



# Alcohol, Tobacco, and Other Drug Use



Addiction is a chronic, relapsing disease. Left untreated, its consequences create a significant public health burden. Its physical and mental health effects range from illness and disability to death. It causes traffic accidents, crime, job loss, homelessness, unplanned pregnancies, domestic violence, child abuse and neglect, and more. Most aspects of our society, and every aspect of our social service and criminal justice systems, bear a significant impact from substance use disorders. The impact on all our systems is extraordinary - from the court system to corrections, emergency rooms to homeless shelters, and from police officers to school teachers, and employers.

Left untreated, SUDs impose significant costs on the Commonwealth, especially upon those who rely upon programs and services of multiple state agencies. Massachusetts bears a greater public health burden from substance use disorders than that of many other states, however substantial work has been done in recent years to decrease this gap.

Alcohol affects most organ systems, and many drugs affect the nervous system and the heart. Unhealthy use can complicate other chronic

Substance use disorders lead to a wide variety of long term disabling diseases such as cirrhosis of the liver, cancer, cardiovascular diseases, cerebral atrophy, and fetal alcohol syndrome, and to an increased incidence of HIV/AIDS and antibiotic-resistant tuberculosis. In society as a whole, substance use disorders also adversely affect family members, ...job and school performance, and are associated with crime, violence and accidents.”<sup>1</sup>

**Substance Use Disorder (SUD)** is a combination of dependence and abuse. Generally known as addiction, or abuse, substance use disorders are chronic medical conditions that professionals can diagnose when a person’s drinking or drug use causes distress or harm.

illnesses such as diabetes, high blood pressure, cardiovascular diseases and depression. Misuse can also counteract medications or make them less effective, can cause ulcers, disrupt sleep, present memory problems and increase anxiety. Alcohol use, even at what might be considered low-risk levels, is counter indicated when used with specific medications, with a diagnosed Substance Use Disorder, when operating machinery, or with certain health conditions.

Health and life consequences can occur even with substance use that may be considered low risk. How often, how much, and under what circumstances can determine if the use is problematic.

Problem and pathological gambling is a behavior of great concern to public health. An estimated 250,000 adults have had gambling problems in the last year.<sup>2</sup> Youth and young adults, the elderly, specific racial and ethnic groups and those with lower incomes appear to be particularly vulnerable and have higher prevalence rates of problem gambling. The Department of Public Health supports a variety of prevention and treatment program to address problem gambling in the Commonwealth.

The use patterns and effects of alcohol, tobacco, and other drugs, can be viewed based on a person's developmental stages. Alcohol use during pregnancy can damage a developing fetus. In fact, there are no known safe levels of alcohol use during pregnancy so pregnant women or women who may become pregnant should not drink from conception to birth.

The effects of even a small amount of alcohol or drugs on children under 18 years of age, when their bodies and brains are still developing, are different from the effects those substances have on adults. During the transitional ages of 18-25 years, the use of alcohol, tobacco and/or other drugs may have different long-term effects than on older adults.

For adults with certain medical problems or medications, alcohol or drug use can have serious health consequences. The impact of alcohol use while taking medications increases as adults enter their sixties and beyond. Because of changes to their metabolism, seniors cannot consume the same amount of alcohol that they could have when they were younger. In addition to biological effects, over-consumption can lead to serious falls or other accidents requiring urgent care.

Research has demonstrated that screening for alcohol, tobacco and other drug use (ATOD) in health care settings along with a brief intervention when risky use is detected help reduce harmful levels of ATOD use.<sup>3</sup> The Substance Abuse and Mental Health Services Administration (SAMHSA) as well as Massachusetts and many other states support the use of Screening, Brief Intervention, and Referral to Treatment (SBIRT) in primary care, emergency room and other health care settings to encourage patients to cut back use where appropriate.

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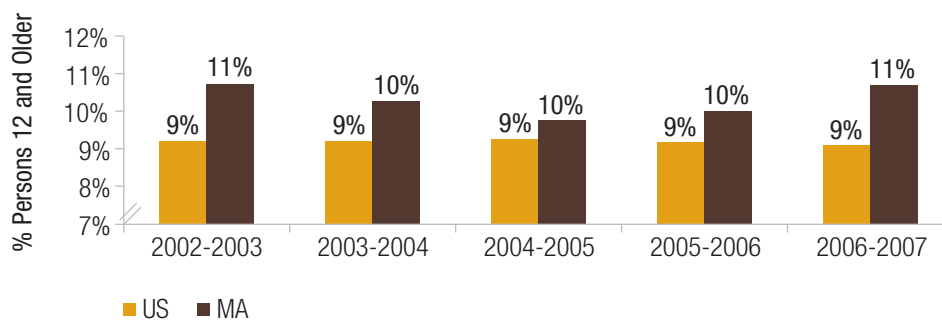
## Dependence and Abuse

Those who are dependent on alcohol or drugs have developed a tolerance for these substances and experience mental and physical withdrawal if they try to stop using them. Dependent substance users spend large amounts of their time and resources purchasing and consuming alcohol or drugs, and continue using despite significant adverse consequences.

National surveys suggest that just over nine percent (9%) of the nation's population currently abuse or are dependent on alcohol and/or illicit drugs (Figure 10.1). Illicit drugs include marijuana, cocaine, heroin, hallucinogens, inhalants, and the non-medical use of prescription-type psychotherapeutic drugs. This percentage has remained constant on the national level during the period of 2002 through 2007. In Massachusetts, the proportion of the population with a substance use disorder is consistently higher and remains steady at approximately ten percent (10%).

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Figure 10.1 **Abuse of Illicit Drugs or Alcohol, MA and US**



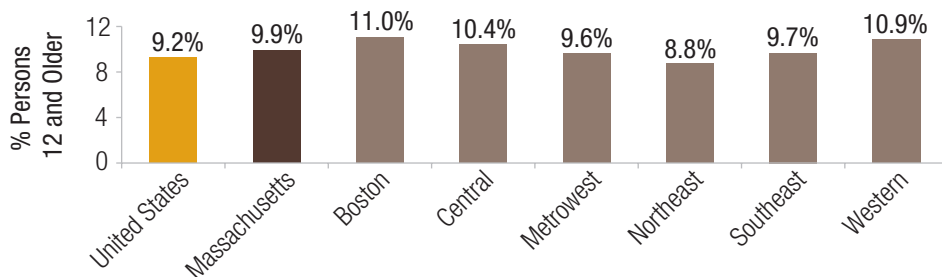
Source: SAMHSA, National Survey on Drug Use and Health, 2004-2006.

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Within Massachusetts there are regional variations in the rates of those currently misusing or dependent on alcohol and/or one or more drugs (Figure 10.2). The problem is most severe in the Greater Boston area, and almost as severe in the less urban western and central regions of the state.

