DRUG TRENDS IN IOWA

PROGRESS, PERIL & PERSEVERANCE

Governor’s Office of Drug Control Policy
March 2016
Trending in Iowa: Drug Use at a Glance

• 2nd lowest rate of illicit drug use & 13th lowest rate of Rx abuse in US.  
  (NSDUH, 2013-2014)

• Youth substance abuse declined steadily over last decade.  
  (IYS, 2014)

• Meth labs down ~90% vs. peak of 12 years ago (135 vs. 1,500).  
  (IDPS, 2015)

• Meth use treatment rate 11th highest in US.  
  (TEDS, 2012)

• Underage & binge drinking exceed national average.  
  (NSDUH, 2013-2014)

• OD deaths from Rx drugs (heroin too) near all time highs. Medicine misuse/abuse fastest growing form of substance abuse.  
  (ODCP, 2015)

• Marijuana “concentrates” are becoming more prevalent.  
  (IDPS/ODCP, 2015)

• Synthetic drugs still evolving threat.  
  (ODCP/IPCC 2015)
Drugs of Choice: All Iowans
Primary Substance of Choice by Iowans in Treatment

IDPH, 2014
Iowa Youth Substance Abuse

6th, 8th and 11th Grade Users, Last 30-Days

Iowa Youth Survey, 2014
Iowa “Drug-Related” Prison Admissions

Primary Drug Involved

- Meth
- Marijuana
- Cocaine/Crack
- Rx Heroin
- Other
- All Drugs

Iowa Justice Data Warehouse, 2015
Iowa Annual Distilled Spirits Sales

Millions of Gallons Sold to Adults

IABD, 2015
Current Alcohol Use
Last 30-Days

U.S.
Iowa

NSDUH, 2013/2014
Current Binge Drinking
Last 30-Days

US.
Iowa

NSDUH, 2013/2014
Marijuana
Marijuana Laws & Use by Teens by State

“Medical” & “Recreational” Marijuana Laws (2015 Governing.com)

Past Month Use by 12-17 Year Olds (2013-2014 NSDUH)

- Dark Green = “Medical” marijuana (23 & DC).
- Light Green = “Medical” & “Recreational” marijuana (4).
- Not Shown: Low THC non-psychoactive “CBD” oils (16, including Iowa, where the Pharmacy Board recommended in 2015 the Legislature consider rescheduling CBD only).
Iowa Youth Drugs of Choice
Primary Substance by Juvenile Clients Entering Treatment

Marijuana 66.3%
Alcohol 21.9%
Other 6.5%
Opiates/Synthetics 1.0%
Cocaine 0.2%
Meth 4.1%
Positive drug tests for marijuana among employees in the general U.S. workforce increased in 2014 for the 3rd straight year. Marijuana was detected in 2.4% of all drug tests, a 14.3% increase vs. 2013, when a 5% increase was recorded vs. 2012. 2015 Quest Diagnostics
Iowa Drug-Related Traffic Fatalities
Number Killed in 2014 Who Tested Positive for Illicit Drugs

<table>
<thead>
<tr>
<th>Drug</th>
<th>Number KILLED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Marijuana</td>
<td>15</td>
</tr>
<tr>
<td>Meth</td>
<td>14</td>
</tr>
<tr>
<td>Rx</td>
<td>8</td>
</tr>
<tr>
<td>Synthetic</td>
<td>4</td>
</tr>
<tr>
<td>Opium</td>
<td>1</td>
</tr>
<tr>
<td>Other</td>
<td>10</td>
</tr>
</tbody>
</table>

Does not include alcohol-related fatalities. Alcohol & poly-drug combinations were detected in some crashes.

Source: IDOT, 2014
Iowa Drug-Impaired Driving
2015 Non-Alcohol Evaluation Findings by Drug Recognition Experts

- Cannabis: 429
- Stimulants
- Depressants
- Narcotic Analgesics
- Inhalants
- Hallucinogens
- Dissociative Anesthetics

IDPS, 2015
Source of Marijuana Seized in Iowa
2015 Iowa State Patrol Significant Highway Interdictions

Iowa was the 6th most frequent state destination for Colorado marijuana seized in highway interdictions.

