Drug Abuse in Iowa

Evolving Issues & Emerging Trends

Drug Endangered Children Workgroup
Iowa Office of Drug Control Policy
September 22, 2016
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

Graph showing trends in substance abuse from 2002 to 2014 for alcohol, tobacco, other drug, Rx, OTC, and meth. The percentage for each category is indicated for each year.

Iowa Youth Survey, 2014
Iowa Drug-Related Traffic Fatalities
Number Killed in 2014 Testing Positive for Illicit Drugs

15% of those killed in Iowa traffic fatalities in 2014 tested positive for illicit drugs.

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
- Stimulants
- Depressants
- Narcotic Analgesics
- Inhalants
- Hallucinogens
- Dissociative Anesthetics

IDPS, 2015
Iowa “Drug-Related” Prison Admissions

Primary Drug Involved

Iowa Justice Data Warehouse, 2015
Iowa Drug-Related Child Abuse
Confirmed/Founded Cases: Illegal Drugs in a Child’s Body

(Differential Response initiative began in 2014)

IDHS, 2015
Alcohol & Tobacco/Nicotine
Iowa Alcohol-Attributed Deaths & Hospitalizations

Iowa Substance Abuse Epidemiological Profile, 2012
Iowa Tobacco-Associated Deaths & Hospitalizations

Iowa Substance Abuse Epidemiological Profile, 2012
Marijuana
“Medical” & “Recreational” Marijuana Laws
(2016 Governing.com)

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

- Olive = “Medical” marijuana (*25 & DC). [OH June 2016]
- Lime = “Medical” & “Recreational” marijuana (4).
- Not Shown: Low THC non-psychoactive “CBD” oils (18, including Iowa, where the Pharmacy Board recommended in 2015 the Legislature consider rescheduling CBD only).
Distinction with a Difference

**Cannabis-Based Medicine:**
Cannabis derivatives that test safe & effective as research-based medicines for use by health care professionals in treating patients with valid medical needs, & regulated to reduce public safety risks.

**Medical Marijuana:**
Differing forms of cannabis approved by legislative or popular vote in some states for treating various health conditions, with fewer controls & safeguards than FDA-approved medicines.

**Iowa Law:**
Permits regulated use of limited quantities of CBD oil to treat qualified patients with intractable epilepsy.
Iowa Youth Drugs of Choice
Primary Substance by Juvenile Clients Entering Treatment

- Marijuana 66.3%
- Alcohol 21.9%
- Other 6.5%
- Meth 4.1%
- Opiates/Synthetics 1.0%
- Cocaine 0.2%

IDPH, 2014
Source of Marijuana Seized in Iowa
2015 Iowa State Patrol Significant Highway Interdictions

Iowa was the 4th most frequent state destination for Colorado marijuana seized in highway interdictions in 2015.

2016 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.

Iowa Department of Public Health, 2014
Most Iowans are not current marijuana users (past 30 days).

Iowa Youth 12-17 years old currently using marijuana.
- Use 5.17%
- Do Not Use 94.83%

Iowans 12 & older currently using marijuana.
- Use 5.02%
- Do Not Use 94.98%

2013-2014 National Survey on Drug Use & Health
Youth Marijuana Attitudes
Among Iowa 11th Graders

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

Iowa Youth Survey, 2014
Marijuana’s Increasing THC Potency
Plant Material (“Weed”) Seized in U.S.

U.S. THC levels averaged less than 1% in 1972.
2014 University of Mississippi Marijuana Project

3.75%
10.59%
University of Mississippi Marijuana Project, through 6-22-16
New Marijuana’s Rising THC Potency
Hash Oil Seized in U.S.

“Concentrates” (hash oils, waxes & marijuana-infused edibles) may contain THC levels of 80+%. 2014 U.S. Department of Justice, Drug Enforcement Administration, National Drug Threat Assessment Summary

2015 Colorado THC levels averaged 17.1% for regular marijuana & 62.1% for “concentrates.” 2015 Rocky Mountain HIDTA

University of Mississippi Marijuana Project, through 6-22-16
Concentrates
Beyond the Plant...
Concentrates
Beyond the Plant…

“Green Crack” wax

“Ear Wax”

Butane Hash Oil (BHO)

“Shatter”

“Budder”

Hash Oil Capsules
New Marijuana in Iowa

Approximately 9.5% of all 2015 marijuana samples submitted to the Iowa crime lab involved marijuana “preparations,” or “concentrates” (e.g., hash oils, waxes & marijuana-infused edibles).

2015 Iowa Department of Public Safety, Division of Criminal Investigation
Iowa Marijuana Policy

• Marijuana, or a substance with *any amount of THC, is illegal as a Schedule I Controlled Substance in Iowa (similar to federal law).

• The 2014 Iowa Medical Cannabidiol Act (SF 2360) permits very limited use of CBD oils that are *low in THC (<3%) to treat intractable epilepsy.

• 25 states & DC have voter approved or legislated “medical” marijuana; 4 states have voter approved “recreational” marijuana; & 18 states, including Iowa, have CBD laws.

