

Michigan Burden Document Update

Focusing on Abuse of Alcohol, Prescription Drugs, and Tobacco

September 2010

**Michigan Department of Community Health (MDCH)
Bureau of Substance Abuse and Addiction Services (BSAAS)**

**Strategic Planning Framework, State Incentive Grant (SPF/SIG)
State Epidemiology Workgroup (SEW)**

INTRODUCTION

Purpose

This document serves as an update to the original “SPF/SIG MICHIGAN STATE EPIDEMIOLOGICAL WORKGROUP (SEW) SUMMARY TO THE STATE SIG ADVISORY COUNCIL (SAC), DESCRIBING THE BURDEN OF ALCOHOL, TOBACCO AND OTHER DRUGS ON THE STATE OF MICHIGAN,” December 2005. The State Epidemiology Workgroup (SEW) of the Strategic Planning Framework State Incentive Grant (SPF/SIG) produced both documents.

Both the original and the updated versions describe the burden of alcohol, tobacco, and other drugs on the state of Michigan, however some differences are notable. The original version tallied the data available as of 2005, and served as a basis for the state to set priorities and to develop logic models for prevention efforts. This update is more narrowly focused on specific priorities set by the SEW in April of 2009, utilizing data available as of January 2010. In setting these priorities, the SEW considered readiness, political will, capacity, and resources in the ranking process. The priorities are noted in *italics* in the following table ([Intro-Table 1](#)).

Primary users of this document are expected to be: federal partners, other state-level agencies, legislators, policy makers, elected officials, regional coordinating agencies and coalitions. For further information, contact the Michigan Department of Community Health, Bureau of Substance Abuse and Addiction Services, 320 S. Walnut, Cass Bldg., Lansing, Michigan 48913, 517-373-4700, mdch-bsaas@michigan.gov.

General Explanation of Format

The data reported in this document are based on numbers provided by state and federal sources. The types of data examined include: magnitude (the number of people affected), prevalence (substance use rates in a particular population), years of potential life lost, trends (increasing, decreasing, or stable rates over time), and comparison data (with nation, other states, per gender, per age, etc...). The data is organized by substance, and then by age group. Within each age grouping, the formatting reflects the same organizational pattern as the state’s planning tool, the logic model. Logic models present a systematic picture of the relationships between substance use and adverse outcomes. Both use and outcomes are influenced by intervening variables such as laws and policies and are also reflected in the logic models. Thus this document reflects the logic models and presents information in the following format:

- Substance (the magnitude of the problem; the drug of choice)
- Consequences (the effects of use, misuse and abuse of a substance on quality of life: health, mortality, crime, dependence, accidents, and potential life lost)
- Consumption Patterns (prevalence, use patterns)
- Intervening Variables (positive and negative contributing factors, such as: availability, enforcement and adjudication, promotion, social norms, laws and policies, risk/protective factors, and other mediating resources)

Links to resources have been included to assist the reader interested in more detailed information. The formatting also contains internal links to supporting information within this burden document. These may be utilized by left clicking on the hyperlink, then right clicking and selecting “open hyperlink” option.

A note about data: This is a dynamic document. New data is released every month. For example, since the original creation of this document, the CDC has released the results of the 2009 National Youth Behavioral Risk Survey (YRBSS) which is available at <http://www.cdc.gov/HealthyYouth/yrbs/index.htm>. This study provides comparison and trend data which can be compared with the state YRBS results noted within this document. It is hoped that following any of the imbedded resource links will provide additional links to the latest data released by the cited sources.

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Focus of the Updated Burden Document, 2010

Substance	Consequences	Consumption Patterns	Intervening Variables
<u>Alcohol Use</u>	<p>Youth:</p> <ul style="list-style-type: none"> Alcohol-Related Traffic Crash Deaths and Serious Injury (ARTCD/SI) Underage Drinking (UAD) and Driving/Riding with Drinking Driver Use Linked to Other Risky Behaviors and Consequences Costs Abuse and Addiction Health Risks <p>General/Adult:</p> <ul style="list-style-type: none"> Alcohol-Related Traffic Crash Deaths (ARTCD) Alcohol-Related Traffic Crash Deaths and Serious Injury (ARTCD/SI) Abuse and Addiction Drove Vehicle After Drinking 	<p>Youth:</p> <ul style="list-style-type: none"> Current Use (last 30 days) UAD Lifetime Use Early Initial Use UAD Binge Drinking <p>General/Adult:</p> <ul style="list-style-type: none"> Initial Use Heavy Drinking Binge Drinking 	<p>Youth:</p> <ul style="list-style-type: none"> Laws & Policies Law Enforcement Access to Tobacco Social Norms Age of Onset <p>General/Adult:</p> <ul style="list-style-type: none"> Safety Belt Use SPF/SIG Focus on ARTCD and UAD on statewide level
<u>Prescription Drug Abuse</u>	<p>Youth:</p> <ul style="list-style-type: none"> Overdoses, Poisonings, etc... Related Risky Behaviors and consequences Death and Serious Injury from Impaired Driving/Riding Abuse and Addiction Related Crime (gap in data) <p>General/Adult:</p> <ul style="list-style-type: none"> Abuse and Addiction Traffic Deaths and Injuries Related Mortality 	<p>Youth:</p> <ul style="list-style-type: none"> MI compared to other states Various consumption patterns Special populations patterns <p>General/Adult:</p> <ul style="list-style-type: none"> National data MI ranking compared to other states 	<p>Youth/General/Adult:</p> <ul style="list-style-type: none"> Access: Point of Access and Disposal Military Considerations Social Norms Perception of Risk <p>General:</p> <ul style="list-style-type: none"> Access: Prescriptions Written Social Norms and Perception of Risk
<u>Tobacco Use</u>	<p>Youth:</p> <ul style="list-style-type: none"> Relationship to other Substance Abuse Health Risks <p>General/Adult:</p> <ul style="list-style-type: none"> Tobacco-related Morbidity and Mortality 	<p>Youth:</p> <ul style="list-style-type: none"> Tobacco Lifetime Use Early Initial Use Current Use (last 30 days) Daily Use Special Population Data <p>General/Adult:</p> <ul style="list-style-type: none"> Smoking Rates, Trends, Comparison with Other States Cultural and Special Population Trends 	<p>Youth:</p> <ul style="list-style-type: none"> Youth Access to Tobacco Prevention Activities (Synar and Block Grant Funding) Laws/Policies Perception of Harm Tobacco Industry Innovations <p>General/Adult:</p> <ul style="list-style-type: none"> Tax Increases FDA Control Over Tobacco Center for Disease Control(CDC) Funded Activities

Note Priorities are shown above in Italics.

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MICHIGAN OVERVIEW

Michigan is a coastal state with picturesque lakes, a large, culturally diverse population and a diversified economy. In 2008, it ranked as the nation's eighth largest state with an estimated 10,000,000 people.¹ Its diversity is manifested by a patchwork of racial, linguistic, geographic, gender, age and socio-economic characteristics. Approximately, 78 percent of the state's population is White; 14.6 percent African American; 3.9 percent Hispanic; 2.4 percent Asian/Pacific Islander; Arab-American and Chaldeans; and 1 percent Native American. English is the primary language spoken at home by 91 percent of the residents of Michigan, followed by languages other than English 8.4 percent, and Spanish 3.3 percent.²

An estimated 44 percent of Michigan's population resides in Southeast Michigan (Lapeer, Livingston, Macomb, Oakland, St. Clair, Washtenaw and Wayne Counties). Although minority populations reside throughout the state, there are concentrated sectors as follows: About 70 percent of all African Americans in Michigan reside in Southeastern Michigan, primarily in Wayne and Oakland counties; 43 percent of Michigan's total Hispanic population resides in Southeast Michigan; higher densities of Asian-Americans tend to be in Western and Southeast Michigan; the largest Arab American and Chaldean population in the United States primarily resides in Wayne, Oakland and Macomb counties, and combined, the Arab American and Chaldean population totals 490,000;³ and many of the 12 federally Native American tribes live in the Northern part of Michigan.⁴ ([Appendix 2](#)) Almost half the state's population is under 35 years of age, with 24 percent under the age of 18. An estimated 51 percent of the state's population is female; 49 percent is male.⁵

According the U.S. Census Bureau, 87 percent of Michigan residents 25 years and older possessed a high school diploma or equivalent and 35 percent have attained an Associates Degree or higher. Michigan's high school graduation rate was 73 percent, slightly lower than the national average rate for high school graduation, 74.5 percent.⁶

Michigan's socio-economic profile reflects a diverse set of industries, including: agricultural, construction, manufacturing, wholesale trade, retailing, transportation, financial, professional, scientific, education, health service, arts, entertainment, food service and public administration. However, within last nine years, Michigan has lost over 500,000 jobs in the manufacturing sector, primarily due to the down turn in the auto industry.

This economic downturn has had a negative effect on Michigan's unemployment rate which, in 2009, ranged from 12.8 percent to over 15 percent, with the preliminary annual average of 14.0 percent. Michigan's preliminary annual average unemployment rate in 2009 rose sharply by five and six-tenths percentage points from the 2008 annual rate of 8.4 percent. The national annual average unemployment rate in 2009 was 9.3 percent, three and a half percentage points above the 2008 annual rate of 5.8 percent. The state's 2009 preliminary annual jobless rate was the third highest since 1976 (the current official series dates back to 1976). Only the 15.6 percent rate recorded in 1982 and the 14.6 percent rate registered in 1983 were higher.

¹ U.S. Census Bureau, 2005-2007, American Community Survey

² *ibid*

³ National Center for Health Statistics, *Estimated Population by County, Single Year of Age, Bridged Race, Sex and Hispanic Origin, 2000-2007, Published 2008*

⁴ State of Michigan, *Michigan Tribal Governments, 2010*. http://www.michigan.gov/som/0,1607,7-192-29701_41909---,00.html

⁵ National Center for Health Statistics, *Estimated Population by County, Single Year of Age, Bridged Race, Sex and Hispanic Origin, 2000-2007, Published 2008*

⁶ U.S. Census Bureau, 2005-2007, American Community Survey, Educational Attainment

The five and six-tenths percentage point increase in unemployment from 2008 to 2009 marked the most pronounced annual jump on record. The next largest annual increase was the four and two-tenths percentage point advance reported from 1979 to 1980. From 2008 to 2009, total employment fell in Michigan by 351,000 or 7.8 percent, while unemployment rose by 264,000 or 64.5 percent. The state's annual average labor force level declined by 88,000, or 1.8 percent, from 2008 to 2009. There was a large increase in 2009, in the average number of weeks individuals remained unemployed in Michigan. Unemployment duration rose from an average of 23 weeks in 2008 to 30 weeks in 2009.⁷

According to the Census Bureau Overview and Analysis of 2007 Income, Earnings and Poverty Data from the American Community Survey, Michigan was the only state to have a statistically significant decrease in its median household income from 2006 to 2007, \$48,546 to \$47,950. This grim economic status was underscored with Michigan having the highest nationwide foreclosure rates during the first four months of 2009 (10,830).⁸

Finally, in 2007, Michigan ranked 17th in its percentage of children living below the poverty line and 5th in the national percentage of households with cash public assistance.⁹ During the same time frame, Michigan ranked 4th in the percentage of households with pension income.¹⁰ Over 200,000 residents are eligible to receive Family Independence Payments; 1.4 million are eligible for the Food Assistance Program; 10,500 are eligible to receive State Disability Assistance; 118,000 are eligible to receive Child Care and Development services; and 1.7 million are eligible to receive Medicaid benefits.¹¹

The Michigan Department of Community Health, Bureau of Substance Abuse and Addiction Services, coordinates substance abuse and addiction treatment, prevention, and recovery services through sixteen regional substance abuse coordinating agencies (CAs.). These sub-state entities are responsible for administering the provision of services within their jurisdictions, which may include single or multiple counties. All of Michigan's 83 counties are served by a CA. These agencies are incorporated in various administrative entities, including local health departments, community mental health service agencies, county commissions and free-standing non-profit agencies appointed by county commissions. ([Map 1](#))

⁷ Department of Labor, Energy, and Economic Growth, *Michigan's 2009 Preliminary Annual Average Labor Force Data*, January 20, 2010 http://www.michigan.gov/dleg/0,1607,7-154-10573_11472-230057--,00.html

⁸ Associated Press, May 9, 2009, and *Michigan's Labor Market News*, April 2009, Vol. 65, Issue No.2

⁹ Census Bureau Overview and Analysis of 2007 Income, Earnings and Poverty Data from the U.S. Census Bureau 2005-2007, American Community Survey

¹⁰ Michigan Department of Human Services Publication: "Green Book Report of Key Program Statistics", March 2009

¹¹ *ibid*

ALCOHOL USE

Alcohol Consequences by Age Group

ALCOHOL CONSEQUENCES – YOUTH

ALCOHOL RELATED TRAFFIC CRASH DEATHS AND SERIOUS INJURIES

Youth may be killed or seriously injured as an innocent victim or as an impaired driver, and may kill or severely injure others. Alcohol related traffic crashes involving at least one driver aged 16-25 who had been drinking, caused an annual average of 586 deaths and serious injuries (KAs) in Michigan each year between 2004 and 2008. (Table 2) Michigan ranked 9th in the country in the average annual number of deaths attributable to fatal motor vehicle traffic crashes in which at least one driver was aged 16-25 and had been drinking, 2003-2007, with 50.7% of these involving underage drinkers, 16-20 years. (Table 3)

UNDERAGE DRINKING AND DRIVING/RIDING WITH DRINKING DRIVER

Data from the 2009 Michigan Youth Behavior Risk Survey (YRBS) indicate that, of 9-12 graders in the last thirty days, 8% had driven while drinking and 28% had ridden in a vehicle with someone who had been drinking.¹²

ALCOHOL USE LINKED TO OTHER RISKY BEHAVIORS AND CONSEQUENCES

On the 2009 Michigan YRBS, twenty-five percent of the 9-12 graders who had sex in the last three months reported doing so after using alcohol or drugs.¹³ Binge drinking, having 5 or more drinks in one sitting, most common in late teens and early twenties, leads to several adverse outcomes for women and children. These include: intentional and non-intentional injuries, unplanned sexual intercourse, unprotected sex, sexually transmitted diseases and unintentional pregnancy. Women with unintended pregnancies are more likely to start prenatal care later in their pregnancy and are less likely to engage in healthy behaviors such as quitting smoking during pregnancy or consuming adequate amounts of folic acid. Thus unintended pregnancies can also have adverse impacts on infants and children. No amount of alcohol is safe for a fetus during pregnancy. Exposure to alcohol in early phases, often before a teen realizes she is pregnant, is linked to miscarriage, mental retardation, and other preventable birth defects, such as Fetal Alcohol Syndrome.¹⁴

COSTS

It is estimated that underage alcohol use costs Michigan taxpayers over \$2 billion per year, including the cost of youth violence, treatment, traffic crashes, property crimes and medical costs. Underage drinking (UAD) cost Michigan \$2.4 billion in 2007, translating to a cost of \$2,275 per year for each youth in the state, resulting in Michigan ranking 28th highest among the 50 states.¹⁵ (Table 4) Excluding pain and suffering, the direct costs of underage drinking incurred through medical care and loss of work cost Michigan \$742 million each year. Youth violence and traffic crashes by underage drinkers represent the largest UAD costs for the state. Among teen mothers, fetal alcohol syndrome (FAS) alone costs Michigan \$32.6 million yearly.¹⁶

¹² "2009 Michigan Youth Risk Behavior Survey", Michigan Department of Education. Contact: Kim Kovalchick, Michigan Department of Education, kovalchick@michigan.gov or (517) 241-4292.
http://www.michigan.gov/documents/mde/09YRBSDetail_327165_7.pdf

¹³ *ibid*

¹⁴ "Preconceptional Binge Drinking and Unintentional Pregnancy", Pregnancy Risk Assessment Monitoring System (PRAMS), Vol.2:4, April 2005, Maternal Health & Childhood Epidemiology Products, MDCH,
http://www.michigan.gov/documents/April_2005_MI_PRAMS_Delivery_124472_7.pdf

¹⁵ *Underage Drinking In Michigan, The Facts*, Pacific Institute for Research and Evaluation (PIRE) with funding from the Office of Juvenile Justice and Delinquency Prevention (OJJDP), November 2009.

