



REPORT ON THE TOLL OF OPIOID USE IN INDIANA AND MARION COUNTY

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**RICHARD M. FAIRBANKS
SCHOOL OF PUBLIC HEALTH**

INDIANA UNIVERSITY
Indianapolis

REPORT ON THE TOLL OF OPIOID USE IN INDIANA AND MARION COUNTY

With Recommendations for Improving Health and Well-Being

Prepared by
IU Richard M. Fairbanks School of Public Health
at Indiana University-Purdue University Indianapolis

Joan Duwve, M.D., M.P.H.
Suzanne Hancock, M.P.H.
Cindy Collier
Paul Halverson, Dr.P.H.

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EXECUTIVE SUMMARY

The United States is in the midst of an opioid epidemic. According to the CDC, nearly two million Americans abused or were dependent on opioids in 2014. Prescription opioid abuse has nearly quadrupled nationally since 1999. Today, one in five patients with pain-related diagnoses (excluding cancer) receives a prescription for opioid pain relievers.

A sharp increase in heroin use has accompanied the increase in prescription opioid abuse. Increases have been seen in men and women, across most age groups, and at all income levels. Addiction to prescription opioid pain relievers has been identified as a risk factor for heroin use and addiction. In fact, the National Survey on Drug Use and Health estimates that people addicted to prescription opioids are 40 times more likely to be addicted to heroin.

An increase in opioid prescribing has fueled the epidemic over the past decade. Prescribing varies across states and cannot be explained by differences in health conditions. Despite increased use of prescription opioids, Americans are not reporting a decrease in their pain. However, deaths from opioid are on the rise, for both males and females, across all races and nearly all age groups. More people died from overdoses in 2014 than in any year on record.

The Impact of the Opioid Problem in Marion County and Indiana

- Indiana and Marion County have not been immune to the opioid epidemic. With 1152 overdose deaths in 2014, Indiana ranks 15th in the nation. The number of deaths from drug overdoses has increased dramatically in the state since 1999, more than 500%. Marion County has the most overdose deaths and non-fatal emergency room visits due to overdose of any county in the state. The number and rate of Marion County deaths from drug overdose has increased steadily since 2000.
- Infants exposed to opioids in utero are often born with **Neonatal Abstinence Syndrome (NAS)**, a condition that can result in increased irritability, hypertonia (spasticity), tremors, difficulty eating, vomiting, watery stools, seizures and respiratory distress. Nationally, the incidence of NAS rose three-fold between the years 2000 and 2009. In Indiana, 657 infants were born with NAS in 2014. Infants with NAS require long and costly hospital stays after birth.
- Drug abuse by parents often has a **negative impact on children**. In 2013, Indiana saw a 30% increase in the number of children entering the welfare system, primarily because of parental substance abuse. In that same year, the Marion County Juvenile Court saw a sharp increase in the number of children taken from their homes and placed in protective custody due to parental addiction. Cases in which parental rights were terminated grew by 31%.
- Needle sharing among people who inject opioids and heroin can result in **transmission of HIV and hepatitis B and C**. It is estimated that 50 to 80% of people who inject drugs will contract one of these viruses within five years of beginning injection drug use.
- **Additional emergency and public safety personnel** are needed to respond to the increase in overdose calls that have occurred over the past five years. Indianapolis Emergency Management Services reported a 117% increase in the number of calls between 2011 and 2015. The Indianapolis Metropolitan Police Department experienced an increase of 306% in calls about narcotics during the same period.
- There has been an **increase in hospital Emergency Department (ED) visits** resulting from

abuse of opioids and heroin. In 2010 alone there were 641,940 visits to Indiana EDs due to non-fatal poisonings (90% of those poisonings were due to drug abuse). Not only do those visits have a dollar amount attached to them, but they also impact the ability of hospitals to deliver timely care.

- The **financial cost to society** on a national level has been estimated at \$55.7 billion (2007), with \$25 billion attributable to healthcare costs, \$25.6 billion in lost workplace productivity and \$5.1 billion in criminal justice costs. Interestingly, of the total, only a miniscule 0.3% was spent on researching the problem and only 0.3% was spent on prevention.
- Drug abuse puts significant **strain on the criminal justice system**. The cost nationally for prescription opioid abuse alone among the prison population has been estimated at \$5.1 billion. In Indiana, 53% of people who are incarcerated are diagnosed with a substance use disorder. Of people who return to prison, 75% have a substance abuse disorder.
- Drug abuse presents **workplace safety and productivity issues**. A first of its kind survey conducted by the National Safety Council and the Indiana Attorney General's office found that 80% of Indiana's employers have observed prescription drug misuse in their employees. The survey also found that 64% of employers perceive prescription drugs to present a bigger problem in the workplace than illegal substances.

Recommendations for Addressing the Problem

While much is being done to address the epidemic of opioid use and the resulting negative outcomes, there is much more that can be done. Recommendations for remedies that can achieve meaningful, measurable results fall into three broad categories:

1. Prevent opioid abuse and heroin use.

- Develop and work with school corporations to provide age-appropriate substance abuse prevention and HIV awareness education beginning in elementary school; include faculty, staff, and adults working with middle and high school athletic programs.
- Develop social media campaigns to inform and educate target audiences about opioid misuse and the risks for addiction.
- Launch a pharmacy education initiative about safe medication use, storage and disposal.
- Increase the number of "Take-Back" events in communities including 1) targeted "Take-Back" events at senior living facilities; 2) permanent "Take-Back" facilities in communities; and 3) on-site drug disposal opportunities at pharmacies.
- Offer opportunities for provider education regarding appropriate pain assessment and management, including risk assessment and informed consent when treating acute, post-operative or chronic pain with opioids. Requiring provider education for prescribers (e.g., linked to controlled substance registration in Indiana) is an evidence-based recommendation.
- Work with health professional schools to include instruction on the safe and appropriate use of opioids.
- Improve provider access to patient-specific data across all clinical settings, including VA hospitals and Opioid Treatment Programs, to inform clinical decision-making, including 1) INSPECT (prescription drug monitoring program); 2) EMS registry (naloxone administration); and 3) coroners' reports (record of overdose fatalities).
- Develop long-term solutions to improve public health infrastructure and socio-economic disparities to improve the overall health and resilience of communities.

2. Minimize negative health outcomes resulting from opioid misuse and addiction.

- Increase access to naloxone for 1) first responders; 2) individuals taking opioids for pain management or treatment of addiction, as well as their family and friends; 3) addiction treatment providers and recovery support professionals; 4) probation officers and correctional facility staff; 5) school nurses and staff; 6) college dormitory resident advisors; and 7) others in the community who may be likely to witness a drug overdose.
- Expand access to comprehensive programs in communities, as permitted by Indiana Code, to provide a safe space for harm reduction services, including syringe exchange, HIV/Hepatitis C (HCV) testing and care coordination, vaccination against tetanus, hepatitis A, hepatitis B, and other illnesses, enrollment in HIP 2.0.
- Expand access to assistance with community services, such as food, shelter, GED programs, job training.

3. Increase access to treatment for opioid use disorder, HIV, HCV.

- Improve access to comprehensive treatment for Substance Use Disorder (SUD), including the full range of Medication Assisted Treatment (MAT); counseling; behavioral therapy and recovery support.
- Develop technology to improve access to treatment (e.g. identify treatment providers, available treatment beds, recovery support services within geographic areas).
- Increase the number of all levels of treatment providers for SUD in Indiana psychiatrists trained in addiction medicine; primary care providers with training in addiction medicine; primary care providers with federal waiver to provide buprenorphine treatment; behavioral health professionals trained to treat individuals with SUD, including 1) licensed clinical social workers; 2) licensed addiction counselors; 3) masters-trained social workers; and 4) addiction psychologists.
- Increase the number and use of Recovery Support Specialists as part of treatment teams and on-call response to overdoses in Emergency Departments (EDs).
- Expand access to supportive environments for people in recovery to live while transitioning back into the community, such as recovery or sober living houses.
- Establish homes for pregnant women with SUD to receive evidence-based, supportive treatment during pregnancy to minimize the symptoms of neonatal abstinence syndrome in their newborn infants.
- Increase localized testing for HIV and HCV, especially in high-risk communities, through field testing, EDs, jails, provider offices, and health departments.
- Increase access to care for individuals with HIV/HCV in underserved communities by 1) developing loan forgiveness programs to incentivize providers to practice in underserved communities and 2) providing ongoing training and support for primary care providers to treat patients with HIV/HCV through tele-health programs (e.g. Project ECHO).
- Decrease the stigma of mental illness, addiction and HIV across the state so people will feel comfortable seeking care for these life-threatening chronic medical conditions.

These areas align with recent evidence-based bipartisan recommendations at the national level. In choosing which remedies to pursue and how best to prioritize efforts, it will be beneficial to seek opportunities to collaborate and coordinate with other organizations that are also pursuing solutions to these critical issues.

INTRODUCTION

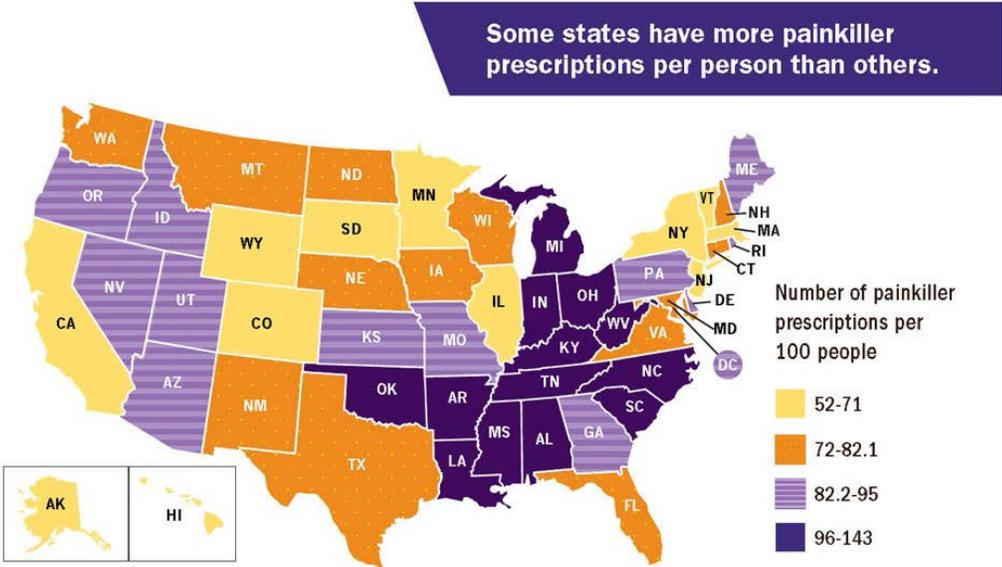
Over the past two and a half decades, prescription opioid abuse has become a rapidly growing public health problem in the United States. A coinciding increase in the use of heroin, an illegal opioid drug indistinguishable from prescription opioids by the human brain, has also occurred locally, state-wide and nationally. This assessment explores how the opioid drug problem has adversely affected the health and safety of individuals who use these drugs, both medically and non-medically, and how the problem has caused significant impacts on the healthcare, law enforcement, judicial and child protection systems in Marion County, and across the state. Due to work by dedicated agencies and individuals, Indiana has made good progress in fighting this epidemic, yet more remains to be done. Based on the findings of this assessment, recommendations will be put forth to further our progress in reducing the burden of opioid misuse in our state.

The National Context – Prescription Opioids

Since 1999, the amount of prescription painkillers prescribed and sold in the U.S. has nearly quadrupled. According to the U.S. Centers for Disease Control and Prevention (CDC), almost two million Americans either abused or were dependent on opioids in 2014. [1] Nationally, deaths from opioid overdose (prescription drugs and heroin) have quadrupled during that same time period. According to the CDC, every day 78 people die from opioid overdose. Despite drastic increases in the availability and use of prescription opioids, Americans have *not* reported a decrease in the pain they've experienced. [2]

The opioid epidemic has been fueled by changes in how providers prescribe painkillers. It is estimated that one out of every five patients with pain-related diagnoses (excluding cancer) are prescribed opioids in doctors' offices, with primary care providers responsible for about half of the opioid medications dispensed. Prescribing practices vary widely between states, but the variation cannot be explained by differences in health issues. Indiana ranked ninth out of 50 states for prescribing in 2012 (Figure 1). [3]

Figure 1 Prescribing rates by state [3]



SOURCE: IMS, National Prescription Audit (NPA™), 2012.

Nationally, the most common drugs involved in prescription overdose deaths include: [4]

- Methadone
- Oxycodone (such as OxyContin®)
- Hydrocodone (such as Vicodin®)

Injection practices among people who inject drugs (PWID) in Scott County, Indiana, using another prescription opioid, Opana® ER (Oxymorphone), led to an unprecedented outbreak of HIV and hepatitis C in the rural southeastern Indiana county.

According to the CDC, the U.S. is in the middle of a drug overdose epidemic, with more than 165,000 people having died since 1999. Over that period of time, the number of deaths from drug overdose increased for both males and females, across all races and nearly all age groups. More people died from overdoses in 2014 than any other year on record. The CDC estimates that three out of every five drug overdose deaths are due to opioids. Opioid overdoses killed more than 28,000 Americans in 2014, [5] Nearly 19,000 of those deaths, 52 deaths each day, involved prescription opioids (up significantly from 16,000 in 2013). [6] Each day in 2014, for every person who died from an opioid overdose, nearly 20 others were treated in emergency departments for opioid misuse or overdose (>1,000 people/day). [4]

The CDC summarized risk factors for prescription opioid abuse and overdose based on a review of the existing literature. Those risk factors include:

- Obtaining overlapping prescriptions from multiple providers and pharmacies. [7,8,9,10]
- Taking high daily dosages of prescription painkillers. [8,11,12,13]
- Having mental illness or a history of alcohol or other substance abuse. [14]
- Living in a rural area and having a low income. [15]

Among those who died from prescription opioid overdose between 1999 and 2014:

- People aged 25 to 54 years had the highest overdose rates.
- Non-Hispanic whites and American Indian or Alaskan Natives had higher overdose rates than non-Hispanic blacks and Hispanics.
- Men were more likely to die from overdose, but the gap between women and men is becoming smaller. [4]

The cost of prescription opioid abuse nationally was estimated at \$55.7 billion in 2007, with 46% of this amount attributable to workplace costs (e.g., lost productivity), 45% to healthcare costs (e.g., opioid abuse treatment), and 9% to costs in the criminal justice system. (16) According to a 2007 study on drug diversion (“the abuse, illegal obtaining and resale of prescription drugs on the black market”), the cost to the insurance industry was \$72.5 billion per year. [17] Costs related to prescription drug abuse have continued to increase as the epidemic has grown over the past eight years.

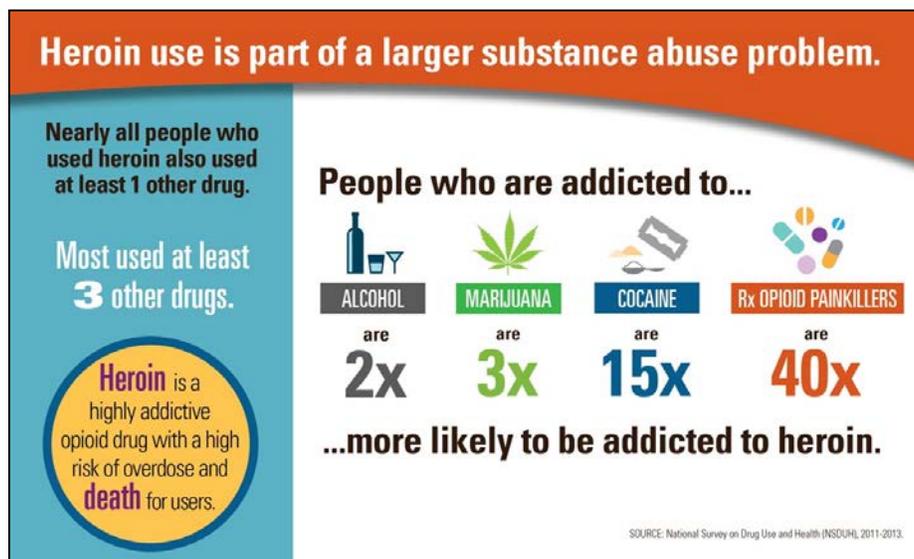
The National Context - Heroin

Heroin use has increased sharply in recent years. [18] Increases have been seen in men and women, across most age groups, and all income levels. Notable increases have occurred in women, the privately insured, and people with higher incomes--groups whose heroin use has been historically low. Increased heroin use has resulted in a three-fold increase in heroin overdose deaths since 2010. More than 10,500 Americans died as a result of heroin overdose in 2014. The highest rate of death (7.0 per 100,000) occurred among non-Hispanic whites between the ages of 18-44. [18a]

Risk factors for heroin addiction include:

- 1) Addiction to prescription opioid pain relievers, cocaine, marijuana or alcohol
- 2) Lack of health insurance
- 3) Living in a large metropolitan area
- 4) Race: Non-Hispanic whites
- 5) Gender: Males
- 6) Age: 18-25 years [18]

Figure 2 Heroin users' prior drug use [19]



Relationship between Prescription Drugs and Heroin

The National Survey on Drug Use and Health (2011-2013) has shown that more than 90% of people who used heroin have used at least one other drug, with people who have become dependent upon or misused opioid pain medications during the past year at highest risk. [19]

Additional evidence supports the association between prescription opioid and heroin abuse. [20] Analyses from several small studies suggest that individuals most often start with oral non-medical opioid use. As tolerance develops, drug-taking moves to more efficient routes of administration, such as insufflation ("snorting"), smoking or injection. By the time heroin is

initiated, users view heroin as easily available, more potent, easier to manipulate for non-oral routes of administration, and more cost effective than prescription opioids.

Although *non-medical use* of prescription opioids has been clearly identified as a risk factor for heroin initiation, the transition to heroin occurs in a relatively small sub-group of non-medical prescription opioid users. Some researchers have suggested a link between recent policy-driven strategies to reduce the availability of prescription opioids and the increase in heroin use. The timing of these trends makes this unlikely, as the rise in heroin use started prior to implementation of those policies. Furthermore, heroin market forces, such as easy access, cheaper price, and high purity have likely influenced the increase in heroin use. [21,22]

Regardless of the causes, comprehensive prevention and treatment efforts are needed to reduce all opioid abuse and related morbidity and mortality. These include strategies to prevent opioid initiation and expand access to naloxone (to reverse overdose) and effective treatment for opioid-use disorders, particularly medication-assisted treatment.

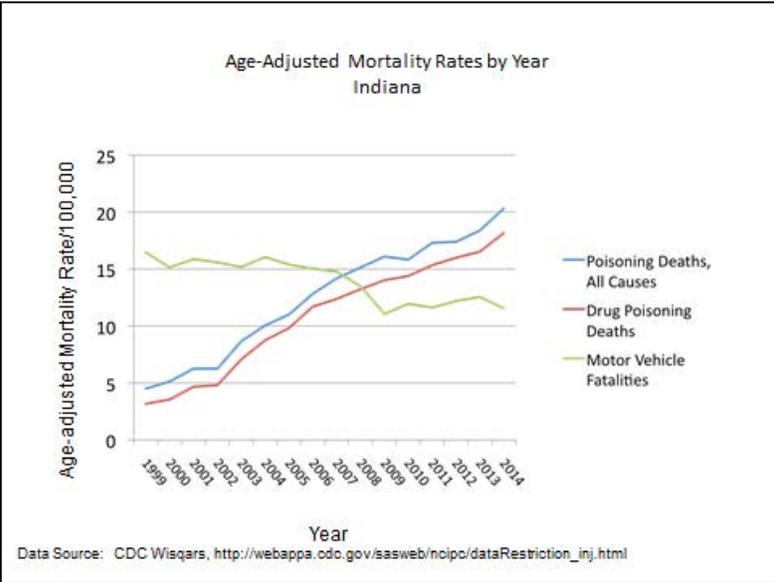
THE OPIOID DRUG PROBLEM

Indiana and Marion County

Overview of the Problem - Indiana

The leading cause of injury death in Indiana is poisoning, with drug overdoses causing more than 9 of 10 poisoning deaths. Drug overdoses overtook the number of motor vehicle deaths in the Hoosier state in 2008. [23]

Figure 3 Drug overdose death rates compared to motor vehicle death rates, Indiana, 1999-2014. [23]



In 2014, Indiana had 1,152 deaths from drug poisonings, up from 184 in 1999, more than a 500% increase.

Figure 4 Number of drug poisoning deaths per year, Indiana, 1999-2014 [24]

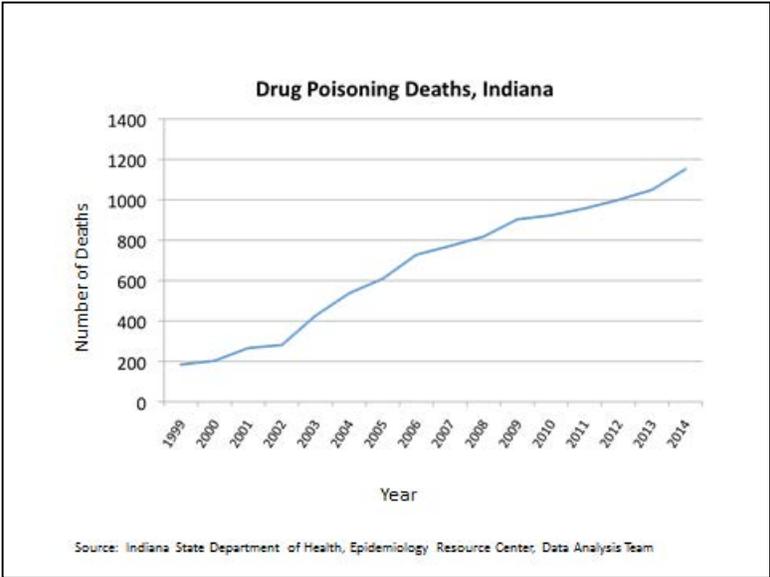


Table 1 details the raw numbers of drug overdose deaths in Indiana from 1999 to 2014. Deaths due to heroin continued to rise in 2014. After decreases in 2012 and 2013, the number of overdose deaths from opioid pain relievers spiked upward to the 2011 level. [24]

As Table 1 illustrates, the cause for most overdose deaths is categorized as “Other & Unspecified Drugs.” In 2014, this category accounted for 792 of 1,152 deaths (69%). The Centers for Disease Control and Prevention estimates that 50.1% of deaths in Indiana were caused by unspecified drugs (2014). [171] In reality, many of these deaths were likely related to opioid overdose, resulting in an understatement in the number of deaths from opioid pain relievers and heroin.

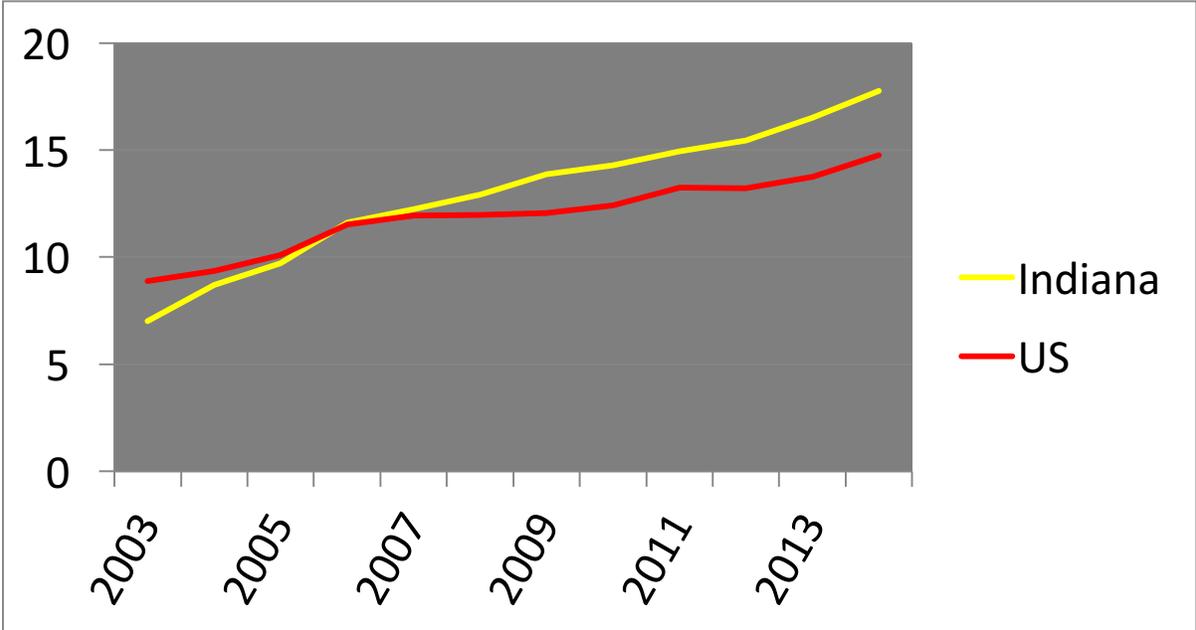
Table 1 Number of Drug Overdose Deaths by Drug Type in Indiana, 1999-2014							
Year:	Heroin	Opioid pain relievers	Cocaine	Other & Unspecified Narcotics	Benzodiazepines	Other & Unspecified Drugs	Total Drug Overdoses
1999	<5	25	27	15	7	99	184
2000	<5	24	14	9	<5	136	203
2001	<5	49	17	<5	7	172	266
2002	<5	43	27	14	10	195	281
2003	<5	92	36	26	21	291	426
2004	7	98	54	32	18	384	537
2005	13	118	46	31	25	447	609
2006	9	135	53	34	31	535	728
2007	16	195	52	32	45	559	771
2008	56	214	49	47	60	569	818
2009	65	259	41	18	96	663	903
2010	54	229	42	19	88	642	923
2011	63	250	33	46	90	712	957
2012	111	206	36	57	94	699	999
2013	152	168	45	51	74	703	1049
2014	170	250	47	61	84	792	1152

Data Notes: Counts under 5 are suppressed due to confidentiality. Total number of overdoses may not be equal to sum of all deaths. Death may have been included in more than one category if multiple drug codes are present.

Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team [24]

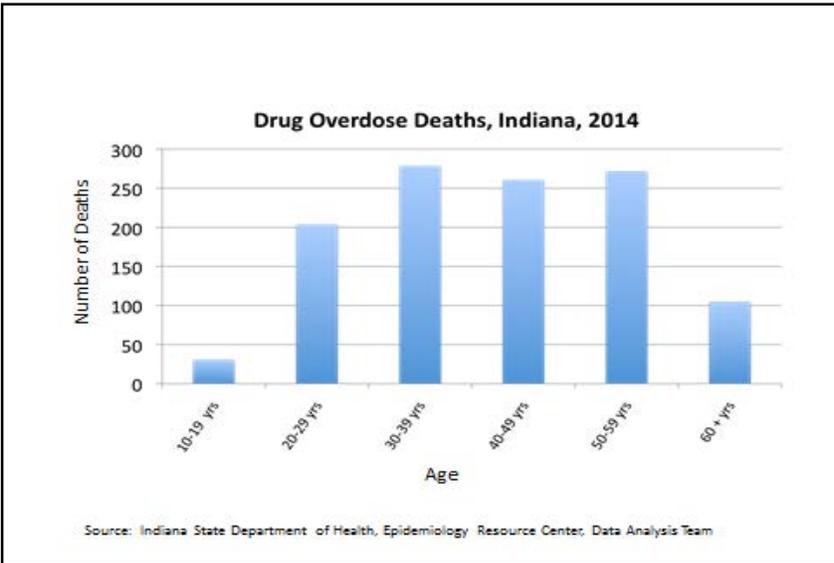
Rates of drug poisoning deaths in Indiana overtook those of the U.S. in 2006 (Fig. 5). In 2014 Indiana ranked 15th nationally for drug overdose fatalities. [187] While overdose deaths due to prescription drugs have leveled off in some states, overdose deaths in Indiana continue to rise.

Figure 5 Drug poisoning death rates per year, Indiana vs. U.S., 2003-2014 [24]



In 2014, the largest number of drug overdose deaths in Indiana occurred in the 30-39 year old age group, followed closely by 50-59 year olds, and then 40-49 year olds.

Figure 6 Drug overdose deaths in Indiana by age group, 2014 [24]



Heroin overdoses increased by nearly three times in Indiana between 2011 and 2014.

Figure 7 Drug deaths caused by heroin, 2003-2014 [24]

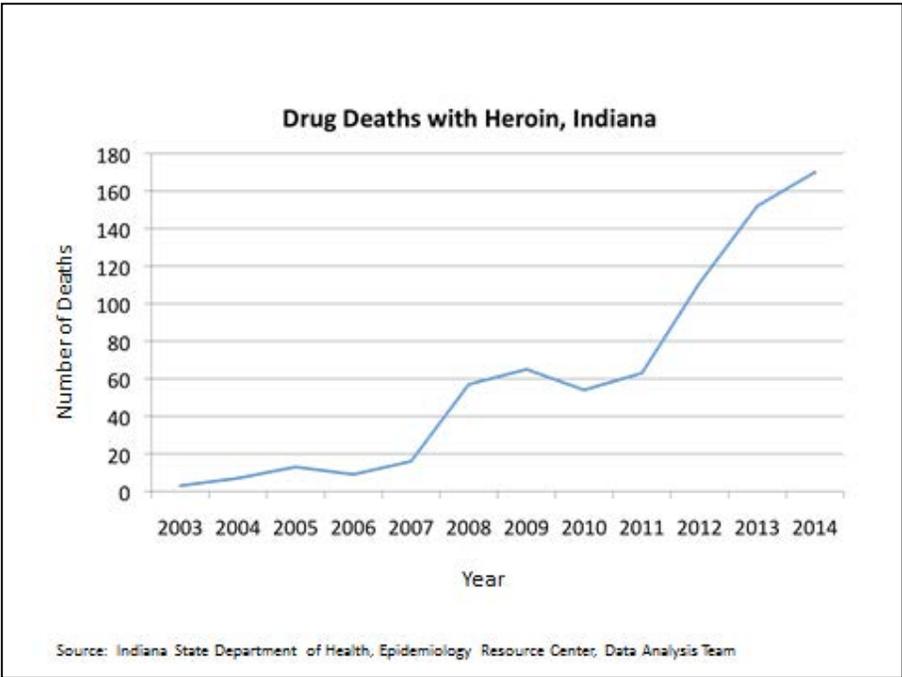


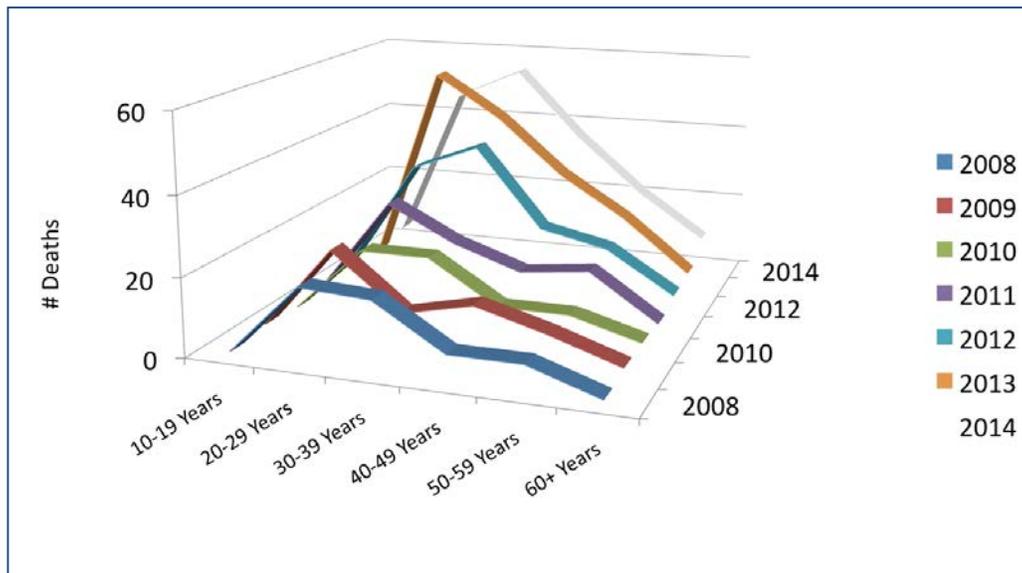
Table 2 depicts number of deaths due to heroin by age group for 2014. [24]

Table 2. Number of Heroin Deaths by Age Group, 2014			
Age Group	Drug Deaths	Deaths by Heroin	Percent Heroin Deaths
10-19	31	4	12.9%
20-29	204	46	22.5%
30-39	279	54	19.4%
40-49	261	36	13.8%
50-59	272	21	7.7%
60+	105	9	8.6%

Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

Figure 8 illustrates the spike in deaths that has occurred among younger heroin users, consistent with the national trend. [24]

Figure 8 Number of heroin deaths by age, Indiana, 2008-2014 [24]



Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team

Opioids present a particular risk to children and youth, because their brains are still developing. Prescribing numbers vary across the state for youth aged 18 and younger (see Fig. 9, next page). [25]

- In the 2011 Youth Behavioral Risk Survey, conducted by Indiana State Department of Health (the last year for which there was a representative sample), 21.4% of Indiana's high school students reported they had taken prescription drugs (e.g., OxyContin, Percocet, Vicodin, codeine, Adderall, Ritalin, or Xanax) without a doctor's prescription one or more times during their life. [26]
- Twenty-six percent of Indiana high school seniors reported using some type of prescription drug without a prescription at some point in their lives, according to findings from the Indiana Youth Survey conducted by the Indiana Prevention Resource Center. [27]

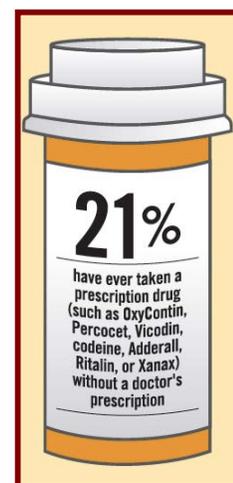
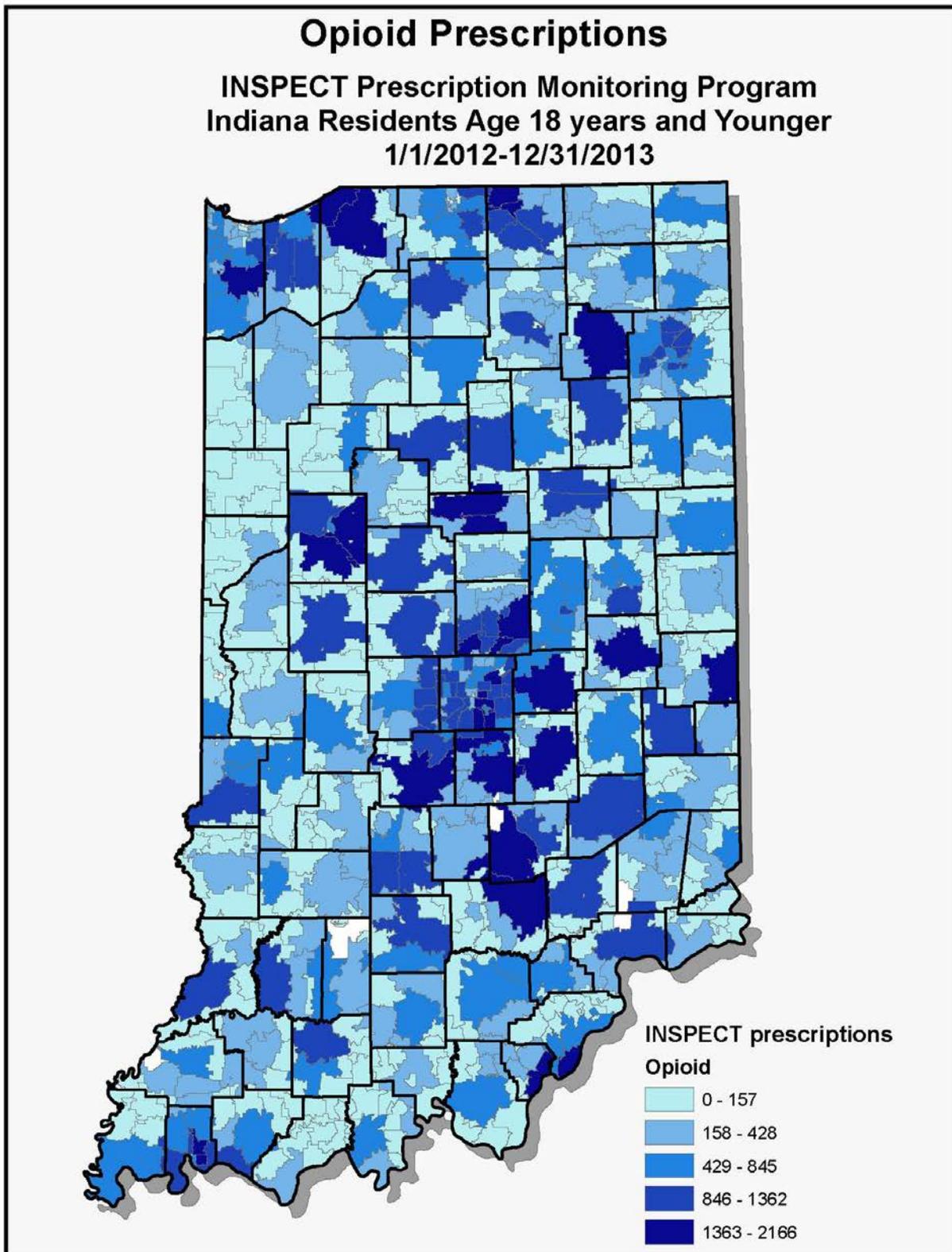


Figure 9 Numbers of prescriptions for young people 18 and younger, Indiana, 2012-2013 [25]



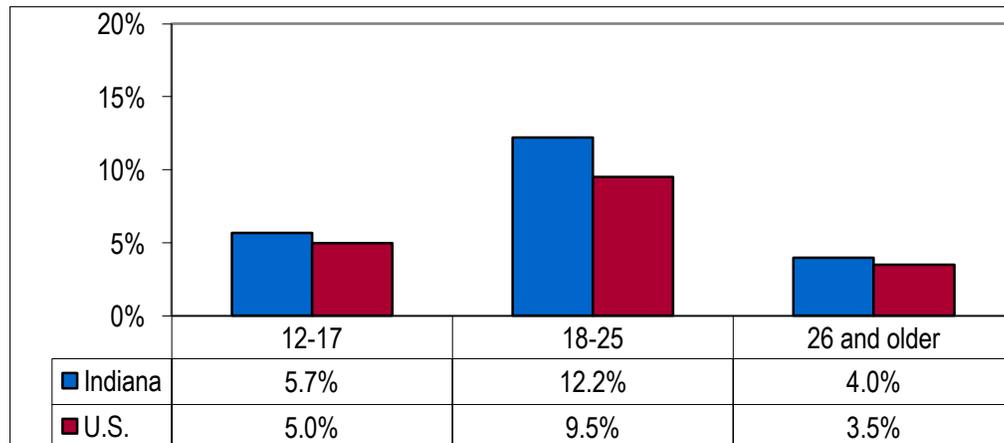
Map Author: ISDH ERC PHG and ISDH Trauma & Injury Prevention - December, 2014

A Closer Look: Prescription Drug Abuse

On behalf of the State Epidemiology and Outcomes Workgroup, the Center for Health Policy (CHP) at the IU Richard M. Fairbanks School of Public Health publishes an annual report on substance abuse in Indiana. For the past nine years, the report has provided data describing the use of alcohol, tobacco, marijuana, cocaine, heroin, methamphetamine, prescription drugs, and poly-substance use, as well as mental health in the Hoosier state. The information in this section, and the following one on heroin use, have been excerpted from CHP's 2014 report. [28]

According to the 2013 National Survey on Drug Use and Health, 5.3% of Hoosiers aged 12 and older, representing 286,000 people, reported non-medical use of pain relievers. The U.S. prevalence was 4.5%, similar to Indiana's rate. [29] Young people in Indiana aged 18-25 had the highest rate of prescription drug abuse, at 12.2%, which was statistically higher than the national rate of 9.5%. [29]

Figure 10 Prevalence of past-year pain reliever use in Indiana and the United States by age group (National Survey on Drug Use and Health, 2013) [29]



Center for Health Policy, SEOW Report, 2014

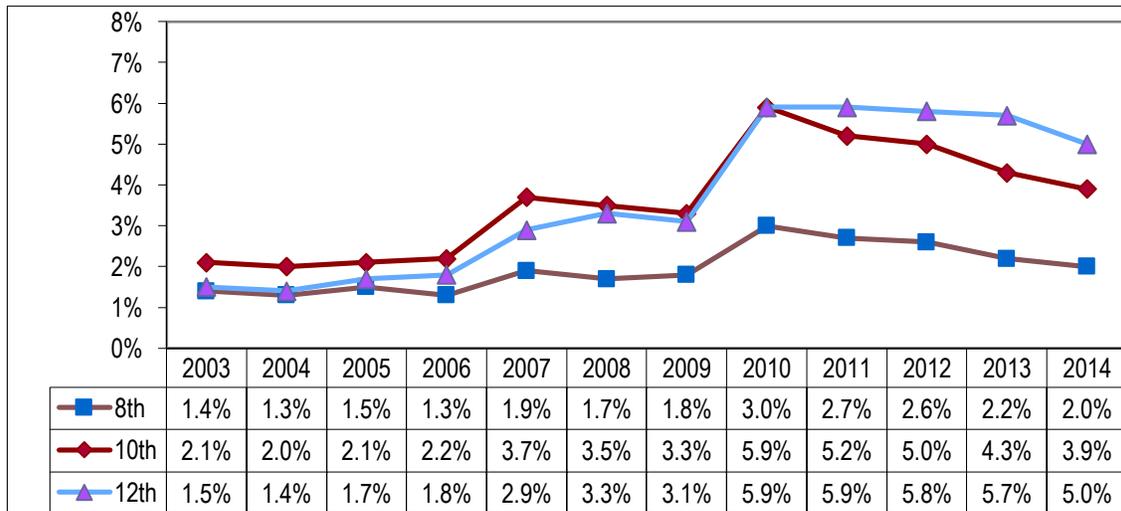
The Indiana College Substance Use 2014 Survey found that 11.2% of college students had taken drugs sometime in the past year that were not prescribed for them (mostly stimulants like Adderall and Ritalin), and 3.8% were taking them currently. Rates were higher for students attending public universities than private (13.5% and 5.0% respectively). [30]

Three percent of Indiana college students reported misusing their prescriptions in the past year, and 1.0% were misusing them currently. Males were more likely than females to misuse in the past year (3.8% and 2.5% respectively). Students attending public schools were more likely to have misused in the past year (3.6% and 2.2%). Among students who were currently using, there were no significant differences between males and females or students attending public and private institutions. [30]

The 2013 National Survey on Drug Use and Health found that Indiana youth aged 12-17 reported statistically similar rates of past year prescription drug abuse as their counterparts

nationally (5.7% vs. 5.0% for the U.S.). [29] Reports of current use vary by age and appear to be on a downward trend since 2010. [31]

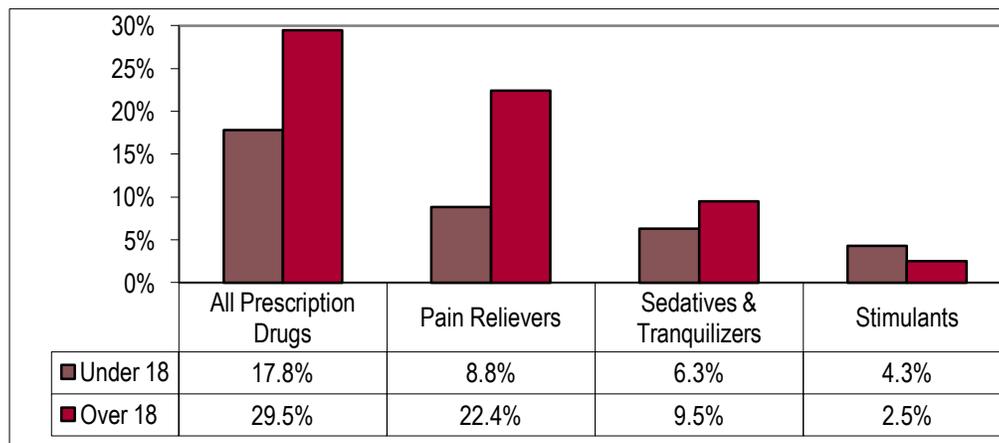
Figure 11 Percentage of Indiana 8th, 10th, And 12th grade students reporting current non-medical use of prescription drugs (Indiana Youth Survey, 2003-2014) [31]



Center for Health Policy, SEOW Report, 2014

Upon entering treatment, persons over aged 18 are more likely than those under 18 to report use of pain relievers, sedatives and tranquilizers, and all prescription drugs than those under age 18. Youth under age 18 are more likely to report abuse of stimulants than those in the over 18 age cohort. [32]

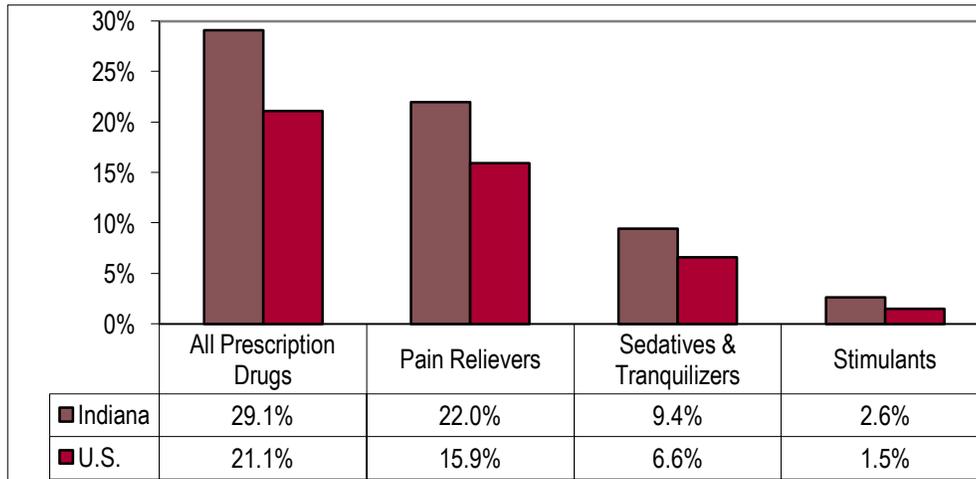
Figure 12 Percentage of Indiana treatment episodes with non-medical prescription drug use reported at treatment admission, by drug category and underage status (Treatment Episode Data Set, 2012) [32]



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According to SAMHSA's Treatment Episode Data Set (TEDS), Hoosiers reported using opioids, central nervous system depressants, and stimulants when they entered treatment at a significantly higher rate than the U.S. rate: 29.1% vs. 21.1%. Opioids were primarily responsible for this difference (Fig. 13). [32]

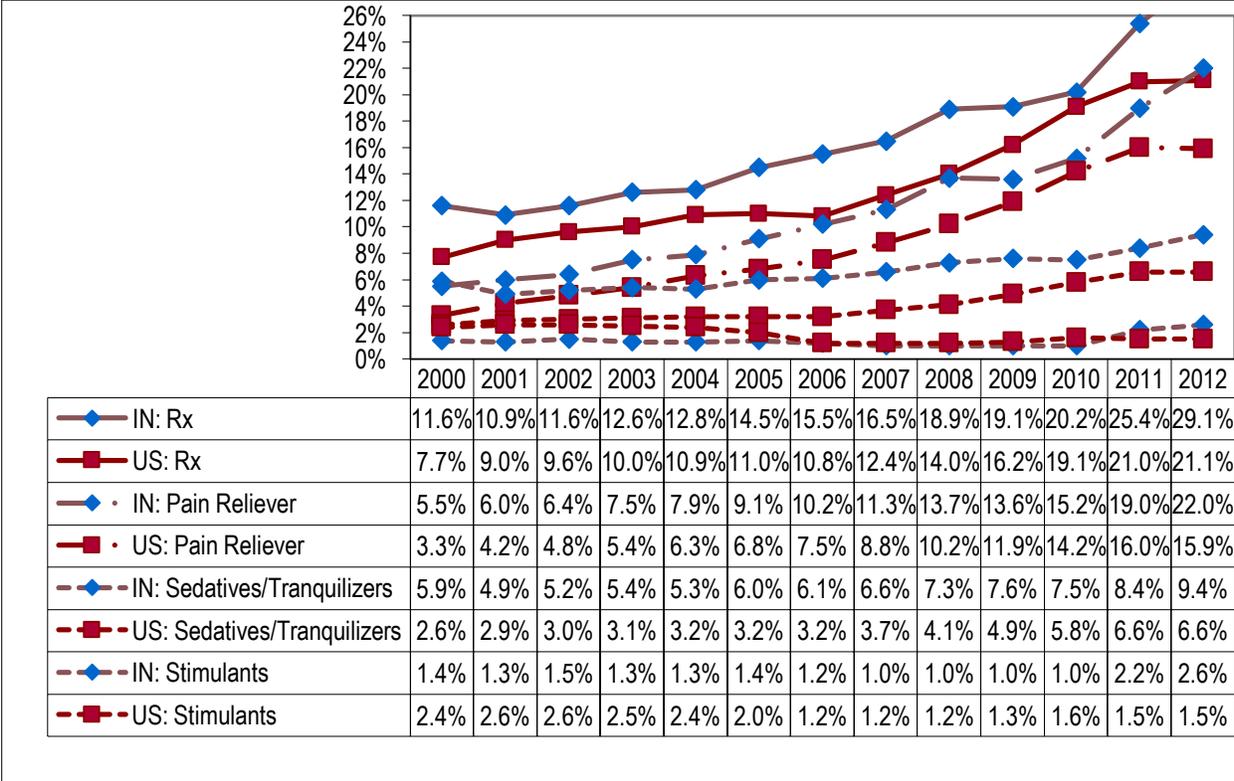
Figure 13 Percentage of Indiana and U.S. treatment episodes with non-medical prescription drug use reported at treatment admission, by drug category (Treatment Episode Data Set, 2012) [32]



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Trend data for 2000-2012 illustrates how reports of opioid abuse at treatment admission have substantially increased over time. [32] U.S. trends for individuals seeking treatment for opioid dependence began to level off in 2012, but Indiana’s did not (Fig. 14, next page).

