

Maine Community Data Overview

(Snapshots, Trends, and Comparisons on Substance Use)

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Goals for the Presentation

- Introduce the Community Profiles
- Highlight comparative trends for key indicators
- Discuss questions and comments

Dual Purposes of SEOW/CESN

Purpose of the State Epidemiological Outcomes Workgroup (SEOW)

- Promote systematic, data-driven decision-making
- Guide effective and efficient use of prevention resources

Purpose of the Community Epidemiological Surveillance Network (CESN)

- Identify substance abuse patterns
- Establish and track substance abuse trends
- Detect emerging substances

Characteristics of the Community Profiles

Reports for eight Maine Public Health Districts (PHDs)

- Consumption
- Consequences
- Contributing Factors
- Mental Health
- Treatment

CESN Profiles

Each indicator includes:

- a description of the indicator
- a justification (e.g., why it is important)
- a chart or graph
- and bulleted key findings

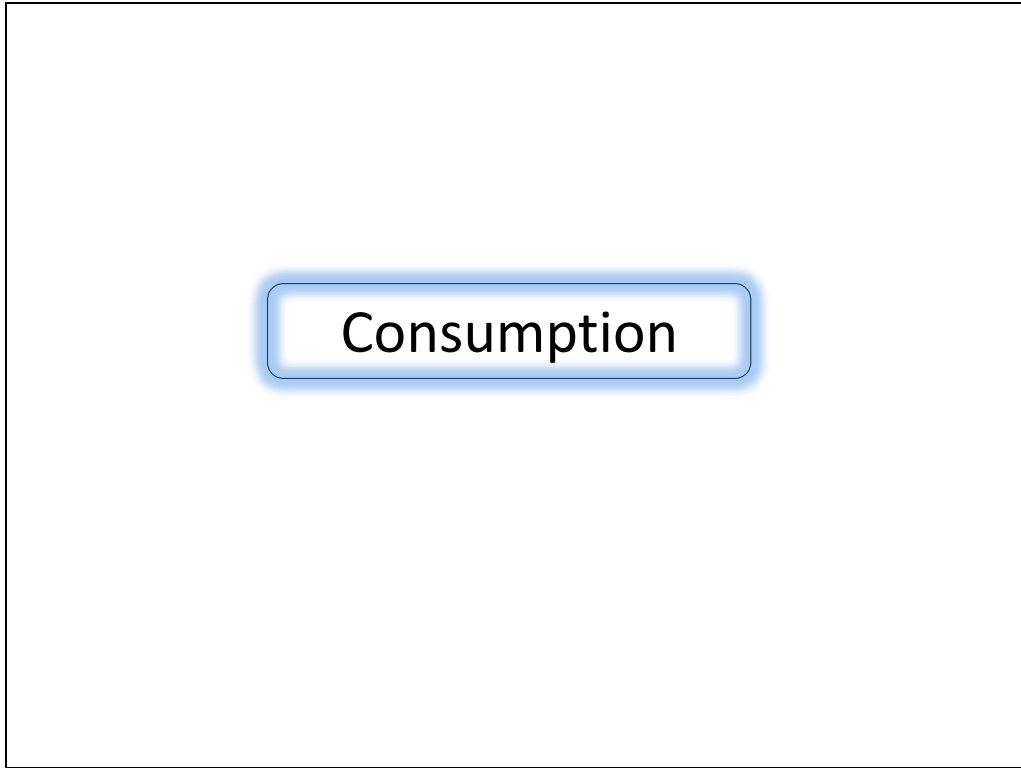
Reports can be found at the following link:

www.maine.gov/dhhs/osa/data/profiles.htm

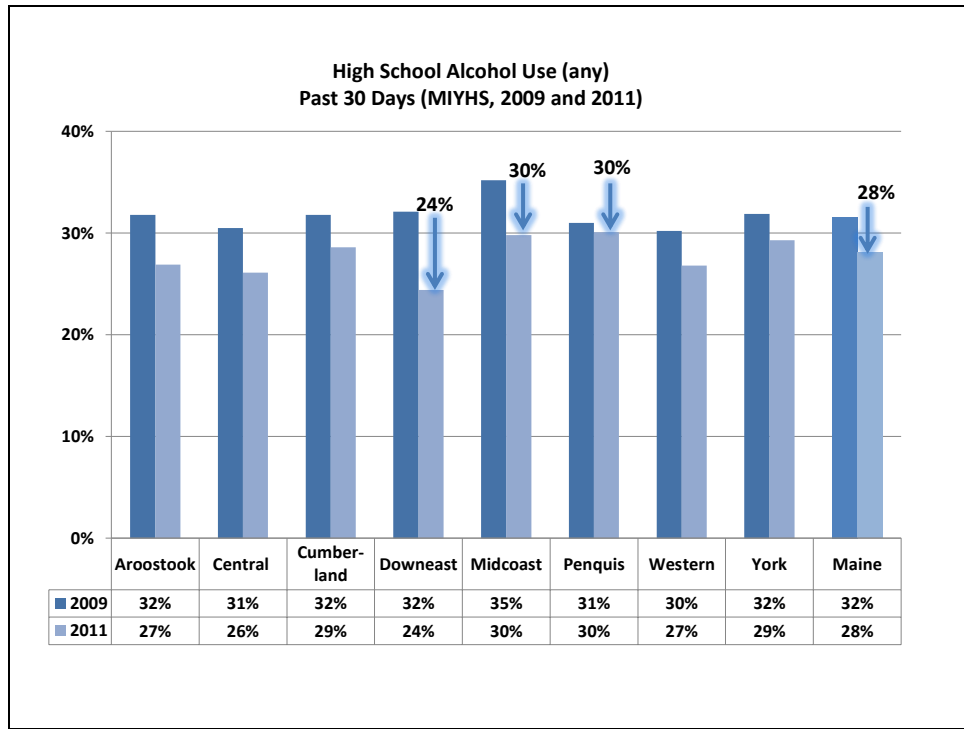
Data Sources

- Behavioral Risk Factor Surveillance System (BRFSS)
- Maine Department of Public Safety (DPS), Uniform Crime Reports (UCR)
- Maine Department of Transportation (MDOT)
- Maine Health Data Organization (MHDO)
- Maine Integrated Youth Health Survey (MIYHS)
- Maine Office of the Chief Medical Examiner
- National Survey on Substance Use and Health (NSDUH)
- Northern New England Poison Center (NNEPC)
- Office of Data, Research and Vital Statistics (ODRVS)
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- Prescription Monitoring Program (PMP)
- Treatment Data System (TDS)
- Youth Risk Behavior Surveillance System (YRBSS)

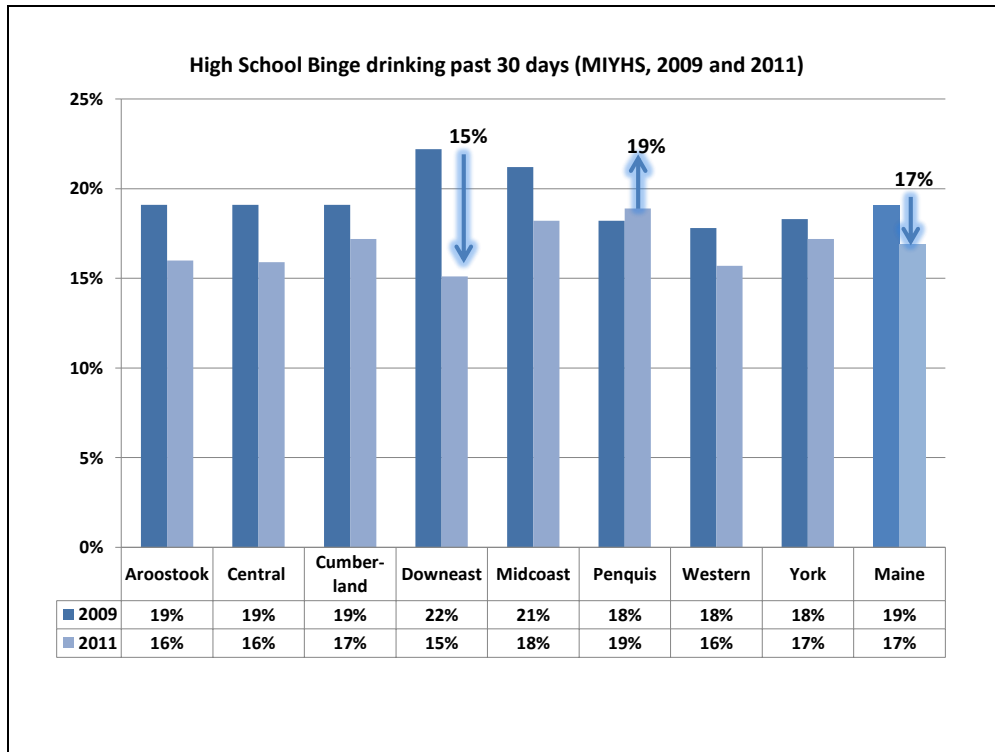
Here are the (14) sources used to compile the community profiles. Due to the limited time we have, I will not be presenting all indicators in the community profiles, rather I will do my best to cover the key findings of interest. A great deal of information will be covered in this presentation. Data and charts of the eight community profiles have been consolidated in this presentation for comparative purposes. For a more detailed report of your community, please check out the individual profile.



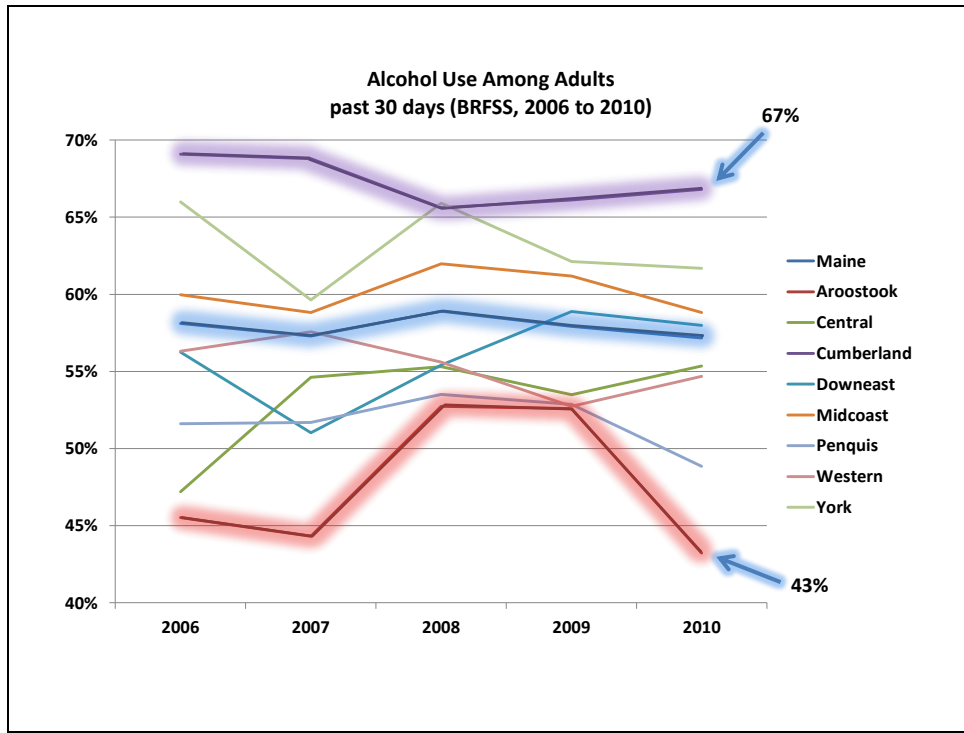
To fully understand the magnitude of substance use consequences, it is important to first understand the prevalence of substance use. Consumption includes overall use of substances, acute or heavy consumption and consumption by high risk groups