• Congress is considering proposals, including a Marijuana Effective Drug Studies (MEDS) Act to promote research on the medical effectiveness & safety of marijuana components.
Meth
Iowa Meth Labs Down 90% vs. Peak of 10 Years Ago. Source: IDPS, 2015.
Iowa Meth Purity
Crime Lab Fiscal Year Averages

Source: IDPS, 2014
Iowa Meth Treatment Admissions

Source: IDPH, 2014
Rate of Meth Treatment

*ALL 12+ Substance Abuse Treatment Admissions for Meth

- Iowa Meth Use Treatment Rate 3rd Highest in US (& 8th Highest Number). Source: TEDS 2012
Opioid & Rx Abuse
Opioid OD Death Rates: 2002-2014

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

2,851 du

IDPS, 2015
Iowa Drug Treatment: *Numbers*

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

#1 “Exposure” call category: Pain Medicines.
Iowa Poison Control Center, 2016

TEDS, 2012
Iowa Opioid-Related ER Visits
Opioid Use (including Opiates & Others) as Causal or Contributing Factor

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

*2015 Data is Preliminary*

Iowa Department of Public Health, Bureau of Health Statistics, 2016
Iowa Opioid-Related OD Deaths: *Rx & Heroin*

Rx = Pain Relievers (Rx Methadone, Other Opioids & Other Synthetic Narcotics)

*2015 Data is Preliminary

Iowa Department of Public Health, Bureau of Health Statistics, 2016
Heroin & Non-Medical Synthetic Opioids (e.g., fentanyl analogs)
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 more likely
- Marijuana: 3x more likely
- Cocaine: 15x more likely
- Rx Opioid Painkillers: 40x more likely

Heroin Seizures
In Grams by Iowa Division of Narcotics Enforcement Agents

Often mixed with heroin, black market synthetic opioids (fentanyl, fentanyl acetyl-fentanyl, furanyl-fentanyl, W-18, U-47700, etc.) can be more potent & lethal than heroin ...& may be legal.

DEA, 2016
Almost 66% of 2015 Cases Occurred in 30 Central & East Central Iowa Counties
The U.S. makes up < 5% of the world’s population, but consumes about 75% of its prescription drugs… including 81% of its oxycodone & 99% of its hydrocodone.

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Iowa Permanent Rx “Take Back” Sites
Controlled Prescription Drugs

Sites doubled to 93 vs. year ago & are on pace to double again by January 2017.
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
The Chemistry

Phenylalkylamines
- Phenethylamines: Methcathinone, Ethcathinone, Flephedrone, Mephedrone
- Dimethoxy derivatives: BZP, MDPB, 4-Bromo-2,5-diMeO-BZP, MBZP, MDBZP

Phenethylamines
- Phenethylamines: phenethylamines, buphedrone
- Dimethoxy derivatives: MDPB, MEBP, MEBP, MEBP, MEBP

Benzodiazepines
- Phenazepam

Piperazines
- Phencyclidine (PCP)
- PCPR, PCMPA, PCMEA, PCEPA, PCEEA
- Dimethoxy derivatives: PCPR, PCMPA, PCMEA, PCEPA, PCEEA
- D Series, 2,5-dimethoxy-phenylpropanamines: 2,5-DMA, 3,4-DMA, DOB, DOC, DOET, DOF, DOI, DOM, DON, DOI, DOM, DOM, DOI, DOM, DOM
- 2C Series – 2,5-dimethoxy-ethanamine: 2C-B, 2C-C, 2C-D, 2C-E, 2C-H, 2C-I, 2C-N, 2C-P, 2C-T-2, 2C-T-4, 2C-T-7, 2C-T-21, 25I-NBOMe
- Trimethoxy derivatives: 3,4,5-TMA
- 4-MTA homologs: 4-MTMA, 4-MTMA, 4-MTEA, 4-MTEA, 4-MTPA, 4-MTPA, 4-MTBA, 4-MTBA, 4-MTDA, 4-MTDA
- Monomethoxy derivatives: PMA, PMMA, N-ethyl-PMA
- Difuranyl 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: MDDMA, Ethyl-amphetamine, N-OMe-MDMA, MDDM, N,N-Dimethyl-1-phenyl-2-ethanamine, 1-phenyl-2-butyramide, MDA

Arylcyclohexamines
- PCMEA, PCMPA, PCEPA, PCEEA, PCEPA
- Dimethoxy derivatives: PCEPA, PCEEA, PCEEA
- Trimethoxy derivatives: PCPR, PCEPA, PCEEA
- Monomethoxy derivatives: PMA
- Eicosanoids: Anandamide
- Other: 47,497-Fluorotropa, 144-Copine

Tryptamines
- Amphetamine, Methamphetamine
- 4-Fluorotropane, 4-MeO-PCE
- Others: MDDMA, Ethyl-amphetamine, N-OMe-MDMA, MDDM, N,N-Dimethyl-1-phenyl-2-ethanamine, 1-phenyl-2-butyramide, MDA

Egonine Derivatives
- Synthentic Cannabinoids: JWH-018, AM2201, AM694, XLR11, SR-18, UR-144, CB-13
- Others: Andarine, Anandamide
- Steroids: THG, Many examples
- Others: LGD-2226, Mk-2866

Designer Drugs
- Eicosanoids: Anandamide
- Steroids: THG, Many examples
- SARMs: Andarine, LGD-2226, Mk-2866

Modified from Wohlfarth and Weinmann, Bioanalysis, 2010
Synthetic Opioid Alert

Dangers of Fentanyl & Fentanyl Analogues/Compounds

Fentanyl is commonly laced in heroin, causing significant problems across the country, particularly as heroin abuse has increased.

Drug incidents & overdoses related to fentanyl are occurring at an alarming rate throughout the U.S. & represent a significant threat to public health & safety.

Often laced in heroin, fentanyl & fentanyl analogues produced in illicit clandestine labs are up to 100 times more powerful than morphine & 30-50 times more powerful than heroin.
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
Visit Our New Website: https://odcp.iowa.gov