Figure 14 Percentage of Indiana and U.S. treatment episodes with non-medical prescription drug use reported at treatment admission, by drug category (Treatment Episode Data Set, 2000–2012) [32]



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Limitations of Treatment Episode Data include the greater likelihood of women to seek treatment than men, and the lack of treatment facilities available in Indiana.

Adverse Outcomes of Prescription Drug Abuse

Drug dependence is the most common adverse outcome associated with prescription drug use/misuse. Individuals can develop dependence on prescription opioids even when they take them as directed by their provider, due to the drug’s ability to re-wire the brain.

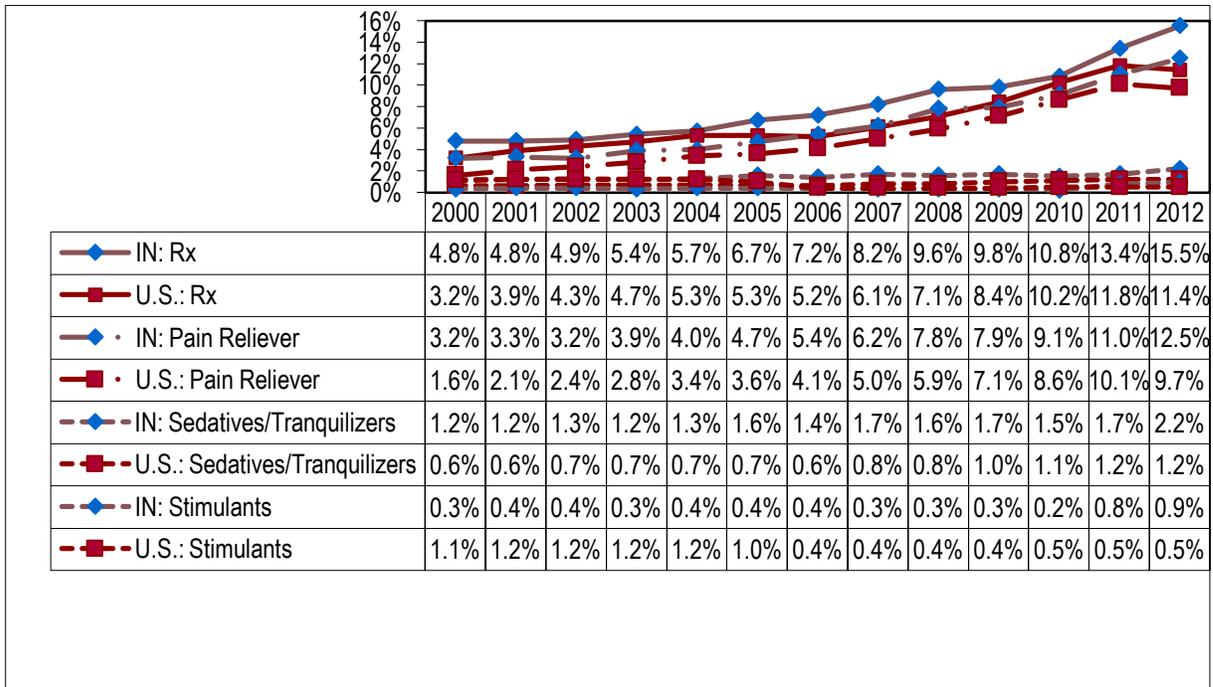
According to the Treatment Episode Database, dependence for those seeking treatment varies by race, gender and age: [32]

- The highest percentage of dependence was found in whites and the lowest in blacks for all drug types (pain relievers, sedatives/tranquilizers, stimulants, all Rx drugs).
- Females more frequently reported dependence on pain relievers and sedatives than males, but males and females reported similar levels of dependence on stimulants.

- Adults aged 25-34 had the highest rates of pain reliever and overall prescription drug abuse. However, 18-24 year olds had the highest rates in the sedative category. Both groups had the same rates for stimulant dependence.

As with drug abuse trends, trend data for drug dependence in 2000-2012 showed significant increases for Hoosiers, based on treatment admission reports. [32]

Figure 15 Percentage of Indiana and U.S. treatment episodes with prescription drug dependence reported at treatment admission, by drug category (Treatment Episode Data Set, 2000–2012) [32]



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A Closer Look: Heroin Use

Heroin is an illegal and highly addictive drug. Users can smoke, snort or inject it. [33] Although the prevalence of heroin among the general population is still low, it has grown rapidly over the past decade, in part due to the significant increase in the availability of prescription drugs. [28] A sub-group of non-medical prescription drug-users transition to heroin when prescription drugs become more difficult to access. [20] Transition to heroin has also been observed among chronic pain patients of opioid “over-prescribers” in Indiana whose operations have been shut down by the Drug Enforcement Agency or the Indiana Attorney General, leaving thousands of patients on high doses of opioids with no access to treatment.

Data on heroin abuse is limited, particularly at the state and local level. The 2013 National Survey on Drug Use estimates heroin use in the U.S. and Indiana. [29]

Table 3 Estimates of heroin use in Indiana and the U.S., 2013 [29]

	U.S. Estimates	Indiana Estimates	Approx. Number (Indiana)
Tried Heroin once in life time	1.8%	1.1%	54,000
Used in the past year	0.3%	0.2%	9,000
Used within the past month	0.1%	0.1%	1,000

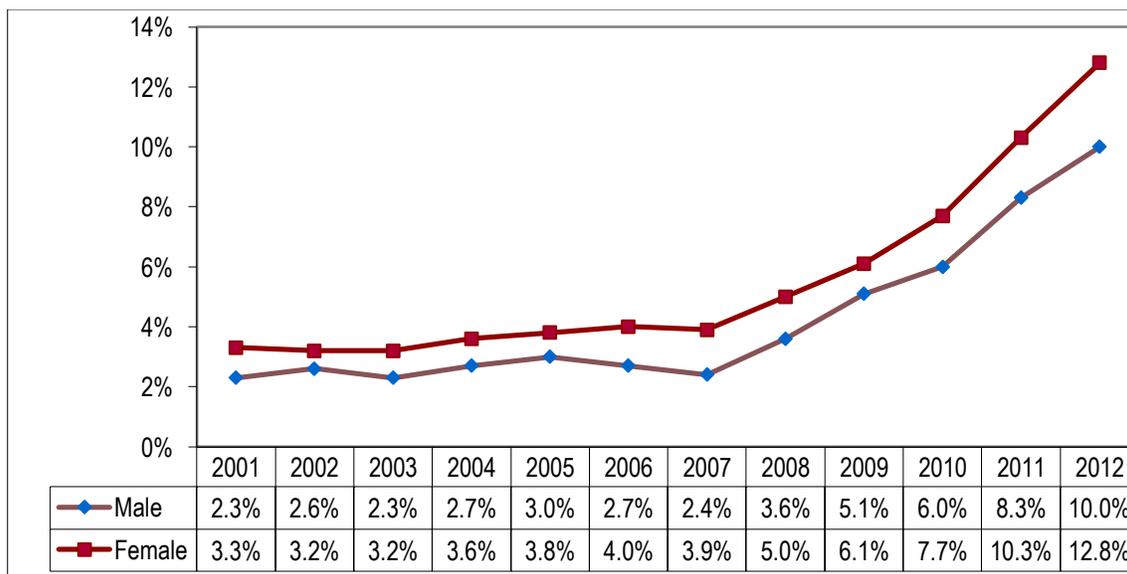
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According to *The Indiana College Substance Abuse Survey 2014*, which measures heroin use among Indiana college students, 0.3% of Indiana college students used heroin in the past year, the same as the U.S rate. The percentage of students reporting use within the last month was 0.1% in Indiana, compared to 0.2% in the U.S., not a statistically significant difference. College men had a past-year use of 0.5%, while college women had 0.2%; current users did not differ significantly by gender (0.2% for men, 0.1% for women). Results did not differ significantly by age (under 21 vs. 21 and older) or by public vs. private institutions. [30]

In 2012, Indiana had a significantly lower reported use of heroin at treatment admission (11.1%) compared to the U.S. as whole (19.8%), which may in part be related to Indiana’s lower number of treatment centers. However, reported use in Indiana was up considerably from the 2001 rate of 2.6%. In Marion County, the number of individuals reporting heroin use at treatment admission was 861 of 4,375 total (19.7%); the number who reported heroin dependence was 713 (16.3%), both higher than the state levels. [32] Higher Marion County levels may be related to more treatment options available.

Trend data on reported heroin use at treatment admission differed significantly by gender, race and age. Women have consistently reported a higher rate than men (Figure 1.0). [32]

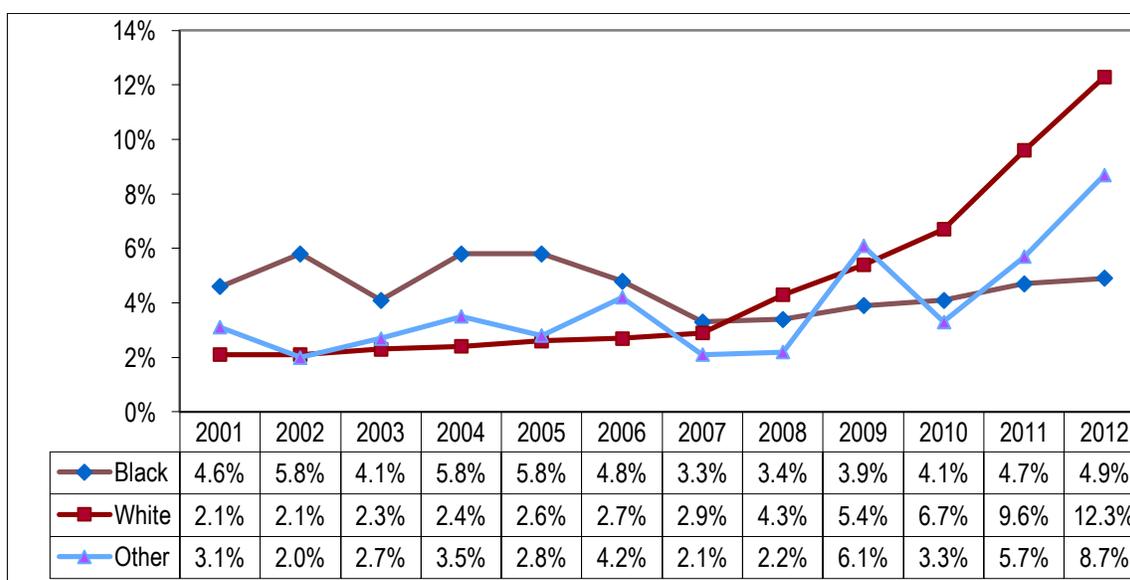
Figure 16 Percentage of Indiana treatment episodes with heroin use reported at treatment admission, by gender (Treatment Episode Data Set, 2001–2012) [32]



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Blacks reported higher rates upon treatment admission than whites or other races until 2007. From 2008 to 2012, whites consistently reported higher use rates than blacks, marking a racial shift in the demographics of heroin use. Other races reported higher use in 2009, 2011 and 2012 (Figure 1.1). [32]

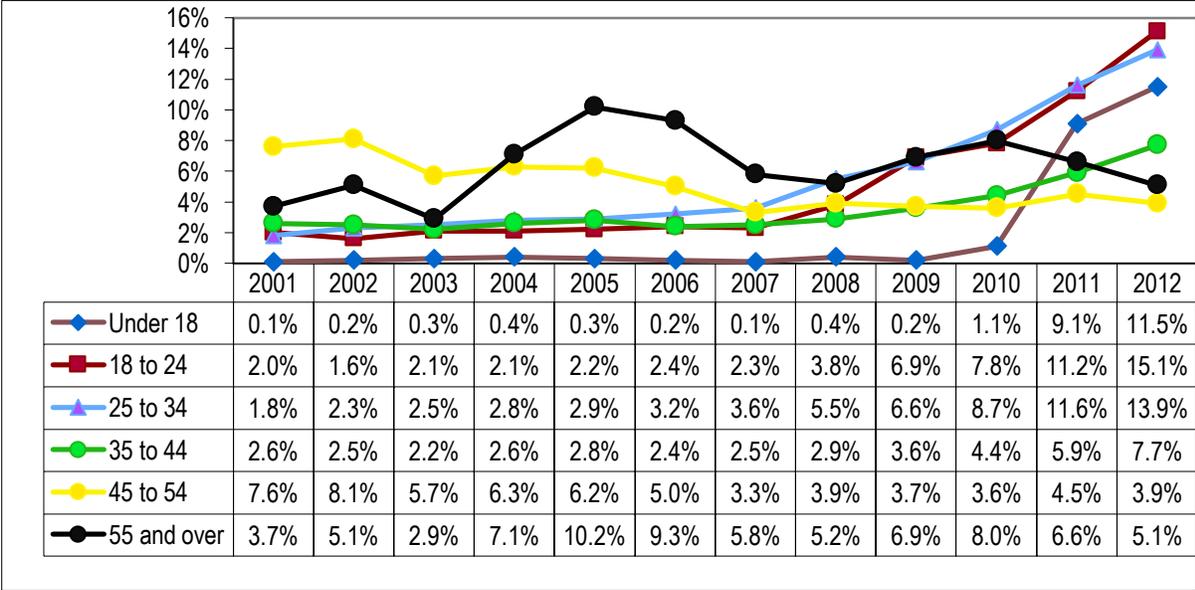
Figure 17 Percentage of Indiana treatment episodes with heroin use reported at treatment admission, by race (Treatment Episode Data Set, 2001–2012) [32]



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The year 2007 saw shifting trends in the ages of persons reporting heroin use. Prior to 2007, mostly older patients (45 and above) reported higher use rates. A dramatic increase in the number of persons aged 18-34 has occurred over the past 11 years, and beginning in 2009, this age group surpassed older adults in their use reporting rates by a significant margin (Fig. 16). [32]

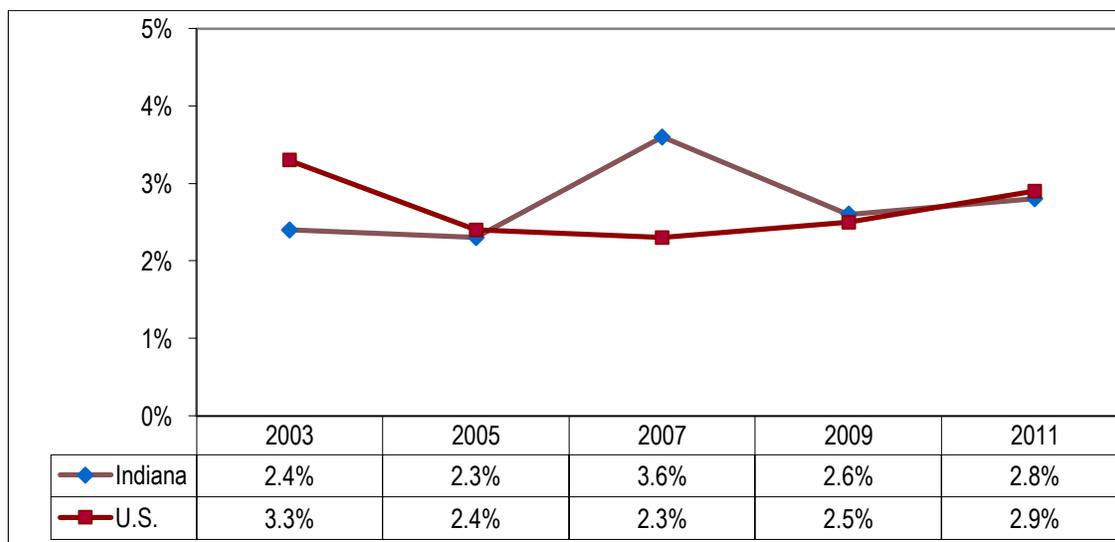
Figure 18 Percentage of Indiana treatment episodes with heroin use reported at treatment admission, by age group (Treatment Episode Data Set, 2001–2012) [32]



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In 2011, the last year Indiana had a representative sample in the YBRS, consumption of heroin among high school students who had tried heroin at least once was about the same in Indiana (2.8%) as it was nationally (2.9%). [25] Prevalence of lifetime use has been stable between 2003 and 2011, according to the Centers for Disease Control and Prevention (Fig. 17). Indiana and the nation had similar rates of any injectable illegal drug use (2.1% vs. 2.3%); these have been relatively stable between 2003 and 2011. [26]

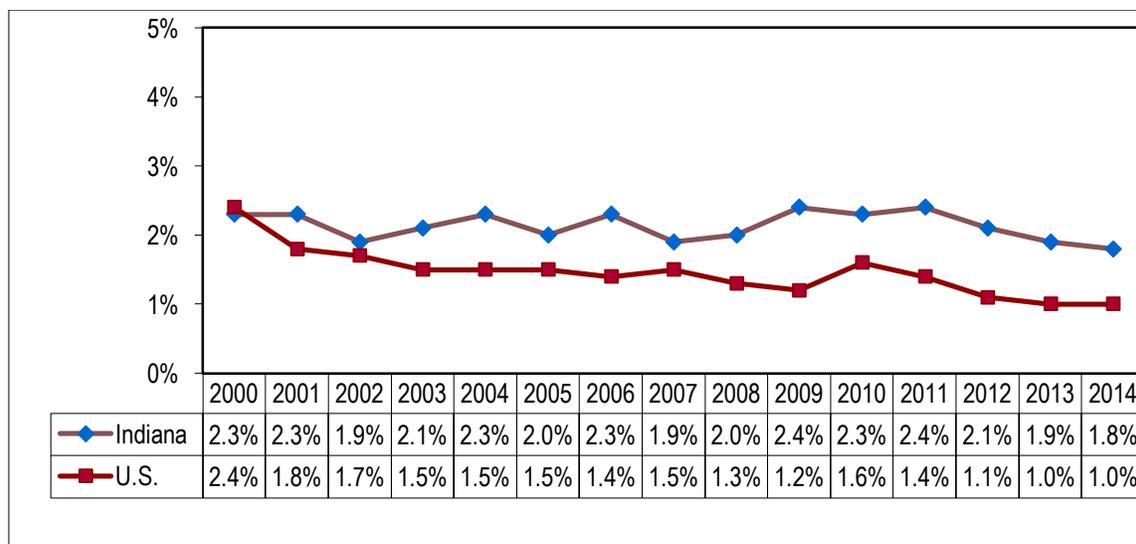
Figure 19 Percentage of Indiana and U.S. high school students (grades 9 through 12) who have used heroin at least once during their lifetime (Youth Risk Behavior Surveillance System, 2003–2011) [26]



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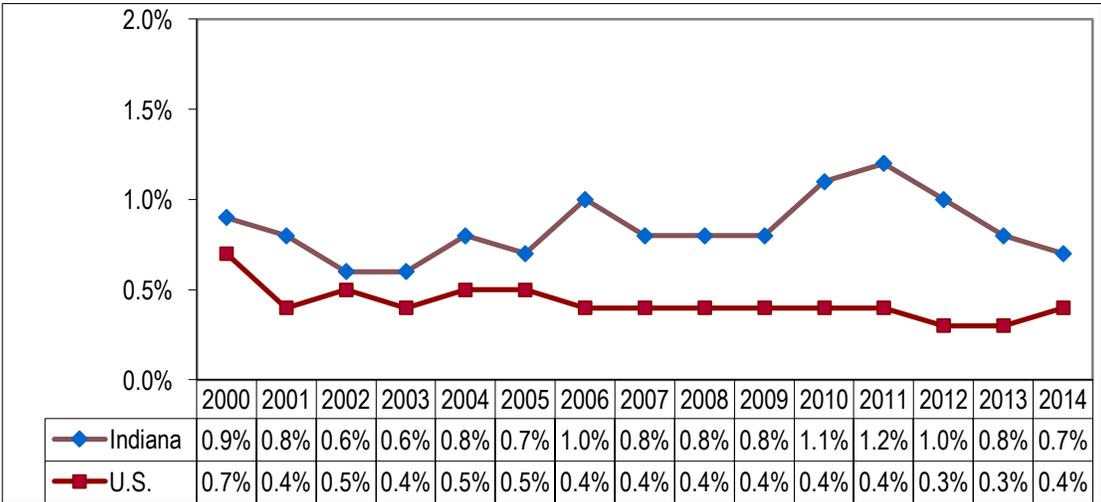
In 2014, the Indiana Youth Survey found that 1.8% of Hoosier 12th graders tried heroin at least once in their lifetime (Fig. 20), and 0.7% reported use in the past month (Fig. 21). [31]

Figure 20 Percentage of Indiana and U.S. 12th grade students reporting lifetime heroin use (Indiana Youth Survey and Monitoring the Future Survey, 2000–2014) [31]



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Figure 21 Percentage of Indiana and U.S. 12th grade students reporting monthly heroin use (Indiana Youth Survey and Monitoring the Future Survey, 2000–2014) [31]



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Heroin use appears to increase with age of the student, but differences were not statistically significant (Table 4). [31]

Table 4 Percentage of Indiana students reporting lifetime and monthly heroin use by region and grade (Indiana Youth Survey, 2014) [31]

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	0.3	0.3	0.4	0.0	0.5	0.4	0.5	0.3	0.2
	Monthly	0.2	0.1	0.3	0.0	0.2	0.3	0.0	0.1	0.0
7th Grade	Lifetime	0.5	*0.7	0.3	0.4	0.3	0.5	0.3	*0.2	0.6
	Monthly	0.2	*0.5	0.1	0.4	0.1	0.2	0.1	0.1	0.3
8th Grade	Lifetime	0.7	0.9	0.7	0.8	0.4	0.7	0.3	0.7	0.7
	Monthly	0.3	0.4	0.3	0.0	0.4	0.3	0.0	0.3	0.2
9th Grade	Lifetime	1.0	1.2	1.2	0.8	0.6	1.0	0.8	0.6	1.2
	Monthly	0.5	0.6	0.8	0.0	0.6	0.4	0.3	0.2	0.6
10th Grade	Lifetime	1.2	1.4	0.9	0.0	1.3	1.0	1.5	*0.8	*1.6
	Monthly	0.5	0.7	0.4	0.0	0.4	0.5	0.7	0.4	0.7
11th Grade	Lifetime	1.5	1.7	1.5	1.7	1.3	1.6	2.0	*1.0	1.8
	Monthly	0.7	1.0	0.7	0.6	0.9	0.7	0.5	0.7	0.7
12th Grade	Lifetime	1.8	*2.5	1.9	1.3	1.8	1.3	1.3	1.6	1.9
	Monthly	0.7	1.1	0.7	0.0	0.8	0.5	1.0	0.6	0.7

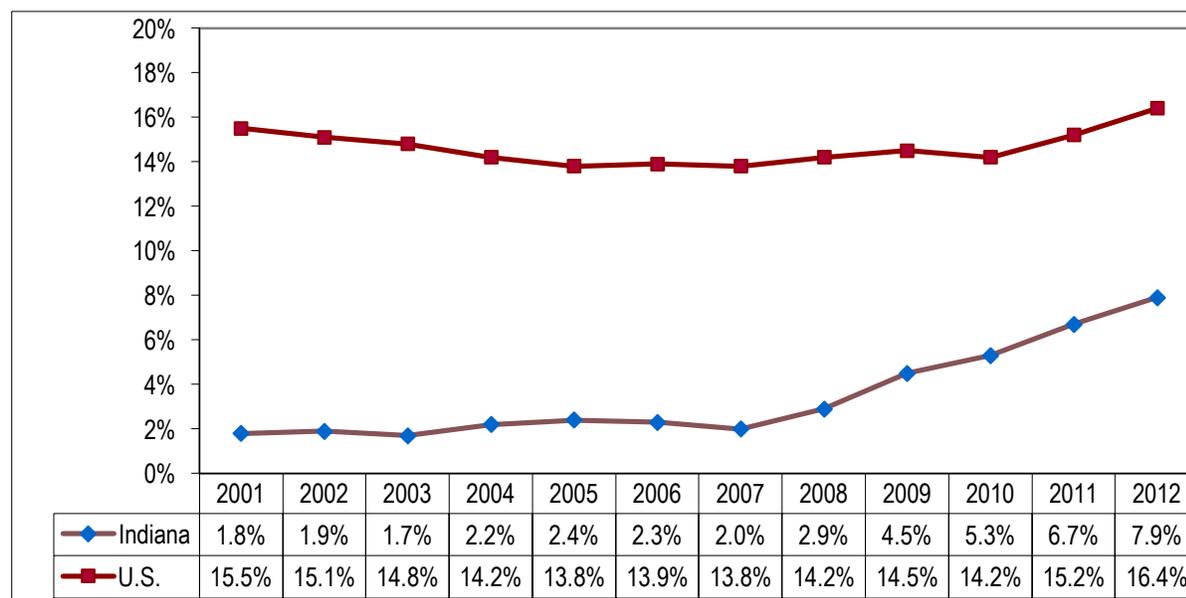
Note: * Indicates a local rate that is significantly different from the overall state rate ($P < 0.05$). Source: Gassman, et al., 2014

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People who use heroin are at risk for serious health consequences, such as drug dependence, spontaneous abortions, and chronic infection. [28] If heroin is injected, the risks increase for HIV, hepatitis C, infections in the heart lining and valves, abscesses, liver disease, and pulmonary system problems. [33] Heroin may contain other toxic substances that don't dissolve and may clog blood vessels leading to such vital organs as the brain, heart, liver, lungs or kidneys, causing patches of organ cells to die and negatively affecting their function. [33] By far the most serious health consequence is death by overdose. Heroin sold "on the street" varies in its level of purity, sometimes combined with "non-pharmacological fillers" that reduce its potency. A person accustomed to doses "cut" with fillers is vulnerable to overdose when pure heroin is ingested. Heroin can also be mixed with other drugs like fentanyl or benzodiazepines (Xanax) that will increase the risk of overdose. The Drug Abuse Warning Network reported that more than 258,000 visits to emergency rooms were related to heroin use, 83 per 100,000. [34]

Heroin dependence has been consistently lower in Indiana than the rest of the U.S. [28] However, like use rates, rates of dependence reported by people seeking treatment in Indiana have been on the rise, from 1.8% in 2001 to 7.9% in 2012 (Figure 22) (Treatment Episode Data Base, 2014). [32]

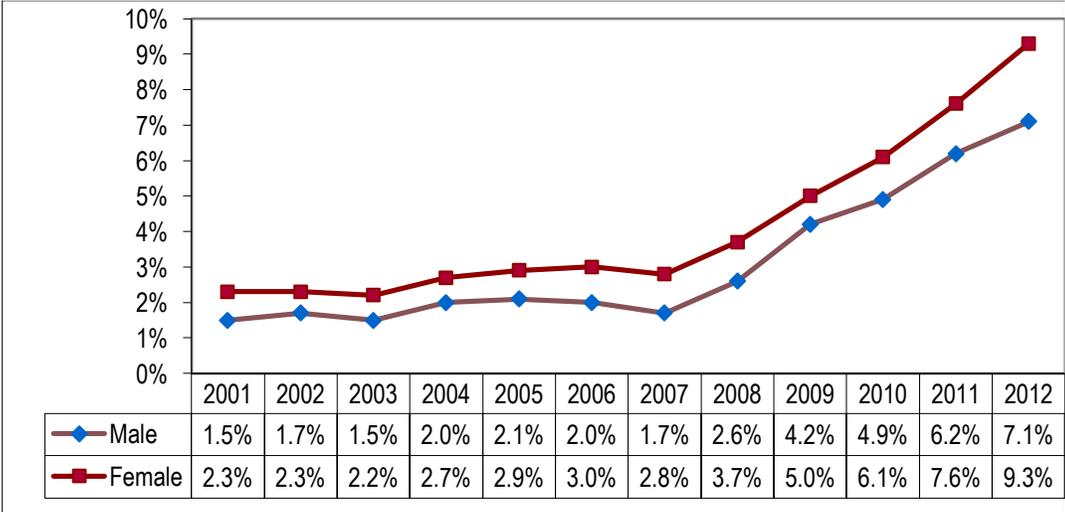
Figure 22 Percentage of Indiana and U.S. treatment episodes with heroin dependence reported at treatment admission (Treatment Episode Data Set, 2001–2012) [32]



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The percentage of women reporting dependence upon treatment admission exceeded the percentage of men (9.3% vs. 7.1%) (Fig. 23). [32] This finding reflects women seeking treatment more often than men, not more women using heroin.

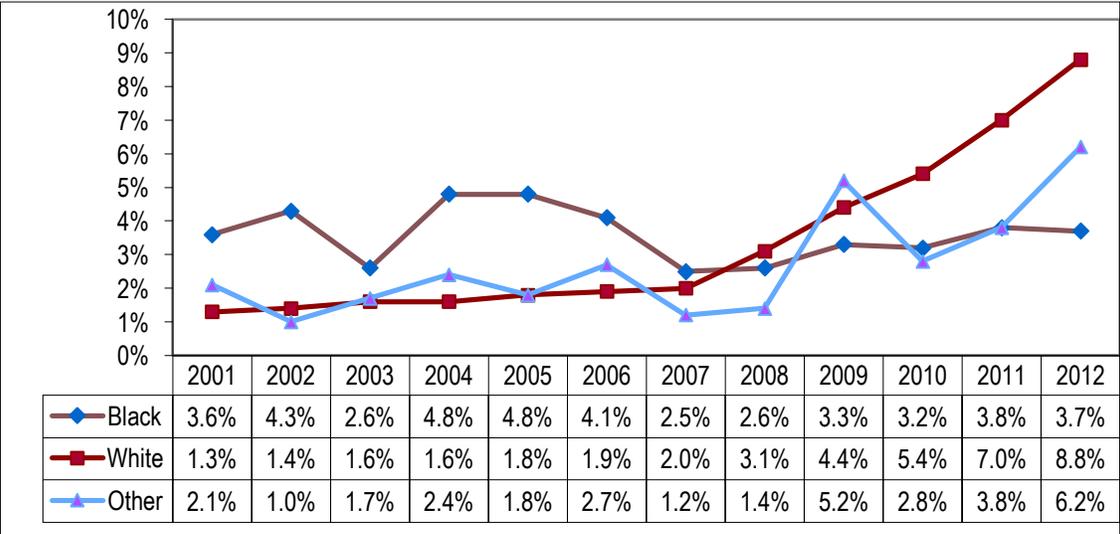
Figure 23 Percentage of Indiana treatment episodes with heroin dependence reported at treatment admission, by gender (Treatment Episode Data Set, 2001–2012) [32]



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The percentage of whites and other races reporting heroin dependence when seeking treatment has increased sharply, while the percentage of blacks has not changed significantly. [32]

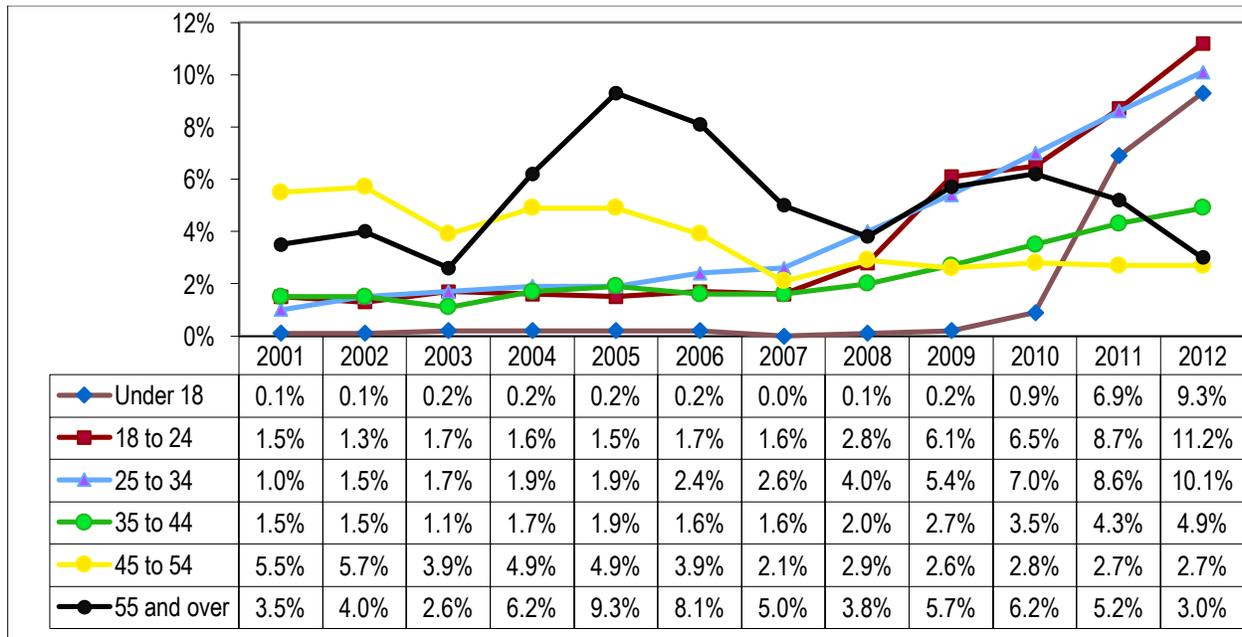
Figure 24 Percentage of Indiana treatment episodes with heroin dependence reported at treatment admission, by race (Treatment Episode Data Set, 2001–2012) [32]



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Heroin dependence was highest among 18-24 year olds in 2012, followed closely by 25-34 year olds. The third highest group is aged 18 and under, which spiked from 0.9% to 9.3% between 2010 and 2012. [32]

Figure 25 Percentage of Indiana treatment episodes with heroin dependence reported at treatment admission, by age group (Treatment Episode Data Set, 2001–2012) [32]



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Adverse Health Outcomes: HIV and Hepatitis

HIV and Hepatitis B and C are adverse health outcomes associated with injection drug use. Both are spread by the exchange of body fluids with an infected person, and are easily spread through needle sharing. A stark example occurred in Austin, Indiana in 2015. In late 2014, three individuals were diagnosed with HIV, raising a red flag since the area had had only five cases in the previous 10 years. A disease intervention specialist from the Indiana State Department of Health discovered that two of the individuals had a common needle sharing partner. Further contact tracing identified eight more cases by mid-January of 2015. Just over a year later, April, 2016, the number of HIV cases had climbed to 191, all linked to Austin. Geo-mapping of people infected with HIV earlier in the outbreak showed that nearly half of the cases were located within a half-square-mile area. All had recent infections from the same strain, with over 90% of those diagnosed being co-infected with hepatitis C.

The spread of hepatitis C is not an anomaly specific to Austin and Scott County. Rates of acute hepatitis C virus infection among young suburban and rural persons who inject drugs have been increasing across much of the Midwest and Appalachia, foreshadowing the Scott County HIV/hepatitis C outbreak (Fig. 26).

It is estimated that 50 to 80% of injection drug users will contract one of these viruses within five years of beginning injection drug use. [35]

Figure 26 Emerging epidemic of Hepatitis C virus infections among young non-urban persons who inject drugs in the United States, 2006–2012 [36]

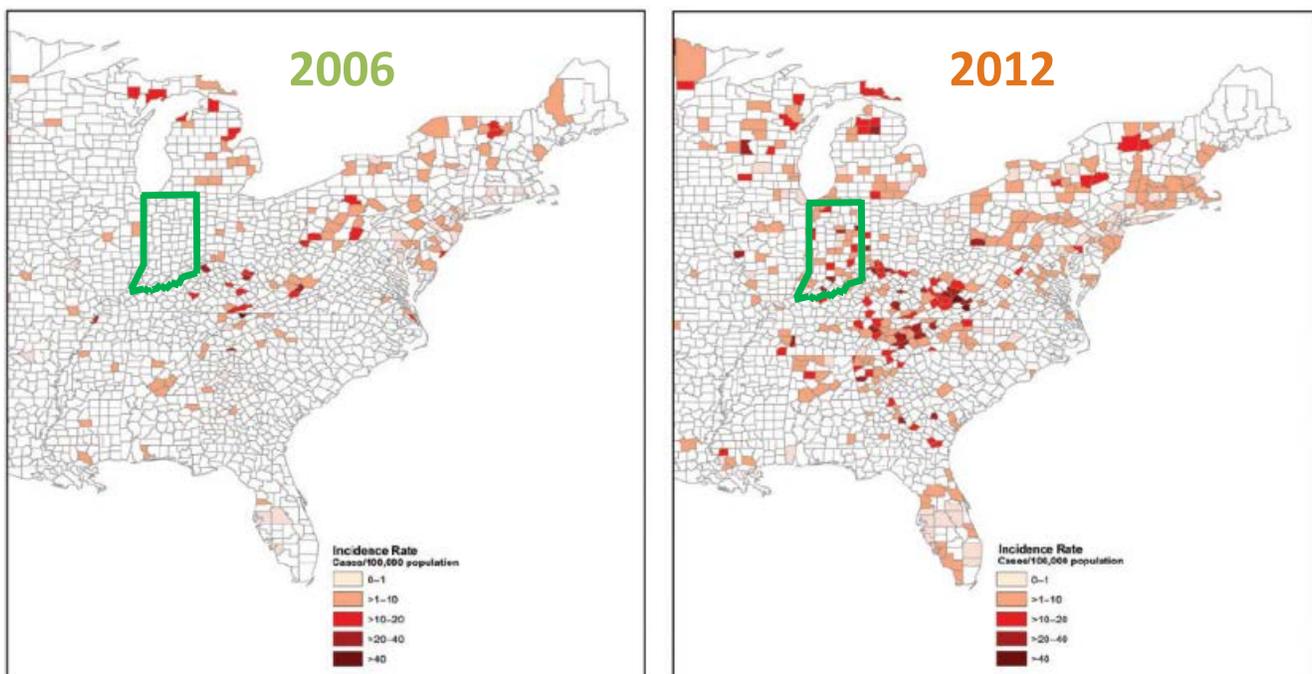
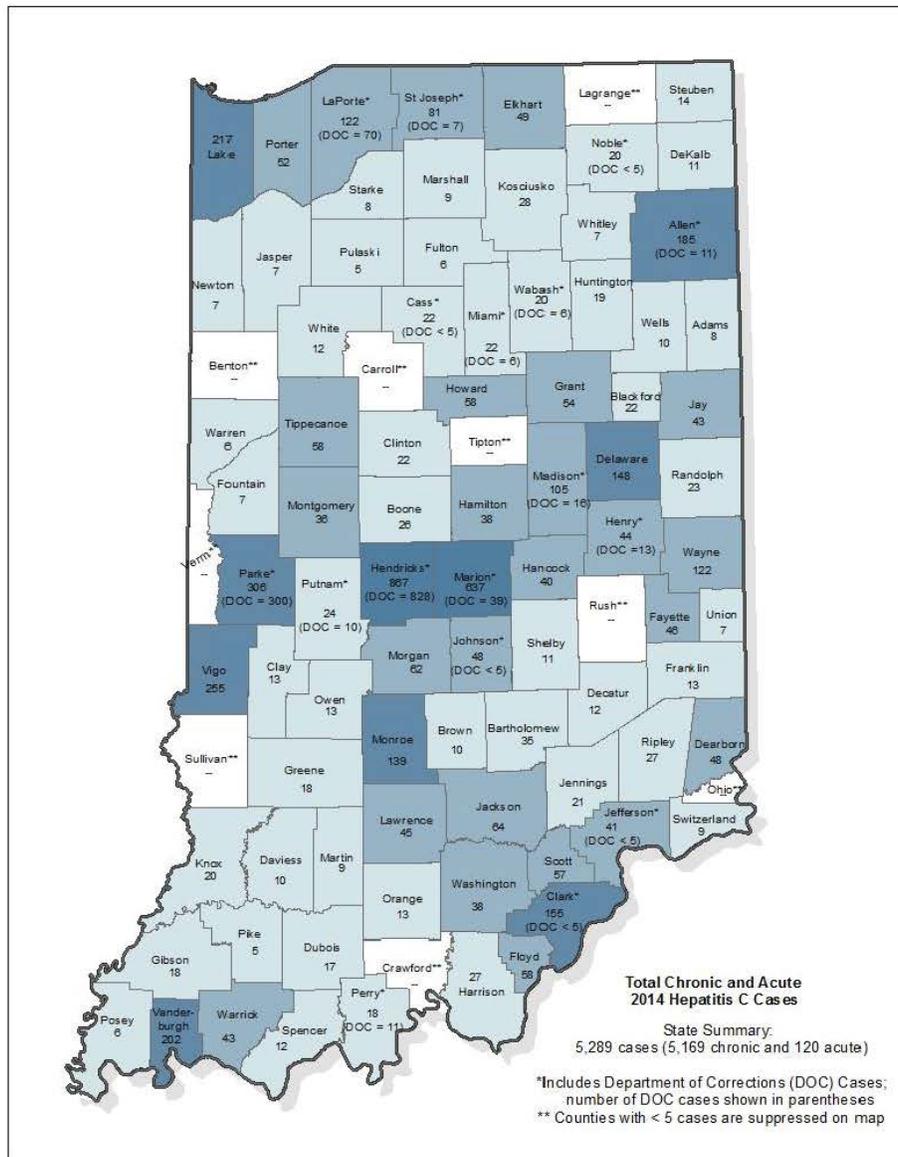


Figure 27 Total cases of Hepatitis C, Indiana, 2014 [37]

HEPATITIS C

January 1, 2014 – December 31, 2014



Adverse Health Outcomes – Neonatal Abstinence Syndrome

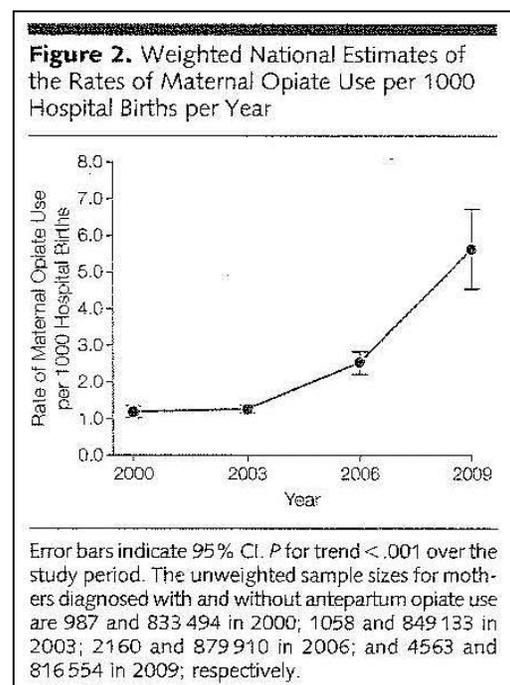
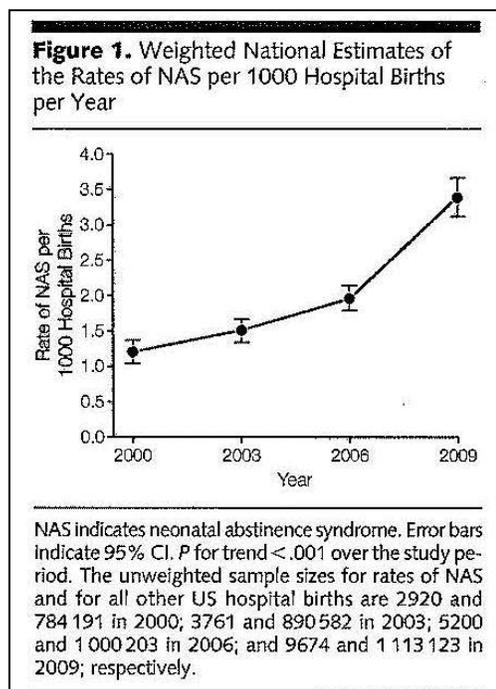
Neonatal Abstinence Syndrome (NAS) is a condition experienced by newborns, resulting from exposure to opioids in utero. Infants born to mothers who used opioids while pregnant are at increased risk for poor neonatal outcomes. [40]

Symptoms appear after birth and include increased irritability, hypertonia (spasticity), tremors, difficulty eating, vomiting, watery stools, seizures and respiratory distress. Of infants exposed to opioids in the womb, 60-80% will experience symptoms. [40]

- Compared to infants without NAS, NAS infants are: [40]
- 30.9% more likely to have respiratory diagnoses
- 19.1% more likely to have low birth weight
- 18.1% more likely to have feeding difficulties
- 2.3% more likely to have seizures

Estimates of incidence of NAS nationally show that it has been on the rise since the year 2000, paralleling the rise in prescription opioid and heroin use. The incidence of maternal opiate use/dependence at birth was 1.19 per 1,000 in 2000; in 2009, it was 5.63 per 1,000, a 473.1% increase. The incidence of NAS rose from 1.20 per 1,000 in 2000 to 3.39 per 1,000, a 282.5% increase. [40] By 2012 the incidence of NAS infants was up to 5.8 per 1,000. [41]

Figure 29 NAS rates compared to maternal opiate rates, 2000-2009 [40]



The incidence of NAS is challenging to estimate because it is commonly under-diagnosed and under-reported. Hospital coding prioritizes billable codes, e.g., respiratory distress, seizure disorder and poor feeding, If NAS is diagnosed, it falls to the bottom of the list of coded conditions, and is excluded from studies who extract the top codes. Actual rates of NAS

currently are likely to be higher for this reason, and because the opioid epidemic has continued to grow since 2012.