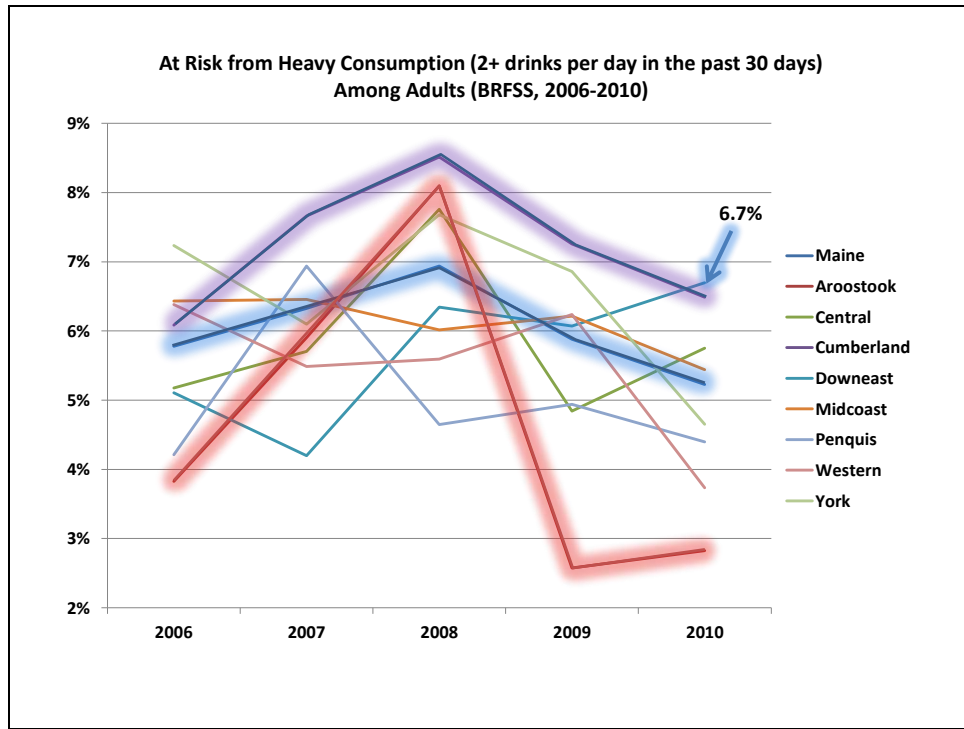
Fortunately, concerning the past 30 day alcohol use among high school students, the statewide average decreased by 4 points from 2009 to 2011. All Public health Districts indicated at least some decrease. The largest decrease was seen in Downeast, with a drop of 8 percentage points, making it the Public Health district with the lowest rate at 24%. Midcoast and Penquis had the highest rates in 2011 at 30%.



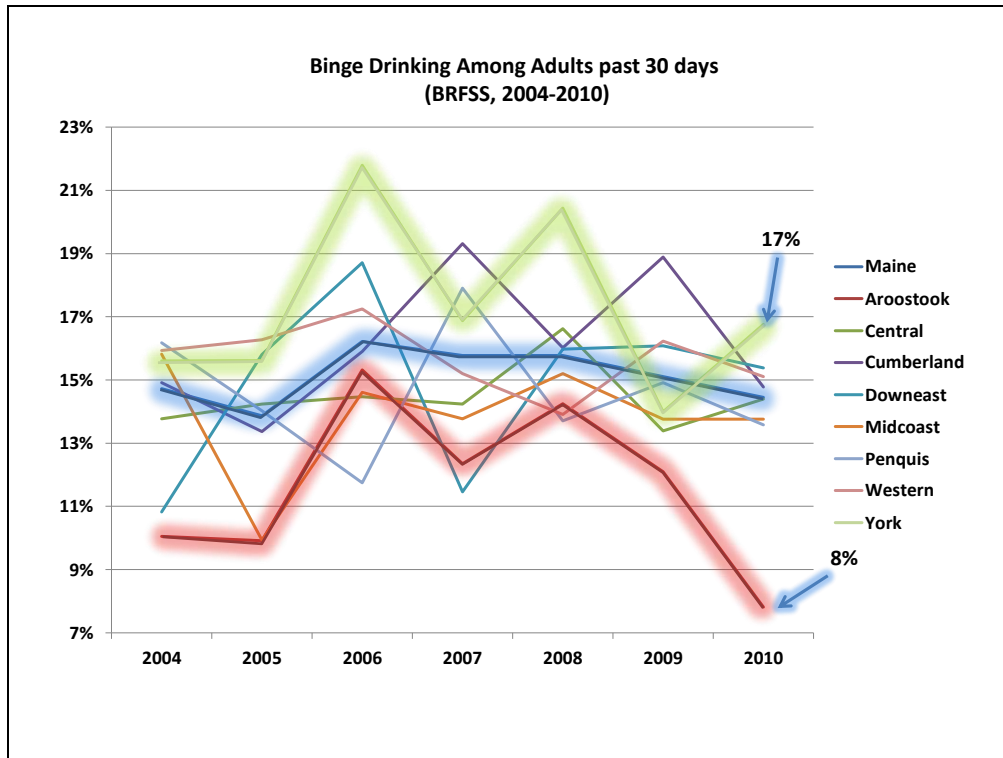
The statewide average for past 30 day binge drinking among high school students decreased slightly from 19% in 2009 to 17% in 2011. The public health district to see the most dramatic change in rate was Downeast with a 7 point drop. Downeast went from having the highest binge drinking rate among high school students at 22% in 2009 to lowest rate in 2011 at 15%. The Public Health District with the highest rate in 2011 was that of the Penquis at 19%.



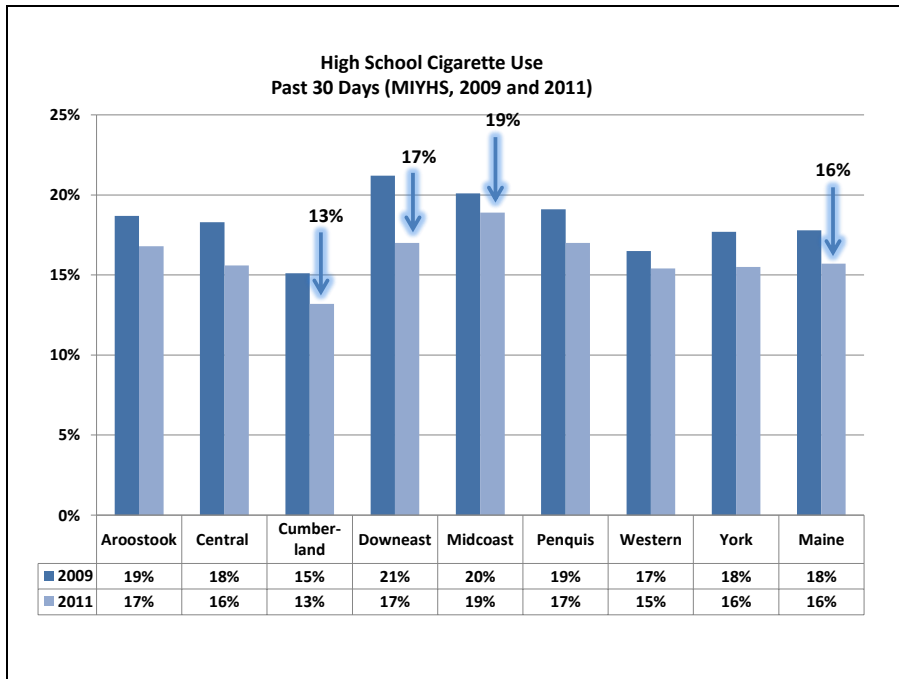
When we look at past 30 day alcohol consumption for adults 18 and over, we can see here that the state average, highlighted in blue, has not varied much over the past several years, ranging between 57 and 59 percent. Aside from 2008, Cumberland (highlighted in purple) has had the highest adult drinking rate for 4 out of the 5 years shown. In 2010, Cumberland reported that 67 percent of adults had consumed alcohol in the past 30 days, this was 10 percentage points higher than the statewide average. In contrast, Aroostook (highlighted in pink) has consistently had the lowest rates for adult drinking, reporting a five year low at 43% in 2010.



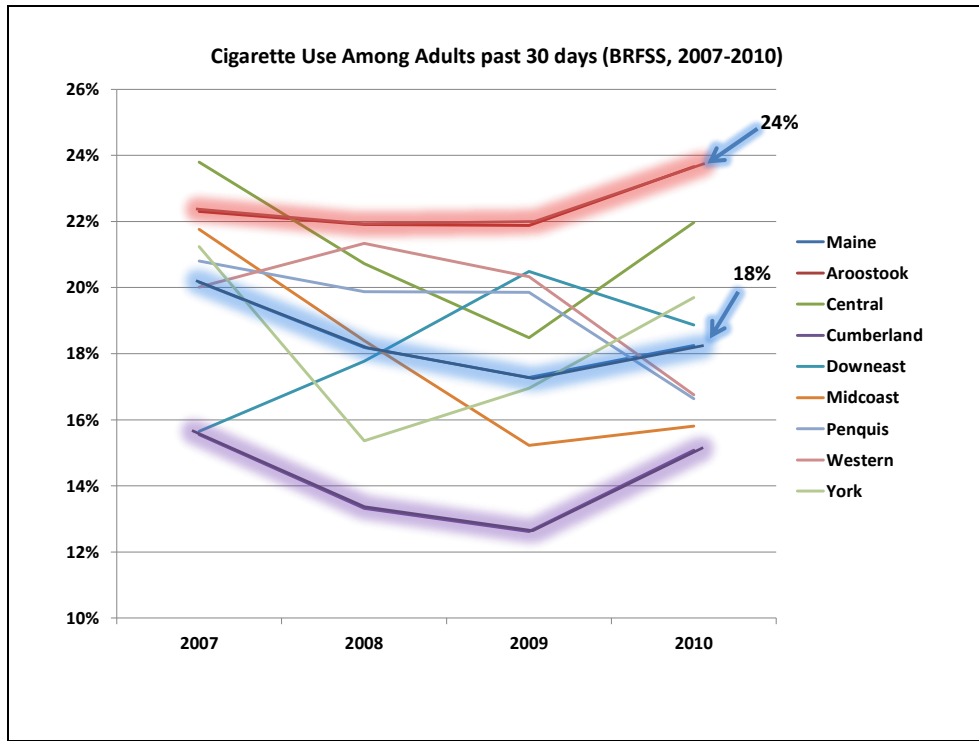
This slide takes a look at the percentage of adults in each public health district that reported consuming 2 or more drinks per day for the past 30 days. The statewide average (highlighted in blue) has remained relatively stable between 5 and 7 percent. Cumberland (highlighted in purple) seems to be steadily decreasing since it hit a peak of 8.5% in 2008. It appears that the Downeast public health district reported having the highest adult heavy drinking rate in 2010 at 6.7%. Most likely due to its small population in combination with a low response rate, Aroostook's rates (outlined in pink) have been quite volatile. After jumping 4 percentage points from 2006 to 2008, rates have subsided to under 3 percent in 2009 and 2010.