¹⁶ *ibid*

ALCOHOL ABUSE AND ADDICTION

Young people who begin drinking before the age of 15 are four times more likely to develop alcohol dependence and are two and a half times more likely to become abusers of alcohol than those who begin drinking at age 21.¹⁷ In 2007, 2,452 youth, ages 12-20 years old, were admitted for alcohol treatment in Michigan, accounting for 9% of all alcohol abuse treatment admissions in the state.¹⁸

HEALTH RISKS

California researchers who compared the brains of teen drinkers to non-drinkers found that young alcohol users suffered damage to nerve tissues that could cause attention deficits among boys and faulty visual information processing among girls.¹⁹ A multitude of research has documented the effects of alcohol on the developing brain, noting that brain development is not complete until about age 25.

ALCOHOL CONSEQUENCES – DRINKING DRIVERS AGED 16-25

ALCOHOL RELATED TRAFFIC CRASH DEATHS AND SERIOUS INJURIES

During 2004-2008, traffic crashes involving drinking drivers aged 16-25 caused an average of 103 Michigan resident deaths, with the corresponding rate of 10.2 deaths per million residents. Drivers in this age group also caused 483 serious injuries (KAs), or 47.9 serious injuries per million residents.²⁰ These crashes caused an average of 4,173 years of potential life lost among state residents, (Table 5) with more than half (2,161) occurring in just ten of the 83 counties.²¹ The average annual death rate (deaths per 1,000,000 population) in the nation during the period of 2003-2007 is 12.7. More than half (53%) of the Michigan residents who were killed and 48% of those who were seriously injured were in crashes involving drinking drivers aged 16-25 who resided in ten of the state's 83 counties.²² Michigan ranked 9th in the country in the average annual number of deaths attributable to fatal motor vehicle traffic crashes in which at least one driver was aged 16-25 and had been drinking, 2003-2007, with 50.7% of these involving underage drinkers, 16-20 years. (Table 2)

ALCOHOL CONSEQUENCES – GENERAL/ADULT

ALCOHOL RELATED TRAFFIC CRASH DEATHS (ARTCD)

Of the 10,003,422 persons living in Michigan, one out of every 10,208 was killed in a traffic crash; and one out of every 134 persons was injured in 2008. The Michigan State Police Criminal Justice Information Center (CJIC) and the Office of Highway Safety Planning (OHSP), in conjunction with the University of Michigan Transportation Research Institute (UMTRI), compiles and publishes the annual Michigan Traffic Crash Facts. Of all 2008 fatal crashes, 32.5 percent involved at least one drinking operator, bicyclist, or pedestrian, 24.8 percent involved drinking but no drugs, 6.6 percent involved drugs but no drinking, and 7.7 percent involved both drinking and drugs.²³ Overall trend data, 2000-2008, for many indicators is available within this document. (Table 1) Overall, alcohol and/or drug related traffic crash deaths showed a decline from 440 in 2006, to 379 in

¹⁷ Grant, B.F. & Dawson, D.A. (1997) "Age at onset of alcohol use and its association with DSM-IV alcohol abuse and dependence: Results from the National Longitudinal Alcohol Epidemiologic Survey". *Journal of Substance Abuse* 9:103-110.

¹⁸ Office of Applied Studies, Substance Abuse and Mental Health Services Administration, Treatment Episode Data Set (TEDS) (2007) "Substance Abuse Treatment by Primary Substance of Abuse, According to Sex, Age, Race and Ethnicity."

¹⁹ Teen Drinkers Suffer Nerve Damage in Brain, <http://www.jointogether.org/news/research/summaries/2010/teen-drinkers-suffer-nerve.html>, January 28, 2010

²⁰ Michigan Department of Community Health, Bureau of Substance Abuse and Addiction Services, Lewis Cass Building, 320 S. Walnut, Lansing, Michigan 48913, 517-373-4700, www.michigan.gov/mdch-bsaas

²¹ *ibid*

²² *ibid*

²³ Michigan Traffic Crash Facts, Michigan State Police, http://www.michigan.gov/msp/0,1607,7-123-1593_3504-17157--,00.html

2008; yet the relative percentage of overall traffic fatalities has remained constant from 2000 to 2008. County level data is available in the Michigan State Police Drunk Driving Audit.²⁴

ARTCD/SI- DEATH AND/OR SERIOUS INJURY CRASHES

The number of people injured in crashes involving alcohol and/or drugs also declined last year, dropping from 7,159 in 2007 to 6,248 in 2008.²⁵ As of May 2009, the Michigan Department of Community Health estimates that the average number of deaths/injuries per year is 586.2. The average annual death/injury rate (deaths/injuries per million population) is 58.1. ([Table 2](#)) Note: The current economic impact of traffic crashes will be available from *The National Safety Council* later this year.

SUBSTANCE ABUSE AND ADDICTION

Treatment Episode Data indicates that numbers for alcohol treatment, within Michigan's public service delivery system, have varied slightly between 2001 and 2009, but maintain a decline since 2001. ([Table 8](#)) Data also indicates that 14.2% of Michigan adults have no health coverage, perhaps influencing the decline in treatment sought. ([Table 6](#))

DROVE VEHICLE AFTER DRINKING

As of August 4, 2009, the combined 2006-2008 Michigan Behavioral Risk Factor Survey (MI BRFS) Regional and Local Health Department Estimates indicate that 2.7% of Michigan adults drove after drinking. ([Table 6](#)) Also notable is the fact that many children reside with parents and caregivers who have substance abuse issues, and are dependent upon them to provide transportation.²⁶

Alcohol Consumption Patterns by Age Groups

ALCOHOL CONSUMPTION – YOUTH

Current use is defined as one or more drinks on one or more occasion within the last thirty days. The 2009 Michigan Youth Risk Behavior Survey (YRBS), for 9-12 graders, reports that past 30 day use is 37%, down slightly over the last ten years but up since 2007. Four percent of these students report drinking on school property in the last month. Sixty-nine percent report having had at least one drink during their lifetime (77% of seniors). Students initiating early alcohol use, before 13 years of age, trended significantly downward over the last decade, reported as 19% in 2009, with the highest rate reported as 24% for 9th graders. Binge drinking trended downward from 1997 to 2005 for males, but saw increases in 2007 and 2009 (24%). Thirty-five percent of high school seniors report binge drinking, which is 4 or more drinks in a row for females/5 or more drinks in a row for males, in the last 30 days in 2009.²⁷ Trend data shows general decreases in alcohol use from 1997 to 2007. ([Table 7](#))

²⁴ *ibid*

²⁵ 2008 Michigan Drunk Driving Audit, April 2009, Michigan State Police, Criminal Justice Information Center, http://www.michigan.gov/documents/msp/2008_DDA_284522_7.pdf

²⁶ Cesar Fax

²⁷ "2009 Michigan Youth Risk Behavior Survey", Michigan Department of Education. Contact: Kim Kovalchick, Michigan Department of Education, kovalchick@michigan.gov or (517) 241-4292. http://www.michigan.gov/documents/mde/09YRBSDetail_327165_7.pdf

In October of 2006, the Pacific Institute for Research and Evaluation (PIRE) reported that in 2005 approximately 409,000 underage youth consumed 14.5% of all alcohol sold in Michigan, providing profits of \$293 million to the alcohol industry. That increased in 2007 to 15.9% of all alcohol sold in Michigan, totaling \$773 million in sales. These sales are all illegal and provided profits of \$379 million to the alcohol industry.²⁸

The Michigan Liquor Control Commission, report of August 2008, notes a significant increase in the number of violations in their “controlled buy” activities for sales to minors, from 15% in 2007 to 17% in January to July 2008, with more than half of the sales occurring in spite of an ID check.²⁹

ALCOHOL CONSUMPTION – GENERAL/ADULT

In 2007, there were 4.6 million persons aged 12 or older who had used alcohol for the first time within the past 12 months. Most of these (85.9%) were under 21 at the time of initiation and the mean age of first use in this group was 15.8 years. The 2006-2008 Michigan Behavioral Risk Factor Survey (BRFS) Regional and Local Health Department Estimates, released August 4, 2009, indicate the following consumption patterns: 5.6% Heavy Drinking and 17.9% Binge Drinking. ([Table 6](#))

Alcohol Intervening Variables by Age Groups

ALCOHOL INTERVENING VARIABLES – YOUTH

LAWS/POLICIES

Graduated Licensing for first time drivers, Zero Tolerance, Social Host Laws, and Ignition Interlock Laws are in place in Michigan. Reductions in motor vehicle crashes are the result, in part, of many policy and program measures, including the following: keeping the minimum legal drinking age to 21 years,³⁰ administrative revocation of licenses for drinking and driving,³¹ lower legal blood alcohol limits for youth³² and adults,³³ and higher prices through increased taxation of alcoholic beverages.³⁴ ³⁵ Higher prices for alcoholic beverages also are associated with reduced frequency of drinking and driving.³⁶ Training programs are in place for servers and clerks, and are often used as a consequence of sales to minors in regards to license protection or reinstatement by the Michigan Liquor Control Commission (LCC). In addition, community coalition/provider programs involving multiple city departments and private citizens have reduced both driving after drinking and traffic

²⁸ Miller, TR, Levy, DT, Spicer, RS, & Taylor, DM (2006) “Societal costs of underage drinking”, *Journal of Studies on Alcohol*, 67(4) 519-528.

²⁹ Michigan Liquor Control Commission, “August 2008 Report”, <http://www.michigan.gov/dleg/0,1607,7-154-10570---,00.html>

³⁰ O'Malley, P.M., and Wagenaar, A.C. “Effects of minimum drinking age laws on alcohol use, related behaviors and traffic crash involvement among American youth: 1976–1987”. *Journal of Studies on Alcohol* 52(5):478-491, 1991. PubMed; PMID 1943105 http://www.ncbi.nlm.nih.gov/entrez/query.fcgi?cmd=Retrieve&db=PubMed&list_uids=1943105&dopt=Abstract

³¹ Zador, P.L.; Lund, A.K.; Fields, M.; et al. “Fatal Crash Involvement and Laws Against Alcohol Impaired Driving, Arlington, VA: Institute for Highway Safety, 1989.

³² Hingson, R.; Heeren, T.; and Winter, M. “Lower legal blood alcohol limits for young drivers” *Public Health Reports* 109(6) 738-744, 1994. PubMed; PMID 7800781 <http://www.ncbi.nlm.nih.gov/pubmed/7800781?dopt=Abstract>

³³ Hingson, R.; Heeren, T.; and Winter, M. “Lowering state legal blood alcohol limits to 0.08 percent: The effect on fatal motor vehicle crashes.” *American Journal of Public Health* 86(9): 1297-1299, 1996

³⁴ Chalopuka, F.J.; Saffer, H.; and Grossman, M. “Alcohol-control policies and motor-vehicle fatalities” *Journal of Legal Studies* 22:161-186, 1993

³⁵ Ruhm, C.J., “Alcohol policies and highway vehicle fatalities.” *Journal of Health Economics* 15:435-454, 1996. PubMed; PMID 10164038 <http://www.ncbi.nlm.nih.gov/pubmed/10164038?dopt=Abstract>

³⁶ Zador, P.L.; Lund, A.K.; Fields, M.; et al. “Fatal Crash Involvement and Laws Against Alcohol Impaired Driving, Arlington, VA: Institute for Highway Safety, 1989.

deaths and injuries. Since 2005, Michigan Department of Community Health has focused on Underage Drinking and Alcohol Related Traffic Crash Deaths with the Strategic Planning Framework /State Incentive Grant.³⁷ As of July 2009, Michigan Drivers Licenses and Identification Cards issued by Michigan Secretary of State to those under 18 years of age utilize vertical formatting with red highlights, contrasting the horizontal licenses for those 21 and over, and making underage status much easier for clerks and servers to recognize.

LAW ENFORCEMENT

The Office of Highway Safety Planning funds Party Patrols, Public Service Announcements, and many other initiatives to the Law Enforcement community. Local law enforcement divisions partner with communities for compliance checks and other youth access prevention initiatives. However, the recent economic struggles have forced budget cuts in Law Enforcement. “Making It Click” is a new initiative by the Office of Highway Safety Planning to encourage high school student seat belt use.³⁸

ACCESS

Packaging for alcoholic energy drinks mimics that of the non-alcoholic energy drinks, confusing retail clerks, parents and school staff, making it easier for minors to access and drink this form of alcohol. The home remains the most likely place where youth can access alcohol. Internet sales are also a likely place for youth to obtain alcohol products. Although delivery services are required to obtain an adult signature upon delivery, this is not common practice.

SOCIAL NORMING

Parental acceptance of underage drinking and the provision of alcohol to minors by family and friends remains a national issue. In Michigan, various media campaigns and evidence based programming within communities address “It’s Not a MINOR issue.” Popular drinking games and portrayal in media have increased. Many communities and college campuses are using social norms campaigns to reduce underage and high-risk drinking. Social norms are people’s beliefs, attitudes, and expectations about the behaviors that are considered normal or acceptable in a certain social environment. High school and college students often have inflated views of how much their peers use alcohol and other drugs. These exaggerated views may influence students to increase their own alcohol use to fit in with what they perceive is “normal.” Social norms marketing campaigns use advertising techniques to correct these misperceptions, which has been associated with decreases in the perceived pressure to use alcohol. Social norms marketing messages are different from traditional prevention messages in their use of statistics and nonjudgmental messages about behaviors the majority of students are engaging in, such as not using alcohol, in order to encourage that behavior in others. Social norms campaigns have also been used to target parents who believe it is acceptable to host parties and provide alcohol to minors.

