Drug Poisoning / Prescription Drug Overdose

Any drug has the potential to be misused and may be even more dangerous when used in combination with other drugs or alcohol. Pain relievers are especially dangerous as they may cause a person to stop breathing, leading to death. In 2017, there were about one and half times more drug overdose deaths than deaths due to motor vehicle collisions.

Risk Factors

Risk factors for pain reliever misuse and overdose include:

- Obtaining overlapping prescriptions from multiple providers and pharmacies
- Taking high daily dosages of prescription pain relievers
- Younger age
- Social or family environments that encourage misuse
- Unemployment
- Poverty
- Dropping out of school

How do drug poisonings/prescription drug overdoses affect the United States?

Race/Ethnicity Data

- Rates of opioid overdose death for all races/ethnicities have been increasing since 1999. In 2017, there were more than 42,000 opioid overdose deaths in the United States. Seventy-eight percent of those deaths were from the White, non-Hispanic population, while 12% and 8% were from Black (non-Hispanic) and Hispanic populations, respectively.
- In 2017, 85% of opioid overdose deaths were from the White (non-Hispanic) population, whereas 11% and 3% were from Black (non-Hispanic) and Hispanic populations, respectively, in Indiana.
- Opioids are more frequently prescribed for patients of the highest socioeconomic status (SES) groups compared to patients in the lowest levels of SES.
- Black, non-Hispanic patients are less likely to be prescribed opioids than the White, non-Hispanic population across all measures of SES.

Pregnant Women Data

- It is estimated that 21,000 pregnant women aged 15-44 misused opioids in the past month. Younger pregnant women (those aged 15-25) were more likely to misuse opioids than older women.
- Using opioids during pregnancy can lead to miscarriage, preterm labor, birth defects, fetal growth restriction, low birth weight and neonatal abstinence syndrome.
- Mothers who are receiving medication-assisted treatment (MAT) can breastfeed if they are no longer misusing opioids or other drugs, if they do not have human immunodeficiency virus (HIV), if the treatment is supervised and if the baby continues to gain weight as the mother continues to breastfeed.

Incarceration data

- Approximately half of those incarcerated in state and federal prisons have a substance use disorder.
A former inmate’s risk of death from overdose within the first two weeks of release is 12 times higher than other individuals.\textsuperscript{26}

Seventy-five percent of people who were in prison or jail with an opioid use disorder experience a relapse to opioid use after release.\textsuperscript{28}

Out of several thousand local and county jails, fewer than 200 in 30 states provide MAT, even though MAT is the recommended treatment option for opioid use disorders.\textsuperscript{27} Most jails inject naltrexone (longer-lasting naloxone) immediately before individuals are released back into the community.\textsuperscript{27}

**Fatal Data**

- In 2017, there were 70,237 drug overdose deaths.\textsuperscript{8}
- Forty-six people die each day from overdose of prescription pain relievers.\textsuperscript{15}
- In 2017, unintentional poisoning was the number-one cause of injury death for adults aged 25-64 and the second-leading cause for youth and young adults aged 15-24.\textsuperscript{9}
- Since 1999, the percentage increase in deaths from prescription pain relievers was more than 400% among women compared to 265% for men. However, men are still more likely to die of prescription pain relievers than women.\textsuperscript{10}
- In 2017, of the 70,237 drug overdose deaths, 67.8% (47,600) were related to some type of opioid, including heroin. Opioids, primarily prescription pain relievers and heroin, are the main drugs associated with overdose deaths.\textsuperscript{14}

**Non-Fatal Data**

- There were an estimated 142,557 emergency department (ED) visits from July 2016 to September 2017 for suspected opioid-involved overdoses.\textsuperscript{21}
- One-half 50.9% of patients for nonmedical use ED visits were patients aged 34 years or younger.\textsuperscript{11}
- Overall, benzodiazepines 46.9% and opioids 36.2% were the most common pharmaceutical classes involved in ED visits for nonmedical use.\textsuperscript{11}
- Approximately three out of four new heroin users report having abused prescription opioids prior to using heroin.\textsuperscript{3}

**Cost Data**

- The economic cost of the opioid crisis was $504 billion, or about 2.8% of the GDP, in 2015. The Council for Economic Advisory (CEA) estimates that, while the provisional data on overdose deaths in 2018 are showing encouraging signs, the current costs are likely higher for 2018 than what was estimated in 2015.\textsuperscript{12}
- The Substance Abuse and Mental Health Services Administration (SAMHSA) in 2016 estimated the non-fatal consequence cost of opioid disorders to be $72.3 billion (see #15).
- Prescription opioid misuse increases healthcare and substance misuse treatment costs by $29.4 billion, increases criminal justice costs by $7.8 billion and reduces productivity among those who do not die of overdose by $7.8 billion.\textsuperscript{16}
How do drug poisonings/prescription drug overdoses affect Indiana?