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Figure 10.2 **Abuse of Illicit Drugs or Alcohol by Region**



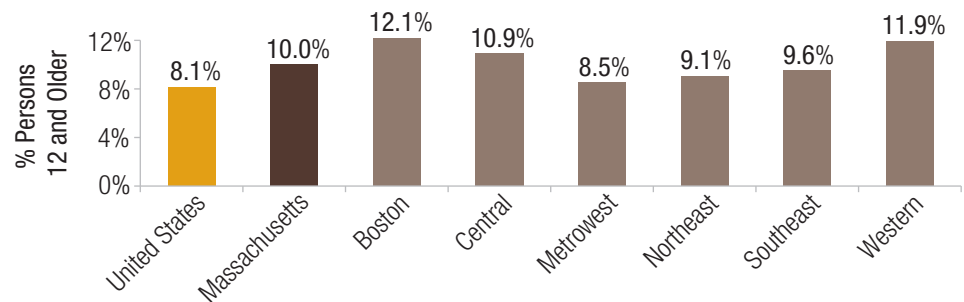
Source: SAMHSA, National Survey on Drug Use and Health, 2004-2006.

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This pattern – higher prevalence of substance use disorders in both the most urban and the most rural areas – has been observed in most other states, and is not unique to Massachusetts.

The use of illicit drugs within the past month has the same regional variation as that of combined illicit drug/alcohol use but is more pronounced (Figure 10.3). As with overall dependence/abuse of illicit drugs/alcohol in the last year, there is a higher prevalence of SUDs in urban and most rural areas of the state.

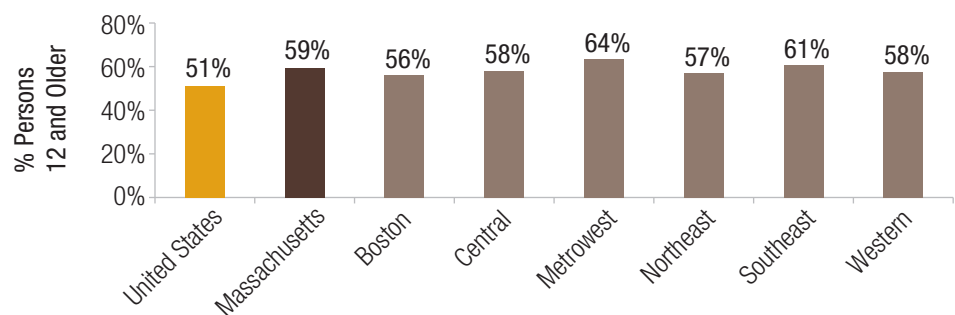
Figure 10.3 **Illicit Drug Use, Past Month by Region**



Source: SAMHSA, National Survey on Drug Use and Health, 2004-2006.

Within Massachusetts there is some variation in the rates of those using alcohol in the past month (Figure 10.4). In contrast to illicit drug use, the Metro West region is slightly higher than all other regions.

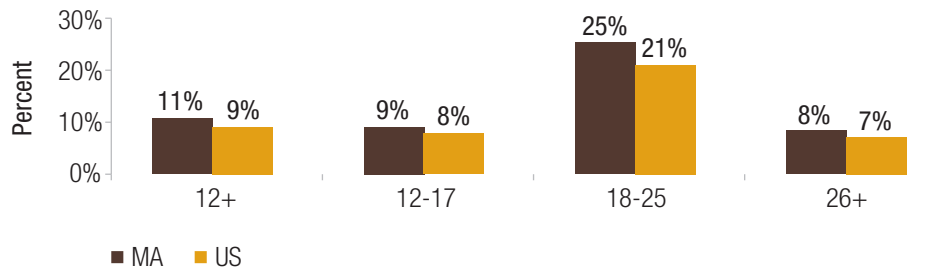
Figure 10.4 **Alcohol Use, Past Month by Region**



Source: SAMHSA, National Survey on Drug Use and Health, 2004-2006.

Rates of dependence and abuse can vary by age as well (Figure 10.5). Overall, Massachusetts residents in every age group experience higher rates of dependence and abuse than national averages. In Massachusetts this difference is most pronounced among the 18-25 year-old age group, with state rates approximately 20% higher than national rates. In Massachusetts and the US, alcohol and drug use peak in this young adult population.

Figure 10.5 Abuse of Illicit Drugs or Alcohol, Past Year by Age



Source: SAMHSA, National Survey on Drug Use and Health, 2004-2006.

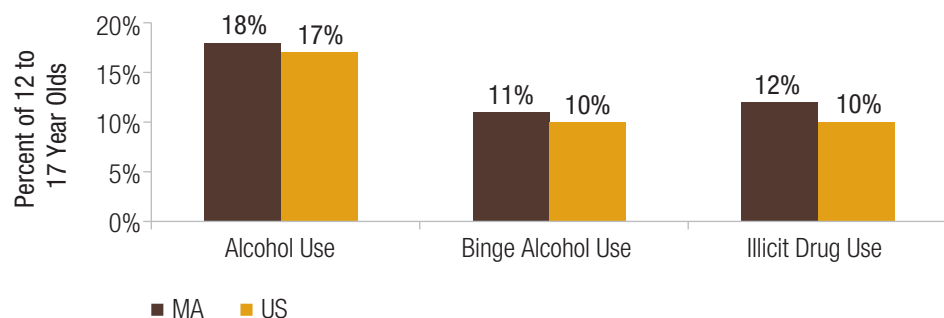
### Substance Use Among Youth

While most young people reported to the National Survey on Drug Use and Health (NSDUH) that they had not had anything to drink in the last month, alcohol is the most commonly used and abused drug among youth in the United States, more than tobacco and illicit drugs.

Although drinking by persons under the age of 21 is illegal, people aged 12 to 20 years drink 11% of all alcohol consumed in the United States. More than 90% of this alcohol is consumed in the form of binge drinking (five or more drinks at one time). On average, underage drinkers consume more drinks per drinking occasion than adult drinkers. In 2005, there were more than 145,000 emergency room visits by youth 12 to 20 years for injuries and other conditions linked to alcohol.<sup>4</sup>

The prevalence rates of alcohol use, binge drinking and illicit drug use are all higher in Massachusetts than nationally (Figure 10.6). In Massachusetts, 18% of youths use alcohol and 11% binge drink compared to 17% and 10% nationally. Illicit drug use at 12% is 20% higher than the national prevalence rate. To put this in context, with approximately 520,000 12 to

Figure 10.6 Youth Substance Use, MA and US



Source: SAMHSA, National Survey on Drug Use and Health, 2006-2007.

17 year-olds in the State, the two percentage point difference in illicit drug represents about 10,000 youths.