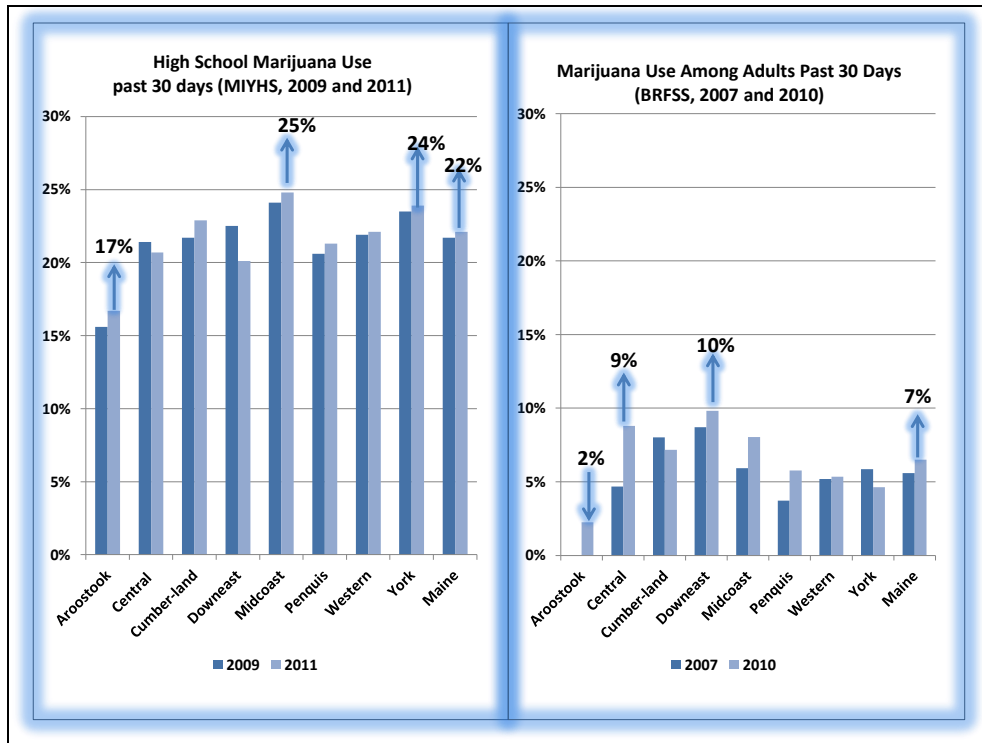
The statewide adult binge drinking rate has held steady between 14 and 16 percent from 2004 to 2010. York Public health district (highlighted here in green), has held the highest rate for adult binge drinking 3 out of the past 5 years shown. In 2010, York reported that 17% of adults had binge drank in the past 30 days. Again, Aroostook has held some of the lowest rates. In 2010, only 8% of adults in Aroostook reported binge drinking in the past month.



From 2009 to 2011, the state average for past 30 day cigarette use among high school students decreased from 18% to 16%. Similar to what we saw in past 30 day alcohol use, Downeast was the public health district that exhibited the sharpest decline in consumption, dropping from 21% in 2009 to 17% in 2011. Although Midcoast decreased slightly from 2009, it appeared to have the highest rate in 2011 with almost 1 in 5 high school students reporting having smoked in the past 30 days. The lowest rates for both years 2009 and 2011 were found in Cumberland, which was 3 percentage points lower than statewide average in 2011.

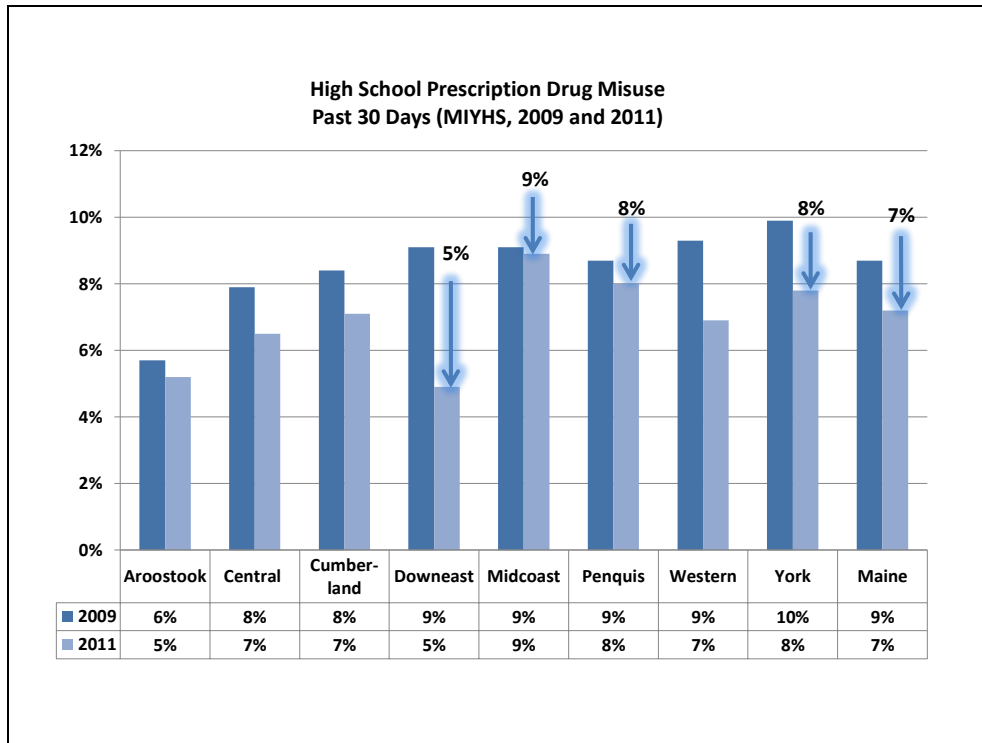


When we take a look at the cigarette smoking rate among adults we can see that the statewide average dropped from 20% in 2007 to 18% in 2010. What is surprising here is that 5 out of the eight public health districts shown showed increases from 2009 to 2010. Aroostook (highlighted in pink) had the highest rate of cigarette smoking among adults from 2008 to 2010. In 2010, it was reported that just about 1 in 4 adults in Aroostook smoked at least one cigarette within the past 30 days. Comparable to that of the high school trend, Cumberland demonstrated the lowest smoking rates for all years shown.

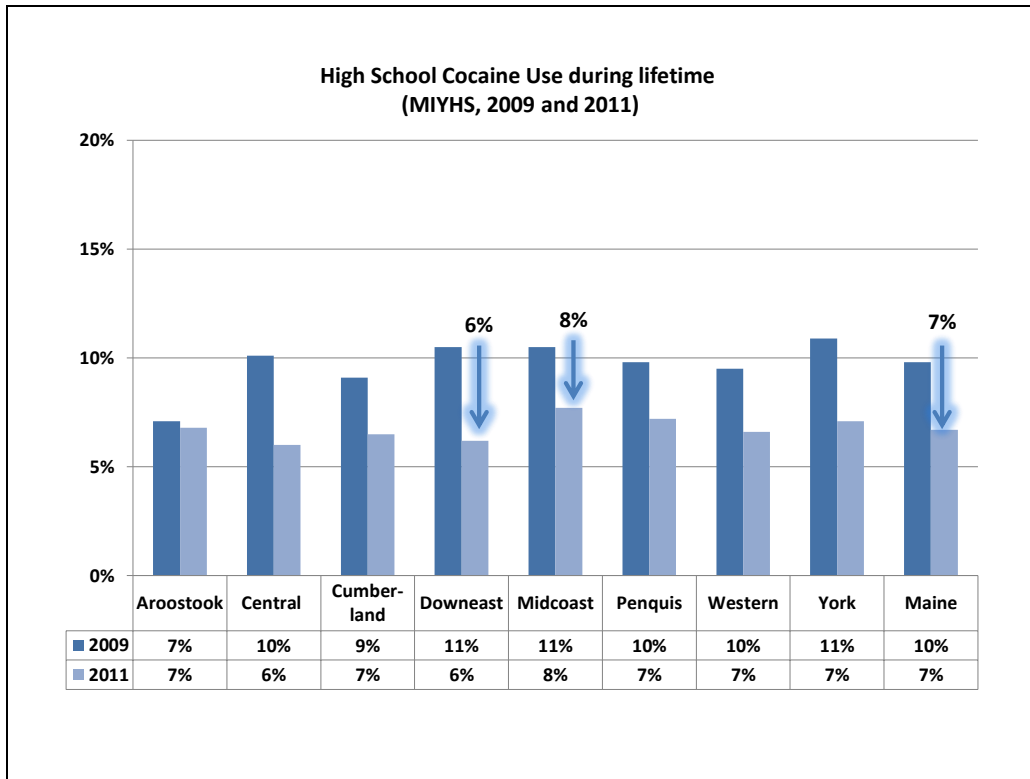


The chart on the left shows us the past 30 day rate of Marijuana use among high school students. The state wide average remained at about 22% from 2009 to 2011. 3 out of the 8 public health districts shown here exhibited an increase of at least 1 percentage point. For both years 2009 and 2011, Midcoast and York reported the highest rates at 24 and 25 percent while Aroostook had the lowest rates for both 2009 and 2011 at 16 and 17 percent.

If we take a look at the chart on the right, we can see that the rates for past 30 day use of marijuana are much lower among adults than students. The state average for adult marijuana use increased from 6% in 2007 to 7% in 2010. Central Public Health District saw the most dramatic change, increasing from 5% to 9%. And in 2010, Downeast reported the highest rate at 10% while Aroostook had the lowest rate at 2%. (please check wording) While adults and students differ substantially in rates of usage, there does seem to be a relationship between consumption rates and the areas where people live.



Fortunately, the past 30 day prescription drug misuse rate among high school students decreased statewide from 9% in 2009 to 7% in 2011. Again, we can see that Downeast had the steepest decline in consumption, dropping from among the highest rates in 2009 at 9%, down to to 5%, the lowest rate in 2011. It appears that Midcoast had the highest rate for prescription drug misuse among students in 2011, holding steady at 9%, this was followed closely by Penquis and York at 8%.

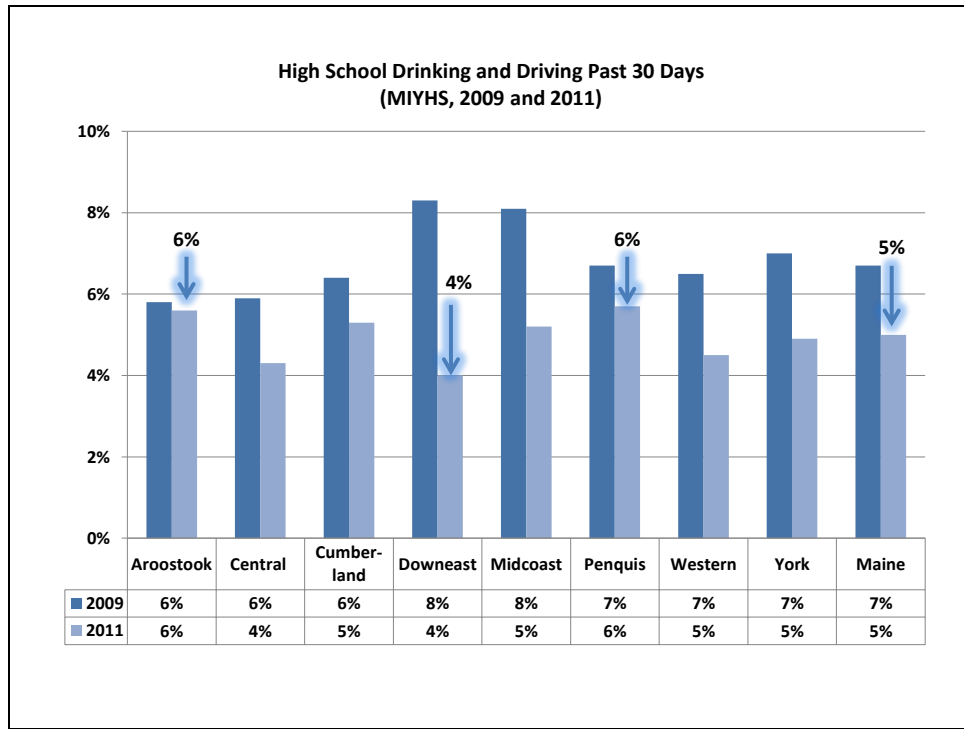


If we take a look at the lifetime cocaine use rates among high school students, we can see a positive change from 2009 to 2011. The state wide average dropped by 3 percentage points from 10% in 2009 to 7% in 2011. The steepest decline was once again seen in Downeast, dropping from one of the highest rates in 2009 at 11% down to one of the lowest rates in 2011 at 6%. Although lifetime cocaine use rates among Midcoast high school students did fall by 3 percentage points, Midcoast reported the highest rate in 2011 at 8 %.

