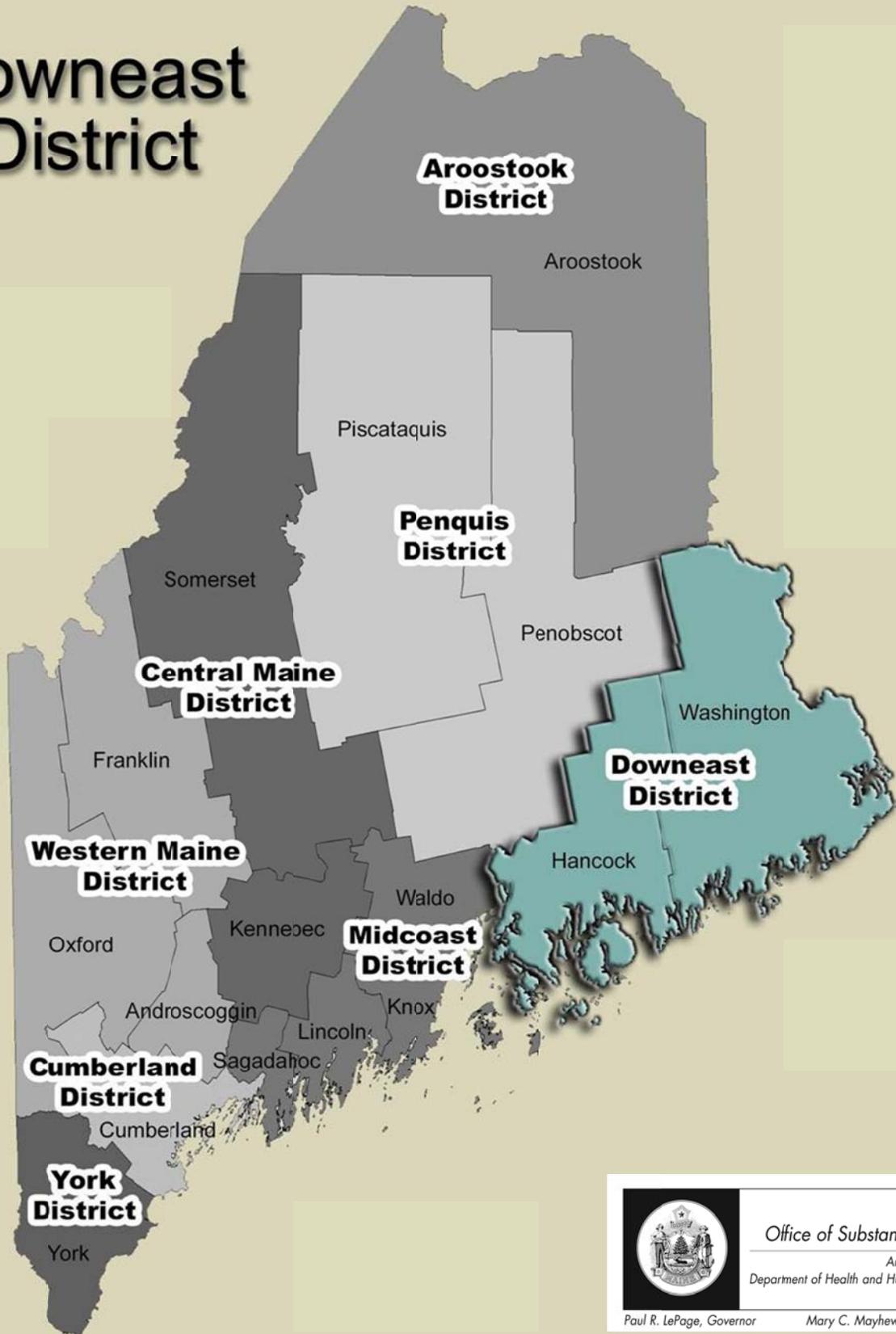


# Substance Abuse Trends in Maine

Epidemiological Profile 2011

## Downeast District



Office of Substance Abuse

An Office of the  
Department of Health and Human Services

Paul R. LePage, Governor

Mary C. Mayhew, Commissioner



# Substance Abuse Trends in Maine

Epidemiological Profile 2011

## Downeast District

THIS REPORT IS PRODUCED FOR  
THE MAINE OFFICE OF SUBSTANCE ABUSE  
COMMUNITY EPIDEMIOLOGY SURVEILLANCE NETWORK  
WITH SUPPORT FROM THE STATE EPIDEMIOLOGICAL  
OUTCOMES WORKGROUP (SEOW) GRANT THROUGH THE  
U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES  
SUBSTANCE ABUSE AND MENTAL HEALTH ADMINISTRATION

Produced by  
Hornby Zeller Associates, Inc.  
373 Broadway  
South Portland, ME 04106  
July 2011  
(207) 773-9529  
[www.hornbyzeller.com](http://www.hornbyzeller.com)

## Table of Contents

---

<b>List of Figures .....</b>	<b>2</b>
<b>Introduction .....</b>	<b>1</b>
<b>Overview of Downeast Public Health District.....</b>	<b>1</b>
<b>Purpose of this Report .....</b>	<b>1</b>
<b>Consumption of Substances .....</b>	<b>2</b>
<b>Alcohol .....</b>	<b>3</b>
<b>Tobacco.....</b>	<b>10</b>
<b>Prescription Drugs.....</b>	<b>13</b>
<b>Other Illegal Drugs.....</b>	<b>16</b>
<b>Consequences Resulting from Substance Use and Abuse.....</b>	<b>20</b>
<b>Criminal Justice Involvement.....</b>	<b>21</b>
<b>Driving Under the Influence.....</b>	<b>24</b>
<b>Overdose Deaths .....</b>	<b>27</b>
<b>Factors Contributing to Substance Use and Abuse.....</b>	<b>28</b>
<b>Availability and Accessibility.....</b>	<b>29</b>
<b>Perceived Risk and Harm .....</b>	<b>33</b>
<b>Perceived Enforcement .....</b>	<b>37</b>
<b>Mental Health, Suicide and Co-occurring Disorders .....</b>	<b>39</b>
<b>Depression and Anxiety .....</b>	<b>40</b>
<b>Suicide and Suicidal Ideation .....</b>	<b>43</b>
<b>Mental Health and Substance Abuse Co-Occurrence .....</b>	<b>44</b>
<b>Treatment Admissions for Substance Abuse.....</b>	<b>45</b>
<b>Treatment Admissions .....</b>	<b>46</b>
<b>Appendix: Data Sources.....</b>	<b>50</b>
<b>Description of Data Sources .....</b>	<b>50</b>

## List of Figures

---

Figure 1. Percent of high school students in Downeast PHD who had at least one drink of alcohol during past 30 days: 2009.....	3
Figure 2. Percent of high school students in Downeast PHD who had at least one drink of alcohol in past 30 days: 2004-2008 .....	4
Figure 3. Percent of high school students in Downeast PHD who had at least five drinks in a row during past 30 days: 2009 .....	5
Figure 4. Percent of adults in Downeast PHD who reported drinking during past 30 days: 2001-2009 .....	6
Figure 5. Percent of adults in Downeast PHD who reported heavy drinking during past 30 days: 2001-2009.....	7
Figure 6. Percent of adults in Downeast PHD who reported binge drinking during past 30 days: 2004-2009.....	8
Figure 7. Percent of adults by Public Health District who reported binge drinking in past 30 days by age group: 2009.....	9
Figure 8. Percent of high school students in Downeast PHD who reported smoking one or more cigarettes during past 30 days: 2009 .....	10
Figure 9. Percent of high school students in Downeast PHD who used smokeless tobacco in the past 30 days: 2009.....	11
Figure 10. Percent of adults by Public Health District who reporting smoking a cigarette in the past 30 days: 2009 .....	12
Figure 11. Percent of high school students in Downeast PHD who have taken prescription drugs not prescribed to them by a doctor: 2009 .....	13
Figure 12. Percent of high school students in Downeast PHD who have taken prescription drugs not prescribed to them by a doctor: 2004-2008.....	14
Figure 13. Percent of population 12 years old or older in Maine who used prescription pain relievers in past year for nonmedical use by Public Health District: 2006-2008.....	15
Figure 14. Percent of high school students in Downeast PHD who have used marijuana during past 30 days: 2009 .....	16
Figure 15. Percent of high school students in Downeast PHD who have used marijuana during past 30 days: 2004-2008 .....	17

<b>Figure 16. Percent of high school students in Downeast PHD that have used cocaine in any form during their lifetime: 2009 .....</b>	<b>18</b>
<b>Figure 17. Percent of high school students in Downeast PHD who have used cocaine one or more times in their lifetime: 2004-2008 .....</b>	<b>19</b>
<b>Figure 18. Violent crime rate per 10,000: 1995-2009 .....</b>	<b>21</b>
<b>Figure 19. Alcohol-related arrest rate per 10,000: 1996-2009 .....</b>	<b>22</b>
<b>Figure 20. Drug-related arrest rate per 10,000: 1996-2009 .....</b>	<b>23</b>
<b>Figure 21. Percent of high school students in Downeast PHD who reported drinking and driving during the past 30 days: 2009 .....</b>	<b>24</b>
<b>Figure 22. Percent of high school students in Downeast PHD who rode in a vehicle driven by someone who had taken illegal drugs: 2009 .....</b>	<b>25</b>
<b>Figure 23. Alcohol-related motor vehicle crash rate per 10,000: 2006-2009.....</b>	<b>26</b>
<b>Figure 24. Drug-related death rate per 100,000: 1997-2008.....</b>	<b>27</b>
<b>Figure 25. Percent of high school students in Downeast PHD who reported it was easy to get alcohol: 2009 .....</b>	<b>29</b>
<b>Figure 26. Percent of high school students in Downeast PHD who reported it would be easy to get marijuana: 2009 .....</b>	<b>30</b>
<b>Figure 27. Number of liquor licensees per 1,000 residents, by PHD: 2010.....</b>	<b>31</b>
<b>Figure 28. Number of prescriptions filled per capita in Downeast PHD: State Fiscal Year 2005-2010. ....</b>	<b>32</b>
<b>Figure 29. Percent of high school students in Downeast PHD who reported a risk of harm from consuming five or more drinks once or twice per week: 2009.....</b>	<b>33</b>
<b>Figure 30. Percent of population age 12 or older who perceive a great risk from binge drinking by Public Health District: 2006-2008 .....</b>	<b>34</b>
<b>Figure 31. Percent of high school students in Downeast PHD who reported a risk of harm from smoking marijuana regularly: 2009 .....</b>	<b>35</b>
<b>Figure 32. Percent of population age 12 or older who perceive a great risk from smoking marijuana once a month by Public Health District: 2006-2008.....</b>	<b>36</b>
<b>Figure 33. Perceived risk among high school students in Downeast PHD of being caught by parents or police for drinking alcohol: 2009 .....</b>	<b>37</b>



<b>Figure 34. Perceived risk among high school students in Downeast PHD of being caught by police for smoking marijuana: 2009 .....</b>	<b>38</b>
<b>Figure 35. Percent of adults who have ever been told they have an anxiety or depressive disorder: Downeast PHD and Maine: 2009.....</b>	<b>40</b>
<b>Figure 36. Percent of adults in Downeast PHD who have ever been told they have an anxiety or depressive disorder: 2006, 2008, and 2009 .....</b>	<b>41</b>
<b>Figure 37. Percent of high school students in Downeast PHD who felt sad or hopeless almost every day for two weeks or more in a row during the past year: 2009 .....</b>	<b>42</b>
<b>Figure 38. Percent of high school students in Downeast PHD who considered suicide during the past year: 2009 .....</b>	<b>43</b>
<b>Figure 39. Percent of individuals admitted for substance abuse treatment that also had a mental health diagnosis: 2005-2010 .....</b>	<b>44</b>
<b>Figure 40. Primary drug admissions for adults in Downeast PHD: 2005-2010.....</b>	<b>46</b>
<b>Figure 41. Primary drug admissions for adults: 2010.....</b>	<b>47</b>
<b>Figure 42. Secondary drug admissions for adults in Downeast PHD: 2005-2010.....</b>	<b>48</b>
<b>Figure 43. Secondary drug admissions for adults: 2010.....</b>	<b>49</b>



## Introduction

---

### Overview of Downeast Public Health District

Downeast Public Health District is comprised of two counties, Hancock and Washington, and has a population of 87,274 people. This represents approximately 6.6 percent of Maine's total population in 2010. Both counties are relatively rural with Hancock having 34.3 people per square mile and Washington having 12.8 people per square mile; Washington is the third most rural county in Maine. The State of Maine is considered an "aging" state, with 16 percent of the population being 65 years old and over, a higher rate than the overall US population (13%). In Downeast Public Health District, approximately 18 percent of the population was 65 years old or older in 2010 (17.3% in Hancock, 18.7% in Washington). The majority of the population in both Hancock and Washington counties is Caucasian (97% and 92%, respectively). In 2010, 4.5 percent of the population in Washington identified themselves as American Indian. Economically, the two counties within Downeast PHD differ greatly. In 2009, the median family income in Washington was \$31,861 (the lowest in the state), whereas the median income in Hancock was \$48,018 (the fourth highest in the state). Similarly, 20.6 percent of the population in Washington lives below the poverty level (highest rate in the state) compared to 11.9 percent in Hancock (fourth lowest). In sum, Downeast PHD tends to be older and more rural compared to the rest of the state and varies greatly in terms of socio-economic factors.

It is within the context of these demographic characteristics that substance abuse in Downeast Public Health District (PHD) must be examined.

### Purpose of this Report

This report takes into account the primary objectives of the Office of Substance Abuse (OSA): to identify substance abuse patterns in defined geographical areas, establish substance abuse trends, detect emerging substances, and provide information for policy development and program planning. It also highlights all the prevention priorities identified in the OSA strategic plan: underage drinking, high-risk drinking, misuse of prescription drugs, and marijuana use. Finally, the report monitors many of the factors that contribute to substance use, such as access and perceptions of harm, as well as the common negative consequences such as crime, car crashes and overdose deaths.

This report includes data available through May 2011. Older and unchanged data are included when more recent data were not available. Five major types of indicators are included: self-reported substance consumption, consequences of substance use, factors contributing to substance use, indicators about mental health and substance abuse, and treatment admissions.

Previous county level reports with older trending data are available at the [www.maineosa.org](http://www.maineosa.org) website.

## Consumption of Substances

---

Consuming harmful substances can have detrimental effects on an individual's well-being, including increased risks of morbidity, addiction and mortality, and has a harmful effect on society as a whole including increased motor vehicle accidents and crime. However, it is the manner and frequency with which people drink, smoke and use drugs that are often linked to particular substance-related consequences. To understand fully the magnitude of substance use consequences, it is important to first understand the prevalence of substance use consumption, itself. Consumption includes overall use of substances, acute or heavy consumption and consumption by high risk groups (e.g., youth, college students, pregnant women).

As demonstrated by the indicators below, alcohol remains the substance most often used by Downeast PHD residents across the lifespan. In particular, high-risk drinking among the youth and younger adults continues to be a concern and it appears that young people in Downeast PHD are somewhat more likely to engage in high-risk drinking compared to the rest of the state. Tobacco use also appears to be higher among Downeast PHD's population when compared to the rest of the state. Prescription drugs and marijuana are the two most commonly used drugs in Maine and Downeast PHD is no different, although the rates of use tend to be somewhat higher.

## Alcohol

---

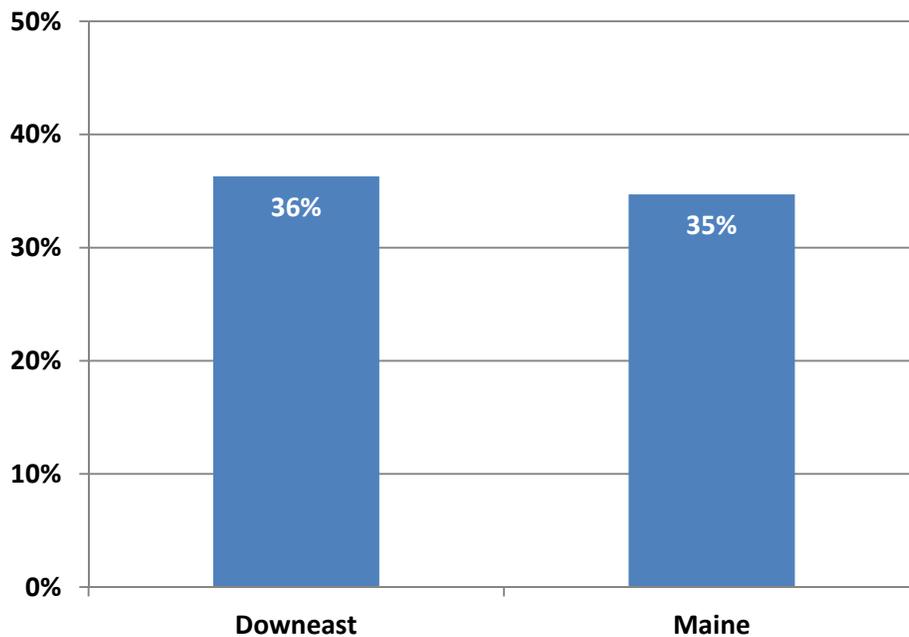
**Indicator Description: ALCOHOL USE AMONG YOUTH.** This measure shows the percentage of Maine high school students who reported having had one or more alcoholic drinks within 30 days prior to the survey.

**Why Indicator is Important:** Alcohol is the most often used substance among youth in Maine. In addition to the risks alcohol consumption carries for adults, developing adolescent brains are especially susceptible to the health risks of alcohol consumption. Adolescents who consume alcohol are more likely to have poor grades and be at risk for experiencing social problems, depression, suicidal thoughts, assault, and violence.

**Data Source(s):** MIYHS, 2009; MYDAUS, 2004-2008<sup>1</sup>.

**Summary:** More than one in three high school students in Downeast PHD (36%) reported having consumed one or more alcoholic beverages in the past month in 2009. This is slightly more than the statewide average.