Until relatively recently, it was believed that the human brain was fully developed by the early teens. Over the last 10 years, it has become clear that not only does the brain continue to develop into the early twenties, but areas of the brain controlling impulse control and judgment are among the last areas of the brain to mature. According to the National Institute on Alcohol Abuse and Alcoholism, use of alcohol during the teens and early twenties can have a very negative impact on the brain, possibly delaying, damaging or preventing the maturation process.

Research has linked adolescent alcohol and drug consumption to a host of consequences, including poor school performance and an increased risk of addiction during adulthood. The National Institute on Alcohol Abuse and Alcoholism (NIAAA) reports that children who began drinking before the age of 15 are four times more likely to become dependent on alcohol at some point in their lives.

**Massachusetts funds 31 substance abuse prevention programs, which have a particular focus on underage drinking. By changing and enforcing policies that limit access to alcohol, the likelihood of underage drinking is significantly decreased.**

Over the past year, Massachusetts has funded 31 substance abuse prevention programs, which have a particular focus on underage drinking. All 31 programs are implementing strategies, including compliance checks, social host liability and server training designed to limit access to alcohol for those under twenty-one. By changing and enforcing policies that limit access to alcohol, the likelihood of underage drinking is significantly decreased.

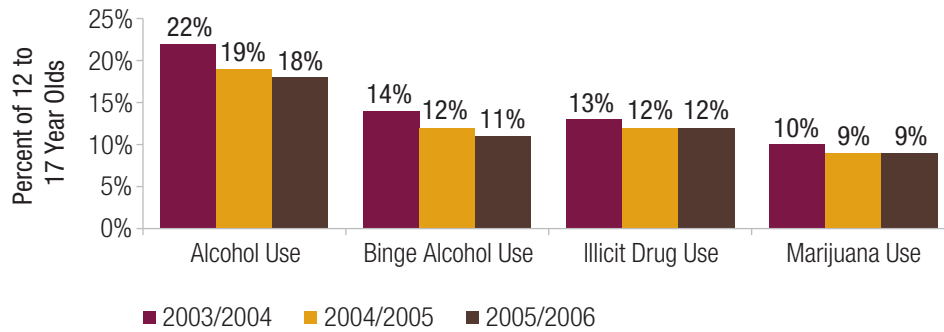
A prime example of policy change is the recent law removing the sales tax exemption for alcohol sold for off-site consumption. Over 112 studies indicate that by raising taxes on alcohol, consumption is reduced, *particularly in the underage population*. These program and policy changes not only highlight successful approaches to prevention in the Commonwealth, but also support the belief that in order to be effective, substance abuse prevention must be ongoing, enhanced and continuous over time.<sup>5</sup>

Along with these programmatic and policy change efforts, binge drinking, illicit drug and marijuana use all decreased from 2003 thru 2006 (Figure 10.7). Of note, alcohol use is down 18% from 22% to 18% of youths using and binge drinking is down 21% to 11%. Illicit drug use is down by almost 8% to 12% and marijuana use by 10% to 9%.

Massachusetts youth are waiting longer to drink and use marijuana than they did several years ago, but the average age when they begin using is still only around 14 years old (Figure 10.8).

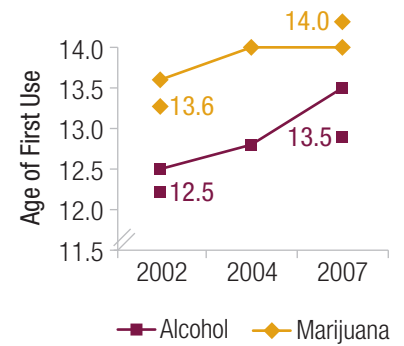
Youth reporting using alcohol in the past month have decreased over time for both middle and high school students (Figure 10.9). High school use has dropped from 53% in 2001 to 46% in 2007. Middle school use has dropped by more than 50% from 23% in 2002/2003 to 11% in 2007.

Figure 10.7 **Youth Substance Use, 2003-2006**



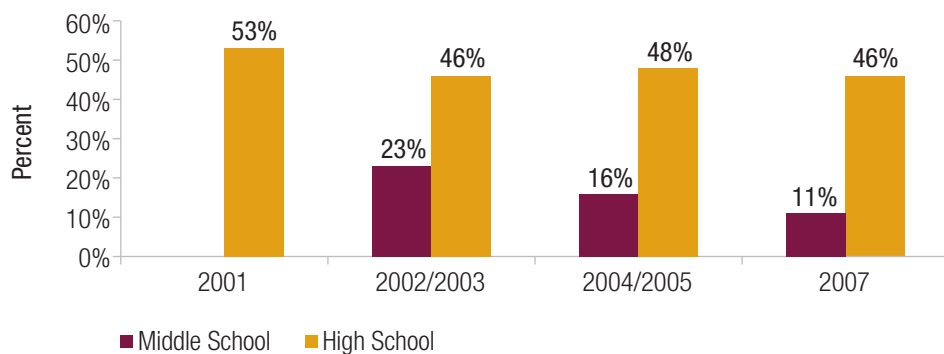
Source: SAMHSA, National Survey on Drug Use and Health, 2003-2006.

Figure 10.8 **Age of First Use, Middle & High School Students Combined**



Source: MDPH Youth Health Survey, 2007.

Figure 10.09 **Youth Alcohol Use, Past Month**



Source: MDPH Youth Health Survey, 2007; Massachusetts Department of Elementary and Secondary Education Youth Risk Behavior Survey, 2007.

Marijuana use in high school has decreased from 27.7% in 2003 to 24.6% in 2007 (Figure 10.10b). Middle school use has also declined from 7.6% in 2002 to 5.1% in 2007.

Figure 10.10a **Youth Marijuana Use, Past Month, Middle School**

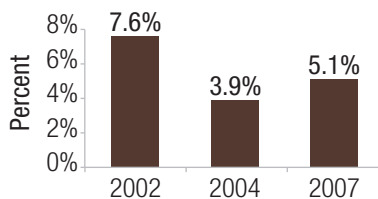
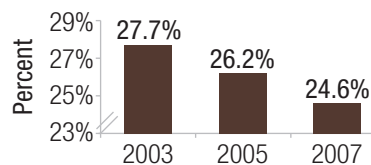


Figure 10.10b **Youth Marijuana Use, Past Month, High School**



Source: MDPH Youth Health Survey, 2007; Massachusetts Department of Elementary and Secondary Education Youth Risk Behavior Survey, 2007.

The prevalence of binge drinking in high school has remained relatively constant at about 27% (Figure 10.11b) while binge drinking has decreased by more than 50% in middle-schoolers from 8.8% in 2002 to 4.2% in 2007.