2014 El Paso Intelligence Center

Iowa Department of Public Safety, 2015
Iowa Marijuana ER Visits
Cannabis Use as Causal or Contributing Factor

Marijuana impairs/worsens respiratory systems, heart rate, coordination, judgment, memory, problem-solving & mood. It contributes to auto crashes & can cause severe anxiety & psychosis.
Current Youth Marijuana Use
Past 30 Days: U.S. vs. Iowa

- 5.02% of all Iowans 12+ & 5.17% of Iowa teens are current marijuana users.
- 54% of Iowa 11th graders say marijuana would be easy or very easy for peers to get in their neighborhood or community.
- 24% of Iowa 11th graders see no risk smoking marijuana once or more a week, about twice as many as 15 years ago.

2015 Monitoring the Future Survey & 2014 Iowa Youth Survey
Youth Marijuana Attitudes
Among Iowa 11th Graders

Iowa Teens Perceiving No Risk Smoking Marijuana Once or More a Week

Iowa Youth Survey, 2014
Youth Marijuana Attitudes vs. Use
Among U.S. 12th Graders

College students daily marijuana use surpassed cigarette smoking for the 1st time in 2014.

Monitoring the Future Survey, 2014
Marijuana’s Increasing THC Potency

Marijuana Seized in U.S.

U.S. THC levels averaged less than 1% in 1972.

2014 University of Mississippi Marijuana Project

University of Mississippi Marijuana Project, through 12-22-15
Marijuana’s Increasing Potency
U.S. Seizures, Concentration of THC by % of Weight

*Concentrates contain THC levels of 50-90%.
(Examples: Hash Oil, Marijuana Wax, Marijuana-Infused Edibles)

Source: NIDA & DEA
New Marijuana
Examples of High THC Concentrates Found in Iowa
Meth
Iowa Meth Labs

Iowa Meth Labs Down 90% vs. Peak of 10 Years Ago. Source: IDPS, 2015

(Gold = “One Pot” Labs)
Iowa Meth Purity
Crime Lab Fiscal Year Averages

Source: IDPS, 2014
Iowa Meth Treatment Admissions

Source: IDPH, 2014
Rate of Meth Treatment
% of 12+ Substance Abuse Treatment Admissions Primarily for Meth

*Clients reporting meth as primary, secondary or tertiary drug of choice

TEDS, 2012
Iowa Drug-Related Child Abuse
Confirmed/Founded Cases: Illegal Drugs in a Child’s Body

(Differential Response initiative began in 2014)

IDHS, 2015
Opioid & Rx Abuse
Types of Medicines Abused

• Opioids (*Pain Relievers)
  – OxyContin®, Vicodin®, Percocet®

• Stimulants
  – Ritalin®, Adderall®, Sudafed®

• Anti-Anxieties
  – Xanax®, Valium®

• Anti-Depressants
  – Prozac®, Zoloft®

• Sedatives
  – Rohypnol®, Nembutal®, Seconal®

• Etc.

*Synthetic Opioid Examples: Oxycodone, Morphine, Methadone, Codeine, Fentanyl & Hydrocodone. Hydrocodone combination products became Schedule II Controlled Substances in October 2014.
Rx Diversion/Abuse in Iowa: *Summary*

- Iowa’s Rx abuse rate is lower than the U.S. average (past year nonmedical use of Rx pain relievers = 3.65%...13th lowest)

- Opioid abuse is one of the fastest growing forms of substance abuse in the U.S. & Iowa (OD deaths at or near all time highs)

- Prescription Monitoring Program (PMP) utilization rates by health care professionals are slowly rising

- Cases of suspected “doctor shopping” detected by the PMP may be decreasing
National Rx Painkiller Trends

**National Overdose Deaths**
Number of Deaths from Prescription Drugs
- Total
- Female
- Male

Sources: National Center for Health Statistics, CDC Wonder

**Prescription Painkiller Sales and Deaths**
- Sales (kg per 10,000)
- Deaths (per 100,000)

Sources:
1. Automation of Reports and Consolidated Orders System (ARCOIS) of the Drug Enforcement Administration (DEA), 2012 data not available.

