MARIJUANA COCAINE

PRESCRIPTION DRUGS

The Consumption and Consequences
of Alcohol, Tobacco, and Drugs in Indiana:
A State Epidemiological Profile
2012

Indiana State Epidemiology and Outcomes Workgroup

RICHARD M. FAIRBANKS SCHOOL OF PUBLIC HEALTH
INDIANA UNIVERSITY
Center for Health Policy
IUPUI

CHP CENTER FOR HEALTH POLICY

TOBACCO HEROIN

METHAMPHETAMINE ALCOHOL

THE CONSUMPTION AND CONSEQUENCES OF ALCOHOL, TOBACCO, AND DRUGS IN INDIANA: A STATE EPIDEMIOLOGICAL PROFILE 2012

Developed by the Indiana State Epidemiology and Outcomes Workgroup, 2012

Our Vision

*Healthy, safe, and drug-free environments
that nurture and assist all Indiana citizens to thrive.*

Our Mission

*To reduce substance use and abuse
across the lifespan of Indiana citizens.*

Indiana University Center for Health Policy

This document, written for state policymakers and community leaders, presents data and analyses to support the development of a framework for advancing the mission of the Indiana Substance Abuse Prevention System.

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About the SEOW Support Team and the Center for Health Policy

This report was developed by the SEOW Support Team headed by **Eric R. Wright, PhD.** Dr. Wright is the director of the Center for Health Policy; Professor for Health Policy and Management at the IU Richard M. Fairbanks School of Public Health at IUPUI; and associate director of the Indiana Consortium for Mental Health Services Research.

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The mission of the Center for Health Policy (CHP) is to conduct research on critical health-related issues and translate data into evidence-based policy recommendations to improve community health. The CHP faculty and staff collaborate with public and private partners to conduct quality data driven program evaluation and applied research analysis on relevant public health issues. The Center serves as a bridge between academic health researchers and federal, state and local government as well as healthcare and community organizations.

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INTRODUCTION

In July 2005, Indiana's Office of the Governor received a grant from the U.S. Department of Health and Human Services' Center for Substance Abuse Prevention (CSAP) as part of CSAP's Strategic Prevention Framework State Incentive Grant (SPF SIG) program. The SPF SIG program represented a continuation of ongoing CSAP initiatives to encourage states to engage in data-based decision-making in the area of substance abuse prevention planning and grant making.

This grant was made on the heels of an earlier CSAP State Incentive Grant (SIG) which helped to lay much of the groundwork for this new initiative. A great deal of work was completed under the first SIG to assess substance abuse prevention services and develop a strategic framework to guide policymaking in this area for the 21st century. The final report summarizing the outcomes of this work, entitled *Imagine Indiana Together: The Framework to Advance the Indiana Substance Abuse Prevention System*, was prepared by the Governor's Advisory Panel within the Division of Mental Health and Addiction (DMHA), Indiana Family and Social Services Administration. This report is available from DMHA and the Indiana Prevention Resource Center at Indiana University Bloomington.

A federal requirement of the SPF SIG initiative stipulated that the State establish a State Epidemiology and Outcomes Workgroup (SEOW). This workgroup was to collate and analyze available epidemiological data and report findings to legislators and policymakers to facilitate data-based decision-making regarding substance abuse prevention programming across the state. While the Indiana SPF SIG officially came to an end in 2010, the State decided to continue to support the SEOW as part of its long-term efforts to improve substance abuse prevention policy.

This report represents the seventh official State Epidemiological Profile completed by the SEOW. As we have in past years, we updated the core set of analyses to reflect the most recent data available. In order to make the report most useful for state and local policymakers and service providers, we present detailed information and descriptive analyses regarding the patterns and consequences of substance use both for the state and, whenever possible, each of Indiana's 92 counties. Prescription drug abuse remains a significant problem in Indiana, and we continue to work closely with the State Board of Pharmacy, reviewing data on dispensation of controlled substances to identify geographic patterns. The State Board of Pharmacy also started collecting data on pharmacy thefts and robberies, which we included in this year's report.

As with all of our prior reports, the primary aim in preparing this annual document is to provide a useful reference tool for policymakers, communities, and professionals involved in substance abuse prevention and mental health promotion. We realize that not everyone has the time or energy to review the contents in detail. For this reason, we again are offering a chart pack of the graphs and figures and a series of fact sheets on each of the major substances. This report, as well as earlier versions and these supplemental resources, are available on the Center for Health Policy website (www.healthpolicy.iupui.edu/SEOW/epi).

We appreciate your interest and leadership in addressing the problem of substance abuse in Indiana, and, as always, we welcome your feedback on this report and our work.

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DATA HIGHLIGHTS

ALCOHOL

Alcohol is the most frequently used drug in both Indiana and the United States. About half of the population 12 years and older reported current (past month) use (IN: 51.0%; U.S.: 51.8%) (Substance Abuse and Mental Health Services Administration, 2012).

An estimated 67.1% of Indiana college students currently drink alcohol (Indiana Collegiate Action Network, 2012).[1] Potentially dangerous uses of alcohol include binge, heavy, and underage drinking, and combining alcohol with driving.

Binge Drinking

Binge drinking is defined as five or more drinks on the same occasion at least once in the past month. The 30-day prevalence for binge drinking in the population 12 years and older was similar between Indiana (22.7%) and the United States (22.9%). The highest rate was found among 18- to 25-year-olds (IN: 41.8%; U.S.: 40.2%) (Substance Abuse and Mental Health Services Administration, 2012).

Among Indiana college students, the past-month binge drinking prevalence was an estimated 55.1% (Indiana Collegiate Action Network, 2012),

Heavy Drinking

Heavy drinking is defined differently for men and women by the Centers for Disease Control and Prevention. For adult men, it is defined as having more than two drinks per day, and for adult women, having more than one drink per day. Overall rates for heavy use were similar in Indiana (6.0%) and the United States (6.6%). Hoosier men had a statistically higher prevalence of heavy use (8.5%) than women (3.8%). No significant differences by race or age group were found among Indiana residents (Centers for Disease Control and Prevention, 2011).

Youth Consumption — Underage Drinking

The rates for underage drinking in Indiana and the nation were statistically similar. In Indiana, 11.6% of 12- to 17-year-old youths reported that they had consumed alcohol in the past 30 days (U.S.: 13.5%).

In the age category of 12- to 20-year-olds, the numbers were even higher: 24.5% of young Hoosiers reported current use of alcohol (U.S.: 25.6%), and 16.4% stated that they engaged in binge drinking (U.S.: 16.3%) (Substance Abuse and Mental Health Services Administration, 2012).

An estimated one in three high school students (grades 9 through 12) reported current alcohol use (IN: 33.4%; U.S.: 38.7%), and one in five admitted to binge drinking in the past month (IN: 19.8%; U.S.: 21.9%). Indiana and the nation were similar on both measures (Centers for Disease Control and Prevention, 1991-2011).

Alcohol Abuse and Dependence

The population-based rates for alcohol abuse and/or dependence were similar in Indiana (6.9%) and the nation (6.8%). The most affected age group encompassed 18- to 25-year-olds (IN: 15.8%; U.S.: 15.0%). The percentages of individuals needing but not receiving treatment for alcohol use in the past year were also comparable (IN: 6.4%; U.S.: 6.5%) (Substance Abuse and Mental Health Services Administration, 2012).

According to treatment data, alcohol was responsible for the largest percentage of admissions to substance abuse treatment facilities in 2010. For the first time in the past 11 years, Indiana's percentage (37.6%) was significantly lower than the nation's (40.9%). Those individuals classified as "Other" races and older adults reported the highest rates (Substance Abuse and Mental Health Data Archive, 2010).

Morbidity and Mortality

An estimated 8.0% of the deaths in Indiana and the nation are attributable to alcohol (Centers for Disease Control and Prevention, 2001-2005). Between 2000 and 2009, a total of 3,646 Hoosiers died from alcohol-related disease causes. In 2009, Indiana's age-adjusted mortality rate for alcohol-attributable deaths was 5.4 per 100,000 population (U.S.: 7.3 per 100,000 population) (Centers for Disease Control and Prevention, 2012a). Tables 1.1 and 1.2 list conditions that can be attributed to alcohol use.

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[1]Nine Indiana colleges participated in the survey; results are based on nonrandom sampling and are not representative of all college students in Indiana.

Motor Vehicle Crashes

Among Indiana high school students, 5.3% admitted to drinking and driving in the past month (U.S.: 8.2%), and 21.7% rode with a driver who had been drinking (U.S.: 24.1%) (Centers for Disease Control and Prevention, 1991-2011).

In Indiana, the number of alcohol-related collisions decreased from 13,911 in 2003 to 8,355 in 2011. Also, the number of fatalities in crashes attributable to alcohol declined from 242 to 185 during those same years. The 2011 overall annual rate for alcohol-related collisions in Indiana was 1.3 per 1,000 population (Indiana State Police, 2012).

Legal Consequences

Indiana's 2010 arrest rates per 1,000 population for alcohol-related infractions were significantly higher than the nation's. This trend included arrests for driving under the influence (IN: 4.2; U.S.: 3.9), public intoxication (IN: 3.0; U.S.: 1.5), and liquor law violations (IN: 2.2; U.S.: 1.4) (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010).

TOBACCO

Cigarette smoking remains the leading cause of preventable death in the United States, accounting for approximately one of every five deaths (Centers for Disease Control and Prevention, 2012b). In Indiana, nearly one-third of the population ages 12 years and older (29.9%) said they used a tobacco product in the past month (U.S.: 28.0%). The age group with the highest rate was 18- to 25-year-olds (IN: 44.1%; U.S.: 40.2%). Most tobacco consumption involved cigarettes. Indiana's past-month cigarette smoking prevalence among individuals ages 12 years and older was 25.3% (U.S.: 22.5%). Again, the highest rate was found among 18- to 25-year-olds (IN: 37.7%; U.S.: 33.9%) (Substance Abuse and Mental Health Services Administration, 2012).

Adult (18 years and older) smoking prevalence in Indiana (25.6%) was the seventh highest in the nation and significantly greater than the U.S. rate (21.2%) in 2011. Smoking prevalence was inversely associated with education and income level: High rates of use were found among individuals with less than a high school education (IN: 41.6%; U.S.: 35.6%) and people whose household income was below $15,000 (IN: 40.6%; U.S.: 35.8%) (see Table 1.3) (Centers for Disease Control and Prevention, 2011).

Table 1.1   Conditions that are Completely Attributable to Alcohol Use in Indiana (Alcohol-Related Disease Impact Database, Based on Averages from 2001–2005)

Condition	Percentage Directly Attributable to Alcohol
Alcohol abuse/dependence	100%
Alcohol cardiomyopathy	100%
Alcohol polyneuropathy	100%
Alcohol-induced chronic pancreatitis	100%
Alcoholic gastritis	100%
Alcoholic liver disease	100%
Alcoholic myopathy	100%
Alcoholic psychosis	100%
Degeneration of nervous system due to alcohol	100%
Fetal alcohol syndrome/Fetus and newborn affected by maternal alcohol use	100%
Alcohol poisoning	100%
Excessive blood alcohol level	100%
Suicide by and exposure to alcohol	100%

Source: Centers for Disease Control and Prevention, 2001-2005

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Table 1.2 Conditions that Are Partially Attributable to Alcohol Use in Indiana (Alcohol-Related Disease Impact Database, Based on Averages from 2001–2005)

Condition	Percentage Directly Attributable to Alcohol
Chronic pancreatitis	84%
Gastroesophageal hemorrhage	47%
Homicide	47%
Fire Injuries	42%
Hypothermia	42%
Esophageal varices	40%
Liver cirrhosis, unspecified	40%
Portal hypertension	40%
Drowning	34%
Fall injuries	32%
Poisoning (not alcohol)	29%
Acute pancreatitis	24%
Suicide	23%

Source: Centers for Disease Control and Prevention, 2001-2005

In regard to smoking, 29.2% of Indiana college students reported past-year cigarette use and 25.8% reported current use (Indiana Collegiate Action Network, 2012).

Youth Consumption

The percentages of young people (12 to 17 years) currently using a tobacco product (IN: 10.7%; U.S.: 10.3%) and currently smoking cigarettes (IN: 8.1%; U.S.: 8.1%) were similar between Indiana and the nation (Substance Abuse and Mental Health Services Administration, 2012).

Of all Indiana high school students surveyed, 24.5% reported past-month use of a tobacco product; 49.5% had tried smoking a cigarette during their lifetime; and 18.1% currently smoke cigarettes. National rates were statistically similar. Black high school students in Indiana have a significantly lower 30-day smoking prevalence than white students (black: 6.6%; white: 19.8%) (Centers for Disease Control and Prevention, 1991-2011).

Past-month cigarette use decreased significantly from 2000 through 2010 among Indiana students: from 9.8% to 4.4% for middle school students, and from 31.6% to 17.5% for high school students (Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2011).

Table 1.3 Adult Smoking Prevalence in Indiana, by Education and Income Levels (Behavioral Risk Factor Surveillance System, 2011)

	Smoking Prevalence (95% CI)
Education	
Less than high school	41.6% (37.0–46.2)
High school or GED	30.0% (27.7–32.4)
Some post-high school	24.3% (21.9–26.8)
College graduate	8.5% (7.1–9.9)
Income	
Less than $15,000	40.6% (36.1–45.0)
$15,000–$24,999	30.3% (26.9–33.6)
$25,000–$34,999	31.2% (26.4–35.9)
$35,000–$49,999	26.7% (23.0–30.4)
$50,000 and above	16.4% (14.3–18.4)

Note: CI = confidence interval
Source: Centers for Disease Control and Prevention, 2011

Morbidity and Mortality

Tobacco causes serious health consequences, including lung cancer, respiratory illness, and heart disease. Over 9,700 Hoosiers are estimated to die annually from smoking-attributable causes. The age-adjusted annual tobacco-attributable mortality rate (per 100,000 population) was higher among Hoosiers (308.9) than the rest of the nation (263.3) (Centers for Disease Control and Prevention, n.d.).

MARIJUANA

Marijuana is the most commonly used illicit substance. One-tenth of Indiana residents ages 12 and older (10.3%) reported past-year use (U.S.: 11.6%), and 6.5% reported past-month use (U.S.: 6.9%). Highest rates of use were found among 18- to 25-year-old Hoosiers (past-year use: 28.6%; past-month use: 18.2%); national rates were similar (Substance Abuse and Mental Health Services Administration, 2012).

Marijuana use is also prevalent among Indiana college students, as 18.7% of college students reported current marijuana use and 34.0% reported past-year use (Indiana Collegiate Action Network, 2012).

Youth Consumption

Among Indiana youth ages 12 to 17, an estimated 5.2% had used marijuana for the first time during the past year (U.S.: 6.1%). Patterns of current use among young people in that age group were similar in Indiana and the nation (IN: 6.5%; U.S.: 7.6%) (Substance Abuse and Mental Health Services Administration, 2012).

One in five Indiana high school students used marijuana in the past month (IN: 20.0%; U.S.: 23.1%). Marijuana use was significantly lower in 9th graders than in 11th and 12th grade students. Current use was significantly higher for male (23.4%) than female (16.4%) high school students. Black students reported significantly higher current use (32.1%) than white students (17.7%) (Centers for Disease Control and Prevention, 1991-2011).

Table 1.4 depicts current marijuana use among Indiana and U.S. 8th, 10th, and 12th grade students throughout the past decade (Gassman, Jun, Samuel, Agley, Lee, Agley, Oi, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012)

Marijuana Abuse and Dependence

In 2010, roughly one-half (46.0%) of Indiana residents in substance abuse treatment reported marijuana use at admission; the percentage was significantly higher in Indiana than the rest of the nation (39.0%). In Indiana's treatment population, the highest percentages of marijuana use were found among males (48.3%), blacks (57.6%), and individuals under the age of 18 (62.4%). About one-fourth of Hoosiers in treatment (21.4%) reported marijuana dependence,[2] a percentage significantly higher than the nation's (18.4%). Again, males (22.8%), blacks

Table 1.4 Percentage of Indiana and U.S. 8th, 10th, and 12th Grade Students Reporting Current Marijuana Use, by Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey and Monitoring the Future Survey, 2002–2012)

Grade	Geography	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
8th	Indiana	11.1%	10.6%	9.8%	9.3%	8.2%	8.3%	7.1%	7.8%	8.9%	8.3%	8.0%
	U.S.	8.3%	7.5%	6.4%	6.6%	6.5%	5.7%	5.8%	6.5%	8.0%	7.2%	6.5%
10th	Indiana	19.2%	18.2%	17.2%	16.0%	14.6%	14.4%	13.5%	14.6%	16.8%	16.4%	15.4%
	U.S.	17.8%	17.0%	15.9%	15.2%	14.2%	14.2%	13.8%	15.9%	16.7%	17.6%	17.0%
12th	Indiana	20.5%	19.8%	18.3%	17.8%	17.2%	15.8%	16.2%	16.7%	19.2%	19.8%	17.8%
	U.S.	21.5%	21.2%	19.9%	19.8%	18.3%	18.8%	19.4%	20.6%	21.4%	22.6%	22.9%

Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

[2]We defined marijuana dependence as "individuals in substance abuse treatment listing marijuana as their primary substance at admission."

(34.4%), and individuals under the age of 18 (51.8%) had statistically higher percentages (Substance Abuse and Mental Health Data Archive, 2010).

Legal Consequences

In 2010, the arrest rate for marijuana possession was the same in Indiana and the nation (2.2 per 1,000 population). Also, arrest rates for marijuana sale/manufacture were comparable (IN: 0.4; U.S.: 0.3; per 1,000 population) (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010).

COCAINE

Population-based estimates on past-year cocaine use were similar between Indiana and the nation (IN: 1.0%; U.S.: 1.6%). Young adults ages 18 to 25 displayed the highest rates (IN: 3.1%; U.S.: 4.6%). Additional data based on annual averages from 2002–2004 show that 562,000 Indiana residents (11.1%) had used cocaine

at least once in their life, and 33,000 Hoosiers (0.7%) were current users (Substance Abuse and Mental Health Services Administration, 2012).

Additionally, 3.9% of Indiana college students used cocaine in the past year and 1.2% reported current use (Indiana Collegiate Action Network, 2012).

Youth Consumption

Past-year cocaine use prevalence among 12- to 17-year-olds was similar in Indiana (0.7%) and the United States (1.0%) (Substance Abuse and Mental Health Services Administration, 2012).

High school students' rates for lifetime use (IN: 5.6%; U.S.: 6.8%) and current use (IN: 2.3%; U.S.: 3.0%) in Indiana and the nation were statistically the same; no differences by gender, race, or grade were detected in Indiana (Centers for Disease Control and Prevention, 1991-2011).

From 2000 through 2012, rates for current cocaine and crack use among high school seniors seemed similar between Indiana and the nation; rates remained

Figure 1.1   Percentage of Indiana and U.S. High School Seniors (Grade 12) Reporting Current Cocaine and Crack Use (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey and Monitoring the Future Survey, 2000–2012)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Indiana Cocaine	2.7%	2.8%	2.9%	2.5%	2.9%	2.9%	3.1%	2.4%	2.0%	1.6%	1.9%	2.0%	1.6%
U.S. Cocaine	2.1%	2.1%	2.3%	2.1%	2.3%	2.3%	2.5%	2.0%	1.9%	1.3%	1.3%	1.1%	1.1%
Indiana Crack	1.1%	1.1%	1.1%	1.1%	1.4%	1.2%	1.4%	1.1%	1.0%	0.9%	1.0%	1.2%	0.9%
U.S. Crack	1.0%	1.1%	1.2%	0.9%	1.0%	1.0%	0.9%	0.9%	0.8%	0.6%	0.7%	0.5%	0.6%
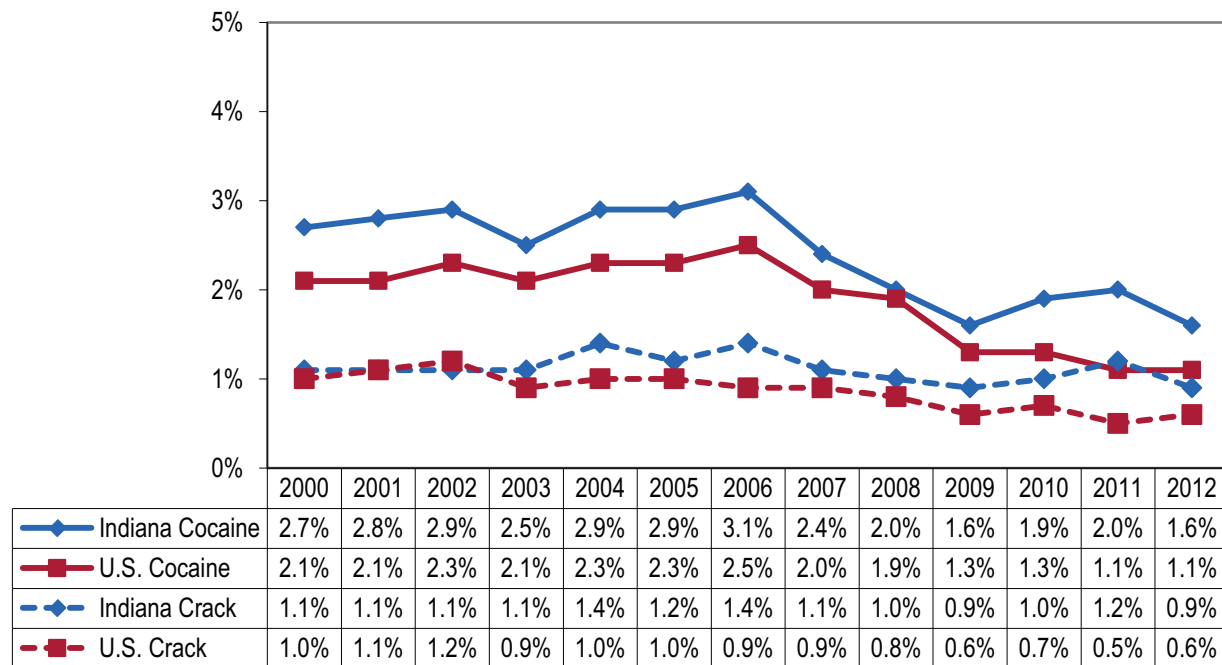
Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

stable or even declined over the years (see Figure 1.1). However, due to lack of detail in the publicly available data sets, statistical significance of the results could not be determined (Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012)

Cocaine Abuse and Dependence

In 2010, over one-tenth of Indiana's treatment episodes involved cocaine use (14.8%); this figure was significantly lower than the U.S. percentage (22.6%). The percentages of treatment episodes with cocaine use were highest among females, blacks, and 35- to 44-year-olds.

In 6.1% of treatment episodes in Indiana, cocaine was reported as the primary drug of abuse; the U.S. percentage (8.2%) was significantly higher. The percentage of treatment episodes with cocaine dependence[3] has been significantly lower in Indiana than the nation for at least the past ten years (2001 through 2010). Significant differences within Indiana's treatment population were seen by gender, race, and age group (see Table 1.5) (Substance Abuse and Mental Health Data Archive, 2010).

Legal Consequences

Indiana law enforcement made almost 2,400 arrests for possession and over 2,000 arrests for sale/manufacture of opiates and cocaine in 2010, representing arrest rates of 0.4 and 0.3 per 1,000 population, respectively. Indiana's arrest rates were lower for cocaine/opiate possession but comparable to the nation's for sale/manufacture (U.S.: 0.7 and 0.3 per 1,000 population, respectively) (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010).[4]

HEROIN

Population data based on 2002–2004 annual averages reveal that among Indiana residents, 54,000 tried heroin at least once (1.1%), 9,000 used it in the past year (0.2%), and 1,000 were current users (less than 0.1%) of the substance. U.S. data were comparable. (Substance

Table 1.5 Percentage of Treatment Episodes with Cocaine Dependence Reported at Treatment Admission in Indiana (Treatment Episode Data Set, 2010)

		Cocaine Dependence
Gender	Male	5.0%
	Female	8.1%
Race	White	3.9%
	Black	17.4%
	Other	5.8%
Age Group	Under 18	0.2%
	18-24	1.7%
	25-34	4.9%
	35-44	11.4%
	45-54	10.4%
	55 and over	6.9%
Total		**6.1%**

Source: Substance Abuse and Mental Health Data Archive, 2010

Abuse and Mental Health Services Administration, 2012).

Among Indiana college students, 0.4% reported past-year heroin use and 0.2% reported use in the past month (Indiana Collegiate Action Network, 2012).

Youth Consumption

Lifetime heroin use among high school students has been similar in Indiana and the nation (IN: 2.8%; U.S.: 2.9%). No significant differences were detected by gender, race, or grade level in Indiana (Centers for Disease Control and Prevention, 1999-2011).

In 2012, reported heroin use among Indiana 12th grade students was as follows: 2.1% for lifetime use (U.S.: 1.1%) and 1.0% for monthly use (U.S.: 0.3%) (Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012)

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[3]We defined cocaine dependence as "individuals in substance abuse treatment listing cocaine as their primary substance at admission."
[4]The Uniform Crime Reporting Program data set combines arrests for cocaine and opiates; arrest information is not available for cocaine or opiates alone.

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Heroin Abuse and Dependence

In 2010, heroin use was reported in 6.6% of Indiana treatment episodes (U.S.: 17.4%), and heroin dependence[5] was indicated in 5.3% (U.S.: 14.2%). While Indiana's percentages were significantly lower than the nation's, note that both heroin use and dependence have increased significantly in Indiana's treatment population since 2001. Significant differences were seen by gender (more women reported use), race (whites reported higher rates), and age group (adults ages 25 to 34 had highest use) (Substance Abuse and Mental Health Data Archive, 2010).

Morbidity and Mortality

A potential consequence of injected heroin use is contraction of HIV and/or hepatitis (B or C) from contaminated needles. In 2011, 385 new HIV infections and 133 new AIDS cases were reported in Indiana. A total of 10,225 individuals were living in Indiana with HIV disease,[6] and 845 (or 8.3%) of these cases were attributable to injection drug use (IDU) (Indiana State Department of Health, 2011).

The calculated annual AIDS rate (per 100,000 population) in Indiana was 1.7 (U.S.: 3.0) (The Kaiser Family Foundation, 2011).

The hepatitis B virus (HBV) and hepatitis C virus (HCV) are usually transmitted via unprotected sex and among injection drug users. The incidence rates per 100,000 population for acute hepatitis in Indiana were 1.2 for HBV (U.S.: 1.1) and 0.4 for HCV (U.S.: 0.3) in 2010. Both HBV and HCV incidence rates have dropped in the past decades (Centers for Disease Control and Prevention, 2012c). The age-adjusted mortality rate (per 100,000 population) attributable to hepatitis B and hepatitis C (acute and chronic) was 1.5 in Indiana, which was statistically significantly lower than the national rate (U.S.: 2.2) (Centers for Disease Control and Prevention, 2012a).

Legal Consequences

In 2010, law enforcement made almost 2,400 arrests for possession and more than 2,000 arrests for sale/manufacture of opiates and cocaine in Indiana, representing arrest rates of 0.4 and 0.3 per 1,000

population, respectively. Compared to the nation, Indiana's arrest rates were lower for cocaine/opiate possession but similar for sale/manufacture (U.S.: 0.7 and 0.3 per 1,000 population, respectively) (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, 2010).[7]

METHAMPHETAMINE

In Indiana, 4.5% of the population (225,000 residents) have used meth at least once in their life (U.S.: 5.0%), while 0.8% (40,000 residents) used it in the past year (U.S.: 0.3%) and 0.2% (10,000 residents) used it in the past month (U.S.: 0.1%). The rate for past-year use was greatest among 18- to 25-year-old Hoosiers (1.9%) (Substance Abuse and Mental Health Services Administration, 2012).

In 2012, an estimated 0.4% of Indiana college students had used meth in the past year and 0.2% had used it in the past month (Indiana Collegiate Action Network, 2012).

Youth Consumption Patterns

Lifetime prevalence of methamphetamine use among high school students was similar in Indiana and the nation (IN: 3.9%; U.S.: 3.8%). Rate differences by gender, race, or grade level were not significant in Indiana (Centers for Disease Control and Prevention, 1991-2011).

Lifetime and monthly meth use prevalence among 12th grade students in Indiana is depicted in Figure 1.2 (Gassman, et al., 2012).

Methamphetamine Abuse and Dependence

Between 2000 and 2010, the percentage of treatment admissions in Indiana reporting meth dependence increased significantly from 1.5% to 4.7%, peaking at 5.9% in 2005. Indiana's percentage was statistically significantly lower compared to the nation's (see Figure 1.3). Significant differences were observed by gender (more women reported using meth), race (whites had the highest rate of use), and age group (primarily 35- to 44-year-olds were affected) (Substance Abuse and Mental Health Data Archive, 2010).[8]

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[5]We defined heroin dependence as "individuals in substance abuse treatment listing heroin as their primary substance at admission."
[6]HIV disease includes both HIV infections and AIDS cases.
[7]The Uniform Crime Reporting Program data set combines arrests for cocaine and opiates; this information is not available for cocaine or opiates alone.
[8]We defined methamphetamine dependence as "individuals in substance abuse treatment listing methamphetamine as their primary substance at admission."

Figure 1.2 Percentage of Indiana 12th Grade Students Reporting Lifetime and Monthly Methamphetamine Use (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2005–2012)

	2005	2006	2007	2008	2009	2010	2011	2012
Lifetime	5.5%	5.0%	3.4%	2.7%	2.7%	2.5%	2.8%	2.4%
Monthly	1.7%	1.5%	1.0%	0.9%	0.9%	1.0%	1.3%	1.1%
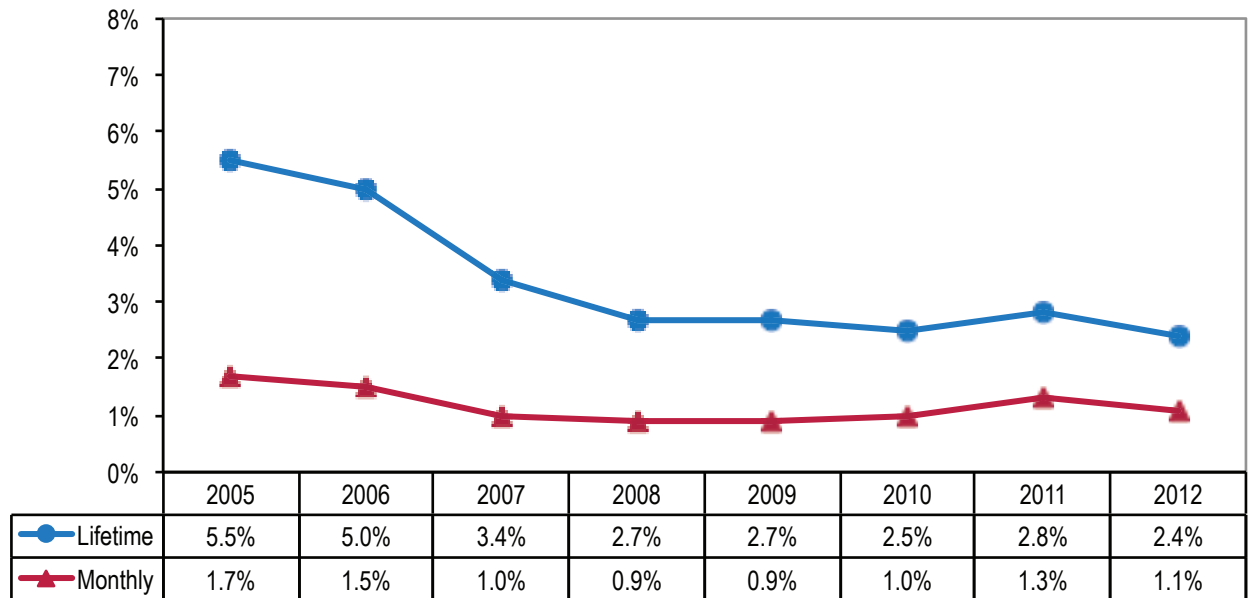
Source: Gassman, et al., 2012

Legal Consequences

The Indiana State Police seized 1,663 clandestine methamphetamine labs in 2012; this represents the highest number of lab seizures thus far (Indiana State Police, 2013).

In Indiana, over 2,000 arrests were made for possession and over 900 for the sale/manufacture of synthetic drugs[9] in 2010; this represents annual arrest rates of 0.3 (U.S.: 0.2) and 0.1 (U.S.: 0.1), per 1,000 population, respectively (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010).

PRESCRIPTION DRUG ABUSE

In 2011, nearly 12.8 million prescription drugs were dispensed in Indiana; most of these pharmaceuticals (12.7 million) were purchased by Indiana residents, while the rest was distributed to out-of-state consumers. The most widely dispensed prescription drugs were opioids[10] (45.8%), followed by depressants of the central nervous system[11] (30.5%) and stimulants[12] (11.1%) (Indiana Board of Pharmacy, 2012).

In Indiana, over a million residents (20.7%) have misused psychotherapeutics at least once in their life (U.S.: 19.9%). Additionally, an estimated 383,000 Hoosiers (7.6%) abused prescription drugs in the past year (U.S.: 5.7%), and 138,000 residents (2.7%) did so in the past month (U.S.: 2.4%).[13] The psychotherapeutics that were primarily abused included pain relievers, tranquilizers, sedatives, and stimulants (see Table 1.6) (Substance Abuse and Mental Health Services Administration, 2012).

Young people between the ages of 18 and 25 had the highest rate of past-year pain medication abuse in 2011 (IN: 14.4%; U.S.: 10.4%) (Substance Abuse and Mental Health Services Administration, 2012).

The Indiana College Substance Use Survey includes questions on (a) use of prescription medications not

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[9]The Uniform Crime Reporting Program collects arrest information on synthetic drugs. The category includes methamphetamine, methadone, and Demerol.
[10]Opioids include pain relievers, such as oxycodone and hydrocodone.
[11]CNS depressants include sedatives, tranquilizers, and hypnotics.
[12]Stimulants include Ritalin®, Adderall®, and dextroamphetamine.
[13]The terms "prescription drug misuse," "prescription drug abuse," and "nonmedical use of prescription drugs" are used interchangeably.

Figure 1.3   Percentage of Treatment Episodes with Methamphetamine Dependence Reported at Treatment Admission in Indiana and U.S. (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	1.5%	2.4%	3.5%	4.2%	5.0%	5.9%	5.6%	4.8%	5.0%	5.0%	4.7%
U.S.	3.8%	4.5%	5.5%	6.2%	6.9%	8.2%	8.4%	7.6%	6.1%	5.5%	5.7%
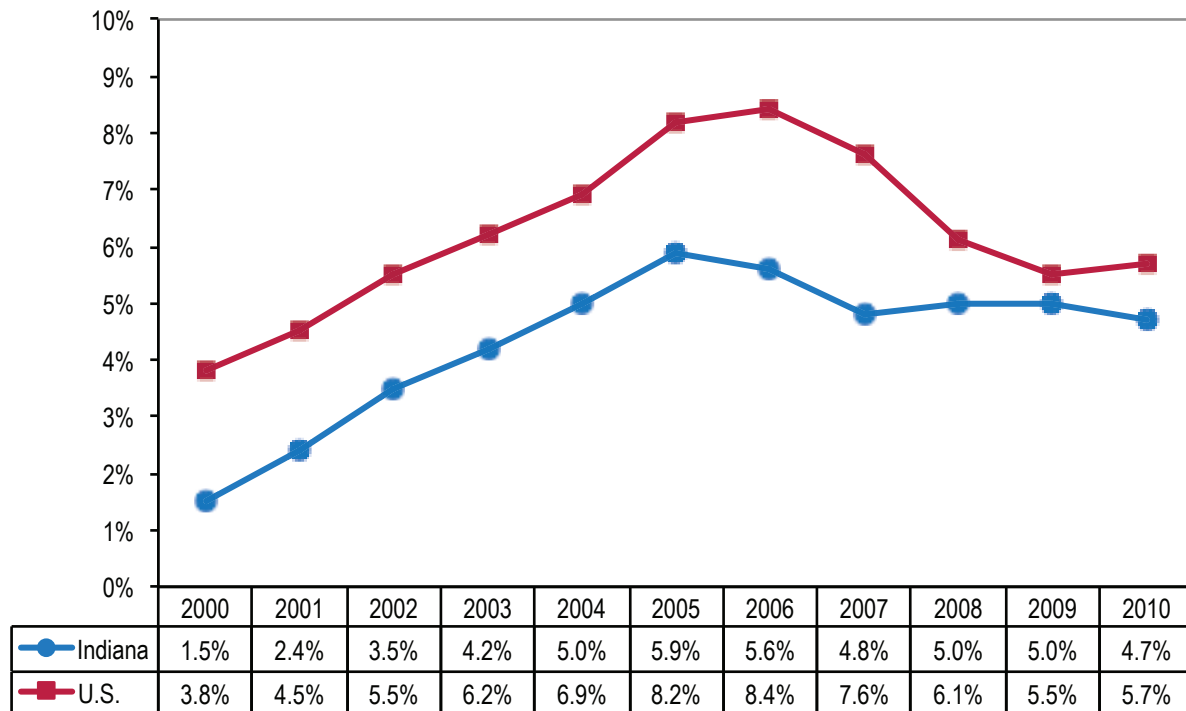
Source: Substance Abuse and Mental Health Data Archive, 2010

prescribed to the student and (b) use of prescription medication prescribed to the student but misused. According to findings from the 2012 survey: (a) 12.8% of Indiana college students used prescription medications not prescribed to them in the past year, with 5.3% currently using; and (b) 3.5% of Indiana college students misused their prescription medication in the past year, with 1.3% of students reporting current misuse (Indiana Collegiate Action Network, 2012).

Table 1.6   Lifetime, Past-Year, and Past-Month Nonmedical Use of Psychotherapeutics, Indiana and United States (National Survey on Drug Use and Health)

	Lifetime Use		Past Year Use		Past Month Use	
	Indiana	U.S.	Indiana	U.S.	Indiana	U.S.
All Psychotherapeutics	20.7%	19.9%	7.6%	5.7%	2.7%	2.4%
Pain Relievers	15.0%	13.3%	6.1%	4.3%	2.0%	1.7%
OxyContin	2.5%	2.3%	0.8%	0.6%	0.3%	0.2%
Tranquilizers	9.1%	8.4%	2.8%	2.0%	0.8%	0.7%
Sedatives	3.9%	2.9%	0.4%	0.2%	0.1%	0.1%
Stimulants	8.3%	7.9%	1.7%	1.0%	0.8%	0.4%

Note: Indiana rates are based on 2002–2004 averages; U.S. rates are based on the 2011 findings.
Source: Substance Abuse and Mental Health Services Administration 2012

Figure 1.4 Percentage of Indiana 8th, 10th, and 12th Grade Students Reporting Current Nonmedical Use of Prescription Drugs (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2003-2012)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
8th	1.4%	1.3%	1.5%	1.3%	1.9%	1.7%	1.8%	3.0%	2.7%	2.6%
10th	2.1%	2.0%	2.1%	2.2%	3.7%	3.5%	3.3%	5.9%	5.2%	5.0%
12th	1.5%	1.4%	1.7%	1.8%	2.9%	3.3%	3.1%	5.9%	5.9%	5.8%
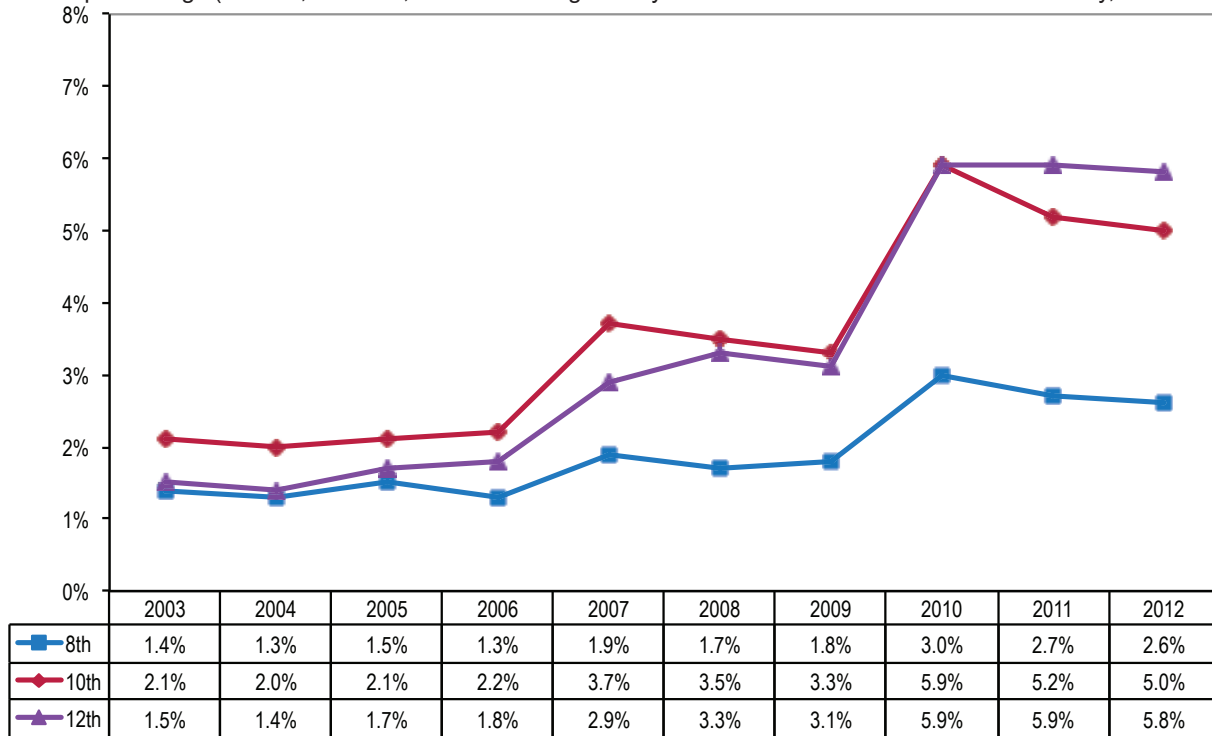
Source: Gassman, et al., 2012

Youth Consumption

Among Hoosiers ages 12 to 17, 7.0% used prescription pain medications for nonmedical purposes in the past year; Indiana's percentage was statistically similar to the nation's, 6.1% (Substance Abuse and Mental Health Services Administration, 2012).

For Indiana prevalence rates of current nonmedical use of prescription drugs among 8th, 10th, and 12th grade students, see Figure 1.4

Prescription Drug Abuse and Dependence

In 10.8% of Indiana treatment episodes in 2010, prescription drug dependence[15] was indicated (U.S.: 10.2%). Most of these were due to pain relievers (IN: 9.1%; U.S.: 8.6 %), followed by sedatives and tranquilizers (IN: 1.5%; U.S.: 1.1%) and stimulants (IN: 0.2%; U.S.: 0.5%). Compared to the nation, Indiana's rates were significantly higher for overall prescription drug, pain reliever, and sedative/tranquilizer dependence, but stimulant dependence rates were higher for the nation. In Indiana, significant differences were seen by gender, race, and age group (see Table

1.7). Rates for prescription drug dependence have increased significantly in Indiana from 2000 through 2010, only remaining stable for stimulants (Substance Abuse and Mental Health Data Archive, 2010).

Legal Consequences

In 2010, law enforcement made nearly 3,500 arrests for possession and over 930 arrests for sale/manufacture of "other drugs" in Indiana. This represents arrest rates of 0.5 and 0.1 per 1,000 population, respectively. U.S. rates were significantly higher for possession (0.8) but similar for sale/manufacture (0.2) (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010).

POLYSUBSTANCE ABUSE

Polysubstance abuse is a particularly serious pattern of drug use that involves consumption of two or more substances. A review of data from 2000 through 2010 revealed that over half of the individuals seeking substance abuse treatment reported using at least two drugs at the time of admission, and Indiana's rates were significantly

[15]We defined prescription drug dependence as "individuals in substance abuse treatment listing prescription drugs as their primary substance at admission."

Table 1.7   Percentage of Treatment Episodes with Prescription Drug Dependence Reported at Treatment Admission in Indiana, by Drug Category, Gender, Race, and Age Group (Treatment Episode Data Set, 2010)

		All Prescription Drugs	Pain Relievers	Sedatives/Tranquilizers	Stimulants
Gender	Male	8.2%	7.0%	1.1%	0.2%
	Female	15.5%	13.0%	2.2%	0.3%
Race	White	12.6%	10.6%	1.8%	0.3%
	Black	1.6%	1.3%	0.1%	0.1%
	Other	4.0%	3.5%	0.5%	<0.1%
Age Group	Under 18	3.1%	1.8%	1.1%	0.2%
	18 to 24	10.8%	8.9%	1.7%	0.1%
	25 to 34	15.8%	13.8%	1.6%	0.4%
	35 to 44	8.5%	7.0%	1.2%	0.3%
	45 to 54	6.1%	4.9%	1.1%	0.1%
	55 and over	5.5%	4.2%	1.2%	0.1%
Total		**10.8%**	**9.1%**	**1.5%**	**0.2%**

Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 1.5   Percentage of Indiana and U.S. Treatment Episodes with Polysubstance Abuse (Using at Least Two Substances; Using at Least Three Substances) Reported at Treatment Admission (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana 2+	55.5%	56.8%	58.3%	58.1%	59.8%	62.4%	60.4%	58.8%	59.8%	57.8%	56.2%
U.S. 2+	53.4%	54.1%	54.1%	54.3%	55.2%	55.7%	55.9%	55.2%	54.4%	54.4%	55.1%
Indiana 3+	23.0%	21.4%	22.1%	22.2%	23.8%	27.7%	26.6%	25.3%	26.3%	26.0%	27.8%
U.S. 3+	20.7%	20.9%	20.9%	20.8%	21.3%	21.7%	20.2%	20.6%	20.5%	20.1%	20.4%
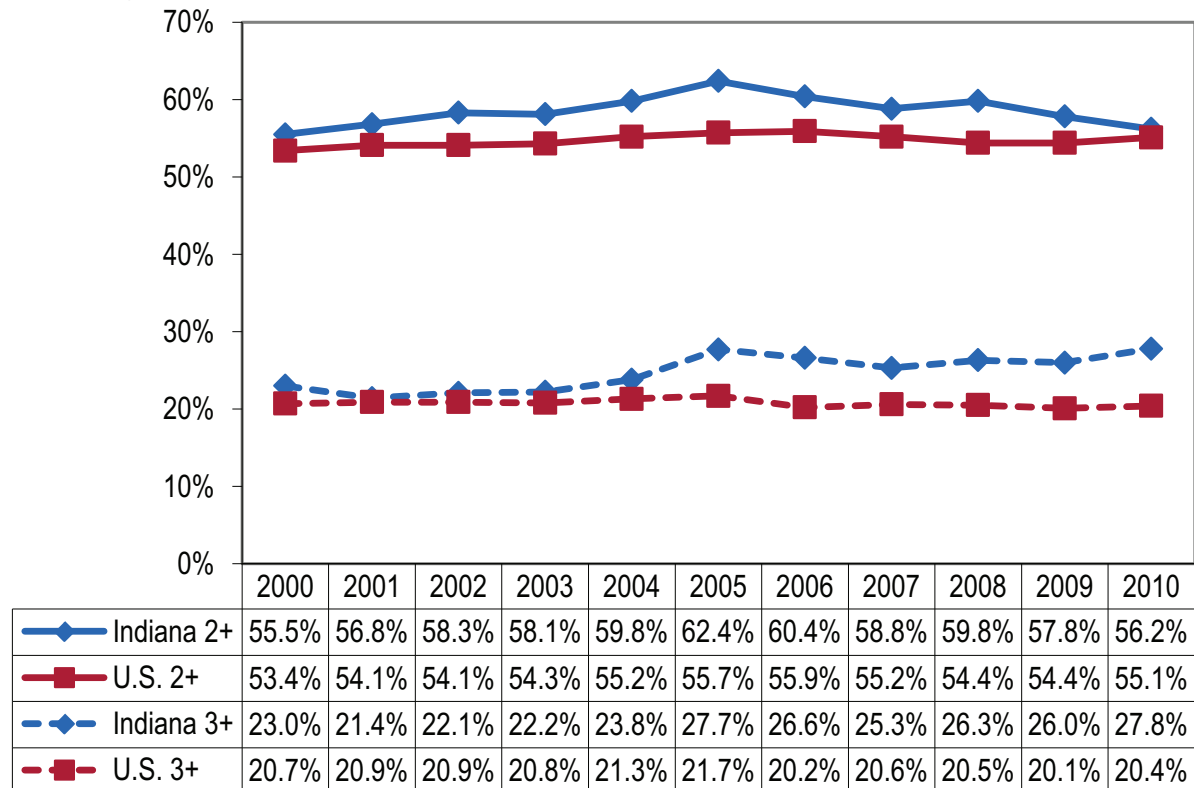
Source: Substance Abuse and Mental Health Data Archive, 2010

higher than the nation's. The percentage of treatment episodes involving two or more substances increased significantly in Indiana, from 55.5% in 2000 to 56.2% in 2010 (see Figure 1.5). Furthermore, in roughly one-fourth of Indiana treatment episodes, use of three or more substances was reported; again, Indiana's rate increased significantly from 23.0% in 2000 to 27.8% in 2010 (see Figure 1.5). The percentages of polysubstance abuse were slightly higher for females, blacks, and adults under 35 (Substance Abuse and Mental Health Data Archive, 2010).

Cluster Analysis

We conducted a cluster analysis of 2010 Indiana TEDS data to determine the combinations of drugs currently used by polysubstance abusers within the state. Alcohol and marijuana were most widely indicated in polysubstance abuse. The drug clusters most frequently reported at substance abuse treatment admission in Indiana were (a) alcohol and marijuana, (b) alcohol, cocaine, and marijuana and (c) alcohol, marijuana, and a drug in the "other drug" category (Substance Abuse and Mental Health Data Archive, 2010).

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Indiana University Center for Health Policy

2

METHODS

This report describes the consumption and consequences of alcohol, tobacco, and other drugs in Indiana residents. We analyzed patterns among Indiana's overall, adult, and youth population, and compared them to patterns found among the U.S. population. Based on discussions with the State Epidemiology and Outcomes Workgroup (SEOW), we have reviewed consumption and consequences data for the following drugs: alcohol, tobacco, marijuana, cocaine, heroin, methamphetamine, and prescription medications. Additionally, we examined the occurrence of polysubstance abuse (i.e., the use of two or more drugs) in Indiana.

Our research team completed statistical analyses on publicly available local and national data sets using Statistical Package for the Social Sciences (SPSS) statistical analysis software. For surveys that do not have publicly available data sets, we conducted statistical analyses using online analysis software and/or analysis tables provided by the agencies that conducted the data collection. Whenever possible, we made statistical comparisons across gender, racial/ethnic, and age groups for both drug-consumption behaviors and drug-use consequences. For all comparisons, a *p* value of .05 or less or the 95 percent Confidence Interval (CI) was used to determine statistical significance.[1]

Prevalence rates and other statistics may be presented somewhat differently across all chapters, depending on the data sources that provided the information.

We used two guidelines to determine potential priorities. The first guideline was statistical significance. Statistical significance is a mathematical concept used to determine whether differences between groups are true or due to chance. Significance in this context does not mean meaningful and does not convey practical or clinical importance. Specific drug consumption and consequence patterns that place Indiana statistically significantly higher than the United States were used as markers for areas that could potentially benefit from intervention.

The second guideline was clinical or substantive significance. We set priority indicators based on consumption behaviors or drug-use consequences trending toward increased frequency within a particular group of Hoosiers, such as gender, race/ethnicity, or age.

DATA SOURCES

The data for these analyses were gathered from various publicly available federal, state, and local-level surveys and data sets. In order to compare Indiana with the nation as a whole and to determine trends in drug use and drug-related consequences over time, we selected, whenever possible, surveys and data sources that had at least two years' worth of data available. In all cases, the most recent findings were included.

All of the data sources have important strengths and weaknesses, which were factored into the interpretations of the findings. In general, trends evident in multiple sources based on probability samples (rather than on nonrandom samples) were given more weight in the interpretation process. The following sections briefly describe the surveys and data sources used to complete these reports. An overview of these sources is also provided in the SEOW data sources list beginning on page 22 at the end of this chapter.

Alcohol-Related Disease Impact (ARDI) Database

The Centers for Disease Control and Prevention's (CDC) ARDI software generates estimates of alcohol-related deaths and years of potential life lost (YPLL) due to alcohol consumption. To do this, ARDI either calculates estimates or uses predetermined estimates of alcohol-attributable fractions (AAFs)—that is, the proportion of deaths from various causes that are due to alcohol. These AAFs are then multiplied by the number of deaths caused by a specific condition (e.g., liver cancer) to obtain the number of alcohol-attributable deaths. Reports can be generated based on national or state-level data.

[1]Throughout the chapters, we use the terms 'significant', 'significantly different', or 'statistically different' to report on a statistically significant difference between groups.

Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD) Survey

ATOD is an annual survey conducted by the Indiana Prevention Resource Center (IPRC) and funded through the Indiana Family and Social Services Administration/ Division of Mental Health and Addiction. The survey is designed to monitor patterns of alcohol, tobacco, and other drug use; gambling behaviors; as well as risk and protective factors among Indiana middle and high school students, grades 6 through 12. Young people who complete the questionnaire are asked to report on their lifetime use (use of drug at least once in the respondent's life) and monthly use (use of drug at least once in the 30 days prior to the survey) of a wide range of substances.[2] However, results should be interpreted with caution as the survey uses a nonrandom convenience sample[3] of students and may not be representative of Indiana's entire student population. ATOD survey results can be compared to findings from the Monitoring the Future survey (see page 19) conducted by the National Institute on Drug Abuse.

Automated Reporting Information Exchange System (ARIES) and Fatality Analysis Reporting System (FARS)

The Indiana State Police's ARIES is a central repository for all vehicle collisions reported in the state of Indiana, with and without alcohol involvement. Information on fatal accidents contained in the system is submitted to the Fatality Analysis Reporting System (FARS). FARS is a national database of fatal motor vehicle accidents, which was developed by the National Highway Traffic Safety Administration's National Center for Statistics and Analysis in 1975. Comparisons between Indiana and the nation should be interpreted with caution as data submissions to the FARS database are done on a voluntary basis and may not include all fatal motor vehicle accidents within a state or the nation.

Behavioral Risk Factor Surveillance System (BRFSS) Survey

The CDC conducts the BRFSS annually with the assistance of health departments in all 50 states and the

District of Columbia, Puerto Rico, Guam, and the U.S. Virgin Islands. BRFSS asks respondents ages 18 and older questions about health-related behaviors, including alcohol consumption and tobacco use. BRFSS results are available at the national and state levels as well as for selected metropolitan/micropolitan areas. BRFSS data allow for statistical comparisons across gender, age, race/ethnicity, educational attainment, and income level.

The BRFSS has traditionally used random-digit-dial telephone sampling of households with landline telephones. However, the increasing percentage of households that are abandoning their landline telephones for cell phones has significantly eroded the population coverage provided by landline-based surveys to 70% of the U.S. household population. To meet challenges for increasing non-coverage and decreasing response rates due to cell-phone-only households, BRFSS has expanded its traditional methodology to a dual frame survey of landline and cell phone numbers and introduces a new weighting method (Raking).

Even though the 2012 State Epidemiological Profile continues to provide information on present and past BRFSS prevalence rates for alcohol and tobacco use, it would not be appropriate to compare previous year estimates with current estimates, because of different data adjustment methods and different sampling frames.

Hospital Discharge Data

The Indiana State Department of Health (ISDH) collects information on inpatients discharged from hospitals in Indiana. The data are publicly available in aggregate format and include information on hospitals, principal diagnoses and procedures, length of stay, total charges, etc. Additionally, ISDH provides reports (on request) on statewide outpatient visits, i.e., information contained in the State Emergency Department Dataset. Both datasets can be queried on diagnoses related to alcohol or drug use.

Indiana Adult Tobacco Survey (IN ATS)

The Indiana Adult Tobacco Survey (IN ATS), a survey by the Indiana Tobacco Prevention and Cessation Agency (ITPC), collects information on tobacco use

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[2]Until 2010, ATOD also collected information on annual use and, for some substances, on daily or special use.
[3]Respondents for a survey can be drawn from a random sample or convenience sample. In a random sample, each member of that population has an equal probability of being selected and results will be more likely to be representative of the underlying population. In convenience sampling, individuals that are easiest to reach are selected at the convenience of the researcher. It is not guaranteed that the sample is an accurate representation of the population under study.

among Hoosiers ages 18 and older. The survey uses a random-sampling design; African-American and Hispanic adults as well as residents in more rural regions of the state are oversampled. Data are available by gender, race/ethnicity, age group, income level, educational attainment, Indiana region, health insurance type, and number of children in household.

Indiana College Substance Use Survey

The Indiana College Substance Use Survey was developed in 2009 by the Indiana Collegiate Action Network (ICAN) and the Indiana Prevention Resource Center (IPRC), with input from Indiana institutions of higher education and the Indiana State Epidemiology and Outcomes Workgroup. The instrument was designed to assess prevalence of alcohol, tobacco and other drug use; consequences of use; alcohol availability; and student perceptions of peer behaviors among Indiana college students. Information is available by gender, age category (under 21 vs. 21 or over), and type of institution (private vs. public). All two- and four-year colleges in Indiana are invited to participate in the survey. Results are based on nonrandom sampling and are not representative of all college students in Indiana.

Indiana Meth Lab Statistics and National Clandestine Laboratory Seizure System (NCLSS)

The Indiana State Police (ISP), Meth Suppression Section, collects data on clandestine meth lab seizures in the state, including number of meth labs seized, number of arrests made during lab seizures, and the number of children located at/rescued from meth labs. The information is then submitted to NCLSS, a database maintained by the U.S. Drug Enforcement Administration and the El Paso Intelligence Center. State and county-level information can be requested from the Indiana State Police.

Indiana Mortality Data and National Vital Statistics System (NVSS)

NVSS is a CDC-maintained data system that provides information on mortality rates by cause of death as coded in the World Health Organization's International Classification of Diseases, 10th Edition (ICD-10). Health departments in the 50 states, the District of Columbia, and U.S. territories provide CDC with data on deaths throughout the country. Using the query system on

CDC's website (CDC WONDER), researchers can compute mortality rates for deaths due to diseases and events associated with alcohol, tobacco, and other drug use (e.g., cirrhosis, lung cancer, heart disease, suicide, homicide, etc.) at the national, state, and county level. The system also allows for comparisons across gender and age and racial groups. Indiana mortality data can also be requested directly from the Indiana State Department of Health.

Indiana Scheduled Prescription Electronic Collection & Tracking (INSPECT)

INSPECT is the state's prescription drug monitoring program. The secure database collects basic demographic information on the patient, the type of controlled substance prescribed, the prescribing practitioner, and the dispensing pharmacy. Each time a controlled substance is dispensed, the dispenser (e.g., pharmacy, physician, etc.) is required to submit the information to INSPECT. The program was designed to help address problems of prescription drug abuse and diversion in Indiana. By compiling controlled substance information into an online database, INSPECT performs two critical functions: (1) maintaining a warehouse of patient information to assist healthcare professionals in making treatment decisions; and (2) providing an important investigative tool for law enforcement to help prevent the possible diversion of controlled substances.

Indiana Youth Tobacco Survey (IYTS) and National Youth Tobacco Survey (NYTS)

The CDC developed NYTS as a way to estimate the current use of tobacco products among middle school and high school students in the United States. Student respondents are asked to describe their lifetime, annual, and current use of cigarettes and other tobacco products. In order to compare Indiana with the rest of the nation, the Indiana Tobacco Prevention and Cessation Agency conducts the statewide survey that includes CDC core and recommended questions, as well as state-specific questions. IYTS is conducted every other year (even years) and findings allow comparisons between Indiana and the nation across gender, race/ethnicity, and grade levels.

Monitoring the Future (MTF) Survey

MTF is a national survey conducted annually by the National Institute on Drug Abuse in order to track

changes in the drug consumption patterns of 8th, 10th, and 12th grade students throughout the United States. Respondents report on their lifetime, annual, and monthly use of a wide variety of substances, including alcohol, tobacco, heroin, cocaine, marijuana, methamphetamine, etc. Results from MTF are released annually and data sets are publicly available. Respondents are sampled randomly from schools throughout the country; data are not available at the state level.

National Survey on Drug Use and Health (NSDUH)

NSDUH is a national survey funded by SAMHSA and designed to monitor patterns and track changes in substance use for U.S. residents 12 years of age and older. The survey asks respondents to report on consumption patterns of substances including alcohol, tobacco, marijuana, cocaine, and other illicit drugs, as well as on the nonmedical (recreational) use of prescription medication. Additionally, NSDUH asks respondents whether they received treatment for drug abuse or drug dependence during the past (prior) year.

Prevalence rates for alcohol, tobacco, and other drug use are provided for the nation and each state. State-level rates are based on statistical algorithms, not on data collected within specific states. Raw data files from NSDUH surveys are publicly available; however, they do not allow for comparisons among states because NSDUH eliminates state identifiers in the process of preparing public-use data files. Tables with prevalence numbers and rates are prepared by SAMHSA's Center for Behavioral Health Statistics and Quality and can be accessed online. Data reports are available since 1994. There is usually a two-year delay from the time of data collection to its availability.

Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)

The CDC's SAMMEC is an online application that allows the user to estimate the health impacts and health-related economic consequences of smoking for adults and infants. Users can compute outcomes such as smoking-attributable mortality, years of potential life lost (YPLL), productivity losses, and expenditures.

Treatment Episode Data Set (TEDS)

TEDS is a national database maintained by SAMHSA that records information about individuals entering treatment for substance abuse and/or dependence. State mental health departments submit data to TEDS on an annual basis. The information reported in TEDS includes age, race, ethnicity, gender, and other demographic characteristics, as well as information on the use of various substances. TEDS data become publicly available one to two years after the information is gathered. The format of the TEDS data allows for comparisons between Indiana and the United States by gender, race, and age groups.

County-level TEDS data for Indiana are available from the Indiana Family and Social Services Administration. While TEDS data can provide some information on drug use and abuse patterns both nationally and at the state level, the population on which the data are based may not be representative of all individuals in drug and alcohol treatment. For Indiana, TEDS data are limited to information on individuals entering substance abuse treatment who are 200% below the federal poverty level and receive state-funded treatment.

Uniform Crime Reporting Program (UCR)

UCR is a national database maintained by the FBI that records the number of arrests for various offenses, including property crimes, violent crimes, and drug-related crimes throughout the United States. Law enforcement agencies in the 50 states and the District of Columbia submit UCR data annually. Data are reported for each state and each county. UCR data sets are publicly available; however, there is a two-year lag from the time data are collected until they are published. The format of the UCR data sets allows for comparisons of arrests between Indiana and the entire United States, and for comparisons between juveniles and adults. Since the data are presented in an aggregate format, demographic variables such as gender, age, or race/ethnicity are not available.

While UCR data include information about drug possession and drug manufacturing arrests, the involvement of drugs or alcohol in the commission of other crimes such as rape, burglary, robbery, etc., is not recorded. Additionally, since states are not required to submit crime information to the FBI, the level of reporting varies considerably. Because of these variations, the FBI uses statistical algorithms to estimate arrests for counties in which reporting is less than 100 percent. In Indiana, typically about 60% of counties, on average, submit

information to the FBI. Because Indiana has a rather low reporting rate, UCR results should be interpreted with caution (see Table 2.1, page 26, for coverage indicator by county).

Youth Risk Behavior Surveillance System (YRBSS)

The YRBSS is a national survey of health-related behaviors among students in grades 9 through 12. The CDC conducts the survey biannually with the cooperation of state health departments throughout the nation. Student respondents are asked to describe whether they have engaged in numerous behaviors that could pose a danger to their health, including the use of alcohol, tobacco, and other drugs. CDC's online database allows comparisons between Indiana and the United States on gender, race/ethnicity, and grade level. Data for the YRBSS are available every other year (odd years), with a one-year lag between the end of data collection and the publication of results. Though YRBSS data for some states are available from 1991, Indiana started participating in data collection in 2003.

CONSIDERATIONS

This report relies primarily on the data sources just discussed. These are publicly available sources that our researchers could access and analyze for this year's state epidemiological report or agency data sources that were provided specifically to the SEOW. Because of the nature of the available data, there are significant limitations to the interpretations presented:

- Consistent comparisons across data sources are not always possible due to the nature of the survey questions asked and information gathered.
- Inconsistencies may occur within classifications of demographic characteristics (e.g., age ranges, racial categories, grade levels).
- Timeframes may be inconsistent for comparisons across substances and data sources (e.g., some data have longer gaps than others before they are made publicly available).
- State-level prevalence rates presented in national surveys are often estimated using statistical algorithms.
- Due to the reporting requirements for national databases, the data may not be representative of the actual population of either the state or the nation.

In future editions of this report, we will expand the data analysis as additional data sources are made available to the SEOW data analysis team.

SEOW DATA SOURCES LIST

Following is a list of the data sources used in this report, presented in a format for comparison.

Alcohol-Related Disease Impact (ARDI) Database

Description: ARDI provides state and national estimates on alcohol-related deaths and years of potential life lost (YPLL) based on alcohol-attributable fractions.

Sponsoring Organization/Source: Centers for Disease Control and Prevention (CDC)

Geographic Level: National and state

Availability: The database can be accessed at http:// apps.nccd.cdc.gov/ardi/HomePage.aspx.

Trend: 2001–2005 (all estimates are based on data averages from 2001 through 2005)

Strengths/Weaknesses: ARDI may underestimate the actual number of alcohol-related deaths and years of potential life lost.

Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD) Survey

Description: The Indiana Prevention Resource Center (IPRC) manages the survey on alcohol, tobacco, and other drug use among children and adolescents (6th through 12th graders) annually in a number of schools throughout the state.

Sponsoring Organization/Source: Indiana Prevention Resource Center (IPRC); Indiana Family and Social Services Administration (FSSA)/Indiana Division of Mental Health and Addiction (DMHA)

Geographic Level: State and regions

Availability: Reports with data tables are available at http://www.drugs.indiana.edu/data-survey_monograph.html.

Trend: 1993–2012

Strengths/Weaknesses: School-specific survey results are valuable to participating schools. Statewide findings provide prevalence estimates but may not be representative of all Hoosier students due to sampling method.

Automated Reporting Information Exchange System (ARIES) and Fatality Analysis Reporting System (FARS)

Description: ARIES contains data on vehicle crashes with and without alcohol involvement; data on fatal crashes are submitted to FARS.

Sponsoring Organization/Source: Indiana State Police (ISP); U.S. Department of Transportation/ National Highway Traffic Safety Administration (NHTSA)

Geographic Level: National, state, and county levels

Availability: Data are available from the NHTSA at http://www.fars.nhtsa.dot.gov/Main/index.aspx and upon request from the Indiana State Police.

Trend: 1994–2011

Strengths/Weaknesses: The data are in aggregate format; comparisons by demographic variables such as age, gender, and race/ethnicity are not possible.

Behavioral Risk Factor Surveillance System (BRFSS) Survey

Description: BRFSS is an annual state health survey that monitors risk behaviors, including alcohol and tobacco consumption, related to chronic diseases, injuries, and death.

Sponsoring Organization/Source: Centers for Disease Control and Prevention (CDC); Indiana State Department of Health (ISDH)

Geographic Level: National and state; selected metropolitan/micropolitan areas

Availability: National and state data are available from the CDC at http://apps.nccd.cdc.gov/brfss/; selected area data can be accessed at http://apps.nccd.cdc.gov/brfsssmart/index.asp.

Trend: 1995–2011

Strengths/Weaknesses: CDC consistently works to test and improve BRFSS methodology in an effort to make findings result in more valid and reliable data for public health surveillance. Due to substantial changes in methodology starting with the 2011 survey, comparison of current estimates with previous estimates from previous years would not be appropriate.

Hospital Discharge Data

Description: Hospital discharge data are publicly available in aggregate format. Dataset can be queried by primary diagnosis (ICD-9 codes), e.g., alcohol- and drug-induced diseases.

Sponsoring Organization/Source: Indiana State Department of Health (ISDH)

Geographic Level: Indiana

Availability: Annual data are available at http://www.in.gov/isdh/20624.htm.

Trend: 1999–2008

Strengths/Weaknesses: The data are in aggregate format; comparisons by demographic variables such as age, gender, and race/ethnicity are not possible.

Indiana College Substance Use Survey

Description: The survey measures the prevalence of alcohol, tobacco and other drug use; consequences of use; alcohol availability; and student perceptions of peer behaviors among Indiana college students.
Sponsoring Organization/Source: Indiana Collegiate Action Network (ICAN); Indiana Prevention Resource Center (IPRC)
Geographic Level: Indiana
Availability: Annual
Trend: 2009-2011
Strengths/Weaknesses: The survey utilizes a nonrandom sampling design; results, therefore, are not representative of all college students in Indiana.

Indiana Adult Tobacco Survey (IN ATS)

Description: This survey measures tobacco use among Indiana adults, and includes items on tobacco use, cessation, secondhand smoke, and awareness.
Sponsoring Organization/Source: Indiana Tobacco Prevention and Cessation Agency (ITPC)
Geographic Level: Indiana and regions
Availability: Datasets can be requested from ITPC; reports are available at http://www.in.gov/itpc/.
Trend: 2002, 2006–2008
Strengths/Weaknesses: IN ATS uses a random-sample design, making findings representative of all Hoosier adults. Oversampling of African-American and Hispanic adults, as well as residents in more rural regions, provides more robust estimates for these population groups.

Indiana Meth Lab Statistics and National Clandestine Laboratory Seizure System (NCLSS)

Description: The Indiana State Police (ISP), Meth Suppression Section, collects meth lab incidence data and submits the information to NCLSS, a national database. Data include: Number of meth labs seized, number of arrests made during lab seizures, and the number of children located at/rescued from meth labs.
Sponsoring Organization/Source: Indiana State Police (ISP), Meth Suppression Section; Drug Enforcement

Administration (DEA); and El Paso Intelligence Center (EPIC)
Geographic Level: National, state, and county
Availability: Indiana data from ISP are available on request; national data can be accessed at http://www.justice.gov/dea/concern/map_lab_seizures.html.
Trend: 1995–2011

Indiana Mortality Data and National Vital Statistics System (NVSS)

Description: NVSS contains mortality data from all U.S. states; the online database can be queried on number of deaths and death rates from alcohol- and drug-related causes. Indiana data can also be directly requested from the Indiana State Department of Health (ISDH).
Sponsoring Organization/Source: Indiana State Department of Health (ISDH); CDC's National Center for Health Statistics
Geographic Level: National, state, and county levels
Availability: National mortality data can be accessed by underlying cause of death (ICD-10 codes) from CDC at http://wonder.cdc.gov/mortSQL.html; state data are available on request from the Indiana State Department of Health.
Trend: 1999–2009 (online from CDC). Indiana data for other years are available on request from Indiana State Department of Health.

Indiana Scheduled Prescription Electronic Collection & Tracking (INSPECT)

Description: INSPECT is Indiana's prescription drug monitoring program; the online database collects information each time a controlled substance is dispensed.
Sponsoring Organization/Source: Indiana Professional Licensing Agency (IPLA)
Geographic Level: Indiana and counties (zip codes)
Availability: Eligible users may register for a secured account at www.in.gov/INSPECT.
Strengths/Weaknesses: Data collection is statewide, and licensed dispensers (e.g., pharmacies, physicians) are required to submit information each time a controlled substance is dispensed.

Indiana Youth Tobacco Survey (IYTS) and National Youth Tobacco Survey (NYTS)

Description: IYTS is Indiana's adapted version of CDC's NYTS. The surveys collect data from students in grades

6 through 12 on all types of tobacco use, exposure to secondhand smoke, and access to tobacco.

Sponsoring Organization/Source: Indiana Tobacco Prevention and Cessation Agency (ITPC); Centers for Disease Control and Prevention (CDC)

Geographic Level: National and state

Availability: Data are available on request from ITPC, and annual reports can be accessed at http://www.in. gov/itpc/. National data are available at http://www.cdc. gov/tobacco/data_statistics/surveys/NYTS/.

Trend: 2000 through 2009 (NYTS) / 2010 (IYTS)

Strengths/Weaknesses: The IYTS provides detailed statewide information regarding youth knowledge, attitudes, and behaviors. However, county-level data are not available.

Monitoring the Future (MTF) Survey

Description: MTF is an ongoing study of youth behaviors, attitudes, and values. Approximately 50,000 students in 8th, 10th, and 12th grades are surveyed annually. Follow-up surveys are distributed to a sample of each graduating class for a number of years after initial participation.

Sponsoring Organization/Source: National Institute on Drug Abuse (NIDA)

Geographic Level: National

Availability: Data tables are available at http://www. monitoringthefuture.org/data/data.html.

Trend: 1991–2012

Strengths/Weaknesses: A limitation of the survey design is that the target population does not include students who drop out of high school before graduation.

National Survey on Drug Use and Health (NSDUH)

Description: NSDUH provides information on the prevalence, patterns, and consequences of alcohol, tobacco, and illegal drug use in the general population (ages 12 and older).

Sponsoring Organization/Source: Substance Abuse and Mental Health Services Administration (SAMHSA)/ Office of Applied Studies (OAS)

Geographic Level: National and state; sub-state data are available using small-area estimation techniques.

Availability: National and state data tables are available at the NSDUH website at http://nsduhweb.rti.org/.

Trend: State estimates are available for 1999–2011.

Strengths/Weaknesses: State-level data do not allow for comparisons by gender or race/ethnicity.

Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)

Description: SAMMEC generates estimates on smoking-attributable outcomes, such as mortality, years of potential life lost (YPLL), productivity losses, and expenditures.

Sponsoring Organization/Source: Centers for Disease Control and Prevention (CDC)

Geographic Level: National and state

Availability: The database can be accessed at http://apps.nccd.cdc.gov/sammec/index.asp.

Trend: Based on 2004 data

Strengths/ Weaknesses: During periods where smoking prevalence is declining, the attributable-fraction (AF) methodology tends to understate the number of deaths caused by smoking. Conversely, when smoking prevalence is increasing, the AF formula may overstate the number of deaths. The relative risk estimates have been adjusted to account for the influence of age, but not for other risk factors, such as alcohol consumption. Although the sample population includes more than 1.2 million people, it is not representative of the U.S. population; it is somewhat more white and middle class. Productivity loss estimates are also understated because they do not include the value of work missed due to smoking-related illness, other smoking-related absenteeism, excess work breaks, or the effects of secondhand smoke.

Treatment Episodes Data Set (TEDS)

Description: TEDS provides information on demographic and substance abuse characteristics of individuals in alcohol- and drug-abuse treatment. Data are collected by treatment episode. A treatment episode is defined as the period from the beginning of treatment services (admission) to termination of services.

Sponsoring Organization/Source: Substance Abuse and Mental Health Services Administration (SAMHSA); Indiana Family and Social Services Administration (FSSA)/Division of Mental Health and Addiction (DMHA)

Geographic Level: National and state; county-level data available from FSSA upon special request.

Availability: National and state TEDS data were acquired from the Inter-university Consortium for Political

and Social Research at http://webapp.icpsr.umich.edu/.
Trend: 1999–2010 national and state TEDS data; county-level data reported for 2012
Strengths/Weaknesses: In Indiana, these data are not representative of the state as a whole, as only individuals who are at or below the 200% federal poverty level are eligible for treatment at state-registered facilities.

Uniform Crime Reporting Program (UCR): County-Level Detailed Arrest and Offense Data

Description: The UCR program provides a nationwide view of crime based on the submission of statistics by local law enforcement agencies throughout the country.
Sponsoring Organization/Source: United States Department of Justice/Federal Bureau of Investigation (FBI)
Geographic Level: National, state, and county
Availability: Data can be downloaded from the National Archive of Criminal Justice Data website (http://www. icpsr.umich.edu/ NACJD/ucr.html).
Trend: 1994–2010
Strengths/Weaknesses: Reporting of UCR data by jurisdictions across the state is often less than 100%, in which case statistical algorithms are employed to estimate arrest numbers. See Table 2.1 on page 26 for coverage indicator by Indiana county.

Youth Risk Behavior Surveillance System (YRBSS)

Description: This biannual national survey monitors health risks and behaviors among youth in grades 9 through 12.
Sponsoring Organization/Source: Centers for Disease Control and Prevention (CDC); Indiana State Department of Health (ISDH)
Geographic Level: National, state
Availability: National and state-level data are downloadable from selected published tables on the CDC website at http://apps.nccd.cdc.gov/yrbss/.
Trend: For the nation, the survey tracks every other year from 1991 through 2009; Indiana data are available for 2003 through 2009.
Strengths/Weaknesses: At the state level, data by ethnicity (Hispanic) might not be available for some variables.

Table 2.1 Coverage Indicator for the 2010 Uniform Crime Reporting Data, by County (in Percent)

County	Coverage Indicator	County	Coverage Indicator
Adams	38.98	Lawrence	90.57
Allen	100.00	Madison	55.02
Bartholomew	100.00	Marion	48.89
Benton	19.63	Marshall	89.77
Blackford	100.00	Martin	86.69
Boone	72.12	Miami	30.94
Brown	100.00	Monroe	100.00
Carroll	98.80	Montgomery	38.27
Cass	100.00	Morgan	30.71
Clark	77.45	Newton	100.00
Clay	29.42	Noble	12.97
Clinton	95.79	Ohio	0.00
Crawford	91.67	Orange	0.00
Daviess	100.00	Owen	0.00
Dearborn	25.97	Parke	100.00
Decatur	26.04	Perry	40.97
DeKalb	32.95	Pike	0.00
Delaware	100.00	Porter	90.53
Dubois	50.36	Posey	6.45
Elkhart	100.00	Pulaski	100.00
Fayette	37.02	Putnam	72.80
Floyd	96.14	Randolph	77.40
Fountain	17.25	Ripley	21.41
Franklin	100.00	Rush	73.52
Fulton	70.16	Saint Joseph	99.76
Gibson	100.00	Scott	63.78
Grant	99.29	Shelby	56.72
Greene	76.98	Spencer	0.00
Hamilton	85.11	Starke	89.02
Hancock	0.00	Steuben	100.00
Harrison	61.64	Sullivan	80.21
Hendricks	48.38	Switzerland	0.00
Henry	63.38	Tippecanoe	99.85
Howard	100.00	Tipton	100.00
Huntington	100.00	Union	0.00
Jackson	88.73	Vanderburgh	100.00
Jasper	17.50	Vermillion	62.58
Jay	88.96	Vigo	56.36
Jefferson	0.00	Wabash	23.56
Jennings	100.00	Warren	0.00
Johnson	92.81	Warrick	100.00
Knox	92.42	Washington	0.00
Kosciusko	24.02	Wayne	88.38
LaGrange	100.00	Wells	94.65
Lake	82.39	White	67.43
LaPorte	96.17	Whitley	31.54

Note: The Coverage Indicator represents the proportion of county data that is not imputed for a given year. The indicator ranges from 0.0% (indicating that all data in the county are based on estimates) to 100.0% (indicating complete reporting; no computation).
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

ALCOHOL USE IN INDIANA:
CONSUMPTION PATTERNS AND CONSEQUENCES

ALCOHOL CONSUMPTION

General Consumption Patterns

Alcohol is the most frequently used substance in both Indiana and the United States. In 2009, 10.7 million gallons of ethanol (the intoxicating agent in alcoholic beverages) were consumed in Indiana; this included, by volume, 125.3 million gallons of beer, 10.1 million gallons of wine, and 9.2 million gallons of spirits. The annual per capita consumption of ethanol for the population 14 years and older was 2.1 gallons in Indiana and 2.3 gallons in the nation (National Institute on Alcohol Abuse and Alcoholism, 2011).

In 2011 a total of 14,032 permits for the sale of alcoholic beverages were on file in Indiana, representing a rate of 2.16 licenses per 1,000 Hoosiers. Most licenses were in Marion (1,984) and Lake (1,217) Counties (Alcohol and Tobacco Commission, 2011).

Based on 2010–2011 averages calculated from the National Survey on Drug Use and Health (NSDUH), the Substance Abuse and Mental Health Services Administration (SAMHSA) estimated that 51.0% (95% Confidence Interval [CI]: 47.7–54.2) of Indiana residents 12 years of age or older had used alcohol during the past month; Indiana's prevalence rate for current alcohol use[1] was similar to the U.S. rate of 51.8% (95% CI: 51.2–52.4). Prevalence rates of current use seemed to have increased from 1999 to 2011 in Indiana; however, the difference was statistically not significant (see Figure 3.1) (Substance Abuse and Mental Health Services Administration, 2012).

Figure 3.1 Percentage of Indiana and U.S. Population (12 Years and Older) Reporting Current Alcohol Use (National Survey on Drug Use and Health, 1999–2011)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Indiana	44.4%	39.7%	41.6%	38.9%	46.6%	47.4%	49.9%	49.4%	50.1%	49.3%	48.0%	49.4%	51.0%
U.S.	46.4%	46.3%	47.6%	51.0%	50.5%	50.2%	51.1%	51.4%	51.0%	51.4%	51.8%	51.8%	51.8%
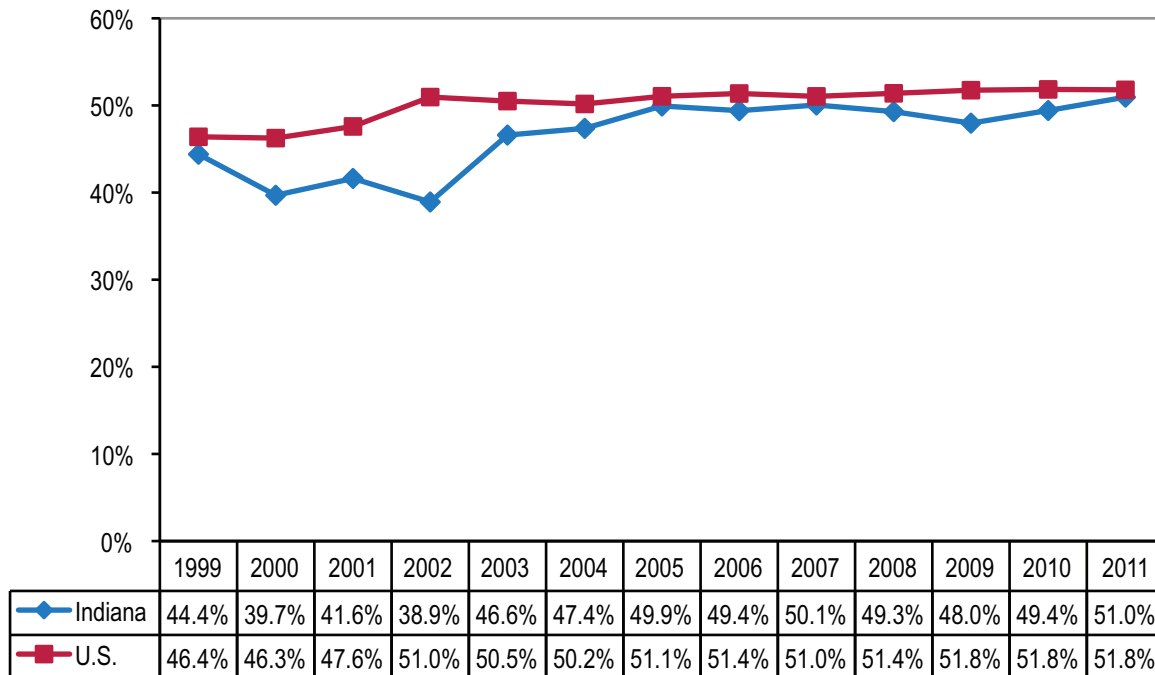
Source: Substance Abuse and Mental Health Services Administration, 2012

[1] Current alcohol use is defined as having used alcohol in the past 30 days or past month.

One risky alcohol consumption pattern assessed by the NSDUH is binge drinking. The NSDUH defines binge drinking as consumption of five or more alcoholic beverages on the same occasion (i.e., at the same time or within a couple of hours of each other) on at least one day in the past month. In 2011, 22.7% of the Indiana population 12 years of age or older reported binge drinking (95% CI: 20.4–25.2), similar to that of the national average of 22.9% (95% CI: 22.5–23.3) (see Figure 3.2) (Substance Abuse and Mental Health Services Administration, 2012).

Figure 3.2   Percentage of Indiana and U.S. Population (12 years and older) Reporting Binge Drinking in the Past 30 Days (National Survey on Drug Use and Health, 1999–2011)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Indiana	19.6%	18.6%	19.0%	24.2%	22.3%	21.7%	22.0%	21.1%	22.3%	23.0%	23.0%	22.6%	22.7%
U.S.	20.2%	20.0%	20.6%	22.9%	22.8%	22.7%	22.7%	22.8%	23.2%	23.3%	23.5%	23.4%	22.9%
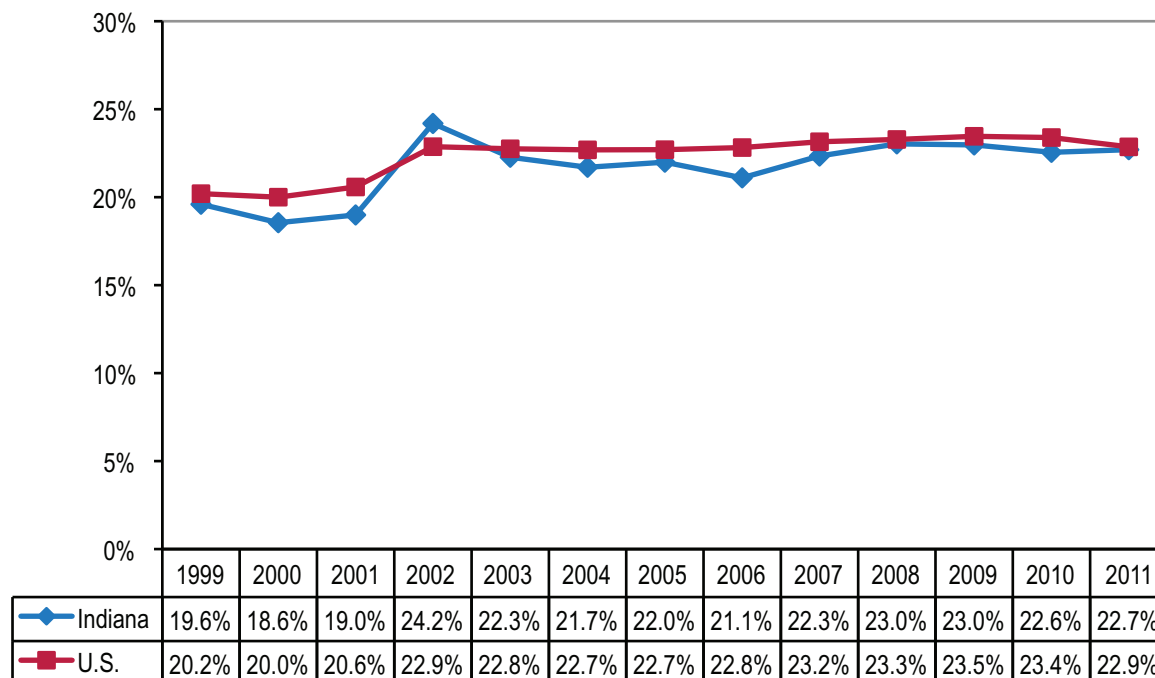
Source: Substance Abuse and Mental Health Services Administration, 2012

Adult Alcohol Consumption Patterns

According to 2010–2011 NSDUH results, 61.1% of Hoosiers (95% CI: 57.1–64.9) between the ages of 18 and 25 reported current alcohol use; the U.S. rate was similar at 61.0%. Past-month consumption of alcohol was significantly lower for adults 26 years and older; Indiana's rate (54.3%; 95% CI: 50.2–58.4) and the national rate (55.0%) were similar (Substance Abuse and Mental Health Services Administration, 2012).

Binge drinking was particularly widespread among young adults. The highest prevalence rate was found among 18- to 25-year-olds, with the Indiana rate (41.8%; 95% CI: 37.9–45.9) and U.S. rate (40.2%; 95% CI: 39.4–40.9) being statistically similar (see Figure 3.3). Among adults, binge drinking rates decreased with age; 21.4% (95% CI: 18.6–24.5) of Hoosiers ages 26 years and older reported having consumed five or more drinks on the same occasion during the last 30 days (U.S.: 21.8%, 95% CI: 21.3–22.3) (Substance Abuse and Mental Health Services Administration, 2012).

Figure 3.3 Percentage of Indiana and U.S. 18- to 25-Year-Olds Reporting Binge Drinking in the Past 30 Days (National Survey on Drug Use and Health, 1999–2011)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Indiana	37.6%	37.8%	33.7%	46.8%	45.1%	43.5%	42.0%	41.1%	41.5%	40.3%	40.8%	40.8%	41.8%
U.S.	37.8%	35.9%	38.1%	40.9%	41.3%	41.4%	41.5%	42.0%	42.0%	41.4%	41.4%	41.2%	40.2%
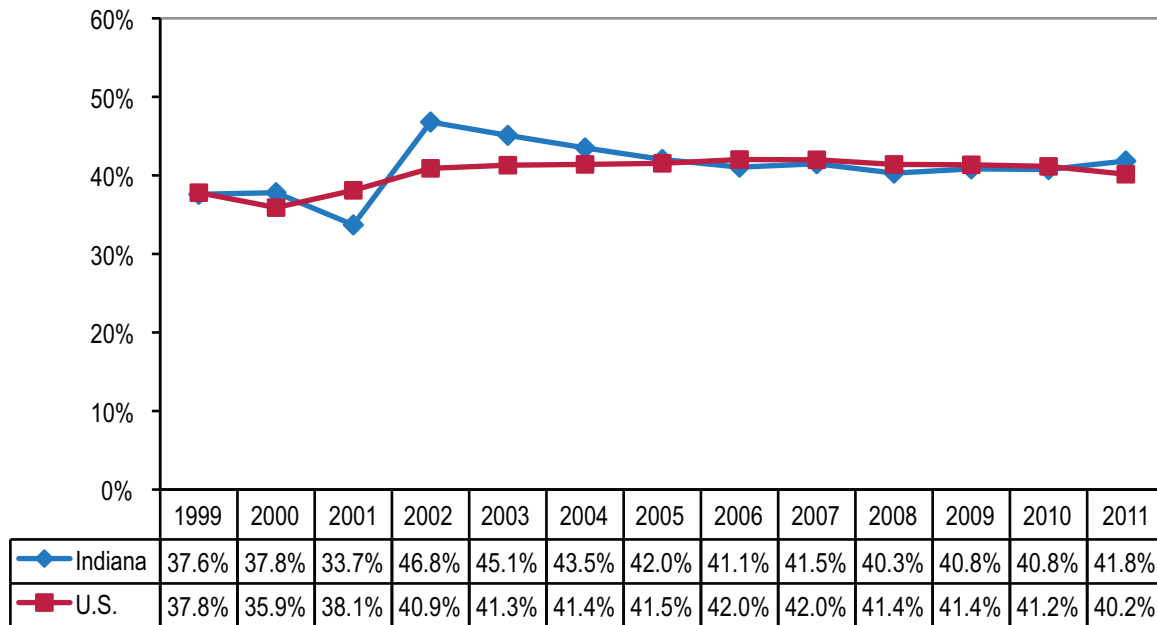
Source: Substance Abuse and Mental Health Services Administration, 2012

Table 3.1 Percentage of Indiana and U.S. Adults Having Used Alcohol in the Past 30 Days, by Gender, Race/Ethnicity, and Age Group (Behavioral Risk Factor Surveillance System, 2011)

		Indiana % (95% CI)	U.S. %
Gender	Male	58.0% (55.7-60.4)	63.3%
	Female	45.7% (43.7-47.6)	51.3%
Race/Ethnicity	White	51.9% (50.2-53.5)	59.9%
	Black	51.2% (45.1-57.2)	50.0%
	Hispanic	48.8% (39.9-57.7)	49.1%
Age Group	18-24	52.9% (46.8-58.9)	55.5%
	25-34	61.2% (57.1-65.3)	66.3%
	35-44	58.6% (54.9-62.4)	60.5%
	45-54	55.7% (52.5-58.9)	59.6%
	55-64	47.5% (44.6-50.4)	53.6%
	65+	33.9% (31.6-36.3)	42.3%
Total		**51.6% (50.1-53.2)**	**57.1%**

Source: Centers for Disease Control and Prevention, 2011

The 2011 Behavioral Risk Factor Surveillance System (BRFSS) reported that Indiana's adult prevalence rate for current alcohol use (51.6%; 95% CI: 50.1–53.2) was significantly lower than the nation's (57.1%). In Indiana, rates were significantly higher among males than females, and among younger age groups (see Table 3.1) (Centers for Disease Control and Prevention, 2011).

