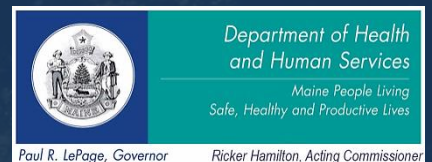




# Substance Abuse Trends in Maine

## Penquis District Epidemiological Profile 2017



Produced for Maine Department of Health and Human Services  
State Epidemiological Outcomes Workgroup (SEOW)  
[www.maineoseow.com](http://www.maineoseow.com)

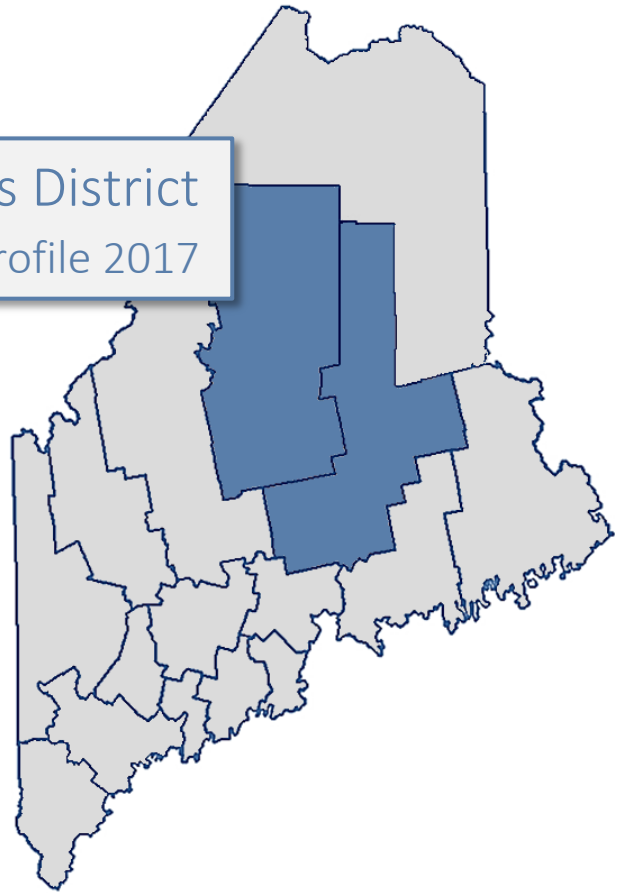
by Hornby Zeller Associates, Inc.

September 2017



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## Penquis District Epidemiological Profile 2017



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

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## Introduction

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### Overview of Penquis Public Health District

Penquis Public Health District consists of Piscataquis and Penobscot Counties, which have a combined population of 168,649 people, representing approximately 13 percent of Maine's total population in 2016. There are 23 people per square mile, making it one of the least densely populated public health districts in Maine. The State of Maine is considered an "aging" state, with 19 percent of the population being 65 years old and over, a higher rate than the overall US population (15%). In Penquis, 21 percent of the population was 65 years old or older in 2016. Approximately 95 percent of Penquis's population is Caucasian, followed by Hispanic (1.4%), Asian (1.0%), American Indian (0.9%), and Black or African American (0.8%). With a median income of \$40,883, 18 percent of the population lives below the poverty level (among the highest rates observed in the state). In sum, Penquis tends to be slightly older and more poverty-stricken compared to the rest of the state.

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

### Purpose of this Report

This report takes into account the objectives of the Maine Department of Health and Human Services (DHHS): 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 SAMHS 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 June 2017. 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.

The most recent data available for the Maine Integrated Youth Health Survey (MIYHS) are from 2014. In addition, please note that data results from the 2013 Maine Integrated Youth Health Survey are not available for the Penquis Public Health District due to an insufficient sample size.

For additional data and resources please visit the Maine State Epidemiological Outcomes Workgroup (SEOW) data dashboard at [www.maineoseow.com](http://www.maineoseow.com).

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## Consumption of Substances

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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 youth and adults across the lifespan, both in Penquis and statewide. Over the past five years, fewer high school students and adults reported smoking cigarettes, although a third of 18 to 25 year olds in Penquis reported binge drinking. Overall, binge drinking rates among adults 18 and over has been increasing in recent years. Fewer high school students in Penquis reported having used/misused marijuana, prescription drugs, or cocaine when compared to the state. According to the Behavioral Risk Factor Surveillance System (BRFSS), Penquis adults ages 18 to 34 had the highest rate of lifetime prescription drug misuse across all public health districts; this type of misuse occurred at almost twice the statewide average.

## Alcohol

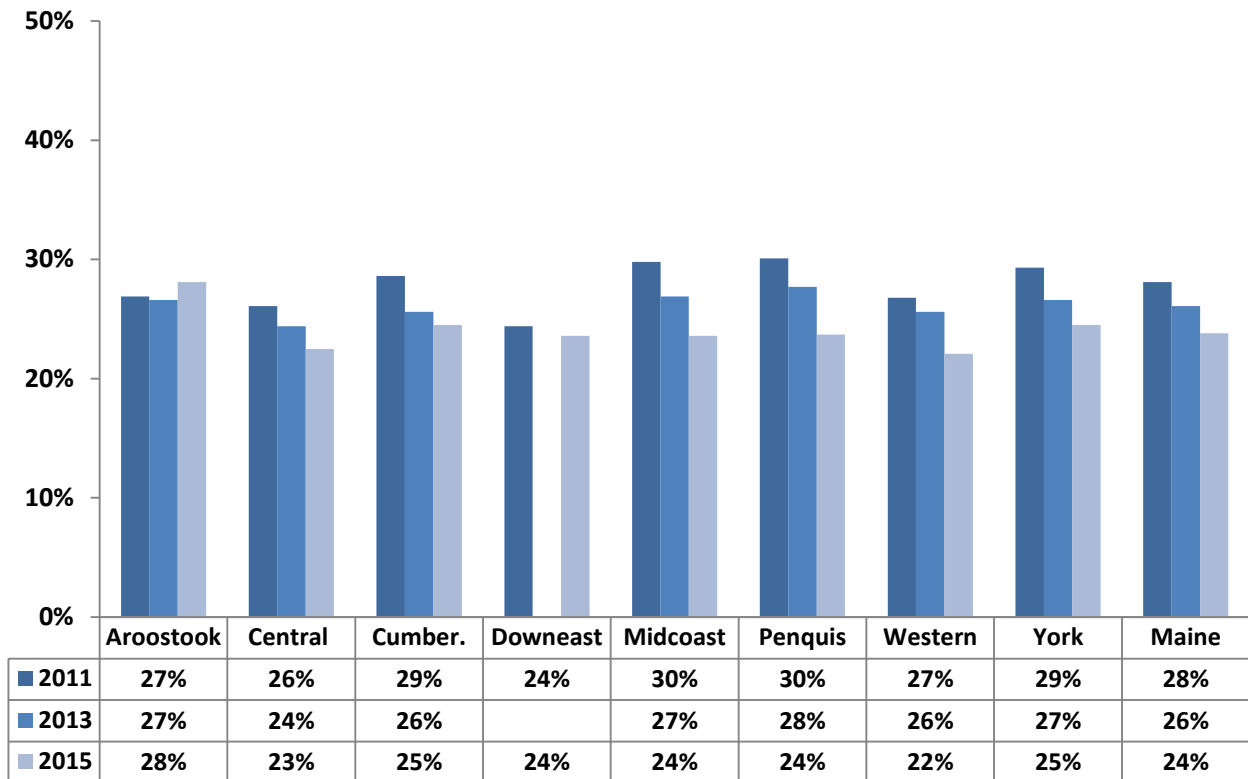
**Indicator Description: ALCOHOL USE AMONG YOUTH.** This measure shows the percentage of Maine high school students who reported having had one or more alcoholic drinks within 30 days prior to the survey.

**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, 2011–2015

**Summary:** In Penquis, the percentage of students who reported drinking in the past 30 days decreased from 30 percent in 2011 to 24 percent in 2015; the percentage statewide decreased from 28 to 24 percent over the same timeframe.

**Figure 1. Percent of high school students by Public Health District who had at least one drink of alcohol during past 30 days: 2011–2015**



Source: MIYHS

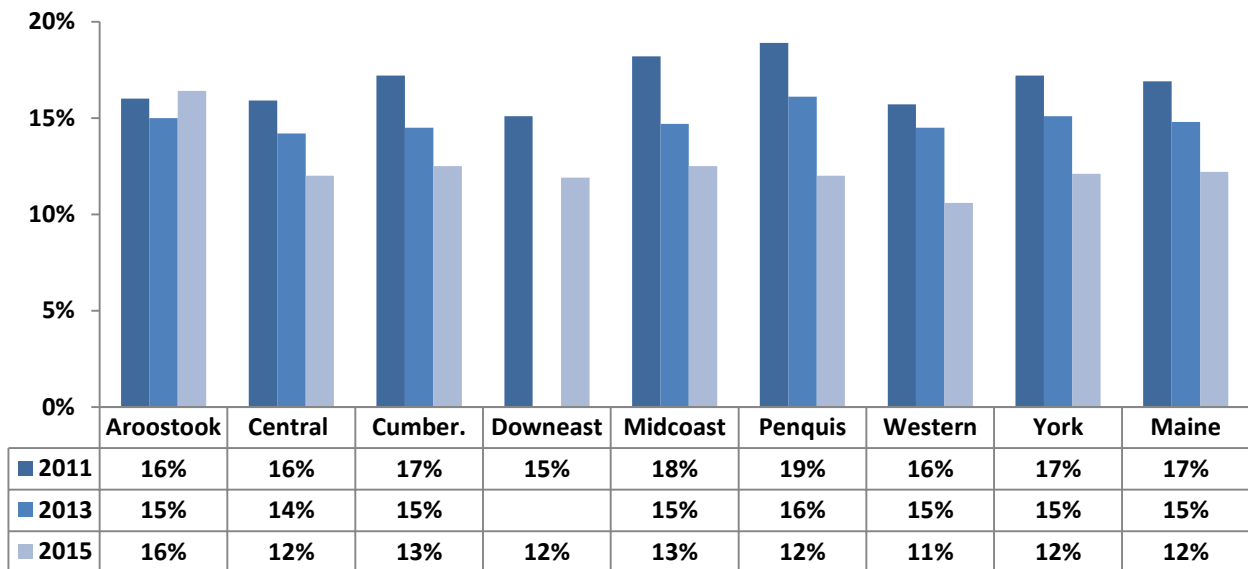
**Indicator Description: HIGH-RISK ALCOHOL USE AMONG YOUTH.** This indicator presents the percentage of Maine high school students who reported having had five or more alcoholic drinks in a row in one sitting at least once during the 30 days prior to the survey.

**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, 2011–2015

**Summary:** From 2011 to 2015, the percentage of high school students in Penquis who reported having consumed five or more alcoholic beverages in one sitting during the past 30 days decreased from 19 percent to 12 percent. This was on par with the current statewide average.

**Figure 2. Percent of high school students by Public Health District who had at least five drinks in a row during past 30 days: 2011–2015**

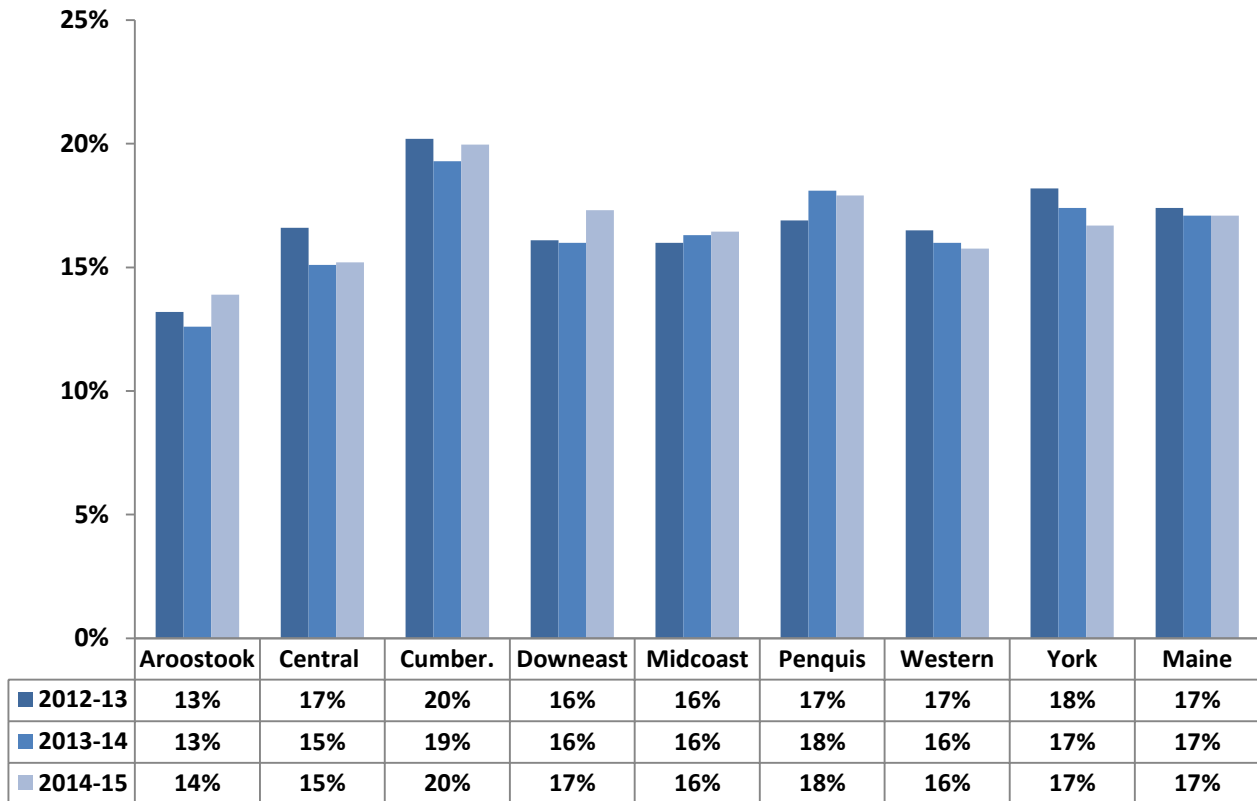


Source: MIYHS



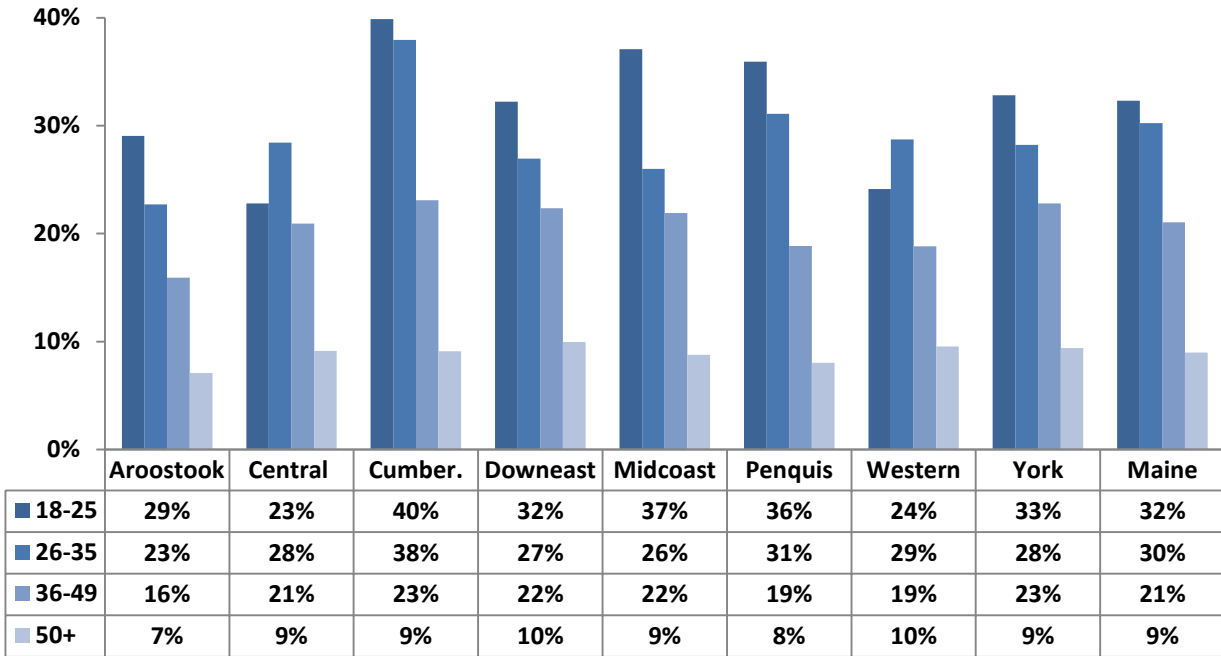
**Summary:** Binge drinking rates among adults 18 and over have remained relatively stable from 2012-13 (17%) to 2014-15 (18%). Looking across all years of available data, the highest rate of binge drinking in Penquis PHD is observed among the 18 to 25 year old population at 36 percent. Those between the ages of 26 and 35 years old had the second highest binge drinking rate in Penquis PHD at 31 percent, followed by 36 to 49 year olds (19%), and those 50 and older (8%). In addition, adult males in Penquis observed a higher binge drinking rate than adult females (22% compared to 13%).

