the extent consistent with applicable federal law.”

*A 2020 FDA review found less than half of CBD products contained the amount of CBD listed on the label, plus other labeling inaccuracies.
**A 2017 Penn. Univ. School of Medicine study found ~70% of CBD products sold online are mislabeled, posing potential harm to consumers.
57 Meds May Not Function as Intended When Used with Medical Cannabinoids, CBD Oil or Marijuana

List of Narrow Therapeutic Index (NTI) medications to be closely monitored when coadministered with cannabinoids, either therapeutically or recreationally.

<table>
<thead>
<tr>
<th>Narrow Therapeutic Index (NTI) medication</th>
<th>Enzyme/metabolism</th>
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<tbody>
<tr>
<td>acenocoumarol (VKA)</td>
<td>CYP1A2, CYP2C9, CYP2C19, CYP3A4</td>
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<tr>
<td>aminophylline</td>
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<td>amphotericin B</td>
<td>Protein binding</td>
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<td>ethinyl estradiol (oral contraceptives)</td>
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<tr>
<td>warfarin (VKA)</td>
<td>CYP1A2, CYP1B1, CYP3A4</td>
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Penn State University, 2020
Medical Marijuana Opioid Misuse

Despite cautions against corollary conclusions from a study that found states with medical marijuana laws from 1999-2010 experienced a slower increase in opioid OD deaths (-21%), medical marijuana was touted as an opioid epidemic solution.

A recent study, using the same methods to extend the original analysis through 2017 & include more medical marijuana states, finds an increase in opioid OD deaths (+23%).

According to the lead author, “We don’t think cannabis was saving lives…10 years ago, & we don’t think it’s killing people now.” Researchers urge caution & more study.

NIDA/Proceedings of the National Academy of Sciences, June 2019
Recent Marijuana Studies
With Health or Public Safety Implications

The number of Americans who admit driving under the influence of marijuana increased 47% from 2014 to 2018.  
CDC/SAMHSA, 2019

14% of U.S. 12th graders report vaping marijuana in the last month during 2019, up from 4.9% in 2017.  
Monitoring the Future Survey, 2019

The odds of psychotic disorder among daily cannabis users were 3 times higher than for never users, whereas odds among high-potency cannabis users were 5 times higher than never users.  
The Lancet Psychiatry/Di Forti, et al., 2019

Young adults who are heavy marijuana users are more likely to seek medical marijuana cards. 19% of those studied received a card within a year, even though physical & mental health problems were not significant predictors.  
Journal of Studies on Alcohol & Drugs/RAND, 2019

NIDA/Proceedings of the National Academy of Sciences, June 2019
Meth
Cheap and powerful 'meth 2.0' is ravaging communities and slowly killing its victims

Christine Vestal  Pew/Stateline
Published 10:36 a.m. ET Nov. 2, 2019  |  Updated 2:02 p.m. ET Nov. 4, 2019

Crystal methamphetamine
U.S. Psychostimulant Trends

U.S. Psychostimulant OD Deaths
CDC, 2020

U.S. Law Enforcement Meth Seizures
NFLIS, 2020

CDC/NFLIS, 2020
Iowa Meth Labs

![Graph showing the number of meth labs in Iowa from 1994 to 2018. The peak was in 2004 with 1,500 labs. The number of labs decreased to 11 in 2019. Gold bars indicate "One Pot" labs.]

Iowa Department of Public Safety, 2020
Iowa Meth Purity
Crime Lab Fiscal Year Averages

Iowa Department of Public Safety, 2019
Iowa Meth Treatment Admissions

Iowa Department of Public Health, 2019
Meth Treatment in Iowa: Context

12+ SUD Treatment Admissions for “Amphetamines” (e.g., Meth)

The number of Iowa amphetamine (e.g., meth) treatment admissions ranks 4th in the U.S. 2019 TEDS.

Iowa has the 19th highest rate of meth use in the U.S. 2017-2018 NSDUH.

U.S. 10.3%
Iowa 30.3%

Treatment Episode Data System, 2019
Iowa Psychostimulant-Related Deaths
As a Contributing Factor

Iowa Department of Public Health, 2020
Alert: Meth Conversion Labs

Drug traffickers have been identified as utilizing meth in solution as a concealment method to transport the drug from the Southwest Border to market areas around the U.S. Meth in solution is not an end-user product; the solution must be converted into usable form, crystal meth, following transport. **Meth conversion labs** typically utilize highly flammable materials and a heat source to convert the meth in solution into crystal meth, presenting a significant risk to law enforcement and other members of the community who may come into contact with these labs.
Opioids

- Rx
- Heroin
- Illicit Synthetics (fentanyl analogs, etc.)
Opioid Misuse: Top Line Trends in U.S.

The U.S. has <5% of the world’s population, but consumes ~75% of its Rx, including 81% of its oxycodone & >99% of its hydrocodone.  

UN 2010

About 3 out of 4 new heroin users report previous Rx opioid misuse.  