The BRFSS examines binge drinking as well, but its definition varies slightly from NSDUH's description and takes gender into account. The BRFSS defines binge drinking as "males having five or more drinks on one occasion and females having four or more drinks on one occasion." The overall prevalence rate for adult binge drinking based on this definition was comparable between Indiana (17.8%; 95% CI: 16.5–19.1) and the United States (18.3%). Binge alcohol use was significantly higher in males than females, and more prevalent in younger individuals; no statistical differences were observed by race/ethnicity (see Table 3.2). Binge drinking has remained stable from 2002 through 2010 (see Figure 3.4) (Centers for Disease Control and Prevention, 2011). However, due to changes the Centers for Disease Control and Prevention made to the BRFSS, 2011 survey data should not be compared to results from previous years. [For more detailed information, see Chapter 2 "Methods".]

Figure 3.4   Percentage of Indiana and U.S. Adults Reporting Binge Drinking in the Past 30 Days (Behavioral Risk Factor Surveillance System, 2002–2010)

	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	15.9%	15.1%	14.5%	14.3%	15.9%	15.6%	16.1%	14.2%	13.5%
U.S.	16.3%	16.5%	15.1%	14.4%	15.4%	15.8%	15.6%	15.8%	15.1%
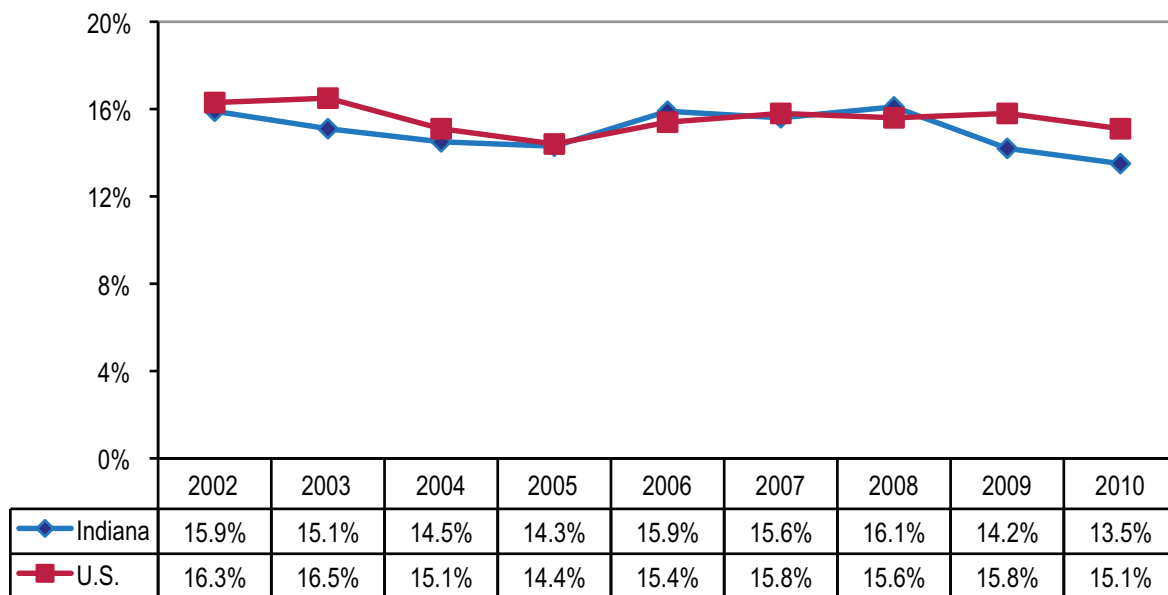
Source: Centers for Disease Control and Prevention, 2011

Additionally, the BRFSS collects information on a measure called heavy drinking. The BRFSS defines heavy drinking as "adult men having more than two drinks per day and adult women having more than one drink per day." Overall rates for heavy drinking were similar in Indiana (6.0%; 95% CI: 5.3–6.8) and the United States (6.6%) in 2011, with a higher prevalence among Hoosier men (8.5%; 95% CI: 7.1–9.9) than women (3.8%; 95% CI: 3.0–4.5) (Centers for Disease Control and Prevention, 2011).

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Table 3.2 Percentage of Indiana and U.S. Residents Who Engaged in Binge Drinking in the Past 30 Days, by Gender, Race/Ethnicity, and Age Group (Behavioral Risk Factor Surveillance System, 2011)

		Indiana % (95% CI)	U.S. %
Gender	Male	23.4% (21.3-25.6)	24.2%
	Female	12.5% (11.0-14.0)	12.6%
Race/Ethnicity	White	17.3% (16.0-18.7)	18.9%
	Black	18.0% (12.7-23.3)	15.4%
	Hispanic	23.4% (15.1-31.7)	21.3%
Age Group	18-24	27.4% (22.0-32.7)	29.2%
	25-34	27.2% (23.2-31.1)	30.3%
	35-44	22.1% (18.8-25.4)	21.3%
	45-54	17.4% (14.9-19.8)	17.0%
	55-64	11.5% (9.4-13.6)	10.3%
	65+	3.5% (2.6-4.3)	4.1%
Total		**17.8% (16.5-19.1)**	**18.3%**

Source: Centers for Disease Control and Prevention, 2011

Youth Alcohol Consumption Patterns

According to the Youth Risk Behavioral Surveillance System (YRBSS), 33.4% (95% CI: 30.2–36.9) of high school students in Indiana had consumed at least one alcoholic drink in the past 30 days in 2011; no significant differences were observed by gender or race/ethnicity. However, rates varied by grade level, with 9th grade students reporting the lowest rate. Past-month alcohol prevalence among high school students was lower for Indiana than the nation (38.7%: 95% CI: 37.2–40.3). Indiana's rate decreased from 2003 to 2011.

In 2011, 19.8% (95% CI: 17.0–22.9) of high school students in Indiana said they had had five or more alcoholic drinks within a couple of hours at least once in the past month. This was statistically similar to the U.S. rate (21.9%; 95% CI: 21.0–22.8). Rates did not differ significantly by gender, but by race. Whites (21.8%; 95% CI: 18.4–25.5) had significantly higher rates than blacks (7.6%; 95% CI: 4.3–13.1), but did not differ statistically from Hispanics (27.3%; 95% CI: 19.8–36.4). In addition, prevalence increased with grade level; more high school

seniors (28.5%; 95% CI: 21.8–36.4) engaged in binge drinking than freshmen (12.3%; 95% CI: 9.7–15.5). Indiana's rate decreased from 2003 until 2011 (Centers for Disease Control and Prevention, 1991-2011).

According to 2010–2011 NSDUH estimates, 11.6% (95% CI: 9.6–13.9) of young people ages 12 to 17 consumed alcohol in the past 30 days in Indiana; the rate was similar on the national level (13.5%; 95% CI: 13.0–13.9). Additionally, 6.6% (95% CI: 5.3–8.2) of Indiana youths in this age group engaged in binge drinking in the past month; the state's prevalence among 12- to 17-year-olds was similar to the nation's (7.6%; 95% CI: 7.3–8.0) (Substance Abuse and Mental Health Services Administration, 2012).

NSDUH also provides underage drinking prevalence estimates among 12- to 20-year-olds. Indiana's rates for current use (24.5%; 95% CI: 22.0–27.1) and binge drinking (16.4%; 95% CI: 14.5–18.5) were similar to U.S. rates of 25.6% (95% CI: 25.0–26.3) and 16.3% (95% CI: 15.8–16.9) respectively (Substance Abuse and Mental Health Services Administration, 2012).

In Indiana, over 65% of 12th grade students reported using alcohol at least once during their lifetime (U.S.: 70.0%) (Gassman, Jun, Samuel, Agley, Lee, Agley, Oi, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012). Overall alcohol consumption patterns seemed to progress with age; i.e., 8th grade students showed lower prevalence rates than 10th and 12th grade students. Indiana students initiated alcohol use, on average, at the age of 13.3 years (Gassman, et al., 2012).

For more detailed data on lifetime and monthly alcohol use among Indiana and U.S. 8th, 10th, and 12th grade students, see Figure 3.5; for trend information (from 2000 through 2012) on lifetime and monthly alcohol use among high school seniors, see Figure 3.6. For lifetime, monthly, and binge use by Indiana region and grade for 2012, see Appendix 3A, page 42.

Figure 3.5   Percentage of Indiana and U.S. 8th, 10th, and 12th Grade Students Reporting Lifetime and Monthly Alcohol Use (Alcohol, Tobacco, and other Drug Use by Indiana Children and Adolescents Survey and Monitoring the Future Survey, 2012)

	8th Grade Lifetime	8th Grade Monthly	10th Grade Lifetime	10th Grade Monthly	12th Grade Lifetime	12th Grade Monthly
Indiana	36.8%	16.5%	53.8%	27.4%	65.1%	37.6%
U.S.	29.5%	11.0%	54.0%	27.6%	69.4%	41.5%
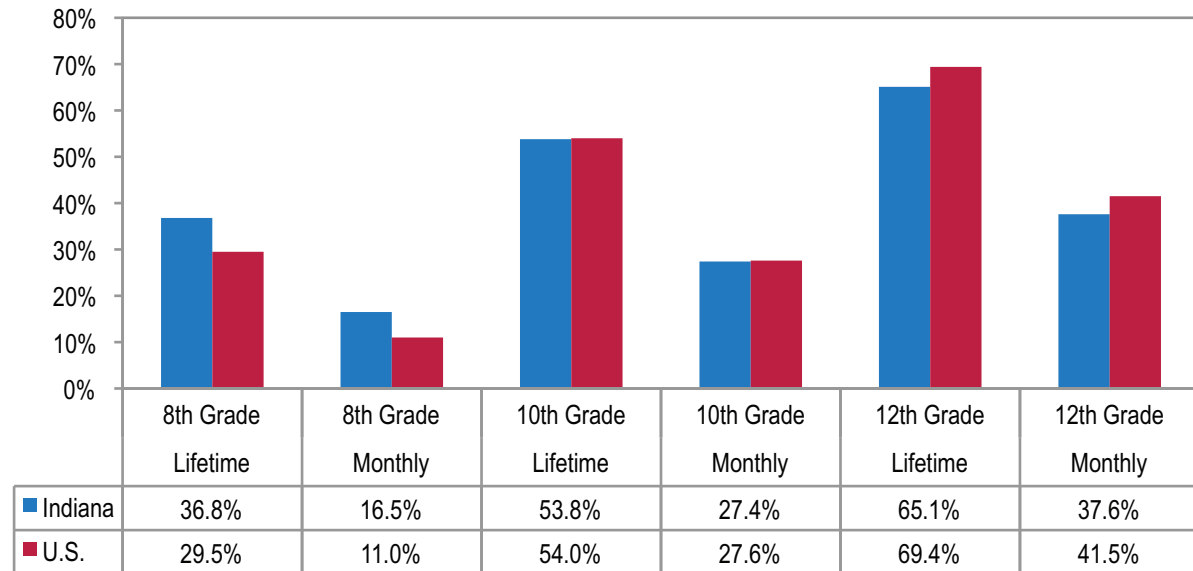
Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

Figure 3.6   Percentage of Indiana and U.S. High School Seniors (12th Grade) Reporting Monthly and Lifetime Alcohol Use (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2000-2012, and Monitoring the Future Survey, 2000–2012)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
IN Monthly Use	50.1%	49.9%	48.1%	46.1%	42.2%	41.8%	42.2%	39.7%	38.4%	35.7%	39.4%	37.8%	37.6%
U.S. Monthly Use	50.0%	49.8%	48.6%	47.5%	48.0%	47.0%	45.3%	44.4%	43.1%	43.5%	41.2%	40.0%	41.5%
IN Lifetime Use	75.9%	78.6%	77.3%	74.8%	72.4%	72.3%	70.2%	69.2%	68.5%	66.5%	67.8%	65.4%	65.1%
U.S. Lifetime Use	80.3%	79.7%	78.4%	76.6%	76.8%	75.1%	72.7%	72.2%	71.9%	72.3%	71.0%	70.0%	69.4%

Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

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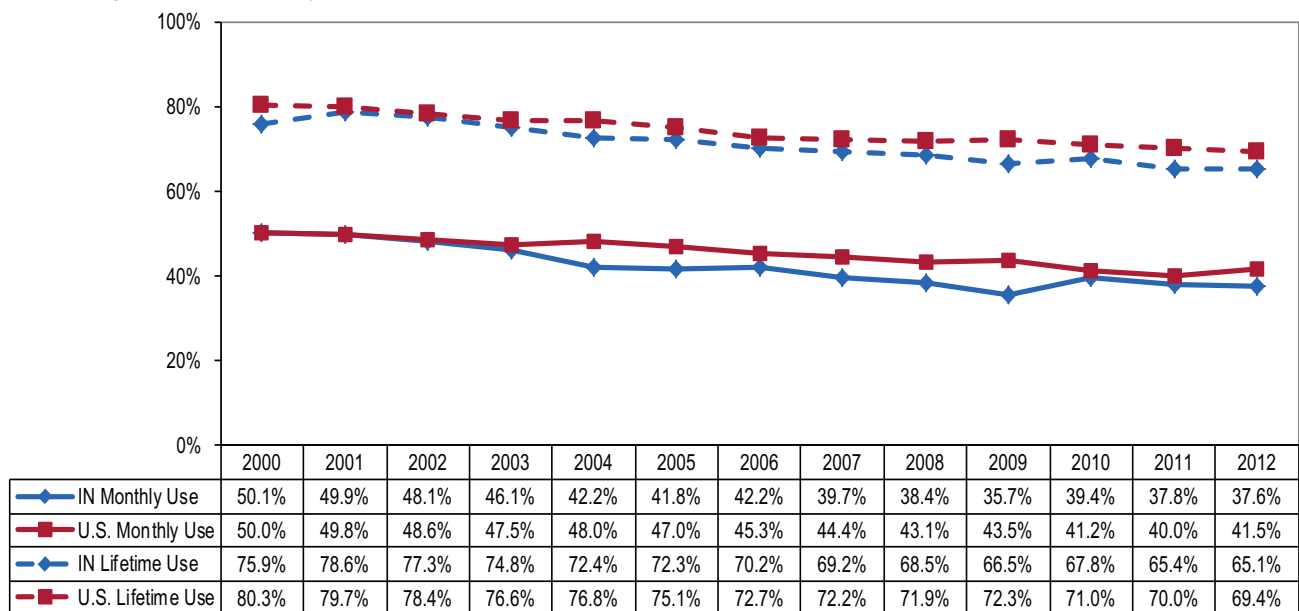
The Indiana College Substance Use Survey was developed to measure alcohol and other drug usage, attitudes, and perceptions among college students at two- and four-year institutions (Indiana Collegiate Action Network, 2012). According to 2012 results, 81.8% of students who responded to the survey reported past-year alcohol use and 67.1% reported past-month use; consumption rates were significantly lower for underage students (past-year use: 74.9%; past-month use: 58.7%) than those ages 21 and older (past-year use: 89.9%; past-month use: 76.9%). Similarly, past-month binge drinking prevalence, 55.1%, was significantly lower for underage students (49.7%) than those ages 21 and older (61.4%) (Indiana Collegiate Action Network, 2012).[2]

The Indiana Department of Education collects information on suspensions and expulsions of students from kindergarten through grade 12. During the 2007–2008 school year, a total of 6,023 students were suspended or expelled due to alcohol, drug, or weapon involvement. This represents a suspension/expulsion rate of 5.21 per 1,000 enrolled students (Indiana Department of Education, 2007-2008). (For county-level rates, see Map 3.1, page 49.)

CONSEQUENCES

Alcohol use is a major factor in homicides, suicides, violent crimes, and motor vehicle crashes. Heavy alcohol use can lead to serious patterns of abuse and/or dependence and is associated with other unsafe behaviors such as cigarette smoking, illicit drug use, and risky sex. Chronic alcohol use can lead to the development of cirrhosis and other serious liver diseases.

Alcohol Abuse and Dependence

Based on 2010–2011 NSDUH averages, the estimated prevalence for alcohol abuse and/or dependence[3] in the past year among those ages 12 and older was 6.9% (95% CI: 5.6–8.5) in Indiana, which was similar to the national estimate (6.8%; 95% CI: 6.6–7.0). Since at least 2000, Indiana's alcohol abuse/dependence prevalence estimates have been similar to U.S. rates (see Figure 3.7). Of all age groups, adults ages 18 to 25 reported the highest prevalence rates both in Indiana and nationally across all years reviewed. Additionally, an estimated 6.4% (95% CI: 5.2–7.9) were in need of but did not receive treatment for alcohol use in Indiana (U.S.: 6.5%; 95% CI: 6.2–6.7) (Substance Abuse and Mental Health Services Administration, 2012).

Figure 3.7   Percentage of Indiana and U.S. Population Ages 12 and Older with Alcohol Abuse and/or Dependence (National Survey on Drug Use and Health, 2000–2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Indiana	5.2%	5.0%	8.8%	7.9%	7.6%	7.9%	7.7%	6.7%	6.9%	7.0%	7.2%	6.9%
U.S.	5.5%	5.7%	7.7%	7.6%	7.5%	7.7%	7.7%	7.2%	7.4%	7.4%	7.3%	6.8%
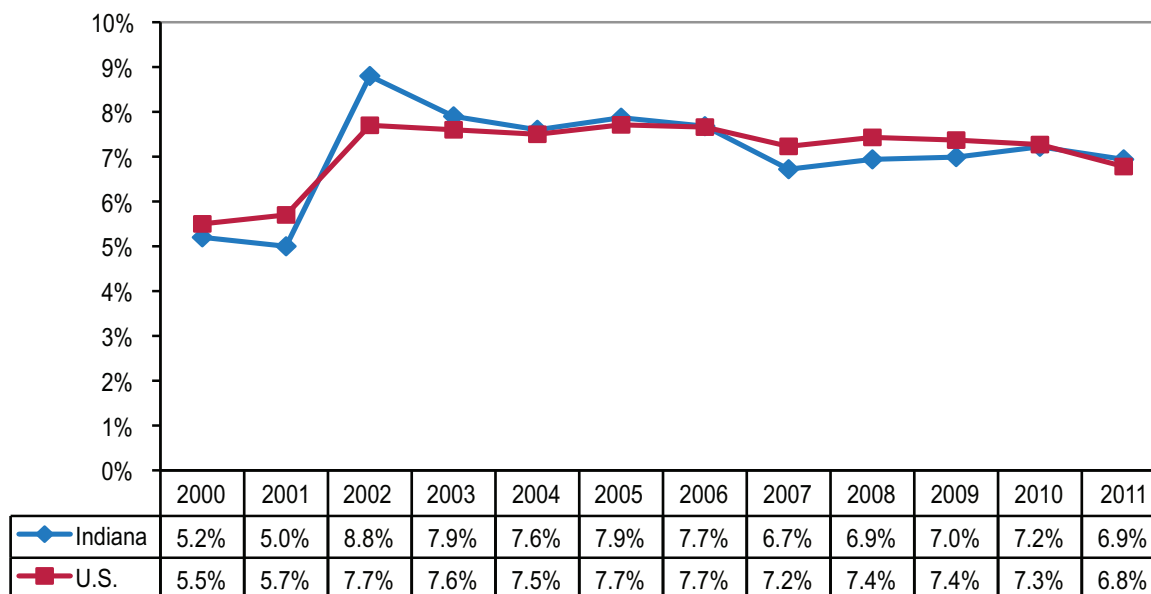
Source: Substance Abuse and Mental Health Services Administration, 2012

[2]Nine Indiana colleges participated in the survey; results are based on nonrandom sampling and are not representative of all college students in Indiana.
[3]The NSDUH uses the terms "dependence" and "abuse" based on definitions found in the 4th edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

Based on findings from the Treatment Episode Data Set (TEDS), alcohol plays a major role in admissions to substance abuse treatment. In over half (57.2%) of Indiana treatment episodes in 2010, alcohol use was reported (U.S.: 59.7%), and in more than one-third (37.6%), alcohol dependence[4] was indicated (U.S.: 40.9%). This is the first time in the past 11 years that the percentages of alcohol use within the treatment population were lower in Indiana than the United States (see Figure 3.8) (Substance Abuse and Mental Health Data Archive, 2010).

Factors significantly associated with alcohol abuse and dependence in Indiana included gender, race/ethnicity, and age (findings from the 2010 TEDS dataset):

Gender—Nearly 41 percent of males (40.7%) in substance abuse treatment listed alcohol as their primary substance, compared to 32.0% of females (P < 0.001).

Race/ethnicity—Over one-third of blacks (36.3%) reported alcohol as their primary substance; this percentage was below that for whites (37.8%) and other races (44.0%) (P < 0.01). With regard to ethnicity, a significantly higher percentage of Hispanics (45.3%) reported alcohol dependence than non-Hispanics (37.7%) (P < 0.001).

Age—In the treatment population, the percentage of Hoosiers with alcohol dependence increased with age; clients under the age of 18 had the lowest percentage (11.3%) and those ages 55 and older had the highest percentage (62.5%) (P < 0.001).

Table 3.3 depicts the percentage of Indiana residents, categorized by gender, race, ethnicity, and age group, in treatment for alcohol abuse and dependence.

See Appendix 3B, page 43, for county-level treatment data.

Figure 3.8 Percentage of Treatment Episodes in Indiana and the United States with Alcohol Dependence Reported at Treatment Admission (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	54.3%	54.4%	52.0%	51.1%	48.9%	47.0%	46.4%	48.1%	47.3%	44.2%	37.6%
U.S.	46.1%	45.6%	42.7%	41.3%	40.0%	39.0%	39.5%	40.2%	41.3%	41.7%	40.9%
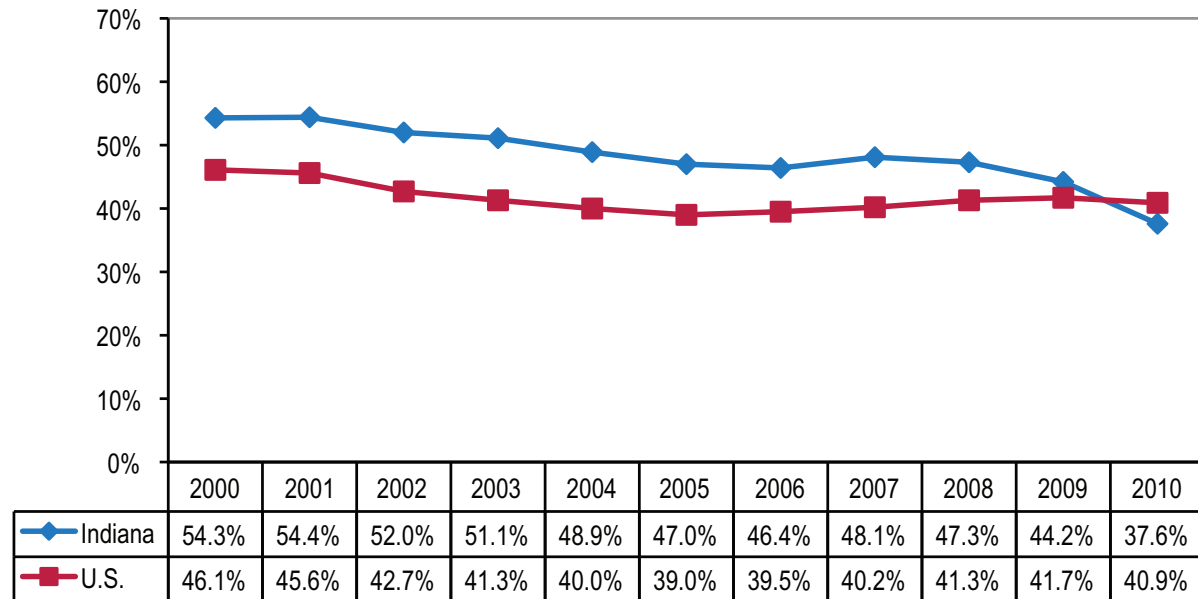
Source: Substance Abuse and Mental Health Data Archive, 2010

[4]We defined alcohol dependence as "individuals in substance abuse treatment listing alcohol as their primary substance at admission."

Table 3.3 Percentage of Treatment Episodes in Indiana with Alcohol Dependence Reported at Treatment Admission, by Gender, Race, Ethnicity, and Age Group (Treatment Episode Data Set, 2010)

		Alcohol Dependence
Gender	Male	40.7%
	Female	32.0%
Race	White	37.8%
	Black	36.3%
	Other	44.0%
Ethnicity	Hispanic	45.3%
	Non-Hispanic	37.7%
Age Group	Under 18	11.3%
	18-24	27.7%
	25-34	32.3%
	35-44	44.5%
	45-54	57.7%
	55 and over	62.5%
Total		**37.6%**

Source: Substance Abuse and Mental Health Data Archive, 2010

Alcohol-Related Morbidity and Mortality

Hospital discharge records show that in 2010, a total of 1,666 hospitalized patients were treated in Indiana for an alcohol-attributable primary diagnosis, representing one percent (1.0%) of all hospital discharges in the state (Indiana State Department of Health, 1999-2010).[5]

From 2000 through 2009, a total of 3,646 Hoosiers died from alcohol-induced causes.[6] The age-adjusted mortality rate for alcohol-attributable deaths has remained stable throughout this time period in Indiana and the United States. Indiana's age-adjusted rate was 5.4 per 100,000 (95% CI: 4.9–6.0) in 2009, which was significantly lower than the U.S. rate of 7.3 per 100,000 population (95% CI: 7.2–7.4) (see Figure 3.9) (Centers for Disease Control and Prevention, 2012). (For alcohol-attributable deaths by county, see Map 3.2, page 50.)

Figure 3.9 Age-Adjusted Alcohol-attributable Mortality Rates per 100,000 Population in Indiana and the United States (CDC WONDER, 2000–2009)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Indiana	5.8	5.1	5.3	5.3	5.2	4.9	5.0	4.6	5.4	5.4
U.S.	7.0	7.0	6.9	7.0	7.0	7.0	6.9	7.1	7.3	7.3
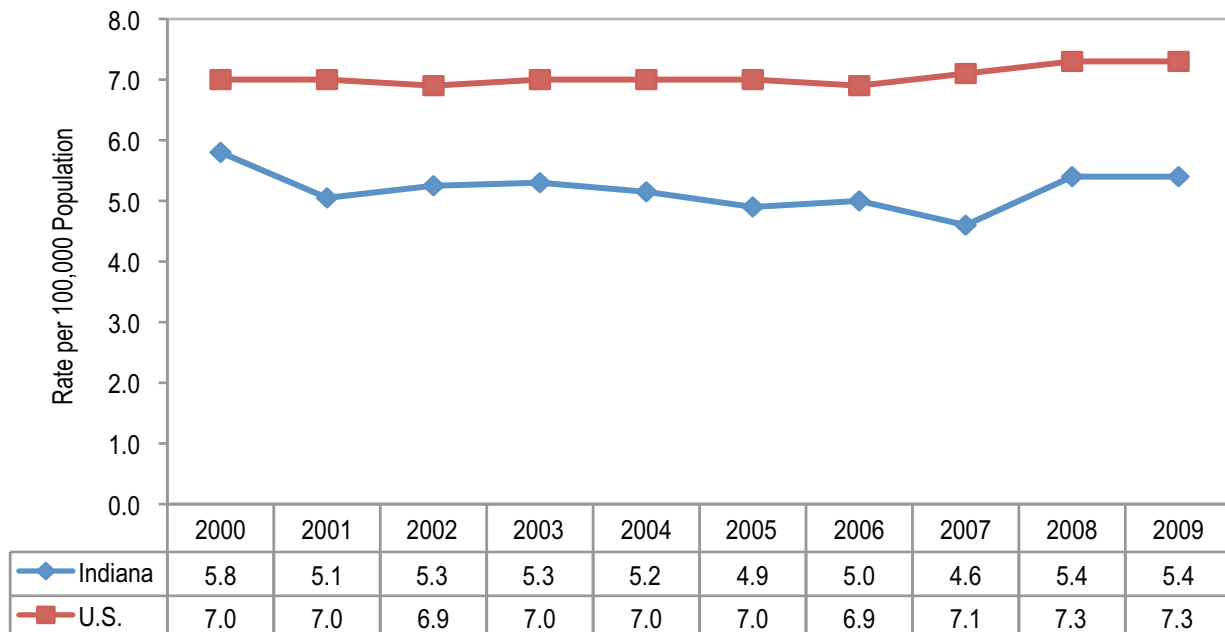
Source: Centers for Disease Control and Prevention, 2012

[5]For our analysis, we only included primary diagnoses that were 100% attributable to alcohol, as listed in CDC's Alcohol-Related Disease Impact (ARDI) database. These included ICD-9 codes 291, 303.0, 303.9, 305.0, 357.5, 425.5, 535.3, 571.0–571.3, 655.4, 760.71, 790.3, 980.0, 980.1, E860.0, E860.1, E860.2, E860.9 (Centers for Disease Control and Prevention, 2001-2005).
[6]Alcohol-induced causes of death include the following ICD-10 codes: E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K86.0, R78.0, X45, X65, Y15.

Though alcohol use is not associated with every suicide and homicide, these violent acts often involve individuals who have been drinking. According to the Alcohol-Related Disease Impact (ARDI) database, the direct alcohol-attributable fraction for suicides and homicides, both in Indiana and in the nation, is 23% and 47%, respectively. In other words, 23% of suicides and 47% of homicides can be attributed to alcohol consumption (Centers for Disease Control and Prevention, 2001-2005). (Appendix 3C, page 44, lists conditions that can be attributed to alcohol, along with their alcohol-attributable fractions.) For this reason, intentional self-harm (suicide)[7] and assault (homicide)[8] rates may provide additional information on alcohol's impact in a community.

From 2000 through 2009, a total of 8,199 Hoosiers committed suicide. Applying ARDI's alcohol-attributable fraction of 23%, this means that during these ten years 1,886 suicide deaths were attributable to alcohol. Indiana's age-adjusted mortality rate for suicide was 12.8 per 100,000 population (95% CI: 11.9–13.7) in 2009, a rate statistically similar to the U.S. rate of 11.8 per 100,000 population (95% CI: 11.6–11.9) (see Figure 3.10).

Additionally, rates were significantly higher for males (21.7 per 100,000 population; 95% CI: 20.0–23.3) than for females (4.5 per 100,000 population; 95% CI: 3.7–5.2). Rates were also significantly higher for whites (13.8 per 100,000 population; 95% CI: 12.8–14.7) than for blacks (3.8 per 100,000 population; 95% CI: 2.4–5.7) in Indiana (Centers for Disease Control and Prevention, 2012).

From 2000 through 2009, a total of 4,015 homicides were committed in Indiana. Applying ARDI's alcohol-attributable fraction of 47%, this means that 1,887 homicide deaths were attributable to alcohol during that time period. Indiana's age-adjusted homicide death rate was 5.4 per 100,000 population (95% CI: 4.8–6.0) in 2009, which was statistically similar to the U.S. rate of 5.4 per 100,000 population (95% CI: 5.3–5.5) (see Figure 3.10). In 2009, rates were significantly higher for Indiana males (8.1 per 100,000 population; 95% CI: 7.1–9.1) than for females (2.7 per 100,000 population; 95% CI: 2.1–3.3). Rates were also significantly higher for blacks (25.7 per 100,000 population; 95% CI: 21.8–29.7) than for whites (3.1 per 100,000 population; 95% CI: 2.6–3.5) (Centers for Disease Control and Prevention, 2012).

[7]Intentional self-harm (suicide) includes ICD-10 codes X60–X84.
[8]Assault (homicide) includes ICD-10 codes X85–Y09.

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Figure 3.10 Age-Adjusted Mortality Rates per 100,000 Population for Intentional Self-Harm (Suicide) and Assault (Homicide), Indiana and the United States (CDC WONDER, 2000–2009)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Suicide Indiana	11.3	11.7	12.1	12.0	11.3	11.9	12.9	12.4	12.6	12.8
Suicide U.S.	10.4	10.7	10.9	10.8	10.9	10.8	10.9	11.3	11.6	11.8
Homicide Indiana	5.9	7.1	6.2	5.6	5.3	5.8	5.9	5.8	5.1	5.4
Homicide U.S.	5.9	6.0	6.0	6.0	5.8	6.0	6.1	6.0	5.8	5.4
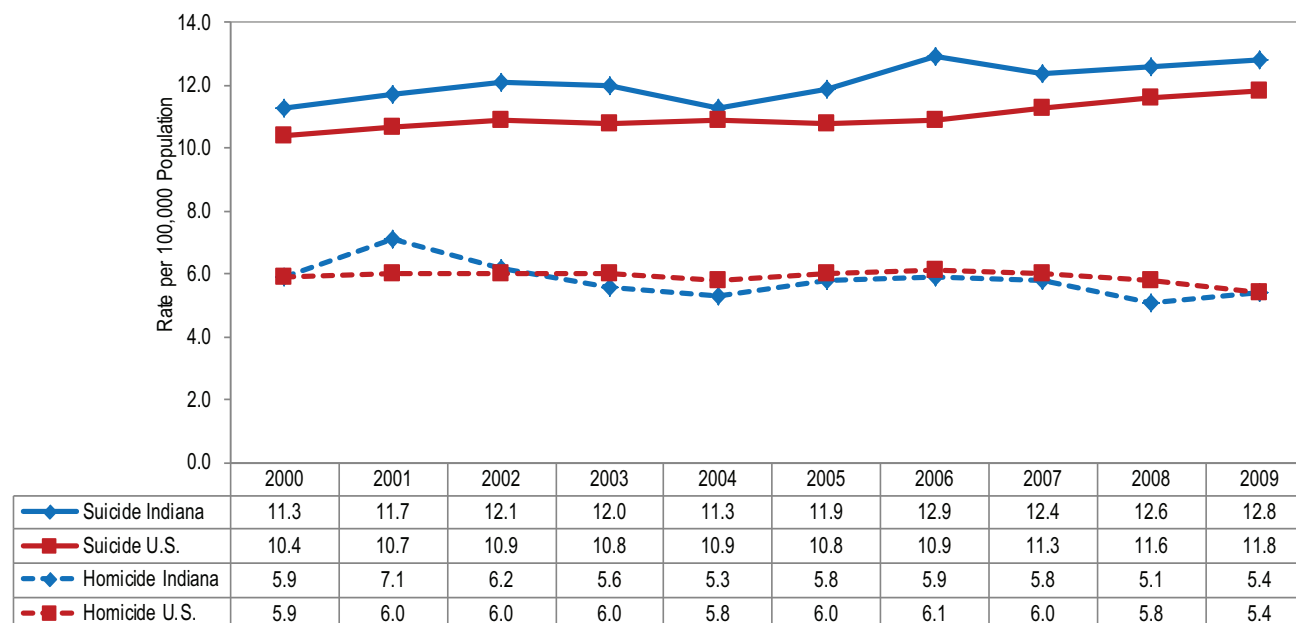
Source: Centers for Disease Control and Prevention, 2012

Alcohol consumption during pregnancy is another major concern since fetal alcohol spectrum disorders (FASD) are a direct result of prenatal exposure to alcohol. FASD is not a clinical diagnosis, but an umbrella term used to describe a range of disorders such as fetal alcohol syndrome, alcohol-related neurodevelopmental disorder, and alcohol-related birth defects. Possible physical effects include brain damage; facial anomalies; growth deficiencies; defects of heart, kidney, and liver; vision and hearing problems; skeletal defects; and dental abnormalities. In the United States, the prevalence of fetal alcohol spectrum disorders is 10.0 per 1,000 live births (Substance Abuse and Mental Health Services Administration, Fetal Alcohol Spectrum Disorders Center for Excellence, 2007).

The Indiana Birth Defects and Problems Registry collects information on birth defects and birth problems for all children in Indiana from birth to 3 years old (5 years old for autism and fetal alcohol syndrome). State law requires doctors, hospitals, and other healthcare providers to submit a report to the registry at the Indiana State Department of Health when a child is born with a birth defect. From 2004 through 2008, 181children were born with fetal alcohol syndrome,[9] he most severe form of FASD, in Indiana (Indiana State Department of Health, 2011).

[9]The ICD-9 code for fetal alcohol syndrome is 760.71.

Alcohol-Related Motor Vehicle Accidents

According to the Fatality Analysis Reporting System (FARS), a total of 701 fatal crashes occurred in Indiana in 2010, of which 186 (or 27%) were alcohol-related (U.S.: 9,337 alcohol-related crashes; 31%) (National Highway Traffic Safety Administration, 2010). Even though most fatal collisions happened in the afternoon between 3:00 and 5:59 p.m., the highest percentage of crashes attributable to alcohol-impaired driving[10] occurred at nighttime, especially between midnight and early morning hours (see Table 3.4).

Data from the Automated Reporting Information Exchange System (ARIES), part of the Indiana State Police's Vehicle Crash Records System, showed a decrease in alcohol-related collisions from 13,911 in 2003 to 8,355 in 2011. This represents a 40% drop. The number of fatal crashes with alcohol involvement also decreased from 242 to 185. (For a detailed listing of alcohol-related collisions and fatalities in Indiana by county for 2011, see Appendix 3D, pages 44-46). The overall rate for alcohol-related collisions in Indiana in 2011 was 1.3 per 1,000 population (Indiana State Police, 2012).

Table 3.4   Number of Fatal Crashes and Percent Alcohol-Related in Indiana, by Time of Day and Crash Type (Fatality Analysis Reporting System, 2010)

Time of Crash	Single Vehicle			Multiple Vehicle			All Crashes		
	Number	Alcohol-impaired driving	Percent Alcohol-impaired driving	Number	Alcohol-impaired driving	Percent Alcohol-impaired driving	Number	Alcohol-impaired driving	Percent Alcohol-impaired driving
Midnight to 2:59 a.m.	63	43	68%	7	3	46%	70	46	65%
3 a.m. to 5:59 a.m.	44	30	69%	16	4	27%	60	35	58%
6 a.m. to 8:59 a.m.	35	6	16%	48	3	6%	83	9	10%
9 a.m. to 11:59 a.m.	28	3	10%	41	2	5%	69	5	7%
Noon to 2:59 p.m.	35	4	12%	61	6	10%	96	10	11%
3 p.m. to 5:59 p.m.	53	6	10%	84	9	11%	137	15	11%
6 p.m. to 8:59 p.m.	45	16	36%	44	10	23%	89	27	30%
9 p.m. to 11:59 p.m.	61	26	43%	36	15	40%	97	41	42%
Total	**364**	**134**	**37%**	**337**	**53**	**16%**	**701**	**186**	**27%**

Note: National Highway Traffic Safety Administration estimates alcohol involvement when alcohol test results are unknown.
Source: National Highway Traffic Safety Administration, 2010

[10]Alcohol-impaired driving means that at least one driver or motorcycle rider had a blood alcohol content (BAC) of .08 or higher.

Alcohol-Related Crimes

Using the Uniform Crime Reporting Program (UCR) dataset, we compared alcohol-related offenses, including arrests for driving under the influence (DUI), public intoxication, and liquor law violations, between Indiana and the United States (National Archive of Criminal Justice Data, Interuniversity Consortium for Political and Social Research, University of Michigan, 2010). In 2010, a total of 27,112 DUI arrests were made in Indiana. The arrest rate was statistically higher among Hoosiers, at 4.2 per 1,000 population (95% CI: 4.1–4.2), than among U.S. residents, at 3.9 per 1,000 population (95% CI: 3.9–3.9). Close to 20,000 Hoosiers were arrested for public intoxication; the arrest rate was twice as high for Indiana, at 3.0 per 1,000 population (95% CI: 3.0–3.1), as for the nation, at 1.5 per 1,000 population (95% CI: 1.5–1.5). Additionally, more than 14,000 arrests occurred for liquor law violations in Indiana, representing an arrest rate of 2.2 per 1,000 population (95% CI: 2.1–2.2), which was significantly higher than the U.S. rate of 1.4 per 1,000 population (95% CI: 1.4–1.4) (see Figures 3.11–3.14).

Arrests for alcohol-related crimes varied among Indiana counties. These county differences are presented in Maps 3.3 through 3.5 (pages 51-53) and Appendix 3E (pages 47-48).

Figure 3.11 Number of Arrests for Driving Under the Influence (DUI), Public Intoxication, and Liquor Law Violations in Indiana (Uniform Crime Reporting Program, 1999–2010)
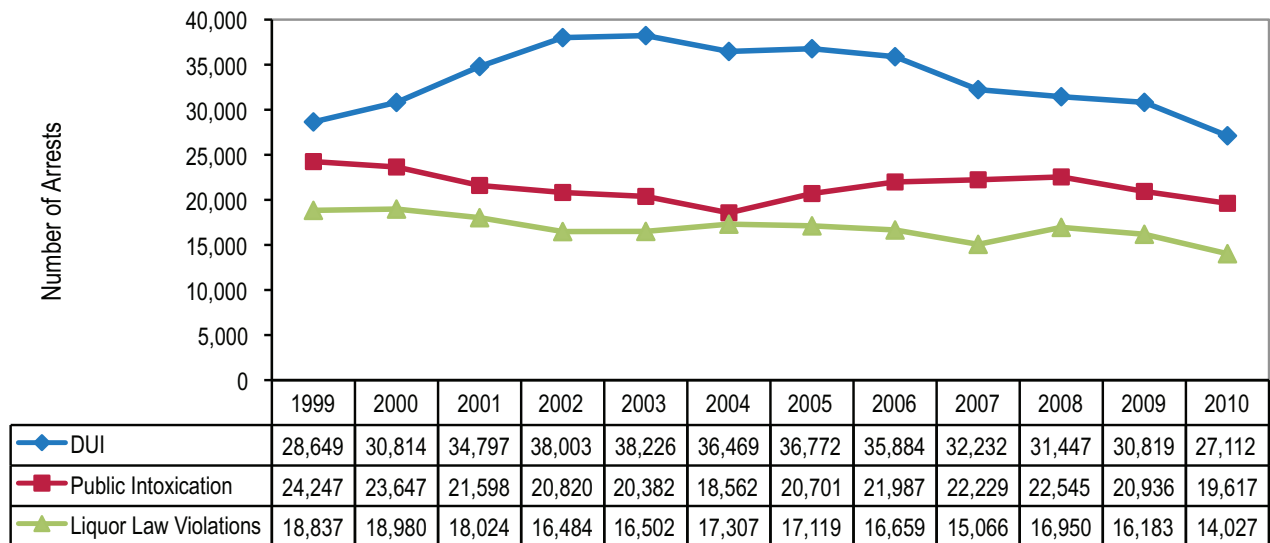
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
DUI	28,649	30,814	34,797	38,003	38,226	36,469	36,772	35,884	32,232	31,447	30,819	27,112
Public Intoxication	24,247	23,647	21,598	20,820	20,382	18,562	20,701	21,987	22,229	22,545	20,936	19,617
Liquor Law Violations	18,837	18,980	18,024	16,484	16,502	17,307	17,119	16,659	15,066	16,950	16,183	14,027

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Figure 3.12 Arrest Rates, per 1,000 Population, for Driving Under the Influence (DUI) in Indiana and the United States (Uniform Crime Reporting Program, 1999–2010)
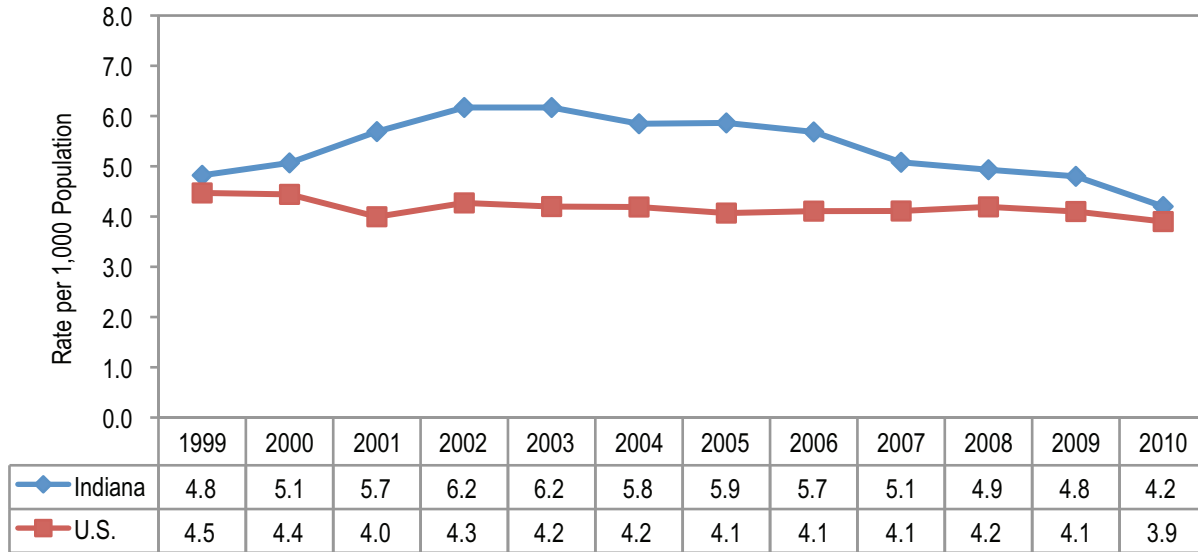
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	4.8	5.1	5.7	6.2	6.2	5.8	5.9	5.7	5.1	4.9	4.8	4.2
U.S.	4.5	4.4	4.0	4.3	4.2	4.2	4.1	4.1	4.1	4.2	4.1	3.9

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Figure 3.13 Arrest Rates, per 1,000 Population, for Public Intoxication in Indiana and the United States (Uniform Crime Reporting Program, 1999–2010)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	4.1	3.9	3.5	3.4	3.3	3.0	3.3	3.5	3.5	3.5	3.2	3.0
U.S.	2.1	1.9	1.8	1.7	1.6	1.7	1.6	1.6	1.7	1.7	1.6	1.5

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Indiana University Center for Health Policy

Figure 3.14 Arrest Rates, per 1,000 Population, for Liquor Law Violation in Indiana and the United States (Uniform Crime Reporting Program, 1999–2010)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	3.2	3.1	2.9	2.7	2.7	2.8	2.7	2.6	2.4	2.7	2.5	2.2
U.S.	2.5	2.6	2.4	2.1	1.9	1.8	1.8	1.9	1.8	1.8	1.6	1.4

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

APPENDIX 3A

Percentage of Indiana Students Reporting Lifetime, Monthly, and Binge Alcohol Use, by Region and Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2012)

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	15.8	14.8	16.4	11.9	17.9	17.0	15.3	13.3	16.9
	Monthly	4.7	4.4	4.9	4.5	5.3	4.9	5.4	3.6	5.4
	Binge	5.5	5.3	6.0	5.0	5.8	7.0	5.6	3.8	5.2
7th Grade	Lifetime	24.0	25.8	25.6	16.6	21.6	21.9	22.7	25.6	26.3
	Monthly	8.8	10.1	9.2	5.9	7.9	7.4	8.7	9.4	9.6
	Binge	7.6	9.2	9.0	5.9	5.2	6.6	7.0	7.1	8.7
8th Grade	Lifetime	36.8	38.4	38.6	33.7	36.4	33.5	40.6	32.8	40.9
	Monthly	16.5	17.4	17.0	14.5	14.8	14.7	19.2	15.2	19.1
	Binge	11.2	11.3	12.2	9.2	9.9	10.0	13.0	9.6	13.7
9th Grade	Lifetime	44.7	48.2	42.9	40.5	42.1	42.3	47.9	43.3	50.4
	Monthly	22.4	25.1	21.1	18.2	20.3	20.3	25.1	23.4	25.9
	Binge	14.2	16.1	13.2	12.7	12.5	13.2	15.8	14.5	16.2
10th Grade	Lifetime	53.8	56.0	52.6	47.7	52.7	52.1	54.2	51.5	60.5
	Monthly	27.4	29.3	27.2	24.0	24.9	25.5	26.3	28.2	31.5
	Binge	18.0	19.6	17.5	16.7	16.4	16.4	17.6	18.3	20.8
11th Grade	Lifetime	58.1	61.9	51.7	52.2	54.0	58.7	60.7	57.3	64.6
	Monthly	31.1	34.1	26.2	27.1	27.5	30.1	32.3	31.4	37.1
	Binge	20.5	22.0	15.7	19.7	17.3	20.3	21.6	21.2	25.0
12th Grade	Lifetime	65.1	68.8	64.4	61.6	63.1	60.3	62.5	65.6	69.2
	Monthly	37.6	41.1	35.0	34.3	34.0	33.0	33.8	41.4	41.3
	Binge	26.0	29.3	24.5	23.0	21.9	21.4	24.1	30.2	28.3

Source: Gassman, et al., 2012

APPENDIX 3B

Number of Treatment Episodes with Alcohol Use and Dependence Reported at Treatment Admission in Indiana, by County (Substance Abuse Population by County/Treatment Episode Data Set, 2012)

County	Treatment Episodes Total	Alcohol Use Number	%	Alcohol Dependence Number	%	County	Treatment Episodes Total	Alcohol Use Number	%	Alcohol Dependence Number	%
Adams	138	104	75.4%	86	62.3%	Madison	804	550	68.4%	343	42.7%
Allen	1,822	1,164	63.9%	737	40.5%	Marion	4,091	2,161	52.8%	1,404	34.3%
Bartholomew	661	310	46.9%	196	29.7%	Marshall	236	32	13.6%	23	9.7%
Benton	41	34	82.9%	20	48.8%	Martin	47	29	61.7%	17	36.2%
Blackford	51	27	52.9%	22	43.1%	Miami	241	161	66.8%	108	44.8%
Boone	199	128	64.3%	82	41.2%	Monroe	1,505	848	56.3%	680	45.2%
Brown	116	67	57.8%	53	45.7%	Montgomery	357	193	54.1%	114	31.9%
Carroll	123	83	67.5%	63	51.2%	Morgan	540	221	40.9%	173	32.0%
Cass	273	214	78.4%	162	59.3%	Newton	44	20	45.5%	12	27.3%
Clark	418	212	50.7%	151	36.1%	Noble	418	130	31.1%	87	20.8%
Clay	173	117	67.6%	81	46.8%	Ohio	38	25	65.8%	20	52.6%
Clinton	146	101	69.2%	75	51.4%	Orange	105	56	53.3%	40	38.1%
Crawford	57	32	56.1%	27	47.4%	Owen	265	131	49.4%	103	38.9%
Daviess	188	113	60.1%	87	46.3%	Parke	135	103	76.3%	72	53.3%
Dearborn	450	263	58.4%	160	35.6%	Perry	148	125	84.5%	70	47.3%
Decatur	193	124	64.2%	107	55.4%	Pike	51	38	74.5%	23	45.1%
DeKalb	205	139	67.8%	111	54.1%	Porter	713	381	53.4%	237	33.2%
Delaware	1,168	624	53.4%	472	40.4%	Posey	118	89	75.4%	55	46.6%
Dubois	358	278	77.7%	194	54.2%	Pulaski	104	77	74.0%	57	54.8%
Elkhart	1,040	700	67.3%	497	47.8%	Putnam	215	112	52.1%	71	33.0%
Fayette	219	106	48.4%	88	40.2%	Randolph	188	104	55.3%	87	46.3%
Floyd	182	79	43.4%	53	29.1%	Ripley	189	116	61.4%	90	47.6%
Fountain	81	42	51.9%	24	29.6%	Rush	137	93	67.9%	64	46.7%
Franklin	91	44	48.4%	27	29.7%	Saint Joseph	1,293	804	62.2%	540	41.8%
Fulton	215	159	74.0%	103	47.9%	Scott	189	93	49.2%	55	29.1%
Gibson	204	137	67.2%	89	43.6%	Shelby	78	50	64.1%	37	47.4%
Grant	448	318	71.0%	192	42.9%	Spencer	195	157	80.5%	97	49.7%
Greene	176	99	56.3%	64	36.4%	Starke	203	87	42.9%	48	23.6%
Hamilton	699	540	77.3%	353	50.5%	Steuben	194	132	68.0%	96	49.5%
Hancock	147	102	69.4%	65	44.2%	Sullivan	102	61	59.8%	31	30.4%
Harrison	119	46	38.7%	39	32.8%	Switzerland	41	26	63.4%	21	51.2%
Hendricks	328	169	51.5%	135	41.2%	Tippecanoe	469	326	69.5%	193	41.2%
Henry	305	129	42.3%	85	27.9%	Tipton	59	36	61.0%	22	37.3%
Howard	588	336	57.1%	214	36.4%	Union	33	21	63.6%	13	39.4%
Huntington	147	28	19.0%	18	12.2%	Vanderburgh	1,367	906	66.3%	543	39.7%
Jackson	271	123	45.4%	86	31.7%	Vermillion	130	94	72.3%	73	56.2%
Jasper	94	48	51.1%	29	30.9%	Vigo	759	428	56.4%	252	33.2%
Jay	126	67	53.2%	50	39.7%	Wabash	183	25	13.7%	15	8.2%
Jefferson	292	164	56.2%	117	40.1%	Warren	29	22	75.9%	12	41.4%
Jennings	204	102	50.0%	68	33.3%	Warrick	278	198	71.2%	114	41.0%
Johnson	207	104	50.2%	68	32.9%	Washington	68	34	50.0%	29	42.6%
Knox	442	289	65.4%	186	42.1%	Wayne	594	362	60.9%	253	42.6%
Kosciusko	314	41	13.1%	28	8.9%	Wells	122	89	73.0%	60	49.2%
LaGrange	172	131	76.2%	71	41.3%	White	148	113	76.4%	76	51.4%
Lake	2,803	1,756	62.6%	1,338	47.7%	Whitley	124	15	12.1%	8	6.5%
LaPorte	637	369	57.9%	266	41.8%	County Info Missing	198	110	55.6%	76	38.4%
Lawrence	432	196	45.4%	159	36.8%	**Indiana**	**35,308**	**20,542**	**58.2%**	**14,012**	**39.7%**

Note: We defined alcohol dependence as "individuals in substance abuse treatment listing alcohol as their primary substance at admission."
We calculated the percentages by dividing the number of reported alcohol use/dependence by the number of treatment episodes.
Source: Indiana Family and Social Services Administration, 2013

APPENDIX 3C

Conditions that are Directly Attributable to Alcohol in Indiana (Alcohol-Related Disease Impact, Based on Averages from 2001–2005)

Condition	Percentage Directly Attributable to Alcohol	Condition	Percentage Directly Attributable to Alcohol
Alcohol abuse/dependence	100%	Chronic pancreatitis	84%
Alcohol cardiomyopathy	100%	Gastroesophageal hemorrhage	47%
Alcohol polyneuropathy	100%	Homicide	47%
Alcohol-induced chronic pancreatitis	100%	Fire Injuries	42%
Alcoholic gastritis	100%	Hypothermia	42%
Alcoholic liver disease	100%	Esophageal varices	40%
Alcoholic myopathy	100%	Liver cirrhosis, unspecified	40%
Alcoholic psychosis	100%	Portal hypertension	40%
Degeneration of nervous system due to alcohol	100%	Drowning	34%
Fetal alcohol syndrome/Fetus and newborn affected by maternal alcohol use	100%	Fall injuries	32%
		Poisoning (not alcohol)	29%
Alcohol poisoning	100%	Acute pancreatitis	24%
Excessive blood alcohol level	100%	Suicide	23%
Suicide by and exposure to alcohol	100%		

Source: Centers for Disease Control and Prevention, 2001-2005

APPENDIX 3D

Alcohol-Related Collisions and Fatalities in Indiana, by County (Automated Reporting Information Exchange System, 2011)

County	All Collisions			Fatal Collisions		
	Total Collisions	Alcohol-related Collisions	Alcohol-related Collision Rate	Total Fatal Collision	Alcohol-related Fatal Collisions	Alcohol-related Fatal Collision Rate
Adams	652	22	0.64	5	2	*0.06
Allen	11,382	546	1.52	21	9	*0.03
Bartholomew	2,083	87	1.12	6	2	*0.03
Benton	128	6	*0.68	1	0	*0.00
Blackford	292	11	*0.87	3	0	*0.00
Boone	1,732	48	0.84	9	1	*0.02
Brown	437	27	1.79	3	0	*0.00
Carroll	510	26	1.30	3	1	*0.05
Cass	1,187	55	1.42	7	2	*0.05
Clark	4,519	175	1.57	13	5	*0.04
Clay	829	40	1.49	1	0	*0.00
Clinton	1,143	53	1.60	5	1	*0.03
Crawford	258	11	*1.03	2	0	*0.00
Daviess	344	27	0.84	4	1	*0.03
Dearborn	1,899	76	1.52	7	1	*0.02
Decatur	765	39	1.50	2	1	*0.04
DeKalb	1,210	49	1.15	7	3	*0.07
Delaware	4,058	183	1.56	15	6	*0.05
Dubois	1,004	57	1.35	3	0	*0.00
Elkhart	5,962	205	1.03	23	9	*0.05
Fayette	461	27	1.11	3	0	*0.00
Floyd	2,516	137	1.83	7	3	*0.04
Fountain	382	21	1.22	1	0	*0.00

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County	All Collisions			Fatal Collisions		
	Total Collisions	Alcohol-related Collisions	Alcohol-related Collision Rate	Total Fatal Collision	Alcohol-related Fatal Collisions	Alcohol-related Fatal Collision Rate
Franklin	522	38	1.65	5	2	*0.09
Fulton	559	25	1.20	2	1	*0.05
Gibson	1,073	40	1.19	4	0	*0.00
Grant	2,236	59	0.85	9	2	*0.03
Greene	871	40	1.22	6	2	*0.06
Hamilton	6,594	260	0.92	14	7	*0.02
Hancock	1,442	76	1.08	4	1	*0.01
Harrison	1,141	45	1.14	11	5	*0.13
Hendricks	3,629	161	1.09	10	2	*0.01
Henry	1,029	38	0.77	11	0	*0.00
Howard	2,380	70	0.85	7	1	*0.01
Huntington	1,121	32	0.86	4	0	*0.00
Jackson	1,402	50	1.16	13	3	*0.07
Jasper	1,162	44	1.32	6	2	*0.06
Jay	688	13	*0.61	4	1	*0.05
Jefferson	896	51	1.58	5	3	*0.09
Jennings	832	34	1.21	4	0	*0.00
Johnson	2,860	119	0.84	5	0	*0.00
Knox	1,033	67	1.74	5	0	*0.00
Kosciusko	2,462	99	1.28	10	3	*0.04
LaGrange	809	36	0.96	4	1	*0.03
Lake	16,113	889	1.79	39	14	*0.03
LaPorte	3,166	185	1.66	20	10	*0.09
Lawrence	1,373	71	1.54	14	3	*0.06
Madison	3,662	170	1.30	9	1	*0.01
Marion	27,426	1,098	1.20	79	17	*0.02
Marshall	1,404	46	0.98	3	0	*0.00
Martin	236	14	*1.36	0	0	*0.00
Miami	1,011	53	1.45	7	1	*0.03
Monroe	3,915	185	1.32	10	2	*0.01
Montgomery	1,006	44	1.14	5	1	*0.03
Morgan	1,487	68	0.98	7	1	*0.01
Newton	352	16	*1.13	4	0	*0.00
Noble	1,238	53	1.11	9	2	*0.04
Ohio	200	3	*0.49	0	0	*0.00
Orange	607	27	1.35	3	0	*0.00
Owen	561	39	1.81	4	1	*0.05
Parke	554	28	1.62	2	2	*0.12
Perry	433	23	1.19	1	0	*0.00
Pike	193	13	*1.02	2	1	*0.08
Porter	4,584	235	1.42	15	3	*0.02
Posey	502	28	1.09	3	1	*0.04
Pulaski	408	20	1.50	2	1	*0.07
Putnam	767	35	0.92	3	0	*0.00
Randolph	424	19	*0.73	4	1	*0.04
Ripley	689	30	1.04	5	0	*0.00
Rush	317	22	1.27	5	0	*0.00
Saint Joseph	6,683	308	1.15	19	9	*0.03
Scott	590	19	*0.79	2	0	*0.00
Shelby	1,108	56	1.26	9	3	*0.07

County	All Collisions			Fatal Collisions		
	Total Collisions	Alcohol-related Collisions	Alcohol-related Collision Rate	Total Fatal Collision	Alcohol-related Fatal Collisions	Alcohol-related Fatal Collision Rate
Spencer	622	33	1.57	5	1	*0.05
Starke	647	29	1.25	6	1	*0.04
Steuben	1,471	56	1.65	3	1	*0.03
Sullivan	404	27	1.26	3	1	*0.05
Switzerland	197	9	*0.85	2	1	*0.09
Tippecanoe	7,109	292	1.67	14	8	*0.05
Tipton	341	13	*0.82	1	0	*0.00
Union	166	8	*1.06	1	1	*0.13
Vanderburgh	6,306	274	1.52	14	2	*0.01
Vermillion	262	15	*0.92	1	1	*0.06
Vigo	3,081	166	1.53	14	3	*0.03
Wabash	997	27	0.83	3	1	*0.03
Warren	260	13	*1.54	5	0	*0.00
Warrick	1,439	52	0.86	3	1	*0.02
Washington	704	46	1.63	5	1	*0.04
Wayne	2,337	86	1.25	8	1	*0.01
Wells	632	25	0.90	2	2	*0.07
White	856	30	1.21	3	1	*0.04
Whitley	796	32	0.96	2	1	*0.03
Indiana	**188,132**	**8,355**	**1.28**	**674**	**185**	**0.03**

* Rates that are based on numbers lower than 20 are unreliable.
Source: Indiana State Police, 2012

APPENDIX 3E

Number and Rate, per 1,000 Population, of Arrests for Driving Under the Influence (DUI), Public Intoxication, and Liquor Law Violations in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Number of Arrests for DUI	DUI Arrest Rate	Number of Arrests for Public Intoxication	Public Intoxication Arrest Rate	Number of Arrests for Liquor Law Violations	Liquor Law Violation Arrest Rate
Adams	103	3.0	26	0.8	77	2.2
Allen	1,847	5.2	757	2.1	242	0.7
Bartholomew	397	5.2	247	3.2	206	2.7
Benton	24	2.7	6	*0.7	11	*1.2
Blackford	55	4.4	33	2.6	15	*1.2
Boone	251	4.4	98	1.7	161	2.8
Brown	33	2.2	5	*0.3	28	1.8
Carroll	94	4.7	39	1.9	44	2.2
Cass	168	4.3	210	5.4	136	3.5
Clark	1,418	12.9	488	4.4	229	2.1
Clay	90	3.3	58	2.2	50	1.9
Clinton	105	3.2	33	1.0	128	3.9
Crawford	70	6.5	23	2.1	7	*0.7
Daviess	116	3.7	63	2.0	54	1.7
Dearborn	225	4.5	118	2.4	66	1.3
Decatur	65	2.5	59	2.3	91	3.5
DeKalb	126	3.0	111	2.6	76	1.8
Delaware	524	4.5	218	1.9	128	1.1
Dubois	89	2.1	43	1.0	100	2.4
Elkhart	1,015	5.1	335	1.7	465	2.3
Fayette	79	3.3	11	*0.5	160	6.6
Floyd	685	9.2	327	4.4	128	1.7
Fountain	73	4.2	37	2.1	29	1.7
Franklin	1	*0.0	0	*0.0	42	2.0
Fulton	51	2.4	38	1.8	34	1.6
Gibson	204	6.1	0	*0.0	99	3.0
Grant	236	3.4	158	2.3	101	1.4
Greene	132	4.0	52	1.6	54	1.6
Hamilton	952	3.5	201	0.7	697	2.5
Hancock	285	4.1	128	1.8	173	2.5
Harrison	93	2.4	31	0.8	20	0.5
Hendricks	493	3.4	184	1.3	301	2.1
Henry	133	2.7	93	1.9	120	2.4
Howard	222	2.7	187	2.3	127	1.5
Huntington	108	2.9	25	0.7	48	1.3
Jackson	105	2.5	102	2.4	104	2.5
Jasper	116	3.5	38	1.1	53	1.6
Jay	73	3.4	89	4.2	48	2.2
Jefferson	113	3.5	69	2.1	84	2.6
Jennings	60	2.1	85	3.0	53	1.9
Johnson	578	4.1	149	1.1	505	3.6
Knox	116	3.0	69	1.8	237	6.2
Kosciusko	329	4.3	182	2.4	172	2.2
LaGrange	92	2.5	27	0.7	163	4.4
Lake	3,189	6.4	2,295	4.6	1,282	2.6
LaPorte	493	4.4	441	4.0	456	4.1
Lawrence	124	2.7	108	2.3	66	1.4
Madison	407	3.1	465	3.5	230	1.7

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County	Number of Arrests for DUI	DUI Arrest Rate	Number of Arrests for Public Intoxication	Public Intoxication Arrest Rate	Number of Arrests for Liquor Law Violations	Liquor Law Violation Arrest Rate
Marion	3,202	3.5	6,044	6.7	855	0.9
Marshall	287	6.1	137	2.9	110	2.3
Martin	9	*0.9	16	*1.5	13	*1.3
Miami	115	3.1	78	2.1	44	1.2
Monroe	454	3.3	955	6.9	840	6.1
Montgomery	132	3.5	100	2.6	61	1.6
Morgan	254	3.7	101	1.5	199	2.9
Newton	98	6.9	45	3.2	5	*0.4
Noble	156	3.3	77	1.6	138	2.9
Ohio	22	3.6	5	*0.8	10	*1.6
Orange	49	2.5	20	1.0	28	1.4
Owen	78	3.6	19	*0.9	34	1.6
Parke	92	5.3	23	1.3	18	*1.0
Perry	87	4.5	74	3.8	75	3.9
Pike	38	3.0	20	1.6	26	2.0
Porter	825	5.0	370	2.3	625	3.8
Posey	93	3.6	41	1.6	49	1.9
Pulaski	30	2.2	17	*1.3	16	*1.2
Putnam	155	4.1	65	1.7	71	1.9
Randolph	32	1.2	22	0.8	43	1.6
Ripley	97	3.2	32	1.1	70	2.3
Rush	16	*0.9	15	*0.9	53	3.0
Saint Joseph	679	2.5	90	0.3	444	1.7
Scott	35	1.4	97	4.0	22	0.9
Shelby	166	3.7	100	2.3	126	2.8
Spencer	52	2.5	21	1.0	29	1.4
Starke	41	1.8	40	1.7	28	1.2
Steuben	123	3.6	27	0.8	117	3.4
Sullivan	58	2.7	25	1.2	29	1.4
Switzerland	26	2.4	11	*1.0	15	*1.4
Tippecanoe	719	4.2	727	4.2	488	2.8
Tipton	46	2.9	21	1.3	36	2.3
Union	19	*2.5	7	*0.9	10	*1.3
Vanderburgh	878	4.9	721	4.0	264	1.5
Vermillion	57	3.5	54	3.3	22	1.4
Vigo	644	6.0	272	2.5	528	4.9
Wabash	79	2.4	29	0.9	63	1.9
Warren	21	2.5	8	*0.9	12	*1.4
Warrick	154	2.6	84	1.4	148	2.5
Washington	112	4.0	45	1.6	64	2.3
Wayne	149	2.2	289	4.2	92	1.3
Wells	71	2.6	32	1.2	50	1.8
White	177	7.2	45	1.8	59	2.4
Whitley	128	3.8	35	1.1	98	2.9
Indiana	**27,112**	**4.2**	**19,617**	**3.0**	**14,027**	**2.2**

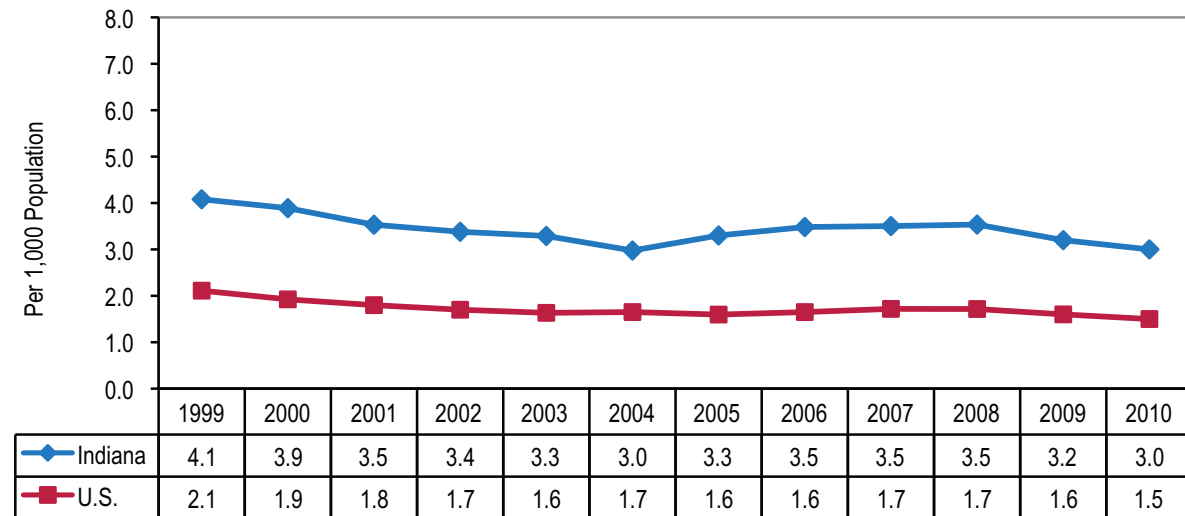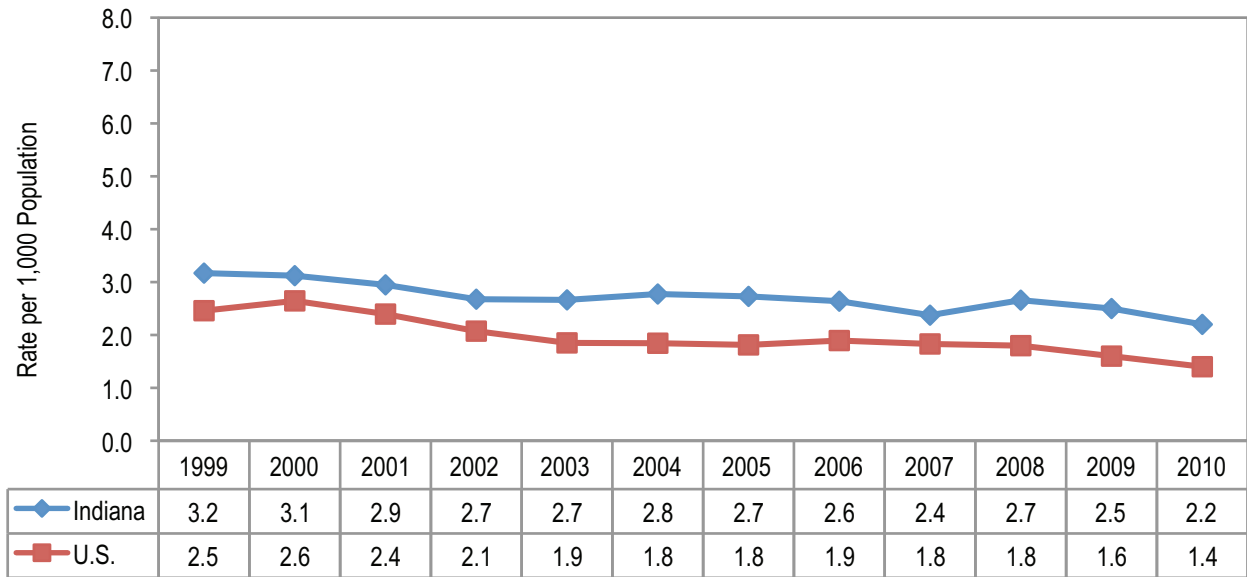* Rates that are based on arrest numbers lower than 20 are unreliable.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Map 3.1 Suspension and Expulsion Rates per 1,000 Enrolled Students, with Alcohol, Drug, or Weapon Involvement in Indiana, by County (School Data, 2007–2008)

Lake 7.16
Porter 7.84
LaPorte 10.7
St. Joseph 7.38
Elkhart 5.42
LaGrange 2.66
Steuben 6.99
Starke 9.42
Marshall 1.61*
Noble 5.37
DeKalb 6.22
Newton 8.76
Jasper 6.05
Pulaski 6.24*
Fulton 2.75*
Kosciusko 4.61
Whitley 2.85*
Allen 3.16
White 6.11
Cass 8.2
Miami 3.41
Wabash 5.57
Huntington 3.81
Wells 3.92
Adams 3.15
Benton 0.99*
Carroll 4.67*
Howard 4.51
Grant 3.92
Blackford 7.7*
Jay 6.69
Warren 8.46*
Tippecanoe 4.97
Clinton 6.16
Tipton 2.36*
Delaware 2.54
Randolph 4.19
Fountain 0.6*
Montgomery 3.3
Boone 7.54
Hamilton 2.79
Madison 6.57
Vermillion 6.43*
Parke 4.92*
Hendricks 4.55
Marion 5.38
Hancock 2.25
Henry 7.9
Wayne 7.26
Putnam 4.89
Rush 2.39*
Fayette 7.14
Union 4.33*
Vigo 7.28
Clay 6.69
Owen 13.15
Morgan 6.32
Johnson 5.78
Shelby 2.62
Franklin 2.58*
Sullivan 4.69*
Greene 3.86
Monroe 2.88
Brown 3.08*
Bartholomew 6.72
Decatur 4.03*
Ripley 5.16
Dearborn 5.11
Jennings 8.56
Ohio 0*
Lawrence 7.96
Jackson 4.67
Jefferson 3.21*
Switzerland 4.44*
Knox 1.69*
Daviess 2.76*
Martin 1.75*
Washington 2.07*
Scott 8.33
Orange 7.99
Clark 3.03
Gibson 4.92
Pike 10.45
Dubois 1.88*
Crawford 11.42
Floyd 5.67
Harrison 0.79*
Posey 5.17
Vanderburgh 3.45
Warrick 4.38
Spencer 4.8*
Perry 0.98*

Rate per 1,000

	0.00 - 3.80
	3.81 - 5.80
	5.81 - 8.80
	> 8.80

* Rates that are based on suspension and expulsion numbers lower than 20 are unreliable.
Source: Indiana Department of Education, 2007-2008

Map 3.2   Number of Alcohol-Induced Deaths in Indiana, by County (Indiana Mortality Data, 2000–2010)

Number of Deaths

- <5
- 5-20
- 20-100
- >100

Source: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team, 2012

Map 3.3 DUI Arrest Rates in Indiana, by County (Uniform Crime Reporting Program, 2010)

Lake 6.43
Porter 5.02
LaPorte 4.42
St. Joseph 2.54
Elkhart 5.13
LaGrange 2.48
Steuben 3.6

Newton 6.88
Jasper 3.46
Starke 1.75
Marshall 6.1
Kosciusko 4.28
Noble 3.28
DeKalb 2.98

Pulaski 2.24
Fulton 2.45
Whitley 3.84
Allen 5.2

Benton 2.71
White 7.18
Cass 4.31
Miami 3.12
Wabash 2.4
Huntington 2.91
Wells 2.57
Adams 3

Warren 2.47
Carroll 4.66
Howard 2.68
Grant 3.37
Blackford 4.36
Jay 3.41

Tippecanoe 4.16
Clinton 3.16
Tipton 2.89
Delaware 4.45
Randolph 1.22

Fountain 4.23
Montgomery 3.46
Boone 4.43
Hamilton 3.47
Madison 3.09
Henry 2.69
Wayne 2.16

Vermillion 3.52
Parke 5.31
Hendricks 3.39
Marion 3.54
Hancock 4.07
Rush 0.92
Fayette 3.25
Union 2.53

Putnam 4.08
Morgan 3.69
Johnson 4.12
Shelby 3.74
Franklin 0.05

Vigo 5.97
Clay 3.35
Owen 3.62
Brown 2.17
Bartholomew 5.2
Decatur 2.53
Ripley 3.18
Dearborn 4.5

Sullivan 2.7
Greene 3.98
Monroe 3.29
Jennings 2.1
Ohio 3.59

Jackson 2.48
Jefferson 3.48
Switzerland 2.45

Lawrence 2.69
Scott 1.45

Knox 3.02
Daviess 3.67
Martin 0.87
Washington 3.96
Clark 12.86

Orange 2.47

Pike 2.96
Dubois 2.12
Crawford 6.53
Floyd 9.19

Gibson 6.09
Harrison 2.36

Vanderburgh 4.89
Warrick 2.58
Perry 4.5

Posey 3.59
Spencer 2.48

Rate per 1,000

	0.00 - 2.24
	2.24 - 4.00
	4.00 - 6.50
	> 6.50

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 3E (pages 47-48) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Map 3.4 Public Intoxication Arrest Rates Per 1,000 in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Rate
St. Joseph	0.34
Elkhart	1.69
LaGrange	0.73
Steuben	0.79
LaPorte	3.96
Porter	2.25
Lake	4.63
Noble	1.62
DeKalb	2.63
Starke	1.71
Marshall	2.91
Kosciusko	2.37
Whitley	1.05
Allen	2.13
Newton	3.16
Jasper	1.14
Pulaski	1.27
Fulton	1.82
Wabash	0.88
Huntington	0.67
Wells	1.16
Adams	0.76
White	1.83
Cass	5.39
Miami	2.11
Benton	0.68
Carroll	1.94
Howard	2.26
Grant	2.26
Blackford	2.61
Jay	4.16
Warren	0.94
Tippecanoe	4.21
Clinton	0.99
Tipton	1.32
Delaware	1.85
Randolph	0.84
Fountain	2.15
Montgomery	2.62
Boone	1.73
Hamilton	0.73
Madison	3.53
Henry	1.88
Wayne	4.19
Vermillion	3.33
Parke	1.33
Putnam	1.71
Hendricks	1.27
Marion	6.69
Hancock	1.83
Rush	0.86
Fayette	0.45
Union	0.93
Vigo	2.52
Clay	2.16
Owen	0.88
Morgan	1.47
Johnson	1.06
Shelby	2.26
Franklin	0
Sullivan	1.16
Greene	1.57
Monroe	6.92
Brown	0.33
Bartholomew	3.23
Decatur	2.29
Ripley	1.05
Dearborn	2.36
Jennings	2.98
Ohio	0.82
Jackson	2.41
Jefferson	2.13
Switzerland	1.04
Lawrence	2.34
Knox	1.8
Daviess	1.99
Martin	1.55
Scott	4.01
Washington	1.59
Orange	1.01
Clark	4.43
Pike	1.56
Dubois	1.03
Gibson	0
Crawford	2.15
Floyd	4.38
Harrison	0.79
Posey	1.58
Vanderburgh	4.01
Warrick	1.41
Spencer	1
Perry	3.83

Rate per 1,000

- 0.00 - 1.20
- 1.20 - 2.00
- 2.00 - 4.00
- > 4.00

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 3E (pages 47-48) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Map 3.5 Liquor Law Violation Arrest Rates Per 1,000 in Indiana, by County (Uniform Crime Reporting Program, 2010)

Lake 2.58
Porter 3.8
LaPorte 4.09
St. Joseph 1.66
Elkhart 2.35
LaGrange 4.39
Steuben 3.42
Noble 2.9
DeKalb 1.8
Starke 1.2
Marshall 2.34
Kosciusko 2.24
Whitley 2.94
Allen 0.68
Newton 0.35
Jasper 1.58
Pulaski 1.19
Fulton 1.63
Wabash 1.92
Huntington 1.29
Wells 1.81
Adams 2.24
White 2.39
Cass 3.49
Miami 1.19
Benton 1.24
Carroll 2.18
Howard 1.53
Grant 1.44
Blackford 1.19
Jay 2.24
Warren 1.41
Tippecanoe 2.82
Clinton 3.85
Tipton 2.26
Madison 1.75
Delaware 1.09
Randolph 1.64
Fountain 1.68
Montgomery 1.6
Boone 2.84
Hamilton 2.54
Henry 2.43
Wayne 1.33
Vermillion 1.36
Parke 1.04
Hendricks 2.07
Marion 0.95
Hancock 2.47
Rush 3.05
Fayette 6.59
Union 1.33
Putnam 1.87
Morgan 2.89
Johnson 3.6
Shelby 2.84
Franklin 1.96
Vigo 4.9
Clay 1.86
Owen 1.58
Decatur 3.54
Dearborn 1.32
Sullivan 1.35
Greene 1.63
Monroe 6.09
Brown 1.84
Bartholomew 2.7
Ripley 2.3
Ohio 1.63
Jennings 1.86
Jackson 2.45
Jefferson 2.59
Switzerland 1.41
Knox 6.17
Daviess 1.71
Martin 1.26
Lawrence 1.43
Washington 2.26
Scott 0.91
Clark 2.08
Orange 1.41
Floyd 1.72
Gibson 2.95
Pike 2.02
Dubois 2.39
Crawford 0.65
Harrison 0.51
Posey 1.89
Vanderburgh 1.47
Warrick 2.48
Spencer 1.38
Perry 3.88

Rate per 1,000

	0.00 - 1.50
	1.50 - 2.70
	2.70 - 4.40
	4.40 - 6.60

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 3E (pages 47-48) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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Indiana University Center for Health Policy

TOBACCO USE IN INDIANA: CONSUMPTION PATTERNS AND CONSEQUENCES

TOBACCO CONSUMPTION

The harmful effects of tobacco on population health have been widely studied and the results published. Cigarette smoking remains the leading cause of preventable death in the United States, accounting for approximately one of every five deaths (Centers for Disease Control and Prevention, 2012).

General Consumption Patterns

The 2011 National Survey on Drug Use and Health (NSDUH) estimates that 29.9% (95% Confidence Interval [CI]: 27.2–32.8) of Indiana residents 12 years and older used a tobacco product in the past month (U.S.: 27.0%; 26.5–27.5). Tobacco products include cigarettes, smokeless tobacco, cigars, and pipe tobacco. Indiana's rate has remained stable for at least the past 12 years, from 2000 through 2011 (see Figure 4.1) (Substance Abuse and Mental Health Services Administration, 2012).

Figure 4.1 Percentage of Indiana and U.S. Population (12 Years and Older) Reporting Any Tobacco Use in the Past Month (National Survey on Drug Use and Health, 2000–2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Indiana	32.8%	32.9%	34.3%	33.1%	32.3%	32.7%	33.4%	33.5%	32.9%	31.9%	30.6%	29.9%
U.S.	29.8%	29.4%	30.4%	30.1%	29.5%	29.3%	29.5%	29.1%	28.5%	28.0%	27.6%	27.0%
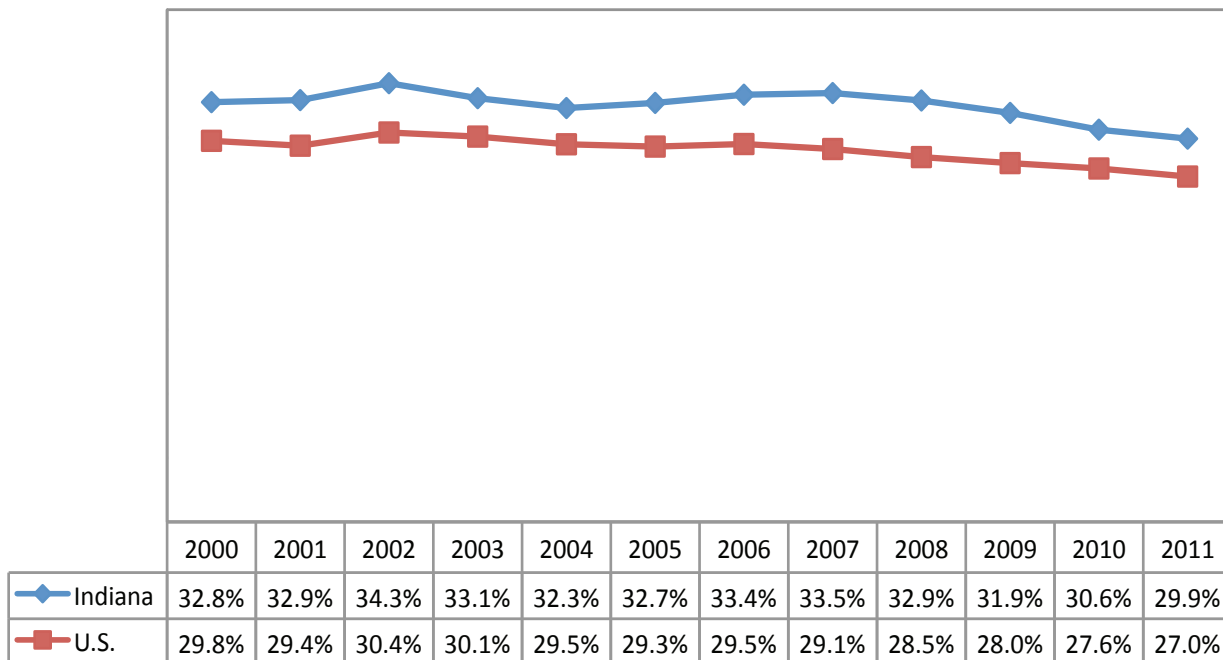
Source: Substance Abuse and Mental Health Services Administration, 2012

The majority of tobacco consumers smoke cigarettes. In 2011, 25.3% (95% CI: 22.8–28.0) of Hoosiers ages 12 years and older admitted to having used cigarettes in the past month (U.S.: 22.5%; 95% CI: 22.1–23.0). The smoking prevalence for Indiana remained stable from 2000 (27.2%; 95% CI: 24.7–29.9) to 2011 (see Figure 4.2).

Figure 4.2   Percentage of Indiana and U.S. Population (12 Years and Older) Reporting Cigarette Use in the Past Month (National Survey on Drug Use and Health, 2000–2011)

	2000	2001	2003	2004	2005	2006	2007	2008	2009	2010	2011
Indiana	27.2%	27.4%	28.3%	27.4%	28.0%	28.2%	28.0%	27.6%	26.8%	25.9%	25.3%
U.S.	25.3%	24.9%	25.4%	24.9%	24.9%	25.0%	24.6%	24.1%	23.6%	23.2%	22.5%
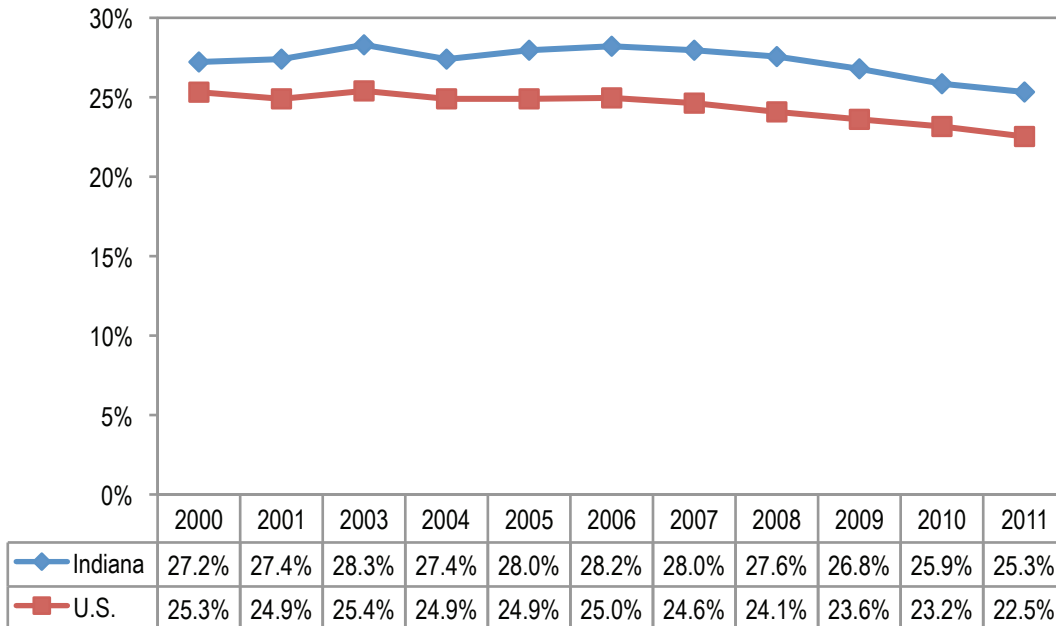
Source: Substance Abuse and Mental Health Services Administration, 2012

Figure 4.3   Percentage of Indiana and U.S. Population (12 Years and Older) Reporting Cigarette Use in the Past Month (National Survey on Drug Use and Health, 2011)

	Total	12-17	18-25	26 and older
Indiana	25.3%	8.1%	37.7%	25.4%
U.S.	22.5%	8.1%	33.9%	22.4%

Source: Substance Abuse and Mental Health Services Administration, 2012

Indiana University Center for Health Policy
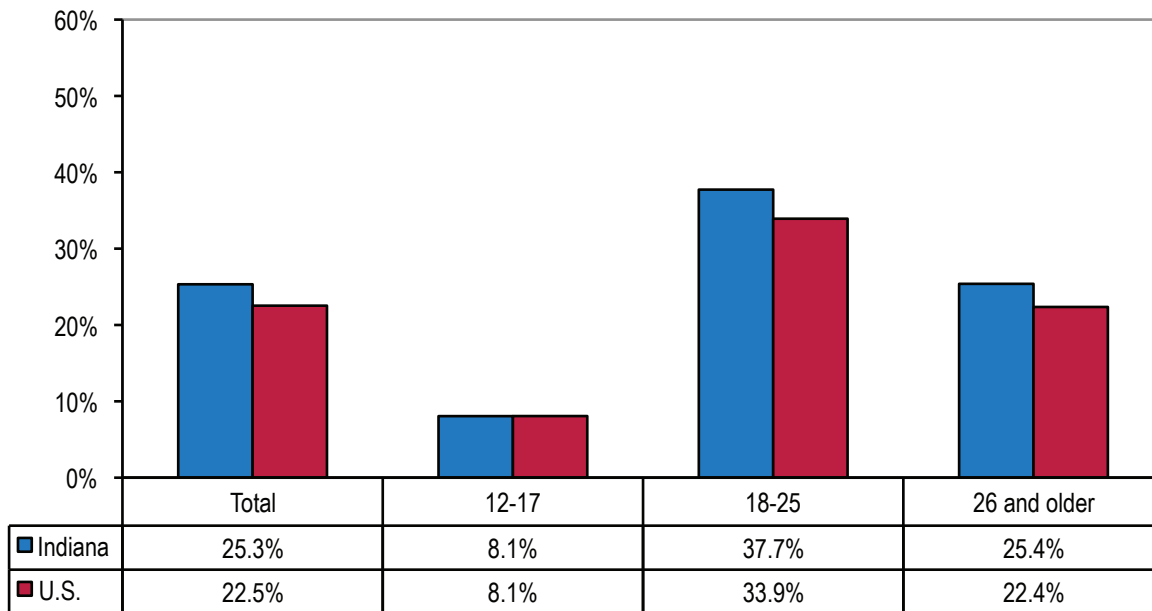
In Indiana, 67.5% (95% CI: 64.4–70.5) of the population 12 years and older perceived smoking one or more packs of cigarettes per day to be a great risk; the percentage within the nation was significantly higher (71.4%; 95% CI: 70.9–71.8) (Substance Abuse and Mental Health Services Administration, 2012).

In addition to smoking rates, cigarette consumption is also an indicator of smoking behavior. The per capita consumption decreased from 121.0 packs sold in 2001 to 68.2 packs sold in 2011 (Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2012).

Adult Consumption Patterns

The highest rate of tobacco use was among 18- to 25-year-olds. An estimated 44.1% of Hoosiers in this age group (95% CI: 40.4–47.9) reported currently, i.e., within the past 30 days, using a tobacco product (U.S.: 40.2%; 95% CI: 39.5–40.9). The 30-day prevalence rate for cigarette smoking among 18- to 25-year-olds was 37.7% (95% CI: 34.2–41.4) in Indiana (U.S.: 33.9%; 95% CI: 33.2–34.6) (see Figure 4.3).

Among Hoosiers ages 26 and older, 29.9% (95% CI: 26.6–33.4) used a tobacco product in the past month and 25.4% (95% CI: 22.3–28.8) smoked cigarettes in the past month. U.S. rates were similar in that age group, at 26.8% (95% CI: 26.2–27.4) and 22.4% (95% CI: 21.8–22.9) respectively (Substance Abuse and Mental Health Services Administration, 2012).

The Behavioral Risk Factor Surveillance System (BRFSS) focuses on behaviors and conditions that are linked with leading causes of death. According to the 2011 BRFSS, the past-month prevalence rate for adult (18 years and older) smoking in Indiana was 25.6% (95% CI: 24.3–27.0). Moreover, 19.4% (95% CI: 18.2–20.6) of Hoosiers used cigarettes every day. Indiana's smoking prevalence rates were significantly higher than national rates: 21.2% of U.S. residents smoked in the past month and 15.4% reported smoking every day (Centers for Disease Control and Prevention, 2011).

Statistical differences in current smoking prevalence were not evident by gender or race, but were observed by age, educational attainment, and income (see Table 4.1):

- Younger adults displayed higher smoking rates than older adults. The difference was statistically significant.

- Educational attainment was inversely associated with prevalence rate; i.e., individuals who achieved higher levels of education had lower smoking rates. The difference was statistically significant.