**Figure 1. Percent of high school students in Downeast PHD who had at least one drink of alcohol during past 30 days: 2009**



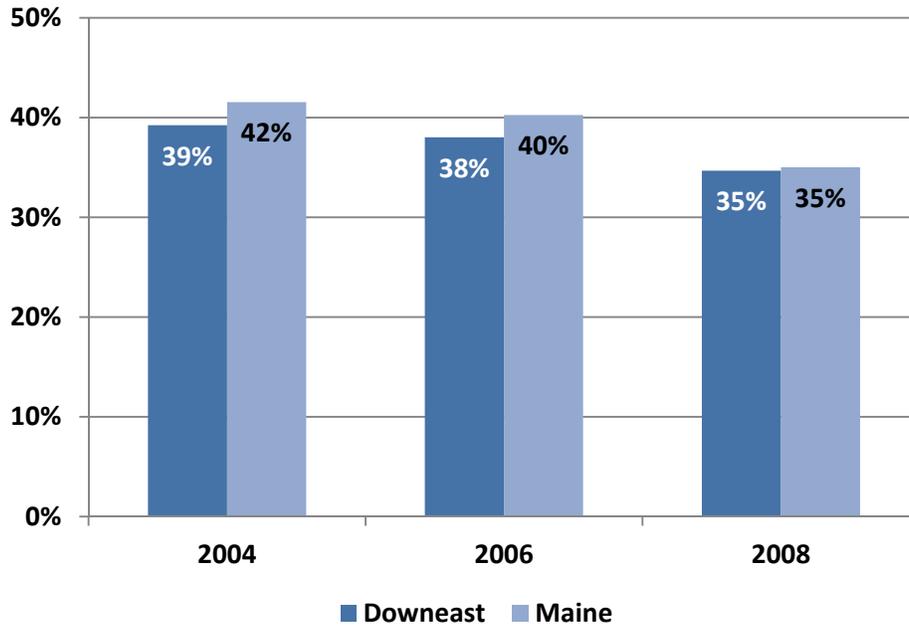
Source: MIYHS

---

<sup>1</sup> Due to survey changes, 2009 MIYHS should not be trended to 2004-08 MYDAUS.

**Summary:** During the three years trended below, high school students in Downeast PHD reported lower current drinking rates than the state average until 2008. The percentage of high school students consuming alcohol in the past 30 days decreased between 2004 and 2008 in Downeast PHD, from 39 percent in 2004 to 35 percent in 2008, mirroring the statewide trend.

**Figure 2. Percent of high school students in Downeast PHD who had at least one drink of alcohol in past 30 days: 2004-2008**



Source: MYDAUS

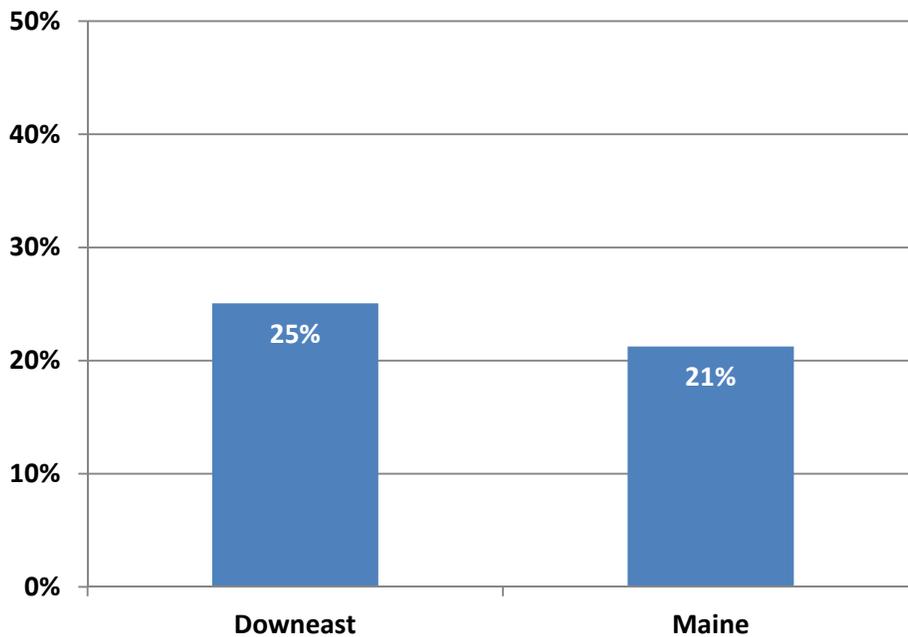
**Indicator Description: HIGH-RISK ALCOHOL USE AMONG YOUTH.** This indicator presents the percentage of Maine high school students who reported having had five or more alcoholic drinks in a row in one sitting at least once during the month prior to the survey.

**Why Indicator is Important:** Youth are more likely than adults to engage in high-risk drinking when they consume alcohol. High risk alcohol use contributes to violence and motor vehicle crashes and can result in negative health consequences for the consumer, including injuries and chronic liver disease. Youth who engage in high-risk drinking also are more likely to use drugs and engage in risky and antisocial behavior.

**Data Source(s):** MIYHS, 2009.

**Summary:** In 2009, one in four high school students in Downeast PHD (25%) reported having consumed five or more alcoholic beverages in one sitting during the past month. This is higher than the statewide average of 21 percent.

**Figure 3. Percent of high school students in Downeast PHD who had at least five drinks in a row during past 30 days: 2009**



Source: MIYHS

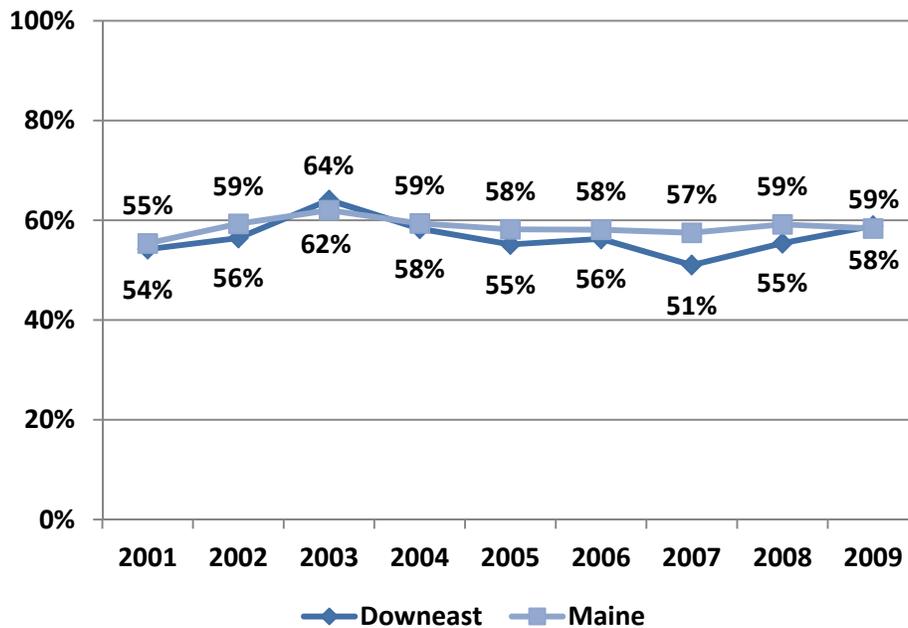
**Indicator Description: ALCOHOL USE AMONG ADULTS.** This indicator portrays the percentage of adults who reported having consumed one or more alcoholic drinks on one or more days within the past 30 days.

**Why Indicator is Important:** Alcohol is the most often used substance in Maine adults. Excessive and high risk alcohol use may contribute to violence and result in many negative health consequences for the consumer. Moderate drinking can also have negative health effects and lead to such consequences as alcohol-related motor vehicle crashes and increased injuries. Current alcohol use in pregnant women is also linked to low birth weight babies, sudden infant death, and other developmental delays in children.

**Data Source(s):** BRFSS, 2001-2009.

**Summary:** In 2009, 59 percent of adults in Downeast PHD reported drinking at least one alcoholic beverage within the past month, about the same as the statewide average of 58 percent. The rates in Downeast PHD have generally been lower than the state since 2004, reaching a low of 51 percent in 2007 and then climbing to 59 percent in 2009.

**Figure 4. Percent of adults in Downeast PHD who reported drinking during past 30 days: 2001-2009**



Source: BRFSS

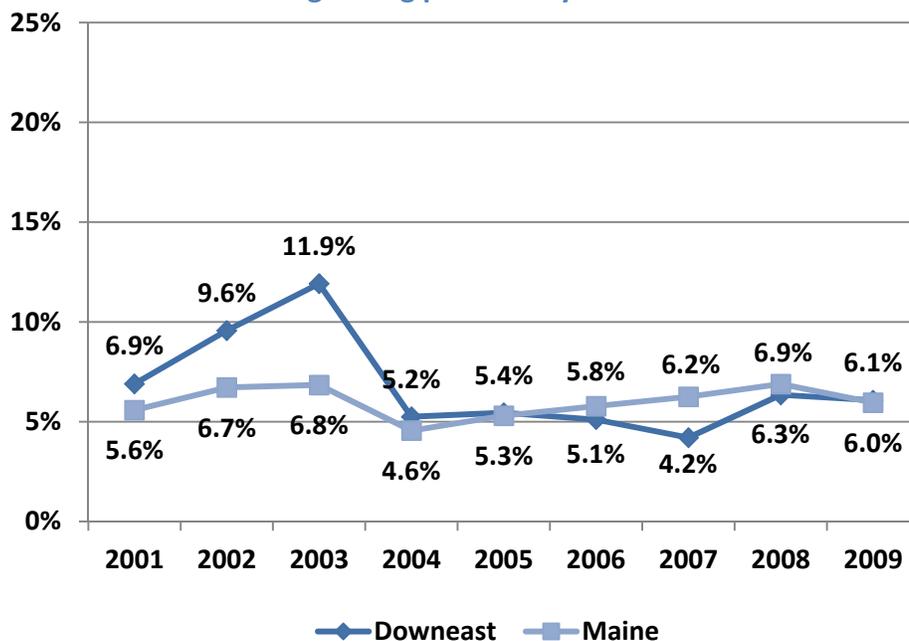
**Indicator Description: HEAVY ALCOHOL USE AMONG ADULTS.** This indicator examines the percentage of Maine residents who reported heavy drinking during the past month. This is defined as two drinks per day for a man or one drink per day for a woman.

**Why Indicator is Important:** Heavy drinking is considered to be a type of high risk drinking, meaning it increases the risk for many health and social related consequences. People who consume alcohol heavily are at increased risk for a variety of negative health consequences, including alcohol abuse and dependence, liver disease, certain cancers, pancreatitis, heart disease, and death. It has also been found that the more heavily a person drinks the greater the potential for problems at home, work, and with friends.<sup>2</sup>

**Data Source(s):** BRFSS, 2001-2009.

**Summary:** In 2009, 6.1 percent of adults in Downeast PHD indicated they engaged in heavy drinking during the past month, about the same as the statewide average. In 2004, heavy drinking rates in Downeast PHD dropped dramatically (from 11.9% to 5.2%) and have remained lower since, although it appears that rates increased between 2007 and 2008.

**Figure 5. Percent of adults in Downeast PHD who reported heavy drinking during past 30 days: 2001-2009**



Source: BRFSS

<sup>2</sup> Citation from Alcoholscreening.org, a service of Join Together and the Boston University School of Public Health and retrieved on 5/5/2011 from <http://www.alcoholscreening.org/Learn-More.aspx?topicID=8&articleID=26>

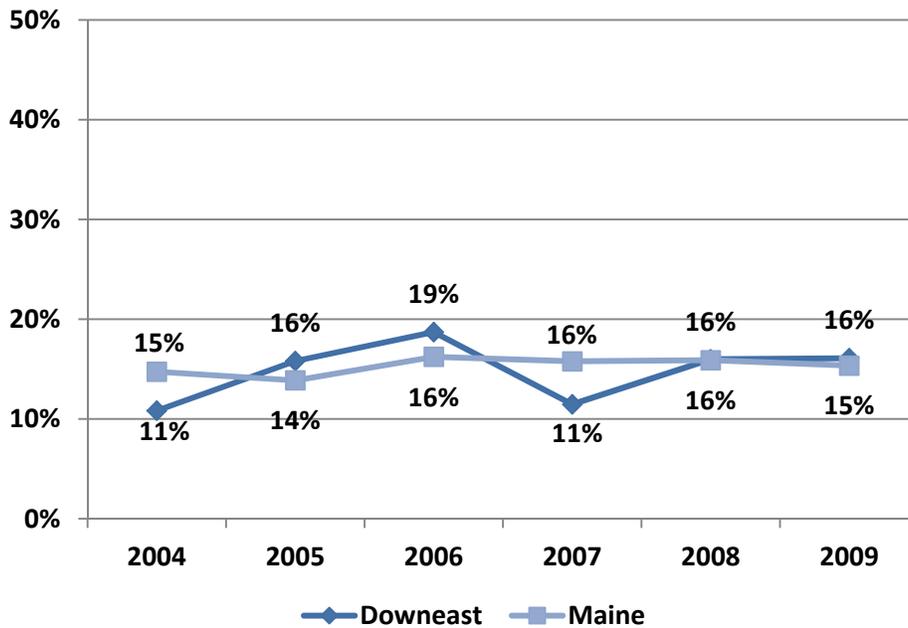
**Indicator Description: HIGH-RISK ALCOHOL USE AMONG ADULTS.** This indicator reflects the percentage of adults who reported engaging in high-risk “binge” drinking within the past month. This is defined as five or more drinks in one sitting for a male and four or more drinks in one sitting for a female.

**Why Indicator is Important:** Binge drinking is considered to be a type of high-risk drinking, meaning it increases the risk for many health- and social-related consequences. It has been linked to injury (such as falls, fights, and suicides), violence, crime rates, motor vehicle crashes stroke, chronic liver disease, addiction, and some types of cancer.

**Data Source(s):** BRFSS, 2004-2009.

**Summary:** In 2009, 16 percent of adults in Downeast PHD indicated they engaged in binge drinking during the past month, compared to the statewide average of 15 percent. This represents an overall increase of 5 percentage points since 2004, but a decrease since 2006 (from 19%).

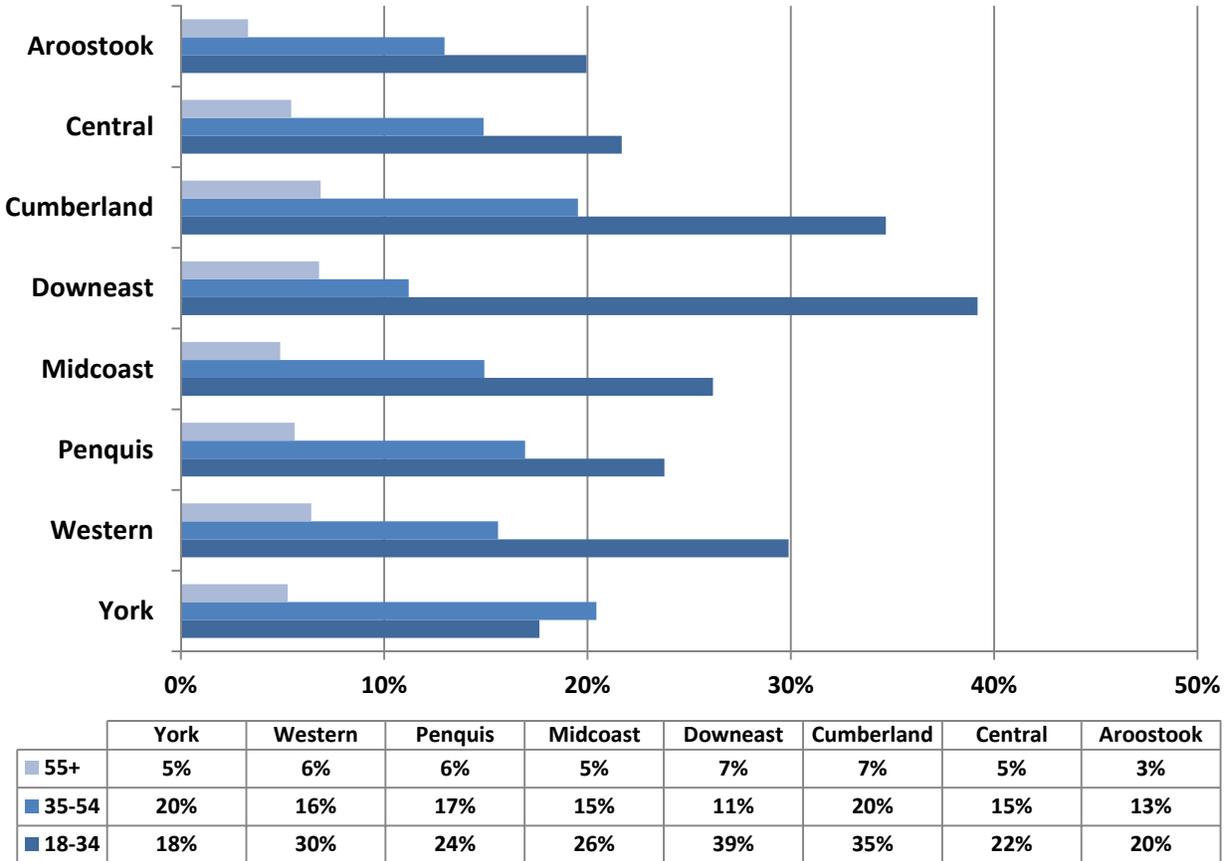
**Figure 6. Percent of adults in Downeast PHD who reported binge drinking during past 30 days: 2004-2009**



Source: BRFSS

**Summary:** In 2009, 39 percent of 18 to 34 year olds in Downeast PHD reported binge drinking in the past month, higher than any other age group in Downeast PHD and the highest rate among this age group compared to other public health districts. Downeast PHD also had the lowest rate of binge drinking with respect to 35 to 54 year olds (11%) and one of the highest rates among adults over the age of 55 (7%).