Figure 10.11a **Youth Binge Drinking, Past Month, Middle School**

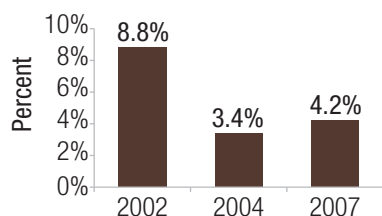
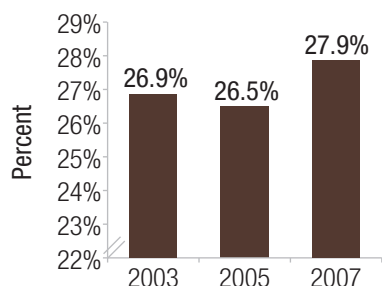


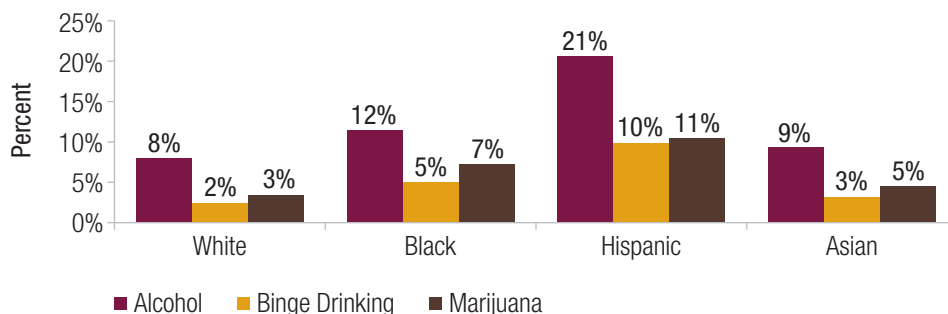
Figure 10.11b **Youth Binge Drinking, Past Month, High School**



Source: MDPH Youth Health Survey, 2007; Massachusetts Department of Elementary and Secondary Education Youth Risk Behavior Survey, 2007.

There is considerable variation in the prevalence of youth substance use between race and ethnic groups (Figure 10.12). Hispanics have roughly twice the prevalence of alcohol use (20.6%) as Blacks (11.5%) followed by Asians (9.3%) and Whites (8%). Binge drinking and marijuana have similar variation in use patterns.

Figure 10.12 **Youth Substance Use**



Source: MDPH Youth Health Survey, 2007.

### Substance Use Among Young Adults (18-25)

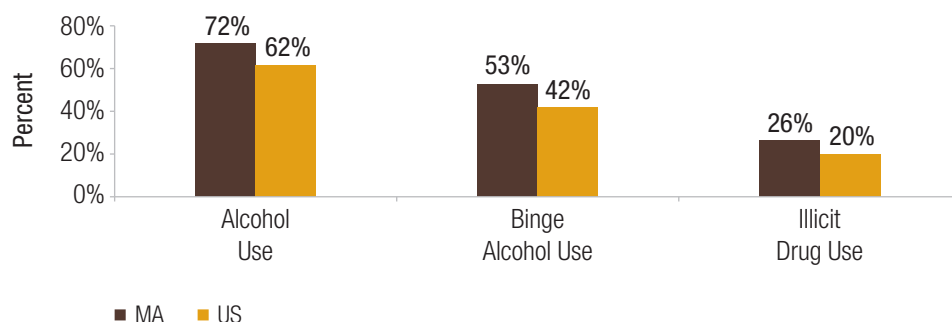
The developmental stage and characteristics of the 18-25 year-old age group are affected in a number of significant ways by alcohol and other drug use and abuse. During “young adulthood”, or “emerging adulthood,” (a more recent designation), continued exploration of identity is a focus. Substance abuse during this period can delay the individuation process on both a psychological and social level.

Factors that affect rates of young adult substance use include education, employment, and marital status. Other factors include living arrangements/ homelessness, incarceration, pregnancy, and parenthood. In 2006 nationally, the number of 18-25 year-olds reporting illicit drug use in the past month who graduated from high school was 35%, compared to 10% for those completing college. In addition, 10% of 18-25 year-olds employed full-time reported illicit drug use in the past month, compared to 47% of those who were unemployed.<sup>6</sup>

Drinking, heavy drinking, binge drinking, and engaging in other risky behaviors while drinking all steadily increase as adolescents age toward adulthood, and peak in the young adult years. Of particular concern is the dramatic increase in the misuse of prescription pain medication in recent years. Nationally there has been a 30% increase in teens who have tried OxyContin® with 1 in 10 high school seniors reporting they have tried Vicodin (2008). With 18-25 year olds there has been an increase from 5.4% in 2002 to 6.3% in 2005.<sup>7</sup>

The prevalence rates of alcohol use, binge drinking, and illicit drug are considerably higher in Massachusetts than nationally (Figure 10.13). Alcohol use at 72% is 17% higher than the national average. Fifty-three percent reported binge drinking versus 42% nationally and 26% reported illicit drug use which is 34% higher than the national average.

Figure 10.13 **Substance Use, Adults 18-25**



Source: SAMHSA, National Survey on Drug Use and Health, 2006-2007.

## Substance Use Among Adults

Among persons 26 years of age or older, Massachusetts ranks among the top ten states in the 2007 National Survey on Drug Use and Health (NSDUH) in the following categories:

- Marijuana use in the past year
- Cocaine use in the past year
- Alcohol use in the past month
- Alcohol dependence or abuse in the past year
- Dependence on or abuse of illicit drugs or alcohol in the past year
- Needing but not receiving treatment for alcohol use in the past year

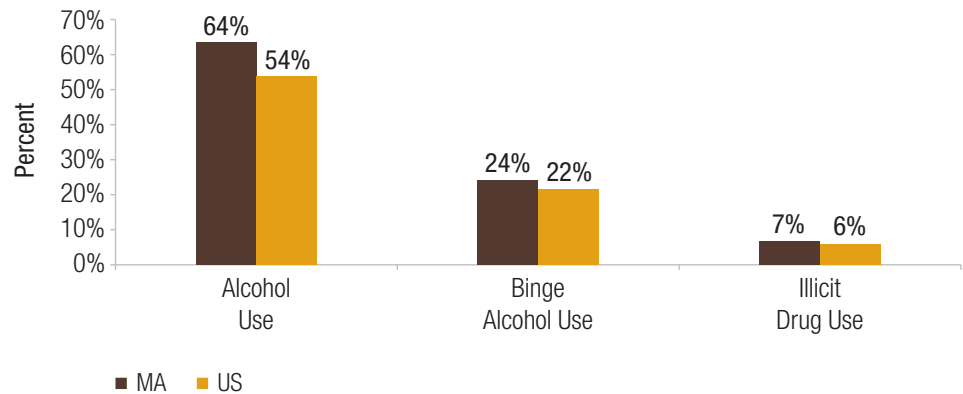
According to data from the survey, illicit drug use among older adults has increased since the beginning of this decade.