- Income level was inversely associated with prevalence rate; i.e., individuals with higher income levels had lower smoking rates. The difference was statistically significant.

Table 4.1 Adult Smoking Prevalence (95% CI) in Indiana and the United States, by Gender, Race, Age Group, Educational Attainment, and Income Level (Behavioral Risk Factor Surveillance System, 2011)

		Indiana	U.S.
Gender	Male	27.6% (25.5–29.7)	23.6%
	Female	23.8% (22.0–25.5)	18.8%
Race/ Ethnicity	White	25.0% (23.6–26.5)	20.8%
	Black	31.4% (26.0–36.9)	26.4%
	Hispanic	22.4% (14.9–29.8)	19.8%
Age Group	18-24	29.0% (23.8–34.3)	24.0%
	25-34	32.6% (28.7–36.5)	29.2%
	35-44	29.2% (25.7–32.7)	22.8%
	45-54	29.6% (26.7–32.4)	23.8%
	55-64	22.3% (19.9–24.7)	18.8%
	65+	11.5% (9.9–13.1)	9.2%
Education	Less than High School	41.6% (37.0–46.2)	35.6%
	High School or GED	30.0% (27.7–32.4)	26.1%
	Some Post-High School	24.3% (21.9–26.8)	21.0%
	College Graduate	8.5% (7.1–9.9)	8.8%
Income	Less than $15,000	40.6% (36.1–45.0)	35.8%
	$15,000 – $24,999	30.3% (26.9–33.6)	29.7%
	$25,000 – $34,999	31.2% (26.4–35.9)	24.4%
	$35,000 – $49,999	26.7% (14.3–18.4)	13.4%
	$50,000 and above	16.4% (14.3–18.4)	13.4%
Total		**25.6% (24.3-27.0)**	**21.2%**

Note: U.S. rates are based on median percentages and do not have an associated confidence interval (CI).
Source: Centers for Disease Control and Prevention, 2011

Adult smoking prevalence in Indiana has been above the U.S. level for at least the past nine years (see Figure 4.4) and ranked 7th among the 50 U.S. states in 2011 (Centers for Disease Control and Prevention, 2011). Adult smoking prevalence, as shown in Figure 4.4, has been trending downward from 2002 through 2010. However, due to changes the Centers for Disease Control and Prevention made to the BRFSS, 2011 survey data should not be compared to results from previous years. [For more detailed information, see Chapter 2 "Methods".]

The Indiana College Substance Use Survey includes questions on the use of cigarettes, cigars, chewing/smokeless tobacco, and smoking tobacco with hookah/water pipe. According to findings from the 2012 survey, 29.2% of Indiana college students reported use of cigarettes in the past-year (U.S.: 25.8; P > 0.05), while 15.7% reported current (past-month) use (U.S. 15.2%; P > 0.05). Results for the different types of tobacco by demographic characteristics can be found in Table 4.2 (Indiana Collegiate Action Network, 2012).[1]

Youth Consumption Patterns

Based on results from the 2011 NSDUH, 10.7% (95% CI: 8.9–12.7) of Hoosiers ages 12 to 17 used a tobacco product in the past month (U.S.: 10.3%; 95%

CI: 10.0–10.7). Of these, 8.1% (95% CI: 6.5–9.9) of young Hoosiers smoked cigarettes (U.S.: 8.1%; 95% CI: 7.7–8.4) (Substance Abuse and Mental Health Services Administration, 2012).

According to the 2011 Youth Risk Behavior Surveillance System (YRBSS), 49.5% (95% CI: 45.9–53.0) of Indiana high school students (grades 9 through 12) have tried smoking a cigarette, even one or two puffs, in their lifetime (Centers for Disease Control and Prevention, 1991-2011). This rate has remained stable from 2003 to 2011 and is similar to the nation's rate (44.7%; 95% CI: 42.3–47.2). The percentage of Indiana students in grades 9 through 12 who currently use any tobacco product (24.5%; 95% CI: 21.8–27.3) has also remained stable and is statistically similar to the U.S. rate of 23.4% (95% CI: 21.8–25.1). The YRBSS further found that in 2011, as illustrated in Figure 4.5:

- 18.1% (95% CI: 15.9–20.4) of Hoosier high school students currently smoke cigarettes (U.S.: 18.1%; 95% CI: 16.7–19.5);
- 14.6% (95% CI: 12.6–16.9) currently smoke cigars (U.S.: 13.1%; 95% CI: 12.2–14.1); and
- 8.2% (95% CI: 7.2–9.3) currently use smokeless tobacco (U.S.: 7.7%; 95% CI: 6.6–9.0)

(Centers for Disease Control and Prevention, 1991-2011).

Figure 4.4 Percentage of Indiana and U.S. Population (18 Years and Older) Reporting Current Cigarette Use (Behavioral Risk Factor Surveillance System, 2002–2010)

	2002	2003	2005	2006	2007	2008	2009	2010
Indiana	27.6%	26.1%	27.3%	24.1%	24.1%	26.0%	23.1%	21.2%
U.S.	23.1%	22.0%	20.5%	20.1%	19.8%	18.4%	17.9%	17.3%
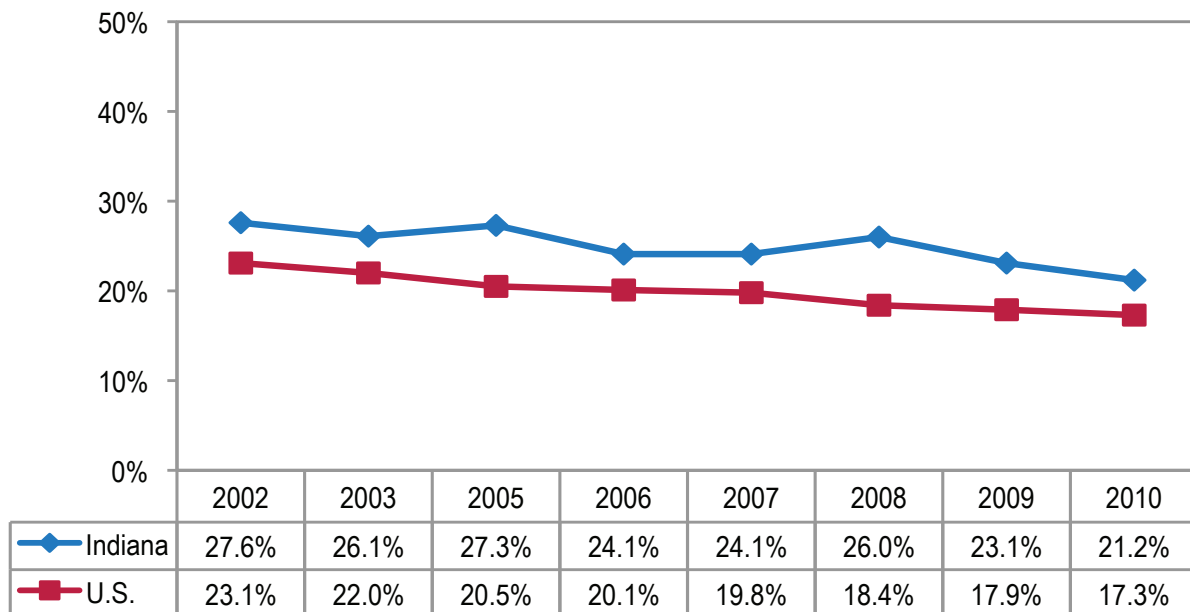
Source: Centers for Disease Control and Prevention, 2011

[1]Nine Indiana colleges participated in the survey; results are based on nonrandom sampling and are not representative of all college students in Indiana.

Table 4.2 Rates of Past-Year and Past-Month (Current) Tobacco Use by Indiana College Students, by Type of Product and by Overall Use, Gender, Age Group, and Type of Institution (Indiana College Substance Use Survey, 2012)

	All Students		Gender		Age		Type of Institution	
	Indiana	U.S.	Male	Female	Under 21	21 or Over	Private	Public
Cigarettes (Past-Year)	29.2	25.8	35.7	25.4‡	26.6	32.3‡	21.2	31.9‡
Cigarettes (Past-Month)	15.7	15.2	20.5	12.9‡	14.5	17.1†	10.4	17.4‡
Cigars (Past-Year)	25.2	N/A	43.7	14.4‡	25.5	24.8	26.2	24.9
Cigars (Past-Month)	7.6	N/A	14.7	3.5‡	8.5	6.6†	9.1	7.1†
Chewing/ smokeless tobacco (Past-Year)	7.5	N/A	17.1	1.8‡	7.2	7.9	8.7	7.1*
Chewing/ smokeless tobacco (Past-Month)	3.7	N/A	9.0	0.7‡	3.8	3.7	4.5	3.5
Smoking tobacco with hookah/water pipe (Past-Year)	29.4	N/A	34.9	26.2‡	30.2	28.5	24.3	31.1‡
Smoking tobacco with hookah/water pipe (Past-Month)	9.0	N/A	11.9	7.3‡	9.9	8.0†	7.7	9.4*

Note: *$P < 0.05$; †$P < 0.01$; ‡$P < 0.001$
Source: Indiana Collegiate Action Network, 2012

Figure 4.5 Percentage of Indiana and U.S. High School Students Reporting Tobacco Consumption (Youth Risk Behavior Surveillance System, 2011)

	Lifetime cigarette use	Current tobacco use	Current cigarette use	Current cigar use	Current smokeless tobacco use
Indiana	49.5%	24.5%	18.1%	14.6%	8.2%
U.S.	44.7%	23.4%	18.1%	13.1%	7.7%
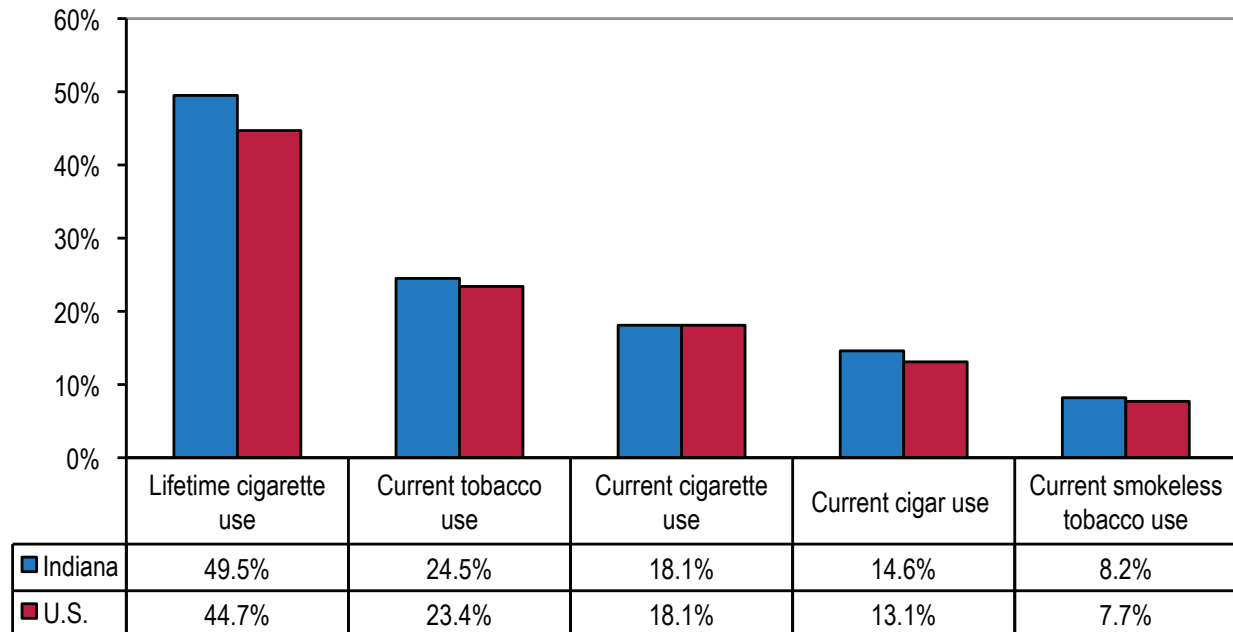
Source: Centers for Disease Control and Prevention, 1991-2011

Current cigarette use rates did not differ by gender. Indiana males seemed to have higher rates in 2011 (19.9%; 95% CI: 17.4–22.8) than females (16.0%; 95% CI: 13.4–19.0), but the difference was statistically not significant. Overall smoking rates remained stable from 2003 to 2011, as did smoking rates by gender (see Table 4.3).

The prevalence rate for current cigarette use among high school students was three times as high among white students (19.8%; 95% CI: 17.2–22.8) than black students (6.6%; 95% CI: 3.5–12.1); use among white and Hispanic students (18.5%; 95% CI: 11.4–28.5) was similar (see Figure 4.6).

Prevalence of current cigarette use increased as students progressed through high school. In 2011, 12.6% (95% CI: 11.1–14.3) of 9th grade students reported current use; this represents a rate significantly lower than the rates for 11th and 12th grade students (11th grade: 19.0%; 95% CI: 14.4–24.7; 12th grade: 22.6%; 95% CI: 17.0–29.4) in Indiana (see Figure 4.7) (Centers for Disease Control and Prevention, 1991-2011).

Table 4.3 Rates of Current Cigarette Use in Indiana and U.S. High School Students (9th–12th grade), by Gender (Youth Risk Behavior Surveillance System, 2003–2011)

Year	Gender	Indiana (95% CI)	U.S. (95% CI)
2003	Females	25.7% (23.2–28.5)	21.9% (19.2–24.9)
	Males	25.6% (22.2–29.4)	21.8% (19.8–24.1)
	Total	25.6% (23.2–28.2)	21.9% (19.8–24.2)
2005	Females	20.5% (16.1–25.8)	23.0% (20.4–25.8)
	Males	23.2% (18.7–28.3)	22.9% (20.7–25.3)
	Total	21.9% (18.0–26.4)	23.0% (20.7–25.5)
2007	Females	19.9% (15.2–25.5)	18.7% (16.5–21.1)
	Males	24.6% (19.4–30.6)	21.3% (18.3–24.6)
	Total	22.5% (17.8–27.9)	20.0% (17.6–22.6)
2009	Females	19.9% (15.2–25.5)	18.7% (16.5–21.1)
	Males	24.6% (19.4–30.6)	21.3% (18.3–24.6)
	Total	22.5% (17.8–27.9)	20.0% (17.6–22.6)
2011	Females	16.0% (13.4–19.0)	16.1% (14.6–17.8)
	Males	19.9% (17.4–22.8)	19.9% (18.2–21.7)
	Total	18.1% (15.9–20.4)	18.1% (16.7–19.5)

Source: Centers for Disease Control and Prevention, 1991-2011

Figure 4.6 Rates of Current Cigarette Use in Indiana and U.S. High School Students (9th–12th Grade), by Race/Ethnicity (Youth Risk Behavior Surveillance System, 2011)

	White	Black	Hispanic
Indiana	19.8%	6.6%	18.5%
U.S.	20.3%	10.5%	17.5%
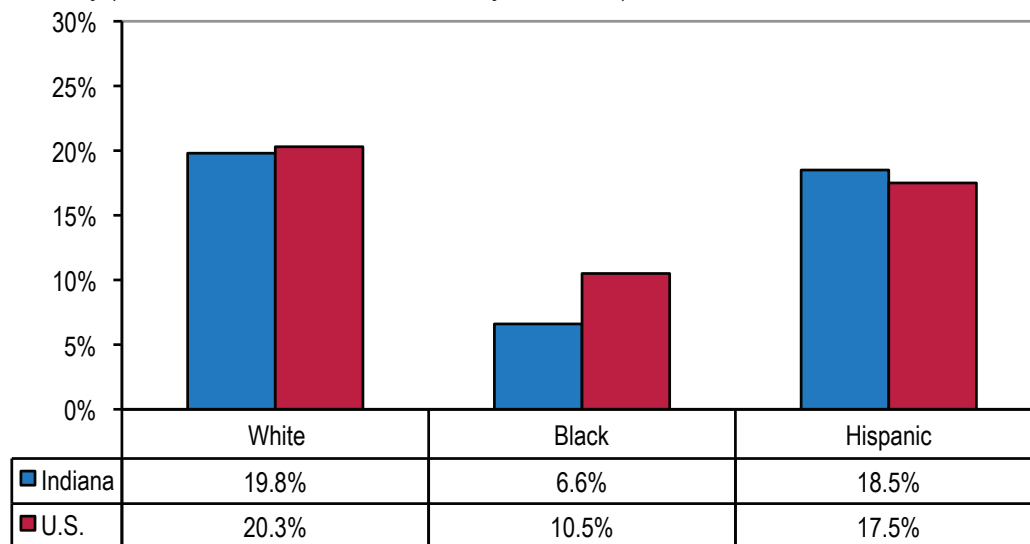
Note: Percentages are only reported for whites, blacks, and Hispanics. Results for other races/ethnicities were too little in number to make valid statistical inferences.
Source: Centers for Disease Control and Prevention, 1991-2011

Figure 4.7 Current Smoking Prevalence for Indiana and U.S. High School Students (9th–12th Grade), by Grade (Youth Risk Behavior Surveillance System, 2011)

	9th Grade	10th Grade	11th Grade	12th Grade
Indiana	12.6%	18.7%	19.0%	22.6%
U.S.	13.0%	15.6%	19.3%	25.1%
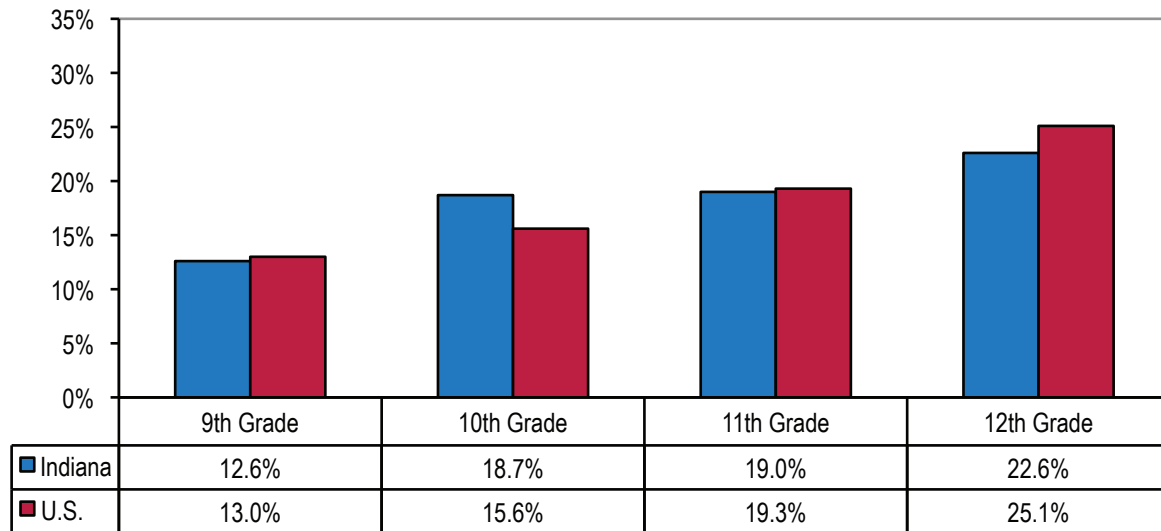
Source: Centers for Disease Control and Prevention, 1991-2011

The Indiana Youth Tobacco Survey (IYTS) is a statewide school-based survey of middle school (grades 6 through 8) and high school (grades 9 through 12) students that captures information on various tobacco-related issues, such as tobacco use, smoking cessation, tobacco-related attitudes and beliefs, social influences on tobacco use, and secondhand smoke exposure. According to IYTS results, lifetime use of cigarettes and current use of various tobacco products declined significantly in Indiana from 2000 to 2010 (see Figure 4.8) (Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2011).

Figure 4.8 Tobacco Use Among Indiana High School Students (9th–12th Grade) (Indiana Youth Tobacco Survey, 2000–2010)
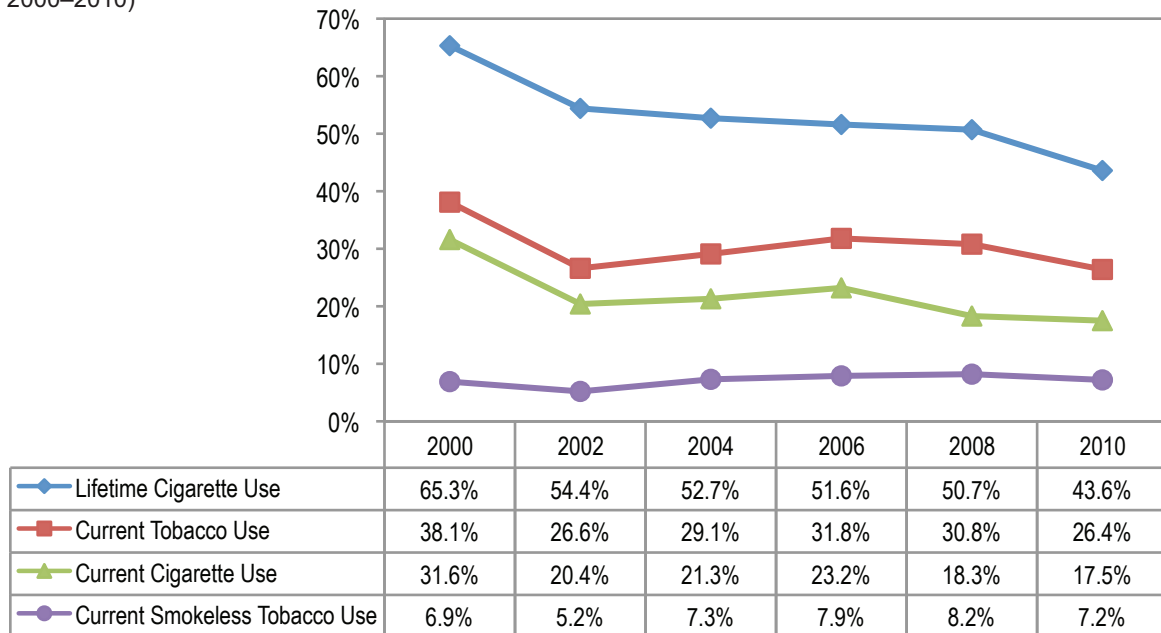
	2000	2002	2004	2006	2008	2010
Lifetime Cigarette Use	65.3%	54.4%	52.7%	51.6%	50.7%	43.6%
Current Tobacco Use	38.1%	26.6%	29.1%	31.8%	30.8%	26.4%
Current Cigarette Use	31.6%	20.4%	21.3%	23.2%	18.3%	17.5%
Current Smokeless Tobacco Use	6.9%	5.2%	7.3%	7.9%	8.2%	7.2%

Source: Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2011

Based on 2010 IYTS results, a total of 7.8% of middle school students (95% CI: 6.2–9.4) and 26.4% of high school students (95% CI: 23.9–28.8) used a tobacco product (any type) in the past month, while 4.4% of middle school students (95% CI: 3.3–5.5) and 17.5% of high school students (95% CI: 15.1–19.9) smoked cigarettes in the past month (Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2011). A review of IYTS data from 2000 through 2010 reveals that the prevalence of cigarette smoking has declined significantly among Indiana middle school students over the past few years. The drop in current cigarette use among high school students from 2000 through 2010 was also significant. For trend information, see Figure 4.9.

Appendix 4A (pages 69-71) shows the percentages, including 95% confidence intervals, of Indiana middle and high school students who reported current use of various tobacco products, grouped by gender, race/ethnicity, and grade, from 2000 through 2010.

According to the 2012 Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD) survey, the mean age of first-time cigarette use among Hoosier 6th through 12th graders was 13.1 years. Initiation of smokeless tobacco use occurred on average at the age of 13.6 years, cigar use at 14.2 years, and pipe use at 14.4 years (Gassman, Jun, Samuel,

Agley, Lee, Agley, Oi, et al., 2012). A comparison of 2012 Indiana data (ATOD survey) and national data (Monitoring the Future, or MTF, survey; Inter-university Consortium for Political and Social Research, University of Michigan, 2012) suggests that Indiana's smoking prevalence among 8th, 10th, and 12th grade students exceeded the national level. However, due the nature of the data, the statistical significance of the differences could not be determined.

Generally, tobacco use seemed to increase as students progressed in school; i.e., higher smoking rates were found in 12th grade students than 8th grade students (see Figure 4.10) (Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012). See Appendix 4B (page 72) for Indiana students' 2012 lifetime and monthly cigarette use by region and grade.

Comparisons between Indiana (ATOD survey) and the United States (MTF survey) on 30-day prevalence of cigarette use among 12th grade students imply that (a) Hoosier students have had higher rates throughout the years, and (b) rates have been declining for both groups (see Figure 4.11). However, these results need to be interpreted with caution; due to the lack of detail provided in the publicly available data set, statistical significance could not be determined.

Figure 4.9 Percentage of Indiana Middle School and High School Students Reporting Current Tobacco and Cigarette Use (Indiana Youth Tobacco Survey, 2000–2010)
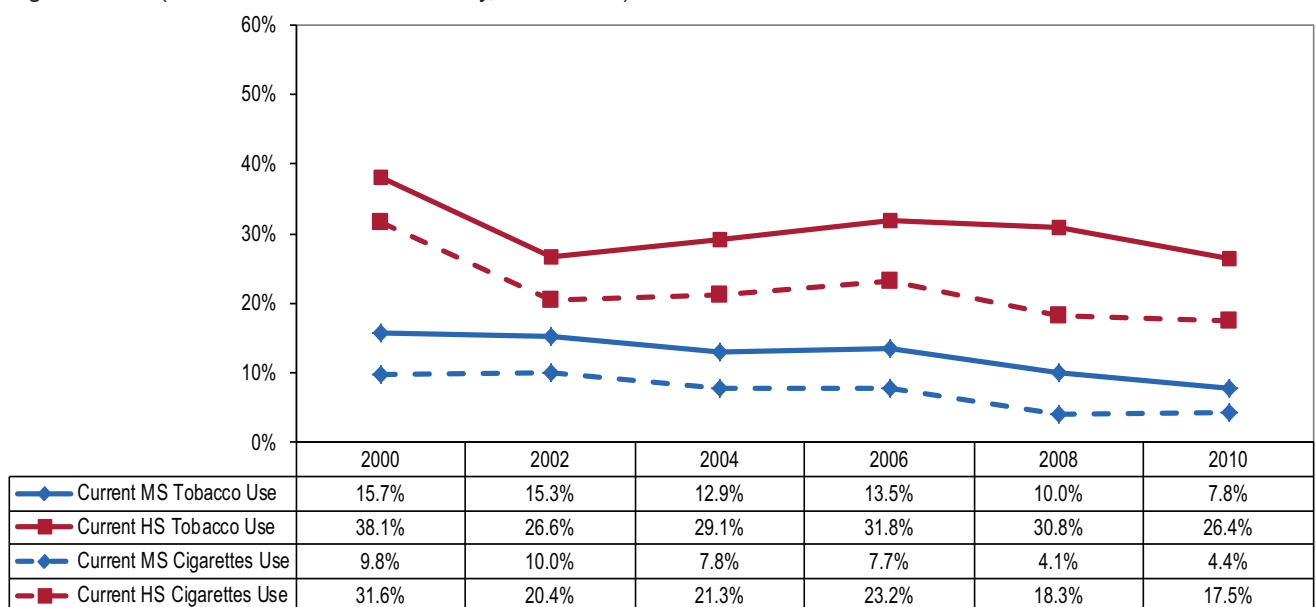
	2000	2002	2004	2006	2008	2010
Current MS Tobacco Use	15.7%	15.3%	12.9%	13.5%	10.0%	7.8%
Current HS Tobacco Use	38.1%	26.6%	29.1%	31.8%	30.8%	26.4%
Current MS Cigarettes Use	9.8%	10.0%	7.8%	7.7%	4.1%	4.4%
Current HS Cigarettes Use	31.6%	20.4%	21.3%	23.2%	18.3%	17.5%

Source: Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2011

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Figure 4.10 Cigarette Use Among 8th, 10th, and 12th Grade Students, Indiana and the United States (Alcohol, Tobacco, and Other Drug Use by Indiana Children Survey and Adolescents and Monitoring the Future Survey, 2012)
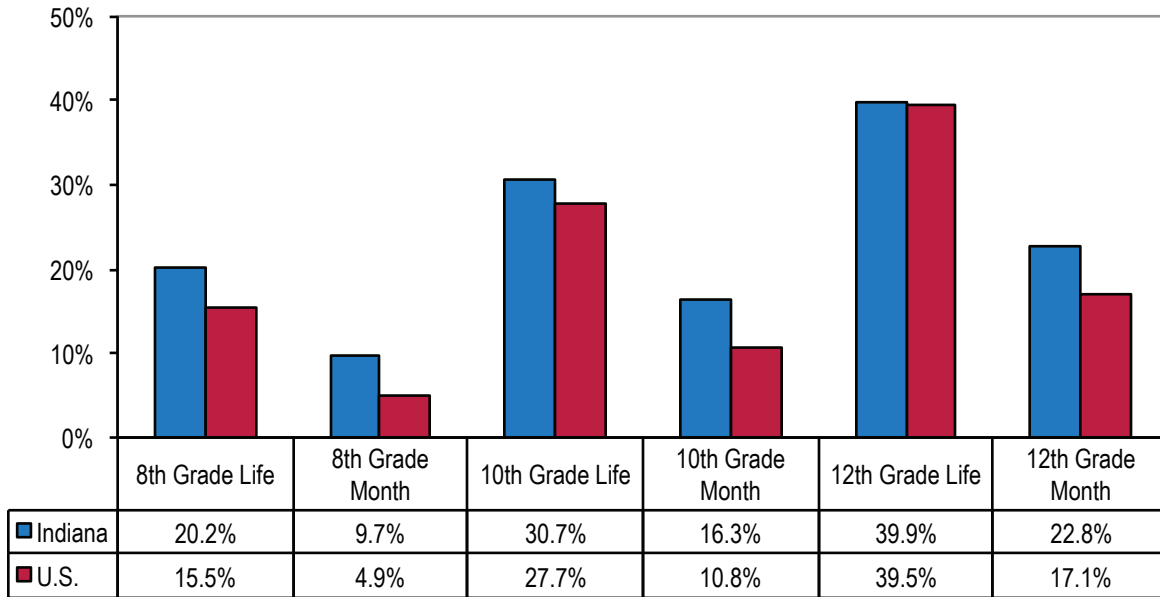
	8th Grade Life	8th Grade Month	10th Grade Life	10th Grade Month	12th Grade Life	12th Grade Month
Indiana	20.2%	9.7%	30.7%	16.3%	39.9%	22.8%
U.S.	15.5%	4.9%	27.7%	10.8%	39.5%	17.1%

Source: Gassman et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

Figure 4.11 Past-Month Smoking Prevalence for 12th Grade Students in Indiana and the United States (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 1998–2012, and Monitoring the Future Survey, 1998–2012)
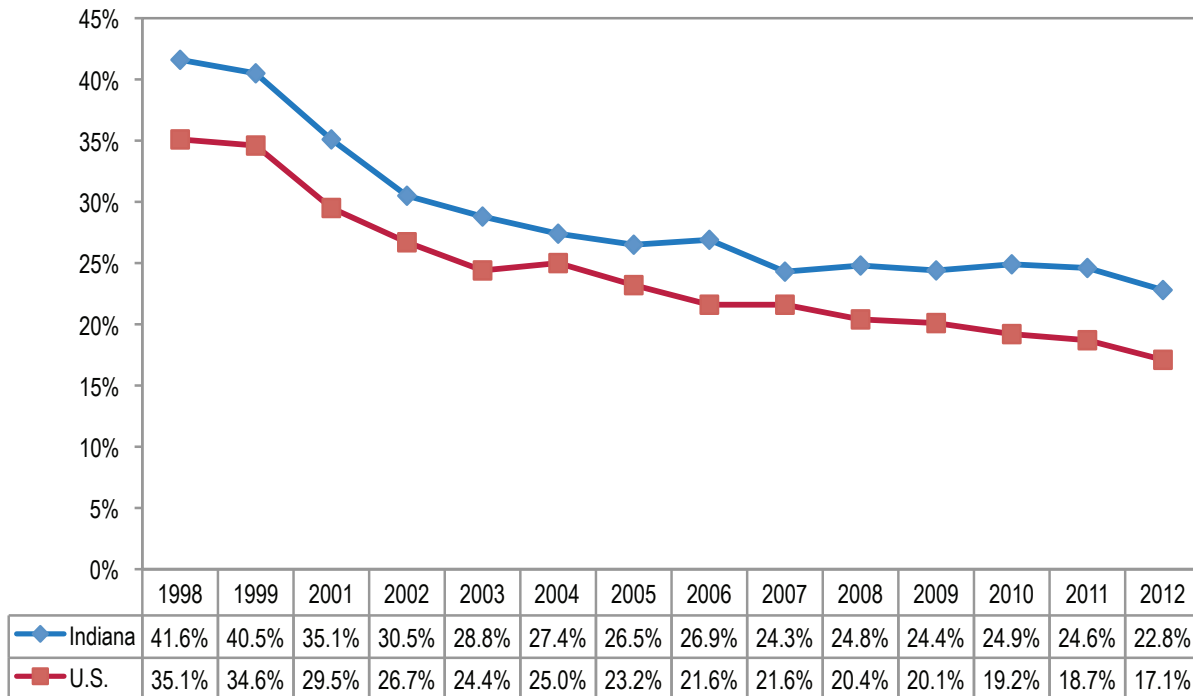
	1998	1999	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Indiana	41.6%	40.5%	35.1%	30.5%	28.8%	27.4%	26.5%	26.9%	24.3%	24.8%	24.4%	24.9%	24.6%	22.8%
U.S.	35.1%	34.6%	29.5%	26.7%	24.4%	25.0%	23.2%	21.6%	21.6%	20.4%	20.1%	19.2%	18.7%	17.1%

Source: Gassman et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

CONSEQUENCES

Health Consequences

Tobacco is the second major cause of death in the world. It is responsible for approximately 1 in 10 deaths among adults worldwide, or about 5 million deaths annually (World Health Organization, 2012). In the United States, cigarette smoking is the single most preventable cause of disease and death, causing more deaths each year than AIDS, alcohol, cocaine, heroin, homicide, suicide, motor vehicle crashes, and fires combined.

Tobacco use is responsible for around 443,000 deaths per year among adults in the United States, representing more than 5 million years of potential life lost. On average, smoking reduces adult life expectancy by approximately 14 years. It contributes greatly to the number of deaths from lung cancer, heart disease, chronic lung diseases, and other illnesses (Centers for Disease Control and Prevention, 2012).

Smoking affects respiratory health as well; it is related to chronic coughing and wheezing among adults. Smokers are more likely than nonsmokers to have upper and lower respiratory tract infections. Generally, lung function declines in smokers faster than in nonsmokers. Smoking can result in cancers of the oral cavity, pharynx, larynx, esophagus, lung, bladder, stomach, cervix, kidney, and pancreas, as well as acute myeloid leukemia. For smoking-attributable cancers, the risk generally increases with the number of cigarettes smoked and the number of years of smoking, and generally decreases after the smoker quits completely. The leading cause of cancer deaths is lung cancer, and cigarette smoking causes most cases. However, any tobacco use can be detrimental. Smokeless tobacco has been shown to cause oral cancers and may be a risk factor for cardiovascular disease as well (Centers for Disease Control and Prevention, 2012).

The effects of smoking can also be observed in unborn babies, infants, and children, and may influence women's reproductive health. Women who smoke have an increased risk for infertility and ectopic pregnancies. Smoking during pregnancy causes health problems for both mothers and babies, such as an increased risk of spontaneous abortions, pregnancy complications (e.g., placenta previa, placental abruption, and premature rupture of membranes before labor begins), premature delivery, low-birth-weight infants, stillbirth, and sudden infant death syndrome (SIDS). Mothers who smoke during pregnancy reduce their babies' lung function (Centers for Disease Control and Prevention, 2012). The percentage of births to mothers who smoked during pregnancy declined in Indiana from 21.3% in 1997 to 17.1% in 2010; a higher percentage of white mothers (18.4%) smoked during pregnancy than black mothers (13.6%) (Indiana State Department of Health, Epidemiology Resource Center, 2012). For a list of health outcomes/diseases for which maternal smoking is a significant risk factor in Indiana, see Appendix 4C, page 72.

Secondhand smoke: Furthermore, even secondhand smoke (also called environmental tobacco smoke) has serious health consequences. More than 126 million nonsmoking Americans continue to be exposed to secondhand smoke in homes, vehicles, workplaces, and public places. Exposure to tobacco smoke can cause heart disease and lung cancer even in nonsmoking adults, increasing the risk by 25% to 30% for heart disease and by 20% to 30% for lung cancer. Children, in particular, are heavily impacted by secondhand smoke. Exposure increases their possibility of developing significant lung conditions, especially asthma and bronchitis. Secondhand smoke can cause SIDS, acute respiratory infections, ear problems, and more frequent and severe asthma attacks in children. In the U.S. population, secondhand smoke is responsible for an estimated 46,000 deaths due to heart disease and 3,000 lung cancer deaths each year among nonsmoking adults (Centers for Disease Control and Prevention, 2012). Furthermore, approximately 1,400 adult Hoosiers die each year from exposure to secondhand smoke (Zollinger, Saywell, & Lewis 2012).

In Indiana, the percentage of smoke-free homes[2] has increased significantly from 60.1% (95% CI: 56.9–63.2) in 2002 to 81.1% (95% CI: 78.5–83.4) in 2008. Similarly, the percentage of smoke-free workplaces[3] rose from 60.3% (95% CI: 55.9–64.6) to 72.8% (95% CI: 68.3–76.9) during that time period (see Figure 4.12)

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[2]This measure refers to the prevalence of smoke-free homes among smokers' households; this is a more sensitive and meaningful measure, given that more than 80% of homes in the general population are smoke-free (Adult Tobacco Survey).
[3]This measure refers to the prevalence of workers reporting a 100% smoke-free workplace (Adult Tobacco Survey).

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Figure 4.12   Percentage of Smoke-free Homes and Workplaces in Indiana (Adult Tobacco Survey, 2002–2008)
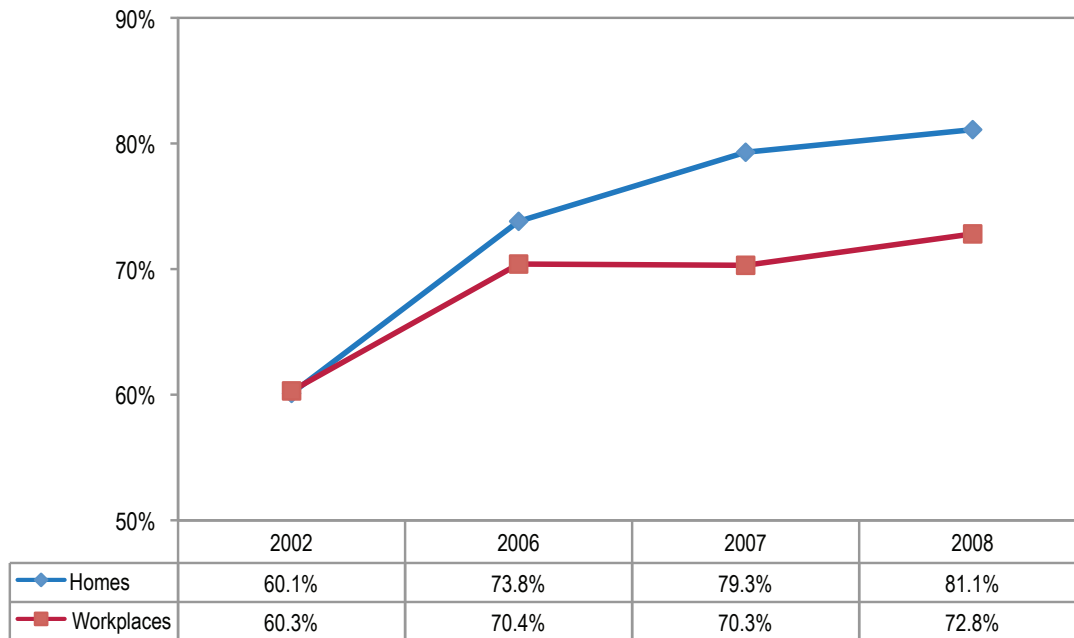
	2002	2006	2007	2008
Homes	60.1%	73.8%	79.3%	81.1%
Workplaces	60.3%	70.4%	70.3%	72.8%

Source: Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2010

Health Consequences for Youth: The use of tobacco products has wide-ranging consequences for adolescents and young adults. The younger people are when they start smoking cigarettes, the more likely they are to become strongly addicted to nicotine. Factors associated with youth tobacco use include low socioeconomic status; use and approval of tobacco use by peers or siblings; smoking by parents or guardians; accessibility, availability and price of tobacco products; a perception that tobacco use is normative; lack of parental support or involvement; low levels of academic achievement; lack of skills to resist influences to tobacco use; lower self-image or self-esteem; belief in functional benefits of tobacco use; and lack of self-efficacy to refuse offers of tobacco. Tobacco use in adolescence is associated with many other health risk behaviors, including higher risk sexual behavior and use of alcohol or other drugs (Centers for Disease Control and Prevention, 2012).

It is estimated that over 9,700 Hoosiers die annually from smoking-attributable causes. This represents an age-adjusted mortality rate of 308.9 per 100,000 population (95% CI: 302.8–315.0), a rate significantly higher than the U.S. median of 263.3 per 100,000 population (Centers for Disease Control and Prevention, n.d.). For a detailed list of smoking-attributable mortality rates by disease category, see Appendix 4D, page 73.

According to the Tobacco Prevention and Cessation Commission at the Indiana State Department of Health, Indiana is home to over one million adult smokers, representing 25.6% of all adults in the state (2011 BRFSS). The rate of deaths due to lung cancer is 58.4 per 100,000 Indiana residents; the rate of cardiovascular disease deaths is 253.1 per 100,000 Hoosiers.[4] The rate of asthma-related ER visits in Indiana is 46.9 per 10,000 residents (Indiana State Department of Health, Tobacco Prevention and Cessation Commission, n.d.). For county-level information on smoking-attributable health consequences in Indiana, see Appendix 4E, pages 74-77.

[4]The rate of cardiovascular disease deaths includes 190.8 per 100,000 for heart disease and 44.3 per 100,000 for stroke.

Economic Consequences

Annual U.S. tobacco industry marketing expenditures were an estimated $8.5 billion in 2010, including Indiana's share of $249.5 million. While total tobacco marketing expenditures in Indiana declined after peaking at $475.4 million in 2003, current spending is still at historically high levels and has increased by almost 80% since the 1998 state tobacco settlement (Campaign for Tobacco-Free Kids, 2012a).

The federal excise tax, as of April 1, 2009, is $1.01 per pack of cigarettes. In addition, the average state cigarette excise tax rate is $1.49 per pack, but varies from 17 cents in Missouri to $4.35 in New York; Indiana's tobacco excise tax rate is 99.5 cents (Campaign for Tobacco-Free Kids, 2012b).

During 2000–2004, cigarette smoking was estimated to be responsible for $193 billion in annual health-related economic losses in the United States ($96 billion in direct medical costs and approximately $97 billion in lost productivity) (Centers for Disease Control and Prevention, 2012). In Indiana, $2.08 billion dollars of health-related costs in 2004 were smoking-attributable expenditures (SAE). Most of these costs accrued through hospital care ($1.14 billion) and prescription drugs ($372 million); the SAE estimate also included ambulatory care ($318 million), nursing home care ($215 million), and other health-related costs ($138 million) (Centers for Disease Control and Prevention, 2004). The combination of increased medical costs, higher insurance rates, added maintenance expenses, lower productivity, and higher rates of absenteeism due to smoking adds financial strain to American businesses every year.

Percentage of Indiana Middle School and High School Respondents Who Currently Use Any Tobacco Product, by Gender, Race/Ethnicity, and School Grade (Indiana Youth Tobacco Survey, 2000–2010)

	2000 %	2000 95% CI	2002 %	2002 95% CI	2004 %	2004 95% CI	2006 %	2006 95% CI	2008 %	2008 95% CI	2010 %	2010 95% CI
MIDDLE SCHOOL												
Gender												
Male	16.8	(12.9–20.8)	15.9	(12.5–19.3)	11.3	(8.9–13.7)	13.8	(10.4–17.2)	11.5	(8.3–14.7)	10.0	(7.5–12.5)
Female	14.6	(10.1–19.0)	14.6	(10.8–18.4)	14.6	(11.3–18.0)	13.2	(10.5–15.8)	8.3	(6.2–10.5)	5.3	(3.4–7.2)
Race/Ethnicity												
White	14.3	(10.5–18.1)	12.2	(9.0–15.5)	12.5	(9.6–15.3)	12.2	(9.3–15.0)	13.5	(9.4–17.6)	6.5	(5.0–8.0)
Black	22.1	(13.2–30.9)	21.7	(17.0–26.5)	15.9	(10.6–21.3)	19.8	(15.0–24.5)	10.0	(6.6–13.5)	11.7	(7.2–16.3)
Hispanic	26.0	(14.9–37.2)	20.3	(12.0–28.7)	14.4	(8.0–20.7)	14.2	(10.1–18.2)	9.3	(6.4–12.3)	14.8	(11.0–18.6)
Grade												
6	10.7	(5.3–16.1)	11.1	(6.2–16.0)	8.9	(4.5–13.4)	6.4	(4.5–8.2)	3.2	(1.5–5.0)	2.1	(0.5–3.7)
7	12.0	(7.9–16.1)	14.5	(10.8–18.3)	11.5	(8.8–14.3)	11.4	(8.9–13.8)	9.5	(6.9–12.0)	5.7	(3.9–7.5)
8	24.9	(19.6–30.1)	19.0	(13.0–25.0)	17.7	(13.4–22.0)	22.3	(17.0–27.5)	17.0	(12.4–21.6)	13.2	(8.8–17.5)
Total	**15.7**	**(12.3–19.2)**	**15.3**	**(12.5–18.1)**	**12.9**	**(10.6–15.3)**	**13.5**	**(10.9–16.2)**	**10.0**	**(7.5–12.4)**	**7.8**	**(6.2–9.4)**
HIGH SCHOOL												
Gender												
Male	42.5	(36.9–48.0)	30.0	(25.7–34.3)	33.9	(30.9–37.0)	36.0	(31.3–40.7)	34.5	(30.7–38.4)	30.4	(26.5–34.2)
Female	33.2	(29.5–37.0)	23.0	(18.4–27.7)	24.0	(21.2–26.7)	27.4	(22.4–32.3)	26.9	(23.6–30.3)	21.9	(19.1–24.8)
Race/Ethnicity												
White	39.1	(35.1–43.2)	27.0	(23.1–30.9)	28.9	(25.8–32.0)	32.6	(27.6–37.7)	34.7	(30.4–39.1)	25.7	(22.9–28.4)
Black	24.7	(18.8–30.7)	26.4	(20.5–32.3)	24.1	(18.8–29.5)	24.8	(18.8–30.9)	29.7	(24.7–34.7)	24.0	(19.5–28.4)
Hispanic	36.7	(25.7–47.7)	22.8	(14.9–30.7)	34.4	(27.5–41.4)	32.0	(27.4–36.6)	25.5	(20.9–30.0)	32.7	(26.7–38.7)
Grade												
9	29.5	(22.4–36.5)	23.4	(17.5–29.2)	25.3	(22.4–28.3)	24.3	(20.1–28.5)	22.1	(18.0–26.3)	19.8	(16.7–23.0)
10	39.0	(34.0–44.0)	24.9	(18.7–31.0)	25.5	(22.3–28.6)	31.1	(25.4–36.8)	28.7	(23.7–33.6)	23.0	(19.2–26.7)
11	36.5	(28.3–44.7)	27.4	(18.6–36.1)	31.7	(26.9–36.5)	36.4	(30.2–42.5)	36.9	(31.3–42.6)	30.9	(27.0–34.9)
12	48.2	(37.9–58.5)	32.4	(25.0–39.7)	35.2	(29.3–41.1)	37.6	(30.4–44.8)	37.5	(31.6–43.4)	31.8	(26.1–37.4)
Total	**38.1**	**(34.3–41.9)**	**26.6**	**(23.1–30.2)**	**29.1**	**(26.5–31.7)**	**31.8**	**(27.6–36.0)**	**30.8**	**(27.8–33.9)**	**26.4**	**(23.9–28.8)**

Source: Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2011

APPENDIX 4A - Part 2

Percentage of Indiana Middle School and High School Respondents Who Currently Use Cigarettes, by Gender, Race/Ethnicity, and School Grade (Indiana Youth Tobacco Survey, 2000–2010)

	2000 %	2000 95% CI	2002 %	2002 95% CI	2004 %	2004 95% CI	2006 %	2006 95% CI	2008 %	2008 95% CI	2010 %	2010 95% CI
MIDDLE SCHOOL												
Gender												
Male	9.3	(6.8–11.9)	8.4	(5.6–11.1)	5.7	(3.7–7.6)	7.1	(5.2–9.1)	4.5	(2.9–6.0)	5.2	(3.7–6.8)
Female	10.4	(6.7–14.2)	11.1	(7.4–14.8)	10.1	(7.5–12.6)	8.3	(6.2–10.5)	3.7	(2.4–4.9)	3.5	(1.9–5.1)
Race/Ethnicity												
White	9.0	(5.9–12.1)	9.1	(6.1–12.1)	8.2	(5.6–10.7)	7.4	(5.5–9.4)	7.0	(4.8–9.1)	4.1	(2.9–5.3)
Black	12.3	(6.0–18.6)	10.2	(7.2–13.1)	6.2	(2.9–9.6)	7.8	(4.5–11.1)	2.9	(1.3–4.4)	4.7	(1.8–7.5)
Hispanic	20.2	(10.3–30.1)	12.1	(5.6–18.6)	7.6	(2.9–12.3)	8.4	(5.3–11.5)	4.2	(2.5–6.0)	8.8	(5.6–12.0)
Grade												
6	5.9	(2.1–9.7)	5.0	(1.6–8.4)	4.9	(0.6–9.2)	2.9	(1.7–4.1)	1.3	(0.3–2.2)	1.5	(0.1–2.9)
7	7.2	(4.1–10.4)	10.2	(6.9–13.5)	8.2	(6.2–10.2)	5.4	(3.8–7.0)	4.1	(2.6–5.7)	2.6	(1.1–4.0)
8	17.1	(11.8–22.3)	13.2	(8.3–18.1)	10.2	(7.1–13.3)	14.6	(10.8–18.5)	6.9	(4.6–9.3)	8.1	(5.3–10.9)
Total	**9.8**	**(7.1–12.6)**	**10.0**	**(7.6–12.4)**	**7.8**	**(5.9–9.7)**	**7.7**	**(5.9–9.6)**	**4.1**	**(2.9–5.3)**	**4.4**	**(3.3–5.5)**
HIGH SCHOOL												
Gender												
Male	32.8	(27.9–37.7)	21.2	(17.9–24.5)	22.8	(20.1–25.6)	23.6	(20.0–27.1)	19.0	(16.0–21.9)	18.8	(15.6–21.9)
Female	30.1	(26.0–34.2)	19.7	(15.3–24.2)	19.4	(17.1–21.8)	22.7	(18.0–27.4)	17.5	(15.1–20.0)	15.8	(13.1–18.5)
Race/Ethnicity												
White	32.8	(29.4–36.3)	20.9	(17.1–24.7)	22.1	(19.4–24.9)	24.8	(20.6–28.9)	21.1	(17.6–24.6)	18.2	(15.4–20.9)
Black	16.5	(11.5–21.6)	16.4	(11.4–21.5)	12.6	(8.9–16.3)	12.5	(8.3–16.8)	12.7	(9.4–16.0)	9.2	(6.2–12.2)
Hispanic	28.2	(16.3–40.1)	17.6	(7.8–27.4)	22.6	(17.3–27.9)	19.9	(14.6–25.1)	15.5	(12.4–18.5)	21.0	(15.6–26.4)
Grade												
9	23.8	(17.1–30.5)	17.0	(11.6–22.5)	18.5	(15.5–21.5)	16.4	(13.5–19.4)	11.5	(8.5–14.5)	13.2	(10.8–15.5)
10	31.4	(26.9–35.9)	19.5	(14.1–25.0)	19.1	(16.6–21.6)	22.5	(18.1–27.0)	16.9	(13.4–20.3)	14.1	(10.5–17.6)
11	30.5	(24.5–36.5)	19.7	(13.1–26.3)	22.9	(18.4–27.3)	27.5	(22.1–32.9)	23.4	(18.2–28.6)	21.2	(17.4–24.9)
12	41.8	(31.7–52.0)	27.3	(20.5–34.1)	25.6	(20.4–30.8)	28.1	(20.6–35.7)	22.7	(18.5–26.9)	21.5	(16.4–26.6)
Total	**31.6**	**(28.3–34.9)**	**20.4**	**(17.0–23.8)**	**21.3**	**(19.1–23.5)**	**23.2**	**(19.5–26.8)**	**18.3**	**(16.0–20.5)**	**17.5**	**(15.1–19.9)**

Source: Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2011

Indiana University Center for Health Policy

Percentage of Indiana Middle School and High School Respondents Who Currently Use Smokeless Tobacco, by Gender, Race/Ethnicity, and School Grade (Indiana Youth Tobacco Survey, 2000–2010)

	2000 %	2000 95% CI	2002 %	2002 95% CI	2004 %	2004 95% CI	2006 %	2006 95% CI	2008 %	2008 95% CI	2010 %	2010 95% CI
MIDDLE SCHOOL												
Gender												
Male	6.3	(3.8–8.8)	3.3	(1.7–4.9)	3.1	(1.5–4.7)	5.2	(3.1–7.3)	4.3	(2.7–5.9)	4.2	(2.6–5.8)
Female	1.8	(0.7–3.0)	1.7	(0.7–2.7)	1.1	(0.3–2.0)	2.0	(1.1–2.8)	2.2	(1.0–3.4)	0.7	(0.2–1.1)
Race/Ethnicity												
White	3.8	(2.3–5.2)	2.5	(1.4–3.6)	2.3	(1.2–3.4)	3.4	(1.9–4.9)	4.1	(2.0–6.2)	2.4	(1.4–3.3)
Black	3.8	(0.0–8.1)	2.0	(0.8–3.2)	3.0	(0.7–5.3)	3.9	(1.4–6.3)	2.8	(1.3–4.3)	1.9	(0.2–3.6)
Hispanic	7.4	(0.6–14.1)	1.3	(0.0–3.0)	0.6	(0.0–1.4)	2.7	(0.8–4.6)	2.7	(1.1–4.2)	2.9	(0.3–5.5)
Grade												
6	4.2	(1.0–7.4)	1.6	(0.3–3.0)	1.9	(0.2–3.5)	1.5	(0.6–2.3)	0.9	(0.1–1.8)	0.5	(0.2–1.3)
7	2.8	(0.9–4.7)	2.2	(0.6–3.8)	1.6	(0.6–2.6)	3.2	(1.8–4.5)	2.9	(1.6–4.1)	1.7	(0.7–2.7)
8	5.4	(2.1–8.6)	3.1	(1.5–4.7)	2.6	(1.1–4.1)	6.1	(2.9–9.3)	6.1	(3.4–8.8)	4.5	(2.3–6.8)
Total	**4.1**	**(2.7–5.6)**	**2.4**	**(1.6–3.2)**	**2.2**	**(1.2–3.1)**	**3.6**	**(2.4–4.9)**	**3.3**	**(2.0–4.6)**	**2.5**	**(1.7–3.4)**
HIGH SCHOOL												
Gender												
Male	12.2	(8.5–16.0)	8.1	(4.4–11.8)	11.8	(9.4–14.1)	14.1	(10.1–18.1)	13.9	(10.5–17.2)	11.8	(9.7–13.9)
Female	1.4	(0.6–2.1)	2.1	(0.8–3.5)	2.5	(1.6–3.3)	1.6	(0.7–2.5)	2.4	(1.5–3.4)	2.3	(1.3–3.3)
Race/Ethnicity												
White	7.7	(5.3–10.1)	5.9	(3.6–8.2)	7.8	(6.2–9.5)	8.9	(6.3–11.4)	10.3	(7.3–13.3)	7.5	(6.1–9.0)
Black	1.2	(0.0–2.8)	3.7	(0.0–8.5)	2.6	(1.0–4.1)	2.5	(0.9–4.0)	5.7	(3.1–8.3)	1.4	(0.1–2.9)
Hispanic	N/A	N/A	0.5	(0.0–1.2)	7.6	(4.3–11.0)	7.1	(3.3–10.9)	4.5	(2.5–6.6)	10.2	(6.5–13.9)
Grade												
9	5.4	(2.0–8.8)	3.9	(2.1–5.7)	6.2	(5.0–7.5)	6.9	(4.3–9.4)	4.6	(3.2–6.0)	3.7	(1.8–5.7)
10	6.7	(4.4–9.0)	5.6	(3.2–7.9)	7.3	(5.3–9.4)	7.0	(3.5–10.5)	8.5	(5.6–11.4)	7.9	(5.5–10.3)
11	6.8	(2.4–11.3)	6.5	(0.3–12.6)	7.8	(5.0–10.6)	7.3	(3.6–11.1)	10.9	(5.9–15.9)	9.1	(6.9–11.4)
12	8.9	(2.3–15.6)	5.2	(1.8–8.6)	8.0	(5.5–10.5)	10.9	(6.9–14.9)	9.4	(6.5–12.4)	8.1	(4.7–11.6)
Total	**6.9**	**(4.7–9.2)**	**5.2**	**(3.1–7.4)**	**7.3**	**(5.9–8.8)**	**7.9**	**(5.7–10.1)**	**8.2**	**(6.1–10.2)**	**7.2**	**(5.9–8.6)**

Source: Indiana State Department of Health, Tobacco Prevention and Cessation Commission, 2011

APPENDIX 4B

Percentage of Indiana Students Reporting Lifetime and Monthly Cigarette Use, by Region and Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2012)

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	6.7	4.9	6.6	7.4	8.9	8.1	8.0	4.4	7.8
	Monthly	2.3	1.4	2.6	2.6	2.6	3.1	5.0	1.2	2.3
7th Grade	Lifetime	11.8	11.6	12.2	8.7	12.7	10.4	16.0	9.9	15.1
	Monthly	5.2	5.4	5.3	2.5	5.4	4.8	6.6	4.5	6.4
8th Grade	Lifetime	20.2	19.1	18.8	19.9	21.2	18.3	29.9	16.7	25.1
	Monthly	9.7	9.4	8.2	9.2	9.4	8.6	14.4	8.2	13.7
9th Grade	Lifetime	25.6	26.3	24.1	25.2	22.8	24.7	30.5	24.2	28.7
	Monthly	12.7	12.7	11.5	12.9	11.7	12.4	15.7	11.5	14.4
10th Grade	Lifetime	30.7	30.8	30.5	27.5	30.8	26.8	34.5	29.0	37.5
	Monthly	16.3	15.7	15.2	14.1	16.0	13.8	19.0	16.9	21.0
11th Grade	Lifetime	35.7	34.9	33.7	32.8	33.8	33.4	41.1	35.2	42.1
	Monthly	19.0	18.2	16.9	15.9	17.5	17.0	22.6	19.8	24.1
12th Grade	Lifetime	39.9	40.6	39.1	34.7	38.4	35.2	40.8	41.4	44.8
	Monthly	22.8	23.2	20.5	19.7	21.2	19.2	22.6	26.0	26.5

Source: Gassman, et al., 2012

APPENDIX 4C

Smoking-Attributable Health Outcomes or Diseases for which Maternal Smoking is a Significant Risk Factor in Indiana (Smoking-Attributable Mortality, Morbidity, and Economic Costs, 2004)

Relative Risk (Risk for infants having the condition, given that their mother smoked during pregnancy; e.g., the risk of SID is 2.29 as high in infants whose mothers smoked during pregnancy as it is in those whose mothers did not smoke)	Sudden Infant Death (SID) Syndrome	2.29
	Short Gestation / Low Birth Weight	1.83
	Respiratory Distress (Syndrome)—newborn	1.30
	Other Respiratory Conditions—perinatal	1.41
Mortality Number of infant deaths caused by maternal smoking)	Short Gestation / Low Birth Weight	Males: 74 Females: 57
	Sudden Infant Death Syndrome	Males: 20 Females: 22
	Respiratory Distress (Syndrome)—newborn	Males: 10 Females: 8
	Other Respiratory Conditions—perinatal	Males: 15 Females: 10
Maternal Smoking Prevalence (Among women who gave birth, percentage who had smoking during pregnancy, as indicated on the birth certificate)		18.0

Source: Centers for Disease Control and Prevention, 2004

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APPENDIX 4D

Average Annual Age-Adjusted Smoking-Attributable Mortality Rate per 100,000 Population Among Adults 35 Years and Older in Indiana (Smoking-Attributable Mortality, Morbidity, and Economic Costs, 2000–2004)

Disease Category	Male	Female	Total
Malignant Neoplasms			
Lip, Oral Cavity, Pharynx	4.9	1.3	2.9
Esophagus	12.1	2.0	6.4
Stomach	2.3	0.6	1.3
Pancreas	5.6	4.4	5.0
Larynx	3.6	0.7	1.9
Trachea, Lung, Bronchus	152.3	66.7	102.2
Cervix Uteri	0.0	0.6	0.3
Kidney and Renal Pelvis	5.5	0.4	2.6
Urinary Bladder	7.0	1.2	3.5
Acute Myeloid Leukemia	1.6	0.4	0.9
Subtotal	**194.9**	**78.3**	**127.0**
Cardiovascular Diseases			
Ischemic Heart Disease	88.6	34.5	57.8
Other Heart Disease	29.5	11.4	18.4
Cerebrovascular Disease	14.9	11.1	12.5
Atherosclerosis	3.4	1.0	1.8
Aortic Aneurysm	11.4	3.8	6.8
Other Circulatory Diseases	1.1	0.9	1.0
Subtotal	**148.9**	**62.7**	**98.3**
Respiratory Diseases			
Pneumonia, Influenza	10.9	4.8	6.9
Bronchitis, Emphysema	17.5	9.2	12.4
Chronic Airway Obstruction	85.0	52.7	64.3
Subtotal	**113.4**	**66.7**	**83.6**
Average Annual Total	**457.2**	**207.7**	**308.9**

Source: Centers for Disease Control and Prevention, 2004

APPENDIX 4E
Health Consequences Attributable to Smoking in Indiana, by County (The State of Tobacco Control)

County	Adult Smokers (%)	Percent of Pregnant Women who Smoke	Births Affected by Smoking	Deaths Attributable to Smoking	Deaths due to Secondhand Smoke	Smoking-related Illness	Lung Cancer Deaths per 100,000 Residents	Cardio-vascular Disease Deaths per 100,000 Residents	Asthma-related ER Visits per 10,000 Residents
Adams	4,522 (19.1%)	9.7%	65	54	7	1,076	46.8	282.7	40.2
Allen	59,396 (22.9%)	15.0%	817	531	65	10,618	52.3	253.7	48.2
Bartholomew	14,818 (25.8%)	18.1%	197	114	14	2,286	60.4	299.5	29.3
Benton	N/A (23.1%)	21.2%	22	15	2	301	70.8	252.4	48.2
Blackford	3,497 (35.5%)	32.7%	51	22	3	450	69.5	292.0	66.9
Boone	8,022 (19.7%)	16.1%	114	74	9	1,475	50.9	298.7	24.6
Brown	2,619 (21.7%)	24.1%	33	24	3	479	63.6	255.0	49.7
Carroll	4,119 (27.1%)	23.5%	54	32	4	645	65.0	232.2	28.8
Cass	7,016 (24.3%)	25.3%	138	65	8	1,310	56.3	289.8	45.7
Clark	23,975 (28.5%)	18.9%	274	154	19	3,087	76.9	330.4	39.2
Clay	6,278 (30.7%)	28.2%	82	42	5	850	58.3	342.3	39.6
Clinton	5,338 (21.9%)	21.7%	116	54	7	1,084	55.9	312.7	37.3
Crawford	N/A (23.1%)	34.7%	43	17	2	344	81.7	346.3	60.2
Daviess	5,407 (24.0%)	15.9%	87	48	6	954	44.7	322.6	45.2
Dearborn	N/A (23.1%)	21.3%	128	74	9	1,475	67.8	269.1	23.9
Decatur	4,546 (23.7%)	28.9%	92	39	5	786	70.7	302.7	48.9
DeKalb	6,000 (19.3%)	31.3%	179	64	8	1,289	52.1	277.9	27.6
Delaware	22,301 (23.7%)	20.6%	276	190	23	3,800	66.9	300.3	51.4
Dubois	6,369 (20.4%)	11.7%	63	63	8	1,269	45.7	299.4	21.6
Elkhart	31,529 (22.3%)	15.0%	534	292	36	5,849	51.8	285.7	40.9
Fayette	4,836 (26.2%)	33.6%	102	41	5	819	74.6	316.1	34.0
Floyd	16,598 (29.3%)	20.8%	183	113	14	2,266	63.2	302.3	45.2
Fountain	3,685 (28.2%)	29.2%	61	29	4	574	62.2	317.2	85.8
Franklin	4,997 (29.3%)	11.0%	34	35	4	709	46.5	233.9	10.2
Fulton	3,573 (22.8%)	34.8%	93	33	4	656	76.9	364.6	61.7

(Continued on next page)

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County	Adult Smokers (%)	Percent of Pregnant Women who Smoke	Births Affected by Smoking	Deaths Attributable to Smoking	Deaths due to Secondhand Smoke	Smoking-related Illness	Lung Cancer Deaths per 100,000 Residents	Cardio-vascular Disease Deaths per 100,000 Residents	Asthma-related ER Visits per 10,000 Residents
Gibson	6,390 (25.2%)	22.6%	102	52	6	1,040	56.4	305.3	46.9
Grant	13,997 (25.5%)	29.3%	254	117	14	2,349	65.7	307.8	87.1
Greene	6,776 (26.8%)	27.9%	112	53	6	1,061	64.6	355.8	23.6
Hamilton	27,978 (14.6%)	4.5%	177	292	36	5,847	44.7	244.8	27.7
Hancock	11,263 (21.8%)	16.2%	145	89	11	1,772	60.5	266.2	43.5
Harrison	6,673 (22.2%)	22.2%	105	55	7	1,098	66.0	299.7	33.6
Hendricks	23,324 (22.1%)	10.4%	193	167	20	3,331	57.7	279.2	24.6
Henry	10,719 (27.9%)	28.3%	143	78	10	1,552	64.0	305.0	64.3
Howard	15,539 (24.6%)	24.2%	274	136	17	2,719	61.5	309.2	65.8
Huntington	7,621 (26.9%)	25.6%	125	61	7	2,719	51.1	280.9	38.5
Jackson	8,374 (26.2%)	23.8%	139	66	8	1,323	64.7	299.2	44.5
Jasper	N/A (23.1%)	22.6%	97	48	6	961	69.5	268.3	16.4
Jay	3,215 (20.6%)	24.1%	77	35	4	698	72.3	290.6	64.5
Jefferson	8,331 (33.2%)	25.1%	96	51	6	1,014	77.4	336.6	22.7
Jennings	7,243 (34.5%)	27.5%	102	44	5	882	71.0	299.1	38.5
Johnson	26,408 (25.7%)	19.0%	363	184	23	3,686	64.3	323.2	47.8
Knox	8,681 (28.7%)	30.4%	151	63	8	1,256	54.0	372.2	59.4
Kosciusko	14,270 (24.8%)	20.9%	230	118	15	2,370	54.3	272.2	33.4
LaGrange	6,640 (27.3%)	12.4%	97	56	7	1,117	39.4	254.0	30.8
Lake	95,870 (26.0%)	13.0%	879	775	95	15,505	59.4	320.6	61.7
LaPorte	22,554 (26.2%)	25.2%	362	176	22	3,523	63.0	316.3	52.5
Lawrence	8,745 (24.8%)	27.7%	138	73	9	1,469	68.6	323.0	64.4
Madison	30,982 (30.6%)	24.7%	413	213	26	4,267	66.2	281.4	66.7
Marion	176,668 (26.1%)	15.4%	2,372	1,377	169	27,532	72.9	302.8	83.6

County	Adult Smokers (%)	Percent of Pregnant Women who Smoke	Births Affected by Smoking	Deaths Attributable to Smoking	Deaths due to Secondhand Smoke	Smoking-related Illness	Lung Cancer Deaths per 100,000 Residents	Cardio-vascular Disease Deaths per 100,000 Residents	Asthma-related ER Visits per 10,000 Residents
Marshall	7,844 (22.8%)	21.3%	142	72	9	1,444	51.1	307.4	33.1
Martin	1,743 (22.2%)	21.4%	30	17	9	332	60.5	317.8	74.8
Miami	8,952 (31.4%)	28.9%	125	58	7	1,155	72.6	275.3	57.1
Monroe	23,678 (20.5%)	18.8%	261	193	24	3,858	54.1	225.2	18.9
Montgomery	8,174 (28.2%)	31.4%	155	60	7	1,204	58.8	299.3	70.0
Morgan	12,324 (23.9%)	28.1%	246	107	13	2,134	75.4	339.4	67.7
Newton	N/A (23.1%)	29.0%	40	23	3	466	78.8	298.6	49.7
Noble	9,053 (26.1%)	24.5%	172	74	9	1,481	67.4	308.1	39.9
Ohio	N/A (23.1%)	23.3%	14	9	1	180	75.9	298.6	49.7
Orange	5,054 (33.8%)	29.5%	78	31	4	618	70.1	321.0	47.9
Owen	6,162 (37.2%)	32.9%	82	35	4	697	94.4	323.5	23.2
Parke	N/A (23.1%)	29.4%	60	28	3	552	79.1	275.9	44.0
Perry	3,966 (26.1%)	30.9%	69	30	4	605	62.5	276.3	55.9
Pike	1,853 (18.6%)	23.7%	36	21	3	411	59.6	358.1	36.3
Porter	29,488 (23.7%)	15.9%	300	235	29	4,697	55.0	284.2	37.3
Posey	4,785 (24.2%)	25.6%	64	43	5	866	63.6	293.8	22.5
Pulaski	2,755 (27.0%)	30.0%	48	22	3	440	60.0	359.4	38.8
Putnam	7,162 (23.9%)	32.5%	136	58	7	1,153	79.4	285.8	39.7
Randolph	4,452 (22.5%)	25.7%	87	44	5	877	59.4	288.0	67.8
Ripley	5,732 (27.0%)	26.6%	98	42	5	849	71.8	288.4	25.0
Rush	3,454 (26.4%)	26.9%	60	29	4	584	80.3	268.6	71.5
Saint Joseph	47,656 (23.7%)	15.7%	591	425	52	8,497	55.5	287.8	33.9
Scott	4,500 (24.5%)	36.4%	126	37	5	735	99.5	315.5	59.0
Shelby	9,573 (28.5%)	27.6%	158	70	9	1,390	64.3	288.3	51.8
Spencer	3,925 (24.7%)	16.2%	40	33	4	652	55.5	324.0	26.9

County	Adult Smokers (%)	Percent of Pregnant Women who Smoke	Births Affected by Smoking	Deaths Attributable to Smoking	Deaths due to Secondhand Smoke	Smoking-related Illness	Lung Cancer Deaths per 100,000 Residents	Cardio-vascular Disease Deaths per 100,000 Residents	Asthma-related ER Visits per 10,000 Residents
Starke	5,600 (31.7%)	31.9%	101	38	5	754	89.2	353.6	46.0
Steuben	7,167 (27.2%)	27.5%	113	53	7	1,063	52.3	309.3	43.6
Sullivan	4,998 (29.6%)	27.3%	59	35	4	696	75.6	358.7	31.9
Switzerland	N/A (23.1%)	29.6%	40	15	2	290	73.4	306.5	49.7
Tippecanoe	28,509 (20.8%)	16.2%	376	238	29	4,766	64.3	274.3	46.8
Tipton	1,725 (14.1%)	17.3%	30	27	3	530	55.5	261.0	55.8
Union	N/A (23.1%)	8.5%	7	12	1	235	56.3	220.2	49.7
Vanderburgh	39,426 (28.2%)	22.5%	555	275	34	5,501	69.1	275.9	60.5
Vermillion	N/A (23.1%)	29.7%	52	27	3	537	59.5	408.8	75.1
Vigo	20,945 (24.7%)	24.9%	333	169	21	3,387	73.2	332.8	41.4
Wabash	6,637 (26.1%)	28.6%	108	56	7	1,119	48.4	281.4	14.4
Warren	1,257 (19.3%)	17.9%	14	13	2	269	57.8	344.5	68.9
Warrick	8,011 (18.1%)	13.4%	92	84	10	1,676	65.4	307.8	42.1
Washington	9,152 (43.3%)	31.4%	103	44	5	871	65.4	307.6	11.3
Wayne	15,698 (29.6%)	24.0%	213	114	14	2,275	74.0	295.4	61.4
Wells	4,666 (22.5%)	18.7%	57	44	5	883	43.4	231.4	26.7
White	3,811 (20.4%)	21.5%	71	40	5	808	77.6	268.2	75.2
Whitley	5,298 (21.1%)	21.6%	97	49	6	983	57.7	278.7	42.4
Indiana	**1,000,000 (21.2%)**	**18.5%**	**16,623**	**9,727**	**1,202**	**196,062**	**67.2**	**294.9**	**49.7**

Source: Indiana State Department of Health, Tobacco Prevention and Cessation Commission (n.d.)

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Marijuana Use in Indiana: Consumption Patterns and Consequences

MARIJUANA CONSUMPTION

Marijuana is a green, brown, or gray mixture of dried, shredded leaves, stems, seeds, and flowers of the hemp plant (Cannabis sativa). All forms of cannabis are mind-altering (psychoactive) drugs. The main active chemical in marijuana is THC (delta-9-tetrahydrocannabinol). Marijuana is usually smoked as a cigarette (called a joint) or in a pipe or bong. It can also be consumed in blunts, which are cigars that have been emptied of tobacco and refilled with marijuana, sometimes in combination with another drug, such as crack. Marijuana can be mixed into foods or brewed as tea (National Institute on Drug Abuse, 2012).

General Consumption Patterns

Marijuana is the most commonly used illicit drug, both in the United States and Indiana. According to results from the 2010–2011 National Survey on Drug Use and Health (NSDUH), an estimated 6.5% (95% Confidence Interval [CI]: 5.4–7.9) of Indiana residents ages 12 and older reported current (past 30 days) marijuana use (U.S.: 6.9%; 95% CI: 6.7–7.2). A slightly larger number, 10.3% (95% CI: 8.8–12.0), of Indiana residents reported past-year use of the drug (U.S.: 11.6%; 95% CI: 11.3–11.9) (Substance Abuse and Mental Health Services Administration, 2012).

Looking at trend data from 2000 through 2011, it seems that the prevalence of current marijuana use has risen from 4.4% to 6.5% in Indiana; however, this increase was statistically not significant (see Figure 5.1). During this period, marijuana use patterns were similar in Indiana and the nation (Substance Abuse and Mental Health Services Administration, 2012).

Figure 5.1 Percentage of Indiana and U.S. Population (Ages 12 and Older) Reporting Current Marijuana Use (National Survey on Drug Use and Health, 2000–2011)
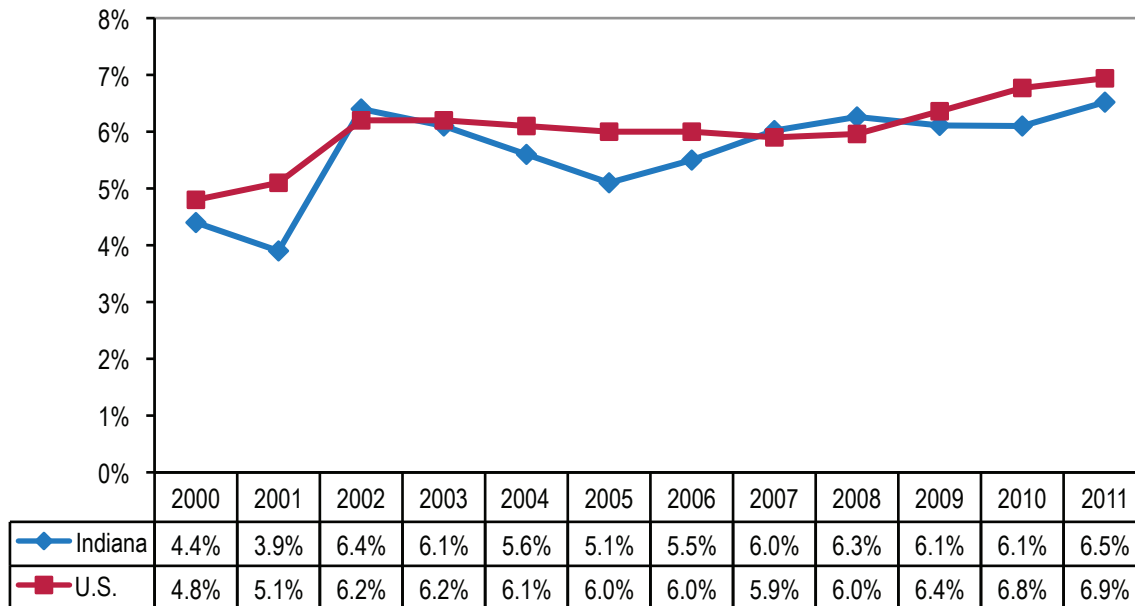
	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Indiana	4.4%	3.9%	6.4%	6.1%	5.6%	5.1%	5.5%	6.0%	6.3%	6.1%	6.1%	6.5%
U.S.	4.8%	5.1%	6.2%	6.2%	6.1%	6.0%	6.0%	5.9%	6.0%	6.4%	6.8%	6.9%

Source: Substance Abuse and Mental Health Services Administration, 2012

Adult Consumption Patterns

Patterns of marijuana use among adults were similar in Indiana and the United States. According to 2010–2011 NSDUH data, marijuana use was highest among individuals ages 18 to 25, with 18.2% (95% CI: 15.4–21.4) of Hoosiers in this age group reporting current use (U.S.: 18.8%; 95% CI: 18.2–19.4) and 28.6% (95% CI: 25.2–32.3) reporting past-year use (U.S.: 30.4; 95% CI: 29.7–31.1) (Substance Abuse and Mental Health Services Administration, 2012).

Among Indiana residents ages 26 and older, 4.4% (95% CI: 3.3–5.9) reported current use (U.S.: 4.8%; 95% CI: 4.5–5.1) and 6.9% (95% CI: 5.4–8.8) reported past-year use (U.S.: 8.0%; 95% CI: 7.6–8.3) (Substance Abuse and Mental Health Services Administration, 2012). See Figure 5.2 for Indiana rates by age group.

Figure 5.2 Percentage of Indiana Residents Reporting Current Marijuana Use, by Age Group (National Survey on Drug Use and Health, 2000–2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
12-17	7.5%	7.2%	7.6%	7.4%	7.6%	6.5%	6.2%	7.4%	7.6%	7.2%	6.7%	6.5%
18-25	12.3%	11.4%	18.3%	17.2%	14.7%	14.4%	15.6%	16.2%	16.9%	16.5%	17.5%	18.2%
26 and older	2.7%	2.2%	4.0%	3.9%	3.6%	3.2%	3.6%	4.1%	4.3%	4.2%	4.1%	4.4%
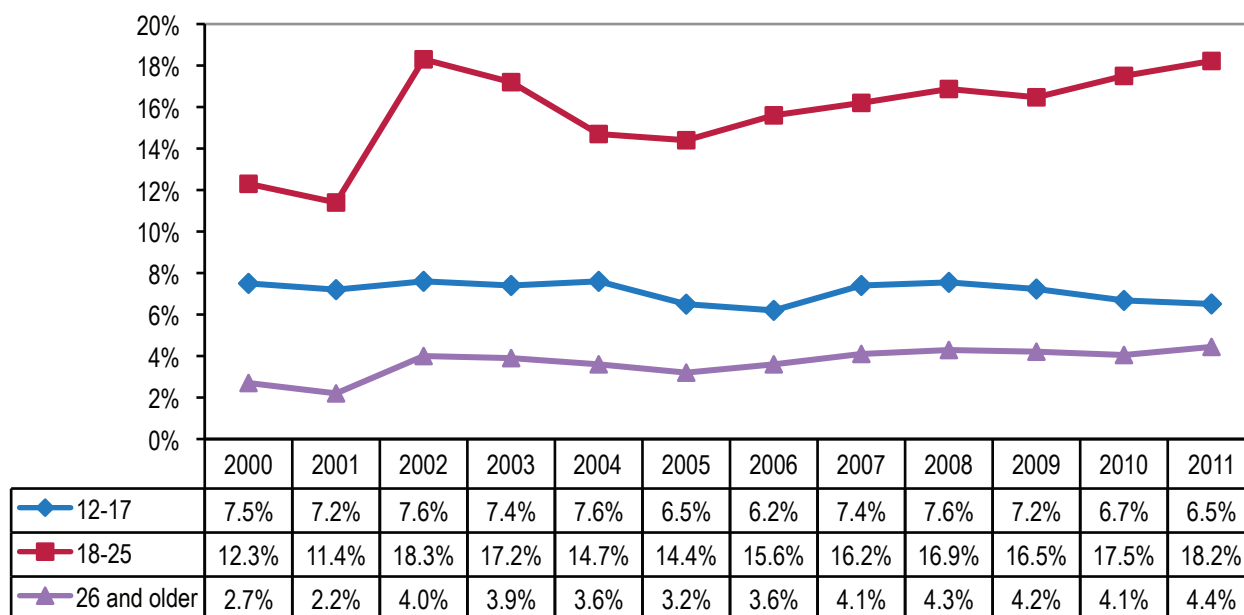
Source: Substance Abuse and Mental Health Services Administration, 2012

Regarding initiation of use in Indiana, 7.3% (95% CI: 5.9–8.9) of 18- to 25-year-olds and 0.2% (95% CI: 0.1–0.2) of individuals 26 years and older reported first use of marijuana during the past year. These rates were statistically similar to the nation's prevalence, 7.3% (95% CI: 7.0–7.7) and 0.2% (95% CI: 0.1–0.2) respectively (Substance Abuse and Mental Health Services Administration, 2012).

Marijuana use is also prevalent among Indiana college students. Based on results from the 2011 Indiana College Substance Use Survey, 18.7% of college students reported current marijuana use (U.S.: 19.4%) and 34.0% reported past-year use (U.S.: 33.2%). Users were more likely to be male and attend a public institution of higher education (Indiana Collegiate Action Network, 2012).[1]

The Treatment Episode Data Set (TEDS) series represents information gathered from clients at admission for each episode of substance abuse treatment (Substance Abuse and Mental Health Data Archive, 2010). TEDS data from 2000 through 2010 show that the percentage of treatment episodes in which marijuana use was reported was significantly higher in Indiana compared to the rest of the United States (P < 0.001). Between 2000 and 2010, roughly one-half of Indiana treatment episodes and approximately one-third of U.S. treatment episodes indicated marijuana use at admission (see Figure 5.3).

[1]Nine Indiana colleges participated in the survey; results are based on nonrandom sampling and are not representative of all college students in Indiana.

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Figure 5.3 Percentage of Indiana and U.S. Treatment Episodes with Marijuana Use Reported at Treatment Admission (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	48.4%	53.8%	54.5%	54.0%	52.6%	52.0%	53.1%	54.0%	55.0%	51.0%	46.0%
U.S.	34.6%	35.3%	35.2%	35.5%	36.2%	36.6%	36.4%	36.0%	37.1%	38.0%	39.0%
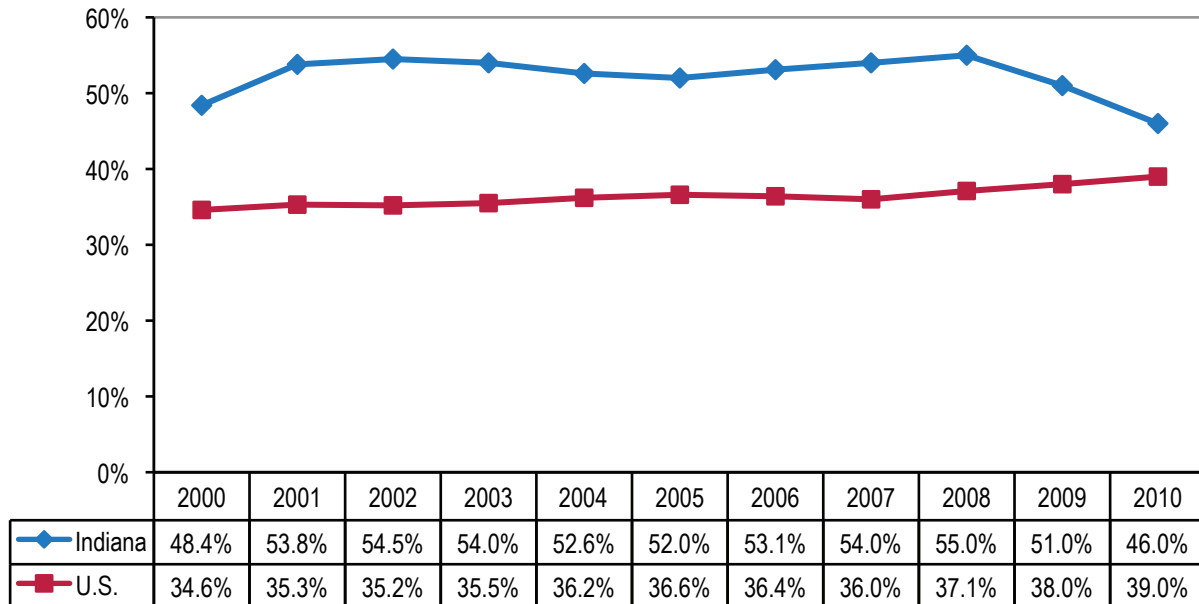
Source: Substance Abuse and Mental Health Data Archive, 2010

Statistically significant differences in marijuana use among Indiana's treatment population were observed by gender, race, and age ($p < 0.001$), as follows:

- Across the years, the percentage of males reporting marijuana use was higher than the percentage of females (see Figure 5.4).
- Blacks had the highest percentage of reported marijuana use, compared to whites and other races in 2010 (see Figure 5.5).
- Throughout the years, marijuana use in the treatment population was highest among adolescents and decreased with age. Most Hoosiers in treatment who were under the age of 18 reported marijuana use (62.4%), while less than one-fifth of Indiana residents ages 55 and older indicated use of the substance (see Figure 5.6).

For county-level information on marijuana use, see Appendix 5A, page 92 (Indiana Family and Social Services Administration, Revenue Enhancement and Data, 2013).

Figure 5.4 Percentage of Indiana Treatment Episodes with Marijuana Use Reported at Treatment Admission, by Gender (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	50.8%	56.4%	56.8%	56.5%	54.9%	54.1%	55.5%	56.7%	57.7%	53.5%	48.3%
Female	43.4%	48.0%	49.5%	48.8%	48.1%	47.7%	48.4%	48.7%	49.5%	45.9%	41.8%
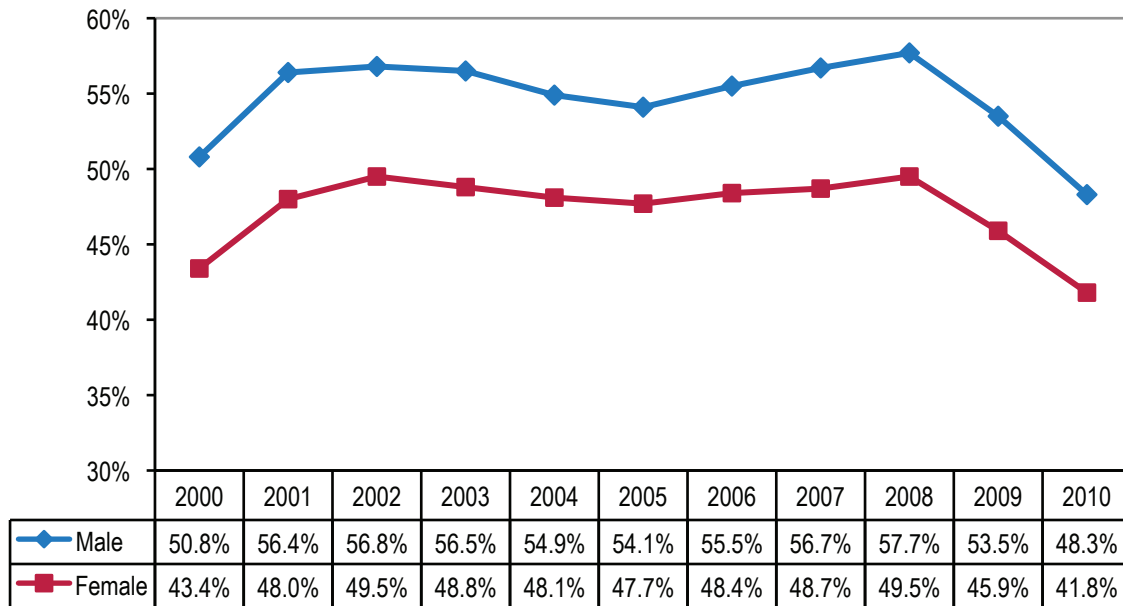
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 5.5 Percentage of Indiana Treatment Episodes with Marijuana Use Reported at Treatment Admission, by Race (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black	48.6%	56.2%	56.1%	56.7%	54.3%	52.0%	54.2%	56.6%	60.6%	58.8%	57.6%
White	49.4%	53.4%	54.6%	53.9%	52.7%	52.7%	53.2%	53.3%	53.9%	49.6%	43.8%
Other	36.1%	49.9%	44.5%	45.6%	46.1%	46.2%	49.4%	58.6%	54.9%	51.5%	50.7%

Source: Substance Abuse and Mental Health Data Archive, 2010

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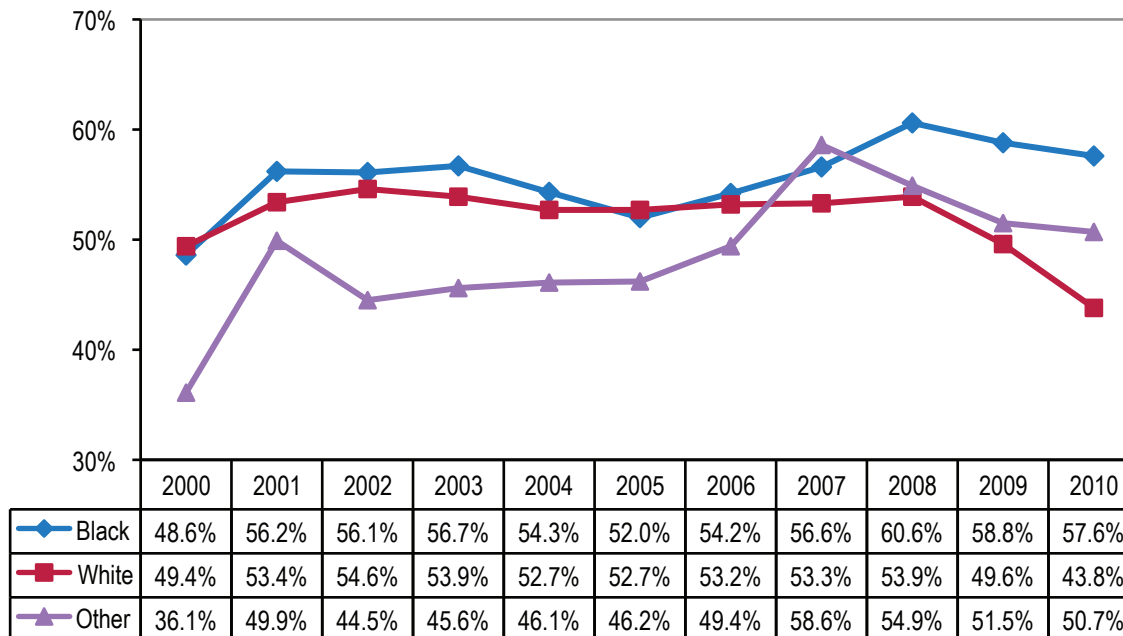
Figure 5.6 Percentage of Indiana Treatment Episodes with Marijuana Use Reported at Treatment Admission, by Age Group (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
under 18	86.0%	88.8%	89.1%	89.9%	86.7%	85.9%	83.8%	83.3%	85.8%	82.0%	62.4%
18 to 24	69.5%	72.7%	73.1%	72.2%	69.6%	68.9%	70.0%	69.7%	70.7%	66.3%	60.1%
25 to 34	52.4%	57.5%	57.1%	56.4%	55.3%	55.2%	56.2%	57.0%	57.3%	53.9%	48.9%
35 to 44	37.8%	41.0%	41.0%	41.5%	41.0%	40.8%	42.4%	44.0%	44.0%	41.5%	38.2%
45 to 54	24.9%	27.7%	29.9%	29.7%	31.0%	32.1%	34.1%	35.1%	34.2%	30.3%	29.3%
55 and over	12.7%	11.3%	11.7%	10.9%	14.3%	13.5%	19.2%	18.3%	20.0%	18.3%	16.5%

Source: Substance Abuse and Mental Health Data Archive, 2010

Youth Consumption Patterns

According to 2011 NSDUH findings, an estimated 5.2% (95% CI: 4.4–6.2) of 12- to 17-year-olds had used marijuana for the first time during the past year in Indiana; the rate was statistically similar to the U.S. rate of 6.1% (95% CI: 5.8–6.3). Over 11% (11.3%; 95% CI: 9.5–13.4) in that age group reported past-year marijuana use (U.S.: 14.1%; 95% CI: 13.7–14.6). Patterns of current marijuana use among Indiana youth mirrored national rates, and remained constant from 2000 to 2011 (see Figure 5.2) (Substance Abuse and Mental Health Services Administration, 2012).