NAS is treatable, but infants with NAS have longer, more complex and more expensive post-natal hospitalizations. [40] In Indiana, 657 infants were born with NAS in 2014. Rural Union County had the highest reported rate of infants with NAS, with 9.091%. [42]

The Cost of Prescription Opioid Abuse

The most recent and robust study on the cost of prescription opioid abuse was conducted by Howard Birnbaum et al. of Analysis Group Inc. in Boston, MA. Birnbaum estimated the cost of prescription opioid abuse, based on administrative claims from private and public insurers in 2007. All costs were converted to 2009 dollars using the Consumer Price Index (the most current index at the time of the project). [43]

Birnbaum's group estimated the costs to society as \$55.7 billion, distributed in the following categories:

- \$25 billion attributable to healthcare
- \$25.6 billion in lost workplace productivity,
- \$5.1 billion in criminal justice costs.

The primary driver of health care costs was excess medical and drug treatment at \$23.7 billion (94.9%). Costs to caregivers accounted for the remaining 5.1%.

In terms of payers, the breakdown was as follows:

- One third of the cost was attributable to patients and caregivers on Medicaid;
- Slightly less than one third was attributed to patients and caregivers who were privately insured;
- Slightly less than one third was attributed to uninsured patients and caregivers;
- Medicare patients accounted for only 4.6%.

Substance abuse treatment (4.5%), research (.3%) and prevention (.3%) accounted for \$1.254 billion (5.1%). Research and prevention dollars came from federal sources, while treatment was funded through state dollars. [43]

Lost workplace productivity accounted for 45.9% of the total \$55.7 billion societal cost. Of that, the largest share (\$11.2 billion, 43.8%) was attributable to premature death. Lost wages/employment and presenteeism were the second largest category with \$7.9 billion (31%). Excess medical absenteeism (7.1%), incarceration (6.9%), and excess disability costs (3.2%) accounted for the rest of the \$25.6 million in lost work productivity. [43]

The largest share of criminal justice costs (\$5.1 billion) were attributable to incarceration (\$2.3 billion or 44.1%). Two thirds of these funds came from state sources. Police protection accounted for \$1.5 billion (29.7%), legal/adjudication costs equaled \$726 million (14.1%), and the remainder, \$625 million (12.2%), resulted from property damage from crimes committed. For a breakdown of costs by all categories, see Appendix A. [43]

In terms of cost per patient, Meyer et al. conducted a demographically matched case-control study using private insurance and Medicaid claims. [44] The mean healthcare cost for opioid abuse patients with private insurance was \$24,193 vs. those who did not abuse opioids, with a mean cost of \$3,647. The mean excess cost for people with opioid use disorders covered by private insurance was \$20,546. The mean healthcare cost for people with opioid disorders insured by Medicaid was \$26,724 compared to non-opioid abusers, whose mean cost was \$11,541; those with opioid use disorder insured by Medicaid incurred a mean excess cost of \$15,183. [44]

In a 2015 report for Partnership for Drug Free Kids, Matrix Global Advisors used the Birnbaum study to create a cost breakdown for states. [45] Using a model that accounted for population, cost of health care, and rates of opioid abuse, they estimated how much of the \$25 billion in health care costs from opioids in 2007 was borne by each state. Indiana's total cost was 12th highest among states with \$650 million and 8th among states in per capita costs at \$99. The state with the highest total cost was California at \$4.263 billion. Washington State had the highest per capita cost at \$138. [45]

Through the Centers for Disease Control and Prevention National Center for Injury Prevention and Control (NCIPC), estimated costs of poisoning deaths, non-fatal emergency visits and hospitalizations related to all types of drug overdose can be calculated using state-specific data generated through available death certificate data, emergency department discharge data, and hospital discharge data (Tables 5, 6 and 7). For Indiana, the estimated lifetime medical and work loss costs of drug overdose fatalities occurring in 2014 were \$1.408 billion; costs incurred for non-fatal drug overdose emergency room visits were \$31.9 million (2014). The lifetime medical and work loss costs of hospitalizations for all non-fatal poisonings over a four-year period (2007-2010) totaled \$350 million. These estimates do not include costs of drug treatment and rehabilitation, costs to the criminal justice system, or other related costs. [46,47,48]

These sources approximate the cost of prescription drug abuse, but all have limitations. Estimates from Birnbaum's work are likely to be understated, because the cost data is not current and the opioid epidemic has continued to grow since the study was conducted. Estimates from the insurance coalition represented health care costs only, not societal costs, and are also understated. Using the NCIPC tool, estimates were derived based on the most recent data available. Since they include all types of drug overdose, these estimates may be high, but we also know that opioid-related overdose deaths and hospitalizations are underreported. Yet to be factored in to any comprehensive cost estimates are the burgeoning costs of hospitalizing infants with Neonatal Abstinence Syndrome, or costs to the child welfare system.

Despite their limitations, these estimates provide a glimpse of how costly injuries from drug overdose are to society. In Indiana, we know that costs are continuing to escalate. Preliminary data for 2015 indicate a 75% increase in the reported number of individuals treated for drug overdose in the state's emergency departments, and 84 more reported overdose deaths than in 2014. [24]

Table 5 Cost of drug poisoning fatalities in Indiana [24, 46]

Fatal Injuries, Both Sexes, All Ages, Indiana 2014

Intent: All
 Mechanism: Drug Poisoning
 Number of Deaths and Estimated Total Lifetime Costs
 Classified by Mechanism and Intent
 Costs: Expressed in Indiana 2014 Prices

Death and Type of Cost				Intent			
				Unintentional	Suicide	Undetermined	Total
Year	Mechanism						
2014	Drug Poisoning	Deaths	Total	920	112	120	1152
		Medical Cost	Total	\$5,065,000	\$572,000	\$800,000	\$6,437,000
		Work Loss Cost	Total	\$1,142,003,000	\$115,423,000	\$144,869,000	\$1,402,295,000
		Combined Cost	Total	\$1,147,068,000	115,995,000	\$145,669,000	\$1,408,732,000

Injury Classification Scheme: Mechanism by Intent of Injury.

Reports for All Ages include those of unknown age.

Base year for average costs is 2010. Base year costs are then indexed to 2014 prices.

Note: For injury-related deaths, lifetime medical costs refer to the medical costs associated with the fatal injury event.

Note that the total cost estimates in this report, produced by combining system-generated average cost estimates with user-entered case counts from the intermediate data entry table, were not evaluated for statistical stability. Produced by: National Center for Injury Prevention and Control, CDC

Data Source: Indiana State Department of Health, Epidemiology Resource Center Data Analysis Team

Commission (CPSC) for numbers of nonfatal injuries. Pacific Institute for Research and Evaluation (PIRE), Calverton, MD for unit cost estimates.

Table 6 Cost of nonfatal drug poisoning emergency department visits [24, 47]

Nonfatal Emergency Department Treated and Released Injuries, Both Sexes, All Ages, Indiana, 2014

Intent: All

Mechanism: Drug Poisoning

Estimated Number of Nonfatal Injuries and Total Lifetime Costs

Classified by Mechanism

Costs Expressed in 2014 U.S. Prices

Drug Poisoning ED Visits, Indiana, 2014

ED Visits and Type of Cost		Number of ED Visits	Medical Cost	Work Loss Cost	Combined Cost
		--	Total	Total	Total
Year	Mechanism				
2014	Drug Poisoning	12,145	\$23,339,000	\$8,600,000	\$31,939,000
	Total	12,145	\$23,339,000	\$8,600,000	\$31,939,000

Injury Classification Scheme: Mechanism by Intent of Injury.

Reports for All Ages include those of unknown age.

Base year for average costs is 2010. Base year costs are then indexed to 2014 prices.

Note that the total cost estimates in this report, produced by combining system-generated average cost estimates with user-entered case counts from the intermediate data entry table, were not evaluated for statistical stability.

Produced by: National Center for Injury Prevention and Control, CDC

Data Source: Indiana State Department of Health, Epidemiology Resource Center Data Analysis Team

Commission (CPSC) for numbers of nonfatal injuries. Pacific Institute for Research and Evaluation (PIRE), Calverton, MD for unit cost estimates.

Table 7 Cost of hospitalizations from drug overdose [48]

Nonfatal Hospitalized Injuries, Both Sexes, All Ages, Indiana, 2007-2010

Intent: All

Mechanism: Poisoning

Estimated Number of Nonfatal Injuries and Total Lifetime Costs

Classified by Mechanism

Costs Expressed in 2014 U.S. Prices

Hospitalizations and Type of Cost		Number Hospitalized	Medical Cost	Work Loss Cost	Combined Cost
		--	Total	Total	Total
Year	Mechanism				
2007-	Poisoning	17,654	\$230,564,000	\$119,485,000	\$350,050,000
2010	Total	17,654	\$230,564,000	\$119,485,000	\$350,050,000

Injury Classification Scheme: Mechanism by Intent of Injury.

Reports for All Ages include those of unknown age.

Base year for average costs is 2010. Base year costs are then indexed to 2014 prices.

Note that the total cost estimates in this report, produced by combining system-generated average cost estimates with user-entered case counts from the intermediate data entry table, were not evaluated for statistical stability.

Produced by: National Center for Injury Prevention and Control, CDC

Data Source: Injuries in Indiana, 2007-2010, May, 2014. http://www.in.gov/isdh/files/Injuries_in_Indiana_Report_2007-2010_Final.pdf.

Commission (CPSC) for numbers of nonfatal injuries. Pacific Institute for Research and Evaluation (PIRE), Calverton, MD for unit cost estimates.

Indiana Medicaid Costs

For this assessment, Medicaid pharmacy costs for treatment of opioid dependence were retrieved for calendar years 2014 and 2015 (Tables 8a and 8b.).

(Note: The cost of Vivitrol is overstated because it is also used for treatment of alcohol abuse.)

Costs to the Indiana Medicaid Pharmaceutical Program for Opioid Dependence [49]

Table 8a. Pharmacy (Outpatient) Claims for Calendar Year 2014			
Drug	Paid Claims (\$)	Paid Claims (#)	\$/Claim
Vivitrol® Rx	\$419,610.00	361	\$1,162
Suboxone®	\$7,848,053.00	30,247	\$259
Buprenorphine (generic for Subutex®)	\$212,819.00	2,375	\$90

Table 8b. Pharmacy (Outpatient) Claims for Calendar Year 2015			
Drug	Paid Claims* (\$)	Paid Claims* (#)	\$/Claim*
Vivitrol® Rx	\$523,443.81	408	\$1283
Suboxone	\$7,633,419.00	31,846	\$240
Buprenorphine (generic for Subutex®)	\$261,096.00	3,081	\$85

(Personal correspondence, Michael Cook, March 4, 2016)

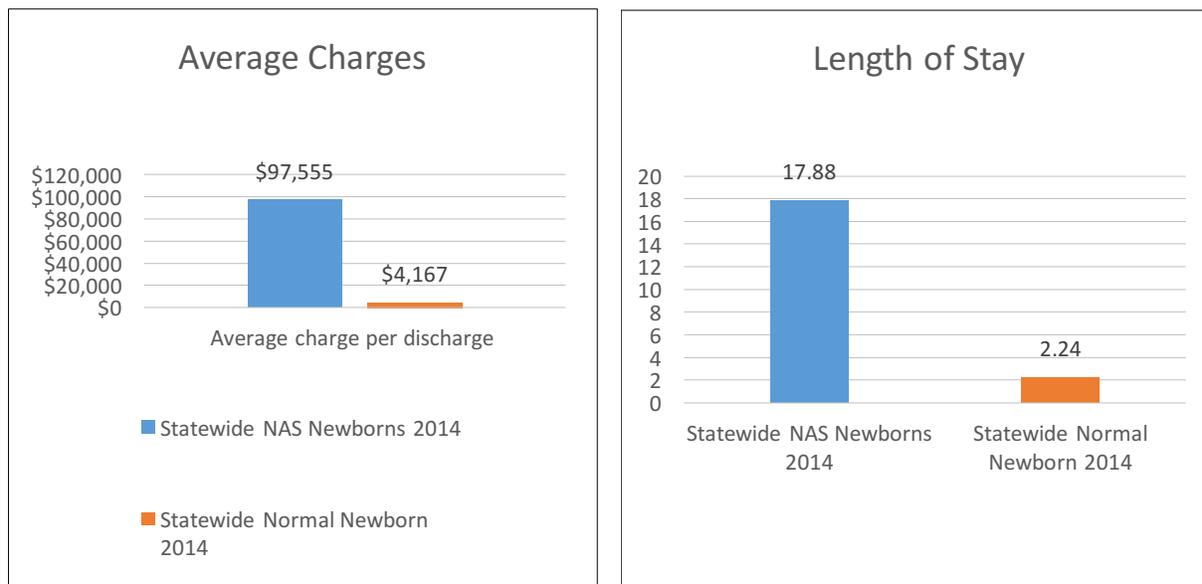
Two year cost trends: For Vivitrol, the cost and number of claims and total cost increased in 2015. Suboxone by far had the most claims and highest expenditures for both years. The total cost for Suboxone claims decreased in 2015 and had a lower cost per claim, although the number of claims increased. Buprenorphine showed a similar pattern of increased number of claims in 2015 and decreased cost per claim, but the total cost increased.

Costs of Neonatal Abstinence Syndrome

Infants born with NAS predictably have longer, more complex and more expensive post-natal hospitalizations. Nationally length of stay for infants with NAS was 16.9 days (longer if pharmacological treatment was required) compared to 2.1 days for infants without NAS (2013). [41] The cost nationally for hospitalization of a NAS infant was \$66,700 in 2013, compared to \$3,500 for an infant without NAS. [41] Total hospital charges for infants with NAS infants were \$1.449 billion in 2013, up from \$190 million in 2000. In 2013, 81.5% of NAS infants were insured by Medicaid, up from 68.7% in 2000. [41]

In Indiana, NAS was diagnosed and reported in 657 infants born in 2014. The average length of hospital stay for these infants was 17.88 days, compared to infants without NAS, who stayed 2.24 days. The average hospital cost for an infant diagnosed with NAS was \$97,555 compared to \$4,167 for infants without NAS. The total hospital costs for 657 babies with NAS in Indiana was \$64 million in 2014. [50]

Figure 30 Average charges and length of stay for NAS infants in Indiana, 2014



Effects of Opioid Addiction on the Indiana Criminal Justice System

Opioid abuse is a complex public health problem, in part due to the drug’s addictive properties, but also due to the legal issues that can be associated with it. Public health and mental health agencies must work in collaboration with criminal justice agencies to help those who are addicted and to protect society.

It has been estimated that the prevalence rate of people in the general population who have a serious mental illness or substance use disorder is 5.4% and 8.8% respectively. Of those incarcerated, 16% have a serious mental illness; 53% of incarcerated persons in Indiana and 47% of incarcerated persons nationally are diagnosed with substance use disorder. Of people who return to prison, 75% have a substance abuse disorder. [51].

People who commit crimes also suffer from substance use disorder, which places an expensive burden on the criminal justice system. The criminal justice cost nationally just for prescription opioid abuse alone has been estimated at more than \$5.1 billion (2007). [43] As Birnbaum noted, \$2.3 billion (44.1%) was attributable to incarceration costs, \$1.5 billion (29.7%) was attributed to costs for police protection, \$726 million (14.1%) was attributed to legal/adjudication costs, and the remainder, \$625 million (12.2%), resulted from property damage from crimes committed. [43] The current estimate is likely to be much greater due to growth of the epidemic since 2007.

When people become dependent on prescription opioids, they often resort to illegal means to maintain their supply, e.g., by doctor shopping, ordering through illegal online suppliers, or robbery/theft. According to the Drug Enforcement Administration's Theft and Loss Database, Indiana had 113 pharmacy robberies in 2012, with more than 35% occurring in Marion County (more than 40). Of the 113 incidents, 105 were armed robberies, two involved drugs stolen from customers, and six were night break-ins (personal conversation, Taya Fernandes, March 17, 2016). Indiana led the nation in pharmacy robberies in 2014, with 78 incidents, and with 68 robberies in the first five months of 2015 was on track for exceeding the 113 incidents that occurred in 2012. [172]

Figure 31 Indiana number was 1 in the US for pharmacy robberies.



With 68 pharmacy robberies during the first five months of 2015, Indiana has twice as many pharmacy robberies as California and more than five times more than Texas. In 2014, Indiana had 78 pharmacy robberies.

Source: DEA Theft & Loss Database

In her annual State of the Judiciary Address, Indiana Supreme Court Chief Justice Loretta Rush sounded the alarm about the effect of addiction on the court system, and how Drug Courts that highlight treatment can help. [52]

The court's Judicial Center has administered the Court Alcohol and Drug Court since assigned the responsibility by the General Assembly in 1997. Approximately 55 circuit, superior, county, and city courts have court alcohol and drug programs.

Chief Justice Rush explained the crisis this way:

“Department of Child Services Director Mary Beth Bonaventura will tell you that our state last year experienced a 30% increase in the number of children entering the welfare system—primarily because of parental substance abuse.

“This past year, my Supreme Court colleagues and I traveled the state to hear from our trial court judges from all 92 counties. They shared with us what became a recurring theme: the drug crisis, particularly heroin and methamphetamine, crippling their communities and flooding their courts. Wayne County Judge Dave Kolger told us that in his 20 years as a prosecutor, he handled a total of 20 heroin cases. Today, as a judge, he has heroin cases in his court daily. Fayette County Judge Paul Freed lamented that his county of 23,000 had 30 heroin overdoses in 30 days.

“We are replicating this drug court model in other parts of the state where courageous leaders sign on to a program that is about rehabilitation, not punishment. We cannot afford to incarcerate or institutionalize our way out of this drug crisis. Our approach must include helping sons, daughters, husbands, and wives return to a life after addiction. There are no easy answers, but your courts stand ready to help communities bring productivity back to those who have lost their way.”

The Multisite Adult Drug Court Evaluation found that adult drug courts significantly reduce participants' drug use and criminal offending during and after program participation. Drug court participants reported less drug use (56 percent versus 76 percent) and were less likely to test positive for drug use (29 percent versus 46 percent) than comparison probationers. Participants also reported less criminal activity (40 percent versus 53 percent) and had fewer rearrests (52 percent versus 62 percent--not a statistically significant difference) than the comparison probationers. Differences in employment, schooling, community service and other outcomes were not statistically significant. [53]

Effects of Opioid Abuse on Employers

A first of its kind survey conducted by the National Safety Council (NSC) and Indiana's Attorney General concluded that 80% of Indiana's employers have observed prescription drug misuse by their employees. Research partners included Tess Benham, Sr. Program Manager at the National Safety Council; Dr. Denise Fields, Pharm D, Sr. Clinical Consultant, Express Scripts and Tamara Watson, Master Trooper, Indiana State Police. [54]

The survey also found that 64% of employers perceive that prescription drugs present bigger problems in the workplace than illegal substances. Drugs like Vicodin, OxyContin and Percocet, commonly taken for pain relief, can present safety and other issues on the job. Only half of employers have written policies

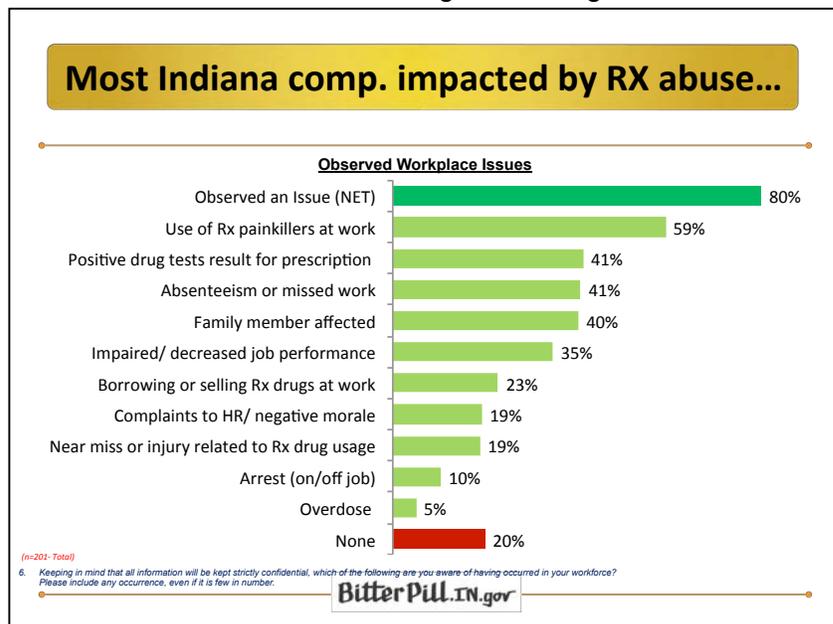


Figure 32 Employers experiencing effects of prescription drug misuse

on prescription drug use, and less than 30% offer training on the topic. Although 87% of employers conduct drug testing, only 52% screen for opioids. [54]

The NSC was quick to acknowledge that the problem was not unique to Indiana, that it was likely common across the country. They recommended that employers develop or expand their drug testing program, train employees on appropriate use of prescription drugs and how to identify signs of drug problems on the job, and use Employee Assistance Programs (EAP) to help people recovering transition back to work. [54] In a [presentation](#) on survey findings, Ms. Benham also recommended the following elements for a strong company policy:

- Address non-medical use of prescription and over-the-counter medications in the policy.
- Include prescription medications in drug testing panel and policy.
- Provide guidance to employees on when it is okay to use medication at work and if they should report this use.
- Be able to assign employees to alternate work tasks while on medication.
- Provide information about how to access employee benefit and assistance programs.

Chuck Gillespie, director of the Wellness Council of the Indiana State Chamber of Commerce, concurred with the findings. He acknowledged that very few professions require comprehensive, regular drug testing; they are only required for an employee accident reportable to the Occupational Safety and Health Administration. However, accidents are not the only negative drug use outcome for employers; financial workers can make costly financial errors, or sales representatives can be rude to customers resulting in loss of business. When testing for drugs, Mr. Gillespie recommends that companies use the 24 panel instead of the 12 panel drug screen. The cost is not significantly greater and produces much better results (personal conversation, Mr. Chuck Gillespie, March 21, 2016).

According to Gillespie, EAPs, in the companies who have them, vary considerably in quality. Employees are often reluctant to access EAPS, due to the perception that they are for behavioral health problems and stigma is attached to using them. When employers create good programs, they can be very successful in helping employees and building loyalty to the company. The Wellness Council is working on a training program for businesses, which they hope to launch by August, 2016. (Personal conversation, March 21, 2016)

Employers like Cummins, based in Columbus, Indiana, support the survey recommendations.

"We recognize drug overuse as an issue in American workplaces," said Dexter Shurney, M.D., Chief Medical Director and Executive Director of Global Health and Wellness at Columbus, Indiana-based engine manufacturer Cummins. Shurney said problems that arise from painkiller abuse are in many respects similar to problems that occur with alcohol abuse, and Cummins believes that programs to improve employee safety in the workplace have to include substance abuse of all kinds.

"We believe zero workplace incidents is the only ethically responsible target, and we have a duty to protect our employees from harming themselves and harming others," Shurney said. "Prevention is a good investment. Healthy employees miss fewer days of work and are more productive while they are here." [55]

Overview of the Problem – Marion County

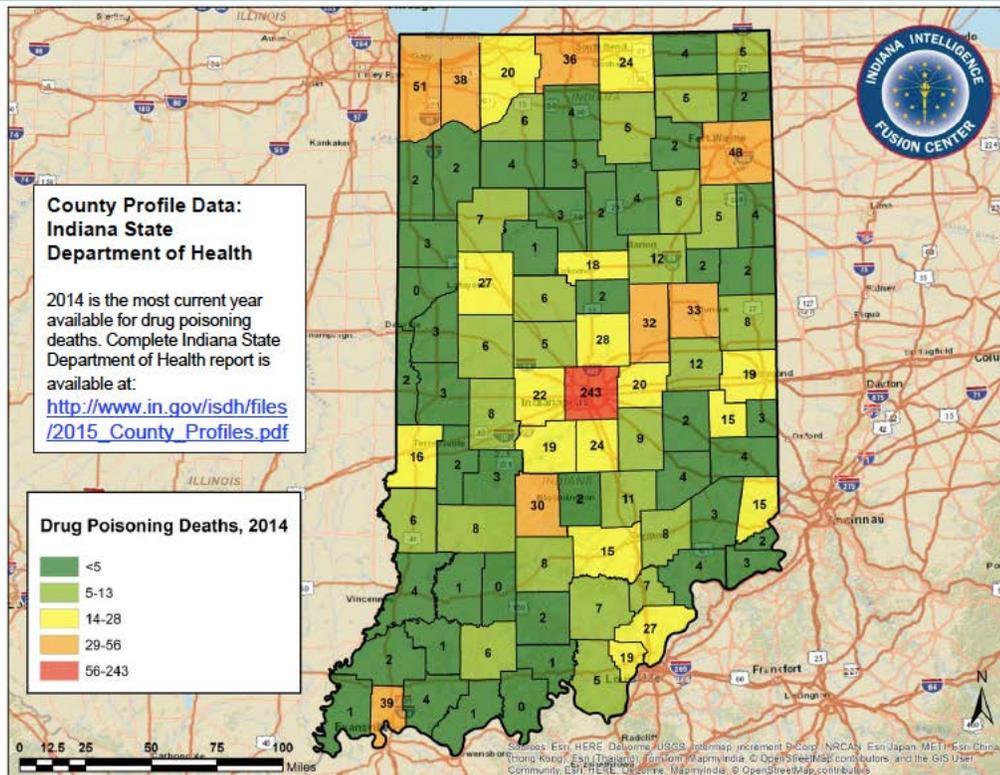
Drug Overdose in Marion County

In 2014, Marion County had the highest number of deaths due to drug overdose, 243, up from 203 in 2013 (see next page). [56] Of those deaths, 31 were caused by heroin, up from 30 in 2013. Lake County came in a distant second in overdose mortality, with 51 deaths in 2014.

Figure 33 Drug poisoning deaths in Indiana, 2014 [56]

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Drug Poisoning Deaths, 2014



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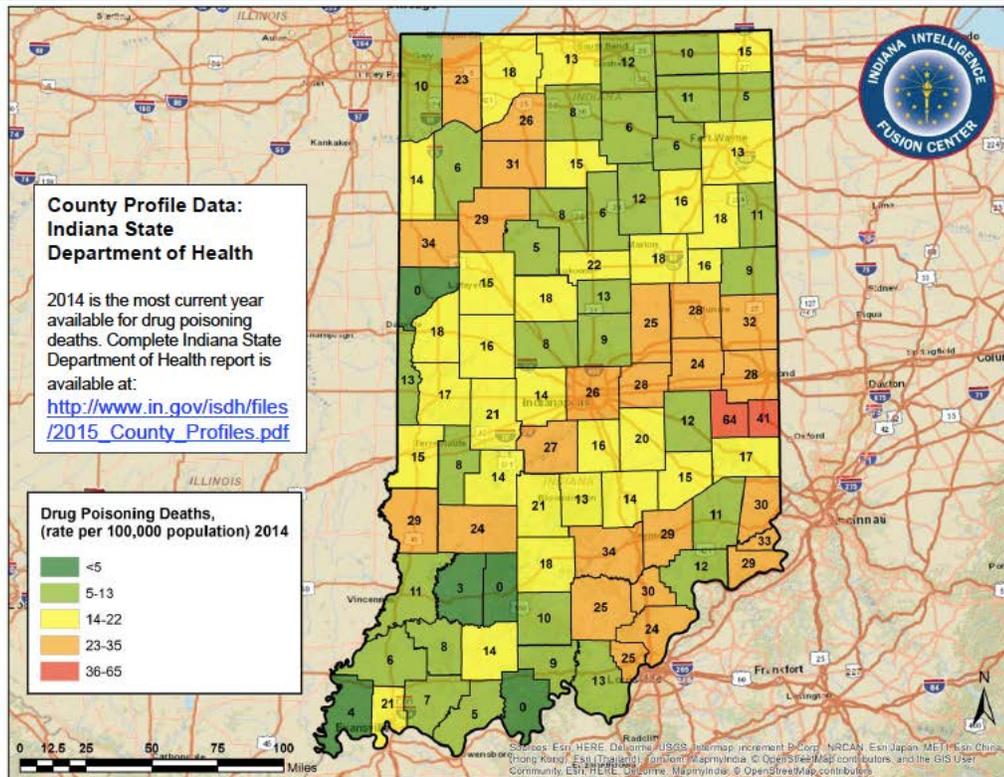
INDIANA COUNTERDRUG TASK FORCE

Marion County's numbers are high in part because of its large population. When we look at rates of mortality and non-fatal overdoses per 100,000 residents, Marion County ranks in the second highest category. Two rural counties, Fayette and Union, had the highest rates in 2014.

Figure 36 Drug poisoning mortality rates in Marion County and Indiana, 2014 [56]

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Drug Poisoning Deaths, (Rate per 100,000 Population) 2014

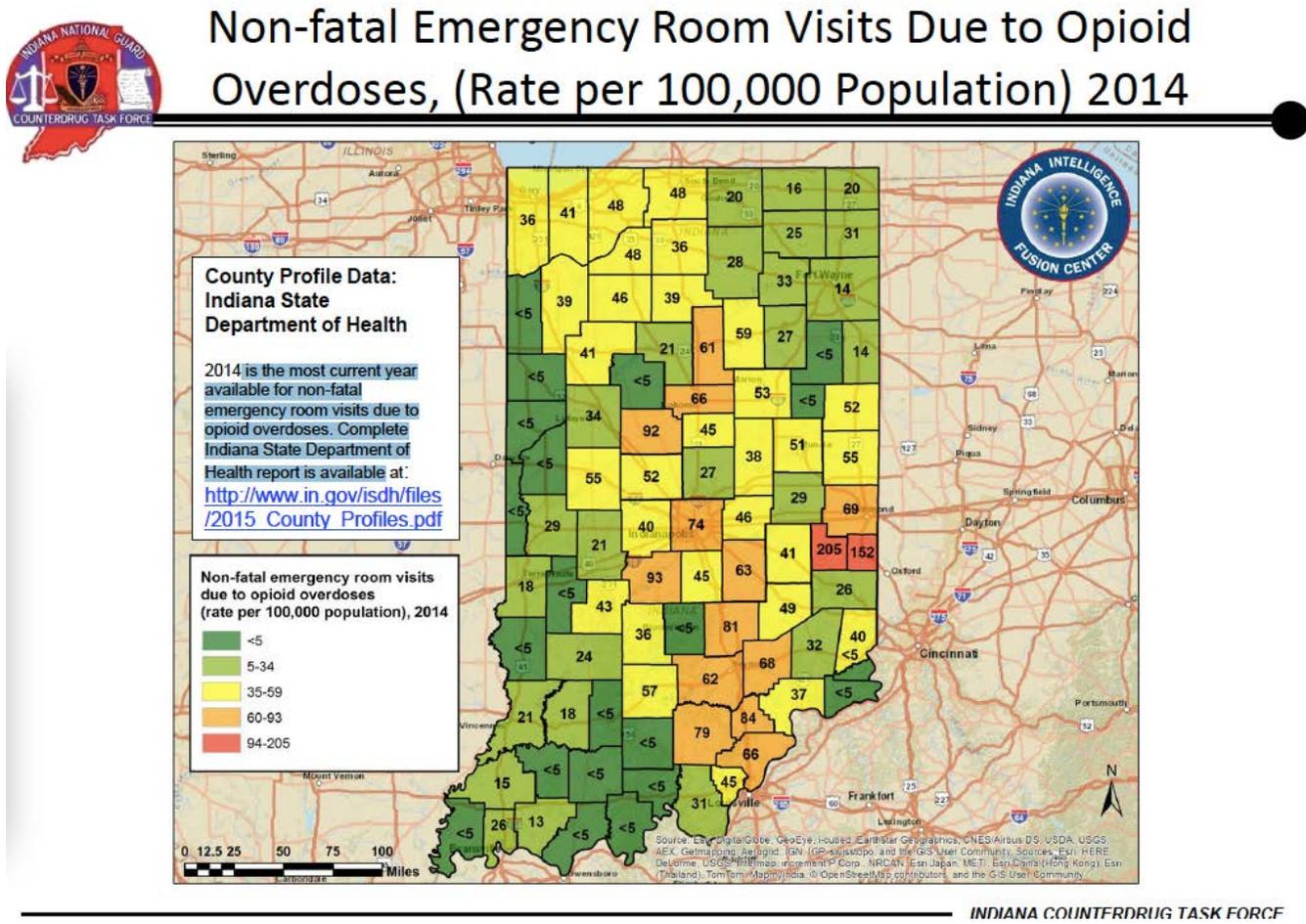


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INDIANA COUNTERDRUG TASK FORCE

Fayette and Union Counties also had the highest rates of non-fatal emergency visits in 2014.

Figure 37 Non-fatal emergency room visit rates due to opioid abuse, Indiana, Marion County, 2014 [56]



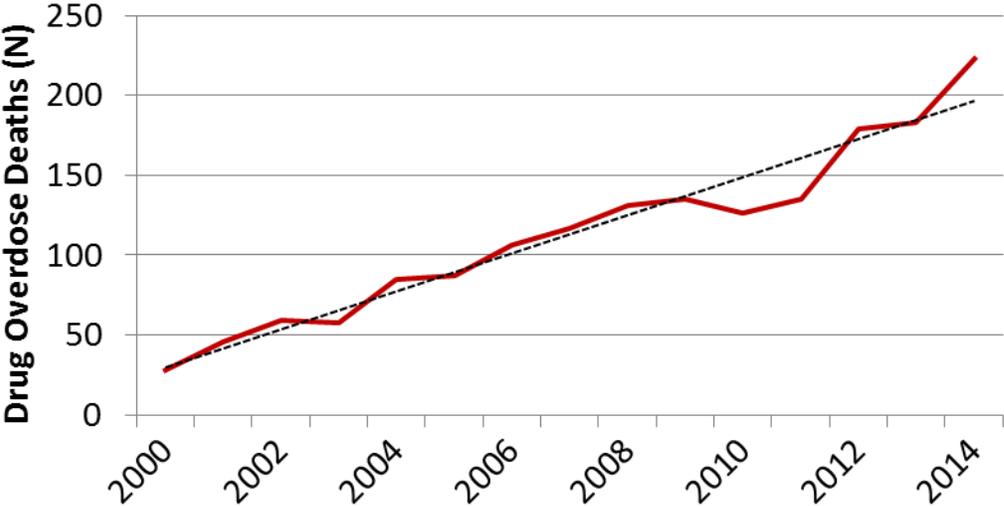
In Marion County, rates of treatment admissions for all prescription drug abuse/dependence and opioid abuse/dependence are slightly higher than those of the state at large [28, pg.158-159]. This could be related in part to more treatment options in Marion County.

Table 9 Marion County vs. Indiana reports of substance dependence upon admission to treatment [28]

	Treatment Episodes		All Rx Abuse		All Rx Dependence		Opioid Abuse		Opioid Dependence	
	Number	%	Number	%	Number	%	Number	%	Number	%
Marion	4,375	12.2%	1,276	29.2%	747	17.1%	1,068	24.4%	687	15.7%
Indiana	35,764	100%	10,007	28.0%	5,519	15.4%	8,105	22.7%	4,640	13.0%

According to the Marion County Public Health Department, the number of fatal drug overdoses among Marion County residents has steadily increased for more than a decade. In 2014, there were 223 deaths from overdose, accounting for 3.1% of all deaths among Marion County residents. [57].