**Figure 7. Percent of adults by Public Health District who reported binge drinking in past 30 days by age group: 2009**



Source: BRFSS

## Tobacco

---

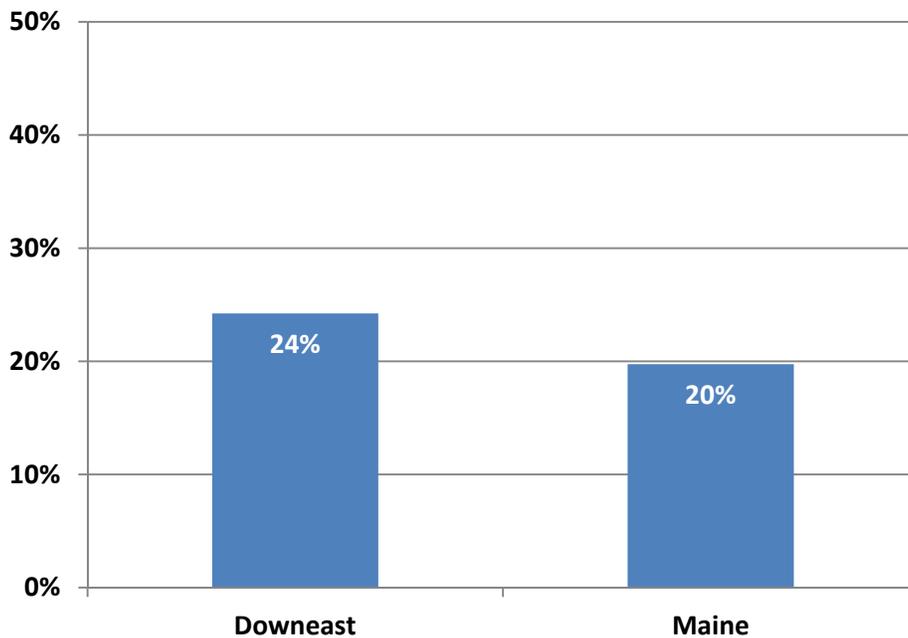
**Indicator Description: SMOKING AMONG YOUTH.** This indicator illustrates the percentage of Maine high school students who reported smoking a cigarette on at least one occasion within 30 days prior to the survey.

**Why Indicator is Important:** Use of tobacco is associated with a greater risk of negative health outcomes, including cancer, cardiovascular, and chronic respiratory diseases, as well as death.

**Data Source(s):** MIYHS, 2009.

**Summary:** In 2009, approximately one in four high school students (24%) in Downeast PHD reported having smoked one or more cigarettes in the past month. This is higher than the state average (20%).

**Figure 8. Percent of high school students in Downeast PHD who reported smoking one or more cigarettes during past 30 days: 2009**



Source: MIYHS

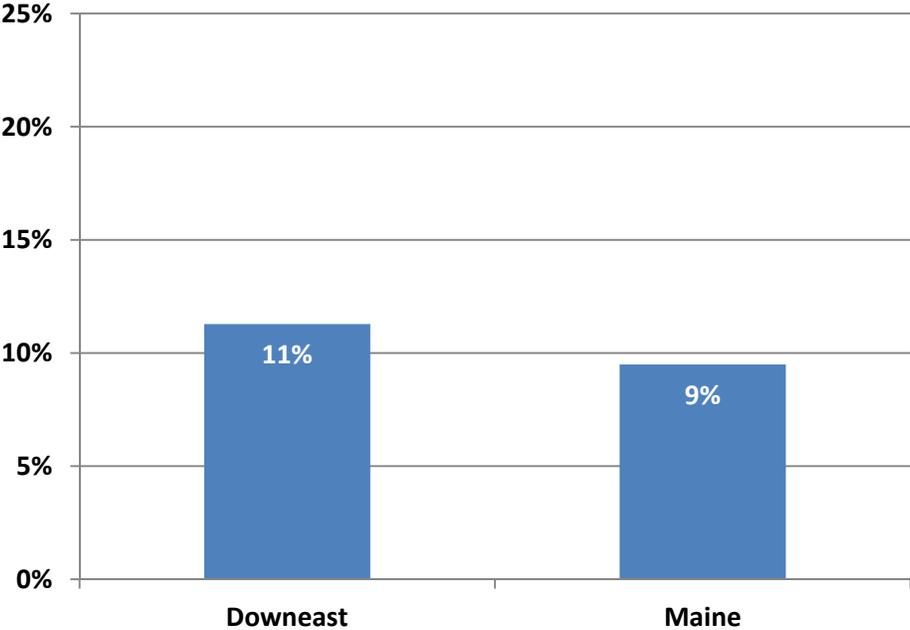
**Indicator Description: SMOKELESS TOBACCO AMONG YOUTH.** This indicator illustrates the percentage of Maine high school students who reported using smokeless tobacco on at least one occasion within 30 days prior to the survey.

**Why Indicator is Important:** Use of tobacco is associated with a greater risk of negative health outcomes, including cancer, cardiovascular, and chronic respiratory diseases, as well as death.

**Data Source(s):** MIYHS, 2009.

**Summary:** The percent of high school students in Downeast PHD who have used smokeless tobacco in the past month is noticeably higher than the statewide average (11% compared to 9%).

**Figure 9. Percent of high school students in Downeast PHD who used smokeless tobacco in the past 30 days: 2009**



Source: MIYHS

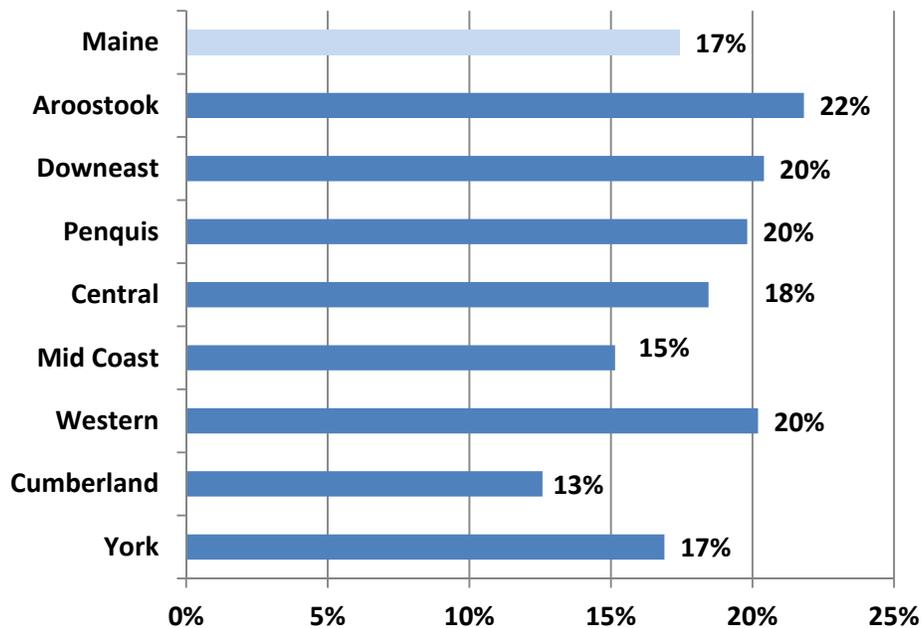
**Indicator Description: SMOKING AMONG ADULTS.** This indicator illustrates the percentage of Maine adults who reported using cigarettes on at least one occasion within 30 days prior to the survey.

**Why Indicator is Important:** Smoking is associated with a greater risk of negative health outcomes, including cancer, cardiovascular, and chronic respiratory diseases, as well as death.

**Data Source(s):** BRFSS, 2009.

**Summary:** In 2009, 20 percent of adults in Downeast PHD indicated they had smoked a cigarette in the past month, higher than the statewide average of 17 percent.

**Figure 10. Percent of adults by Public Health District who reporting smoking a cigarette in the past 30 days: 2009**



Source: BRFSS

## Prescription Drugs

---

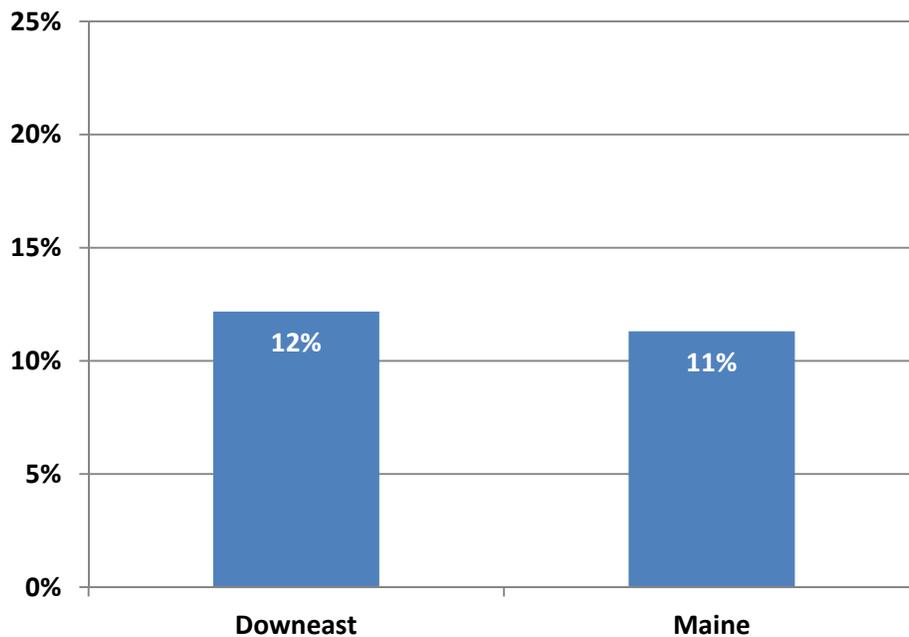
**Indicator Description: MISUSE OF PRESCRIPTION DRUGS AMONG YOUTH.** This indicator presents the percentage of Maine high school students who reported using prescription drugs that were not prescribed to them by a doctor within 30 days prior to the survey.

**Why Indicator is Important:** Young people are increasingly using available prescription drugs, including stimulants and opiates, instead of illegal drugs to get high. Abuse of prescription drugs may lead to consequences such as unintentional poisonings or overdose, automobile crashes, addiction, and increased crime.

**Data Source(s):** MIYHS, 2009; MYDAUS 2004-2008<sup>3</sup>.

**Summary:** In 2009, 12 percent of high school students in Downeast PHD reported having taken prescription drugs not prescribed to them by a doctor one or more times in the past month compared to 11 percent statewide.

**Figure 11. Percent of high school students in Downeast PHD who have taken prescription drugs not prescribed to them by a doctor: 2009**



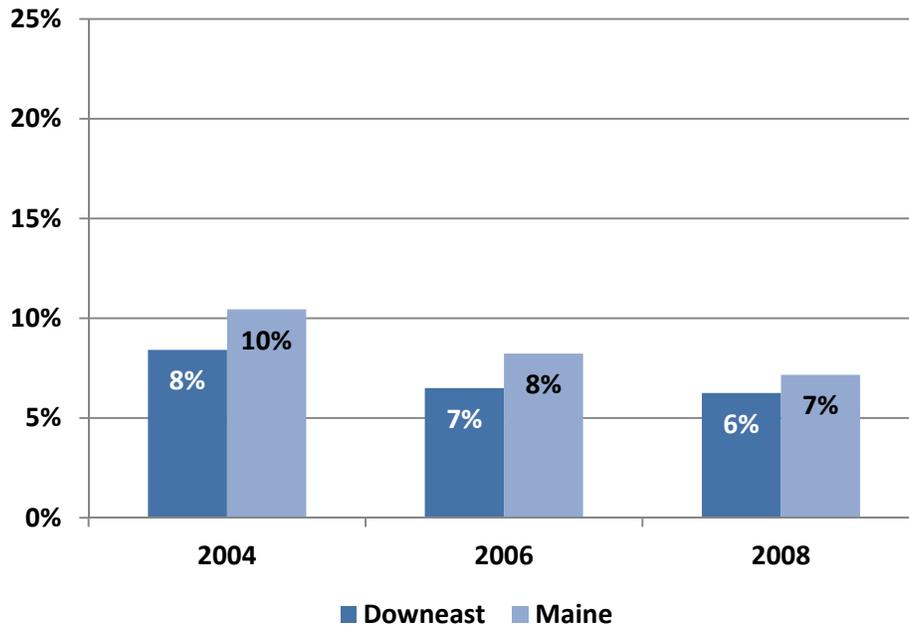
Source: MIYHS

---

<sup>3</sup> Due to survey changes, 2009 MIYHS should not be trended to 2004-08 MYDAUS.

**Summary:** Between 2004 and 2008, the percentage of high school students in Downeast PHD who indicated that they used prescription drugs not prescribed to them in the past 30 days decreased from 8 percent to 6 percent, mirroring the statewide trend.

**Figure 12. Percent of high school students in Downeast PHD who have taken prescription drugs not prescribed to them by a doctor: 2004-2008**



Source: MYDAUS

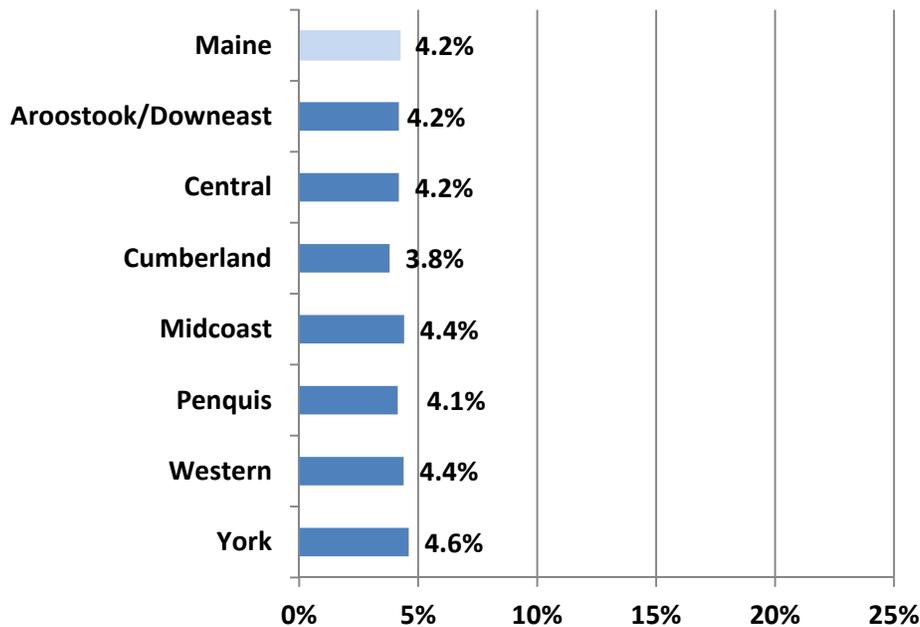
**Indicator Description: NONMEDICAL USE OF PRESCRIPTION PAIN RELIEVERS AMONG MAINERS AGE 12 AND OLDER.** This measure reflects the percentage of adults who reported using prescription drugs, particularly prescription pain relievers, for reasons other than their intended purpose. Because of small sample sizes, survey data from multiple years must be combined in order to produce this estimate.

**Why Indicator is Important:** Mainers are increasingly using available prescription drugs, particularly pain relievers, instead of illegal drugs to get high. Abuse of prescription drugs may lead to consequences such as unintentional poisonings, overdose, dependence and increased crime.

**Data Source(s):** NSDUH, 2006-08.

**Summary:** In 2006-08, 4.2 percent of people ages 12 and older in Aroostook and Downeast Public Health Districts<sup>4</sup> reported using prescription pain relievers for nonmedical purposes in the past year.

**Figure 13. Percent of population 12 years old or older in Maine who used prescription pain relievers in past year for nonmedical use by Public Health District: 2006-2008**



Source: NSDUH

<sup>4</sup> Aroostook and Downeast Public Health District (which consists of Washington County and Hancock County) were combined to produce this estimate due to small sample sizes.

## Other Illegal Drugs

---

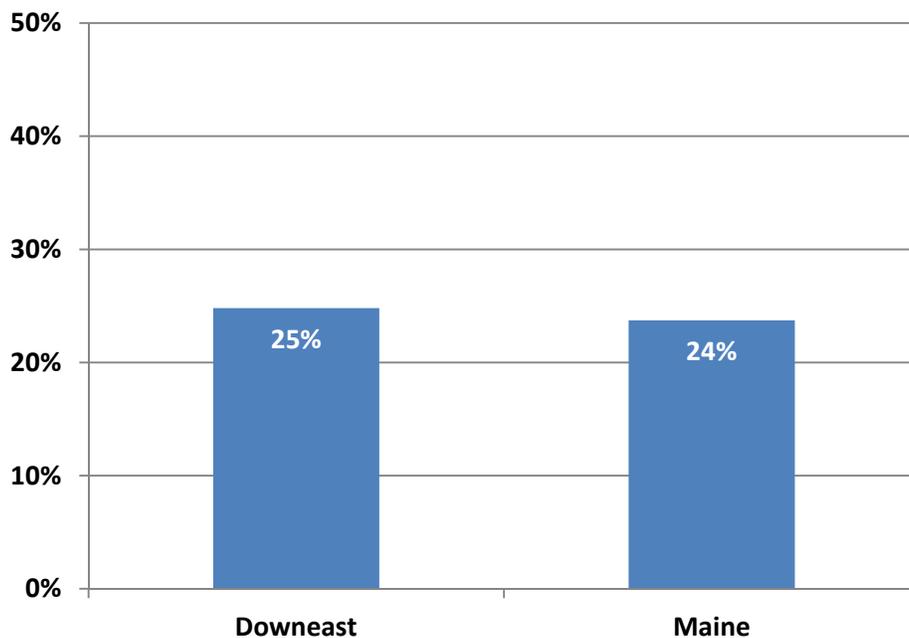
**Indicator Description: MARIJUANA USE AMONG YOUTH.** This measure shows the percentage of Maine high school students who reported using marijuana within 30 days prior to the survey.

**Why Indicator is Important:** Marijuana can be addictive and is associated with increased risk for respiratory illnesses and memory impairment. Even occasional use can have consequences on learning and memory, muscle coordination, and mental health symptoms.

**Data Source(s):** MIYHS, 2009; MYDAUS, 2004-2008.

**Summary:** Twenty-five percent of high school students in Downeast PHD reported having used marijuana one or more times in the past month compared to 24 percent statewide.