Based on findings from the 2011 Youth Risk Behavior Surveillance System (YRBSS), 20.0% (95% CI: 17.8–22.4) of high school students (grades 9 through 12) reported current marijuana use; this was similar to the national rate of 23.1% (95% CI: 21.5–24.7) (Centers for Disease Control and Prevention, 1991-2011). Prevalence has remained stable from 2003 levels when 22.1% (95% CI: 19.8–24.7) of Indiana students and 22.4% (95% CI: 20.2–24.6) of U.S. students indicated current use (see Figure 5.7).

In 2011, current use increased with grade level and was significantly lower among 9th graders compared to students in grades 11 and 12. Current use was significantly higher for male (23.4%; 95% CI: 19.9–27.3) than female (16.4%; 95% CI: 14.0–19.2) high school students in Indiana. Black students reported significantly higher current use (32.1%; 95% CI: 25.7–39.3) than white students (17.7%; 95% CI: 15.5–20.1) (see Table 5.1) (Centers for Disease Control and Prevention, 1991-2011).

Figure 5.7 Percentage of Indiana and U.S. High School Students Currently Using Marijuana (Youth Risk Behavior Surveillance System, 2003–2011)

	2003	2005	2007	2009	2011
Indiana	22.1%	18.9%	18.9%	20.9%	20.0%
U.S.	22.4%	20.2%	19.7%	20.8%	23.1%
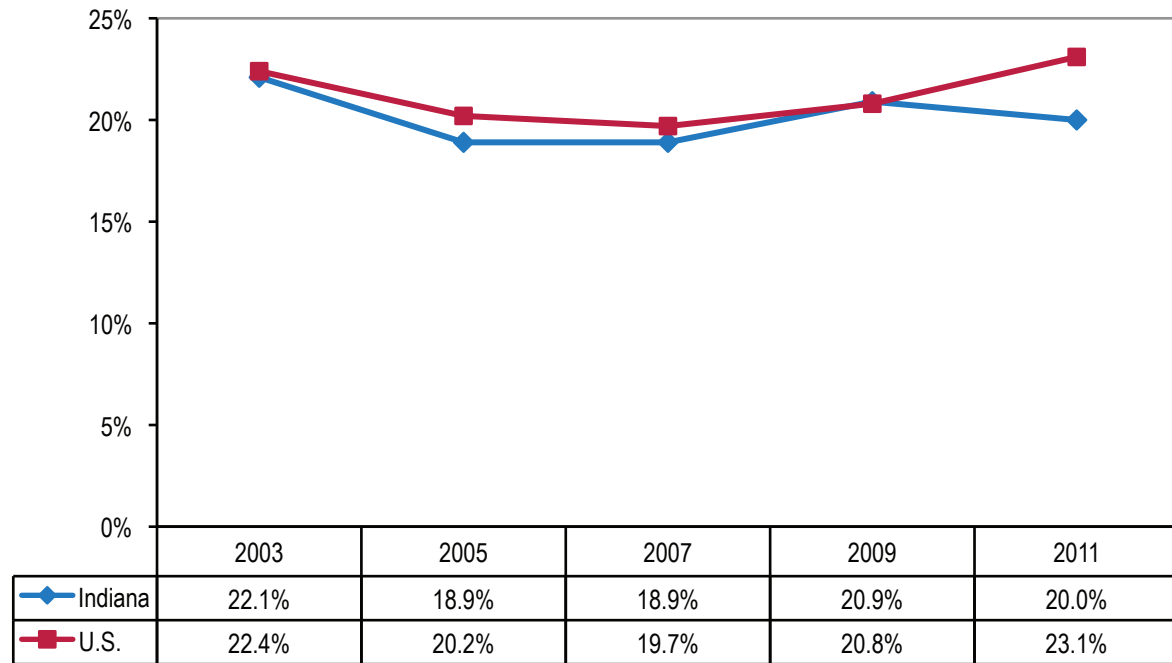
Source: Centers for Disease Control and Prevention, 1991-2011

Table 5.1 Percentage of Indiana and U.S. High School Students Reporting Current (Past Month) Marijuana Use, by Grade, Gender, and Race/Ethnicity (Youth Risk Behavior Surveillance System, 2011)

		Indiana Prevalence Rate (95% CI)	U.S. Prevalence Rate (95% CI)
Grade	9th	12.2% (9.8–15.0)	18.0% (15.9–20.4)
	10th	20.6% (16.2–25.9)	21.6% (19.4–24.0)
	11th	24.6% (19.7–30.3)	25.5% (22.7–28.5)
	12th	23.8% (19.5–28.6)	28.0% (25.9–30.2)
Gender	Male	23.4% (19.9–27.3)	25.9% (23.9–28.0)
	Female	16.4% (14.0–19.2)	20.1% (18.2–22.1)
Race/Ethnicity	Black	32.1% (25.7–39.3)	25.1% (22.5–27.9)
	White	17.7% (15.5–20.1)	21.7% (19.6–24.0)
	Hispanic	21.5% (15.7–28.6)	24.4% (22.0–27.1)
Total		**20.0% (17.8–22.4)**	**23.1% (21.5–24.7)**

Source: Centers for Disease Control and Prevention, 1991-2011

Table 5.2 Percentage of Indiana and U.S. High School Students Reporting Marijuana Initiation Before Age 13, by Grade, Gender, and Race/Ethnicity (Youth Risk Behavior Surveillance System, 2011)

		Indiana Prevalence Rate (95% CI)	U.S. Prevalence Rate (95% CI)
Grade	9th	6.3% (4.3–9.1)	9.7% (8.3–11.3)
	10th	7.9% (6.0–10.4)	7.5% (6.3–8.9)
	11th	7.5% (4.4–12.5)	7.6% (6.4–9.1)
	12th	5.9% (2.8–12.2)	7.0% (5.8–8.5)
Gender	Male	8.1% (6.4–10.2)	10.4% (9.3–11.6)
	Female	5.8% (4.1–8.0)	5.7% (4.8–6.7)
Race/Ethnicity	Black	10.7% (5.9–18.7)	10.5% (8.8–12.6)
	White	5.8% (4.6–7.3)	6.5% (5.7–7.4)
	Hispanic	11.1% (7.3–16.5)	9.4% (7.9–11.2)
Total		**6.9% (5.6–8.6)**	**8.1% (7.3–9.0)**

Source: Centers for Disease Control and Prevention, 1991-2011

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Age at drug initiation is an important risk factor in the subsequent progression to substance abuse and dependence. Researchers found that adolescents who used marijuana by the age of 17 were at greater risk to use other drugs and develop alcohol dependence and drug abuse/dependence (Lynskey, Heath, Bucholz, Slutske, Madden, Nelson, et al., 2003).

In 2011, 6.9% (95% CI: 5.6–8.6) of Indiana students reported that they had tried marijuana before the age of 13; that figure was similar at the national level (8.1%; 95% CI: 7.3–9.0).

No statistically significant differences in initiation of marijuana use before age 13 were observed by gender, race/ethnicity, or grade level in Indiana (see Table 5.2) (Centers for Disease Control and Prevention, 1991-2011).

Reported lifetime use of marijuana among Indiana high school students was 37.2% (95% CI: 33.5–41.1) in 2011 (see Figure 5.8). Prevalence rates did not differ by gender. Black students reported significantly higher lifetime use (54.5%; 95% CI: 45.8–63.0) than white students (33.9%; 95% CI: 30.0–38.1); the difference was not statistically significant between black students and Hispanic students (42.1%; 95% CI: 31.0–54.0). However, 9th grade students had a significantly lower rate than 11th and 12th graders (see Table 5.3). Lifetime prevalence decreased significantly among Indiana high school students from 2003 through 2011 (Centers for Disease Control and Prevention, 1991-2011).

Figure 5.8 Percentage of Indiana and U.S. High School Students Reporting Lifetime Marijuana Use (Youth Risk Behavior Surveillance System, 2003–2011)

	2003	2005	2007	2009	2011
Indiana	43.4%	38.2%	37.8%	37.1%	37.2%
U.S.	40.2%	38.4%	38.1%	36.8%	39.9%
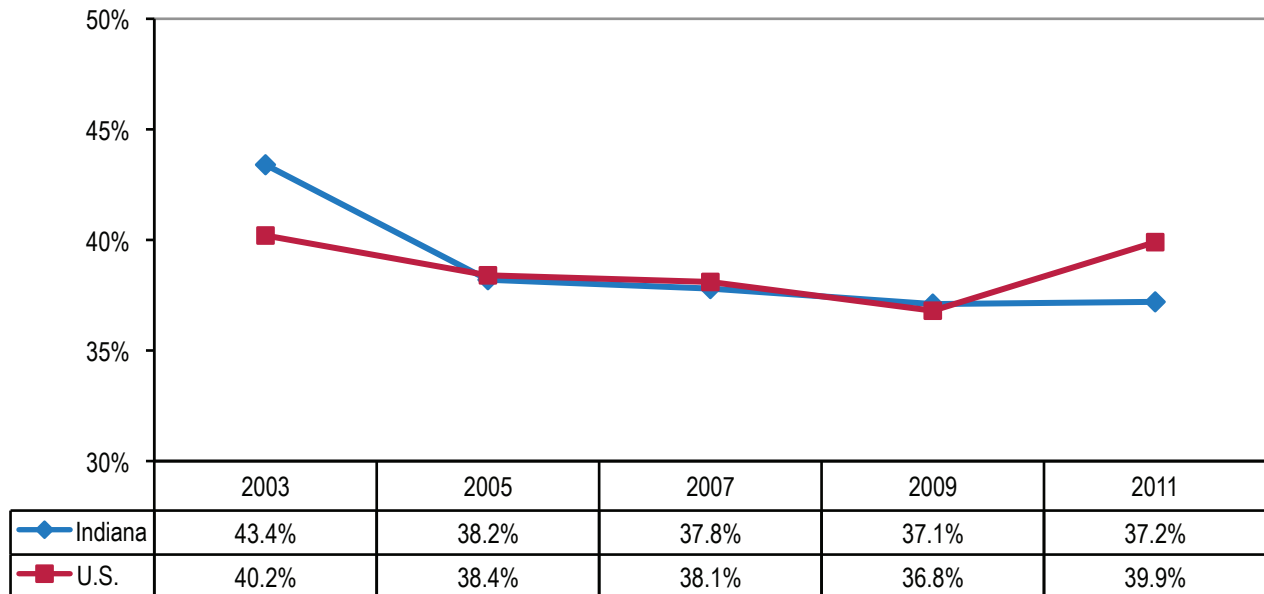
Source: Centers for Disease Control and Prevention, 1991-2011

Table 5.3   Percentage of Indiana and U.S. High School Students Reporting Lifetime Marijuana Use, by Grade, Gender, and Race/Ethnicity (Youth Risk Behavior Surveillance System, 2011)

		Indiana Prevalence Rate (95% CI)	U.S. Prevalence Rate (95% CI)
Grade	9th	23.8% (19.7–28.5)	30.8% (28.0–33.7)
	10th	35.1% (30.1–40.4)	36.4% (33.4–39.5)
	11th	44.3% (36.2–52.8)	45.5% (42.1–48.9)
	12th	47.7% (41.1–54.4)	48.9% (45.7–52.1)
Gender	Male	41.0% (35.9–46.3)	42.5% (39.8–45.2)
	Female	33.3% (29.4–37.4)	37.2% (34.7–39.7)
Race/Ethnicity	Black	54.5% (45.8–63.0)	43.0% (38.9–47.3)
	White	33.9% (30.0–38.1)	37.9% (35.3–40.6)
	Hispanic	42.1% (31.0–54.0)	42.1% (39.2–45.0)
Total		**37.2% (33.5–41.1)**	**39.9% (37.8–42.1)**

Source: Centers for Disease Control and Prevention, 1991-2011

Results from the Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD) survey (Gassman, Jun, Samuel, Agley, Lee, Agley, Oi, et al., 2012) and the Monitoring the Future (MTF) survey (Inter-university Consortium for Political and Social Research, University of Michigan, 2012) show that marijuana use among 8th, 10th, and 12th grade students increased with age. Prevalence rates for current marijuana use seemed comparable between Indiana and the nation; however, due to the lack of detail provided in the publicly available dataset, statistical significance could not be determined. (For current marijuana use trends among 8th, 10th, and 12th grade students from 2002 through 2012, see Figure 5.9).

From 2002 until 2012, lifetime use among students in grades 8, 10, and 12 seemed to have declined both nationally and in Indiana (see Figure 5.10). Again, due to the data format, statistical significance of the differences could not be determined (Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012). For lifetime and monthly marijuana use by Indiana region and grade level for 2012, see Appendix 5B, page 93.

Figure 5.9   Percentage of Indiana and U.S. 8th, 10th, and 12th Grade Students Reporting Current Marijuana Use (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2002-2012, and Monitoring the Future Survey, 2002–2012)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Indiana 8th Grade	11.1%	10.6%	9.8%	9.3%	8.2%	8.3%	7.1%	7.8%	8.9%	8.3%	8.0%
U.S. 8th Grade	8.3%	7.5%	6.4%	6.6%	6.5%	5.7%	5.8%	6.5%	8.0%	7.2%	6.5%
Indiana 10th Grade	19.2%	18.2%	17.2%	16.0%	14.6%	14.4%	13.5%	14.6%	16.8%	16.4%	15.4%
U.S. 10th Grade	17.8%	17.0%	15.9%	15.2%	14.2%	14.2%	13.8%	15.9%	16.7%	17.6%	17.0%
Indiana 12th Grade	20.5%	19.8%	18.3%	17.8%	17.2%	15.8%	16.2%	16.7%	19.2%	19.8%	17.8%
U.S. 12th Grade	21.5%	21.2%	19.9%	19.8%	18.3%	18.8%	19.4%	20.6%	21.4%	22.6%	22.9%

Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

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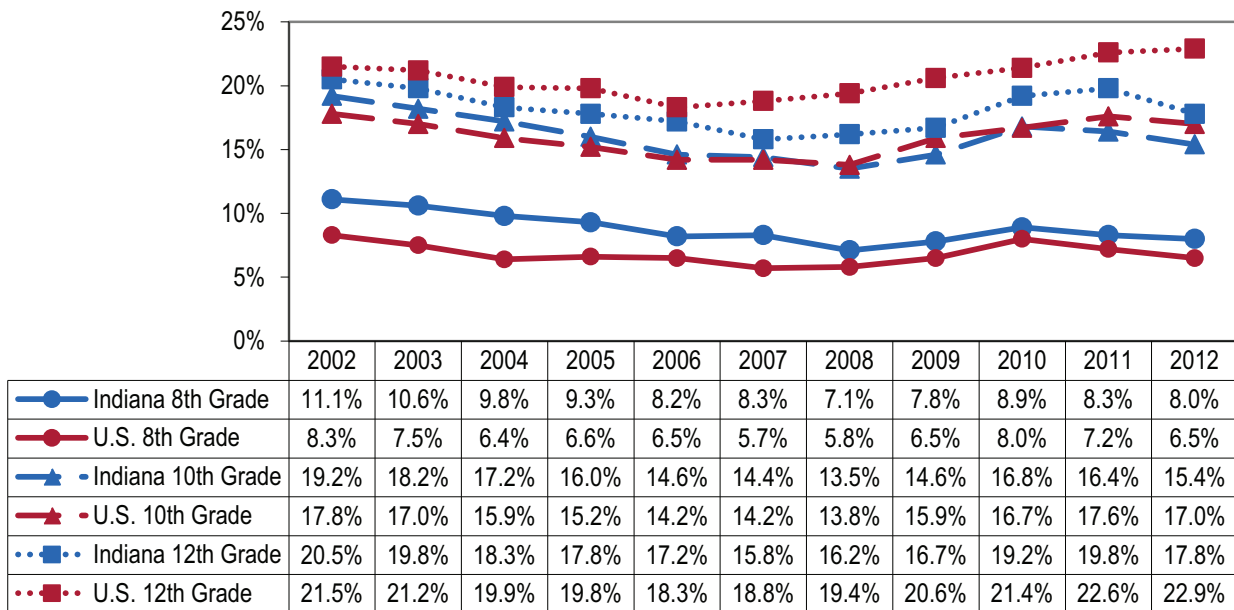
Figure 5.10 Percentage of Indiana and U.S. 8th, 10th, and 12th Grade Students Reporting Use of Marijuana Once or More in Their Life, by Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2002-2012, and Monitoring the Future Survey, 2002–2012)

	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Indiana 8th Grade	20.0%	19.1%	18.6%	17.6%	15.6%	16.1%	14.4%	15.0%	15.3%	14.6%	14.6%
U.S. 8th Grade	19.2%	17.5%	16.3%	16.5%	15.7%	14.2%	14.6%	15.7%	17.3%	16.4%	15.2%
Indiana 10th Grade	36.9%	34.8%	33.5%	31.6%	30.1%	29.9%	28.3%	29.1%	30.9%	30.3%	29.4%
U.S. 10th Grade	38.7%	36.4%	35.1%	34.1%	31.8%	31.0%	29.9%	32.3%	33.4%	34.5%	33.8%
Indiana 12th Grade	44.8%	42.3%	40.5%	40.1%	37.1%	36.5%	36.5%	36.8%	38.6%	38.6%	37.5%
U.S. 12th Grade	47.8%	46.1%	45.7%	44.8%	42.3%	41.8%	42.6%	42.0%	43.8%	45.5%	45.2%
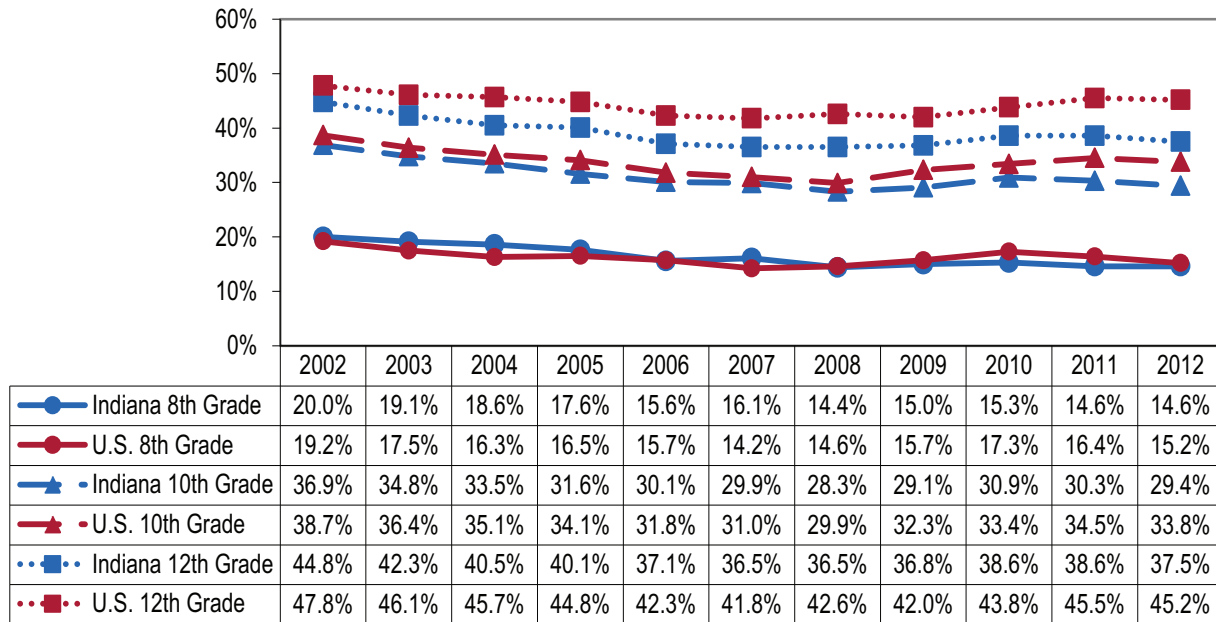
Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

CONSEQUENCES OF MARIJUANA USE

Health-Related Consequences

Marijuana use can produce adverse physical, mental, emotional, and behavioral changes, and long-term use can lead to addiction. Short-term effects include memory impairment and learning problems, distorted perception, difficulty thinking and solving problems, loss of coordination, and increased heart rate. Harmful health effects also include respiratory illnesses, a weakened immune system, and increased risk of heart attack and cancer (National Institute on Drug Abuse, 2012).

Marijuana use also is associated with risky sexual behavior, and is considered a gateway to teen sex. As such, it might result in an increase in unwanted pregnancies and sexually transmitted diseases (STDs). In addition, babies born to women who used marijuana during their pregnancy exhibit altered responses to visual stimuli and increased tremulousness, indicating problems with neurological development. Marijuana use is also correlated with higher rates of "harder" drug use and higher rates of tobacco use (National Institute on Drug Abuse, 2012).

Marijuana Dependence

The Treatment Episode Data Set (TEDS) series indicates that at least for the past nine years, marijuana dependence[3] was more of a problem among the treatment population in Indiana than the treatment population in the rest of the nation. In 2010, marijuana dependence was indicated in 21.4% of Indiana's treatment episodes, compared to 18.4% in the nation (see Figure 5.11) (Substance Abuse and Mental Health Data Archive, 2010).

Significant differences for marijuana dependence were observed by gender, age, and race, as follows (findings from the 2010 TEDS dataset):

- More males (22.8%) than females (19.0%) reported marijuana dependency ($p < 0.001$) (see Figure 5.12).
- More blacks (34.4%) reported marijuana dependency than whites (18.9%) or persons from other races (26.0%) ($p < 0.001$) (see Figure 5.13).
- The percentage of adolescents (under age 18) reporting marijuana dependency was higher than any other age group ($p < 0.001$) (see Figure 5.14) (Substance Abuse and Mental Health Data Archive, 2010).

For county-level information on marijuana dependence, see Appendix 5A, page 92.

[3]We defined marijuana dependence as "individuals in substance abuse treatment listing marijuana as their primary substance at admission."

Figure 5.11 Percentage of Indiana and U.S. Treatment Episodes with Marijuana Dependence Reported at Treatment Admission (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	20.4%	24.8%	24.7%	24.7%	24.6%	23.8%	24.1%	23.8%	24.7%	23.0%	21.4%
U.S.	14.1%	15.0%	15.0%	15.4%	15.7%	15.8%	15.9%	15.7%	16.9%	18.0%	18.4%
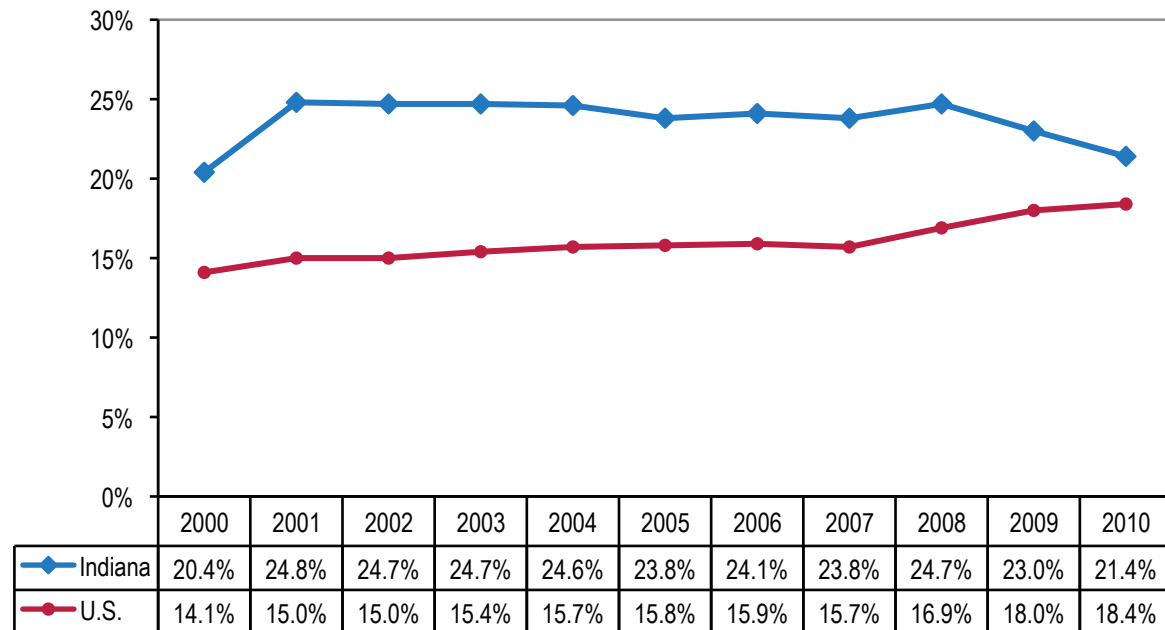
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 5.12 Percentage of Indiana Treatment Episodes with Marijuana Dependence Reported at Treatment Admission, by Gender (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	22.1%	27.0%	26.5%	26.2%	26.1%	25.0%	25.4%	25.4%	26.4%	24.2%	22.8%
Female	16.6%	19.9%	21.0%	21.6%	21.6%	21.2%	21.6%	20.6%	21.1%	20.6%	19.0%

Source: Substance Abuse and Mental Health Data Archive, 2010

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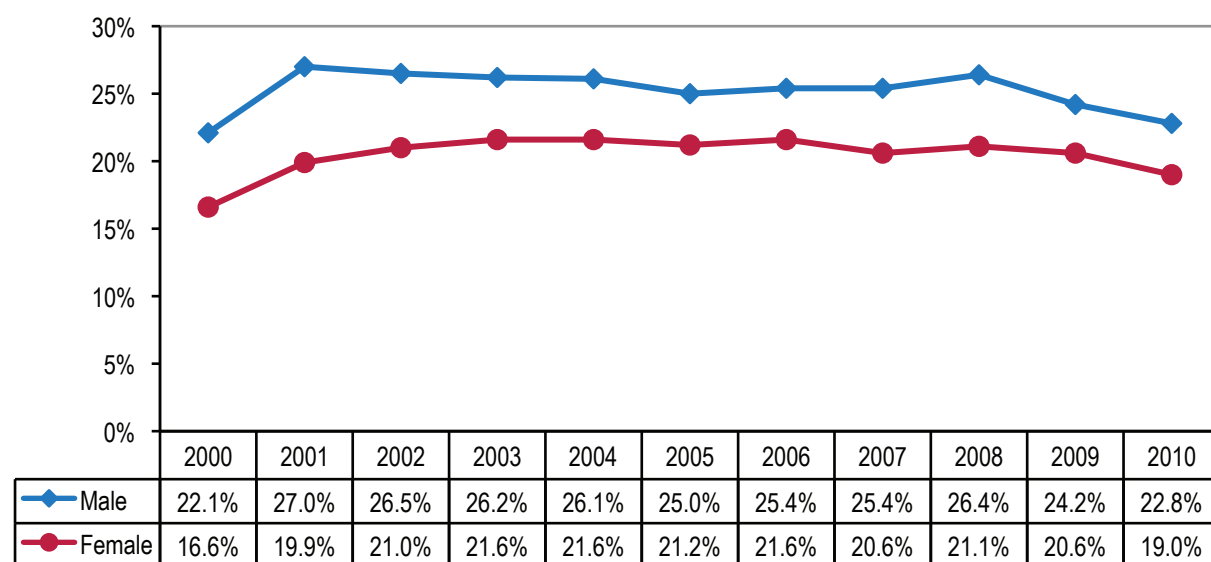
Figure 5.13 Percentage of Indiana Treatment Episodes with Marijuana Dependence Reported at Treatment Admission, by Race (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black	20.3%	27.8%	29.0%	29.7%	30.8%	28.4%	29.8%	30.2%	35.0%	33.7%	34.4%
White	20.7%	24.0%	23.8%	23.8%	23.3%	23.3%	23.1%	22.2%	22.4%	20.9%	18.9%
Other	15.6%	24.4%	23.6%	23.0%	23.6%	22.1%	20.9%	28.8%	27.0%	22.9%	26.0%
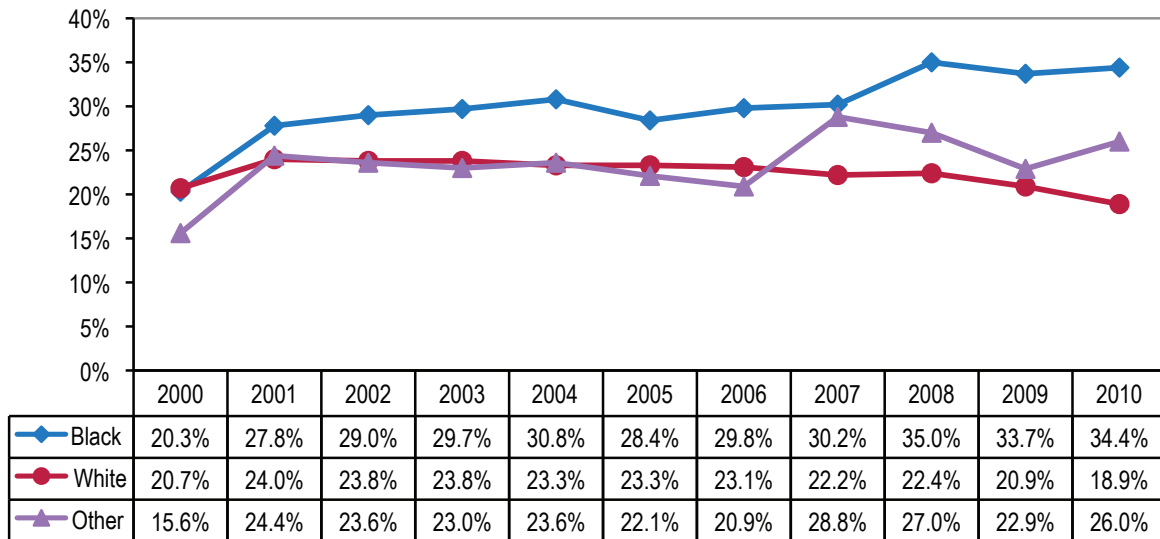
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 5.14 Percentage of Indiana Treatment Episodes with Marijuana Dependence Reported at Treatment Admission, by Age Group (Treatment Episode Data Set, 2000–2010)

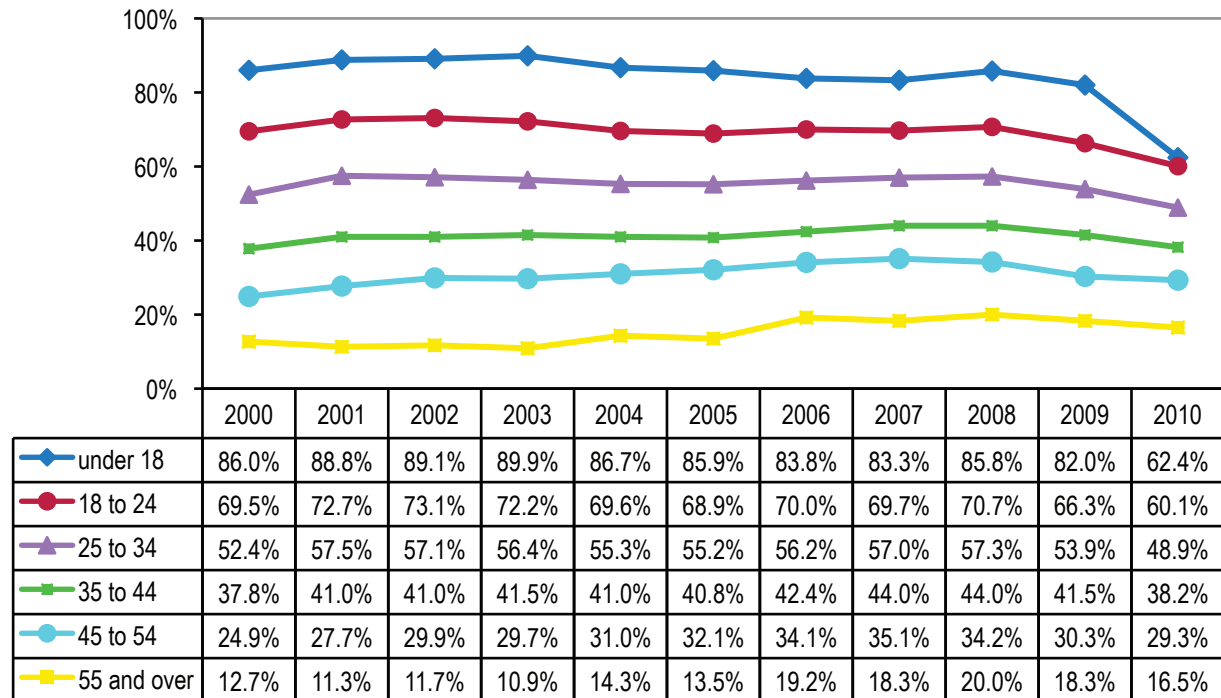|	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
under 18	71.7%	73.2%	74.1%	74.0%	71.6%	66.4%	64.1%	63.3%	68.8%	70.3%	51.8%
18 to 24	38.6%	41.4%	40.1%	40.4%	39.1%	37.9%	39.3%	37.6%	38.4%	35.7%	34.3%
25 to 34	19.6%	23.7%	22.8%	23.2%	24.1%	24.4%	24.4%	24.3%	23.7%	22.8%	20.9%
35 to 44	9.4%	11.1%	11.5%	11.8%	12.0%	12.5%	13.2%	13.0%	13.7%	12.6%	13.6%
45 to 54	4.4%	6.1%	6.5%	7.2%	8.6%	8.7%	8.7%	8.5%	8.0%	8.0%	7.6%
55 and over	2.1%	2.7%	3.6%	2.6%	3.1%	4.2%	5.2%	4.5%	4.5%	3.9%	4.0%
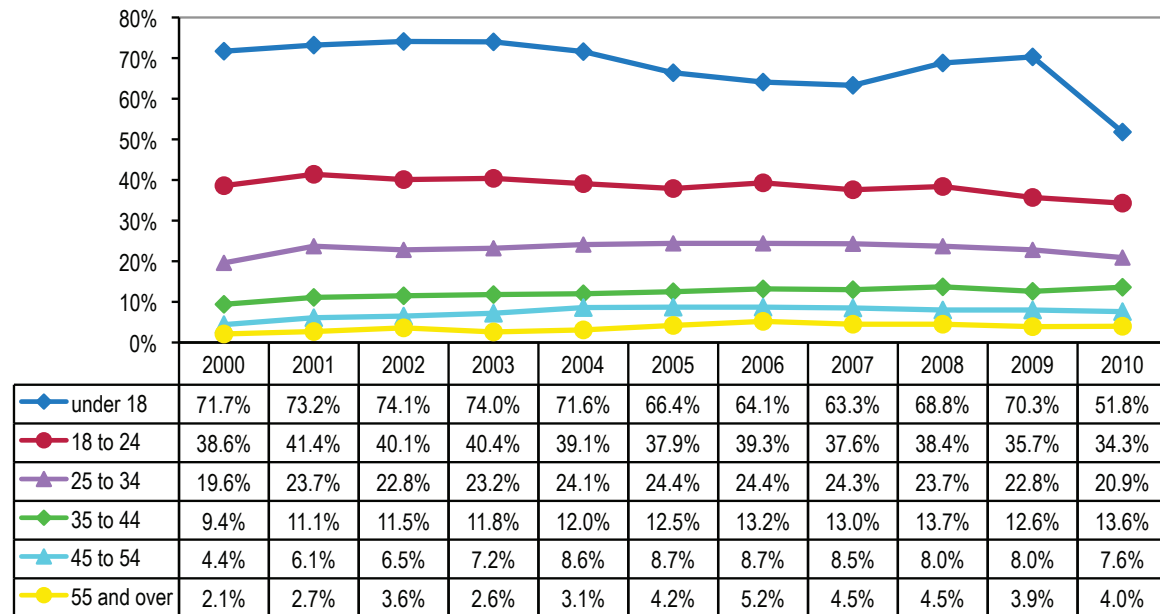
Source: Substance Abuse and Mental Health Data Archive, 2010

Criminal Consequences

The Uniform Crime Reporting (UCR) program collects drug violation arrest data nationwide (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010). According to 2010 results, over 14,000 arrests were made in Indiana for the possession of marijuana. This represents an arrest rate of 2.2 (95% CI: 2.2–2.3) per 1,000 population; which is the same as the U.S. rate of 2.2 (95% CI: 2.2–2.2) per 1,000 population. Additionally, over 2,300 Hoosiers were arrested for selling marijuana. Indiana's arrest rate for sale of the substance was 0.4 per 1,000 population (95% CI: 0.3–0.4), comparable to the national rate of 0.3 per 1,000 population (95% CI: 0.3–0.3) (see Figures 5.15 and 5.16).

Maps 5.1 and 5.2 (pages 96 and 97) and Appendix 5C (pages 94-95), portray the distribution by county of 2010 arrest rates (per 1,000 population) due to marijuana possession and dealing (sale/manufacture) based on UCR data. While geographic/regional arrest patterns are not immediately apparent, these data demonstrate that most counties' arrest rates for possession exceed those for dealing. Caution should be exercised when interpreting these data due to variations in reporting procedures. In Indiana, reporting coverage by county and local law enforcement jurisdictions is sometimes incomplete; therefore, a portion of these data are based on estimates. (For further details, see the discussion of UCR data in Chapter 2, Methods, page 17.)

Social Consequences

In terms of social consequences, depression, anxiety, and personality disturbances are associated with chronic marijuana use. Marijuana use compromises the ability to learn and retain information, and heavy use leads to loss of critical intellectual, job, and social skills. Students who smoke marijuana exhibit lower academic performance and are less likely to graduate from high school, compared to their nonsmoking peers. Higher rates of absenteeism are also found among students who use marijuana. Individuals who use marijuana are more likely to have problems at work, including accidents, injuries, and absenteeism. Marijuana use also impacts children and families by contributing to increased interpersonal conflicts, financial problems, poor parenting, incarceration of parents, and children being placed in protective custody (National Institute on Drug Abuse, 2012).

Figure 5.15 Number of Indiana Arrests for Marijuana Possession and Sale/Manufacture (Uniform Crime Reporting Program, 1999–2010)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Possession	14,608	14,484	13,945	12,670	13,511	14,431	15,358	16,373	14,493	13,797	14,432	14,552
Sales	1,608	1,806	1,744	1,655	2,086	2,124	2,053	2,082	1,904	2,106	2,297	2,324

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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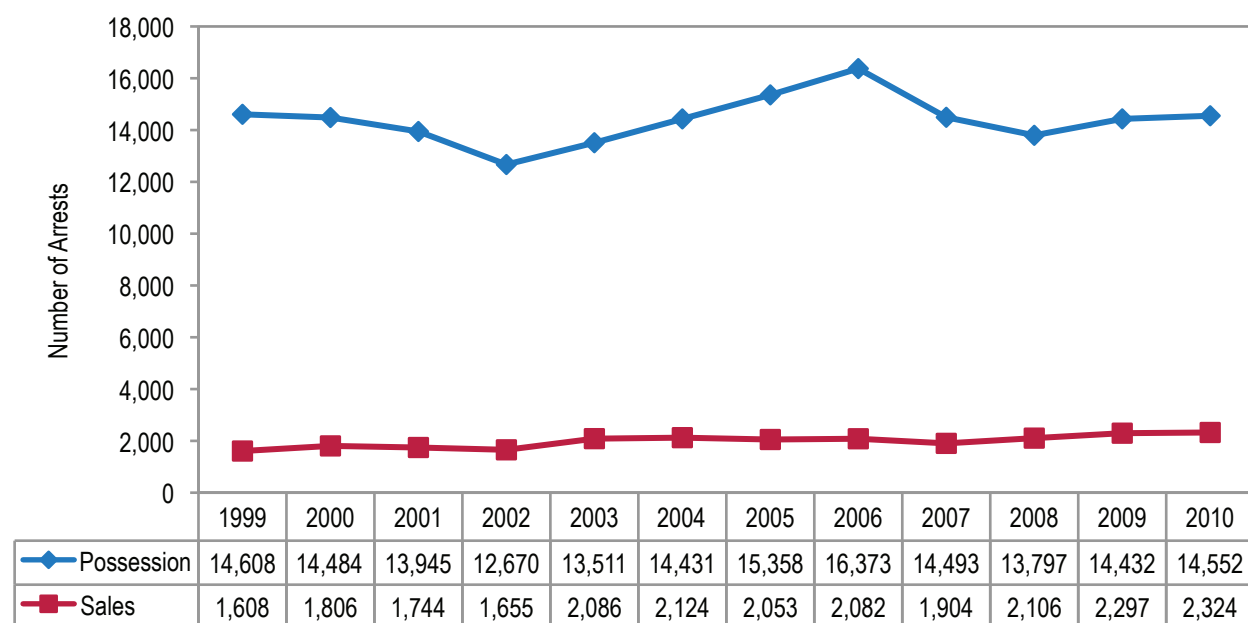
Figure 5.16 Indiana and U.S. Arrest Rates for Marijuana Possession and Sale/Manufacture per 1,000 Population (Uniform Crime Reporting Program, 1999–2010)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana Possession	2.5	2.4	2.3	2.1	2.2	2.3	2.4	2.6	2.3	2.2	2.2	2.2
U.S. Possession	2.1	2.2	2.0	1.8	1.9	2.0	2.1	2.2	2.3	2.3	2.2	2.2
Indiana Sales	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.4	0.4
U.S. Sales	0.3	0.3	0.3	0.2	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
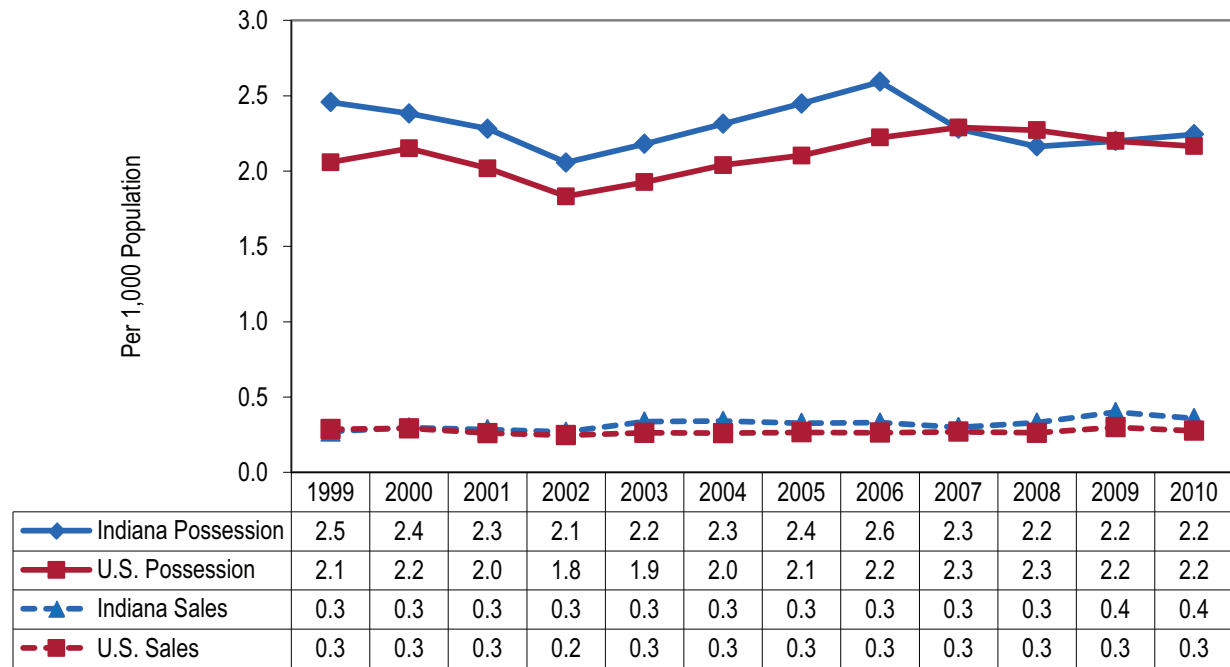
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Number of Treatment Episodes with Marijuana Use and Dependence Reported at Treatment Admission in Indiana, by County (Substance Abuse Population by County/Treatment Episode Data Set, 2012)

County	Treatment Episodes Total	Marijuana Use Number	Marijuana Use %	Marijuana Dependence Number	Marijuana Dependence %	County	Treatment Episodes Total	Marijuana Use Number	Marijuana Use %	Marijuana Dependence Number	Marijuana Dependence %
Adams	138	70	50.7%	25	18.1%	Madison	804	516	64.2%	209	26.0%
Allen	1,822	949	52.1%	361	19.8%	Marion	4,091	1,872	45.8%	975	23.8%
Bartholomew	661	277	41.9%	84	12.7%	Marshall	236	37	15.7%	7	3.0%
Benton	41	23	56.1%	10	24.4%	Martin	47	21	44.7%	11	23.4%
Blackford	51	27	52.9%	15	29.4%	Miami	241	146	60.6%	55	22.8%
Boone	199	98	49.2%	38	19.1%	Monroe	1,505	611	40.6%	219	14.6%
Brown	116	49	42.2%	11	9.5%	Montgomery	357	215	60.2%	111	31.1%
Carroll	123	61	49.6%	21	17.1%	Morgan	540	210	38.9%	114	21.1%
Cass	273	162	59.3%	48	17.6%	Newton	44	23	52.3%	9	20.5%
Clark	418	125	29.9%	39	9.3%	Noble	418	135	32.3%	49	11.7%
Clay	173	87	50.3%	42	24.3%	Ohio	38	14	36.8%	6	15.8%
Clinton	146	84	57.5%	32	21.9%	Orange	105	41	39.0%	13	12.4%
Crawford	57	23	40.4%	5	8.8%	Owen	265	125	47.2%	59	22.3%
Daviess	188	88	46.8%	39	20.7%	Parke	135	65	48.1%	30	22.2%
Dearborn	450	205	45.6%	69	15.3%	Perry	148	82	55.4%	38	25.7%
Decatur	193	75	38.9%	29	15.0%	Pike	51	30	58.8%	15	29.4%
DeKalb	205	100	48.8%	52	25.4%	Porter	713	282	39.6%	117	16.4%
Delaware	1,168	516	44.2%	265	22.7%	Posey	118	66	55.9%	25	21.2%
Dubois	358	182	50.8%	76	21.2%	Pulaski	104	54	51.9%	14	13.5%
Elkhart	1,040	552	53.1%	304	29.2%	Putnam	215	89	41.4%	43	20.0%
Fayette	219	61	27.9%	15	6.8%	Randolph	188	85	45.2%	25	13.3%
Floyd	182	53	29.1%	18	9.9%	Ripley	189	77	40.7%	29	15.3%
Fountain	81	54	66.7%	26	32.1%	Rush	137	66	48.2%	20	14.6%
Franklin	91	37	40.7%	10	11.0%	Saint Joseph	1,293	555	42.9%	246	19.0%
Fulton	215	120	55.8%	55	25.6%	Scott	189	64	33.9%	25	13.2%
Gibson	204	107	52.5%	53	26.0%	Shelby	78	37	47.4%	10	12.8%
Grant	448	291	65.0%	122	27.2%	Spencer	195	115	59.0%	38	19.5%
Greene	176	85	48.3%	37	21.0%	Starke	203	82	40.4%	36	17.7%
Hamilton	699	400	57.2%	191	27.3%	Steuben	194	117	60.3%	50	25.8%
Hancock	147	79	53.7%	30	20.4%	Sullivan	102	50	49.0%	19	18.6%
Harrison	119	36	30.3%	15	12.6%	Switzerland	41	15	36.6%	<5	N/A
Hendricks	328	125	38.1%	78	23.8%	Tippecanoe	469	284	60.6%	128	27.3%
Henry	305	131	43.0%	64	21.0%	Tipton	59	29	49.2%	13	22.0%
Howard	588	310	52.7%	118	20.1%	Union	33	14	42.4%	5	15.2%
Huntington	147	26	17.7%	10	6.8%	Vanderburgh	1,367	858	62.8%	323	23.6%
Jackson	271	131	48.3%	36	13.3%	Vermillion	130	51	39.2%	24	18.5%
Jasper	94	36	38.3%	13	13.8%	Vigo	759	435	57.3%	211	27.8%
Jay	126	50	39.7%	23	18.3%	Wabash	183	24	13.1%	9	4.9%
Jefferson	292	111	38.0%	31	10.6%	Warren	29	18	62.1%	10	34.5%
Jennings	204	87	42.6%	17	8.3%	Warrick	278	173	62.2%	66	23.7%
Johnson	207	88	42.5%	35	16.9%	Washington	68	22	32.4%	8	11.8%
Knox	442	235	53.2%	111	25.1%	Wayne	594	256	43.1%	84	14.1%
Kosciusko	314	44	14.0%	12	3.8%	Wells	122	72	59.0%	32	26.2%
LaGrange	172	121	70.3%	56	32.6%	White	148	91	61.5%	26	17.6%
Lake	2,803	1,103	39.4%	531	18.9%	Whitley	124	22	17.7%	6	4.8%
LaPorte	637	280	44.0%	123	19.3%	County Info Missing	198	80	40.4%	37	18.7%
Lawrence	432	170	39.4%	84	19.4%	**Indiana**	**35,308**	**16,450**	**46.6%**	**7,082**	**20.1%**

Note: We defined marijuana dependence as "individuals in substance abuse treatment listing marijuana as their primary substance at admission."
We calculated the percentages by dividing the number of reported marijuana use/dependence by the number of treatment episodes.
Information on treatment episodes <5 was suppressed due to confidentiality constraints.
Source: Indiana Family and Social Services Administration, 2013

APPENDIX 5B

Percentage of Indiana Students Reporting Lifetime and Monthly Marijuana Use, by Region and Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2012)

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	2.7	2.3	2.6	2.1	2.3	4.8	3.6	1.0	2.7
	Monthly	1.3	0.9	1.2	1.2	1.0	2.7	1.8	0.5	1.0
7th Grade	Lifetime	6.1	7.1	6.4	2.5	5.4	5.8	9.6	4.5	6.9
	Monthly	3.2	3.8	3.7	1.1	2.2	3.0	4.7	2.4	3.9
8th Grade	Lifetime	14.6	15.7	16.5	11.6	12.0	14.6	20.7	9.8	16.1
	Monthly	8.0	8.8	8.9	5.2	5.9	8.4	11.8	5.5	8.7
9th Grade	Lifetime	21.0	25.0	18.8	18.2	18.0	23.0	25.9	16.4	21.2
	Monthly	11.5	14.2	10.0	8.1	9.9	13.3	15.4	8.8	10.7
10th Grade	Lifetime	29.4	32.7	30.0	22.0	26.5	31.7	30.3	24.5	32.0
	Monthly	15.4	17.7	15.5	10.9	14.0	16.7	16.0	12.7	16.6
11th Grade	Lifetime	32.7	36.5	29.0	26.4	31.5	35.3	38.4	27.2	34.8
	Monthly	15.8	17.3	13.1	11.8	14.5	17.1	20.8	13.7	17.2
12th Grade	Lifetime	37.5	42.5	40.5	26.2	33.3	37.0	36.4	34.1	41.1
	Monthly	17.8	22.1	19.2	10.6	14.8	18.2	17.6	13.4	21.4

Source: Gassman, et al., 2012

APPENDIX 5C

Number and Rate, per 1,000 Population, of Arrests for Marijuana Possession and Sale/Manufacture in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Number of Arrests for Possession	Possession Arrest Rate	Number of Arrests for Sale	Sale Arrest Rate
Adams	31	0.9	2	*0.1
Allen	792	2.2	82	0.2
Bartholomew	201	2.6	1	*0.0
Benton	9	*1.0	1	*0.1
Blackford	26	2.1	2	*0.2
Boone	73	1.3	16	*0.3
Brown	13	*0.9	0	*0.0
Carroll	38	1.9	2	*0.1
Cass	59	1.5	17	*0.4
Clark	262	2.4	18	*0.2
Clay	55	2.0	4	*0.1
Clinton	42	1.3	4	*0.1
Crawford	1	*0.1	3	*0.3
Daviess	52	1.6	13	*0.4
Dearborn	100	2.0	21	0.4
Decatur	34	1.3	15	*0.6
DeKalb	64	1.5	5	*0.1
Delaware	136	1.2	4	*0.0
Dubois	37	0.9	3	*0.1
Elkhart	469	2.4	22	0.1
Fayette	31	1.3	1	*0.0
Floyd	241	3.2	37	0.5
Fountain	24	1.4	2	*0.1
Franklin	1	*0.0	16	*0.7
Fulton	22	1.1	4	*0.2
Gibson	22	0.7	3	*0.1
Grant	142	2.0	6	*0.1
Greene	50	1.5	5	*0.2
Hamilton	605	2.2	18	*0.1
Hancock	122	1.7	18	*0.3
Harrison	44	1.1	2	*0.1
Hendricks	290	2.0	28	0.2
Henry	53	1.1	9	*0.2
Howard	201	2.4	14	*0.2
Huntington	45	1.2	3	*0.1
Jackson	125	2.9	14	*0.3
Jasper	37	1.1	8	*0.2
Jay	57	2.7	4	*0.2
Jefferson	55	1.7	8	*0.2
Jennings	3	*0.1	31	1.1
Johnson	332	2.4	25	0.2
Knox	46	1.2	45	1.2
Kosciusko	150	2.0	7	*0.1
LaGrange	26	0.7	0	*0.0
Lake	1,089	2.2	486	1.0
LaPorte	201	1.8	43	0.4
Lawrence	82	1.8	10	*0.2
Madison	310	2.4	38	0.3
Marion	3,339	3.7	575	0.6

(continued on next page)

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County	Number of Arrests for Possession	Possession Arrest Rate	Number of Arrests for Sale	Sale Arrest Rate
Marshall	89	1.9	4	*0.1
Martin	11	*1.1	0	*0.0
Miami	27	0.7	18	*0.5
Monroe	354	2.6	22	0.2
Montgomery	113	3.0	5	*0.1
Morgan	115	1.7	58	0.8
Newton	51	3.6	3	*0.2
Noble	89	1.9	11	*0.2
Ohio	8	*1.3	1	*0.2
Orange	21	1.1	2	*0.1
Owen	28	1.3	4	*0.2
Parke	43	2.5	1	*0.1
Perry	40	2.1	8	*0.4
Pike	18	*1.4	2	*0.2
Porter	328	2.0	41	0.2
Posey	38	1.5	7	*0.3
Pulaski	23	1.7	1	*0.1
Putnam	52	1.4	14	*0.4
Randolph	40	1.5	2	*0.1
Ripley	32	1.1	9	*0.3
Rush	19	*1.1	61	3.5
Saint Joseph	480	1.8	55	0.2
Scott	20	0.8	0	*0.0
Shelby	84	1.9	18	*0.4
Spencer	22	1.1	2	*0.1
Starke	39	1.7	7	*0.3
Steuben	80	2.3	6	*0.2
Sullivan	21	1.0	3	*0.1
Switzerland	11	*1.0	1	*0.1
Tippecanoe	474	2.7	38	0.2
Tipton	25	1.6	4	*0.3
Union	8	*1.1	1	*0.1
Vanderburgh	724	4.0	108	0.6
Vermillion	22	1.4	19	*1.2
Vigo	332	3.1	26	0.2
Wabash	46	1.4	3	*0.1
Warren	9	*1.1	1	*0.1
Warrick	88	1.5	21	0.4
Washington	46	1.6	7	*0.2
Wayne	114	1.7	18	*0.3
Wells	24	0.9	1	*0.0
White	61	2.5	9	*0.4
Whitley	44	1.3	7	*0.2
Indiana	**14,552**	**2.2**	**2,324**	**0.4**

* Rates that are based on arrest numbers lower than 20 are unreliable.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Map 5.1   Marijuana Possession Arrest Rates in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Rate
St. Joseph	1.8
Elkhart	2.37
LaGrange	0.7
Steuben	2.34
LaPorte	1.8
Porter	2
Lake	2.2
Noble	1.87
DeKalb	1.52
Starke	1.67
Marshall	1.89
Kosciusko	1.95
Whitley	1.32
Allen	2.23
Jasper	1.11
Pulaski	1.72
Fulton	1.06
Newton	3.58
Wabash	1.4
Huntington	1.21
Wells	0.87
Adams	0.9
White	2.48
Cass	1.51
Miami	0.73
Benton	1.02
Carroll	1.89
Howard	2.43
Grant	2.03
Blackford	2.06
Jay	2.66
Warren	1.06
Tippecanoe	2.74
Clinton	1.26
Tipton	1.57
Delaware	1.16
Randolph	1.53
Fountain	1.39
Montgomery	2.96
Boone	1.29
Hamilton	2.2
Madison	2.35
Henry	1.07
Wayne	1.65
Vermillion	1.36
Parke	2.48
Hendricks	1.99
Marion	3.7
Hancock	1.74
Rush	1.09
Fayette	1.28
Union	1.06
Putnam	1.37
Morgan	1.67
Johnson	2.37
Shelby	1.89
Franklin	0.05
Vigo	3.08
Clay	2.05
Owen	1.3
Decatur	1.32
Brown	0.85
Bartholomew	2.63
Ripley	1.05
Dearborn	2
Sullivan	0.98
Greene	1.51
Monroe	2.57
Jennings	0.11
Ohio	1.31
Jackson	2.95
Jefferson	1.7
Switzerland	1.04
Lawrence	1.78
Knox	1.2
Daviess	1.64
Martin	1.06
Scott	0.83
Washington	1.63
Orange	1.06
Clark	2.38
Pike	1.4
Dubois	0.88
Crawford	0.09
Floyd	3.23
Gibson	0.66
Harrison	1.12
Posey	1.47
Vanderburgh	4.03
Warrick	1.47
Spencer	1.05
Perry	2.07

Rate per 1,000

	0.00 - 1.16
	1.17 - 1.80
	1.81 - 2.75
	> 2.75

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 5C (pages 94-95) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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Map 5.2 Marijuana Sale/Manufacture Arrest Rates in Indiana, by County (Uniform Crime Reporting Program, 2010)

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 5C (pages 94-95) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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6

COCAINE USE IN INDIANA:
CONSUMPTION PATTERNS AND CONSEQUENCES

COCAINE CONSUMPTION

Cocaine is the most potent stimulant of natural origin. It can be snorted, smoked, or injected. When snorted, cocaine powder is inhaled through the nose where it is absorbed into the bloodstream through the nasal tissues. When injected, a needle is used to release the drug directly into the bloodstream. Smoking involves inhaling cocaine vapor or smoke into the lungs where absorption into the bloodstream is as rapid as by injection (National Institute on Drug Abuse, 2010).

Crack is cocaine base that has not been neutralized by an acid to make hydrochloride salt. This form of cocaine comes in a rock crystal that is heated to produce vapors, which are smoked. The term "crack" refers to the crackling sound produced by the rock as it is heated (National Institute on Drug Abuse, 2010).

General Consumption Patterns

The National Survey on Drug Use and Health (NSDUH) provides national and state-level estimates of alcohol, tobacco, and other drug use (Substance Abuse and Mental Health Services Administration, 2012). According to 2010–2011 data, the most recent estimates available, 1.0% (95% Confidence Interval [CI]: 0.7–1.5) of Indiana's population ages 12 and older used cocaine in the past year, representing a rate similar to the nation's (1.6%; 95% CI: 1.5–1.7) (see Figure 6.1).

Figure 6.1 Percentage of Indiana and U.S. Population (12 Years and Older) Reporting Cocaine Use in the Past Year, by Age Group (National Survey on Drug Use and Health, 2011)

	Total	12-17	18-25	26 and older
Indiana	1.0%	0.7%	3.1%	0.7%
U.S.	1.6%	1.0%	4.6%	1.2%
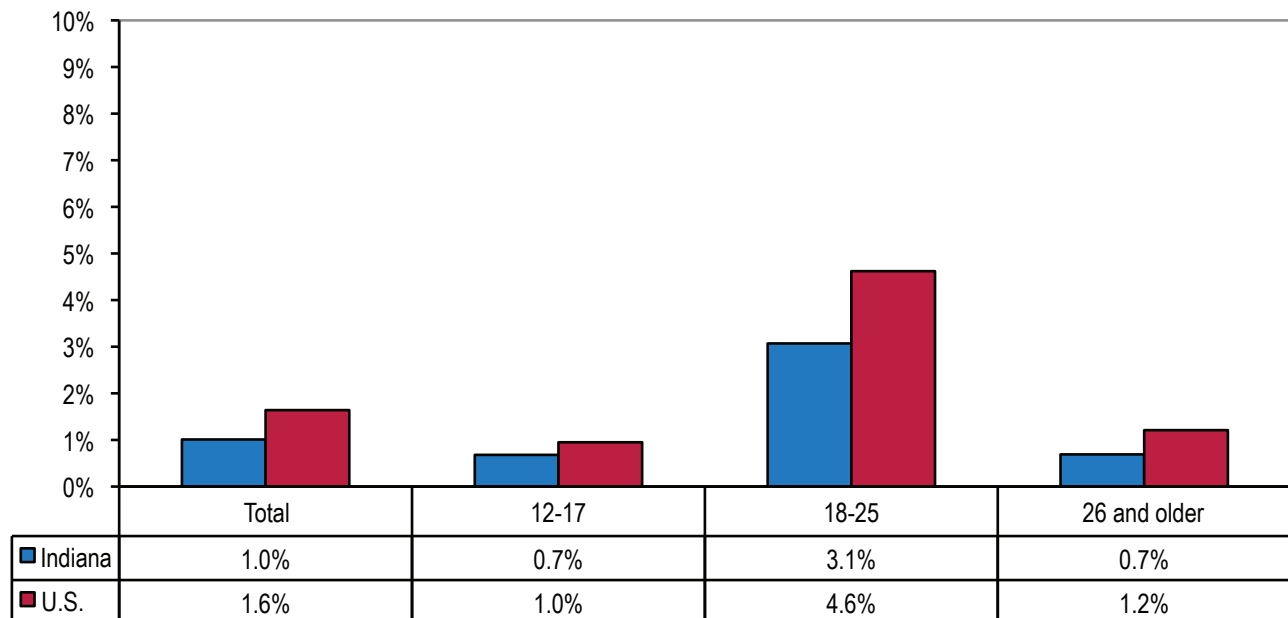
Source: Substance Abuse and Mental Health Services Administration, 2012

NSDUH data from 2001 through 2011 show that past-year cocaine use remained stable in Indiana from 1.5% (95% CI: 1.1–2.0) in 2001 to 1.0% (95% CI: 0.7–1.5) in 2011, mirroring national rates (see Figure 6.2).

Lifetime cocaine use was reported by 562,000 Hoosiers, or 11.1% (U.S.: 14.3%); current (past-month) use was reported by 33,000 Hoosiers, or 0.7% (U.S.:

1.0%).[1] Publicly available NSDUH data currently do not include gender or race comparisons at the state level (Substance Abuse and Mental Health Services Administration, 2012).

Figure 6.2 Percentage of Indiana and U.S. Population (12 Years and Older) Reporting Cocaine Use in the Past Year (National Survey on Drug Use and Health, 2001–2011)
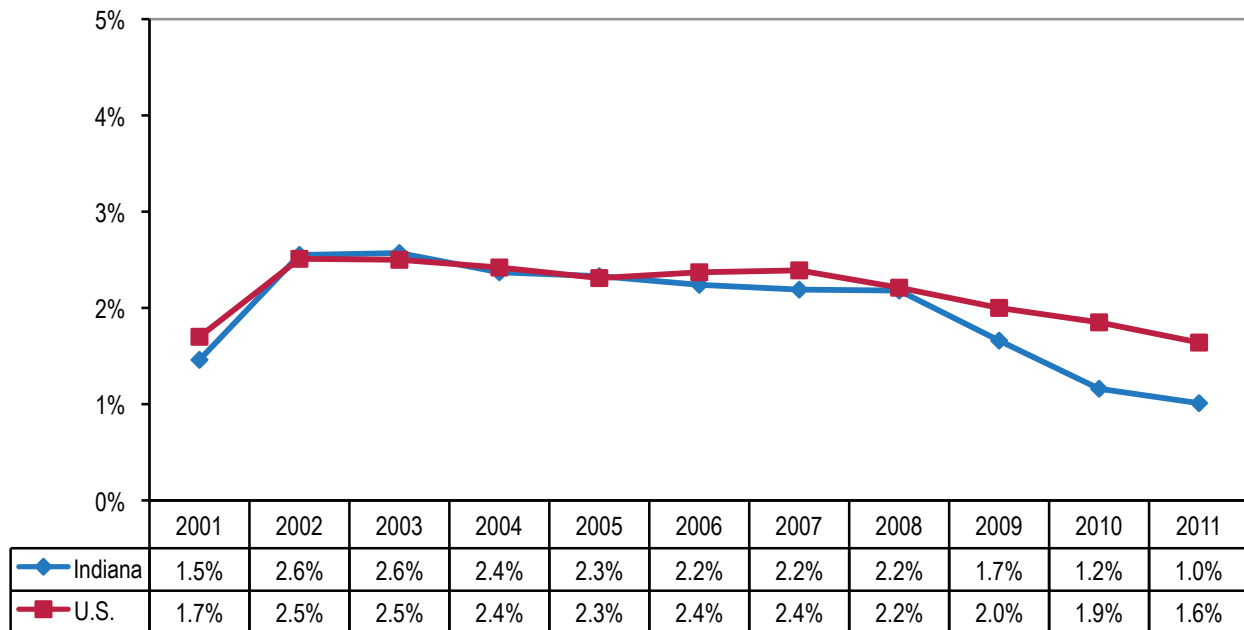
	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Indiana	1.5%	2.6%	2.6%	2.4%	2.3%	2.2%	2.2%	2.2%	1.7%	1.2%	1.0%
U.S.	1.7%	2.5%	2.5%	2.4%	2.3%	2.4%	2.4%	2.2%	2.0%	1.9%	1.6%

Source: Substance Abuse and Mental Health Services Administration, 2012

Adult Consumption Patterns

According to 2010–2011 NSDUH estimates, the prevalence rate for cocaine use was highest among 18- to 25-year-olds; 3.1% (95% CI: 2.0–4.6) of Hoosiers in that age group reported using cocaine in the past year (U.S.: 4.6%; 95% CI: 4.3–4.9). The rate of cocaine use was significantly lower among those ages 26 and older in Indiana (0.7%; 95% CI: 0.4–1.2) and the nation (1.2%; 95% CI: 1.1–1.3) (see Figure 6.1). Indiana and U.S. rates were statistically the same.

The Indiana College Substance Use Survey provides estimates of alcohol, tobacco, and other drug use among Indiana college students. According to findings from the 2012 survey, 3.9% of Indiana college students used cocaine in the past year (U.S.: 3.3%), and 1.2% currently use it (U.S.: 1.2%).[2] Rates were higher for males (past-year use: 6.1%; current use: 2.1%) than for females (past-year use: 2.6%; current use: 0.7%). Rates were also higher for those attending public institutions of higher education (past-year use: 4.7%; current use: 1.6%) than

[1] The most recent state-level estimates of lifetime and current (past-month) cocaine use from the National Survey on Drug Use and Health are based on annual averages from 2002 to 2004. The confidence intervals (CI) for these rates were not provided.
[2] National data are based on the Monitoring the Future study. College students were defined as "[T]hose follow-up respondents one to four years past high school who say they were registered as full-time students in a two- or four-year undergraduate college at the beginning of March in the year in question" (Johnston, O'Malley, Bachman, & Schulenberg, 2011, p. 255).

Figure 6.3 Percentage of Indiana and U.S. Treatment Episodes with Cocaine Use Reported at Treatment Admission (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	25.5%	22.3%	22.0%	22.7%	22.8%	23.8%	25.0%	23.9%	21.4%	18.3%	14.8%
U.S.	31.2%	30.2%	30.1%	30.9%	30.9%	31.2%	31.7%	30.5%	27.9%	24.3%	22.6%
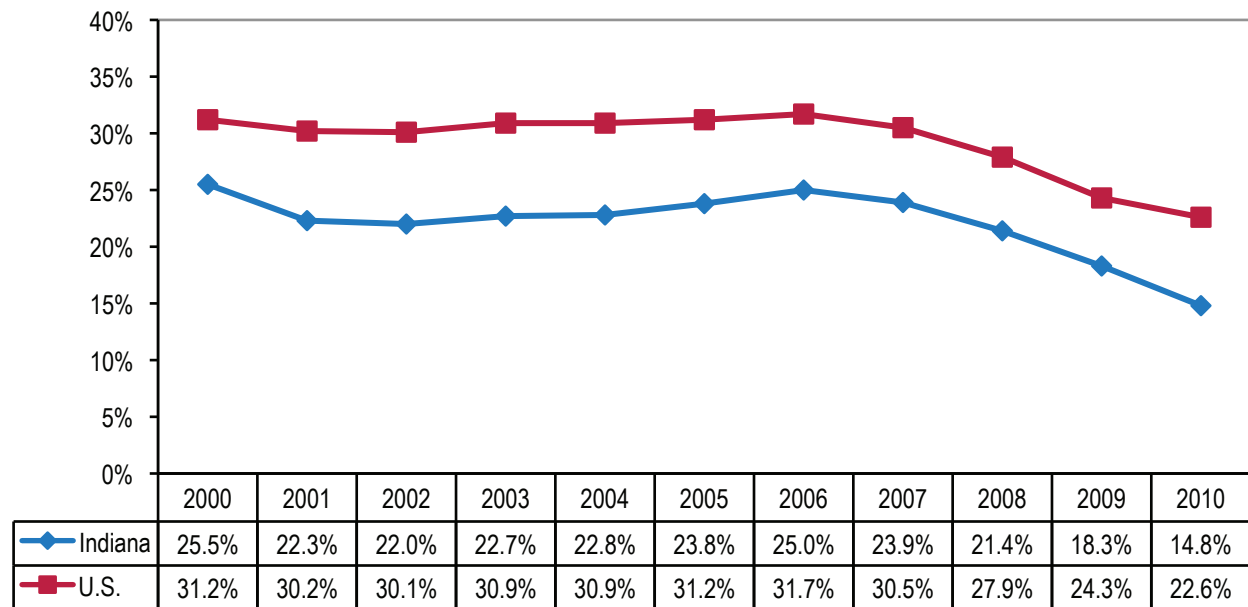
Source: Substance Abuse and Mental Health Data Archive, 2010

for those who attended private institutions (past-year use: 1.3%; current use: 0.2%) (Indiana Collegiate Action Network, 2012).[3]

The 2010 Treatment Episode Data Set (TEDS) shows that cocaine use was reported in 14.8% of treatment episodes in Indiana; the U.S. percentage was significantly higher at 22.6% ($p < 0.001$) (see Figure 6.3) (Substance Abuse and Mental Health Data Archive, 2010).

Gender, age, and race differences in the Indiana treatment population were significant ($p < 0.001$). More women (17.6%) than men (13.3%) reported cocaine use; blacks displayed drastically higher rates (32.7%) than whites (11.3%) and other races (16.3%); and the percentage of 35- to 44-year-olds (23.0%) using cocaine was greater than that of any other age group among those in treatment (see Table 6.1). (For county-level information on cocaine use, see Appendix 6A, page 107.)

Table 6.1 Percentage of Indiana Treatment Episodes with Cocaine Use Reported at Treatment Admission (Treatment Episode Data Set, 2010)

		Cocaine Use
Gender	Male	13.3%
	Female	17.6%
Race	White	11.3%
	Black	32.7%
	Other	16.3%
Age Group	Under 18	2.4%
	18-24	7.0%
	25-34	13.8%
	35-44	23.0%
	45-54	22.6%
	55 and over	15.9%
Total		**14.8%**

Source: Substance Abuse and Mental Health Data Archive, 2010

[3]Nine Indiana colleges participated in the survey; results are based on nonrandom sampling and are not representative of all college students in Indiana.

Youth Consumption Patterns

Findings from the 2010–2011 NSDUH survey show that 0.7% (95% CI: 0.4–1.1) of 12- to 17-year-old Hoosiers used cocaine in the past year (see Figure 6.1). The national rate was similar, at 1.0% (95% CI: 0.8–1.1) (Substance Abuse and Mental Health Services Administration, 2012).

According to the 2011 Youth Risk Behavior Surveillance System (YRBSS), 5.6% (95% CI: 4.1–7.7) of Indiana high school students (grades 9 through 12) reported that they had used a form of cocaine, including powder, crack, or freebase, at least once in their life; 2.3% (95% CI: 1.7–3.2) stated that they currently use cocaine (Centers for Disease Control and Prevention, 1991-2011). National rates for lifetime use and current use

were similar, at 6.8% (95% CI: 6.2–7.5) and 3.0% (95% CI: 2.6–3.5), respectively. Indiana prevalence rates did not differ statistically by gender, race/ethnicity, or grade level (see Table 6.2).

Overall prevalence of lifetime and current cocaine use among Indiana's high school students remained stable from 2003 through 2011 (Centers for Disease Control and Prevention, 1991-2011).

According to the annual Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD) survey, rates of current cocaine and crack use among 12th grade students have remained fairly stable from 2000 through 2012. Comparisons with the national Monitoring the Future survey imply that Indiana rates were slightly above U.S. rates (see Figure 6.4); however, due

Table 6.2 Percentage of Indiana and U.S. High School Students (Grades 9 through 12) Reporting Lifetime and Current Cocaine Use, by Gender, Race/Ethnicity, and Grade (Youth Risk Behavior Surveillance System, 2011)

		Indiana		U.S.	
		Lifetime Use (95% CI)	Current Use (95% CI)	Lifetime Use (95% CI)	Current Use (95% CI)
Gender	Male	6.4% (3.9–10.1)	2.9% (1.7–4.7)	7.9% (7.0–8.9)	4.1% (3.5–4.9)
	Female	4.9% (3.6–6.6)	1.7% (0.9–3.1)	5.7% (4.9–6.5)	1.8% (1.5–2.3)
Race/Ethnicity	White	5.5% (3.9–7.7)	2.4% (1.7–3.4)	6.7% (6.0–7.5)	2.5% (2.2–2.9)
	Black	6.2% (2.3–15.3)	1.9% (0.5–7.0)	2.6% (1.8–3.8)	1.1% (0.7–1.7)
	Hispanic	5.7% (2.4–12.9)	2.6% (1.1–6.3)	10.2% (8.8–11.9)	5.4% (4.5–6.5)
Grade	9	4.1% (2.6–6.4)	2.2% (1.2–4.0)	5.0% 4.2–6.1)	2.8% (2.2–3.4)
	10	5.3% (3.4–8.0)	1.6% (0.9–2.7)	6.5% (5.4–7.8)	3.0% (2.3–4.0)
	11	4.7% (2.5–8.8)	2.9% (1.2–6.7)	7.5% (6.4–8.9)	3.0% (2.3–4.0)
	12	8.7% (4.8–15.1)	2.4% (1.1–5.3)	8.5% (7.5–9.6)	3.0% (2.4–3.9)
Total		**5.6% (4.1–7.7)**	**2.3% (1.7–3.2)**	**6.8% (6.2–7.5)**	**3.0% (2.6–3.5)**

Source: Centers for Disease Control and Prevention, 1991-2011

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to the nature of the publicly available data, no statistical significance could be inferred (Gassman, Jun, Samuel, Agley, Lee, Agley, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012). For 2012 data on lifetime and current cocaine and crack use among students in grades 6 through 12, by Indiana region, see Appendix 6B, parts 1 and 2, page 108.

Figure 6.4 Percentage of Indiana and U.S. High School Seniors (Grade 12) Reporting Current Cocaine and Crack Use (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2000-2012, and Monitoring the Future Survey, 2000–2012)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Indiana Cocaine	2.7%	2.8%	2.9%	2.5%	2.9%	2.9%	3.1%	2.4%	2.0%	1.6%	1.9%	2.0%	1.6%
U.S. Cocaine	2.1%	2.1%	2.3%	2.1%	2.3%	2.3%	2.5%	2.0%	1.9%	1.3%	1.3%	1.1%	1.1%
Indiana Crack	1.1%	1.1%	1.1%	1.1%	1.4%	1.2%	1.4%	1.1%	1.0%	0.9%	1.0%	1.2%	0.9%
U.S. Crack	1.0%	1.1%	1.2%	0.9%	1.0%	1.0%	0.9%	0.9%	0.8%	0.6%	0.7%	0.5%	0.6%
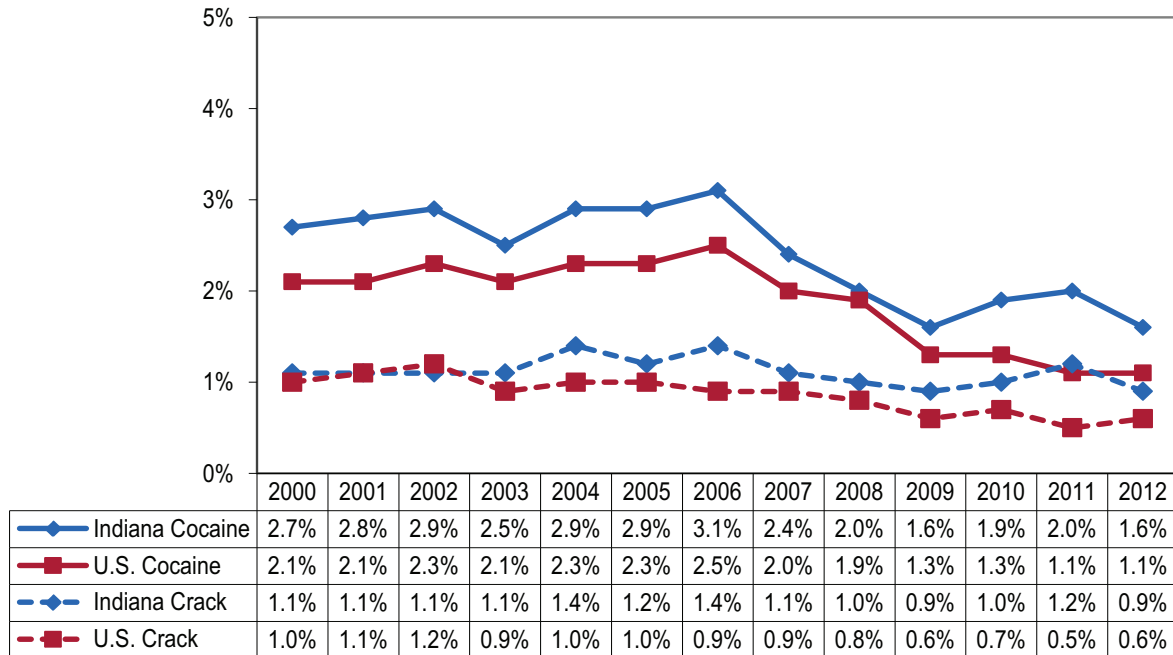
Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

CONSEQUENCES

Health Consequences

Cocaine is an addictive drug and powerful stimulant. The effects of cocaine depend on the amount of the drug taken and the route of administration. Taken in small amounts, it can make the user feel euphoric, energetic, talkative, and mentally alert; it might temporarily decrease the need for food and sleep. Short-term physiological effects of cocaine include constricted blood vessels; dilated pupils; and increased temperature, heart rate, and blood pressure. Large amounts might lead to bizarre, erratic, and violent behavior. Users might experience tremors, vertigo, muscle twitches, and paranoia. With repeated doses, users might have a toxic reaction closely resembling amphetamine poisoning. Use of crack/cocaine might result in feelings of restlessness, irritability, and anxiety. A user might suffer sudden death with the first use of cocaine or unexpectedly during any use thereafter. Long-term effects of cocaine use include dependence, irritability, mood disturbances, restlessness, paranoia, and auditory hallucinations (National Institute on Drug Abuse, 2010).

The medical consequences of cocaine abuse are primarily cardiovascular problems (such as disturbances in heart rhythm and heart attacks), respiratory difficulties (such as chest pain and respiratory failure), neurological effects (such as strokes, seizures, and headaches), and gastrointestinal complications (such as abdominal pain and nausea). Babies born to mothers who abuse cocaine during pregnancy are often prematurely delivered, have low birth weights and smaller head circumferences, and are often shorter in length. Additionally, users who inject cocaine intravenously are at higher risk for acquiring and/or transmitting sexually transmitted diseases, including HIV/AIDS, if needles or other injection equipment are shared (National Institute on Drug Abuse, 2010).

Cocaine Dependence

Results from the Treatment Episode Data Set (TEDS) show that the percentage of treatment episodes for cocaine dependence[4] has been significantly lower in Indiana than the nation for at least the past ten years (2001 through 2010) ($p < 0.001$). Furthermore, the

Figure 6.5 Percentage of Indiana and U.S. Treatment Episodes with Cocaine Dependence Reported at Treatment Admission (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	13.6%	11.0%	10.8%	11.5%	11.6%	12.1%	12.6%	11.8%	9.3%	8.0%	6.1%
U.S.	13.5%	12.9%	12.9%	13.6%	13.7%	13.9%	13.9%	12.9%	11.3%	9.4%	8.2%
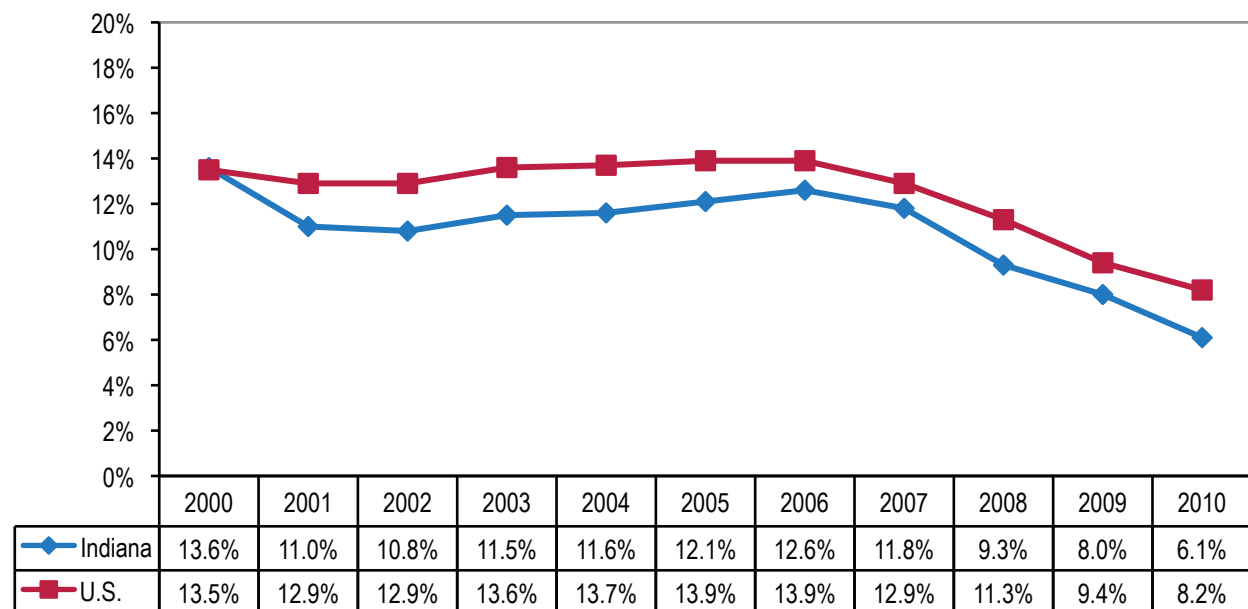
Source: Substance Abuse and Mental Health Data Archive, 2010

[4]We defined cocaine dependence as "individuals in substance abuse treatment listing cocaine as their primary substance at admission."

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percentage within Indiana decreased significantly from 13.6% in 2000 to 6.1% in 2010 ($p < 0.001$) (see Figure 6.5) (Substance Abuse and Mental Health Data Archive, 2010).

According to 2010 TEDS data, gender, race, and age were associated with cocaine dependence in Indiana ($p < 0.001$). Higher rates were found among women (8.1%) than among men (5.0%); among blacks (17.4%) than among whites (3.9%) or other races (5.8%); and among 35- to 44-year-olds (11.4%) compared to other age groups (see Table 6.3) (Substance Abuse and Mental Health Data Archive, 2010). (For county-level information, see Appendix 6A, page 107.)

Legal and Criminal Consequences

Legal consequences associated with cocaine use include arrests for possession and sale or manufacture of the substance. The Uniform Crime Reporting (UCR) Program provides the number of arrests for offenses regarding cocaine and opiates combined; data on either drug category individually are currently not available (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010). According to 2010 results, almost 2,400 arrests were made in Indiana for possession of cocaine/opiates. However, Indiana's arrest rate, 0.4 (95% CI: 0.4–0.4) per 1,000 population, was below the nation's rate of 0.7 (95% CI: 0.7–0.7) per 1,000 population.

The number of arrests for sale and manufacture of cocaine/opiates in Indiana was more than 2,000, representing an arrest rate of 0.3 per 1,000 population (95% CI: 0.3–0.3), comparable to the U.S. rate of 0.3 per 1,000 population (95% CI: 0.3–0.3) (see Figures 6.6 and 6.7). Maps 6.1 and 6.2 (pages 111-112) and Appendix 6C (pages 109-110) show Indiana's cocaine/opiates possession and sale/manufacture arrests by county for 2010.

Table 6.3   Percentage of Indiana Treatment Episodes with Cocaine Dependence Reported at Treatment Admission (Treatment Episode Data Set, 2010)

		Cocaine Dependence
Gender	Male	5.0%
	Female	8.1%
Race	White	3.9%
	Black	17.4%
	Other	5.8%
Age Group	Under 18	0.2%
	18-24	1.7%
	25-34	4.9%
	35-44	11.4%
	45-54	10.4%
	55 and over	6.9%
Total		**6.1%**

Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 6.6 Number of Arrests for Cocaine and Opiates Possession and Sale/Manufacture in Indiana (Uniform Crime Reporting Program, 1999–2010)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Possession	2,872	3,185	3,410	3,964	3,856	4,317	5,020	5,608	3,937	3,301	2,617	2,397
Sale	2,585	1,885	1,803	1,977	2,207	2,464	2,617	3,227	2,668	2,336	2,425	2,028
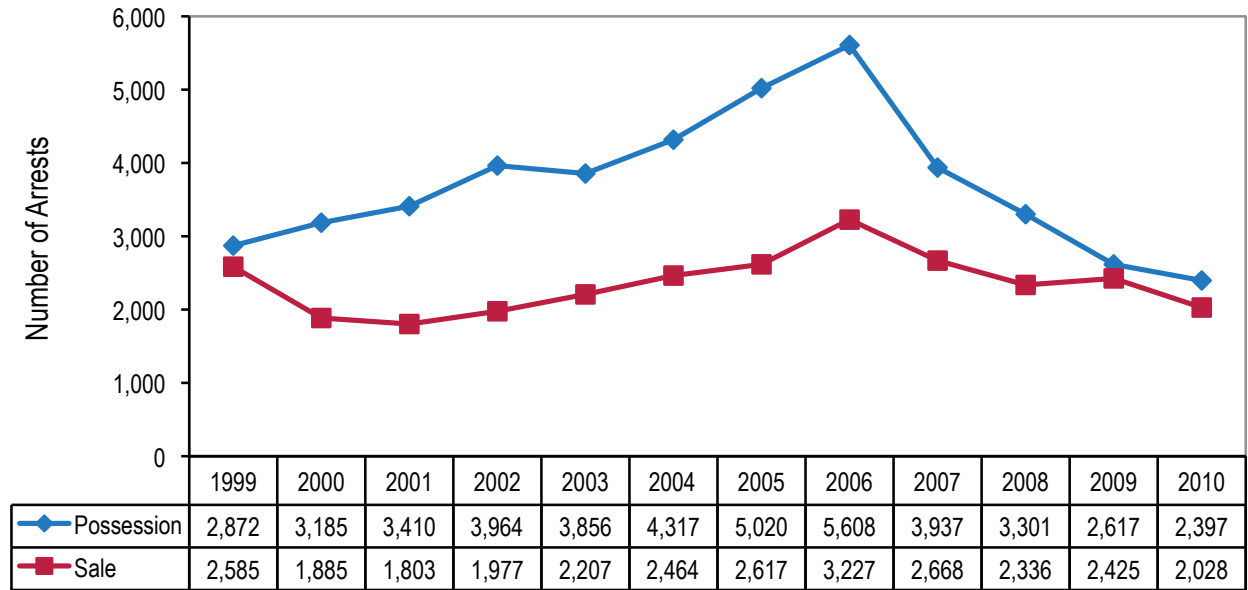
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Figure 6.7 Indiana and U.S. Arrest Rates, per 1,000 Population, for Cocaine and Opiates Possession and Sale/Manufacture (Uniform Crime Reporting Program, 1999–2010)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
IN Possession	0.5	0.5	0.6	0.6	0.6	0.7	0.8	0.9	0.6	0.5	0.4	0.4
U.S. Possession	1.1	1.1	1.0	1.0	1.0	1.1	1.2	1.2	1.1	1.0	0.8	0.7
IN Sale	0.4	0.3	0.3	0.3	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.3
U.S. Sale	0.6	0.5	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.3	0.3

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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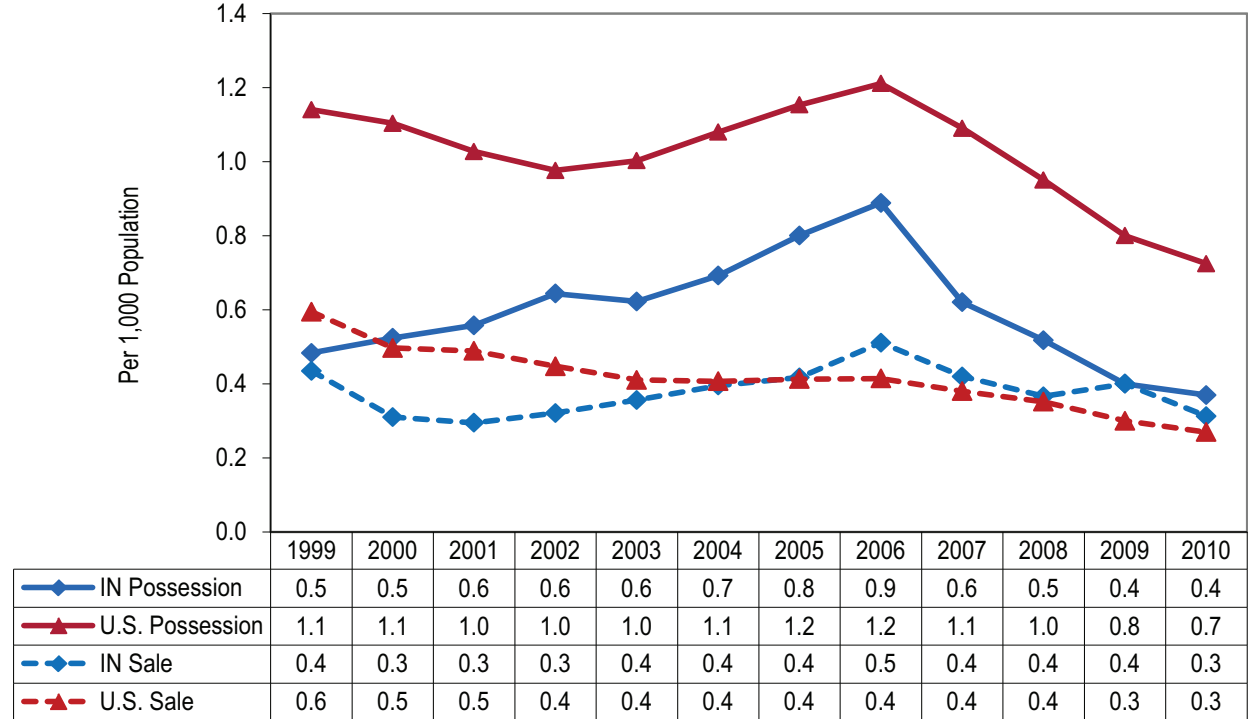
APPENDIX 6A

Number of Treatment Episodes with Cocaine Use and Dependence Reported at Treatment Admission in Indiana, by County (Substance Abuse Population by County/Treatment Episode Data Set, 2012)

County	Treatment Episodes Total	Cocaine Use Number	Cocaine Use %	Cocaine Dependence Number	Cocaine Dependence %	County	Treatment Episodes Total	Cocaine Use Number	Cocaine Use %	Cocaine Dependence Number	Cocaine Dependence %
Adams	138	24	17.4%	7	5.1%	Madison	804	139	17.3%	45	5.6%
Allen	1,822	662	36.3%	318	17.5%	Marion	4,091	977	23.9%	436	10.7%
Bartholomew	661	64	9.7%	16	2.4%	Marshall	236	123	52.1%	71	30.1%
Benton	41	<5	N/A	<5	N/A	Martin	47	<5	N/A	<5	N/A
Blackford	51	<5	N/A	<5	N/A	Miami	241	30	12.4%	9	3.7%
Boone	199	25	12.6%	13	6.5%	Monroe	1,505	136	9.0%	45	3.0%
Brown	116	5	4.3%	<5	N/A	Montgomery	357	31	8.7%	8	2.2%
Carroll	123	12	9.8%	<5	N/A	Morgan	540	24	4.4%	<5	N/A
Cass	273	32	11.7%	<5	N/A	Newton	44	11	25.0%	<5	N/A
Clark	418	65	15.6%	26	6.2%	Noble	418	146	34.9%	71	17.0%
Clay	173	6	3.5%	<5	N/A	Ohio	38	<5	N/A	<5	N/A
Clinton	146	10	6.8%	<5	N/A	Orange	105	<5	N/A	<5	N/A
Crawford	57	<5	N/A	<5	N/A	Owen	265	8	3.0%	<5	N/A
Daviess	188	7	3.7%	<5	N/A	Parke	135	<5	N/A	<5	N/A
Dearborn	450	64	14.2%	15	3.3%	Perry	148	5	3.4%	<5	N/A
Decatur	193	14	7.3%	<5	N/A	Pike	51	<5	N/A	<5	N/A
DeKalb	205	18	8.8%	<5	N/A	Porter	713	97	13.6%	30	4.2%
Delaware	1,168	117	10.0%	44	3.8%	Posey	118	7	5.9%	<5	N/A
Dubois	358	11	3.1%	5	1.4%	Pulaski	104	11	10.6%	<5	N/A
Elkhart	1,040	153	14.7%	75	7.2%	Putnam	215	8	3.7%	<5	N/A
Fayette	219	20	9.1%	7	3.2%	Randolph	188	30	16.0%	5	2.7%
Floyd	182	35	19.2%	13	7.1%	Ripley	189	15	7.9%	<5	N/A
Fountain	81	8	9.9%	<5	N/A	Rush	137	<5	N/A	<5	N/A
Franklin	91	6	6.6%	<5	N/A	Saint Joseph	1,293	496	38.4%	270	20.9%
Fulton	215	23	10.7%	<5	N/A	Scott	189	23	12.2%	6	3.2%
Gibson	204	7	3.4%	<5	N/A	Shelby	78	9	11.5%	<5	N/A
Grant	448	69	15.4%	27	6.0%	Spencer	195	6	3.1%	<5	N/A
Greene	176	5	2.8%	<5	N/A	Starke	203	21	10.3%	11	5.4%
Hamilton	699	53	7.6%	8	1.1%	Steuben	194	27	13.9%	8	4.1%
Hancock	147	23	15.6%	6	4.1%	Sullivan	102	<5	N/A	<5	N/A
Harrison	119	7	5.9%	<5	N/A	Switzerland	41	<5	N/A	<5	N/A
Hendricks	328	19	5.8%	9	2.7%	Tippecanoe	469	59	12.6%	10	2.1%
Henry	305	25	8.2%	8	2.6%	Tipton	59	5	8.5%	<5	N/A
Howard	588	60	10.2%	19	3.2%	Union	33	5	15.2%	<5	N/A
Huntington	147	51	34.7%	30	20.4%	Vanderburgh	1,367	180	13.2%	66	4.8%
Jackson	271	15	5.5%	6	2.2%	Vermillion	130	<5	N/A	<5	N/A
Jasper	94	13	13.8%	<5	N/A	Vigo	759	51	6.7%	13	1.7%
Jay	126	<5	N/A	<5	N/A	Wabash	183	87	47.5%	52	28.4%
Jefferson	292	30	10.3%	6	2.1%	Warren	29	<5	N/A	<5	N/A
Jennings	204	9	4.4%	<5	N/A	Warrick	278	17	6.1%	<5	N/A
Johnson	207	17	8.2%	<5	N/A	Washington	68	<5	N/A	<5	N/A
Knox	442	10	2.3%	<5	N/A	Wayne	594	102	17.2%	34	5.7%
Kosciusko	314	196	62.4%	124	39.5%	Wells	122	21	17.2%	<5	N/A
LaGrange	172	26	15.1%	8	4.7%	White	148	15	10.1%	5	3.4%
Lake	2,803	595	21.2%	227	8.1%	Whitley	124	71	57.3%	31	25.0%
LaPorte	637	111	17.4%	37	5.8%	County Info Missing	198	38	19.2%	16	8.1%
Lawrence	432	12	2.8%	5	1.2%	**Indiana**	**35,308**	**5,798**	**16.4%**	**2,383**	**6.7%**

Note: We defined cocaine dependence as "individuals in substance abuse treatment listing cocaine as their primary substance at admission."