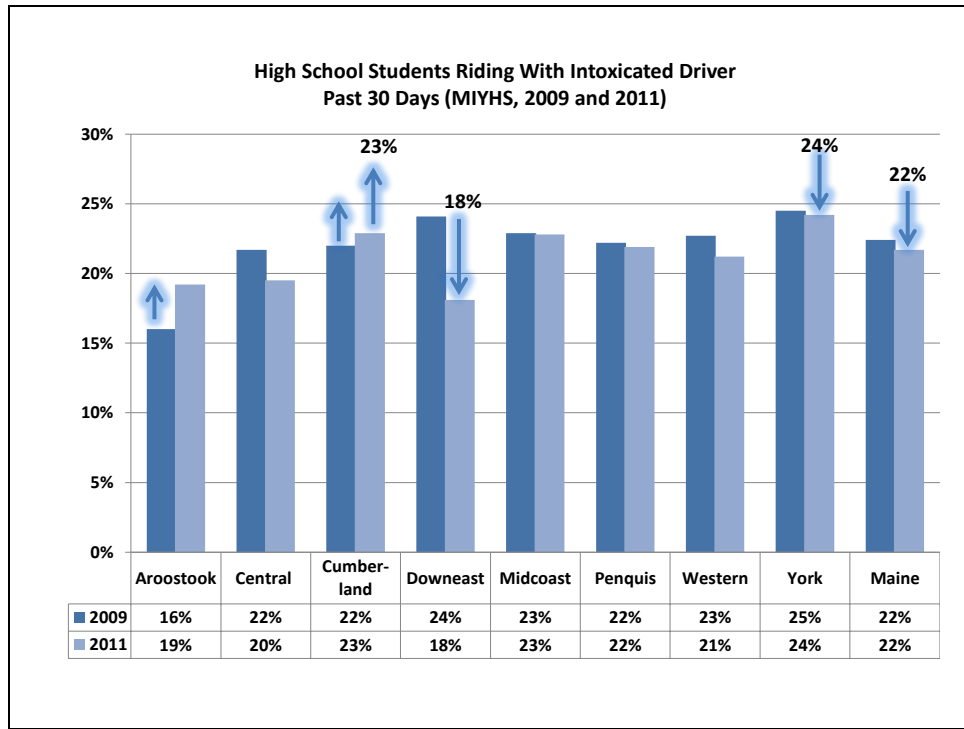


Consequences

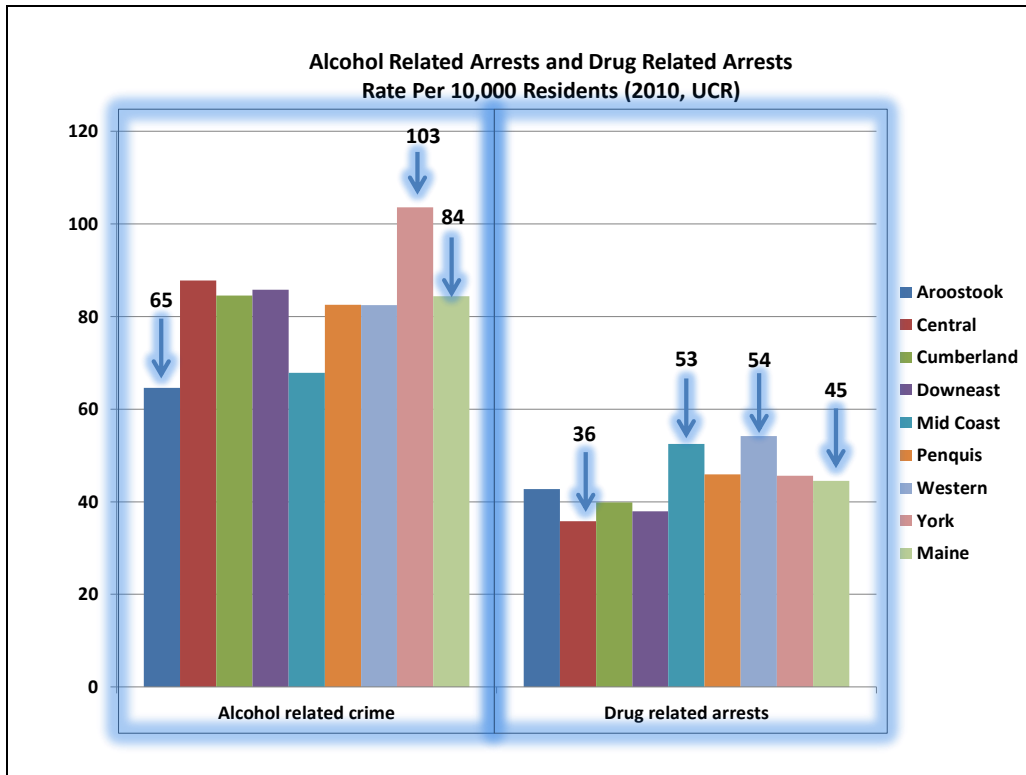
While a great deal of information regarding substance use can be obtained from the data described in the previous section, information on the effects on individuals and communities can be derived from what has come to be called “consequence” data. Consequences are defined as the social, economic, and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



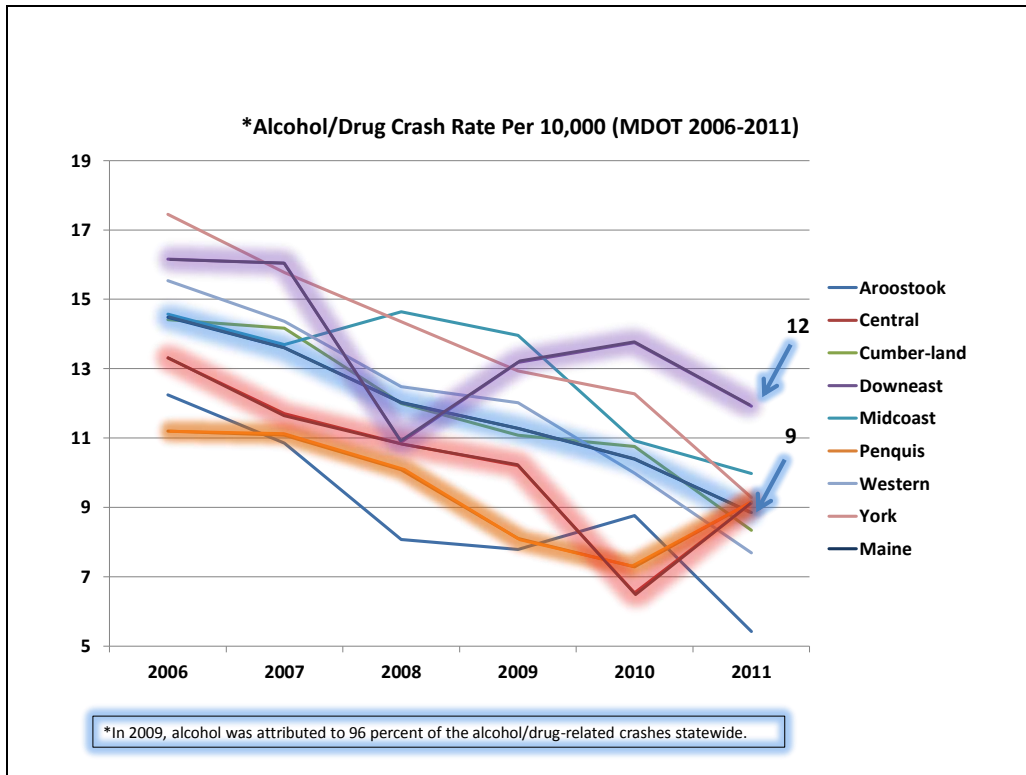
The good news here, is that all public health districts observed a decrease in the rate of drinking and driving among high school students. An average of 5% of students in Maine reported drinking and driving in the past 30 days in 2011, this was down from 7% in 2009. Once again, Downeast saw the greatest change, decreasing by 4 percentage points. Downeast went from having the highest rate of drinking and driving in 2009 at 8%, to the lowest rate in 2011 at 4%. In 2011, both Aroostook and Penquis reported the highest rates of drinking and driving at 6%, this was only slightly higher than the state average.



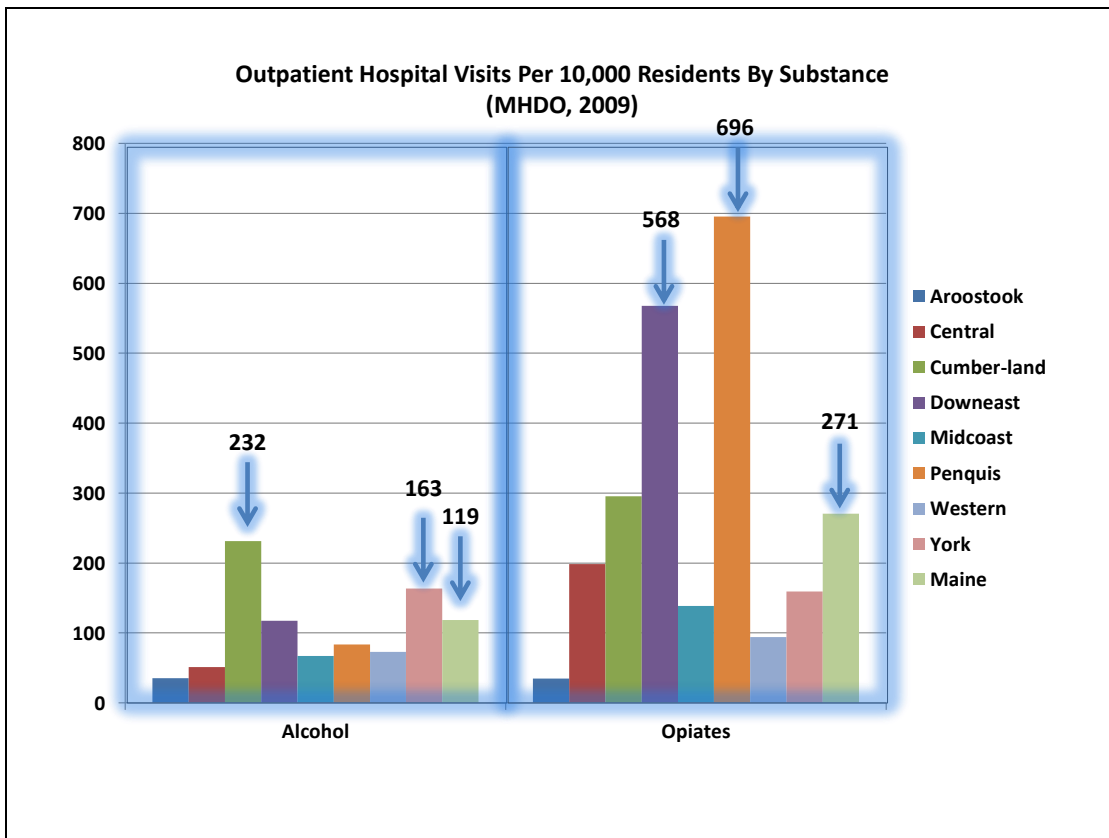
While drinking and driving rates have been declining, it does not appear the same can be said for high school students riding with a driver that is intoxicated by drugs or alcohol. Although a significant decrease was observed in Downeast, from 24% in 2009 to 18% in 2011, increases were seen in Aroostook as well as Cumberland. Statewide, it appears that a little over one fifth of students claimed to have ridden with a driver who was under the influence of drugs or alcohol in the past 30 days. The highest rates were found in Maine’s most densely populated public health districts, Cumberland and York.