AGE OF ONSET

Efforts to delay age of onset are considered critical in research, noting that a need to screen and counsel adolescents about alcohol use should be coupled with policies and programs that delay alcohol consumption.³⁹

³⁷ Michigan Department of Community Health, Bureau of Substance Abuse and Addiction Services

³⁸ Making It Click, Office of Highway Safety Planning,

http://www.michigan.gov/documents/msp/high_school_seatbelt_program_06_296925_7.pdf

³⁹ Hingson, R.W., Heeren, T., and Winter, M., ARCH Pediatric Adolescent Medicine/Vol 160, July 2006, Age at Drinking Onset and Alcohol Dependence, Age at Onset, Duration and Severity, www.archpediatrics.com

ALCOHOL INTERVENING VARIABLES – GENERAL/ADULT

SAFETY BELT USE

Seat belt use has dramatically increased (70% to 97%) from 1998 to 2008, rising to 98% in 2009 and making Michigan tied for the highest use rate in the nation.⁴⁰ According to Fatality Analysis Reporting System (FARS) data, during this time period there were decreases in total traffic fatalities (1,366 to 980, respectively), unrestrained fatalities (518 to 210), alcohol involved fatalities with .01 BAC or higher (502 to 331), and alcohol involved fatalities with .08 BAC or higher (427 to 282).⁴¹ Increased belt use has contributed to reducing fatalities in alcohol-involved crashes and all crashes; the official National Center for Statistics and Analysis methodology estimates fewer potential “lives saved” as total fatalities decrease but still shows about 500 Michigan lives saved by safety belts every year.⁴² Safety belt use is addressed as a Health and Safety issue by the Michigan Office of Highway Safety Planning. ([Table 6](#))

STATEWIDE FOCUS OF SPF/SIG ACTIVITIES ON ARTCD

The federal Strategic Planning Framework/State Incentive Grant (SPF/SIG) has afforded dollars to build community capacity to address Alcohol Related Traffic Crash Deaths for the last five years. Community level needs assessments, capacity building, and strategic plans have been completed by sub-state entities for MDCH/BSAAS. Implementation plans and evaluations are currently underway. ARTCD and underage drinking remain a focus of statewide prevention planning for 2010-2011.

⁴⁰ Michigan State Police, Office of Highway Safety Planning, 2009 Direct Observation Survey of Safety Belt Use. http://www.michigan.gov/msp/0,1607,7-123-1645_3501_49814---,00.html

⁴¹ Fatality Analysis Reporting System (FARS), <http://www-fars.nhtsa.dot.gov/Main/index.aspx>

⁴² OHSP-NCSA private communication, 2009; Seat Belt Use savings calculations use the same methodology as NHTSA's Traffic Safety Sheets, Research Notes: "Increase in Lives Saved, Injuries Prevented, and Cost Saved if Seat Belt Use Rose to 90% in all states." <http://www-nrd.nhtsa.dot.gov/Pubs/811140.PDF>

PRESCRIPTION DRUG ABUSE

Prescription Drug Abuse Consequences by Age Groups

PRESCRIPTION DRUG ABUSE CONSEQUENCES – YOUTH

Prescription drugs are considered misused if taken in amounts or manners in which they were not prescribed and/or if they are taken by a person other than to whom they are prescribed. Drug overdoses and interactions, accidental poisonings and deaths are risks of this behavior. ([Table 10](#)) This category of misuse and abuse is also known as Medication Abuse. Violence and extreme risk taking may also become by-products of misuse. On the 2009 Michigan YRBS, twenty-five percent of the 9-12 graders who had sex in the last three months reported doing so after using alcohol or drugs.⁴³ Healthy pregnancy outcomes are threatened by drug use. Prescription drug abuse also leads to impaired driving and traffic crashes causing severe injury or death. ([Table 1](#))

The most commonly abused prescription drugs⁴⁴:

- **Opioids** – for pain
 - oxycodone (OxyContin), propoxyphene (Darvon), hydrocodone (Vicodin), hydromorphone (Dilaudid), meperidine (Demerol), diphenoxylate (Lomotil)
- **Depressants** – for anxiety and sleep disorders
 - barbituates: pentobarbital sodium (Nebutol); benzodiazapenes: diazepam (Valium), alprazolam (Xanax)
- **Stimulants** – for narcolepsy, ADHD, and obesity
 - dextroamphetamine (Dexedrine), methylphenidate (Ritalin) and steroids (anabolic/androgenic)

Many prescription drugs are addictive to varying degrees and result in the need for substance abuse and addiction treatment. These drugs are organized into Schedules. ([Appendix 5](#))

ABUSE AND ADDICTION

In a gender/age cross reference of publicly funded treatment sought in 2009, where the initial treatment involved prescription drugs, as primary, secondary or tertiary drugs of choice, all youth under 14 were female ([Table 13](#)) and 138 youth twenty years and under were treated. National data is readily available, but state data collection is just beginning and is fragmented. State data collection is considered a gap for the SEW to focus on, as the problem has escalated nationally and continues to make headlines within the state.

PRESCRIPTION DRUG ABUSE CONSEQUENCES – GENERAL/ADULT

ABUSE AND ADDICTION

The percent of treatment admissions for opiate abuse and addiction has nearly tripled from 2003 (3.7%) to 2009 (9.10%). ([Table 8](#)) This increase has not just been in prescription drugs as primary drug of choice. Michigan publicly funded treatment involving prescription drug abuse as the primary, secondary, and tertiary drug of choice totaled 4,472 treatment entrances in 2009, with the highest rates in adults aged 21-54 years. ([Table 13](#))

⁴³ "2009 Michigan Youth Risk Behavior Survey", Michigan Department of Education. Contact: Kim Kovalchick, Michigan Department of Education, kovalchick@michigan.gov or (517) 241-4292.
http://www.michigan.gov/documents/mde/09YRBSDetail_327165_7.pdf

⁴⁴ National Institute of Drug Abuse (NIDA) of National Institutes of Health (NIH) of U.S. Department of Health and Human Services (DHHS)

Illicit drug use has also increased as it becomes a more affordable option for a person as their prescription drug addiction progresses from expensive prescriptions to more affordable illicit substances. ([Figures 2-4](#)) The number of legitimate prescriptions drugs had also increased dramatically from 2003-2006. ([Table 11](#)) ([Table 12](#))

TRAFFIC DEATHS AND INJURIES

Traffic deaths involving drugs jumped 43 percent from 98 in 2007 to 140 in 2008. Some of this increase can be attributed to increases in testing. Of all 2008 crashes, 6.6 percent involved drugs but no drinking, and 7.7 percent involved both drinking and drugs.⁴⁵ Some of the numbers involve illicit drug use, which is often an outcome of progressive addiction to prescription drugs, as noted above.

Prescription Drug Consumption Patterns by Age Groups

PRESCRIPTION DRUG CONSUMPTION – YOUTH

Prescription Drug Misuse is an emerging trend. Although national data is prevalent; state data is limited. Two questions regarding prescription drug use are being asked on the Michigan Profile of Healthy Youth (MiPHY) this school year (2009-10) for the first time.⁴⁶ Illegal drugs were offered to thirty percent of students within the last year; many of these were prescription drugs. Michigan ranks among the top five states (11.5%) in prescription drug misuse of any prescription drug among youth, according to SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2002, 2003, 2004. According to the 2009 Michigan Youth Risk Behavior Survey, six percent of 9-12 grade students have taken barbiturates without a doctor's prescription in the last thirty days. This rate is significantly higher for Hispanic/Latino students (11%) and eleventh graders (8%). Ten percent of 9-12 grade students have used barbiturates without a prescription at least once in their life, again with higher rates for Hispanic/Latino students (16%). Nine percent of 9-12 grade students have used club drugs one or more times during their life, with higher rates for Hispanic/Latino students (16%) and eleventh (13%) and twelfth (11%) graders. Four percent of students have taken steroid pills or shots at least once and three percent have done so in the last thirty days. The 2009 Michigan YRBS data also show that 14% of students have sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paint or spray to get high one or more times during their life.⁴⁷ Prescription drug misuse is prevalent in the headlines and all media. "Pharming" parties are common.

PRESCRIPTION DRUG CONSUMPTION – GENERAL/YOUTH

In the nation as a whole, an annual average of 7.5% of persons aged 12-17 used pain relievers non-medically in the twelve months leading up to the 2002, 2003, and 2004 NSDUH survey. Michigan ranked fourth among all states with a rate of 9.9% for non-medical pain reliever usage and within the top ten for non-medical stimulant use (3.2% Michigan; 2.3% national).

⁴⁵ 2008 Michigan Drunk Driving Audit, April 2009, Michigan State Police, Criminal Justice Information Center, http://www.michigan.gov/msp/0,1607,7-123-1645_3501_4626-217635--,00.html

⁴⁶ Michigan Department of Education, MiPHY questions, <http://www.michigan.gov/miphy>

⁴⁷ "2009 Michigan Youth Risk Behavior Survey", Michigan Department of Education. Contact: Kim Kovalchick, Michigan Department of Education, kovalchick@michigan.gov or (517) 241-4292. http://www.michigan.gov/documents/mde/09YRBSDetail_327165_7.pdf

Prescription Drug Intervening Variables by Age Groups

PRESCRIPTION DRUG INTERVENING VARIABLES – YOUTH/GENERAL/ADULT

ACCESS

The home is most prevalent point of access for prescription drugs. Adults are ill-informed about how accessible their prescriptions are to their family, friends, babysitters, and visitors. Prescriptions are often discontinued before completely used and kept beyond their expiration dates. Some “take it back” programs and proper disposal techniques have been recently advocated in several Michigan communities. Of particular interest is Hydrocodone. In 2007, there were over 4 million prescriptions for this drug category, Schedule III, and now accounts for 29.2% of all controlled substance prescriptions. This includes vicodin, lortab, tussionex, etc.

MILITARY CONSIDERATIONS

Wartime creates additional stress with deployments, wounds, and loss of life for both the veterans and their families. This creates high risk for all and often increased access. Prescription drugs have replaced marijuana as the current substance abuse and addiction issue for the military. Stigma has created apprehension about utilizing treatment within the military, with veterans often returning to civilian life with unresolved substance issues.

SOCIAL NORMS

Sharing prescriptions, attitudes about self-medicating for even minor complaints, advertising campaigns, jovial acceptance in media all contribute to misuse and abuse of prescription drugs.

PERCEPTION OF RISK

Prescription drugs are often thought safer by youth because they are initially prescribed by a doctor.

PRESCRIPTION DRUG INTERVENING VARIABLES – GENERAL MISUSE

ACCESS

The number of legitimate prescriptions written has consistently increased. ([Figure 1](#)) Michigan Automated Prescription Service (MAPS) reports 15,989,785 in 2006; 16,803,988 in 2007; and 17,254,281 in 2008.

Prescriptions for Hydrocodone have dramatically increased since 2005, accounting for 29.9% of all controlled substance prescriptions in 2008. Suboxone prescriptions increased 108% from 2005-06, and again by 81.2% in 2007, and by another 5.9% in 2008. Its patent expires in late 2009 and will be generically available thereafter, which usually spikes prescriptions. Some highlights from the MAPS data, focusing on 2006: Frequency of prescribed controlled substance by NSDUH Use Category: pain relievers at 8.1 million, tranquilizers at 3.3 million, stimulants at 1.4 million, and sedatives at 0.89 million. (Increase in prescriptions noted by drug 2003-2006, [Table 11](#).) Just about every category of controlled drug has been increasing in number of prescriptions since 2003. All Schedule II (stimulants and pain relievers) drug prescriptions are increasing, with the biggest increases from 2003 to 2006 among the major drugs including: methadone (200%), amphetamines and other stimulants (150%), and morphine and hydromorphone (150%). Opioid antagonists (Suboxone, Schedule III) are new and small in numbers but increasing rapidly (52,000 prescriptions in 2006, almost 1600% increase). (Increase in prescriptions noted by NSDUH Category 2003-2006, [Table 12](#).) The only prescriptions decreasing in number were: Darvon/darvocet 3% (Schedule IV pain reliever), Codeine 4% (Schedule III pain reliever), and Halcion 5% (Schedule IV sedative). The most commonly prescribed pain relievers in 2006: Hydrocodone (Vicodin, etc; Schedule III) at 4.6 million prescriptions, Propoxyphene (Darvon etc, Schedule IV) at 1.1 million,

codeine (Tylenol #3, #4, Schedule 3) at 0.92 million, fentanyl (Schedule 2) at 0.58 million, oxycodone (OxyContin, etc Schedule 2) at 0.45 million, and morphine (Schedule 2) at 0.24 million.⁴⁸

SOCIAL NORMS and PERCEPTION OF RISK

See Previous Page.

⁴⁸ Laurie Cameron, MDCH, Bureau of Epidemiology, 2009.

TOBACCO USE

Tobacco Consequences by Age Groups

TOBACCO CONSEQUENCE – YOUTH

TOBACCO USE: RELATIONSHIP TO OTHER SUBSTANCE USE

According to 2007 National Survey on Drug Use and Health results, nationally the rate of current illicit drug use was approximately 9 times higher among youths aged 12-17 who smoked cigarettes in the past month (47.3%) than it was among youth who did not smoke (5.4%). Alcohol consumption levels are also associated with tobacco use. Heavy alcohol use among those aged 12 years and over who smoked cigarettes in the past month was found to be 45%, while only 16.4% of non-binge drinkers were current smokers.⁴⁹

HEALTH RISKS

Most health risks associated with smoking tend to occur after years of use. However, asthma and leukoplakia can occur in youth. Asthma rates in Michigan exceed the national rates, but data does not allow separation of asthma (or other health risks) caused by tobacco from those caused by other contaminants in Michigan, such as chemical and manufacturing plants. (Table 9) According to the 2009 Michigan YRBS, of youth in grades 9-12, 23% have ever received an asthma diagnosis; 12% currently have asthma, and of those with asthma, 18% are uncontrolled cases requiring emergency treatment one or more times during the past 12 months.⁵⁰ Leukoplakia is a condition of thickened, white patches on the gums, cheeks, tongue and bottom of mouth, in which a small percentage of patches show early signs of cancer; many mouth cancers form adjacent to these patches. Tobacco, either smoked or chewed, is considered the main contributing factor for leukoplakia.⁵¹

Secondhand smoke remains an issue for youth exposure. Youth are often exposed to smokers in vehicles, homes, events, and, more often than adults, at the worksite.

Riding in a car with a smoker can cause exposure to secondhand smoke in levels higher than in a smoke-filled bar. Researchers report that rolling down a window or turning on the air conditioning does not provide full protection. Nicotine levels in a smoker's car average 9.6 micrograms per cubic meter, higher than that detected in spaces where smoking is permitted. Nicotine concentrations in smoker's cars are doubled for every cigarette smoked.⁵² Thirdhand smoke involves exposure to the tars and chemicals left on surrounding surfaces exposed to secondhand smoke.