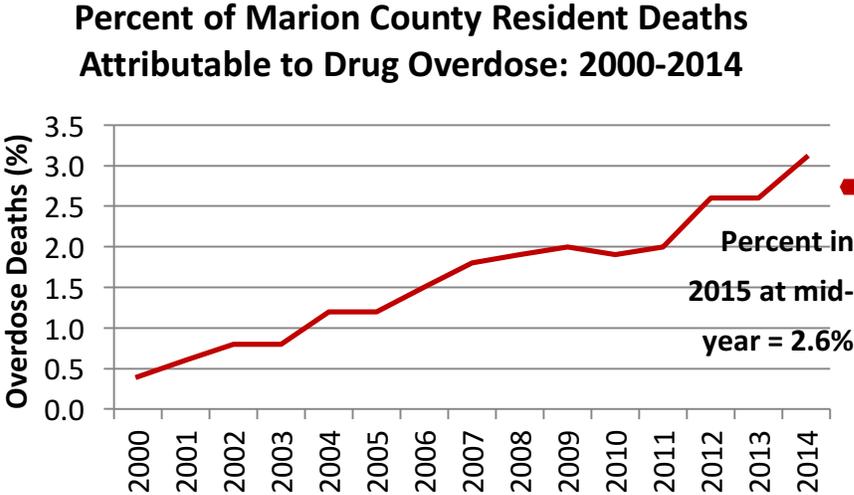
Figure 38 Number of Marion County resident deaths attributable to drug overdose, 2000-2014 [57]



Marion County Public Health Department, Epidemiology Division

The percentage of Marion County deaths attributable to overdose increased almost eight-fold between 2000 and 2014, from .4 to 3.1. [57]

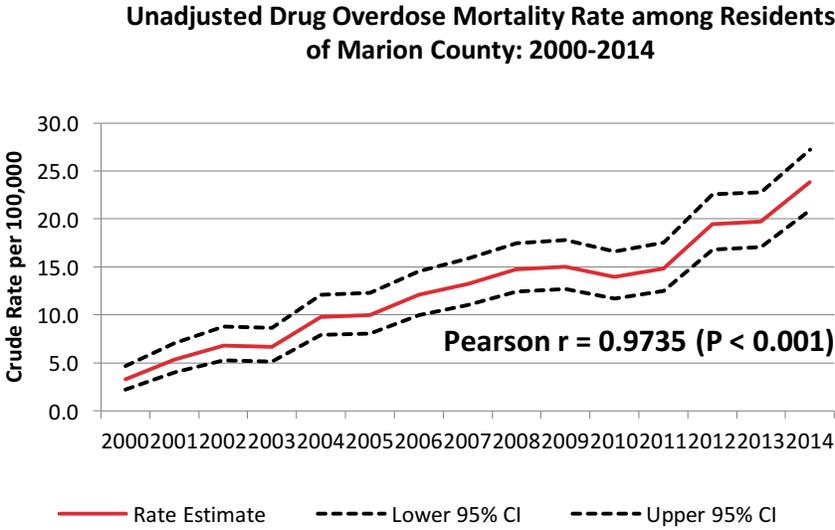
Figure 39 Percent of Marion County resident deaths attributable to drug overdose: 2000-2014 [57]



Marion County Public Health Department, Epidemiology Division

Unadjusted mortality rates for drug overdose among Marion County residents increased from 3.3 in 2000 to 23.9 in 2014, more than a seven-fold increase. [57]

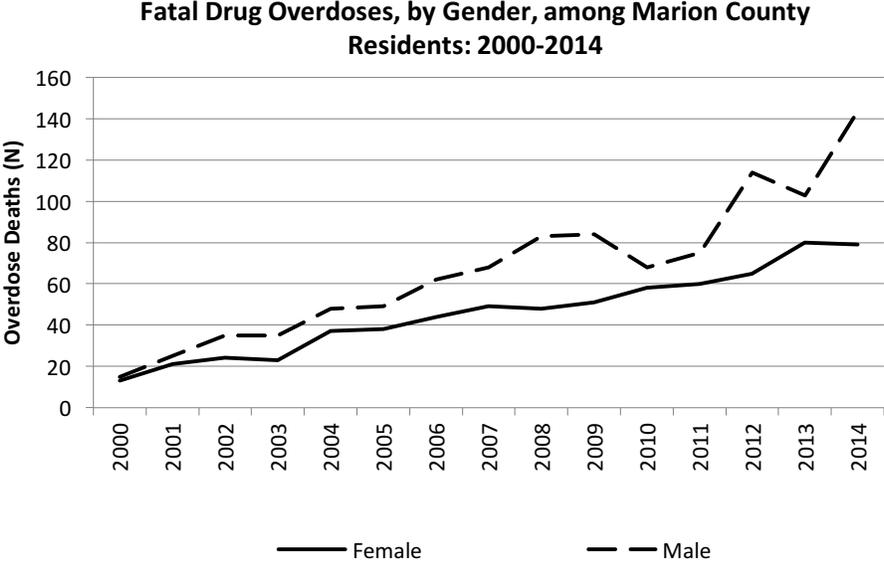
Figure 40 Unadjusted drug overdose mortality rate among residents of Marion County, 2000-2014 [57]



Marion County Public Health Department, Epidemiology Division

The number of drug overdose deaths in Marion County has increased for both males and females, although the increase for males was greater. [57]

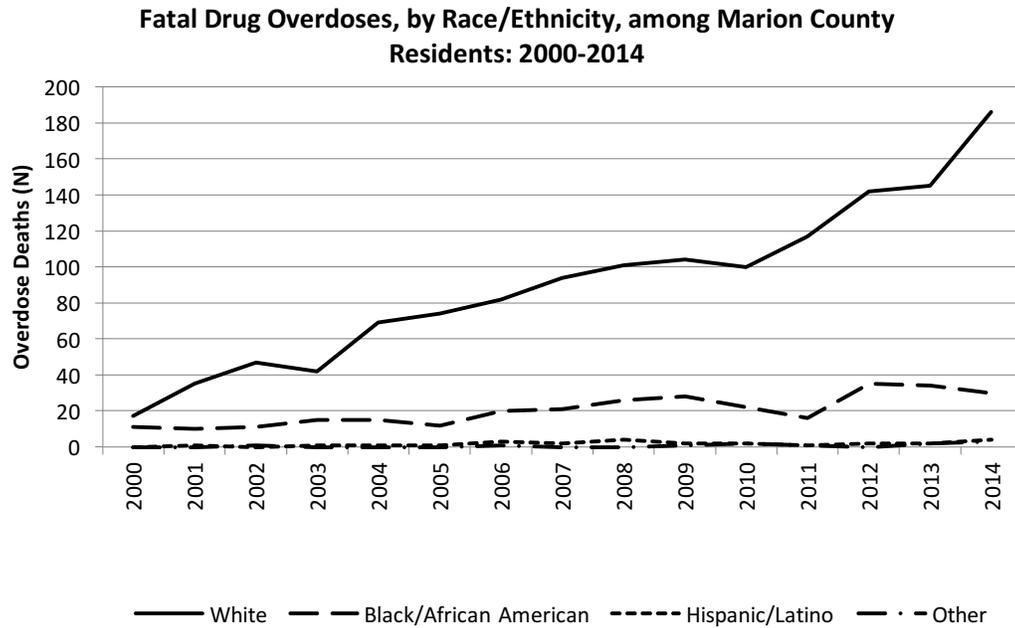
Figure 41 Fatal drug overdoses, by gender, among Marion County residents. [57]



Marion County Public Health Department, Epidemiology Division

The number of deaths among white residents is growing much more rapidly than any other race. [57]

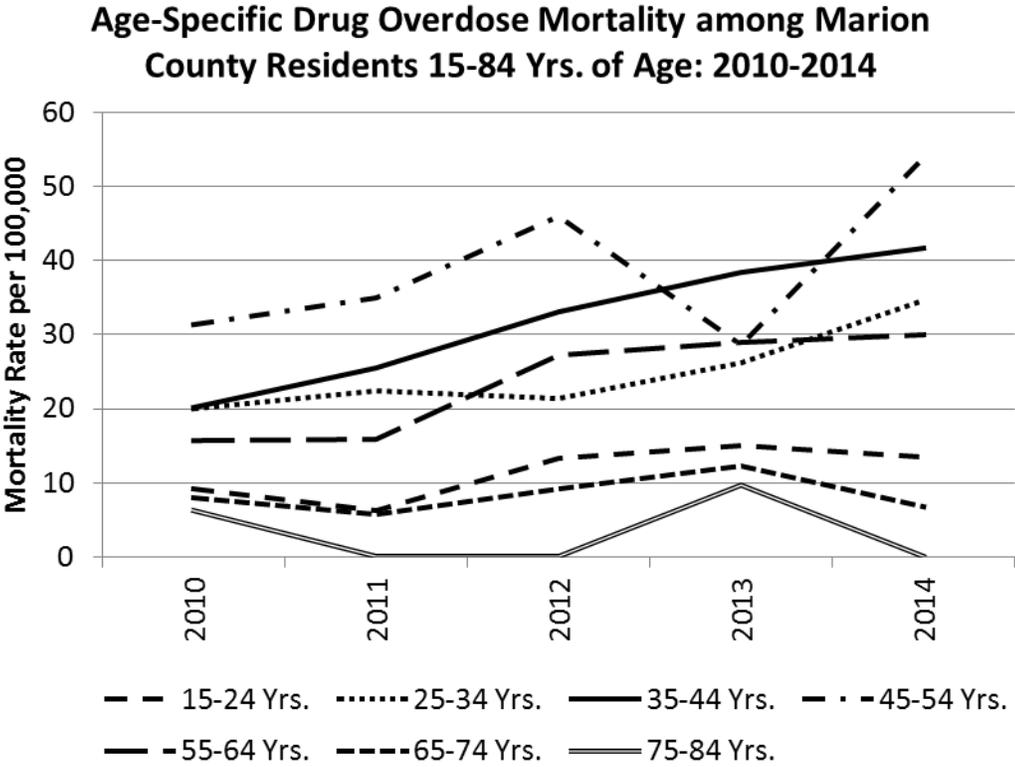
Figure 42 Fatal drug overdoses by race/ethnicity, among Marion County residents: 2000-2014 [57]



Marion County Public Health Department, Epidemiology Division

The highest number of deaths occurred among persons aged 45-54 in 2014, followed by those aged 35-44 and 25-34. All three groups trended upward in 2014. [57]

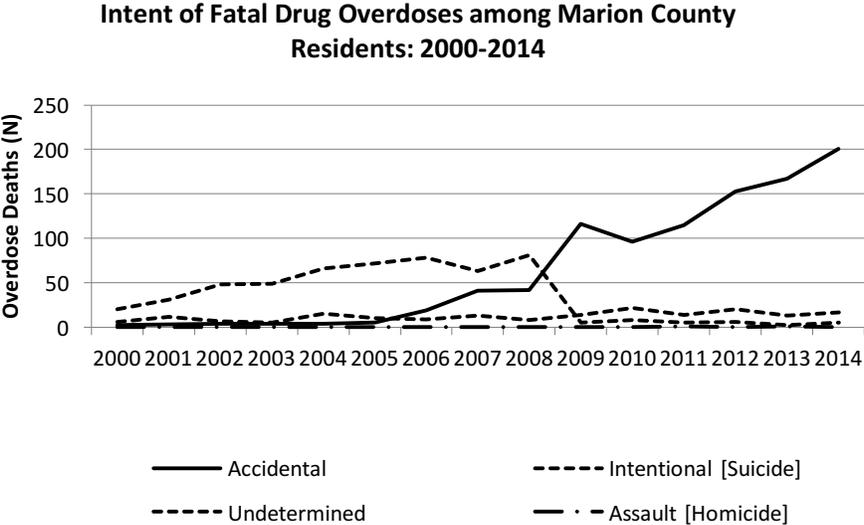
Figure 43 Age-specific drug overdose mortality among Marion County residents 15-84 Years of Age, 2010-2014 [57]



Marion County Public Health Department, Epidemiology Division

Overdose deaths are predominantly ruled accidental since 2009. The decrease in number of undetermined intent is unknown, but may be related to a change in reporting practices. [57]

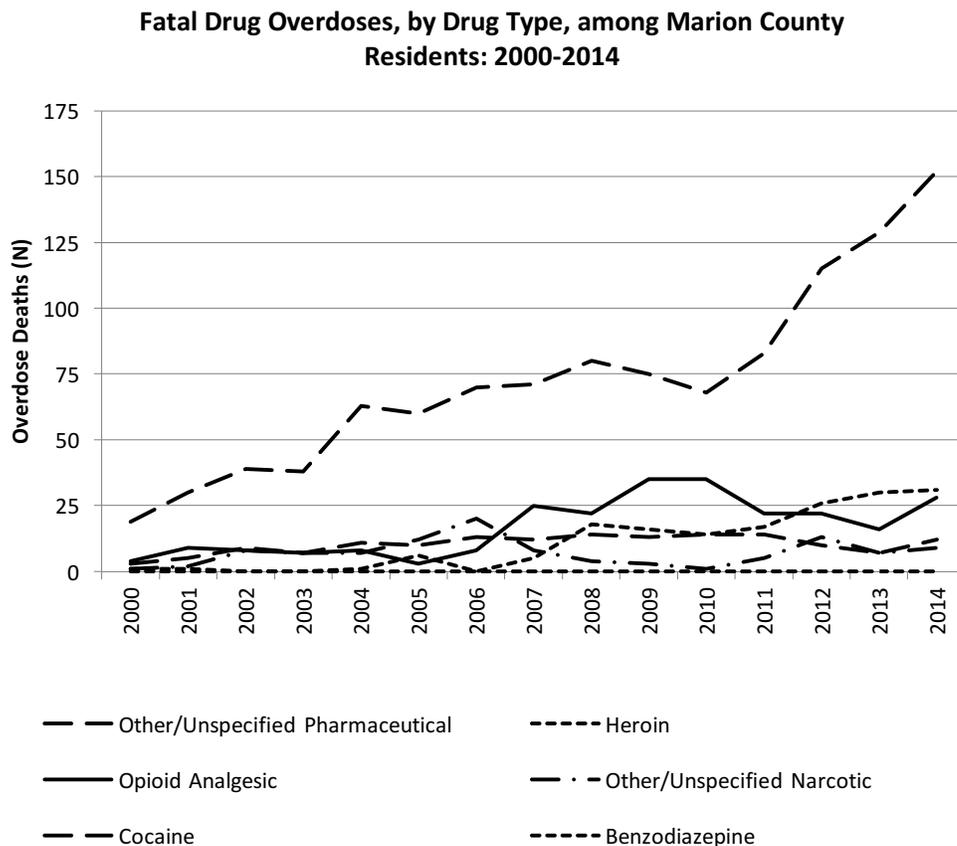
Figure 44 Intent of fatal drug overdoses among Marion County residents, 2000-2014 [57]



Marion County Public Health Department, Epidemiology Division

Marion County also resembles the state in that the largest number of overdoses resulted from an “unspecified” drug (next page). Both prescription opioids and heroin have trended upward since 2007. It is likely the trend is understated, due to inclusion of heroin and prescription opioid overdose cases in the “unspecified” category. [57]

Figure 45 Fatal drug overdoses, by drug type, among Marion County residents: 2000-2014 [57]

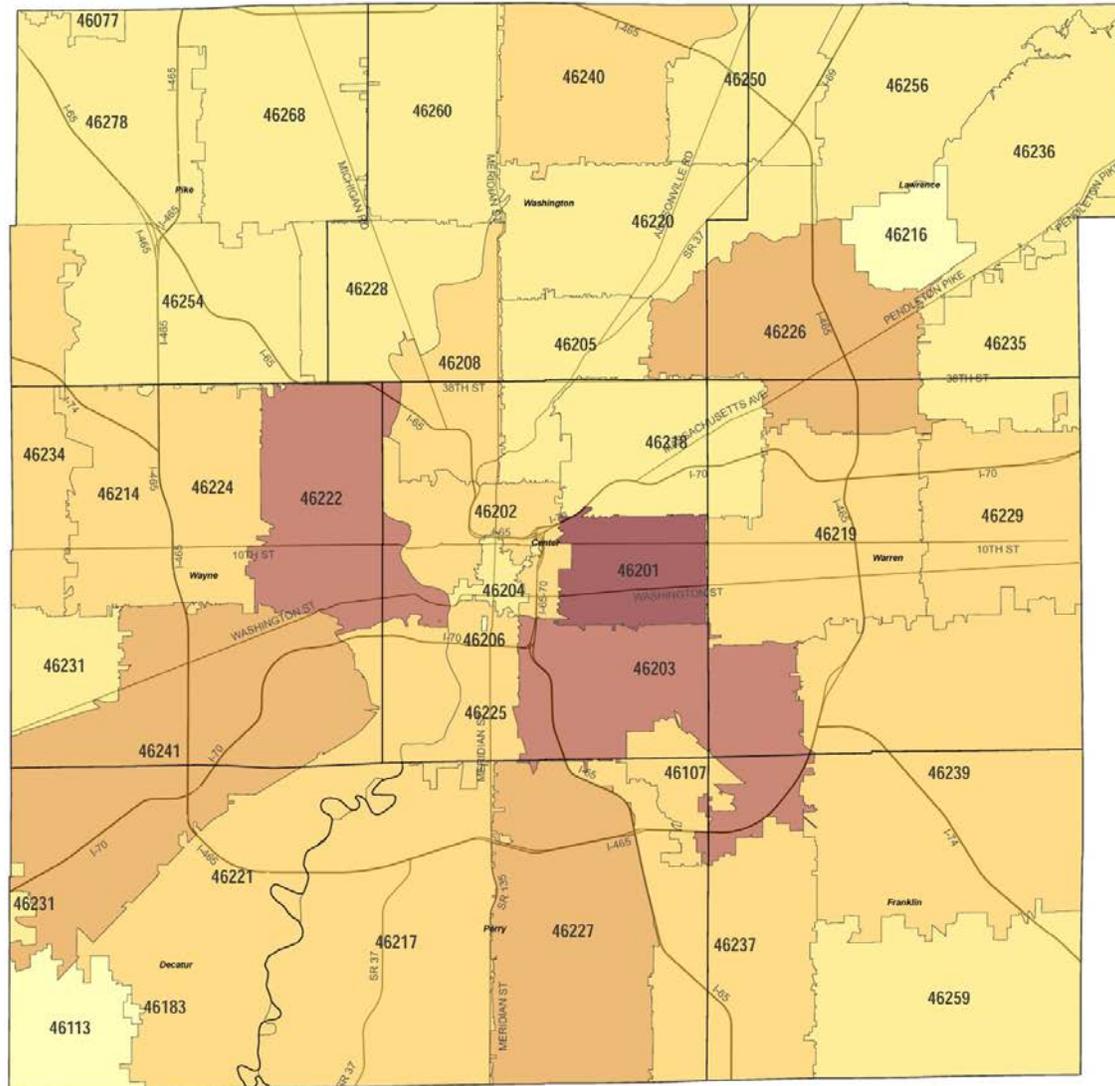


Marion County Public Health Department, Epidemiology Division

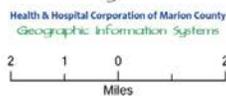
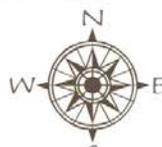
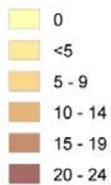
Nearly all counties have been affected by drug overdose deaths. Only two zip codes had no residents with a reported drug overdose death in 2014. Zip codes with the highest number of deaths were 46201, 46203 and 46222. Zip codes 46226, 46227 and 46241 also had higher numbers of overdoses. [57]

Figure 46 Fatal drug overdoses by zip code [57]

FATAL DRUG OVERDOSES 2014 Marion County, Indiana



Fatal Overdoses by Zip Code

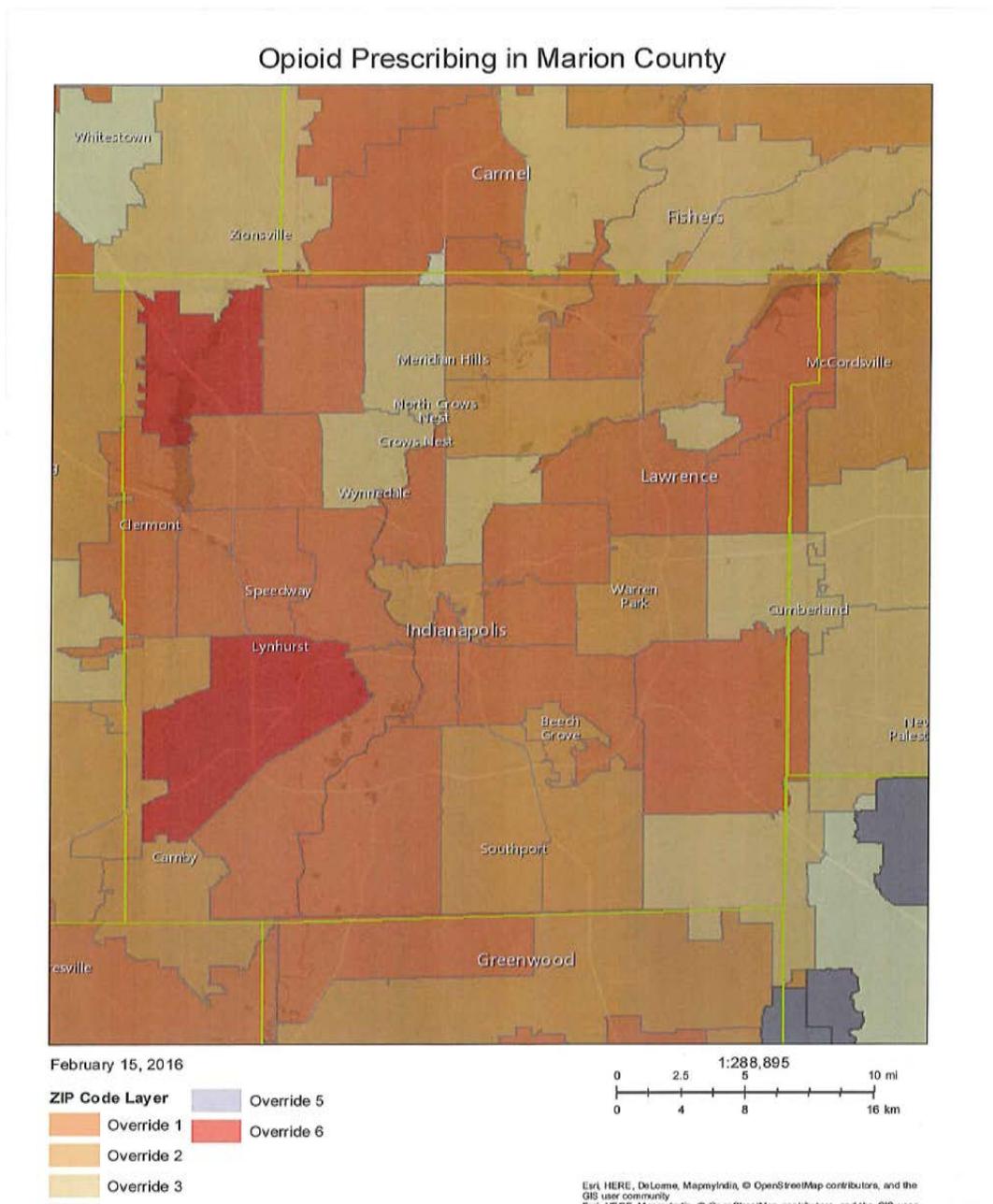


September 16, 2015
BPHI/2015/154114

Created 16SEP2015, Marion County Public Health Department, Epi DR2645, GIS 154114. Source: IPHIS, Marion County Public Health Department
Highlighted areas indicate numbers of fatal drug overdoses per zip code of residence for 2014.

The map below illustrates zip codes by level of prescribing. Darker colors indicate higher prescribing and lighter colors indicate lower rates. [58] Zip codes with the highest level of overdose rates were the same as or near zip codes with high prescribing levels. Zip code number 46278 was one of two very high prescribing rates in the county, but overdose rates were low. An orthopedic hospital in that zip code, which services patients from a wide region, may be related to the high rate of prescribing.

Figure 47 Levels of opioid prescribing, Marion County [58]



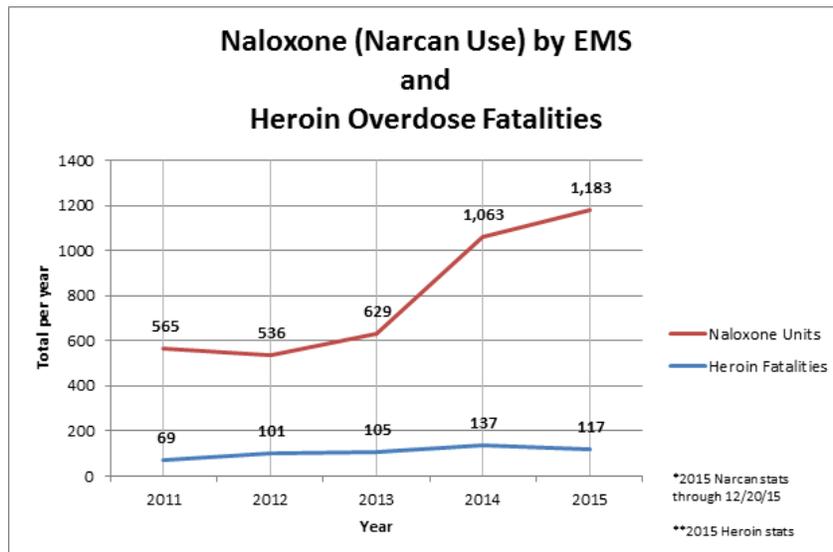
Heroin Use in Marion County

Indianapolis Emergency Management Services

Indianapolis Emergency Management Services (IEMS) has responded to a marked increase in overdose calls between 2011 (565) and 2015 (1183, as of 12-20-2015), a 117% increase. According to Carl Rochelle with the agency, additional emergency personnel have been needed to respond to the increase number of calls (personal conversation, March, 2016). Despite an increase in calls, the number of fatalities has not risen at the same pace, due to the administration of NARCAN. In 2015, the number of deaths actually decreased slightly.

IEMS currently averaged 3.3 calls per day. The most common times for overdose calls were 2-3 p.m. and 7-8 p.m. on Fridays. Of those calls, 93% were for people IEMS had not previously treated for an overdose; 7% had been treated for overdose on one or more occasions (personal conversation, Carl Rochelle, March, 2016).

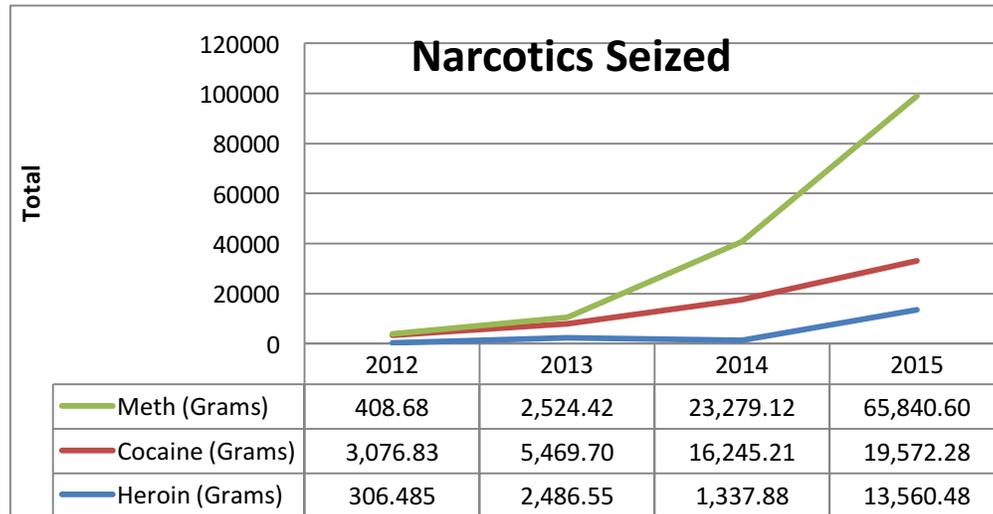
Figure 48 Naloxone use by IEMS and heroin fatalities



Indianapolis Metropolitan Police Department

Figure 49 illustrates the amount of narcotics seized by the Indianapolis Metropolitan Police Department (IMPD) from 2012-2015. While there has been a leveling out of marijuana seizures, the amount of methamphetamine, cocaine, and heroin has dramatically increased over this period. IMPD believes drug seizure data is actually under-reported due to different agencies using non-standardized reporting systems and different labs for testing (personal correspondence, Captain David M. Allender, March 9, 2016).

Figure 49 Narcotics seized by IMPD, 2012-2015



- The majority of narcotic complaints come to IMPD via Crime Stoppers. The volume of complaints has grown at an unanticipated rate, from 588 in 2011 to 2,390 in 2014 (personal conversation, Captain David M. Allender, March 9, 2016).
- The city's murder rate has correspondingly been on the rise since 2010, when 94 criminal homicides were recorded. The city reported 125 criminal homicides in 2013, followed by 138 in 2014, and 158 in 2015. There are only two other years on record when more homicides occurred. Additionally, there were 426 non-fatal shooting incidents in 2015 with 473 victims, an increase of 16.71 % from 2014.
- Marion County has led the state (which has led the country) in the number of pharmacy robberies.
- The Marion County Public Health Department has officially noted homicide as a public health concern. While drug trafficking is not the only reason for the increased homicide rate, public safety officials attribute the rise in competition among drug trafficking and heroin use as significant contributing factors. (Personal conversation, Captain David M. Allender, March 9, 2016)

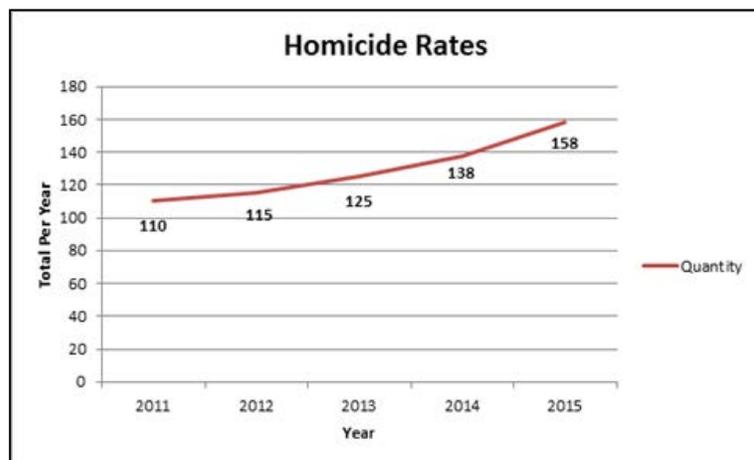


Figure 50 Number of Marion County homicides

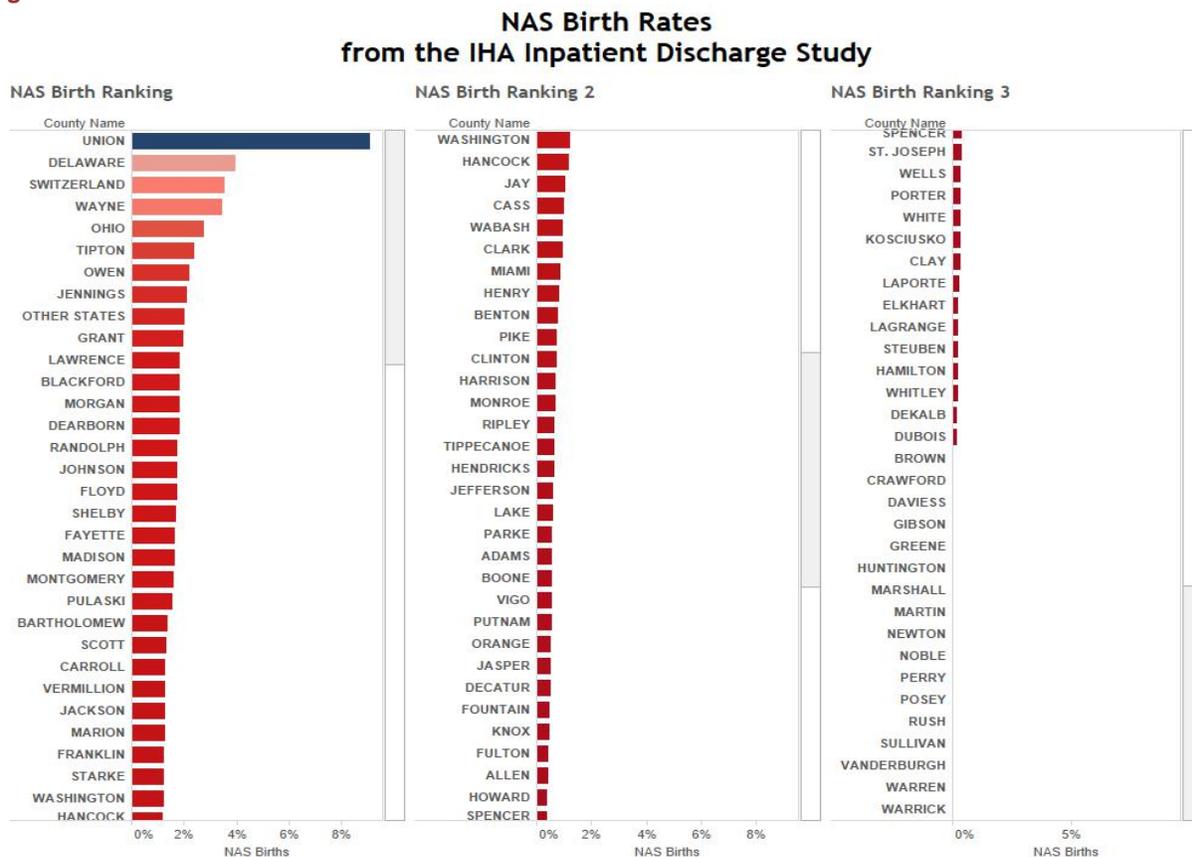
Juvenile Court

Rising rates of drug use affect not only the users, but also their families. Marion County Juvenile Court, presided over by Judge Marilyn Moores, has seen a sharp increase in the number of children taken from their homes because of parents' addiction. In 2013, nearly 2,300 children were placed in protective custody, but by 2015 the number was 3,776 cases - a record number. The number of cases where the court terminated parental rights also grew by 31%, and Moores believes things will get worse. [59]

Neonatal Abstinence Syndrome (NAS) in Marion County

In 2014, the rate of infants diagnosed with NAS in Marion County was 1.283%. [42] Based on NAS birth rates, the county ranked 28th in the state; Union County, on the state's eastern border ranked first with 9.09%. With 14,573 infants born in Marion County in 2014, the county's rate equates to 187 infants born with NAS, compared to 82 infants born in Union County and 7 infants diagnosed with NAS. [60] Hospitalization costs for infants with NAS, based on the state average of \$97,555, is estimated at \$18,242,785 for Marion County and \$682,885 in Union County. Although Marion County has a smaller rate of NAS births than the county with the highest rate, the number of infants affected and the costs to treat them are considerably higher.

Figure 51 NAS Birth Rates



Summary: Section I

- The number of deaths from drug overdoses has increased dramatically in Indiana since 1999, more than 600%. Indiana ranked 15th nationally in overdose fatalities for 2014.
- Hoosiers aged 30-39 had the highest rates of overdose death, followed closely by those aged 50-59 (2014).
- Men die at greater rates from drug overdose than women, but the gap between genders is shrinking.
- Non-Hispanic whites and American Indian or Alaskan Natives had higher overdose rates than non-Hispanic blacks and Hispanics.
- A primary driver of the mortality increase is the availability of prescription opioid pain relievers related to changes in prescribing practices, which vary across states.
- Heroin deaths have escalated rapidly in Indiana since 2007. Males, non-Hispanic whites, and people aged 30-39 had the highest mortality rates from drug overdose.
- Marion County has the most overdose deaths and non-fatal emergency room visits due to overdose of any county in the state, but does not have the highest rates. (Two rural counties had the highest rates in 2014, Fayette and Union counties.)
- The number and rate of Marion County deaths from drug overdose has increased steadily since 2000.
- Men, non-Hispanic whites, and persons aged 45-54 had the highest rates.
- Living in a large metropolitan area is a risk factor for death from heroin overdose, according to the Centers for Disease Control and Prevention.
- In the majority of Marion County overdose deaths, the drug type causing overdose was classified as “Other/Unspecified,” and were ruled accidental. In Indiana the overdose deaths categorized as unspecified equals 50.1%. Numbers of opioid deaths are likely underestimated.
- The highest number of overdose deaths occurred in zip codes in the west central (46222) and east central parts of the city (46201, 46203). The highest prescribing rates occurred in 46241 and 46278.
- In Marion County, the percent of persons reporting heroin dependence at treatment admission was (16.3%), higher than the state level of 7.9%, which may be a result of more treatment options in the county compared to other areas of the state.
- The opioid epidemic is costly to the health care, mental health, and criminal justice systems, and to employers in Indiana, with lifetime costs in excess of \$1.4 billion from 2014 opioid abuse alone.

CONTEXTUAL FACTORS

Affecting Opioid Misuse

Federal and National Support

Opioid misuse is a complex public health problem, and an effective response requires a cross-sector approach. Health and human services, criminal justice, education and commerce entities, both public and private, must work together to devise and implement solutions.

Many federal agencies and national organizations are involved with substance abuse issues, including prescription drug misuse and heroin use. A few key groups and their activities related to the issue are described below.

President's Obama's Initiative

In October of 2015, the White House announced a combination of federal, state, local and private sector efforts to battle the epidemic. [61]

Those efforts include:

- Opioid prescriber training
- A national media campaign
- Improving access to treatment
- Doubling the number of members of the State Prescription Drug Monitoring Program

The federal focus is on promising practices:

- Informing opioid prescribing practices
- Increasing the use of naloxone
- Using medication-assisted treatment to move people out of opioid addiction

As part of the initiative, the CDC will provide all 50 states with funding for the Prevention for States Program to:

1. Maximize prescription drug monitoring programs (PDMPs)
2. Improve public insurance mechanisms to protect patients
3. Evaluate policies to identify effective prevention practices

Before 2,000 people at the National Prescription Drug Abuse & Heroin Summit on March 29, 2016, President Obama announced he was seeking \$1.1 billion in new funds for the expansion of treatment, which nearly triples the current funding level. The President and Congress have made opioid abuse a priority. [62]

Other features of the President's plan announced were:

- A Department of Health and Human Services rule to double (to 200) the patient limit for qualified physicians who prescribe buprenorphine.
- \$94 million in HHS spending for community health centers to support medication-assisted treatment in poor and isolated communities.
- A new rule offering treatment for more people enrolled in Medicaid and the Children's Health Insurance Program.

- \$11 million provided to 11 states by the Substance Abuse Mental Health Services Administration to expand their medication-assisted treatment services, and \$11 million to distribute naloxone.
- A commitment by 60 medical schools to require evidence-based training for opioid prescribing. [63]

White House Office of National Drug Control Policy

The Office of National Drug Control Policy [64] is located in the Executive Office of the President. Created in 1998, the “ONDCP advises the President on drug-control issues, coordinates drug-control activities and related funding across the Federal government, and produces the annual [National Drug Control Strategy](#), which outlines Administration efforts to reduce illicit drug use, manufacturing and trafficking, drug-related crime and violence, and drug-related health consequences.” [65] A cross-sector federal agency, the ONDCP conducts research, funnels money to states through grants, e.g., Drug Free Communities grants (more information about these grants in the next section under Indiana Criminal Justice Institute), provides information on prevention, treatment and law enforcement issues, among other functions. [63]

In 2016, the ONDCP compiled state profiles that included death rates from drug poisonings, statewide distribution of deaths by county, rate of pain reliever prescriptions dispensed in pharmacies and state policies/best practices related to drug poisoning (see next page). This document provides a brief summary of the state’s performance in combatting the opioid epidemic (personal correspondence, Veronica Schilb, Governor’s Office, March 23, 2016).

From 2010-2014, Indiana saw a slight increase in the death rate and a slight decrease in prescribing; both are slightly higher than the national rates and are consistent with the national trends. Of 8 policies/best-practices, Indiana has five in place. The state does *not* 1) require all prescribers to receive appropriate prescribing training; 2) require use of the prescription drug monitoring program by all prescribers; and 3) have a state law that explicitly allows syringe exchange programs.

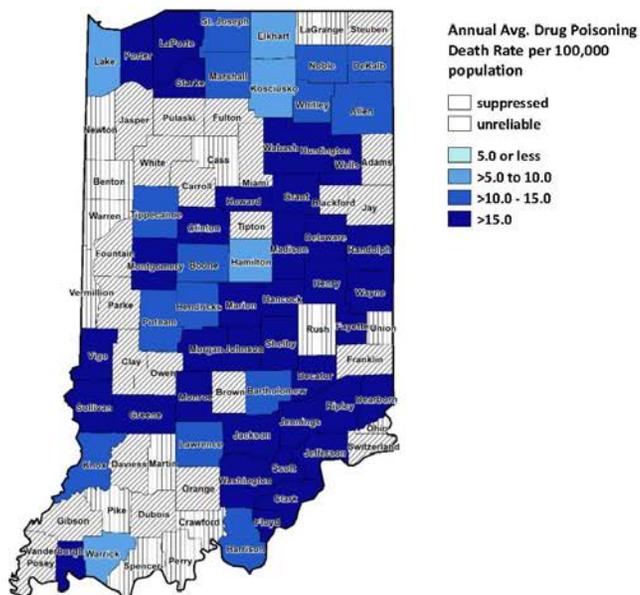
The ONDCP produced an older but more extensive profile for the year 2012. It included a listing of federal dollars that come to Indiana through federal sources. In 2012 these funds totaled \$217,090,920 (see Appendix B). [66]

Figure 52 ONDCP Drug Poisoning Profile, Indiana

INDIANA

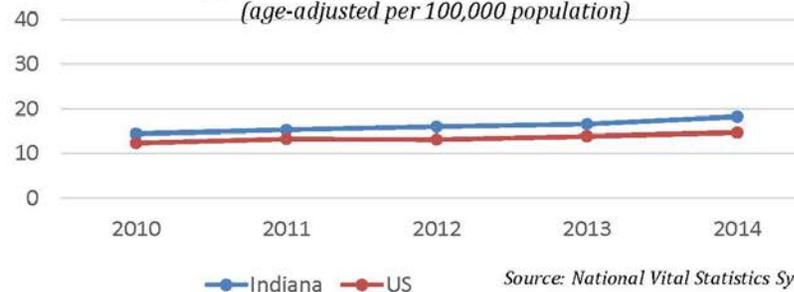
Based on information available as of March 21, 2016

Drug Poisoning Death Rate per 100,000, by County, 2010-2014

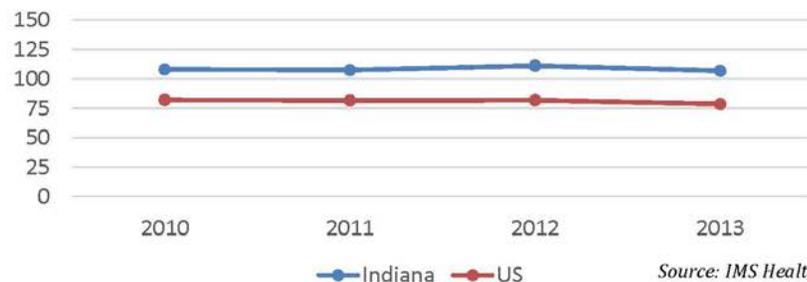


Source: CDC NVSS Multiple Cause of Death File, 2010-2014

Drug Poisoning Death Rate by State and National (age-adjusted per 100,000 population)



Annual rate of opioid pain reliever prescriptions dispensed by retail pharmacies (per 100 population)



Indiana's Status:

Age-Adjusted Drug Poisoning Death Rate (2014)	18.2 per 100K population
National Rank in Drug Poisoning Death Rate (2014)	15th (tied with AZ, MO)
Requires ALL Prescribers Receive Appropriate Opioid Prescribing Training	NO
Established a Prescription Drug Monitoring Program (PDMP)	YES [PDMP TTAC State Profiles]
Requires Pharmacy to Submit Data to PDMP within 24 hours	YES [CDC Prevention Status Reports]
Requires PDMP use by ALL Prescribers	NO [CDC Prevention Status Reports]
PDMP Interoperable with other States	Shares info with 21 states [National Association of Boards of Pharmacy]
State Law Explicitly Allows Syringe Service Programs	NO (only with locally declared public health emergency) [Burns Ind. Code Ann. § 16-41-7.5-5]
Permits Distribution of Naloxone by Pharmacists*	YES [SB 406 (2015)]
Permits Third Party Prescriptions of Naloxone (eg. Family member, caregiver)	YES [SB 406 (2015)]

*Under a standing order, collaborative practice agreement, or prescriptive authority.

Substance Abuse and Mental Health Services Administration

The Substance Abuse and Mental Health Services Administration (SAMHSA) is the federal government's one-stop shop for mental health and substance abuse issues. They: 1) provide states with data about mental health and substance abuse conditions; 2) are the conduit for funding to states from the federal government; 3) identify evidence-based programs and policies that states can implement; 4) regulate provision of certain types of services (e.g. methadone clinics) and, 5) provide information for the public on mental illness and substance abuse, as well as treatment and recovery programs. [67]

SAMHSA is actively engaged in the battle against opioid misuse. The following section, extracted from their [website](#), describes their involvement with links to their initiatives:

Prevention

[Health care practitioners](#), [communities and workplaces](#), [patients, and families](#) all can contribute to preventing prescription drug abuse. SAMHSA's [2014 National Prevention Week Toolkit](#) contains many valuable ideas. SAMHSA's 2014 [Opioid Overdose Prevention Toolkit](#) describes strategies to prevent opioid overdose for all these groups. [68]

Physicians

Physicians play a critical role in prescription drug misuse and abuse prevention. They can screen their patients to identify signs of prescription drug abuse or dependence, and talk with patients about the negative effects of misusing prescription drugs. Physicians also can note rapid increases in amounts of medication needed and requests for frequent refills, which may signal "doctor shopping." [The Prescription Drug Monitoring Program Training and Technical Assistance Center](#) provides assistance in identifying these behaviors among patients. [68]

In 2011, SAMHSA operationalized the Action Plan for Improving Access to Prescription Drug Monitoring Program through Health Information Technology by funding the [Enhancing Access to Prescription Drug Monitoring Programs using Health Information Technology Project](#), which is managed by the Office of the National Coordinator for Health Information Technology (ONC), in collaboration with SAMHSA, the Centers for Disease Control & Prevention (CDC), and the White House Office of National Drug Control Policy (ONDCP). The project explored opportunities to use health information technology (HIT) to integrate critical prescription drug history information from prescription drug monitoring programs into provider and pharmacy systems to empower more informed decision making at the point of care. [68]

(Note: Indiana was one of the pilot projects for this effort. Working with the Mitre corporation, the Indiana Health Information Exchange integrated INSPECT data into Wishard Hospital Emergency Department electronic health records, allowing doctors to access patients' controlled substance histories via their medical records. More information about the project can be found under State Infrastructure – Indiana Professional Licensing Agency, pg. 80.)

According to the CDC, prescribers may contribute to opioid abuse and overdose because of a lack of education and awareness about appropriate opioid prescribing practices. SAMHSA offers an in-person continuing education course, [Clinical Challenges in Prescribing Controlled Drugs: Prescribing Opioids for Chronic Pain](#). The course, targeted to primary care providers, provides specific knowledge and skills associated with safely prescribing opioids for chronic pain, and clinical strategies for managing challenging patient situations. In addition, SAMHSA

supports [Providers' Clinical Support System for Opioid Therapies \(PCSS-O\)](#), which provides training and mentoring services to a variety of health care providers on the safe and appropriate prescribing of opioids. [68]

Communities and Workplaces

Communities and workplaces can access a number of SAMHSA's initiatives and resources to prevent prescription drug misuse and abuse: [68]

- The [Drug Free Communities Support Program](#) is a collaborative effort between the ONDCP and SAMHSA to strengthen collaboration among community coalitions to prevent and reduce substance use, including prescription drug misuse and abuse.
- The [2014 National Drug Control Strategy](#) serves as the Obama Administration's blueprint for reducing drug use and its consequences, including a national framework for reducing prescription drug diversion and abuse.
- The [2011 Prescription Drug Abuse Prevention Plan \(PDF | 306 KB\)](#) expands upon the Obama Administration's National Drug Control Strategy and includes action in four major areas to reduce prescription drug abuse: education, monitoring, proper medication disposal, and enforcement.
- The [Division of Workplace Programs \(DWP\)](#) provides oversight for the Federal Drug-Free Workplace Program and for the National Laboratory Certification Program.
- The [Center for the Application of Prevention Technologies \(CAPT\)](#) is a nationwide substance abuse prevention training and technical assistance system. It works with states, tribes, jurisdictions, and communities to develop and implement strategies to prevent the misuse and abuse of prescription drugs.
- SAMHSA's [Opioid Overdose Prevention Toolkit](#) equips communities and local governments with material to develop policies and practices to help prevent opioid-related overdoses and deaths. It addresses issues for first responders, treatment providers, and those recovering from opioid overdose.
- In collaboration with SAMHSA, the [National Council on Patient Information and Education](#) works to improve communication of information to consumers and health care providers on the appropriate use of medication.
- [National Prevention Week](#), a SAMHSA-supported annual health observance dedicated to increasing public awareness of, and action around, mental and/or substance use disorders, included a day devoted to prescription drug abuse prevention. [68]

Patients and Families

Patients need to ensure they use prescription drugs appropriately, store them securely, and dispose of them safely. SAMHSA participates in the Drug Enforcement Administration's [National Take-Back Initiative](#), which aims to provide a safe, secure, and environmentally responsible means of disposing of prescription drugs, while also educating the general public about the potential for abuse and trafficking of medications. The Food and Drug Administration (FDA) and ONDCP have also developed [guidelines on disposal](#) for unused medicines. [68]

Treatment

Treatment can incorporate several components, including withdrawal management (detoxification), counseling, and the use of FDA-approved addiction pharmacotherapies. Research has shown that a combined approach of medication, counseling, and recovery services works best. SAMHSA is a leader in [Medication-Assisted Treatment \(MAT\)](#)—the use of

medications, in combination with counseling and behavioral therapies, to provide a whole-patient approach to the treatment of substance use disorders. [68]

Medications available to treat opioid addiction include [naltrexone \(PDF | 223 KB\)](#) , [methadone \(PDF | 245 KB\)](#), and [buprenorphine/naloxone](#). The choice of medication depends on the patients' needs. Since the Drug Addiction Treatment Act of 2000 (DATA 2000), physicians who meet certain qualifications may treat opioid addiction with buprenorphine/naloxone from office-based practice settings. A [recent NIH-funded study](#) demonstrated the efficacy of buprenorphine/naloxone for the treatment of prescription opioid addiction. As a result, the [NIH's NIDA-SAMHSA Blending Initiative](#) developed the [Prescription Opioid Addiction Treatment Study](#) to help treatment providers incorporate study findings into their practice. [68]

SAMHSA has numerous programs and resources focused on treatment for prescription drug misuse and abuse. It works to close the gap between available treatment capacity and demand; supports the adaptation and adoption of evidence-based and best practices by community-based treatment programs and services; and improves and strengthens substance abuse treatment organizations and systems: [68]

- [Federal Regulation 42 CFR Part 8](#), dated September 24, 2015, provides for an accreditation and certification-based system for Opioid Treatment Programs (OTPs), overseen by SAMHSA. SAMHSA's [Opioid Treatment Technical Assistance Program \(OTTAP\)](#) educates and prepares opioid treatment programs nationwide to achieve certification and accreditation by SAMHSA-approved bodies. The Division of Pharmacologic Therapies within the Center for Substance Abuse Treatment manages the day-to-day regulatory oversight activities necessary to implement 42 CFR Part 8, on the use of opioid agonist medications such as methadone and buprenorphine.
- [Providers' Clinical Support Systems](#) are available for [methadone](#) (a medication used to treat opioid addiction), [buprenorphine products](#), and [naltrexone](#). These sites connect health care providers with experts who provide information, mentoring, and training on the treatment of opioid use disorders and prescription drug abuse with FDA-approved medications.
- SAMHSA established the [Addiction Technology Transfer Center \(ATTC\) Network](#) in 1993 to improve the quality of addictions treatment and recovery services. The Network is composed of 14 Regional Centers and a National Office.
- The [Substance Abuse Prevention and Treatment Block Grant Program](#) supports states and community-based groups to improve and expand existing substance abuse treatment services. Additionally, primary prevention funds can be used for overdose prevention education/training; treatment block grant funds can be used for the purchase of naloxone and overdose kits.