**National Overdose Deaths**
Number of Deaths from Prescription Opioid Pain Relievers
- Total
- Female
- Male

Source: National Center for Health Statistics, CDC Wonder

**National Overdose Deaths**
Number of Deaths from Heroin
- Total
- Female
- Male

Source: National Center for Health Statistics, CDC Wonder
Pain Reliever Prescriptions: By State

CDC, 2014
Controlled Prescription Drug Seizures
In Dosage Units by Iowa Division of Narcotics Enforcement Agents

IDPS, 2015
Iowa Drug Treatment: *Numbers*

Any Abuse of Non-Heroin Opiates & Synthetics Reported at Admission

TEDS, 2012
Poison Center: *Public “Help” Calls*
Exposure, ID & Info Calls re: Painkillers Hydrocodone & Oxycodone

#1 Category of “Exposure” Calls: Pain Medicines (opoid & non-opioid).

Iowa Poison Control Center, 2015
Iowa Opioid-Related ER Visits
Opioid Use (including Opiates & Others) as Causal or Contributing Factor

IDPH, 2014
Iowa Drug-Related OD Deaths: All Drugs

IDPH, 2015
Iowa Drug-Related OD Deaths: *Pain Relievers*
Rx Methadone, Other Opioids & Other Synthetic Narcotics

IDPH, 2015
Heroin
The heroin epidemic: 'It's going to get worse and worse'

Cedar Rapids saw 44 heroine-related overdoses so far this year

Lee Hermiston, The Gazette
AUGUST 23, 2015 | 5:00 AM

CEDAR RAPIDS — One narcotics law enforcement officer says taking heroin is similar to grabbing a loaded gun and spinning the chamber.

Even worse, he added, heroin use is spreading in Iowa, and its deadly reach is likely to continue to grow.

Heroin overdoses, for example, have surged in Cedar Rapids in the past five years.

In 2009, authorities responded to nine reported heroin-related deaths and non-fatal overdoses, which represented 45 percent of all overdoses in Cedar Rapids.
Rx Pain Reliever-Heroin Connection

Hydrocodone (Lorcet®) = $5-$7/tab

Oxycodone Combinations (Percocet®) = $7-$10/tab

OxyContin® = $80/tab

Roxicodone® Oxycodone IR 15mg, 30mg = $30-$40/tab

Heroin = $10/bag

DEA, 2013
Rx-Heroin Trends

Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least 3 other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and death for users.

People who are addicted to...

- Alcohol: 2x
- Marijuana: 3x
- Cocaine: 15x
- Rx Opioid Painkillers: 40x

...more likely to be addicted to heroin.


NSDUH, 2013
Heroin Seizures
In Grams by Iowa Division of Narcotics Enforcement Agents

IDPS, 2015
Iowa Drug-Related Overdose Deaths: *Heroin*

![Graph showing the number of heroin-related overdose deaths in Iowa from 2002 to 2014. The number of deaths increases significantly from 2010 to 2013.](image-url)
Drug-Related OD Incidents: *Cedar Rapids*

- **All Drugs**
- **Heroin**

CRPD, September 29, 2015
Iowa Drug-Related Prison Admissions

Primary Drug Involved

Prescription Pain Relievers/Opioids

Heroin/Opiates

Iowa Justice Warehouse, 2015
Ease of Access & Perceptions of Safety

Classmates hospitalized after sharing medication
The Hoyt Middle School students had taken the unidentified drug at school. Teachers noticed their odd behavior.

Girl’s overdose should be ‘lesson,’ stepfather says
She and four other Des Moines middle-schoolers took a parent’s prescription drug; one of them remains hospitalized.
Attitudes Drive Behavior

• 56% say it’s easy to get prescription drugs from their parent’s medicine cabinet.

• 42% who have misused or abused a prescription drug obtained it from their parent’s medicine cabinet.