As with youth and young adults, the prevalence of adult alcohol use, binge drinking and illicit drug use are higher than national averages (Figure 10.14). Alcohol use at 64% is 18% higher while binge drinking and illicit drug use is 11% and 14% higher. At-risk drinking (consuming two or more drinks per day) is a problem as well with 17% of men and 11% of women ages 50 and older reporting such activity in the previous month.

The percentage of adults ages 50 to 59 in the US who reported using at least one illicit drug in the past year jumped from 5.1% in 2002 to 9.4% in 2007. In addition to alcohol and illicit drug use, the use of non-medical pain relievers has become a significant issue with steadily increasing incidence of deaths and emergency visits related to opioid use. In Massachusetts, the percentage

of adults using non-medical pain relievers is 4% which is 9.5% higher than the national average. Incidences of deaths and emergency room visits related to opioid use have been increasing steadily in recent years as well.

Figure 10.14 **Substance Use, Adults 26+**



Source: SAMHSA, National Survey on Drug Use and Health, 2006-2007.

Population projections suggest a steady increase in adults over the age of 26 in the next 50 years. It can be anticipated that the need for treatment and prevention efforts targeting this group will grow as well.

## Treatment Need

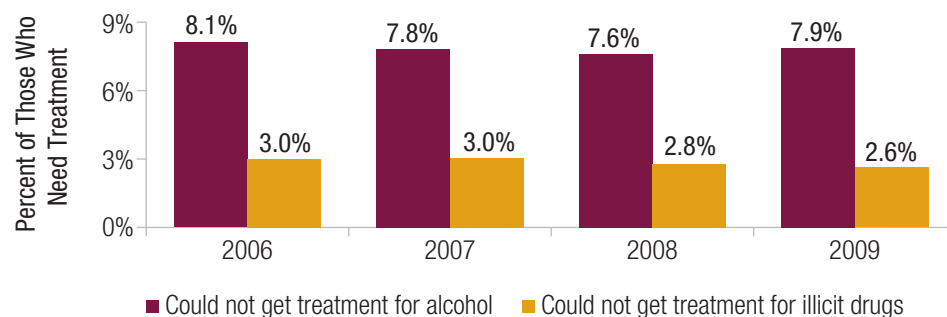
Based on SAMHSA's definition, any individual who meets the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) criteria for dependence or abuse of drugs or alcohol in the past year, or who has received substance abuse treatment in the past year is in need of treatment services. "Met need" is determined using the states administrative treatment data, while the estimates of unmet need are generally based on population based survey data.

The Department of Public Health funded 106,000 treatment admissions for roughly 58,000 people last year, but the need far outweighs the demand. According to NSDUH/SAMSHA in-person interviews, *most people in need of treatment do not seek it*. In 2007, of the 20.8 million people nationwide that needed treatment for illicit drug or alcohol use, 93.6% did not feel they needed treatment; 4.6% felt they needed treatment but did not make an effort to obtain it, and only 1.8% felt they needed treatment and made an effort to get treatment.

In Massachusetts, the rates of unmet alcohol and/or drug treatment need have been above the national rates for all age groups across all survey years (Figure 10.15). The rates for unmet drug treatment need for those aged 18-25 have consistently been among the highest in the country.

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Figure 10.15 People Who Could Not Get Into Treatment, Ages 12+

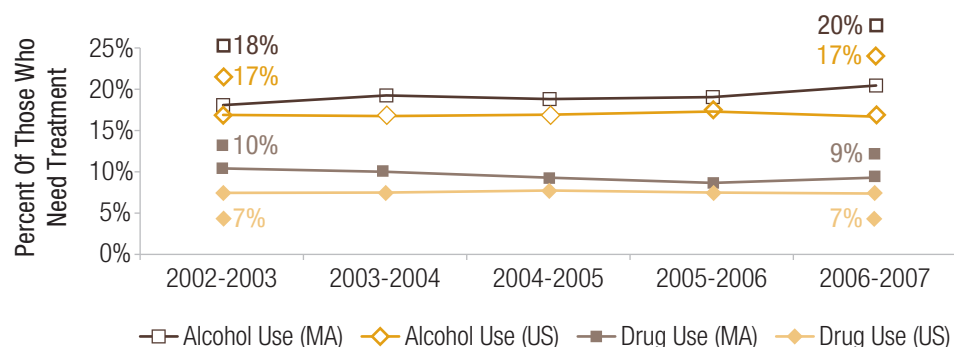


Source: Substance Abuse and Mental Health Services Administration Center for Substance Abuse Treatment (CSAT) State Snapshot, 2009.

Geographically in Massachusetts, the proportions of those people in need of, but not receiving, treatment range from a low of 6.8% in the Northeast to a high of 8.8% in Boston.

The highest levels of those needing but not receiving treatment occur among the young adult (18-25 year old) population. Again, Massachusetts rates are higher than the US averages for this age group (Figure 10.16).

Figure 10.16 People Who Could Not Get Into Treatment, Ages 18-25



Source: SAMHSA, National Survey on Drug Use and Health, 2002-2007.

## Opioid Related Morbidity and Mortality

Opioids include heroin, morphine, codeine, and other drugs commonly used for severe pain relief, including Oxycodone (OxyContin® and Percocet®) and hydrocodone (Vicodin®). Opioids have long been used to treat acute pain, such as post-operative pain. They are also used in palliative care to alleviate the severe chronic pain of terminal conditions such as cancer.

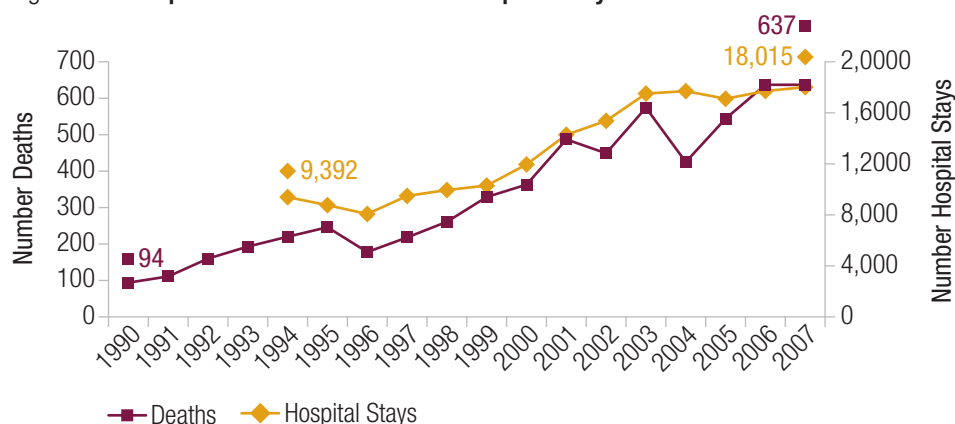
Opioids bind to specific opioid receptors in the central nervous system and other tissues, and have some of the greatest potential for dependence of any

**While heroin prices have remained low, purity levels have begun to fluctuate with both extremely high and low purity levels at the street level.**

category of drugs. Opioids are addictive. Withdrawal symptoms include severe dysphoria, sweating, muscle aches, goose flesh, vomiting and pain.