Helping individuals find appropriate treatment services is key to SAMHSA's mission. In addition to the [Behavioral Health Treatment Services Locator](#), SAMHSA offers two locators specific to drug misuse and abuse: [68]

- [Buprenorphine Physician & Treatment Program Locator](#)
- [Opioid Treatment Program Directory](#)

Recovery

SAMHSA's recovery efforts include research and practice. More can be found about these efforts at the [Recovery and Recovery Support](#) topic. [68]

Centers for Disease Control and Prevention

The Centers for Disease Control and Prevention (CDC) supports state public health agencies and communities in a myriad of ways, with data and information, funding opportunities, research and best practices, staff embedded in state departments, assistance with epidemic outbreaks, and cost projections, just to name a few. They provide these functions for hundreds of diseases and conditions. [69]

One of the latest examples of this support occurred on March 15, 2016, when the CDC released their new opioid prescribing guidelines. The guidelines were developed for primary care physicians who prescribe opioids, but for purposes other than treatment for cancer and palliative or end-of-life care. The guideline's purpose is to "improve communication between clinicians and patients about the risks and benefits of opioid therapy for chronic pain, improve the safety and effectiveness of pain treatment, and reduce risks associated with long-term opioid therapy, including opioid use disorder, overdose, and death." [70]

The CDC underwent a rigorous process to develop the guideline, which included use of the Grading of Recommendations Assessment, Development, and Evaluation (GRADE) framework. Recommendations were based on a systematic review of the scientific evidence but also considered "benefits and harms, values and preferences, and resource allocation." Additionally, they solicited and received input from "experts, stakeholders, the public, peer reviewers, and a federally chartered advisory committee." They recognized that the rate of opioid prescribing varies between states, and acknowledged that there is a lack of consensus on when to prescribe opioids and for what length of time. [70]

Included in the guidelines are recommendations for 1) when to begin or continue opioid treatment for chronic pain, 2) how to select the drug type, dosage level, duration of the prescription, patient follow-up, and termination of the treatment, and 3) how to assess risk and address harms of opioid use. The guidelines stress the importance of using non-opioid therapies whenever possible. When opioid use is indicated, they recommend closely monitoring their use, keeping the dosage and length of time used as low as possible, and assessing the risk to the patient. The prescriber is asked to weigh the risks and benefits of prescribing opioids for every patient. (See Appendix C for a summary of the guideline.) [70]

The Centers for Disease Control has provided grants to states to reduce the adverse outcomes of prescription opioid misuse. [71] Their capacity to support states in this way will be increased if the President's plan (see page 67) and budget is approved by Congress. In March, 2016, the state of Indiana was funded for the first time. (A description of grant activities is included in the next section under Indiana State Department of Health, page 83.)

Food and Drug Administration

On March 22, 2016, the U.S. Food and Drug Administration (FDA) announced class-wide safety labeling changes for immediate-release (IR) opioid pain medications. IR opioids are taken every 4-6 hours, as opposed to extended release which are taken one or two times per day. The FDA is requiring a label warning about the serious risks of misuse, abuse, addiction, overdose and death, and recommending that IR opioids should be reserved for severe pain for which alternative treatment (e.g., non-opioid analgesics or opioid combination products) are not adequate or tolerated. New dosing information will include information about initial dosage, dosage changes during therapy, and a warning not to abruptly stop treatment in patients who are physically dependent. [72]

In addition, the FDA will require a precaution that a woman's use of opioids during pregnancy can result in neonatal opioid withdrawal syndrome (aka Neonatal Abstinence Syndrome or NAS), which can be life-threatening if not treated. New warning labels will include safety information about 1) potentially harmful drug interactions with other medicines that can result in serotonin syndrome, a serious central nervous system condition, and 2) opioid effects on the endocrine system, including a rare but serious disorder called adrenal insufficiency, and 3) decreased sex hormone levels (androgen deficiency). [72]

These labeling steps complement actions taken by other Health and Human Services entities, which focus on three priority areas: informing opioid prescribing practices, increasing the use of naloxone (the rescue medication given to prevent death from overdose) and expanding access to medication-assisted treatment (MAT) for treatment of opioid use disorder. [72]

Federal Legislative Activity by Indiana Lawmakers

A [search](#) of active legislation in the 114th Congress, using the term "opioid epidemic", resulted in 142 pieces of active legislation on May 16, 2016. Indiana lawmakers have taken leadership roles to encourage passage of at least three proposed laws addressing opioid misuse.

Senator Joe Donnelly co-sponsored the *Comprehensive Addiction and Recovery Act (CARA)* with Kelly Ayotte (New Hampshire). *CARA* would provide states and local communities with tools to prevent and treat drug addiction and support individuals in recovery. [73]

The version of *CARA* that passed out of the Senate and to the House of Representatives on March 10, 2016, includes provisions to:

- Help update best practices for pain management and prescribing pain medication.
- Increase public awareness of the opioid abuse epidemic and its connection to heroin use.
- Expand access to naloxone for law enforcement and first responders.
- Support treatment and recovery services, including initiatives for women, youth, and veterans.
- Provide for statewide responses to opioid abuse that include strengthening prescription drug monitoring programs. [73]

Donnelly also cosponsored the *Protecting our Infants Act* to help newborns with opioid withdrawal and symptoms associated with NAS. The Protecting our Infants Act was signed into law by President Obama in November of 2015. [74]

Representative Susan Brooks introduced *H.R. 2805, the Heroin and Prescription Opioid Abuse Prevention, Education, and Enforcement Act of 2015*, which targeted several areas to reduce the number of painkiller and heroin overdose deaths each year. [75] H.R. 2085 was the companion bill to the legislation introduced by Senators Donnelly and Ayotte. The bill was assigned to the Subcommittee on Crime, Terrorism, Homeland Security, and Investigations on July 9, 2015.

In the fall of 2015, Donnelly and Brooks co-hosted a roundtable at IUPUI (Indianapolis) with state and federal health officials, doctors, and pharmacists to hear a range of perspectives about best practices to help curb the opioid abuse epidemic. They made recommendations to the Governor Pence's newly formed Drug Task Force, providing suggestions for short- and long-term responses to Indiana's addiction problems. Subsequently, Paul Halverson, founding dean of the Indiana University Richard M. Fairbanks School of Public Health, testified before the House of Representatives Committee on Energy and Commerce at Rep. Brooks' invitation.

While it is beyond the scope of this report to analyze all proposed federal legislation related to opioid abuse, it is important to note the bi-partisan support on this issue from the nation's legislative branch and the Indiana congressional delegation.

National Governor's Association

At their winter meeting in February (2016), the National Governor's Association called on the federal government and private sector partners to support them in reducing opioid misuse in their states. In advance of their meeting in Washington DC, the Governors released their [18 Priorities for Addressing the Nation's Opioid Crisis](#): [76]

- Provide emergency supplemental funding to help states and communities turn the tide on the opioid epidemic.
- Improve provider education and training on pain management and safe opioid prescribing.
- Expedite the release of the Centers for Disease Control and Prevention's (CDC) guideline for primary care providers prescribing opioids for chronic non-cancer pain.
- Improve access to and encourage the manufacture and evaluation of abuse-deterrent formulations (ADFs) of opioid painkillers.
- Require prescribers to register with their state Prescription Drug Monitoring Program (PDMP) and complete training on pain management and addiction as a condition of licensure by the Drug Enforcement Administration (DEA).
- Require Veterans Affairs (VA) health care providers to check and report information to state PDMPs when prescribing and dispensing opioids.
- Amend patient satisfaction surveys and accreditation standards to prevent unnecessary and improper opioid prescribing.

- Work in coordination with states to maximize state PDMPs and develop a national approach for sharing PDMP data.
- Permit patient review and restriction (PRR) programs in Medicare.
- Support pharmacies and law enforcement agencies in establishing and expanding permanent take-back programs for disposing of unneeded controlled substances.
- Amend the Drug Addiction Treatment Act of 2000 to permit nurse practitioners and physician assistants to prescribe buprenorphine for opioid addiction.
- Permit medical residents to prescribe buprenorphine under an institutional DEA registration number.
- Lift or eliminate the cap on the number of patients a provider can treat with buprenorphine at any given time.
- Amend federal privacy rules (42 CFR Part 2) to ensure providers have access to their patients' substance use disorder treatment information.
- Develop additional guidance regarding best practices for addiction treatment and the distribution of naloxone.
- Eliminate the Institutions for Mental Diseases (IMD) exclusion to help states expand access to inpatient treatment for Medicaid enrollees with substance use disorder.
- Reinstate equitable sharing payments under the Department of Justice (DOJ) Asset Forfeiture Program.
- Expand the federal Heroin Response Strategy to support coordination among regional High Intensity Drug Trafficking Areas (HIDTAs) and a public health-public safety approach to combatting heroin.

Since the Governors met in February, at least two of these requests have been addressed. The CDC guidelines for prescribing have been released, and the president has proposed to raise the cap on the number of patients a physician can treat with buprenorphine.

Summary: Federal and National Support

The organizational activities outlined above are by no means an exhaustive list of initiatives happening at the federal and national level. Many more public and private groups are and will become involved. Opioid misuse and the country's response to the problem is featured in the news nearly every day. Its rapid growth along with the serious negative health outcomes (e.g., overdose deaths among young people) have given this issue a high profile, and galvanized the national attention.

Statewide Infrastructure

Part of what makes opioid misuse a complex public health problem are the legal ramifications involved, giving rise to the need for public health agencies to work with criminal justice, law enforcement, and other government agencies. Cross sector work with organizations that have different cultures is predictably challenging, as public health professionals experienced when working with those involved with emergency preparedness after 9-11. The work is further complicated by fragmented funding streams that come to the state through a variety of federal and other channels. Like any large enterprise, state agencies are complex organizations that sometimes function in silos, both internally and externally, adding to the difficulty of crafting and implementing a cohesive response to the opioid misuse problem.

In Indiana, several agencies and task forces have collaborated and are devoting resources to implementing solutions. This section will examine some of the key public sector players in Indiana that are engaged in the work to reduce the destruction of opioid abuse.

Indiana Attorney General's Task Force

In response to the prescription drug abuse epidemic, The Indiana Prescription Drug Abuse Prevention Task Force was created in 2012 by the Office of the Indiana Attorney General (OAG) and the Indiana State Department of Health (ISDH). The task force has focused on 1) preventing opioid overprescribing, misuse, overdose, and death, 2) enhancing access to addiction treatment, and 3) defining the burden of opioid use.

The Task Force, modeled after recommendations included in the ONDCP 2011 document, "Epidemic: Responding to America's Prescription Drug Abuse Crisis", is comprised of 5 committees: 1) Education, 2) INSPECT, 3) Take-back, 4) Enforcement, and 5) Treatment and Recovery. Task force members with recognized expertise in these areas and representing diverse stakeholder groups were intentionally recruited from geographically diverse areas of the state. Task force members include individuals from Division of Mental Health and Addiction (Family and Social Service Administration), Indiana State Police, Indiana Professional Licensing Agency, academic institutions, hospitals, multiple health care provider specialties, professional associations, legislators, local public health agencies and law enforcement, consumers, persons in recovery, and families affected by opioid misuse. A list of task force successes follows:

- Worked with the OAG to introduce successful legislation in the 2013 session of the General Assembly that 1) directed 100% of the Indiana Controlled Substance Registration fees paid by prescribers be used for maintenance of INSPECT, the state's prescription drug monitoring program; 2) Worked with the Medical Licensing Board, Indiana State Medical Association, and other physician groups to write rules for prescribing opioids for the management of chronic, non-terminal pain; 3) Required pill dispensing facility owners to have a controlled substance registration, which can be quickly suspended by law enforcement in the case of an infraction, forcing the owner to close the facility.

- Published a prescriber toolkit, [First Do No Harm](#).
- Increased awareness of the opioid epidemic by launching the [Bitter Pill website](#) [77] and media campaign statewide, providing professional presentations about the topic, and promoting the work of the task force at public events.
- Highlighted inconsistent reporting of Neonatal Abstinence Syndrome, resulting in the development and piloting of screening and reporting protocols to assess number of infants born with NAS in hospitals throughout Indiana.
- They worked with legislators to sponsor legislation in 2014 to: 1) reduce pharmacies' reporting interval to INSPECT from seven days to 24 hours; 2) provide tuition reimbursement for training in addiction treatment, 3) allow first responders to use naloxone.
- The task force worked with sponsors to introduce legislation in 2015 to: 1) permit lay-responder naloxone use; 2) expand access to MAT for opioid addiction (including naltrexone in criminal justice system diversion/parole/early release programs); 3) allow harm-reduction measures such as syringe exchange programs.

The Attorney General's Task Force is in the midst of implementing a 2-year strategic plan. For a list of their current objectives, see Appendix D.

The Governor's Task Force on Drug Enforcement, Treatment, and Prevention

On September 1, 2015, Indiana Gov. Mike Pence (R) announced the creation of a 21-member task force to combat growing opioid abuse in the Hoosier State. [78] The group, comprised of state health leaders, law enforcement officials and lawmakers, was charged with making recommendations for improving the state's response to the increase in heroin-related deaths, particularly in rural Indiana. The Governor's Task Force is a select group of state agency leaders and lawmakers appointed by the Governor, as compared to the Attorney General's Task Force, which has broader representation, and is open to anyone interested in participating.

As a result of Task Force recommendations, the Governor issued the following directives: [79]

- FSSA should determine the feasibility of pursuing a Medicaid [Section 1115](#) Demonstration Waiver for individuals with drug use disorders.
- All state agencies should raise awareness of the existence of Aaron's law, ([SEA 406-2015](#)), which allows individuals to obtain and administer lifesaving overdose intervention drugs.
- The Department of Workforce Development should work with youth assistance programs and identify best practice models and replicate programs statewide.
- The Indiana Department of Homeland Security should identify gaps in Naloxone availability compared with overdose demographics.
- The Indiana State Department of Health Commissioner should convene a working group to recommend improvements and best practices for prescription drug monitoring programs to the INSPECT Oversight Committee.
- Chronic pain prescribing rules moving through the rulemaking process should be promulgated promptly for the State Board of Nursing, Physician Assistant Committee, Board of Podiatric Medicine, and the State Board of Dentistry.
- The Commission for Improving the Status of Children should make recommendations through its Educational Outcomes Task Force and Substance Abuse and Child Safety Task Force on developing

age appropriate substance abuse curriculum for students and finding ways to better connect affected youth with substance abuse services.

- The Indiana State Department of Health, with entities representing physicians, nurses, dentists, physician assistants, podiatrists, and veterinarians, should develop guidelines for prescribing acute pain medications.
- The Department of Correction should work with Starke and other northwest Indiana counties to adopt and pilot the Regional Therapeutic Communities program (for individuals incarcerated locally).
- The Professional Licensing Agency should request that the INSPECT Oversight Committee explore possible measures to increase access to INSPECT for prescribers and dispensers.
- The Governor agreed to include the following items on his legislative agenda:
 - Expand the Lifeline Law to include immunity beyond alcohol offenses.
 - Amend state law to require the Indiana State of Department of Health (ISDH) to issue a standing order for entities (like pharmacies) to dispense an overdose intervention drug, such as naloxone, without a prescription.
 - Modify the Commission for a Drug-Free Indiana in a way that maintains support for local coordinating councils (LCCs) but brings together state agencies and stakeholders to address the drug abuse issues Indiana is facing today.
- The Indiana Family and Social Services Administration should implement the Gold Card Program, which removes administrative burdens by allowing qualified physicians the ability to prescribe medications without prior authorization.
- The Governor will include a bill addressing drug dealer penalties on his legislative agenda for the 2016 session of the Indiana General Assembly.
- The Indiana Criminal Justice Institute and the Family and Social Services Administration's Division of Mental Health & Addiction should identify a county criminal justice entity and implement a therapeutic program for offenders while incarcerated and awaiting adjudication.

According to Veronica Schilb, staff person for the Governor's Task Force, accomplishments related to task force recommendations are as follows (personal correspondence, April 1, 2016):

- 1) The Governor included three bills to combat drug abuse on his 2016 agenda. Indiana General Assembly passed and the Governor signed:
 - SEA 187, which ensures that lifesaving overdose intervention drugs are available statewide by requiring the Indiana State Department of Health to issue a statewide standing order for naloxone. This will increase access to naloxone statewide and allow entities such as pharmacies and non-profits to register with ISDH using their standing order and dispense naloxone to individuals in need of the drug without a prescription from a physician. SEA 187 also provides immunity from certain offenses for individuals who administer naloxone to a person who has overdosed, call 911, and cooperate with law enforcement when they arrive on the scene.
 - SEA 271, which establishes the Indiana Commission to Combat Drug Abuse, which will be responsible for coordinating substance abuse prevention, treatment and enforcement throughout the State of Indiana. The Commission goes into effect on January 1, 2017, transitioning from and building on the work accomplished by the Governor's Drug Task Force.

- HEA 1235, which ensures that those convicted of repeated, drug dealing felony offenses may not receive suspended sentences if the offense involves methamphetamine or heroin and the person has a prior conviction for dealing cocaine, heroin or methamphetamine.

2) Agencies have been working to raise awareness of Aaron's law in various ways including creating a public service announcement on naloxone and distributing information via social media, email, and flyers. Law enforcement agencies are being provided with Naloxone for emergency response to overdoses when emergency medical providers are not present.

3) A working group sent recommendations on improvements and best practices related to INSPECT to the INSPECT Oversight Committee in October 2015.

4) The Indiana Department of Homeland Security (IDHS) provided a primary report on gaps in Naloxone availability among the first responder community compared with overdose demographics in December 2015 (more information on page 79).

5) The Department of Correction worked with Starke and other northwest Indiana counties to begin piloting the Regional Therapeutic Communities program to provide more treatment options for local officials in addressing drug addiction, allowing offenders to have treatment options locally without requiring judges to utilize more harsh sentencing options by sending offenders to the Department of Correction.

6) The Indiana Criminal Justice Institute and the Division of Mental Health & Addiction are identifying a program that could serve as a model for implementing a therapeutic substance use disorder treatment program for offenders awaiting adjudication and for those serving sentences while in jail. They also have developed guidelines that will help define and drive a successful jail-based treatment program (personal correspondence, Veronica Schilb, April 1, 2016)

Indiana Professional Licensing Agency - INSPECT Prescription Drug Monitoring Program

INSPECT is Indiana's prescription drug monitoring program, established as a law enforcement tool in 1994. Over 1,700 pharmacies report to INSPECT (97% compliance) and about 13 million prescription records are collected annually. In 2007, healthcare providers received access to INSPECT, and were able to check prescriptions filled by their patients. Access to INSPECT helped providers avoid prescribing dangerously high doses or combinations of controlled substances that could be life threatening to the patient or diverted for non-medical use. Approximately 47% of eligible healthcare providers are registered with the program (14,328 of 30,659 Controlled Substance Registration holders), accessing on average 47,400 reports weekly (personal conversation, Taya Fernandes, March 17, 2016).

In 2010, INSPECT received the Administrators in Medicine "[Best of Boards](#)" award for its lead on data integration efforts. INSPECT "firsts" include:

- First to track and enforce pharmacy uploading (2009)
- First to participate in interstate sharing of data (with Ohio since 2011; sharing data with 20 other states by 2015)

- First to email unsolicited reporting of PDMP information to practitioners (2011)
- First to permit user-led unsolicited reporting (2012)
- First to integrate prescription drug monitoring data into an electronic healthcare system
- First to share data with all surrounding states (2013)

In an effort to increase physician utilization, INSPECT worked with MITRE Corporation, Indiana Health Information Exchange (IHIE), and Wishard Hospital (now Eskenazi Health) to directly integrate INSPECT data into the hospital emergency department's patient management system. After one month, nearly 60% of physicians reported decreased numbers of controlled substance prescriptions or pills, and 72% said that INSPECT data had an effect on prescribing decisions. The successful pilot led other physicians to request integration into their electronic health record (EHR) system. The pilot was expanded to four additional hospital systems and their primary care settings (personal conversation, Taya Fernandes, March 17, 2016).

Due to concerns about patient privacy, implementation of the project was temporarily suspended. INSPECT is currently interested in resuming work on this project once data security issues are resolved. They have a new pilot program with Kroger pharmacies to merge data into the regular pharmacy workflow using an information product with several security enhancements. According to Fernandes (personal conversation, March 17, 2016), the pilot is progressing well and they are receiving good feedback. Integrating INSPECT data into electronic health records is also part of the Indiana State Department of Health Prevention for States grant recently funded by the CDC (see page 83).

IPLA has seen a decrease in prescribing by physicians, most likely related to the Pain Management [Prescribing Rule](#) adopted by the Indiana Medical Licensing Board. [80] Since the rule does not apply to prescribers that aren't physicians, some provider categories have increased their number of prescriptions (personal conversation, Taya Fernandes, March 17, 2016). Investigation to discover trends and drivers of prescribing rates is ongoing.

Indiana Homeland Security

The Indiana Department of Homeland Security (IDHS) is responsible for oversight of the Emergency Management System (EMS) in Indiana, including the EMS registry. First responders are required to report pre-hospital incidents of naloxone administration to the registry, whether they administer it themselves or someone else administers it before they arrive at the scene (lay person or other first responder – police or fire department). Only EMS personnel have access to the registry; other first responders do not.

Nationally, lay naloxone rescue programs have prevented more than 10,000 overdose deaths. [81] This is critical in a rural state like Indiana, where 56% of the land mass and 30% of the population live in EMS provider shortage areas, more than 45 minutes away from a trauma center. First responder naloxone administration legislation was championed by physicians and law enforcement and received overwhelming support by the legislature and public. However, anecdotal reports suggest uptake in the field has been slow. Assessment of naloxone use by first responders and barriers to implementing naloxone rescue programs will provide important information about how to expand the use of this life-saving medication.

According to the Indiana Department of Homeland Security, paramedic providers classified as Advanced Life Support (ALS) have routinely carried Naloxone. Recently, Basic Life Support vehicles have also started to carry it. The left map below (Fig. 52) illustrates the number of vehicles per square mile by county, ranked in quintiles. The map on the right (Fig. 53) shows the number of law enforcement agencies that are equipped with Naloxone, indicating a more limited uptake. [82]

Figures 53

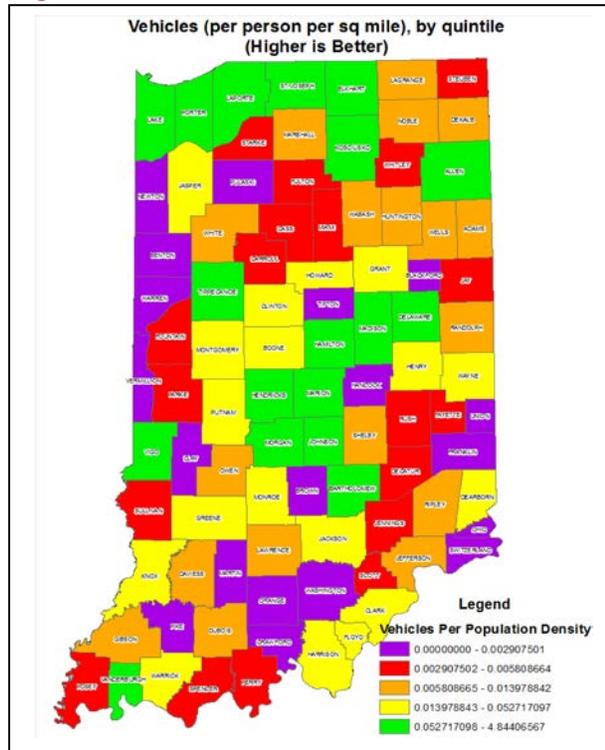
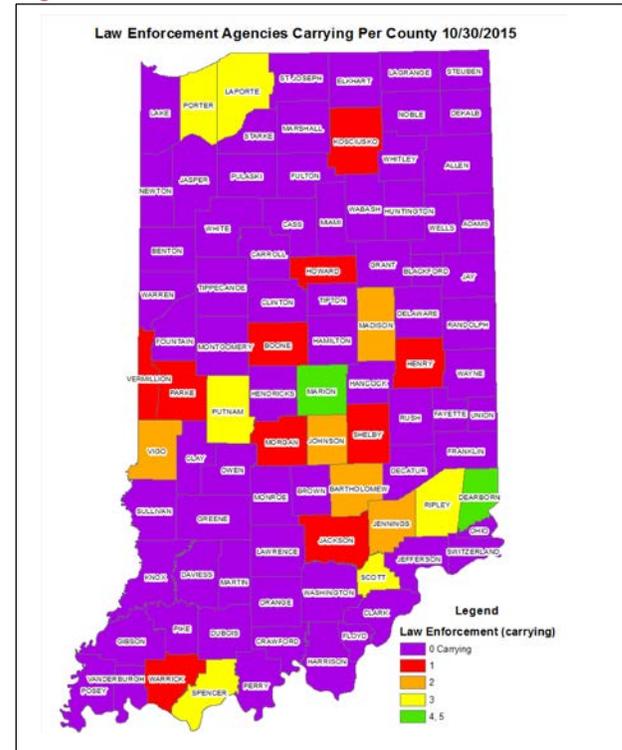


Figure 54



These data have significant limitations. They are based on each EMS Branch District Manager’s survey of the EMS agencies in their respective districts. Currently no entity has been charged with tracking the number of law enforcement agencies that have been trained in naloxone’s administration, the number of police officers carrying it, or the number of police vehicles on duty at any given time. [82]

Indiana appears to be increasing the number of people trained to administer naloxone, but until reporting issues are resolved, the rate of uptake and use will not be certain. [82]

Indiana State Department of Health

The Indiana State Department of Health (ISDH) brings many resources to the battle against opioid misuse/abuse. The agency’s commissioner, Jerome Adams, MD, and Chief Medical Officer, Joan Duwve, MD, have provided leadership and expertise at the state and community levels. Dr. Adams and Dr. Duwve were appointed to the Governor’s Task Force, in September 2015; Dr. Duwve has co-chaired the Attorney General’s Task Force since its inception in 2012. The following ISDH programs have been directly involved in addressing the opioid epidemic:

Epidemiology Resource Center

The ISDH [Epidemiology Resource Center](#) provides surveillance on a myriad of diseases and health conditions that exist in the state, including drug overdose, HIV and Hepatitis C. They routinely collect and analyze data for incidence and prevalence, geographical distribution, contributing risk factors and means of transmission. [83]

Trauma and Injury Prevention Division

Drug overdoses are classified as injuries by the CDC. Activities related to drug misuse and overdose reside in the ISDH Trauma and Injury Prevention Division. [84] The division provides information and resources to local communities on all types of injuries and the state's capacity to respond (i.e., the trauma system). The [drug overdose](#) webpages include data and information on drug overdose prevention and [reports](#) on overdose mortality, non-fatal emergency room visits (by county and trends over time), and an annual Special Emphasis Reports. In April, 2015, the division launched a registry called Overdose Prevention Therapy-Indiana, or [optIN](#), which allows nonprofits, pharmacies, local health departments, addiction treatment facilities, correctional facilities and other entities to register as providers of naloxone, the non-narcotic medication that counteracts respiratory failure, which is usually the cause of overdose deaths.

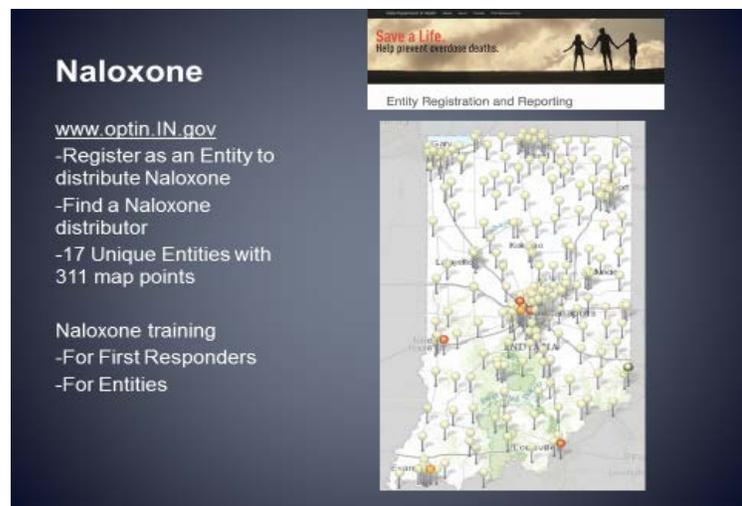


Figure 55 Opt.in website functions

HIV, HCV Surveillance, Testing

Adverse outcomes resulting from needle sharing among people who inject drugs (PWID) are transmission of HIV and Hepatitis C (HCV). The ISDH HIV/STD Division provides a wide range of services spanning the prevention continuum (preventing new infections, testing to identify persons with infections and notification of partners, and referrals for medical care and services for those who test positive). [85] They collaborate with the State Laboratory to obtain test results. Several HIV/STD programs support people who test positive with case coordination and referral for treatment. The division also provides statewide surveillance and reporting of HIV and HCV.

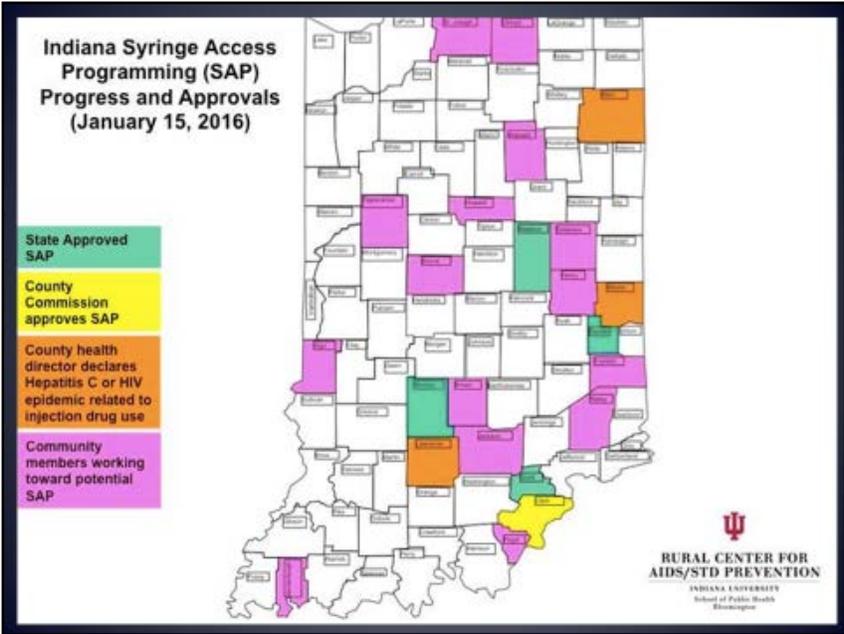
Syringe Exchange Programs

A new program initiated by ISDH in 2015 was the Syringe Exchange Program (SEP). In their 2015 session, the General Assembly enacted a law providing a [process](#) for local health

departments who had epidemic levels of HIV and HCV in their communities to establish SEPs, an evidence-based intervention to prevent transmission of infection. [86] The legislature authorized SEPs in response to the outbreak in Scott County, where, in just over a year's time, 188 people tested positive for HIV related to needle sharing among PWID. [87]

Prior to the outbreak (2013), there were 364 new cases of HIV infections in Indiana, bringing the total of Hoosiers living with HIV to more than 11,000 [88]. (Although HIV can be transmitted though needle sharing as witnessed in Scott County, the majority of HIV cases are transmitted by men having sex with men.) In 2012, there were 88 cases of acute hepatitis B, and 110 of acute hepatitis C and 5,758 cases of chronic hepatitis C. Indiana incidence rates for hepatitis B and C were 1.4/ and 1.7/100,000, both higher than the U.S. rate of .9 and .6/100,000 respectively. [88]

Since the SEP law went into effect, 23 Indiana counties that have experienced rapid increases in HIV and hepatitis infections have initiated the required steps to set up needle exchange programs. SEPs must be approved by the State Health Commissioner before they commence



operations. [86] As of January 15, health officers in 8 counties had declared a state of emergency based on outbreaks of HIV or hepatitis C; commissioners in 5 counties had approved a syringe exchange program; and, SEPs have been approved for start-up by ISDH in 4 counties. (Note: Since January 15, Wayne County moved one step closer to start-up when commissioners unanimously approved their county's proposal for an SEP. [89])

Figure 56 Indiana Syringe Access Programs in Process

Neonatal Abstinence Syndrome Monitoring (NAS)

Infants exposed to opioids in the womb often experience Neonatal Abstinence Syndrome (NAS) after birth. During the 2014 legislative session, the treatment committee of the Attorney General's Task Force worked with lawmakers to pass SEA 408 which directed ISDH to meet with representatives of stakeholder organizations to study and make recommendations on issues concerning NAS. [90]

The Indiana Perinatal Quality Improvement Collaborative at ISDH organized a NAS Task Force for this purpose. Their established goal was to support ISDH in setting up a comprehensive

screening and reporting process that would encourage mothers to seek treatment for their addiction. A data collection process and tool pilot project was initiated with 4 hospitals in 2015. When the process is finalized, the ISDH Maternal and Child Health Division will be the repository for NAS data.

Centers for Disease Control and Prevention - Prevention for States Grant

In March, 2016, Indiana was awarded a Prescription Drug Overdose: Prevention for States grant from the CDC to expand prescription drug misuse, abuse, diversion, and overdose prevention efforts. A description of the project components extracted from the grant narrative follows below:

- 1. Enhance and Maximize INSPECT** (Indiana's PDMP) using recommendations from Brandeis University's "Assessment of the Evidence for Best Practices" in PDMPs. PDMP integration with electronic health records (EHRs) was supported by a 2012 MITRE Corporation pilot study using health information exchange (HIE) to integrate INSPECT/EHR in a large Indianapolis emergency department. The study demonstrated impact on controlled prescribing decisions of 72% of physicians. A 2013 survey of Indiana prescribers found that most do not use INSPECT regularly due to time constraints. Reduced data reporting interval to PDMPs to near real-time supports effective clinical decision-making and prevents drug diversion. The reporting interval to INSPECT decreased from 7 days to 24 hours by January 2016. In addition, expansion of the Indiana Violent Death Reporting System to include INSPECT integration into the Drug Overdose/ Poisoning Module will provide more robust data about opioid overdose and overdose-related deaths at the county level to inform prevention efforts and expand use of PDMP data for public health surveillance. Expected outputs include: increase INSPECT/EHR data integration sites, including a VA Hospital; educate providers about required INSPECT use when prescribing for chronic pain; assist pharmacy compliance with decreased reporting intervals; and maintain INSPECT data integrity. Expected outcomes include increased use of INSPECT at the point of care; more evidence-based prescribing; less poly-pharmacy; less doctor-shopping; fewer opioids diverted; and decreased opioid misuse, overdose and death.
- 2. Implement community interventions to coordinate intensive prevention efforts aimed at identifying and targeting high-burden "hot spot" counties**, with an emphasis on addressing problematic prescribing through technical assistance and coordinating efforts, forming coalitions, and building local health department capacity. Expected outputs include: data reports for counties to inform local efforts, technical assistance with naloxone education for first responders and lay providers, technical assistance for local coalitions, and use of interns to increase capacity for analysis of local overdose / heroin death data. Expected outcomes include increased awareness of opioid prescribing, dispensing and overdose death at the county level; increased awareness and use of naloxone to prevent overdose deaths; and more accurate county- level overdose death data.
- 3. Evaluate the impact of policy changes** implemented in Indiana since 2013, affecting pain clinic ownership, opioid prescribing, first responder and lay provider use of naloxone. Expected outputs include: evaluate prescriber adherence to best practices for opioid use; assess changes in prescriber attitudes towards INSPECT and opioid prescribing; evaluate changes in opioid prescribing; evaluate the use of naloxone by first responders and lay-savers.

Expected outcomes include: create an operational definition for pain clinics; assess the effectiveness of Indiana's pain clinic ownership law and opioid prescribing rule; identify barriers to naloxone use by first responders and lay-savers; increase the evidence-base around prescription drug policies; and recommend ways to strengthen policy implementation and impact.

FSSA Division of Mental Health and Addiction

The Division of Mental Health and Addiction (DMHA) in the Indiana Family and Social Service Administration plays a key role in the state's response to substance abuse issues. The agency manages all six [state-operated mental health facilities](#) in Logansport, Indianapolis, Richmond, Madison, and Evansville, as well as the Evansville Psychiatric Children's Center. [91]

DMHA contracts with 25 [Community Mental Health Centers](#) (CMHCs) that provide substance abuse treatment services to every county in the state on a regional basis. [91] Residents have access to outpatient services either within their county, in a contiguous county, or within a 60-minute drive. DMHA funds provide treatment at CMHCs for patients at or below 200% of poverty. DMHA also funds treatment for substance use disorder treatment by non-CMHC providers to meet the needs of specialty populations around the state. Included in the DMHA's continuum of care are: [92]

- Individualized treatment planning to increase patient coping skills, symptom management
- Twenty-four (24) hour-a-day crisis intervention
- Case management to fulfill individual patient needs, including assertive case management when indicated
- Outpatient services, including intensive outpatient services, substance abuse services and treatment
- Acute stabilization services including detoxification services
- Residential services
- Day treatment, partial hospitalization, or psychosocial rehabilitation
- Family support
- Medication evaluation and monitoring
- Services to prevent unnecessary and inappropriate treatment and hospitalization and the deprivation of a person's liberty

DMHA contracts with LifeSpring Health Systems, based in Jeffersonville, and Regional Mental Health Center in Merrillville to provide detoxification services. For residential treatment, DMHA has contractual arrangements with ASPIN, Amethyst House, LifeSpring Health Systems, Park Center INC., Salvation Army/Harbor Light Center, Regional Mental Health Center, Southwestern Behavioral Healthcare, and Tara Treatment Center. Persons at or below 200% of poverty are eligible for a five-day stay for detoxification and 30-day residential treatment stay. Patients are responsible for providing their own transportation to and from the facility and the cost of any prescribed medications. [93]

DMHA oversees regulation of the 13 certified [Opioid Treatment Programs](#) that provide medication-assisted treatment (MAT). [94] [Six](#) facilities are located in the northern tier of the state (Fort Wayne, Merrillville, South Bend and Valparaiso, Gary-2), four are located in the

central tier (Marion, Richmond, Indianapolis-2), and three are located in the southern tier (Evansville, Charlestown, Lawrenceburg). DMHA does not cover the cost of medication used for treatment at these facilities.

The division has designated certain populations as high priority for addiction services. Pregnant women have been designated a top priority for admission into DMHA-funded treatment programs. [95] The DMHA website lists six facilities in the state that receive DMHA funds and provide residential treatment for pregnant women (South Bend, Fort Wayne, Indianapolis, Franklin, Bloomington, Evansville). They provide a hotline number for women who are not able to be admitted or receive interim services within 48 hours. Other priority populations include: [96]

- Veterans in need of psychiatric care, particularly those who live in rural areas. Telemedicine has been used to link them to services through the Veterans Administration Hospital in Indianapolis.
- Older adults who may be at risk for suicide and substance use disorder. DMHA is cross training providers through the Division of Aging and Medicaid.
- Offenders re-entering community (see description of Recovery Works, below)
- Lesbian, Gay, Bi-Sexual, Transgender, and Questioning individuals (LGBTQ)
- Those with dual (mental health/substance abuse) diagnoses

The Division certifies more than 200 mental health and substance abuse service providers statewide. [97] These do not currently include primary care office-based providers utilizing Buprenorphine for the treatment of addiction. In the 2016 legislative session, the General Assembly passed [SEA 297](#), [98] a bill requiring DMHA to draft treatment guidelines for doctors who prescribe Buprenorphine and recommend them to the Indiana Professional Licensing Agency, Office of Medicaid Policy and Planning, and the Medicaid Managed Care Organizations (MCO's).

During the 2015 legislative session, the Indiana General Assembly modified the moratorium on certification of new Opioid Treatment Programs (OTP) and authorized up to 5 new OTP clinics that must be directly associated with a community mental health center or a hospital. ([SB 464](#)). [99] Rules guiding the application and implementation of OTP expansion to CMHCs or hospitals are currently in the state approval process, according to Kevin Moore, Director, DMHA (personal conversation, March 23, 2016).

The Indiana General Assembly also passed [HEA 1006](#) in 2015, [100] providing \$10 million in year one and \$20 million in year two for mental health and substance abuse services for adult felony criminal offenders without insurance who are in the pre-incarceration diversion phase or post-incarceration re-entry phase. The DMHA-administered program, called Recovery Works, was implemented on November 1, 2015 in all 92 counties in Indiana. [51] Through a voucher system, the program supports access to treatment, housing, and transportation services, according to Stephanie Spoolstra, former Deputy Director, DMHA (personal conversation, March 23, 2016). During the first five months of operation, 1,473 participants enrolled in the program.

In 2014, the State Legislature passed [HEA 1360](#), [101] authorizing the Mental Health and Addiction Services Loan Repayment Assistance Program administered by DMHA. The program provides loan repayment funds equal to 25% (up to \$25,000 per year) for four years for psychiatrists, psychologists, psychiatric nurses, addiction counselors, and other licensed mental health professionals who accept a new position or establish a practice in Indiana. Addiction psychiatrists are eligible for loan reimbursement for five years.

DMHA Primary Prevention

It is often said that we cannot “arrest our way out” of the negative effects of substance abuse on people, families and communities. Kevin Moore, DMHA Director, believes, “We cannot arrest or treat ourselves out of substance abuse problems. We have to use an upstream approach.” The Bureau of Mental Health Promotion and Addiction Prevention, the Division’s primary prevention arm, receives \$6 million annually in SAMHSA funds to implement primary prevention programs in communities. (Personal conversation, Kevin Moore, March 23, 2016).

Just over 36% of the prevention funds are used to fund statewide projects. These are: [102]

- Prenatal Substance Use Prevention Program (PSUPP), Indiana State Department of Health
- Leading and Educating Across Domains (L.E.A.D.) Initiative, including 10 expansion sites (youth leadership), Elder L.E.A.D., (senior leadership), Geminus Corporation
- Addiction Technical Assistance Center, the Indiana Prevention Resource Center at Indiana University-Bloomington
- Indiana Coalition to Reduce Underage Drinking (ICRUD)
- State Alcohol Compliance (SAC) Program, Indiana Alcohol and Tobacco Commission/Indiana State Excise Police
- Indiana State Epidemiological Outcomes Workgroup (SEOW), Indiana University Richard M. Fairbanks School of Public Health Center for Health Policy

The Bureau is in year 4 of a 5-year strategic plan (2012-2017) [103], in which they have re-tooled their approach to community prevention programming. The Community Prevention Framework is a SAMHSA-supported approach that has two components: the Strategic Prevention Framework (SPF) and Communities That Care (CTC). SPF is a five-step planning model, including: Assessment, Capacity, Planning, Implementation and Evaluation, with cultural competence and sustainability emphasized in all steps of the process. CTC is a five-step prevention planning tool that communities can use to facilitate program implementation.

DMHA partners with the Indiana Criminal Justice Institute (ICJI) to work with [Local Coordinating Councils](#) (LCCs) to conduct the community planning process. [104] LCCs are planning and coordinating bodies in each county funded by ICJI to address alcohol and substance abuse at the community level. Members include volunteers from a variety of local organizations including education, treatment, social services, and law enforcement. DMHA awards four types of grants to LCCs [development (8), partnership (5), family (5), and implementation (18)] to execute the SPF planning process and implement evidence-based programs in their communities. [Indiana Prevention Resource Center](#) provides technical assistance to LCCs on implementation and evaluation of the projects.