**Figure 3. Percent of adults by Public Health District who reported binge drinking in past 30 days: 2012–13 to 2014–15**



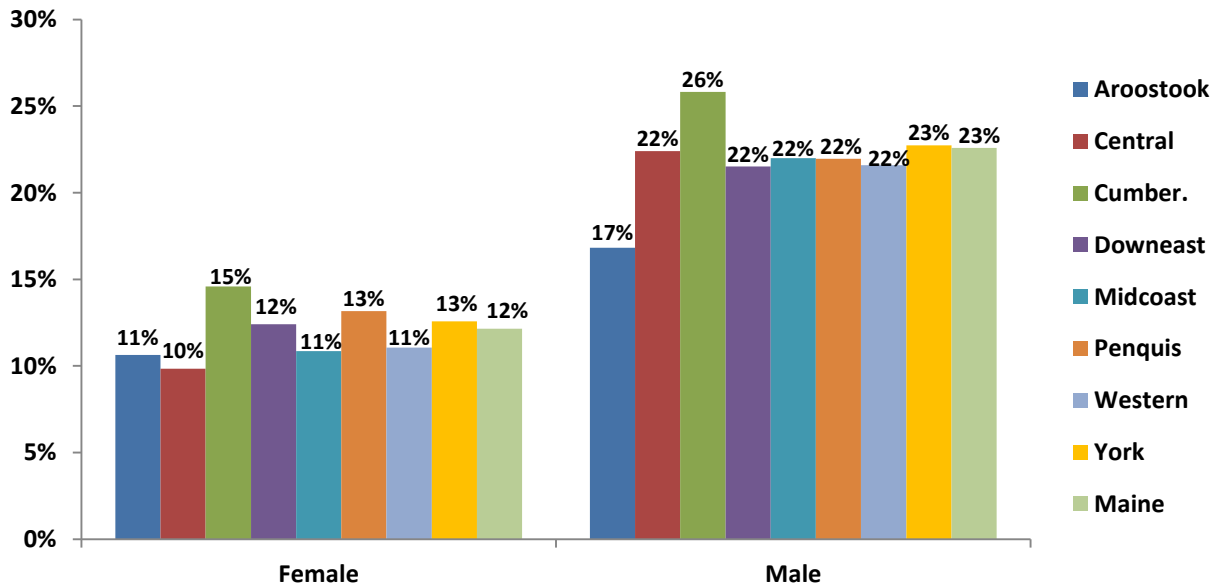
Source: BRFSS

**Figure 4. Percent of adults by Public Health District who reported binge drinking in past 30 days by age group: 2012–15**



Source: BRFSS

**Figure 5. Percent of adults by Public Health District who reported binge drinking in past 30 days by gender: 2012–15**



Source: BRFSS

## Tobacco

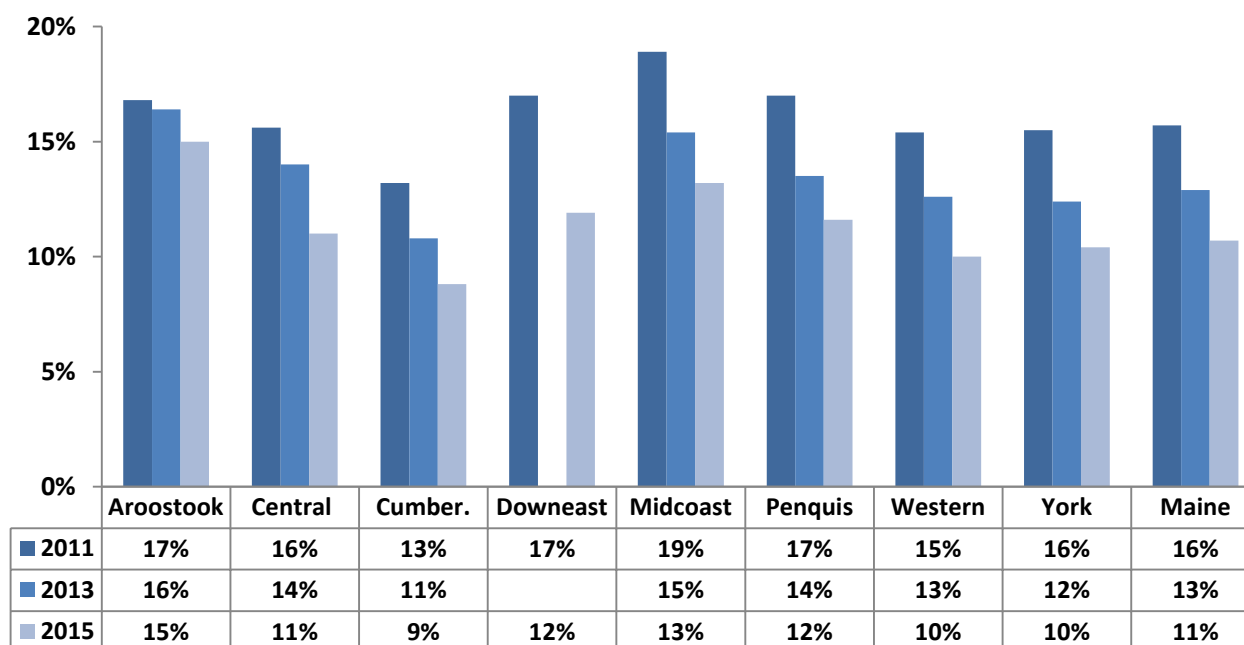
**Indicator Description: SMOKING AMONG YOUTH.** This indicator illustrates the percentage of Maine high school students who reported smoking a cigarette on at least one occasion within 30 days prior to the survey.

**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, 2011–2015

**Summary:** From 2011 to 2015 the percentage of high school students in Penquis who reported having smoked one or more cigarettes in the past 30 days decreased from 17 percent to 12 percent, slightly above the statewide average.

**Figure 6. Percent of high school students by Public Health District who reported smoking one or more cigarettes during past 30 days: 2011–2015**



Source: MIYHS

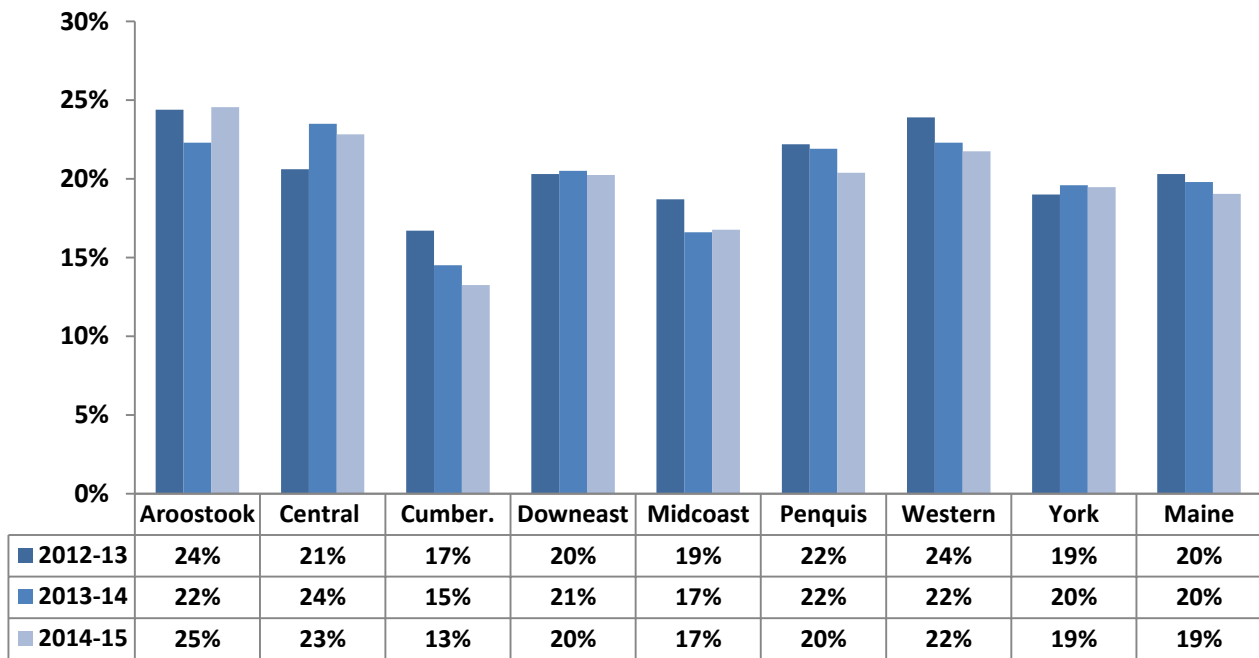
**Indicator Description: SMOKING AMONG ADULTS.** This indicator illustrates the percentage of Maine adults who reported using cigarettes on at least one occasion within 30 days prior to the survey.

**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, 2012–2013 to 2014–15, 2012–15

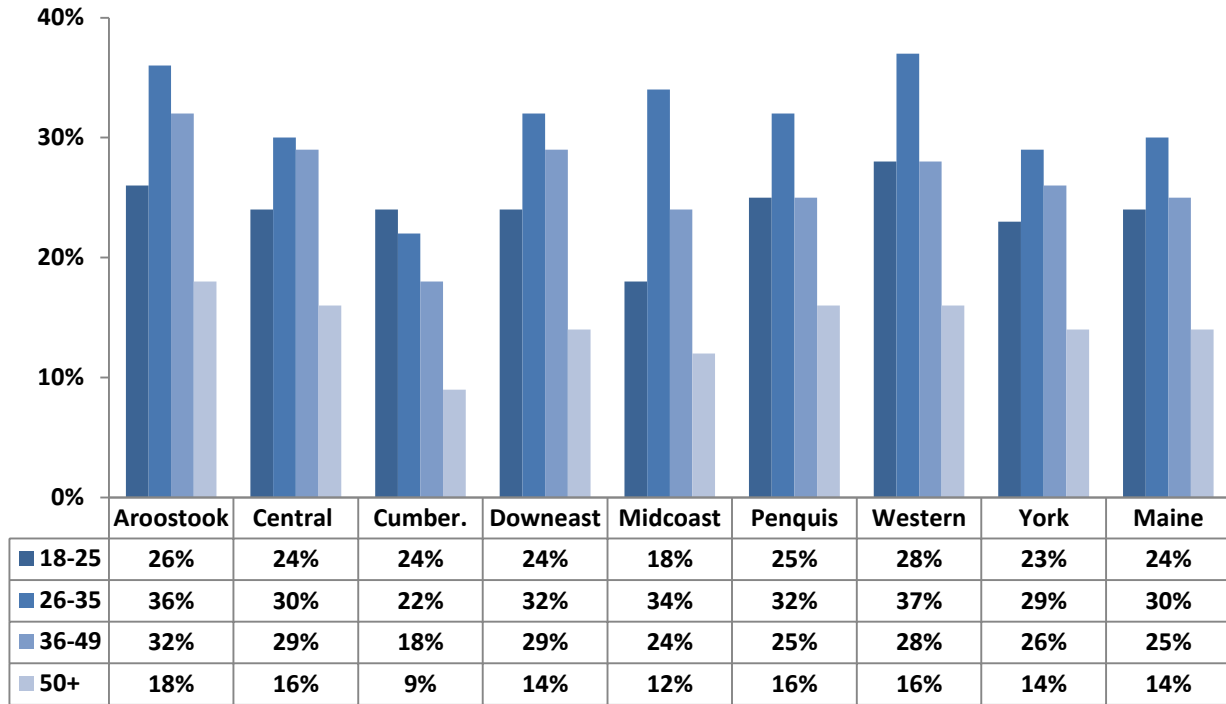
**Summary:** In 2014–15, 20 percent of adults in Penquis indicated they had smoked cigarettes in the past 30 days; this was slightly higher than the statewide average (19%). During the 2012–15 period, 26 to 35 year olds had the highest rates in Penquis at 32 percent, followed by 18 to 25 year olds and 36–49 year olds (25%). In addition, adult males in Penquis were notably more likely to smoke cigarettes than females (23% compared to 20%).