TOBACCO CONSEQUENCE – GENERAL/ADULT

Health risks associated with tobacco exposure/use include: heart attack, lung cancers, and cancers of the mouth, lips, nasal cavity, sinus, larynx, esophagus, stomach, pancreas, kidney, bladder, uterus, cervix, and myeloid leukemia.⁵³ Lung cancer rates in Michigan are significantly higher than national rates over the last five

⁴⁹ MDCH, BSAAS, overview of NSDUH (SAMHSA, 2008) data. <http://www.oas.samhsa.gov/tobacco.htm>

⁵⁰ "2009 Michigan Youth Risk Behavior Survey", Michigan Department of Education. Contact: Kim Kovalchick, Michigan Department of Education, kovalchick@michigan.gov or (517) 241-4292. http://www.michigan.gov/documents/mde/09YRBSDetail_327165_7.pdf

⁵¹ Leukoplakia, Mayo Clinic Staff, www.mayoclinic.com/print/leukoplakia/DS00458/DSECTION=all&METHOD=print

⁵² Reuters, August 25, 2009, based on study reported in Tobacco Control Journal and researcher Ana Navas-Acien of the Johns Hopkins Bloomberg School of Public Health.

⁵³ American Cancer Society, <http://www.cancer.org>

years. ([Table 9](#)) Michigan asthma rates are significantly higher than the U. S. rates.⁵⁴ ([Table 6](#)) Coronary Disease is often the result of smoking and exposure to secondhand smoke. ([Table 6](#)) A 2006 Surgeon General Report concluded that there are increased risks of coronary heart disease morbidity and mortality among men and women exposed to secondhand smoke. In October 2009, the Center for Disease Control reported that there is about a 25-30 percent increase in the risk of coronary heart disease from exposure to secondhand smoke.⁵⁵

Tobacco Consumption Patterns by Age Groups

TOBACCO CONSUMPTION – YOUTH

According to the preliminary 2009 Michigan YRBS, nearly half of 9-12 grade students (46%) have tried smoking, with 52% of 11th and 12th graders and 58% of Hispanic/Latino students. Eleven percent had smoked a whole cigarette before the age of 13. While 19% of students report smoking on one or more of the past thirty days, only 8% reported doing so on 20 or more of the last thirty days. Six percent have smoked on school property within the last thirty days. Thirteen percent have smoked on a daily basis; 54% of those have indicated that they have tried to quit. Eighteen percent have tried chewing tobacco, dip, or snuff in their life, with 11% having used it in the last thirty days. Fifteen percent have smoked cigar, cigarillos, or little cigars in the past thirty days. Twenty-five percent report having used some form of tobacco in the last thirty days.⁵⁶ (Trend data from 1997-2007 is available in [Table 7.](#))

TOBACCO CONSUMPTION – GENERAL/ADULT

According to the CDC projections (actual 2009 data available summer 2010) on Behavioral Risk Factor Survey (BRFSS) data, the Michigan 2007 rates for persons 18+ having smoked more than 100 cigarettes during their lifetime and currently smoke every day, or some days, are 23.5% for males and 19% for females. Michigan's overall rate of 21.2% exceeds the median of all states and territories of 19%, as well as the Healthy People 2010 goal of 12%. Smoking in Michigan has declined since 1997 when the rate was highest at 27.4%; Michigan's lowest rate was in 2008 at 20.2%.

The 2006-2008 Michigan BFRSS Regional & Local Health Department Estimates, released August 4, 2009, indicates Michigan rates to be 21% for current smoking, 25.4% for former smoking, and 53.6% for never smoked. Note: There is considerable use of hookah in the southeastern part of the state.

Tobacco use is a public health epidemic among lesbian, gay, bisexual, and transgender (LGBT) populations. The American Cancer Society estimates that over 30,000 LGBT people die each year of tobacco-related diseases nationally. Locally, preliminary survey results indicate that 37% of LGBT people in Southeastern Michigan smoke, while only 21% of all adults in Michigan smoke. The Michigan Department of Community Health recognizes that LGBT population is disparately affected by tobacco.⁵⁷

⁵⁴ Michigan Resident Cancer Incidence File. Updated with cases processed through December 29, 2008. Division for Vital Records & Health Statistics, Michigan Department of Community Health, July 13, 2009

⁵⁵ Secondhand Smoke Exposure and Cardiovascular Effects: Making Sense of the Evidence, Center for Disease Control, http://www.cdc.gov/tobacco/basic_information/health_effects/heart_disease/iom_report

⁵⁶ "2009 Michigan Youth Risk Behavior Survey", Michigan Department of Education. Contact: Kim Kovalchick, Michigan Department of Education, kovalchick@michigan.gov or (517) 241-4292. http://www.michigan.gov/documents/mde/09YRBSDetail_327165_7.pdf

⁵⁷ Center Facts: Smoking and the LGBT Community, http://www.thedcenter.org/facts_smoking.html. Affirmations: People Building Community, survey, <http://www.goaffirmations.org>

Tobacco Intervening Variables by Age Groups

TOBACCO INTERVENING VARIABLES – YOUTH

ACCESS

Of those smoking, 15% of youth in 9-12 grades report buying tobacco items for themselves from a store or gas station.⁵⁸ Local communities have many evidence based programs and campaigns implemented and provide non-Synar compliance checks and vendor education. An August 2009 review of statewide Youth Access to Tobacco plans for non-Synar activity indicate 3,034 vendor education visits and 3,623 compliance checks will be conducted in 2010, of the state's 10,989 tobacco retailer sites.⁵⁹

LAWS/POLICIES

Policies:

Based on the 2008 Michigan School Health Profile, 50% of public schools have adopted 24/7 tobacco-free school policies, compared to 42% in 2006. Based on the Michigan Smoke-Free Community Assessment Tool (MI SCAT), many public four-year universities and eight two-year community colleges have adopted smoke-free campus policies. All of Michigan's 15 public four-year universities have adopted 100% smoke-free residence hall policies. Most of the two-year community colleges do not have residence halls.

State Legislation:

Michigan's Youth Tobacco Act provides limited youth access protection.⁶⁰ Youth are required to be at least eighteen years of age to purchase or have tobacco in their possession.

Currently there are some municipalities in Michigan with some sort of restriction on public smoking. ([Map 2](#)) Smoke-free worksite legislation, passed in Michigan in 2009, will significantly reduce the exposure of workers and patrons at worksites. On May 1, 2010, Michigan residents and visitors will be protected from exposure to secondhand tobacco smoke in all restaurants, bars and worksites (including hotels and motels), thanks to the "Dr. Ron Davis Law-AN ACT TO PROHIBIT SMOKING IN CERTAIN PUBLIC PLACES AND CERTAIN PLACES OF EMPLOYMENT." Michigan's smoke free air law was passed by the Michigan legislature and signed by the Governor in December 2009. The law requires all worksites, including restaurants and bars to be smoke-free effective May 1, 2010. Smoking is also banned in enclosed areas of hotels, motels, and inns. Smoking is permitted in: 1) cigar bars that meet specific requirements; 2) tobacco specialty shops that meet specific requirements; 3) private offices where only one person is the employee; and 4) gaming floors of Detroit's casinos.⁶¹

Federal Legislation:

Summer of 2009 saw the Food and Drug Administration take control over tobacco on a national level, with the Family Smoking Prevention and Tobacco Control Act – HR1256. Implementation is just beginning at this point.

⁵⁸ "2009 Michigan Youth Risk Behavior Survey", Michigan Department of Education. Contact: Kim Kovalchick, Michigan Department of Education, kovalchick@michigan.gov or (517) 241-4292.

http://www.michigan.gov/documents/mde/09YRBSDetail_327165_7.pdf

⁵⁹ Michigan Department of Community Health, Bureau of Substance Abuse and Addiction Services, Prevention Section, 2009

⁶⁰ Michigan Youth Tobacco Act 83, as amended 2006.

⁶¹ Michigan's Smoke Free Air Law, MDCH http://www.michigan.gov/mdch/0,1607,7-132-2940_2955_2973_55026---,00.html and full bill HB4377: http://www.michigan.gov/documents/mdch/2009-HNB-4377_304980_7.pdf

As the FDA imposes limits on flavored tobacco products, marketing, and the like, some changes in retailer/manufacturing, marketing and retailing is imminent.

Synar legislation continues to tie federal Block Grant dollars to a minimum sell rate to minors of 20%. Michigan Synar rate is 14.1% for 2009, meaning that nearly 86% of retailers conform to the Youth Tobacco Act guidelines.

PERCEPTION OF HARM

Cesar-Fax reports in 2009 that youth are more likely to believe that tobacco use is more dangerous to their health than any other drug use. Smoke free policies and social attitudes have diminished the glamour and acceptability that smokers once enjoyed.⁶² Although youth may be more likely to know of consequences, they anticipate that ill health will occur only after many years of use. Quit lines and nicotine replacement products are readily available and regularly advertised.⁶³

TOBACCO INDUSTRY INNOVATIONS

The tobacco industry has been introducing many new products. Many of these are targeted toward smokers in smoke free environments, yet have small, discreet packaging that makes them attractive to youth abuse. The data on the harmful effects of these is not yet conclusive.

TOBACCO INTERVENING VARIABLES – GENERAL/ADULT

TAX INCREASES:

A federal tax increase on cigarettes during 2009 increased the usage of quit lines, etc... Quit Line data will be available from MDCH Tobacco Section in the summer of 2010. On April 1, 2009, the single largest federal excise tax increase in history raised tax from \$.039 to \$1.01. Tax increases are proven to reduce smoking rates, but also increases the illegal sales of "loosies," the sale of single cigarettes.

FDA CONTROL OVER TOBACCO

See Federal Legislation above.

CDC FUNDED ACTIVITIES

The CDC funds a variety of tobacco use reduction initiatives in Michigan. Currently there are efforts to increase the number of 24/7 Tobacco Free Schools, Smoke Free College Campuses, smoke free apartments and low income housing, youth advocacy efforts, and to reduce tobacco use and eliminate associated health disparities among populations of color, low social economic populations, and the lesbian, gay, bisexual and transgender population.

⁶² Cesar-Fax, 2009 www.cesar.umd.edu

⁶³ Michigan Department of Community Health, Tobacco Control Section

SPECIAL POPULATIONS/EMERGING TRENDS

Upcoming focus of State Epidemiology Workgroup will be on these areas. Currently limited data is available, primarily only at the federal level.

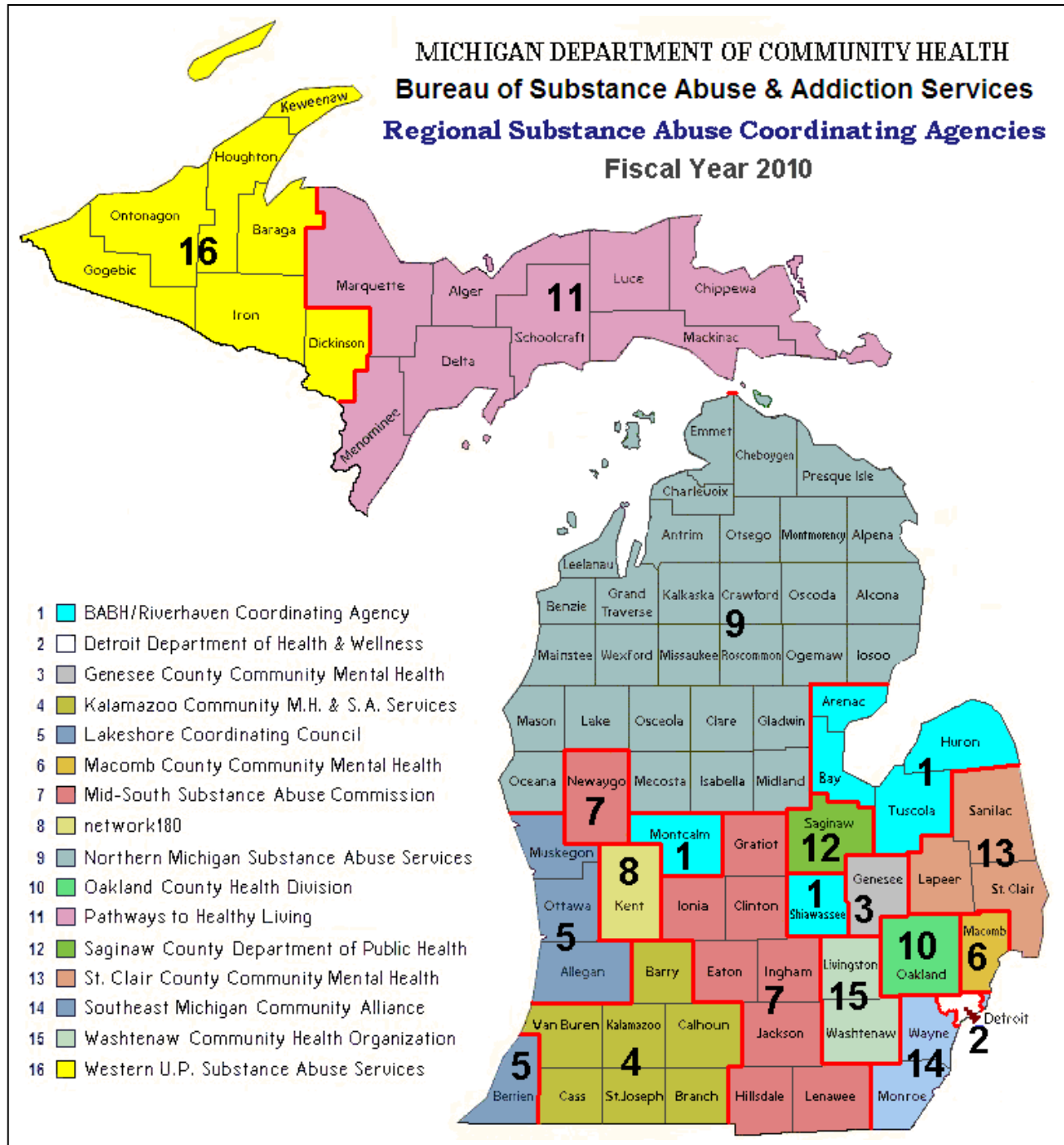
- ELDERLY
- VETERANS
- MILITARY
- FETAL ALCOHOL SPECTRUM DISORDER (FASD)
- ABUSE RELATED CRIME
- OVER THE COUNTER ABUSE
- SUBSTANCE ABUSE AND CORRECTIONS
 - More than half of all U.S. inmates (2.3 million) meet medical criteria for substance abuse addiction, while an additional 458,000 had at least a history of abusing substances; committed their crimes while under the influence; broke the law in an attempt to get money to purchase alcohol or drugs; had committed an alcohol or drug law violation; or some combination of these characteristics. When the additional group is added to those meeting the DSM IV medical criteria for addiction, the two groups constitute 85 percent of the U.S. prison population. ⁶⁴
 - Drugs and/or alcohol are implicated in 78 percent of violent crimes, 83 percent of property crimes, and 77 percent of weapon, public order, and immigration offenses, and probation/parole violations in the United States. ⁶⁵

⁶⁴ "Behind Bars II: Substance Abuse and America's Prison Population", February 2010, The National Center on Addiction and Substance Abuse at Columbia University (CASA)