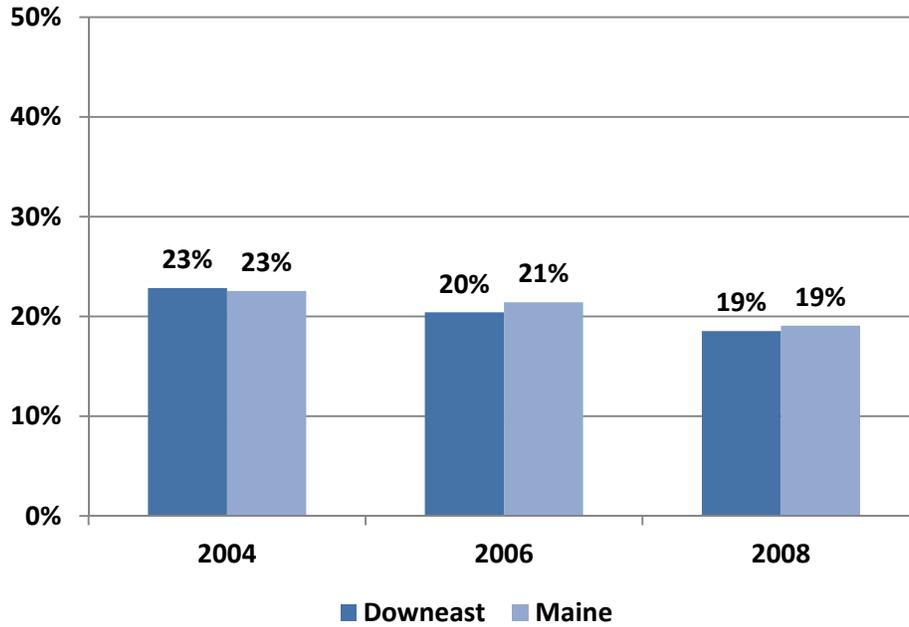
**Figure 14. Percent of high school students in Downeast PHD who have used marijuana during past 30 days: 2009**



Source: MIYHS

**Summary:** In 2008, 19 percent of high school students in Downeast PHD had used marijuana in the past month, the same as the state average. This decreased from 23 percent in 2004.

**Figure 15. Percent of high school students in Downeast PHD who have used marijuana during past 30 days: 2004-2008**



Source: MYDAUS

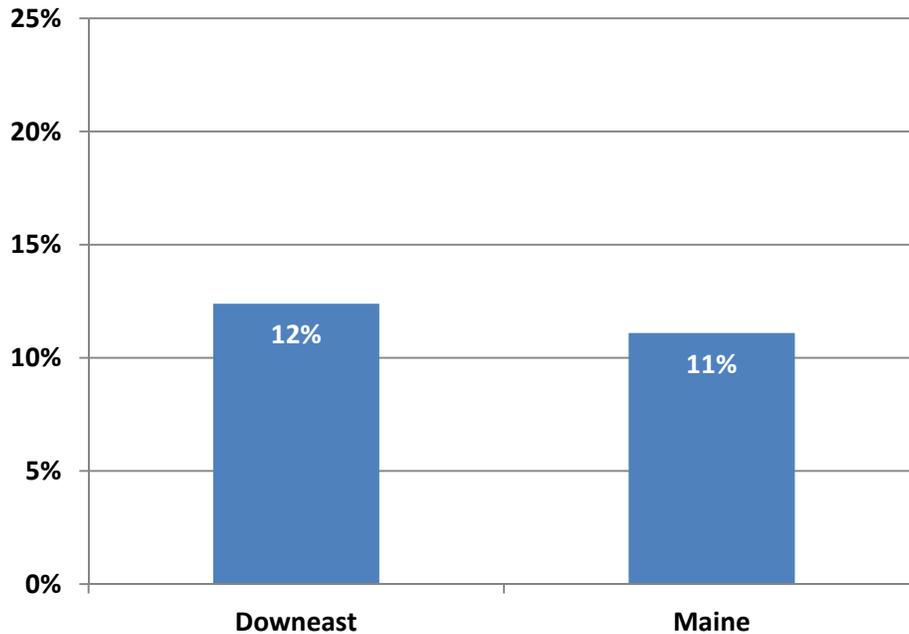
**Indicator Description: LIFETIME COCAINE USE AMONG YOUTH.** This indicator illustrates the percentage of Maine high school students who used cocaine at least once in their lifetime (i.e., ever).

**Why Indicator is Important:** Cocaine is highly addictive. Use of cocaine is associated with adverse health effects such as cardiac events, seizures, and stroke. It also increases the risk of cognitive impairment, injury, and crime.

**Data Source(s):** MIYHS, 2009; MYDAUS, 2004-2008.

**Summary:** In 2009, 12 percent of high school students in Downeast PHD reported that they had used cocaine (in any form) during their lifetime, slightly higher than the statewide average of 11 percent.

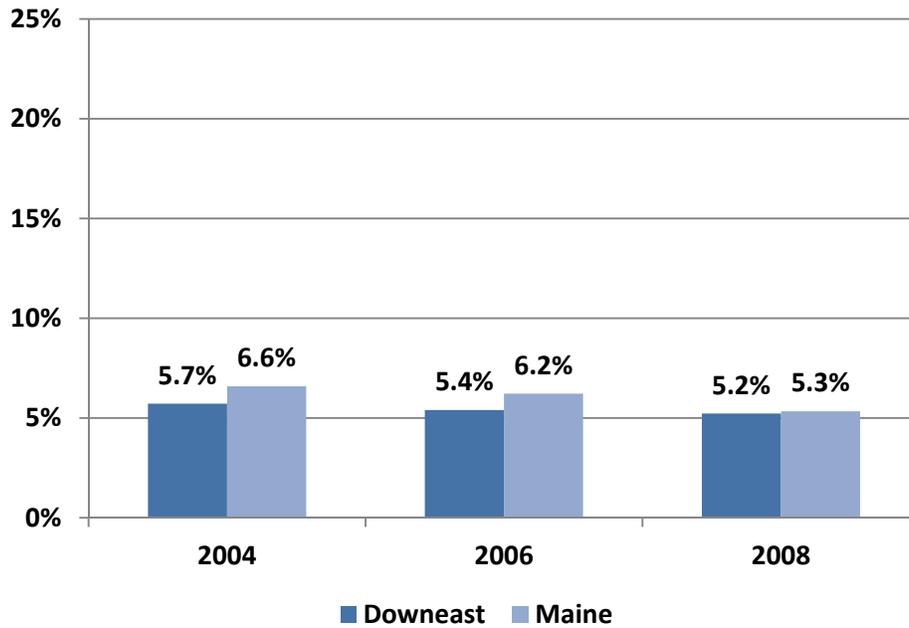
**Figure 16. Percent of high school students in Downeast PHD that have used cocaine in any form during their lifetime: 2009**



Source: MIYHS

**Summary:** In 2008, there was little difference between Downeast PHD and the state average with respect to the percent of high school students who have used cocaine at last once in their lifetime (5.2% an 5.3%, respectively). This has remained fairly stable since 2004.

**Figure 17. Percent of high school students in Downeast PHD who have used cocaine one or more times in their lifetime: 2004-2008**



Source: MYDAUS

## **Consequences Resulting from Substance Use and Abuse**

---

Both individuals and communities suffer the consequences of substance abuse in terms of increased health care needs and criminal justice resources. While a great deal of information regarding substance use can be obtained from the data described in the previous section, information on the effects of that use on individuals and communities can be derived from what has come to be called “consequence” data. Consequences are defined as the social, economic and health problems associated with the use of alcohol and illicit drugs. Examples are things such as illnesses related to alcohol, drug overdose deaths, property and personal crimes, as well as driving accidents, poisonings and suicides that involve alcohol or drugs.

Downeast PHD shows lower rates of crime-related consequences related to substance use compared to the statewide trends. However, high school students are somewhat more likely to report driving a car after drinking and the alcohol-related crash rate is higher in Downeast than it is statewide, although both have been declining.

## Criminal Justice Involvement

**Indicator Description: ANNUAL VIOLENT CRIME RATE.** This indicator shows the number of violent crimes reported to the police, per 10,000 people. Violent crimes include simple and aggravated assaults, sexual assaults, and robberies. The rate per 10,000 allows us to see frequency with which an occurrence shows up within a population over time as well as make relative comparisons between small and large population areas.

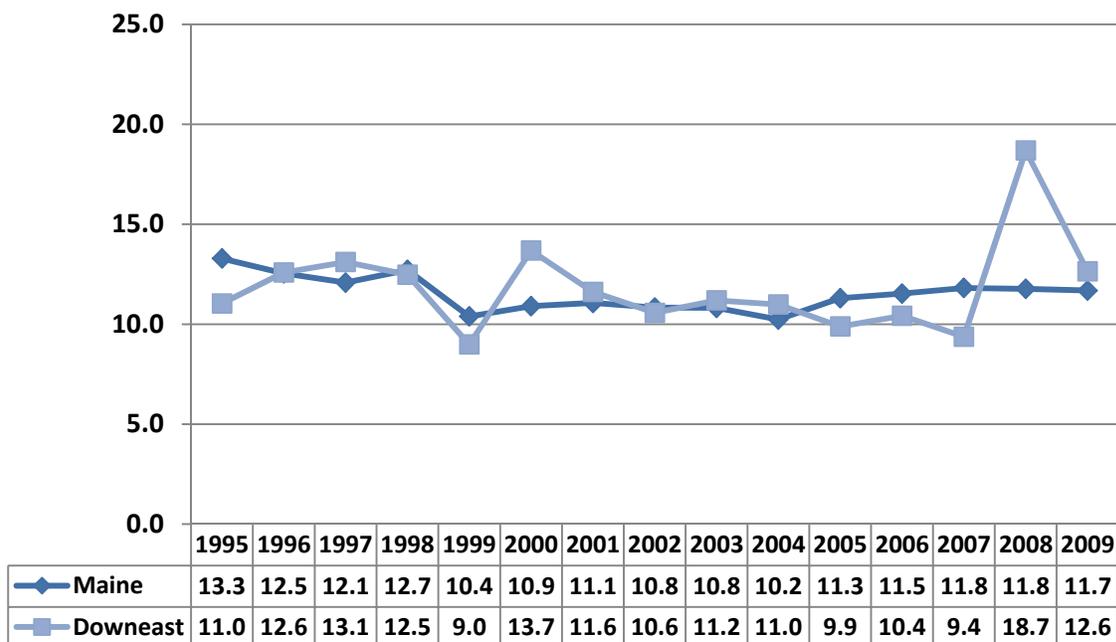
Operationalized as:  $\left(\frac{\# \text{ of violent crimes}}{\text{population}}\right) \times 10,000$

**Why Indicator is Important:** Violence is associated with alcohol, though the causal pathway is not completely understood. Drinking on the part of the victim or a perpetrator can increase the risk of assaults and assault-related injuries. Approximately 23 percent of sexual assaults and 30 percent of physical assaults are attributable to alcohol. Reported violent crimes are an under report of the total number of actual violent crimes.

**Data Source(s):** DPS, UCR , 1995-2009.

**Summary:** In 2009, there were 12.6 violent crimes per 10,000 people in Downeast PHD compared to 11.7 per 10,000 people statewide. Barring 2008, Downeast PHD has generally shown violent crime rates that were comparable to the state overall.

Figure 18. Violent crime rate per 10,000: 1995-2009



Source: DPS; UCR

**Indicator Description: ANNUAL ALCOHOL-RELATED ARREST RATE.** This indicator reflects arrests related to alcohol per 10,000 people. Alcohol-related arrests include Operating Under the Influence (OUI), liquor law violations, and drunkenness. The rate per 10,000 allows us to see frequency with which an occurrence shows up within a population over time as well as make relative comparisons between small and large population areas.

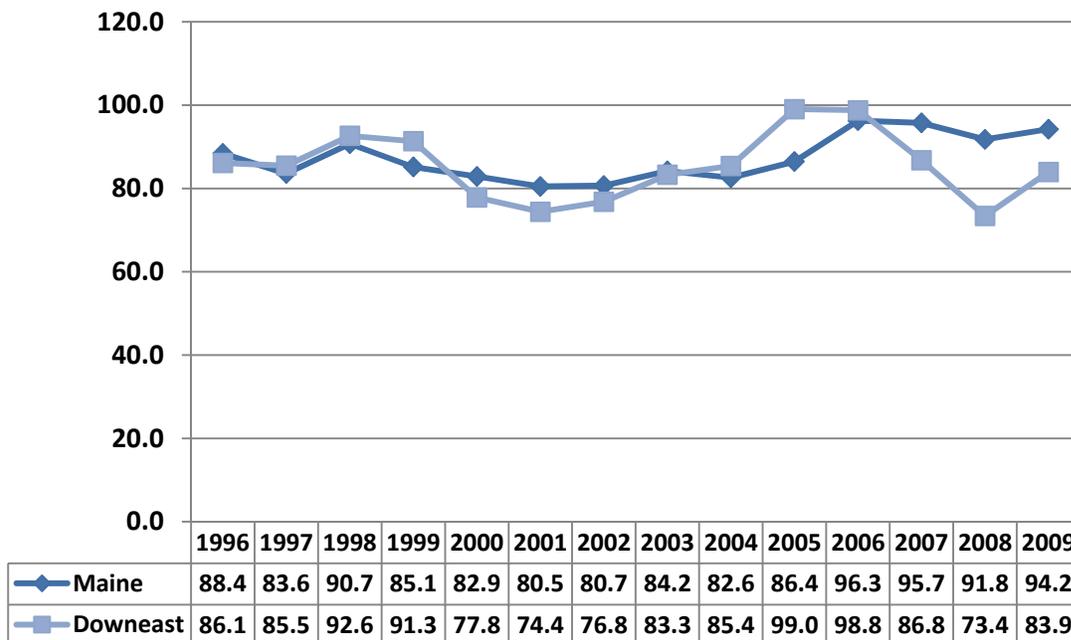
Operationalized as:  $\left(\frac{\# \text{ of alcohol arrests}}{\text{population}}\right) \times 10,000$

**Why Indicator is Important:** OUI and liquor law arrest rates can be an indication of the rate of criminal behavior, but it is important to note that they are also an *indication of the level of law enforcement*. Arrests rates are expected to increase with increased enforcement regardless of whether a decline in criminal behavior is observed. The education component of Maine’s Driver Education and Evaluation Program services an average of 4,000 Maine residents annually who receive alcohol OUIs.

**Data Source(s):** DPS, UCR, 1996-2009.

**Summary:** In 2009, Downeast PHD had 83.9 alcohol-related arrests per 10,000 people, compared to the statewide rate of 94.2 per 10,000. This represents an uptick in what had been a decreasing since 2006; the statewide rate remained fairly stable over the same period.

**Figure 19. Alcohol-related arrest rate per 10,000: 1996-2009**



Source: DPS; UCR

**Indicator Description: ANNUAL DRUG-RELATED ARREST RATE.** This indicator reflects the number of arrests that were related to drugs per 10,000 people. Drug-related arrests include manufacturing, sales, and possession. The rate per 10,000 allows us to see frequency with which an occurrence shows up within a population over time as well as make relative comparisons between small and large population areas.

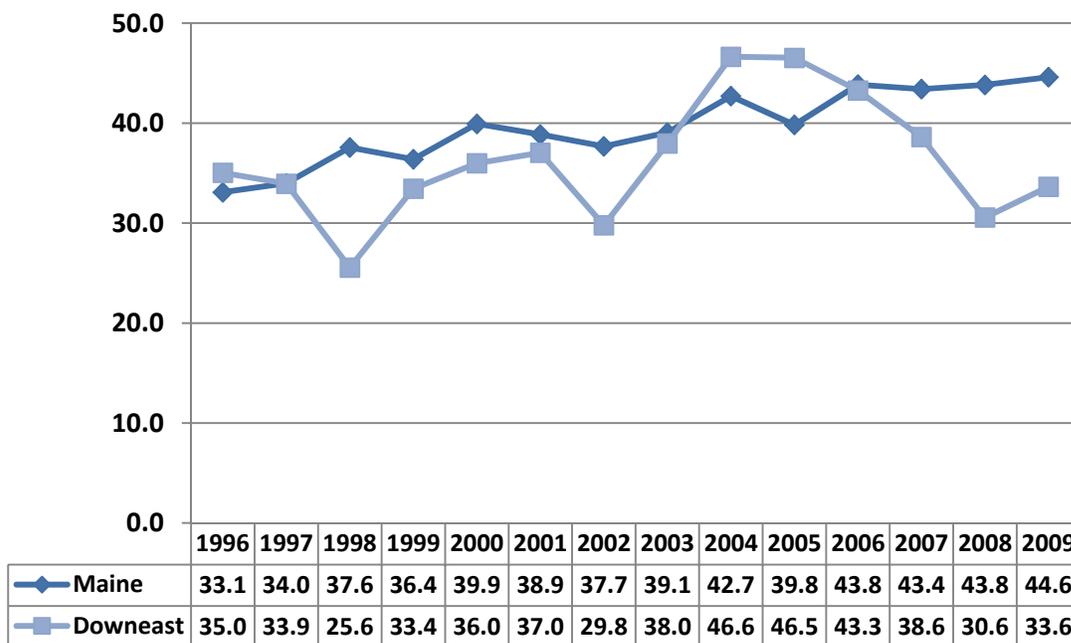
Operationalized as:  $\left(\frac{\# \text{ of drug arrests}}{\text{population}}\right) \times 10,000$

**Why Indicator is Important:** Arrest rates for drug sales, manufacturing and drug possession can be an indication of the rate of criminal behavior, but it is important to note that they are also an *indication of the level of law enforcement*. Arrests rates are expected to increase with increased enforcement regardless of whether a decline in criminal behavior is observed.

**Data Source(s):** DPS, UCR, 1996–2009.

**Summary:** In 2009, there were 33.6 drug-related arrests per 10,000 people in Downeast PHD, compared to 44.6 per 10,000 people statewide. This represents a slight increase after seeing rates decline steadily since 2005.

**Figure 20. Drug-related arrest rate per 10,000: 1996-2009**



Source: DPS; UCR

## Driving Under the Influence

---

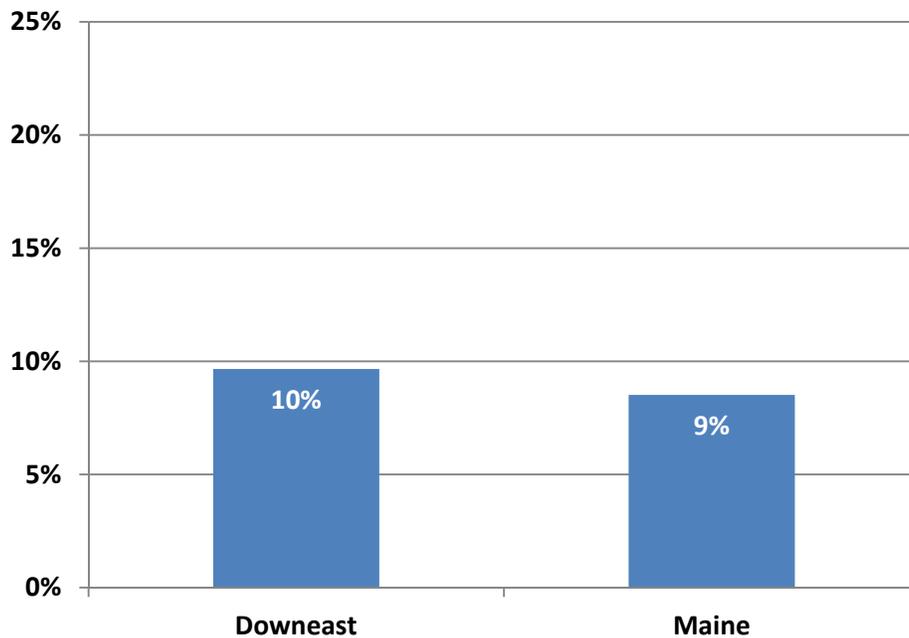
**Indicator Description: DRINKING AND DRIVING AMONG YOUTH.** This measure shows the proportion of high school students who reported that they drove a car after consuming alcohol at least once within 30 days prior to taking the survey.