**Figure 7. Percent of adults by Public Health District who reported as current smokers: 2012–13 to 2014–15**



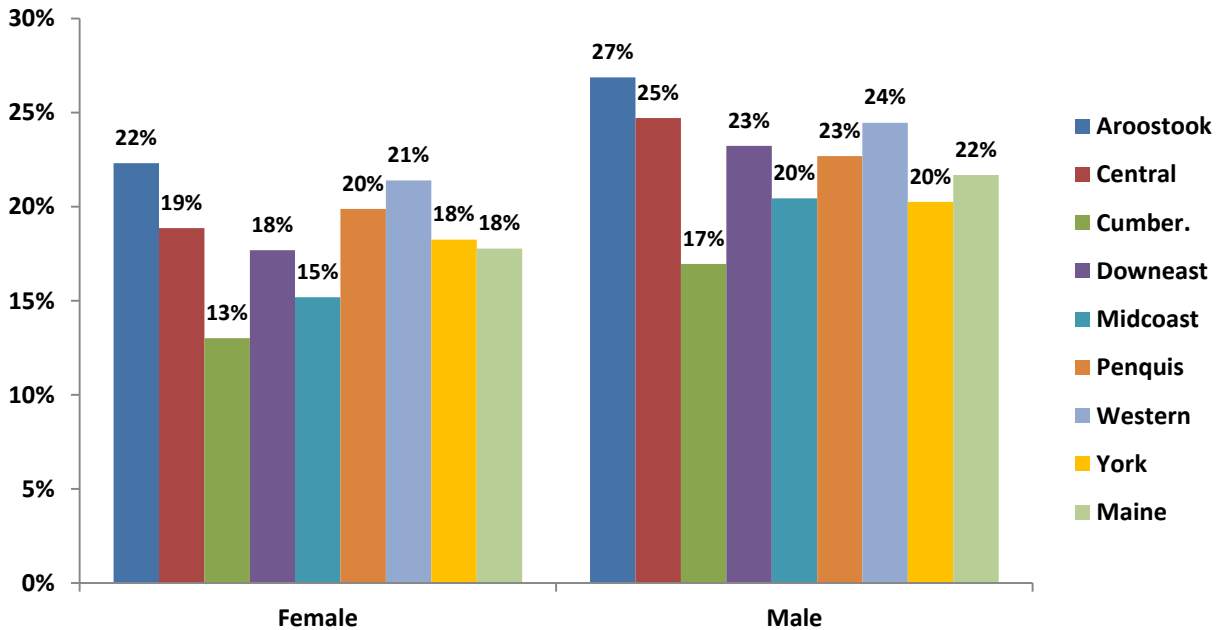
Source: BRFSS

Figure 8. Percent of adults by Public Health District who reported as current smoker, by age group: 2012–15



Source: BRFSS

Figure 9. Percent of adults by Public Health District who reported as current smoker, by gender: 2012–15



Source: BRFSS

## Prescription Drugs

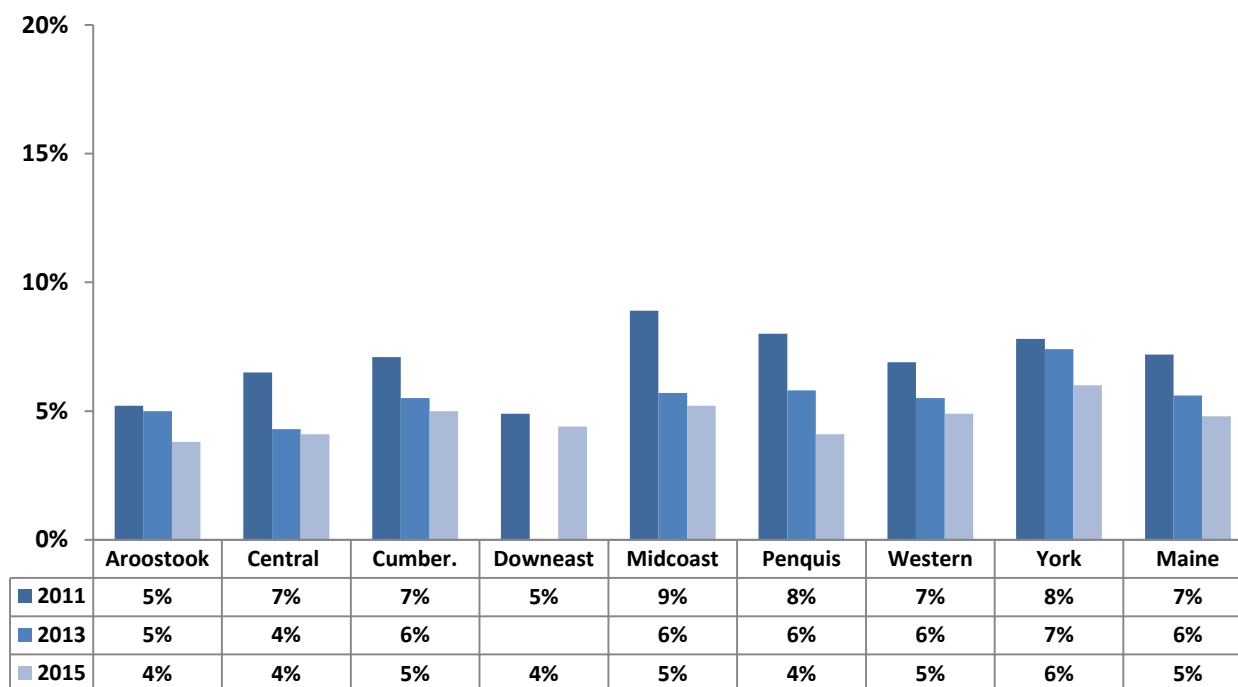
**Indicator Description: MISUSE OF PRESCRIPTION DRUGS AMONG YOUTH.** This indicator presents the percentage of Maine high school students who reported using prescription drugs that were not prescribed to them by a doctor within 30 days prior to the survey.

**Why Indicator is Important:** Some people are 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, 2011–2015

**Summary:** Penquis observed a decrease in the percentage of high school students reporting having taken prescription drugs not prescribed to them by a doctor one or more times in the past 30 days from 2011 (8%) to 2015 (4%). This was one percentage point below the statewide average.

**Figure 10. Percent of high school students by Public Health District who have taken prescription drugs not prescribed to them by a doctor (past 30 days): 2011–2015**



Source: MIYHS

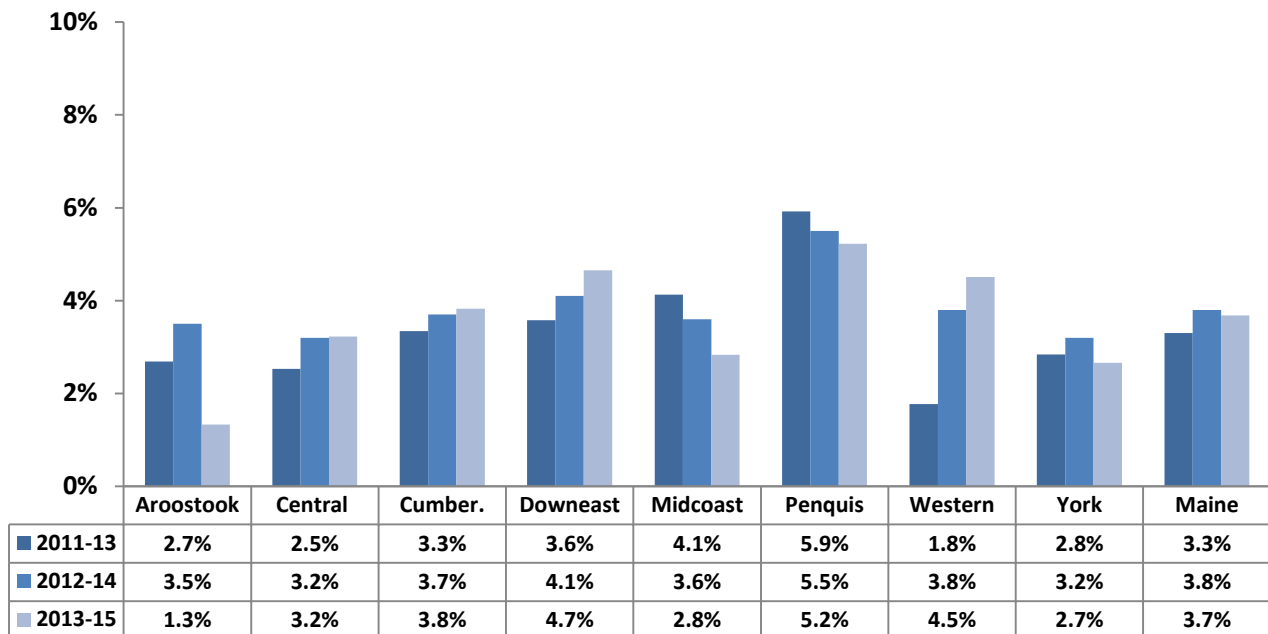
**Indicator Description: MISUSE OF PRESCRIPTION DRUGS AMONG ADULTS.** This measure reflects the percentage of adults in Maine who reported using prescription drugs not prescribed to them by a doctor, or using them in a way other than the one prescribed, at least once in their lifetime. Because of small sample sizes, survey data from multiple years must be combined in order to produce this estimate.

**Why Indicator is Important:** Some Mainers misuse 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, overdose, dependence and increased crime.

**Data Source(s):** BRFSS, 2011–13 to 2013–15, 2012–15

**Summary:** During 2013–15 (combined years), 5.2 percent of adults in Penquis reported that they had misused prescription drugs in their lifetime. This was higher than the statewide average (3.7%) and the highest rate among public health districts. During 2012–15, Penquis residents 18 to 34 years old had the highest rate of prescription drug misuse in the state at 10.7 percent. Adult males in Penquis were more than twice as likely to have misused prescription drugs in their lifetime as adult females (6.5% compared to 2.6%).

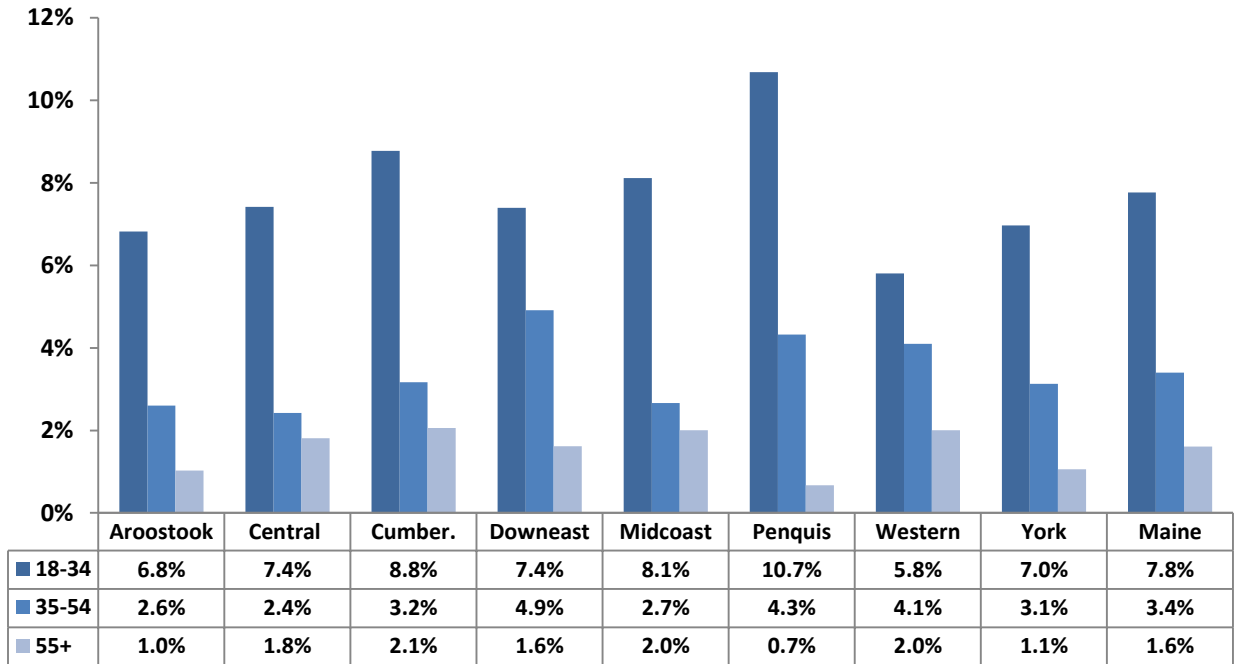
**Figure 11. Misuse of prescription drugs among Maine residents (18 and older) in their lifetime, by Public Health District: 2011–13 to 2013–15**



Source: BRFSS

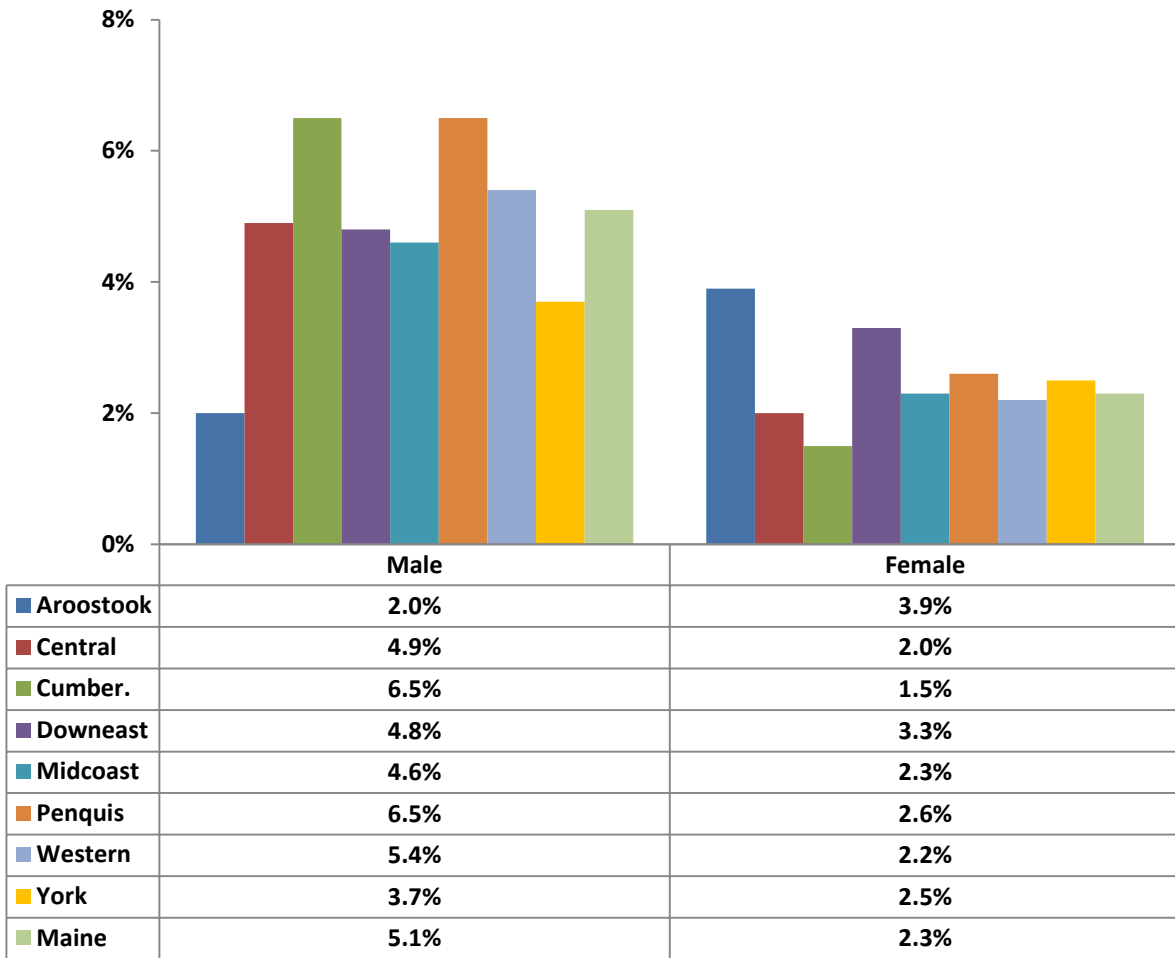


Figure 12. Lifetime misuse of prescription drugs among Maine adults, by age and Public Health District: 2012–15



Source: BRFSS

Figure 13. Lifetime misuse of prescription drugs among Maine adults, by age and Public Health District: 2012–15