Division Director Moore acknowledges that, like every state, Indiana has gaps in its substance abuse infrastructure. Under-funded prevention programs, provider shortages of every type, and inadequate access to basic treatment, detoxification and residential services are all areas that could be strengthened. He noted the importance of addressing socio-economic factors, and the social determinants of health; unless root causes of substance abuse are resolved, a person who misuses prescription drugs today may switch to other substances tomorrow. (Personal conversation, Kevin Moore, March 23, 2016).

Opportunities for investment include:

- Primary prevention programs in communities
- Social media campaigns
- Technology to improve access to treatment, e.g. identify available beds
- Programs to identify and prevent provider burnout
- Capital investment for methadone clinics, since facility requirements are stringent and expensive to implement
- Sober living houses, to provide a supportive living environment for people in recovery.

State-Sponsored Insurance Coverage

Medicaid/Healthy Indiana Plan

The Indiana Medicaid program is authorized by statute to provide reimbursement for inpatient detoxification, rehabilitation, and aftercare for chemical dependency when these services have received prior authorization (405 IAC 5-17-5(a)). There are two primary points through which Medicaid patients can access benefits: [105]

- 7) Pharmacy benefits
- 8) Medical benefits, administered in an outpatient or inpatient setting

Medicaid can reimburse for inpatient detoxification services or outpatient treatment for substance use disorders. [105] Indiana Medicaid does not reimburse for medication assisted treatment (MAT) for opioid use disorders using methadone beyond initial detoxification, but does cover methadone prescribed for pain management. Prior authorization is not required for methadone when used for pain management if prescribed quantities are less than 60 milligrams/day.

Indiana Medicaid does permit reimbursement for other forms of MAT, including treatment with partial agonists (buprenorphine and buprenorphine/naloxone; e.g. SUBUTEX[®] and SUBOXONE[®]) and antagonists (naltrexone; e.g. VIVITROL[®]). Indiana Medicaid requires prior authorization for medications containing buprenorphine, but not for those containing naltrexone [105]

Medicaid benefits are terminated when individuals enter a penal institution, and states or counties become responsible for providing healthcare services to individuals in prisons or jails. Many states, including Indiana, have authorized correctional facilities to act on behalf of

individuals housed in their facilities to apply for Medicaid coverage while they are still incarcerated, with coverage effective upon release.

Hoosier Assurance Plan (HAP)

The Hoosier Assurance Plan (HAP) is the DMHA's system to pay for mental health and addiction services. DMHA contracts with managed care providers who provide an array of care for individuals who meet diagnostic, functioning level and income criteria. The managed care providers provide one year's care at the most appropriate levels to all enrollees. [106]

Service providers specialize in working with individuals in the following targeted areas:

- Adults with serious mental illness
- Children and adolescents with serious emotional disturbance
- Persons with substance use disorders
- Persons with gambling problems

Persons qualify for HAP if they lack insurance coverage to pay for mental health or addictions treatment needed to access care. The Hoosier Assurance Plan helps fund services if: 1) applicants are on Medicaid, Food Stamps, or have income levels at or below 200% of poverty; 2) meet certain evaluation criteria that are determined by a mental health professional; and 3) provide proof of income and Social Security number. Individuals enrolled in HAP are expected to contribute to the cost of their care based on a sliding fee schedule. [106]

Indiana Department of Corrections

Over half of offenders incarcerated in the state's prison system (53%), have substance use disorders (SUD). Of those returning to prison, 75% have SUD, emphasizing the importance of SUD treatment for incarcerated individuals. [51] The Indiana Department of Correction's mission is to provide effective treatment in all IDOC facilities to increase the likelihood that offenders will successfully reintegrate back into their community. IDOC provides assessment, education and treatment for substance abuse, and makes referrals based on offenders' individual needs. [107] Detoxification is available through IDOC's medical services (personal conversation, Stephanie Spoolstra, May 2, 2016).

Therapeutic Communities

IDOC's therapeutic communities (TCs) are designed for offenders with severe substance use disorders. The program spans a minimum of 8 months and includes intensive, cognitive-behavioral counseling. Clients participate in 12-15 hours of programming each day to specifically focus on recovering from their addiction and building social skills, including job interviewing skills. Clients work on peer and personal relationship skills to support their recovery when released back to the community. [107]

IDOC has 1,200 TC beds in 9 facilities for both male and female offenders. The largest TC program in the state (and the country) is located at the Westfield facility, with 600 beds. Offenders participating in the program are segregated from the general prison population and

live in separate dormitories. Participants are paid while in the program, since their participation does not permit them to work. TCs are competency based; some offenders may take up to a year to complete the core program. Upon successful completion, participants are eligible for up to a 6-month reduction in served time. [107]

A program initiated by judges in Vanderburgh County, called Purposeful Incarceration, makes participation in a TC available to offenders at sentencing. This option was created for offenders with repeated convictions related to SUD. Offenders are flagged at their intake assessment and are placed at a facility with a TC close to their community, if possible. The program is now available statewide via appellate rule. A pilot TC project has also been established in the Starke County jail, an outcome of the Governor's Task Force. Starke County offenders who would normally go to a state facility can participate in a TC run by IDOC staff in their home community, facilitating the reintegration process after completion of the program (personal conversation, Stephanie Spoolstra, May 2, 2016).

According to the IDOC website, outcomes measured indicate the program is having an impact on recidivism and conduct while still in prison. Recidivism rates for those who complete the program are nearly ½ that of the overall rate for offenders. Rates of poor conduct among TC participants are about 1/10 that of the general offender population. [107]

Outpatient Substance Abuse Program

The Outpatient Substance Abuse Program is less intensive program for offenders with SUD. The program is called "outpatient" because participants reside among the general prison population; TCs, with their segregated living arrangements, more closely resemble inpatient programs outside the prison setting. The Outpatient Program consists of three phases: Phase 1 is a guided self-study on basic drug education; Phase 2 includes evidence-based cognitive-behavioral treatment, both group and individual therapy; Phase 3 is a 3-segment program focused on relapse prevention and re-entry into society. The 12 Steps are introduced, as well as materials from the Texas Christian University Institute of Behavioral Research. Patients who complete all three phases are eligible for a 2-3 month reduction in time served. [107]

Alcoholics Anonymous, Narcotics Anonymous and Crystal Methamphetamine Anonymous

AA, NA and CMA programs are variations of 12-step programs that facilitate self-help and peer support. Groups are available in all IDOC facilities, according to their website. Staffed by community volunteers, these programs include group meetings where individuals share their life experiences, including those of addiction and recovery. [107]

Youth Programs

IDOC provides a number of programs for youth that promote protective factors and reduce the risk of substance abuse. [108] Interventions vary in intensity and frequency of services and include prevention, education, and treatment components. IDOC utilizes juvenile treatment programs that are based on developmental frameworks and that consider the multiple systems to which youth belong: school, family, and community.

On its website, IDOC lists its evidence-based youth programs. These are: [108]

- [Midwestern Prevention Project](#)
- [Project Towards No Drug Abuse](#)
- [Guiding Good Choices](#)
- [Project ALERT](#)
- [Intensive Protective Supervision Project](#)
- [Orange County Juvenile Substance Abuse Treatment Court](#)
- [Delaware Juvenile Drug Court Diversion Program](#)
- [Maine Juvenile Drug Treatment Court](#)
- [Substance Abuse Treatment Initiative \(SATI\)](#)

A check of the National Registry of Evidence-based Programs and Practices' list of substance abuse programs for youth verified that only programs 2, 3 and 4 were recognized by SAMHSA as evidence-based. [109]

Indiana Criminal Justice Institute

The Indiana Criminal Justice Institute's (ICJI) mission includes reducing the incidence and prevalence of substance abuse and addiction among Indiana's adults and children. [110] The institute is home to the IN Commission to Combat Drug Abuse (ICCD), which was authorized by Senate Enrolled Act 271 (2016), and replaced the Commission for Drug Free Indiana. [111] Drug Free Indiana members were appointed by the governor according to requirements in its authorizing statute; the group was primarily advisory in nature. In contrast, ICCD is an executive level group, very similar to that of the Governor's Task Force, and comprised of state agency heads and others who can engineer policy change (personal conversation, Sonya Carrico, May 10, 2016).

ICJI is also home to Indiana's 92 county-based Local Coordinating Councils (LCCs) that have worked to reduce substance abuse at the local level for more than two decades. [104] Councils are funded by fees for alcohol offenses (DUI, OWI) and drug interdiction fees (paid by those convicted of possession of or dealing illegal drugs) of which LCCs receive 75% of collections in their county. To be eligible for funding, LCCs are required to develop comprehensive community plans to reduce substance abuse through prevention, treatment, and law enforcement. The plans ensure that implementation funding provided to LCCs was effectively targeted.

Some LCCs also receive funds from the Division of Mental Health and Addiction for prevention activities; some apply for and received funds through federal grants. Councils rarely have enough funding to support full time staff, according to Sonya Carrico of ICJI (personal conversation, May 10, 2016). She estimates no more than 10 counties employ staff on a full time basis; most counties have either part time staff or are all volunteers.

LCCs select programs to implement based on results of their community plan. ICJI classified their programs into 3 groups: 1) universal – not targeted toward any specific group (such as a school prevention program); 2) selected – targeted toward high risk groups; and 3) indicated—targeted toward groups who have already used or offended. ICJI encourages LCCs to conduct evidenced-based programs as well as evaluation activities. However, program evaluation is not

required; most LCCs lack the expertise and resources to collect data for process or outcome measures (personal conversation, Sonya Carrico, May 10, 2016).

In addition to its work with LCCs, ICJI also contracts with the Department of Corrections (DOC) to provide substance abuse treatment to incarcerated individuals. This work is funded through a grant from the Federal Bureau of Justice Assistance in the Office of Justice Programs. [112] In 2015, ICJI contracted with IDOC for \$ 148,127.00 for Residential Substance Abuse Treatment programs at the Westfield Correctional Facility and in Bartholomew County. IDOC used their funds to contract with Corizon Correctional Healthcare for 6 addictions recovery staff in the Westville Therapeutic Community program (personal correspondence, Adam Baker, May 12, 2016).

On the Horizon: Neuro-Diagnostic Institute

In December 2015, Governor Pence announced plans to build a state-of-the-art neuro-diagnostic institute. The focus of the 159-bed facility will be the precise diagnosis and assertive treatment of brain-based disorders, including acute and chronic mental illness, chronic addictions, intellectual and developmental disabilities, traumatic brain injury, and neuro-degenerative processes such as Alzheimer's disease. [113]

The institute will be located on the campus of Community East Hospital in Indianapolis and have capacity to treat 1,500 patients each year. Co-locating with an acute care hospital will allow leverage of emergency services, specialty medical care and neuro-diagnostic techniques and integration with medical services The institute is slated to begin serving patients in 2018. [113]

Recent State Legislation Related to Opioid Abuse Treatment

The rise in opioid misuse has been the impetus for several pieces of new state legislation. A summary of laws passed 2013-2016 follows:

Table 10. State Legislation Passed Related to Opioid Misuse, 2013-2016	
2013 Legislation	
<u>SEA 246 (2013)</u>	Controlled substances - Partial listing. Defines "owner" for purposes of requiring an owner that employs or contracts with individuals to dispense controlled substances to, beginning January 1, 2014, maintain a controlled substance registration. Beginning January 1, 2014, allows the attorney general to petition the court to obtain an injunction against an owner that violates the controlled substance registration and control laws. Requires the medical licensing board to adopt emergency rules and permanent rules within a specified period concerning: (1) standards and procedures for the attorney general to follow in accessing physicians' records and inventory; and (2) standards and protocol for the prescribing of controlled substances. [114]
<u>HEA 1465 (2013)</u>	Prescriptions and INSPECT program - Allows prescriptions for schedule V controlled substances to be transmitted by an electronic prescription from the practitioner or the agent of the practitioner to a pharmacy. Provides that the controlled substances registration fees must be deposited into the controlled substances data fund. (Current law requires the deposit of 16% of the fees into the fund.) Establishes the INSPECT interim study committee. [115]
2014 Legislation	
<u>SEA 227 (2014)</u>	Alcohol and medical emergencies; crime studies – Partial listing. Allows an advanced emergency medical technician, an emergency medical responder, an emergency medical technician, a firefighter or volunteer firefighter, a law enforcement officer, or a paramedic to administer an overdose intervention drug to a person suffering from an overdose. Allows certain health care providers to prescribe, and a pharmacist to dispense, an overdose intervention drug for an advanced emergency medical technician, an emergency medical responder, an emergency medical technician, a fire department or volunteer fire department, a law enforcement agency, or a paramedic. [116]
<u>SEA 408 (2014)</u>	Neonatal abstinence syndrome. Defines "neonatal abstinence syndrome" (NAS). Requires the state department of health to: (1) meet with representatives of certain associations to study and make recommendations on issues concerning NAS; and (2) report, before November 1, 2014, on certain issues concerning NAS to the legislative council for distribution to the appropriate interim study committee. Allows the state department of health to establish, before June 1, 2015, one or more pilot programs with hospitals that consent to participate in the programs to implement appropriate and effective models for NAS identification, data collection, and reporting. [90]

Table 10. State Legislation Passed Related to Opioid Misuse, 2013-2016

2014 Legislation, cont.	
<p><u>HEA 1218 (2014)</u></p>	<p>Drug treatment and reporting – <i>Partial listing.</i> Prohibits an opioid treatment program from prescribing, dispensing, or providing more than a seven-day supply of opioid treatment medication to a patient to take out of the facility. Requires the division of mental health and addiction (division) to establish certain standards and protocols for opioid treatment programs. Requires the dispenser at an opioid treatment program to transmit certain information to the division within specified time frames. Requires that the board of pharmacy adopt a rule requiring a practitioner and an opioid treatment program to check the Indiana scheduled prescription electronic collection and tracking (INSPECT) program in specified circumstances. Requires the Indiana professional licensing agency to study the impact of including all prescription drugs in the INSPECT program. Requires the legislative council to assign an interim committee to study: (1) the security of the INSPECT program; and (2) whether opioid treatment programs should be prohibited from allowing patients to take home opioid treatment medication. [117]</p>
<p><u>HEA 1360 (2014)</u></p>	<p>Addiction treatment and services – <i>Partial listing.</i> Authorizes the following persons as eligible for the loan forgiveness program: (1) psychiatrists pursuing fellowship training and certification in addiction psychiatry; (2) addiction counselors; and (3) mental health professionals. Allows recipients to work in state funded addiction treatment centers. Changes the names of the accounts that fund the loan forgiveness and development programs. Provides that certain psychiatrists may receive loan forgiveness grants for not more than five years. Requires the board to give consideration to annually funding two psychiatrists pursuing fellowship training and certification in addiction psychiatry. [101]</p>
2015 Legislation	
<p><u>SEA 358 (2015)</u></p>	<p>Medications - Defines "medication therapy management" for the purposes of the regulation of pharmacies and pharmacists. Adds the provision of medication therapy management to the definition of "the practice of pharmacy". Includes advanced practice nurses and physician assistants in the definition of "direct supervision" for the purposes of consulting with a pharmacist on certain drug regimen protocols. Establishes the INSPECT oversight committee. Provides the committee's approval for the board to execute a contract with a vendor to administer the INSPECT program. Requires approval from the chairperson of the board of pharmacy to hire a director of the INSPECT program. Provides that if a dispenser's pharmacy is closed the day following a dispensing, the information required to be sent to the INSPECT program must be transmitted by the end of the next business day. Amends the definition of "medication assistance" in the administrative code for purposes of the rules concerning home health agencies. [118]</p>

Table 10. State Legislation Passed Related to Opioid Misuse, 2013-2016, continued

2015 Legislation, continued	
<p><u>SEA 406</u> <u>(2015)</u></p>	<p>Overdose intervention drugs. Requires certain emergency personnel to report to the state department of health the number of times an overdose intervention medication is administered. Allows specified health care professionals with prescriptive authority to dispense, write a prescription, or prepare a standing order for an overdose intervention drug without examining the individual to whom it may be administered if specified conditions are met. <i>Allows for an individual who is a person at risk, a family member, friend, or other individual or entity in a position to assist another individual who, there is reason to believe, is at risk of experiencing an opioid-related overdose, to obtain and administer an overdose intervention drug if certain conditions are met. Provides for civil immunity.</i> [119]</p>
<p><u>SEA 461</u> <u>(2015)</u></p>	<p>Health matters - Partial listing. Authorizes the state department of health to enter into partnerships to encourage best practices in: (1) identification and testing of populations at risk of disease related to illegal drug use; and (2) the health care treatment of incarcerated individuals for conditions related to illegal drug use. <i>Authorizes the state health commissioner to declare a public health emergency. Sets forth conditions in which a local health department, a municipality, a county, or a nonprofit organization may operate a syringe exchange program and expires the authorization of a program July 1, 2019. Provides exceptions to certain criminal laws concerning the funding, possession, and distribution of needles and syringe.</i> [120]</p>
<p><u>SEA 464</u> <u>(2015)</u></p>	<p>Mental health issues – Partial listing. Specifies limitations for reimbursement for methadone by: (1) the state employee health plan; (2) Medicaid; (3) certain policies of accident and sickness insurance; and (4) certain health maintenance organization contracts; if the drug is prescribed for the treatment of pain. Provides that addiction counseling, inpatient detoxification, case management, daily living skills, and long acting, non-addictive medication may be required to treat opioid or alcohol addiction as a condition of parole, probation, community corrections, pretrial diversion, or participation in a problem solving court. <i>Authorizes the division of mental health and addiction to approve before June 30, 2018, up to five new opioid treatment programs if: (1) they are run by a hospital, a specified institution, or a certified community mental health center; and (2) the division determines that there is a need for a new opioid treatment program in the proposed location.</i> Establishes the mental health and addiction forensic treatment services account within the statutes governing the division, rather than the statutes governing corrections. <i>Provides that the division may use money in the account to fund grants and vouchers that are provided to the following for mental health and addiction forensic treatment services: (1) Community corrections programs. (2) Court administered programs. (3) Probation and diversion programs. (4) Community mental health centers. (5) Certified mental health or addiction providers. (continued)</i></p>

Table 10. State Legislation Passed Related to Opioid Misuse, 2014-2016, cont.

2015 Legislation, continued	
<p><u>SEA 464 (2015), cont.</u></p>	<p><i>Allows the division to use money in the account as a state match under the Medicaid rehabilitation program and the Primary Health Coordination Program. An individual is eligible for mental health and addiction forensic treatment services if he/she meets certain criteria and if reimbursement is not available under a health insurance policy, a health maintenance organization contract, the Medicaid program, Medicare program, or any other federal assistance program. [99]</i></p>
<p><u>SEA 534 (2015)</u></p>	<p>Rules for prescribing controlled substances - Requires the medical licensing board to adopt standards and protocols for the prescribing of controlled substances, including the use of abuse deterrent formulations. <i>Requires, before March 1, 2016, the following boards to adopt rules concerning the prescribing of opioid controlled substances for pain management treatment: (1) the medical licensing board, concerning physician assistants; (2) the board of podiatric medicine, concerning podiatrists; (3) the state board of dentistry, concerning dentists; and (4) the Indiana state board of nursing, concerning advanced practice nurses. Requires each board to report before December 31, 2015, to the legislative council with a status report on the board's efforts to adopt rules. [121]</i></p>
<p><u>HEA 1006 (2015)</u></p>	<p>Criminal justice funding – (summary). Effective July 1, 2015, \$30 million was appropriated to the Mental Health and Addiction Forensic Treatment Services account that is to be administered by the Division of Mental Health and Addiction (DMHA) with FSSA. DMHA shall give priority in awarding funding to programs that provide evidence based treatment for mental health and addiction or cognitive behavior intervention directly to individuals. [100]</p>
<p><u>HEA 1304 (2015)</u></p>	<p>Various criminal law matters – Partial listing. Authorizes a prosecuting attorney to require a person participating in a prosecutorial diversion program to receive mental health treatment to reduce recidivism, and allows diversion and deferral fees to be used to fund mental health treatment programs to reduce recidivism. Provides that addiction counseling, inpatient detoxification, and the administration of a federal Food and Drug Administration (FDA) approved, non-addictive medication for alcohol or opioid treatment may be required to treat opioid or alcohol addiction as a condition of parole, probation, community corrections, pretrial diversion, or participation in a problem solving court. Provides that the division of mental health and addiction may consider the administration of an FDA approved, non-addictive medication for alcohol or opioid treatment as an alternative to methadone treatment. [122]</p>

Table 10. State Legislation Passed Related to Opioid Misuse, 2013-2016, cont.

2015 Legislation, continued	
<p><u>HEA 1448</u> <u>(2015)</u></p>	<p>Mental health drugs and coverage - Includes inpatient substance abuse detoxification services as a Medicaid service. Authorizes the office of Medicaid policy and planning to require prior authorization for addictive medication used as medication assisted treatment for substance abuse. Allows money in the forensic treatment services account to be used to fund grants and vouchers for licensed mental health or addiction providers. Requires information and training to judges, prosecutors, and public defenders concerning diversion programs, probationary programs, and involuntary commitment. [123]</p>
2016 Legislation	
<p><u>SEA 187</u> <u>(2016)</u></p>	<p>Overdose intervention drugs - Requires an entity acting under a standing order issued by a prescriber for an overdose intervention drug to report annually certain information to the state department of health (state department). Requires the state department to ensure that a statewide standing order for the dispensing of an overdose intervention drug is issued for Indiana. Allows the state health commissioner or a public health authority to issue a statewide standing order for the dispensing of an overdose intervention drug. Requires certain emergency ambulance services responsible for submitting the report to report the number of times an overdose intervention drug has been administered. Requires the ambulance service to include the information in the emergency ambulance service's report to the emergency medical services commission under the emergency medical services system review. Provides that, if certain conditions are met, an individual who aided an individual in need of medical assistance due to an opioid related overdose is immune from certain criminal prosecutions. [124]</p>
<p><u>SEA 214</u> <u>(2016)</u></p>	<p>Controlled substances - Prohibits Medicaid reimbursement for Subutex, Suboxone, or a similar trade name or generic of the drug if the drug was prescribed for the treatment of pain or pain management and the drug is only indicated for addiction treatment. Requires the division of mental health and addiction to adopt rules concerning: (1) opioid treatment by an opioid treatment provider; (2) take home opioid treatment medications; (3) clinical standards for: (A) tapering of a patient on and off an opioid treatment medication; (B) relapse; and (C) overdose prevention; and (4) specified standards and protocols for an opioid treatment provider. Requires an opioid treatment provider to periodically and randomly test a patient for specified drugs during treatment. [125]</p>
<p><u>SEA 271</u> <u>(2016)</u></p>	<p>Drug enforcement, treatment, and prevention. Establishes IN Commission to Combat Drug Abuse (ICCDA). Repeals Commission for a Drug Free IN. Requires Indiana Criminal Justice Institute to assume certain duties concerning approval of comprehensive drug free community plans / grants. Shifts certain ICCDA and local coordinating council responsibilities to ICJI Exec. Dir. [111]</p>

Table 10. State Legislation Passed Related to Opioid Misuse, 2013-2016, cont.

2016 Legislation, continued	
<p><u>SEA 297</u> <u>(2016)</u></p>	<p>Opioid dependence treatment-Partial listing. Requires Medicaid coverage for inpatient detoxification for the treatment of opioid or alcohol dependence. Specifies that the Healthy Indiana Plan include coverage of counseling services for substance abuse treatment. Adds requirements for an opioid treatment program in Indiana. Requires the DMHA to adopt specified administrative rules concerning opioid treatment by an opioid treatment provider. Requires the office of the secretary and the division to develop treatment protocol containing best practice guidelines for the treatment of opiate dependent patients. [126]</p>
<p><u>HEA 1235</u> <u>(2016)</u></p>	<p>Drug offenses. Specifies that Level 2 controlled substance offenses are non-suspendible if: (1) offense involves methamphetamine or heroin; and (2) person has a prior felony conviction for dealing in certain controlled substances. [127]</p>
<p><u>HB 1278</u> <u>(2016)</u></p>	<p>INSPECT program - Allows a dentist, physician, advanced practice nurse, physician assistant, and podiatrist to include an INSPECT program report in a patient's file. Removes a provision that allows the board of pharmacy to adopt rules for an out-of-state person seeking to provide home medical equipment services in Indiana. Allows an individual who holds a temporary fellowship permit to access the INSPECT program. Allows a county coroner conducting a medical investigation of the cause of death to access the INSPECT program. Makes certain changes to the immunity granted to practitioners who use the INSPECT program. (Current law extends immunity to both practitioners who use and do not use the INSPECT program.) Allows a practitioner's agent to check INSPECT program reports on behalf of the practitioner. Allows a patient to access an INSPECT program report that is in the patient's medical file. Requires the boards that regulate health care providers that prescribe or dispense prescription drugs to establish prescribing norms and dispensing guidelines that, if exceeded, justify the unsolicited dissemination of exception reports. Specifies the exception reports that a board's designee may forward to a law enforcement agency or the attorney general for purposes of an investigation. [128]</p>
<p><u>HB 1347</u> <u>(2016)</u></p>	<p>Mental health matters - Requires the office of Medicaid policy and planning to reimburse under the Medicaid program: (1) certain advanced practice nurses for specified Medicaid services; (2) certain graduate and post-graduate degree level students in specified fields who are interning or in a practicum at a community mental health center under the direct supervision of a licensed professional; and (3) licensed clinical addiction counselors who under the clinical supervision of a physician or health service provider in psychology. Requires the department of insurance (department), in consultation with the office of the secretary of family and social services, to review, study, and make recommendations concerning the capacity, training, and barriers to health navigators in assisting individuals in obtaining health insurance program coverage. Requires the department to report their findings to the interim study committee on public health, behavioral health, and human services before September 30, 2016. [129]</p>

As Table 11 illustrates, the rise in opioid misuse has been the impetus for several pieces of new legislation in the past 4 years. The Indiana General Assembly has passed laws to create needle exchange programs, expand methadone treatment, and allow the use of naloxone by first responders and other lay providers to prevent deaths from opioid overdose. Programs have been instituted to divert offenders into treatment instead of prison and ensure treatment for those released from prison to continue their recovery.

Not all legislation is viewed as positive, however; some restrict access to Medication Assisted Treatment. Examples are the 7-day take-home law for methadone, and laws requiring physicians to progressively decrease doses to wean patients off addictive MAT drugs as soon as possible. These laws contradict best-practices for treating individuals with opioid use disorders and attempt to direct how providers use MAT. Further analysis is needed to determine if new laws are effective in reducing opioid misuse and its negative health outcomes.

Summary – State Infrastructure

Indiana has several state agencies that are working collaboratively to contain the opioid epidemic. The list is not exhaustive, particularly from the social determinants of health perspective; agencies that provide safe housing, food, training and paths to employment, economic development and other services, all have a role to play in helping people recover from addiction and preventing the initiation of addictive drug use.

At first glance it may appear that Indiana has adequate assets in place, but this is not necessarily the case. Further analysis will show that the state falls short of the resources it needs to effectively combat opioid misuse, as well as other types of substance abuse (page 111).

Marion County Opioid Abuse Infrastructure

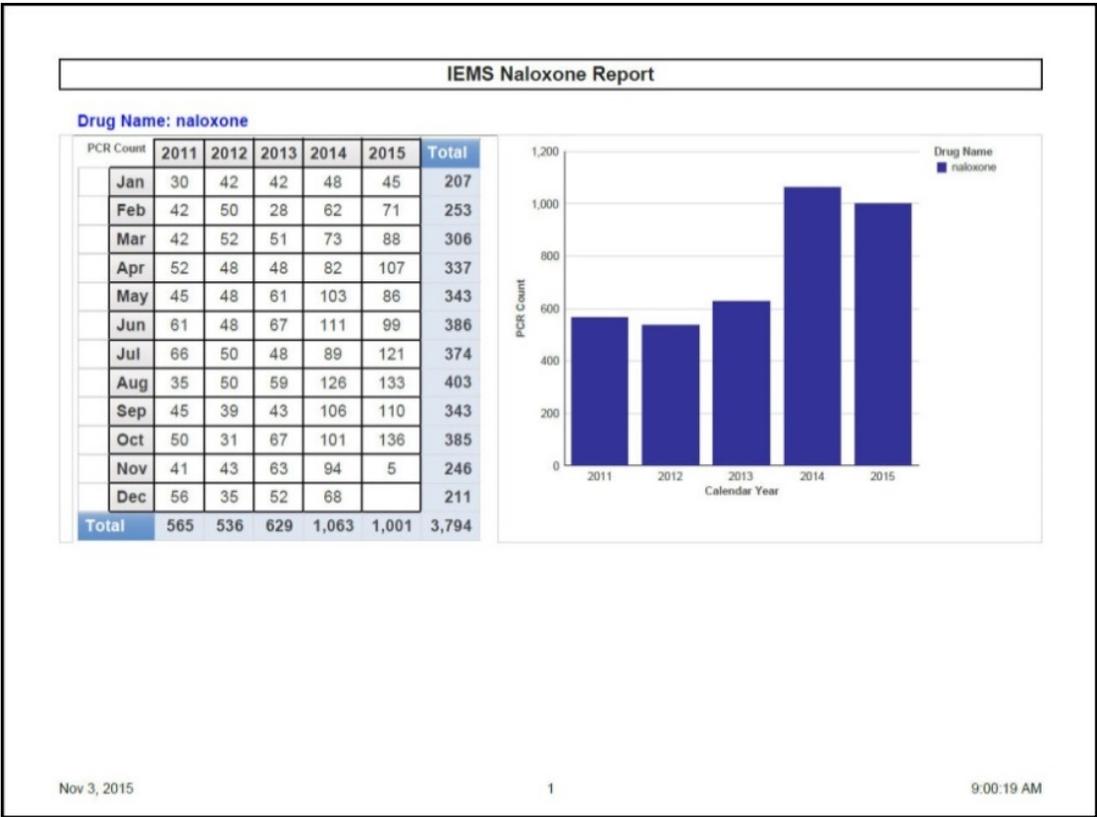
Marion County and Indianapolis benefit from the state’s policies and programs, and have infrastructure of their own to address the morbidity and mortality opioid misuse. Hospitals and healthcare providers, emergency management and law enforcement agencies, substance abuse treatment providers, community agencies and schools are working at different points on the prevention continuum to reign in the problem.

Access to Naloxone

The Indianapolis community’s most pressing need is to prevent deaths from opioid overdose. Indianapolis Emergency Management Service has taken the lead in providing this life saving intervention and increasing access by training others to administer it.

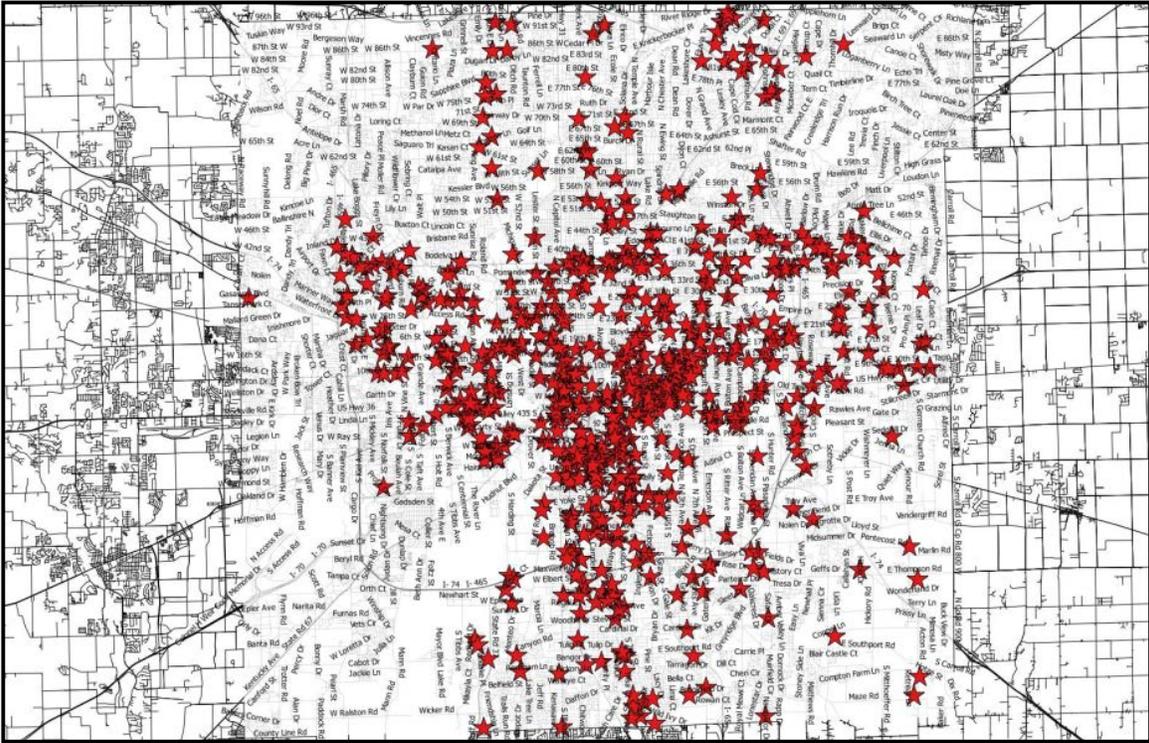
Use of naloxone by IEMS personnel has increased sharply over the past five years. Figure 57 illustrates the increase in use by month and year since 2012. Use depicted in 2015 is for ten months, and most likely surpassed the number of uses in 2014 for the full 12-month period.

Figure 57 Indianapolis EMS Naloxone Use, 2011-November 3, 2015



IEMS has administered naloxone for overdose in many areas of the city. The majority of emergency calls requiring naloxone use were concentrated around the city's center, particularly the near south and east sides. A dense cluster of incidents occurred on the near west side as well. Figure 58 illustrates the geographical distribution of naloxone administration for the first 9 months of 2015.

Figure 58 Geographical distribution of Indianapolis EMS Naloxone Use, Jan. 1 – Sep. 30, 2015



In addition to using naloxone on their own emergency calls, IEMS is expanding access by training Indianapolis Metropolitan Police Department officers and Indianapolis Fire Department staff to administer this life saving drug. In 2015, 2,500 people received the 30-minute IEMS training (personal correspondence, Carl Rochelle, March, 2016).

Naloxone administration has been aided by a cost reduction with introduction of the intranasal form of the anecdote. Prior to late 2015, naloxone had to be administered by IV, which required advanced life support 1 (ALS1) response. The cost of an ALS1 call is \$2,166.87. The cost of calls using the intranasal kit, which only requires a Basic Life Support call, is \$1,885.00. Each naloxone kit costs \$31. Use of the intranasal kit also reduces the likelihood of transmission of blood borne infectious diseases, an added advantage for first responders (personal correspondence, Carl Rochelle, March, 2016).

IEMS is also working to reduce opioid drug overdose by connecting victims with mental health professionals at the hospital or within 24 hours of transport (personal correspondence, Carl Rochelle, March, 2016).

Overprescribing of Opioid Pain Relievers

Patient Safety Coalition

The Indianapolis Patient Safety Coalition (IPSC) is a non-profit organization focused on preventing medical errors that put patients at risk for adverse outcomes in health care settings. Members of the IPSC include six major Indianapolis hospitals/health systems, Community Health Network, Eskenazi Health, Indiana University Health, Franciscan/St. Francis Health, St. Vincent Health, and Richard Roudebush Veterans Administration Medical Center. [130] Coalition partners include Eli Lilly and the Lilly Foundation, the Indiana Hospital Association, Indiana Health Information Exchange, Indiana Patient Safety Center, the Regenstrief Institute, Regenstrief Center for Healthcare Engineering, and Indiana State Department of Health. [131]

IPSC assembled an interdisciplinary workgroup from their membership to address opioid prescribing in emergency departments (EDs). The group recognized that EDs are frequently a place for patients to obtain narcotic pain medication, and that ED practitioners are challenged to manage patients pain needs in an immediate but sustainable way, while attempting to prevent overdose, opioid dependency and the non-medical use of opioid drugs. The working group reviewed national programs, reviewed the members' existing practices and lessons learned and then developed the following tools: 1) guidelines for appropriate ED narcotic prescribing practice, including differentiating between acute and chronic pain; 2) a suggested process for follow-up and long term management; 3) a script for difficult conversations; and, 4) patient educational material that would provide a consistent message across systems. A flow chart illustrating the prescribing process, recommendations for managing patients with chronic pain, and a patient education brochure are included in Appendix E. [130]

Non-Pharmacological Pain Management Programs

Eskenazi Integrative Pain Clinic - Evidence-based programs that teach non-pharmacological methods of pain management have existed for more than 35 years. One of the earliest examples, developed by Kate Lorig at Stanford University, was targeted toward people with rheumatoid arthritis, a painful incurable auto-immune disorder. [132] The six-week curriculum emphasizes relaxation, cognitive techniques like distraction and guided imagery, and the importance of good nutrition, adequate sleep, managing depression and regular exercise. Program evaluations have consistently shown that participants experienced less pain, improved function and quality of life, and had fewer visits to health care providers after completing the program. The effects have been shown to last for as long as two years. [133] Participants also discover that they do not have to be held hostage to their pain. The program has been replicated and evaluated in countries all over the world. [132]

Palmer MacKie, MD, with the Eskenazi Integrative Pain Center [134], has won awards for his work in non-pharmacological pain management practices. The center's website states:

“The [Integrative Pain Center's] program de-emphasizes pain medication and emphasizes improving the quality of life. Eskenazi Health Integrative Pain Program has several steps to help patients manage pain. Patients begin by doing a bio-psycho-social assessment and evaluation. After the assessment, patients participate in a mandatory

six-week self-management program. The program is designed to last four to six months and will require effort and participation from the patient so meaningful relief can be achieved.”

MackKie employs techniques like relaxation and breathing, exercise work with balls and bands, and chair yoga. The goal is formation of new habits while enjoying the process and building relationships. Additional services offered by the center are hypnosis, acupuncture, and cognitive and behavioral training. Eskenazi’s goal is to eventually offer exercise and yoga in all their community health centers.

A barrier to programs like these is the lack of a reimbursement mechanism for the educational component and supporting classes. Even though positive outcomes have been documented for decades, insurance does not reimburse for these services; providers are prohibited from charging fees to patients insured by Medicaid. MackKie credits the program’s success to Eskenazi leadership and their willingness to underwrite the program for their patients. They recognize that the program’s value can be recouped by decreased use of urgent/emergent care as a result of patients’ increased physical activity, aerobic capacity and sense of empowerment (personal correspondence, Palmer MackKie, MD, April 23, 2016).

MackKie acknowledges that there is a role for pain medication, but that the use of opioid drugs should be intentional, instead of reflexive. If opioid medication is indicated, providers should evaluate patients carefully, safely administer it, and supervise their patient’s discontinuation. (Personal conversation, March 17, 2016)

Substance Abuse Treatment Providers

A key piece of the Marion County infrastructure addressing opioid misuse is its substance abuse treatment programs. The county has a variety of chronic addiction treatment providers, from those connected to large health systems like Eskenazi Health and Community Health Network, to small independent providers offering non-medical, counseling-based services.

For this assessment, eleven state-certified substance abuse treatment providers were identified in Marion County (Table 11a & b, pages 103-104). [97,135]

- Three providers are large Community Mental Health Centers: Midtown Mental Health Center, Gallahue Mental Health Center and Aspire, Indiana (based in Noblesville but with a satellite office in Indianapolis). Midtown and Gallahue are associated with large hospital systems, Eskenazi Health and Community Hospitals, respectively.
- Fairbanks, a stand-alone hospital, specializes in addiction treatment of all types.
- Harbor House, affiliated with the Salvation Army, is a residential treatment facility.
- Five agencies provide cognitive behavioral therapy/counseling on an outpatient basis: Indianapolis Counseling Center, Life Recovery Center, Indy Cottage Counseling, Families First, and Indianapolis Treatment Center.
- The Child and Adolescent Psychiatry Clinic at Riley Children’s Hospital provides substance abuse services to youth, but only those with co-occurring psychiatric / substance abuse disorders. [136]

Table 11a: Certified Substance Abuse Treatment Providers in Marion County

Agency	Detoxification Services		Substance Abuse Treatment (Cognitive-Behavioral)				Medication-Assisted Treatment	Service Populations	
	In-patient	Out-patient	Residential	Partial hospitalization ¹	Intensive out-patient ²	Out-patient ³	Multiple Types	Adults	Adolescents, Youth
Aspire Indiana, Inc.					x	x	Suboxone	x	x
Fairbanks	x		x	x	x	x		x	x
Families First Indiana, Inc.					x	x		x	
Gallahue Mental Health Center	x			x	x	x	Vivitrol, Suboxone Naloxone	x	x
Indianapolis Counseling Center					x	x		x	
Indianapolis Treatment Center ⁵					x	x	Methadone, Suboxone Vivitrol, Subutex	x	
Indy Cottage Counseling ⁵					x	x			
Life Recovery Center					x	x		x	
Midtown Mental Health Center		x			x	x	Methadone, Suboxone Buprenorphine, Vivitrol	x	x
Riley Child and Adolescent Psychiatry Clinic					x	x	Vivitrol, Suboxone		Adolescents ⁴
Salvation Army, Harbor House ⁵	x		x		x	x		x	

¹Partial Hospitalization - Visit facility daily, home at night

²Intensive outpatient = multiple sessions per week

³Outpatient = 1 session per week

⁴Co-occurring psychiatric /substance abuse disorders

⁵Information retrieved from organization's website

Table 11b: Substance Abuse Treatment Providers in Marion County

Agency	Ancillary services						Financing		
	Relapse Prevention ⁶	Education/Prevention ⁷	Supportive Living	Extended Residential	Transportation	Child Care	Medicaid	Sliding fee, charity care	Private Insurance
Aspire Indiana, Inc.	x	x			x ⁸		x	x	x
Fairbanks	x	x	x	x			x	x	x
Families First Indiana, Inc.	x	x			x	x	x	x	x
Gallahue Mental Health Center					x ⁸		x		x
Indianapolis Counseling Center	x	x						x	
Indianapolis Treatment Center ⁵									x
Indy Cottage Counseling ⁵	x	x							
Life Recovery Associates	x	x			x ⁹			x	x
Midtown Mental Health Center	x	x	x		x ⁹		x	x	x
Riley Child and Adolescent Psychiatry Clinic	x	x			x ⁹		x	x	x
Salvation Army, Harbor House ⁵	x	x	x						

⁵Information retrieved from organization's website

⁶Less frequent appointments or free group attendance

⁷General community, first time offenders

⁸Medicaid patients

⁹Bus passes, gas cards

To gain insight into the opioid epidemic and current substance abuse trends, we reached out to all eleven treatment providers. Eight providers responded and six agreed to be interviewed in depth (shaded yellow, Table 12):

- Kimble Richard, Gallahue Mental Health Center
- Duncan Brown, Aspire Indiana, Inc.
- Eric Davis, Life Recovery Center
- Julie Lysik, Families First Indiana
- Dean Babcock, Midtown Community Mental Health Center
- Kent Brown, Fairbanks Hospital

All reported an increase in patients with opioid misuse disorder, and increased diversity in their patient populations – varying in income level, education, age. One agency reported a 30% increase in their 18-34 year old patients. Another has experienced a significant increase in the number of MAT patients in need of behavioral therapy/counseling services.

Providers did not report having significant waiting lists for treatment (with the exception of one methadone clinic), but acknowledged that the time required to get into the system can vary from 1-3 weeks based on the patient's specific situation. Providers of inpatient detoxification reported that there is high demand for this service and their beds are full much of the time.

Cognitive-behavioral treatment was available at all 11 facilities, but only 5 are certified to provide medication-assisted treatment (MAT). Providers report access to medication to facilitate treatment is extremely limited. Only two methadone clinics service the Indianapolis area and much of the Central Indiana region. One provider told us that their methadone services were not insurance-driven; they are constrained by the number of providers and size of their space. "There are a finite number of patient slots; when those are full, we can't serve any more patients." Persons taking methadone must visit the clinic daily to receive their dose, making administration of this drug a labor-intensive process.

Other types of MAT do not require daily clinic visits, but providers who are licensed to prescribe them were still in short supply. According to one provider, there were not nearly enough specialty providers (e.g., addiction psychiatrists) to meet the demand; more primary and obstetrical care providers need to become certified to prescribe. To encourage interest in MAT training, his clinic is organizing an electronic learning collaborative for providers in their parent hospital system. It began as a Sharepoint site with articles on MAT posted for potential providers to access; eventually learning modules will be developed to facilitate provider training (personal conversation with Dean Babcock, March 11, 2016).