⁶⁵ *ibid*

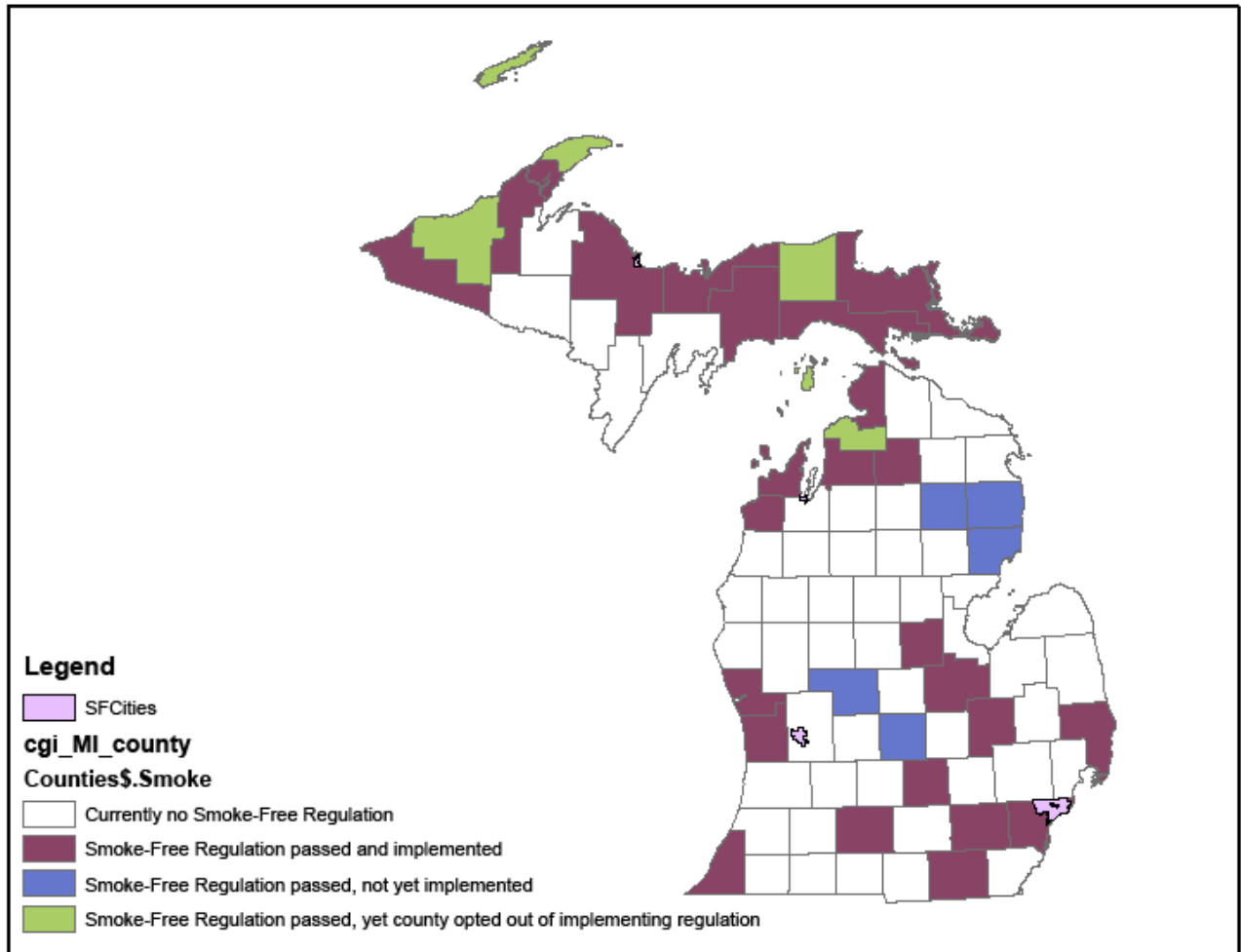
APPENDIX 1 – MAPS

Map 1 – Regional Substance Abuse Coordinating Agencies of MDCH, Bureau of Substance Abuse and Addiction Services



[\(BACK to Overview\)](#)

Map 2 – Prevalence of Legislation Restricting Exposure to Secondhand Smoke



Michigan Department of Community Health, Tobacco Control Section, January 2010

[\(BACK to Tobacco Variables\)](#)

APPENDIX 2 – TRIBAL GOVERNMENTS

Michigan Native American Tribal Governments

Michigan is home to a total of twelve federally-acknowledged Indian tribes that enjoy a special status under federal law and treaties. Federally acknowledged tribes are not merely organizations of citizens who happen to be of Native American descent. Rather, they are sovereign governments that exercise direct jurisdiction over their members and territory and, under some circumstances, over other citizens as well. Tribal governments provide a wide array of governmental services to their members including lawmaking, tribal police and court systems, health and education services, and many more.

The state generally does not have legal authority over tribal governments and tribal members when they are inside the tribe's territory - those lands designated as the tribe's reservation or trust lands. Instead, the state interacts with tribes on a government-to-government basis.

- Sault Ste. Marie Tribe of Chippewa Indians
- Saginaw Chippewa Indian Tribe
- Pokagon Band of Potawatomi Indians
- Match-e-be-nash-she-wish Band of Potawatomi Indians of Michigan
- Little River Band of Odawa Indians
- Bay Mills Chippewa Indian Community
- Lac Vieux Desert Band of Lake Superior Chippewa Indians
- Keweenaw Bay Indian Community
- Huron Potawatomi-Nottawaseppi Huron Band of Potawatomi
- Hannahville Potawatomi Indian Community
- Grand Traverse Bay Band of Ottawa and Chippewa Indians
- Little Traverse Bay Band of Odawa Indians

State of Michigan http://www.michigan.gov/som/0,1607,7-192-29701_41909---,00.html

[\(BACK to Overview\)](#)

APPENDIX 3 – TABLES**Table 1 – Michigan Traffic Crash Facts, 2000-2008**

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Total Crashes	424,867	400,813	395,515	391,486	373,028	350,838	315,322	324,174	316,057
Total Injuries	121,832	112,292	112,484	105,555	99,680	90,510	81,942	80,576	74,568
Total Fatalities	1,382	1,328	1,279	1,283	1,159	1,129	1,084	1,084	980
Fatal Crashes	1,237	1,206	1,175	1,172	1,055	1,030	1,002	987	915
Death Rate*	1.5	1.4	1.3	1.3	1.2	1.1	1.1	1.0	0.9
Fatal Crash Rate**	1.3	1.2	1.2	1.2	1.1	1.0	1.0	0.9	0.9
Restraint Use, Percent***	48.0	47.4	51.4	49.8	51.0	54.7	54.9	54.4	49.7
Alcohol/Drug-Involved Fatal Crashes	457	458	421	403	385	361	397	349	357
% of Alcohol/Drug-Involved Crashes to total fatal crashes	36.9	38.0	35.8	34.4	36.5	35.0	39.6	35.4	39.0
Alcohol/Drug Involved Fatalities	515	504	463	442	418	408	440	381	379
% of Alcohol/Drug Involved Fatalities to total fatalities	37.3	38.0	36.2	34.5	36.1	36.1	40.6	35.1	38.7
OUIL Arrests (all agencies)	60,889	58,562	57,782	55,728	55,056	54,036	53,297	49,867	47,251
Registered Vehicles (Millions)	8.57	8.89	9.00	9.92	9.93	9.69	8.70	8.33	8.38
MVMT (Billions)	94.9	96.5	96.5	98.2	100.2	101.8	103.2	104	104.6
Population (Millions)	9.93	9.99	10.05	10.08	10.08	10.11	10.12	10.090	10.07

2007 Footnote: Total registered vehicles will be changed from this year forward to subtract the registered trailer plates.

*Death Rate=Persons killed per 100 million MVMT

**Fatal Crash Rate=Fatal Crashes per 100 million MVMT

***Restraint Use by deceased occupants of motor vehicles equipped with safety belts

03/17/2010, Criminal Justice Information Center, 517-332-1150,
http://www.michigan.gov/documents/HistoryAtAGlance_82570_7.pdf

[\(BACK to Alcohol Consequences\)](#) [\(BACK to Rx\)](#)

Table 2 – Michigan Death or Serious Injury Traffic Crash Averages and Totals for 16-25 Year Old Drivers and for Underage Drivers (UAD, 16-20 Year Olds), 2004-2008

Avg. No. of Deaths / Serious Injuries Per Yr.	Avg. Annual Death / Injury Rate (Deaths / Injuries per 1,000,000 Pop)	Total Death / Serious Injury Crashes with Drinking Drivers 16-25 Years	UAD - Total Death / Serious Injury Crashes with Drinking Drivers 16-20 Years	UAD - % of Death / Serious Injury 16-20 Years
600.8	59.5	2,253	781	34.7 %

Note: Data in Table 2 covers traffic crashes involving both deaths and severe injuries; the data in Table 5 covers only fatal crashes. Totals are averages for 2004-2008 in both tables.

Michigan Office of Highway Safety Planning, April 2009.

[\(BACK to Alcohol\)](#) [\(BACK to Alcohol Consequences\)](#)

Table 3 – Ranking of States for Average Number Deaths per 16-25 Year Old Drinking Drivers

Years 2003-2007		
Rank	State - Location of Crash	Avg. # Deaths Per Year
1	CA	421.8
2	TX	306.8
3	FL	287.8
4	IL	188.4
5	PA	157.0
6	OH	127.2
7	WI	126.8
8	MS	123.8
9	MI	99.2

Michigan Department of Community Health, May 2009

[\(BACK to Alcohol\)](#)

Table 4 – Cost of Underage Drinking by Problem, Michigan 2007

Problem	Total Cost (In millions)
Youth Violence	\$1,669.8
Youth Traffic Crashes	\$253.6
High-Risk Sex, Ages 14-20	\$129.8
Youth Property Crime	\$100.2
Youth Injury	\$68.2
Poisonings and Psychoses	\$13.4
Fetal Alcohol Syndrome among Mothers, Ages 15-20	\$32.6
Youth Alcohol Treatment	\$84.7
Total	\$2,352.3

2007 Data from *Underage Drinking in Michigan; The Facts*, produced for the Underage Drinking Enforcement Training Center (UDETTC) by the Pacific Institute for Research and Evaluation (PIRE) with funding from the Office of Juvenile Justice and Delinquency Prevention (OJJDP), November 2009, available at <http://www.udetc.org/factsheets/Michigan.pdf>

[\(BACK to Alcohol\)](#)

Table 5 – Fatal Traffic Crashes Attributable to Alcohol Drinking Underage (UAD) Drivers, 2004-2008

Avg. No. of Deaths Per Yr.	Avg. Annual Death Rate (Deaths per 1,000,000 Pop)	Avg. Annual Years of Potential Life Lost (YPLL)	Total Fatal Crashes with Drinking Drivers 16-25 Years	UAD -Total Fatal Crashes with Drinking Drivers 16-20 Years	UAD -% of Fatal 16-20 Years
107.4	10.7	4,173 *	458	151	33.0 %

Note: Data in Table 2 covers traffic crashes involving both deaths and severe injuries; the data in Table 5 covers only fatal crashes. Totals are averages for 2004-2008 in both tables.

Michigan Office of Highway Safety Planning provided for the Michigan Department of Community Health, May 2009

[\(BACK to Alcohol Consequences\)](#)

Table 6 – Adult Health and Safety Patterns from Michigan Behavioral Risk Factor Survey (BRFS), 2006-2008

Michigan	N Sample Size	Percent	Table
Heavy Drinking	21,913	5.6 %	15
Binge Drinking	22,119	17.8 %	15
Drove a vehicle after drinking alcohol	14,906	2.7 %	16
Always wears seatbelt	14,863	88.3 %	17
No Health Coverage	15,876	14.2 %	9
Cigarette Smoking Current	22,512	21.0 %	14
Cigarette Smoking Ever	22,512	25.4 %	14
POTENTIALLY RELATED TO EXPOSURE TO OR USE OF TOBACCO			
Never smoked	22,512	53.6 %	14
Ever had asthma	22,523	14.8 %	26
Still has asthma	22,399	9.7 %	26
Stroke	22,529	2.9 %	29
Angina/Coronary Heart Disease	22,349	4.9 %	28
Heart Attack	22,495	4.7 %	27

Michigan BRFS, Regional and Local Health Departments, August 2009, PDF Files, Available by contacting Chris Fussman, 517-335-8144, email MiBRFSS@michigan.gov

([BACK to Alcohol Consequences](#)) ([BACK to Alcohol Variables](#)) ([BACK to Tobacco](#))

Table 7 – Alcohol and Tobacco Trend Data from Michigan Youth Risk Behavior Survey (YRBS), 1997-2007

CB#	Indicator Description	Behavior	MI 97	MI 99	MI 01	MI 03	MI 05	MI 07
Q #								
ALCOHOL								
39	% of students who had at least one drink of alcohol on one or more days during their life	Alcohol Ever	82	82	77	76	73	72
40			81.9	81.7	77.4	75.9	72.6	72.2
			78.5-85.3	79.4-84.1	74.2-80.6	74.0-77.7	68.9-76.4	69.0-75.1
40	% of students who had their first drink of alcohol, other than a few sips, before age 13	Alcohol before age 13	35	32	27	27	23	21
41			34.9	32.2	26.9	26.9	22.6	21.4
			31.7-38.1	28.9-35.5	24.6-29.2	24.7-29.1	19.2-25.9	18.7-24.4
41	% of students who had at least one drink of alcohol on one or more of the past 30 days	Recent alcohol use (30 days)	51	49	46	44	38	43
42			50.5	48.5	46.2	44.0	38.1	42.8
			46.1-54.8	45.4-51.7	42.6-49.8	41.2-46.7	34.7-41.5	39.4-46.2
42	% of students who had 5 or more drinks of alcohol in a row, that is, within a couple of hours, on one or more of the past 30 days	Alcohol binge (30 days)	32	30	29	27	23	25
43			32.4	29.9	29.3	27.4	22.5	24.6
			27.9-36.9	27.0-32.8	25.6-33.1	24.1-30.7	19.4-25.6	20.8-28.9
Tobacco								
28	% of students who ever tried cigarette smoking, even one or two puffs	Cigarettes Ever	75	72	64	60	52	51
29			75.0	72.2	63.5	60.2	52.4	51.2
			71.8-78.2	69.8-74.6	60.0-67.1	57.0-63.4	48.3-56.6	47.4-54.9
29	% of students who smoked a whole cigarette for the first time before age 13	Cigarettes before age 13	27	27	23	21	16	14
30			27.2	26.7	23.2	21.3	16.1	13.8
			24.4-30.0	23.4-30.0	20.6-25.7	17.7-24.8	12.9-19.3	11.7-16.3
30	% of students who smoked cigarettes on one or more of the past 30 days	Cigarettes 1+ 30 days (Recent)	38	34	26	23	17	18
31			38.2	34.1	25.7	22.6	17.0	18.0
			34.4-42.0	30.9-37.4	22.6-28.8	18.3-26.9	14.6-19.5	14.7-21.8
FR CIG	% of students who smoked cigarettes on 20 or more of the past 30 days	Cigarettes 20+ days 30 days (Frequent)	20	17	13	11	8	8
31			19.8	17.4	12.7	11.3	7.8	8.1
			16.6-23.0	14.4-20.5	10.1-15.4	6.8-15.8	6.0-9.6	6.2-10.7
31	% of students who smoked 2 or more cigarettes per day on the days they smoked during the past 30 days	Cigarettes 2+ per day 30 days (Regular)	27	23	18	16	14	9
32			26.9	23.0	17.7	15.9	13.6	8.7
			23.6-30.2	20.1-25.8	15.1-20.4	11.1-20.8	9.2-17.9	6.5-11.6