CDC 2018

In 2019, U.S. drug OD deaths—fueled largely by opioids—reversed 2018’s decline & increased 4.6% to 70,980, claiming over 194 lives per day.  

Opioid-involved deaths in Iowa increased to 156 in 2019, up from 137 in 2018.  

CDC & IDPH 2020
Sources of Opioids being Misused in U.S. Among those 12+ Misusing Rx Pain Relievers in the Past Year

- **Friends or Family**
  - Given by, bought from, or took from
  - 53.7%

- **Rx or Theft**
  - From health care provider
    - 36.4%
  - (34% Rx from 1 source)

- **Drug Dealer or Stranger**
  - 4.9%

- **Other**
  - 5.0%

**63.4% of Rx opioid misusers report doing so to relieve pain.**

2017 American Journal of Public Health

**Heroin initiation was 19x higher among those with prior non-medical pain reliever use.**

2002-2012 National Institute on Drug Abuse

National Survey on Drug Use & Health, 2015
Top 10 Iowa Rx Controlled Substances
CII-ClIvs per Iowa’s Prescription Monitoring Program (PMP) in 2019

- Hydrocodone-19% (opioid)
- Tramadol-16% (opioid)
- Alprazolam-11% (anti-anxiety)
- Oxycodone-8% (opioid)
- Clonazepam-8% (anti-anxiety)
- Lorazepam-8% (anti-anxiety)
- Methylphenidate-6% (stimulant)
- Amphetamine-8% (stimulant)
- Zolpidem-5% (sedative)
- Dextroamphetamine-11% (stimulant)

In 2019 Iowa C2-4 Rxs & doses dropped to lowest levels since 2013 (down 3.5% & 8.6% respectively).

Iowa Pharmacy Board/PMP, 2020
74% of farmers say they’ve been directly impacted by opioid misuse & 77% say it’s easy to get a large amount of Rx opioids in their community w/o a prescription.

American Farm Bureau & National Farmers Union, 2017
Iowa Opioid Treatment Admissions
Heroin + Non-Heroin Opiates/Synthetics Primary at Admission

Iowa 12+ Pain Reliever Misuse
(4.19%) 31st in U.S.
National Survey on Drug Use & Health, 2016-2017

Top 2019 “Exposure” Calls:
#1 Analgesics (Pain Meds = 14%),
#2 Antidepressants, &
#3 Sedatives.
Iowa Poison Control Center, 2019

U.S. Treatment Episode Data System, 2019
Illicit Synthetic Opioids: Less is More

Often mixed with heroin, illicit synthetic opioids (e.g., fentanyl analogs)—in tiny amounts—can be much more lethal vs. heroin.

Drug Enforcement Administration, 2017
Heroin, Fentanyl & Illicit Synthetic Opioids
Law Enforcement Seizure Cases per Iowa’s Crime Lab

Iowa’s crime lab reports counterfeit oxycodone tablets with carfentanil & cases of illicit opioids mixed with cocaine, meth, ketamine, caffeine, etc.

*2020 projection based on YTD pace through July.

Iowa Department of Public Safety, 2020
Iowans with Chronic HCV (Hepatitis C)
Confirmed Diagnoses possibly due to IV Drug Use, etc.

All Iowans: 220% increase.
Iowans Under Age 40: 1,042% increase.
(2018 vs. 2000)

Iowa Department of Public Health, 2019
Kratom: A Concern?

What is kratom?
A tropical tree native to Southeast Asia. Consumption of leaves produces both stimulant effects (low doses) & sedative effects (high doses), & can lead to psychological & physiological dependence.

How is it used?
Kratom leaves typically are crushed & smoked, brewed into tea, or placed into gel capsules or tablets. Leaves may be dried or powdered, & chewed.

What are the effects?
Low doses: Stimulant effects such as increased alertness, physical energy & talkativeness.
High doses: Sedative effects that can lead to addiction. Several cases of psychosis have been reported, including delusion, confusion & hallucinations. Effects on the body include nausea, itching, sweating, dry mouth, constipation, increased urination, tachycardia, vomiting, drowsiness, loss of appetite, etc.
*At least 1 kratom-related Iowa OD death has been reported, in 2017.

Legal status?
Currently unregulated federally, though some states have imposed regulations or prohibitions on kratom possession & use. The FDA & DEA have listed kratom as a “drug & chemical of concern.”

91 Americans died of ODs related to the herbal drug “kratom” during an 18-month period ending December 2017.
CDC/FDA, 2019
Rates of Opioid Treatment & Prescriptions
By Iowa County in 2016

State of Iowa, Opioid Admissions by County 2014 - 2016

Iowa Prescription Monitoring Program (PMP) data for opioid prescriptions per 100 people in 2016

Iowa Department of Public Health, Bureau of Substance Abuse

Iowa Department of Public Health, 2017
Iowa Opioid OD Deaths

Primary Cause of Deaths vs. Contributing Factor (Related) Deaths

Iowa drug OD death rate: 9.6 per 100,000, 48th in U.S.