We calculated the percentages by dividing the number of reported cocaine use/dependence by the number of treatment episodes.

Source: Indiana Family and Social Services Administration, 2013

APPENDIX 6B - PART 1

Percentage of Indiana Students Reporting Lifetime and Monthly Cocaine Use, by Region and Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2012)

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	0.4	0.3	0.6	0.2	0.6	0.4	0.8	0.2	0.3
	Monthly	0.2	0.2	0.3	0.2	0.1	0.2	0.4	0.1	0.2
7th Grade	Lifetime	0.7	1.0	0.8	0.4	0.8	0.5	0.3	0.8	1.0
	Monthly	0.4	0.5	0.5	0.0	0.5	0.3	0.3	0.5	0.7
8th Grade	Lifetime	1.7	2.2	1.4	0.7	1.3	1.7	2.9	1.2	2.4
	Monthly	0.8	1.1	0.6	0.4	0.4	0.7	1.4	0.6	0.9
9th Grade	Lifetime	2.3	3.0	2.3	2.1	2.0	2.1	2.9	1.9	2.4
	Monthly	1.0	1.0	0.8	1.1	1.0	1.0	1.5	0.9	0.9
10th Grade	Lifetime	3.3	3.6	3.2	3.0	3.6	3.3	3.7	2.7	3.6
	Monthly	1.3	1.4	1.4	1.3	1.3	1.2	1.8	1.2	1.1
11th Grade	Lifetime	4.2	4.0	4.2	3.5	4.2	4.3	6.1	3.1	4.5
	Monthly	1.4	1.4	1.7	2.2	1.2	1.2	1.9	0.7	1.6
12th Grade	Lifetime	4.9	5.6	5.3	3.5	4.4	4.2	5.1	4.4	5.5
	Monthly	1.6	2.1	1.8	1.2	1.3	1.7	1.3	1.0	1.6

Source: Gassman et al., 2012

APPENDIX 6B - PART 2

Percentage of Indiana Students Reporting Lifetime and Monthly Crack Use, by Region and Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2012)

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	0.4	0.4	0.7	0.5	0.6	0.3	0.8	0.3	0.3
	Monthly	0.2	0.2	0.5	0.2	0.1	0.2	0.4	0.2	0.2
7th Grade	Lifetime	0.8	0.8	0.7	0.4	1.0	0.7	0.4	0.8	1.2
	Monthly	0.4	0.4	0.5	0.0	0.6	0.3	0.2	0.4	1.0
8th Grade	Lifetime	1.3	1.6	0.8	0.7	0.9	1.2	2.2	1.2	1.9
	Monthly	0.6	0.8	0.4	0.4	0.3	0.6	1.1	0.4	0.9
9th Grade	Lifetime	1.6	1.9	1.7	1.2	1.4	1.5	1.8	1.7	1.8
	Monthly	0.7	0.8	0.7	0.7	0.6	0.7	0.8	0.8	0.5
10th Grade	Lifetime	1.9	2.1	1.6	1.9	2.2	1.9	2.2	1.7	2.0
	Monthly	0.8	0.8	0.8	0.8	1.0	0.6	1.0	0.8	0.9
11th Grade	Lifetime	2.1	1.9	2.1	2.5	2.0	2.3	3.1	1.7	1.6
	Monthly	0.7	0.7	0.8	0.9	0.8	0.8	0.7	0.6	0.5
12th Grade	Lifetime	2.0	2.1	2.5	1.0	1.6	1.7	2.7	1.7	2.3
	Monthly	0.9	1.0	1.1	0.7	0.8	0.9	0.8	0.8	1.0

Source: Gassman et al., 2012

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APPENDIX 6C

Number and Rate, per 1,000 Population, of Arrests for Cocaine/Opiates Possession and Sale/Manufacture in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Number of Arrests for Possession	Possession Arrest Rate	Number of Arrests for Sale	Sale Arrest Rate
Adams	3	*0.1	4	*0.1
Allen	169	0.5	156	0.4
Bartholomew	7	*0.1	4	*0.1
Benton	1	*0.1	1	*0.1
Blackford	1	*0.1	0	*0.0
Boone	5	*0.1	7	*0.1
Brown	0	*0.0	0	*0.0
Carroll	2	*0.1	2	*0.1
Cass	2	*0.1	6	*0.2
Clark	36	0.3	46	0.4
Clay	5	*0.2	4	*0.1
Clinton	8	*0.2	1	*0.0
Crawford	0	*0.0	0	*0.0
Daviess	4	*0.1	15	*0.5
Dearborn	6	*0.1	8	*0.2
Decatur	7	*0.3	4	*0.2
DeKalb	6	*0.1	10	*0.2
Delaware	19	*0.2	14	*0.1
Dubois	3	*0.1	4	*0.1
Elkhart	81	0.4	29	0.1
Fayette	1	*0.0	2	*0.1
Floyd	2	*0.0	58	0.8
Fountain	4	*0.2	4	*0.2
Franklin	1	*0.0	2	*0.1
Fulton	2	*0.1	2	*0.1
Gibson	3	*0.1	5	*0.1
Grant	17	*0.2	28	0.4
Greene	7	*0.2	5	*0.2
Hamilton	29	0.1	54	0.2
Hancock	13	*0.2	16	*0.2
Harrison	2	*0.1	0	*0.0
Hendricks	36	0.2	19	*0.1
Henry	5	*0.1	9	*0.2
Howard	68	0.8	53	0.6
Huntington	1	*0.0	0	*0.0
Jackson	7	*0.2	19	*0.4
Jasper	4	*0.1	8	*0.2
Jay	9	*0.4	2	*0.1
Jefferson	6	*0.2	7	*0.2
Jennings	0	*0.0	0	*0.0
Johnson	19	*0.1	17	*0.1
Knox	12	*0.3	12	*0.3
Kosciusko	9	*0.1	10	*0.1
LaGrange	3	*0.1	7	*0.2
Lake	120	0.2	272	0.5
LaPorte	37	0.3	112	1.0
Lawrence	3	*0.1	1	*0.0
Madison	42	0.3	33	0.3
Marion	1,113	1.2	555	0.6

County	Number of Arrests for Possession	Possession Arrest Rate	Number of Arrests for Sale	Sale Arrest Rate
Marshall	4	*0.1	6	*0.1
Martin	0	*0.0	0	*0.0
Miami	10	*0.3	6	*0.2
Monroe	22	0.2	37	0.3
Montgomery	28	0.7	13	*0.3
Morgan	15	*0.2	19	*0.3
Newton	3	*0.2	1	*0.1
Noble	7	*0.1	9	*0.2
Ohio	1	*0.2	1	*0.2
Orange	3	*0.2	3	*0.2
Owen	3	*0.1	4	*0.2
Parke	2	*0.1	0	*0.0
Perry	3	*0.2	2	*0.1
Pike	2	*0.2	3	*0.2
Porter	31	0.2	9	*0.1
Posey	3	*0.1	4	*0.2
Pulaski	1	*0.1	0	*0.0
Putnam	8	*0.2	17	*0.4
Randolph	3	*0.1	3	*0.1
Ripley	4	*0.1	4	*0.1
Rush	9	*0.5	0	*0.0
Saint Joseph	90	0.3	27	0.1
Scott	11	*0.5	0	*0.0
Shelby	8	*0.2	6	*0.1
Spencer	3	*0.1	4	*0.2
Starke	15	*0.6	4	*0.2
Steuben	20	0.6	19	*0.6
Sullivan	5	*0.2	2	*0.1
Switzerland	1	*0.1	2	*0.2
Tippecanoe	36	0.2	81	0.5
Tipton	2	*0.1	1	*0.1
Union	1	*0.1	1	*0.1
Vanderburgh	37	0.2	45	0.3
Vermillion	2	*0.1	2	*0.1
Vigo	16	*0.1	16	*0.1
Wabash	4	*0.1	6	*0.2
Warren	1	*0.1	1	*0.1
Warrick	1	*0.0	2	*0.0
Washington	5	*0.2	6	*0.2
Wayne	31	0.4	29	0.4
Wells	1	*0.0	2	*0.1
White	0	*0.0	0	*0.0
Whitley	5	*0.2	4	*0.1
Indiana	**2,397**	**0.4**	**2,028**	**0.3**

* Rates that are based on arrest numbers lower than 20 are unreliable.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Map 6.1 Cocaine/Opiate Possession Arrest Rates in Indiana, by County (Uniform Crime Reporting Program, 2010)

Rate per 1,000

	0.00 - 0.09
	0.10 - 0.14
	0.15 - 0.23
	> 0.23

County rates shown on map:

LaGrange 0.08, Steuben 0.59, St. Joseph 0.34, Elkhart 0.41, LaPorte 0.33, Lake 0.24, Porter 0.19, Noble 0.15, DeKalb 0.14, Starke 0.64, Marshall 0.09, Kosciusko 0.12, Whitley 0.15, Allen 0.48, Jasper 0.12, Pulaski 0.07, Fulton 0.1, Newton 0.21, Wabash 0.12, Huntington 0.03, Wells 0.04, Adams 0.09, White 0, Cass 0.05, Miami 0.27, Benton 0.11, Carroll 0.1, Howard 0.82, Grant 0.24, Blackford 0.08, Jay 0.42, Tippecanoe 0.21, Warren 0.12, Clinton 0.24, Tipton 0.13, Delaware 0.16, Randolph 0.11, Fountain 0.23, Montgomery 0.73, Boone 0.09, Hamilton 0.11, Madison 0.32, Henry 0.1, Wayne 0.45, Vermillion 0.12, Parke 0.12, Putnam 0.21, Hendricks 0.25, Marion 1.23, Hancock 0.19, Rush 0.52, Fayette 0.04, Union 0.13, Vigo 0.15, Clay 0.19, Owen 0.14, Morgan 0.22, Johnson 0.14, Shelby 0.18, Franklin 0.05, Sullivan 0.23, Greene 0.21, Monroe 0.16, Brown 0, Bartholomew 0.09, Decatur 0.27, Ripley 0.13, Dearborn 0.12, Jennings 0, Ohio 0.16, Knox 0.31, Daviess 0.13, Martin 0, Lawrence 0.07, Jackson 0.17, Jefferson 0.19, Switzerland 0.09, Scott 0.45, Washington 0.18, Clark 0.33, Orange 0.15, Pike 0.16, Dubois 0.07, Crawford 0, Floyd 0.03, Harrison 0.05, Gibson 0.09, Posey 0.12, Vanderburgh 0.21, Warrick 0.02, Spencer 0.14, Perry 0.16

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 6C (pages 109-110) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Map 6.2 Cocaine/Opiate Sales Arrest Rates in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Rate
Lake	0.55
Porter	0.05
LaPorte	1
St. Joseph	0.1
Elkhart	0.15
LaGrange	0.19
Steuben	0.56
Noble	0.19
DeKalb	0.24
Starke	0.17
Marshall	0.13
Kosciusko	0.13
Whitley	0.12
Allen	0.44
Newton	0.07
Jasper	0.24
Pulaski	0
Fulton	0.1
Wabash	0.18
Huntington	0
Wells	0.07
Adams	0.12
White	0
Cass	0.15
Miami	0.16
Benton	0.11
Carroll	0.1
Howard	0.64
Grant	0.4
Blackford	0
Jay	0.09
Warren	0.12
Tippecanoe	0.47
Clinton	0.03
Tipton	0.06
Delaware	0.12
Randolph	0.11
Madison	0.25
Fountain	0.23
Montgomery	0.34
Boone	0.12
Hamilton	0.2
Henry	0.18
Wayne	0.42
Vermillion	0.12
Parke	0
Hendricks	0.13
Marion	0.61
Hancock	0.23
Putnam	0.45
Rush	0
Fayette	0.08
Union	0.13
Vigo	0.15
Clay	0.15
Owen	0.19
Morgan	0.28
Johnson	0.12
Shelby	0.14
Franklin	0.09
Sullivan	0.09
Greene	0.15
Monroe	0.27
Brown	0
Bartholomew	0.05
Decatur	0.16
Ripley	0.13
Dearborn	0.16
Jennings	0
Ohio	0.16
Knox	0.31
Daviess	0.47
Martin	0
Lawrence	0.02
Jackson	0.45
Jefferson	0.22
Switzerland	0.19
Scott	0
Orange	0.15
Washington	0.21
Clark	0.42
Gibson	0.15
Pike	0.23
Dubois	0.1
Crawford	0
Floyd	0.78
Harrison	0
Posey	0.15
Vanderburgh	0.25
Warrick	0.03
Spencer	0.19
Perry	0.1

Rate per 1,000

	0.00 - 0.09
	0.10 - 0.15
	0.16 - 0.24
	> 0.24

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 6C (pages 109-110) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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HEROIN USE IN INDIANA:
CONSUMPTION PATTERNS AND CONSEQUENCES

HEROIN CONSUMPTION

Heroin is an illegal, highly addictive drug. It is the most abused and the most rapidly acting of the illegal opiate-type drugs. It is processed from morphine, a naturally occurring substance extracted from the seed pod of certain varieties of poppy plants. Heroin can be injected, smoked, or sniffed/snorted (National Institute on Drug Abuse, 2005).

General Consumption Patterns

Only limited information on heroin use is available, especially at the state level. According to the 2011 National Survey on Drug Use and Health (NSDUH), 1.6% of all U.S. citizens ages 12 or older had tried heroin at least once in their lifetime; 0.2% had used it in the past year; and 0.1% were current (past month) users. The annual averages in Indiana for heroin use, based on 2002–2004 NSDUH data,[1] were as follows:

- lifetime use: 1.1% (approximately 54,000 residents)
- past-year use: 0.2% (approximately 9,000 residents)
- current use: less than 0.1% (approximately 1,000 residents)

(Substance Abuse and Mental Health Services Administration, 2012).

Adult Consumption Patterns

Heroin use prevalence in the general population is very low. Based on findings from the 2011 NSDUH, past-year use was an estimated 0.7% among 18- to 25-year-old U.S. residents and 0.2% among those ages 26 and older (Substance Abuse and Mental Health Services Administration, 2012). Prevalence rates by age group were not available at the state level.

The Indiana College Substance Use Survey provides estimates of alcohol, tobacco, and other drug use among Indiana college students. According to 2012 results, 0.4% of Indiana college students had used heroin in the past year (U.S.: 0.1%) and 0.2% had used

Figure 7.1   Percentage of Indiana and U.S. Treatment Episodes with Heroin Use Reported at Treatment Admission (Treatment Episode Data Set, 2001–2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	2.6%	2.8%	2.6%	3.0%	3.3%	3.2%	2.9%	4.1%	5.5%	6.6%
U.S.	18.5%	18.1%	17.7%	16.8%	16.4%	16.6%	16.5%	17.0%	17.3%	17.4%
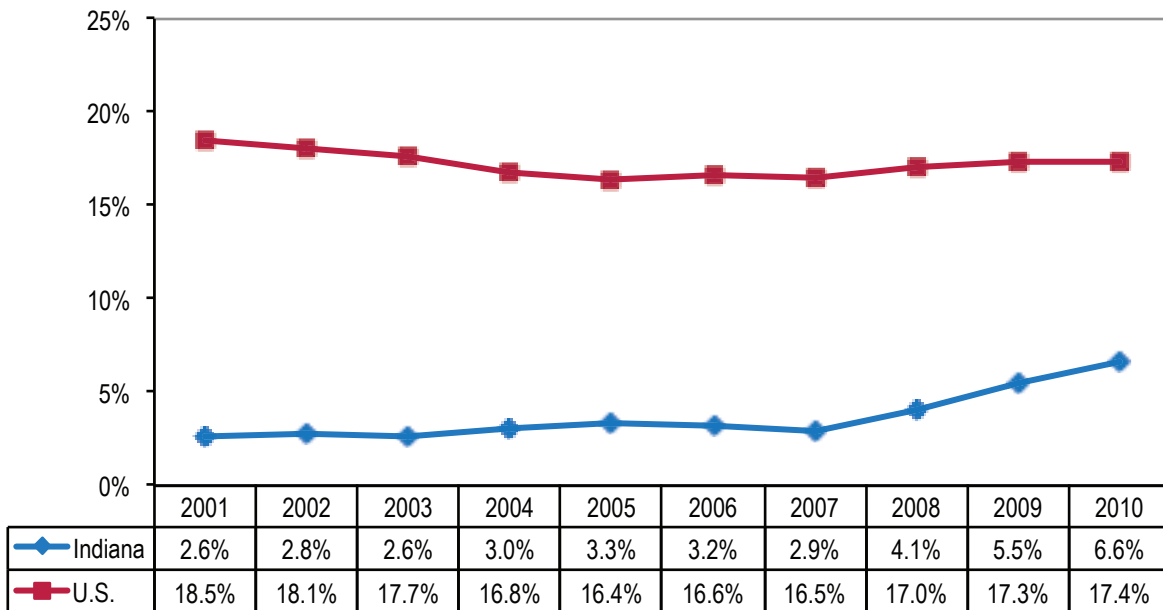
Source: Substance Abuse and Mental Health Data Archive, 2010

[1]Estimates based on NSDUH averages from 2002 through 2004 represent the most recent state-level data available.

it in the past month (U.S.: less than 0.05%); compared to Indiana, U.S. rates were statistically significantly lower. Among Indiana college students, prevalence rates were higher for males (past-year use: 0.9%; current use: 0.4%) than for females (past-year use: 0.2%; current use: 0.1%), but no significant differences were detected by age group (under 21 vs. 21 or over) or type of academic institution (private vs. public) (Indiana Collegiate Action Network, 2012).

Data from the Treatment Episode Data Set (TEDS) spanning 2001 through 2010 show that the percentage of treatment episodes in which heroin use was reported at admission was significantly lower in Indiana than the United States (*P* < 0.001). In 2010, 6.6% of Hoosiers in treatment reported heroin use, as compared to 17.4% of Americans. Reported heroin use, however, significantly increased in Indiana from 2.6% in 2001 to 6.6% in 2010; the opposite was true for the nation, which showed a decrease from 18.5% to 17.4% during the same time period (see Figure 7.1) (Substance Abuse and Mental Health Data Archive, 2010). For 2012 county-level information on treatment admissions with reported heroin use in Indiana, see Appendix 7A, page 124.

Reported heroin use differed significantly by gender, race, and age group among Indiana's treatment population:

- **Gender**—From 2001 through 2010, the percentage of females reporting use of the drug was significantly higher than the percentage of males (see Figure 7.2).
- **Race**—Reported heroin use also differed significantly by race for most years examined (2001 through 2010, except 2007). Until 2005, blacks had higher percentages of reported use than whites or other races. Since 2008, the percentage of whites reporting heroin use has seen a sharp increase and is currently the highest (see Figure 7.3).
- **Age**—For most years, heroin use within Indiana's treatment population was associated with older adults aged 45 and above. However, the percentage of 25- to 34-year-olds who reported heroin use more than quadrupled from 1.8% in 2001 to 8.7% in 2010 (see Figure 7.4) (Substance Abuse and Mental Health Data Archive, 2010).

Figure 7.2 Percentage of Indiana Treatment Episodes with Heroin Use Reported at Treatment Admission, by Gender (Treatment Episode Data Set, 2001–2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	2.3%	2.6%	2.3%	2.7%	3.0%	2.7%	2.4%	3.6%	5.1%	6.0%
Female	3.3%	3.2%	3.2%	3.6%	3.8%	4.0%	3.9%	5.0%	6.1%	7.7%

Source: Substance Abuse and Mental Health Data Archive, 2010

Indiana University Center for Health Policy
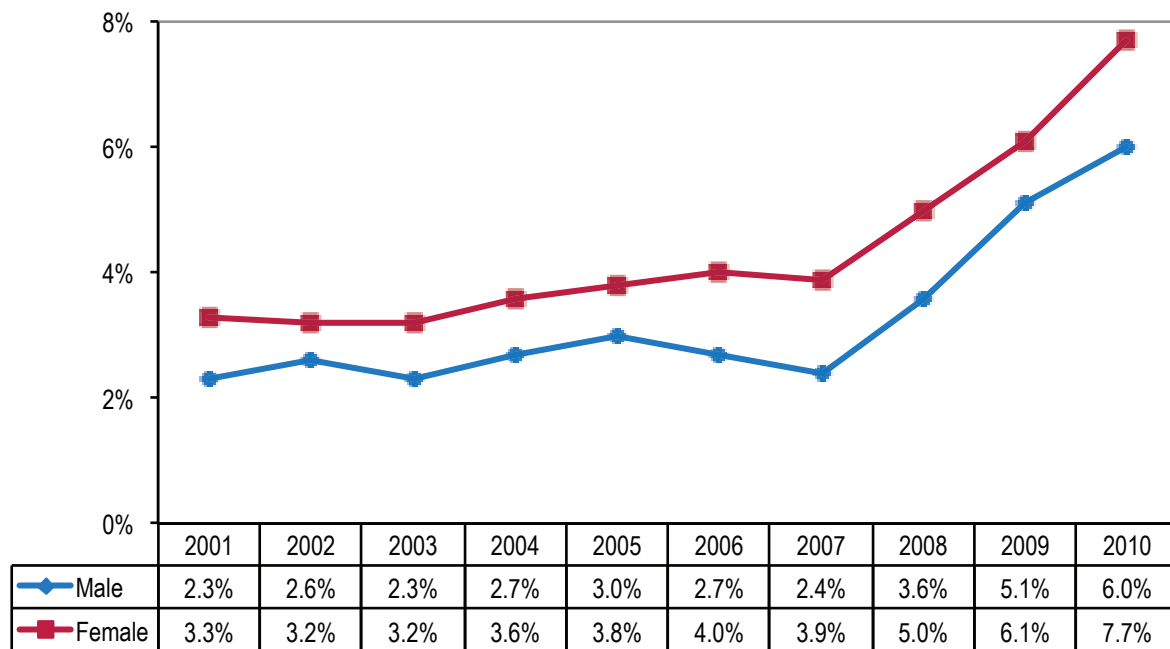
Figure 7.3 Percentage of Indiana Treatment Episodes with Heroin Use Reported at Treatment Admission, by Race (Treatment Episode Data Set, 2001–2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black	4.6%	5.8%	4.1%	5.8%	5.8%	4.8%	3.3%	3.4%	3.9%	4.1%
White	2.1%	2.1%	2.3%	2.4%	2.6%	2.7%	2.9%	4.3%	5.4%	6.7%
Other	3.1%	2.0%	2.7%	3.5%	2.8%	4.2%	2.1%	2.2%	6.1%	3.3%
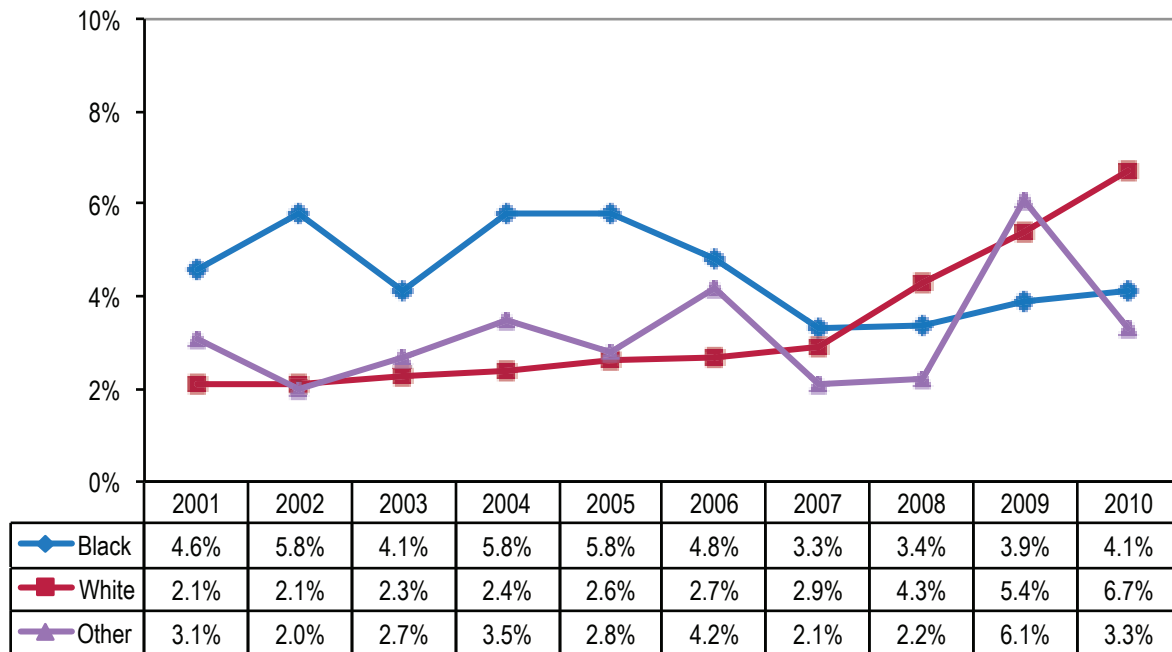
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 7.4 Percentage of Indiana Treatment Episodes with Heroin Use Reported at Treatment Admission, by Age Group (Treatment Episode Data Set, 2001–2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Under 18	0.1%	0.2%	0.3%	0.4%	0.3%	0.2%	0.1%	0.4%	0.2%	1.1%
18 to 24	2.0%	1.6%	2.1%	2.1%	2.2%	2.4%	2.3%	3.8%	6.9%	7.8%
25 to 34	1.8%	2.3%	2.5%	2.8%	2.9%	3.2%	3.6%	5.5%	6.6%	8.7%
35 to 44	2.6%	2.5%	2.2%	2.6%	2.8%	2.4%	2.5%	2.9%	3.6%	4.4%
45 to 54	7.6%	8.1%	5.7%	6.3%	6.2%	5.0%	3.3%	3.9%	3.7%	3.6%
55 and over	3.7%	5.1%	2.9%	7.1%	10.2%	9.3%	5.8%	5.2%	6.9%	8.0%
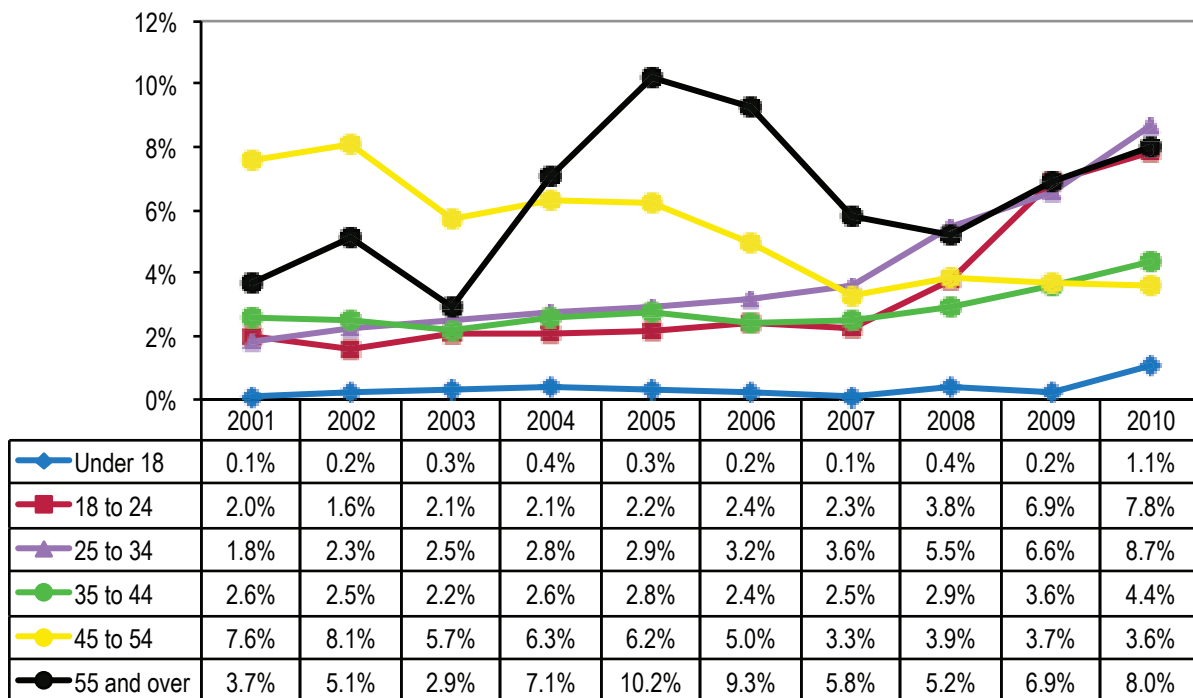
Source: Substance Abuse and Mental Health Data Archive, 2010

Youth Consumption Patterns

According to the 2011 Youth Risk Behavior Surveillance System (YRBSS), 2.8% (95% Confidence Interval [CI]: 1.7–4.5) of high school students (grades 9 through 12) in Indiana tried heroin at least once in their life. Indiana's rate was statistically similar to the national YRBSS rate (2.9%; 95% CI: 2.5–3.3) (see Figure 7.5). No statistical differences by gender, race, or grade level were observed in 2011. Prevalence of lifetime heroin use has remained stable among Indiana high school students from 2003 through 2011 (Centers for Disease Control and Prevention, 1999-2011).

As noted previously, a common method for heroin usage is by needle injection. According to the 2011 YRBSS, the percentage of students who used a needle to inject any illegal drug into their body one or more times during their lifetime was statistically similar in Indiana (2.1%; 95% CI: 1.3–3.2) and the nation (2.3%; 95% CI: 1.9–2.7). Indiana's rate remained stable from 2003 through 2011 (Centers for Disease Control and Prevention, 1999-2011).

Based on results from the 2012 Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD) survey, 2.1% of Hoosier 12th grade students reported lifetime use (U.S. 1.1%) and 1.0% reported monthly (current) heroin use (U.S.: 0.3%) (see Figures 7.6 and 7.7) (Gassman, Jun, Samuel, Agley, Lee, Agley, Oi, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012).[2]

Heroin use among Hoosier students appeared to increase with age, with lower rates in earlier grades and highest rates in high school seniors; however, statistical significance could not be determined (Gassman, et al., 2012). For lifetime and monthly heroin use rates in Indiana by region and grade level, see Appendix 7B, page 125.

Figure 7.5 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)

	2003	2005	2007	2009	2011
Indiana	2.4%	2.3%	3.6%	2.6%	2.8%
U.S.	3.3%	2.4%	2.3%	2.5%	2.9%
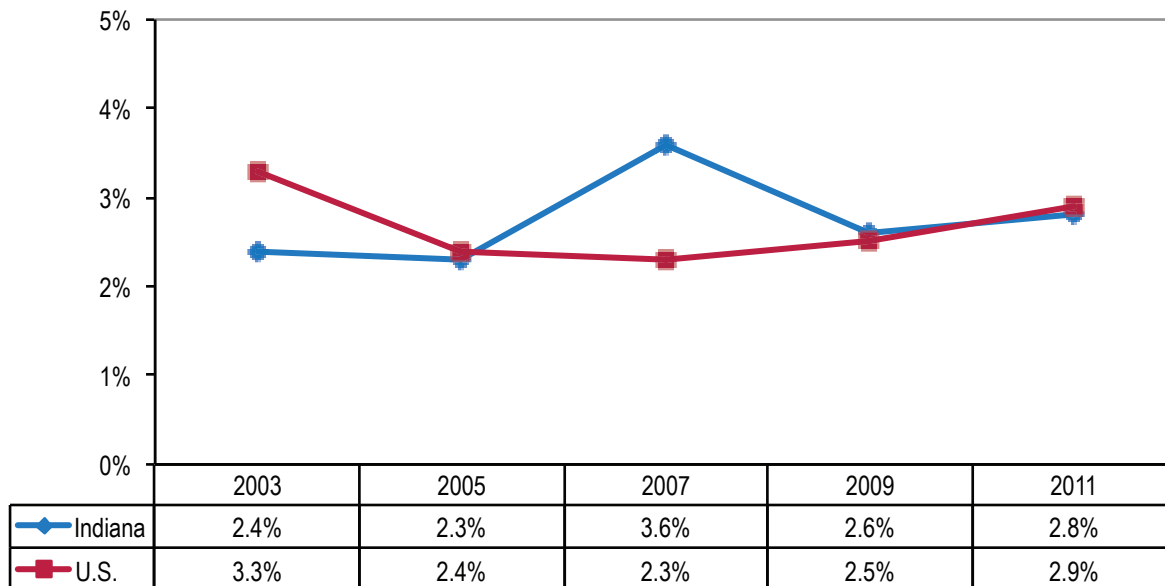
Source: Centers for Disease Control and Prevention, 1999-2011

[2]Due to lack of detail provided in the publicly available data sets, statistical significance between Indiana and U.S. rate differences could not be ascertained.

Figure 7.6 Percentage of Indiana and U.S. 12th Grade Students Reporting Lifetime Heroin Use (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2000–2012, and Monitoring the Future Survey, 2000–2012)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Indiana	2.3%	2.3%	1.9%	2.1%	2.3%	2.0%	2.3%	1.9%	2.0%	2.4%	2.3%	2.4%	2.1%
U.S.	2.4%	1.8%	1.7%	1.5%	1.5%	1.5%	1.4%	1.5%	1.3%	1.2%	1.6%	1.4%	1.1%
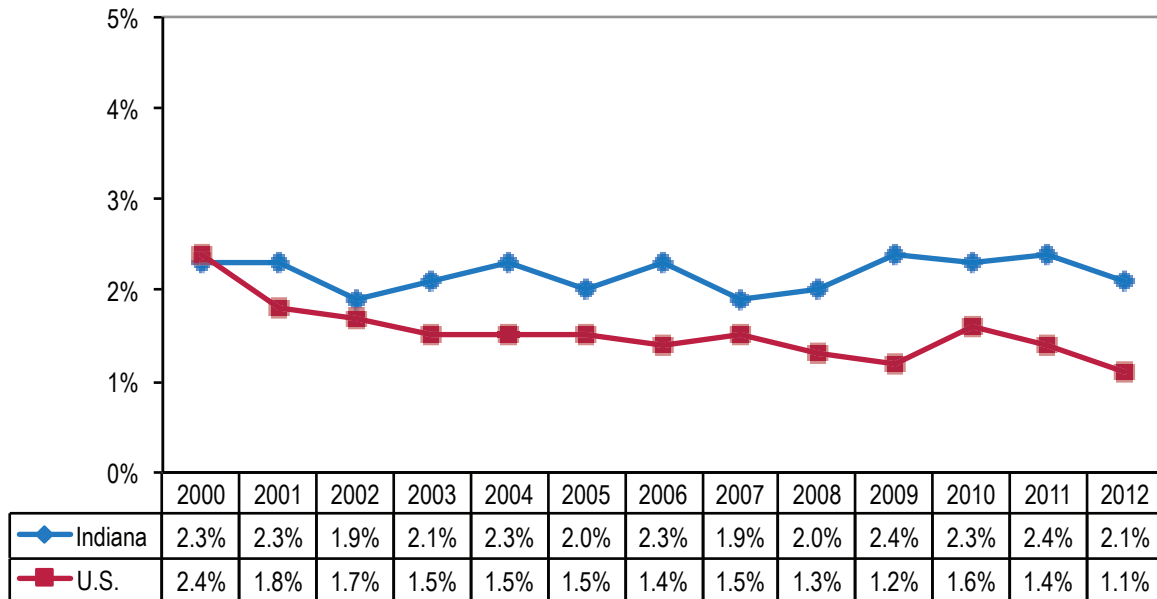
Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

Figure 7.7 Percentage of Indiana and U.S. 12th Grade Students Reporting Monthly Heroin Use (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2000-2012, and Monitoring the Future Survey, 2000–2012)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Indiana	0.9%	0.8%	0.6%	0.6%	0.8%	0.7%	1.0%	0.8%	0.8%	0.8%	1.1%	1.2%	1.0%
U.S.	0.7%	0.4%	0.5%	0.4%	0.5%	0.5%	0.4%	0.4%	0.4%	0.4%	0.4%	0.4%	0.3%
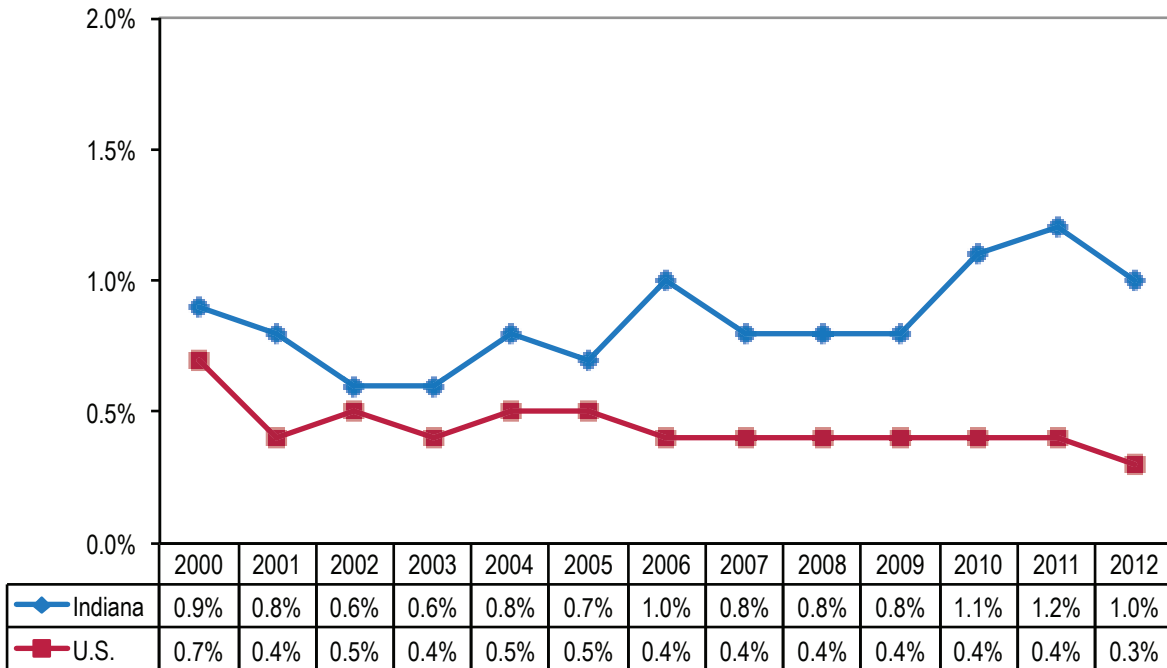
Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

Figure 7.8 Percentage of Indiana and U.S. Treatment Episodes with Heroin Dependence Reported at Treatment Admission (Treatment Episode Data Set, 2001–2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	1.8%	1.9%	1.7%	2.2%	2.4%	2.3%	2.0%	2.9%	4.5%	5.3%
U.S.	15.5%	15.1%	14.8%	14.2%	13.8%	13.9%	13.8%	14.2%	14.5%	14.2%
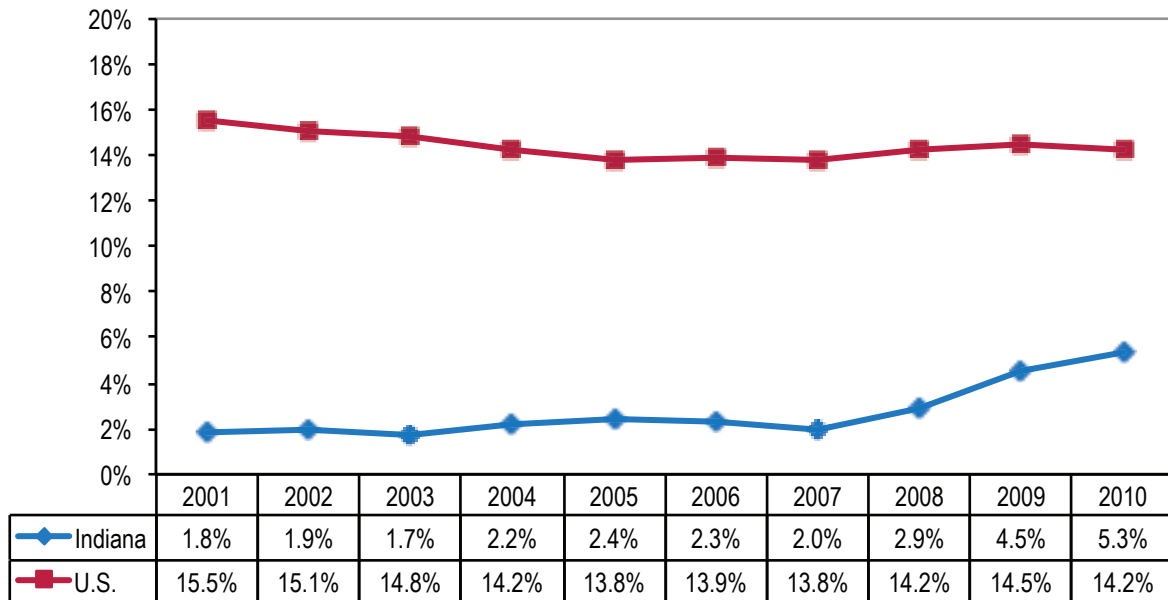
Source: Substance Abuse and Mental Health Data Archive, 2010

CONSEQUENCES

Heroin abuse is associated with serious health conditions, including heroin dependence, fatal overdose, spontaneous abortion, and collapsed veins. In addition, particularly in users who inject the drug, serious health effects include infectious diseases, such as HIV/AIDS and hepatitis C (HCV). Other health problems reported in heroin abusers are infections of the heart lining and valves, abscesses, liver disease, and pulmonary complications (National Institute on Drug Abuse, 2005).

Because street heroin often contains toxic additives that do not easily dissolve, blood vessels leading to the heart, lungs, liver, kidneys, or brain can become clogged. Clogs of this nature can lead to infection or death of small patches of cells in vital organs (National Institute on Drug Abuse, 2005). The Drug Abuse Warning Network reported that nationwide, approximately 224,706 visits to Emergency Departments (ED) in 2010 involved heroin use; the ED visit rate involving heroin was 72.6 per 100,000 population (Substance Abuse and Mental Health Services Administration, Center for Behavioral Health Statistics and Quality, 2012).

Heroin Dependence

A comparison of data from the Treatment Episode Data Set (TEDS) from 2001 through 2010 shows that the percentage of drug treatment admissions for heroin dependence[3] has consistently been lower in Indiana than the rest of the United States ($p < 0.001$). In addition, there has been a considerable increase in Indiana for heroin dependence from 1.8% in 2001 to 5.3% in 2010 (see Figure 7.8).

Statistically significant differences in treatment admissions for heroin dependence were observed in Indiana by gender, race, and age group ($P < 0.001$):

- **Gender:** The percentage of women with heroin dependence was greater than the percentage of men, at 6.1% and 4.9% respectively (see Figure 7.9).
- **Race:** From 2001 through 2007, the percentage of whites with heroin dependence was relatively low; since 2008, however, the percentage within this racial group has risen steeply (see Figure 7.10).
- **Age:** Heroin dependence was reported almost exclusively by individuals 18 years of age or older. Heroin dependence among Hoosiers ages 18 to 24 more than quadrupled from 1.5% in 2001 to 6.5% in 2010 (see Figure 7.11). (For county-level information on heroin dependence, see Appendix 7A, page 124.)

[3]We defined heroin dependence as "individuals in substance abuse treatment listing heroin as their primary substance at admission."

Figure 7.9 Percentage of Indiana Treatment Episodes with Heroin Dependence Reported at Treatment Admission, by Gender (Treatment Episode Data Set, 2001–2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	1.5%	1.7%	1.5%	2.0%	2.1%	2.0%	1.7%	2.6%	4.2%	4.9%
Female	2.3%	2.3%	2.2%	2.7%	2.9%	3.0%	2.8%	3.7%	5.0%	6.1%
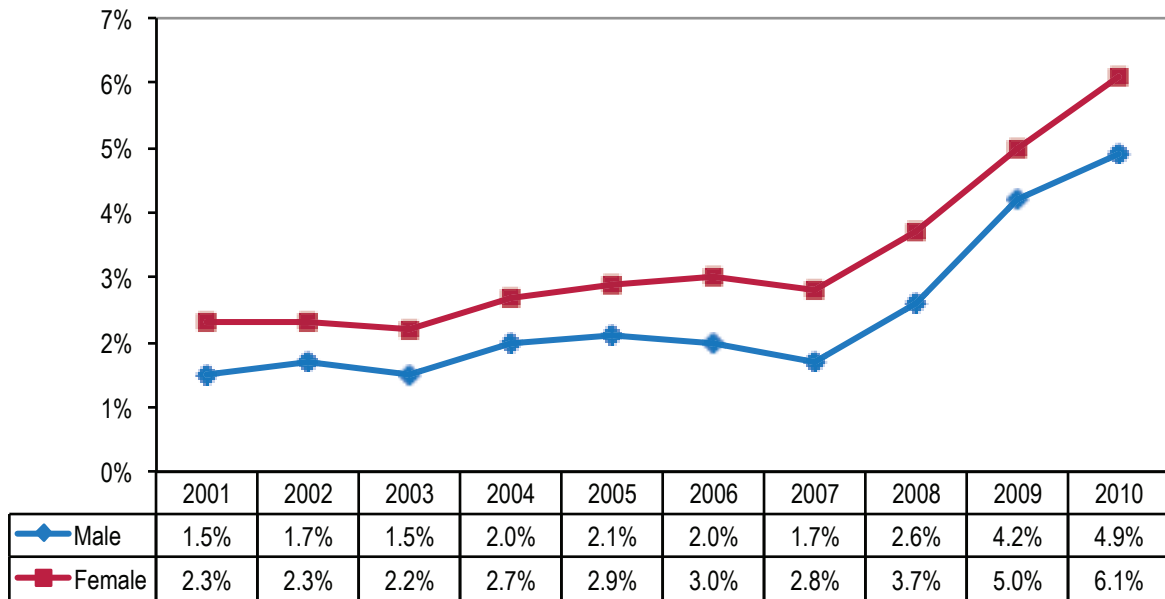
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 7.10 Percentage of Indiana Treatment Episodes with Heroin Dependence Reported at Treatment Admission, by Race (Treatment Episode Data Set, 2001–2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black	3.6%	4.3%	2.6%	4.8%	4.8%	4.1%	2.5%	2.6%	3.3%	3.2%
White	1.3%	1.4%	1.6%	1.6%	1.8%	1.9%	2.0%	3.1%	4.4%	5.4%
Other	2.1%	1.0%	1.7%	2.4%	1.8%	2.7%	1.2%	1.4%	5.2%	2.8%
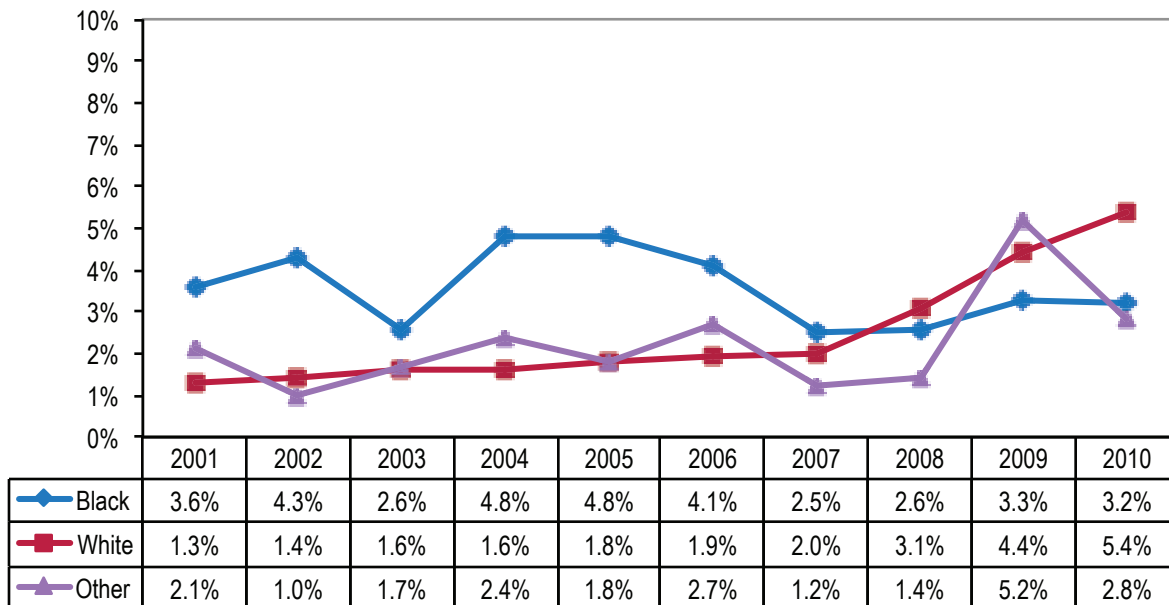
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 7.11 Percentage of Indiana Treatment Episodes with Heroin Dependence Reported at Treatment Admission, by Age Group (Treatment Episode Data Set, 2001–2010)

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Under 18	0.1%	0.1%	0.2%	0.2%	0.2%	0.2%	0.0%	0.1%	0.2%	0.9%
18 to 24	1.5%	1.3%	1.7%	1.6%	1.5%	1.7%	1.6%	2.8%	6.1%	6.5%
25 to 34	1.0%	1.5%	1.7%	1.9%	1.9%	2.4%	2.6%	4.0%	5.4%	7.0%
35 to 44	1.5%	1.5%	1.1%	1.7%	1.9%	1.6%	1.6%	2.0%	2.7%	3.5%
45 to 54	5.5%	5.7%	3.9%	4.9%	4.9%	3.9%	2.1%	2.9%	2.6%	2.8%
55 and over	3.5%	4.0%	2.6%	6.2%	9.3%	8.1%	5.0%	3.8%	5.7%	6.2%

Source: Substance Abuse and Mental Health Data Archive, 2010

Indiana University Center for Health Policy
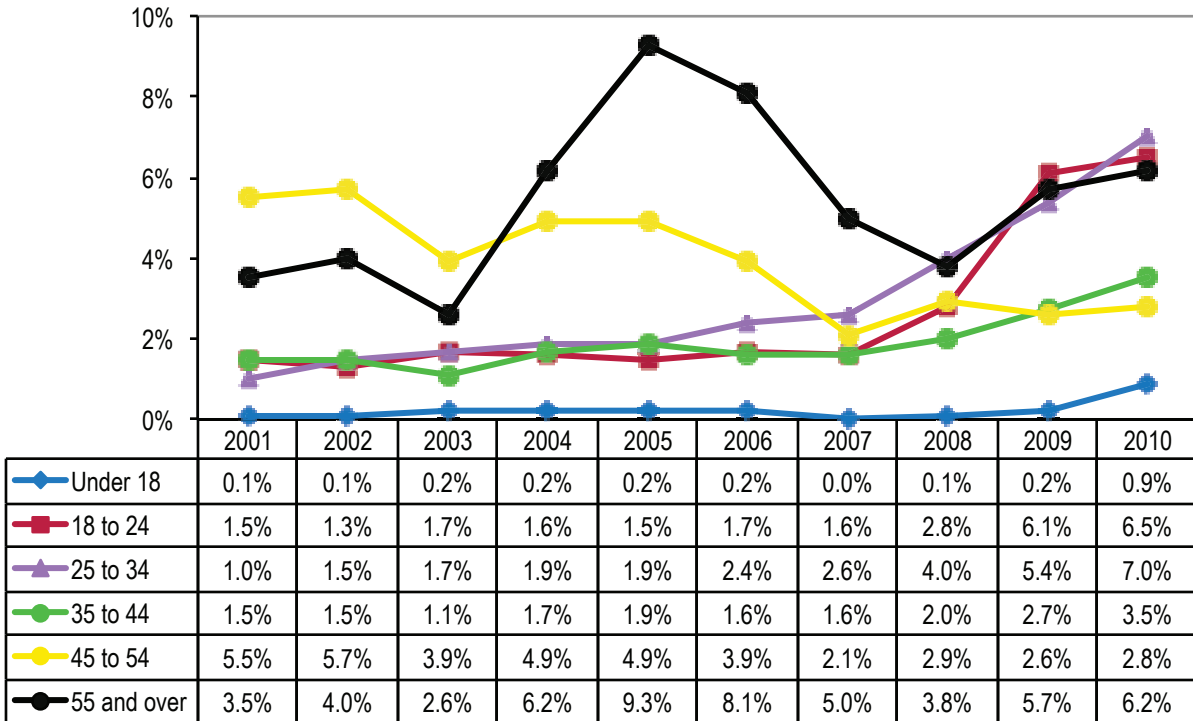
HIV/AIDS

One of the most serious consequences of heroin abuse is contraction of HIV from contaminated needles; injection drug use (IDU) remains a significant risk factor for HIV/AIDS. In 2011, 385 new HIV infections and 133 new AIDS cases were reported in Indiana. As of December 31, 2011, a total of 10,225 persons were living with HIV disease[4] in Indiana; the mode of transmission in 845 of these cases involved IDU (Indiana State Department of Health, 2011).[5] The estimated annual rate of AIDS diagnoses in Indiana adults and adolescents was 6.9 per 100,000 population in 2010 (U.S.: 13.1) (The Kaiser Family Foundation, 2011). Indiana's age-adjusted HIV/AIDS mortality rate for 2009 was 1.7 per 100,000 population (95% CI: 1.4–2.1), which was significantly lower than the U.S. rate of 3.0 per 100,000 population (95% CI: 2.9–3.0) (Centers for Disease Control and Prevention, 2012a).

Hepatitis

Hepatitis is a liver disease that is caused by viral infection. The most common types are hepatitis A, B, and C. The hepatitis B virus (HBV) and hepatitis C virus (HCV) are transmitted when blood of an infected person enters the body of a person who is not infected. The disease is frequently spread via unprotected sex and among injection drug users (Centers for Disease Control and Prevention, 2012b).

There were 75 acute cases of hepatitis B and 27 acute cases of hepatitis C in 2010 in Indiana, representing rates of 1.2 for HBV (U.S.: 1.1) and 0.4 for HCV (U.S.: 0.3), per 100,000 population (Centers for Disease Control and Prevention, 2012b).

The 2009 age-adjusted mortality rate attributable to HBV and HCV[6] was 1.5 per 100,000 population (95% CI: 1.2–1.8) in Indiana, which was significantly lower than the national rate of 2.2 per 100,000 population (95% CI: 2.2–2.3) (Centers for Disease Control and Prevention, 2012a).

Legal Consequences

The Uniform Crime Reporting (UCR) Program collects information on arrests for possession and sale/manufacture of opiates and cocaine combined; data on either drug category individually are currently not available (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010). According to the 2010 dataset, law enforcement made almost 2,400 arrests for possession and more than 2,000 arrests for sale/manufacture of opiates and cocaine in Indiana in that year. This represents arrest rates of 0.4 per 1,000 population (95% CI: 0.4–0.4) for possession and 0.3 per 1,000 population (95% CI: 0.3–0.3) for sale/manufacture. For trend information and comparisons with the United States, refer to Chapter 6, Cocaine, on pages 99-113; for county-level data, see Maps 6.1 and 6.2 (pages 111 and 112) and Appendix 6C (pages 109-110).

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[4]HIV disease includes both HIV infections and AIDS cases.
[5]A total of 390 cases were attributed to IDU alone and 455 to IDU and MSM (men having sex with men) together.
[6]Mortality rates for hepatitis B and C infections are based on the following ICD-10 codes: B16 (Acute hepatitis B), B17.0 (Acute delta-[super]infection of hepatitis B carrier), B17.1 (Acute hepatitis C), B18.0 (Chronic viral hepatitis B with delta-agent), B18.1 (Chronic viral hepatitis B without delta-agent), B18.2 (Chronic viral hepatitis C).

APPENDIX 7A

Number and Percentage of Treatment Episodes with Heroin Use and Dependence Reported at Treatment Admission in Indiana, by County (Substance Abuse Population by County/Treatment Episode Data Set, 2012)

County	Treatment Episodes Total	Heroin Use Number	%	Heroin Dependence Number	%	County	Treatment Episodes Total	Heroin Use Number	%	Heroin Dependence Number	%
Adams	138	10	7.2%	5	3.6%	Madison	804	25	3.1%	15	1.9%
Allen	1,822	342	18.8%	220	12.1%	Marion	4,091	527	12.9%	430	10.5%
Bartholomew	661	7	1.1%	<5	N/A	Marshall	236	91	38.6%	53	22.5%
Benton	41	<5	N/A	<5	N/A	Martin	47	<5	N/A	<5	N/A
Blackford	51	<5	N/A	<5	N/A	Miami	241	8	3.3%	<5	N/A
Boone	199	35	17.6%	26	13.1%	Monroe	1,505	95	6.3%	45	3.0%
Brown	116	<5	N/A	<5	N/A	Montgomery	357	40	11.2%	31	8.7%
Carroll	123	12	9.8%	8	6.5%	Morgan	540	52	9.6%	38	7.0%
Cass	273	6	2.2%	<5	N/A	Newton	44	11	25.0%	7	15.9%
Clark	418	36	8.6%	26	6.2%	Noble	418	118	28.2%	37	8.9%
Clay	173	<5	N/A	<5	N/A	Ohio	38	6	15.8%	<5	N/A
Clinton	146	<5	N/A	<5	N/A	Orange	105	<5	N/A	<5	N/A
Crawford	57	<5	N/A	<5	N/A	Owen	265	8	3.0%	<5	N/A
Daviess	188	<5	N/A	<5	N/A	Parke	135	<5	N/A	<5	N/A
Dearborn	450	102	22.7%	74	16.4%	Perry	148	<5	N/A	<5	N/A
Decatur	193	<5	N/A	<5	N/A	Pike	51	<5	N/A	<5	N/A
DeKalb	205	5	2.4%	<5	N/A	Porter	713	183	25.7%	166	23.3%
Delaware	1,168	18	1.5%	8	0.7%	Posey	118	<5	N/A	<5	N/A
Dubois	358	5	1.4%	<5	N/A	Pulaski	104	<5	N/A	<5	N/A
Elkhart	1,040	34	3.3%	24	2.3%	Putnam	215	10	4.7%	5	2.3%
Fayette	219	29	13.2%	13	5.9%	Randolph	188	26	13.8%	20	10.6%
Floyd	182	17	9.3%	13	7.1%	Ripley	189	33	17.5%	23	12.2%
Fountain	81	7	8.6%	5	6.2%	Rush	137	<5	N/A	<5	N/A
Franklin	91	13	14.3%	11	12.1%	Saint Joseph	1,293	139	10.8%	101	7.8%
Fulton	215	10	4.7%	7	3.3%	Scott	189	5	2.6%	<5	N/A
Gibson	204	<5	N/A	<5	N/A	Shelby	78	7	9.0%	6	7.7%
Grant	448	5	1.1%	<5	N/A	Spencer	195	<5	N/A	<5	N/A
Greene	176	7	4.0%	5	2.8%	Starke	203	27	13.3%	18	8.9%
Hamilton	699	60	8.6%	45	6.4%	Steuben	194	7	3.6%	<5	N/A
Hancock	147	7	4.8%	7	4.8%	Sullivan	102	<5	N/A	<5	N/A
Harrison	119	11	9.2%	7	5.9%	Switzerland	41	<5	N/A	<5	N/A
Hendricks	328	40	12.2%	32	9.8%	Tippecanoe	469	59	12.6%	47	10.0%
Henry	305	15	4.9%	9	3.0%	Tipton	59	<5	N/A	<5	N/A
Howard	588	29	4.9%	19	3.2%	Union	33	5	15.2%	<5	N/A
Huntington	147	51	34.7%	29	19.7%	Vanderburgh	1,367	14	1.0%	5	0.4%
Jackson	271	17	6.3%	10	3.7%	Vermillion	130	<5	N/A	<5	N/A
Jasper	94	19	20.2%	18	19.1%	Vigo	759	14	1.8%	9	1.2%
Jay	126	5	4.0%	<5	N/A	Wabash	183	79	43.2%	35	19.1%
Jefferson	292	12	4.1%	<5	N/A	Warren	29	<5	N/A	<5	N/A
Jennings	204	6	2.9%	<5	N/A	Warrick	278	<5	N/A	<5	N/A
Johnson	207	25	12.1%	22	10.6%	Washington	68	<5	N/A	<5	N/A
Knox	442	<5	N/A	<5	N/A	Wayne	594	109	18.4%	71	12.0%
Kosciusko	314	116	36.9%	51	16.2%	Wells	122	5	4.1%	<5	N/A
LaGrange	172	6	3.5%	<5	N/A	White	148	5	3.4%	<5	N/A
Lake	2,803	435	15.5%	383	13.7%	Whitley	124	69	55.6%	24	19.4%
LaPorte	637	145	22.8%	117	18.4%	County Info Missing	198	13	6.6%	9	4.5%
Lawrence	432	25	5.8%	9	2.1%	**Indiana**	**35,308**	**3,563**	**10.1%**	**2,465**	**7.0%**

Note: We defined heroin dependence as "individuals in substance abuse treatment listing heroin as their primary substance at admission."

We calculated the percentages by dividing the number of reported heroin use/dependence by the number of treatment episodes.

Source: Indiana Family and Social Services Administration, 2013

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APPENDIX 7B

Percentage of Indiana Students Reporting Lifetime and Monthly Heroin Use in Indiana, by Region and Grade
(Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2012)

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	0.3	0.2	0.6	0.2	0.5	0.3	0.8	0.3	0.2
	Monthly	0.2	0.1	0.4	0.2	0.1	0.1	0.6	0.2	0.2
7th Grade	Lifetime	0.6	0.5	0.8	0.2	0.6	0.4	0.4	0.6	1.0
	Monthly	0.3	0.2	0.5	0.0	0.4	0.2	0.1	0.4	0.5
8th Grade	Lifetime	0.9	1.1	0.7	0.1	0.6	0.8	1.7	0.6	1.4
	Monthly	0.5	0.8	0.4	0.1	0.3	0.3	0.8	0.3	0.8
9th Grade	Lifetime	1.2	1.7	0.9	0.8	1.2	1.0	1.7	1.2	1.4
	Monthly	0.6	0.8	0.7	0.5	0.4	0.5	0.8	0.6	0.5
10th Grade	Lifetime	1.7	2.1	1.5	1.4	1.7	1.6	1.9	1.3	1.9
	Monthly	0.7	0.8	0.8	0.4	0.5	0.8	1.0	0.7	0.8
11th Grade	Lifetime	1.8	1.7	1.6	1.3	1.6	1.7	2.9	1.6	1.9
	Monthly	0.7	1.0	0.6	0.8	0.7	0.7	1.0	0.2	0.8
12th Grade	Lifetime	2.1	2.5	2.2	1.1	1.5	1.9	2.8	1.5	2.9
	Monthly	1.0	1.3	1.0	0.7	0.6	0.9	0.8	0.8	1.3

Source: Gassman, et al., 2012

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8

METHAMPHETAMINE USE IN INDIANA: CONSUMPTION PATTERNS AND CONSEQUENCES

METHAMPHETAMINE CONSUMPTION

Methamphetamine (meth) is a powerful, highly addictive stimulant that affects the central nervous system. Meth is similar to amphetamine, but it has a more pronounced effect. It can be injected, snorted, smoked, or ingested orally. Methamphetamine users feel a short, yet intense "rush" when the drug is initially administered. The immediate effects of methamphetamine include increased activity and decreased appetite (National Institute on Drug Abuse, 2010).

General Consumption Patterns

The National Survey on Drug Use and Health (NSDUH) measures lifetime, past year, and past month (current) use of methamphetamine in the population ages 12 and older (Substance Abuse and Mental Health Services Administration, 2012). The latest prevalence estimates for the nation are based on results from the 2011 survey. However, state-level rates were calculated using annual averages from 2002 through 2004. Therefore, comparisons between Indiana and U.S. rates should be made with caution, especially since national rates were higher between 2002 and 2004 than they are today. According to NSDUH findings:

- 4.5% of Hoosiers (225,000 residents) used meth at least once in their life (U.S.: 5.0%).
- 0.8% of Hoosiers (40,000 residents) used meth in the past year (U.S.: 0.3%).
- 0.2% of Hoosiers (10,000 residents) used meth in the past month (U.S.: 0.1%) (Substance Abuse and Mental Health Services Administration, 2012).

Adult Consumption Patterns

According to pooled NSDUH data from 2002 through 2005, 1.9% of Indiana residents ages 18 to 25 used meth in the past year. In comparison, the highest and lowest rates of past-year meth use among 18- to 25-year-olds were found in young adults from Wyoming (4.6%) and New York (0.3%), respectively (Substance Abuse and Mental Health Services Administration, Office of Applied Studies, 2008).

The Indiana College Substance Use Survey provides estimates of alcohol, tobacco, and other drug use among Indiana college students. According to 2012 results, 0.4% of Indiana college students had used meth in the past year (U.S.: 0.2%) and 0.2% had used it in the past month (U.S.: less than 0.05%); U.S. rates were statistically not different.[1] Rates were higher for males (past-year use: 0.6%; current use: 0.4%) than for females (past-year use: 0.3%; current use: less than 0.0%). Prevalence rates for meth use among Indiana college students did not differ by age group (under 21 vs. 21 or over), or type of academic institution (private vs. public) (Indiana Collegiate Action Network, 2012).[2]

The Treatment Episode Data Set (TEDS) includes information gathered from patients at the time of substance abuse treatment admission (Substance Abuse and Mental Health Data Archive, 2010). Indiana TEDS data show a steady increase in the percentage of patients reporting meth use at admission, from 4.0% in 2000 to 10.9% in 2005, and then a decrease to 9.3% in 2010. The percentage of treatment admissions with reported meth use was significantly higher in Indiana than in the United States starting in 2009 ($p < 0.001$) and continuing in 2010 ($p < 0.05$) (see Figure 8.1).

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[1]National data is based on the Monitoring the Future study. College students were defined as "[T]hose follow-up respondents one to four years past high school who say they were registered as full-time students in a two- or four-year undergraduate college at the beginning of March in the year in question" (Johnston, O'Malley, Bachman, & Schulenberg, 2011, p. 255).
[2]Nine Indiana colleges participated in the survey; results are based on nonrandom sampling and are not representative of all college students in Indiana.

Figure 8.1   Percentage of Treatment Episodes with Meth Use Reported at Treatment Admission in Indiana and the United States (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	4.0%	5.3%	7.1%	8.2%	9.2%	10.9%	10.5%	9.2%	9.2%	9.4%	9.3%
U.S.	6.5%	7.4%	8.5%	9.3%	10.2%	11.8%	12.0%	11.1%	9.3%	8.5%	8.9%
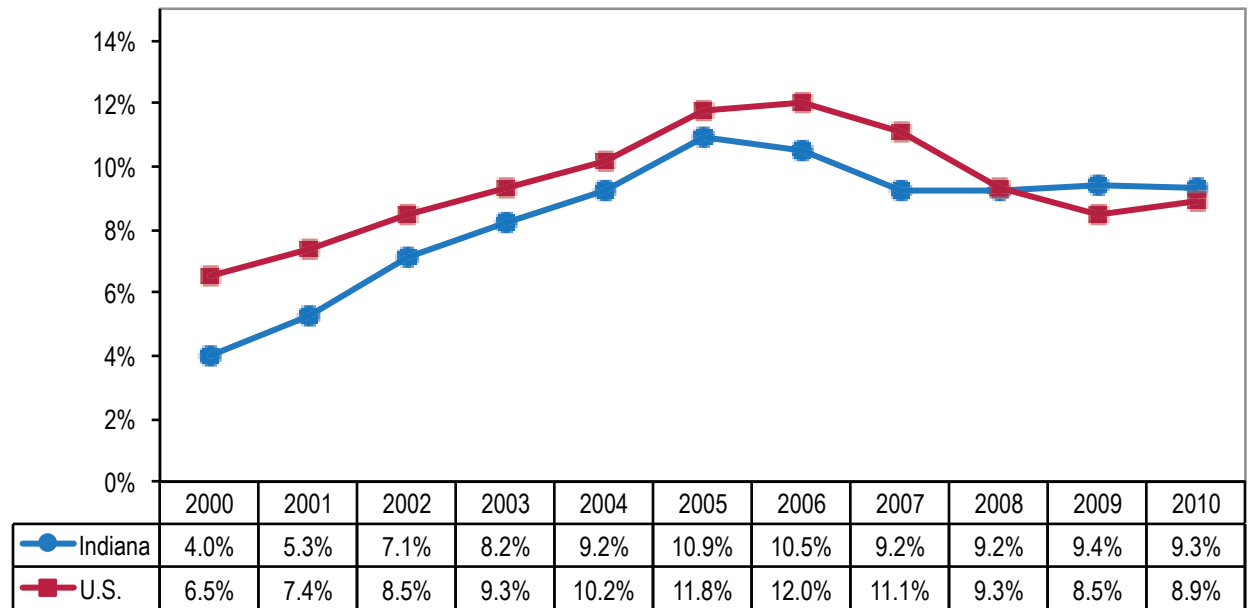
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 8.2   Percentage of Treatment Episodes with Meth Use Reported at Treatment Admission in Indiana, by Gender (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	3.5%	4.6%	6.0%	7.1%	7.8%	9.2%	8.7%	7.8%	8.3%	7.8%	7.9%
Female	4.9%	7.0%	9.5%	10.6%	12.0%	14.2%	14.0%	11.9%	11.1%	12.6%	11.8%

Source: Substance Abuse and Mental Health Data Archive, 2010

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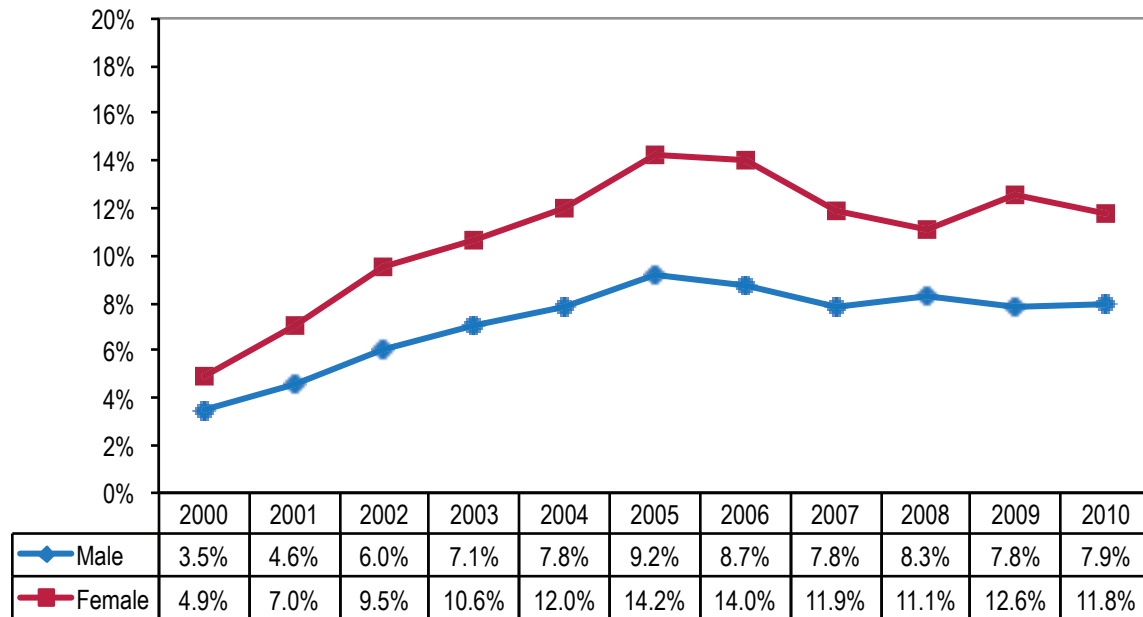
In Indiana, statistically significant differences in meth use were observed by gender, race, and age, as follows (*p* < 0.001):

- **Gender**—Across all data points, the percentage of female clients reporting meth use at admission was significantly greater than the percentage of male clients (see Figure 8.2).
- **Race**—Meth use was significantly higher among white patients than black or other minority patients. Reported use for whites more than doubled from 5.2% in 2000 to 11.3% in 2010. Even though blacks consistently had the lowest percentage, reported use increased significantly from 0.3% to 1.5% during that time period; however, the greatest increase was found among other races, whose percentages rose from 0.7% to 6.5% (see Figure 8.3).
- **Age**—With the exception of individuals under the age of 18, younger adults had higher rates of use than older people, with the highest rates among those ages 25 to 34 (see Figure 8.4) (Substance Abuse and Mental Health Data Archive, 2010).

For county-level treatment data, see Appendix 8A, page 139.

Figure 8.3 Percentage of Treatment Episodes with Meth Use Reported at Treatment Admission in Indiana, by Race (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black	0.3%	0.4%	0.5%	0.4%	0.4%	0.5%	0.7%	0.6%	0.8%	1.7%	1.5%
White	5.2%	6.6%	8.8%	10.2%	11.5%	13.3%	12.6%	10.9%	11.1%	11.2%	11.3%
Other	0.7%	1.9%	3.0%	2.5%	3.0%	7.2%	10.0%	8.4%	6.9%	6.6%	6.5%
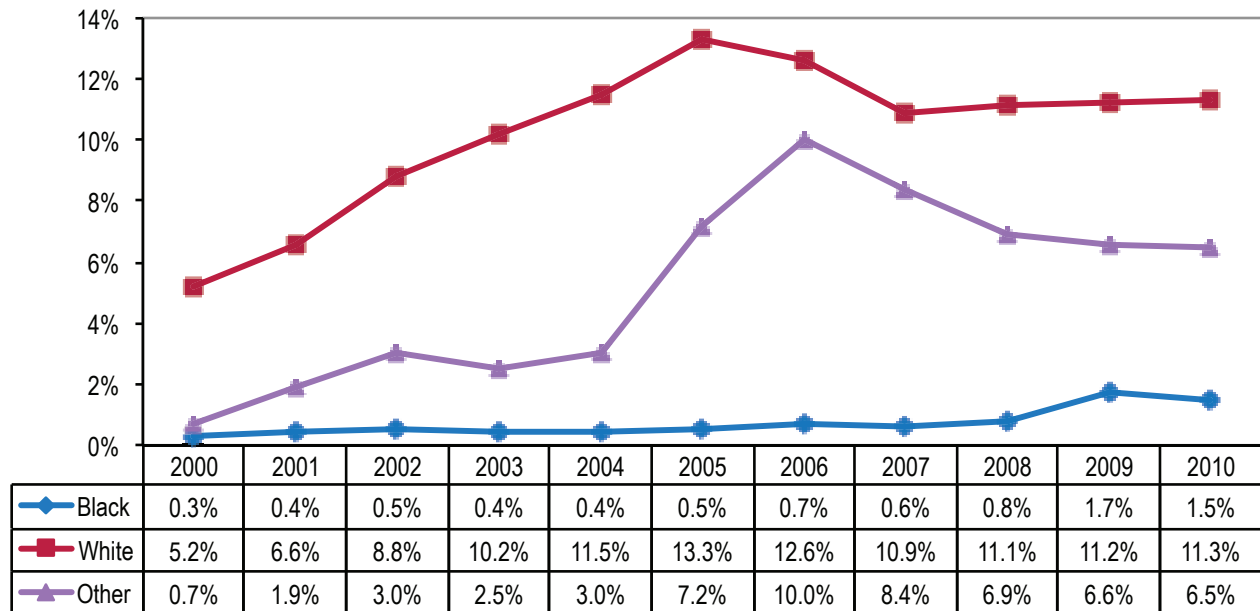
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 8.4 Percentage of Treatment Episodes with Meth Use Reported at Treatment Admission in Indiana, by Age Group (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Under 18	1.9%	2.9%	3.9%	3.8%	3.4%	7.0%	4.3%	2.8%	2.2%	1.0%	1.7%
18 to 24	5.3%	6.4%	8.3%	8.9%	10.3%	12.4%	11.1%	8.1%	8.2%	7.8%	7.7%
25 to 34	5.1%	7.4%	9.6%	11.0%	12.9%	14.7%	13.7%	12.5%	11.9%	12.5%	12.0%
35 to 44	3.5%	4.6%	6.4%	8.1%	8.4%	9.6%	10.9%	10.3%	10.4%	11.9%	11.6%
45 to 54	1.9%	1.7%	3.1%	3.3%	4.3%	5.3%	5.3%	4.9%	6.6%	5.4%	6.4%
55 and over	0.4%	0.9%	0.4%	0.9%	0.8%	0.8%	2.1%	2.5%	2.8%	2.7%	2.9%
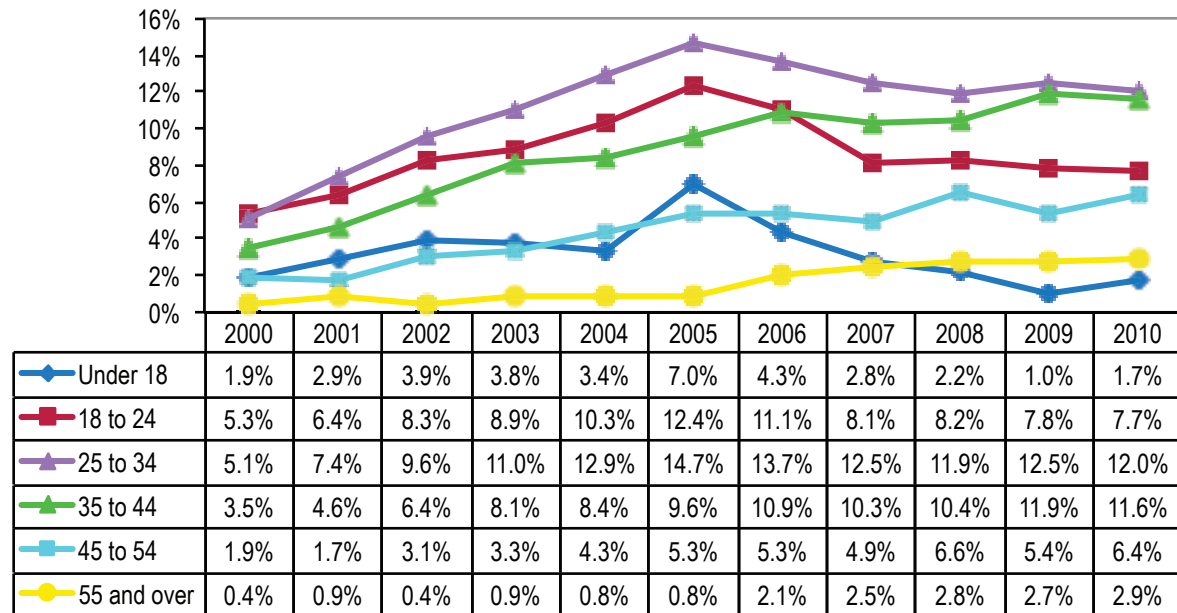
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 8.5 Percentage of Indiana and U.S. High School Students (9th–12th Grade) Reporting Lifetime Methamphetamine Use (Youth Risk Behavior Surveillance System, 2003–2011)
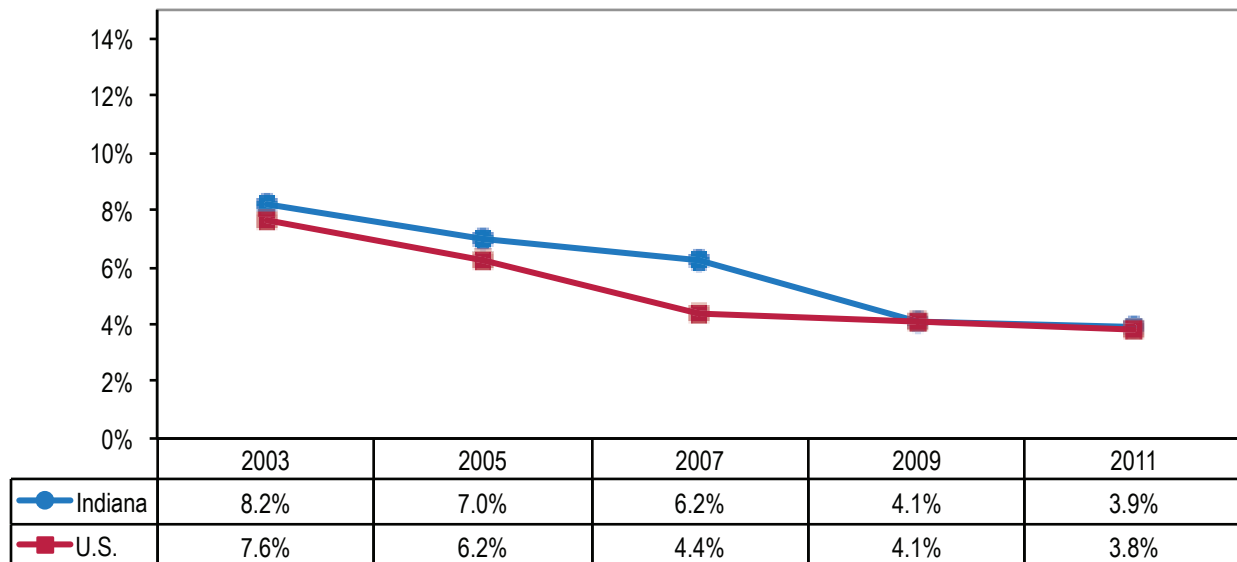
	2003	2005	2007	2009	2011
Indiana	8.2%	7.0%	6.2%	4.1%	3.9%
U.S.	7.6%	6.2%	4.4%	4.1%	3.8%

Source: Centers for Disease Control and Prevention, 1991-2011

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Youth Consumption Patterns

According to the 2011 Youth Risk Behavior Surveillance System (YRBSS), 3.9% (95% Confidence Interval [CI]: 2.3–6.5) of Indiana high school students reported having used meth once or more in their lifetimes; the national rate was virtually the same (3.8%; 95% CI: 3.4–4.3). This represents a significant drop from Indiana's 2003 level of 8.2% (95% CI: 6.5–10.3) (see Figure 8.5). Rate differences by gender, race, and grade level were not significant in Indiana (see Table 8.1) (Centers for Disease Control and Prevention, 1991-2011).

Two other surveys of young people that include questions about lifetime and current methamphetamine use are the Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD) survey, conducted among Indiana students in grades 6 through 12 (Gassman, Jun, Samuel, Agley, Lee, Agley, Oi, et al., 2012), and the Monitoring the Future (MTF) survey, administered nationally among 8th, 10th, and 12th graders (Inter-university Consortium for Political and Social Research, University of Michigan, 2012).

In Indiana, current (past month) rates of meth use in 8th, 10th, and 12th grade students seemed to have decreased from 2005 through 2012 (see Figure 8.6).

Table 8.1 Percentage of Indiana and U.S. High School Students Reporting Lifetime Methamphetamine Use, by Gender, Race/Ethnicity, and Grade (Youth Risk Behavior Surveillance System, 2011)

		Indiana Prevalence % (95% CI)	U.S. Prevalence % (95% CI)
Gender	Male	4.5% (2.3–8.5)	4.5% (3.9–5.2)
	Female	3.4% (2.2–5.1)	3.0% (2.5–3.6)
Race/Ethnicity	Black	3.9% (1.0–14.2)	2.6% (1.9–3.6)
	White	3.8% (2.4–6.0)	3.7% (3.1–4.3)
	Hispanic	4.8% (2.0–11.2)	4.6% (3.7–5.8)
Grade	9th	3.7% (2.6–5.1)	3.2% (2.6–4.1)
	10th	4.0% (2.6–5.9)	3.7% (2.9–4.7)
	11th	3.0% (1.3–7.0)	4.1% (3.3–5.0)
	12th	5.1% (1.6–14.8)	4.1% (3.4–4.9)
Total		**3.9% (2.3–6.5)**	**3.8% (3.4–4.3)**

Source: Centers for Disease Control and Prevention, 1991-2011

Figure 8.6 Percentage of Indiana 8th, 10th, and 12th Grade Students Reporting Current (Past Month) Methamphetamine Use, by Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2005–2012)

	2005	2006	2007	2008	2009	2010	2011	2012
8th Grade	1.1%	0.9%	0.7%	0.7%	0.6%	0.8%	0.9%	0.5%
10th Grade	1.6%	1.2%	1.0%	1.0%	0.9%	1.0%	0.9%	0.9%
12th Grade	1.7%	1.5%	1.0%	0.9%	0.9%	1.0%	1.3%	1.1%
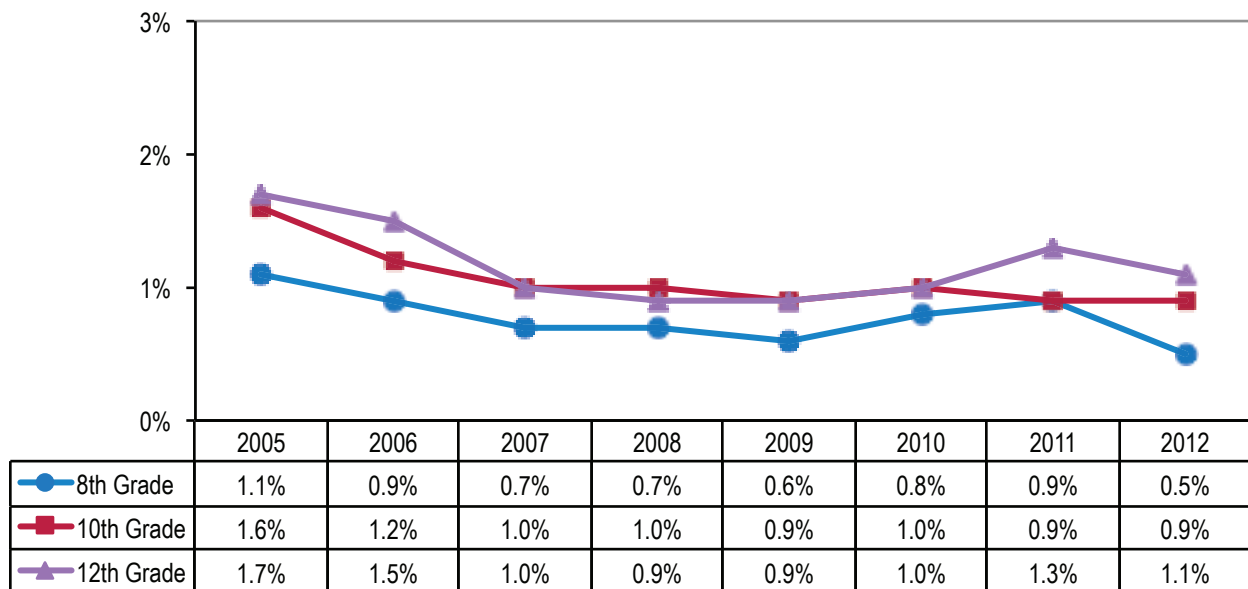
Source: Gassman, et al., 2012

For grades 8, 10, and 12, Indiana's rates of lifetime meth use seemed slightly higher as compared to U.S. rates; however, due to the lack of detail provided in the publicly available data sets, statistical significance of the differences could not be determined (see Figure 8.7). For lifetime and monthly meth use in Indiana, by region and grade, see Appendix 8B, page 140.