**Why Indicator is Important:** Operating a vehicle after consuming alcohol increases the risk of motor vehicle crashes, injuries and death.

**Data Source(s):** MIYHS, 2009.

**Summary:** Approximately 10 percent of high school students in Downeast PHD reported driving a vehicle at least once after drinking alcohol in the past month compared to 9 percent statewide.

**Figure 21. Percent of high school students in Downeast PHD who reported drinking and driving during the past 30 days: 2009**



Source: MIYHS

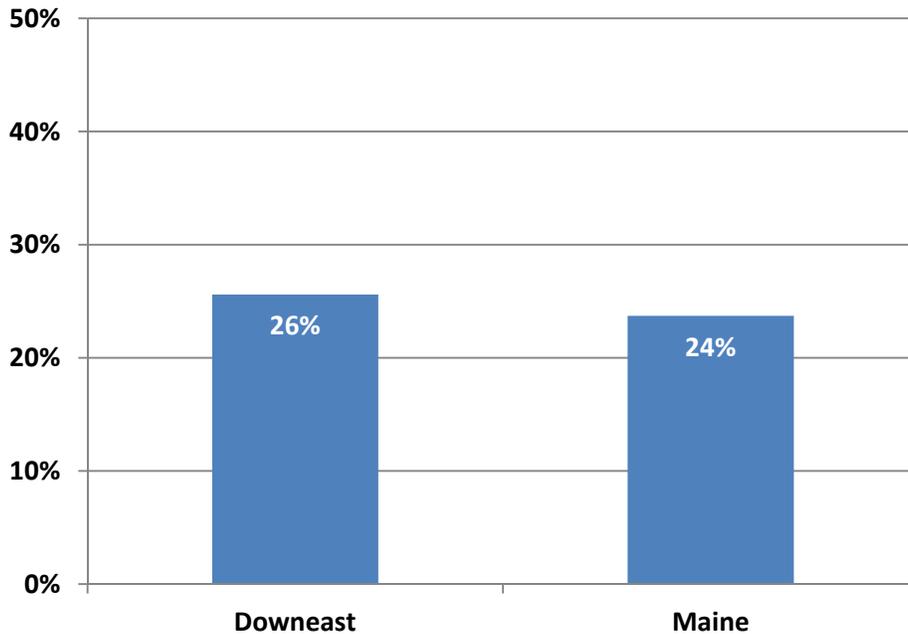
**Indicator Description: YOUTH AS PASSENGERS IN VEHICLES DRIVEN BY INDIVIDUALS USING ILLEGAL DRUGS.** This measure shows the proportion of high school students who reported that, within 30 days prior to taking the survey, they were a passenger in a car being operated by an individual who had consumed illegal drugs.

**Why Indicator is Important:** Operating a vehicle while under the influence of drugs increases the risk of motor vehicle crashes, injuries and death.

**Data Source(s):** MIYHS, 2009.

**Summary:** Twenty-six percent of high school students in Downeast PHD reported that, within the past month, they had been passengers in a vehicle operated by someone who had taken illegal drugs compared to 24 percent across the state.

**Figure 22. Percent of high school students in Downeast PHD who rode in a vehicle driven by someone who had taken illegal drugs: 2009**



Source: MIYHS

**Indicator Description: ALCOHOL-INVOLVED MOTOR VEHICLE CRASH RATE.** This indicator shows the number of motor vehicle crashes in which alcohol was a factor per 10,000 people. Alcohol-involved crashes means that at least one driver had consumed alcohol prior to the crash. The rate per 10,000 allows us to see frequency with which an occurrence shows up within a population over time as well as make relative comparisons between small and large population areas.

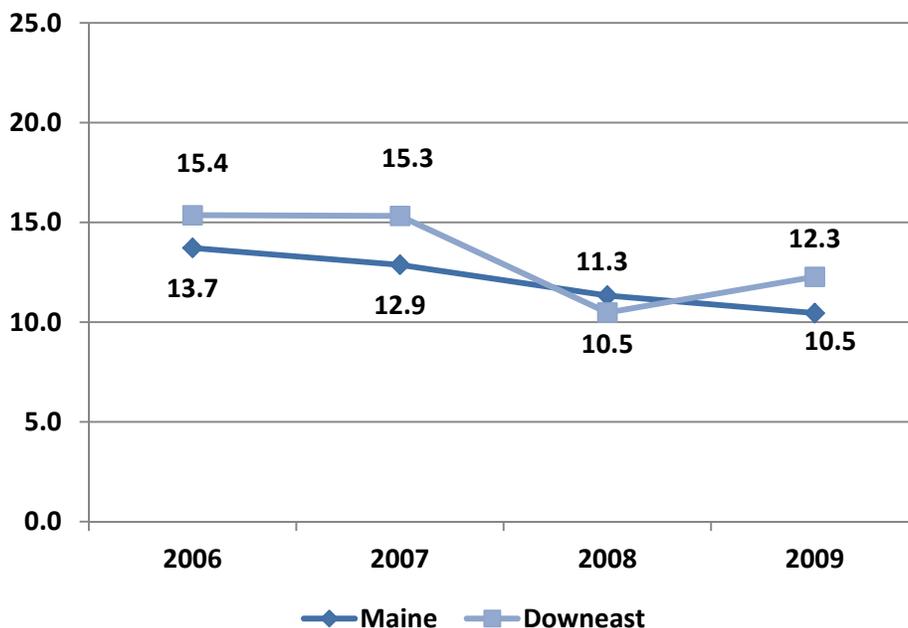
Operationalized as:  $\left(\frac{\# \text{ of alcohol-involved crashes}}{\text{population}}\right) \times 10,000$

**Why Indicator is Important:** About five percent of all reported motor vehicle crashes involve alcohol. However, the resulting injuries and fatalities from alcohol-related crashes tend to be much higher. Motor vehicle crashes are the second leading cause of traumatic brain injury, with 29 percent of traumatic brain injuries occurring from motor vehicle crashes.<sup>5</sup>

**Data Source(s):** MDOT, 2006-2009.

**Summary:** In Maine and in Downeast PHD, the rate of alcohol-related crashes has been declining since 2006. In 2009, there were 12.3 alcohol-related crashes per 10,000 people in Downeast PHD (higher than the statewide rate of 10.5 per 10,000 people) and represents a decrease from 15.4 per 10,000 people in 2006.

**Figure 23. Alcohol-related motor vehicle crash rate per 10,000: 2006-2009**



Source: MDOT

<sup>5</sup> 2006 Maine Injury Report, Maine Center for Disease Control, Injury Prevention Program. Retrieved online 5/5/2011 from <http://www.maine.gov/dhhs/bohdcfh/inj/documents/Final08Year3Maine2006InjuryReport.pdf>

## Overdose Deaths

**Indicator Description: DRUG OVERDOSE DEATH RATE.** This measure shows the rate of deaths determined by the State Medical Examiner to be caused by substance abuse or overdose, per 100,000 people. The measure excludes accidental ingestion, suicides and cases where a substance was ingested prior to engaging in a behavior that resulted in death (e.g., drunk driving). The rate per 100,000 allows us to see frequency with which an occurrence shows up within a population over time as well as make relative comparisons between small and large population areas. In this case, the base of 100,000 people was used due to small numbers.

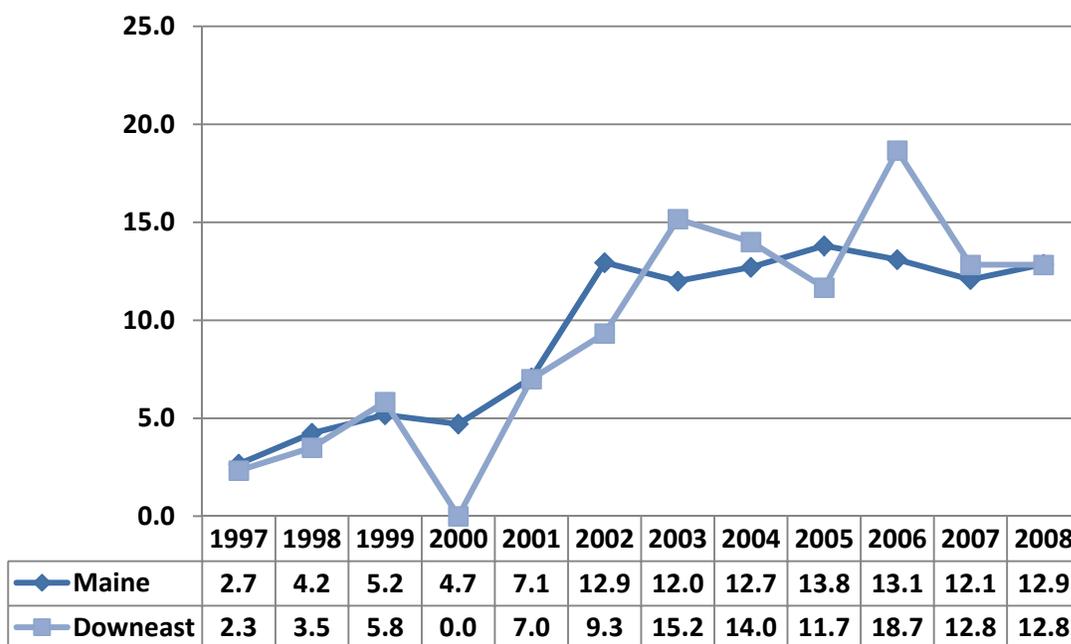
Operationalized as:  $\left(\frac{\# \text{ of overdose deaths}}{\text{population}}\right) \times 100,000$

**Why Indicator is Important:** One of the most extreme consequences of alcohol and drug abuse is overdose death; that is, the substance(s) consumed played a direct role in an individual's death. These are seen as potentially preventable deaths.

**Data Source(s):** Office of Chief Medical Examiner, 1997-2008<sup>6</sup>.

**Summary:** In 2008, there were 12.8 drug overdose deaths per 100,000 people in Downeast PHD, about the same as the statewide rate (12.9 per 100,000 people). The overdose death rate in Downeast PHD has fluctuated since 2003.

Figure 24. Drug-related death rate per 100,000: 1997-2008



Source: Office of the Chief Medical Examiner.

<sup>6</sup> Sorg, Marcella H. "Drug-Induced Deaths in Maine: 1997-2008, With Estimates for 2009." (2010).

## Factors Contributing to Substance Use and Abuse

---

A body of substance abuse prevention research has identified certain groups of factors that “cause” or have an impact on substance use and the consequences related to use. That is, they appear to influence the occurrence and magnitude of substance use and its related consequences. Generically, these causal factors (also known as contributing factors) are categorized into groups which include:

- Social Access (e.g., getting drugs and alcohol from friends or family)
- Retail Availability (e.g., retailer not carding properly)
- Pricing & Promotion (e.g., two-for-one specials, industry sponsorships or signage)
- Social/Community Norms (e.g., parental/community attitudes and beliefs)
- Enforcement (e.g., lack of compliance checks)
- Perceptions of Harm (e.g., individuals’ belief that using a substance is harmful)
- Perceived Risk of Being Caught (e.g., individuals’ belief that s/he will be caught by parents or police)<sup>7</sup>

Substance abuse prevention in Maine is undertaken with the assumption that making changes to these factors at the community level will result in changing behaviors around substance use and related problems. It is through positively impacting these factors that Maine can achieve population-level changes in substance consumption and consequences.

Although most high school students in Downeast PHD seem to perceive that regular use of substances poses a risk of harm, less than half think they will be caught by their parents if they consume alcohol, and even fewer think they will be caught by the police if they use alcohol or marijuana. In fact, most students in Downeast PHD think it is easy to obtain alcohol and marijuana. In 2010, Downeast PHD had the highest number of liquor licensees per capita than any other public health district.

For county-level trends prior to 2009, data are available at the [www.maineosa.org](http://www.maineosa.org) website or by calling Maine OSA at (207) 287-2595.

---

<sup>7</sup> "A General Causal Model to Guide Alcohol, Tobacco and Illicit Drug Prevention: Assessing the Research Evidence." *Multi-State Technical Assistance Workshop*. Washington, DC. March 16, 2006. Bonnie, Richard J., and Mary Ellen O’Connell, eds. (2004). *Reducing Underage Drinking: A Collective Responsibility*. (2004). The National Academies Press: Washington, DC.

## Availability and Accessibility

---

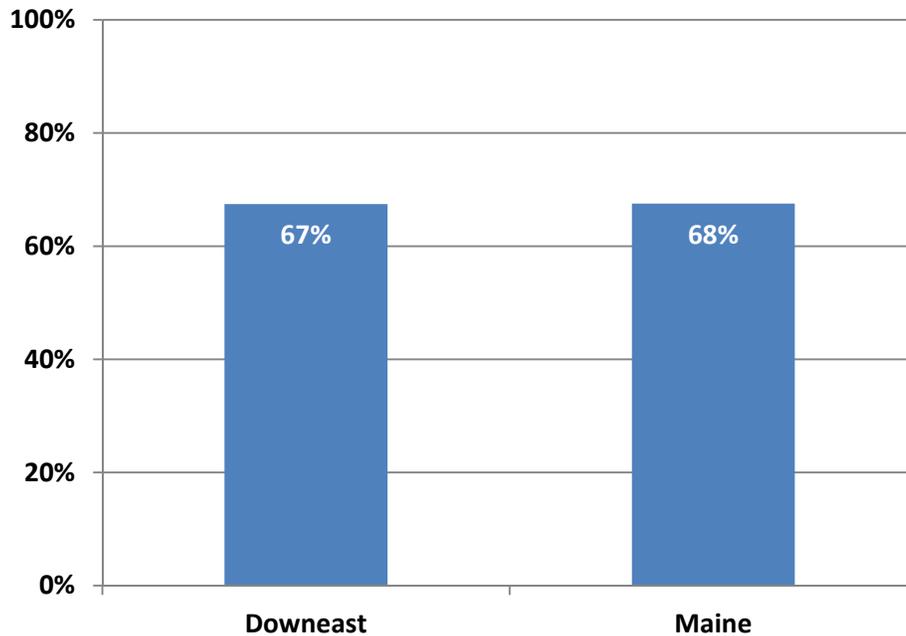
**Indicator Description: PERCEIVED EASE OF OBTAINING ALCOHOL BY UNDERAGE YOUTH.** This indicator reflects the percentage of high school students (grades 9 to 12) who reported that it would be easy or very easy for them to get alcohol if they wanted some.

**Why Indicator is Important:** In 2009, students who reported that they thought alcohol was easy to obtain were over 2.5 times as likely to report consuming alcohol within the past month compared to students who did not think it was easy obtain.

**Data Source(s):** MIYHS, 2009.

**Summary:** Sixty-seven percent of high school students in Downeast PHD (almost seven out of ten) indicated that it was easy to get alcohol, slightly less than the statewide rate of 68 percent.

**Figure 25. Percent of high school students in Downeast PHD who reported it was easy to get alcohol: 2009**



Source: MIYHS

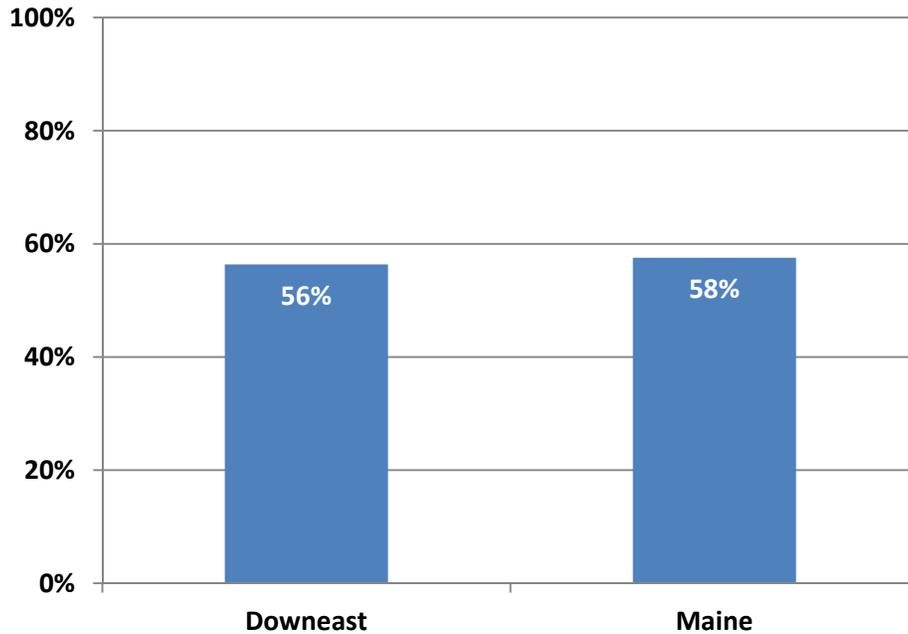
**Indicator Description: PERCEIVED EASE OF OBTAINING MARIJUANA BY YOUTH.** This indicator illustrates the percentage of high school students reporting it would be easy or very easy to obtain marijuana if they wanted it.

**Why Indicator is Important:** In 2009, students who reported that they thought marijuana was easy to obtain were 5.6 times as likely to use marijuana compared to their peers who thought it was difficult to obtain.

**Data Source(s):** MIYHS, 2009.

**Summary:** More than one-half (56%) of high school students in Downeast PHD indicated that it would be easy to get marijuana; the state average was somewhat higher (58%).