Prepared by Kim Kovalchick, Michigan Department of Education for MDCH, 2009

[\(BACK to Alcohol Consumption\)](#) [\(BACK to Tobacco Consumption\)](#)

Table 8 – Self-Reported Primary Drug of Choice Trend Data, from Treatment Episode Data, at Admission into Michigan Publicly Funded Services

Fiscal Year	Alcohol		Cocaine		Heroin		Other Opiates		Marijuana		Meth		Other Stim		All Others		Totals
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N
2001	29,492	49.3%	10,330	17.3%	7,857	13.1%	1,882	3.1%	8,528	14.3%	165	0.3%	108	0.2%	1,459	2.4%	59,821
2002	28,091	50.1%	9,558	17.1%	6,517	11.6%	1,929	3.4%	8,834	15.8%	280	0.5%	81	0.1%	759	1.4%	56,049
2003	31,710	48.4%	11,708	17.9%	7,935	12.1%	2,618	4.0%	10,262	15.6%	506	0.8%	77	0.1%	768	1.2%	65,584
2004	29,927	45.3%	11,765	17.8%	8,726	13.2%	3,246	4.9%	10,893	16.5%	689	1.0%	97	0.1%	742	1.1%	66,085
2005	30,185	43.2%	12,382	17.7%	9,601	13.8%	4,002	5.7%	11,816	16.9%	913	1.3%	92	0.1%	817	1.2%	69,808
2006	30,579	42.1%	13,290	18.3%	9,958	13.7%	4,918	6.8%	12,368	17.0%	707	1.0%	87	0.1%	712	1.0%	72,619
2007	30,488	42.1%	12,895	17.8%	9,931	13.7%	5,603	7.7%	12,264	16.9%	444	0.6%	77	0.1%	759	1.0%	72,461
2008	28,496	42.0%	9,698	14.3%	10,365	15.3%	6,154	9.1%	11,680	17.2%	500	0.7%	93	0.1%	790	1.2%	67,776
2009	28,981	41.5%	7,125	10.2%	12,522	17.9%	7,779	11.1%	11,707	16.8%	502	0.7%	124	0.2%	1,092	1.6%	69,832

Note: Does not include private practice data. This table may include duplicate counts of persons if they entered treatment more than one time during the year, either for the same or other substance.

Michigan Department of Community Health, February 2010

[\(BACK to Alcohol Consequences\)](#) [\(Back to Rx Consequences\)](#)

Table 9 – Invasive Lung Cancer Incidence and Mortality Trends, Potentially Associated with Exposure To or Use of Tobacco, 1985-2007

Year of Diagnosis or Death	Cases Diagnosed			Deaths		
	Number	Age-Adjusted Rate	National SEER Rate	Number	Age-Adjusted Rate	National Rate
1985	5,837	69.9	64.6	4,568	55.4	54.3
1986	5,922	70.6	65.8	4,552	54.7	55.0
1987	6,019	70.8	67.9	4,833	57.0	56.2
1988	6,217	72.5	68.0	4,909	57.6	57.0
1989	6,722	78.0	67.5	4,952	57.8	57.9
1990	6,704	76.6	68.1	5,022	57.9	58.9
1991	7,244	82.1	69.2	5,260	59.7	59.0
1992	7,150	79.8	69.4	5,503	61.7	58.9
1993	7,380	81.3	67.8	5,539	61.2	59.1
1994	7,245	79.0	67.1	5,396	58.9	58.5
1995	7,254	78.2	66.8	5,570	60.2	58.4
1996	7,237	77.0	66.4	5,653	60.4	57.9
1997	7,203	75.9	66.6	5,543	58.5	57.5
1998	7,352	76.7	67.5	5,547	57.9	57.1
1999	7,312	75.6	65.8	5,425	56.1	55.4
2000	7,351	75.0	64.0	5,534	56.6	55.8
2001	7,410	74.9	63.9	5,625	56.9	55.3
2002	7,404	73.9	63.7	5,665	56.6	55.0
2003	8,001	78.8	64.2	5,680	56.1	54.2
2004	7,683	75.1	61.4	5,822	56.8	53.3
2005	7,829	75.8	61.8	5,789	55.9	52.8
2006	7,603	72.4	60.0	5,816	55.6	51.7
2007	---	---	---	5,910	55.5	---

Source: Michigan Resident Cancer Incidence File. Updated with cases processed through December 29, 2008. Division for Vital Records & Health Statistics, Michigan Department of Community Health. Last Updated: July 13, 2009

[\(BACK to Tobacco\)](#)

Table 10 – Unintentional Poisoning Deaths in Michigan, 1999-2006

DRUG TYPE	1999	2000	2001	2002	2003	2004	2005	2006	% relative increase from 1999-2006
Opioid analgesic w/out heroin or cocaine	24	19	28	50	54	82	114	186	675.0 %
Opioid analgesic w/ cocaine	3	2	5	5	9	16	29	70	2233.3 %
Opioid analgesic w/ heroin but not cocaine	0	0	0	1	1	2	9	33	3200.0 %
Total opioid analgesic	27	21	32	56	64	100	152	289	970.4 %
Cocaine w/out opioid or heroin	34	36	36	39	40	49	67	74	117.6 %
Heroin w/out cocaine or opioid	27	54	54	36	40	50	77	46	70.4 %
Cocaine w/ Heroin, no opioid	11	33	14	16	23	28	40	35	218.2 %
Other specified*	28	37	46	50	69	82	131	150	435.7 %
Unspecified drugs	85	107	103	169	133	170	167	206	142.4 %
Total Drug poisoning deaths	212	288	285	366	369	479	634	800	277.4 %

MDCH/Bureau of Epidemiology and the University of Michigan analysis of Vital Records data, 2009

[\(BACK to Rx\)](#) [\(BACK to Tobacco\)](#)

Table 11 – Increase in Legitimate Prescriptions Filled in Michigan, by Drug, 2003-2006

Drug Group	2003	2004	2005	2006	% change 03 to 06
Schedule II					
amphetamine	514,920	624,627	698,445	800,971	155.6 %
methyphenidate	223,139	239,537	253,893	324,067	145.2 %
fentanyl	437,686	529,707	527,820	576,988	131.8 %
morphine	173,083	204,725	219,443	244,838	141.5 %
hydromorphone	21,393	32,942	40,540	53,233	248.8 %
oxycodone	327,525	389,107	364,248	452,145	138.0 %
methadone	79,845	110,328	133,359	163,627	204.9 %
mipiridine	7,760	8,127	8,727	8,492	109.4 %
Schedule III					
hydrocodone	3,174,922	3,689,073	4,061,462	4,596,486	144.8 %
codeine	950,532	909,285	915,277	915,578	96.3 %
cannabinoid	5,508	7,171	8,783	9,693	176.0 %
buprenorphine	327	12,026	26,902	51,834	15851.4 %
Schedule IV					
butorphanol	2,468	16,995	14,845	13,706	555.3 %
propoxyphene	1,128,667	1,148,280	1,107,059	1,092,709	96.8 %
zolpidem	555,016	641,926	630,270	726,845	131.0 %
triazolam	33,824	34,853	32,213	32,007	94.6 %
phenobarbital	127,568	131,605	123,735	135,071	105.9 %
diazepam	419,148	454,140	458,389	501,762	119.7 %
alprazolam	1,120,670	1,265,304	1,347,357	1,520,048	135.6 %
clonazepam	454,533	511,889	540,730	603,746	132.8 %
lorazepam	594,152	638,947	631,051	688,122	115.8 %
phentermine	88,319	111,014	163,855	170,176	192.7 %
modafinil	45,808	56,720	72,593	88,567	193.3 %

Data from the Michigan Automated Prescription System (MAPS), MDCH Bureau of Health Professions Health Investigation Division

Categorized by L. Cameron, Bureau of Epidemiology

[\(Back to Rx Consequences\)](#) [\(Back to Rx Variables\)](#)

For more information on scheduled drugs, see page 41.

Table 12 – Increase in Legitimate Prescriptions Filled in Michigan, by National Household Survey on Drug Abuse Categories, 2003-2006

NSDUH category	2003	2004	2005	2006	% change 03 to 06
Schedule II					
stimulant	738,059	864,164	952,338	1,125,038	152.4 %
pain reliever	1,047,292	1,274,936	1,294,137	1,499,323	143.2 %
Schedule III					
pain reliever	4,125,454	4,598,358	4,976,739	5,512,064	133.6 %
other					
Schedule IV					
pain reliever	1,131,135	1,165,275	1,121,904	1,106,415	97.8 %
sedative	716,408	808,384	786,218	893,923	124.8 %
tranquilizer	2,588,503	2,870,280	2,977,527	3,313,678	128.0 %
stimulant	134,127	167,734	236,448	258,743	192.9 %

Data from the Michigan Automated Prescription System (MAPS), MDCH Bureau of Health Professions Health Investigation Division

Categorized by L. Cameron, Bureau of Epidemiology

[\(Back to Rx Consequences\)](#) [\(Back to Rx Variables\)](#)

For more information on scheduled drugs, see page 41.

Table 13 – Prescription Drug Involved Treatment: Initially Self-Reported as Primary, Secondary, or Tertiary Drug of Choice; Client Gender Cross Tabulation from Treatment Episode Data, for Treatment in Michigan Publicly Funded Services, FY2009

Age in Years	Client Gender				TOTAL COUNTS
	Male		Female		
	Count	Percentage	Count	Percentage	
10-14	0	0.0 %	1	100.0 %	1
14-17	16	66.7 %	8	33.3 %	24
18-20	76	51.7 %	71	48.3 %	147
21-25	320	43.8 %	410	56.2 %	730
26-29	346	43.7 %	446	56.3 %	792
30-35	323	41.1 %	463	58.9 %	786
36-44	423	44.3 %	532	55.7 %	955
45-54	405	49.3 %	417	50.7 %	822
55-64	103	52.0 %	95	48.0 %	198
65+	4	23.5 %	13	76.5 %	17
Total	2,016	45.1 %	2,456	54.9 %	4,472

Note: Does not include private practice data. Data may include duplicate counts of persons if they entered treatment more than one time during the year, either for the same or other substance.

Michigan Department of Community Health, August 2010

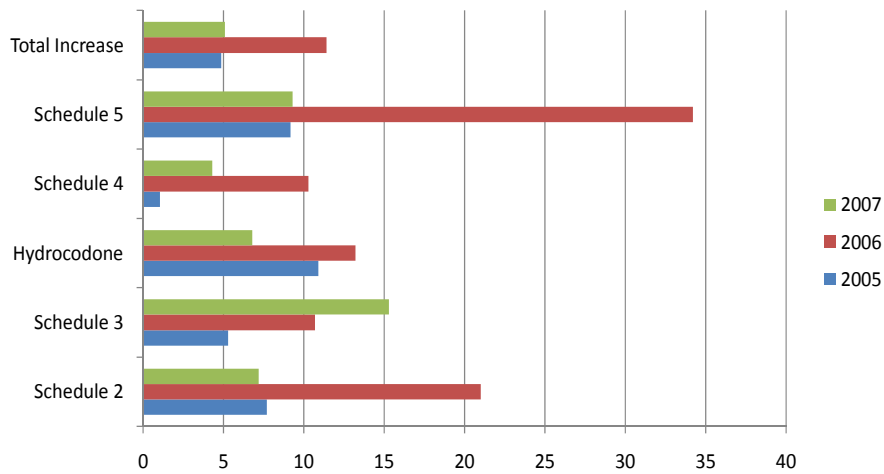
[\(BACK to Rx\)](#) [\(Back to Rx Consequences\)](#)

APPENDIX 4 – FIGURES

Figure 1 – Increase in Legitimate Prescriptions Filled by Schedule and Hydrocodone, Michigan, 2005-2007

Note: “Legitimate” refers to the prescription written as part of thorough medical care, including blood tests, regular doctor visits, health history, etc...

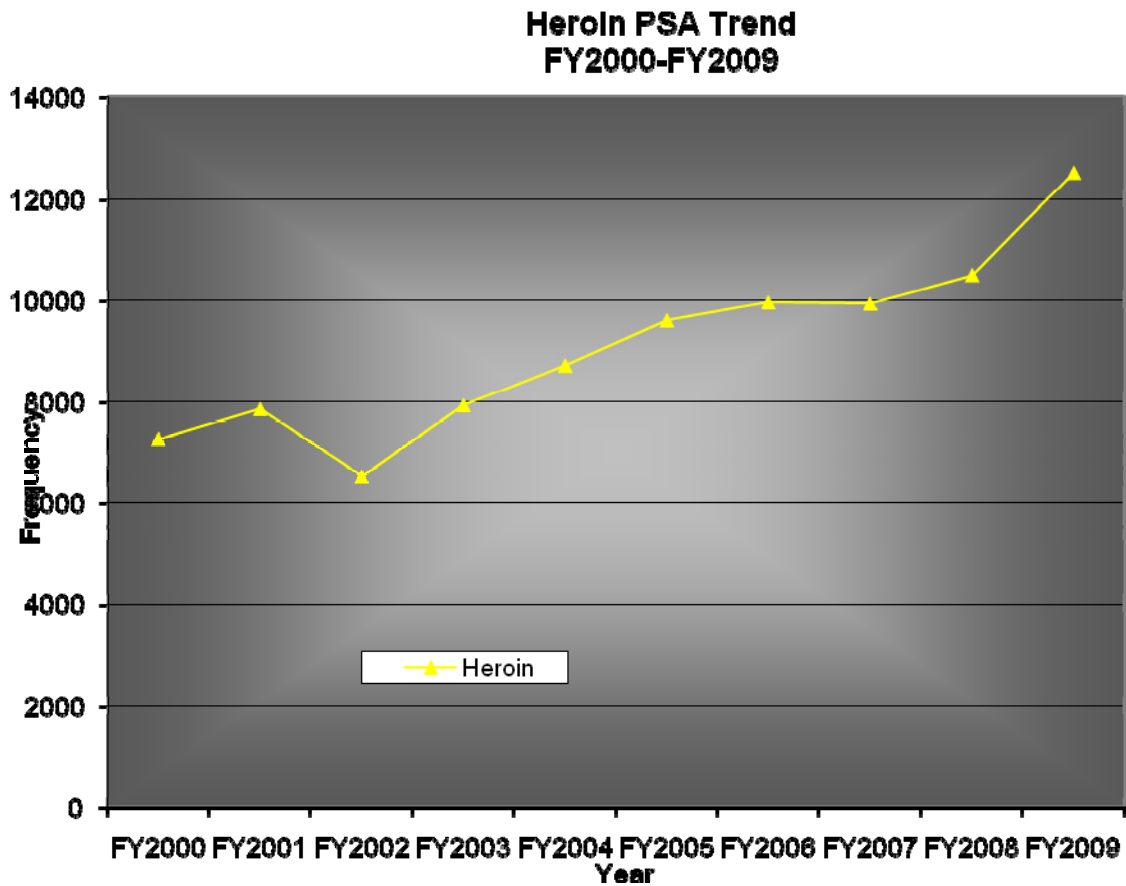
Increases in Legitimate Prescriptions



Source: Michigan Automated Prescription Services (MAPS)