The state of Indiana has approximately 200 providers certified to prescribe, according to the SAMHSA website. [137] Certified providers are limited by federal regulation to 100 MAT patients; but they often do not treat their full quota, and some treat none at all. SAMHSA's website states that in 2016 Indiana had approximately 20 DATA (Drug Addiction Treatment Act of 2000)-certified physicians with 30 MAT patients and 7 physicians with the maximum number of 100 patients. [138]

According to SAMHSA’s list, which changes frequently, about 40% of Indiana’s MAT certified providers (79) practice in the Indianapolis metropolitan area. Table 12 lists the number and location of physicians authorized to prescribe buprenorphine as of May 12, 2016. [137]

Table 12: Physicians Authorized to Prescribe Buprenorphine, Indianapolis Metro-Area	
City	Number
Indianapolis	65
Greenwood	3
Carmel	3
Noblesville	3
Avon	2
McCordsville	2
Lebanon	1
Total	79

Across the board interviewees expressed concern about the shortage of providers, both clinical and non-clinical. Not only physicians to prescribe medications for MAT, but licensed therapists, certified addictions counselors and addiction psychiatrists are desperately needed. At the non-clinical level, pay is low and staff vacancies high, leading to high levels of burnout and turnover in these positions. None of the providers we talked with anticipated this workforce problem to be solved in the near future.

Four providers employed people recovering from addiction to augment their services. Some use Certified Recovery Coaches to provide case management, support and encouragement to clients/patients. Another used their “alumni” as mentors for patients, noting that it often had a very powerful effect.

Providers noted the limited number of facilities that treat adolescents. Adolescents are particularly vulnerable to harm from substance abuse because their brains are still developing. Ten facilities provided services for adults, but only five treated adolescents, one of which limited their services to adolescents with co-occurring psychiatric disorders. Two providers had previously attempted to serve adolescents, but were unable to support the program fiscally. However, a new model is showing promise with this population—telemedicine. Two providers have launched this method with some success.

Providers also noted that access to publicly funded treatment was extremely limited. Eight of the 11 providers accepted private insurance, but only six accepted Medicaid. Seven reported subsidizing treatment by accessing charity care through their parent health systems, charging patients on the basis of a sliding fee scale, or cost shifting (fees from private insurance subsidizing costs for those without coverage) in order to get patients the services they need.

Transportation and lack of childcare were mentioned by several providers as barriers to patients' participation in treatment. Six were able to help with transportation and one provided childcare. Providers who accepted Medicaid billed that program for patient transportation. One CMHC owned a van which they used to transport patients. Three organizations provided bus passes or gas cards. All acknowledged that, even with support, transportation was still a barrier to treatment for many, particularly those taking daily doses of methadone that must travel to the clinic every day. The lone provider that offered childcare reported the demand far exceeded their ability to provide it.

A few treatment providers made note of the fragmentation between substance abuse treatment, mental health treatment and primary care. They recognized that medication is just the first step in recovery, and that patients need therapy/counseling to further their progress. If primary care and substance abuse treatment services facilitated by MAT were more integrated, even co-located, patient care would receive more seamless and potentially more successful treatment.

Recommendations:

- More beds are needed for detoxification.
- Patients need in-patient treatment beyond detoxification; more inpatient capacity is needed.
- Capacity for publicly funded treatment should be expanded.
- More prescribers are needed to oversee Medication Assisted Treatment.
- More long term residential facilities are needed for those in early recovery.
- More trained staff are needed at the clinical and non-clinical level.
- Treatment centers need resources to provide childcare for parents in treatment.
- Adolescents misusing opioids should be a high priority for services.

Primary Prevention

School-based programs

Preventing initiation of opioid use, particularly among youth, is the most cost-effective and promising way to prevent the ongoing epidemic of opioid use disorder in subsequent generations. [139] Schools have traditionally been the most efficient and comprehensive venue to reach youth in grades K-12. According to Sonya Carrico who oversees the Local Coordination Councils through the Indiana Criminal Justice Institute, substance abuse prevention activity in the schools has dropped significantly since the Safe and Drug Free Schools program was defunded six years ago. Other factors contributing to the decrease have been the growing emphasis on standardized testing and the linkage between test scores and teachers' performance assessment. Class time is devoted to teaching material directly related to the test, leaving little time for other topics (personal conversation, May 10, 2016).

The state of Indiana does not have strong infrastructure to support teaching substance abuse prevention in the school setting, whether infused into the regular curriculum or taught by an outside prevention educator. Indiana schools are not mandated to expose youth to substance abuse prevention education by Indiana law. [140] The Indiana Department of Education adopted the [Indiana Academic Standards for Health Wellness](#) in 2010 and updated them in 2011 [141], but these are vague and leave the classroom instructor much latitude in how to present the information. (More information about the law and guidelines is presented on page 120.)

For this assessment, we were unable to identify a state-wide or county-wide mechanism for tracking substance abuse prevention activities in schools. This is not to say that programs are not provided. They are, but data on where they are, what they do, when they are provided, and how many youth are reached is not readily known. Many of the treatment providers interviewed for this assessment worked with a few schools to provide primary prevention. Some did so by request, and evidence-based programs were not always used. Two anecdotal sources reported that the DARE program, which is not supported by strong scientific evidence, is still provided in some elementary and middle schools. Drug Free Marion County (DMHC) has used the Michigan Model in three middle schools. DMHC also told us that, at one time, all Marion County school districts employed a prevention specialist. These positions were eliminated due to funding cuts; only Indianapolis Public Schools continued to fund this position for their district.

One up-and coming not-for profit group appears to be making inroads in school-based primary drug prevention. Overdose Lifeline was created by Justin Phillips, the mother of Aaron Sims, a 20 year-old who died from a heroin overdose in 2013. Overdose Lifeline developed a video and accompanying curriculum to educate 8th-12th grade students about the dangers of prescription drug abuse and heroin. The organization's website states the program has reached over 6,000 students to date. Overdose Lifeline has engaged an evaluation team to collect and analyze effectiveness data, aiming to demonstrate evidence of effectiveness in order to get listed on the SAMHSA Registry of Evidence-based and Best Practices [142] Ms. Phillips has won a number of awards for her work in this area. [143]

Primary substance abuse prevention activity exists in the school setting but does not appear to be systematically tracked, is not coordinated, and the effectiveness of these activities is unknown.

Community Programs

The Division of Mental Health and Addiction, Bureau of Mental Health Promotion and Addiction Prevention, funds community programs that use SAMHSA's Community Prevention Framework to develop a community plan and identify their top substance abuse prevention priorities (see page 86). The Bureau funded three organizations in FY 2015 to conduct prevention projects using evidence-based programs in Marion County: Indiana Youth Group, Pike Township, and Drug Free Marion County. According to an evaluation conducted by Indiana Prevention Resource Center, these groups accomplished the following in FY 2015 (July 1, 2014 – June 30, 2015): [144]

- Indiana Youth Group (IYG) prioritized substance abuse, depression, and suicidality, and low self-efficacy. To address these factors, IYG implemented Coping and Support Training (CAST), Strength-Based Case Management (SBCM) and The Systematic Training for Effective Parenting program (STEP). Through these direct strategies, IYG

reached 133 individuals. IYG was challenged by a lower than expected number of youth participating in CAST. However, they were successful in increasing the number of parents participating in STEP. Eighty-two parents/care givers were trained in STEP in 11 cohorts.

- Pike Township prioritized early and persistent anti-social behavior and family conflict. To address these factors, Pike Township implemented Too Good for Drugs, Active Parenting Now, Social Norm Messaging Campaign, and advocated for a school wide health curriculum school-wide. Through these strategies, Pike Township reached 130 individuals in direct strategies, and 1385 in universal indirect (environmental) strategies. Pike Township reported that implementing the comprehensive health school-wide curriculum was challenging, but was successful in implementing military parenting classes using the Active Parenting Now Curriculum.
- Drug Free Marion County prioritized laws and norms favoring drug use, family conflict, low risk associated with use, perceived favorable attitudes towards use by peers, and interaction with anti-social peers. To address these factors, Drug Free Marion County implemented Strengthening Families Program, a parent prevention/public awareness campaign, and a prevention education curriculum (the Michigan Model). [145] Through these strategies, Drug Free Marion County reached 268 individuals directly, and 688,684 in universal indirect (environmental) strategies. Identifying potential funding sources and allocation strategies for each program or policy was challenging for Drug Free Marion County, but they were successful in developing collaborative agreements with implementing organizations and providers.

Drug Free Marion County (DFMC) is also the Local Coordinating Council (LCC) in Marion County. [146] As the LCC, they distributed funding received from the Indiana Criminal Justice Institute to other county agencies for substance abuse work in three categories: prevention, treatment, and criminal justice. Table 13 (next page) details the list of [funded agencies](#) for 2016). [147] Programs funded through LCCs are required to be evidence-based (Personal conversation, Sonya Carrico, May 10, 2016).

As the budget indicates, DFMC funds Indianapolis Schools, the Boys and Girls Club, John H. Boner Center, and the YMCA to conduct drug prevention activities. Grant amounts are \$20,000 less and total \$78,750. As listed in the budget, none of the programs can be found on SAMHSA's National Registry of Evidence-based Programs and Practices, but according to the County Health Rankings, What Works for Health, there is strong evidence that mentoring programs reduce delinquent behavior and drug use for at-risk youth. [148]

Table 13 Drug Free Marion County Grant Recipients, 2016

2016 MARION COUNTY DFC GRANT RECIPIENTS			
#	ORGANIZATION NAME	PROJECT NAME	GRANT AMOUNT
	Prevention/Education		
5	Indianapolis Public Schools	ATOD Data Strategies	20,000
14	Boys & Girls Clubs of Indianapolis, Inc.	SMART Moves	19,750
15	John H. Boner Community Center	EDGE	19,000
22	YMCA of Greater Indianapolis	Y-Future Leaders Mentoring Program	20,000
			78,750
	Treatment/Intervention		
7	HealthNet Inc./Homeless Initiative Project	Community Outreach Task (COT) Force	19,688
10	HHC of Marion County dba Indianapolis EMS	Project POINT	19,687
11	Eskenazi Health Midtown Community Mental Health	Methadone Maintenance Treatment	19,687
17	Pathway to Recovery, Inc.	Pathway Supportive Housing Program	19,688
			78,750
	Law Enforcement/Criminal Justice		
1	Marion County Drug Treatment Court	Drug Treatment Court	19,950
2	Marion County Re-Entry Court	Re-Entry Court	19,950
9	Lawrence Police Department	Overdose Reduction Initiative -- Narcan	4,990
19	Indianapolis Metropolitan Police Dept.	Heroin Enforcement	13,910
20	John P. Craine House	One More Step Forward	19,950
			78,750
	Administration		
	Drug Free Marion County	Comm. Prevention, Advocacy & Grant Mgmt.	78,750
			-
	GRAND TOTAL		\$315,000

As an organization, DFMC primarily focuses their work on programs and policies to prevent under-age drinking. Their efforts are directed toward adolescents and young adults in the college age group. (Personal conversation, Nancy Beals, March 18, 2016). DFMC [board members](#) are [149]:

- Bill Nelson, Marion County Superior Court - President
- Jason Tolliver, Cassidy Turley - Vice President (Commercial real estate)
- Becky Droeger, DiscipleData, Inc. – Treas. (Nonprofit software/technology cooperative)
- Kim Manlove, Indiana Addiction Issues Coalition (Addictions advocacy group)
- Dean Babcock, Midtown Community Mental Health Center

- Bryston Cutter, AIT Laboratories (toxicology testing services)
- Bob Holt, Indianapolis Metropolitan Police Department
- Cara Misetic, Corizon Health (Health care and re-entry services for correctional facilities)
- Don Rix, Big Red Liquors
- Shaunette Terrell, Marion County Prosecutor's Office

Activities specific to prescription drug abuse prevention on which DFMC has collaborated include: 1) working with the Marion County Sheriff and police departments in Speedway, Lawrence and Beech Grove to place prescription disposal boxes; 2) supporting Eskenazi Health's participation in the [Yellow Jug Old Drug](#) pill disposal program in all eight of their pharmacies (Yellow Jugs have a substance in the bottom that dissolves pills); 3) working with the Marion County Public Health Department to place needle disposals in three Indianapolis fire stations.

As noted by the Indiana previously, DFMC uses the [Michigan Model](#) for primary prevention education in the school setting, an evidence-based program that can be tailored to grade level and blended into the regular curriculum. [145] They have facilitated prevention programs at Broad Ripple, Lincoln, and John Marshall Middle Schools. The interactive curriculum teaches refusal skills, peer persuasion techniques, and public advocacy.

DFMC has worked on a number of under-age and binge drinking policy issues:

- Limiting the density of alcohol outlets in Marion County
- Closing down bars that served minors or over-served adults (This process took three to four years. They also worked with governor's office to streamline the process.)
- Opposing legislation to allow Sunday sales of alcohol. (Some Indiana legislators see breweries and distilleries as economic engines for the state and want to loosen alcohol laws to promote economic development.)
- Passing a local ordinance to stop gas and convenience stores from selling drug paraphernalia, e.g., marijuana wax and butane, used to manufacture "dab" (a high grade of hashish). (Personal conversation, Nancy Beals, March 18, 2016).

DFMC completed their most recent Comprehensive [Community Plan](#) in July of 2013. [150] The plan noted gaps specific to substance prevention/intervention, including:

- A reduction in funds for data collection on drug usage. Schools who formerly implemented a survey are no longer willing to do so without funding.
- The number of detoxification beds available in the county is inadequate.
- People are not completing drug treatment due to their unmet functional needs (e.g., employment, housing, childcare, transportation)
- Marion County is experiencing a steep increase in heroin and opioid use.

Goals listed in the community plan to address the heroin/opioid increase include:

- Reducing the number of heroin cases as assessed by 5%
- Reducing the number of heroin-related and heroin overdose deaths

Recommendations for investment (Personal conversation, Nancy Beals, March 18, 2016):

Primary Prevention:

- Implementation of more evidence-based drug prevention programs
- Implementation of more multi-faceted health education curricula
- Addition of a health literacy assessment to the school testing process
- Create and support school-based health councils.
- Support efforts to collect and dispose of unused/unwanted prescription painkillers

Treatment:

- Support more beds for detoxification
- Provide funds to subsidize functional needs for those in treatment

Criminal Justice:

- Support use of evidence-based drug treatment diversion programs
- Support assessment and treatment for juveniles arrested for drug related crimes
- Support initiatives that improve local collection of data regarding use of drugs by those committing crimes
- Support increased resources for the Public Defender's Office, Prosecutor's Office and Probation Department for handling drug-related cases
- Support increased resources for local law enforcement agencies and other organizations in combating criminal activity related to heroin/opiates and other drugs

Analysis of Contextual Factors

Like most states, Indiana continues to build its capacity to address the adverse health outcomes of a rapidly growing opioid epidemic. Several supportive structures are in place:

- The Indiana State Prescription Drug Abuse Prevention Task Force (AG's Task Force) chaired by the Attorney General and Co-chaired by Dr. Joan Duwve, Chief Medical Officer of the Indiana State Department of Health (ISDH).
- The Indiana Governor's Task Force on Drug Abuse, Prevention, and Treatment chaired by John Hill and Dr. John Wernert.
- INSPECT managed by the Indiana Professional Licensing Agency (IPLA) with oversight by the Indiana Board of Pharmacy.
- Naloxone dispensing and training programs offered through the ISDH and the Office of the Attorney General.
- Private inpatient and outpatient treatment programs for opioid use disorder.
- The network of Community Mental Health Centers and Opioid Treatment Centers funded and regulated through the Division of Mental Health and Addiction.
- The Indiana Office of Medicaid, Healthy Indiana Plan 2.0 and HAP.
- Therapeutic Communities through the Indiana Department of Corrections
- HIV Counseling and Testing supported by the ISDH Division of HIV/STDs.
- The ISDH Communicable Disease Reporting Rule requiring reporting of HIV and HCV.
- Surveillance systems in place at the ISDH that can be expanded to include monitoring of emergency department visits for drug-related complaints (overdose, abscesses) and reporting of infants born with NAS.
- The Indiana Violent Death Reporting System Opioid Overdose Module at ISDH funded through a grant awarded by the CDC.
- The Network of Local Coordinating Councils funded through the Indiana Criminal Justice Institute.

Through the work of the AG's Task Force, policymakers began initiating policy changes in 2012 to stem the rising tide of the epidemic. Momentum around syringe exchange programs increased when the national spotlight focused on Scott County's HIV and HCV outbreak. New laws and administrative policies have been created to:

- Require certain opioid prescribing and patient monitoring practices for the management of chronic, non-terminal pain.
- Require 100% of the Indiana Controlled Substance Registration (CSR) fees paid by healthcare providers to be used to fund ongoing operational costs and updates to the INSPECT program.
- Require pill dispensing facility owners to have an Indiana Controlled Substance Registration which can be quickly suspended by the Indiana Medical Licensing Board in the case of an infraction.
- Require Indiana Medicaid to reimburse FDA approved evidence-based treatment options for substance use disorder.
- Require Indiana Medicaid to restrict the use of methadone for the management of chronic pain.

- Reimburse mental health treatment providers for a portion of student loans if they establish a practice in Indiana.
- Allow first responders and citizens to administer naloxone, and register with the ISDH as an “Entity” to dispense naloxone under a prescriber’s standing order.
- Modify the moratorium on establishing new methadone clinics by requiring DMHA to write rules for 5 new OTPs operated by CMHCs or hospitals.
- Expand beds available in therapeutic communities (TCs) throughout the system of state correctional facilities, and pilot the TC program in local jails.
- Define a standardized approach to identifying pregnant women at risk for having a baby with NAS, and create a reporting process that can be implemented in birthing hospitals statewide.
- Establish a process for county governments to request approval through the ISDH to operate syringe exchange programs in response to an epidemic of disease related to injection drug use.

These changes represent forward progress, but more work needs to be done.

INSPECT: Expanding Provider Use

Currently about 47% of eligible healthcare providers are registered with INSPECT (14,328 of 30,659 CSR holders), according to the IPLA. Increasing the numbers of providers registered with INSPECT and the frequency of INSPECT queries prior to prescribing controlled substances have resulted in safer prescribing practices (a decrease the number of prescriptions written for opioids and the numbers of pills dispensed per prescription) in those states where PDMP use is required. [151]

INSPECT has plans to make the system more user-friendly to providers by automatically issuing an access account when providers renew their license (every two years). They regularly conduct statewide outreach efforts to promote provider utilization of INSPECT. To further enhance INSPECT’s effectiveness, IPLA focuses on data integrity issues, such as errors made when prescriptions are hand-entered from pharmacies (Taya Fernandes, personal conversation, March 17, 2016). INSPECT encourages e-prescriptions to facilitate more accurate data collection.

The CDC recently awarded the Prescription Drug Overdose Prevention for States grant to the ISDH. One of the grant deliverables is the integration of INSPECT into electronic health records (EHRs) through the network of health information exchanges in Indiana. A 2012 pilot study by the MITRE Corporation tested the feasibility and uptake of INSPECT data integration into the Wishard Emergency Department EHR system through the Indiana Health Information Exchange. The results of this pilot were resoundingly positive, showing that access to INSPECT data during the normal flow of work resulted in more evidence-based prescribing of opioids.

Naloxone Availability and Use by First Responders: Improving Data Collection

Naloxone use should be increasing due to basic emergency vehicles now carrying naloxone and to more law enforcement officers becoming trained in its administration. Indianapolis EMS

has documented a significant increase in naloxone use. However, at the state level, issues with data collection have made it difficult to ascertain the actual dispersion of training and rates of use. The Indiana Department of Homeland Security (DHS) has reported that naloxone use among law enforcement agencies across the state has been limited, but they have also acknowledged that 40% of EMS providers do not regularly report their runs through the Emergency Medical System (EMS) Registry and that statewide data is incomplete. [82]

Legislation was passed in the 2016 of the General Assembly that requires emergency management entities to report any use of naloxone in the field through the EMS registry. [124] This legislation is one step toward improved data quality. To further improve data collection, IDHS suggests tracking: 1) the number of law enforcement agencies that have been trained in naloxone's administration, 2) the number of police officers carrying it, 3) the number of police vehicles on duty at any given time, and 4) the number of EMS response vehicles on duty at any given time. Until reporting and tracking deficiencies are resolved, it will be difficult to have an accurate accounting of naloxone availability and use in the field.

Reliability of Data on Overdose Death and Emergency Department Visits for Non-fatal Overdoses

The CDC recently published an analysis of the completeness of cause of overdose death reporting by states. [152] Indiana ranked among the bottom three states for completeness of overdose death reporting, with over 50% of death certificates lacking data about specific drugs implicated in overdose deaths.

Data accuracy for unexpected, unexplained deaths in Indiana is dependent upon reporting by a system of elected coroners. Most coroners in Indiana are not medically trained. In addition, autopsy expenses, including laboratory analyses of drugs and drug metabolites, are the responsibility of the county and are not performed uniformly throughout the state. Non-fatal overdose data is derived from emergency department discharge diagnoses as documented by the treating physician. Often, appropriate laboratory diagnosis of the specific drugs involved in the overdose is not available at the time of the visit, and may not be ordered. The ISDH has included an evaluation of these factors in its recently-funded grant through the CDC.

Pain Management Treatment: Inadequate Provider Training

Studies of medical curricula in the U.S. have shown that pain management education is limited and fragmented; significant gaps between recommended pain curricula and documented educational content have been identified. The topic of pain is often addressed in a few sessions within general medical school courses. [153] A 2016 study found that there is considerable misinformation about prescription opioid treatment among primary care physicians. [154]

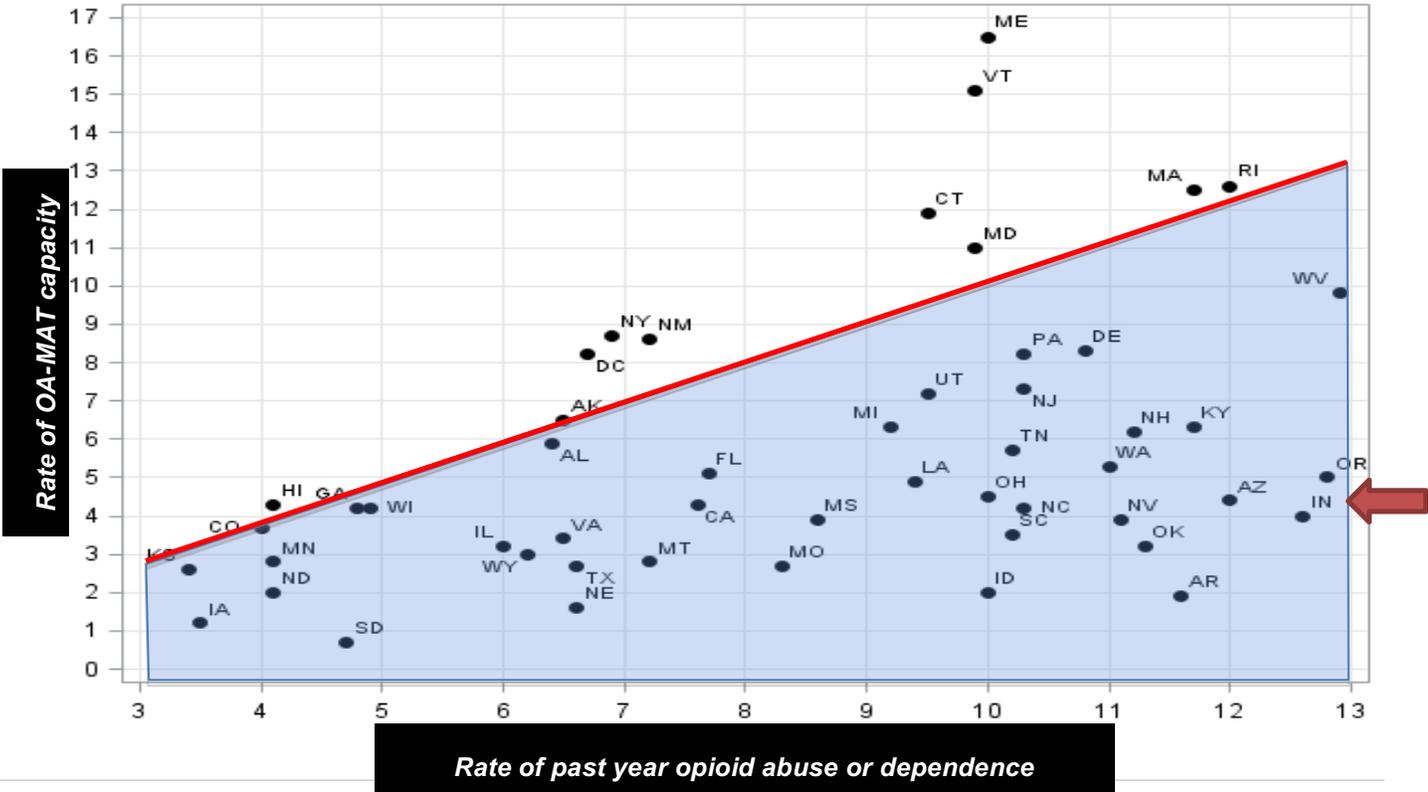
As President Obama has advocated in his new initiative, pain management should receive more emphasis in medical school curricula. Sixty medical schools responded to President Obama's request to include education and training for medical students regarding evidence-based opioid prescribing before they graduate. [63] Indiana University was notably absent from this list. Practicing physicians also need continuing education on prescribing opioid drugs. The Eskenazi Health learning collaborative has the potential to become a model program to meet this need.

Substance Abuse Treatment: Severe Shortages

Indiana has a significant shortage of professionals who can provide treatment for substance use disorder. Indiana ranked among states with the highest rate of past year opioid abuse and dependence, but the rate of Medication Assisted Treatment capacity fell far short of its need (Fig. 59). [155] With only 13 clinics licensed to dispense methadone, access to this treatment is extremely limited. Patients on methadone are required to visit the clinic *daily* to receive their dose. Travel time can easily exceed 2 hours one way, particularly in rural areas. In the western third of the state, clinics are located in Merrillville and Evansville, with nothing in between.

One Marion County clinic provider interviewed for this assessment talked about a patient who lived over an hour away from the Indianapolis clinic. She made the trip every day for three years. When her recovery was well underway, she testified before the state legislature. She told them she would have much preferred to be home opening presents with her children on Christmas morning, rather than driving more than 2 hours to pick up her medication dose. The provider emphasized to us that methadone treatment is *not* the easy way out of addiction; and, Indiana needs the five new methadone clinics authorized by the legislature in 2015. His clinic, which is constrained by space and the number of providers that can be housed, often has a waiting list.

Figure 59 Rate opioid use or dependence vs. rate of Medication Assisted Treatment capacity



The federal Drug Addiction Treatment Act of 2000 (DATA 2000) permitted physicians to prescribe medications containing buprenorphine (Suboxone®, Subutex®) to treat opioid use

disorder in outpatient office settings without registering under the Narcotic Addict Treatment Act that regulates Opioid Treatment Programs dispensing methadone. [156] A study on the geographical distribution of all MAT providers in Indiana found that fewer than half of Indiana counties have an OTP or a DATA 2000 waived physician [157]. The study found that rural communities, often the most vulnerable to opioid misuse, were less likely to have a MAT provider.

The federal DATA 2000 limits the number of patients a physician can treat for opioid use disorder (OUD) with buprenorphine to 30 during year one, with a cap at 100 in subsequent years. The PEW Charitable Trusts ranked Indiana 44 out of 50 states in capacity to meet the state's need for MAT. [158] If every physician in Indiana with a DATA 2000 waiver treated the maximum number of patients with OUD allowed, only 25% of the treatment need would be met. The U.S. at large would have enough DATA 2000 waived physicians to treat only 50% of those with OUD. Patients with OUD in a few states with more than enough DATA 2000 waived physicians to treat everyone with OUD still face barriers to access because most DATA 2000 waived doctors limit the numbers of patients they treat to fewer than the 100 maximum number allowed. PEW notes the irony of doctors having to take an eight-hour course and receive a DATA waiver to prescribe buprenorphine to treat OUD when *no additional training or registration* is required for them to prescribe other opioids like OxyContin, Percocet and Vicodin to treat pain. [158]

Publicly Funded Substance Abuse Treatment: Lack of Access

Several of the professionals interviewed for this assessment acknowledged that comprehensive treatment for substance use disorders (SUD) is in short supply in Indiana, particularly publicly funded treatment. According to a study by the Illinois Consortium on Drug Policy, Indiana ranked 33rd out of 46 states (4 states did not report data) in the rate of publicly funded treatment with 382.8 publicly funded admissions per 100,000 people in 2012. The state with the highest rate of publicly funded treatment was South Dakota with 1,741.9 per 100,000; the lowest state was Texas with 161.6 per 100,000. [159]

The Substance Abuse Block Grant administered by SAMHSA, which funds treatment for patients at or below 200% of the poverty level, accounts for approximately 32% of spending by state substance abuse agencies. [160] Block grant funding for SUD treatment has been flat-lined for several years. Yet in the past decade, there has been a five-fold increase in treatment admissions for prescription drug abuse alone. [160] The National Survey on Drug Use and Health estimated that, in 2014, 21.5 million Americans aged 12 or older needed treatment for SUD. More than four million actually received treatment, but a striking 17.5 million people (more than 80% of those in need) did not. [160] While the Block Grant is not the only public funding source for treatment for SUD available to states, it is one of the largest, and it has not kept pace with the need for treatment.

Funding and capacity for SUD treatment experienced another major decrease in 2014, when the Indiana Access to Recovery (INART) program ended in 2014. The federally funded program assisted clients interested in recovery who could not afford treatment. Qualified applicants had a household income at or below 200% of the Federal Poverty Line (500% for military) and belonged to one of the following (high risk) groups: veterans, pregnant women, women with

dependent children; individuals who had just been released from a criminal justice facility or were involved with the criminal justice system (post adjudication); or individuals with a recently signed agreement with a Diversion Court. [161] Due to federal budget cuts, Indiana lost \$3.3 million in funding for the program [162] which was not replaced by other sources in the DMHA budget [personal conversation, Kevin Moore, March 28, 2016].

As mentioned (page 85) the State of Indiana has allocated funds for Recovery Works, a voucher program for felony offenders re-entering the community from the corrections system. The program is missing some key components provided by the ATR program that contributed to its effectiveness, according to an evaluation conducted by the Fairbanks School of Public Health (FSPH) (personal conversation, Dennis Watson, May 12, 2016). FSPH has submitted a grant proposal on behalf of a Marion County community coalition to the National Institute of Drug Abuse to develop and evaluate a program called Substance Use Programming for Person-Oriented Recovery Treatment (SUPPORT). SUPPORT will be modeled after Indiana's Access to Recovery (ATR) program and will: 1) focus specifically on a prison reentry population; 2) be community-driven, rather than state administered; 3) require direct service staff be certified peer recovery coaches; 4) provide clients a full year of services instead of 6-months; 5) and utilize an electronic data capture system, rather than paper surveys, to improve data-driven decision making. The primary goal of the project is to establish SUPPORT as an effective and scalable recovery-oriented system of care (personal correspondence, Dennis Watson, May 12, 2016).

Sober Living Houses: Inadequate to Meet the Need

Sober living facilities provide a safe environment that serves as a bridge between treatment and re-entry into the community. Treatment providers, funders and others interviewed for this report stated that there are not enough sober living houses in Indiana to meet the need of individuals in recovery. The website, "[Intervention America](#), National Resource for Recovery", lists 310 sober living homes across the state, 48 of which are located in Indianapolis. This count is likely overstated as listings are self-reported, and some indicate they are substance abuse treatment centers and mental health providers affiliated with sober homes which are listed independently. [163]

Sober living home listings on the Intervention America website do not include the number of beds available, making it difficult to assess their capacity to meet the demand. Some listings state that they only accept clients who are able to pay out-of-pocket which would exclude people without the means to do so. Further study is needed to determine the accuracy of postings on this website in order to understand the true gap in sober living home bed availability in Indiana and Marion County.

Criminal Justice System Issues - Treatment for Incarcerated Persons

Because a large percentage of criminal offenders have substance use disorder (SUD), and often co-existing psychiatric disorders, incarceration provides a window of opportunity for intervention. The benefits of treatment during incarceration are significant—lower rates of recidivism and improved behavior during incarceration. The Indiana Department of Corrections (IDOC) provides SUD treatment, but current policy states that offenders must be within 24 months of release to access it. Other states provide treatment facilitated by medication upon

entering the correctional system, but not without significant financial investment by the state. Specialized treatment staff must be hired and, in the case of therapeutic communities (TC), dormitories must be re-arranged so participants can be segregated from the general prison population. IDOC is currently re-evaluating their 24-month policy and are reviewing evidence-based practices, Bureau of Justice recommendations, and policies and practices of other states. They hope to have a revised strategy by end of 2016 (personal conversation, Stephanie Spoolstra, May 2, 2016).

Addressing SUD issues during the transition to incarceration is equally as important as interventions during incarceration. IDOC has been criticized for not providing detoxification for their SUD population. According to Stephanie Spoolstra, detoxification is available through their medical services, but offenders often spend time in another facility, such as a local jail, before they enter the IDOC system (personal conversation, May 2, 2016). By the time offenders reach IDOC, they have already progressed through detoxification. More investigation is needed to learn how improvements could be realized with better coordination of detoxification services. If the pilot program in Starke County is implemented in other Indiana counties (IDOC prisoners are housed and participate in TCs in their county jail), ensuring that detoxification services are available will be an important component.

The State of Indiana also needs to assure that offenders with SUD, particularly those with few resources, have the services they need to maintain sobriety upon release from IDOC facilities. An important service gap was exacerbated when the INART program was defunded by the federal government, and Recovery Works was created to address the need. The new program requires careful scrutiny though, to determine if components omitted from the ATR model are affecting offenders' chances for successful re-entry. The Fairbanks School of Public Health will be involved in the evaluation of the Recovery Works program to shed light on the outcomes.

In his state of the city speech, Indianapolis Mayor Joe Hogsett reiterated his commitment to treatment for substance abuse and mental health for offenders held in the Marion County jail. Plans for a new jail facility have been discussed for the past several years; but Mayor Hogsett advocated for a comprehensive incarceration program that would safely house criminal offenders and address their needs for treatment and rehabilitation. [164]

Primary Prevention: More Data, Comprehensive, Evidence-based Programs Needed

School-based Programs

As mentioned, preventing initiation of opioid use, particularly among youth, is the most cost-effective and promising way to prevent the ongoing epidemic of opioid use disorder. [139] In the past, schools have been an efficient and comprehensive conduit for substance abuse prevention education for youth, grades K-12. Unfortunately, very little information on prevention programming in Indiana schools is readily available. It is unknown what type of programming is provided, which grade levels are exposed, whether programs are evidence-based, and how many students are reached. This situation is likely to produce considerable variability in quality of programming and rate of exposure between school districts and even between schools in the same district.

Requiring schools by law to present specific information or programming is one way to assure consistency and quality of delivery. Indiana law requires that school corporations provide health education without specifying grades, levels, or amounts of instruction. [140] It requires that “principles of hygiene and sanitary science” be taught in the 5th grade and that a semester of safety education be taught in the 8th grade. The law requires school boards to provide education on “the spread of disease by rats, flies, and mosquitoes, and its effects, and of disease prevention by the proper selection and consumption of food,” but does not stipulate the grade level or amount of education. High school students are required to 1) take one credit (of 24 required to graduate) of health education, 2) to learn about breast and testicular cancer and early detection techniques, and 3) to learn about the benefits of organ and blood donor programs. [140]

Another method of assurance, although more voluntary in nature, is through development and adoption of standards and guidelines. The Indiana Department of Education adopted the [Indiana Academic Standards for Health Wellness](#) in 2010 and updated them in 2011 [141]. These standards describe health and wellness principles to be taught at each grade level. However as written, the Indiana standards are vague and allow educators broad latitude in topics to introduce in the classroom. For instance, standard K.1.4 stipulates that kindergarten students should be able to “State behaviors to prevent or reduce childhood injuries,” and K.7.2 asks that students “Name behaviors that prevent injuries.” Contrast these with one objective for kindergarten students in the Michigan Model [145], which states, “Students will comprehend the dangers and benefits of medicines.” The latter is more specific and increases the likelihood that harm from prescription drug abuse is discussed explicitly in an age appropriate way.

In order for health education programs to be effective, they should optimally involve multiple-exposures, be age-appropriate and be sustained over time. [165] They not only include topical information on the harms of substance abuse, but also promote self-esteem, teach refusal skills, and other important tactics for avoiding drugs. They can include mentoring programs and mass communication campaigns. One-time presentations are not a substitute for building effective drug prevention education into school health curricula. However, dedicated efforts like those of Overdose Lifeline *can* be important catalysts to revitalize and institutionalize effective substance abuse prevention education for children and youth.

For this assessment, we were unable to identify a readily available inventory of school-based programs at the state or county level. Quality school-based programming cannot be assured if data on the current state does not exist. A logical next step would be to contact school districts in Marion County to inquire about substance abuse programming, preferably for each grade level. The findings could serve as a basis for system improvement efforts in the county. The process could then be shared with other Indiana counties to 1) begin building a state-wide inventory of substance abuse prevention efforts, and 2) improve program effectiveness and standardize quality.

Community-based Programs - Indiana

Community-based prevention programs are an important component of the prevention continuum. Programs provided by community organizations are not required to fit the structure of the classroom environment, and can reinforce anti-drug messages communicated in other

contexts. Group activities can involve smaller numbers of youth, and more opportunities to interact with mentors and role models. Community organizations often serve high risk youth in after-school settings, making inclusion of substance abuse prevention programming even more important.

The Indiana Criminal Justice Institute (ICJI) Drug Free Indiana program and the Indiana FSSA Division of Mental Health Bureau of Mental Health Promotion and Addiction Prevention have collaborated to fund prevention projects at the local level. Although ICJI has funded Local Coordinating Councils in all 92 Indiana counties for more than two decades, evaluations have not been conducted, due to the lack of council resources and expertise; effectiveness remains unknown. However, unknown is not synonymous with non-existent; the LCCs have been a stable structure in Indiana communities for more than 2 decades. If more resources were provided, these groups could contribute more in terms of data collection, provision and coordination of programming, and evaluation of effectiveness in their communities.

The Bureau of Mental Health and Addiction Prevention (the Bureau) has coordinated with LCCs for their SAMHSA-recommended community planning and priority setting process, which counties undertook in preparation for requesting funds for prevention programs from the Bureau. In 2015, the Bureau funded programs in 33 of Indiana's 92 counties, including major urban areas in the state. Programs were required to be evidence-based, and were selected based on the results of the community planning process.

These programs reached 33,268 Indiana youth in 2015, 20% fewer youth than the 41,667 reached in 2011, over a period when overdose rates were continuing to rise. [144] By comparison, the U.S. Census Bureau estimates that there are 1.161 million children aged 5-18 in Indiana, who would be eligible for age appropriate substance abuse prevention, such as the evidence-based Michigan Model for Health provides. [166, 145] Evaluations of these programs were conducted by the Indiana Prevention Resource Center (IPRC). [144] IPRC measured protective factors, risk factors, and use of substances measured annually in their "Indiana Youth Survey." [27] The results of their evaluation showed that participating counties have improved in measured areas over time, but still lag behind the unfunded communities.

The Bureau's prevention programs reached fewer than 3% of the state's youth in 2015, and the number of youth reached has decreased since 2011. According to DMHA Director, Kevin Moore (personal conversation, March 23, 2016), the Bureau would like to have a broader reach for their prevention programs, but funding for community prevention programs has been limited.

Community-based Programs – Marion County

As the designated LCC for Indianapolis/Marion County, Drug Free Marion County (DMHC) funded 4 primary prevention programs in FY2016 for just less than \$80,000, about \$20,000 per program. [147] One of the four was a data collection project through Indianapolis Public Schools; the remaining three were provided through the Boys and Girls Club, John H. Boner Community Center, and the YMCA. While it's likely that these programs benefitted high risk youth, grant amounts were small and the number of youth impacted is also likely to be small compared to the number of youth in Marion County.

Three Marion County groups, including DMHC, Indiana Youth Group and Pike Township, received DMHA Bureau funds for prevention programming. Evidence-based programs were utilized by all three groups and results were evaluated by the Indiana Prevention Resource Center. These projects directly served 531 individuals and another 690,000 in universal indirect (environmental) strategies. DMHC was responsible for the vast majority of people reached through environmental strategies with more than 688,000. [144]

Summary – Primary Prevention

The status of substance abuse primary prevention in Indiana and Marion County is largely unknown. Data on school programs is not readily available. Infrastructure supporting primary prevention in the schools, (i.e., laws, guidelines), is weak and not conducive to consistent, high quality programming across the county and state. Funding for community programs is very limited and, in most cases, does not result in broad exposure. Many Marion County providers interviewed for this assessment reported they have engaged in primary prevention activities in schools or churches, presenting programs upon request. They use a variety of curricula, not all of which is evidenced-based, which may result in limited effectiveness.

An important next step would be to conduct a comprehensive inventory of school and community-based programs and practices in Marion County, including sources of local funding. This process could provide a model for other counties to use that could eventually provide a clearer picture of substance abuse prevention activities state-wide.

Scott County: A Bellwether for Other Rural Counties in the Midwest

Pockets of the state and of Marion County lack opportunities for gainful employment and resources to maintain good physical and mental health. Generations of poverty have led to a self-fulfilling cycle of despair and its social and behavioral consequences, including poor parenting, adverse childhood events, low graduation rates, unemployment, substance use disorders, and family instability. A September 19, 2015 article in the *Economist* summarized the landscape in the rural Midwest, “In depressed areas in the Rust Belt, where poverty and unemployment rates shot up as factories shut down and jobs disappeared, the drug epidemic is ravaging once-idyllic communities.” [167]

Scott County has had the worst health status in Indiana every year since the County Health Rankings began publishing county-level data for states; the county has consistently had high rates of premature death, drug overdose death, injury, teen pregnancy, unemployment, and lack of health insurance. In addition, the number of doctors, dentists and mental health care providers in Scott County fall far below the state average. [168] It is no surprise that, against this backdrop, the introduction of HIV into a tightly-knit network of people who inject drugs would spread rapidly and unchecked. Starke and Fayette counties have similar poor socioeconomic indicators, and also struggle with high rates of opioid addiction and overdose death. [169,170]

In terms of health status, Marion County is a microcosm of the state. There are areas in the county where people are healthy and thrive, and areas where people live in food deserts, reside in sub-standard housing, have high rates of chronic disease, and die prematurely. Researcher Tess Weathers, of the IU Richard M. Fairbanks School of Public Health, found that life

expectancy varied by as much as 14 years depending on where one lives in Marion County. [171] Life expectancy in the county's northeastern corner is 83.7 years, but is only 69.4 years just east of downtown. As her graphic portrays, 69.4 years was the U.S. life expectancy 60 years ago, and the equivalent of life expectancy today in Uzbekistan, Bangladesh, and Iraq (Figure 60).

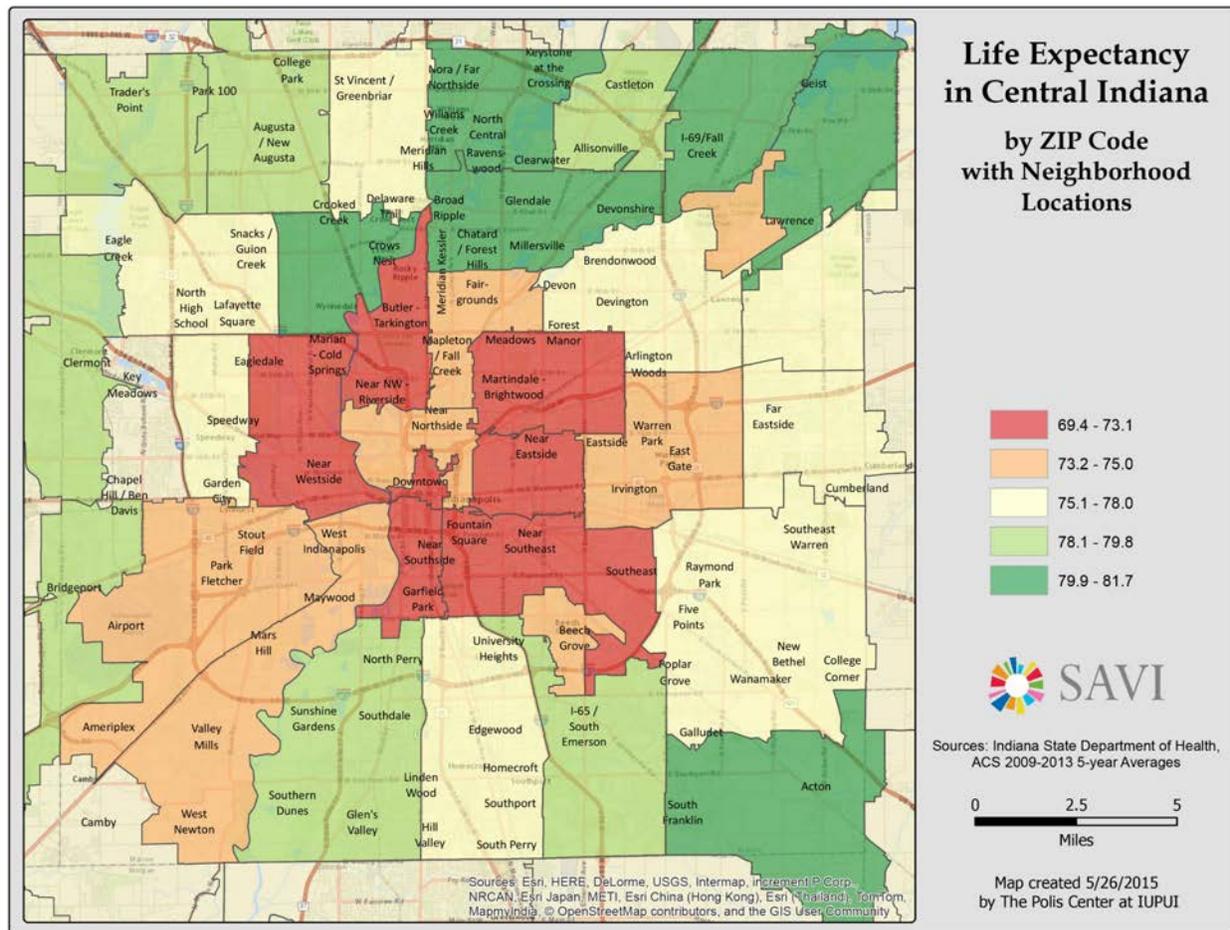
Figure 60 Marion County life expectancy varies by more than 14 years, depending on where one lives.