**Figure 26. Percent of high school students in Downeast PHD who reported it would be easy to get marijuana: 2009**



Source: MIYHS

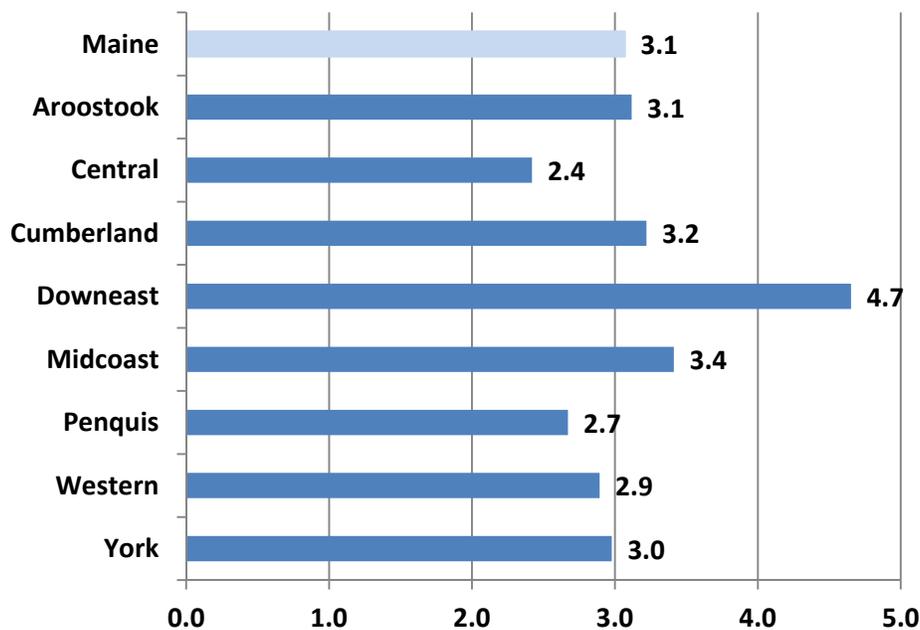
**Indicator Description: NUMBER OF ALCOHOL OUTLETS PER CAPITA.** This indicator reflects the number of retail establishments selling alcohol per person. This includes both on-premise (e.g., bars, restaurants) and off-premise (e.g., convenience stores) establishments. It is calculated by dividing the number of retail establishments by the number of residents in the county (based on 2010 U.S. Census figures).

**Why Indicator is Important:** National research shows that there is a correlation between the number of places that sell alcohol in an area (retail density) and the rate of alcohol-related crime.<sup>8</sup>

**Data Source(s):** DPS, Liquor Licensing and Compliance, 2010; U.S. Census, 2010.

**Summary:** At 4.7 per 1,000 residents, the number of liquor licensees in Downeast PHD per was the highest in the state in 2010.

**Figure 27. Number of liquor licensees per 1,000 residents, by PHD: 2010**



Source: DPS and U.S. Census

<sup>8</sup> Gruebe, J. "The Prevention Research Center: An Overview." Retrieved 6/22/2010 online from [http://www.marininstitute.org/presentations/PRC\\_Overview.htm](http://www.marininstitute.org/presentations/PRC_Overview.htm)

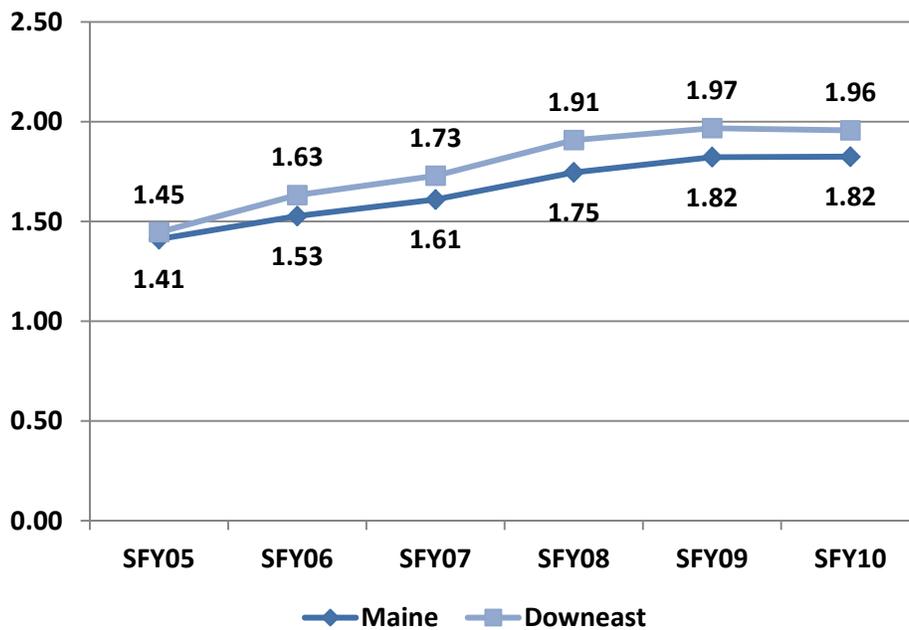
**Indicator Description: NUMBER OF PRESCRIPTIONS FILLED PER CAPITA.** This indicator reflects the number of narcotic, tranquilizer, stimulant, and other prescriptions filled per person. This includes only prescription drugs that are classified “Schedule II” drugs, meaning those with a high potential for abuse. It is important to note that the number of prescriptions per capita does not indicate the overall number of pills prescribed, or the size/dosage of the pills. All pharmacies in Maine report to the Prescription Monitoring Program.

**Why Indicator is Important:** The number of prescriptions filled per capita indicates the volume of prescription pills potentially available in the community for diversion (e.g., gift, sale, or theft). A higher level of availability contributes to misuse by individuals without a prescription.

**Data Source(s):** PMP, 2005-2010.

**Summary:** Since SFY 2005, Downeast PHD has consistently had a higher number of prescriptions per capita compared to the statewide average (1.96 in 2010 compared to 1.82 statewide). This has been increasing each year following the statewide trend.

**Figure 28. Number of prescriptions filled per capita in Downeast PHD: State Fiscal Year 2005-2010.**



Source: PMP

## Perceived Risk and Harm

---

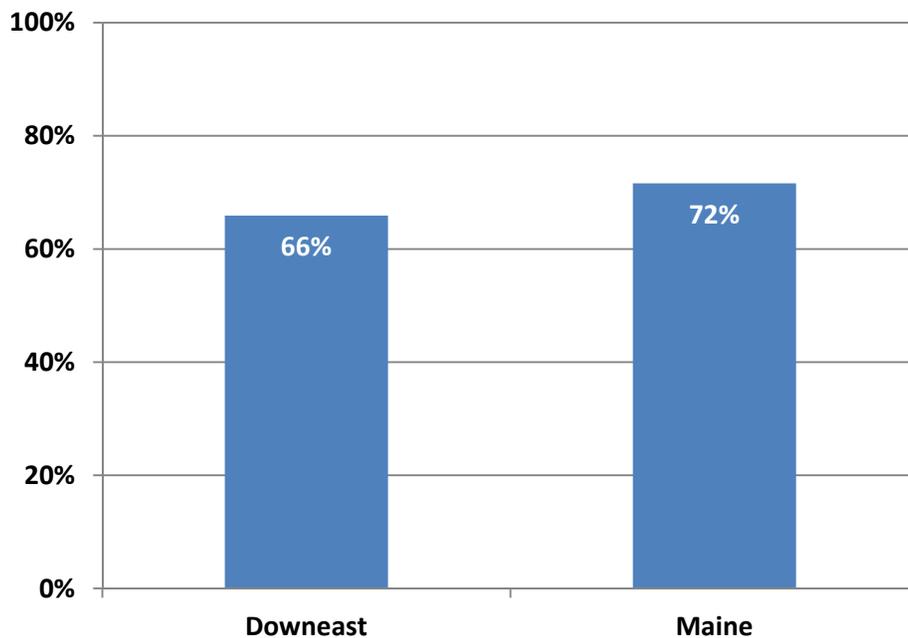
**Indicator Description: PERCEIVED RISK FROM BINGE DRINKING AMONG YOUTH.** This indicator reflects the percentage of individuals who perceive that there is moderate to great risk from drinking five or more drinks once or twice per week.

**Why Indicator is Important:** High school students are nearly half as likely to drink when they perceive binge alcohol use as presenting a moderate to great risk of harm. Adults are also less likely to binge drink if they perceive it to be risky.

**Data Source(s):** MIYHS, 2009.

**Summary:** In 2009, 66 percent high school students in Downeast PHD indicated that there is a moderate-to-great risk of people harming themselves if they consume five or more drinks regularly. This is lower than the state average (72%).

**Figure 29. Percent of high school students in Downeast PHD who reported a risk of harm from consuming five or more drinks once or twice per week: 2009**



Source: MIYHS

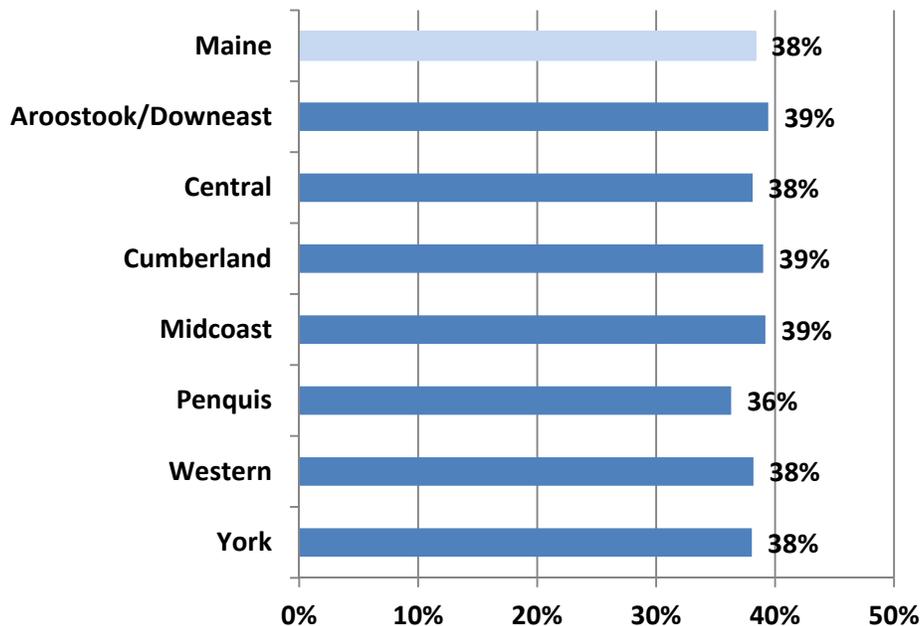
**Indicator Description: PERCEIVED RISK FROM BINGE DRINKING AMONG MAINERS.** This indicator reflects the percentage of Mainers age 12 and older who perceive that there is risk from consuming five or more drinks once or twice per week. Because of small sample sizes, survey data from multiple years must be combined in order to produce this estimate.

**Why Indicator is Important:** The perception that consuming a lot of alcohol is risky indicates an individual is knowledgeable about health risks and other negative consequences. Adults are less likely to binge drink if they perceive it to be risky.

**Data Source(s):** NSDUH, 2006-08.

**Summary:** While combined with data from the Aroostook Public Health District<sup>9</sup>, findings indicate that the percent of the population in Maine age 12 or older in area who perceives a great risk from binge drinking is relatively on par with the state average (39% and 38%, respectively).

**Figure 30. Percent of population age 12 or older who perceive a great risk from binge drinking by Public Health District: 2006-2008**



Source: NSDUH

<sup>9</sup> Aroostook and Downeast Public Health District (which consists of Washington County and Hancock County) were combined to produce this estimate due to small sample sizes.

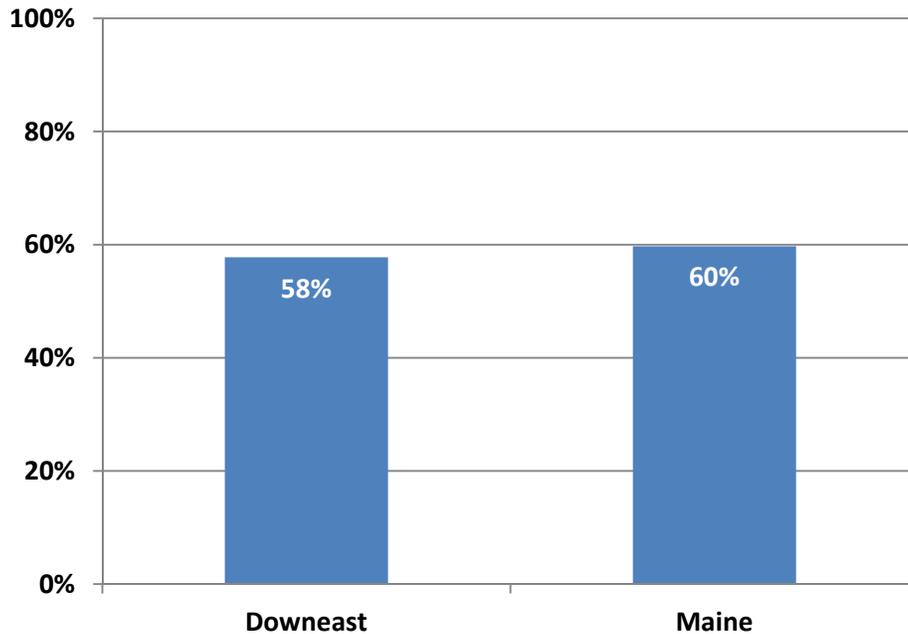
**Indicator Description: PERCEIVED RISK OF REGULAR MARIJUANA USE AMONG YOUTH.** This measure demonstrates the percentage of individuals who perceive a moderate to great risk of harm from smoking marijuana regularly.

**Why Indicator is Important:** High school students who believe there is moderate to great risk in smoking marijuana regularly are one-fifth as likely to smoke marijuana as their peers; that is, they are less likely to smoke marijuana.

**Data Source(s):** MIYHS, 2009.

**Summary:** Approximately six out of ten high school students in Downeast PHD (58%) indicated that there is a moderate-to-great risk of people harming themselves if they smoke marijuana regularly, slightly less than the state average of 60 percent.

**Figure 31. Percent of high school students in Downeast PHD who reported a risk of harm from smoking marijuana regularly: 2009**



Source: MIYHS

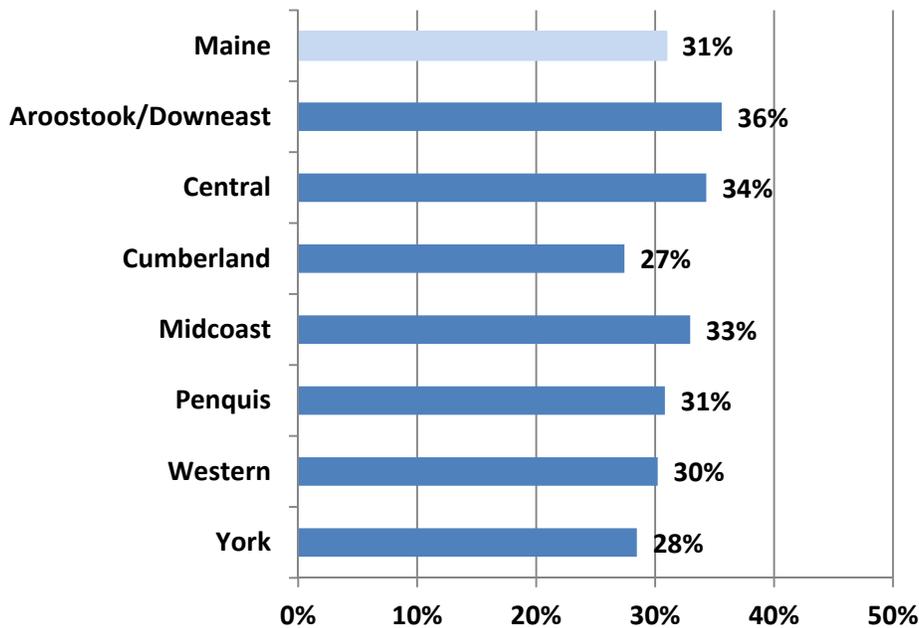
**Indicator Description: PERCEIVED RISK OF REGULAR MARIJUANA USE AMONG MAINERS.** This measure demonstrates the percentage of Mainers over the age of 12 who perceive a risk of harm from smoking marijuana once a month. Because of small sample sizes, survey data from multiple years must be combined in order to produce this estimate.

**Why Indicator is Important:** The perception that using a substance is risky indicates an individual is knowledgeable about health risks and other negative consequences associated with that substance. Perceptions of risk reduce the likelihood that an individual will engage in the behavior.

**Data Source(s):** NSDUH, 2006-08.

**Summary:** Aroostook and Downeast Public Health District<sup>10</sup> had the highest percent of Mainers over the age of 12 who perceived a great risk from smoking marijuana once a month at 36 percent, compared to 31 percent statewide.

**Figure 32. Percent of population age 12 or older who perceive a great risk from smoking marijuana once a month by Public Health District: 2006-2008**



Source: NSDUH

<sup>10</sup> Aroostook and Downeast Public Health District (which consists of Washington County and Hancock County) were combined to produce this estimate due to small sample sizes.

## Perceived Enforcement

---

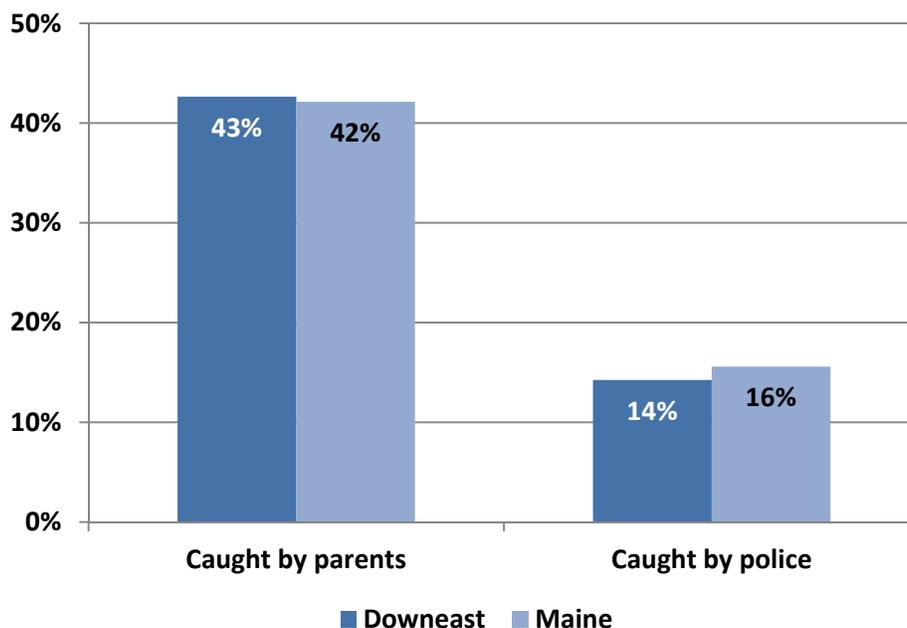
**Indicator Description: PERCIEVED RISK OF BEING CAUGHT FOR DRINKING ALCOHOL AMONG YOUTH.** This indicator reflects the percentage of high school students who reported that they would be caught by their parents or by police if they drank alcohol.