[\(Back to Rx Variables\)](#)

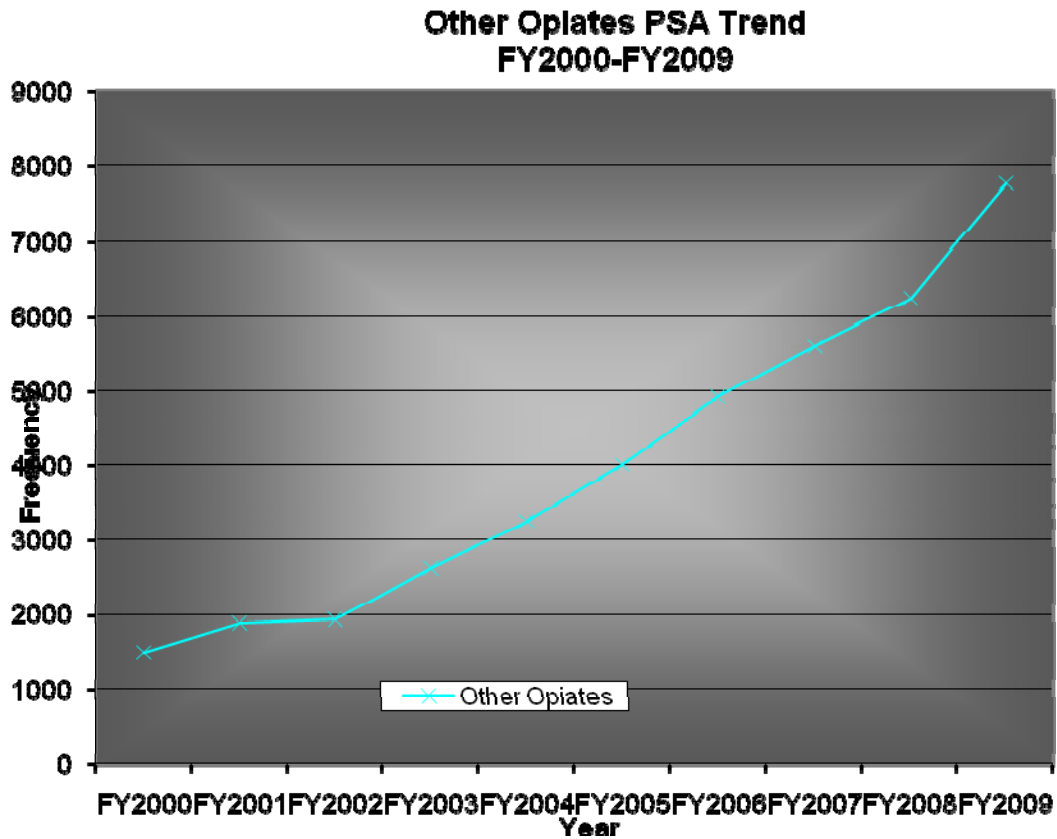
Figure 2 – Heroin Primary Drug of Choice Trend Data, as Self-Reported Primary Substance of Abuse (PSA)



MDCH/BSAAS, Treatment Episode Data Set (TEDS), February 2010

[\(Back to Rx Consequences\)](#)

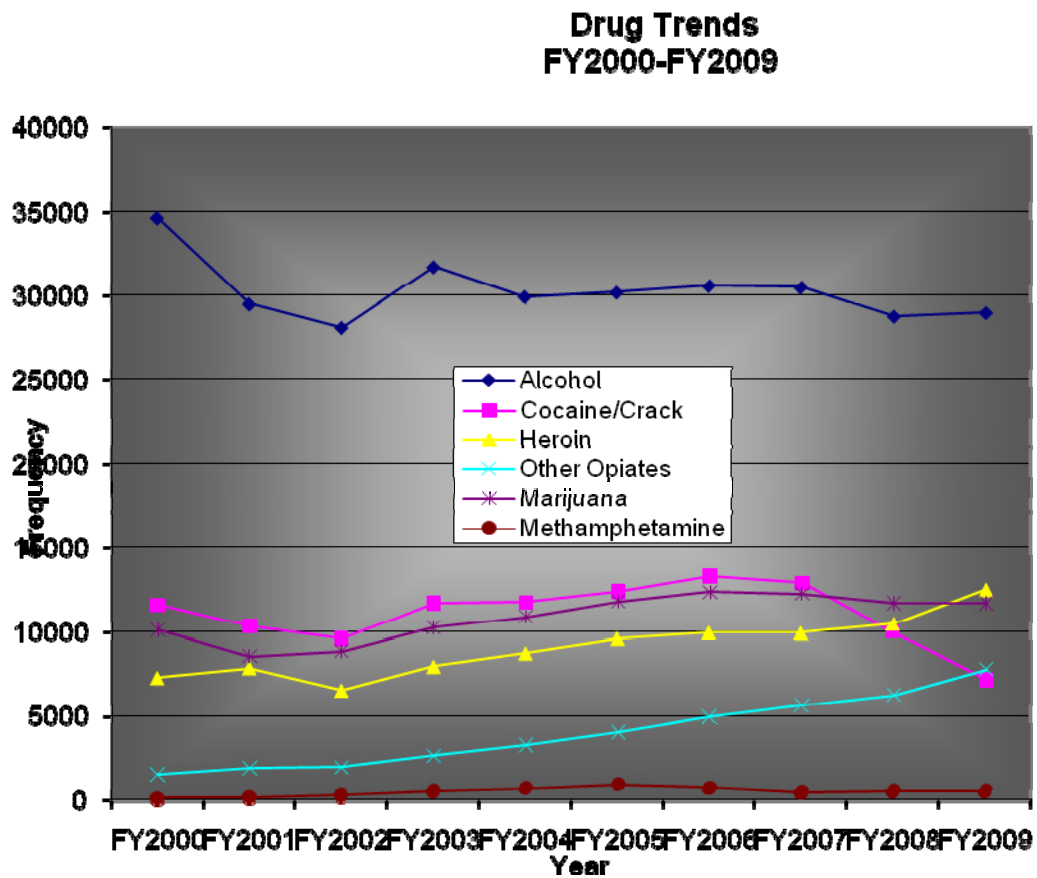
Figure 3 – Other Opiates Primary Drug of Choice Trend Data, as Self-Reported Primary Substance of Abuse (PSA)



MDCH/BSAAS, Treatment Episode Data Set (TEDS), February 2010

[\(Back to Rx Consequences\)](#)

Figure 4 – Primary Drug of Choice as Self-Reported, Comparison



MDCH/BSAAS, Treatment Episode Data Set (TEDS), February 2010

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APPENDIX 5 – DRUG SCHEDULING

Drug Scheduling

The Federal Government classifies different drugs per the following schedule. Although the laws and what drug is where in the tables may vary state to state, almost always federal law supersedes. The Controlled Substance Act regulates the making, selling and use of a drug the responsibility of the U.S. Federal Drug Administration. Drugs are classified into categories based on how they are used and how they work. *More information is available through the U.S. Drug Enforcement Administration at www.dea.gov or the Michigan Board of Pharmacy at www.michigan.gov/healthlicense.*

Most drug offenses involve Schedule I and II drugs.

- **Schedule I** drugs have a high abuse tendency and no accepted medical use of any kind. Pharmacies are not allowed to dispense Schedule I drugs, and they are not available by prescription. This category includes drugs such as heroin, ecstasy, and LSD.
- **Schedule II** drugs, like Schedule I, have a high abuse tendency, however have some medical uses. Schedule II drugs are only available by prescription, but not all pharmacies can fill the script. There is a strict record of fills, and special storage measures are required. They can become addictive with persistent use, and includes drugs such as cocaine, morphine, fentanyl and methamphetamine.
- **Schedule III** drugs have a low abuse tendency and accepted medical uses. Like Schedule II, these drugs are available by prescription, but again, not all pharmacies will carry. Drugs in this category include steroids, codeine, and hydrocodone with aspirin (e.g. Tylenol 3).
- **Schedule IV** drugs have a very low abuse tendency and a low chance of addiction when used as prescribed. Drugs in this category are available by prescription and include drugs like valium, xanax, and rohipnol (the date rape drug).
- **Schedule V** drugs have the lowest abuse tendency and the lowest addiction rates of the classifications. Typically, these drugs often do not require a prescription, but are usually regulated by store policies, such as product placement behind the counter with signature and identification required for purchase and tracking. These include the cough syrups with suppressants, such as codeine, and medicines including contents used in the manufacture of illicit drugs.

[\(BACK to Rx\)](#)

Drug Schedules

This DEA document is a general reference and not a comprehensive list. This list describes the basic or parent chemical and does not describe the salts, isomers and salts of isomers, esters, ethers and derivatives which may also be controlled substances.

Schedule I			
Substance	DEA Number	Non Narcotic	Other Names
1-(1-Phenylcyclohexyl)pyrrolidine	7458	N	PCPy, PHP, rolicyclidine
1-(2-Phenylethyl)-4-phenyl-4-acetoxypiperidine	9663		PEPAP, synthetic heroin
1-[1-(2-Thienyl)cyclohexyl]piperidine	7470	N	TCP, tenocyclidine
1-[1-(2-Thienyl)cyclohexyl]pyrrolidine	7473	N	TCPy
1-Methyl-4-phenyl-4-propionoxypiperidine	9661		MPPP, synthetic heroin
2,5-Dimethoxy-4-ethylamphetamine	7399	N	DOET
2,5-Dimethoxyamphetamine	7396	N	DMA, 2,5-DMA
3,4,5-Trimethoxyamphetamine	7390	N	TMA
3,4-Methylenedioxyamphetamine	7400	N	MDA, Love Drug
3,4-Methylenedioxy-methamphetamine	7405	N	MDMA, Ecstasy, XTC
3,4-Methylenedioxy-N-ethylamphetamine	7404	N	N-ethyl MDA, MDE, MDEA
3-Methylfentanyl	9813		China White, fentanyl
3-Methylthiofentanyl	9833		Chine White, fentanyl
4-Bromo-2,5-dimethoxyamphetamine	7391	N	DOB, 4-bromo-DMA
4-Bromo-2,5-dimethoxyphenethylamine	7392	N	Nexus, 2-CB, has been sold as Ecstasy, i.e. MDMA
4-Methoxyamphetamine	7411	N	PMA
4-Methyl-2,5-dimethoxyamphetamine	7395	N	DOM, STP
4-Methylaminorex (cis isomer)	1590	N	U4Euh, McN-422
5-Methoxy-3,4-methylenedioxyamphetamine	7401	N	MMDA
Acetorphine	9319		
Acetyl-alpha-methylfentanyl	9815		
Acetyldihydrocodeine	9051		Acetylcodone
Acetylmethadol	9601		Methadyl acetate
Allylprodine	9602		
Alphacetylmethadol except levo-alphacetylmethadol	9603		
Alpha-Ethyltryptamine	7249	N	ET, Trip
Alphameprodine	9604		
Alphamethadol	9605		
Alpha-Methylfentanyl	9814		China White, fentanyl
Alpha-Methylthiofentanyl	9832		China White, fentanyl
Aminorex	1585	N	has been sold as methamphetamine

Schedule I			
Substance	DEA Number	Non Narcotic	Other Names
Benzethidine	9606		
Benzylmorphine	9052		
Betacetylmethadol	9607		
Beta-Hydroxy-3-methylfentanyl	9831		China White, fentanyl
Beta-Hydroxyfentanyl	9830		China White, fentanyl
Betameprodine	9608		
Betamethadol	9609		
Betaprodine	9611		
Bufotenine	7433	N	Mappine, N,N-dimethylserotonin
Cathinone	1235	N	Constituent of "Khat" plant
Clonitazene	9612		
Codeine methylbromide	9070		
Codeine-N-oxide	9053		
Cyprenorphine	9054		
Desomorphine	9055		
Dextromoramide	9613		Palfium, Jetrium, Narcolo
Diampromide	9615		
Diethylthiambutene	9616		
Diethyltryptamine	7434	N	DET
Difenoxin	9168		Lyspafen
Dihydromorphine	9145		
Dimenoxadol	9617		
Dimepheptanol	9618		
Dimethylthiambutene	9619		
Dimethyltryptamine	7435	N	DMT
Dioxaphetyl butyrate	9621		
Dipipanone	9622		Dipipan, phenylpiperone HCl, Diconal, Wellconal
Drotebanol	9335		Metebanyl, oxymethebanol
Ethylmethylthiambutene	9623		
Etonitazene	9624		
Etorphine (except HCl)	9056		
Etoxidine	9625		
Fenethylamine	1503	N	Captagon, amfetyline, ethyltheophylline amphetamine
Furethidine	9626		
Gama Hydroxybutyric Acid (GHB)	2010	N	GHB, gama hydroxybutyrate, sodium oxybate
Heroin	9200		Diacetylmorphine, diamorphine

Schedule I			
Substance	DEA Number	Non Narcotic	Other Names
Hydromorphenol	9301		
Hydroxypethidine	9627		
Ibogaine	7260	N	Constituent of "Tabernanthe iboga" plant
Ketobemidone	9628		Cliradon
Levomoramide	9629		
Levophenacymorphan	9631		
Lysergic acid diethylamide	7315	N	LSD, lysergide
Marijuana	7360	N	Cannabis, marijuana
Mecloqualone	2572	N	Nubarene
Mescaline	7381	N	Constituent of "Peyote" cacti
Methaqualone	2565	N	Quaalude, Parest, Somnafac, Opitimid, Mandrax
Methcathinone	1237	N	N-Methylcathinone, "cat"
Methyldesorphine	9302		
Methyldihydromorphine	9304		
Morpheridine	9632		
Morphine methylbromide	9305		
Morphine methylsulfonate	9306		
Morphine-N-oxide	9307		
Myrophine	9308		
N,N-Dimethylamphetamine	1480	N	
N-Ethyl-1-phenylcyclohexylamine	7455	N	PCE
N-Ethyl-3-piperidyl benzilate	7482	N	JB 323
N-Ethylamphetamine	1475	N	NEA
N-Hydroxy-3,4-methylenedioxyamphetamine	7402	N	N-hydroxy MDA
Nicocodeine	9309		
Nicomorphine	9312		Vilan
N-Methyl-3-piperidyl benzilate	7484	N	JB 336
Noracymethadol	9633		
Norlevorphanol	9634		
Normethadone	9635		Phenyldimazone
Normorphine	9313		
Norpipanone	9636		
Para-Fluorofentanyl	9812		China White, fentanyl
Parahexyl	7374	N	Synhexyl,
Peyote	7415	N	Cactus which contains mescaline
Phenadoxone	9637		