- Poisoning is the leading cause of injury deaths in Indiana, and drugs cause 9 out of 10 poisoning deaths. Drug poisoning (overdose) deaths increased five-fold since 1999, surpassing motor vehicle traffic-related deaths in 2008.
- In 2017, 1,852 deaths in Indiana were caused by drug overdose. Indiana currently ranks 13th in highest rate of overdose death per 100,000 people.\textsuperscript{17}
- In 2017, there were 1,176 deaths due to drug overdose that involved any opioid in Indiana.\textsuperscript{17}
- In 2018, there were 17,311 non-fatal ED visits involving drug overdose, of which 5,825 corresponded to poisoning involving an opioid and 3,727 corresponded to poisoning involving heroin.\textsuperscript{17}
- The Indiana Youth Survey found that Indiana youth rates for heroin use remained steady, with an overall prevalence about 0.2%.\textsuperscript{18}
- The Indiana Youth Survey also found that the prevalence rates for cocaine decreased in 2018 for 7th and 8th grade students but increased for 10th grade students.\textsuperscript{18}

How do we address the problem?

Collaborations

- Established by Executive Order, the Governor’s Task Force on Drug Enforcement, Treatment, and Prevention brings together Indiana experts from a variety of specialties to evaluate the growing national drug problem here in Indiana. Specifically, the task force is charged with statewide assessment: Evaluate the existing resources across all areas; identify gaps in enforcement, treatment and prevention; and provide recommendations for improvement; enforcement: Identify effective strategies so federal, state and local law enforcement can partner together to combat drug misuse; treatment: Analyze available resources for treatment and identify best practices for treating drug addiction; and prevention: Identify programs and/or policies that are effective in preventing drug misuse, including early youth intervention programs. Website: \url{https://www.in.gov/recovery/}
- The multibranch statewide Commission on Improving the Status of Children in Indiana, in cooperation with other entities, studies issues concerning vulnerable youth and makes recommendations concerning pending legislation, and reviews and promotes information sharing and best practices. As part of the commission, the Mental Health and Substance Abuse Task Force’s mission is to “support creative and effective methods of improving assessment, access to treatment and wraparound resources for vulnerable youth and households in need of mental health and substance abuse services.” Website: \url{http://www.in.gov/children/2358.htm}
- FSSA Division of Mental Health and Addiction Substance Abuse Prevention and the Mental Health Promotion Strategic Plan 2019-2023. Website: \url{https://www.in.gov/fssa/dmha/2955.htm}
- The Indiana State Department of Health received a grant from the Centers for Disease Control and Prevention (CDC) to help prevent overdose deaths related to prescription opioids as part of the CDC’s Prescription Drug Overdose: Prevention for States program. Funding currently supports enhancements to INSPECT, improvements to opioid prescribing practices, prevention efforts at the state and community levels to address new and emerging problems related to prescription drug overdoses and a partnership with the IU Fairbanks School of Public Health to evaluate opioid prescribing practices in Indiana. The funding will be used to expand the Indiana Violent Death Reporting System to provide additional data regarding opioid overdose at the
county level and will help inform prevention efforts and expand use of data for public health surveillance.

- The Rehabilitation Hospital of Indiana is currently working to understand the relationship between traumatic brain injuries (TBIs) and opioid misuse and to develop guidelines for prescribers on the prevalence of opioid misuse.
- The Family and Social Services Administration’s Division of Mental Health and Addiction in Indiana is creating a naloxone card for first responders to leave behind with those who have experienced an overdose and refuse transfer to a hospital.

**Data Collection**

- INSPECT, Indiana’s prescription drug monitoring program, was designed to serve as a tool to address the problem of prescription drug abuse and diversion in Indiana. By compiling controlled substance information into an online database, INSPECT performs two critical functions
  - Maintain a warehouse of patient information for health care professionals.
  - Provide an important investigative tool for law enforcement.
  - Indiana was the first state in the nation to share data with all neighboring states and continues to share live data with other states. Website: [http://www.in.gov/pla/inspect/](http://www.in.gov/pla/inspect/)
- Naloxone used by emergency medical service (EMS) providers is captured and compiled into a real-time map: [https://www.in.gov/isdh/28002.htm](https://www.in.gov/isdh/28002.htm).
- With the passage of Senate Enrolled Act 406 (also known as Aaron’s Law) in 2015, ISDH currently captures data on naloxone use by laypersons. Website: [https://optin.in.gov](https://optin.in.gov)
- The Indiana State Department of Health Division of Trauma and Injury Prevention conducts statewide injury surveillance of overdose deaths through death certificates, hospitalizations and ED visits. The Drug Overdose Information website: [http://www.in.gov/isdh/26689.htm](http://www.in.gov/isdh/26689.htm).