Figure 8.7 Percentage of Indiana and U.S. 8th, 10th, and 12th Grade Students Reporting Lifetime Methamphetamine Use (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey and Monitoring the Future Survey, 2005–2012)
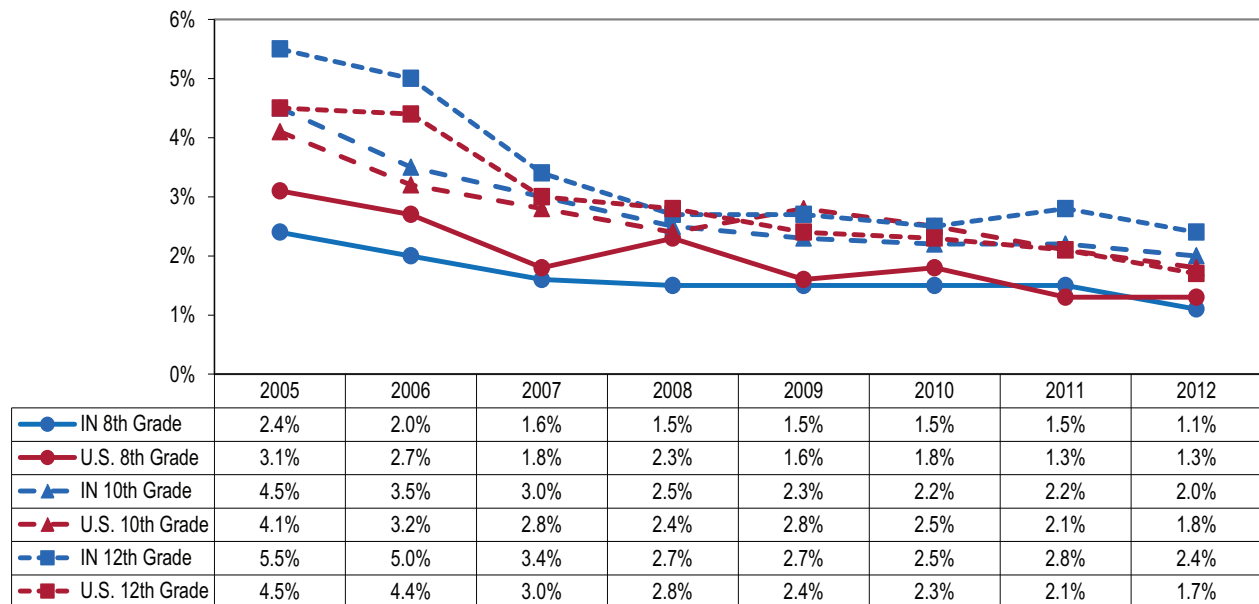
	2005	2006	2007	2008	2009	2010	2011	2012
IN 8th Grade	2.4%	2.0%	1.6%	1.5%	1.5%	1.5%	1.5%	1.1%
U.S. 8th Grade	3.1%	2.7%	1.8%	2.3%	1.6%	1.8%	1.3%	1.3%
IN 10th Grade	4.5%	3.5%	3.0%	2.5%	2.3%	2.2%	2.2%	2.0%
U.S. 10th Grade	4.1%	3.2%	2.8%	2.4%	2.8%	2.5%	2.1%	1.8%
IN 12th Grade	5.5%	5.0%	3.4%	2.7%	2.7%	2.5%	2.8%	2.4%
U.S. 12th Grade	4.5%	4.4%	3.0%	2.8%	2.4%	2.3%	2.1%	1.7%

Source: Gassman, et al., 2012; Inter-university Consortium for Political and Social Research, University of Michigan, 2012

CONSEQUENCES

Health-Related Consequences

The health consequences of meth use include both short-term and chronic impacts. Short-term effects include increased wakefulness, physical activity, and decreased appetite, as well as cardiac problems, hyperthermia (elevated body temperature), depression, and confusion. When used chronically, meth causes physiological changes that result in impaired memory, mood alterations, diminished motor coordination, and psychiatric problems. Chronic, long-term use can also lead to insomnia, violent behavior, hallucinations, weight loss, and stroke. Other health consequences of prolonged meth use include cardiovascular collapse;

brain, liver, and kidney damage; severe tooth decay (or "meth mouth"); hepatitis; extreme weight loss; mental illness; increased risk of unsafe sex and risky sexual behavior; increased risk of STD/HIV transmission; unwanted pregnancy; and death (National Institute on Drug Abuse, 2006, 2010).

Meth labs and parental addiction pose serious risks to children due to the highly toxic fumes generated during production. Additionally, users often sleep for long periods of time, neglecting their children. Children who are present during or after meth production may face severe health and safety risks, including medical neglect and physical, emotional, and sexual abuse (Messina, Marinelli-Casey, West, & Rawson, 2007).

Meth Dependence

As previously mentioned, meth is considered a highly addictive substance, and consumption can easily result in drug dependence.[4] TEDS data demonstrate that the percentage of treatment admissions in which meth was indicated as the primary drug has been statistically significantly lower in Indiana than in the rest of the nation (Substance Abuse and Mental Health Data Archive, 2010).

Between 2000 and 2010, the percentage of treatment admissions in Indiana in which meth dependence was indicated increased significantly from 1.5% to 4.7%, peaking at 5.9% in 2005 (see Figure 8.8).

According to the 2010 TEDS dataset, methamphetamine dependence in Indiana's treatment population differed significantly by gender, race, and age group, as follows (*p* < 0.001):

- **Gender**—More women (6.3%) than men (3.8%) listed meth as their primary drug at treatment admission (see Figure 8.9).
- **Race**—The highest and lowest percentages of meth dependence were reported by white patients (5.8%) and black patients (0.5%), respectively (see Figure 8.10).
- **Age**—Meth dependence was indicated primarily among patients ages 35 to 44 (6.3%); Hoosiers under the age of 18 had the lowest percentage (0.8%) (see Figure 8.11) (Substance Abuse and Mental Health Data Archive, 2010).

For county-level treatment data, see Appendix 8A, page 139.

Figure 8.8 Percentage of Treatment Episodes with Meth Dependence Reported at Treatment Admission in Indiana and the United States (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	1.5%	2.4%	3.5%	4.2%	5.0%	5.9%	5.6%	4.8%	5.0%	5.0%	4.7%
U.S.	3.8%	4.5%	5.5%	6.2%	6.9%	8.2%	8.4%	7.6%	6.1%	5.5%	5.7%
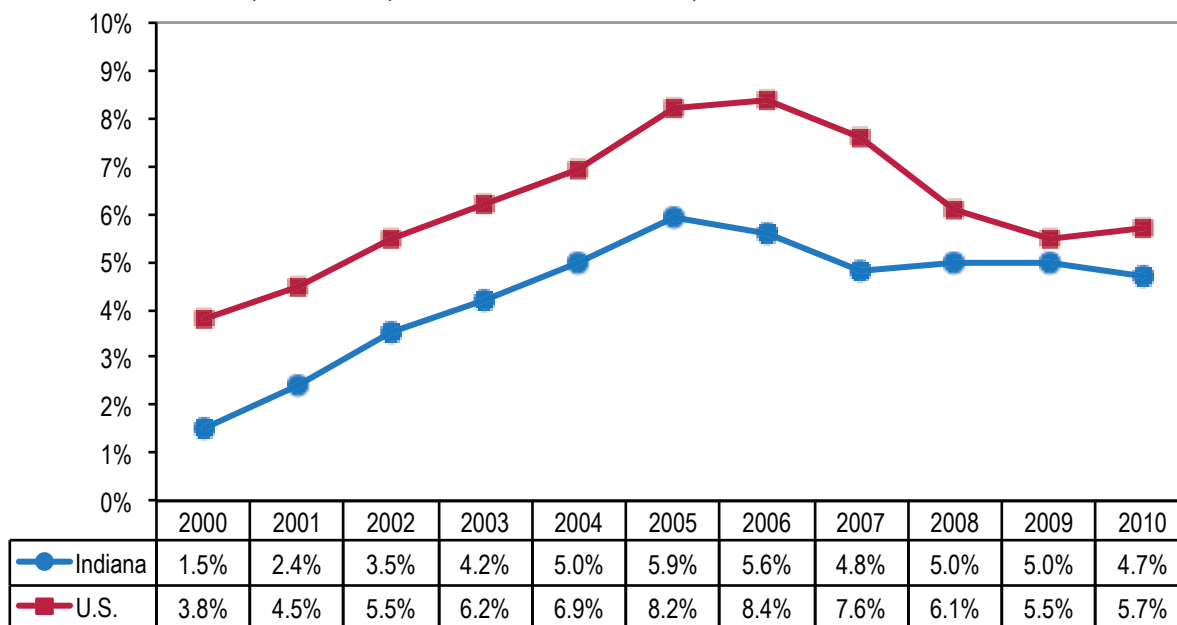
Source: Substance Abuse and Mental Health Data Archive, 2010

[4]We defined methamphetamine dependence as "individuals in substance abuse treatment listing methamphetamine as their primary substance at admission."

Figure 8.9 Percentage of Treatment Episodes with Meth Dependence Reported at Treatment Admission in Indiana, by Gender (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Male	1.2%	1.8%	2.7%	3.5%	4.1%	4.5%	4.2%	3.8%	4.2%	3.9%	3.8%
Female	2.2%	3.7%	5.4%	5.8%	6.7%	8.6%	8.3%	6.7%	6.6%	7.1%	6.3%
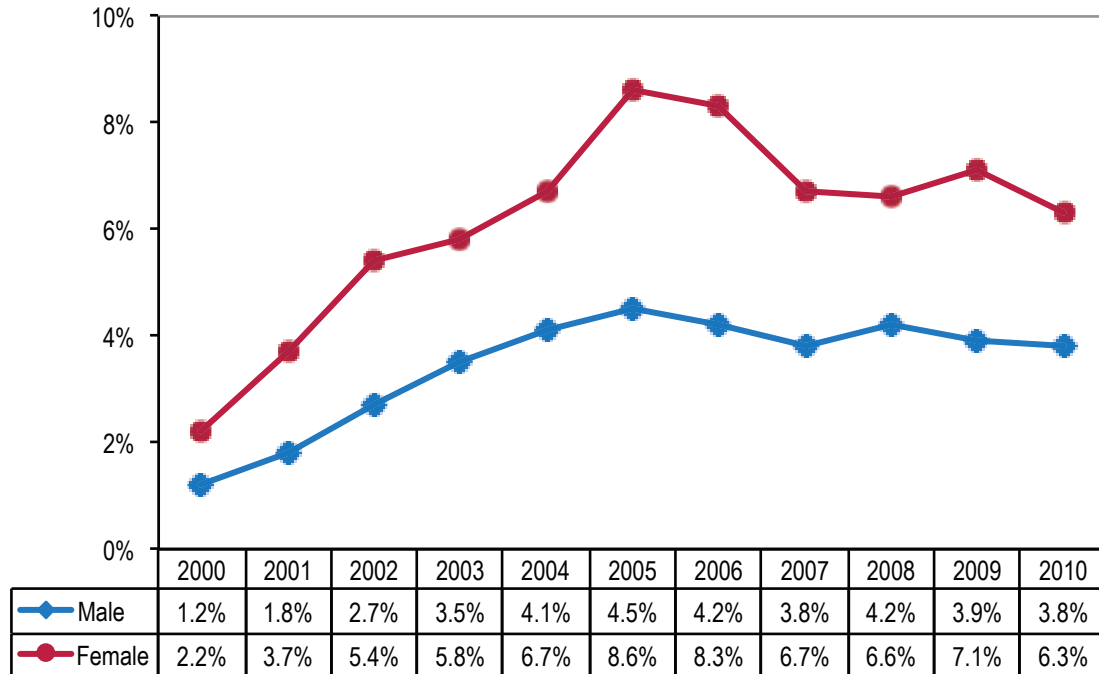
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 8.10 Percentage of Treatment Episodes with Meth Dependence Reported at Treatment Admission in Indiana, by Race (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black	0.1%	0.1%	0.1%	0.2%	0.1%	0.2%	0.2%	0.3%	0.2%	0.4%	0.5%
White	2.0%	3.0%	4.4%	5.3%	6.2%	7.1%	6.7%	5.7%	6.0%	6.0%	5.8%
Other	0.4%	1.2%	1.1%	1.3%	1.3%	3.9%	4.6%	4.6%	4.0%	3.7%	2.8%

Source: Substance Abuse and Mental Health Data Archive, 2010

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Figure 8.11 Percentage of Treatment Episodes with Meth Dependence Reported at Treatment Admission in Indiana, by Age Group (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Under 18	0.5%	1.0%	1.5%	1.7%	1.4%	2.1%	1.3%	0.6%	1.2%	0.3%	0.8%
18 to 24	1.9%	3.0%	3.9%	4.2%	5.0%	6.1%	5.3%	4.1%	3.9%	3.6%	3.5%
25 to 34	1.9%	3.4%	4.9%	6.0%	7.2%	8.3%	7.7%	6.8%	6.6%	7.0%	6.0%
35 to 44	1.4%	2.2%	3.4%	4.2%	5.0%	5.6%	6.0%	5.4%	5.9%	6.7%	6.3%
45 to 54	0.8%	0.5%	1.4%	1.7%	2.1%	2.9%	2.4%	2.7%	3.7%	2.6%	3.5%
55 and over	0.4%	0.4%	0.1%	0.3%	0.4%	0.6%	1.8%	1.2%	1.7%	1.1%	1.7%
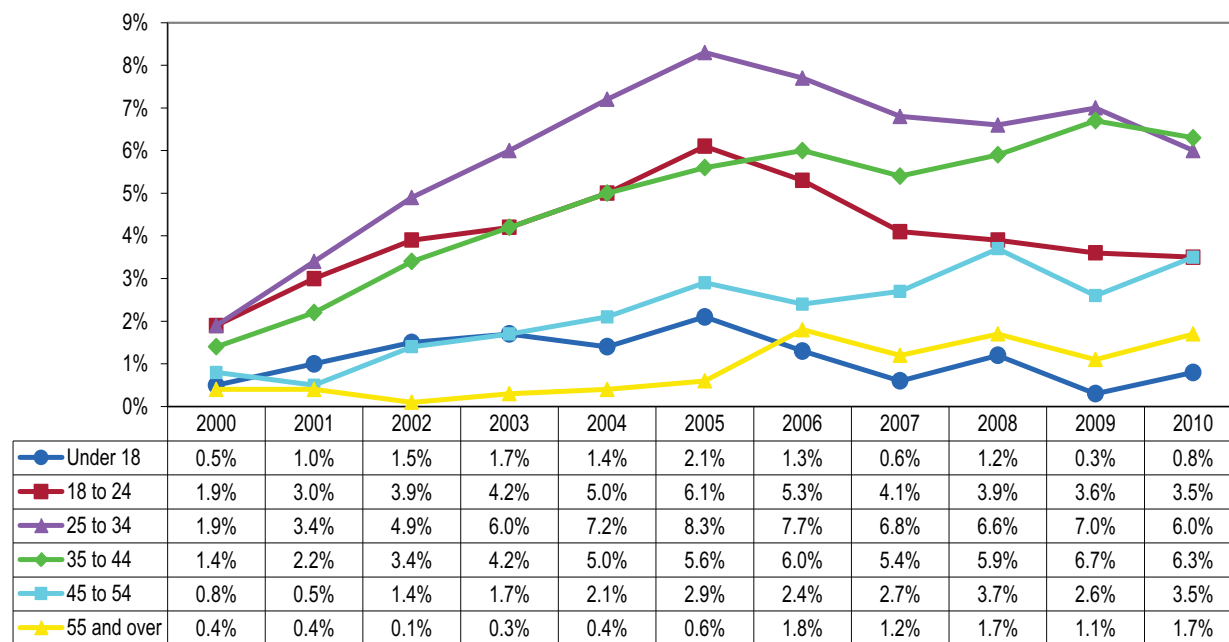
Source: Substance Abuse and Mental Health Data Archive, 2010

Criminal Consequences

From January 1 to December 31, 2012, the Indiana State Police (ISP) seized 1,663 clandestine methamphetamine labs and made 1,448 meth lab arrests in the state, which is the highest number of lab seizures and resulting arrests since records have been kept (see Figure 8.12) (Indiana State Police, 2013). However, not all seizures involved the "traditional" clandestine lab. A popular technique to produce meth is the one-pot or "shake and bake" method, for which all ingredients are combined in one container (often a 2-liter or 20-ounce plastic soda bottle) and then shaken. This can be done almost anywhere, even in a moving vehicle. Waste is often disposed along roadsides, in discarded plastic bottles (Blostein, 2009; Greene, Williams, & Wright, 2010). The number of ISP's meth lab seizures included all meth incidents, such as labs, "dump sites," and "chemical and glassware" seizures. In 2012, over 1,300 seizures, i.e., 81% of all Meth labs seized by ISP, were due to the one-pot method, which is a major increase from 2010 (493 seizures, or 37%) (Indiana State Police, 2013). Map 8.1 (page 143) shows the number of meth labs seized by ISP in each county in 2012.

Figure 8.12 Number of Clandestine Methamphetamine Labs Seized and Number of Arrests Made at Methamphetamine Labs by the Indiana State Police (Indiana Meth Lab Statistics, 1995–2012)

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Number of Lab Seizures	6	13	28	43	129	314	542	732	1,011	1,115	992	766	820	1,059	1,343	1,346	1,363	1,663
Number of Arrests	6	13	25	39	117	248	395	587	860	885	674	530	534	739	1,031	1,212	1,328	1,448
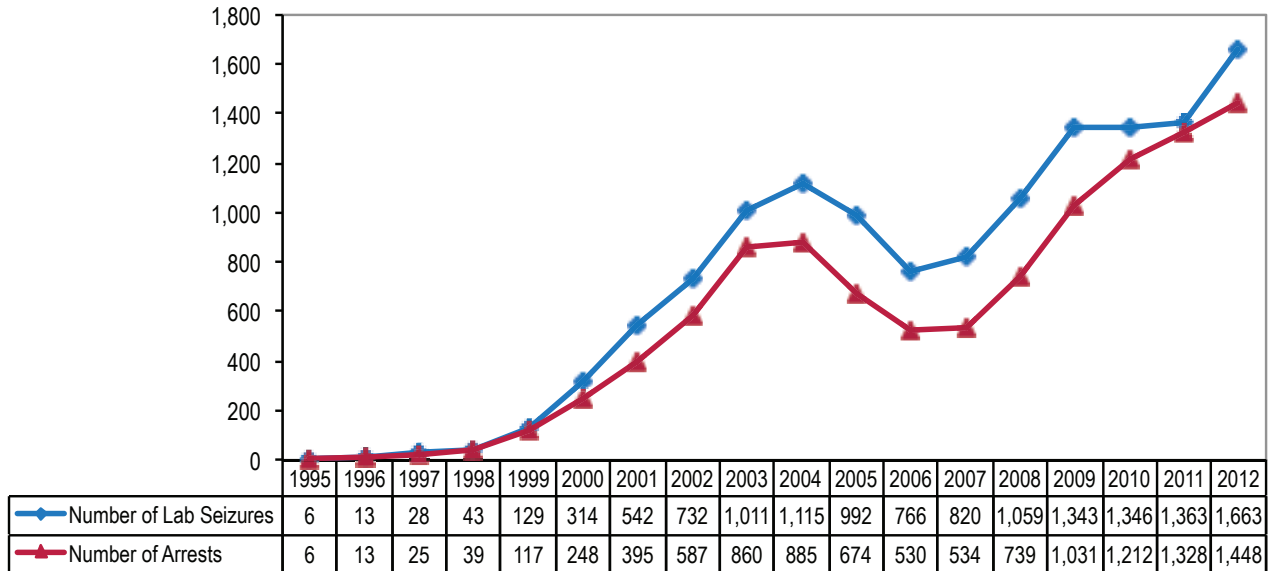
Source: Indiana State Police, 2013

Figure 8.13 Number of Arrests for Synthetic Drug Possession and Sale/Manufacture in Indiana (Uniform Crime Reporting Program, 1999–2010)

	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Possession	337	658	901	859	1,328	1,795	2,034	1,683	1,511	1,671	1,824	2,058
Sale	62	248	590	361	675	740	581	529	649	628	777	908

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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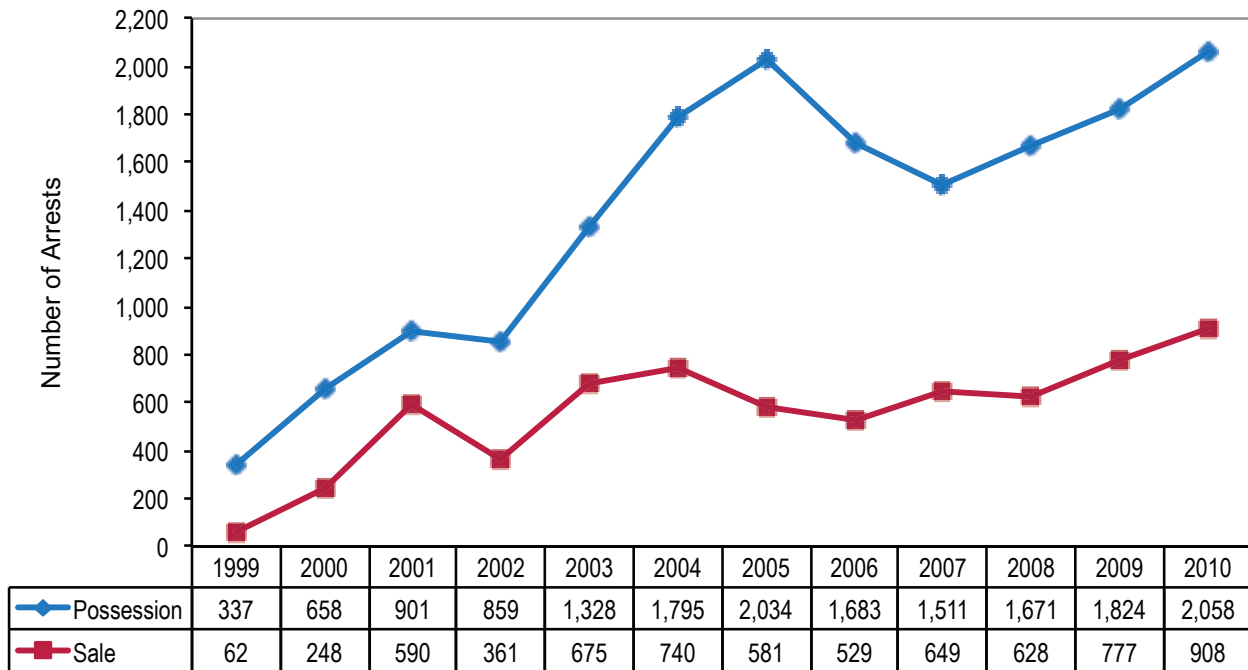
Meth is classified as a synthetic stimulant. The Uniform Crime Reporting (UCR) Program describes crimes associated with synthetic drug possession and sale/manufacture. Substances defined as "synthetic" include a number of drugs in addition to methamphetamine, such as Demerol and methadone (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010). According to 2010 results, over 2,000 Hoosiers were arrested for possession of synthetic drugs. This represents an arrest rate of 0.3 (95% CI: 0.3–0.3) per 1,000 population, which was statistically higher than the nation's, at 0.2 (95% CI: 0.2–0.2). Additionally, over 900 arrests were made in Indiana for the sale and manufacture of synthetic drugs; Indiana's arrest rate of 0.1 (95% CI: 0.1–0.1) per 1,000 population was the same as the U.S. rate (see Figures 8.13 and 8.14).

Maps 8.2 and 8.3 (pages 144 and 145), and Appendix 8C (pages 141–142) show arrest data for synthetic drug possession and sale/manufacture by county. Caution should be exercised when interpreting these data due to variations in reporting procedures and a lack of data to identify meth-specific arrests. In Indiana, reporting by county and local law enforcement jurisdictions is sometimes incomplete; therefore, a portion of these data are based on estimates. (For more details, see the discussion of UCR data in Chapter 2, Methods, page 17.)

Social Consequences

In addition to the consequences discussed above, meth use and abuse can have serious social impacts, affecting children and families in ways similar to other forms of substance abuse, such as contributing to increased interpersonal conflicts, financial problems, poor parenting, incarceration of parents, and placement of children in protective custody (National Institute on Drug Abuse, 2010). According to data from the Indiana State Police (ISP), the number of children who were taken from meth lab homes in Indiana rose from 125 in 2003 to 372 in 2012 (see Figure 8.15) (Indiana State Police, 2013).

Figure 8.14 Arrest Rates for Synthetic Drug Possession and Sale/Manufacture per 1,000 Population, Indiana and United States (Uniform Crime Reporting Program, 1999–2010)
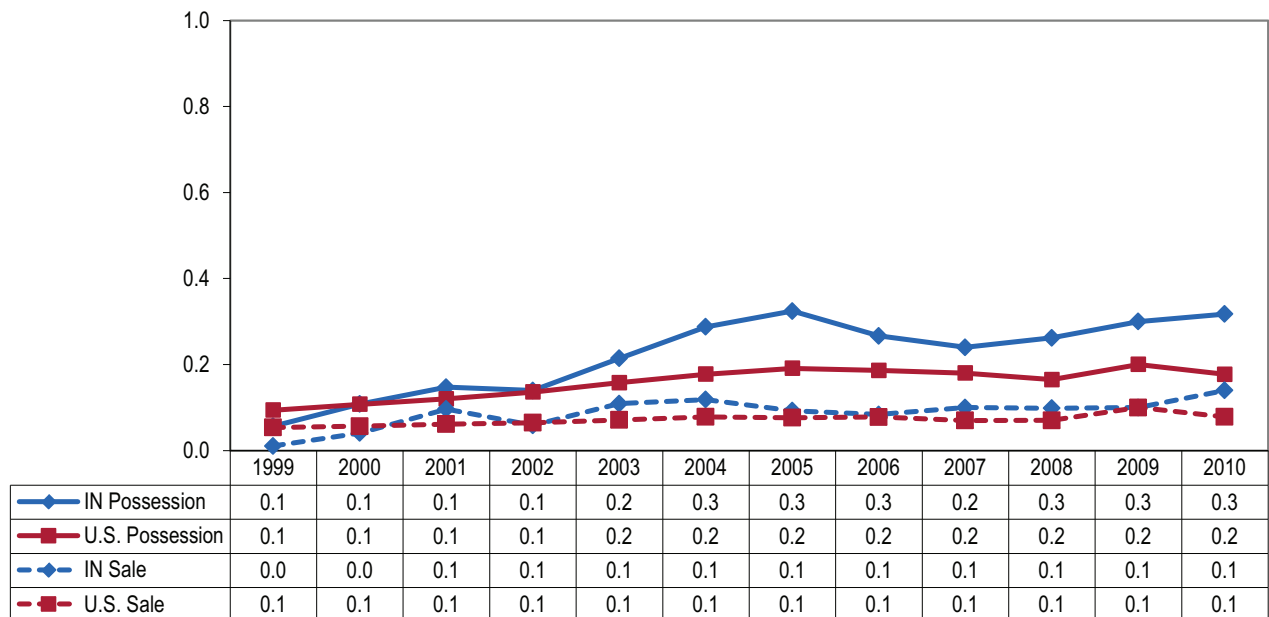
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
IN Possession	0.1	0.1	0.1	0.1	0.2	0.3	0.3	0.3	0.2	0.3	0.3	0.3
U.S. Possession	0.1	0.1	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
IN Sale	0.0	0.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
U.S. Sale	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Figure 8.15 Number of Indiana Children Taken by the Indiana State Police from Methamphetamine Lab Homes (Indiana Meth Lab Statistics, 2003–2012)
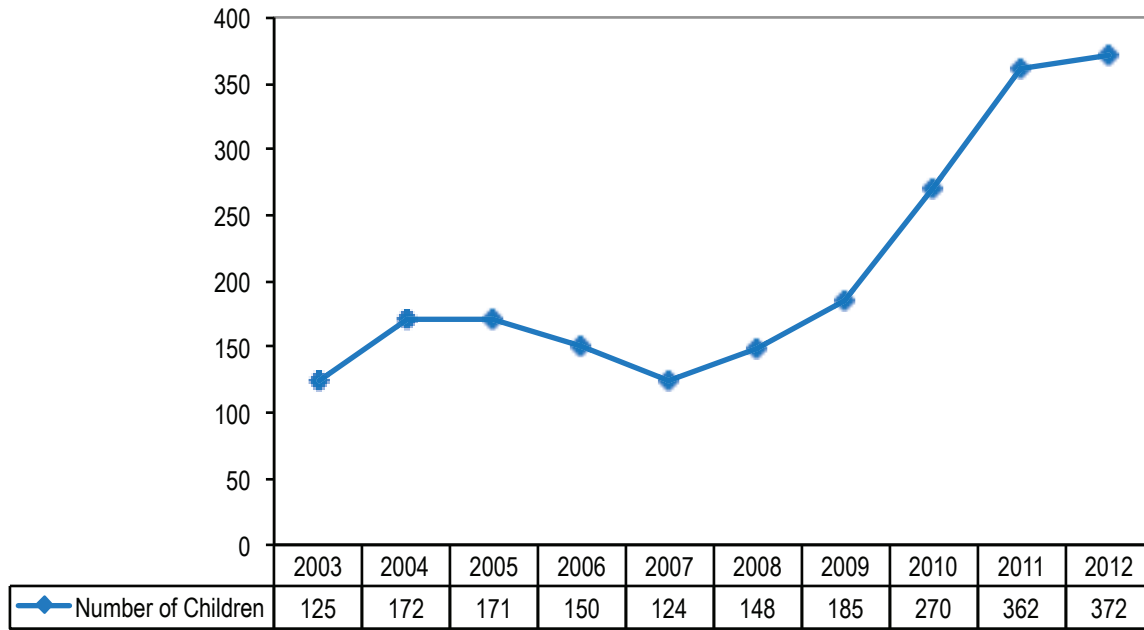
	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Number of Children	125	172	171	150	124	148	185	270	362	372

Source: Indiana State Police, 2013

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Number of Treatment Episodes with Methamphetamine Use and Dependence Reported at Treatment Admission in Indiana, by County (Substance Abuse Population by County/Treatment Episode Data Set, 2012)

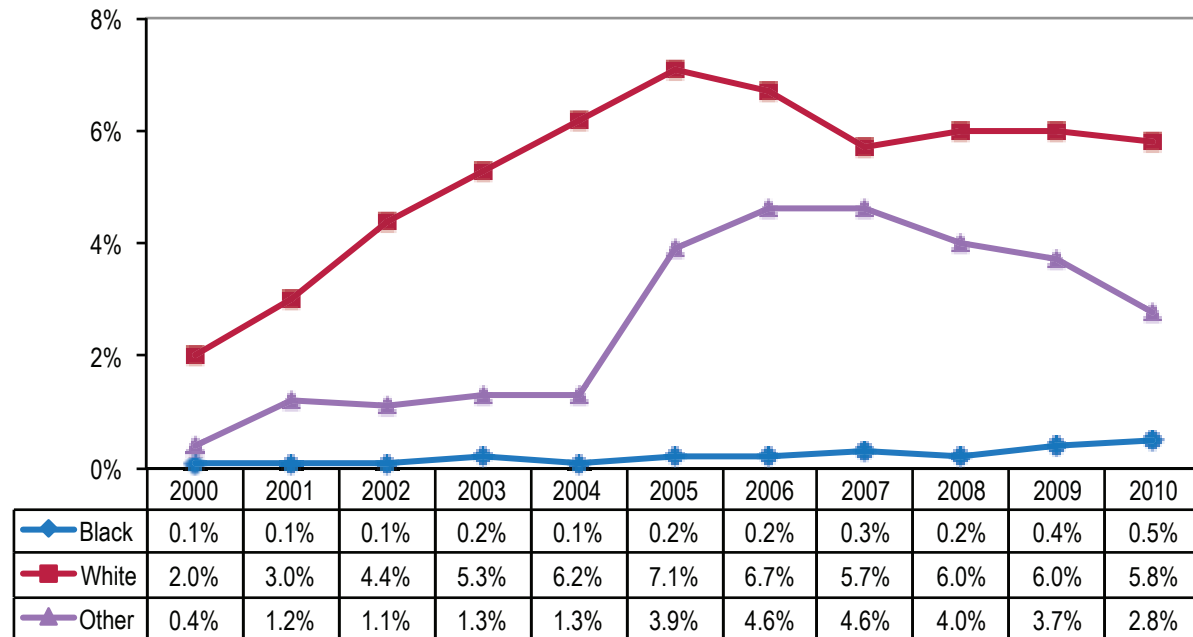| County	Treatment Episodes Total	Meth Use Number	%	Meth Dependence Number	%	County	Treatment Episodes Total	Meth Use Number	%	Meth Dependence Number	%
Adams	138	6	4.3%	<5	N/A	Madison	804	46	5.7%	19	2.4%
Allen	1,822	60	3.3%	34	1.9%	Marion	4,091	107	2.6%	56	1.4%
Bartholomew	661	195	29.5%	151	22.8%	Marshall	236	26	11.0%	15	6.4%
Benton	41	<5	N/A	<5	N/A	Martin	47	13	27.7%	5	10.6%
Blackford	51	<5	N/A	<5	N/A	Miami	241	39	16.2%	14	5.8%
Boone	199	17	8.5%	7	3.5%	Monroe	1,505	135	9.0%	94	6.2%
Brown	116	18	15.5%	11	9.5%	Montgomery	357	65	18.2%	35	9.8%
Carroll	123	26	21.1%	7	5.7%	Morgan	540	83	15.4%	53	9.8%
Cass	273	51	18.7%	20	7.3%	Newton	44	6	13.6%	5	11.4%
Clark	418	25	6.0%	17	4.1%	Noble	418	61	14.6%	32	7.7%
Clay	173	48	27.7%	27	15.6%	Ohio	38	<5	N/A	<5	N/A
Clinton	146	<5	N/A	<5	N/A	Orange	105	17	16.2%	10	9.5%
Crawford	57	14	24.6%	8	14.0%	Owen	265	40	15.1%	24	9.1%
Daviess	188	60	31.9%	28	14.9%	Parke	135	28	20.7%	22	16.3%
Dearborn	450	11	2.4%	<5	N/A	Perry	148	50	33.8%	21	14.2%
Decatur	193	22	11.4%	19	9.8%	Pike	51	14	27.5%	5	9.8%
DeKalb	205	43	21.0%	28	13.7%	Porter	713	11	1.5%	<5	N/A
Delaware	1,168	44	3.8%	24	2.1%	Posey	118	47	39.8%	23	19.5%
Dubois	358	74	20.7%	31	8.7%	Pulaski	104	14	13.5%	8	7.7%
Elkhart	1,040	128	12.3%	77	7.4%	Putnam	215	34	15.8%	15	7.0%
Fayette	219	7	3.2%	6	2.7%	Randolph	188	15	8.0%	12	6.4%
Floyd	182	9	4.9%	<5	N/A	Ripley	189	12	6.3%	7	3.7%
Fountain	81	20	24.7%	11	13.6%	Rush	137	7	5.1%	<5	N/A
Franklin	91	8	8.8%	7	7.7%	Saint Joseph	1,293	99	7.7%	30	2.3%
Fulton	215	61	28.4%	27	12.6%	Scott	189	35	18.5%	17	9.0%
Gibson	204	59	28.9%	30	14.7%	Shelby	78	5	6.4%	<5	N/A
Grant	448	9	2.0%	<5	N/A	Spencer	195	70	35.9%	29	14.9%
Greene	176	33	18.8%	15	8.5%	Starke	203	48	23.6%	26	12.8%
Hamilton	699	15	2.1%	5	0.7%	Steuben	194	40	20.6%	18	9.3%
Hancock	147	7	4.8%	<5	N/A	Sullivan	102	33	32.4%	18	17.6%
Harrison	119	23	19.3%	14	11.8%	Switzerland	41	<5	N/A	<5	N/A
Hendricks	328	15	4.6%	13	4.0%	Tippecanoe	469	46	9.8%	16	3.4%
Henry	305	6	2.0%	<5	N/A	Tipton	59	8	13.6%	<5	N/A
Howard	588	77	13.1%	37	6.3%	Union	33	<5	N/A	<5	N/A
Huntington	147	<5	N/A	<5	N/A	Vanderburgh	1,367	441	32.3%	220	16.1%
Jackson	271	77	28.4%	54	19.9%	Vermillion	130	24	18.5%	11	8.5%
Jasper	94	12	12.8%	5	5.3%	Vigo	759	289	38.1%	187	24.6%
Jay	126	8	6.3%	<5	N/A	Wabash	183	7	3.8%	6	3.3%
Jefferson	292	52	17.8%	45	15.4%	Warren	29	6	20.7%	<5	N/A
Jennings	204	65	31.9%	53	26.0%	Warrick	278	106	38.1%	57	20.5%
Johnson	207	13	6.3%	10	4.8%	Washington	68	11	16.2%	5	7.4%
Knox	442	171	38.7%	88	19.9%	Wayne	594	17	2.9%	9	1.5%
Kosciusko	314	11	3.5%	8	2.5%	Wells	122	6	4.9%	<5	N/A
LaGrange	172	47	27.3%	24	14.0%	White	148	26	17.6%	11	7.4%
Lake	2,803	17	0.6%	7	0.2%	Whitley	124	<5	N/A	<5	N/A
LaPorte	637	17	2.7%	6	0.9%	County Info Missing	198	8	4.0%	<5	N/A
Lawrence	432	57	13.2%	47	10.9%	Indiana	35,308	3,950	11.2%	2,185	6.2%

Note: We defined methamphetamine dependence as "individuals in substance abuse treatment listing methamphetamine as their primary substance at admission."
We calculated the percentages by dividing the number of reported methamphetamine use/dependence by the number of treatment episodes.
Source: Indiana Family and Social Services Administration, 2013

APPENDIX 8B

Percentage of Indiana Students Reporting Lifetime and Monthly Methamphetamine Use, by Region and Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2012)

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	0.4	0.3	0.6	0.5	0.4	0.5	0.6	0.4	0.2
	Monthly	0.3	0.2	0.3	0.2	0.4	0.2	0.6	0.2	0.3
7th Grade	Lifetime	0.7	0.8	0.8	0.5	0.7	0.6	0.5	0.6	1.3
	Monthly	0.3	0.4	0.4	0.0	0.5	0.3	0.2	0.3	0.4
8th Grade	Lifetime	1.1	1.3	0.7	0.4	1.1	1.2	1.5	0.8	1.8
	Monthly	0.5	0.6	0.5	0.1	0.3	0.6	1.0	0.3	0.8
9th Grade	Lifetime	1.6	2.1	1.3	1.3	1.6	1.4	2.1	1.6	1.8
	Monthly	0.7	0.8	0.7	0.7	0.7	0.7	0.9	0.6	0.7
10th Grade	Lifetime	2.0	2.1	1.9	1.9	1.8	1.9	2.3	2.1	2.2
	Monthly	0.9	0.9	1.0	0.5	0.7	0.8	1.4	1.1	1.0
11th Grade	Lifetime	2.3	2.4	1.8	2.9	2.0	2.2	2.4	2.3	2.6
	Monthly	0.8	1.0	0.8	0.8	0.9	0.7	0.9	0.7	0.9
12th Grade	Lifetime	2.4	2.0	2.3	1.6	2.2	1.8	2.4	2.4	3.5
	Monthly	1.1	1.3	1.0	0.8	0.9	1.0	0.9	1.0	1.4

Source: Gassman, et al., 2012

APPENDIX 8C

Number and Rate, per 1,000 Population, of Arrests for Synthetic Drug Possession and Sale/Manufacture in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Number of Arrests for Possession	Possession Arrest Rate	Number of Arrests for Sale	Sale Arrest Rate
Adams	14	*0.4	6	*0.2
Allen	12	*0.0	0	*0.0
Bartholomew	118	1.5	12	*0.2
Benton	2	*0.2	1	*0.1
Blackford	8	*0.6	15	*1.2
Boone	11	*0.2	2	*0.0
Brown	7	*0.5	10	*0.7
Carroll	5	*0.2	0	*0.0
Cass	1	*0.0	1	*0.0
Clark	152	1.4	10	*0.1
Clay	16	*0.6	3	*0.1
Clinton	3	*0.1	3	*0.1
Crawford	0	*0.0	3	*0.3
Daviess	45	1.4	34	1.1
Dearborn	24	0.5	5	*0.1
Decatur	18	*0.7	19	*0.7
DeKalb	15	*0.4	11	*0.3
Delaware	75	0.6	0	*0.0
Dubois	15	*0.4	7	*0.2
Elkhart	40	0.2	14	*0.1
Fayette	5	*0.2	3	*0.1
Floyd	58	0.8	0	*0.0
Fountain	10	*0.6	5	*0.3
Franklin	0	*0.0	0	*0.0
Fulton	3	*0.1	1	*0.0
Gibson	12	*0.4	29	0.9
Grant	62	0.9	6	*0.1
Greene	9	*0.3	7	*0.2
Hamilton	85	0.3	9	*0.0
Hancock	22	0.3	9	*0.1
Harrison	4	*0.1	0	*0.0
Hendricks	45	0.3	21	0.1
Henry	8	*0.2	2	*0.0
Howard	1	*0.0	2	*0.0
Huntington	0	*0.0	0	*0.0
Jackson	15	*0.4	17	*0.4
Jasper	7	*0.2	5	*0.1
Jay	20	0.9	11	*0.5
Jefferson	14	*0.4	6	*0.2
Jennings	0	*0.0	1	*0.0
Johnson	3	*0.0	5	*0.0
Knox	53	1.4	20	0.5
Kosciusko	30	0.4	17	*0.2
LaGrange	7	*0.2	1	*0.0
Lake	41	0.1	10	*0.0
LaPorte	15	*0.1	2	*0.0
Lawrence	22	0.5	7	*0.2
Madison	29	0.2	15	*0.1
Marion	42	0.0	90	0.1

County	Number of Arrests for Possession	Possession Arrest Rate	Number of Arrests for Sale	Sale Arrest Rate
Marshall	15	*0.3	8	*0.2
Martin	6	*0.6	0	*0.0
Miami	11	*0.3	17	*0.5
Monroe	41	0.3	4	*0.0
Montgomery	9	*0.2	5	*0.1
Morgan	12	*0.2	7	*0.1
Newton	0	*0.0	0	*0.0
Noble	27	0.6	8	*0.2
Ohio	2	*0.3	1	*0.2
Orange	8	*0.4	5	*0.3
Owen	5	*0.2	3	*0.1
Parke	17	*1.0	10	*0.6
Perry	10	*0.5	4	*0.2
Pike	5	*0.4	3	*0.2
Porter	10	*0.1	2	*0.0
Posey	17	*0.7	3	*0.1
Pulaski	3	*0.2	3	*0.2
Putnam	9	*0.2	7	*0.2
Randolph	9	*0.3	1	*0.0
Ripley	12	*0.4	7	*0.2
Rush	0	*0.0	5	*0.3
Saint Joseph	56	0.2	3	*0.0
Scott	13	*0.5	10	*0.4
Shelby	8	*0.2	12	*0.3
Spencer	9	*0.4	5	*0.2
Starke	30	1.3	6	*0.3
Steuben	1	*0.0	6	*0.2
Sullivan	2	*0.1	0	*0.0
Switzerland	4	*0.4	2	*0.2
Tippecanoe	105	0.6	32	0.2
Tipton	12	*0.8	3	*0.2
Union	3	*0.4	2	*0.3
Vanderburgh	123	0.7	157	0.9
Vermillion	8	*0.5	4	*0.2
Vigo	163	1.5	42	0.4
Wabash	10	*0.3	5	*0.2
Warren	4	*0.5	2	*0.2
Warrick	46	0.8	36	0.6
Washington	8	*0.3	4	*0.1
Wayne	11	*0.2	8	*0.1
Wells	0	*0.0	0	*0.0
White	5	*0.2	4	*0.2
Whitley	6	*0.2	5	*0.2
Indiana	**2,058**	**0.3**	**908**	**0.1**

* Rates that are based on arrest numbers lower than 20 are unreliable.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Map 8.1 Number of Clandestine Methamphetamine Labs Seized by the Indiana State Police in Indiana, by County, (Indiana Lab Statistics, 2012)

Number of Lab Seizures

- 0 - 6
- 7 - 12
- 13 - 40
- > 40

Source: Indiana State Police, 2013

Map 8.2   Arrest Rates for Synthetic Drug Possession, per 1,000 Population, in Indiana, by County (Uniform Crime Reporting Program, 2010)

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 8C (pages 141-142) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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Map 8.3 Arrest Rates for Synthetic Drug Sale/Manufacture, per 1,000 Population, in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Rate
Lake	0.02
Porter	0.01
LaPorte	0.02
St. Joseph	0.01
Elkhart	0.07
LaGrange	0.03
Steuben	0.18
Starke	0.26
Marshall	0.17
Kosciusko	0.22
Noble	0.17
DeKalb	0.26
Newton	0
Jasper	0.15
Pulaski	0.22
Fulton	0.05
Whitley	0.15
Allen	0
White	0.16
Cass	0.03
Miami	0.46
Wabash	0.15
Huntington	0
Wells	0
Adams	0.17
Benton	0.11
Carroll	0
Howard	0.02
Grant	0.09
Blackford	1.19
Jay	0.51
Warren	0.24
Tippecanoe	0.19
Clinton	0.09
Tipton	0.19
Delaware	0
Randolph	0.04
Fountain	0.29
Montgomery	0.13
Boone	0.04
Hamilton	0.03
Madison	0.11
Henry	0.04
Wayne	0.12
Vermillion	0.25
Parke	0.58
Hendricks	0.14
Marion	0.1
Hancock	0.13
Rush	0.29
Fayette	0.12
Union	0.27
Putnam	0.18
Shelby	0.27
Franklin	0
Vigo	0.39
Clay	0.11
Owen	0.14
Morgan	0.1
Johnson	0.04
Decatur	0.74
Sullivan	0
Greene	0.21
Monroe	0.03
Brown	0.66
Bartholomew	0.16
Ripley	0.23
Dearborn	0.1
Jennings	0.04
Ohio	0.16
Jackson	0.4
Lawrence	0.15
Jefferson	0.19
Switzerland	0.19
Knox	0.52
Daviess	1.07
Martin	0
Scott	0.41
Washington	0.14
Clark	0.09
Orange	0.25
Pike	0.23
Dubois	0.17
Crawford	0.28
Floyd	0
Gibson	0.87
Harrison	0
Posey	0.12
Vanderburgh	0.87
Warrick	0.6
Spencer	0.24
Perry	0.21

Rate per 1,000

- 0.00 - 0.03
- 0.04 - 0.16
- 0.17 - 0.26
- > 0.26

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 8C (pages 141-142) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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PRESCRIPTION DRUG ABUSE IN INDIANA:
CONSUMPTION PATTERNS AND CONSEQUENCES

Abuse of prescription drugs[1] is a serious and growing public health problem in the United States. According to the National Survey on Drug Use and Health (NSDUH), in 2011 over 51 million Americans (19.9%) ages 12 years and older reported nonmedical use[2] of prescription-type psychotherapeutics at some point during their lifetime, including pain relievers, sedatives, tranquilizers, and stimulants. In Indiana alone, over one million Hoosiers reported that they misused psychotherapeutics at least once in their life (20.7%)[3] (Substance Abuse and Mental Health Services Administration, 2012). The National Institute on Drug Abuse (NIDA) lists the three most commonly abused types of prescription medicine as:

- *Opioids,* which are primarily prescribed to treat pain—examples include oxycodone (e.g., OxyContin®, Percocet®), hydrocodone (e.g., Vicodin®), codeine, and morphine;

- *Central nervous system (CNS) depressants,* such as sedatives and tranquilizers to treat sleep and anxiety disorders—examples include barbiturates (e.g., Mebaral®, Nembutal®) and benzodiazepines (e.g., Valium®, Xanax®); and

- *Stimulants,* which are often prescribed to treat narcolepsy, attention-deficit hyperactivity disorder (ADHD), and obesity—examples include dextroamphetamine (Dexedrine® and Adderall®) and methylphenidate (Ritalin® and Concerta®) (National Institute on Drug Abuse, 2011).

Prescription drugs are regulated at the state level and can only be dispensed by licensed physicians and pharmacists. In addition, "all state pharmacy laws require that records of prescription drugs dispensed to patients be maintained and that state pharmacy boards have access to the prescription records" (United States General Accounting Office, 2003). Indiana maintains a statewide prescription drug monitoring database, the Indiana Scheduled Prescription Electronic Collection & Tracking (INSPECT) program, which collects information on the dispensing of all controlled substances (Schedules II through V; Schedule I drugs are not included because they contain substances that have no currently accepted medical use in the United States).

In 2011, nearly 12.8 million prescription drugs were dispensed in Indiana; most of these pharmaceuticals (12.7 million) were purchased by Indiana residents, while the rest were distributed to out-of-state consumers. The most widely dispensed prescription drug categories to Indiana residents were opioids (45.8%), depressants of the central nervous system (30.5%), and stimulants (11.1%); for trend information, see Figure 9.1 (Indiana Board of Pharmacy, 2012a).

However, it is important to note that these results describe the legal dispensation of prescription pharmaceuticals; they infer use of the drugs but do not estimate misuse. For number and percentage of prescription drugs dispensed at the county level, see Appendix 9A, pages 157-160.

[1]Throughout the report, the term "prescription drugs" refers to controlled substances (Schedules II-V) that are being prescribed by a healthcare professional. Other non-controlled prescriptions such as blood pressure medication, cholesterol-lowering drugs, etc. are not included.

[2]The terms nonmedical use, misuse, and abuse of prescription drugs are used interchangeably throughout this report and refer to any type of use other than that prescribed by a healthcare professional.

[3]Indiana rates are based on annual NSDUH averages from 2002 through 2004, the most recent state-level estimate available.

Figure 9.1 Number of Controlled Substance Prescriptions Dispensed in Indiana (INSPECT, 2008–2011)

	2008	2009	2010	2011
Opioids	5,849,460	6,376,664	5,591,679	5,830,367
CNS Depressants	3,558,007	3,902,414	3,514,361	3,889,652
Stimulants	1,149,939	1,353,939	1,309,265	1,419,003
Total	11,635,092	12,713,931	11,341,539	12,743,236
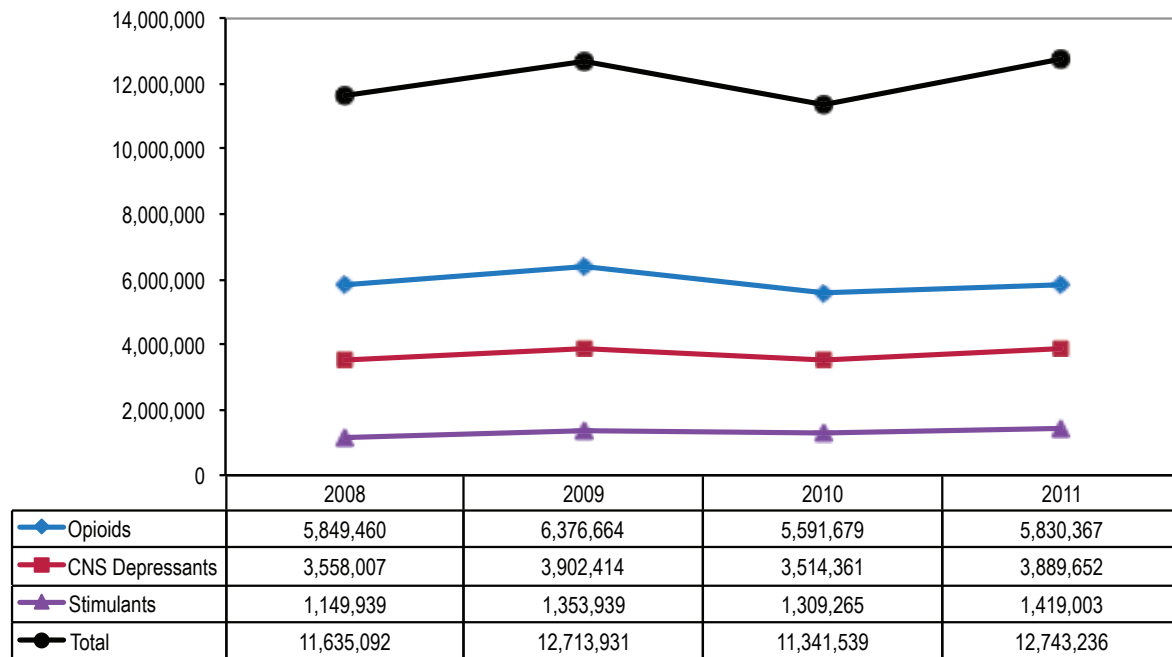
Source: Indiana Board of Pharmacy, 2012a

General Consumption Patterns

According to NSDUH annual averages from 2002 through 2004, a total of 7.6% of Hoosiers ages 12 and older (383,000 residents) engaged in the nonmedical use of psychotherapeutics in the past year, and 2.7% (138,000 residents) reported past-month use. The highest misuse was reported for pain relievers, which include OxyContin®, one of the most abused drugs among the psychotherapeutics. Due to the nature of the data, statistical significance could not be assessed (see Table 9.1) (Substance Abuse and Mental Health Services Administration, 2012).

Based on 2011 NSDUH results, an estimated 5.7% (95% Confidence Interval [CI]: 4.7–6.9) of the Indiana population ages 12 and older reported nonmedical use of pain relievers in the past year (U.S.: 4.6; 95% CI: 4.4–4.8); prevalence rates between Indiana and the nation were similar.

Adult Consumption Patterns

According to 2011 NSDUH results, young people ages 18 through 25 had the highest rate of prescription pain medication abuse. Indiana's past-year usage rate of 14.4% (95% CI: 11.9–17.3) was statistically higher than the nation's rate (10.4%; 95 % CI: 10.0-10.8) (see Figure 9.2).

Table 9.1 Lifetime, Past Year, and Current Nonmedical Use of Psychotherapeutics, Indiana[4] and United States[5] (National Survey on Drug Use and Health)

	Lifetime Misuse		Past-Year Misuse		Past-Month Misuse	
	Indiana	U.S.	Indiana	U.S.	Indiana	U.S.
All Psychotherapeutics	20.7%	19.9%	7.6%	5.7%	2.7%	2.4%
Pain Relievers	15.0%	13.3%	6.1%	4.3%	2.0%	1.7%
OxyContin	2.5%	2.3%	0.8%	0.6%	0.3%	0.2%
Tranquilizers	9.1%	8.4%	2.8%	2.0%	0.8%	0.7%
Sedatives	3.9%	2.9%	0.4%	0.2%	0.1%	0.1%
Stimulants	8.3%	7.9%	1.7%	1.0%	0.8%	0.4%

Source: Substance Abuse and Mental Health Services Administration, 2012

[4]Indiana rates are based on annual NSDUH averages from 2002 through 2004.
[5]U.S. rates are based on 2011 NSDUH survey results.

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Figure 9.2 Prevalence of Past-Year Pain Reliever Use in Indiana and the United States, by Age Group (National Survey on Drug Use and Health, 2011)
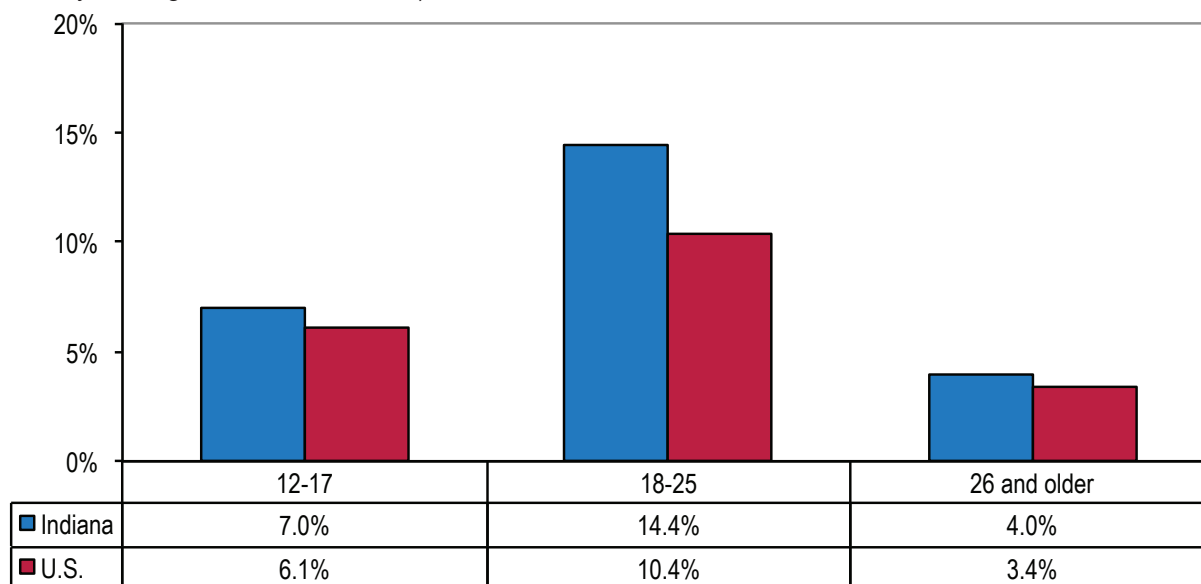
	12-17	18-25	26 and older
Indiana	7.0%	14.4%	4.0%
U.S.	6.1%	10.4%	3.4%

Source: Substance Abuse and Mental Health Services Administration, 2012

The Indiana College Substance Use Survey includes questions on (a) use of prescription medications not prescribed to the student and (b) use of prescription medication prescribed to student but misused. According to findings from the 2012 survey:[6]

a) Regarding use of prescription medications not prescribed to the student:
   - 12.8% of Indiana college students used prescription medications not prescribed to them in the past year, and 5.3% currently use it.
   - Rates were significantly higher among males for both past-year use (15.8%) and current use (7.2%) than among females (11.1% and 4.1% respectively).
   - Rates were significantly higher for those attending public institutions of higher education (past-year use: 14.4%; current use: 6.0%) than for those who attended private institutions (past-year use: 8.1%; current use: 3.1%).
   - Rates were significantly higher for college students ages 21 or over (14.1%) than students under 21 (11.7%) for past-year use. No significant differences were found for current use.

b) Regarding use of prescription medication prescribed to student but misused:
   - 3.5% of Indiana college students misused their prescription medication in the past year, and 1.3% of students reported current misuse.
   - Rates were significantly higher among males for both past-year misuse (4.9%) and current misuse (1.9%) than among females (2.7% and 0.9% respectively).
   - Rates were significantly higher for those attending public institutions of higher education (past-year use: 4.0%; current use: 1.5%) than for those who attended private institutions (past-year use: 1.9%; current use: 0.8%).
   - Rates were significantly higher for college students ages 21 or over (4.0%) than students under 21 (3.1%) for past-year use. No significant differences were found for current use (Indiana Collegiate Action Network, 2012).[7]

[6]National data, based on the Monitoring the Future study, are not currently available for comparison of prescription drug variables from the Indiana College Substance Use Survey. College students in the national study were defined as "[T]hose follow-up respondents one to four years past high school who say they were registered as full-time students in a two- or four-year undergraduate college at the beginning of March in the year in question" (Johnston, O'Malley, Bachman, & Schulenberg, 2011, p. 255).
[7]Nine Indiana colleges participated in the survey; results are based on nonrandom sampling and are not representative of all college students in Indiana.

Another method of tracking prescription drug abuse is to examine the Treatment Episode Data Set (TEDS) for individuals who report nonmedical use of pain relievers (opioids),[8] CNS depressants (sedatives and tranquilizers),[9] and stimulants[10] at the time of admission to substance abuse treatment (Substance Abuse and Mental Health Data Archive, 2010). Overall reported use of these drug categories in 2010, when combined, was 20.2% in Indiana, which was significantly higher than the nation's rate of 19.1% ($p < 0.001$). A look at the individual drug types shows that Indiana's rates were significantly higher for pain relievers and CNS depressants ($p < 0.001$), but not for stimulants (see Figure 9.3).

Figure 9.3 Percentage of Indiana and U.S. Treatment Episodes with Nonmedical Prescription Drug Use Reported at Treatment Admission, by Drug Category (Treatment Episode Data Set, 2010)

	All Prescription Drugs	Pain Relievers	Sedatives & Tranquilizers	Stimulants
Indiana	20.2%	15.2%	7.5%	1.0%
U.S.	19.1%	14.2%	5.8%	1.6%
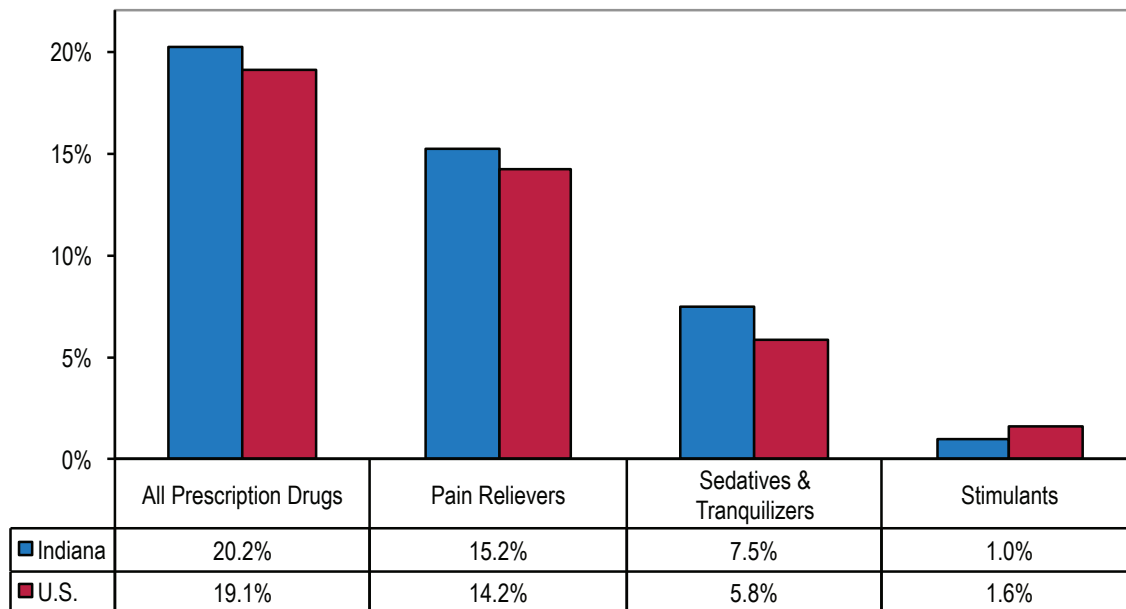
Source: Substance Abuse and Mental Health Data Archive, 2010

In Indiana, significant differences in reported prescription drug abuse were seen by gender, race, and age group (see Table 9.2) (Substance Abuse and Mental Health Data Archive, 2010):

- **Gender**—Women reported higher rates of use across all prescription drug categories.
- **Race**—Whites had the highest rates across all prescription drug categories.
- **Age group**—Differences by age group were observed for all prescription drug categories.

[8]We used TEDS variables "nonprescription methadone" and "other opiates/synthetics" to define pain reliever use.
[9]We used TEDS variables "benzodiazepines," "other tranquilizers," "barbiturates," and "other sedatives/hypnotics" to define CNS depressant use.
[10]We used TEDS variables "other amphetamines" and "other stimulants" to define stimulant use.

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Table 9.2 Percentage of Indiana Treatment Episodes with Nonmedical Prescription Drug Use Reported at Treatment Admission, by Drug Category, Gender, Race, and Age Group (Treatment Episode Data Set, 2010)

		All Prescription Drugs	Pain Relievers	Sedatives/Tranquilizers	Stimulants
Gender	Male	17.0%	12.7%	6.1%	0.9%
	Female	25.9%	19.8%	10.2%	1.2%
Race	White	23.3%	17.7%	8.9%	1.1%
	Black	4.9%	3.2%	1.4%	0.7%
	Other	12.6%	7.5%	5.3%	0.7%
Age Group	Under 18	12.0%	6.4%	5.7%	1.8%
	18-24	22.9%	16.5%	9.0%	1.1%
	25-34	26.3%	20.7%	9.2%	1.2%
	35-44	15.3%	11.7%	5.7%	0.9%
	45-54	12.8%	9.5%	4.9%	0.5%
	55+	11.0%	8.1%	4.4%	0.2%

Source: Substance Abuse and Mental Health Data Archive, 2010

A review of TEDS data from 2000 through 2010 shows that rates for use of certain nonmedical prescription drugs have increased significantly in both Indiana and the nation; this trend includes pain reliever and sedative/tranquilizer use. However, the pattern was different for stimulant use, rates of which decreased slightly but significantly from 2000 to 2010 (see Figure 9.4). For county-level information, see Appendix 9B, pages 161-164.

Figure 9.4 Percentage of Indiana and U.S. Treatment Episodes with Nonmedical Prescription Drug Use Reported at Treatment Admission, by Drug Category (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
IN: Rx	11.6%	10.9%	11.6%	12.6%	12.8%	14.5%	15.5%	16.5%	18.9%	19.1%	20.2%
US: Rx	7.7%	9.0%	9.6%	10.0%	10.9%	11.0%	10.8%	12.4%	14.0%	16.2%	19.1%
IN: Pain Reliever	5.5%	6.0%	6.4%	7.5%	7.9%	9.1%	10.2%	11.3%	13.7%	13.6%	15.2%
US: Pain Reliever	3.3%	4.2%	4.8%	5.4%	6.3%	6.8%	7.5%	8.8%	10.2%	11.9%	14.2%
IN: Sedatives/Tranquilizers	5.9%	4.9%	5.2%	5.4%	5.3%	6.0%	6.1%	6.6%	7.3%	7.6%	7.5%
US: Sedatives/Tranquilizers	2.6%	2.9%	3.0%	3.1%	3.2%	3.2%	3.2%	3.7%	4.1%	4.9%	5.8%
IN: Stimulants	1.4%	1.3%	1.5%	1.3%	1.3%	1.4%	1.2%	1.0%	1.0%	1.0%	1.0%
US: Stimulants	2.4%	2.6%	2.6%	2.5%	2.4%	2.0%	1.2%	1.2%	1.2%	1.3%	1.6%
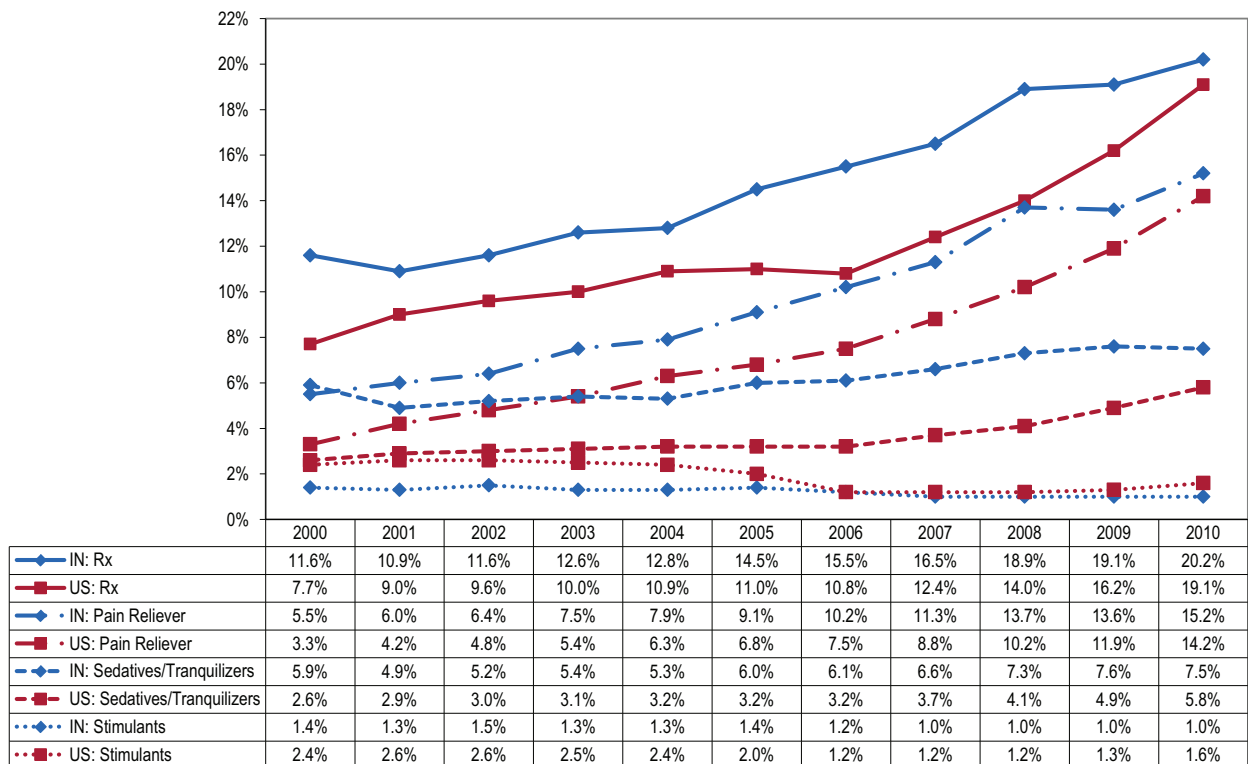
Source: Substance Abuse and Mental Health Data Archive, 2010

Youth Consumption Patterns

Estimates from the 2011 NSDUH suggest that 7.0% (95% CI: 5.6–8.7) of Indiana's youth ages 12 through 17 used prescription pain medications for nonmedical purposes in the past year. The national rate of prescription drug abuse by 12- to 17-year-olds was statistically similar at 6.1% (95% CI: 5.8–6.4) (Substance Abuse and Mental Health Services Administration, 2012).

For Indiana prevalence rates of current nonmedical use of prescription drugs[11] among 8th, 10th, and 12th grade students, see Figure 9.5 (Gassman, Jun, Samuel, Agley, Lee, Agley, Oi, et al., 2012). For regional prevalence rates, grades 6 through 12, see Appendix 9C, page 165.

Young Hoosiers (under the age of 18) in treatment reported significantly less use of psychotherapeutics than adults 18 and older. An examination of use by individual drug category shows that young patients used significantly less pain relievers and sedatives/tranquilizers than their older counterparts. However, rates for stimulant use were significantly higher for Hoosiers under the age of 18 (see Figure 9.6).

Figure 9.5 Percentage of Indiana 8th, 10th, and 12th Grade Students Reporting Current Nonmedical Use of Prescription Drugs (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2003-2012)

	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
8th	1.4%	1.3%	1.5%	1.3%	1.9%	1.7%	1.8%	3.0%	2.7%	2.6%
10th	2.1%	2.0%	2.1%	2.2%	3.7%	3.5%	3.3%	5.9%	5.2%	5.0%
12th	1.5%	1.4%	1.7%	1.8%	2.9%	3.3%	3.1%	5.9%	5.9%	5.8%
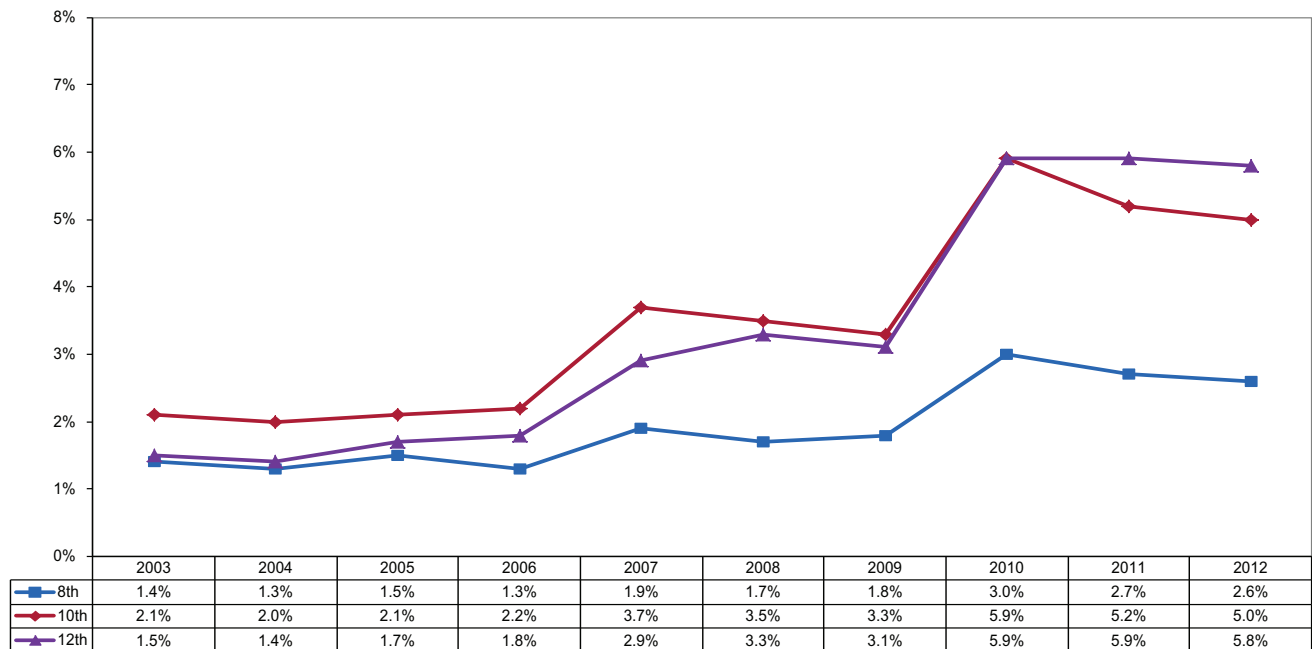
Source: Gassman, et al., 2012

PRESCRIPTION DRUG ABUSE CONSEQUENCES

Prescription Drug Dependence

The most common consequences of prescription drug abuse are addiction and/or dependence.[12] To determine the extent of prescription drug abuse both nationally and in Indiana, we used the TEDS data set to track the percentage of substance abuse treatment admissions due to pain relievers, sedatives/tranquilizers, and stimulants. In 2010, overall prescription drug

[11]Includes Ritalin®, Oxycontin®, and Xanax®.
[12]We defined prescription drug dependence as "individuals in substance abuse treatment listing prescription drugs as their primary substance at admission."

Figure 9.6 Percentage of Indiana Treatment Episodes with Nonmedical Prescription Drug Use Reported at Treatment Admission in Indiana, by Drug Category and Underage Status (Treatment Episode Data Set, 2010)

	All Prescription Drugs	Pain Relievers	Sedatives & Tranquilizers	Stimulants
Under 18	12.0%	6.4%	5.7%	1.8%
Over 18	20.5%	15.6%	7.6%	1.0%
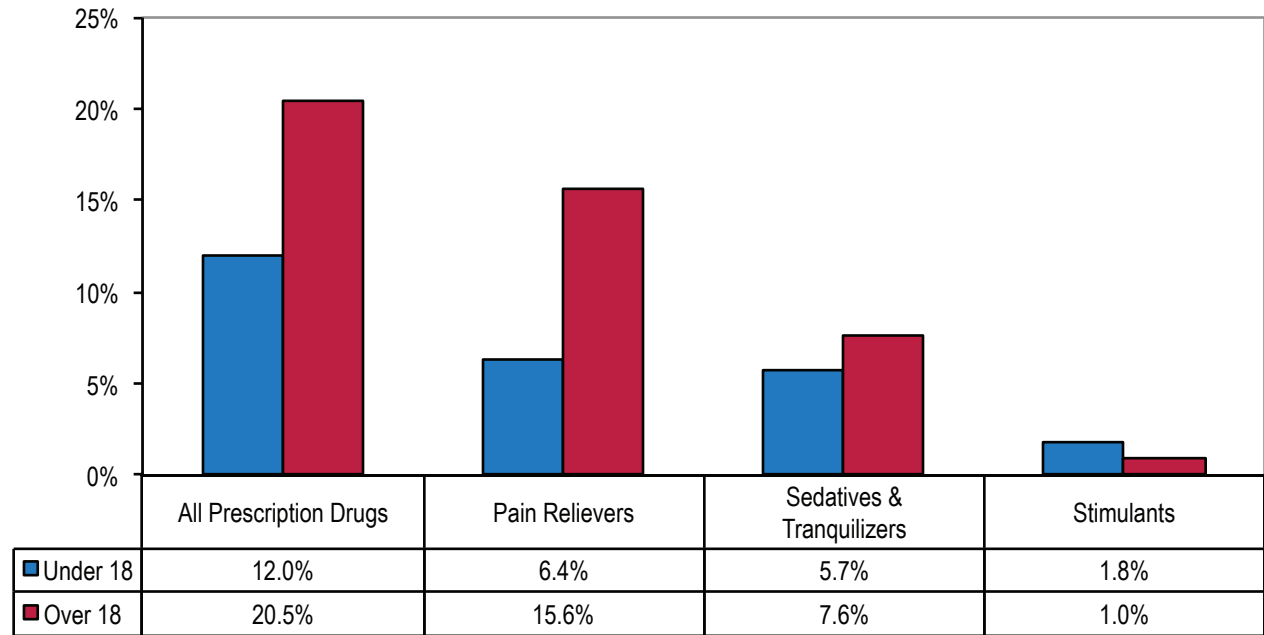
Source: Substance Abuse and Mental Health Data Archive, 2010

dependence was significantly higher in Indiana than the United States. The percentage of treatment episodes with reported pain reliever and sedative/tranquilizer dependence was significantly higher for Indiana, while the percentage with reported stimulant dependence was greater for the nation (see Figure 9.7).

Figure 9.7 Percentage of Indiana and U.S. Treatment Episodes with Nonmedical Prescription Drug Dependence Reported at Treatment Admission, by Drug Category (Treatment Episode Data Set, 2010)

	All Prescription Drugs	Pain Relievers	Sedatives & Tranquilizers	Stimulants
Indiana	10.8%	9.1%	1.5%	0.2%
U.S.	10.2%	8.6%	1.1%	0.5%
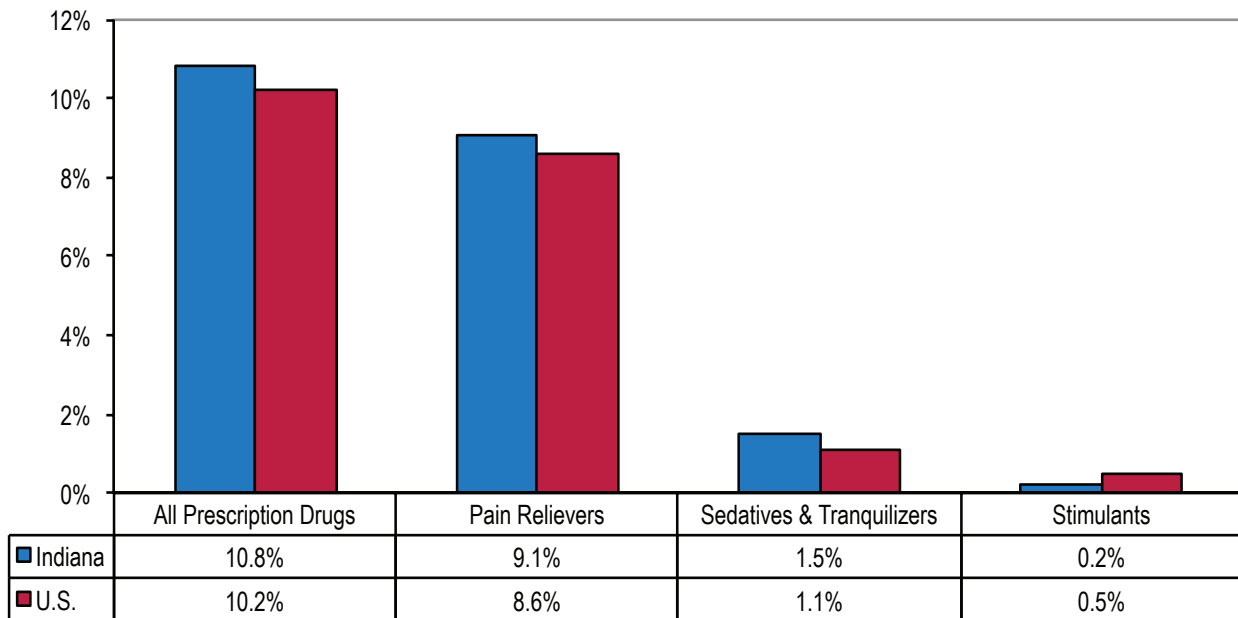
Source: Substance Abuse and Mental Health Data Archive, 2010

The percentage of treatment episodes in which prescription drug dependence was indicated varied significantly by gender, race, and age group in Indiana (see Table 9.3) (Substance Abuse and Mental Health Data Archive, 2010):

- **Gender**—The percentage of females reporting dependence was higher than the percentage of males across all prescription drug categories, except stimulants.

- **Race**—The lowest percentage of dependence was found in blacks and the highest percentage of dependence occurred in whites; results were significant across all prescription drug groups, except stimulants.

- **Age group**—Significant differences by age category were found across all prescription drug categories, except sedatives/tranquilizers.

For county-level information, see Appendix 9B, pages 161-164.

Table 9.3   Percentage of Indiana Treatment Episodes with Prescription Drug Dependence Reported at Treatment Admission, by Drug Category, Gender, Race, and Age Group (Treatment Episode Data Set, 2010)

		All Prescription Drugs	Pain Relievers	Sedatives/Tranquilizers	Stimulants
Gender	Male	8.2%	7.0%	1.1%	0.2%
	Female	15.5%	13.0%	2.2%	0.3%
Race	White	12.6%	10.6%	1.8%	0.3%
	Black	1.6%	1.3%	0.1%	0.1%
	Other	4.0%	3.5%	0.5%	<0.1%
Age Group	Under 18	3.1%	1.8%	1.1%	0.2%
	18 to 24	10.8%	8.9%	1.7%	0.1%
	25 to 34	15.8%	13.8%	1.6%	0.4%
	35 to 44	8.5%	7.0%	1.2%	0.3%
	45 to 54	6.1%	4.9%	1.1%	0.1%
	55+	5.5%	4.2%	1.2%	0.1%

Source: Substance Abuse and Mental Health Data Archive, 2010

A review of TEDS data from 2000 through 2010 reveals that dependence on overall prescription medications increased significantly in Indiana. This holds true for pain relievers and sedatives/tranquilizers. Stimulant dependence, however, remained constant in Indiana and even decreased in the nation (see Figure 9.8).

Criminal Consequences

Individuals illegally obtain prescription drugs through a variety of means, such as "doctor shopping" (going to a number of doctors to obtain prescriptions for a controlled pharmaceutical) or other prescription fraud; illegal online pharmacies; theft and burglary (from residences and pharmacies); and receiving/purchasing the medication from friends or family members. Patients may also obtain controlled substances when physicians overprescribe, either negligently or intentionally (Substance Abuse and Mental Health Services Administration, 2012).

The Uniform Crime Reporting (UCR) Program collects information on criminal activities, including possession and sale/manufacture of various drugs (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010). The "other drugs" category in the data set refers to arrests involving barbiturates (sedatives) and Benzedrine (amphetamine/stimulant). In 2010, nearly 3,500 arrests were made for possession and over 930 arrests for sale/manufacture of "other drugs" in Indiana. This represents arrest rates of 0.5 (95% CI: 0.5–0.5) and 0.1 (95% CI: 0.1–0.2) per 1,000 population, respectively. The U.S. rates per 1,000 population were statistically higher for possession, 0.8 per 1,000 population (95% CI: 0.8–0.8), and similar for sale/manufacture of "other drugs", 0.2 per 1,000 population (95% CI: 0.2–0.2) (see Figures 9.9 and 9.10) (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010). The distribution of arrest rates for possession and sale/manufacture in Indiana by county for 2009 is depicted on Maps 9.1 and 9.2, pages 169 and 170, and in Appendix 9D, pages 166 and 167.

Figure 9.8 Percentage of Indiana and U.S. Treatment Episodes with Prescription Drug Dependence Reported at Treatment Admission, by Drug Category (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
IN: Rx	4.8%	4.8%	4.9%	5.4%	5.7%	6.7%	7.2%	8.2%	9.6%	9.8%	10.8%
U.S.: Rx	3.2%	3.9%	4.3%	4.7%	5.3%	5.3%	5.2%	6.1%	7.1%	8.4%	10.2%
IN: Pain Reliever	3.2%	3.3%	3.2%	3.9%	4.0%	4.7%	5.4%	6.2%	7.8%	7.9%	9.1%
U.S.: Pain Reliever	1.6%	2.1%	2.4%	2.8%	3.4%	3.6%	4.1%	5.0%	5.9%	7.1%	8.6%
IN: Sedatives/Tranquilizers	1.2%	1.2%	1.3%	1.2%	1.3%	1.6%	1.4%	1.7%	1.6%	1.7%	1.5%
U.S.: Sedatives/Tranquilizers	0.6%	0.6%	0.7%	0.7%	0.7%	0.7%	0.6%	0.8%	0.8%	1.0%	1.1%
IN: Stimulants	0.3%	0.4%	0.4%	0.3%	0.4%	0.4%	0.4%	0.3%	0.3%	0.3%	0.2%
U.S.: Stimulants	1.1%	1.2%	1.2%	1.2%	1.2%	1.0%	0.4%	0.4%	0.4%	0.4%	0.5%
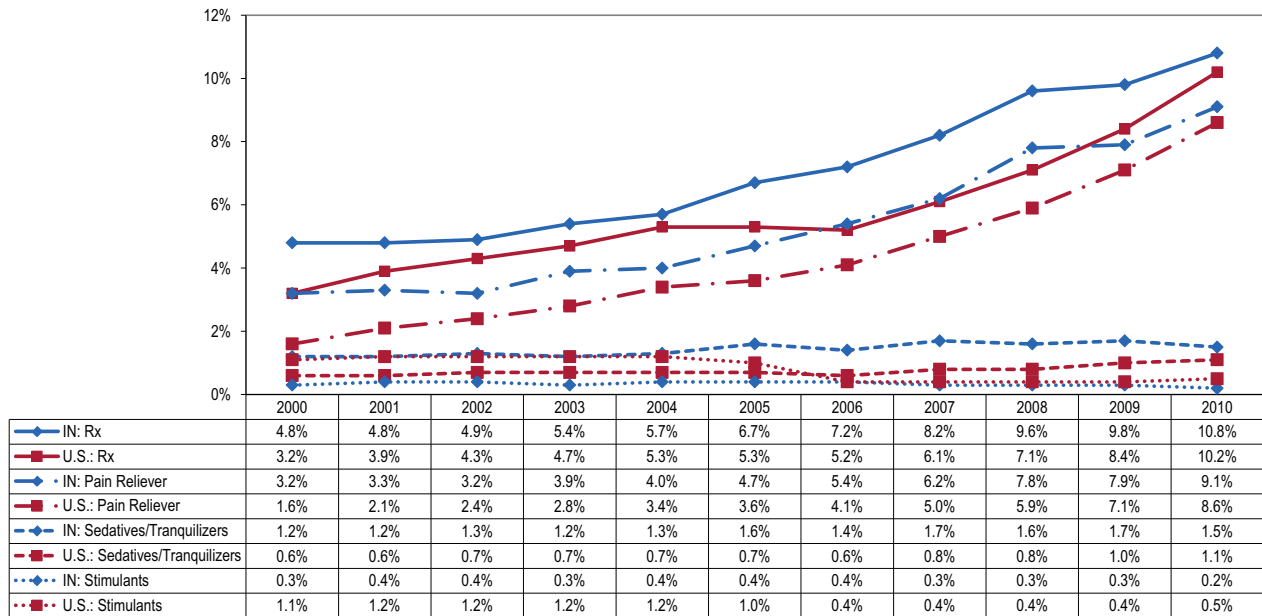
Source: Substance Abuse and Mental Health Data Archive, 2010

The Indiana Board of Pharmacy collects information on pharmacy robberies in the state. Between January 1, 2012, and August 31, 2012, there were a total of 87 pharmacy robberies, with the most being in Marion County (32). Of the total number of pharmacy robberies, 82 were armed robbery; 1 was from customer theft; and 4 were from night break-ins. For county-level information, see Appendix 9E, page 168 (Indiana Board of Pharmacy, 2012b).

Figure 9.9 Number of Arrests for Possession and Sale/Manufacture of "Other Drugs" (Barbiturates and Benzedrine) in Indiana (Uniform Crime Reporting Program, 1999–2010)
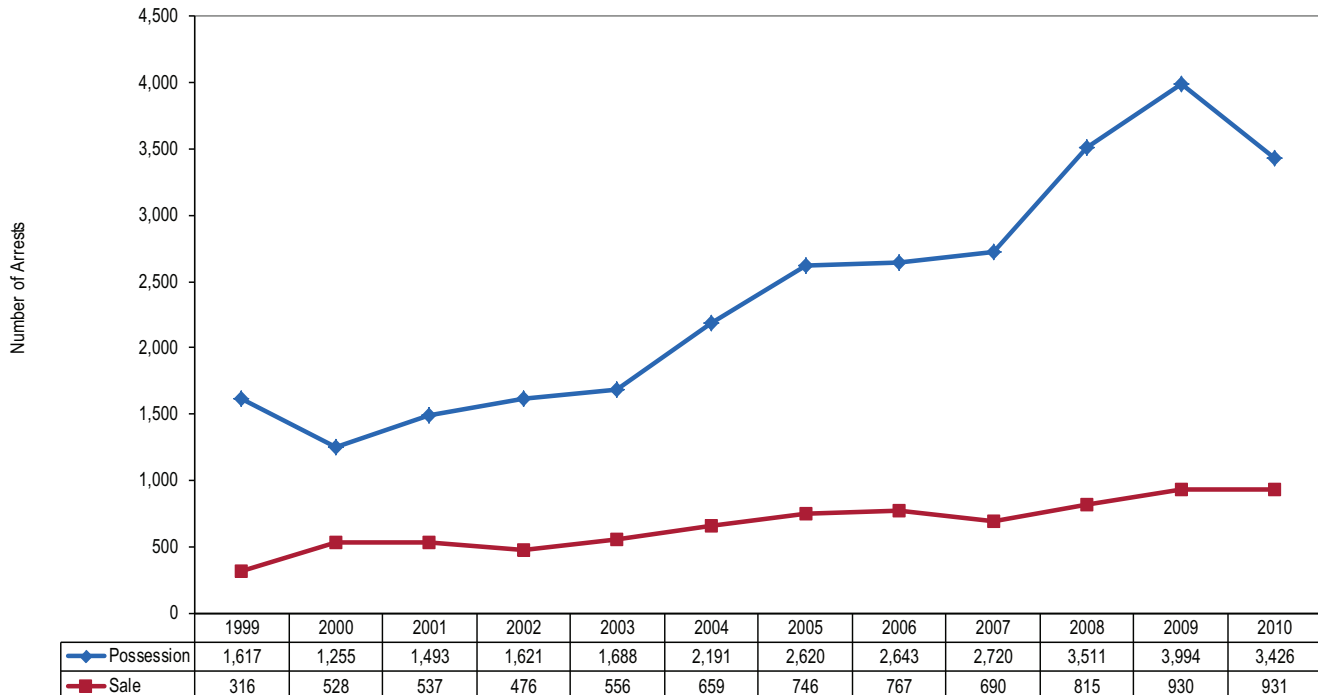
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Possession	1,617	1,255	1,493	1,621	1,688	2,191	2,620	2,643	2,720	3,511	3,994	3,426
Sale	316	528	537	476	556	659	746	767	690	815	930	931

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Figure 9.10 Arrest Rates, per 1,000 Population, for Possession and Sale/Manufacture of "Other Drugs" (Barbiturates and Benzedrine) in Indiana and the United States (Uniform Crime Reporting Program, 1999–2010)
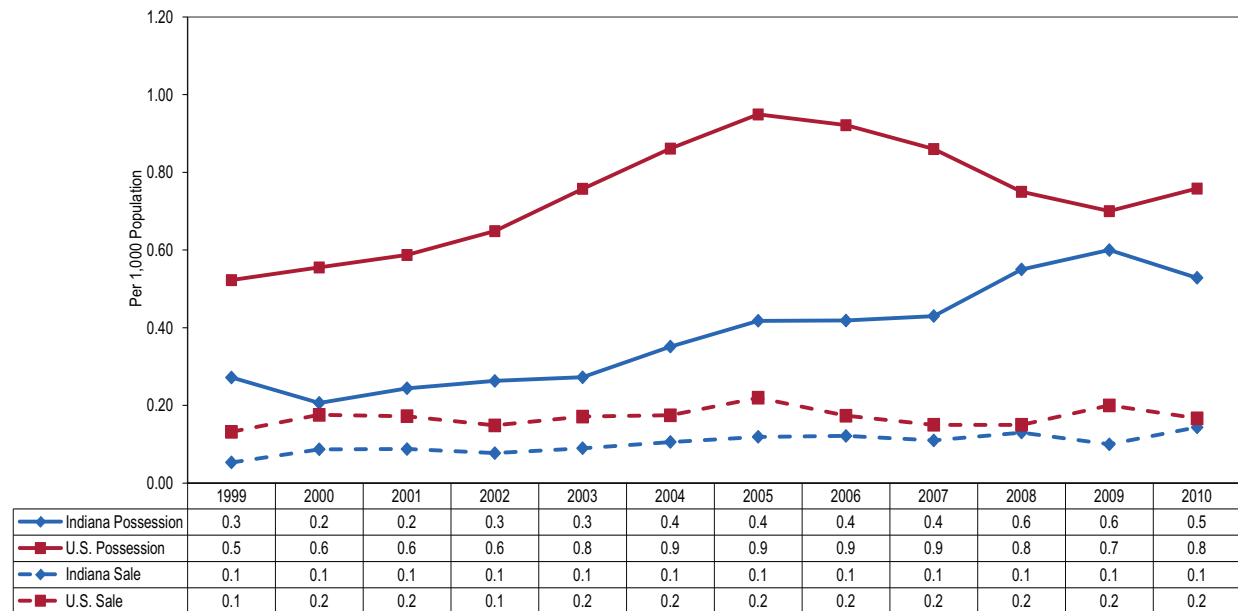
	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana Possession	0.3	0.2	0.2	0.3	0.3	0.4	0.4	0.4	0.4	0.6	0.6	0.5
U.S. Possession	0.5	0.6	0.6	0.6	0.8	0.9	0.9	0.9	0.9	0.8	0.7	0.8
Indiana Sale	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
U.S. Sale	0.1	0.2	0.2	0.1	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Fatal Drug Overdoses

Since 1990, mortality rates due to prescription drug overdoses have more than tripled in the United States, with an estimated 100 people dying every day (Centers for Disease Control and Prevention, 2012). The number of fatal overdoses increased in Indiana from 848 in 2008 to 953 in 2010; over the three-year period, more than 70% of these poisoning deaths were accidental, 13% were intentional, and 17% were of undetermined intent (Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team, 2013).[13] For number of prescription drug overdose deaths by county, 2002-2010, see Map 9.3 on page 171.