Figure 61 (next page) displays the variation in life expectancy by zip code in Marion County. [171]

Communities or neighborhoods with high rates of poverty, unemployment and little hope for opportunity can be breeding grounds for a myriad of health problems, including substance abuse. [172] With better data capabilities and the ability to see where people are struggling to lead healthy lives, we have the opportunity to intervene without waiting for a crisis like Scott County's to erupt. Partnering with communities and others to address the social determinants of health—education, employment, income, environment, access to healthy food and safe housing—is an important component of substance abuse prevention.

Figure 62 Variation in Marion County life expectancy by zip code



STATE APPROACHES

Promising Practices

State Approaches to Prevent Opioid Misuse

Because prescription opioids have surfaced recently as a public health problem, the scientific evidence for interventions is still building. The County Health Rankings and Roadmaps to Health (2016) lists three promising strategies to prevent overdose due to opioids: [173]

Table 14. Evidence-Based Approaches to Prevent Overdose		
Strategy	Description	Indiana Status
Naloxone Access (Some Evidence)	States and communities can expand access to naloxone through laws permitting prescriptions to people who are likely to encounter a person who might overdose, as well as through education and distribution efforts for community members, injection drug users, and their family and friends. States and communities can also ensure that all first responders, including EMTs, firefighters, and law enforcement officers, are trained and authorized to administer naloxone. [174]	Law passed < 300 distributors registered (Opt.IN) Carriers expanded Usage up Training ongoing
Good Samaritan Laws (Expert Opinion)	Good Samaritan drug overdose laws provide individuals who are experiencing an overdose and those who act in good faith to summon emergency services during an overdose immunity from criminal prosecution for drug possession, paraphernalia, or other crimes. Good Samaritan laws may also provide protection from other legal concerns such as violations of probation and parole and protection from arrest on outstanding minor warrants. [175]	Law passed in 2016; excludes person who overdosed and anyone else at the scene.
Prescription Drug Monitoring Programs (Some evidence)	Prescription drug monitoring programs (PDMPs) are databases, housed in state agencies, that track prescription and dispensing of drugs. PDMPs can be used by prescribers and pharmacists to view prescriptions written for and dispensed to individual patients, by law enforcement agencies to identify drug diversion or pill mills, or by state medical boards to identify potentially problematic prescribers. Drugs monitored, individuals authorized to use the system, functionality, and use varies from state to state. [176]	Live since 1994 Data sharing with states All pharmacies in system Pilots: Integrating data into EHRs, pharmacy records

The County Health Rankings also notes that mentoring programs for at-risk youth are strongly supported by scientific evidence to reduce delinquent behavior and substance abuse [177], while the evidence for school-based norming campaigns is mixed. [178]

CDC - Promising Practices, Preventing Prescription Drug Overdose

To help prevent prescription drug overdose, the CDC recommends these promising practices: [179]

Table 15: CDC Promising Practices	
1	Consider ways to increase use of prescription drug monitoring programs, which are state-run databases that track prescriptions for controlled substances and can help improve opioid pain reliever prescribing, inform clinical practice, and protect patients at risk.
2	Consider policy options relating to pain clinics to reduce prescribing practices that are risky to patients.
3	Evaluate state data and programs and consider ways to assess Medicaid, workers' compensation programs, and state-run health plans to detect and address inappropriate prescribing of opioid pain relievers, such as through use of prior authorization, drug utilization review, and patient review and restriction programs.
4	Increase access to substance abuse treatment services, including Medication-Assisted Treatment (MAT), for opioid addiction.
5	Increase access to substance abuse treatment services, including Medication-Assisted Treatment (MAT), for opioid addiction.
6	Identify opportunities to expand first responder access to naloxone, a drug used to reverse overdose.
7	Promote and support the use of the CDC Guideline for Prescribing Opioids for Chronic Pain.
8	Help local jurisdictions to put these effective practices to work in communities where drug addiction is common.

Indiana is well on its way toward implementation of these recommendations. More work remains before they will be fully operational, but significant progress has been made.

CDC - State Laws on Prescription Drug Misuse and Abuse

The CDC's Public Health Law Program (PHLP) noted that in spite of the unprecedented epidemic from opioid overdose deaths, there is little information about the effectiveness of state statutes or regulations designed to prevent prescription drug abuse and diversion. The PHLP created menus summarizing legal strategies that states have used to address the problem: [180]

- [Menu of Prescription Drug Time and Dosage Limit Laws](#) - An inventory of time and dosage limit laws on the prescribing or dispensing of controlled substances.
- [Menu of Physical Examination Requirements](#) - An inventory of physical examination laws that expressly require a practitioner to examine or evaluate the patient before prescribing or dispensing controlled substances.
- [Menu of Doctor Shopping Laws](#) - An inventory of state legal strategies to help assess doctor shopping laws. Doctor shopping is when a patient visits multiple healthcare practitioners to obtain controlled substances without the prescribers' knowledge of the other prescriptions.
- [Menu of Tamper-Resistant Prescription Form Requirements](#) - An inventory of various state laws aimed at inhibiting diversion of prescription drugs by establishing requirements for tamper-resistant prescription forms.
- [Menu of State Prescription Drug Identification Laws](#) - An inventory of various provisions in state prescription drug identification laws, including laws requiring patients to show personal identification to pharmacists before receiving prescription drugs.
- [Menu of Pain Management Clinic Regulation](#) - An inventory of state legal strategies to help assess pain management clinic laws.
- [Menu of State Laws Related to Prescription Drug Overdose Emergencies](#) - An inventory of emergency laws that grant people who call 911 in response to an overdose emergency either immunity from prosecution or mitigation in prosecution or at sentencing.
- [Pseudoephedrine: Legal Efforts To Make It a Prescription-Only Drug](#) - An overview of legal efforts at the federal, state, and local levels to limit access to pseudoephedrine, the main ingredient used to make methamphetamine

It is beyond the scope of this assessment to conduct a thorough analysis on state laws to determine which, if any, might be effective in Indiana. However, Indiana's CDC-funded project through the Indiana State Department of Health and the IU Richard M. Fairbanks School of Public Health includes an evaluation of the state's policies that have been adopted to combat opioid abuse. An analysis of other state laws will likely be conducted within the parameters of that project to discover potential improvements to existing policies.

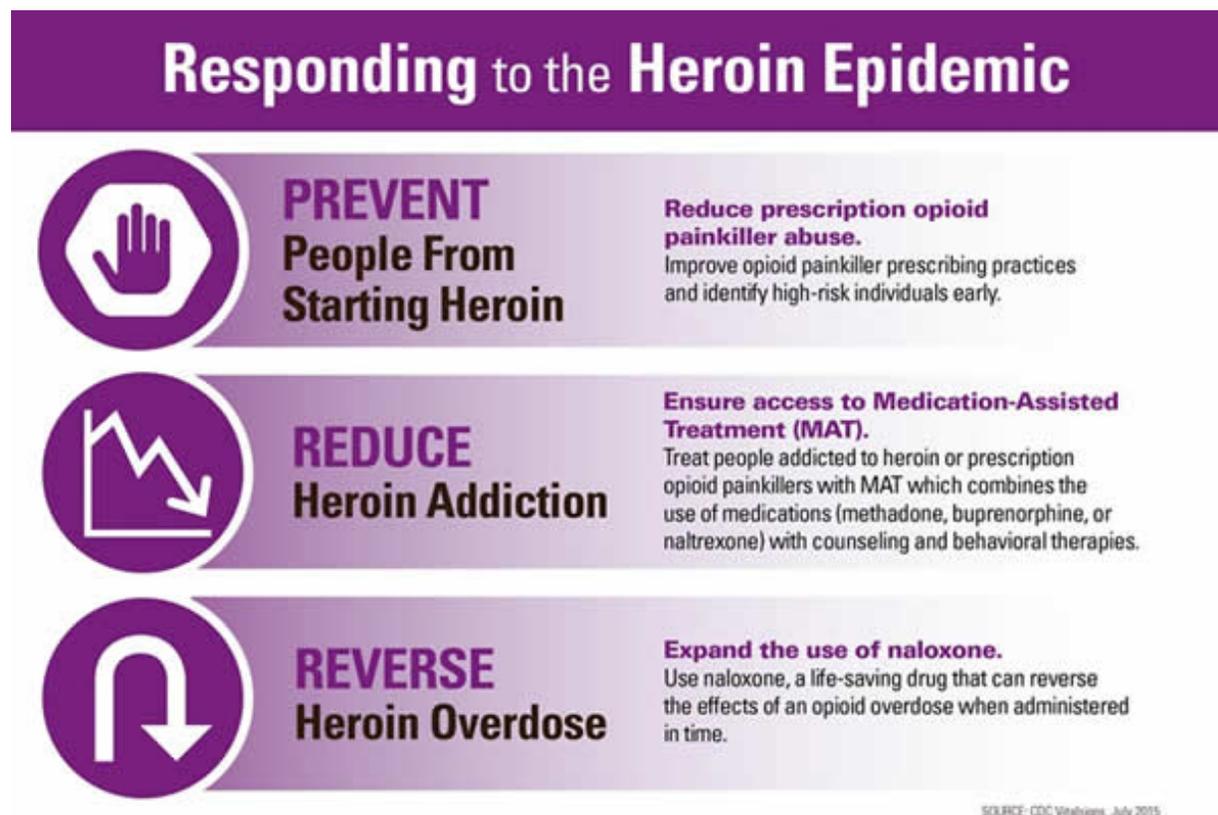
CDC - Reducing Overdose from Heroin

Regarding prevention of heroin overdose, the CDC makes the following recommendations: [181]

- Reduce prescription opioid abuse - Improve opioid prescribing practices, help identify individuals at high risk **early**.
- Ensure access to prevention services - Ensure that people have access to integrated prevention services, including access to sterile injection equipment from a reliable source, as allowed by local policy.
- Ensure access to Medication-Assisted Treatment - Treat people addicted to heroin or prescription opioids with MAT which combines the use of medications (methadone, buprenorphine, or naltrexone) with counseling and behavioral therapies.
- Expand the use of naloxone, the life-saving drug that can reverse the effects of an opioid overdose when administered in time.

With new legislation allowing better access to naloxone, creation of more MAT clinics, and allowance of syringe exchange programs under certain conditions, the state of Indiana is moving forward on these recommendations as well.

Figure 62 CDC's 3 step response to the heroin epidemic



RECOMMENDATIONS

**To Reduce Prescription Opioid Misuse, Heroin Use,
and Opioid Overdose Death**

Addressing the epidemic of opioid misuse, addiction, and overdose death from a public health perspective involves **preventing high risk exposures to opioids, minimizing negative health outcomes as a result of opioid misuse, and providing access to treatment for those with opioid use disorder**. Working with and listening to stakeholders from around the state, including healthcare professionals, law enforcement, and families affected directly and indirectly by the epidemic, both the Indiana State Prescription Drug Prevention Task Force (chaired by the Attorney General and commonly known as the AG's Task Force) and the Governor's Task Force on Drug Enforcement, Abuse, and Prevention have worked in these domains to 1) Turn off the Spigot of supply, 2) Stop the Bleeding of overdose death and the Transmission of HIV/HCV, and 3) Decrease Stigma and Expand Touch Points and Treatment Opportunities to engage individuals with Opioid Use Disorder in conversation and care.

Prevent high-risk exposures

- Develop and work with school corporations to provide age-appropriate substance abuse prevention and HIV awareness education beginning in elementary school, and including faculty, staff, and adults working with middle and high school athletic programs.
- Develop social media campaigns to inform and educate target audiences about opioid misuse and the risks for addiction.
- Launch pharmacy education initiatives about safe medication use, storage and disposal.
- Increase the number of "Take-Back" events in communities, including targeted "Take-Back" at senior living facilities; permanent "Take-Back" facilities in communities; and on-site drug disposal opportunities at pharmacies.
- Offer opportunities for provider education regarding appropriate pain assessment and management, including risk assessment and informed consent when treating acute, post-operative, or chronic pain with opioids. Required provider education for prescribers (e.g. linked to controlled substance registration) is an evidence-based recommendation.
- Work with health professional schools to include instruction on the safe and appropriate use of opioids.
- Improve provider access to patient-specific data across all clinical settings, including VA hospitals and Opioid Treatment Programs, to inform clinical decision-making, including:
 - INSPECT (record of prescriptions patient has filled for all controlled substances)
 - EMS registry (record of overdose reversal with naloxone)
 - Coroners' reports (record of overdose fatalities).
- Develop long-term solutions to improve public health infrastructure and socioeconomic disparities to improve the overall health and resilience of communities.

Minimize negative health outcomes as a result of opioid misuse/addiction

- Increase access to naloxone for first responders; individuals taking opioids for pain management or treatment of addiction, their family and friends; addiction treatment providers and recovery support professionals; probation officers and correctional facility staff; school nurses, staff, and college dormitory resident advisors; and others in the community who may witness a drug overdose.
- Expand access to comprehensive programs in communities, as permitted by Indiana Code, to provide a safe space for harm reduction services (including syringe exchange,

HIV/HCV testing and care coordination, vaccination against tetanus, hepatitis A, hepatitis B, and other vaccines), enrollment in Hip 2.0, and assistance with community services (e.g. food, shelter, GED programs, job training).

Provide access to treatment for Opioid Use Disorder, HIV, HCV

- Improve access to comprehensive treatment for Substance Use Disorder (SUD), including full range of Medication Assisted Treatment (MAT), Counseling, Behavioral Therapy, and Recovery Support.
- Develop Technology to improve access to treatment (e.g. identify treatment providers, available treatment beds, recovery support services within geographic areas)
- Increase the number of all levels of treatment providers for SUD in Indiana:
 - Psychiatrists trained in addiction medicine
 - Primary care providers with training in addiction medicine
 - Primary care providers with federal waiver to provide buprenorphine treatment
 - Behavioral health professionals trained to treat individuals with SUD, including licensed clinical social workers, licensed addiction counselors, masters-trained social workers, and addiction psychologists.
- Increase the number and use of Recovery Support Specialists as part of treatment teams and on-call response to overdoses in Emergency Departments (EDs).
- Expand access to supportive environments for people in recovery to live while transitioning back into the community, such as recovery or sober living houses
- Establish homes for pregnant women with SUD to receive evidence-based, supportive treatment during pregnancy to minimize the symptoms of neonatal abstinence syndrome in their newborn infants.
- Increase localized testing for HIV and HCV, especially in high-risk communities, through field testing, EDs, jails, provider offices, and health departments.
- Increase access to care for individuals with HIV/HCV in underserved communities:
 - Develop loan forgiveness programs to incentivize providers to practice in underserved communities.
 - Provide ongoing training and support for primary care providers to treat patients with HIV/HCV through tele-health programs (e.g. Project ECHO).
- Decrease the stigma of mental illness, addiction and HIV across the state so people will feel comfortable seeking care for these life-threatening chronic medical conditions.

These areas align nicely with recent evidence-based, bipartisan recommendations for budget appropriations and federal and state priorities made by the Secretary of the Department of Health and Human Services (HHS), Sylvia Burwell [182].

The Secretary's efforts focus on three priority areas included in our recommendations:

- **Providing training and educational resources, including updated prescriber guidelines, to assist health professionals in making informed prescribing decisions** and address the over-prescribing of opioids.

- **Increasing use of naloxone**, as well as continuing to support the development and distribution of the life-saving drug, to help reduce the number of deaths associated with prescription opioid and heroin and address the over-prescribing of opioids.
- **Expanding the use of Medication-Assisted Treatment (MAT)**, a comprehensive way to address the needs of individuals that combines the use of medication with counseling and behavioral therapies to treat substance use disorders.

The White House Office of National Drug Control Policy (ONDCP) published “Epidemic: Responding to America’s Prescription Drug Abuse Crisis” guidance document for states in 2011, upon which the Indiana AG’s Task Force was modeled. [183] This plan expanded upon the Administration’s *National Drug Control Strategy* and included action in **four major areas to reduce prescription drug abuse: education, monitoring, proper disposal, and enforcement**, acknowledging that our efforts must provide for evidence-based prescribing of these drugs with a focus on patient safety. Although not included as a major strategy area, the plan also acknowledged that **improving access to effective treatment for substance use disorders is critical to our success** in turning the tide on this epidemic. Accordingly, the AG’s Task Force added a fifth major strategy area: treatment / recovery.

In 2015, the ONDCP strengthened its policy recommendations and joined forces with other federal, state, community and private sector partners to support evidence-based recommendations for reversing the increasingly fatal toll of this epidemic on individuals, their families and their communities. [184]

The Centers for Disease Control and Prevention (CDC) Vital Signs publication entitled “Prescription Overdoses in the US”, released in November, 2011, provided recommendations for the U.S. government, states, individual, healthcare providers, and health insurers. [185] The list of actionable items for states included: augmenting PDMPs to enhance their effectiveness and usability; more effective use of data to identify dangerous prescribing and use patterns; creating and enforcing laws and rules to address inappropriate prescribing, dispensing, and use of opioids, and evaluation of those code changes; and increasing access to treatment for substance use disorders. To help states achieve these goals, since 2014, 29 states have been funded to implement programs and policies based on best practices, and to provide rigorous evaluations of those programs and policies in order to add to the body of evidence in this domain. [71] In March, 2016, after an onerous review and evaluation of existing literature, input from national experts, and comments from over 4,000 public stakeholders, with the unanimously supported recommendation of the Board of Scientific Counselors for the CDC National Center for Injury Control and Prevention, the CDC published “Guidelines for Prescribing Opioids for Chronic Pain” [70], guidelines similar to the Indiana Medical Licensing Board “Opioid Prescribing Requirements” published as Emergency Rule in 2013 and finalized in 2014. [186]

The focused expert recommendations of these and other federal agencies private and academic partners with expertise in this domain highlight the ongoing urgency around opioid misuse, addiction, and overdose prevention and point the way for state, local and private sector agencies. The recently published CDC guidelines validate Indiana’s achievements in this arena and the recommendations affirm our focus moving forward.

CONCLUSION

Opioid misuse has grown rapidly in the past decade, resulting in lives lost too early and societal contributions unrealized. Today's face of opioid addiction is younger, increasingly Caucasian, increasingly female (although males still have higher mortality), and sometimes of higher income than in the past. The change has occurred swiftly and has riveted the nation's attention.

Every day brings new developments in the battle against this nemesis. Public and private groups alike are sounding the alarm and dispatching assistance. Although heroin has been a substance abuse problem for decades, its use in Indiana has historically been low. The rise in prescription opioids misuse, and the coinciding increase in heroin use, is a phenomenon Marion County, the state of Indiana, and the nation have never seen before. The most appropriate responses to the crisis are not yet clear. There is (sometimes passionate) disagreement about which solutions will produce the best results. The process can be chaotic and disorganized, but the energy and momentum around solving the problem are palpable.

Because today's opioid epidemic is unlike anything the nation has ever experienced, research on evidence-based programs is still building, and costs for interventions have not been determined. States and communities are experimenting with approaches to discover what works. The CDC is collecting data, disseminating findings and recommending best practices. In this scenario, it is relatively simple to identify needs, but more challenging to estimate costs of interventions, making investment decision-making a more complex process.

This report has described the opioid epidemic in terms of its incidence, prevalence and trends in Marion County, Indiana and the nation at large. It has provided an environmental scan of county, state, and selected federal organizations working to stem the tide. It answers several questions but exposes many new ones, which beg for further inquiry and exploration.

The Fairbanks School of Public Health thanks the Richard M. Fairbanks Foundation for its thoughtful consideration of the opioid misuse problem in Marion County and Indiana. Investment in this area, as well as many others in public health, is sorely needed to elevate health status in the state and county, improve productivity, and attract economic activity that will position Indiana as a national leader. We applaud the foundation for taking on this challenge.

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APPENDICES

Societal Costs of Prescription Opioid Abuse

Table 3 Annual societal costs of opioid abuse, dependence, and misuse

Cost category	Estimation method	Estimated cost (in millions) [†] (\$)	Percentage of total societal costs (%)
Health care			
Excess medical and drug (excluding substance abuse treatment) [‡]			
Privately insured opioid abuse patients	Quantity	6,736	12.1
Medicaid opioid abuse patients	Quantity	7,336	13.2
Medicare opioid abuse patients	Quantity	1,010	1.8
Uninsured opioid abuse patients	Quantity	6,861	12.3
Privately insured caregivers [§]	Quantity	547	1.0
Medicaid caregivers [§]	Quantity	596	1.1
Medicare caregivers [§]	Quantity	82	0.1
Uninsured caregivers [§]	Quantity	557	1.0
All excess medical and drug costs		23,725	42.6
Substance abuse treatment			
Federal	Quantity	326	0.6
State and local	Quantity	558	1.0
Private	Quantity	235	0.4
All treatment costs		1,119	2.0
Prevention			
Federal	Apportionment	52	0.1
State and local	Apportionment	14	0.0
Private	Apportionment	19	0.0
All prevention costs		85	0.2
Research			
Federal	Apportionment	52	0.1
State and local	Apportionment	2	0.0
Private	Apportionment	16	0.0
All research costs		69	0.1
Total health care costs		24,998	44.9
Criminal justice			
Police protection	Apportionment	1,526	2.7
Legal and adjudication	Apportionment	726	1.3
Correctional facilities			
Federal	Apportionment	212	0.4
State	Apportionment	1,430	2.6
Local	Apportionment	623	1.1
All correctional facility costs		2,265	4.1
Property lost due to crime	Apportionment	625	1.1
Total criminal justice costs		5,142	9.2
Lost workplace productivity			
Premature death	Quantity	11,218	20.1
Lost wages/employment	Apportionment	7,931	14.2
Incarceration (lost wages)			
Federal	Quantity and apportionment	143	0.3
State	Quantity and apportionment	1,097	2.0
Local	Quantity and apportionment	528	0.9
All incarceration costs		1,768	3.2
Excess medically related absenteeism			
Employees with abuse/dependence	Quantity	1,171	2.1
Employed caregivers	Quantity	643	1.2
All excess medically related absenteeism costs		1,814	3.3
Excess disability			
Employees with abuse/dependence	Quantity	727	1.3
Employed caregivers	Quantity	80	0.1
All excess disability costs		807	1.4
Presenteeism			
Employees with abuse/dependence	Quantity	1,576	2.8
Employed caregivers	Quantity	468	0.8
All presenteeism costs		2,044	3.7
Total workplace costs		25,582	45.9
Total societal costs (in millions)		55,721	100.0

[†] All costs are reported in 2009 USD.

[‡] Estimates of excess health care costs include patients exhibiting clinical abuse/dependence and do not include patients engaging only in nonmedical use.

[§] Caregivers are defined as dependents or spouses of patients with abuse or dependence, but who do not meet criteria for abuse or dependence themselves.

Federal Grant Awards Available to Reduce Drug Use in the State of Indiana

The Federal Government awards competitive grants to help states in their efforts to reduce drug use and its harmful consequences. In FY 2012, direct support was provided to state and local governments, schools, and law enforcement organizations in your state for this purpose. Some Federal grant programs are dedicated to reducing drug use and its harmful consequences while others can be used for reducing drug use or for other purposes. In FY 2012, your State received support under the grant programs shown below.

Federal Grant Awards That Help Reduce the Availability and Misuse Of Drugs In The State of IN	
Department / Office / Program Name	2012
Department of Agriculture	\$ 15,623,917
National Institute of Food and Agriculture	
Cooperative Extension Service	\$ 15,623,917
Department of Defense	\$ 3,000,000
The Army	
National Guard Challenge Program	\$ 3,000,000
Department of Education	\$ 19,958,171
Office of Elementary and Secondary Education	
Safe and Drug-Free Schools and Communities National Programs	\$ 467,846
Twenty-First Century Community Learning Centers	\$ 19,490,325
Department of Health and Human Services	\$ 130,249,984
Administration for Children and Families	
Promoting Safe and Stable Families	\$ 6,966,083
Transitional Living for Homeless Youth	\$ 555,055
Centers For Medicare and Medicaid Services	
Medical Assistance Program - Grants to States for Medicaid To Treat Substance Abuse	\$ 54,278,628
National Institutes Of Health	
Alcohol Research Programs	\$ 16,570,966
Drug Abuse and Addiction Research Programs	\$ 4,089,820
Substance Abuse and Mental Health Services Administration	
Block Grants for Prevention and Treatment of Substance Abuse	\$ 33,055,561
Projects for Assistance in Transition from Homelessness (PATH)	\$ 1,029,000
Substance Abuse and Mental Health Services Projects of Regional and National Significance	\$ 8,960,295
Substance Abuse and Mental Health Services-Access to Recovery	\$ 2,404,987
Prescription Drug Monitoring Program Electronic Health Record (EHR) Integration	\$ 218,614
Health Resources and Services Administration	
Healthy Start Initiative	\$ 2,120,975
Department of Housing and Urban Development	\$ 25,852,975
Community Planning and Development	
Emergency Solutions Grant Program	\$ 5,545,827
Shelter Plus Care	\$ 10,473,236
Supportive Housing Program	\$ 9,833,912
Department Of Justice	\$ 7,859,177
Office of Justice Programs	
Drug Court Discretionary Grant Program	\$ 198,357
Edward Byrne Memorial Justice Assistance Grant Program	\$ 5,246,609
Edward Byrne Memorial State and Local Law Enforcement Assistance Discretionary Grants Program	\$ 165,263
Harold Rogers Prescription Drug Monitoring Program	\$ 394,802
Juvenile Accountability Block Grants	\$ 449,535
Juvenile Justice and Delinquency Prevention Allocation to States	\$ 527,689
Juvenile Mentoring Program	\$ 400,000
Residential Substance Abuse Treatment for State Prisoners	\$ 168,524
Second Chance Act Prisoner Reentry Initiative	\$ 308,398
Department of Labor	\$ 2,598,975
Employment and Training Administration	
Reintegration of Ex-Offenders	\$ 1,500,000

Federal Grant Awards That Help Reduce the Availability and Misuse Of Drugs In The State of IN	
Department / Office / Program Name	2012
Youthbuild	\$ 1,098,975
Department of Transportation	\$ 2,522,934
National Highway Traffic Safety Administration	
Alcohol Impaired Driving Countermeasures Incentive Grants I	\$ 2,522,934
Department of Veteran's Affairs	\$ 4,603,329
Veterans Health Administration	
VA Homeless Providers Grant and Per Diem Program	\$ 4,603,329
Executive Office of The President	\$ 4,821,458
Office of National Drug Control Policy	
Drug-Free Communities Support Program Grants	\$ 1,624,959
High Intensity Drug Trafficking Areas Program	\$ 3,196,499
Grand Total	\$ 217,090,920

File updated 08/01/13.

7

ONDCP seeks to foster healthy individuals and safe communities by effectively leading the Nation's effort to reduce drug use and its consequences.

Summary of Guidelines for Prescribing Opioids for Chronic Pain
Centers for Disease Control and Prevention

Released March 15, 2016

1. Non-pharmacologic therapy and non-opioid pharmacologic therapy are preferred for chronic pain. Clinicians should consider opioid therapy only if expected benefits for both pain and function are anticipated to outweigh risks to the patient.
2. Before starting opioid therapy for chronic pain, clinicians should establish treatment goals with all patients, including realistic goals for pain and function, and should consider how opioid therapy will be discontinued if benefits do not outweigh risks. Clinicians should continue opioid therapy only if there is clinically meaningful improvement in pain and function that outweighs risks to patient safety.
3. Before starting and periodically during opioid therapy, clinicians should discuss with patients known risks and realistic benefits of opioid therapy and patient and clinician responsibilities for managing therapy.
4. When starting opioid therapy for chronic pain, clinicians should prescribe immediate-release opioids instead of extended-release/long-acting (ER/LA) opioids
5. When opioids are started, clinicians should prescribe the lowest effective dosage. Clinicians should use caution when prescribing opioids at any dosage, should carefully reassess evidence of individual benefits and risks when considering increasing dosage to ≥ 50 morphine milligram equivalents (MME)/day, and should avoid increasing dosage to ≥ 90 MME/day or carefully justify a decision to titrate dosage to ≥ 90 MME/day
6. Long-term opioid use often begins with treatment of acute pain. When opioids are used for acute pain, clinicians should prescribe the lowest effective dose of immediate-release opioids and should prescribe no greater quantity than needed for the expected duration of pain severe enough to require opioids. Three days or less will often be sufficient; more than seven days will rarely be needed.
7. Clinicians should evaluate benefits and harms with patients within 1 to 4 weeks of starting opioid therapy for chronic pain or of dose escalation. Clinicians should evaluate benefits and harms of continued therapy with patients every 3 months or more frequently. If benefits do not outweigh harms of continued opioid therapy, clinicians should optimize other therapies and work with patients to taper opioids to lower dosages or to taper and discontinue.

Summary of Guidelines for Prescribing Opioids for Chronic Pain, continued

8. Before starting and periodically during continuation of opioid therapy, clinicians should evaluate risk factors for opioid-related harms. Clinicians should incorporate into the management plan strategies to mitigate risk, including considering offering naloxone when factors that increase risk for opioid overdose, such as history of overdose, history of substance use disorder, higher opioid dosages (≥ 50 MME/day), or concurrent benzodiazepine use, are
9. Clinicians should review the patient's history of controlled substance prescriptions using state prescription drug monitoring program (PDMP) data to determine whether the patient is receiving opioid dosages or dangerous combinations that put him or her at high risk for overdose. Clinicians should review PDMP data when starting opioid therapy for chronic pain and periodically during opioid therapy for chronic pain, ranging from every prescription to every 3 months
10. When prescribing opioids for chronic pain, clinicians should use urine drug testing before starting opioid therapy and consider urine drug testing at least annually to assess for prescribed medications as well as other controlled prescription drugs and illicit drugs.
11. Clinicians should avoid prescribing opioid pain medication and benzodiazepines concurrently whenever possible.
12. Clinicians should offer or arrange evidence-based treatment (usually medication-assisted treatment with buprenorphine or methadone in combination with behavioral therapies) for patients with opioid use disorder.

For complete guideline description, see

<http://www.cdc.gov/drugoverdose/prescribing/guideline.html>.



INDIANA PRESCRIPTION DRUG ABUSE PREVENTION TASK FORCE

2015 Task Force Objectives

Education Committee Objectives

- Additional outreach will need to occur once the [Medical Licensing Board] final rules go into effect. We will look at areas of the state where outreach is lacking and focus on those areas. Additional online CME videos may be needed to help educate prescribers on how to implement the rules into their practice, post op prescribing, urine drug screen monitoring, how to use INSPECT and also specific outreach to prescribing dentists.
- Collaborate with other licensing boards, (Dental Nursing Board, Podiatry Physician Assistant, Veterinarians, etc...) and assist them with promulgating rules that address prescribing opioids in their respective professions.
- Collaborate with INSPECT committee to develop programs for providers to run self-assessment reports, including thresholds for primary care and various specialties. Consider adding morphine equivalency charts on INSPECT reports.
- Look into legislative initiatives that would expand Medicaid formulary for chronic pain; create alternate means of measuring patient satisfaction for patients not receiving requested narcotics; examine the ability to use naloxone in the field for high risk opioid users/addicts by laypersons; and pursue removing pain as the 5th Vital Sign.
- Consider working with in-state labs to help standardize urine drug screen panels, compile lists of available labs and prices and provide training for prescribers.
- Collaborate with Enforcement Committee to develop a training toolkit and video for first responders and other non-medical laypersons regarding the use of naloxone in the field.
- Development of methods of near real time sharing of information amongst professions regarding narcotic prescribing and dispensing. Develop protocols to facilitate referrals to mental health/treatment providers. Development of protocols for coordination of care between pharmacists and physicians regarding chronic pain treatment
- Create prescribing guidelines for Emergency Departments and Post Op Care.

Outreach Goals

- Consider developing a web-based interactive training module that can be used by school officials.
- Follow-up on Indiana Collegiate Action Network survey results to determine how we can assist colleges with resources to educate students on prescription drug awareness/abuse.
- Collaborate with town/city officials around the state on communicating through tweets/social media.

- Partner with major Indiana employers to educate employees on prescription drug awareness and treatment options by establishing partnerships with area health fairs and chambers ' wellness programs, including a partnership with the National Safety Council.
- Attempt to empower consumers with knowledge on prescription drugs and safer alternatives and what they need to know to protect themselves from being overprescribed medications. Recent studies show that the "typical" victim of overdose is not who the public thinks.... About 60% of overdoses occur in people prescribed the drugs by a single physician, not in those who "doctor shopped" or got them on the black market. And a third of those were taking a low dose.
- Working with the Colts to promote student awareness through a challenge among the high schools to sign pledges to not use/abuse/share Rx drugs. The winning school will receive a Colts pep rally. We anticipate having appearances by Blue, David Thornton and hopefully some Colts players. The Colts org indicated they would videotape the event and make a 30 second PSA for us to air on Colts media.
- Update digital material by providing other options to target specific audience types, such as seniors or athletes (similar to the Colt's Pledge Challenge).

Enforcement Committee

- Continue to address the lack of drug diversion being reported within healthcare facilities – especially long-term care facilities and home health agencies.
- Training for pharmacists on recognizing red flags of substance abuse and pharmacy shopping, perhaps make an educational video to incorporate "next steps" for pharmacists to take when they identify a red flag—collaborate with Education Committee and highlight Indiana statutes. This video could be sent out to pharmacists, pharmacy schools, could try to partner with the larger chain pharmacies (Walgreens and CVS) to garner support.
- Collaborate with Education Committee to develop a training toolkit and video for first responders and other non-medical laypersons regarding the use of naloxone in the field. Contact police departments and educate them on the new law that offers them immunity. Research grant opportunities for funding naloxone kits. Develop a survey to send out to LE, to try and gauge interest, and better plan our next steps. Work on gathering collaborative data on the success of naloxone use.
- Offer additional INSPECT trainings for law enforcement on how to analyze reports and what exactly they can do with the reports. Work with INSPECT committee on providing statutorily required reports to law enforcement.

INSPECT Committee Objectives

- Consider whether the INSPECT committee should be dissolved but have functions absorbed into the education and enforcement committees. Many INSPECT issues also deal with clinical and law enforcement aspects.
- Pursue additional integration into patient medical records for all hospitals and medical offices.
- Work with Professional Licensing Agency on updating INSPECT user policies.
- Work with INSPECT committee on providing statutorily required reports to law enforcement.

- Collaborate with Education committee to develop programs for providers to run self-assessment reports, including thresholds for primary care and various specialties and to also specify morphine equivalency on INSPECT reports.
- Assist with educating prescribers on the necessity to report Tramadol and educating physicians on mandatory use when initially prescribing at the onset of a treatment plan annually thereafter.
- Work with SEOW on developing data outcomes that will identify prescribing trends
- The current medical prescribing guidelines require a physician to check INSPECT initially at the onset of a treatment program and annually thereafter. Investigate whether this requirement is good enough or should require physicians to run reports more often.
- Work with the VA Hospitals on having them report and query INSPECT.
- Work with INSPECT on making a tool available to prescribers so they can identify how their prescribing practices compare to other prescribers in the same specialty/practice settings. Perhaps even for it to specify morphine equivalency and identify early refills.

Take Back Committee Objectives

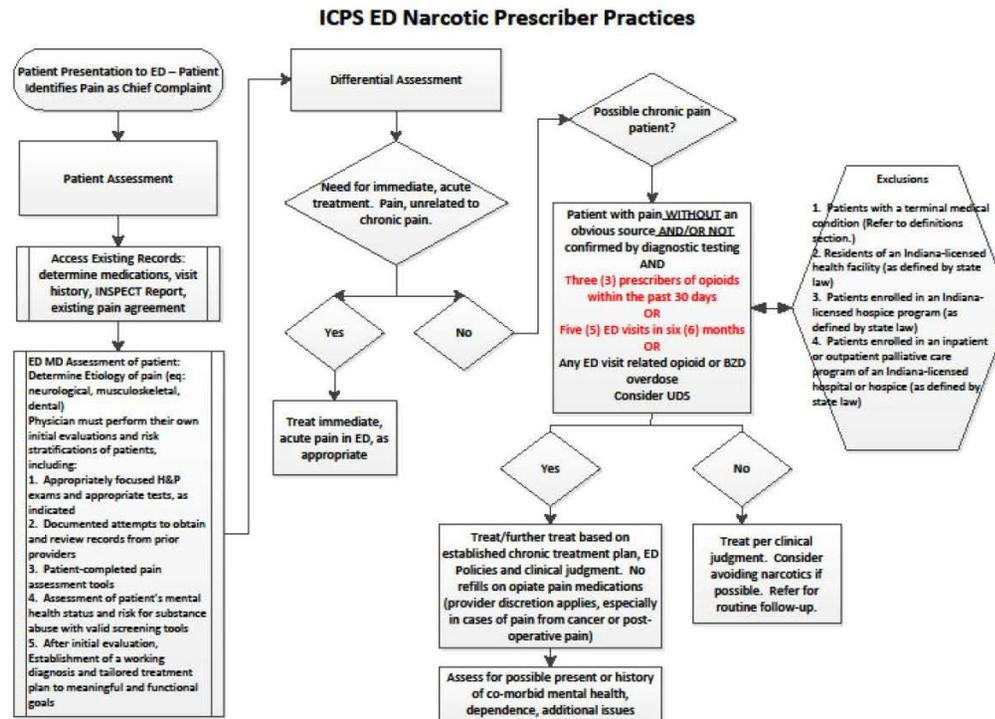
- Implement pilot take back program with in-state pharmacies measure results, and share findings with other pharmacies to encourage participation.
- Continue to work with hospitals having a pilot program in place to collect controlled substances – such as the one located in Bloomington Hospital.
- Work with IDEM to create a toolkit, along with media kit, to assist communities in holding their own take back events.
- Work with law enforcement to get collection sites in their posts. Goal is to have at least once in every community (or at least 1 in every county).
- Educate real estate agents about having clients lock up their meds during open houses.
- Work on guidelines or resources for physicians so they can provide information to patients about locking up their meds.
- Talk to hospice and funeral homes about handouts/resources so they can provide to family members of the deceased about how to destroy their meds.
- Work with Indiana State Police on a collection site in the Government Bldg or Capital.

Treatment & Recovery Committee Objectives

- Proceed legislatively for additional funding for psychiatry fellow student loan repayment
- Talk to IUSM about ways we can increase exposure of mental health and addiction.
- Further discuss ways we can expand telehealth to the area of mental health and addiction. Talk with Riley about how their telemental health program operates.
- Work with FSSA on Informed consent for enrollment in opioid treatment programs
- Work on Psychiatric Advanced Directive template and how we can add addictive disorders
- Work with DCS on their procedures for assisting addicted pregnant women and educate them on methadone treatment
- Assist FSSA on adopting rules, per HEA 1218, to establish certain standards and protocols for opioid treatment programs and exceptions to the seven day supply.
- Educate providers on involuntary commitment laws
- Work with Education and Enforcement group on naloxone initiatives

- Explore how it can be a requirement of for-profit methadone clinics to accept insurance. Previous insurance coverage was limited but with the mandates of the ACA, addiction treatment should be covered.
- Discuss with FSSA on how to offer Medicaid coverage for patients who would be treated as Community Mental Health Centers with a dual diagnosis for addiction and mental health. This would require changing the moratorium on methadone treatment centers and authorize Medicaid coverage of methadone for addiction treatment at centers that met the qualifications.
- Change the overall perception of mental health and addiction in Indiana by having people treat it just like any other illness/disease.
- Explore policy and legislative recommendations to expand the Lifeline Law to include Rx drug overdoses.

ED Narcotic Prescriber Practices



Chronic Pain Patient

Chronic Pain Patient

<u>New Patient</u>	<u>Established Patient</u>
<ul style="list-style-type: none">• Referral for care<ul style="list-style-type: none">• PCP• Specialist• Addiction Services• Behav. Health• Appropriate Treatment options• Treatment options until linkage:<ul style="list-style-type: none">• Limited supply until follow-up• Non narcotic treatment• Alternative treatment as appropriate (physical therapy, acupuncture, massage)	<ul style="list-style-type: none">• See contract (reinforce to bring contract to each visit/encounter)• If no contract, dialogue appropriate to presentation• Communication between ED and pain MD• NO narcotic meds at discharge

Discharge and Follow-up

- Document all within EMR, use ICD9 or ICD 10 code appropriate for chronic pain
- Appropriate referral
- Follow up letter to patient (St. Vincent example)
- Chronic Pain Discharge Instructions and Information Sheet (examples: St. Vincent, VA, St. Francis)
- Guidelines and Scripting for discussion with patients (examples: St. Vincent, IU Health, VA)
- Identify Community Resources as appropriate (St. Vincent example)
- Refer to Narcotics Anonymous or Alcoholics Anonymous as appropriate



Appendix E – Indianapolis Patient Safety Coalition, Draft Patient Brochure, Side 1



Our emergency department staff understand that pain relief is important when someone is hurt or needs emergency care. Many of our patients come to us with an unexpected injury or illness that causes pain. If you are in pain, pain management is one of the most important things we do during your visit to the emergency department.

However, providing pain relief can be complex. The prescribing and use of narcotic pain relief medications and sedatives is a serious medical issue. Misuse of pain medication can cause serious health problems and even death. Further, narcotics are called controlled substances because they are subject to the U.S. Controlled Substances Act of 1970 which regulates the prescribing and dispensing of these medications based on their potential for abuse and dependence.

Our main focus in the Emergency Department is to look for and treat emergency medical conditions. We use our best judgment when treating pain and follow all legal and ethical guidelines.

We treat new pain with the smallest amount of medicine that will work for you. Narcotics pain medications are not always the best choice and are not used to treat all pain related problems. There are many other medications that are effective in treating pain.

If you are seen in the emergency department for chronic pain, we will work with you to make a plan to improve your care that may include staying away from medicine that can be abused or addictive.

DRAFT

St. Mary's Hospital
8600 Main St.
Indianapolis, IN 46268
317 555-2500

General Hospital
100 Healthy Way
Indianapolis, IN 46268
317 865-0000



Patient Pamphlet:

Taking Care of Your Pain in the Emergency Department



Appendix E – Indianapolis Patient Safety Coalition, Draft Patient Brochure, Page 2

Taking Care of your pain in the Emergency Department

For the safety of all patients:

We will not refill prescriptions for controlled substances.

We will not replace missing controlled substances (such as codeine (Tylenol #3), tramadol (Ultram), morphine (MS Contin, Kadian, Avinza), hydrocodone (Norco, Vicodin, Zohydro ER, Hysingla ER), oxycodone (Oxycontin, Percocet, Roxicet), hydromorphone (Dilaudid, Exalgo), buprenorphine (Buprenex, Butran, Zubsolv, Suboxone, Subutex), alprazolam (Xanax), clonazepam (Klonopin), diazepam (Vallium), lorazepam (Ativan))

We will not provide new controlled substances prescriptions to patients with chronic pain complaints.

We will not provide controlled substances prescriptions if you have already received controlled substances prescriptions from another health care provider, Emergency or Urgent Care facility in the recent past for the same complaint.

Any new prescriptions given for a controlled substance will be limited to a small number of pills.

Any patient returning to the Emergency Department for treatment of a pain-related condition, or to refill a previous prescription, will only be given non-controlled substances medication.

All patients seeking relief from chronic pain will be referred to their primary care physician for follow up care.

Before prescribing a narcotic or other controlled substance, we check the Indiana Scheduled Prescription Electronic Collection and Tracking Program (INSPECT) or a similar database that tracks your narcotic and other controlled substance prescriptions.



It is your responsibility to:

Give us the correct information about all the medicines you are taking and your medical history including information about an existing pain contract so we can give you treatment that is right and safe for you.

Lock up your pain medicine so it is not stolen or used by someone else.

See your doctor often enough so you do not run out of your pain medicine.

Take your medicine the way your doctor tells you to.

Do not give, sell or take pain medicine from anyone else.

Tell all healthcare providers you see that you are taking pain medicine.

Follow up with your healthcare provider or on-going pain treatment.



Other ways to get help:

Assistance with ongoing pain management may be obtained from your primary care provider or through a pain treatment specialist. A list of providers in your area is available upon request.

Go to xxxxxxx.org to find the help you need.

If you feel you need help with substance abuse or addiction, please call XXXXXXXXXX Behavioral Health Department, The XXXXXXXXX Behavioral Health Crisis Hotline, or Central Indiana Area of Narcotics Anonymous:

XXXXXXXXXX Behavior Health 317-xxx-0000

XXXXXXXXXX Crisis Line 317-xxx-0000

Central Indiana Area of Narcotics Anonymous (317) 875-5459

Following up with your personal physician or establishing one if you do not have one is vital to your well-being. These things are important and they need to be managed by your longer-term health care team and are not managed the best in the Emergency Department setting.



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