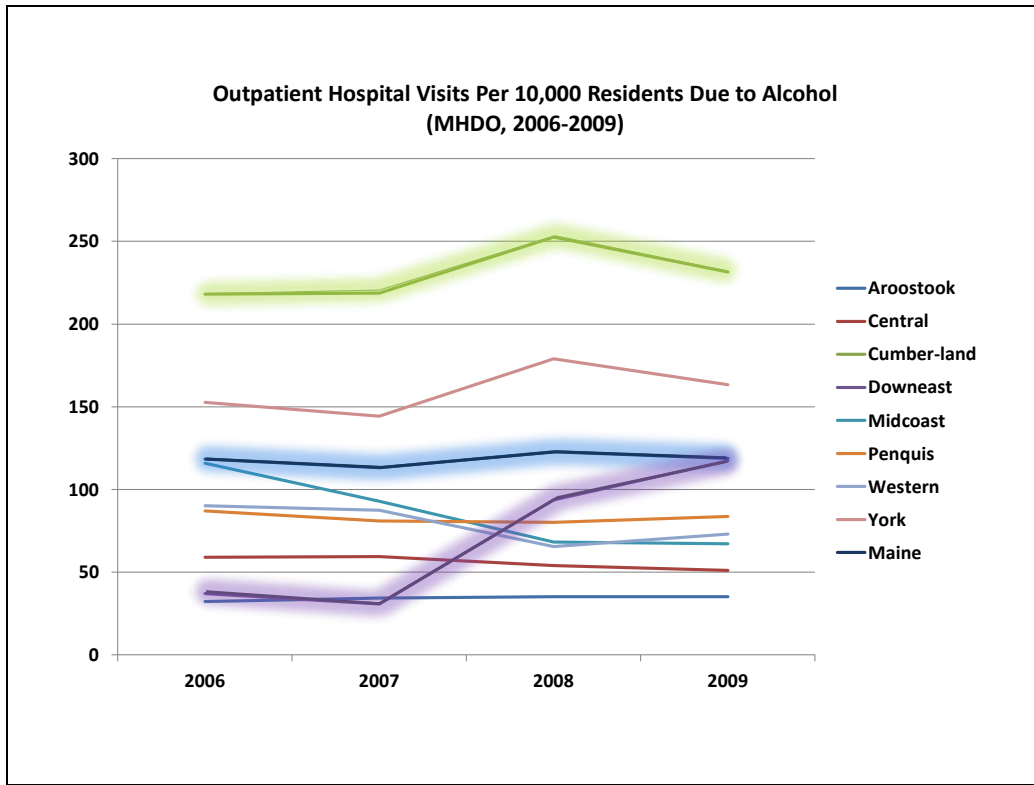
This chart gives us a snapshot of the alcohol related arrests and drug related arrests per 10,000 residents in 2010. Right off, it is evident that there were almost twice as many alcohol related arrests as there were drug related arrests. Statewide, there were about 84 arrests per 10,000 residents that were related to alcohol. The highest rate was found in York with 104 arrests per 10,000 and the lowest rate was observed in Aroostook with 65 arrests per 10,000. When we take a look at drug related arrests, we can see that there were about 45 arrests per 10,000 residents related to drugs statewide in 2010. The highest drug related arrest rate was found in Western Public Health District with 54 arrests per 10,000 followed closely by Midcoast with a rate of 53 arrests per 10,000. The lowest rate proved to be in the Central Public health district with 36 arrests per 10,000 residents. Since arrest rates are expected to increase with increased enforcement regardless of whether a decline in criminal behavior is observed, it is important for us to keep in mind that less or more arrests is not necessarily indicative of how well an area is doing concerning substance abuse.



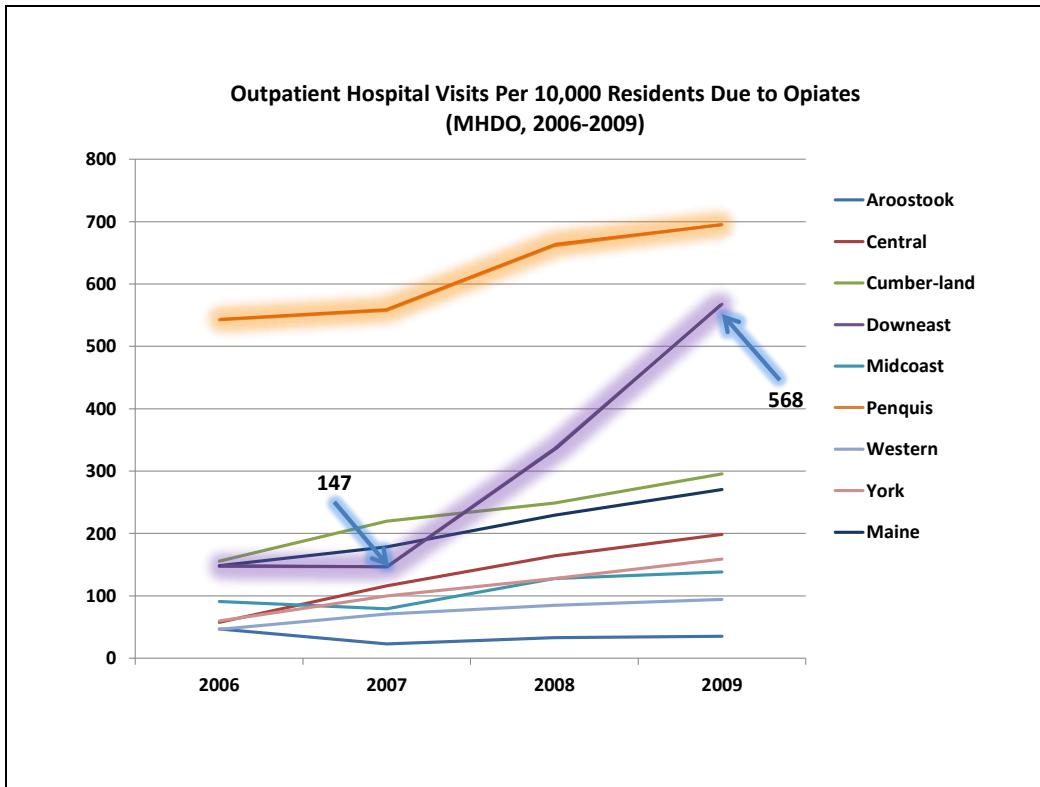
This chart examines the alcohol and/or drug crash rate per 10,000 residents. Although not pictured here, in 2009, it was estimated that alcohol was attributed to 96 percent of the alcohol and/or drug related crashes statewide. For the most part, all public health districts seem to have steadily declining crash rates. Highlighted in blue, the statewide average declined from around 15 crashes per 10,000 in 2006 down to 9 crashes per 10,000 in 2011. It appears that all Public health districts, except Penquis (highlighted in orange) and Central (highlighted in red), saw a decrease from 2010 to 2011. For the last two years shown, the highest alcohol and/or drug related crash rates were observed in Downeast (highlighted in purple), reporting an average of about 12 crashes for every 10,000 residents in 2011.



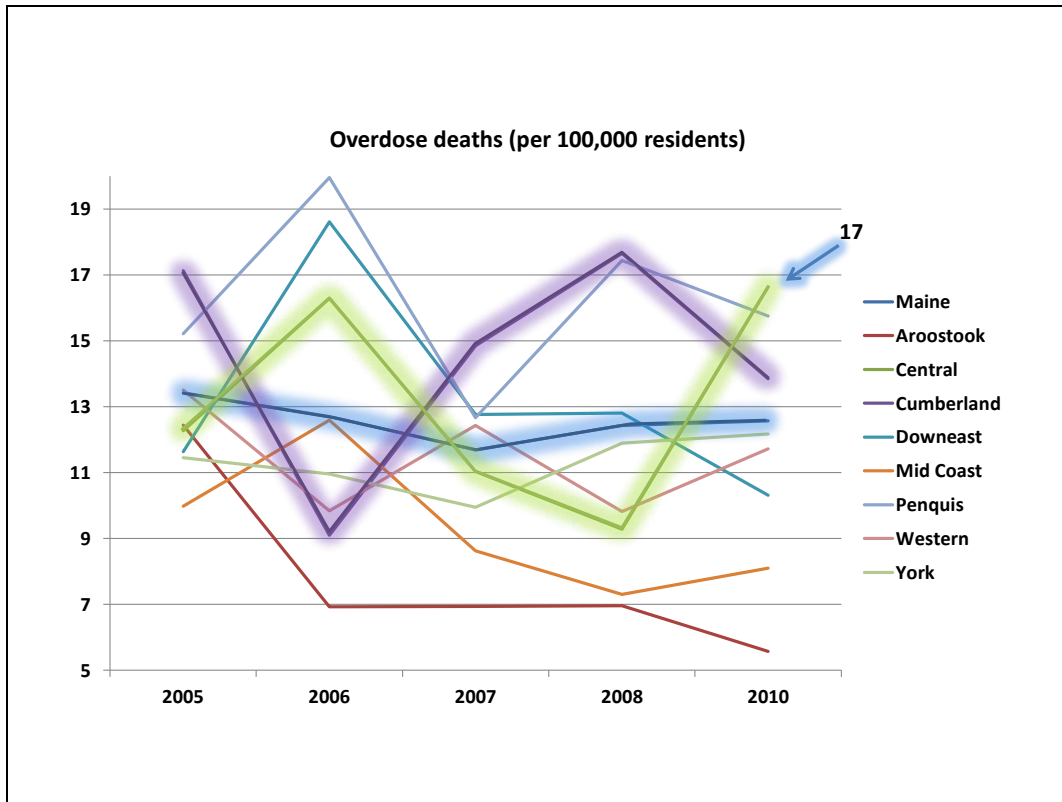
Here is a snapshot of the latest data we have on outpatient hospital visits by substance. The left side of the chart represents the rate of outpatient hospital visits due to alcohol. In 2009, the statewide average was at about 119 outpatient visits per 10,000 residents. Cumberland had the highest rate at 232 visits per 10,000, followed by York with a rate of 163 visits per 10,000 residents. When we shift to the right side of the chart and examine the rate of outpatient hospital visits due to opiates, we can see that statewide rate for opiate visits is more than double than that of alcohol. In 2009, the state averaged 271 outpatient visits per 10,000 residents. This statewide rate was driven upward mostly by high rates observed in the Downeast and Penquis Public Health Districts. In 2009, with 696 outpatient visits per 10,000 residents, Penquis had a opiate related visit rate rate that was 8.3 times greater than its rate for outpatient visits due to alcohol.



If we take a quick look at the trend for alcohol related outpatient visit rates, we can see that the statewide average (highlighted in blue) has remained relatively stable, Cumberland (highlighted in green) has consistently had the highest rate from 2006 to 2009 while Downeast (highlighted in purple) was the only public health district to see increases in rates in both 2008 and 2009.



When we take a look at the trend patterns concerning outpatient hospital visits due to opiates, it's evident that Penquis (highlighted in orange) consistently had the highest rates between 2006 and 2009. It also appears that Downeast has been increasing in outpatient visits due to opiates at a startling rate. Downeast's rate (highlighted in purple) increased rapidly from 147 outpatient visits per 10,000 residents in 2007 to 568 visits per 10,000 residents in 2009.



This graph shows the rate of deaths determined by the State Medical Examiner to be caused by substance abuse or overdose, per 100,000 people. At first glance, you can tell how volatile rates are within public health districts. From 2005 to 2010, the statewide rate (highlighted in blue) ranged between 12 and 14 deaths per 100,000 residents. Cumberland (highlighted in purple) had the highest overdose rates for 3 out of the 5 years shown. From 2008 to 2010, Central (highlighted in green) saw a steep increase in the rate of overdoses. In 2010, Central had the highest rate at about 17 overdose deaths per 100,000.