Source: BRFSS

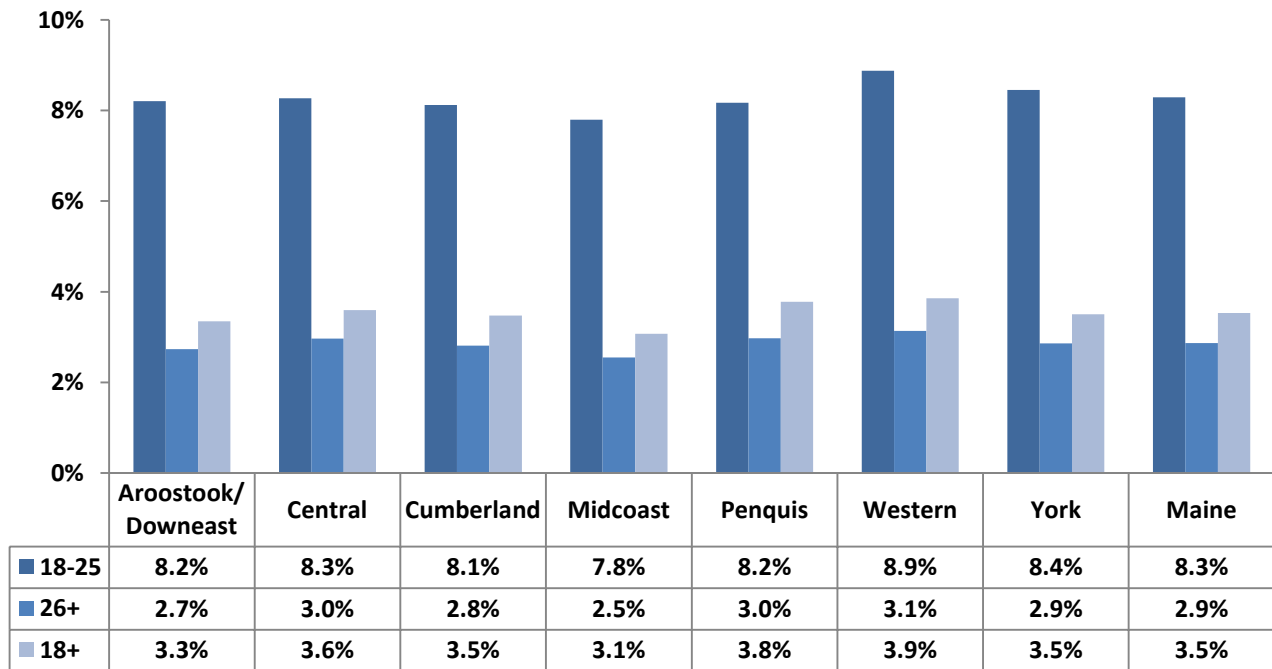
**Indicator Description: NONMEDICAL USE OF PRESCRIPTION PAIN RELIEVERS AMONG MAINERS AGE 18 AND OLDER.** This measure reflects the percentage of adults who reported using prescription pain relievers in the past year, for reasons other than their intended purpose. Because of small sample sizes, survey 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, 2012–14, 2008–10 to 2012–14

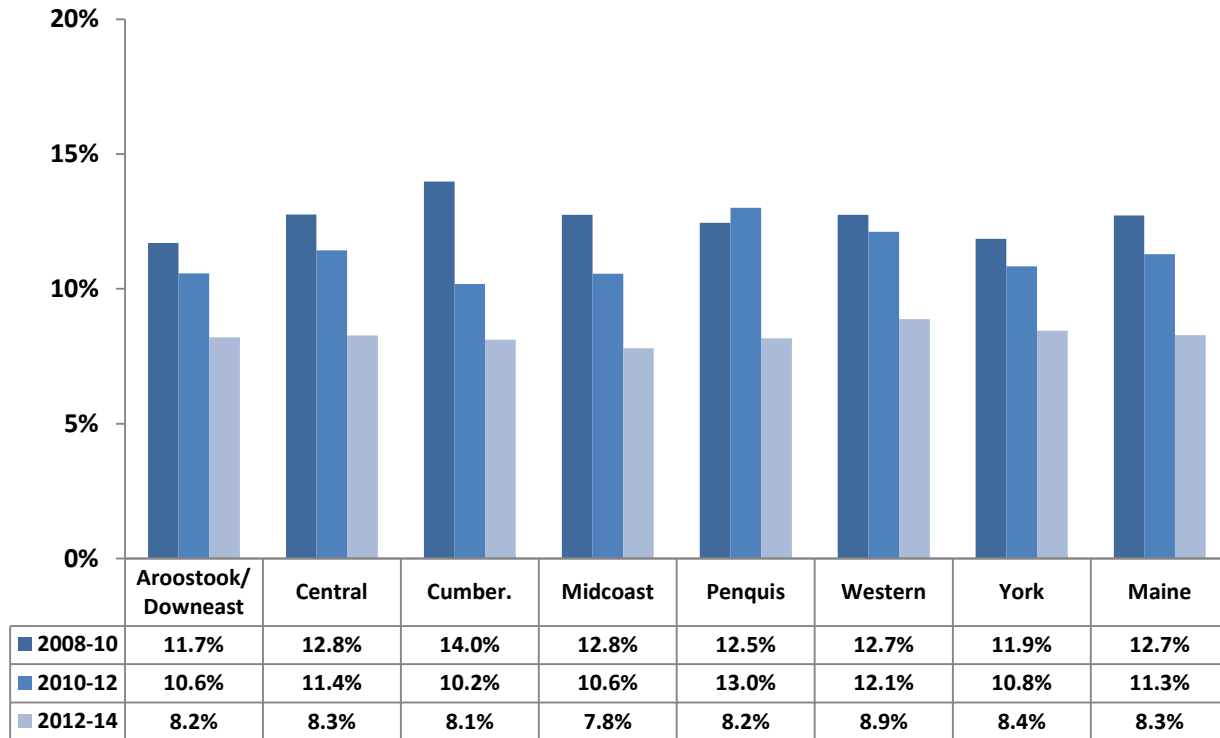
**Summary:** In 2012–14, 8.2 percent of 18 to 25 year olds in Penquis reported non-medical use of prescription pain relievers during the past year, compared to 3.0 percent among those who were 26 and older. Past year use of non-medical pain relievers among 18 to 25 year olds in Penquis decreased by more than four percentage points from 2008–10 to 2012–14.

**Figure 14. Percent of adults who used prescription pain relievers in past year for nonmedical use, by age group and Public Health District: 2012–14**



Source: NSDUH

**Figure 15. Percent of 18 to 25 year olds who used prescription pain relievers in past year for nonmedical use, by Public Health District: 2008–10 to 2012–14**



Source: NSDUH

## Marijuana

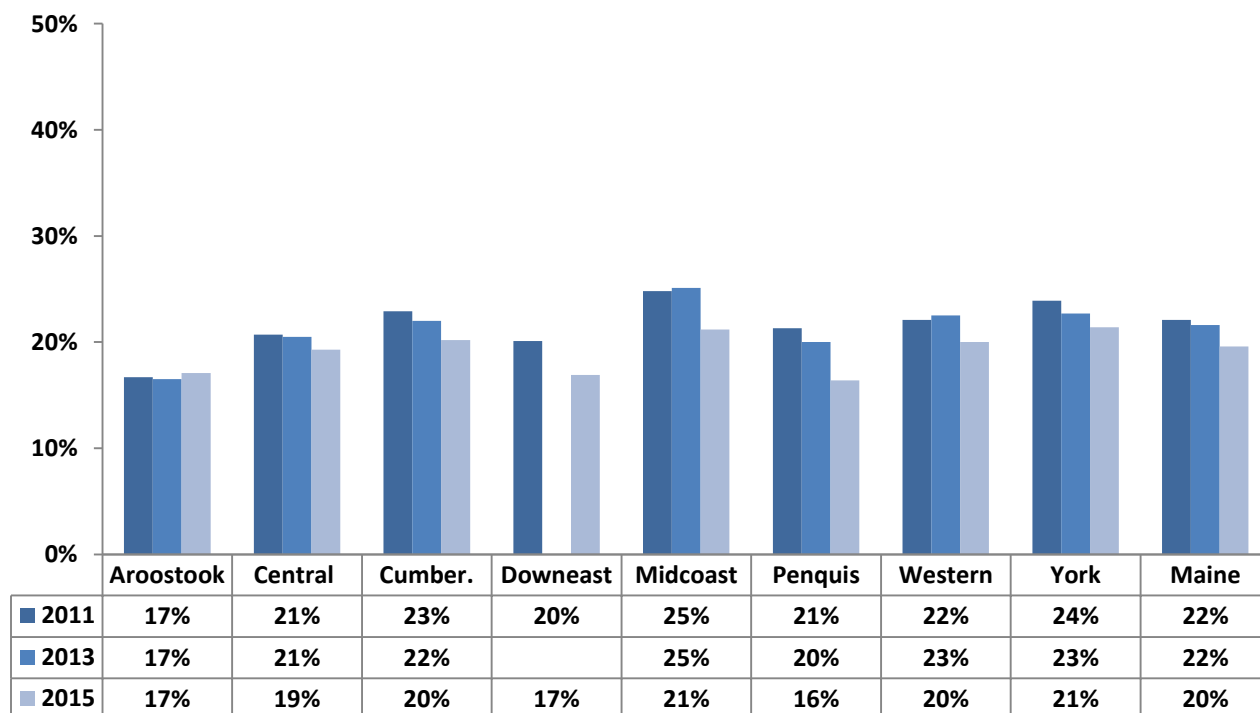
**Indicator Description: CURRENT MARIJUANA USE.** This measure shows the percentage of Maine residents who reported using marijuana in the past 30 days. This is presented for high school students and adults in Maine.

**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, 2011–2015; BRFSS, 2011–13 and 2012–14, 2012–15

**Summary:** In 2015, 16 percent of high school students in Penquis reported having used marijuana one or more times in the past 30 days; this was four percentage points lower than the state average (20%). Rates in Penquis decreased by five percentage points since 2011.

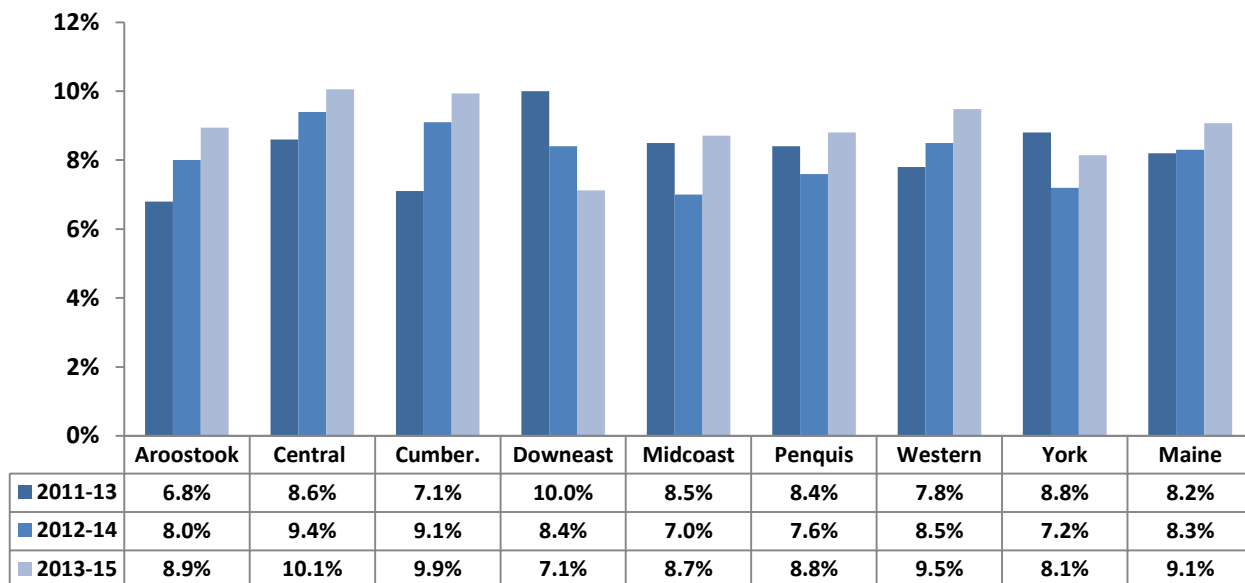
**Figure 16. Percent of high school students by Public Health District who have used marijuana during past 30 days: 2011–2015**



Source: MIYHS

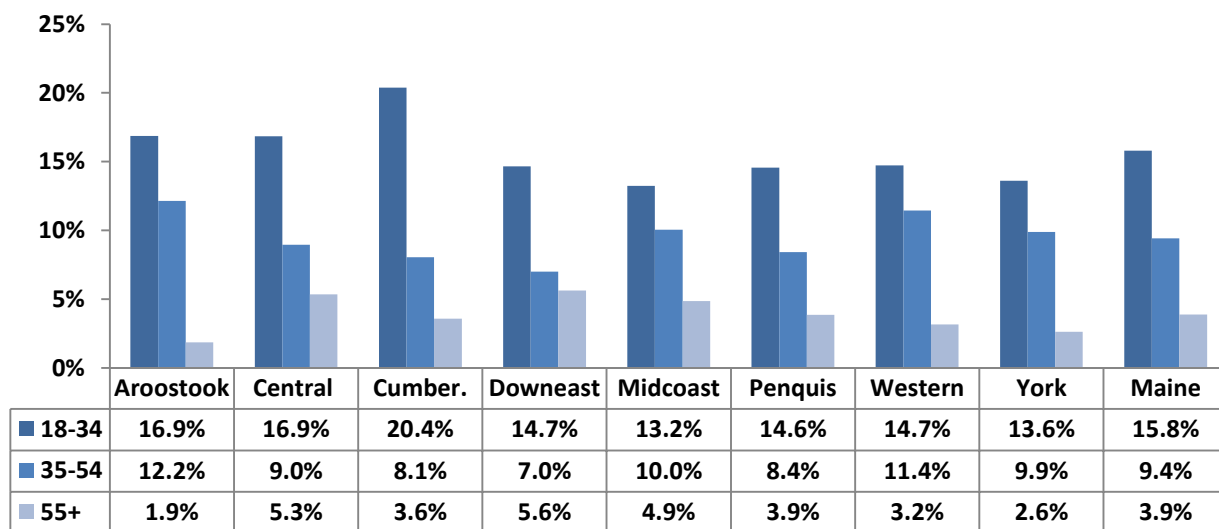
**Summary:** Among Penquis adults, in 2013–15, nearly nine (8.8%) percent reported using any marijuana within the past 30 days. This was very similar to the statewide rate of 9.1 percent. The Penquis adult rate increased by 0.4 percentage points from 2011–13 to 2013–15. In 2012–15, past month marijuana use rates were highest among 18 to 34 year olds at 14.6 percent; slightly lower than the statewide average (15.8). Penquis adult males were more likely to have used marijuana in the past month than adult females (12.8% compared to 3.6%).