Since the late 1990s, the availability and purity of heroin in the Northeast United States as well as the increased availability and abuse of prescription painkillers has led to serious increase in the incidence of fatal and non-fatal overdoses from opioids (Figure 10.17).

Figure 10.17 Opioid-Related Deaths and Hospital Stays



Source: MDPH Death file, 1990-2007; Massachusetts Division of Health Care Finance and Policy Inpatient Hospital Discharge Database and Outpatient Observation Stay Database, 1994-2007. Note: Trends for deaths and hospital stays for dependence abuse or overdose are significantly increasing for period shown ( $p \leq .05$ ).

According to a recent National Drug Intelligence Center Drug Threat Assessment, heroin is the primary drug threat in Massachusetts. Nationally, heroin ranks fourth, after methamphetamine, cocaine and marijuana. Bureau of Substance Abuse Services treatment admission data have shown that heroin is the illicit drug that is most often the reason that people seek treatment.

In the past decade, the number of prescriptions for Schedule II opioid painkillers has doubled in Massachusetts. Although it is important to properly treat pain, the availability of these prescription drugs in the community can be a risk. The NSDUH has shown that “new initiates” to drug use are now more likely to use pain killers than to use marijuana. Often people who develop tolerance to prescription pain killers switch to heroin due to the lower cost and broad availability. These new prescribing patterns and drug use patterns have influenced the increase in opioid-related overdoses.

In addition to increase in availability of heroin, current investigations by the National Drug Intelligence Center indicate that diversion of pharmaceutical drugs, particularly Oxycodone products such as OxyContin®, continues to be a problem in Massachusetts. According to the 2007 National Survey on Drug Use and Health, the most common way that

people get prescription pain medication for non-medical use is from family and friends who have a legal prescription.

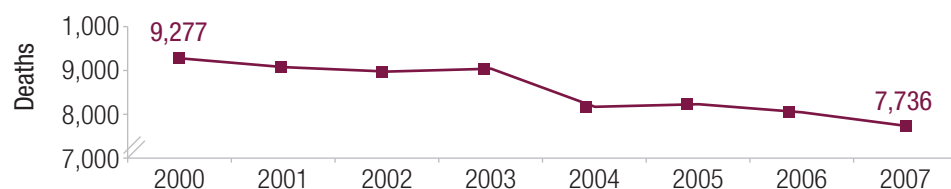
Massachusetts has seen an almost 20% increase of non-fatal overdose emergency department visits from 9,899 in 2002 to 11,777 in 2007. For every opioid-related fatal overdose in 2007, there were 47 nonfatal incidents treated at Massachusetts acute care hospitals.

## Tobacco Use

### Health and Economic Costs

Tobacco use is the leading cause of preventable death and disease in Massachusetts. Approximately 7,800 Massachusetts residents die each year from tobacco-related causes (Figure 10.18), including cancers of the lung, larynx, throat, esophagus and mouth; heart disease and stroke; and emphysema and other respiratory diseases. Though smoking-attributable deaths in Massachusetts have decreased at the rate of 2.6% annually since 2000<sup>8</sup>, tobacco kills more people in Massachusetts than motor vehicle crashes, AIDS, homicides, suicides and poisonings combined.

Figure 10.18 Deaths from Smoking



Source: MDPH Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC), 2006.

Tobacco imposes a heavy financial burden on the Commonwealth, costing Massachusetts an estimated \$6.0 billion annually - \$4.3 billion in excess health care costs and \$1.7 billion in lost productivity (Figure 10.19).

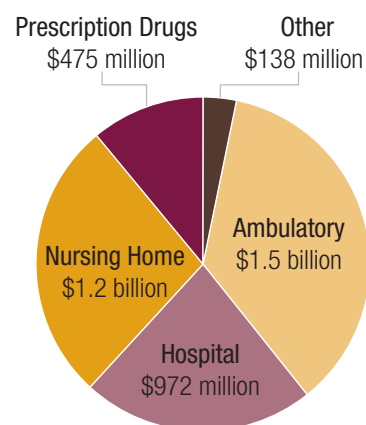
### Adult Tobacco Use

Thanks to aggressive public education campaigns, policy initiatives and targeted regulatory changes, far fewer adults smoke today than they did twenty years ago. The percentage of adult cigarette smokers in Massachusetts has declined at a rate of 2.2% annually, from 21.1% in 1993 to 16.1% in 2008. This represents a reduction of more 200,000 smokers (Figure 10.20). Currently, approximately 800,000 Massachusetts adults smoke.<sup>9</sup>

Based on 2008 data, 17% of men smoke and 15% of women smoke. The smoking rate by race/ethnicity is 16% for whites, 19% for blacks, and 15%

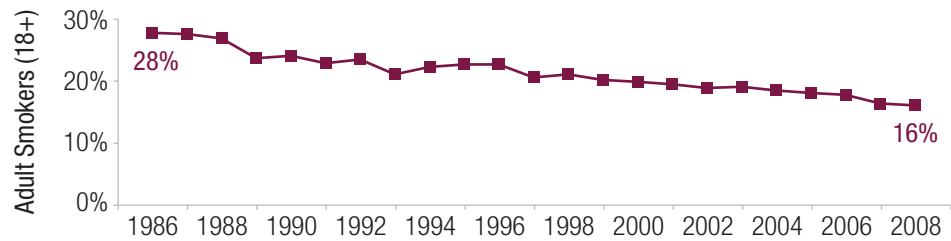
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Figure 10.19 Smoking-Attributable Health Care Expenditures



Source: MDPH Smoking-Attributable Mortality, Morbidity, and Economic Costs (SAMMEC), 2006.