• 49% of teens who misuse or abuse prescription medicines obtained them from a friend.

• 27% of teens mistakenly believe abusing prescription drugs is safer than using street drugs.

• 16% of parents believe using prescription drugs to get high is safer than using street drugs.
Response to Reduce Rx Abuse: Iowa Plan

Education & Intervention

Secure Storage & Safe Disposal

Monitoring

Enforcement
Rx Abuse Prevention = Heroin Prevention

Talking about prescription drug misuse

IowaMedicineTLC.org

Talking to kids about prescription drug abuse
Safe Medicine Disposal

**National Take-Back Events:** Special take-back events are a good way to remove expired, unwanted, or unused medicines from the home.

**Law Enforcement Collection:** A growing number of law enforcement agencies collect expired, unwanted, or unused pharmaceutical controlled prescription drugs on an ongoing basis via secure drop-off boxes.

**Pharmacy Collection:** Some pharmacies collect expired, unwanted, or unused pharmaceutical controlled prescription drugs from patients.

**Disposal in Household Trash:** You may carefully mix medicines with substances such as kitty litter or used coffee grounds and place them in a container such as a sealed plastic bag to throw in your household trash.

**Disposal by Flushing:** A few medicines have specific instructions to flush them down the sink or toilet when they are no longer needed.
U.S. “Take-Back” Initiative
Amount (in Tons) of Rx Drugs Collected

10 Events, 5 Years = 2,783 Tons

DEA, 2015
Iowa “Take-Back” Initiative

Amount (in Pounds) of Rx Drugs Collected

10 Events, 5 Years = 59,935 Pounds
(~30 Tons)

DEA, 2015
Iowa Permanent Rx “Take Back” Sites
Controlled Prescription Drugs
Iowa PMP: *Total Prescriptions Dispensed*

- 2009: 4,239,890
- 2010: 4,400,000
- 2011: 4,500,000
- 2012: 4,600,000
- 2013: 4,700,000
- 2014: 4,800,912

IDPH, 2014
Iowa PMP: *Prescription Doses Dispensed*

- 2009: 228,149,732
- 2010: 269,466,402
- 2011: 269,466,402
- 2012: 269,466,402
- 2013: 269,466,402
- 2014: 269,466,402

IDPH, 2014
Synthetic Drugs
Synthetic Cannabinoids & Cathinones
Hallucinogens & Stimulants by State

2010

2012

Reports per State
- 200 or More
- 100-199
- 50-99
- 1-49
- 0
- No Data

DEA, 2013
Signs & Symptoms

Synthetic Cannabinoids

- Nausea, Vomiting
- Drowsiness
- Agitation
- Dyspnea (shaking)
- Palpitations
- Headache, Dizziness
- Seizures
- Panic, Anxiety
- Hallucinations
- Hypertension
- Tachycardia
- Paranoia
- Aggressive Behavior
- Suicidal Tendencies
Signs & Symptoms

Synthetic Cathinones

- Nausea, Vomiting
- Sleeplessness
- Agitation
- Palpitations
- Shortness of Breath
- Headache, Dizziness
- Seizures
- Panic, Anxiety
- Hallucinations, Delusions
- Hypertension
- Tachycardia
- Paranoia
- Violence
- Suicidal Tendencies
The Chemistry

Designer Drugs

Phenylalkylamines
- Phenethylamines
  - Methcathinone
  - Ethcathinone
  - Flephedrone
  - Mephedrone
  - buphedrone

Benzodiazepines
- phenazepam

Phenylpiperazines
- Benzylpiperazines
  - BZP
  - MDBP
  - 4-Bromo-2,5-diMeO-BZP
  - MBZP
  - MDBZP

Phenylpiperazin Es:
- mCPP
- TFMPP
- MeOPP
- pFPP

Benzodiazepines
- PCPR
- PCMPA
- PCMEA
- PCEEA
- PCEPA
- 5-MeO-PCP
- MXE
- 4-Me-PCP
- 3-MeO-PCE