**Figure 17. Percent of adults who have used marijuana during the past 30 days, by Public Health District: 2011–13 to 2013–15**



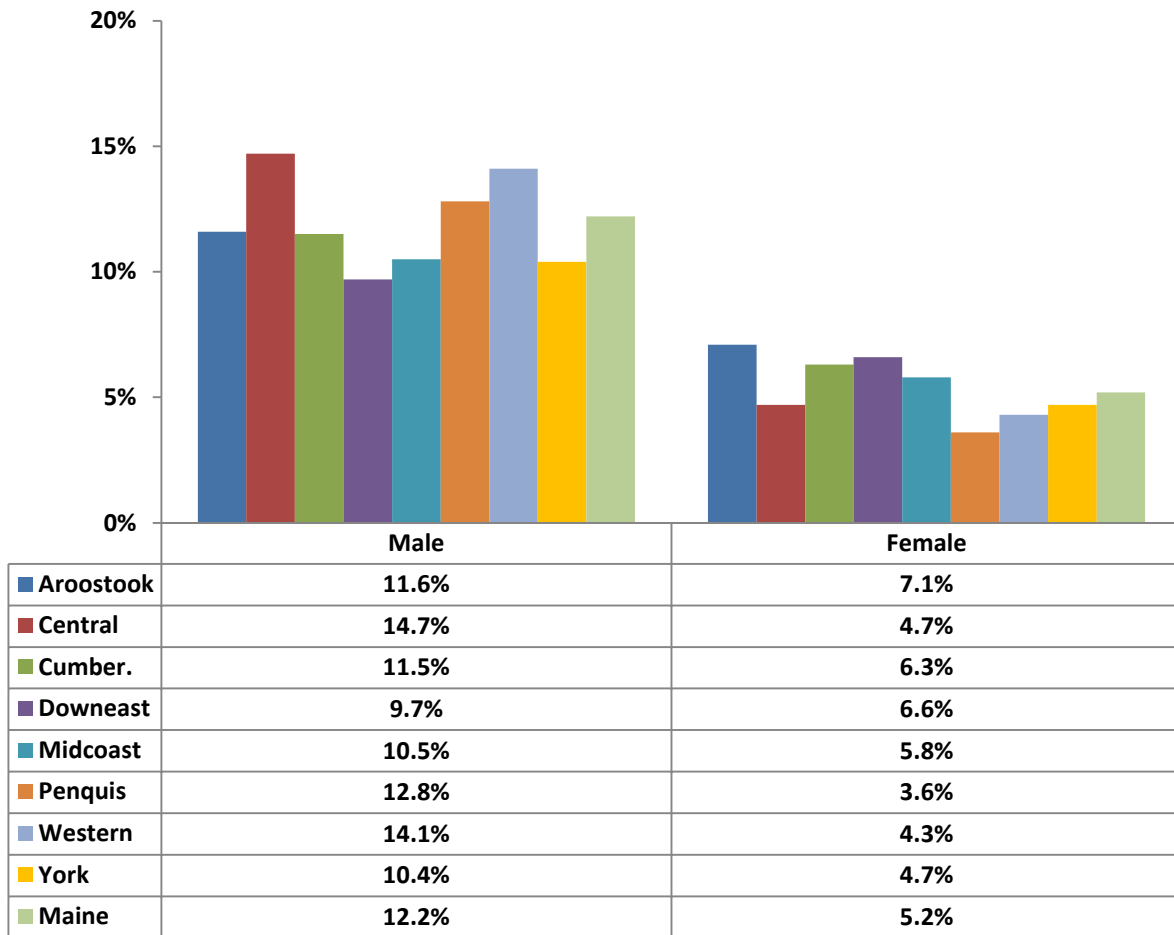
Source: BRFSS

**Figure 18. Percent of adults who have used marijuana during the past 30 days, by age and Public Health District: 2012–15**



Source: BRFSS

**Figure 19. Percent of adults who have used marijuana during the past 30 days, by gender and Public Health District: 2012–15**



Source: BRFSS



## Other Illegal Drugs

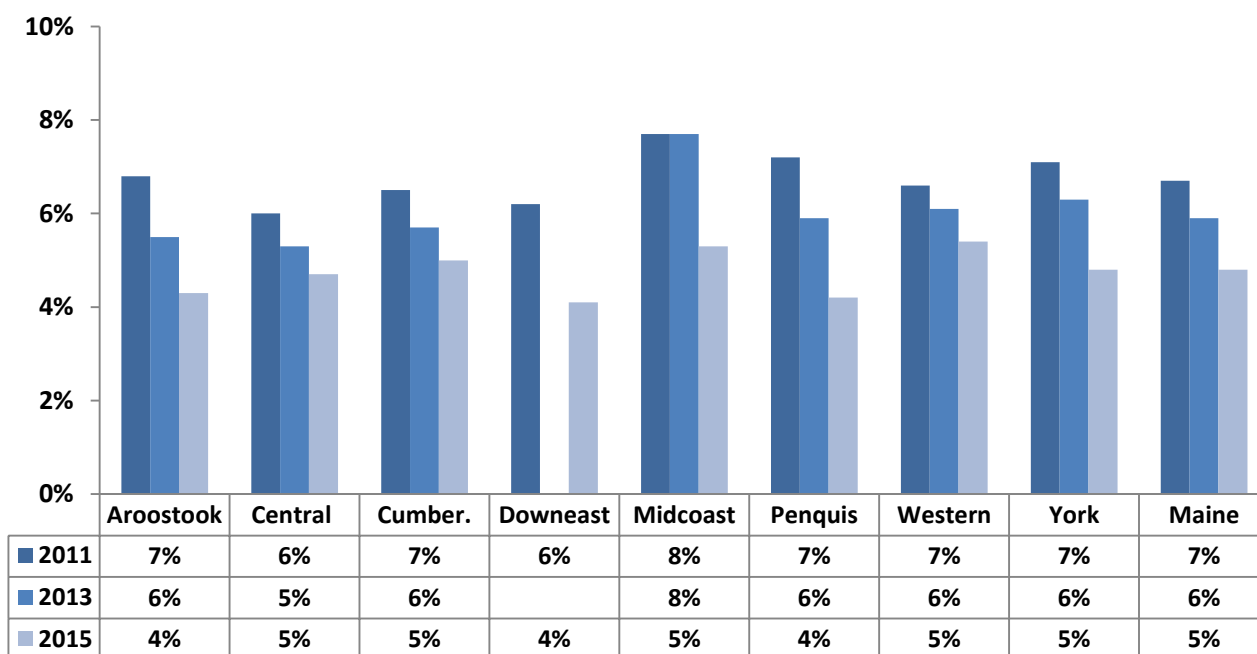
**Indicator Description: LIFETIME COCAINE USE AMONG YOUTH.** This indicator illustrates the percentage of Maine high school students who used cocaine at least once in their lifetime (*i.e.*, ever).

**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, 2011–2015

**Summary:** From 2011 to 2015, the rate of Penquis high school students reporting that they had used cocaine (in any form) during their lifetime decreased by three percentage points (from 7% to 4%).

**Figure 20. Percent of high school students by Public Health District that have used cocaine in any form during their lifetime: 2011–2015**



Source: MIYHS

## Consequences Resulting from Substance Use and Abuse

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Both individuals and communities suffer the consequences of substance abuse, resulting in increased health care needs and criminal justice resource utilization. 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 drugs. Examples include, but are not limited to; drug overdoses, drug/alcohol-related arrests, substance-exposed newborns, poison center calls, and driving accidents involving alcohol and/or drugs.

Penquis has consistently been lower than the state rate for violent crime over the past several years as well as alcohol-related arrests. However, in 2015 Penquis observed the highest rate of drug-affected babies among public health districts as well as the third highest rate of 2-1-1 Maine referral calls seeking substance abuse treatment services. On a more positive note, Penquis has one of the lowest rates of high school students reporting riding with intoxicated drivers, as well as one of the lowest rate of alcohol/drug-related vehicle crashes.

## Substance Use and Pregnancy

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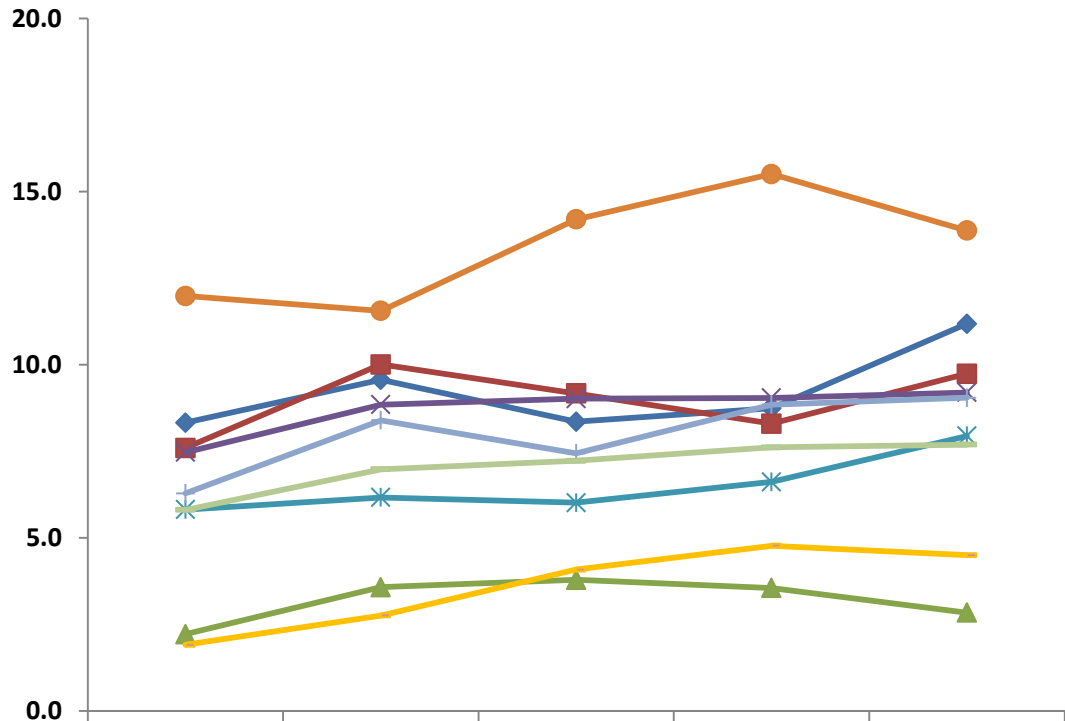
**Indicator Description: BABIES BORN AFFECTED BY SUBSTANCES.** This measure reflects the number of infants born in Maine where a healthcare provider reported to OCFS that there was reasonable cause to suspect the baby may be affected by drugs or alcohol or demonstrating withdrawal symptoms resulting from prenatal drug exposure (illicit or prescribed) or who have fetal alcohol spectrum disorders. This measure potentially excludes instances where the infant was exposed to substances and did not show withdrawal symptoms after birth, instances where the birth of an infant affected by substances was not reported to OCFS, and any other instances in which there were discrepancies between reporters when interpreting Title 22, §4011-A; *notification of prenatal exposure to drugs or having fetal alcohol spectrum disorders.*

**Why Indicator is Important:** Prenatal exposure to alcohol, tobacco, and illicit drugs has the potential to cause a wide spectrum of physical, emotional, and developmental problems for these infants. The harm caused to the child can be significant and long-lasting, especially if the exposure is not detected and the effects are not treated as soon as possible.

**Data Source(s):** OCFS/MACWIS, 2012–2016

**Summary:** The rate of drug-affected baby (substance-exposed infant) reports in Penquis increased slightly from 2012 (12 per 10,000 residents) to 2015 (13.9 per 10,000 residents); this was the highest rate observed across all public health districts. The proportion of live births with substance-exposed infant reports in Penquis increased from 13 percent in 2012 to 14 percent in 2016; this was six percentage points higher than the statewide proportion of eight percent.

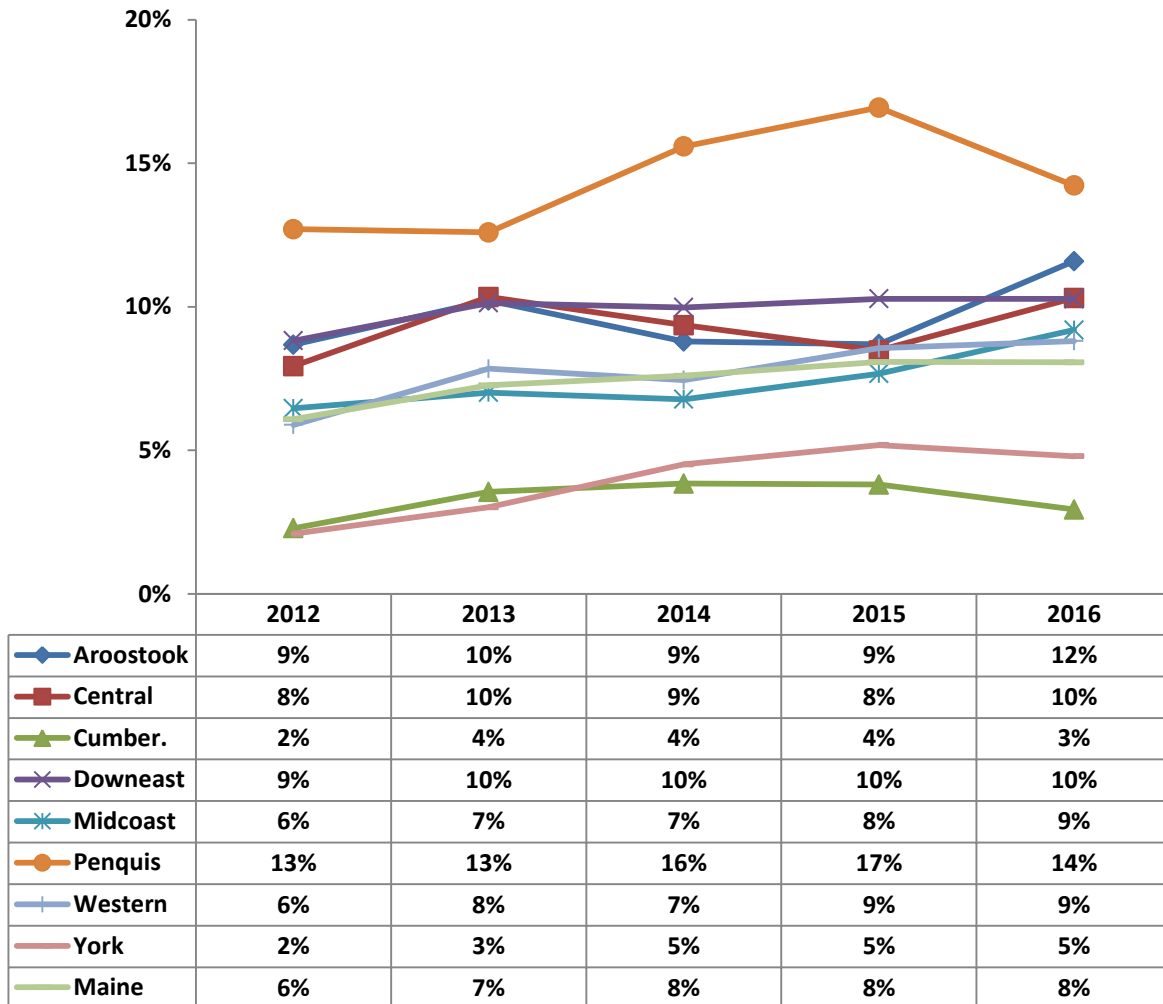
**Figure 21. Number of drug-affected baby (substance-exposed infant) reports per 10,000 residents, by Public Health District: 2012–2016**



	2012	2013	2014	2015	2016
◆ Aroostook	8.3	9.6	8.4	8.7	11.2
■ Central	7.6	10.0	9.2	8.3	9.7
▲ Cumberland	2.2	3.6	3.8	3.6	2.8
✕ Downeast	7.5	8.8	9.0	9.0	9.2
✱ Midcoast	5.8	6.2	6.0	6.6	7.9
● Penquis	12.0	11.6	14.2	15.5	13.9
+ Western	6.3	8.4	7.4	8.8	9.0
— York	1.9	2.8	4.1	4.8	4.5
— Maine	5.8	7.0	7.2	7.6	7.7

Source: OCFS/MACWIS

**Figure 22. Proportion of live births with drug-affected baby (substance-exposed infant) reports, by Public Health District: 2012–2016**