CDC, 2018

13 OD deaths were caused by heroin mixed with other drugs (meth, cocaine, fentanyl).

Iowa State Medical Examiner, 2017

*2020 projection based on preliminary data through April.

Iowa Department of Public Health, 2020
Iowa Opioid OD-Related Naloxone Use

# Annual Cases of Administration by Iowa EMS Providers

Effective July 1, 2018: Iowa hospitals are required to report all naloxone administrations.

(Reporting process changed in 2015.)

Iowa Department of Public Health, Emergency & Trauma Services, 2019
Iowa Medication Assisted Treatment
Provider Locations

107 Iowa MAT Providers in 2018 vs. 31 in 2015

Iowa Department of Public Health, 2018
Iowa “Take-Back” Initiative
Amount (in Pounds) of Rx Drugs Collected

Total collected in first 18 one-day events:
Iowa = 72+ tons (144,225 pounds)
US = 6,300+ tons (12.7 million pounds)

Next National Prescription Drug Take Back Day:
October 24, 2020!

*April 2020 Event Canceled Due to Pandemic

DEA, 2020
Iowa Permanent Rx “Take Back” Sites
Controlled Prescription Drug Disposal Locations

392 Sites Statewide (273 Pharmacies & 119 Law Enforcement Centers) vs. 47 in January 2016
Iowa Drug-Related Legislation

2020: Enacted
• Legal Smoking/Vaping Age Raised from 18 to 21 (SF 2268)
• New Synthetic Drugs Banned & Authority for Assigning Medical Properties to Marijuana Shifted from Pharmacy Board to U.S. FDA (SF 2119)
• Prescription Monitoring Program Enhanced by Adding Schedule V Controlled Substances & Requiring Veterinarian Reports (SF 2120)
• Alcohol Poisoning Calls Made Eligible for Good Samaritan Immunity (HF 684)
• Consumable Hemp (e.g., CBD) Legalized, but No Inhaling, subject to Regulatory Rules (HF 2581)
• Medical Cannabidiol Program Revised to Change THC Content Limit & Patient Access/Use (HF 2589)
• Cocktails To Go Legalized, subject to Regulatory Rules (HF 2540)

Recent Bills Introduced, but Did Not Pass (2019-2020)
• Medical CBD/Marijuana Expansion (HF 732-Vetoed)
• Needle Exchange Pilot Program (SF 500 / HF 580)
• Marijuana Possession Reduced Penalty for Small Amounts (SF 378)
• Legal Marijuana (SF 469), Psychedelic Mushrooms & MDMA (HF 248/249)
Do Drug Control Laws Work?

Percentage of people worldwide who used drugs in the past year (ages 15+)

- Alcohol: 38%
- Tobacco: 21%
- Illegal drugs: 5%

New Paradigm: Reject False Choices?
Health Care vs. Criminal Justice
Addiction Treatment vs. Drug Enforcement
Harm Reduction vs. Drug-Free Lifestyle

WHO & UNODC, 2014/2012/2013
Youth Substance Use 40+ Year Trends
Current Use (past 30 days) Among U.S. 12th Graders

- **Alcohol**: 68.2% - 29.3%
- **Cigarettes**: 36.7% - 5.7%
- **Marijuana**: 27.1% - 22.3%
- **Marijuana Vaping**: 4.9% - 14.0%
- **Any Vaping**: 16.6% - 30.9%

Monitoring the Future, 1975-2019
Iowa Drug Control Strategy

2020 Goals

• Reduce drug-related deaths involving Iowans.

• Reduce drug-related injuries involving Iowans, including those involving electronic smoking/vaping.

• Reduce the number of Iowa youth who are current users of alcohol, tobacco & other drugs.

• Increase the number of Iowans who find employment during or after substance use disorder (SUD) treatment.

• Reduce the number of Iowans incarcerated for drug-related offenses.
**COVID-19 Iowa Effect or Coincidence?**

- Surge in alcoholic beverage sales & legal “cocktails to go.”
- Reports of excessive drinking, withdrawal & treatment admissions.
- Reports of substance use disorder (SUD) rise, as positive non-pharmaceutical fentanyl & meth drug test results increase.
- ~80% of SUD treatment shifts from in-person to telehealth.
- Unused medicines accumulate, due to limited Take Backs. One option: contactless drive-thru drop off. Next Take Back Day is October 24.
- Reports of suicides/attempts with OTC medicines are up.
- Opioid overdose deaths rise (~155 first half of ‘20 vs. 137 all of ‘19 or +126%).
- Fewer drug & alcohol fatal traffic crashes (-23% 1st half of ‘20 vs. ‘19).
- Alternatives to arrest & incarceration (e.g., diversion, tele-supervision).
- “Smoke-free” policies in some casinos, upon reopening.
- Some drug trafficking pipelines slow, resulting in tighter supplies.
- Federal resources to prevent, prepare for & respond to COVID-19.
STAY SAFE!

Iowa Governor’s Office of Drug Control Policy
Visit Our Website: https://odcp.iowa.gov

Get Help 24/7: Call 855-581-8111, Text 855-895-8398 or go to YourLifelowa.org