Contributing Factors

- Social Access
- Retail Availability
- Pricing & Promotion
- Social/Community Norms
- Enforcement
- Perceptions of Harm
- Perceived Risk of Being Caught

Research has identified certain groups of factors that 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

Retail Availability

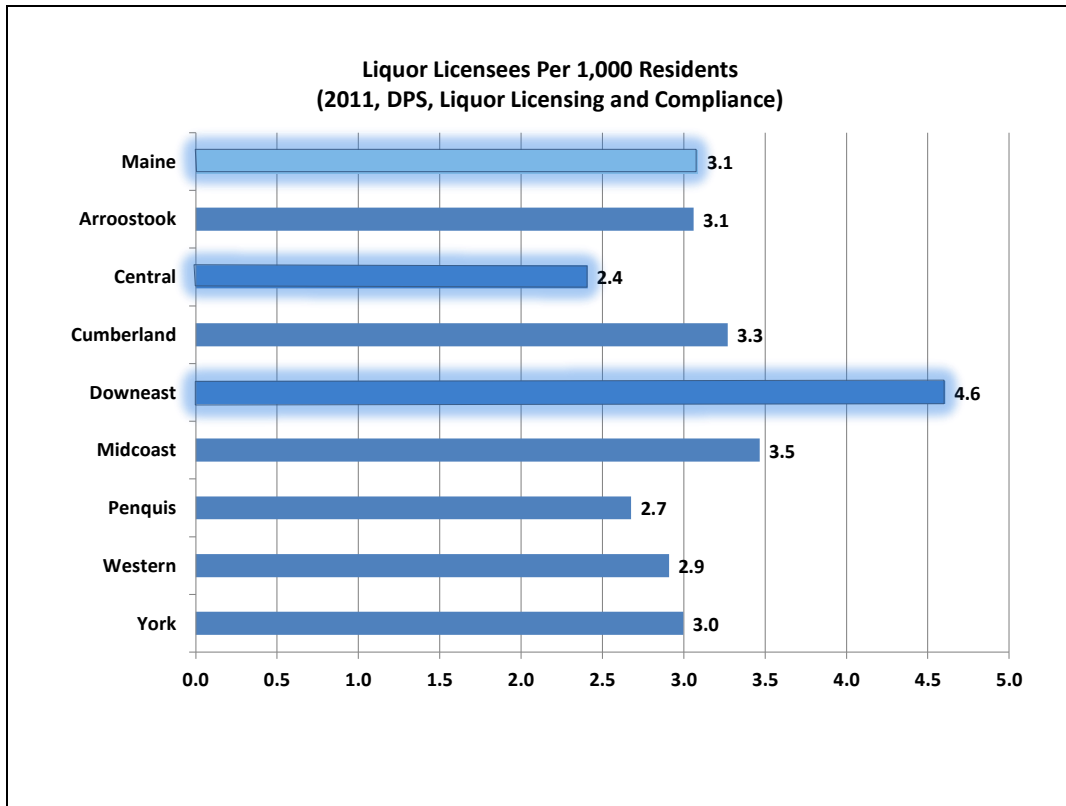
Pricing & Promotion

Social and Community Norms

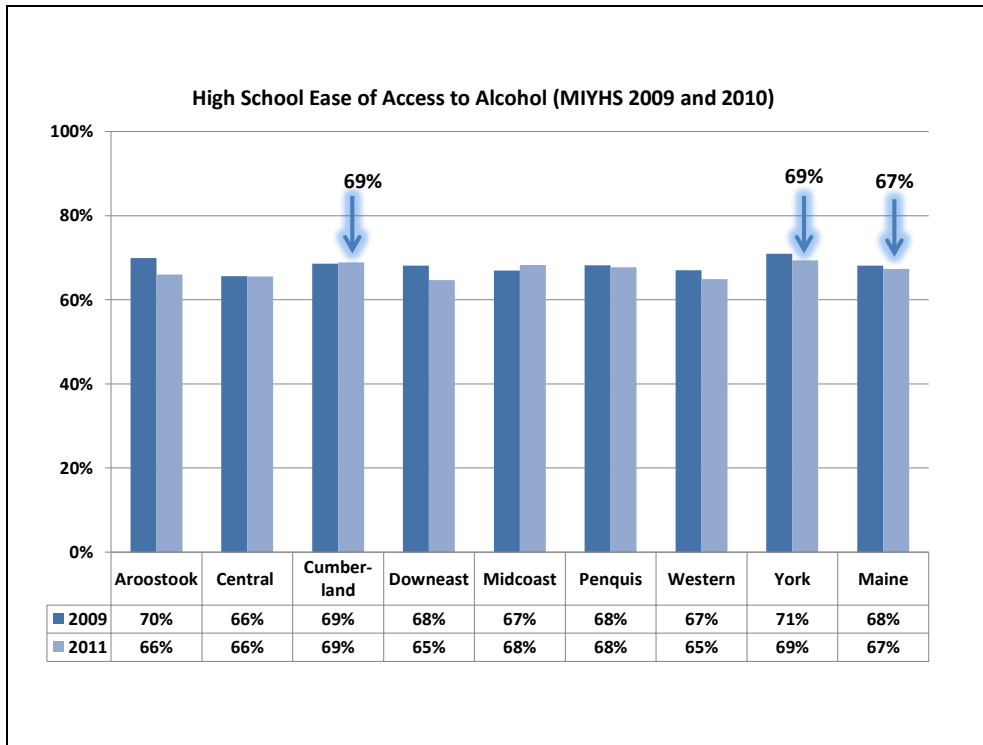
Enforcement

Perceptions of Harm

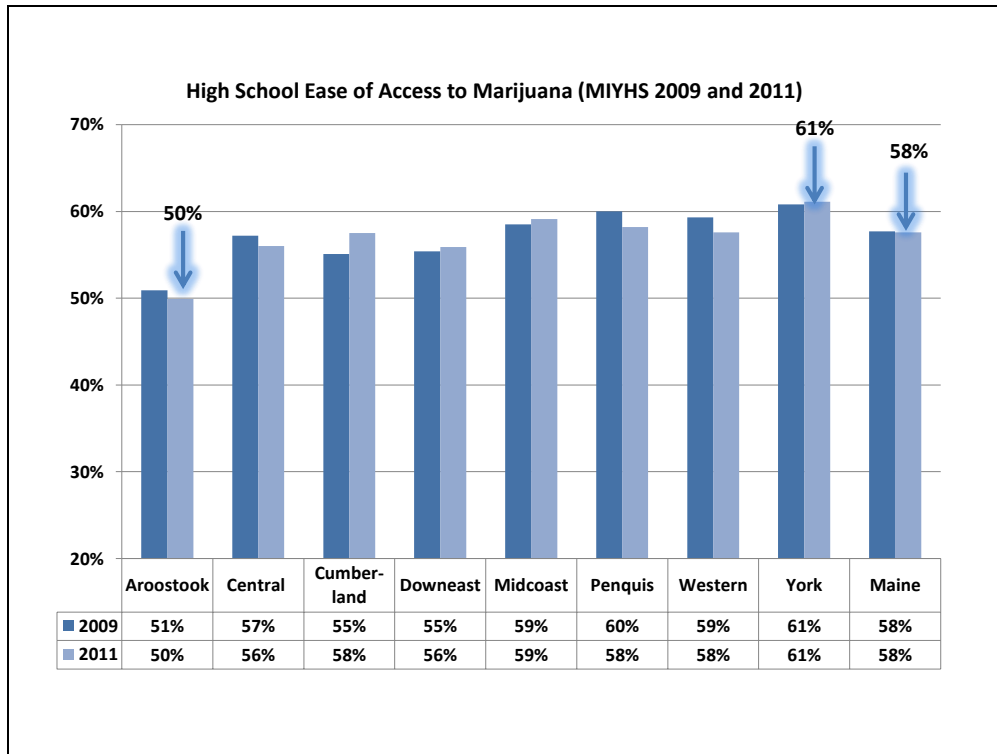
Perceived Risk of Being Caught



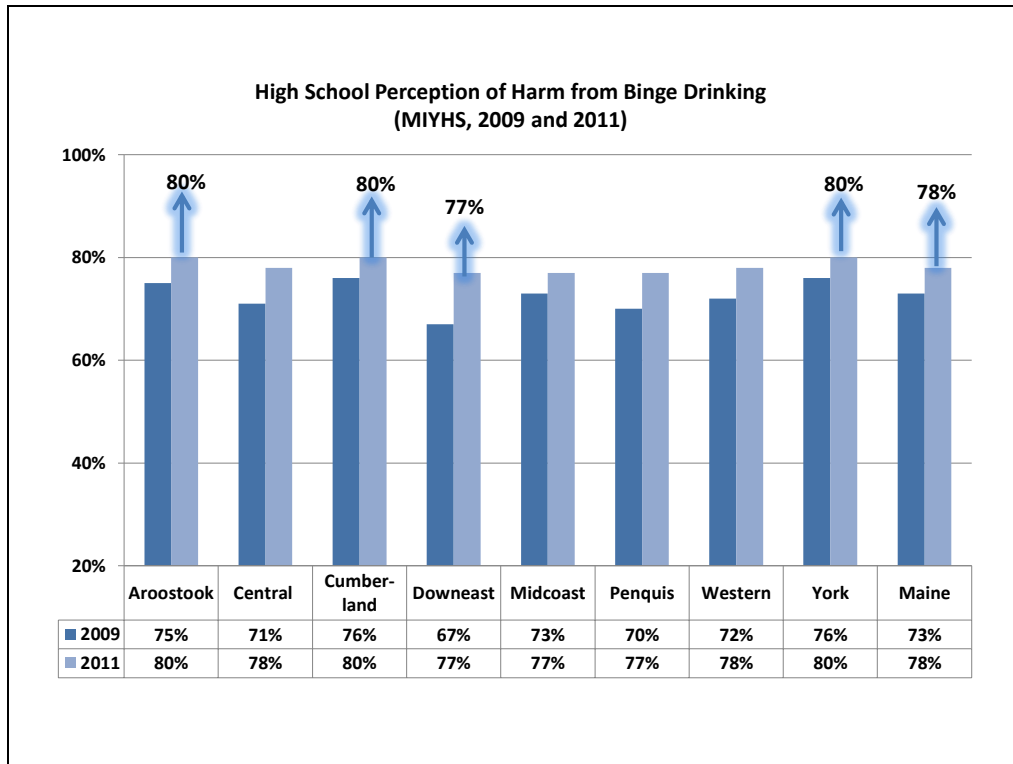
These next few slides represent indicators that attempt to measure the availability and accessibility of substances. This particular chart examines the rate of liquor licensees per 1,000 residents. Although not pictured here, the state rate has not changed much within the past few years. In 2011, Maine had 3.1 liquor licensees per every 1,000 residents. Downeast had the highest rate with 4.6 liquor licensees per 1,000 residents while Central had the lowest rate with 2.4 liquor licensees per 1,000 residents.



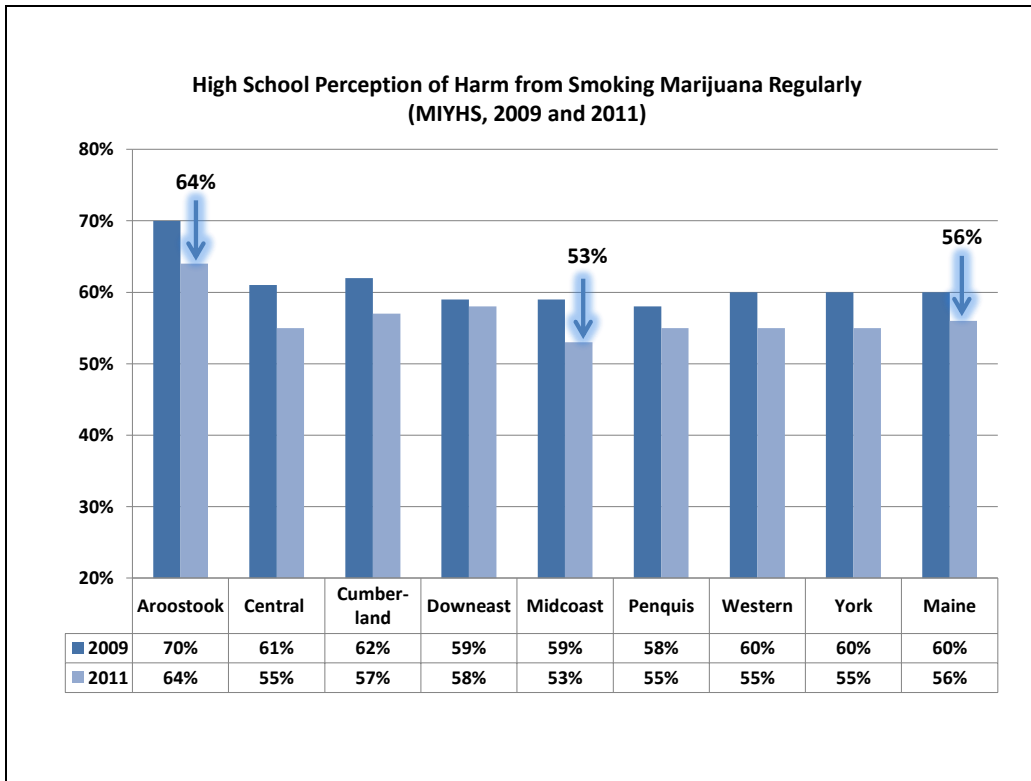
Well over half of high school students in all of the Public Health Districts reported that it would be easy to get alcohol. In 2011, the statewide average was 67%, this was a slight decrease from 2009. Rates were very similar across Public health districts and have changed very little from 2009 to 2011. The highest rates were found in Cumberland and York. In those public health districts, just about 7 out of every 10 students felt alcohol was easily accessible.