[13]Includes ICD-10 causes of death: X40, X41, X42, X43, X44, X60, X61, X62, X63, X64, Y10, Y11, Y12, Y13, and Y14

Indiana University Center for Health Policy

Number and Percentage of Controlled Prescriptions Dispensed in Indiana, by Prescription Type and County (INSPECT De-identified Dataset, 2011)

County	Opioids	CNS Depressants	Stimulants	Other*	Total (all dispensed controlled substances)
Adams	21,771	14,011	4,265	5,035	45,082
	48.3%	31.1%	9.5%	11.2%	
Allen	242,875	149,205	61,497	75,963	529,540
	45.9%	28.2%	11.6%	14.3%	
Bartholomew	83,764	51,771	13,682	21,627	170,844
	49.0%	30.3%	8.0%	12.7%	
Benton	6,493	5,381	2,549	2,023	16,446
	39.5%	32.7%	15.5%	12.3%	
Blackford	17,440	9,127	2,763	3,793	33,123
	52.7%	27.6%	8.3%	11.5%	
Boone	46,769	37,582	18,342	17,581	120,274
	38.9%	31.2%	15.3%	14.6%	
Brown	18,674	11,689	3,196	4,713	38,272
	48.8%	30.5%	8.4%	12.3%	
Carroll	13,116	10,893	3,495	3,367	30,871
	42.5%	35.3%	11.3%	10.9%	
Cass	30,048	20,695	8,845	8,904	68,492
	43.9%	30.2%	12.9%	13.0%	
Clark	153,723	105,785	28,647	39,914	328,069
	46.9%	32.2%	8.7%	12.2%	
Clay	23,354	19,411	5,133	6,141	54,039
	43.2%	35.9%	9.5%	11.4%	
Clinton	37,380	26,122	6,898	8,244	78,644
	47.5%	33.2%	8.8%	10.5%	
Crawford	10,719	5,745	1,452	2,803	20,719
	51.7%	27.7%	7.0%	13.5%	
Daviess	27,935	24,065	6,542	6,313	64,855
	43.1%	37.1%	10.1%	9.7%	
Dearborn	41,799	28,082	6,928	10,793	87,602
	47.7%	32.1%	7.9%	12.3%	
Decatur	24,690	16,573	4,112	5,877	51,252
	48.2%	32.3%	8.0%	11.5%	
DeKalb	30,250	19,890	8,958	8,922	68,020
	44.5%	29.2%	13.2%	13.1%	
Delaware	136,616	74,059	26,012	37,022	273,709
	49.9%	27.1%	9.5%	13.5%	
Dubois	35,607	27,395	9,612	9,352	81,966
	43.4%	33.4%	11.7%	11.4%	
Elkhart	128,515	82,330	59,163	35,564	305,572
	42.1%	26.9%	19.4%	11.6%	
Fayette	34,876	22,937	8,421	7,777	74,011
	47.1%	31.0%	11.4%	10.5%	
Floyd	86,513	62,326	18,063	22,523	189,425
	45.7%	32.9%	9.5%	11.9%	
Fountain	19,128	14,129	2,963	4,206	40,426
	47.3%	35.0%	7.3%	10.4%	

County	Opioids	CNS Depressants	Stimulants	Other*	Total (all dispensed controlled substances)
Franklin	24,398	17,077	5,291	7,176	53,942
	45.2%	31.7%	9.8%	13.3%	
Fulton	20,036	11,940	6,331	5,584	43,891
	45.6%	27.2%	14.4%	12.7%	
Gibson	34,288	26,414	10,189	8,685	79,576
	43.1%	33.2%	12.8%	10.9%	
Grant	79,384	45,200	20,224	18,332	163,140
	48.7%	27.7%	12.4%	11.2%	
Greene	35,326	26,486	7,487	8,115	77,414
	45.6%	34.2%	9.7%	10.5%	
Hamilton	154,158	135,434	89,703	69,327	448,622
	34.4%	30.2%	20.0%	15.5%	
Hancock	62,017	43,251	22,419	21,096	148,783
	41.7%	29.1%	15.1%	14.2%	
Harrison	41,810	24,131	7,169	10,410	83,520
	50.1%	28.9%	8.6%	12.5%	
Hendricks	96,354	71,356	29,370	33,511	230,591
	41.8%	30.9%	12.7%	14.5%	
Henry	67,467	40,202	12,137	23,759	143,565
	47.0%	28.0%	8.5%	16.5%	
Howard	98,920	68,222	22,568	35,680	225,390
	43.9%	30.3%	10.0%	15.8%	
Huntington	35,030	17,266	7,617	9,296	69,209
	50.6%	24.9%	11.0%	13.4%	
Jackson	49,474	27,473	6,768	13,319	97,034
	51.0%	28.3%	7.0%	13.7%	
Jasper	29,818	22,489	6,308	7,827	66,442
	44.9%	33.8%	9.5%	11.8%	
Jay	23,926	13,444	3,817	6,300	47,487
	50.4%	28.3%	8.0%	13.3%	
Jefferson	41,700	31,622	6,624	10,679	90,625
	46.0%	34.9%	7.3%	11.8%	
Jennings	33,913	17,354	5,181	8,617	65,065
	52.1%	26.7%	8.0%	13.2%	
Johnson	128,915	92,087	31,301	41,990	294,293
	43.8%	31.3%	10.6%	14.3%	
Knox	47,694	37,797	9,449	12,507	107,447
	44.4%	35.2%	8.8%	11.6%	
Kosciusko	59,088	31,965	12,474	16,170	119,697
	49.4%	26.7%	10.4%	13.5%	
LaGrange	15,999	9,828	3,258	4,682	33,767
	47.4%	29.1%	9.6%	13.9%	
Lake	356,234	261,054	66,801	96,311	780,400
	45.6%	33.5%	8.6%	12.3%	
LaPorte	116,649	67,065	25,232	29,911	238,857
	48.8%	28.1%	10.6%	12.5%	
Lawrence	60,859	40,362	12,482	14,839	128,542
	47.3%	31.4%	9.7%	11.5%	

County	Opioids	CNS Depressants	Stimulants	Other*	Total (all dispensed controlled substances)
Madison	178,542	113,532	35,285	46,023	373,382
	47.8%	30.4%	9.5%	12.3%	
Marion	816,623	459,681	182,845	202,339	1,661,488
	49.2%	27.7%	11.0%	12.2%	
Marshall	34,120	22,854	13,023	9,824	79,821
	42.7%	28.6%	16.3%	12.3%	
Martin	14,193	12,167	3,391	3,849	33,600
	42.2%	36.2%	10.1%	11.5%	
Miami	29,777	18,446	8,448	9,137	65,808
	45.2%	28.0%	12.8%	13.9%	
Monroe	89,925	70,814	24,042	31,798	216,579
	41.5%	32.7%	11.1%	14.7%	
Montgomery	38,899	31,107	7,900	10,855	88,761
	43.8%	35.0%	8.9%	12.2%	
Morgan	89,356	53,119	16,321	21,780	180,576
	49.5%	29.4%	9.0%	12.1%	
Newton	10,135	8,094	2,095	2,056	22,380
	45.3%	36.2%	9.4%	9.2%	
Noble	36,527	23,753	6,518	9,682	76,480
	47.8%	31.1%	8.5%	12.7%	
Ohio	5,500	3,559	585	1,252	10,896
	50.5%	32.7%	5.4%	11.5%	
Orange	30,802	20,136	5,188	6,338	62,464
	49.3%	32.2%	8.3%	10.1%	
Owen	27,573	17,460	4,030	5,938	55,001
	50.1%	31.7%	7.3%	10.8%	
Parke	10,648	8,743	2,271	2,944	24,606
	43.3%	35.5%	9.2%	12.0%	
Perry	15,904	12,395	3,150	4,589	36,038
	44.1%	34.4%	8.7%	12.7%	
Pike	17,862	13,676	3,990	4,372	39,900
	44.8%	34.3%	10.0%	11.0%	
Porter	140,427	94,705	33,984	41,843	310,959
	45.2%	30.5%	10.9%	13.5%	
Posey	26,670	17,604	5,766	6,829	56,869
	46.9%	31.0%	10.1%	12.0%	
Pulaski	13,838	8,980	3,264	3,750	29,832
	46.4%	30.1%	10.9%	12.6%	
Putnam	32,707	22,504	5,977	7,744	68,932
	47.4%	32.6%	8.7%	11.2%	
Randolph	27,494	13,678	5,051	7,147	53,370
	51.5%	25.6%	9.5%	13.4%	
Ripley	21,308	13,801	3,019	5,832	43,960
	48.5%	31.4%	6.9%	13.3%	
Rush	19,155	11,383	3,942	4,247	38,727
	49.5%	29.4%	10.2%	11.0%	
Saint Joseph	191,368	134,710	70,478	55,533	452,089
	42.3%	29.8%	15.6%	12.3%	

County	Opioids	CNS Depressants	Stimulants	Other*	Total (all dispensed controlled substances)
Scott	38,558	27,605	6,325	9,189	81,677
	47.2%	33.8%	7.7%	11.3%	
Shelby	43,986	29,627	8,622	10,672	92,907
	47.3%	31.9%	9.3%	11.5%	
Spencer	19,656	14,502	5,371	4,898	44,427
	44.2%	32.6%	12.1%	11.0%	
Starke	27,858	17,105	5,175	7,072	57,210
	48.7%	29.9%	9.0%	12.4%	
Steuben	24,555	14,814	4,742	6,809	50,920
	48.2%	29.1%	9.3%	13.4%	
Sullivan	23,990	19,979	4,022	5,596	53,587
	44.8%	37.3%	7.5%	10.4%	
Switzerland	9,167	5,592	1,145	2,306	18,210
	50.3%	30.7%	6.3%	12.7%	
Tippecanoe	111,919	91,244	37,228	30,907	271,298
	41.3%	33.6%	13.7%	11.4%	
Tipton	14,013	10,025	3,330	4,769	32,137
	43.6%	31.2%	10.4%	14.8%	
Union	5,075	3,765	1,585	1,364	11,789
	43.0%	31.9%	13.4%	11.6%	
Vanderburgh	211,300	148,668	61,153	51,899	473,020
	44.7%	31.4%	12.9%	11.0%	
Vermillion	15,447	11,411	2,685	3,443	32,986
	46.8%	34.6%	8.1%	10.4%	
Vigo	106,505	87,262	22,090	26,221	242,078
	44.0%	36.0%	9.1%	10.8%	
Wabash	32,996	16,477	6,250	6,596	62,319
	52.9%	26.4%	10.0%	10.6%	
Warren	5,240	3,476	762	1,346	10,824
	48.4%	32.1%	7.0%	12.4%	
Warrick	56,167	44,694	20,692	15,691	137,244
	40.9%	32.6%	15.1%	11.4%	
Washington	31,983	20,951	4,939	7,993	65,866
	48.6%	31.8%	7.5%	12.1%	
Wayne	73,897	49,974	14,256	18,683	156,810
	47.1%	31.9%	9.1%	11.9%	
Wells	19,981	11,795	4,053	5,434	41,263
	48.4%	28.6%	9.8%	13.2%	
White	23,921	19,184	6,271	5,734	55,110
	43.4%	34.8%	11.4%	10.4%	
Whitley	29,288	15,879	6,006	9,311	60,484
	48.4%	26.3%	9.9%	15.4%	
Indiana	**5,830,367**	**3,889,652**	**1,419,003**	**1,604,214**	**12,743,236**
	45.8%	**30.5%**	**11.1%**	**12.6%**	
Out of State	**13,603**	**10,290**	**2,884**	**7,787**	**34,564**

* Other category contains controlled substances not defined as opioids, depressants, or stimulants.
Source: Indiana Board of Pharmacy, 2012a

Number of Treatment Episodes with Prescription Drug (Rx) Abuse and Dependence Reported at Treatment Admission in Indiana, by County and Drug Category (Substance Abuse Population by County/Treatment Episode Data Set, 2012)

County	Treatment Episodes Total	All Rx Abuse		All Rx Dependence		Opioid Abuse		Opioid Dependence	
		Number	%	Number	%	Number	%	Number	%
Adams	138	20	14.5%	9	6.5%	16	11.6%	8	5.8%
Allen	1,822	265	14.5%	96	5.3%	140	7.7%	64	3.5%
Bartholomew	661	178	26.9%	93	14.1%	143	21.6%	69	10.4%
Benton	41	13	31.7%	5	12.2%	5	12.2%	<5	N/A
Blackford	51	15	29.4%	10	19.6%	15	29.4%	10	19.6%
Boone	199	51	25.6%	24	12.1%	40	20.1%	22	11.1%
Brown	116	37	31.9%	20	17.2%	30	25.9%	15	12.9%
Carroll	123	39	31.7%	20	16.3%	28	22.8%	15	12.2%
Cass	273	72	26.4%	35	12.8%	48	17.6%	23	8.4%
Clark	418	199	47.6%	140	33.5%	170	40.7%	116	27.8%
Clay	173	29	16.8%	10	5.8%	16	9.2%	6	3.5%
Clinton	146	42	28.8%	23	15.8%	34	23.3%	21	14.4%
Crawford	57	17	29.8%	12	21.1%	15	26.3%	10	17.5%
Daviess	188	59	31.4%	24	12.8%	43	22.9%	18	9.6%
Dearborn	450	213	47.3%	117	26.0%	179	39.8%	102	22.7%
Decatur	193	39	20.2%	15	7.8%	32	16.6%	11	5.7%
DeKalb	205	20	9.8%	7	3.4%	15	7.3%	6	2.9%
Delaware	1,168	387	33.1%	274	23.5%	301	25.8%	227	19.4%
Dubois	358	95	26.5%	45	12.6%	69	19.3%	40	11.2%
Elkhart	1,040	101	9.7%	52	5.0%	69	6.6%	38	3.7%
Fayette	219	90	41.1%	59	26.9%	75	34.2%	44	20.1%
Floyd	182	106	58.2%	77	42.3%	95	52.2%	74	40.7%
Fountain	81	32	39.5%	14	17.3%	27	33.3%	11	13.6%
Franklin	91	34	37.4%	24	26.4%	29	31.9%	21	23.1%
Fulton	215	40	18.6%	12	5.6%	16	7.4%	5	2.3%
Gibson	204	49	24.0%	24	11.8%	34	16.7%	17	8.3%
Grant	448	134	29.9%	88	19.6%	108	24.1%	82	18.3%
Greene	176	73	41.5%	42	23.9%	51	29.0%	31	17.6%
Hamilton	699	180	25.8%	89	12.7%	125	17.9%	68	9.7%
Hancock	147	53	36.1%	33	22.4%	40	27.2%	26	17.7%
Harrison	119	50	42.0%	35	29.4%	44	37.0%	32	26.9%
Hendricks	328	83	25.3%	54	16.5%	68	20.7%	44	13.4%
Henry	305	136	44.6%	108	35.4%	115	37.7%	90	29.5%
Howard	588	251	42.7%	171	29.1%	221	37.6%	157	26.7%
Huntington	147	58	39.5%	22	15.0%	9	6.1%	5	3.4%
Jackson	271	76	28.0%	36	13.3%	66	24.4%	29	10.7%
Jasper	94	40	42.6%	18	19.1%	27	28.7%	16	17.0%
Jay	126	48	38.1%	35	27.8%	46	36.5%	33	26.2%
Jefferson	292	132	45.2%	68	23.3%	114	39.0%	54	18.5%
Jennings	204	79	38.7%	44	21.6%	66	32.4%	35	17.2%
Johnson	207	81	39.1%	53	25.6%	67	32.4%	43	20.8%
Knox	442	114	25.8%	51	11.5%	79	17.9%	39	8.8%
Kosciusko	314	163	51.9%	55	17.5%	14	4.5%	9	2.9%
LaGrange	172	27	15.7%	8	4.7%	21	12.2%	8	4.7%
Lake	2,803	412	14.7%	211	7.5%	274	9.8%	169	6.0%
LaPorte	637	143	22.4%	76	11.9%	119	18.7%	69	10.8%
Lawrence	432	156	36.1%	102	23.6%	129	29.9%	70	16.2%
Madison	804	363	45.1%	167	20.8%	271	33.7%	142	17.7%
Marion	4,091	1,167	28.5%	714	17.5%	982	24.0%	651	15.9%
Marshall	236	93	39.4%	39	16.5%	18	7.6%	12	5.1%
Martin	47	19	40.4%	11	23.4%	17	36.2%	8	17.0%
Miami	241	76	31.5%	46	19.1%	63	26.1%	41	17.0%

County	Treatment Episodes Total	All Rx Abuse		All Rx Dependence		Opioid Abuse		Opioid Dependence	
		Number	%	Number	%	Number	%	Number	%
Monroe	1,505	353	23.5%	181	12.0%	251	16.7%	116	7.7%
Montgomery	357	113	31.7%	46	12.9%	72	20.2%	32	9.0%
Morgan	540	153	28.3%	91	16.9%	129	23.9%	78	14.4%
Newton	44	9	20.5%	5	11.4%	7	15.9%	<5	N/A
Noble	418	192	45.9%	121	28.9%	21	5.0%	10	2.4%
Ohio	38	17	44.7%	6	15.8%	14	36.8%	5	13.2%
Orange	105	46	43.8%	27	25.7%	39	37.1%	23	21.9%
Owen	265	55	20.8%	36	13.6%	46	17.4%	30	11.3%
Parke	135	23	17.0%	8	5.9%	19	14.1%	7	5.2%
Perry	148	37	25.0%	18	12.2%	25	16.9%	15	10.1%
Pike	51	13	25.5%	6	11.8%	11	21.6%	6	11.8%
Porter	713	238	33.4%	146	20.5%	187	26.2%	131	18.4%
Posey	118	33	28.0%	12	10.2%	23	19.5%	8	6.8%
Pulaski	104	27	26.0%	13	12.5%	19	18.3%	10	9.6%
Putnam	215	44	20.5%	23	10.7%	32	14.9%	17	7.9%
Randolph	188	59	31.4%	26	13.8%	42	22.3%	19	10.1%
Ripley	189	49	25.9%	27	14.3%	46	24.3%	24	12.7%
Rush	137	31	22.6%	21	15.3%	23	16.8%	13	9.5%
Saint Joseph	1,293	195	15.1%	81	6.3%	140	10.8%	66	5.1%
Scott	189	102	54.0%	69	36.5%	91	48.1%	63	33.3%
Shelby	78	29	37.2%	14	17.9%	25	32.1%	13	16.7%
Spencer	195	53	27.2%	25	12.8%	39	20.0%	23	11.8%
Starke	203	83	40.9%	54	26.6%	68	33.5%	45	22.2%
Steuben	194	25	12.9%	11	5.7%	9	4.6%	<5	N/A
Sullivan	102	45	44.1%	27	26.5%	34	33.3%	23	22.5%
Switzerland	41	15	36.6%	12	29.3%	15	36.6%	11	26.8%
Tippecanoe	469	155	33.0%	64	13.6%	93	19.8%	43	9.2%
Tipton	59	26	44.1%	16	27.1%	23	39.0%	16	27.1%
Union	33	13	39.4%	8	24.2%	11	33.3%	6	18.2%
Vanderburgh	1,367	436	31.9%	196	14.3%	319	23.3%	165	12.1%
Vermillion	130	30	23.1%	14	10.8%	22	16.9%	13	10.0%
Vigo	759	156	20.6%	77	10.1%	103	13.6%	56	7.4%
Wabash	183	97	53.0%	35	19.1%	26	14.2%	16	8.7%
Warren	29	13	44.8%	<5	N/A	8	27.6%	<5	N/A
Warrick	278	80	28.8%	32	11.5%	64	23.0%	27	9.7%
Washington	68	25	36.8%	16	23.5%	21	30.9%	13	19.1%
Wayne	594	163	27.4%	98	16.5%	107	18.0%	57	9.6%
Wells	122	31	25.4%	15	12.3%	24	19.7%	12	9.8%
White	148	38	25.7%	13	8.8%	17	11.5%	9	6.1%
Whitley	124	74	59.7%	33	26.6%	6	4.8%	<5	N/A
County Info Missing	198	73	36.9%	53	26.8%	59	29.8%	45	22.7%
Indiana	**35,308**	**9,898**	**28.0%**	**5,396**	**15.3%**	**7,168**	**20.3%**	**4,236**	**12.0%**

Note: We defined prescription drug dependence as "individuals in substance abuse treatment listing prescription drugs as their primary substance at admission."

Source: Indiana Family and Social Services Administration, 2013

APPENDIX 9B — PART 2

County	CNS Depressant Abuse Number	%	CNS Depressant Dependence Number	%	Stimulant Abuse Number	%	Stimulant Dependence Number	%
Adams	<5	N/A	<5	N/A	<5	N/A	<5	N/A
Allen	49	2.7%	7	0.4%	93	5.1%	25	1.4%
Bartholomew	48	7.3%	20	3.0%	6	0.9%	<5	N/A
Benton	5	12.2%	<5	N/A	<5	N/A	<5	N/A
Blackford	<5	N/A	<5	N/A	<5	N/A	<5	N/A
Boone	12	6.0%	<5	N/A	<5	N/A	<5	N/A
Brown	12	10.3%	5	4.3%	<5	N/A	<5	N/A
Carroll	16	13.0%	5	4.1%	7	5.7%	<5	N/A
Cass	17	6.2%	5	1.8%	19	7.0%	7	2.6%
Clark	72	17.2%	20	4.8%	9	2.2%	<5	N/A
Clay	16	9.2%	<5	N/A	<5	N/A	<5	N/A
Clinton	13	8.9%	<5	N/A	<5	N/A	<5	N/A
Crawford	7	12.3%	<5	N/A	<5	N/A	<5	N/A
Daviess	30	16.0%	<5	N/A	<5	N/A	<5	N/A
Dearborn	44	9.8%	9	2.0%	13	2.9%	6	1.3%
Decatur	11	5.7%	<5	N/A	<5	N/A	<5	N/A
DeKalb	6	2.9%	<5	N/A	<5	N/A	<5	N/A
Delaware	135	11.6%	41	3.5%	13	1.1%	6	0.5%
Dubois	40	11.2%	5	1.4%	<5	N/A	<5	N/A
Elkhart	25	2.4%	6	0.6%	17	1.6%	8	0.8%
Fayette	28	12.8%	13	5.9%	<5	N/A	<5	N/A
Floyd	31	17.0%	<5	N/A	<5	N/A	<5	N/A
Fountain	12	14.8%	<5	N/A	<5	N/A	<5	N/A
Franklin	6	6.6%	<5	N/A	<5	N/A	<5	N/A
Fulton	14	6.5%	<5	N/A	12	5.6%	<5	N/A
Gibson	25	12.3%	6	2.9%	<5	N/A	<5	N/A
Grant	42	9.4%	6	1.3%	11	2.5%	<5	N/A
Greene	23	13.1%	8	4.5%	7	4.0%	<5	N/A
Hamilton	66	9.4%	14	2.0%	17	2.4%	7	1.0%
Hancock	22	15.0%	6	4.1%	<5	N/A	<5	N/A
Harrison	9	7.6%	<5	N/A	<5	N/A	<5	N/A
Hendricks	23	7.0%	8	2.4%	<5	N/A	<5	N/A
Henry	44	14.4%	15	4.9%	7	2.3%	<5	N/A
Howard	102	17.3%	12	2.0%	8	1.4%	<5	N/A
Huntington	9	6.1%	<5	N/A	41	27.9%	14	9.5%
Jackson	19	7.0%	6	2.2%	<5	N/A	<5	N/A
Jasper	13	13.8%	<5	N/A	<5	N/A	<5	N/A
Jay	9	7.1%	<5	N/A	<5	N/A	<5	N/A
Jefferson	27	9.2%	9	3.1%	6	2.1%	5	1.7%
Jennings	17	8.3%	<5	N/A	6	2.9%	5	2.5%
Johnson	25	12.1%	10	4.8%	<5	N/A	<5	N/A
Knox	49	11.1%	12	2.7%	<5	N/A	<5	N/A
Kosciusko	15	4.8%	<5	N/A	142	45.2%	45	14.3%
LaGrange	8	4.7%	<5	N/A	<5	N/A	<5	N/A
Lake	119	4.2%	27	1.0%	46	1.6%	15	0.5%
LaPorte	24	3.8%	5	0.8%	9	1.4%	<5	N/A
Lawrence	45	10.4%	27	6.3%	6	1.4%	5	1.2%
Madison	170	21.1%	22	2.7%	15	1.9%	<5	N/A
Marion	356	8.7%	55	1.3%	25	0.6%	8	0.2%
Marshall	8	3.4%	<5	N/A	71	30.1%	24	10.2%
Martin	7	14.9%	<5	N/A	<5	N/A	<5	N/A
Miami	24	10.0%	5	2.1%	5	2.1%	<5	N/A
Monroe	120	8.0%	52	3.5%	38	2.5%	13	0.9%
Montgomery	52	14.6%	13	3.6%	<5	N/A	<5	N/A

County	CNS Depressant Abuse Number	%	CNS Depressant Dependence Number	%	Stimulant Abuse Number	%	Stimulant Dependence Number	%
Morgan	37	6.9%	11	2.0%	<5	N/A	<5	N/A
Newton	<5	N/A	<5	N/A	<5	N/A	<5	N/A
Noble	12	2.9%	<5	N/A	166	39.7%	110	26.3%
Ohio	<5	N/A	<5	N/A	<5	N/A	<5	N/A
Orange	9	8.6%	<5	N/A	5	4.8%	<5	N/A
Owen	13	4.9%	6	2.3%	<5	N/A	<5	N/A
Parke	5	3.7%	<5	N/A	<5	N/A	<5	N/A
Perry	16	10.8%	<5	N/A	<5	N/A	<5	N/A
Pike	6	11.8%	<5	N/A	<5	N/A	<5	N/A
Porter	63	8.8%	12	1.7%	13	1.8%	<5	N/A
Posey	17	14.4%	<5	N/A	<5	N/A	<5	N/A
Pulaski	8	7.7%	<5	N/A	5	4.8%	<5	N/A
Putnam	17	7.9%	5	2.3%	<5	N/A	<5	N/A
Randolph	19	10.1%	<5	N/A	6	3.2%	<5	N/A
Ripley	5	2.6%	<5	N/A	<5	N/A	<5	N/A
Rush	11	8.0%	6	4.4%	<5	N/A	<5	N/A
Saint Joseph	66	5.1%	10	0.8%	19	1.5%	5	0.4%
Scott	37	19.6%	6	3.2%	<5	N/A	<5	N/A
Shelby	10	12.8%	<5	N/A	<5	N/A	<5	N/A
Spencer	18	9.2%	<5	N/A	<5	N/A	<5	N/A
Starke	36	17.7%	9	4.4%	<5	N/A	<5	N/A
Steuben	8	4.1%	<5	N/A	11	5.7%	6	3.1%
Sullivan	23	22.5%	<5	N/A	<5	N/A	<5	N/A
Switzerland	<5	N/A	<5	N/A	<5	N/A	<5	N/A
Tippecanoe	73	15.6%	17	3.6%	16	3.4%	<5	N/A
Tipton	10	16.9%	<5	N/A	<5	N/A	<5	N/A
Union	<5	N/A	<5	N/A	<5	N/A	<5	N/A
Vanderburgh	194	14.2%	26	1.9%	26	1.9%	5	0.4%
Vermillion	14	10.8%	<5	N/A	<5	N/A	<5	N/A
Vigo	79	10.4%	19	2.5%	<5	N/A	<5	N/A
Wabash	10	5.5%	<5	N/A	74	40.4%	18	9.8%
Warren	7	24.1%	<5	N/A	<5	N/A	<5	N/A
Warrick	31	11.2%	<5	N/A	5	1.8%	<5	N/A
Washington	8	11.8%	<5	N/A	<5	N/A	<5	N/A
Wayne	69	11.6%	37	6.2%	7	1.2%	<5	N/A
Wells	6	4.9%	<5	N/A	<5	N/A	<5	N/A
White	22	14.9%	<5	N/A	6	4.1%	<5	N/A
Whitley	5	4.0%	<5	N/A	67	54.0%	30	24.2%
County Info Missing	30	15.2%	7	3.5%	<5	N/A	<5	N/A
Indiana	**3,129**	**8.9%**	**717**	**2.0%**	**1,179**	**3.3%**	**443**	**1.3%**

Note: We defined prescription drug dependence as "individuals in substance abuse treatment listing prescription drugs as their primary substance at admission."

Source: Indiana Family and Social Services Administration, 2013

APPENDIX 9C

Percentage of Indiana Students Reporting Lifetime and Monthly Nonmedical Prescription Drug Use, by Region and Grade (Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents Survey, 2012)

		Indiana	Northwest	North Central	Northeast	West	Central	East	Southwest	Southeast
6th Grade	Lifetime	1.2	1.3	1.1	1.9	1.3	1.2	1.8	0.9	0.9
	Monthly	0.6	0.6	0.5	1.7	0.6	0.6	0.8	0.5	0.8
7th Grade	Lifetime	2.1	2.1	2.1	1.8	2.3	1.6	3.1	1.8	3.2
	Monthly	1.1	1.2	1.3	0.9	0.9	0.8	1.6	1.0	1.6
8th Grade	Lifetime	5.0	5.3	4.1	3.9	6.3	4.4	6.8	3.8	6.3
	Monthly	2.6	2.9	2.3	1.6	3.4	2.2	3.1	1.9	3.4
9th Grade	Lifetime	7.9	9.1	7.0	6.3	7.1	8.2	10.1	7.9	7.4
	Monthly	3.6	4.4	3.0	2.3	3.2	3.8	5.3	3.4	3.3
10th Grade	Lifetime	11.1	11.5	11.8	9.0	10.8	10.2	10.9	10.4	12.8
	Monthly	5.0	5.6	5.2	4.0	4.2	4.7	5.1	5.2	5.2
11th Grade	Lifetime	13.0	12.8	11.3	9.7	12.4	13.3	15.9	12.4	15.3
	Monthly	5.5	5.9	4.5	3.7	4.9	6.0	6.1	5.0	6.3
12th Grade	Lifetime	14.5	15.4	15.4	7.5	12.6	13.2	14.9	15.2	16.5
	Monthly	5.8	6.9	7.2	2.4	4.7	5.1	6.7	5.8	5.9

Note: Includes Ritalin®, Oxycontin®, and Xanax®.

Source: Gassman, et al., 2012

Number and Rate, per 1,000 Population, of Arrests for Possession and Sale/Manufacture of "Other Drugs" (including Barbiturates and Benzedrine) in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Number of Arrests for Possession	Possession Arrest Rate	Number of Arrests for Sale	Sale Arrest Rate
Adams	9	*0.3	1	*0.0
Allen	195	0.5	87	0.2
Bartholomew	37	0.5	0	*0.0
Benton	2	*0.2	1	*0.1
Blackford	0	*0.0	0	*0.0
Boone	13	*0.2	3	*0.1
Brown	0	*0.0	0	*0.0
Carroll	6	*0.3	0	*0.0
Cass	11	*0.3	24	0.6
Clark	20	0.2	1	*0.0
Clay	9	*0.3	3	*0.1
Clinton	5	*0.2	4	*0.1
Crawford	0	*0.0	1	*0.1
Daviess	17	*0.5	1	*0.0
Dearborn	15	*0.3	17	*0.3
Decatur	6	*0.2	1	*0.0
DeKalb	14	*0.3	5	*0.1
Delaware	4	*0.0	7	*0.1
Dubois	9	*0.2	1	*0.0
Elkhart	12	*0.1	1	*0.0
Fayette	22	0.9	0	*0.0
Floyd	128	1.7	185	2.5
Fountain	7	*0.4	1	*0.1
Franklin	3	*0.1	4	*0.2
Fulton	6	*0.3	3	*0.1
Gibson	31	0.9	2	*0.1
Grant	5	*0.1	2	*0.0
Greene	16	*0.5	2	*0.1
Hamilton	23	0.1	5	*0.0
Hancock	29	0.4	11	*0.2
Harrison	0	*0.0	0	*0.0
Hendricks	62	0.4	14	*0.1
Henry	10	*0.2	3	*0.1
Howard	93	1.1	11	*0.1
Huntington	18	*0.5	2	*0.1
Jackson	36	0.8	15	*0.4
Jasper	10	*0.3	7	*0.2
Jay	9	*0.4	0	*0.0
Jefferson	15	*0.5	3	*0.1
Jennings	0	*0.0	12	*0.4
Johnson	75	0.5	25	0.2
Knox	22	0.6	13	*0.3
Kosciusko	26	0.3	4	*0.1
LaGrange	0	*0.0	0	*0.0
Lake	358	0.7	59	0.1
LaPorte	19	*0.2	1	*0.0
Lawrence	21	0.5	4	*0.1
Madison	109	0.8	44	0.3
Marion	746	0.8	99	0.1

County	Number of Arrests for Possession	Possession Arrest Rate	Number of Arrests for Sale	Sale Arrest Rate
Marshall	62	1.3	17	*0.4
Martin	5	*0.5	0	*0.0
Miami	16	*0.4	1	*0.0
Monroe	105	0.8	18	*0.1
Montgomery	75	2.0	1	*0.0
Morgan	54	0.8	21	0.3
Newton	0	*0.0	0	*0.0
Noble	18	*0.4	3	*0.1
Ohio	2	*0.3	1	*0.2
Orange	8	*0.4	1	*0.1
Owen	7	*0.3	3	*0.1
Parke	5	*0.3	1	*0.1
Perry	10	*0.5	1	*0.1
Pike	6	*0.5	1	*0.1
Porter	100	0.6	10	*0.1
Posey	7	*0.3	3	*0.1
Pulaski	1	*0.1	0	*0.0
Putnam	7	*0.2	2	*0.1
Randolph	7	*0.3	6	*0.2
Ripley	10	*0.3	1	*0.0
Rush	25	1.4	9	*0.5
Saint Joseph	93	0.3	22	0.1
Scott	4	*0.2	4	*0.2
Shelby	13	*0.3	4	*0.1
Spencer	9	*0.4	1	*0.0
Starke	14	*0.6	6	*0.3
Steuben	76	2.2	7	*0.2
Sullivan	3	*0.1	1	*0.0
Switzerland	4	*0.4	0	*0.0
Tippecanoe	29	0.2	17	*0.1
Tipton	2	*0.1	0	*0.0
Union	3	*0.4	0	*0.0
Vanderburgh	211	1.2	31	0.2
Vermillion	0	*0.0	0	*0.0
Vigo	88	0.8	10	*0.1
Wabash	7	*0.2	1	*0.0
Warren	3	*0.4	0	*0.0
Warrick	21	0.4	20	0.3
Washington	11	*0.4	4	*0.1
Wayne	8	*0.1	0	*0.0
Wells	1	*0.0	10	*0.4
White	4	*0.2	1	*0.0
Whitley	9	*0.3	3	*0.1
Indiana	**3,426**	**0.5**	**931**	**0.1**

* Rates based on arrest numbers lower than 20 are unreliable.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

APPENDIX 9E

Robberies of Indiana Pharmacies, by County, January 1, 2012, through August 31, 2012 (Indiana Board of Pharmacy, 2012)

County	Number of Robberies
Adams	1
Allen	12
Cass	1
Clark	1
Clinton	2
Dearborn	2
Delaware	6
Elkhart	1
Floyd	1
Grant	2
Hamilton	3
Hancock	1
Hendricks	1
Henry	2
Howard	4
Johnson	3
Kosciuskio	2
Lawrence	2
Madison	2
Marion	32
Steuben	1
Tippecanoe	2
Vigo	2
Whitley	1
Indiana	**87**

Source: Indiana Board of Pharmacy, 2012b

Indiana University Center for Health Policy

Map 9.1 Arrest Rates, per 1,000 Population, for Possession of "Other Drugs" (Barbiturates and Benzedrine) in Indiana, by County (Uniform Crime Reporting Program, 2010)

County	Rate
Lake	0.72
Porter	0.61
LaPorte	0.17
St. Joseph	0.35
Elkhart	0.06
LaGrange	0
Steuben	2.22
Noble	0.38
DeKalb	0.33
Starke	0.6
Marshall	1.32
Kosciusko	0.34
Whitley	0.27
Allen	0.55
Newton	0
Jasper	0.3
Pulaski	0.07
Fulton	0.29
Wabash	0.21
Huntington	0.48
Wells	0.04
Adams	0.26
White	0.16
Cass	0.28
Miami	0.43
Benton	0.23
Carroll	0.3
Grant	0.07
Blackford	0
Jay	0.42
Howard	1.12
Tippecanoe	0.17
Warren	0.35
Clinton	0.15
Tipton	0.13
Delaware	0.03
Randolph	0.27
Madison	0.83
Fountain	0.41
Montgomery	1.97
Boone	0.23
Hamilton	0.08
Henry	0.2
Wayne	0.12
Vermillion	0
Parke	0.29
Putnam	0.18
Hendricks	0.43
Marion	0.83
Hancock	0.41
Rush	1.44
Fayette	0.91
Union	0.4
Vigo	0.82
Clay	0.33
Owen	0.32
Morgan	0.78
Johnson	0.54
Shelby	0.29
Franklin	0.14
Sullivan	0.14
Greene	0.48
Monroe	0.76
Brown	0
Bartholomew	0.48
Decatur	0.23
Ripley	0.33
Dearborn	0.3
Jennings	0
Ohio	0.33
Jackson	0.85
Lawrence	0.46
Jefferson	0.46
Switzerland	0.38
Knox	0.57
Daviess	0.54
Martin	0.48
Scott	0.17
Washington	0.39
Orange	0.4
Clark	0.18
Gibson	0.93
Pike	0.47
Dubois	0.21
Crawford	0
Floyd	1.72
Harrison	0
Posey	0.27
Vanderburgh	1.17
Warrick	0.35
Spencer	0.43
Perry	0.52

Rate per 1,000

- 0.00 - 0.17
- 0.18 - 0.37
- 0.38 - 0.60
- > 0.60

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 9D (pages 166-167) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Map 9.2 Arrest Rates, per 1,000 Population, for Sale/Manufacture of "Other Drugs" (Barbiturates and Benzedrine) in Indiana, by County (Uniform Crime Reporting Program, 2010)

Steuben 0.2
LaGrange 0
St. Joseph 0.08
Elkhart 0.01
LaPorte 0.01
Lake 0.12
Porter 0.06
Noble 0.06
DeKalb 0.12
Starke 0.26
Marshall 0.36
Kosciusko 0.05
Whitley 0.09
Allen 0.24
Jasper 0.21
Pulaski 0
Fulton 0.14
Newton 0
Wabash 0.03
Huntington 0.05
Wells 0.36
Adams 0.03
White 0.04
Cass 0.62
Miami 0.03
Benton 0.11
Carroll 0
Grant 0.03
Blackford 0
Jay 0
Howard 0.13
Tippecanoe 0.1
Warren 0
Clinton 0.12
Tipton 0
Delaware 0.06
Randolph 0.23
Fountain 0.06
Madison 0 33
Montgomery 0.03
Boone 0.05
Hamilton 0.02
Henry 0.06
Wayne 0
Vermillion 0
Parke 0.06
Hendricks 0.1
Marion 0.11
Hancock 0.16
Putnam 0.05
Rush 0.52
Fayette 0
Union 0
Morgan 0.3
Johnson 0.18
Shelby 0.09
Vigo 0.09
Clay 0.11
Owen 0.14
Franklin 0.19
Decatur 0.04
Brown 0
Bartholomew 0
Ripley 0.03
Dearborn 0.34
Monroe 0.13
Sullivan 0.05
Greene 0.06
Jennings 0.42
Ohio 0.16
Jackson 0.35
Jefferson 0.09
Switzerland 0
Lawrence 0.09
Knox 0.34
Daviess 0.03
Martin 0
Scott 0.1
Washington 0.14
Orange 0.05
Clark 0.01
Pike 0.08
Dubois 0.02
Crawford 0.09
Floyd 2.48
Gibson 0.06
Harrison 0
Posey 0.12
Vanderburgh 0.1
Warrick 0.34
Spencer 0.05
Perry 0.05

Rate per 1,000

- 0.00 - 0.02
- 0.03 - 0.09
- 0.10 - 0.20
- > 0.20

Note: Rates based on arrest numbers lower than 20 are unreliable. Please refer to Appendix 9D (pages 166-167) for additional information.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

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Map 9.3 Number of Prescription Drug Overdose Deaths in Indiana, by County (Indiana Mortality Data, 2002-2010)

Note: Includes ICD-10 causes of death: X40, X41, X42, X43, X44, X60, X61, X62, X63, X64, Y10, Y11, Y12, Y13, and Y14.
Source: Indiana State Department of Health, Epidemiology Resource Center, Data Analysis Team, 2013

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POLYSUBSTANCE ABUSE

Polysubstance Abuse

Polysubstance abuse refers to substance abuse during which two or more substances are used in combination. It is a particularly serious pattern of drug abuse that appears to be generally established by late adolescence (Collins, Ellickson, & Bell, 1998).

Available data are limited, and all information gathered for this chapter was provided by the Treatment Episode Data Set (TEDS) (Substance Abuse and Mental Health Data Archive, 2010). A review of the 2000 through 2010 TEDS data shows that for over half of the treatment episodes in the database, use of at least two drugs was reported at the time of treatment admission (see Figure 10.1).

Compared to the rest of the United States, the percentage of reported polysubstance abuse among the treatment population was significantly higher in Indiana. Also, use of two or more substances increased significantly from 2000 to 2009 in Indiana, peaking at 62.5% in 2005 (see Figure 10.1). The percentage of individuals reporting polysubstance abuse has decreased slightly from 2008 through 2010 in Indiana. Nationally, rates rose slightly from 2009 to 2010. County-level treatment data on individuals using two or more substances is available in Appendix 10A, pages 183-184.

Figure 10.1 Percentage of Indiana and U.S. Treatment Episodes with Polysubstance Abuse (Use of at Least Two Substances) Reported at Treatment Admission (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Indiana	56.5%	56.9%	58.0%	58.2%	59.9%	62.5%	60.5%	59.2%	60.4%	57.7%	56.2%
U.S.	53.8%	54.4%	54.3%	54.5%	54.8%	55.4%	56.1%	55.5%	54.6%	53.8%	55.1%
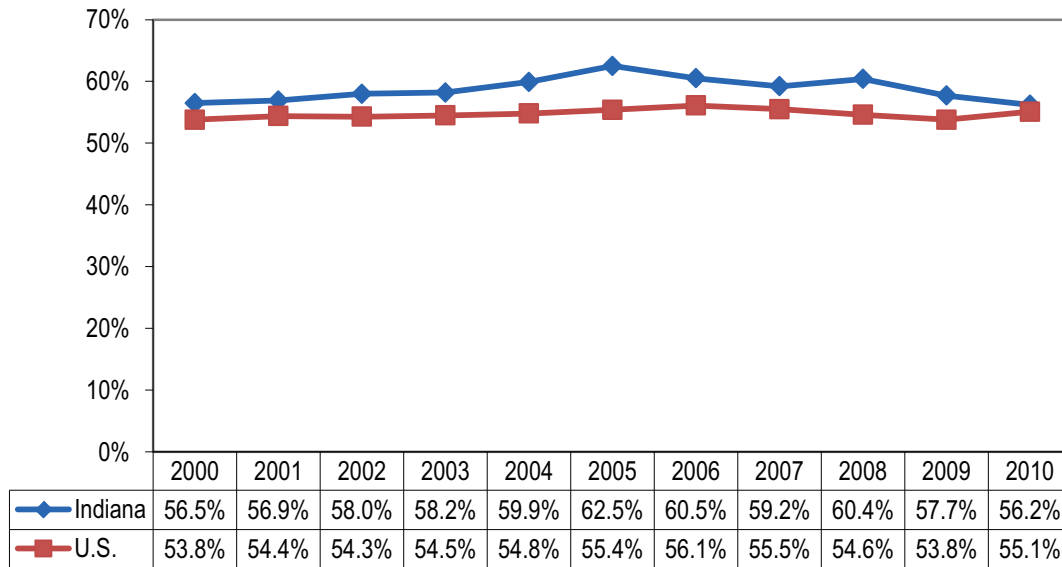
Source: Substance Abuse and Mental Health Data Archive, 2010

Among Indiana treatment episodes alone, fewer than 30.0% reported use of two substances and slightly more than one-quarter reported use of three substances (see Figure 10.2).

Demographic Characteristics of Polysubstance Users

Gender—From 2000 through 2009, the percentage of both males and females reporting use of two or more substances at treatment admission hovered around 60%. In 2010, the percentage of males using two or more drugs had dropped back to levels seen in 2000 while the percentage of females had dropped back to levels similar to 2001 (see Figure 10.3).

In 2010, the percentage of men and women using two drugs was nearly equal; however, a larger percentage of women than men reported use of three drugs (see Figure 10.4).

Figure 10.2 Percentage of Indiana Treatment Episodes with Use of Two and Three Substances Reported at Treatment Admission (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
■ 3 Drugs Reported	21.9%	21.3%	21.7%	22.0%	23.6%	27.5%	25.9%	23.9%	25.0%	25.9%	27.8%
■ 2 Drugs Reported	34.6%	35.6%	36.3%	36.2%	36.3%	35.0%	34.6%	35.3%	35.4%	31.8%	28.4%

Source: Substance Abuse and Mental Health Data Archive, 2010

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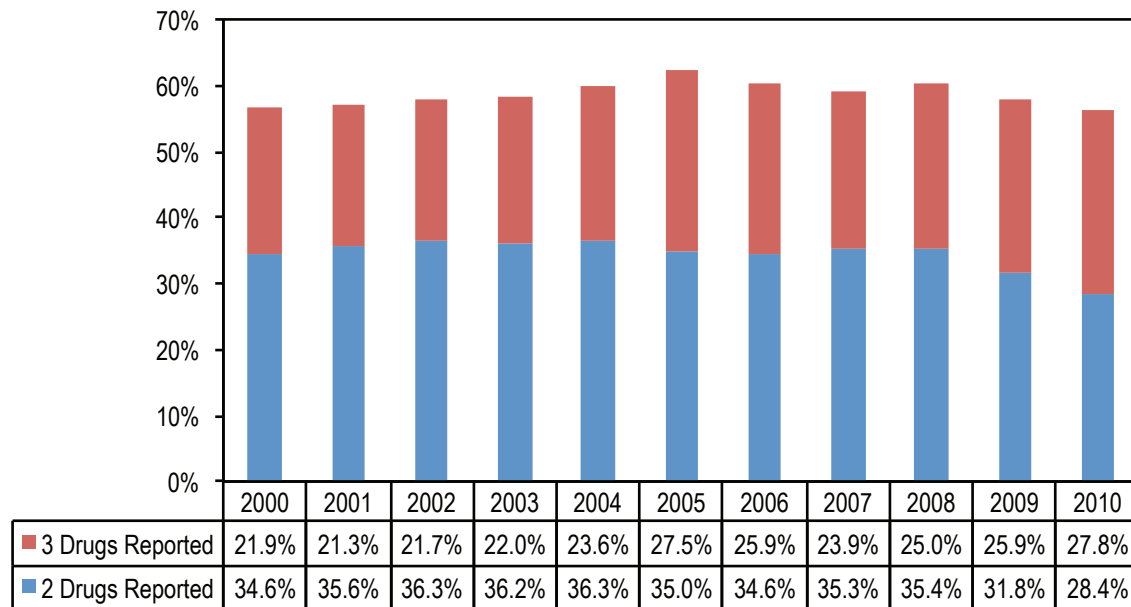
Figure 10.3 Percentage of Indiana Treatment Episodes with Polysubstance Abuse (Use of at Least Two Substances) Reported at Treatment Admission, by Gender (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Males	55.7%	56.6%	57.7%	58.2%	59.9%	62.0%	60.6%	59.0%	59.9%	57.5%	55.6%
Females	58.1%	57.2%	58.9%	58.3%	59.8%	63.5%	60.4%	59.6%	61.2%	58.1%	57.4%
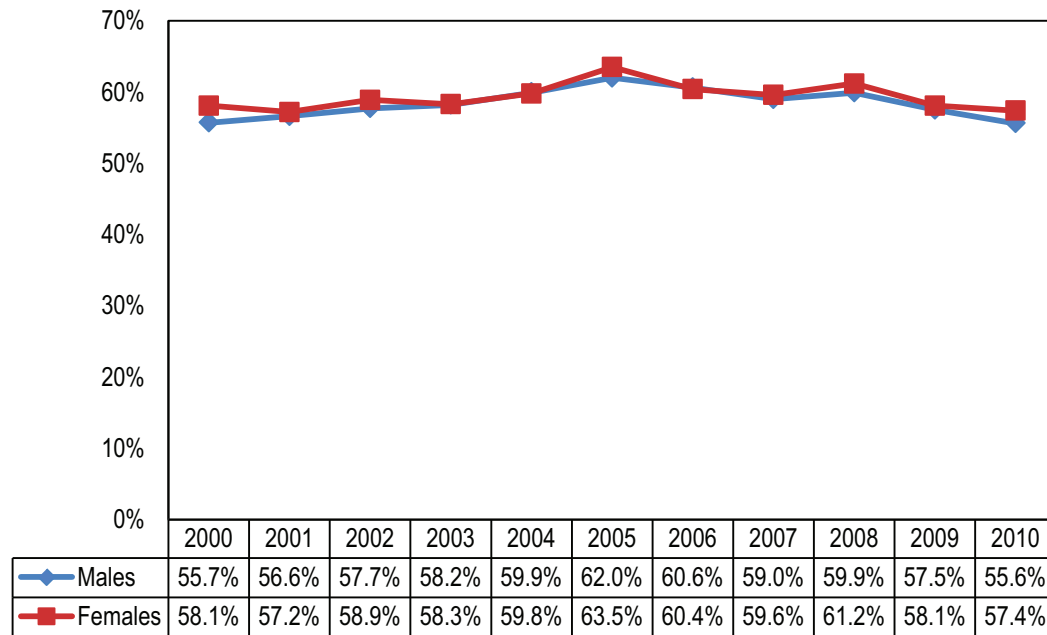
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 10.4 Percentage of Indiana Treatment Episodes with Use of Two and Three Substances Reported at Treatment Admission, by Gender (Treatment Episode Data Set, 2010)

	Males	Females
3 Drugs Reported	26.9%	29.4%
2 Drugs Reported	28.7%	28.0%
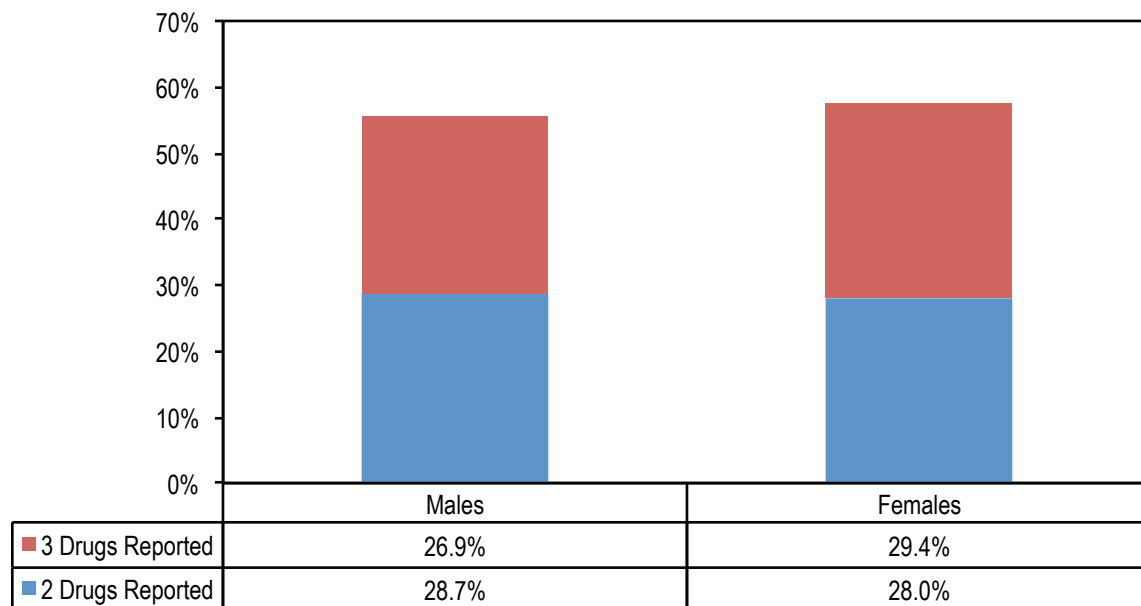
Source: Substance Abuse and Mental Health Data Archive, 2010

Race—The percentage of treatment episodes with polysubstance abuse reported at admission decreased for blacks from 63.4% in 2000 to 58.1% in 2009; however, it showed a slight increase to 62.4% for 2010. Treatment episodes with polysubstance abuse reported at admission increased for whites (from 55.2% to 56.2%) and other races (from 51.0% to 55.8%) (see Figure 10.5).

In 2010, reported use of two substances was highest among the black treatment population (33.5%), while use of three substances was greatest among whites (28.9%) (see Figure 10.6).

Age—Adults ages 25 to 34 had the highest percentage of polysubstance abuse reported at treatment admission, closely followed by 18- to 24-year-olds. Nearly 40% of adults ages 55 and over reported use of two or more substances (see Figure 10.7). Meanwhile 25- to 34-year-olds had the greatest percentage of using three drugs (see Figure 10.8).

Figure 10.5 Percentage of Indiana Treatment Episodes with Polysubstance Abuse (Use of at Least Two Substances) Reported at Treatment Admission, by Race (Treatment Episode Data Set, 2000–2010)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Black	63.4%	62.6%	60.7%	62.7%	59.6%	60.3%	56.9%	57.5%	57.1%	58.1%	62.4%
White	55.2%	55.8%	58.0%	57.9%	60.3%	63.4%	61.4%	59.6%	61.2%	57.8%	56.2%
Other	51.0%	49.6%	45.3%	46.1%	54.0%	56.1%	58.3%	59.3%	58.6%	55.9%	55.8%

Source: Substance Abuse and Mental Health Data Archive, 2010

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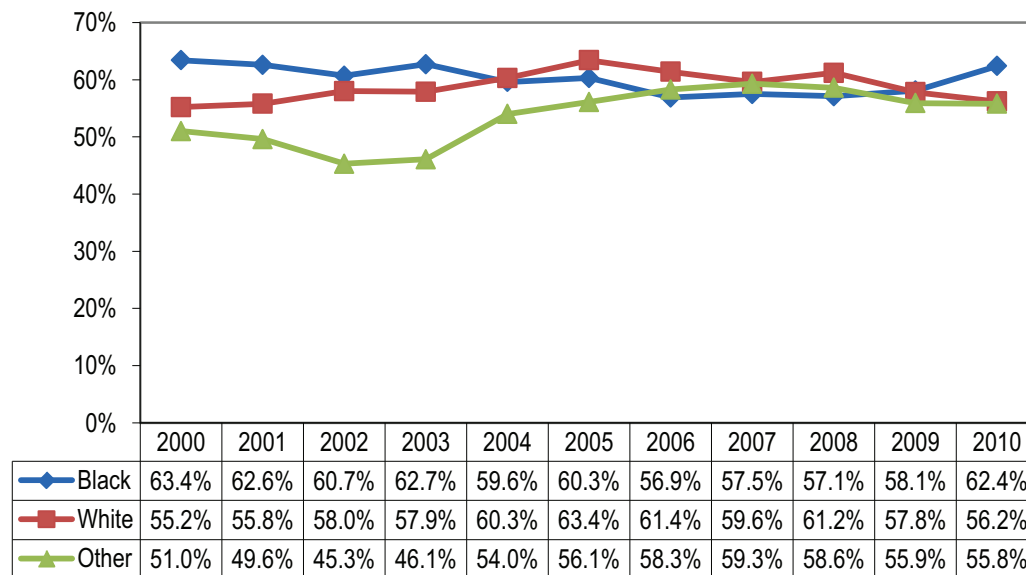
Figure 10.6 Percentage of Indiana Treatment Episodes with Use of Two and Three Substances Reported at Treatment Admission, by Race (Treatment Episode Data Set, 2010)

	Black	White	Other
■ 3 Drugs Reported	23.8%	28.9%	26.0%
■ 2 Drugs Reported	33.5%	27.3%	29.8%
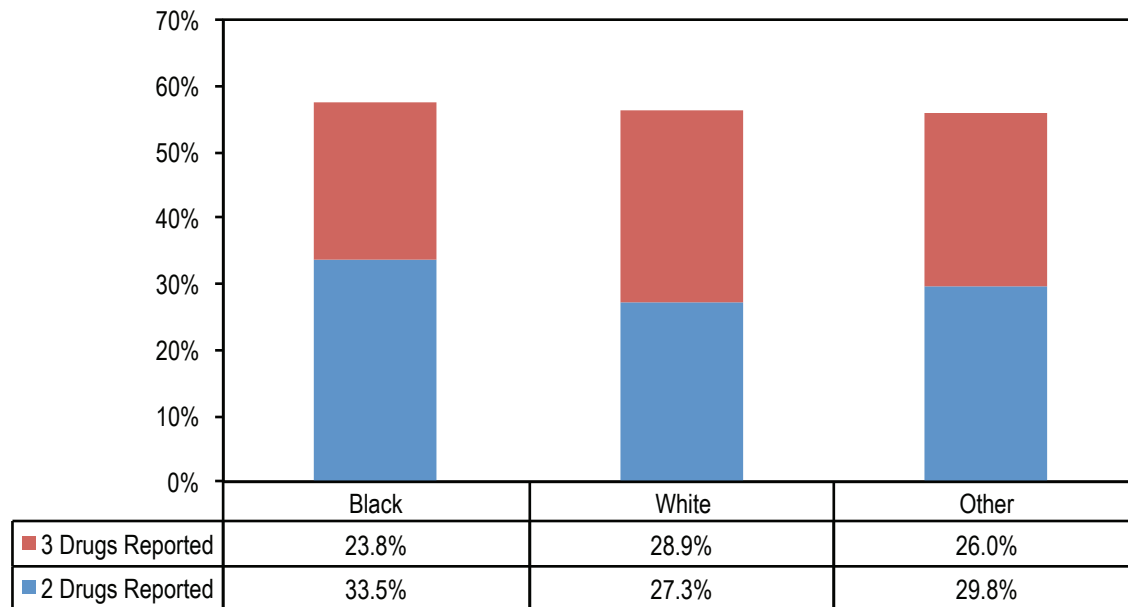
Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 10.7 Percentage of Indiana Treatment Episodes with Polysubstance Abuse (Use of at Least Two Substances) Reported at Treatment Admission, by Age (Treatment Episode Data Set, 2000–2010)

|	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Under 18	51.0%	54.0%	51.5%	56.8%	55.6%	61.6%	59.7%	57.5%	53.8%	50.9%	43.2%
18 to 24	63.1%	64.1%	65.6%	65.2%	66.3%	68.0%	65.8%	63.7%	66.1%	62.3%	59.2%
25 to 34	61.5%	62.1%	62.8%	61.8%	63.4%	65.6%	64.0%	63.7%	64.2%	61.9%	60.4%
35 to 44	55.0%	54.6%	55.3%	55.8%	58.7%	61.3%	58.5%	57.0%	58.2%	57.5%	55.4%
45 to 54	46.6%	42.8%	46.3%	46.1%	49.7%	53.5%	52.4%	50.6%	51.0%	47.6%	50.3%
55 and Over	23.1%	21.4%	23.4%	24.2%	28.6%	34.8%	36.0%	34.7%	32.4%	34.2%	39.9%

Source: Substance Abuse and Mental Health Data Archive, 2010

Figure 10.8 Percentage of Indiana Treatment Episodes with Use of Two and Three Substances Reported at Treatment Admission, by Age (Treatment Episode Data Set, 2010)

	Under 18	18 to 24	25 to 34	35 to 44	45 to 54	55 and Over
■ 3 Drugs Reported	19.0%	28.8%	31.7%	27.8%	22.8%	15.0%
■ 2 Drugs Reported	24.2%	30.4%	28.7%	27.6%	27.5%	24.9%

Source: Substance Abuse and Mental Health Data Archive, 2010

Polysubstance Abuse Clusters in Indiana

Statewide Analysis—We conducted a cluster analysis of 2010 Indiana TEDS data to determine the combinations of drugs currently used by polysubstance abusers within the state. The cluster analysis was completed in two steps following standardized methods (Hair, Anderson, Tatham, & Black, 1995).

In the first step, we performed a hierarchical cluster analysis specifying solutions with 2 to 20 clusters using Ward's method (Hair et al., 1995). Second, we used the results of the hierarchical cluster analysis to create "seed points" to serve as cluster centroids for follow-up K-Means cluster analyses, specifying 2 to 20 clusters. We selected this two-step method because it produces clusters that are more easily interpretable (Hair et al., 1995).

Then, to select the final classification solution, we compared the cubic clustering criteria (the expected value of the within sum of squares) with the face-validity of the set of drugs across the clusters (Hair et al., 1995). The results of the K-Means cluster analyses indicated that an 8-cluster solution best fit the available data.

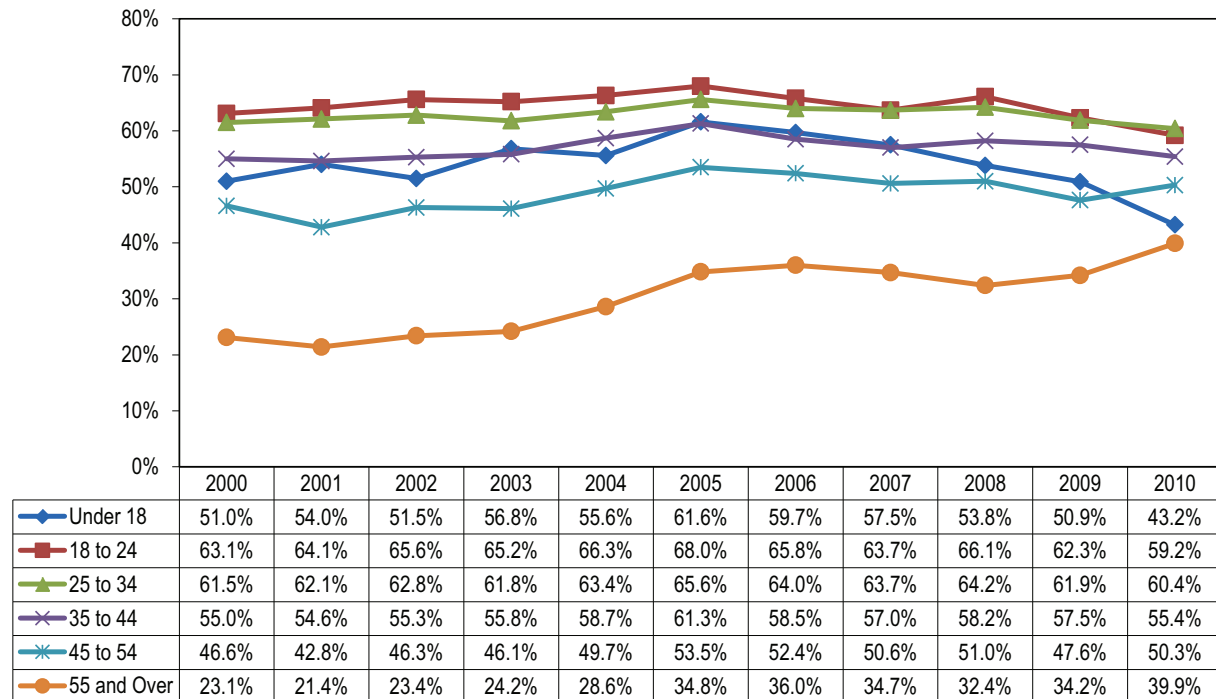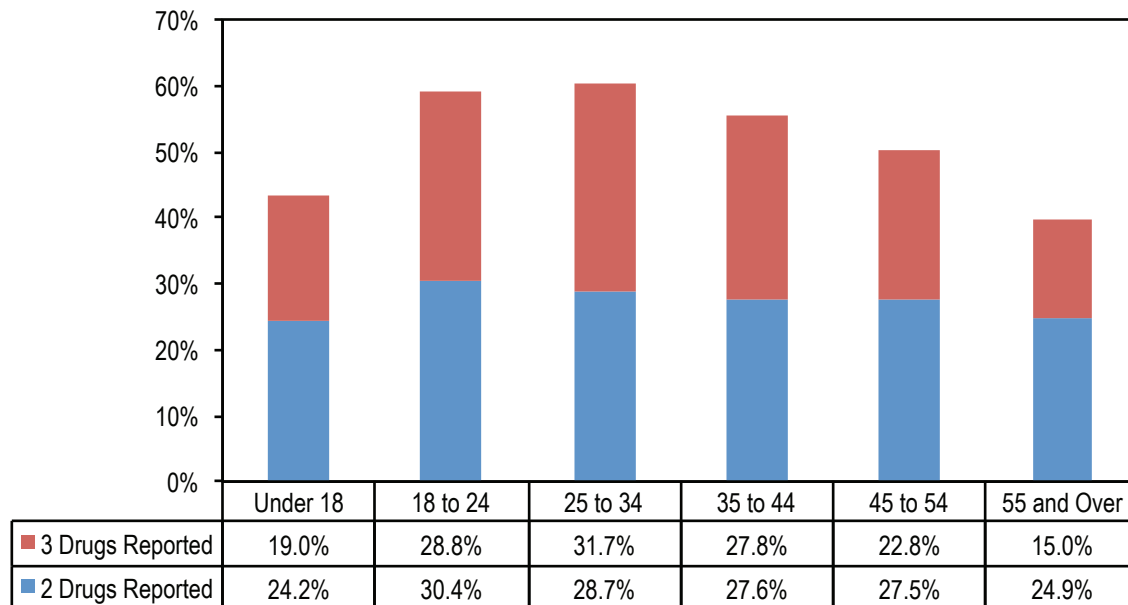Tables 10.1 and 10.2, pages 180-181, show the image and identity matrices for the 8-cluster solution.

The image matrix represents the percentage of individuals within a cluster that used each specific drug. Using cluster 3 as an example, 81% of the individuals in this cluster used alcohol, 100% used cocaine, 63% used marijuana, 0% used heroin and so on. Due to the nature of the 2010 TEDS data, a specific drug was considered part of a cluster if at least 40% of the individuals within the cluster used the drug. The use of this more liberal criterion was required to aid in the interpretability of the results of the cluster analysis. Only two clusters were affected by this practice: cluster 6 and cluster 7.

The identity matrix presents the makeup of each cluster using a series of ones and zeros. For each specific drug within a cluster, a "1" indicates that at least 40% of the people within that cluster report using the drug; hence that drug is considered to be part of the cluster. A "0" indicates that less than 40% of the people within the cluster report using the drug, thus the drug is not considered to be part of the cluster.

The most frequently occurring drug clusters in Indiana were clusters 1, 3, and 2. These clusters accounted for more than half of polysubstance users in the analysis (56.7%). Individuals in cluster 1 reported using a combination of alcohol and marijuana. Polysubstance users in cluster 3 reported using a

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combination of alcohol, cocaine, and marijuana. The individuals making up cluster 2 reported using alcohol, marijuana, and a drug in the other drug category. The remaining five clusters each accounted for 4.8% to 11.4% of polysubstance users.

Alcohol and marijuana were the most commonly reported drugs, with both appearing in six of the eight clusters. The second most frequently reported drug category was made up of opiates/synthetic drugs, and it was included in two of the eight clusters. Cocaine, heroin, methamphetamine, benzodiazepines, and "other" drugs were each represented in one cluster. For detailed information on all eight clusters, see Table 10.3 (page 181).

Table 10.4 (page 182) breaks down the clusters by demographic characteristics. In terms of gender, men accounted for 50% or more of the individuals within seven of the eight clusters. Women comprised just over 52% of the individuals in cluster 4 (alcohol and opiates/ synthetics). The difference in the percentages of men vs. women was smaller in cluster 5 (alcohol, marijuana, and methamphetamine) indicating that women may be somewhat more likely to use these combinations of drugs as well. Clusters 1, 2, and 7 were the most male-oriented clusters.

Racially, whites composed the largest percentage of polysubstance abusers across every cluster. Blacks, however, were more strongly represented in cluster 3, the only cluster that contained cocaine. Whites represented more than 85% of the population in clusters 4, 5, and 7. These three clusters included opiates/ synthetics or methamphetamine.

Over 50% of polysubstance abusers within the eight clusters were between the ages of 21 and 39. The youngest polysubstance users, those between the ages of 12 and 20, were more likely to be found in clusters 1 (alcohol and marijuana), 7 (alcohol, marijuana, and opiates/synthetics), and 8 (alcohol, marijuana, and benzodiazepines). Each of these clusters contained both alcohol and marijuana. Older polysubstance users, those 40 years of age and above, were most strongly represented in cluster 3 (alcohol, cocaine, and marijuana).

County-Level Analyses—We completed cluster analyses for each county within Indiana using the 2012 county-level TEDS data set. Appendix 10B (pages 185-192) lists the results of the cluster analysis for each county. Similar to the statewide findings, the most common polysubstance cluster was composed of both alcohol and marijuana, the top-ranked cluster in 55 of 92 counties.

Table 10.1   Image Matrix for Polysubstance Abuse Clusters (Treatment Episode Data Set, 2010)

Image Matrix	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6	Cluster 7	Cluster 8
Drug								
alcohol	1.00	0.87	0.81	0.52	0.50	0.31	0.45	0.56
cocaine	0.00	0.00	1.00	0.19	0.08	0.29	0.07	0.05
marijuana	0.99	0.56	0.63	0.00	0.81	0.41	1.00	0.84
heroin	0.00	0.01	0.00	0.02	0.02	1.00	0.00	0.06
methadone	0.01	0.00	0.01	0.03	0.01	0.01	0.01	0.05
opiates/synthetics	0.00	0.00	0.00	1.00	0.08	0.29	1.00	0.00
pcp	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01
hallucinogens	0.02	0.00	0.00	0.00	0.01	0.01	0.00	0.02
methamphetamine	0.00	0.03	0.04	0.17	1.00	0.06	000	0.00
amphetamines	0.02	0.01	0.01	0.03	0.01	0.01	0.00	0.04
stimulants	0.00	0.00	0.00	0.01	0.00	0.00	0.00	0.01
benzodiazepines	0.00	0.01	0.01	0.37	0.07	0.07	0.18	0.88
tranquilizers	0.00	0.01	0.00	0.01	0.00	0.00	0.00	0.00
barbiturates	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
sedatives/hypnotics	0.01	0.00	0.01	0.02	0.01	0.02	0.02	0.03
inhalants	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
over-the-counter	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.01
other drug	0.00	1.00	0.12	0.16	0.10	0.14	0.06	0.05

Note: Each number in the image matrix represents the percentage of individuals within a cluster that used each individual drug. For example, in cluster 1, 100% used alcohol, 100% used cocaine, 100% used marijuana, 0% used heroin and so on.
Source: Substance Abuse and Mental Health Data Archive, 2010

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Table 10.2 Identity Matrix for Polysubstance Abuse Clusters (Treatment Episode Data Set, 2010)

Image Matrix	Cluster 1	Cluster 2	Cluster 3	Cluster 4	Cluster 5	Cluster 6	Cluster 7	Cluster 8
Drug								
alcohol	1	1	1	1	1	0	1	1
cocaine	0	0	1	0	0	0	0	0
marijuana	1	1	1	0	1	1	1	1
heroin	0	0	0	0	0	1	0	0
methadone	0	0	0	0	0	0	0	0
opiates/synthetics	0	0	0	1	0	0	1	0
pcp	0	0	0	0	0	0	0	0
hallucinogens	0	0	0	0	0	0	0	0
methamphetamine	0	0	0	0	1	0	0	0
amphetamines	0	0	0	0	0	0	0	0
stimulants	0	0	0	0	0	0	0	0
benzodiazepines	0	0	0	0	0	0	0	1
tranquilizers	0	0	0	0	0	0	0	0
barbiturates	0	0	0	0	0	0	0	0
sedatives/hypnotics	0	0	0	0	0	0	0	0
Inhalants	0	0	0	0	0	0	0	0
over-the-counter	0	0	0	0	0	0	0	0
other drug	0	1	0	0	0	0	0	0

Note: The identity matrix simplifies the information from the image matrix by using the percentages to assign a "1" or "0" to each drug. A "1" indicates that at least 40% of people in a cluster used the drug, and a "0" indicates that less than 40% of people in a cluster used the drug. The binary use of "1" and "0" provides a clearer picture of the drugs most commonly used within each cluster.
*Due to the nature of the data this cluster was composed of one or more drugs where at least 50% of individuals reported using the drug and at least one other drug where at least 40% of individuals reported using the drug.
Source: Substance Abuse and Mental Health Data Archive, 2010

Table 10.3 Number and Percentage of Treatment Episodes within Each Cluster in Indiana (Treatment Episode Data Set, 2010)

Cluster	Number of Treatment Episodes Within Cluster	Percentage)
1 – Alcohol/Marijuana	3,250	24.3
3 – Alcohol/Cocaine/Marijuana	2,371	17.7
2 – Alcohol/Marijuana/Other Drug	1,971	14.7
5 – Alcohol/Marijuana/Methamphetamine	1,526	11.4
7 – Alcohol/Marijuana/Opiates-Synthetics	1,282	9.6
4 – Alcohol/Opiates-Synthetics	1,232	9.2
6 – Marijuana/Heroin	1,086	8.1
8 – Alcohol/Marijuana/Benzodiazepines	646	4.8
Total	**13,364**	**100.0**

Source: Substance Abuse and Mental Health Data Archive, 2010

Table 10.4 Demographic Characteristics of Polysubstance Abusers within Clusters (Treatment Episode Data Set, 2010)

	Cluster 1 N	Cluster 1 %	Cluster 2 N	Cluster 2 %	Cluster 3 N	Cluster 3 %	Cluster 4 N	Cluster 4 %
Gender								
Male	2428	74.7	1342	68.1	1449	61.1	588	47.7
Female	822	25.3	629	31.9	922	38.9	644	52.3
Race								
White	2272	69.9	1466	74.4	1241	52.3	1097	89.0
Black	633	19.5	276	14.0	918	38.7	34	2.8
Other	345	10.6	229	11.6	212	8.9	101	8.2
Ethnicity								
Non-Hispanic	3071	94.5	1863	94.5	2235	94.3	1207	98.0
Hispanic	179	5.5	108	5.5	136	5.7	25	2.0
Age								
12-20	646	19.9	292	14.8	93	3.9	71	5.8
21-29	1308	40.2	635	32.2	499	21.0	474	38.5
30-39	709	21.8	441	22.4	719	30.3	378	30.7
40-49	408	12.6	389	19.7	768	32.4	210	17.0
50 and Older	179	5.1	214	11.0	292	12.3	99	8.0
Education								
Less than H.S.	1113	34.2	696	35.3	806	34.0	346	28.1
H.S. Diploma	1352	41.6	788	40.0	890	37.5	493	40.0
Above H.S.	620	19.1	391	19.8	484	20.4	281	22.8
Unknown	165	5.1	96	4.9	191	8.1	112	9.1

	Cluster 5 N	Cluster 5 %	Cluster 6 N	Cluster 6 %	Cluster 7 N	Cluster 7 %	Cluster 8 N	Cluster 8 %
Gender								
Male	861	56.4	646	59.5	822	64.1	389	60.2
Female	665	43.6	440	40.5	460	35.9	257	39.8
Race								
White	1391	91.2	853	78.5	1115	87.0	542	83.9
Black	34	2.2	105	9.7	45	3.5	41	6.3
Other	101	6.6	128	11.8	122	9.5	63	9.8
Ethnicity								
Non-Hispanic	1492	97.8	1030	94.8	1249	97.4	632	97.8
Hispanic	34	2.2	56	5.2	33	2.6	14	2.2
Age								
12-20	131	8.6	102	9.4	212	16.5	156	24.1
21-29	575	37.7	520	47.9	640	49.9	261	40.4
30-39	532	34.9	279	25.7	286	22.3	135	20.9
40-49	225	14.7	94	8.7	105	8.2	56	8.7
50 and Older	63	4.1	91	8.4	39	3.0	38	5.9
Education								
Less than H.S.	611	40.0	295	27.2	383	29.9	251	38.9
H.S. Diploma	658	43.1	425	39.1	546	42.6	251	38.9
Above H.S.	220	14.4	237	21.8	263	20.5	100	15.5
Unknown	37	2.4	129	11.9	90	7.0	44	6.8

Source: Substance Abuse and Mental Health Data Archive, 2010

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APPENDIX 10A

Number and Percentage of Treatment Episodes with Polysubstance Abuse (Use of Two and Three Substances) Reported at Treatment Admission in Indiana, by County (Substance Abuse Population by County/Treatment Episode Data Set, 2012)

County	Treatment Episodes Total	Use of 2 Substances Number	Use of 2 Substances Percentage	Use of 3 Substances Number	Use of 3 Substances Percentage	Polysubstance Abuse Number	Polysubstance Abuse Percentage
Adams	138	48	34.8%	36	26.1%	84	60.9%
Allen	1822	6876	37.7%	601	33.0%	1288	70.7%
Bartholomew	661	168	25.4%	190	28.7%	358	54.1%
Benton	41	9	22.0%	21	51.2%	30	73.2%
Blackford	51	16	31.4%	7	13.7%	23	45.1%
Boone	199	67	33.7%	55	27.6%	122	61.3%
Brown	116	35	30.2%	32	27.6%	67	57.8%
Carroll	123	29	23.6%	65	52.8%	94	76.4%
Cass	273	43	20.5%	174	63.7%	230	84.2%
Clark	418	193	22.5%	123	29.4%	217	51.9%
Clay	173	44	39.9%	60	34.7%	129	74.6%
Clinton	146	60	23.3%	50	34.2%	84	57.5%
Crawford	57	22	28.1%	18	31.6%	34	59.6%
Daviess	188	73	25.0%	65	34.6%	112	59.6%
Dearborn	450	129	28.7%	190	42.2%	319	70.9%
Decatur	193	98	24.9%	33	17.1%	81	42.0%
DeKalb	205	102	31.2%	38	18.5%	102	39.8%
Delaware	1168	592	28.7%	194	16.6%	529	45.3%
DuBois	358	136	24.9%	131	36.6%	220	61.5%
Elkhart	1040	384	36.9%	152	14.6%	536	51.5%
Fayette	219	43	19.6%	55	25.1%	98	44.7%
Floyd	182	41	22.5%	67	36.8%	108	59.3%
Fountain	81	23	28.4%	44	54.3%	67	82.7%
Franklin	91	30	33.0%	26	28.6%	56	61.6%
Fulton	215	63	29.3%	122	56.7%	185	86.0%
Gibson	204	73	35.8%	89	43.6%	162	79.4%
Grant	448	113	25.2%	234	52.2%	347	77.4%
Greene	176	37	21.0%	65	36.9%	102	57.9%
Hamilton	699	270	38.6%	178	25.5%	448	64.1%
Hancock	147	57	38.8%	45	30.6%	102	69.4%
Harrison	119	24	20.2%	26	21.8%	50	42.0%
Hendricks	328	79	24.1%	45	13.7%	124	37.8%
Henry	305	81	26.6%	68	22.3%	149	48.9%
Howard	588	185	31.5%	248	42.2%	433	73.7%
Huntington	147	47	32.0%	39	26.5%	86	58.5%
Jackson	271	72	26.6%	81	29.9%	153	56.5%
Jasper	94	36	38.3%	38	40.4%	74	78.7%
Jay	126	34	27.0%	24	19.0%	58	46.0%
Jefferson	292	57	19.5%	108	37.0%	165	56.5%
Jennings	204	51	25.0%	66	32.4%	117	57.4%
Johnson	207	75	36.2%	52	25.1%	127	61.3%
Knox	442	134	30.3%	141	31.9%	275	62.2%
Kosciusko	314	82	26.1%	142	45.2%	224	71.3%
LaGrange	172	53	30.8%	79	45.9%	132	76.7%
Lake	2803	784	28.0%	667	23.8%	1451	51.8%
LaPorte	637	149	23.4%	181	28.4%	330	51.8%

County	Treatment Episodes	Use of 2 Substances		Use of 3 Substances		Polysubstance Abuse	
	Total	Number	Percentage	Number	Percentage	Number	Percentage
Lawrence	432	98	22.7%	75	17.4%	173	40.1%
Madison	804	222	27.6%	372	46.3%	594	73.9%
Marion	4091	1265	30.9%	1323	32.3%	2588	63.2%
Marshall	236	78	33.1%	73	30.9%	151	64.0%
Martin	47	9	19.1%	18	38.3%	27	57.4%
Miami	241	64	26.6%	138	57.3%	202	83.9%
Monroe	1505	385	25.6%	318	21.1%	703	46.7%
Montgomery	357	116	32.5%	152	42.6%	268	75.1%
Morgan	540	116	21.5%	96	17.8%	212	39.3%
Newton	44	9	20.5%	26	59.1%	35	79.6%
Noble	418	152	36.4%	166	39.7%	318	76.1%
Ohio	38	14	36.8%	11	28.9%	25	65.7%
Orange	105	40	38.1%	36	34.3%	76	72.4%
Owen	265	65	24.5%	47	17.7%	112	42.2%
Parke	135	33	24.4%	51	37.8%	84	62.2%
Perry	148	35	23.6%	67	45.3%	102	68.9%
Pike	51	24	47.1%	15	29.4%	39	76.5%
Porter	713	197	27.6%	276	38.7%	473	66.3%
Posey	118	26	22.0%	64	54.2%	90	76.2%
Pulaski	104	40	38.5%	49	47.1%	89	85.6%
Putnam	215	101	47.0%	54	25.1%	155	72.1%
Randolph	188	47	25.0%	59	31.4%	106	56.4%
Ripley	189	40	21.2%	51	27.0%	91	48.2%
Rush	137	39	28.5%	35	25.5%	74	54.0%
Saint Joseph	1293	456	35.3%	361	27.9%	820	63.2%
Scott	189	27	14.3%	78	41.3%	105	55.6%
Shelby	78	25	32.1%	29	37.2%	54	69.3%
Spencer	195	44	22.6%	96	49.2%	140	71.8%
Starke	203	58	28.6%	89	43.8%	147	72.4%
Steuben	194	71	36.6%	84	43.3%	155	79.9%
Sullivan	102	20	19.6%	49	48.0%	69	67.6%
Switzerland	41	12	29.3%	9	22.0%	21	51.3%
Tippecanoe	469	145	30.9%	231	49.3%	376	80.2%
Tipton	59	21	35.6%	20	33.9%	41	69.5%
Union	33	7	21.2%	14	42.4%	21	63.6%
Vanderburgh	1367	328	24.0%	755	55.2%	1083	79.2%
Vermillion	130	48	36.9%	42	32.3%	90	69.2%
Vigo	759	232	30.6%	331	43.6%	563	74.2%
Wabash	183	51	27.9%	86	47.0%	137	74.9%
Warren	29	6	20.7%	18	62.1%	24	82.8%
Warrick	278	57	20.5%	160	57.6%	217	78.1%
Washington	68	14	20.6%	19	27.9%	33	48.5%
Wayne	594	162	27.3%	182	30.6%	344	57.9%
Wells	122	40	32.8%	43	35.2%	83	68.0%
White	148	37	25.0%	94	63.5%	131	88.5%
Whitley	124	30	24.2%	72	58.1%	102	82.3%
Indiana	**35,110**	**10,223**	**29.1%**	**11,599**	**33.0%**	**21,822**	**62.1%**

Note: The category "Polysubstance Abuse" is an aggregate of "Use of 2 Substances" and "Use of 3 Substances."
We calculated the percentages by dividing the number of reported polysubstance abuse by the number of treatment episodes.
Information on treatment episodes <5 was suppressed due to confidentiality constraints.
Source: Indiana Family and Social Services Administration, 2013

APPENDIX 10B

Combination of Drugs Used Among Polysubstance Abusers in Substance Abuse Treatment, by County (Based on Cluster Analysis of Substance Abuse Population by County/Treatment Episode Data Set, 2012)

County	Cluster #	Cluster Composition	N	%
Adams				
	1	alcohol/marijuana	38	45.2
	2	alcohol/other drug	19	22.6
	3	alcohol/marijuana/opiates-synthetics	14	16.7
	4	cocaine/heroin	13	15.5
	Total		84	100.0
Allen				
	1	alcohol/marijuana	434	33.7
	3	alcohol/cocaine/marijuana	215	16.7
	5	cocaine/heroin	156	12.1
	2	alcohol/marijuana/other drug	137	10.6
	7	alcohol/marijuana/opiates-synthetics	90	7.0
	4	alcohol/cocaine	88	6.8
	8	cocaine/marijuana	65	5.0
	6	cocaine/heroin/amphetamine	58	4.5
	9	alcohol/methamphetamine	45	3.5
	Total		1288	100.0
Bartholomew				
	2	alcohol/marijuana	75	20.9
	1	alcohol/opiates-synthetics	67	18.7
	3	marijuana/methamphetamine	67	18.7
	6	alcohol/methamphetamine	41	11.5
	5	alcohol/other drug	37	10.3
	7	cocaine/marijuana	36	10.1
	4	opiates-synthetics/methamphetamine	35	9.8
	Total		358	100.0
Benton				
	2	alcohol/marijuana	8	26.7
	1	alcohol/marijuana/other drug	7	23.3
	3	alcohol/other drug	6	20.0
	4	alcohol/marijuana/amphetamine	3	10.0
	5	alcohol/marijuana/methamphetamine	3	10.0
	6	marijuana/benzodiazepines	3	10.0
	Total		30	100.0
Blackford				
	2	marijuana/opiates-synthetics	12	52.2
	1	alcohol/marijuana	11	47.8
	Total		23	100.0
Boone				
	1	alcohol/marijuana	42	34.4
	2	alcohol/cocaine/marijuana	22	18.0
	7	opiates-synthetics/other drug	14	11.5
	3	alcohol/marijuana/opiates-synthetics	12	9.8
	4	alcohol/marijuana/heroin	11	9.0

County	Cluster #	Cluster Composition	N	%
Boone (cont.)	5	marijuana/heroin/opiates-synthetics	11	9.0
	6*	alcohol/benzodiazepines	10	8.2
	Total		122	100.0
Brown				
	1	alcohol/marijuana	40	59.7
	2	opiates-synthetics/methamphetamine	27	40.3
	Total		67	100.0
Carroll				
	1	alcohol/marijuana	33	35.1
	2	alcohol/marijuana/other drug	27	28.7
	4	alcohol/heroin	20	21.3
	3	opiates-synthetics/benzodiazepines	14	14.9
	Total		94	100.0
Cass				
	1	alcohol/marijuana/other drug	61	26.6
	2	alcohol/other drug	58	25.2
	3	alcohol/marijuana	53	23.0
	4	alcohol/cocaine/marijuana	29	12.6
	5	marijuana/other drug	29	12.6
	Total		230	100.0
Cass				
	1	alcohol/marijuana/other drug	61	26.6
	2	alcohol/other drug	58	25.2
	3	alcohol/marijuana	53	23.0
	4	alcohol/cocaine/marijuana	29	12.6
	5	marijuana/other drug	29	12.6
	Total		230	100.0
Clark				
	3	alcohol/cocaine/marijuana	46	21.2
	1	alcohol/marijuana	38	17.5
	4	alcohol/opiates-synthetics/benzodiazepines	34	15.7
	2	marijuana/opiates-synthetics	33	15.2
	6	heroin/opiates-synthetics	26	12.0
	5	opiates-synthetics/benzodiazepines	24	11.1
	7	alcohol/methamphetamine	16	7.3
	Total		217	100.0
Clay				
	4	alcohol/other drug	41	31.8
	1	alcohol/marijuana	31	24.0
	3	alcohol/marijuana/methamphetamine	29	22.5
	2	alcohol/marijuana/other drug	28	21.7
	Total		129	100.0
Clinton				
	1	alcohol/marijuana	37	44.1

County	Cluster #	Cluster Composition	N	%
Clinton (cont.)	3	marijuana/opiates-synthetics	27	32.1
	2	alcohol/marijuana/other drug	20	23.8
	Total		84	100.0
Crawford				
		alcohol/marijuana/methamphetamine	17	50.0
		opiates-synthetics/other drug	17	50.0
	Total		34	100.0
Daviess				
	2	alcohol/marijuana	57	50.9
	3	marijuana/opiates-synthetics/methamphetamine	30	26.8
	1	alcohol/opiates-synthetics	25	22.3
	Total		112	100.0
Dearborn				
	3	alcohol/marijuana	75	23.5
	2	alcohol/marijuana/opiates-synthetics	49	15.4
	6	alcohol/other drug	44	13.8
	4	marijuana/opiates-synthetics	40	12.5
	5	marijuana/heroin	34	10.7
	1	heroin/opiates-synthetics	31	9.7
	7	cocaine/heroin	25	7.8
	8	cocaine/opiates-synthetics	21	6.6
	Total		319	100.0
Decatur				
	2	alcohol/marijuana	37	45.7
	3	alcohol/opiates-synthetics	25	30.9
	1	alcohol/methamphetamine	19	23.5
	Total		81	100.0
DeKalb				
	1	alcohol/marijuana	35	34.3
	2	alcohol/marijuana/methamphetamine	31	30.4
	3	cocaine/marijuana	13	12.7
	4	alcohol/marijuana/other drug	12	11.8
	5	marijuana/opiates-synthetics	11	10.8
	Total		102	100.0
Delaware				
	1	alcohol/marijuana	146	27.6
	3	marijuana/opiates-synthetics	94	17.8
	2	alcohol/cocaine/marijuana	76	14.4
	5	alcohol/marijuana/opiates-synthetics	58	11.0
	6	alcohol/benzodiazepines	48	9.1
	4	marijuana/benzodiazepines	43	8.1
	7	alcohol/marijuana/other drug	32	6.0

County	Cluster #	Cluster Composition	N	%
Delaware (cont.)	8	opiates-synthetics/methamphetamine	32	6.0
	Total		529	100.0
DuBois				
	1	alcohol/marijuana	79	35.9
	2	alcohol/marijuana/methamphetamine	41	18.6
	6	alcohol/opiates-synthetics	36	16.4
	3	alcohol/marijuana/other drug	25	11.4
	5	marijuana/benzodiazepines	23	10.5
	4	marijuana/opiates-synthetics/methamphetamine	16	7.3
	Total		220	100.0
Elkhart				
	2	alcohol/marijuana	252	47.0
	1	alcohol/cocaine/marijuana	93	17.4
	3	alcohol/marijuana/methamphetamine	78	14.6
	4	alcohol/opiates-synthetics	54	10.1
	6	alcohol/other drug	31	5.8
	5	cocaine/heroin	28	5.2
	Total		536	100.0
Fayette				
	1	alcohol/marijuana	31	31.6
	5	heroin/opiates-synthetics	20	20.4
	2	marijuana/opiates-synthetics/benzodiazepines	16	16.3
	3	alcohol/opiates-synthetics	16	16.3
	4	alcohol/other drug	15	15.3
	Total		98	100.0
Floyd				
	2	alcohol/opiates-synthetics	63	58.3
	1	alcohol/marijuana	45	41.7
	Total		108	100.0
Fountain				
	1	alcohol/marijuana	25	37.3
	2	marijuana/opiates-synthetics	25	37.3
	3	marijuana/methamphetamine	17	25.4
	Total		67	100.0
Franklin				
	3	heroin/opiates-synthetics	20	35.7
	2	alcohol/marijuana/other drug	19	33.9
	1	alcohol/marijuana	17	30.4
	Total		56	100.0
Fulton				
	6	alcohol/other drug	40	21.6
	2	alcohol/marijuana/methamphetamine	35	18.9
	1	alcohol/marijuana/other drug	34	18.4
	5	alcohol/marijuana	30	16.2