Arylcyclohexamines
- AMT
- DMT
- DET
- DPT
- DBT
- DIP
- MiPT
- 4-OH-DIPT
- 4-OH-MIPT
- 4-OH-MET
- 5-MeO-AMT
- 5-MeO-DMT
- 5-MeO-DIPT
- 5-MeO-MIPT
- 5-MeO-EIPT
- 5-AcO-DIPT
- 5-MeO-DPT
- 5-MeO-DALT

Dimethoxy derivatives:
- Classic cannabinoids:
  - HU-210
  - IP-751
  - Paraxyl and many others

Cyclohexylphenols
- CP-47,497
- CP-47,497-C8
- CP-55,950

Synthetic Cannabinoids
- 4-Fluorotropacocaine
- β-CFT
- p-FBT

Indoles/Pyrroles
- JWH-018
- AM2201
- JWH-200
- JWH-081
- JWH-250
- AM694
- RCS-4
- SR-18
- UR-144
- XLR11

Eicosanoids
- Anandamide Oleamide

Steroids:
- THG
- Many examples

SARMs:
- Andarine
- LGD-2226
- Mk-2866

Other:
- AK-49
- URB597
- CB-13

β-Keto-phenethylamines
- Mephedrone
- MDPV
- Methoprene
- Ethylene
- Butylene
- Ethedrone
- Methedrine
- Ethedrine
- bk-MDDMA
- Naphryne
- 4-MEC
- 4-EMC
- a-PVP
- 4-MePPP
- a-PBP
- buphedrone

D-Series-2,5-dimethoxy-phenylpropanamines:
- 2,5-DMA
- 3,4-DMA
- DOB
- DOC
- DOET
- DOF
- DIO
- DON
- DOPR
- MDOB

2C Series – 2,5-dimethoxy-ethanamine:
- 2C-5
- 2C-3
- 2C-2
- 2C-1
- 2C-1
- 2C-T-2
- 2C-T-4
- 2C-T-7
- 2C-T-21
- 25I-NBOMe

Trimethoxy derivatives:
- 3,4,5-TMA
- TMA-2
- TMA-3
- TMA-4
- TMA-5
- TMA-6

4-MTA homologs:
- 4-MTA
- 4-MTMA
- 4-MTEA
- 4-MTPA
- 4-MTBA
- 4-MTDA

Monomethoxy derivatives:
- PMA
- PMMA
- N-ethyl-PMA

Difurnanyl compounds:
- Bromo-dragonfly
- 2C-B-fly

Fluoro-containing compounds:
- 4-FA
- 3-FA
- 2-FA
- N-Methyl-4-FA
- N-Ethyl-4-FA
- 3-F-4-MeO-A

Others:
- MDDA
- Ethylamphetamine
- N-OH-MDMA
- MDDM
- N,N-Dimethyl-1-phenyl-2-ethanamine
- 1-phenyl-2-butyramide
- MDA

Modified from Wohlfarth and Weinmann, *Bioanalysis*, 2010
Parents & Key Influencers Make a Difference

• Drug use is a preventable behavior. Drug addiction is a treatable disease.

• Teenagers who learn about the dangers of drugs through ongoing dialogue at home are up to 50% less likely to ever use drugs.

• Illegal means unsafe, but legal substances can also be unsafe when not used as intended.

• One of the most frequent reasons cited by drug free teenagers for their decision to not use drugs is the fear of disappointing their parents.
Drug Trends in Iowa: Summary

- Alcohol remains Iowa’s most abused addictive substance.
- Iowans’ appetite for meth remains strong, fed by cartels.
- Marijuana is Iowa’s most used illicit substance, & is morphing into new more potent forms.
- Medicine/Opioid abuse is Iowa’s fastest growing form of substance abuse…leading to more heroin use too.
- Synthetic drugs are a fast-changing threat to Iowa youth.
- With exceptions, Iowans generally abuse drugs at rates below many other states…& Iowa youth substance abuse is declining. Challenges remain, now & in the future.
SHARE THE NEWS & STAY SAFE!

Iowa Governor’s Office of Drug Control Policy

www.iowa.gov/odcp