Figure 10.20 Adult Smokers (Age 18+)

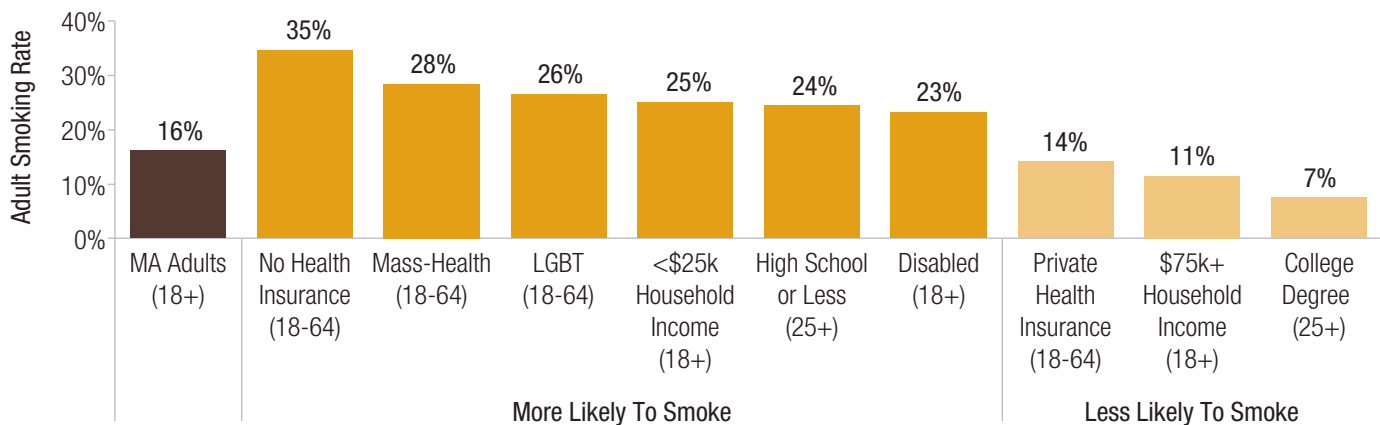


Source: MDPH BRFSS, 1988-2008.

for Hispanics. The smoking rate among young adults, age 18-24, is the highest of any age group (21%).

The burden of tobacco use is greater for some segments of the population than others. Smoking rates are highest among low socio-economic groups, people with no health insurance, people with disabilities, and the LGBT (lesbian, gay, bisexual, and transgender) population.

Figure 10.21 Adult Smoking Rate Among Subgroups



Source: MDPH BRFSS, 2008.

## Smoking among MassHealth

recipients decreased

annually by 10% since

tobacco cessation was

incorporated into the benefit

package in July 2006.

The Massachusetts Tobacco Cessation and Prevention Program (MTCP) promotes cessation and helps smokers quit through a number of strategies: making low-cost tobacco treatment available through the health care system, helping health care providers make interventions with smokers a part of routine patient care, and creating a statewide network of tobacco treatment information, training and services through a centralized resource center available to consumers and providers.

In FY07 and FY08, MTCP worked closely with MassHealth, the Massachusetts Medicaid program, to design and promote a tobacco cessation benefit. As part of the implementation of this new benefit, MTCP funded and developed smoking intervention protocols in community health

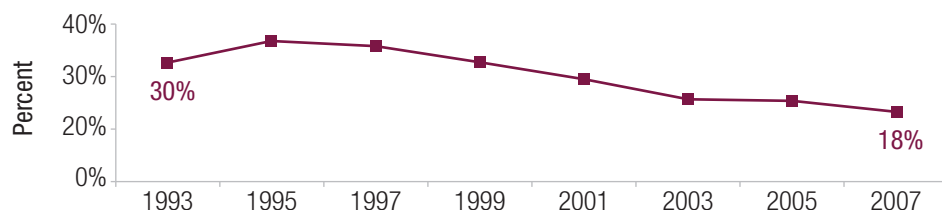
centers and rural birth hospitals to improve the ways that health care providers address tobacco use with their patients. Research findings have shown that current smoking among MassHealth recipients decreased annually by 10% since tobacco cessation was incorporated into the benefit package in July 2006.<sup>10</sup>

## Youth Tobacco Use

Eighty-five percent of adult smokers in Massachusetts had their first cigarette as teenagers. Sixty-nine percent were smoking regularly by the age of 18.<sup>11</sup>

Since reaching 35.7% in 1995, current smoking (past 30 day use) among high school students in Massachusetts has declined by 50% (Figure 10.22). In 2007, the rate of current cigarette smoking among high school students was 17.7%.<sup>12</sup>

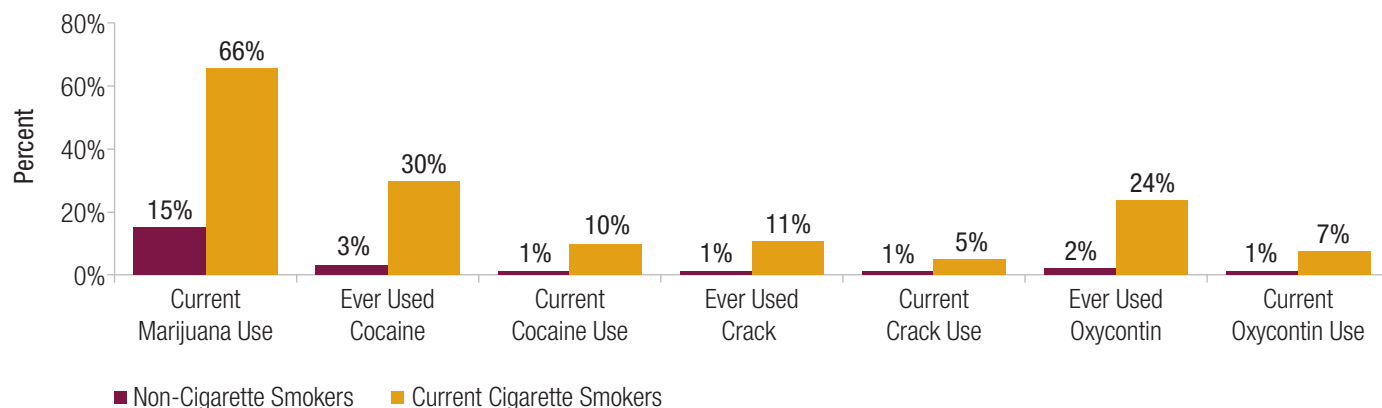
Figure 10.22 **Current Cigarette Use, High School Students**



Source: Massachusetts Department of Elementary and Secondary Education, Youth Risk Behavior Survey, 1993-2007.

In 2007, current smoking was highest among high school students with two or more friends who smoke cigarettes (53%) and those who live at home with a smoker (26%).<sup>5</sup>

Figure 10.23 **Cigarette Smoking and Illegal Drug Use, High School Students**



Source: Massachusetts Department of Elementary and Secondary Education, Youth Risk Behavior Survey, 2007.