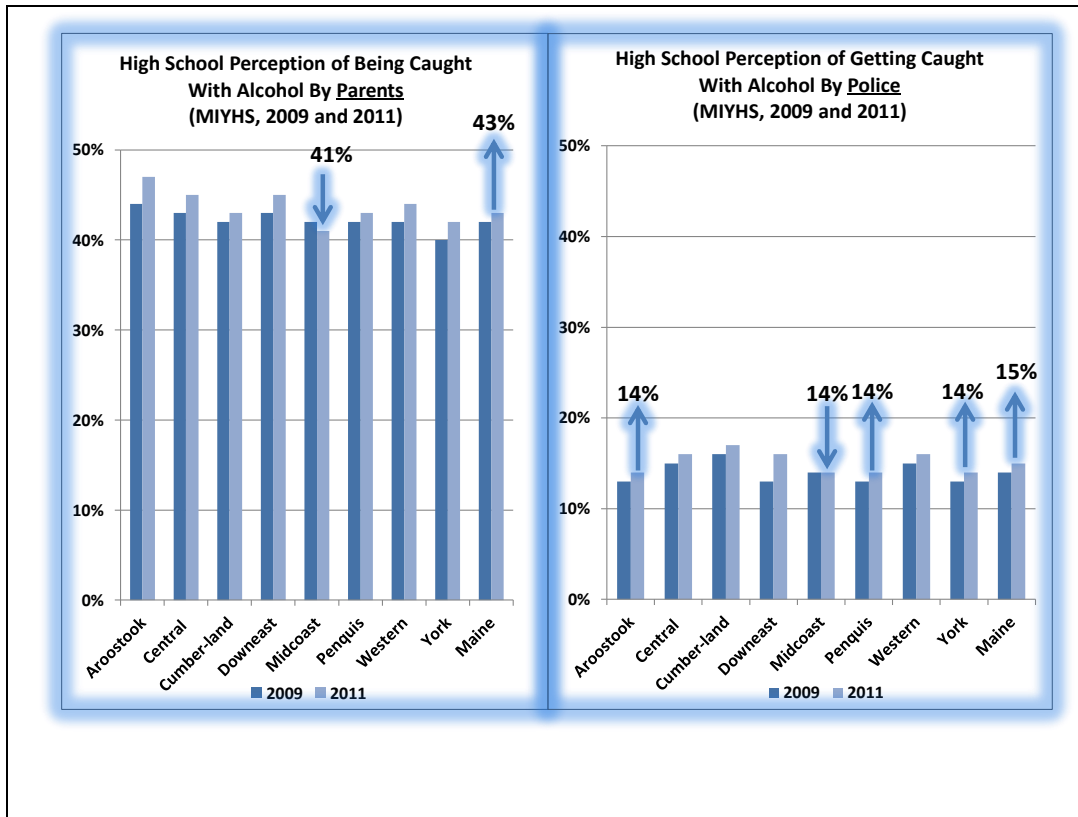
Similar to the perception of access to alcohol, most students in Maine feel it would be fairly easy to get marijuana as well. In 2011, 58% of Maine High School students felt that it would not be difficult to obtain marijuana, this rate hadn't change since 2009. York, as had been observed with accessibility of alcohol, had the highest rate for perception of access to marijuana for both 2009 and 2011, at 61%. The lowest rates were found in Aroostook with about half of students living there reporting that marijuana was easily accessible.



The next two slides concern the perception of harm of substance abuse among high school students in Maine. The good news is that from 2009 to 2011, Maine saw an overall increase in the proportion of high school students who felt binge drinking was harmful. The state average increased from 73% to 78%. Downeast observed the greatest change with an increase of 10 percentage points. In 2011, within the public health districts of Aroostook, Cumberland, and York, 8 out of 10 high school students felt binge drinking was harmful.



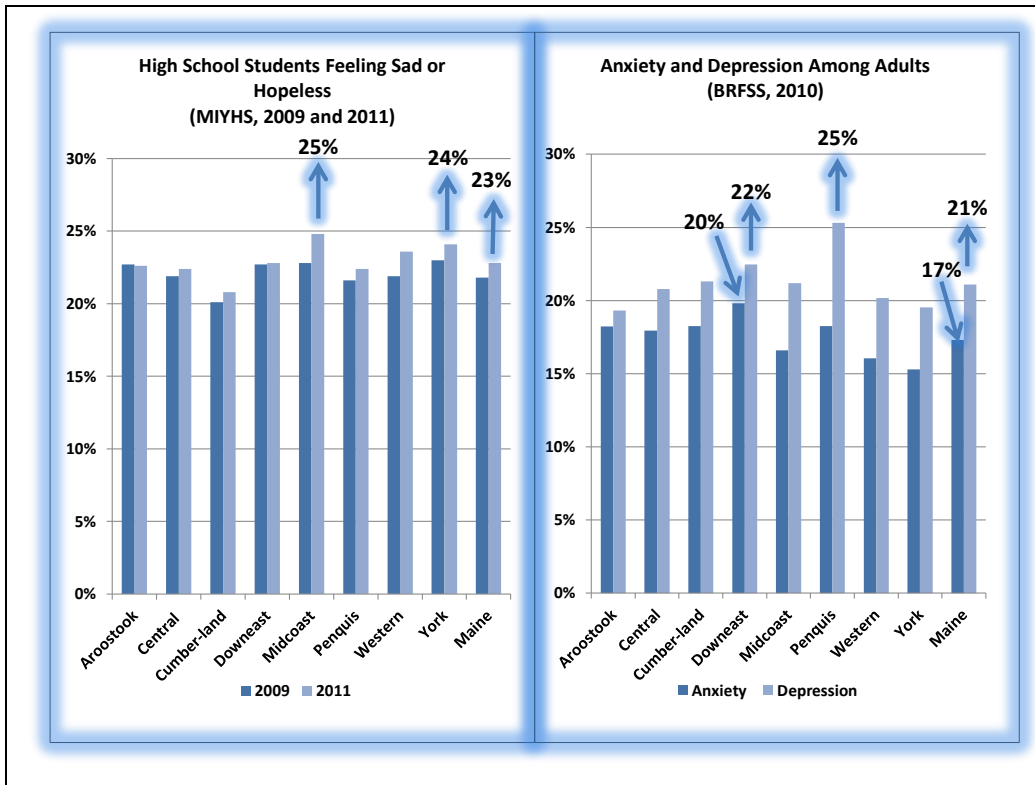
When high students were asked whether or not they perceived smoking marijuana on a regular basis was harmful, the reports weren't as positive. The statewide average decreased from 60% in 2009 to 56% in 2011. A decrease in perception of harm was seen across every public health district. In fact, there was a decrease of 5 or more percentage points in 6 out the 8 public health districts shown. Aroostook and Midcoast saw the largest drops with Midcoast observing the lowest rate in perception of harm in 2011 at 53%.



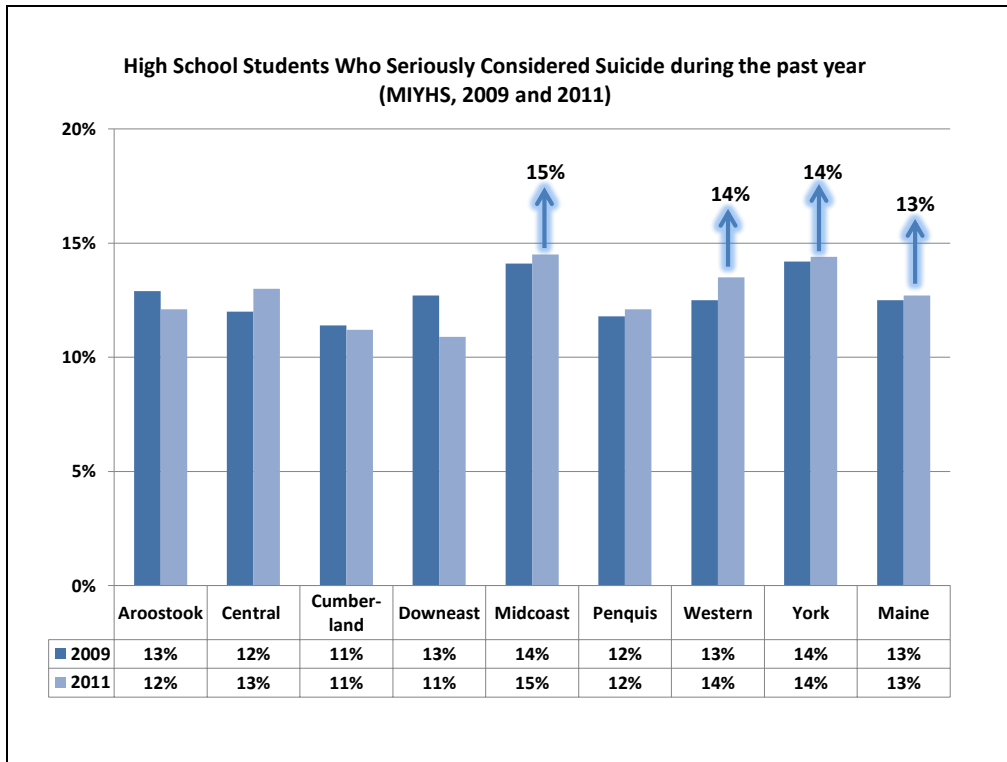
These two charts attempt to measure Maine High school students' perception of getting caught for drinking alcohol. The chart on the left looks at high school students' perceptions of getting caught for drinking by their parents. Statewide, this rate increased slightly in 2011 to 43%. While this increase does seem to indicate some progress, alternatively, well over half of high school students in Maine thought they would not get caught by their parents. Midcoast was the only public health district to see a slight drop in perception, leaving it with the lowest rate among public health districts at 41%. If we take a look at the chart on the right, it is clear that the vast majority of students do not think they will be caught by the police for drinking. In 2011, only 15% of Maine high school students thought they would be caught. At around 14%, four out of the eight Public Health Districts were slightly below the state average. This means that 86 percent of students in those areas were not worried about getting caught for drinking by the police.



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.