**Why Indicator is Important:** High school students who believe they will be caught by their parents or the police are less likely to drink alcohol than their peers.

**Data Source(s):** MIYHS, 2009.

**Summary:** At 43 percent, the perceived risk among high school students of being caught by their parents for drinking alcohol in Downeast PHD is slightly greater than the state average (42%). Only 14 percent of high school students indicated that they thought they would be caught by the police for drinking alcohol (compared to 16% statewide). That means high school students in Downeast PHD are approximately three times more likely to perceive being caught by their parents than by the police for drinking alcohol.

**Figure 33. Perceived risk among high school students in Downeast PHD of being caught by parents or police for drinking alcohol: 2009**



Source: MIYHS

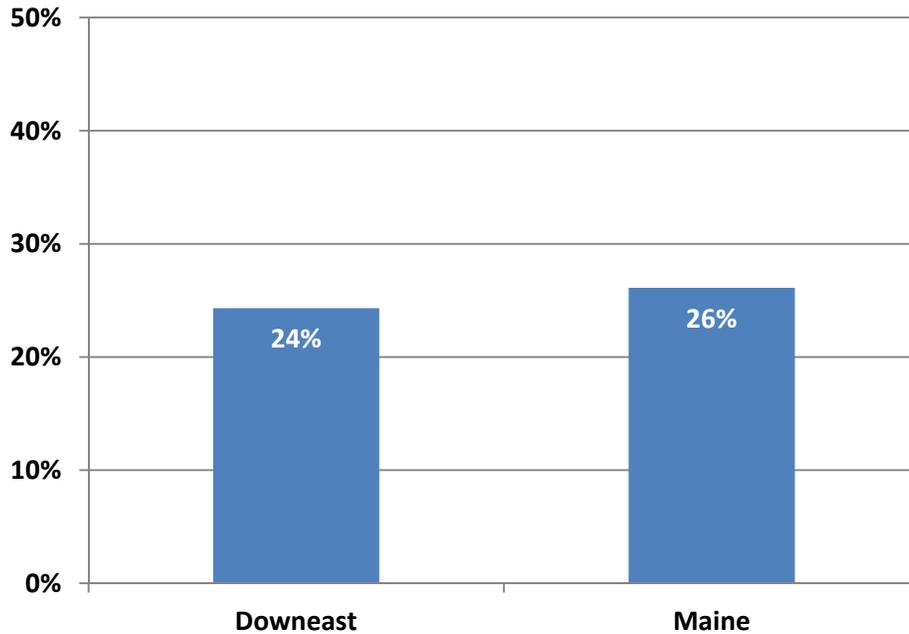
**Indicator Description: PERCEIVED RISK OF BEING CAUGHT FOR SMOKING MARIJUANA AMONG YOUTH.** This measure shows the percentage of high school students who reported that they thought they would be caught by police if they smoked marijuana.

**Why Indicator is Important:** High school students who believe they will be caught by the police are half as likely to smoke marijuana as their peers.

**Data Source(s):** MIYHS, 2009.

**Summary:** Twenty-four percent of high school students in Downeast PHD indicated that they thought they would be caught by the police if they smoked marijuana, compared to 26 percent statewide.

**Figure 34. Perceived risk among high school students in Downeast PHD of being caught by police for smoking marijuana: 2009**



Source: MIYHS

## **Mental Health, Suicide and Co-occurring Disorders**

---

The relationship between substance use and mental health has been well documented. There are great efforts underway at the Substance Abuse Mental Health Services Administration (SAMHSA) and throughout Maine to better integrate mental health promotion and substance abuse prevention. At the individual level, it is important to know if one exists because the symptoms of each can affect the other; that is, a person who is depressed may abuse alcohol in an effort to feel better. At the community level, it is important to understand how the prevalence of one interacts with the other so that prevention and intervention efforts can better address the needs of both. The data indicators included below represent the first attempt to collect multiple mental health indicators that can be routinely monitored in relation to substance abuse in hopes that this will lead to better prevention and intervention.

About one fifth of adults in Downeast PHD report having ever been diagnosed with depression and more than one quarter of high school students felt sad or hopeless every day for two weeks in 2009; more than one in ten high school students considered suicide. The proportion of individuals from Downeast PHD admitted for substance abuse treatment who also have a mental health diagnosis is lower than the statewide rate but has been increasing since 2005.

## Depression and Anxiety

---

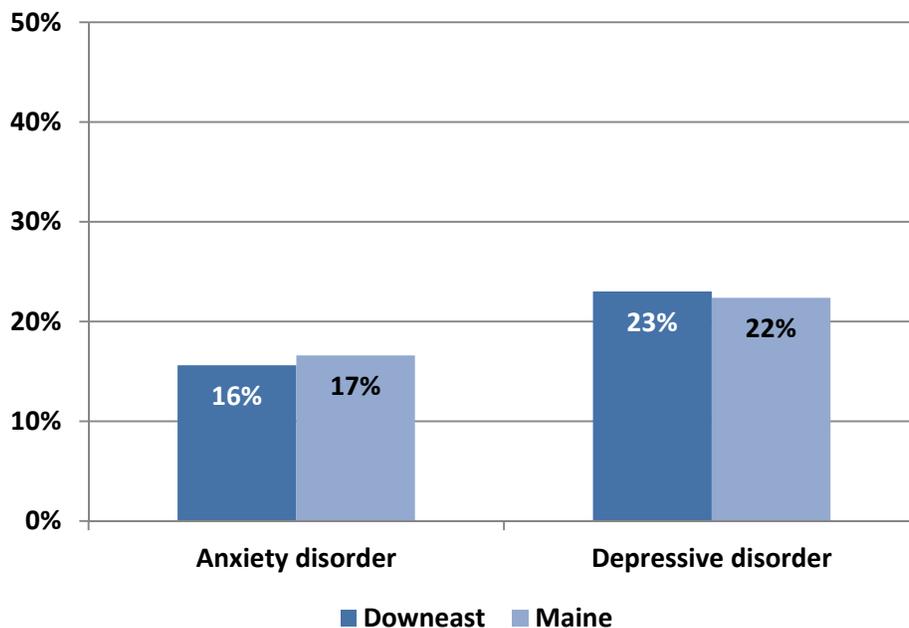
**Indicator Description: DIAGNOSIS OF ANXIETY AND DEPRESSION AMONG ADULTS.** This indicator examines the percentage of Maine residents age 18 and older who have ever been told by a doctor that they have a depressive or anxiety disorder.

**Why Indicator is Important:** The link between mental health and substance abuse is well documented. Experiencing anxiety or depression is associated with higher rates of substance abuse.

**Data Source(s):** BRFSS, 2006, 2008, and 2009.

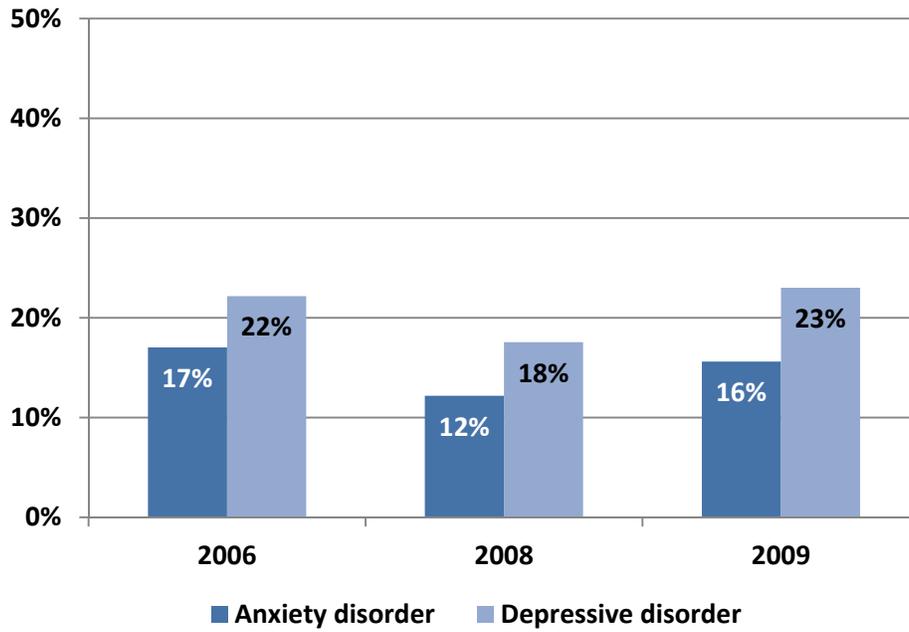
**Summary:** In 2009, approximately 16 percent of adults in Downeast PHD had been told they have an anxiety disorder, and 23 percent had been told they have a depressive disorder. More adults in Downeast PHD had been told they have a depressive disorder in 2009 than in Maine overall (22%). While it appears that the rates have not noticeably changed since 2006 (see the figure on the following page), there are too few years of data to determine whether this represents a trend.

**Figure 35. Percent of adults who have ever been told they have an anxiety or depressive disorder: Downeast PHD and Maine: 2009**



Source: BRFSS

**Figure 36. Percent of adults in Downeast PHD who have ever been told they have an anxiety or depressive disorder: 2006, 2008, and 2009**



Source: BRFSS

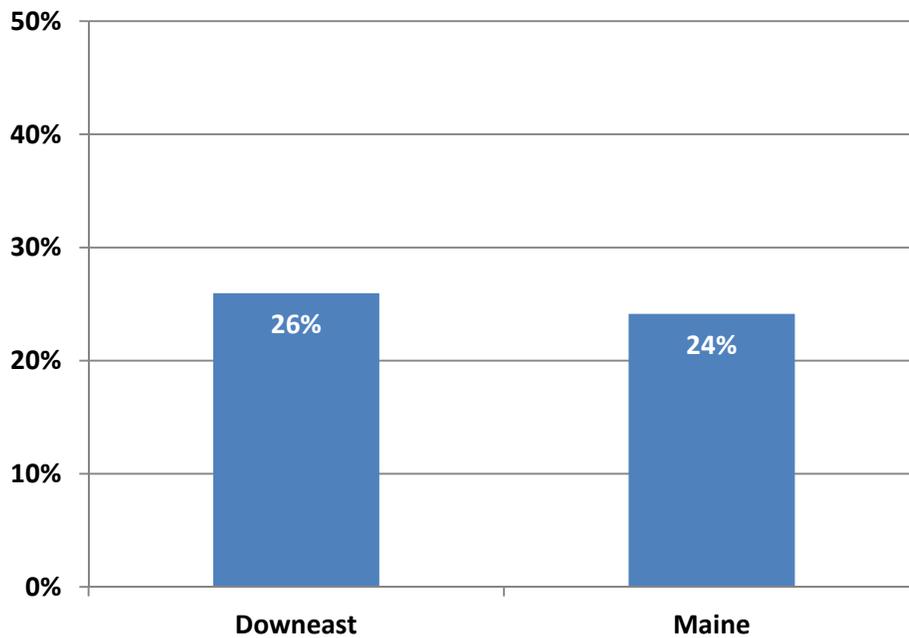
**Indicator Description: DEPRESSION AMONG YOUTH.** This indicator measures the percentage of high school students reporting they felt sad or hopeless almost every day for two weeks in a row during the past year.

**Why Indicator is Important:** Experiencing depression in the past year is associated with higher rates of substance abuse. Among youth, depression is also associated with problems with relationships and academic achievement.

**Data Source(s):** MIYHS, 2009.

**Summary:** In 2009, approximately 26 percent of high school students in Downeast PHD indicated that they felt sad or hopeless every day for two weeks or more in a row during the past year. This was higher when compared to all Maine high school students (24%).

**Figure 37. Percent of high school students in Downeast PHD who felt sad or hopeless almost every day for two weeks or more in a row during the past year: 2009**



Source: MIYHS

## Suicide and Suicidal Ideation

---

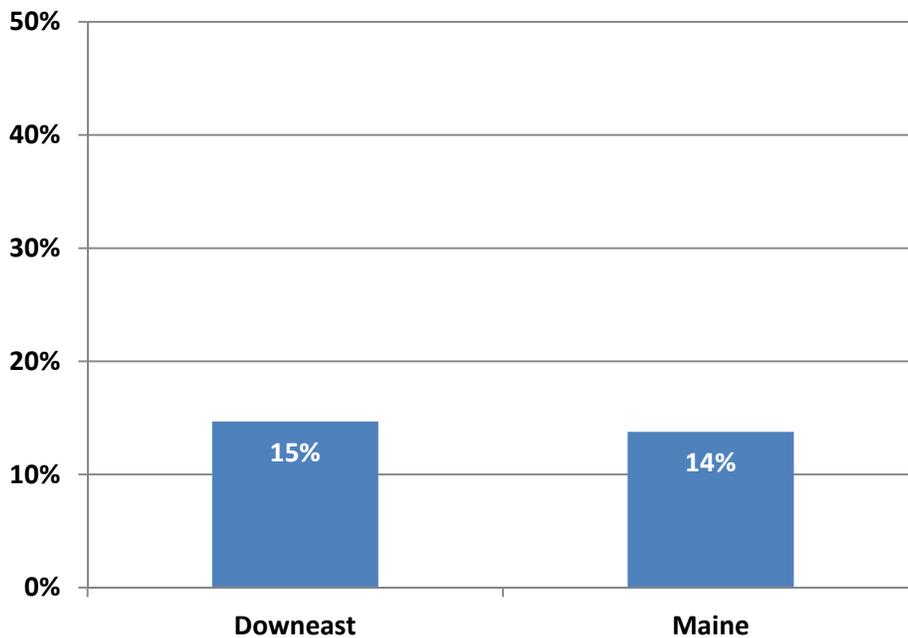
**Indicator Description: SUICIDAL IDEATION AMONG YOUTH.** This measure examines the percentage of high school students who reported that they seriously considered attempting suicide during the past year.

**Why Indicator is Important:** Suicide is the most tragic consequence of major depressive disorders. Abuse of alcohol or other drugs may increase emotional problems leading to suicidal ideation and suicidal behavior.

**Data Source(s):** MIYHS, 2009.

**Summary:** In 2009, 15 percent of high school students in Downeast PHD considered suicide during the past year, similar to high school students statewide (14%).

**Figure 38. Percent of high school students in Downeast PHD who considered suicide during the past year: 2009**



Source: MIYHS

## Mental Health and Substance Abuse Co-Occurrence

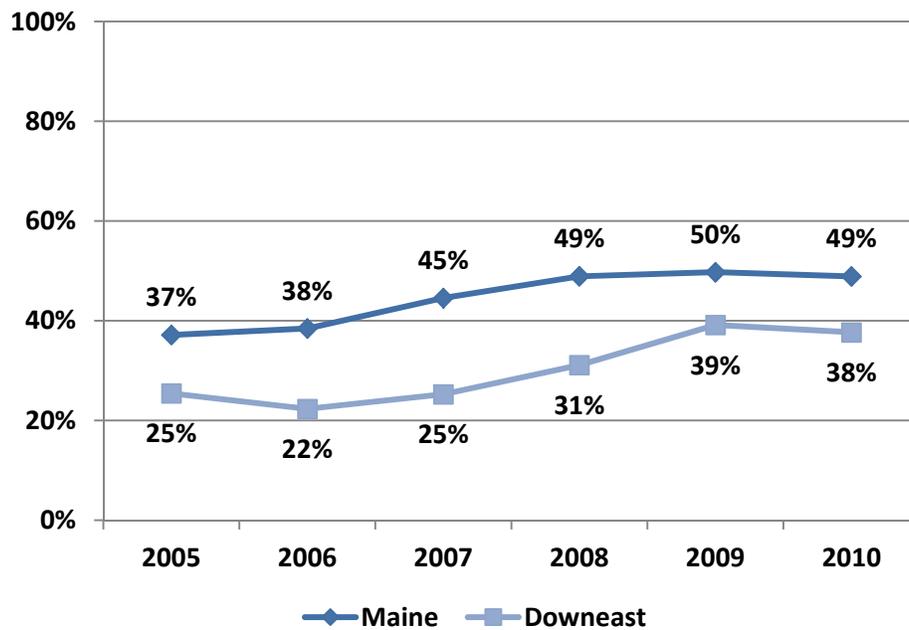
**Indicator Description: CO-OCCURRING MENTAL HEALTH AND SUBSTANCE ABUSE TREATMENT.** This indicator reflects the proportion of treatment admissions for substance abuse where the individual also has a mental health diagnosis.

**Why Indicator is Important:** The link between mental health and substance abuse is well documented. In terms of treatment, it is important to know if one exists because the symptoms of each can affect the other.

**Data Source(s):** TDS, 2005-2010.

**Summary:** From 2005 through 2010, Downeast PHD has consistently reported lower percentages of individuals admitted for substance abuse treatment who also have a mental health diagnosis compared to statewide rates. However, since 2005 this has increased in Downeast PHD from 25 percent to 38 percent.

**Figure 39. Percent of individuals admitted for substance abuse treatment that also had a mental health diagnosis: 2005-2010**



Source: TDS

## Treatment Admissions for Substance Abuse

---

Substance abuse treatment admissions are an indicator of how many people *receive treatment* for a substance abuse problem. These admissions can be voluntary, but they can also be court-ordered. Treatment admission data should not be used as an indicator of the magnitude of the problems related to substance abuse. Rather, treatment should be seen as a major consequence stemming from substance use and one that requires many resources.

The overall number of Mainers seeking treatment has been declining since 2007, from 14,159 to 12,351 in 2010. Mainers continued to seek out treatment for abuse involving a wide array of substances; in 2010 there were 5,535 admissions for alcohol as the primary substance followed by synthetic opioids (3,594) and marijuana (1,164).

In Downeast PHD, there have been more primary treatment admissions related to synthetic opioids than for alcohol since 2008 but have remained stable since then. This is higher when compared to the state. Downeast PHD also has a higher proportion of secondary admissions related to marijuana.