**Policy**

- The 2013 legislative session ensured the sustainability of INSPECT by dedicating 100% of the Indiana Controlled Substance Registration (CSR) fees paid by prescribers to support ongoing use and maintenance of INSPECT, requiring owners of pain management clinics to maintain a CSR and requiring the Medical Licensing Board (MLB) to adopt rules for prescribing opioids for chronic pain. The task force assisted with rule promulgation and published a complementary prescriber toolkit.
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  - The task force highlighted inconsistent reporting of neonatal abstinence syndrome (NAS) during the 2014 legislative session. A NAS Committee of the Indiana Perinatal Quality Improvement Collaborative (IPQIC) Network developed screening and reporting protocols to assess the NAS burden, now implemented in a pilot program. Additional legislation passed reduces the reporting interval to INSPECT from seven days to 24 hours, effective January 2016, and permits first responder use of naloxone.
Senate Enrolled Act 406 during the 2015 legislative session, commonly referred to as the “Naloxone Bill” or “Aaron’s Law”, allows for broader distribution of naloxone, a prescription drug that reverses the effects of an opioid overdose. Prescribers can prescribe directly to someone at-risk or to their family/friends or by standing order. The prescriber has to provide instructions on how to use the drug, ensure that emergency authorities are called if the drug is used and provide information on drug addiction treatment information.

Senate Enrolled Act 226 was signed into law in 2017 implementing a seven-day limit on first-time opioid prescriptions and allowing partial prescription fills.

House Enrolled Act 1438 was signed into law in 2017 allowing municipalities to establish a syringe service program without state approval.

Senate Enrolled Act 221, signed into law in 2018, requires prescribers to check the patient prescription database, INSPECT, before prescribing opioids or benzodiazepines, so they can help prevent dangerous drug interactions, doctor shopping and substance dependency.

House Enrolled Act 1007, signed into law in 2018, authorized the addition of nine new opioid treatment centers in Indiana.

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**Education**

- “First Do No Harm: The Indiana Healthcare Providers Guide to the Safe, Effective Management of Chronic Non-Terminal Pain” developed by the Indiana Prescription Drug Abuse Prevention Task Force’s Education Committee. This provider toolkit, based on expert opinion and recognized standards of care, was developed over many months with the input of healthcare
providers representing multiple specialties and all corners of the state. First Do No Harm provides options for the safe and responsible treatment of chronic pain, including prescriptions for opioids when indicated, with the ultimate goals of patient safety and functional improvement. It was developed as an interactive compendium to the new Medical Licensing Board rule addressing Opioid Prescribing for Chronic, Non-terminal Pain. Website: http://www.in.gov/bitterpill/files/First_Do_No_Harm_V_1_0.pdf.

- Substance Abuse and Mental Health Services Administration Opioid Overdose Prevention Toolkit - Updated 2014 equips communities and local governments with material to develop policies and practices to help prevent opioid-related overdoses and deaths. Addresses issues for first responders, treatment providers, and those recovering from opioid overdose. Website: https://www.samhsa.gov/node/472200

- CDC education recommendations
  - Talk with your doctor about
  - Use prescription painkillers only as instructed by your doctor.
  - Store prescription painkillers in a safe place and out of reach of others.
  - Help prevent misuse and abuse by not selling or sharing prescription painkillers. Never use another person’s prescription painkillers. Website: https://www.cdc.gov/drugoverdose/patients/prevent-misuse.html


- The CDC recommends patients who are prescribed opioid pain relievers be counseled against sharing medications; about proper medication storage, use and disposal; and about compliance with the prescribing physician’s instructions.

- Project Lazarus works to prevent deaths due to drug overdose through community activation and coalition building, monitoring and epidemiologic surveillance; prevention of overdose through medical education and other means; use of overdose-reversing medication by community members; and evaluation of program components. Website: http://www.projectlazarus.org/

- The Indiana State Department of Health has guidelines for prescribing opioids for pain management. Website: https://www.in.gov/isdh/28027.htm

**Measures: Healthy People 2020**

- Injury and Violence Prevention (IVP)-9 Prevent an increase in poisoning deaths
  - IVP-9.1: Prevent an increase in poisoning deaths among all persons.
  - IVP-9.2: Prevent an increase in poisoning deaths among persons aged 35 to 54 years.
  - IVP-9.3: Prevent an increase in poisoning deaths caused by unintentional or undetermined intent among all persons.
  - IVP-9.4: Prevent an increase in poisoning deaths caused by unintentional or undetermined intent among persons aged 35 to 54 years.

- SA-12: Reduce drug-induced deaths.

- IVP-10 Prevent an increase in non-fatal poisonings
  - SA-12: Reduce drug-induced deaths.
  - SA-19: Reduce the past-year nonmedical use of prescription drugs.
Additional Resources

A. ISDH Division of Trauma and Injury Prevention: http://www.in.gov/isdh/19537.htm and http://www.in.gov/isdh/26689.htm
B. Knowing the O Facts: http://in.gov/recovery/know-the-o/
C. DMHA Bureau of Mental Health Promotion and Addiction Prevention: http://www.in.gov/fssa/dmha/index.htm
D. Indiana Poison Center Helpline: 1-800-222-1222 http://indianapoison.org/
E. Indiana Governor’s Task Force on Drug Enforcement, Treatment and Prevention: http://www.in.gov/recovery/
F. INSPECT (Indiana’s Prescription Drug Monitoring Program): http://www.in.gov/pla/inspect/
J. Substance Abuse and Mental Health Services Administration (SAMHSA): http://www.samhsa.gov
K. SAMHSA National Helpline: 1-800-662-4357

References