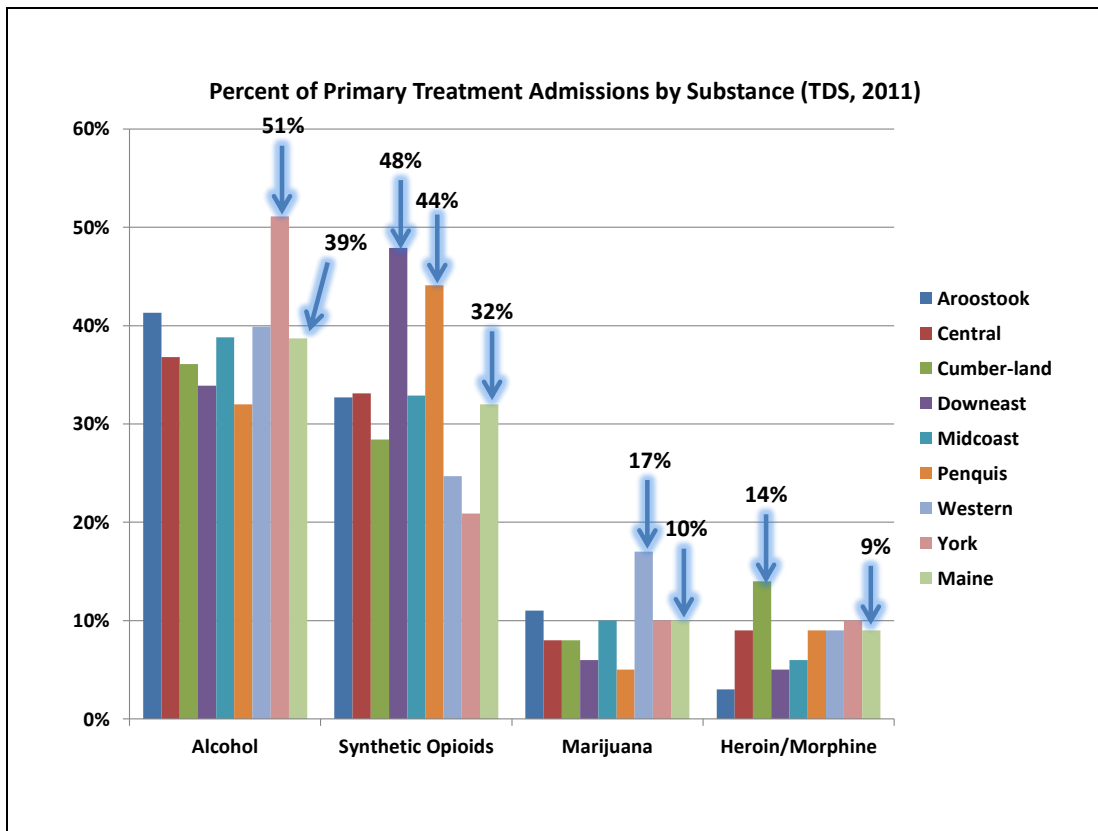
Displayed here are two indicators that attempt to gauge the anxiety and depression among Maine’s youth and adults. The indicator on the left asked high school students if they felt so sad in the past year that they stopped doing their usual activities for at least two weeks. The statewide average increased slightly to 23% in 2011. Midcoast at 25%, and York at 24% reported the highest rates of students who felt sad or hopeless. If we shift to the right side of the slide, we can observe a snapshot of adult rates for anxiety and depression. 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. In 2010, 17% of adults were told they had anxiety, while 21% were told they had depression. The highest rate of anxiety was observed in Downeast at a rate of 20%. Downeast also had the second highest rate of depression at 22%. The Penquis public health district reported the highest rate with 1 in 4 adults residing there reporting they had been told they had depression.



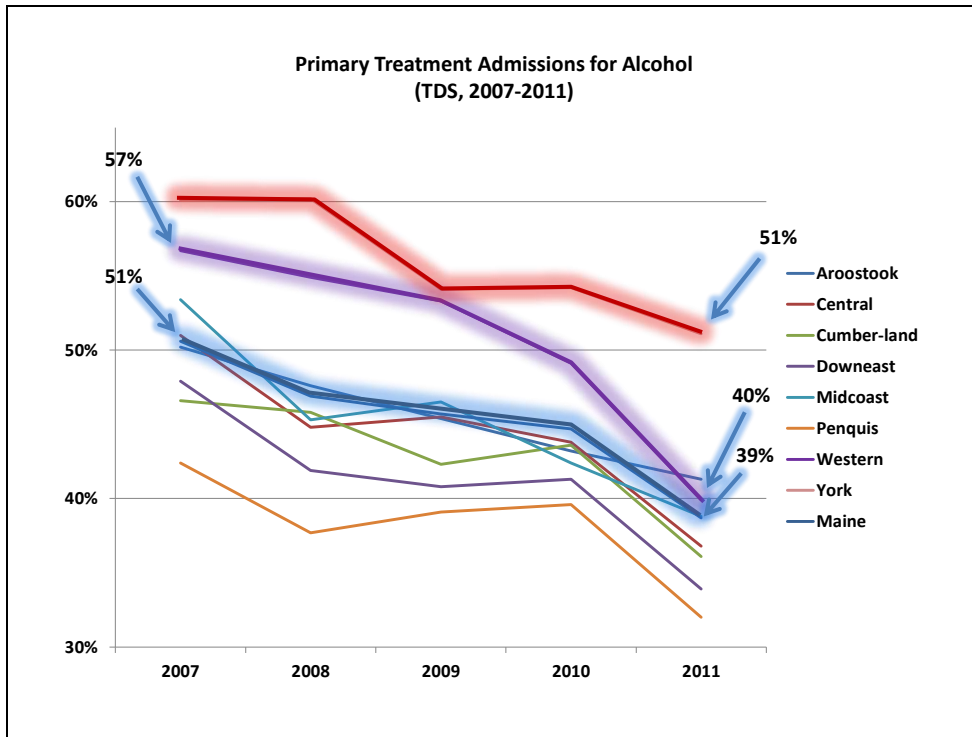
This indicator takes a look at the frequency of suicide ideation among Maine high school students. In 2011, the statewide rate of high school students who seriously considered suicide was 13%, which had not changed since 2009. The highest rates of suicide ideation in 2011 were observed in Midcoast at 15%, followed by Western and York at 14%.



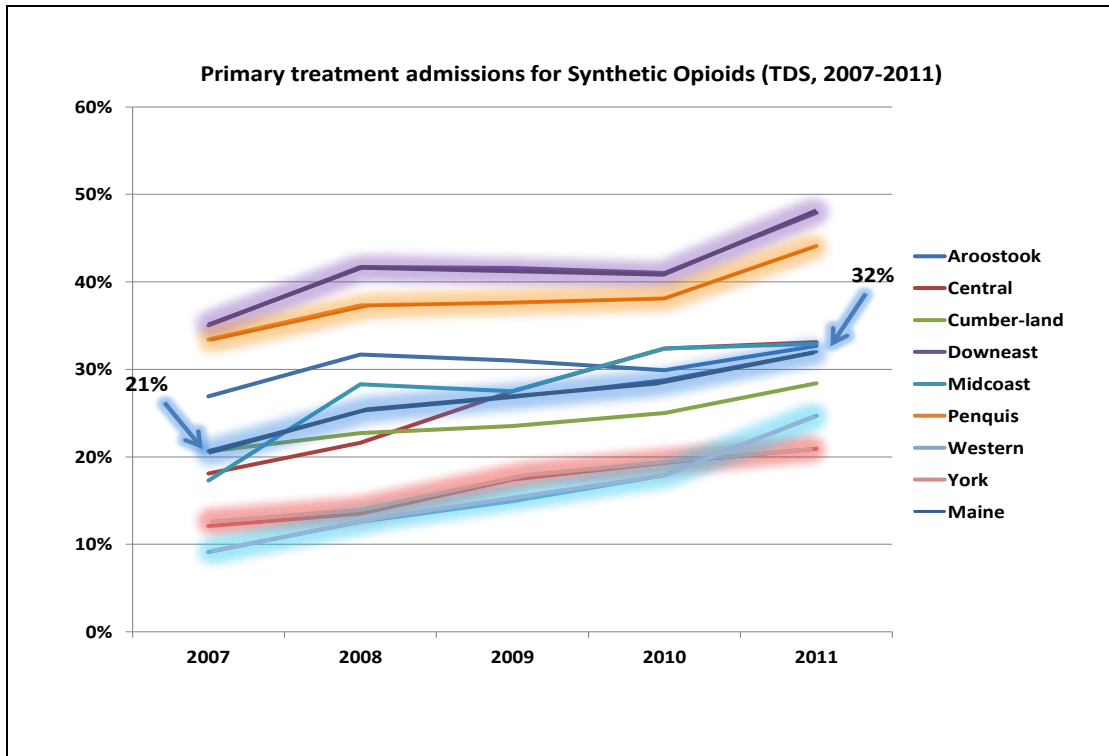
Substance abuse treatment admissions are an indicator of how many people *receive treatment* for a substance abuse problem. Treatment admission data should not be used as an indicator of the magnitude of the problems related to substance abuse. Rather, treatment should be seen as a major consequence from substance use and one that requires many resources. Information regarding treatment admissions can also provide useful information about the patterns of substance use among various populations.



This indicator examines the proportion of primary treatment admissions by the four most common substances sought for treatment in 2011. At 39%, alcohol remains to be the most common primary reason in which people seek treatment in Maine. This was followed by Synthetic Opioids at 32%, Marijuana at 10% and heroin and/or morphine at 9%. In 2011, York had the highest rate of primary treatment admissions for alcohol at 50%. Similar to patterns of outpatient hospital visits due to opioids, Downeast and Penquis stood out in primary treatment admissions for synthetic opioids, with the highest rates at 48 and 44 percent. Western public health district had the highest rate for primary treatment admissions due to Marijuana at 17%, while Cumberland reported the highest rate for primary treatment admissions due to heroin and/or morphine at 14%.



Overall, it appears that the percent of primary treatment admissions for alcohol have been steadily declining since 2007 in all public health districts shown here. The statewide rate (highlighted in blue) decreased from 51% in 2007 to 39% in 2011. Western's rate (highlighted in purple) fell by 17 points in 5 years, from 57% in 2007 down to 40% in 2011. York (highlighted in red) has consistently had the highest percentage of primary treatment admissions for alcohol. In 2011, alcohol accounted for a little over half of all the primary treatment admissions in York.



This last indicator shows us the 5 year trend for primary treatment admissions due to synthetic opioids. In contrast to alcohol, it is evident that primary treatment admissions for synthetic opiates have been steadily increasing among all public health districts in Maine. The statewide average increased from 21% in 2007 to 32% in 2011. It appears that since 2007, Downeast (highlighted in purple) and Penquis (highlighted in orange) held the highest rates while Western (highlighted in turquoise) and York (highlighted in pink) observed the lowest rates.

Conclusion

Consumption

- Alcohol is still the most often used substance in Maine.
- Adult past 30 day alcohol use has not changed much over the past several years and is more prevalent in Maine's more densely populated regions in the south and on the coast.
- High school rates of past 30 day use and binge drinking have been decreasing since 2009
- Cigarette use among adults is higher in more rural areas particularly in Northern and Central Maine.
- Marijuana use continues to be prevalent among Maine High School students especially in southern and coastal regions.
- Marijuana use among adults has remained fairly low but has observed some substantial increases in some public health districts
- Prescription drug misuse is down among high school students with a statewide average of 7%.

Conclusion

Consequences

- Drinking and Driving rates have decreased among high school students in Maine
- 1 in 5 high school students reported having ridden with an intoxicated driver in the past 30 days.
- Alcohol related arrests continue to be most prevalent in southern and central communities.
- Drug related arrests seem to be more predominant in rural and less densely populated regions in Maine.
- Alcohol and/or drug related crash rates have been declining overall for the past several years.
- Outpatient hospital visits due to opiates have been steadily increasing and are much higher in particular areas.

Conclusion

Contributing Factors

- 2 out of 3 high school students feel it would be easy get alcohol in Maine.
- Well over half of high school students in Maine think Marijuana is easily accessible.
- More high school students perceive a risk of harm from binge drinking.
- Fewer high school students feel that smoking marijuana on a regular basis is harmful – Almost half of high school students felt smoking marijuana on a regular basis was not risky.
- Students are much more like to think they would be caught by their parents for drinking rather than the police – Only 15% of high school students thought they would be caught by the police for drinking in their neighborhood.

Conclusion

Mental Health

- Anxiety and Depression rates among youth and adults in Maine appear to be increasing particularly among coastal and rural areas.
- More than 1 in 10 high school students seriously considered suicide in 2011.

Treatment

- Although rates have been steadily decreasing over time, alcohol continues to be the most common substance sought for treatment.
- Synthetic opioids are the second most common substance in which Mainers seek treatment – Rates have been steadily increasing and are much higher in particular public health districts.

Questions/Comments?

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Reports can be found at the following
link:

www.maine.gov/dhhs/osa/data/profiles.htm