Source: OCFS/MACWIS

## Referral Services

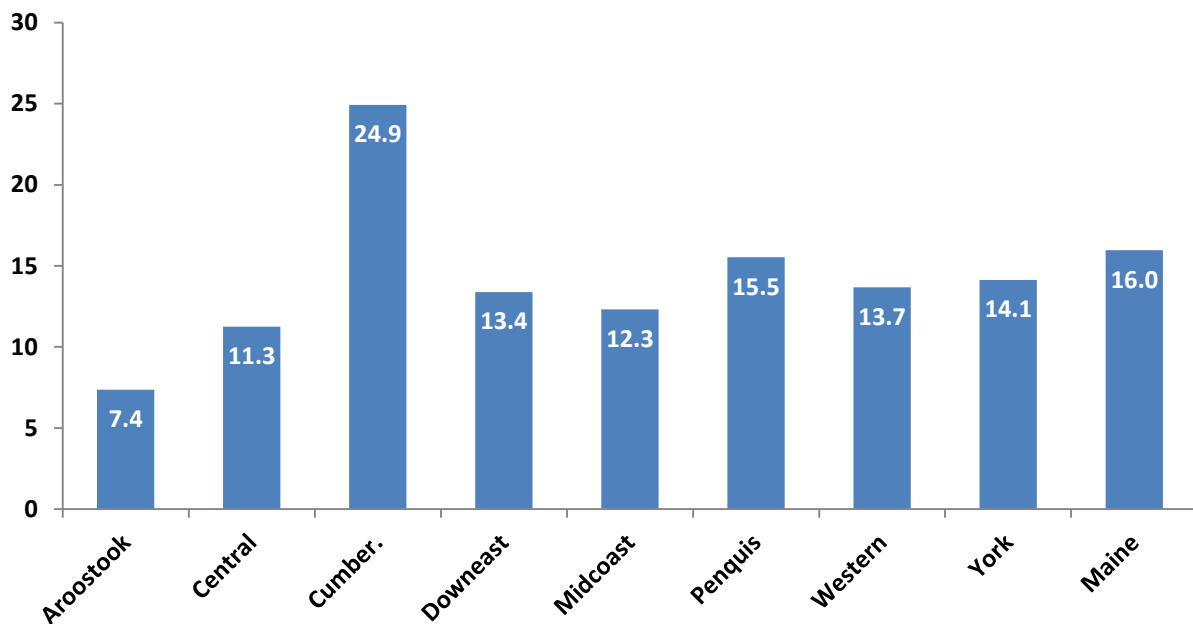
**Indicator Description: INFORMATION CALLS FOR REFERRAL SERVICES.** 2-1-1 Maine is a telephone and internet service that provides information and referrals to a wide range of health and human services. This indicator reflects the number of calls received by 2-1-1 Maine where the callers were seeking services related to the treatment of substance use. Callers are referred to support services such as alcohol anonymous meetings, residential treatment programs, outpatient counseling/certification programs, and medication assisted treatment programs. Virtually all callers are seeking treatment for themselves, family members, friends, or significant others.

**Why Indicator is Important:** The data collected provides valuable information serving as a barometer of health and human service needs related to substance use in the state.

**Data Source(s):** 2-1-1 Maine, 2012–2016

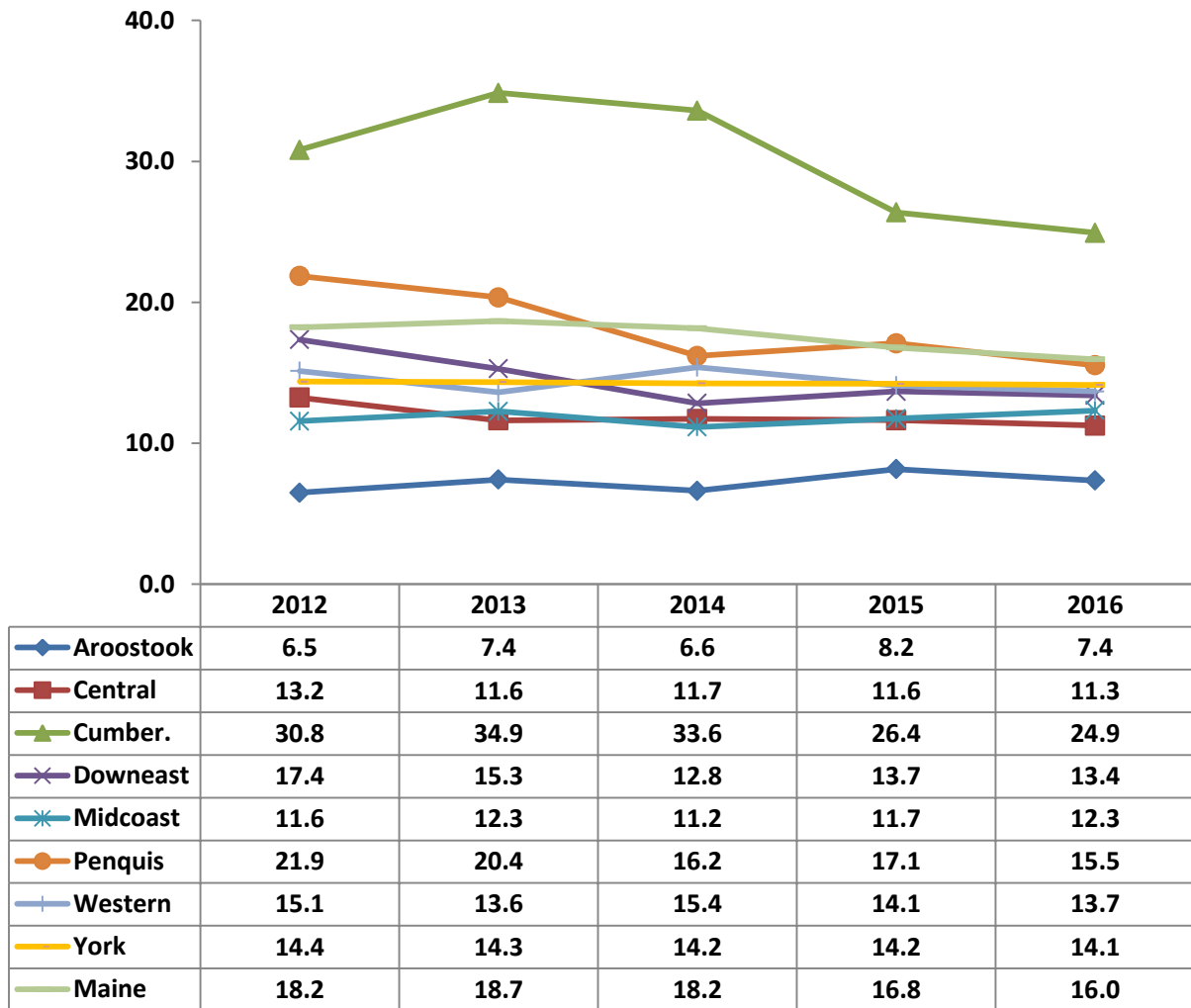
**Summary:** In 2016, Penquis observed about 15 2-1-1 Maine calls per 10,000 residents related to substance use; this was comparable to the rate of the state (16 calls per 10,000). From 2012 to 2016, Penquis held one of the highest rates among public health districts. Penquis's rate decreased from 21.9 in 2012 to 15.5 in 2016.

**Figure 23. Number of 2-1-1 Maine referral calls relating to substance use per 10,000 residents, by Public Health District: 2016**



Source: 2-1-1 Maine

**Figure 24. Number of 2-1-1 referral calls relating to substance use per 10,000 residents, by Public Health District: 2012–2016**



Source: 2-1-1 Maine

## 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 murder, rape, robberies, and aggravated assaults. The rate indicates only the rate of incidents reported to police and does not reflect the number of criminals who committed them or the number of injuries inflicted. 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.

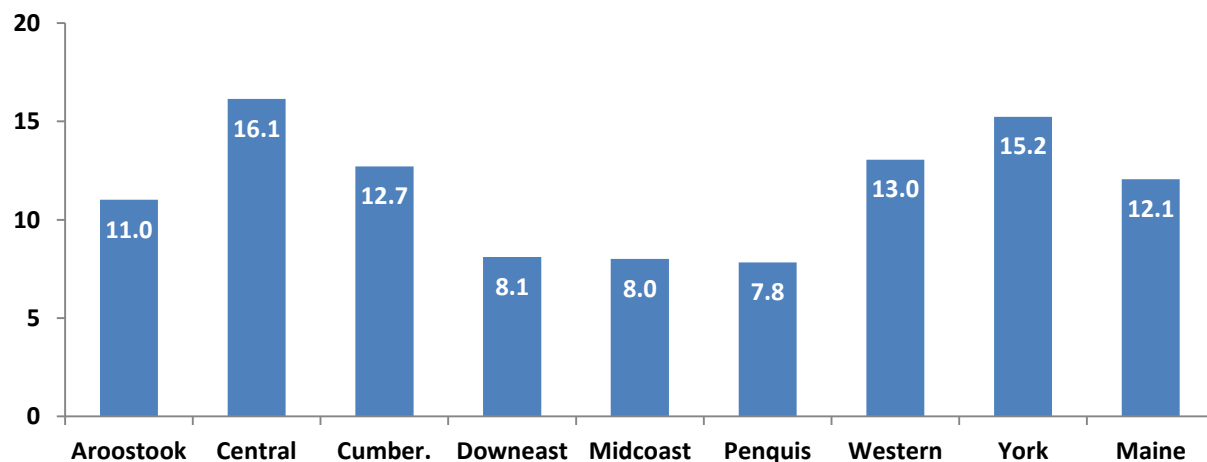
Operationalized as:  $\left(\frac{\# \text{ of violent crimes}}{\text{population}}\right) \times 10,000$

**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. Estimates have indicated that at least 23 percent of sexual assaults and 30 percent of physical assaults can be attributed to alcohol. Reported violent crimes are an under-report of the total number of actual violent crimes.

**Data Source(s):** DPS-UCR, 2012–13 to 2014–15

**Summary:** In 2014–15 (combined years), there were an average of eight violent crimes per 10,000 people per year in Penquis, compared to 12.1 per 10,000 people statewide. Penquis has consistently been lower than the state rate for violent crime. Although not shown, the number of violent crimes in Penquis decreased from 176 in 2013 to 127 in 2015; representing a 28 percent decrease.

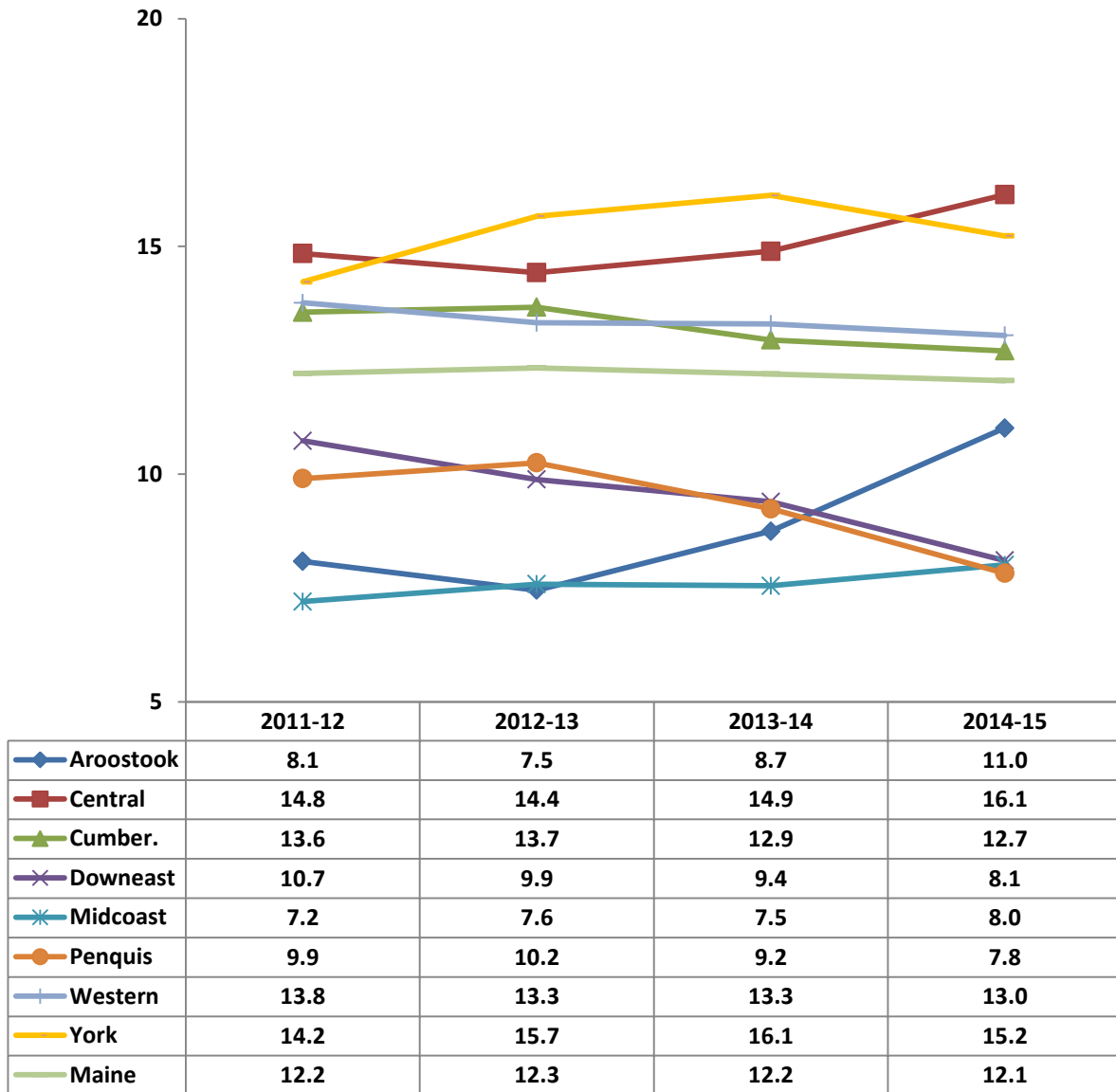
**Figure 25. Violent crime rate per 10,000 residents, by Public Health District: 2014–15**



Source: DPS; UCR



Figure 26. Violent crime rate per 10,000 residents, by Public Health District:  
2011–12 to 2014–15



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.

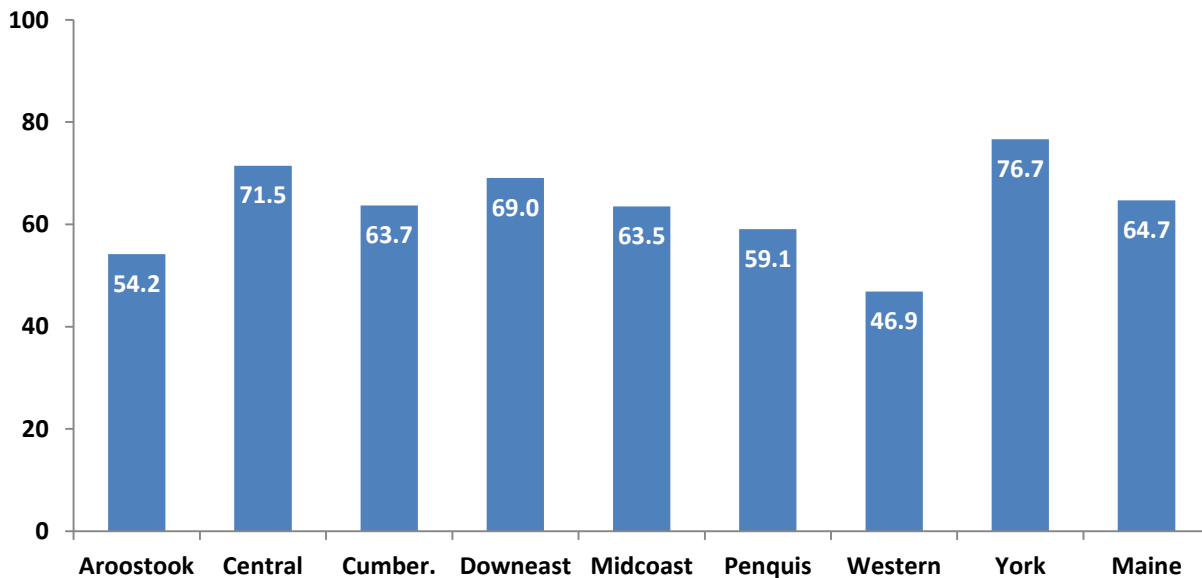
Operationalized as:  $\left(\frac{\# \text{ of alcohol arrests}}{\text{population}}\right) \times 10,000$

**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*. Arrest rates are expected to increase with increased enforcement regardless of whether a decline in criminal behavior is observed. The educational component of Maine’s Driver Education and Evaluation Program serviced 5,192 Maine residents during the 2014 fiscal year.