Schedule I			
Substance	DEA Number	Non Narcotic	Other Names
Phenampromide	9638		
Phenomorphin	9647		
Phenoperidine	9641		Operidine, Lealgin
Pholcodine	9314		Copholco, Adaphol, Codisol, Lantuss, Pholcolin
Piritramide	9642		Piridolan
Proheptazine	9643		
Properidine	9644		
Propiram	9649		Algeril
Psilocybin	7437	N	Constituent of "Magic mushrooms"
Psilocyn	7438	N	Psilocin, constituent of "Magic mushrooms"
Racemoramide	9645		
Tetrahydrocannabinols	7370	N	THC, Delta-8 THC, Delta-9 THC and others
Thebacon	9315		Acetylhydrocodone, Acedicon, Thebacetyl
Thiofentanyl	9835		Chine white, fentanyl
Tilidine	9750		Tilidate, Valoron, Kitadol, Lak, Tilsa
Trimeperidine	9646		Promedolum

Schedule II			
Substance	DEA Number	Non Narcotic	Other Names
1-Phenylcyclohexylamine	7460	N	Precursor of PCP
1-Piperidinocyclohexanecarbonitrile	8603	N	PCC, precursor of PCP
Alfentanil	9737		Alfenta
Alphaprodine	9010		Nisentil
Amobarbital	2125	N	Amytal, Tuinal
Amphetamine	1100	N	Dexedrine, Biphetamine
Anileridine	9020		Leritine
Benzoylcegonine	9180		Cocaine metabolite
Bezitramide	9800		Burgodin
Carfentanil	9743		Wildnil
Coca Leaves	9040		
Cocaine	9041		Methyl benzoylcegonine, Crack
Codeine	9050		Morphine methyl ester, methyl morphine
Dextropropoxyphene, bulk (non-dosage forms)	9273		Propoxyphene
Dihydrocodeine	9120		Didrate, Parzone
Diphenoxylate	9170		

Schedule II			
Substance	DEA Number	Non Narcotic	Other Names
Diprenorphine	9058		M50-50
Ecgonine	9180		Cocaine precursor, in Coca leaves
Ethylmorphine	9190		Dionin
Etorphine HCl	9059		M 99
Fentanyl	9801		Innovar, Sublimaze, Duragesic
Glutethimide	2550	N	Doriden, Dorimide
Hydrocodone	9193		dihydrocodeinone
Hydromorphone	9150		Dilaudid, dihydromorphinone
Isomethadone	9226		Isoamidone
Levo-alphaacetylmethadol	9648		LAAM, long acting methadone, levomethadyl acetate
Levomethorphan	9210		
Levorphanol	9220		Levo-Dromoran
Meperidine	9230		Demerol, Mepergan, pethidine
Meperidine intermediate-A	9232		Meperidine precursor
Meperidine intermediate-B	9233		Meperidine precursor
Meperidine intermediate-C	9234		Meperidine precursor
Metazocine	9240		
Methadone	9250		Dolophine, Methadose, Amidone
Methadone intermediate	9254		Methadone precursor
Methamphetamine	1105	N	Desoxyn, D-desoxyephedrine, ICE, Crank, Speed
Methylphenidate	1724	N	Ritalin
Metopon	9260		
Moramide-intermediate	9802		
Morphine	9300		MS Contin, Roxanol, Duramorph, RMS, MSIR
Nabilone	7379	N	Cesamet
Opium extracts	9610		
Opium fluid extract	9620		
Opium poppy	9650		Papaver somniferum
Opium tincture	9630		Laudanum
Opium, granulated	9640		Granulated opium
Opium, powdered	9639		Powdered Opium
Opium, raw	9600		Raw opium, gum opium
Oxycodone	9143		OxyContin, Percocet, Tylox, Roxicodone, Roxicet,
Oxymorphone	9652		Numorphan
Pentobarbital	2270	N	Nembutal
Phenazocine	9715		Narphen, Prinadol

Schedule II			
Substance	DEA Number	Non Narcotic	Other Names
Phencyclidine	7471	N	PCP, Sernylan
Phenmetrazine	1631	N	Preludin
Phenylacetone	8501	N	P2P, phenyl-2-propanone, benzyl methyl ketone
Piminodine	9730		
Poppy Straw	9650		Opium poppy capsules, poppy heads
Poppy Straw Concentrate	9670		Concentrate of Poppy Straw, CPS
Racemethorphan	9732		
Racemorphan	9733		Dromoran
Remifentanil	9739		Ultiva
Secobarbital	2315	N	Seconal, Tuinal
Sufentanil	9740		Sufenta
Thebaine	9333		Precursor of many narcotics

Schedule III			
Substance	DEA Number	Non Narcotic	Other Names
Amobarbital & noncontrolled active ingred.	2126	N	Amobarbital/ephedrine capsules
Amobarbital suppository dosage form	2126	N	
Anabolic steroids	4000	N	"Body Building" drugs
Aprobarbital	2100	N	Alurate
Barbituric acid derivative	2100	N	Barbiturates not specifically listed
Benzphetamine	1228	N	Didrex, Inapetyl
Boldenone	4000	N	Equipoise, Parenabol, Vebonol, dehydrotestosterone
Buprenorphine	9064		Buprenex, Temgesic
Butabarbital	2100	N	Butisol, Butibel
Butalbital	2100	N	Fiorinal, Butalbital with aspirin
Chlorhexadol	2510	N	Mechloral, Mecoral, Medodorm, Chloralodol
Chlorotestosterone (same as clostebol)	4000	N	if 4-chlorotestosterone then clostebol
Chlorphentermine	1645	N	Pre-Sate, Lucofen, Apsedon, Desopimon
Clortermine	1647	N	Voranil
Clostebol	4000	N	Alfa-Trofodermin, Clostene, 4-chlorotestosterone
Codeine & isoquinoline alkaloid 90 mg/du	9803		Codeine with papaverine or noscapine
Codeine combination product 90 mg/du	9804		Empirin, Fiorinal, Tylenol, ASA or APAP w/codeine
Dehydrochloromethyltestosterone	4000	N	Oral-Turinabol
Dihydrocodeine combination product 90 mg/du	9807		Synalgos-DC, Compal

Schedule III			
Substance	DEA Number	Non Narcotic	Other Names
Dihydrotestosterone (same as stanolone)	4000	N	see stanolone
Dronabinol in sesame oil in soft gelatin capsule	7369	N	Marinol, synthetic THC in sesame oil/soft gelatin
Drostanolone	4000	N	Drolban, Masterid, Permastril
Ethylestrenol	4000	N	Maxibolin, Orabolin, Durabolin-O, Duraboral
Ethylmorphine combination product 15 mg/du	9808		
Fluoxymesterone	4000	N	Anadroid-F, Halotestin, Ora-Testryl
Formebolone (incorrect spelling in law)	4000	N	Esiclene, Hubernol
Hydrocodone & isoquinoline alkaloid 15 mg/du	9805		Dihydrocodeinone+papaverine or noscapine
Hydrocodone combination product 15 mg/du	9806		Tussionex, Tussend, Lortab, Vicodin, Hycodan, Anexsia ++
Ketamine	7285	N	Ketaset, Ketalar, Special K, K
Lysergic acid	7300	N	LSD precursor
Lysergic acid amide	7310	N	LSD precursor
Mesterolone	4000	N	Proviron
Methandienone (see Methandrostenolone)	4000	N	
Methandranone	4000	N	?incorrect spelling of methandienone?
Methandriol	4000	N	Sinesex, Stenediol, Troformone
Methandrostenolone	4000	N	Dianabol, Metabolina, Nerobol, Perbolin
Methenolone	4000	N	Primobolan, Primobolan Depot, Primobolan S
Methyltestosterone	4000	N	Android, Oreton, Testred, Virilon
Methypylon	2575	N	Noludar
Mibolerone	4000	N	Cheque
Morphine combination product/50 mg/100 ml or gm	9810		
Nalorphine	9400		Nalline
Nandrolone	4000	N	Deca-Durabolin, Durabolin, Durabolin-50
Norethandrolone	4000	N	Nilevar, Solevar
Opium combination product 25 mg/du	9809		Paregoric, other combination products
Oxandrolone	4000	N	Anavar, Lonavar, Provitar, Vasorome
Oxymesterone	4000	N	Anamidol, Balnimax, Oranabol, Oranabol 10
Oxymetholone	4000	N	Anadrol-50, Adroyd, Anapolon, Anasteron, Pardroyd
Pentobarbital & noncontrolled active ingred.	2271	N	FP-3
Pentobarbital suppository dosage form	2271	N	WANS
Phendimetrazine	1615	N	Plegine, Prelu-2, Bontril, Melfiat, Statobex
Secobarbital & noncontrolled active ingred	2316	N	various
Secobarbital suppository dosage form	2316	N	various

Schedule III			
Substance	DEA Number	Non Narcotic	Other Names
Stanolone	4000	N	Anabolex, Andractim, Pesomax, dihydrotestosterone
Stanozolol	4000	N	Winstrol, Winstrol-V
Stimulant compounds previously excepted	1405	N	Mediatric
Sulfondiethylmethane	2600	N	
Sulfonethylmethane	2605	N	
Sulfonmethane	2610	N	
Talbutal	2100	N	Lotusate
Testolactone	4000	N	Teslac
Testosterone	4000	N	Android-T, Androlan, Depotest, Delatestyl
Thiamylal	2100	N	Surital
Thiopental	2100	N	Pentothal
Tiletamine & Zolazepam Combination Product	7295	N	Telazol
Trenbolone	4000	N	Finaplix-S, Finajet, Parabolan
Vinbarbital	2100	N	Delvinal, vinbarbitone

Schedule IV			
Substance	DEA Number	Non Narcotic	Other Names
Alprazolam	2882	N	Xanax
Barbital	2145	N	Veronal, Plexonal, barbitone
Bromazepam	2748	N	Lexotan, Lexatin, Lexotaniil
Butorphanol	9720	N	Stadol, Stadol NS, Torbugesic, Torbutrol
Camazepam	2749	N	Albego, Limpidon, Paxor
Cathine	1230	N	Constituent of "Khat" plant
Chloral betaine	2460	N	Beta Chlor
Chloral hydrate	2465	N	Noctec
Chlordiazepoxide	2744	N	Librium, Libritabs, Limbitrol, SK-Lygen
Clobazam	2751	N	Urbadan, Urbanyl
Clonazepam	2737	N	Klonopin, Clonopin
Clorazepate	2768	N	Tranxene
Clotiazepam	2752	N	Trecalmo, Rize
Cloxazolam	2753	N	Enadel, Sepazon, Tolestan
Delorazepam	2754	N	
Dexfenfluramine	1670	N	Redux

Schedule IV			
Substance	DEA Number	Non Narcotic	Other Names
Dextropropoxyphene dosage forms	9278		Darvon, propoxyphene, Darvocet, Dolene, Propacet
Diazepam	2765	N	Valium, Valrelease
Dichloralphenazone	2467	N	Midrin, dichloralantipyrine
Diethylpropion	1610	N	Tenuate, Tepanil
Difenoxin 1 mg/25 ug AtSO4/du	9167		Motofen
Estazolam	2756	N	ProSom, Domnamid, Eurodin, Nuclalon
Ethchlorvynol	2540	N	Placidyl
Ethinamate	2545	N	Valmid, Valamin
Ethyl loflazepate	2758	N	
Fencamfamin	1760	N	Reactivan
Fenfluramine	1670	N	Pondimin, Ponderal
Fenproporex	1575	N	Gacilin, Solvolip
Fludiazepam	2759	N	
Flunitrazepam	2763	N	Rohypnol, Narcozep, Darkene, Roipnol
Flurazepam	2767	N	Dalmane
Halazepam	2762	N	Paxipam
Haloxazolam	2771	N	
Ketazolam	2772	N	Anxon, Loftran, Solatran, Contamex
Loprazolam	2773	N	
Lorazepam	2885	N	Ativan
Lormetazepam	2774	N	Noctamid
Mazindol	1605	N	Sanorex, Mazanor
Mebutamate	2800	N	Capla
Medazepam	2836	N	Nobrium
Mefenorex	1580	N	Anorexic, Amexate, Doracil, Pondinil
Meprobamate	2820	N	Miltown, Equanil, Deprol, Equagesic, Meprospan
Methohexital	2264	N	Brevital
Methylphenobarbital (mephobarbital)	2250	N	Mebaral, mephobarbital
Midazolam	2884	N	Versed
Modafinil	1680	N	Provigil
Nimetazepam	2837	N	Erimin
Nitrazepam	2834	N	Mogadon
Nordiazepam	2838	N	Nordazepam, Demadar, Madar
Oxazepam	2835	N	Serax, Serenid-D
Oxazolam	2839	N	Serenal, Converal
Paraldehyde	2585	N	Paral

Schedule IV			
Substance	DEA Number	Non Narcotic	Other Names
Pemoline	1530	N	Cylert
Pentazocine	9709	N	Talwin, Talwin NX, Talacen, Talwin Compound
Petrichloral	2591	N	Pentaerythritol chloral, Periclor
Phenobarbital	2285	N	Luminal, Donnatal, Bellergal-S
Phentermine	1640	N	Ionamin, Fastin, Adipex-P, Obe-Nix, Zantryl
Pinazepam	2883	N	Domar
Pipradrol	1750	N	Detaril, Stimolag Fortis
Prazepam	2764	N	Centrax
Quazepam	2881	N	Doral, Dormalin
Sibutramine	1675	N	Meridia
SPA	1635	N	1-dimethylamino-1,2-diphenylethane, Lefetamine
Temazepam	2925	N	Restoril
Tetrazepam	2886	N	
Triazolam	2887	N	Halcion
Zaleplon	2781	N	Sonata
Zolpidem	2783	N	Ambien, Stilnoct, Ivadal

Schedule V			
Substance	DEA Number	Non Narcotic	Other Names
Codeine preparations - 200 mg/100 ml or 100 gm			Cosanyl, Robitussin A-C, Cheracol, Cerose, Pediacof
Difenoxin preparations - 0.5 mg/25 ug AtSO4/du			Motofen
Dihydrocodeine preparations 10 mg/100 ml or 100 gm			Cophene-S, various others
Diphenoxylate preparations 2.5 mg/25 ug AtSO4			Lomotil, Logen
Ethylmorphine preparations 100 mg/100 ml or 100 gm			
Opium preparations - 100 mg/100 ml or gm			Parepectolin, Kapectolin PG, Kaolin Pectin P.G.
Pyrovalerone	1485	N	Centroton, Thymergix

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