## Treatment Admissions

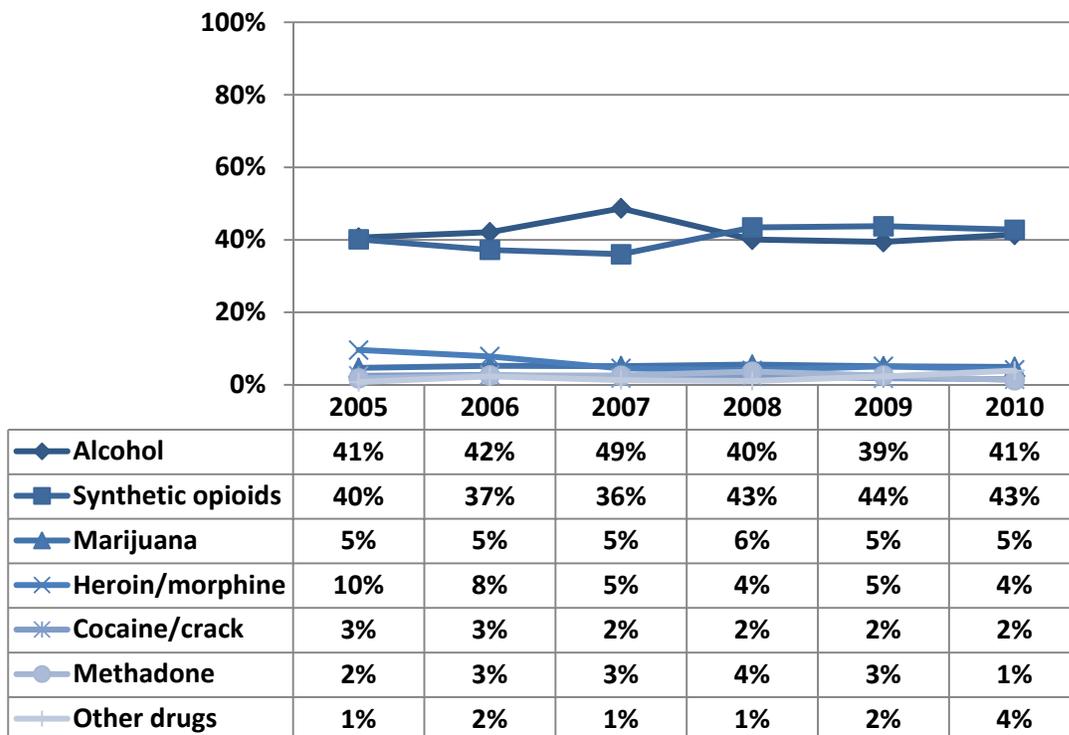
**Indicator Description: PRIMARY TREATMENT ADMISSIONS.** This measure reflects substance abuse treatment admissions. A “primary” substance is identified during the treatment admissions process based on use patterns (e.g., frequency, duration, quantity) and the risk(s) posed to the individual. The analysis excludes admissions for shelter/detoxification services.

**Why Indicator is Important:** The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Treatment admission data are not a good indicator of substance use, abuse or dependence but provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

**Data Source(s):** TDS, 2005-2010.

**Summary:** In 2010, 43 percent of all primary treatment admissions in Downeast PHD were related to synthetic opioids<sup>11</sup> followed by alcohol at 41 percent. Primary treatment admissions related to synthetic opioids surpassed those related to alcohol in 2008 and this has remained stable since that time.

**Figure 40. Primary drug admissions for adults in Downeast PHD: 2005-2010**

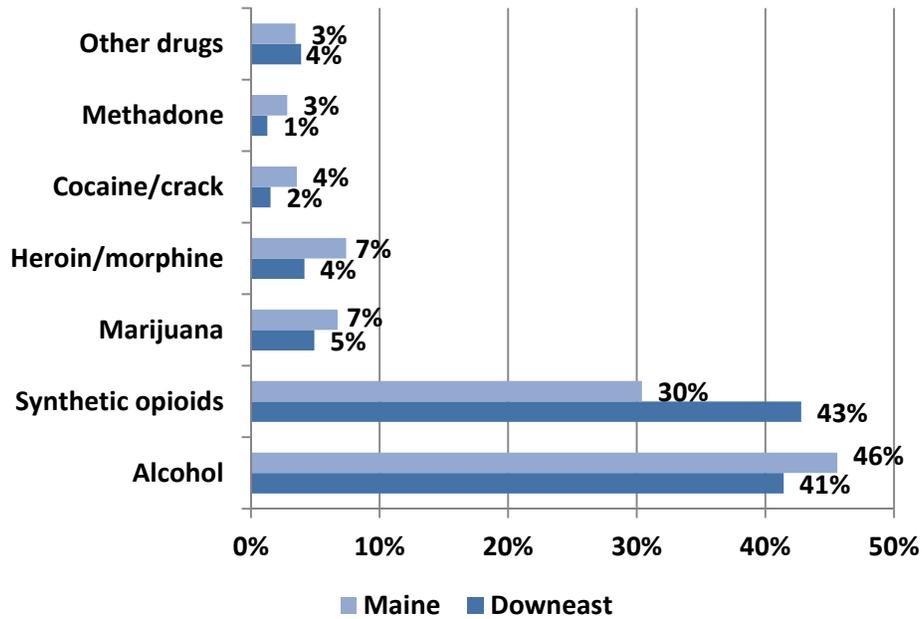


Source: TDS

<sup>11</sup> “Synthetic opioids” excludes methadone and buprenorphine.

**Summary:** In 2010, 43 percent of primary treatment admissions in Downeast PHD were for synthetic opioids, significantly higher compared to all primary treatment admissions statewide (30%). Primary treatment admissions related to alcohol were lower in Downeast PHD (41%) compared to the state (46%).

**Figure 41. Primary drug admissions for adults: 2010**



Source: TDS

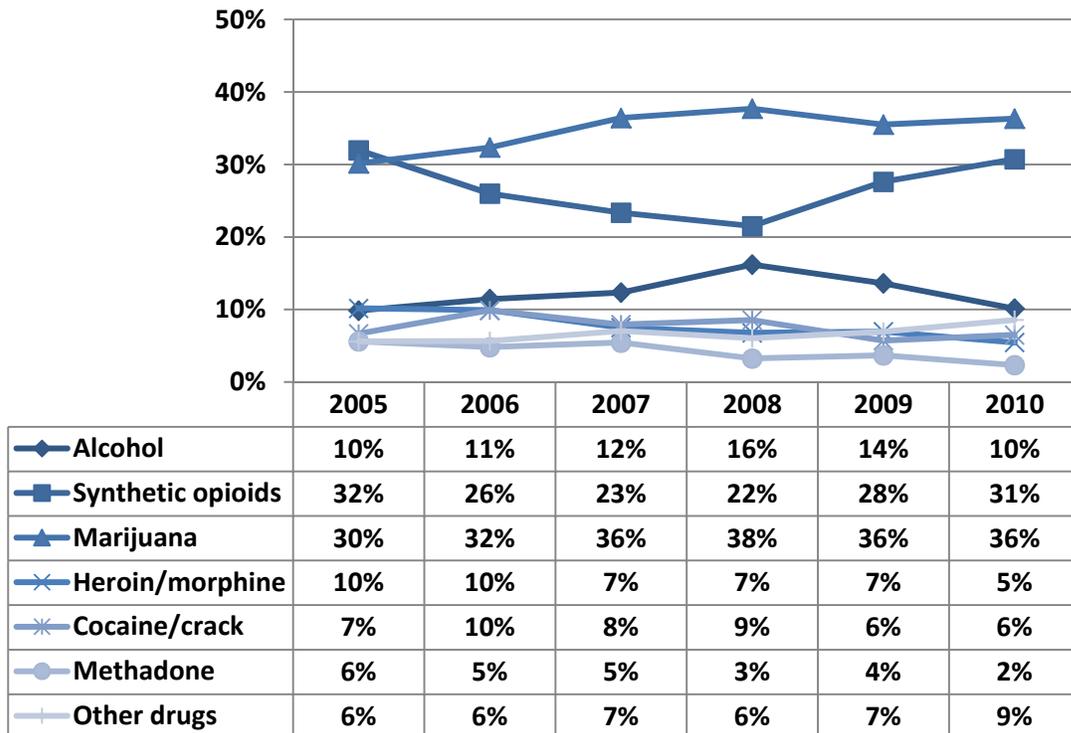
**Indicator Description: SECONDARY TREATMENT ADMISSIONS.** This measure reflects substance abuse treatment admissions. A “secondary” substance is identified during the admissions process as one used by the individual and for which treatment may be received, but it is not the primary substance for which treatment was sought. The analysis excludes admissions for shelter/detoxification services.

**Why Indicator is Important:** The number of substance abuse treatment admissions is bound by both the need and the capacity for treatment. Treatment admission data are not a good indicator of substance use, abuse or dependence but provide an indication of service usage and the impact of substance use on the behavioral healthcare system.

**Data Source(s):** TDS, 2005-2010.

**Summary:** In 2010, 36 percent of secondary treatment admissions in Downeast PHD were for marijuana, followed by synthetic opioids (31%) and then alcohol (10%). Since 2008, synthetic opioids appear to be increasing as a secondary substance in Downeast PHD, while alcohol appears to be declining.

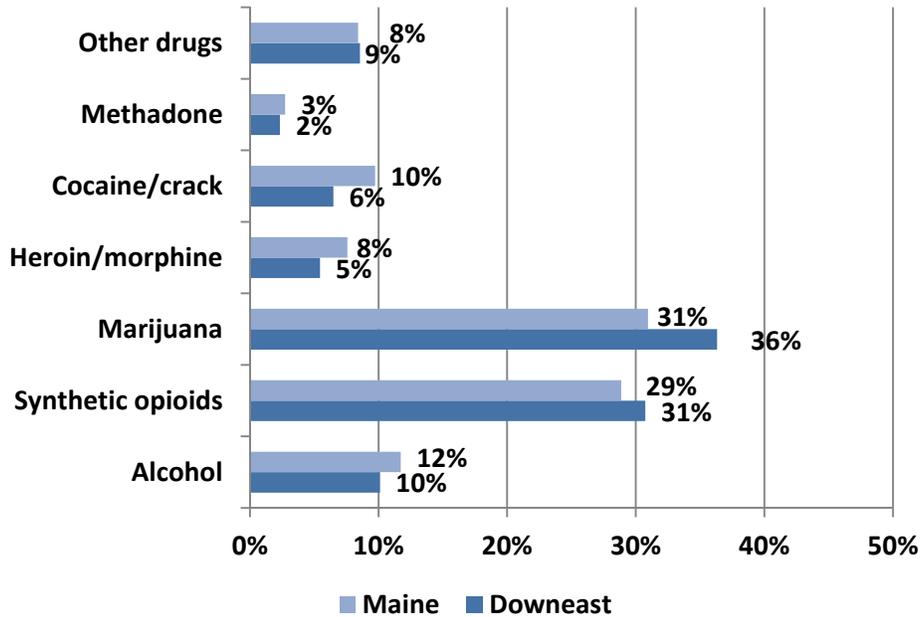
**Figure 42. Secondary drug admissions for adults in Downeast PHD: 2005-2010**



Source: TDS

**Summary:** In 2010, Downeast PHD had a higher percent of secondary admissions related to marijuana (36%) and synthetic opioids (31%) compared to all secondary treatment admissions statewide.

**Figure 43. Secondary drug admissions for adults: 2010**



Source: TDS

## Appendix: Data Sources

---

This report includes data that was gathered from a number of data sources. A detailed description of each source is provided below, consisting of information about the data included in each source, the strengths and weaknesses, and retrieval or contact information. The report includes data that were available through May 2011.

There are multiple purposes for this report. One is to provide a snapshot of the most recent data regarding substance abuse, while another is to examine trends over time. Therefore, each indicator may have multiple sources of data that are included. While each indicator provides a unique and important perspective on drug use in Maine, none should individually be interpreted as providing a full picture of drug trends in Maine. In particular, the percentages and figures from one data source do not always align with the data and percentages from a similar source. Older data are often included in order to examine an indicator among a specific population or to find trends over time. When discussing rates of prevalence, however, the user should use rely upon the most recent data source available.

### Description of Data Sources

Behavioral Risk Factor Surveillance System (BRFSS). The BRFSS is a national survey administered on an ongoing basis by the National Centers for Disease Control and Prevention (CDC) to adults in all 50 states and several districts and territories. The instrument collects data on adult risk behaviors, including alcohol abuse. BRFSS defines heavy drinking as adult men having more than two drinks per day and adult women having more than one drink per day, and binge drinking as males having five or more drinks on one occasion and females having four or more drinks on one occasion. The most recent data available are from 2009. Older data are also included for trending analyses. Public Health District data were obtained through special analysis. Contact: John Greenwood, SEOW Coordinator; [john.greenwood@maine.gov](mailto:john.greenwood@maine.gov); (207) 287-2596.

Maine Department of Public Safety (DPS), Uniform Crime Reports (UCR). UCR data include drug and alcohol arrests. Drug arrests include sale and manufacturing as well as possession of illegal substances. Liquor arrests include all liquor law violations. OUI arrests are arrests for operating a motor vehicle under the influence of a controlled substance. DPS data are now available from 2009. Arrest data may reflect differences in resources or focus of law enforcement efforts so may not be directly comparable from year to year.

Retrieval: [http://www.maine.gov/dps/cim/crime\\_in\\_maine/cim.htm](http://www.maine.gov/dps/cim/crime_in_maine/cim.htm)

Maine Department of Public Safety (DPS), Liquor Licensing and Compliance. DPS issues and renews licenses for the manufacture, importation, storage, transportation and sale of all liquor and administers those laws relating to licensing and the collection of taxes on malt liquor and wine. DPS maintains a list of all active licenses that can be accessed online.

Retrieval: [http://www.maine.gov/dps/liqr/active\\_licenses.htm](http://www.maine.gov/dps/liqr/active_licenses.htm)

Maine Department of Transportation (MDOT). MDOT collects information on all traffic statistics. Statistics for years 2006 through 2010 regarding the year of occurrence and the number of alcohol-related crashes/injuries were obtained via personal correspondence. Due to the population estimates for July 1, 2010 being unavailable through the U.S. Census Bureau, only data from years 2006 through 2009 were analyzed. Contact: Duane Brunell, Safety Performance Analysis Manager; [duane.brunell@maine.gov](mailto:duane.brunell@maine.gov); (207) 624-3278.

Maine Integrated Youth Health Survey (MIYHS). The MIYHS is a statewide survey administered biennially through a collaborative partnership by the Maine Office of Substance Abuse (OSA) the Maine Center for Disease Control and Prevention and the Maine department of Education to students in grades 5 through 12. The survey collects information on student substance use, risk factors related to substance use, as well as consequences, perceptions and social risk factors related to substances, and collects information on many other health factors. As of the date of this report, the most recent data available are from 2009. Due to changes in the survey administration and structure, the new survey data cannot be trended with the Maine Youth Drug and Alcohol Survey (MYDAUS); however, trend data from previous MYDAUS years are presented through 2008. Contact: Melanie Lanctot, Research Analyst, Office of Substance Abuse, [melanie.lanctot@maine.gov](mailto:melanie.lanctot@maine.gov); (207) 287-2964.

Maine Office of the Chief Medical Examiner. The Maine Office of the Chief Medical Examiner maintains records of all deaths associated with drug overdose. Drug categories include methadone, cocaine, benzodiazepines, oxycodone and heroin/morphine. The death data are compiled on an annual basis and must be finalized prior to release and so are not available to track changes that may occur over shorter time frames. Contact: Dr. Marcella Sorg, Director, Rural Drug & Alcohol Research Program, Margaret Chase Smith Policy Center, University of Maine; [marcella\\_sorg@umit.maine.edu](mailto:marcella_sorg@umit.maine.edu); (207) 581-2596.

Maine Youth Drug and Alcohol Use Survey (MYDAUS). The MYDAUS was a statewide survey administered biennially by the Maine state Office of Substance Abuse (OSA) to students in grades 6 through 12 between 1995 and 2008. The survey collected information on student substance use, including binge-drinking. Trending data from 2004, 2006 and 2008 are included in this report. Due to changes in the survey administration, additional trending is not possible (see MIYHS above). Contact: Melanie Lanctot, Research Analyst, Office of Substance Abuse, [melanie.lanctot@maine.gov](mailto:melanie.lanctot@maine.gov); (207) 287-2964.

National Survey on Substance Use and Health (NSDUH). The NSDUH is a national survey administered annually by the Substance Abuse and Mental Health Services Administration (SAMHSA) to youth grades 6 through 12 and adults ages 18 and up. The instrument collects information on substance use and health at the national, regional and state levels. The advantage of NSUDH is that it allows comparisons to be made across the lifespan (that is, ages 12 and up). However, NSDUH is not as current as other data sources; as of this report, data at the sub-state level are available through 2007-2008; Public Health District data were obtained

through special request. Contact: Anne Rogers, Office of Substance Abuse, [anne.rogers@maine.gov](mailto:anne.rogers@maine.gov); (207) 287-4706.

Prescription Monitoring Program (PMP). PMP maintains a database of all transactions for class C-II through C-IV drugs dispensed in the state of Maine. Drug categories used in this report include narcotics, tranquilizers, stimulants, and other prescriptions. Other prescriptions includes those that not narcotics, tranquillizers or stimulants, including products such as endocrine and metabolic drugs, analgesics and anesthetics, gastrointestinal agents, and nutritional products. Prescription counts do not reflect amounts in terms of dosage or quantity of pills, but do represent the volume of active prescriptions during the time period. The counts included in this report represent the number of prescriptions filled between 2005 and 2009. Contact: PMP Coordinator, Office of Substance Abuse; (207) 287-3363. Retrieval: <http://www.maine.gov/dhhs/osa/data/datastats.htm>

Treatment Data System (TDS). TDS is a statewide database that includes information about clients admitted to treatment in OSA-funded facilities through December 2010. Analyses in this report are based on clients' reported primary, secondary and tertiary drug(s) of choice as well as other demographic and background information that is collected at intake. Drug categories included in this report are alcohol, marijuana, cocaine, heroin, synthetic opiates and methadone/buprenorphine. Contact: Stacey Chandler, Office of Substance Abuse, [stacey.chandler@maine.gov](mailto:stacey.chandler@maine.gov); (207) 287-6337.

U.S. Census Bureau. The U.S. Census provides summary profiles showing frequently requested data items from various Census Bureau programs. Profiles are available for all states and counties, and for cities and towns with more than 25,000 people. Data are updated no less than annually. Retrieval for Maine census data: <http://quickfacts.census.gov/qfd/states/23000.html>