High school students who smoke are also more likely to engage in other risky behaviors such as substance abuse. Compared to high school students who did not smoke cigarettes, current cigarette smokers were more than four times more likely to report current marijuana use (Figure 10.23), 11 times more likely to report current cocaine use, and 12 times more likely to report current OxyContin® use.<sup>5</sup>

MTCP efforts to prevent tobacco use by young people involve multiple strategies. MTCP is responsible for reducing minors' ability to purchase tobacco products, coordinating youth programs across the Commonwealth by awarding mini-grants to youth groups, holding annual youth summits, and hosting special events such as an annual film shorts competition. The84.org (named for the percentage of youth who do not smoke) - funded by MTCP - is an organization that promotes a positive, healthy lifestyle for young people. In FY07, MTCP strengthened its efforts to prevent young people from starting to smoke and saw the rate of illegal tobacco sales to minors fall by 50%.

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### Exposure to Secondhand Tobacco Smoke

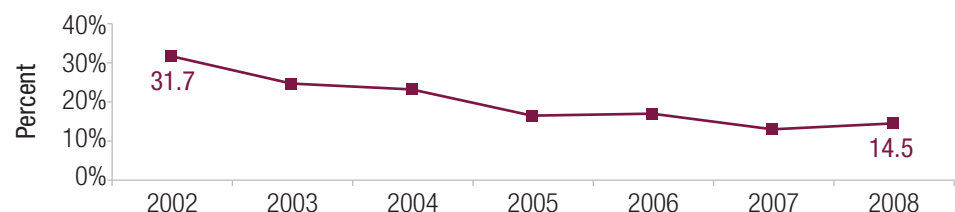
Exposure to secondhand smoke can lead to lung cancer and heart disease in non-smoking adults and to lower respiratory infections, asthma, ear infections, and sudden infant death syndrome in children. Secondhand tobacco smoke is especially harmful to pregnant women and to fetal development.

Though they are not smokers themselves, an estimated 1,000 or more Massachusetts adults and children die each year from exposure to secondhand smoke.

Exposure to secondhand smoke among adult nonsmokers declined in Massachusetts from 32% in 2002 to 15% in 2008 (Figure 10.24). In July 2004, the Massachusetts Legislature enacted a comprehensive statewide smoking ban in workplaces, including restaurants and bars. Since enactment of the Smoke-Free Workplace Law, exposure to secondhand tobacco smoke has been reduced. However, nonsmokers continue to report exposure to secondhand smoke, especially in homes, private vehicles, and other places.

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Figure 10.24 **Exposure to Secondhand Smoke for Nonsmokers**

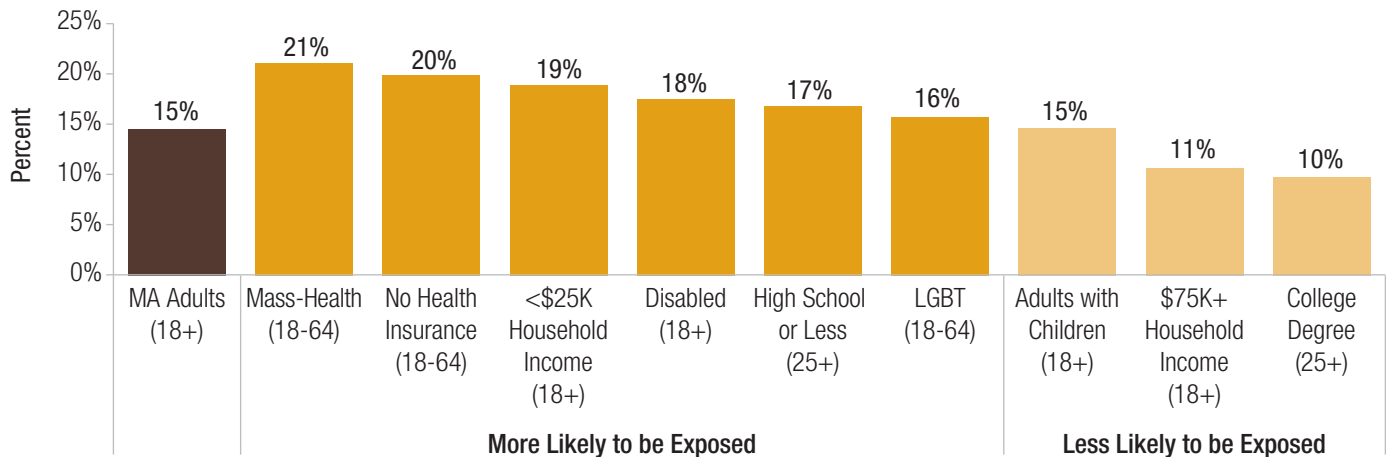


Source: MDPH BRFSS, 2002-2008.

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Exposure to secondhand smoke is most prevalent among low socio-economic groups, people with no health insurance, people with disabilities, and the LGBT (lesbian, gay, bisexual, and transgender) population (Figure 10.25).

Figure 10.25 Exposure to Secondhand Smoke for Nonsmokers by Subgroup



Source: MDPH BRFSS, 2008.

### MTCP Initiatives

MTCP’s efforts are aimed at reducing smoking, decreasing health care costs, reducing the suffering caused by tobacco use, and saving lives. Moving forward, major initiatives include promoting comprehensive tobacco cessation benefit policies, expanding technical assistance to help health care providers address tobacco use with their patients, supporting increased prices of tobacco products to reduce demand, and creating an environment where all Massachusetts residents can live tobacco free.



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**T**here have been numerous advances in the prevention and treatment of substance use disorders (SUDs). Greater emphasis on evidence-based practices, such as screening, brief intervention and medication-assisted treatment like methadone and suboxone, and inclusion of addictions in recent federal parity legislation are among the successes that should lead to more effective and equitable treatment. However, much remains to be done.

Some areas have potential for particularly high returns. Underage drinking imposes high societal costs in terms of deaths, medical costs, work loss, and quality of life. Increasing the price of alcohol products is a strategy that has well documented effects on curbing underage drinking.

On the treatment side, we need to do a better job of reaching those who are affected by SUDs. Approaches that treat SUDs similar to other chronic conditions and recognize the frequent co-occurrence of medical and mental conditions are needed. A comprehensive continuum of care with services spanning primary prevention to acute and stabilization services, to long-term residential, to outpatient counseling, all the way to recovery support and aftercare services are necessary. Engaging other systems, especially mainstream health care and corrections are essential to meeting the tremendous unmet need for SUD services. Finally, we need to demonstrate the value of SUD services in terms of improved outcomes for clients. This can occur in a system where performance is measured and rewarded and is accompanied by using this information to continuously improve quality.

Addictions are one area where the public benefits considerably from preventing and treating the problem. Success should reduce crime, accidents, and medical costs, all of which impose economic burdens on society. We need to support our prevention and treatment efforts as we work to lessen the impact of addictions on the people of Massachusetts. Without robust and comprehensive efforts in prevention and treatment, we will pay the cost in other areas.

# FIGURE NOTES

**Figure 10.1–** Estimates are based on a three year average of the 2004-2006 surveys  
**10.5:** for persons 12 and older.

## ENDNOTES

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