**Data Source(s):** DPS-UCR, 2014–15, 2011–12 to 2014–15

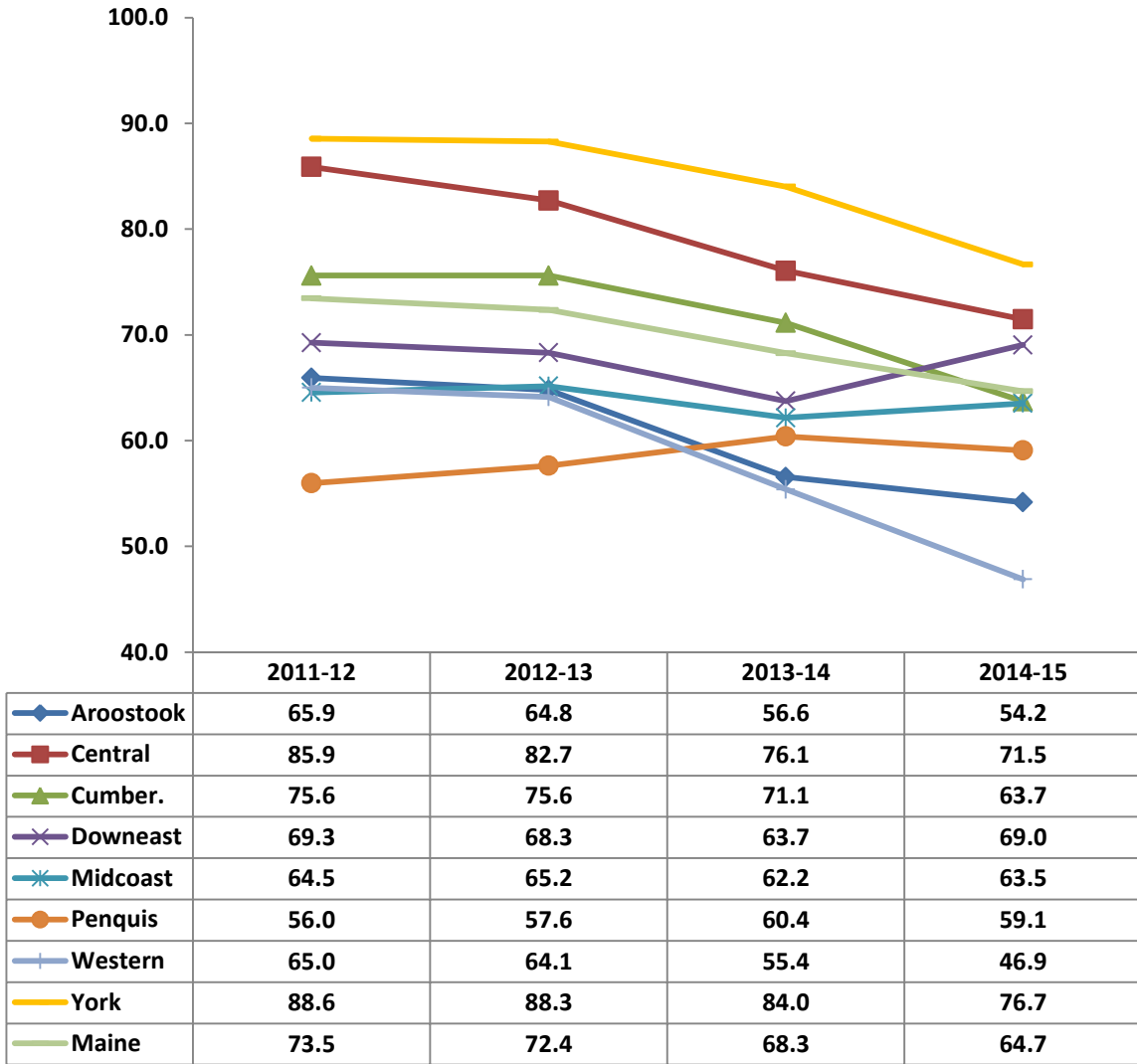
**Summary:** Penquis’s alcohol-related arrest rate has increased from 56 per 10,000 residents in 2011–12 to 59.1 per 10,000 residents in 2014–15; this was lower than the statewide rate (64.7) and the third lowest rate among public health districts. Although not explicitly shown, Penquis’s alcohol-related arrest rate increased from 2011 (974) to 2015 (976). Overall, most public health districts have observed a decline in alcohol-related arrests over the past several years, however, Penquis PHD does not follow this trend.

**Figure 27. Alcohol-related arrest rate per 10,000 residents, by Public Health District: 2014–15**



Source: DPS; UCR

Figure 28. Alcohol-related arrest rate per 10,000 residents, by Public Health District: 2011–12 to 2014–15



Source: DPS; UCR

**Indicator Description: ANNUAL DRUG-RELATED ARREST RATE.** This indicator reflects the number of arrests (made by all local and state law enforcement) 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.

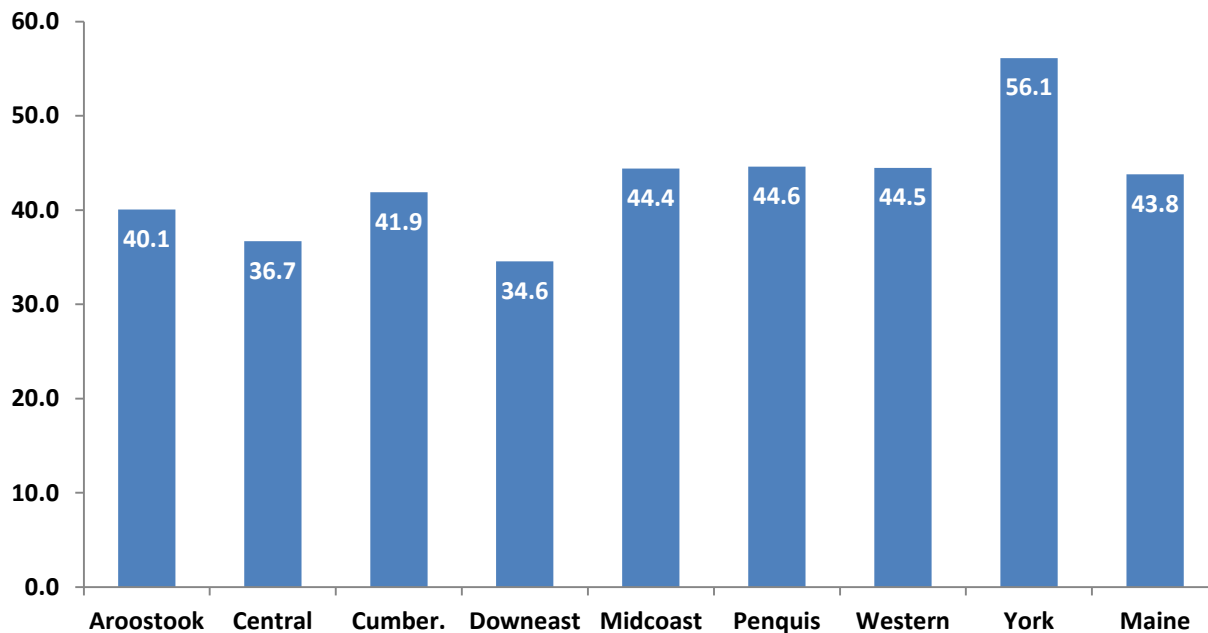
Operationalized as:  $\left(\frac{\# \text{ of drug arrests}}{\text{population}}\right) \times 10,000$

**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, 2010–11 to 2014–15, 2014–15

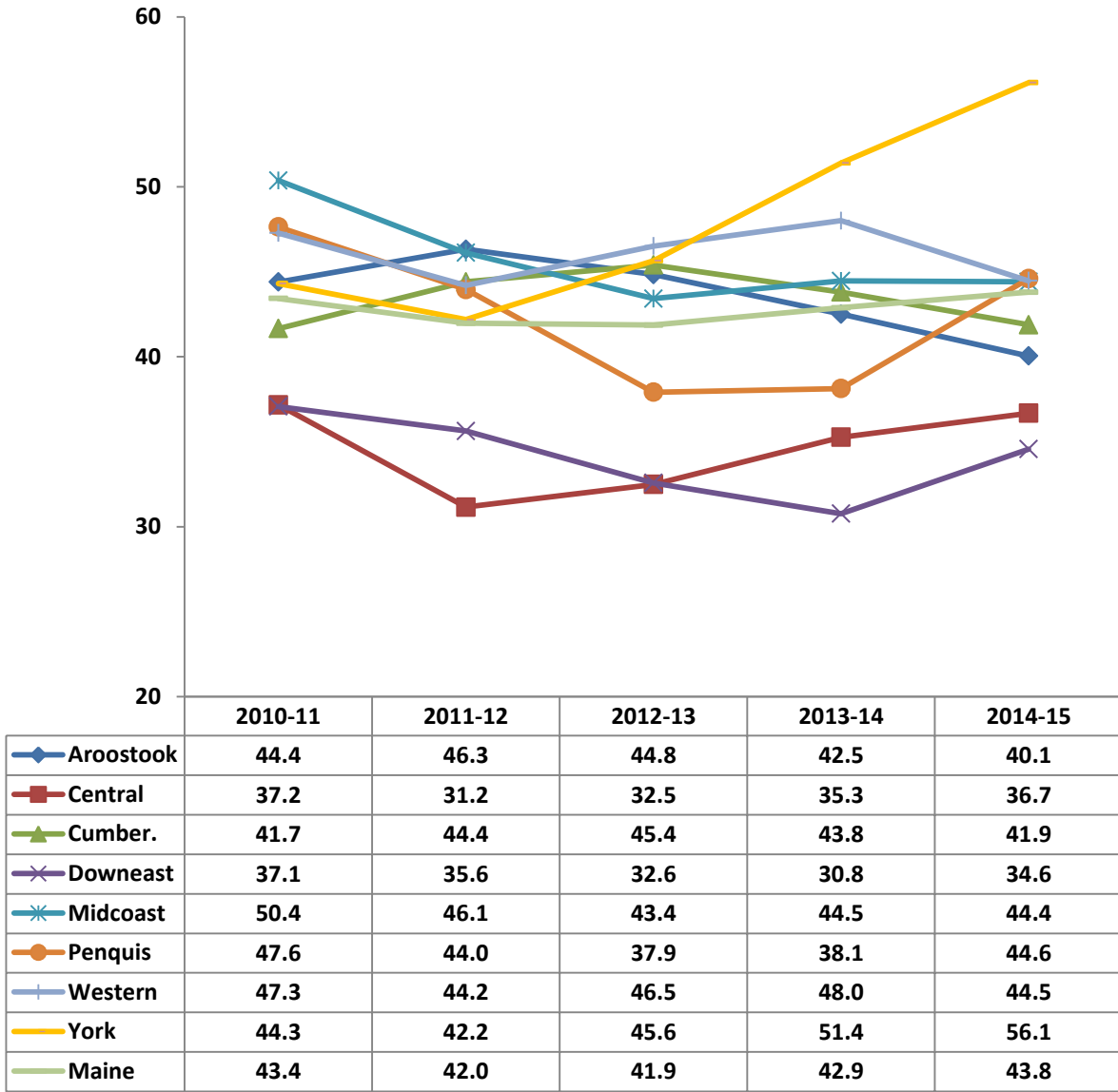
**Summary:** In 2014–15, there was an annual average of 44.6 drug-related arrests per 10,000 people in Penquis compared to 43.8 per 10,000 people statewide. Penquis’s drug-related crime rate has observed an overall decrease since 2010–11 (47.6).

**Figure 29. Drug-related arrest rate per 10,000 residents, by Public Health District: 2014–15**



Source: DPS; UCR

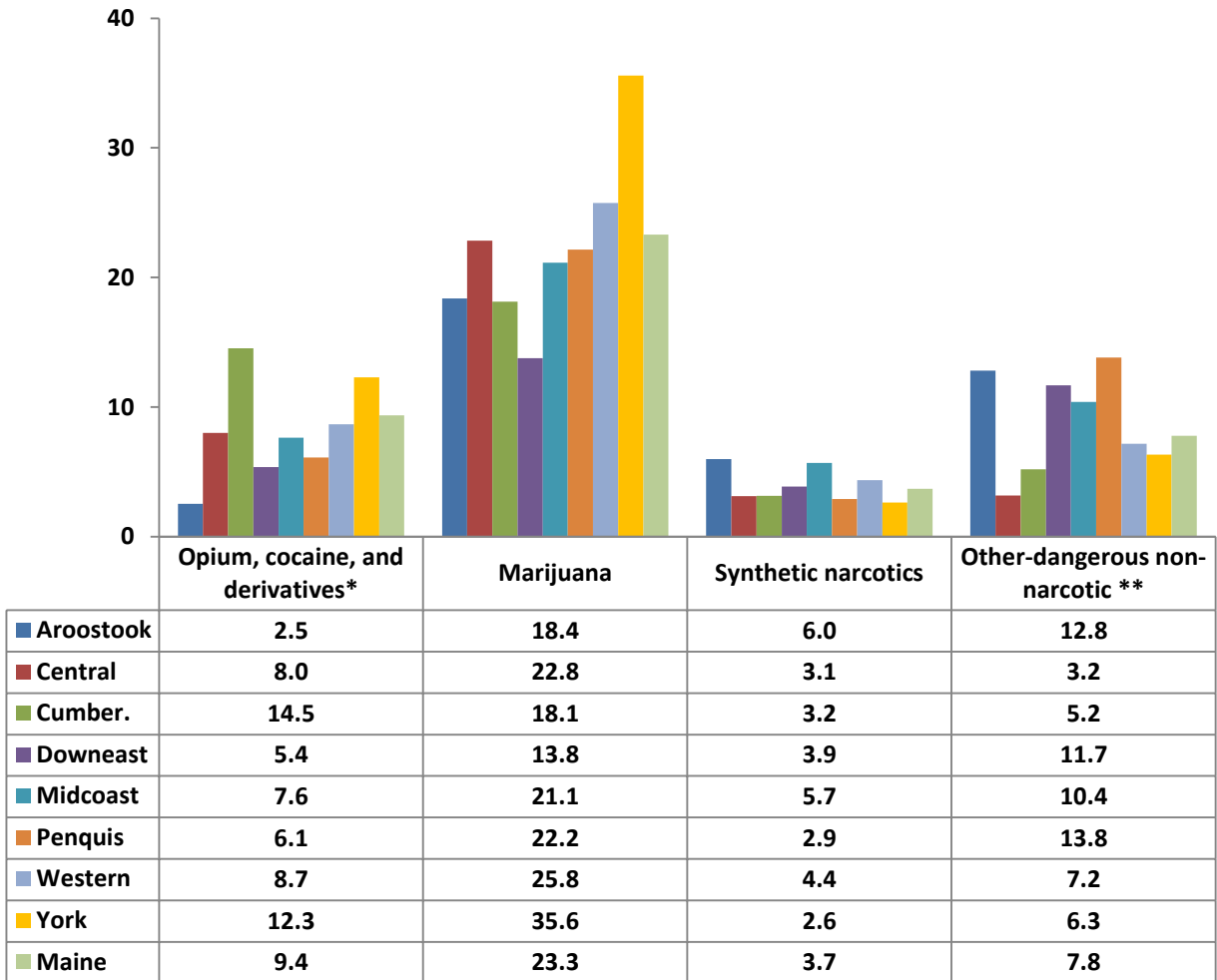
Figure 30. Drug-related arrest rate per 10,000 residents, by Public Health District: 2010–11 to 2014–15



Source: DPS; UCR

**Summary:** In 2014–15, Penquis had the third lowest rate of drug-related arrests (including possession and sales/manufacturing) involving opium, cocaine, and derivatives with an average of 6.1 arrests per 10,000 residents; this was lower than the statewide rate (9.4). During the same period, Penquis observed 22.2 arrests per 10,000 residents for marijuana, 2.9 arrests per 10,000 residents for synthetic narcotics, and 13.8 arrests per 10,000 residents related to other dangerous narcotics.