County	Cluster #	Cluster Composition	N	%
Fulton (cont.)	4	marijuana/other drug	28	15.1
	3	alcohol/cocaine	18	9.7
	Total		185	100.0
Gibson				
	2	alcohol/marijuana/other drug	47	16.7
	1	alcohol/marijuana/ methamphetamine	45	27.8
	3	alcohol/other drug	45	27.8
	4	marijuana/opiates-synthetics	25	15.4
	Total		162	100.0
Grant				
	3	alcohol/marijuana/other drug	89	25.6
	2	alcohol/marijuana	69	19.9
	4	alcohol/cocaine/ marijuana	44	12.7
	1	marijuana/opiates-synthetics	40	11.5
	5	alcohol/marijuana/ opiates-synthetics	40	11.5
	7	marijuana/other drug	35	10.1
	6	alcohol/other drug	30	8.6
	Total		347	100.0
Greene				
	1	alcohol/marijuana	66	64.7
	2	marijuana/opiates-synthetics	36	35.3
	Total		102	100.0
Hamilton				
	1	alcohol/marijuana	237	52.9
	4	alcohol/cocaine/ marijuana	44	9.8
	5	marijuana/heroin/ opiates-synthetics	40	8.9
	7	alcohol/opiates-synthetics	37	8.3
	2	alcohol/marijuana/ benzodiazepines	31	6.9
	6	marijuana/ opiates-synthetics/ benzodiazepines	31	6.9
	3	alcohol/marijuana/ opiates-synthetics	28	6.3
	Total		448	100.0
Hancock				
	3	alcohol/marijuana	40	39.2
	1	alcohol/opiates-synthetics	22	21.6
	2	cocaine/marijuana/ opiates-synthetics	16	15.7
	4	alcohol/marijuana/ benzodiazepines	12	11.8
	5	alcohol/cocaine/ marijuana	12	11.8
	Total		102	100.0
Harrison				
	1	marijuana/opiates-synthetics	26	52.0
	2*	alcohol/marijuana	24	48.0
	Total		50	100.0
Hendricks				
	1	alcohol/marijuana	67	54.0

County	Cluster #	Cluster Composition	N	%
Hendricks (cont.)	2*	marijuana/opiates-synthetics	57	46.0
	Total		124	100.0
Henry				
	3	opiates-synthetics/ benzodiazepines	30	20.1
	1	alcohol/marijuana	28	18.8
	5	alcohol/marijuana/other drug	21	14.1
	4	marijuana/opiates-synthetics	20	13.4
	6	marijuana/ opiates-synthetics/ benzodiazepines	19	12.8
	7	alcohol/opiates-synthetics	19	12.8
	2	alcohol/cocaine/ marijuana	12	8.1
	Total		149	100.0
Howard				
	4	alcohol/marijuana	92	21.2
	8*	opiates-synthetics/ benzodiazepines	80	18.5
	1	marijuana/opiates-synthetics	56	12.9
	2	alcohol/other drug	47	10.9
	3	alcohol/marijuana/other drug	43	9.9
	7	alcohol/cocaine/ marijuana	43	9.9
	6	alcohol/marijuana/ methamphetamine	40	9.2
	5	marijuana/ opiates-synthetics/ benzodiazepines	32	7.4
	Total		433	100.0
Huntington				
	1	alcohol/marijuana	18	20.9
	2	cocaine/heroin/ amphetamine	18	20.9
	4	cocaine/heroin	17	19.8
	3	alcohol/other drug	13	15.1
	5	cocaine/amphetamine	12	14.0
	6	heroin/pcp	8	9.3
	Total		86	100.0
Jackson				
	1	marijuana/ methamphetamine	38	24.8
	3	alcohol/marijuana	32	20.9
	4	alcohol/marijuana/ methamphetamine	29	19.0
	5	marijuana/opiates-synthetics	28	18.3
	2	alcohol/opiates-synthetics	26	17.0
	Total		153	100.0
Jasper				
	1	alcohol/marijuana/other drug	49	66.2
	2	heroin/opiates-synthetics	25	33.8
	Total		74	100.0
Jay				
	1*	marijuana/opiates-synthetics	33	57.0

County	Cluster #	Cluster Composition	N	%
Jay (cont.)	2	alcohol/marijuana	25	43.0
	Total		58	100.0
Jefferson				
	1	alcohol/marijuana	32	19.4
	3	alcohol/marijuana/opiates-synthetics	30	18.2
	2	alcohol/opiates-synthetics	24	14.5
	5	cocaine/marijuana	23	13.9
	6	marijuana/opiates-synthetics/methamphetamine	16	9.7
	8	marijuana/opiates-synthetics/other drug	15	9.1
	4	alcohol/marijuana/other drug	13	7.9
	7	alcohol/methamphetamine	12	7.3
	Total		165	100.0
Jennings				
	2	alcohol/marijuana	58	49.6
	1	alcohol/marijuana/methamphetamine	37	31.6
	3	opiates-synthetics/methamphetamine	22	18.8
	Total		117	100.0
Johnson				
	1	marijuana/opiates-synthetics	19	15.0
	2	alcohol/opiates-synthetics/benzodiazepines	17	13.4
	3	alcohol/marijuana	42	33.1
	4	opiates-synthetics/other drug	22	17.3
	5	alcohol/cocaine	14	11.0
	6	marijuana/heroin	13	10.2
	Total		127	100.0
Knox				
	4	alcohol/marijuana	70	25.5
	1	alcohol/marijuana/methamphetamine	53	19.3
	6	marijuana/methamphetamine	53	19.3
	5	alcohol/methamphetamine	41	14.9
	3	alcohol/marijuana/opiates-synthetics	33	12.0
	2	opiates-synthetics/benzodiazepines	25	9.1
	Total		275	100.0
Kosciusko				
	1	cocaine/amphetamine	58	25.9
	2	cocaine/heroin/amphetamine	43	19.2
	3	cocaine/heroin	56	25.0
	4	heroin/amphetamine	35	15.6
	5	alcohol/marijuana/other drug	32	14.3
	Total		224	100.0
LaGrange				
	3	alcohol/marijuana	38	28.8
	1	alcohol/marijuana/methamphetamine	30	22.7
	5	alcohol/cocaine/marijuana	26	19.7

County	Cluster #	Cluster Composition	N	%
LaGrange (cont.)	2	marijuana/opiates-synthetics	19	14.4
	4	alcohol/marijuana/other drug	19	14.4
	Total		132	100.0
Lake				
	6	alcohol/marijuana	334	23.0
	3	alcohol/other drug	183	12.6
	1	alcohol/cocaine/marijuana	178	12.3
	7	alcohol/cocaine	164	11.3
	8	marijuana/opiates-synthetics	155	10.7
	5	cocaine/heroin	143	9.9
	2	alcohol/marijuana/other drug	126	8.7
	4	marijuana/heroin	95	6.5
	9	heroin/other drug	73	5.0
	Total		1451	100.0
LaPorte				
	3	alcohol/marijuana	84	25.5
	2	heroin/opiates-synthetics	48	14.5
	6	alcohol/cocaine/marijuana	42	12.7
	4	alcohol/other drug	41	12.4
	8	cocaine/marijuana	33	10.0
	5	marijuana/heroin	30	9.1
	7	alcohol/cocaine	30	9.1
	1	alcohol/opiates-synthetics	22	6.7
	Total		330	100.0
Lawrence				
	4	alcohol/marijuana	39	22.5
	6	alcohol/marijuana/methamphetamine	27	15.6
	1	marijuana/opiates-synthetics	26	15.0
	2	opiates-synthetics/benzodiazepines	26	15.0
	5	marijuana/benzodiazepines	20	11.6
	3	alcohol/opiates-synthetics	18	10.4
	7	marijuana/other drug	17	9.8
	Total		173	100.0
Madison				
	1	alcohol/marijuana	174	29.3
	2	alcohol/cocaine/marijuana	108	18.2
	5	alcohol/opiates-synthetics/benzodiazepines	99	16.7
	6	marijuana/opiates-synthetics/benzodiazepines	78	13.1
	4	alcohol/marijuana/opiates-synthetics	75	12.6
	3	alcohol/marijuana/benzodiazepines	60	10.1
	Total		594	100.0
Marion				
	5	alcohol/marijuana	529	20.4
	6	alcohol/cocaine/marijuana	297	11.5
	3	alcohol/cocaine	275	10.6

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County	Cluster #	Cluster Composition	N	%
Marion (cont.)	8	alcohol/marijuana/other drug	264	10.2
	7	alcohol/other drug	242	9.4
	4	marijuana/opiates-synthetics	236	9.1
	2	opiates-synthetics/other drug	192	7.4
	9	heroin/opiates-synthetics	190	7.3
	10	cocaine/heroin	186	7.2
	1	opiates-synthetics/benzodiazepines	177	6.8
	Total		2588	100.0
Marshall				
	1	cocaine/heroin	51	33.8
	2	alcohol/marijuana	47	31.1
	3	cocaine/heroin	53	35.1
	Total		151	100.0
Martin				
	1	alcohol/opiates-synthetics/benzodiazepines	5	18.5
	2	alcohol/marijuana/methamphetamine	4	14.8
	3	alcohol/marijuana	10	37.0
	4	marijuana/opiates-synthetics/benzodiazepines	5	18.5
	5	opiates-synthetics/methamphetamine	3	11.1
	Total		27	100.0
Miami				
	1	alcohol/marijuana/other drug	52	25.7
	4	alcohol/marijuana	38	18.8
	2	marijuana/opiates-synthetics	34	16.8
	3	alcohol/other drug	34	16.8
	5	alcohol/marijuana/methamphetamine	22	10.9
	6	alcohol/cocaine/marijuana	22	10.9
	Total		202	100.0
Monroe				
	1	alcohol/marijuana	279	39.7
	2	alcohol/cocaine/marijuana	87	12.4
	6	heroin/opiates-synthetics	75	10.7
	4	alcohol/marijuana/opiates-synthetics	70	10.0
	5	alcohol/marijuana/methamphetamine	58	8.3
	3	opiates-synthetics/benzodiazepines	54	7.7
	7	alcohol/benzodiazepines	49	7.0
	8	alcohol/marijuana/other drug	31	4.4
	Total		703	100.0
Montgomery				
	3*	marijuana/opiates-synthetics	36	13.4
	1	alcohol/marijuana/other drug	34	12.7
	5	alcohol/marijuana	34	12.7

County	Cluster #	Cluster Composition	N	%
Montgomery (cont.)	2	marijuana/methamphetamine	31	11.6
	4	marijuana/other drug	29	10.8
	6	alcohol/marijuana/benzodiazepines	25	9.3
	8	marijuana/heroin	25	9.3
	7	alcohol/other drug	23	8.6
	9	alcohol/cocaine/marijuana	15	5.6
	10	alcohol/marijuana/opiates-synthetics	16	6.0
	Total		268	100.0
Morgan				
	3	alcohol/marijuana	70	33.0
	2*	marijuana/opiates-synthetics	59	27.8
	1	marijuana/methamphetamine	48	22.6
	4*	heroin/opiates-synthetics	35	16.5
	Total		212	100.0
Newton				
	1	marijuana/other drug	13	37.1
	2	alcohol/marijuana	8	22.9
	3	opiates-synthetics/other drug	8	22.9
	4	cocaine/marijuana/heroin	6	17.1
	Total		35	100.0
Noble				
	3	alcohol/marijuana/other drug	48	15.1
	1	alcohol/marijuana	43	13.5
	8	alcohol/marijuana	41	12.9
	2	heroin/stimulant	37	11.6
	7	cocaine/heroin/amphetamine	36	11.3
	5	cocaine/amphetamine	34	10.7
	6	cocaine/heroin/stimulant	30	9.4
	4	heroin/amphetamine	25	7.9
	9	marijuana/opiates-synthetics	24	7.5
	Total		318	100.0
Ohio				
	1*	marijuana/opiates-synthetics	14	56.0
	2	alcohol/marijuana	11	44.0
	Total		25	100.0
Orange				
	1	alcohol/marijuana/other drug	39	51.3
	2*	marijuana/opiates-synthetics	37	48.7
	Total		76	100.0
Owen				
	4	alcohol/marijuana/other drug	36	32.1
	1	alcohol/marijuana	31	27.7
	2	marijuana/methamphetamine	23	20.5
	3	alcohol/marijuana/opiates-synthetics	22	19.6
	Total		112	100.0
Parke				
	2	alcohol/marijuana	26	31.0

County	Cluster #	Cluster Composition	N	%
Parke (cont.)	1	alcohol/marijuana/other drug	25	29.8
	3	alcohol/other drug	19	22.6
	4	marijuana/methamphetamine	14	16.7
	Total		84	100.0
Perry				
	1	alcohol/marijuana/methamphetamine	30	29.4
	2	alcohol/other drug	13	12.7
	3	alcohol/marijuana/opiates-synthetics	14	13.7
	4	alcohol/marijuana	29	28.4
	5	marijuana/methamphetamine	16	15.7
	Total		102	100.0
Pike				
	1	alcohol/marijuana	19	48.7
	2	alcohol/marijuana/methamphetamine	14	35.9
	3	alcohol/opiates-synthetics/benzodiazepines	6	15.4
	Total		39	100.0
Porter				
	3	alcohol/marijuana	92	19.5
	4	alcohol/other drug	92	19.5
	1	alcohol/marijuana/other drug	69	14.6
	5	marijuana/opiates-synthetics	61	12.9
	6	alcohol/marijuana/heroin	57	12.1
	7	marijuana/other drug	54	11.4
	2	heroin/opiates-synthetics	48	10.1
	Total		473	100.0
Posey				
	2	alcohol/marijuana	40	44.4
	1	alcohol/marijuana/methamphetamine	28	31.1
	3	marijuana/opiates-synthetics/methamphetamine	22	24.4
	Total		90	100.0
Pulaski				
	1	alcohol/marijuana/other drug	35	39.3
	2	marijuana/opiates-synthetics/other drug	12	13.5
	3	alcohol/marijuana	25	28.1
	4	alcohol/cocaine	17	19.1
	Total		89	100.0
Putnam				
	1	alcohol/other drug	46	29.7
	2	marijuana/other drug	35	22.6
	3	alcohol/marijuana	24	15.5
	4	alcohol/marijuana/other drug	27	17.4
	5	methamphetamine/other drug	23	14.8
	Total		155	100.0
Randolph				
	1	alcohol/marijuana	37	34.9

County	Cluster #	Cluster Composition	N	%
Randolph (cont.)	4	alcohol/marijuana/opiates-synthetics	24	22.6
	2*	marijuana/heroin	23	21.7
	3	alcohol/cocaine/marijuana	22	20.8
	Total		106	100.0
Ripley				
	2	alcohol/marijuana	23	25.3
	1	cocaine/marijuana/heroin	20	22.0
	3	alcohol/opiates-synthetics	18	19.8
	5	marijuana/opiates-synthetics	16	17.6
	4	alcohol/marijuana/other drug	14	15.4
	Total		91	100.0
Rush				
	2	alcohol/marijuana	31	41.9
	1	alcohol/other drug	18	24.3
	3	alcohol/marijuana/other drug	13	17.6
	4	alcohol./marijuana/opiates-synthetics	12	16.2
	Total		74	100.0
Saint Joseph				
	1	alcohol/marijuana	177	21.7
	2	alcohol/cocaine	120	14.7
	4	alcohol/cocaine/marijuana	106	13.0
	5	alcohol/other drug	91	11.1
	8*	cocaine/heroin	74	9.1
	3	cocaine/marijuana	70	8.6
	7	alcohol/marijuana/opiates-synthetics	62	7.6
	9	alcohol/cocaine/methamphetamine	43	5.3
	6	marijuana/other drug	41	5.0
	10	marijuana/opiates-synthetics/benzodiazepines	33	4.0
	Total		817	100.0
Scott				
	3	alcohol/opiates-synthetics/benzodiazepines	29	27.6
	1	alcohol/marijuana/opiates-synthetics	24	22.9
	5	alcohol/methamphetamine	23	21.9
	4	cocaine/marijuana/methamphetamine	16	15.2
	2	marijuana/opiates-synthetics/benzodiazepines	13	12.4
	Total		105	100.0
Shelby				
	1	alcohol/marijuana	28	51.9
	2	alcohol/opiates-synthetics	26	48.1
	Total		54	100.0
Spencer				
	1	alcohol/marijuana	45	32.1
	2	alcohol/marijuana/methamphetamine	40	28.6

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County	Cluster #	Cluster Composition	N	%
Spencer (cont.)	4	alcohol/marijuana/opiates-synthetics	34	24.3
	3	alcohol/methamphetamine	21	15.0
	Total		140	100.0
Starke				
	4	marijuana/other drug	31	21.1
	1	alcohol/other drug	30	20.4
	6	opiates-synthetics/methamphetamine	30	20.4
	3	alcohol/marijuana	23	15.6
	5*	cocaine/heroin/methamphetamine	17	11.6
	2	marijuana/opiates-synthetics/benzodiazepines	16	10.9
	Total		147	100.0
Steuben				
	1	alcohol/marijuana/other drug	34	21.9
	2	alcohol/marijuana/methamphetamine	32	20.6
	4	alcohol/marijuana	32	20.6
	5	cocaine/marijuana	30	19.4
	3	alcohol/other drug	27	17.4
	Total		155	100.0
Sullivan				
	4	alcohol/marijuana	20	29.0
	3	alcohol/marijuana/methamphetamine	20	29.0
	2	marijuana/opiates-synthetics	17	24.6
	1	alcohol/opiate-synthetics/benzodiazepines	12	17.4
	Total		69	100.0
Switzerland				
	1	alcohol/marijuana	11	52.4
	2	marijuana/opiates-synthetics	10	47.6
	Total		21	100.0
Tippecanoe				
	1	alcohol/marijuana	88	23.4
	5	alcohol/marijuana/other drug	77	20.5
	8*	marijuana/opiates-synthetics	46	12.2
	3	alcohol/marijuana/benzodiazepines	37	9.8
	6	alcohol/marijuana/methamphetamine	36	9.6
	4	alcohol/cocaine/marijuana	35	9.3
	7	alcohol/marijuana/opiates-synthetics	31	8.2
	2	heroin/other drug	26	6.9
	Total		376	100.0
Tipton				
	1	alcohol/marijuana	26	63.4
	2	opiates-synthetics/benzodiazepines	15	36.6
	Total		41	100.0
Union				
	1	marijuana/opiates-synthetics	8	38.1

County	Cluster #	Cluster Composition	N	%
Union (cont.)	3	alcohol/other drug	5	23.8
	Total		21	100.0
Vanderburgh				
	2	alcohol/marijuana	254	23.5
	4	alcohol/marijuana/methamphetamine	215	19.9
	7	alcohol/marijuana/other drug	142	13.1
	3	opiates-synthetics/benzodiazepines	131	12.1
	1	alcohol/cocaine/marijuana	121	11.2
	5	marijuana/methamphetamine	116	10.7
	6	marijuana/other drug	104	9.6
	Total		1083	100.0
Vermillion				
	1	alcohol/other drug	26	28.9
	2	alcohol/marijuana/other drug	20	22.2
	3	alcohol/marijuana	24	26.7
	4	marijuana/methamphetamine	20	22.2
	Total		90	100.0
Vigo				
	2	alcohol/marijuana	91	16.2
	3	alcohol/marijuana/methamphetamine	87	15.5
	7	marijuana/methamphetamine/other drug	67	11.9
	9	alcohol/other drug	63	11.2
	4	marijuana/benzodiazepines	62	11.0
	8*	marijuana/opiates-synthetics/methamphetamine	58	10.3
	1	marijuana/methamphetamine	50	8.9
	6	alcohol/marijuana/other drug	49	8.7
	5	methamphetamine/other drug	36	6.4
	Total		563	100.0
Wabash				
	2	cocaine/heroin/amphetamine	39	28.5
	4	cocaine/amphetamine	29	21.2
	1	alcohol/marijuana/other drug	28	20.4
	3	cocaine/heroin	26	19.0
	5	heroin/pcp	15	10.9
	Total		137	100.0
Warren				
	2	alcohol/marijuana	10	41.7
	1	alcohol/other drug	6	25.0
	4	marijuana/opiates-synthetics/methamphetamine	5	20.8
	3	alcohol/opiates-synthetics	3	12.5
	Total		24	100.0
Warrick				
	2	alcohol/marijuana	48	22.1

County	Cluster #	Cluster Composition	N	%
Warrick (cont.)	3	alcohol/marijuana/other drug	48	22.1
	1	alcohol/marijuana/ methamphetamine	46	21.2
	5	alcohol/opiates-synthetics/ benzodiazepines	33	15.2
	4	marijuana/ opiates-synthetics/ methamphetamine	25	11.5
	6	alcohol/ methamphetamine	17	7.8
	Total		217	100.0
Washington				
	3	alcohol/marijuana/other drug	13	39.4
	2	marijuana/ opiates-synthetics/ methamphetamine	12	36.4
	1	alcohol/opiates-synthetics	8	24.2
	Total		33	100.0
Wayne				
	2	alcohol/marijuana	90	26.2
	6	alcohol/other drug	54	15.7
	4	alcohol/marijuana/ heroin	53	15.4
	1	marijuana/opiates-synthetics/other drugs	50	14.5
	3	alcohol/cocaine/ marijuana	43	12.5

County	Cluster #	Cluster Composition	N	%
Wayne (cont.)	7	cocaine/heroin/opiates-synthetics	30	8.7
	5	alcohol/marijuana/other drug	24	7.0
	Total		344	100.0
Wells				
	2	alcohol/marijuana	28	33.7
	3	alcohol/marijuana/ opiates-synthetics	24	28.9
	4	alcohol/marijuana/other drug	16	19.3
	1	alcohol/cocaine/ marijuana	15	18.1
	Total		83	100.0
White				
	2	alcohol/marijuana	47	35.9
	3	alcohol/marijuana/other drug	35	26.7
	1	alcohol/other drug	32	24.4
	4	marijuana/ opiates-synthetics/ benzodiazepines	17	13.0
	Total		131	100.0
Whitley				
	1	cocaine/heroin/ amphetamine	41	40.2
	2	cocaine/heroin	22	21.6
	3	heroin/amphetamine	22	21.6
	4	alcohol/marijuana/other drug	17	16.7
	Total		102	100.0

Note: Results from the county-level cluster analysis differ from the state-level findings.

*Due to the small sample size and/or the nature of the data this cluster was composed of one drug where at least 50% of individuals reported using the drug and at least one other drug where at least 40% of individuals reported using the drug.

Source: Indiana Family and Social Services Administration, 2013

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INDICATORS OF SUBSTANCE ABUSE

INDIANA COMMUNITIES AT RISK

To measure and compare the severity of substance abuse among Indiana communities, we identified county-level consumption and consequence data for individual drug categories, including alcohol, marijuana, cocaine and heroin, methamphetamine, and prescription drugs. We then ranked Indiana counties on the selected indicators, using a highest-need/highest-contributor model; i.e., counties received a priority score based on their *need* for intervention (measured by the rate[1] at which an indicator occurred) and their overall *contribution* to the problem (measured by the frequency with which an indicator occurred).

For each indicator, counties were given three points if they were in the top 10 percent (90th percentile), two points if they were in the top 11 to 25 percent (75th percentile), one point if they were in the top 26 to 50 percent (50th percentile), and zero points if they fell below the 50th percentile. The points were then added up, averaged over the number of indicators, and multiplied by 100; this created a priority score for each drug category. Higher scores equated to larger burdens of substance abuse. For each substance, the top 10 percent of counties, i.e., those most severely affected, were determined.

We then calculated an *overall substance abuse priority score* to assess severity of consumption and consequences of alcohol and other drugs within each community. This score was computed by averaging the priority scores from each drug category. The top 10 percent of counties, i.e., those with the highest overall scores and most severe problems, were identified; these are listed in Table 11.6.

The selection of substance abuse indicators was limited to datasets with de-identified county-level information, such as the 2012 Treatment Episode Data Set (TEDS) (Indiana Family and Social Services

Administration, 2013),[2] 2010 Uniform Crime Reporting (UCR) Program (National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010),[3] 2011 Indiana Automated Reporting Information Exchange System (ARIES) (Indiana State Police, 2012), 2010 Meth Lab Statistics (Indiana State Police, 2013), and 2011 INSPECT data (Indiana Board of Pharmacy, 2012).

CHANGES IN METHODOLOGY

The primary purpose of this chapter is to give communities a tool that will help them assess the burden of substance abuse in their county and to assist policymakers in allocating prevention funding. Over the past seven years, the SEOW has continued to develop a methodology for ranking communities based on their highest need and highest contribution to the alcohol and drug problem in Indiana. This year, with input from the Substance Abuse and Mental Health Services Administration (SAMHSA), we changed our approach slightly: We (a) included additional county-level data, and (b) made priority scores for each substance more comparable by averaging them over the number of indicator variables included. For example, the alcohol priority score is based on 10 indicators, each indicator being associated with a priority score. For the final (or total) alcohol priority score, we added up the individual priority scores, divided by 10 (because of 10 indicators) and then multiplied by 100 (to avoid decimals). Total priority scores are then ranked based on their percentile.

INDICATORS OF ABUSE
Alcohol Indicators

Communities were assessed and ranked according to the following 10 indicators for alcohol abuse:
- number and rate of alcohol-related crashes

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[1]The rate was calculated by taking the frequency of an event (e.g., number of arrests), dividing it by the specified population (e.g., county population), and multiplying the result by 1,000. This represents the rate per 1,000 population.
[2]Indiana TEDS data are limited to individuals entering substance abuse treatment who are 200% below the federal poverty level and receive state-funded treatment; therefore, data are not representative of the entire substance abuse treatment population.
[3]States are not required to submit crime information to the FBI and level of reporting varies by county. The FBI uses statistical algorithms to estimate arrests for counties in which reporting is less than 100%. In Indiana, an average of about 60% of counties report the number of arrests, so the rest is estimated (see Table 2.1, page 26, for level of coverage by county).

- number and rate of arrests for driving under the influence (DUI)
- number and rate of arrests for public intoxication
- number and rate of arrests for liquor law violations
- number and rate of substance abuse treatment episodes with reported alcohol use

The counties that scored in the top 10 percent based on these 10 alcohol indicators are shown in Table 11.1. For a complete listing of counties by all alcohol abuse indicators, see Appendix 11A, pages 199-201.

Table 11.1 Counties with Alcohol Priority Scores in the Top 10 Percent

Top 10 Percent	Alcohol Priority Score
Lake	260
Tippecanoe	230
Monroe	230
LaPorte	220
Vigo	220
Vanderburgh	220
Clark	200
Porter	200
Marion	200

Note: Alcohol priority scores ranged from 0 to 260, with higher scores indicating a more severe problem. Source: Indiana Family and Social Services Administration, 2013; National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010; Indiana State Police, 2012

Marijuana Indicators

Following the methodology of the highest-need/highest-contributor model, priority scores for marijuana abuse were computed for each county. We examined communities based on the following six indicators for marijuana abuse:
- number and rate of arrests for possession of marijuana
- number and rate of arrests for sale/manufacture of marijuana
- number and rate of substance abuse treatment episodes with reported marijuana use

Table 11.2 lists the counties that ranked in the top 10 percent for marijuana abuse. For a complete listing of counties by all marijuana indicators, see Appendix 11B, pages 202-203.

Table 11.2 Counties with Marijuana Priority Scores in the Top 10 Percent

Top 10 Percent	Marijuana Priority Score
Vanderburgh	300
Marion	250
Lake	233
Monroe	217
Allen	217
Vigo	200
Madison	200
Knox	183
Morgan	183
Elkhart	183
Saint Joseph	183
Tippecanoe	183

Note: Marijuana priority scores ranged from 0 to 300, with higher scores indicating a more severe problem. Source: Indiana Family and Social Services Administration, 2013; National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Cocaine and Heroin Indicators

Since the UCR data do not provide cocaine- or heroin-specific information, we utilized aggregated arrests for cocaine and opiates. In order to stay consistent with our methodology, we included both treatment admissions with reported use of cocaine and heroin. Our analysis is based on the following eight indicators:

- number and rate of arrests for possession of cocaine and opiates
- number and rate of arrests for sale/manufacture of cocaine and opiates
- number and rate of substance abuse treatment episodes with reported cocaine use
- number and rate of substance abuse treatment episodes with reported heroin use

Table 11.3 displays the counties with priority scores in the top 10 percent. For a complete listing of counties by cocaine and heroin abuse indicators, see Appendix 11C, pages 204-205.

Table 11.3   Counties with Cocaine and Heroin Priority Scores in the Top 10 Percent

Top 10 Percent	Cocaine-Heroin Priority Score
Allen	275
LaPorte	263
Lake	263
Marion	263
Wayne	250
Saint Joseph	213
Howard	213
Noble	200
Monroe	188
Clark	188
Madison	188

Note: Cocaine-heroin priority scores ranged from 0 to 275, with higher scores indicating a more severe problem.
Source: Indiana Family and Social Services Administration, 2013; National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

Methamphetamine Indicators

Meth priority scores were computed based on eight indicators:

- number and rate of arrests for possession of synthetic drugs
- number and rate of arrests for sale/manufacture of synthetic drugs
- number and rate of substance abuse treatment episodes with reported meth use
- number and rate of clandestine meth lab seizures

The UCR program does not collect meth-specific information, but includes arrests for possession and sale/manufacture of synthetic drugs, encompassing methamphetamine. For the top 10 percent of counties with the highest meth priority scores, see Table 11.4. A complete listing of all counties by methamphetamine indicators can be found in Appendix 11D, pages 206-207.

Table 11.4   Counties with Methamphetamine Priority Scores in the Top 10 Percent

Top 10 Percent	Meth Priority Score
Knox	288
Vanderburgh	263
Bartholomew	250
Starke	213
Vigo	213
Warrick	200
Decatur	188
Noble	188
Parke	188
Daviess	188

Note: Methamphetamine priority scores ranged from 0 to 288, with higher scores indicating a more severe problem.
Source: Indiana Family and Social Services Administration, 2013; National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010; Indiana State Police, 2013

Prescription Drug Indicators

Prescription drug abuse refers to the nonmedical use of any prescription-type pharmaceutical, which includes opioids (pain relievers), CNS depressants (sedatives, hypnotics, and tranquilizers), and stimulants. We selected the following prescription drug indicators for our analysis:

- number and rate of arrests for possession of "other drugs" (barbiturates and Benzedrine)
- number and rate of arrests for sale/manufacture of "other drugs" (barbiturates and Benzedrine)[4]
- number and rate of treatment episodes with nonmedical prescription drug use reported
- number and rate of controlled substances dispensed in Indiana

Table 11.5 lists the counties in the top 10 percent for prescription drug abuse. For a complete listing of counties by prescription drug abuse indicators, see Appendix 11E, pages 208-209.

Table 11.5 Counties with Prescription Drug (Rx) Priority Scores in the Top 10 Percent

Top 10 Percent	Rx Priority Score
Madison	263
Vanderburgh	263
Howard	238
Floyd	213
Allen	200
Knox	188
Morgan	188
Marion	188
Lake	188
Monroe	188

Note: Prescription drug priority scores ranged from 0 to 263, with higher scores indicating a more severe problem.
Source: Indiana Family and Social Services Administration, 2013; National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010

SEVERITY OF BURDEN – OVERALL RANKING OF COUNTIES

To measure the overall burden of substance abuse on Indiana communities, we averaged the priority scores across all five drug categories and ranked counties by severity of alcohol and drug problems. The top 10 percent of counties are displayed in Table 11.6. A complete listing of all counties by overall priority score can be found in Appendix 11F, page 210.

Table 11.6 Counties with Total Priority Scores in the Top 10 Percent

Top 10 Percent	Overall Priority Score
Vanderburgh	244
Marion	200
Lake	199
Monroe	189
Allen	189
Madison	187
Knox	181
Vigo	179
Tippecanoe	170

Note: Overall substance abuse priority scores ranged from 7 to 244, with higher scores indicating a more severe problem.
Source: Indiana Family and Social Services Administration, 2013; National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010; Indiana State Police, 2012, 2013; Indiana Board of Pharmacy, 2012

[4]Barbiturates (central nervous system depressants) and Benzedrine (amphetamine/stimulant) are types of prescription drugs that are frequently used nonmedically for recreational purposes.

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APPENDIX 11A

Alcohol Abuse Indicators and Priority Scores by County, All Rates per 1,000 Population (Uniform Crime Reporting Program, 2010; Treatment Episode Data Set, 2012; and Automated Reporting Information Exchange System, 2011)

County	DUI Arrests		Public Intoxication Arrests		Liquor Law Violation Arrests		Alcohol Use Reported at Treatment Admission		Alcohol-Related Collisions		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
Adams	103	3.00	26	0.76	77	2.24	104	3.02	22	0.64	20	
Allen	1,847	5.20	757	2.13	242	0.68	1,164	3.28	546	1.52	190	Top 25%
Bartholomew	397	5.20	247	3.23	206	2.70	310	4.06	87	1.12	170	Top 25%
Benton	24	2.71	6	*0.68	11	*1.24	34	3.84	6	*0.68	10	
Blackford	55	4.36	33	2.61	15	*1.19	27	2.14	11	*0.87	40	
Boone	251	4.43	98	1.73	161	2.84	128	2.26	48	0.84	100	Top 50%
Brown	33	2.17	5	*0.33	28	1.84	67	4.40	27	1.79	50	
Carroll	94	4.66	39	1.94	44	2.18	83	4.12	26	1.30	60	
Cass	168	4.31	210	5.39	136	3.49	214	5.49	55	1.42	170	Top 25%
Clark	1,418		488	4.43	229	2.08	212	1.92	175	1.57	200	Top 10%
Clay	90	3.35	58	2.16	50	1.86	117	4.35	40	1.49	50	
Clinton	105	3.16	33	0.99	128	3.85	101	3.04	53	1.60	70	Top 50%
Crawford	70	6.53	23	2.15	7	*0.65	32	2.99	11	*1.03	40	
Daviess	116	3.67	63	1.99	54	1.71	113	3.57	27	0.84	60	
Dearborn	225	4.50	118	2.36	66	1.32	263	5.26	76	1.52	130	Top 25%
Decatur	65	2.53	59	2.29	91	3.54	124	4.82	39	1.50	90	Top 50%
DeKalb	126	2.98	111	2.63	76	1.80	139	3.29	49	1.15	70	Top 50%
Delaware	524	4.45	218	1.85	128	1.09	624	5.30	183	1.56	170	Top 25%
Dubois	89	2.12	43	1.03	100	2.39	278	6.64	57	1.35	90	Top 50%
Elkhart	1,015	5.13	335	1.69	465	2.35	700	3.53	205	1.03	180	Top 25%
Fayette	79	3.25	11	*0.45	160	6.59	106	4.37	27	1.11	60	
Floyd	685	9.19	327	4.38	128	1.72	79	1.06	137	1.83	160	Top 25%
Fountain	73	4.23	37	2.15	29	1.68	42	2.44	21	1.22	30	
Franklin	1	0.05	0	*0.00	42	1.96	44	2.05	38	1.65	40	
Fulton	51	2.45	38	1.82	34	1.63	159	7.63	25	1.20	60	
Gibson	204	6.09	0	*0.00	99	2.95	137	4.09	40	1.19	100	Top 50%
Grant	236	3.37	158	2.26	101	1.44	318	4.54	59	0.85	100	Top 50%
Greene	132	3.98	52	1.57	54	1.63	99	2.99	40	1.22	40	
Hamilton	952	3.47	201	0.73	697	2.54	540	1.97	260	0.92	150	Top 25%
Hancock	285	4.07	128	1.83	173	2.47	102	1.46	76	1.08	100	Top 50%
Harrison	93	2.36	31	0.79	20	0.51	46	1.17	45	1.14	10	
Hendricks	493	3.39	184	1.27	301	2.07	169	1.16	161	1.09	100	Top 50%
Henry	133	2.69	93	1.88	120	2.43	129	2.61	38	0.77	60	
Howard	222	2.68	187	2.26	127	1.53	336	4.06	70	0.85	90	Top 50%
Huntington	108	2.91	25	0.67	48	1.29	28	0.75	32	0.86	0	
Jackson	105	2.48	102	2.41	104	2.45	123	2.90	50	1.16	60	
Jasper	116	3.46	38	1.14	53	1.58	48	1.43	44	1.32	40	
Jay	73	3.41	89	4.16	48	2.24	67	3.13	13	*0.61	60	
Jefferson	113	3.48	69	2.13	84	2.59	164	5.06	51	1.58	120	Top 25%
Jennings	60	2.10	85	2.98	53	1.86	102	3.58	34	1.21	50	

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County	DUI Arrests		Public Intoxication Arrests		Liquor Law Violation Arrests		Alcohol Use Reported at Treatment Admission		Alcohol-Related Collisions		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
Johnson	578	4.12	149	1.06	505	3.60	104	0.74	119	0.84	120	Top 25%
Knox	116	3.02	69	1.80	237	6.17	289	7.52	67	1.74	170	Top 25%
Kosciusko	329	4.28	182	2.37	172	2.24	41	0.53	99	1.28	120	Top 25%
LaGrange	92	2.48	27	0.73	163	4.39	131	3.53	36	0.96	70	Top 50%
Lake	3,189	6.43	2,295	4.63	1,282	2.58	1,756	3.54	889	1.79	260	Top 10%
LaPorte	493	4.42	441	3.96	456	4.09	369	3.31	185	1.66	220	Top 10%
Lawrence	124	2.69	108	2.34	66	1.43	196	4.25	71	1.54	80	Top 50%
Madison	407	3.09	465	3.53	230	1.75	550	4.18	170	1.30	160	Top 25%
Marion	3,202	3.54	6,044	6.69	855	0.95	2,161	2.39	1,098	1.20	200	Top 10%
Marshall	287	6.10	137	2.91	110	2.34	32	0.68	46	0.98	110	Top 50%
Martin	9	*0.87	16	*1.55	13	*1.26	29	2.81	14	*1.36	10	
Miami	115	3.12	78	2.11	44	1.19	161	4.36	53	1.45	70	Top 50%
Monroe	454	3.29	955	6.92	840	6.09	848	6.15	185	1.32	230	Top 10%
Montgomery	132	3.46	100	2.62	61	1.60	193	5.06	44	1.14	90	Top 50%
Morgan	254	3.69	101	1.47	199	2.89	221	3.21	68	0.98	110	Top 50%
Newton	98	6.88	45	3.16	5	*0.35	20	1.40	16	*1.13	50	
Noble	156	3.28	77	1.62	138	2.90	130	2.73	53	1.11	70	Top 50%
Ohio	22	3.59	5	*0.82	10	*1.63	25	4.08	3	*0.49	20	
Orange	49	2.47	20	1.01	28	1.41	56	2.82	27	1.35	10	
Owen	78	3.62	19	*0.88	34	1.58	131	6.07	39	1.81	80	Top 50%
Parke	92	5.31	23	1.33	18	*1.04	103	5.94	28	1.62	70	Top 50%
Perry	87	4.50	74	3.83	75	3.88	125	6.46	23	1.19	130	Top 25%
Pike	38	2.96	20	1.56	26	2.02	38	2.96	13	*1.02	10	
Porter	825	5.02	370	2.25	625	3.80	381	2.32	235	1.42	200	Top 10%
Posey	93	3.59	41	1.58	49	1.89	89	3.43	28	1.09	30	
Pulaski	30	2.24	17	*1.27	16	*1.19	77	5.75	20	1.50	40	
Putnam	155	4.08	65	1.71	71	1.87	112	2.95	35	0.92	30	
Randolph	32	1.22	22	0.84	43	1.64	104	3.97	19	*0.73	10	
Ripley	97	3.18	32	1.05	70	2.30	116	3.81	30	1.04	30	
Rush	16	*0.92	15	*0.86	53	3.05	93	5.35	22	1.27	50	
Saint Joseph	679	2.54	90	0.34	444	1.66	804	3.01	308	1.15	110	Top 50%
Scott	35	1.45	97	4.01	22	0.91	93	3.85	19	*0.79	40	
Shelby	166	3.74	100	2.26	126	2.84	50	1.13	56	1.26	90	Top 50%
Spencer	52	2.48	21	1.00	29	1.38	157	7.49	33	1.57	60	
Starke	41	1.75	40	1.71	28	1.20	87	3.72	29	1.25	20	
Steuben	123	3.60	27	0.79	117	3.42	132	3.86	56	1.65	110	Top 50%
Sullivan	58	2.70	25	1.16	29	1.35	61	2.84	27	1.26	10	
Switzerland	26	2.45	11	*1.04	15	*1.41	26	2.45	9	*0.85	0	
Tippecanoe	719	4.16	727	4.21	488	2.82	326	1.89	292	1.67	230	Top 10%
Tipton	46	2.89	21	1.32	36	2.26	36	2.26	13	*0.82	10	
Union	19	*2.53	7	*0.93	10	*1.33	21	2.79	8	*1.06	0	
Vanderburgh	878	4.89	721	4.01	264	1.47	906	5.04	274	1.52	220	Top 10%

County	DUI Arrests		Public Intoxication Arrests		Liquor Law Violation Arrests		Alcohol Use Reported at Treatment Admission		Alcohol-Related Collisions		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
Vermillion	57	3.52	54	3.33	22	1.36	94	5.80	15	*0.92	60	
Vigo	644	5.97	272	2.52	528	4.90	428	3.97	166	1.53	220	Top 10%
Wabash	79	2.40	29	0.88	63	1.92	25	0.76	27	0.83	10	
Warren	21	2.47	8	*0.94	12	*1.41	22	2.59	13	*1.54	20	
Warrick	154	2.58	84	1.41	148	2.48	198	3.32	52	0.86	70	Top 50%
Washington	112	3.96	45	1.59	64	2.26	34	1.20	46	1.63	50	
Wayne	149	2.16	289	4.19	92	1.33	362	5.25	86	1.25	140	Top 25%
Wells	71	2.57	32	1.16	50	1.81	89	3.22	25	0.90	0	
White	177	7.18	45	1.83	59	2.39	113	4.59	30	1.21	100	Top 50%
Whitley	128	3.84	35	1.05	98	2.94	15	*0.45	32	0.96	50	
Indiana	**27,112**	**4.18**	**19,617**	**3.03**	**14,027**	**2.16**	**20,542**	**3.17**	**8,355**	**1.28**		

* Rates that are based on numbers lower than 20 are unreliable.
Note: Due to confidentiality concerns, health data (such as treatment data) with numbers less than five, are not specified, but marked <5.
The alcohol priority score was based on 10 indicators and ranged from 0 to 260. Higher priority scores indicate a more severe problem.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010; Indiana Family and Social Services Administration, 2013; Indiana State Police, 2012

APPENDIX 11B

Marijuana Abuse Indicators and Priority Scores by County, All Rates per 1,000 Population (Uniform Crime Reporting Program, 2010; Treatment Episode Data Set, 2012)

County	Marijuana Possession Arrests		Marijuana Sale Arrests		Marijuana Use Reported At Treatment Admission		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate		
Adams	31	0.90	2	*0.06	70	2.04	0	
Allen	792	2.23	82	0.23	949	2.67	217	Top 10%
Bartholomew	201	2.63	1	*0.01	277	3.62	117	Top 50%
Benton	9	*1.02	1	*0.11	23	2.60	0	
Blackford	26	2.06	2	*0.16	27	2.14	17	
Boone	73	1.29	16	*0.28	98	1.73	67	
Brown	13	*0.85	0	*0.00	49	3.21	17	
Carroll	38	1.89	2	*0.10	61	3.03	33	
Cass	59	1.51	17	*0.44	162	4.16	117	Top 50%
Clark	262	2.38	18	*0.16	125	1.13	117	Top 50%
Clay	55	2.05	4	*0.15	87	3.24	67	
Clinton	42	1.26	4	*0.12	84	2.53	0	
Crawford	1	*0.09	3	*0.28	23	2.15	17	
Daviess	52	1.64	13	*0.41	88	2.78	117	Top 50%
Dearborn	100	2.00	21	0.42	205	4.10	167	Top 25%
Decatur	34	1.32	15	*0.58	75	2.91	67	
DeKalb	64	1.52	5	*0.12	100	2.37	33	
Delaware	136	1.16	4	*0.03	516	4.39	133	Top 25%
Dubois	37	0.88	3	*0.07	182	4.34	83	Top 50%
Elkhart	469	2.37	22	0.11	552	2.79	183	Top 10%
Fayette	31	1.28	1	*0.04	61	2.51	0	
Floyd	241	3.23	37	0.50	53	0.71	150	Top 25%
Fountain	24	1.39	2	*0.12	54	3.13	17	
Franklin	1	*0.05	16	*0.75	37	1.73	67	
Fulton	22	1.06	4	*0.19	120	5.76	83	Top 50%
Gibson	22	0.66	3	*0.09	107	3.19	33	
Grant	142	2.03	6	*0.09	291	4.15	117	Top 50%
Greene	50	1.51	5	*0.15	85	2.56	17	
Hamilton	605	2.20	18	*0.07	400	1.46	150	Top 25%
Hancock	122	1.74	18	*0.26	79	1.13	83	Top 50%
Harrison	44	1.12	2	*0.05	36	0.91	0	
Hendricks	290	1.99	28	0.19	125	0.86	117	Top 50%
Henry	53	1.07	9	*0.18	131	2.65	67	
Howard	201	2.43	14	*0.17	310	3.75	150	Top 25%
Huntington	45	1.21	3	*0.08	26	0.70	0	
Jackson	125	2.95	14	*0.33	131	3.09	167	Top 25%
Jasper	37	1.11	8	*0.24	36	1.08	33	
Jay	57	2.66	4	*0.19	50	2.34	83	Top 50%
Jefferson	55	1.70	8	*0.25	111	3.42	100	Top 50%
Jennings	3	*0.11	31	1.09	87	3.05	117	Top 50%
Johnson	332	2.37	25	0.18	88	0.63	117	Top 50%
Knox	46	1.20	45	1.17	235	6.11	183	Top 10%
Kosciusko	150	1.95	7	*0.09	44	0.57	67	
LaGrange	26	0.70	0	*0.00	121	3.26	33	
Lake	1,089	2.20	486	0.98	1,103	2.22	233	Top 10%
LaPorte	201	1.80	43	0.39	280	2.51	167	Top 25%
Lawrence	82	1.78	10	*0.22	170	3.68	117	Top 50%
Madison	310	2.35	38	0.29	516	3.92	200	Top 10%
Marion	3,339	3.70	575	0.64	1,872	2.07	250	Top 10%
Marshall	89	1.89	4	*0.09	37	0.79	33	
Martin	11	*1.06	0	*0.00	21	2.03	0	
Miami	27	0.73	18	*0.49	146	3.96	117	Top 50%
Monroe	354	2.57	22	0.16	611	4.43	217	Top 10%
Montgomery	113	2.96	5	*0.13	215	5.64	150	Top 25%

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County	Marijuana Possession Arrests		Marijuana Sale Arrests		Marijuana Use Reported At Treatment Admission		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate		
Morgan	115	1.67	58	0.84	210	3.05	183	Top 10%
Newton	51	3.58	3	*0.21	23	1.61	83	Top 50%
Noble	89	1.87	11	*0.23	135	2.84	100	Top 50%
Ohio	8	*1.31	1	*0.16	14	*2.28	0	
Orange	21	1.06	2	*0.10	41	2.07	0	
Owen	28	1.30	4	*0.19	125	5.79	83	Top 50%
Parke	43	2.48	1	*0.06	65	3.75	67	
Perry	40	2.07	8	*0.41	82	4.24	117	Top 50%
Pike	18	*1.40	2	*0.16	30	2.34	0	
Porter	328	2.00	41	0.25	282	1.72	133	Top 25%
Posey	38	1.47	7	*0.27	66	2.55	33	
Pulaski	23	1.72	1	*0.07	54	4.03	50	
Putnam	52	1.37	14	*0.37	89	2.34	83	Top 50%
Randolph	40	1.53	2	*0.08	85	3.25	17	
Ripley	32	1.05	9	*0.30	77	2.53	50	
Rush	19	*1.09	61	3.51	66	3.79	133	Top 25%
Saint Joseph	480	1.80	55	0.21	555	2.08	183	Top 10%
Scott	20	0.83	0	*0.00	64	2.65	17	
Shelby	84	1.89	18	*0.41	37	0.83	100	Top 50%
Spencer	22	1.05	2	*0.10	115	5.49	67	
Starke	39	1.67	7	*0.30	82	3.51	83	Top 50%
Steuben	80	2.34	6	*0.18	117	3.42	83	Top 50%
Sullivan	21	0.98	3	*0.14	50	2.33	0	
Switzerland	11	*1.04	1	*0.09	15	*1.41	0	
Tippecanoe	474	2.74	38	0.22	284	1.64	183	Top 10%
Tipton	25	1.57	4	*0.25	29	1.82	33	
Union	8	*1.06	1	*0.13	14	*1.86	0	
Vanderburgh	724	4.03	108	0.60	858	4.77	300	Top 10%
Vermillion	22	1.36	19	*1.17	51	3.15	100	Top 50%
Vigo	332	3.08	26	0.24	435	4.03	200	Top 10%
Wabash	46	1.40	3	*0.09	24	0.73	0	
Warren	9	*1.06	1	*0.12	18	*2.12	0	
Warrick	88	1.47	21	0.35	173	2.90	117	Top 50%
Washington	46	1.63	7	*0.25	22	0.78	50	
Wayne	114	1.65	18	*0.26	256	3.71	150	Top 25%
Wells	24	0.87	1	*0.04	72	2.61	0	
White	61	2.48	9	*0.37	91	3.69	150	Top 25%
Whitley	44	1.32	7	*0.21	22	0.66	33	
Indiana	**14,552**	**2.24**	**2,324**	**0.36**	**16,370**	**2.52**		

* Rates that are based on numbers lower than 20 are unreliable.
Note: Due to confidentiality concerns, health data (such as treatment data) with numbers less than five, are not specified, but marked <5.
The marijuana priority score was based on six indicators and ranged from 0 to 300. Higher priority scores indicate a more severe problem.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010; Indiana Family and Social Services Administration, 2013

Cocaine and Heroin Abuse Indicators and Priority Scores by County, All Rates per 1,000 Population (Uniform Crime Reporting Program, 2010; Treatment Episode Data Set, 2012)

County	Cocaine-Heroin Possession Arrests		Cocaine-Heroin Sale Arrests		Cocaine Use Reported at Treatment Admission		Heroin Use Reported at Treatment Admission		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
Adams	3	*0.09	4	*0.12	24	0.70	10	*0.29	50	
Allen	169	0.48	156	0.44	662	1.86	342	0.96	275	Top 10%
Bartholomew	7	*0.09	4	*0.05	64	0.84	7	*0.09	50	
Benton	1	*0.11	1	*0.11	<5	N/A	<5	N/A	13	
Blackford	1	*0.08	0	*0.00	<5	N/A	<5	N/A	0	
Boone	5	*0.09	7	*0.12	25	0.44	35	0.62	88	Top 50%
Brown	0	*0.00	0	*0.00	5	*0.33	<5	N/A	13	
Carroll	2	*0.10	2	*0.10	12	*0.60	12	*0.60	38	
Cass	2	*0.05	6	*0.15	32	0.82	6	*0.15	50	
Clark	36	0.33	46	0.42	65	0.59	36	0.33	188	Top 10%
Clay	5	*0.19	4	*0.15	6	*0.22	<5	N/A	38	
Clinton	8	*0.24	1	*0.03	10	*0.30	<5	N/A	38	
Crawford	0	*0.00	0	*0.00	<5	N/A	<5	N/A	0	
Daviess	4	*0.13	15	*0.47	7	*0.22	<5	N/A	50	
Dearborn	6	*0.12	8	*0.16	64	1.28	102	2.04	150	Top 25%
Decatur	7	*0.27	4	*0.16	14	*0.54	<5	N/A	63	Top 50%
DeKalb	6	*0.14	10	*0.24	18	*0.43	5	*0.12	63	Top 50%
Delaware	19	*0.16	14	*0.12	117	0.99	18	*0.15	113	Top 50%
Dubois	3	*0.07	4	*0.10	11	*0.26	5	*0.12	0	
Elkhart	81	0.41	29	0.15	153	0.77	34	0.17	175	Top 25%
Fayette	1	*0.04	2	*0.08	20	0.82	29	1.19	63	Top 50%
Floyd	2	*0.03	58	0.78	35	0.47	17	*0.23	125	Top 50%
Fountain	4	*0.23	4	*0.23	8	*0.46	7	*0.41	63	Top 50%
Franklin	1	*0.05	2	*0.09	6	*0.28	13	*0.61	38	
Fulton	2	*0.10	2	*0.10	23	1.10	10	*0.48	63	Top 50%
Gibson	3	*0.09	5	*0.15	7	*0.21	<5	N/A	25	
Grant	17	*0.24	28	0.40	69	0.98	5	*0.07	150	Top 25%
Greene	7	*0.21	5	*0.15	5	*0.15	7	*0.21	50	
Hamilton	29	0.11	54	0.20	53	0.19	60	0.22	113	Top 50%
Hancock	13	*0.19	16	*0.23	23	0.33	7	*0.10	88	Top 50%
Harrison	2	*0.05	0	*0.00	7	*0.18	11	*0.28	25	
Hendricks	36	0.25	19	*0.13	19	*0.13	40	0.28	125	Top 50%
Henry	5	*0.10	9	*0.18	25	0.51	15	*0.30	88	Top 50%
Howard	68	0.82	53	0.64	60	0.73	29	0.35	213	Top 10%
Huntington	1	*0.03	0	*0.00	51	1.37	51	1.37	113	Top 50%
Jackson	7	*0.17	19	*0.45	15	*0.35	17	*0.40	113	Top 50%
Jasper	4	*0.12	8	*0.24	13	*0.39	19	*0.57	63	Top 50%
Jay	9	*0.42	2	*0.09	<5	N/A	5	*0.23	50	
Jefferson	6	*0.19	7	*0.22	30	0.93	12	*0.37	113	Top 50%
Jennings	0	*0.00	0	*0.00	9	*0.32	6	*0.21	0	
Johnson	19	*0.14	17	*0.12	17	*0.12	25	0.18	63	Top 50%
Knox	12	*0.31	12	*0.31	10	*0.26	<5	N/A	75	Top 50%
Kosciusko	9	*0.12	10	*0.13	196	2.55	116	1.51	175	Top 25%
LaGrange	3	*0.08	7	*0.19	26	0.70	6	*0.16	50	
Lake	120	0.24	272	0.55	595	1.20	435	0.88	263	Top 10%
LaPorte	37	0.33	112	1.00	111	1.00	145	1.30	263	Top 10%
Lawrence	3	*0.07	1	*0.02	12	*0.26	25	0.54	25	
Madison	42	0.32	33	0.25	139	1.06	25	0.19	188	Top 10%
Marion	1,113	1.23	555	0.61	977	1.08	527	0.58	263	Top 10%
Marshall	4	*0.09	6	*0.13	123	2.61	91	1.93	138	Top 50%

(continued on next page)

Indiana University Center for Health Policy

County	Cocaine-Heroin Possession Arrests		Cocaine-Heroin Sale Arrests		Cocaine Use Reported at Treatment Admission		Heroin Use Reported at Treatment Admission		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
Martin	0	*0.00	0	*0.00	<5	N/A	<5	N/A	0	
Miami	10	*0.27	6	*0.16	30	0.81	8	*0.22	88	Top 50%
Monroe	22	0.16	37	0.27	136	0.99	95	0.69	188	Top 10%
Montgomery	28	0.73	13	*0.34	31	0.81	40	1.05	175	Top 25%
Morgan	15	*0.22	19	*0.28	24	0.35	52	0.75	150	Top 25%
Newton	3	*0.21	1	*0.07	11	*0.77	11	*0.77	63	Top 50%
Noble	7	*0.15	9	*0.19	146	3.07	118	2.48	200	Top 10%
Ohio	1	*0.16	1	*0.16	<5	N/A	6	*0.98	63	Top 50%
Orange	3	*0.15	3	*0.15	<5	N/A	<5	N/A	25	
Owen	3	*0.14	4	*0.19	8	*0.37	8	*0.37	25	
Parke	2	*0.12	0	*0.00	<5	N/A	<5	N/A	0	
Perry	3	*0.16	2	*0.10	5	*0.26	<5	N/A	13	
Pike	2	*0.16	3	*0.23	<5	N/A	<5	N/A	38	
Porter	31	0.19	9	*0.05	97	0.59	183	1.11	150	Top 25%
Posey	3	*0.12	4	*0.15	7	*0.27	<5	N/A	13	
Pulaski	1	*0.07	0	*0.00	11	*0.82	<5	N/A	13	
Putnam	8	*0.21	17	*0.45	8	*0.21	10	*0.26	113	Top 50%
Randolph	3	*0.11	3	*0.11	30	1.15	26	0.99	75	Top 50%
Ripley	4	*0.13	4	*0.13	15	*0.49	33	1.08	50	
Rush	9	*0.52	0	*0.00	<5	N/A	<5	N/A	50	
Saint Joseph	90	0.34	27	0.10	496	1.86	139	0.52	213	Top 10%
Scott	11	*0.45	0	*0.00	23	0.95	5	*0.21	88	Top 50%
Shelby	8	*0.18	6	*0.14	9	*0.20	7	*0.16	38	
Spencer	3	*0.14	4	*0.19	6	*0.29	<5	N/A	13	
Starke	15	*0.64	4	*0.17	21	0.90	27	1.16	150	Top 25%
Steuben	20	0.59	19	*0.56	27	0.79	7	*0.20	150	Top 25%
Sullivan	5	*0.23	2	*0.09	<5	N/A	<5	N/A	38	
Switzerland	1	*0.09	2	*0.19	<5	N/A	<5	N/A	13	
Tippecanoe	36	0.21	81	0.47	59	0.34	59	0.34	175	Top 25%
Tipton	2	*0.13	1	*0.06	5	*0.31	<5	N/A	0	
Union	1	*0.13	1	*0.13	5	*0.67	5	*0.67	38	
Vanderburgh	37	0.21	45	0.25	180	1.00	14	*0.08	175	Top 25%
Vermillion	2	*0.12	2	*0.12	<5	N/A	<5	N/A	0	
Vigo	16	*0.15	16	*0.15	51	0.47	14	*0.13	113	Top 50%
Wabash	4	*0.12	6	*0.18	87	2.65	79	2.40	150	Top 25%
Warren	1	*0.12	1	*0.12	<5	N/A	<5	N/A	13	
Warrick	1	*0.02	2	*0.03	17	*0.28	<5	N/A	0	
Washington	5	*0.18	6	*0.21	<5	N/A	<5	N/A	50	
Wayne	31	0.45	29	0.42	102	1.48	109	1.58	250	Top 10%
Wells	1	*0.04	2	*0.07	21	0.76	5	*0.18	25	
White	0	*0.00	0	*0.00	15	*0.61	5	*0.20	13	
Whitley	5	*0.15	4	*0.12	71	2.13	69	2.07	150	Top 25%
Indiana	**2,397**	**0.37**	**2,028**	**0.31**	**5,760**	**0.89**	**3,550**	**0.55**		

* Rates that are based on numbers lower than 20 are unreliable.

Note: Due to confidentiality concerns, health data (such as treatment data) with numbers less than five, are not specified, but marked <5. The cocaine-heroin priority score was based on eight indicators and ranged from 0 to 275. Higher priority scores indicate a more severe problem.

Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010; Indiana Family and Social Services Administration, 2013

Methamphetamine Abuse Indicators and Priority Scores by County, All Rates per 1,000 Population (Uniform Crime Reporting Program, 2010; Treatment Episode Data Set, 2012; Meth Lab Statistics, 2011)

County	Synthetic Possession Arrests		Synthetic Sale Arrests		Meth Use Reported at Treatment Admission		ISP Lab Seizures		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
Adams	14	*0.41	6	*0.17	6	*0.17	7	*0.20	50	
Allen	12	*0.03	0	*0.00	60	0.17	32	0.09	63	
Bartholomew	118	1.54	12	*0.16	195	2.55	53	0.69	250	Top 10%
Benton	2	*0.23	1	*0.11	<5	N/A	2	*0.23	0	
Blackford	8	*0.63	15	*1.19	<5	N/A	9	*0.71	113	Top 50%
Boone	11	*0.19	2	*0.04	17	*0.30	18	*0.32	25	
Brown	7	*0.46	10	*0.66	18	*1.18	14	*0.92	138	Top 25%
Carroll	5	*0.25	0	*0.00	26	1.29	2	*0.10	25	
Cass	1	*0.03	1	*0.03	51	1.31	17	*0.44	50	
Clark	152	1.38	10	*0.09	25	0.23	25	0.23	138	Top 25%
Clay	16	*0.60	3	*0.11	48	1.79	6	*0.22	75	Top 50%
Clinton	3	*0.09	3	*0.09	<5	N/A	10	*0.30	0	
Crawford	0	*0.00	3	*0.28	14	*1.31	7	*0.65	63	
Daviess	45	1.42	34	1.07	60	1.90	10	*0.32	188	Top 10%
Dearborn	24	0.48	5	*0.10	11	*0.22	6	*0.12	50	
Decatur	18	*0.70	19	*0.74	22	0.85	59	2.29	188	Top 10%
DeKalb	15	*0.36	11	*0.26	43	1.02	24	0.57	138	Top 25%
Delaware	75	0.64	0	*0.00	44	0.37	62	0.53	125	Top 25%
Dubois	15	*0.36	7	*0.17	74	1.77	14	*0.33	113	Top 50%
Elkhart	40	0.20	14	*0.07	128	0.65	46	0.23	113	Top 50%
Fayette	5	*0.21	3	*0.12	7	*0.29	2	*0.08	0	
Floyd	58	0.78	0	*0.00	9	*0.12	19	*0.25	75	Top 50%
Fountain	10	*0.58	5	*0.29	20	1.16	8	*0.46	88	Top 50%
Franklin	0	*0.00	0	*0.00	8	*0.37	8	*0.37	13	
Fulton	3	*0.14	1	*0.05	61	2.93	9	*0.43	75	Top 50%
Gibson	12	*0.36	29	0.87	59	1.76	13	*0.39	175	Top 25%
Grant	62	0.88	6	*0.09	9	*0.13	13	*0.19	100	Top 50%
Greene	9	*0.27	7	*0.21	33	1.00	23	0.69	88	Top 50%
Hamilton	85	0.31	9	*0.03	15	*0.05	5	*0.02	63	
Hancock	22	0.31	9	*0.13	7	*0.10	1	*0.01	38	
Harrison	4	*0.10	0	*0.00	23	0.58	35	0.89	63	
Hendricks	45	0.31	21	0.14	15	*0.10	2	*0.01	75	Top 50%
Henry	8	*0.16	2	*0.04	6	*0.12	9	*0.18	0	
Howard	1	*0.01	2	*0.02	77	0.93	36	0.44	75	Top 50%
Huntington	0	*0.00	0	*0.00	<5	N/A	14	*0.38	25	
Jackson	15	*0.35	17	*0.40	77	1.82	28	0.66	175	Top 25%
Jasper	7	*0.21	5	*0.15	12	*0.36	11	*0.33	38	
Jay	20	0.93	11	*0.51	8	*0.37	4	*0.19	100	Top 50%
Jefferson	14	*0.43	6	*0.19	52	1.60	20	0.62	125	Top 25%
Jennings	0	*0.00	1	*0.04	65	2.28	22	0.77	100	Top 50%
Johnson	3	*0.02	5	*0.04	13	*0.09	25	0.18	38	
Knox	53	1.38	20	0.52	171	4.45	53	1.38	288	Top 10%
Kosciusko	30	0.39	17	*0.22	11	*0.14	47	0.61	125	Top 25%
LaGrange	7	*0.19	1	*0.03	47	1.27	24	0.65	75	Top 50%
Lake	41	0.08	10	*0.02	17	*0.03	3	*0.01	50	
LaPorte	15	*0.13	2	*0.02	17	*0.15	7	*0.06	13	
Lawrence	22	0.48	7	*0.15	57	1.24	16	*0.35	100	Top 50%
Madison	29	0.22	15	*0.11	46	0.35	96	0.73	125	Top 25%

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County	Synthetic Possession Arrests		Synthetic Sale Arrests		Meth Use Reported at Treatment Admission		ISP Lab Seizures		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate		
Marion	42	0.05	90	0.10	107	0.12	2	*0.00	100	Top 50%
Marshall	15	*0.32	8	*0.17	26	0.55	42	0.89	125	Top 25%
Martin	6	*0.58	0	*0.00	13	*1.26	11	*1.06	88	Top 50%
Miami	11	*0.30	17	*0.46	39	1.06	23	0.62	113	Top 50%
Monroe	41	0.30	4	*0.03	135	0.98	60	0.43	125	Top 25%
Montgomery	9	*0.24	5	*0.13	65	1.70	27	0.71	113	Top 50%
Morgan	12	*0.17	7	*0.10	83	1.20	3	*0.04	63	
Newton	0	*0.00	0	*0.00	6	*0.42	1	*0.07	0	
Noble	27	0.57	8	*0.17	61	1.28	47	0.99	188	Top 10%
Ohio	2	*0.33	1	*0.16	<5	N/A	0	*0.00	25	
Orange	8	*0.40	5	*0.25	17	*0.86	13	*0.66	100	Top 50%
Owen	5	*0.23	3	*0.14	40	1.85	9	*0.42	50	
Parke	17	*0.98	10	*0.58	28	1.61	13	*0.75	188	Top 10%
Perry	10	*0.52	4	*0.21	50	2.59	1	*0.05	75	Top 50%
Pike	5	*0.39	3	*0.23	14	*1.09	5	*0.39	50	
Porter	10	*0.06	2	*0.01	11	*0.07	1	*0.01	0	
Posey	17	*0.66	3	*0.12	47	1.81	19	*0.73	113	Top 50%
Pulaski	3	*0.22	3	*0.22	14	*1.04	7	*0.52	38	
Putnam	9	*0.24	7	*0.18	34	0.90	4	*0.11	50	
Randolph	9	*0.34	1	*0.04	15	*0.57	6	*0.23	13	
Ripley	12	*0.39	7	*0.23	12	*0.39	13	*0.43	75	Top 50%
Rush	0	*0.00	5	*0.29	7	*0.40	6	*0.34	38	
Saint Joseph	56	0.21	3	*0.01	99	0.37	9	*0.03	63	
Scott	13	*0.54	10	*0.41	35	1.45	10	*0.41	138	Top 25%
Shelby	8	*0.18	12	*0.27	5	*0.11	20	0.45	75	Top 50%
Spencer	9	*0.43	5	*0.24	70	3.34	7	*0.33	113	Top 50%
Starke	30	1.28	6	*0.26	48	2.05	36	1.54	213	Top 10%
Steuben	1	*0.03	6	*0.18	40	1.17	29	0.85	100	Top 50%
Sullivan	2	*0.09	0	*0.00	33	1.54	9	*0.42	50	
Switzerland	4	*0.38	2	*0.19	<5	N/A	3	*0.28	25	
Tippecanoe	105	0.61	32	0.19	46	0.27	38	0.22	150	Top 25%
Tipton	12	*0.75	3	*0.19	8	*0.50	15	*0.94	100	Top 50%
Union	3	*0.40	2	*0.27	<5	N/A	2	*0.27	38	
Vanderburgh	123	0.68	157	0.87	441	2.45	81	0.45	263	Top 10%
Vermillion	8	*0.49	4	*0.25	24	1.48	8	*0.49	88	Top 50%
Vigo	163	1.51	42	0.39	289	2.68	9	*0.08	213	Top 10%
Wabash	10	*0.30	5	*0.15	7	*0.21	14	*0.43	50	
Warren	4	*0.47	2	*0.24	6	*0.71	1	*0.12	50	
Warrick	46	0.77	36	0.60	106	1.78	11	*0.18	200	Top 10%
Washington	8	*0.28	4	*0.14	11	*0.39	36	1.27	63	
Wayne	11	*0.16	8	*0.12	17	*0.25	15	*0.22	38	
Wells	0	*0.00	0	*0.00	6	*0.22	5	*0.18	0	
White	5	*0.20	4	*0.16	26	1.06	8	*0.32	38	
Whitley	6	*0.18	5	*0.15	<5	N/A	8	*0.24	25	
Indiana	**2,058**	**0.32**	**908**	**0.14**	**3,942**	**0.61**	**1,663**	**0.26**		

* Rates that are based on numbers lower than 20 are unreliable.
Note: Due to confidentiality concerns, health data (such as treatment data) with numbers less than five, are not specified, but marked <5.
The methamphetamine priority score was based on eight indicators and ranged from 0 to 288. Higher priority scores indicate a more severe problem.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010; Indiana Family and Social Services Administration, 2013; Indiana State Police, 2013

Prescription Drug (Rx) Abuse Indicators and Priority Scores by County, All Rates per 1,000 Population (except rate for controlled substances dispensed is per capita) (Uniform Crime Reporting Program, 2010; Treatment Episode Data Set, 2012; INSPECT Data, 2011)

County	"Other" Drug Possession Arrests		"Other" Drug Sale Arrests		Rx Drug Abuse Reported at Treatment Admission		Controlled Substances Dispensed		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate (per capita)		
Adams	9	*0.26	1	*0.03	20	0.58	45,082	1.31	0	
Allen	195	0.55	87	0.24	265	0.75	529,540	1.49	200	Top 10%
Bartholomew	37	0.48	0	*0.00	178	2.33	170,844	2.24	125	Top 50%
Benton	2	*0.23	1	*0.11	13	*1.47	16,446	1.86	13	
Blackford	0	*0.00	0	*0.00	15	*1.19	33,123	2.62	25	
Boone	13	*0.23	3	*0.05	51	0.90	120,274	2.12	50	
Brown	0	*0.00	0	*0.00	37	2.43	38,272	2.51	50	
Carroll	6	*0.30	0	*0.00	39	1.94	30,871	1.53	13	
Cass	11	*0.28	24	0.62	72	1.85	68,492	1.76	113	Top 50%
Clark	20	0.18	1	*0.01	199	1.81	328,069	2.98	125	Top 50%
Clay	9	*0.33	3	*0.11	29	1.08	54,039	2.01	38	
Clinton	5	*0.15	4	*0.12	42	1.26	78,644	2.37	63	Top 50%
Crawford	0	*0.00	1	*0.09	17	*1.59	20,719	1.93	13	
Daviess	17	*0.54	1	*0.03	59	1.86	64,855	2.05	63	Top 50%
Dearborn	15	*0.30	17	*0.34	213	4.26	87,602	1.75	150	Top 25%
Decatur	6	*0.23	1	*0.04	39	1.52	51,252	1.99	0	
DeKalb	14	*0.33	5	*0.12	20	0.47	68,020	1.61	50	
Delaware	4	*0.03	7	*0.06	387	3.29	273,709	2.33	138	Top 25%
Dubois	9	*0.21	1	*0.02	95	2.27	81,966	1.96	38	
Elkhart	12	*0.06	1	*0.01	101	0.51	305,572	1.54	50	
Fayette	22	0.91	0	*0.00	90	3.71	74,011	3.05	150	Top 25%
Floyd	128	1.72	185	2.48	106	1.42	189,425	2.54	213	Top 10%
Fountain	7	*0.41	1	*0.06	32	1.86	40,426	2.34	50	
Franklin	3	*0.14	4	*0.19	34	1.59	53,942	2.52	63	Top 50%
Fulton	6	*0.29	3	*0.14	40	1.92	43,891	2.11	50	
Gibson	31	0.93	2	*0.06	49	1.46	79,576	2.38	113	Top 50%
Grant	5	*0.07	2	*0.03	134	1.91	163,140	2.33	63	Top 50%
Greene	16	*0.48	2	*0.06	73	2.20	77,414	2.33	88	Top 50%
Hamilton	23	0.08	5	*0.02	180	0.66	448,622	1.63	88	Top 50%
Hancock	29	0.41	11	*0.16	53	0.76	148,783	2.13	113	Top 50%
Harrison	0	*0.00	0	*0.00	50	1.27	83,520	2.12	25	
Hendricks	62	0.43	14	*0.10	83	0.57	230,591	1.59	113	Top 50%
Henry	10	*0.20	3	*0.06	136	2.75	143,565	2.90	138	Top 25%
Howard	93	1.12	11	*0.13	251	3.03	225,390	2.72	238	Top 10%
Huntington	18	*0.48	2	*0.05	58	1.56	69,209	1.86	38	
Jackson	36	0.85	15	*0.35	76	1.79	97,034	2.29	163	Top 25%
Jasper	10	*0.30	7	*0.21	40	1.19	66,442	1.98	50	
Jay	9	*0.42	0	*0.00	48	2.24	47,487	2.22	38	
Jefferson	15	*0.46	3	*0.09	132	4.07	90,625	2.79	138	Top 25%
Jennings	0	*0.00	12	*0.42	79	2.77	65,065	2.28	113	Top 50%
Johnson	75	0.54	25	0.18	81	0.58	294,293	2.10	163	Top 25%
Knox	22	0.57	13	*0.34	114	2.97	107,447	2.80	188	Top 10%
Kosciusko	26	0.34	4	*0.05	163	2.12	119,697	1.56	100	Top 50%
LaGrange	0	*0.00	0	*0.00	27	0.73	33,767	0.91	0	
Lake	358	0.72	59	0.12	412	0.83	780,400	1.57	188	Top 10%
LaPorte	19	*0.17	1	*0.01	143	1.28	238,857	2.14	75	Top 50%
Lawrence	21	0.46	4	*0.09	156	3.38	128,542	2.79	150	Top 25%
Madison	109	0.83	44	0.33	363	2.76	373,382	2.84	263	Top 10%

County	"Other" Drug Possession Arrests		"Other" Drug Sale Arrests		Rx Drug Abuse Reported at Treatment Admission		Controlled Substances Dispensed		Priority Score	Rank
	Number	Rate	Number	Rate	Number	Rate	Number	Rate (per capita)		
Marion	746	0.83	99	0.11	1,167	1.29		1.84	188	Top 10%
Marshall	62	1.32	17	*0.36	93	1.98	79,821	1.70	163	Top 25%
Martin	5	*0.48	0	*0.00	19	*1.84	33,600	3.25	63	Top 50%
Miami	16	*0.43	1	*0.03	76	2.06	65,808	1.78	50	
Monroe	105	0.76	18	*0.13	353	2.56	216,579	1.57	188	Top 10%
Montgomery	75	1.97	1	*0.03	113	2.96	88,761	2.33	125	Top 50%
Morgan	54	0.78	21	0.30	153	2.22	180,576	2.62	188	Top 10%
Newton	0	*0.00	0	*0.00	9	*0.63	22,380	1.57	0	
Noble	18	*0.38	3	*0.06	192	4.04	76,480	1.61	125	Top 50%
Ohio	2	*0.33	1	*0.16	17	*2.77	10,896	1.78	63	Top 50%
Orange	8	*0.40	1	*0.05	46	2.32	62,464	3.15	63	Top 50%
Owen	7	*0.32	3	*0.14	55	2.55	55,001	2.55	75	Top 50%
Parke	5	*0.29	1	*0.06	23	1.33	24,606	1.42	13	
Perry	10	*0.52	1	*0.05	37	1.91	36,038	1.86	50	
Pike	6	*0.47	1	*0.08	13	*1.01	39,900	3.11	63	Top 50%
Porter	100	0.61	10	*0.06	238	1.45	310,959	1.89	175	Top 25%
Posey	7	*0.27	3	*0.12	33	1.27	56,869	2.19	38	
Pulaski	1	*0.07	0	*0.00	27	2.01	29,832	2.23	25	
Putnam	7	*0.18	2	*0.05	44	1.16	68,932	1.82	13	
Randolph	7	*0.27	6	*0.23	59	2.25	53,370	2.04	63	Top 50%
Ripley	10	*0.33	1	*0.03	49	1.61	43,960	1.44	25	
Rush	25	1.44	9	*0.52	31	1.78	38,727	2.23	113	Top 50%
Saint Joseph	93	0.35	22	0.08	195	0.73	452,089	1.69	163	Top 25%
Scott	4	*0.17	4	*0.17	102	4.22	81,677	3.38	138	Top 25%
Shelby	13	*0.29	4	*0.09	29	0.65	92,907	2.10	63	Top 50%
Spencer	9	*0.43	1	*0.05	53	2.53	44,427	2.12	50	
Starke	14	*0.60	6	*0.26	83	3.55	57,210	2.45	150	Top 25%
Steuben	76	2.22	7	*0.20	25	0.73	50,920	1.49	100	Top 50%
Sullivan	3	*0.14	1	*0.05	45	2.10	53,587	2.50	38	
Switzerland	4	*0.38	0	*0.00	15	*1.41	18,210	1.72	13	
Tippecanoe	29	0.17	17	*0.10	155	0.90	271,298	1.57	113	Top 50%
Tipton	2	*0.13	0	*0.00	26	1.63	32,137	2.02	0	
Union	3	*0.40	0	*0.00	13	*1.73	11,789	1.57	13	
Vanderburgh	211	1.17	31	0.17	436	2.43	473,020	2.63	263	Top 10%
Vermillion	0	*0.00	0	*0.00	30	1.85	32,986	2.03	13	
Vigo	88	0.82	10	*0.09	156	1.45	242,078	2.24	150	Top 25%
Wabash	7	*0.21	1	*0.03	97	2.95	62,319	1.89	38	
Warren	3	*0.35	0	*0.00	13	*1.53	10,824	1.27	13	
Warrick	21	0.35	20	0.34	80	1.34	137,244	2.30	125	Top 50%
Washington	11	*0.39	4	*0.14	25	0.88	65,866	2.33	63	Top 50%
Wayne	8	*0.12	0	*0.00	163	2.37	156,810	2.28	88	Top 50%
Wells	1	*0.04	10	*0.36	31	1.12	41,263	1.49	63	Top 50%
White	4	*0.16	1	*0.04	38	1.54	55,110	2.24	13	
Whitley	9	*0.27	3	*0.09	74	2.22	60,484	1.82	50	
Indiana	**3,426**	**0.53**	**931**	**0.14**	**9,825**	**1.52**		**1.97**		

* Rates that are based on numbers lower than 20 are unreliable.
Note: Due to confidentiality concerns, health data (such as treatment data) with numbers less than five, are not specified, but marked <5. The prescription drug priority score was based on eight indicators and ranged from 0 to 263. Higher priority scores indicate a more severe problem.
Source: National Archive of Criminal Justice Data, Inter-university Consortium for Political and Social Research, University of Michigan, 2010; Indiana Family and Social Services Administration, 2013; Indiana Board of Pharmacy, 2012

APPENDIX 11F

Overall Priority Scores by County, Ranked in Descending Order (Uniform Crime Reporting Program, 2010; Treatment Episode Data Set, 2012; Indiana Automated Reporting Information Exchange System, 2011; Meth Lab Statistics, 2011; INSPECT data, 2011)

County	Total Priority Score	Rank	County	Total Priority Score	Rank
Vanderburgh	244	Top 10%	DeKalb	71	
Marion	200	Top 10%	Henry	70	
Lake	199	Top 10%	Parke	67	
Monroe	189	Top 10%	Fulton	66	
Allen	189	Top 10%	Jay	66	
Madison	187	Top 10%	Boone	66	
Knox	181	Top 10%	Dubois	65	
Vigo	179	Top 10%	Owen	63	
Tippecanoe	170	Top 10%	White	63	
Clark	153	Top 25%	Whitley	62	
Howard	153	Top 25%	Spencer	60	
LaPorte	147	Top 25%	Putnam	58	
Saint Joseph	146	Top 25%	Greene	56	
Floyd	145	Top 25%	Washington	55	
Bartholomew	142	Top 25%	Fayette	55	
Elkhart	140	Top 25%	Brown	53	
Morgan	139	Top 25%	Clay	53	
Noble	137	Top 25%	Vermillion	52	
Delaware	136	Top 25%	Wabash	50	
Jackson	135	Top 25%	Fountain	49	
Wayne	133	Top 25%	Ripley	46	
Porter	132	Top 25%	LaGrange	46	
Montgomery	131	Top 25%	Posey	45	
Dearborn	129	Top 50%	Jasper	45	
Starke	123	Top 50%	Franklin	44	
Jefferson	119	Top 50%	Orange	40	
Kosciusko	117	Top 50%	Newton	39	
Marshall	114	Top 50%	Blackford	39	
Hamilton	113	Top 50%	Randolph	35	
Steuben	109	Top 50%	Huntington	35	
Grant	106	Top 50%	Clinton	34	
Hendricks	106	Top 50%	Ohio	34	
Warrick	102	Top 50%	Carroll	34	
Cass	100	Top 50%	Pulaski	33	
Johnson	100	Top 50%	Martin	32	
Daviess	95	Top 50%	Pike	32	
Lawrence	94	Top 50%	Tipton	29	
Gibson	89	Top 50%	Sullivan	27	
Miami	87	Top 50%	Crawford	26	
Hancock	84	Top 50%	Harrison	25	
Scott	84	Top 50%	Adams	24	
Decatur	81	Top 50%	Warren	19	
Perry	77	Top 50%	Union	18	
Rush	77	Top 50%	Wells	18	
Jennings	76	Top 50%	Switzerland	10	
Shelby	73	Top 50%	Benton	7	

Note: Higher priority scores indicate a more severe problem.

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APPENDIX I: Data Sources Recommended by the State Epidemiology and Outcomes Workgroup (SEOW)

Data Set	Source	Years	How to Access	Coverage	Target
Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents (ATOD) Survey	IPRC	Annual 1993-2012	http://www.drugs.indiana.edu/data-survey_monograph.html	Indiana and regions	6th – 12th grade students in Indiana
Alcohol-Related Disease Impact (ARDI) Database	CDC	Based on averages 2001-2005	http://apps.nccd.cdc.gov/ardi/Homepage.aspx	U.S. and states	General population
Automated Reporting Information Exchange System (ARIES)	ISP	Annual	On request from ISP	Indiana and counties	Vehicle collisions in general population
Behavioral Risk Factor Surveillance System (BRFSS)	CDC	Annual 1995-2011	http://apps.nccd.cdc.gov/brfss/	U.S. and states	Adults 18 and older
Behavioral Risk Factor Surveillance System: Selected Metropolitan/Micropolitan Area Risk Trends (BRFSS SMART)	CDC	Annual 2002-2010	http://apps.nccd.cdc.gov/brfss-smart/index.asp	Selected Metropolitan and Micropolitan Areas	Adults 18 and older
Fatality Analysis Reporting System (FARS)	NHTSA	Annual 1994-2011	http://www-fars.nhtsa.dot.gov/	U.S., states, and counties	General population
Hospital Discharge Database	ISDH	Annual 1999-2011	http://www.in.gov/isdh/20624.htm	Indiana and counties	General population
Indiana Adult Tobacco Survey (IATS)	ISDH/Tobacco Prevention and Cessation Commission	Bi-annual 2002-2010	On request from ISDH	Indiana	Adults
Indiana Clandestine Meth Lab Seizures	ISP	Annual 1995-2012	On request from ISP	Indiana and counties	General population
Indiana Youth Tobacco Survey (IYTS)	ISDH/Tobacco Prevention and Cessation Commission	Bi-annual 2000-2010	On request from ISDH	Indiana	6th – 12th grade students in Indiana
Monitoring the Future (MTF) Survey	NIDA	Annual 1999-2012	http://www.monitoringthefuture.org/data/data.html	U.S.	8th, 10th, and 12th grade students
Mortality data (e.g., alcohol-, smoking-, and drug-related mortality)	ISDH	Annual	On request from ISDH	Indiana and counties	General population
	CDC	Annual 1999-2010	http://wonder.cdc.gov/mortSQL.html	U.S., states, and counties	General population
National Survey on Drug Use and Health (NSDUH)	SAMHSA	Annual 1994-2011	http://www.samhsa.gov/data/NSDUH.aspx	U.S., states, and some sub-state estimates	Population 12 years and older
National Youth Tobacco Survey (NYTS)	CDC	Bi-annual 1999-2011	http://www.cdc.gov/tobacco/data_statistics/surveys/nyts/index.htm	U.S.	6th – 12th grade students

APPENDIX I *(continued)*

Data Set	Source	Years	How to Access	Coverage	Target
Population Estimates	U.S. Census Bureau	Annual	http://www.census.gov/	U.S., states, and counties	General population
School-related variables (e.g., suspensions & expulsions, drop-outs, ISTEP scores, etc.)	Indiana DOE	Annual 1998-2008	http://dew4.doe.state.in.us/htbin/sas1.sh	Indiana and counties	K-12 students in Indiana
Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC)	CDC	Based on 2004 data	http://apps.nccd.cdc.gov/sammec/index.asp	U.S. and states	General population
Treatment Episode Data Set (TEDS)	SAMHSA	Annual 1992-2010	http://www.icpsr.umich.edu/icpsrweb/ICPSR/series/00056	U.S. and states; for county-level data contact Indiana DMHA	Treatment population eligible for public services (200% FPL)
Uniform Crime Reporting Program (UCR)	FBI/NACJD	Annual 1994-2010	http://www.icpsr.umich.edu/NACJD/ucr.html	U.S., states, and counties	Arrests within general population
Youth Risk-Behavior Surveillance System (YRBSS)	CDC	Bi-annual Indiana: 2003-2011	http://apps.nccd.cdc.gov/yrbss/	U.S. and states	High school students

Abbreviations used: AHRQ = Agency for Healthcare Research and Quality; ARIES = Automated Reporting Information Exchange System; CDC = Centers for Disease Control and Prevention; CLEI = County-level Epidemiological Indicators (previously SIS, or Social Indicator System); CSAP = Center for Substance Abuse Prevention; DOE = Department of Education; FBI = Federal Bureau of Investigation; HHS = Department of Health and Human Services; ICJI = Indiana Criminal Justice Institute; IPRC = Indiana Prevention Resource Center; ISDH = Indiana State Department of Health; NACJD = National Archive of Criminal Justice Data; SAMMEC = Smoking-Attributable Mortality, Morbidity, and Economic Costs; ISP = Indiana State Police; ITPC = Indiana Tobacco Prevention and Cessation Agency; NHTSA = National Highway Traffic Safety Administration; NIDA = National Institute on Drug Abuse; SAMHSA = Substance Abuse and Mental Health Services Administration; SEDS = State Epidemiological Data System.

APPENDIX II: SUBSTANCE USE INDICATORS AT-A-GLANCE

SUBSTANCE	PATTERN OR CONSEQUENCE	TARGET POPULATION	DATASET
Alcohol	Past-month use Past-month binge drinking Alcohol dependence or abuse in the past year Needing but not receiving treatment for alcohol use in the past year	General population ages 12+	NSDUH
	Past-month alcohol use Past-month binge drinking Past-month heavy drinking	Adults ages 18+	BRFSS
	Past-month alcohol use Past-month binge drinking	Grades 9-12	YRBSS
	Lifetime use Past-month use	Grades 6-12	ATOD
	Use reported at treatment admission Primary use (dependence) reported at treatment admission	Treatment population at or below 200% FPL, in state-sponsored programs	TEDS

	Arrests for
	    DUI
	    Public intoxication
	    Liquor law violation
		General population	UCR

	Alcohol-related crashes Alcohol-related fatal crashes	General population	ARIES
	Alcohol-attributable deaths Alcohol-attributable fractions	General population	ARDI

Tobacco	Past-month use of
	    Tobacco product
	    Cigarettes
		General population ages 12+	NSDUH

	Past-month smoking Four-level smoking status (smoked every day)	Adults ages 18+	BRFSS

	Past-month use of
	    Tobacco
	    Cigarettes
	    Smokeless tobacco
		Middle and high school students	IYTS

	Lifetime and past-month use of cigarettes
	    Past-month use of
	    Any tobacco
	    Cigars
	    Smokeless tobacco
		Grades 9-12	YRBSS

	Lifetime use Past-month use	Grades 6-12	ATOD

APPENDIX II *(continued)*

SUBSTANCE	PATTERN OR CONSEQUENCE	TARGET POPULATION	DATASET
Tobacco (cont.)	Percentage of smoke-free homes and work places	General population	IATS
	Smoking-attributable mortality rate	Adults ages 35+	SAMMEC
Marijuana	Past-year use Past-month use	General population ages 12+	NSDUH
	Past-month use Tried marijuana before age 13	Grades 9-12	YRBSS
	Lifetime use Past-month use	Grades 6-12	ATOD
	Use reported at treatment admission Primary use (dependence) reported at treatment admission	Treatment population at or below 200% FPL, in state-sponsored programs	TEDS

	Arrests for
	    Possession of marijuana
	    Sale of marijuana
		General population	UCR

Cocaine	Past-year use	General population ages 12+	NSDUH
	Lifetime use Past-month use	Grades 9-12	YRBSS

	Lifetime and past-month use of
	    Cocaine
	    Crack
		Grades 6-12	ATOD

	Use reported at treatment admission Primary use (dependence) reported at treatment admission	Treatment population at or below 200% FPL, in state-sponsored programs	TEDS
	Arrests for Possession of cocaine/opiates Sale of cocaine/opiates	General population	UCR
Heroin	Lifetime, past-year, and past-month use (aggregated data 2002-2004)	General population ages 12+	NSDUH
	Lifetime use of heroin Used a needle to inject any illegal drug at least once during their lifetime	Grades 9-12	YRBSS
	Lifetime use Past-month use	Grades 6-12	ATOD
	Use reported at treatment admission Primary use (dependence) reported at treatment admission	Treatment population at or below 200% FPL, in state-sponsored programs	TEDS

	Arrests for
	    Possession of cocaine/opiates
	    Sale of cocaine/opiates
		General population	UCR

Methamphetamine	Lifetime, past-year, and past-month use (aggregated data 2002-2004)	General population ages 12+	NSDUH
	Lifetime use	Grades 9-12	YRBSS

SUBSTANCE	PATTERN OR CONSEQUENCE	TARGET POPULATION	DATASET
Methamphetamine (cont.)	Lifetime use Past-month use	Grades 6-12	ATOD
	Use reported at treatment admission Primary use (dependence) reported at treatment admission	Treatment population at or below 200% FPL, in state-sponsored programs FPL, in state-sponsored programs	TEDS
	Arrests for Possession of synthetic drugs Sale of synthetic drugs	General population	UCR
	Clandestine meth lab seizures Children identified/rescued in lab homes Arrests made during lab seizures	General population	ISP Meth Lab Seizures
Prescription Drugs	Past-year nonmedical use of pain relievers	General population ages 12+	NSDUH
	Lifetime and past-month use of Prescription painkillers Prescription drugs Tranquilizers	Grades 6-12	ATOD
	Past-year dispensation of Opioids CNS depressants Stimulants	General population	INSPECT
	Use reported at treatment admission Primary use (dependence) reported at treatment admission	Treatment population at or below 200% FPL, in state-sponsored programs	TEDS
	Arrests for Possession of 'other drugs' Sale of 'other drugs'	General population	UCR
Polysubstance Abuse	Use of 2+ substances reported at treatment admission	Treatment population at or below 200% FPL, in state-sponsored programs	TEDS
Miscellaneous	Suspensions and expulsions due to drugs, weapons, or alcohol	K-12	IDOE School Data

Abbreviations used: ARDI = Alcohol-Related Disease Impact database; ARIES = Automated Reporting Information Exchange System; ATOD = Alcohol, Tobacco, and Other Drug Use by Indiana Children and Adolescents; BRFSS = Behavioral Risk Factor Surveillance System; IATS = Indiana Adult Tobacco Survey; IDOE = Indiana Department of Education; INSPECT = Indiana Scheduled Prescription Drug Electronic Collection and Tracking system; ISP = Indiana State Police; IYTS = Indiana Youth Tobacco Survey; NSDUH = National Survey on Drug Use and Health; SAMMEC = Smoking-Attributable Mortality, Morbidity, and Economic Costs; TEDS = Treatment Episode Data Set; UCR = Uniform Crime Reporting program; YRBSS = Youth Risk Behavior Surveillance System.

Additional information on these datasets, including how to access them, can be found in Chapter 2 and Appendix I.

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MARIJUANA COCAINE
PRESCRIPTION DRUGS

THE CONSUMPTION AND CONSEQUENCES
OF ALCOHOL, TOBACCO, AND DRUGS IN INDIANA:
A STATE EPIDEMIOLOGICAL PROFILE
2012

INDIANA STATE EPIDEMIOLOGY AND OUTCOMES WORKGROUP

The Indiana State Epidemiology and Outcomes Workgroup (SEOW) was established in April 2006 to review epidemiological data on the patterns and consequences of substance use and abuse in Indiana and to make recommendations to the Governor's Strategic Prevention Framework (SPF) Advisory Council regarding priorities for prevention funding for the following year. The priorities were developed based on a systematic analysis of available data, the results of which are detailed in this report.

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CHP CENTER FOR HEALTH POLICY

Our Vision
"Healthy, safe, and drug-free environments
that nurture and assist all Indiana citizens to thrive."

Our Mission
"To reduce substance use and abuse
across the lifespan of Indiana citizens."