**Figure 31. Drug-related arrest rate per 10,000, by drug type and Public Health District: 2014–15**



Source: DPS; UCR

\*Derivatives include cocaine/crack, codeine, heroin, and morphine.

\*\*Other dangerous non-narcotics include but are not limited to benzodiazepines, steroids, stimulants, synthetic cannabis, bath salts, methamphetamine, hallucinogens, and barbiturates.

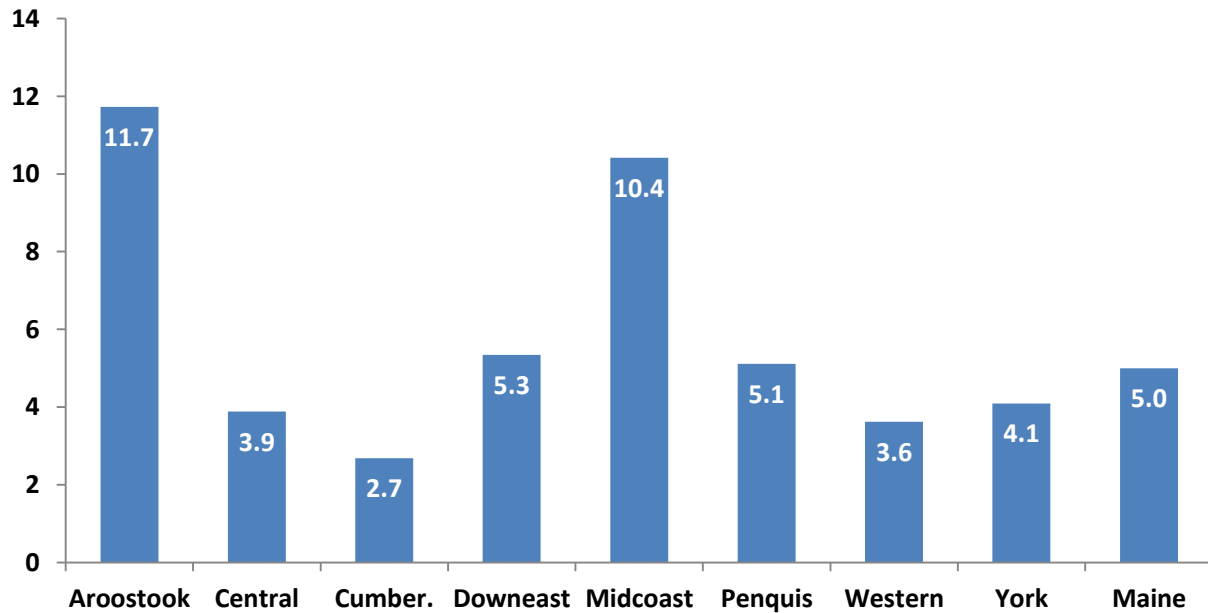
**Indicator Description: MAINE DEA DRUG OFFENSE ARRESTS BY TYPE.** This indicator reflects drug offense arrests made by the Maine’s Drug Enforcement Agency, overall and by drug type. The MDEA, through its eight regional multi-jurisdictional task forces, is the lead state agency in *confronting drug trafficking crime*. This indicator differs from the previous drug-related arrest data in that it only tracks MDEA efforts and does not encompass all activity within Maine law enforcement agencies.

**Why Indicator is Important:** Drug offense 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. Drug arrest rates are expected to increase with increased enforcement regardless of whether a decline in criminal behavior is observed.

**Data Source(s):** MDEA, 2015–16; 2011–12 to 2015–16; 2014–16

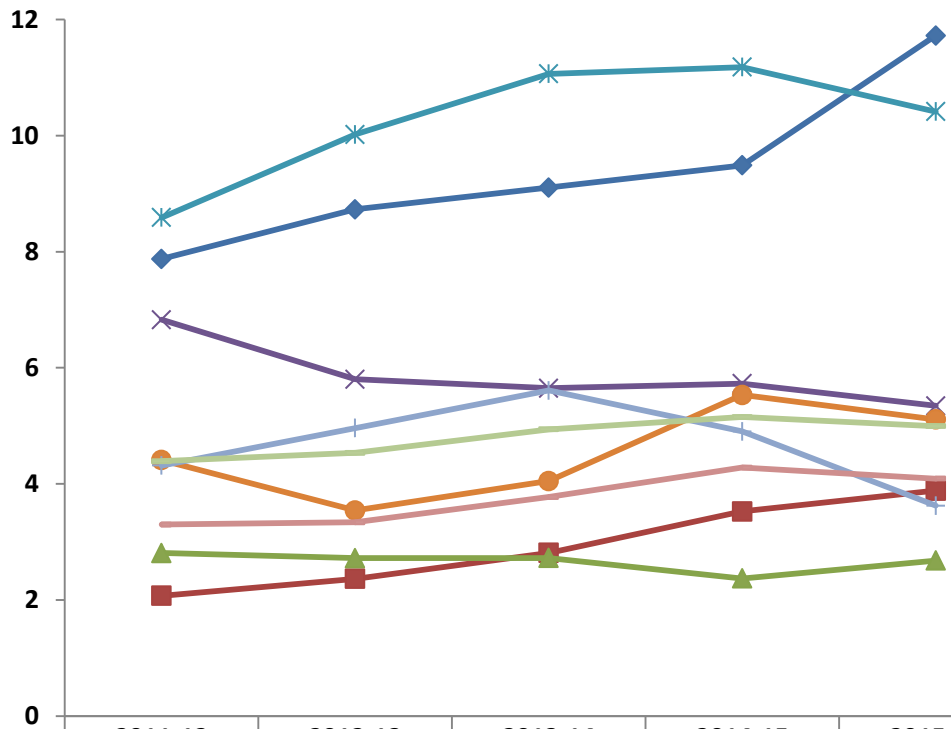
**Summary:** In 2015–16, there were 5.1 drug offense arrests per 10,000 residents in Penquis made by the Maine Drug Enforcement Agency (MDEA); this was an average rate among public health districts in Maine. Rates have been steadily increasing since 2010–11. Although not explicitly shown, the number of MDEA drug offenses in Penquis increased by three percent from 2012 (61) to 2016 (63).

**Figure 32. Maine DEA drug trafficking and manufacturing arrests per 10,000 residents, by Public Health District: 2015–16**



Source: MDEA

Figure 33. Maine DEA drug offense arrests per 10,000 residents, by Public Health District: 2012–13 to 2015–16

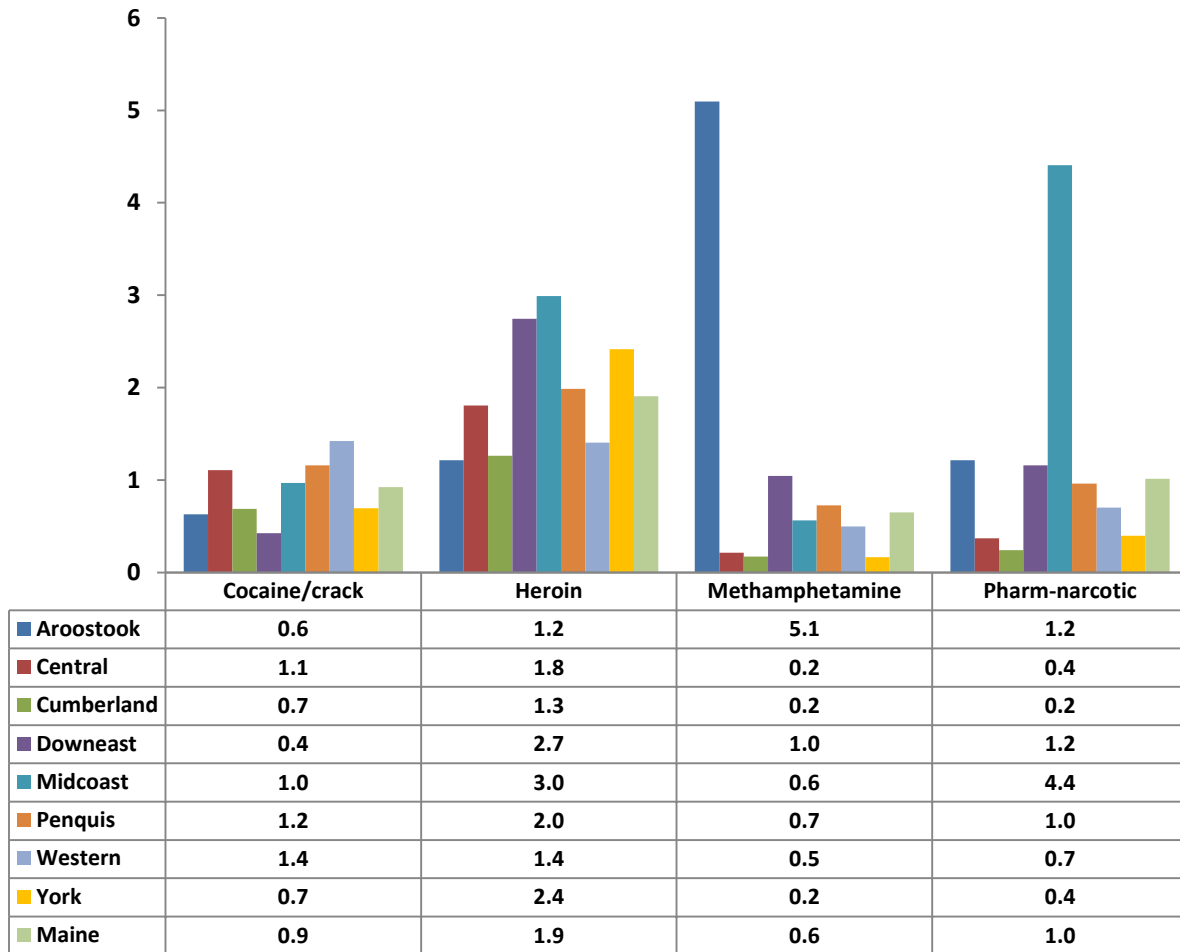


	2011-12	2012-13	2013-14	2014-15	2015-16
◆ Aroostook	7.9	8.7	9.1	9.5	11.7
■ Central	2.1	2.4	2.8	3.5	3.9
▲ Cumber.	2.8	2.7	2.7	2.4	2.7
× Downeast	6.8	5.8	5.6	5.7	5.3
* Midcoast	8.6	10.0	11.1	11.2	10.4
● Penquis	4.4	3.5	4.0	5.5	5.1
+ Western	4.3	5.0	5.6	4.9	3.6
— York	3.3	3.3	3.8	4.3	4.1
— Maine	4.4	4.5	4.9	5.2	5.0

Source: MDEA



Figure 34. Maine DEA drug offense arrests per 10,000 residents, by drug type and Public Health District: 2014–16



Source: MDEA

## Driving Under the Influence

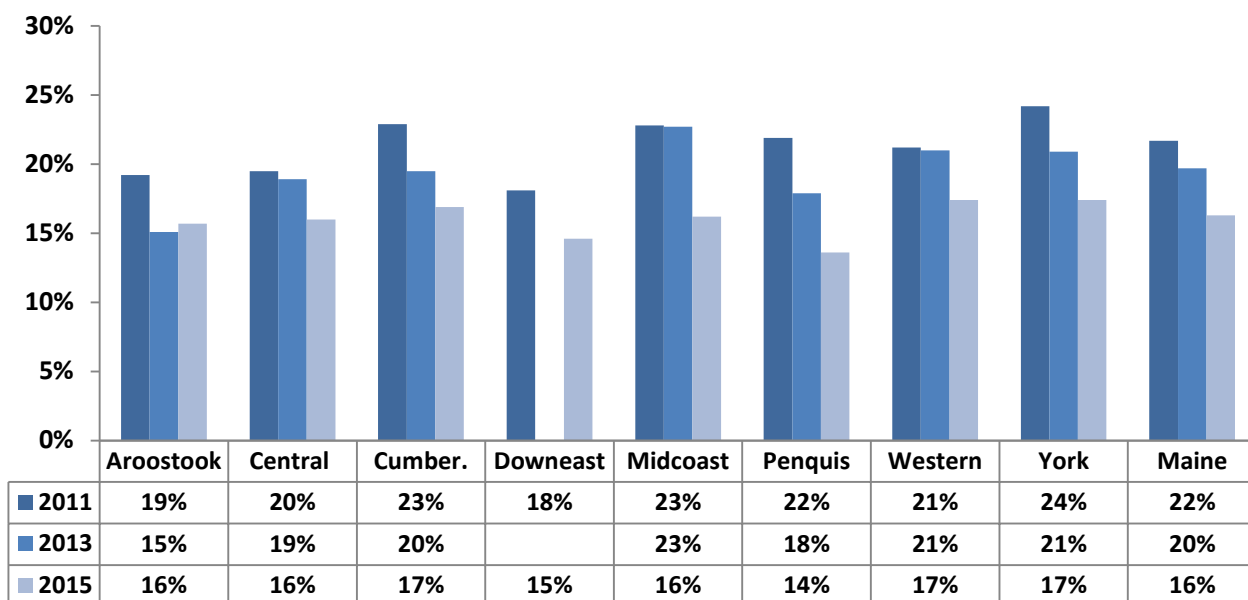
**Indicator Description: YOUTH AS PASSENGERS IN VEHICLES DRIVEN BY INDIVIDUALS USING ILLEGAL DRUGS.** This measure shows the proportion of high school students who reported that within 30 days prior to taking the survey they were a passenger in a car being operated by an individual who had consumed illegal 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, 2011–2015

**Summary:** From 2011 to 2015 the rate of students in Penquis who reported that, within the past 30 days, they had been passengers in a vehicle operated by someone who had taken illegal drugs decreased substantially from 22 percent to 14 percent; this was two percentage points lower than the statewide rate (16%).

**Figure 35. Percent of high school students by Public Health District who rode in a vehicle driven by someone who had taken illegal drugs\*: 2011–2015**



Source: MIYHS

*\*The wording of the question changed slightly in 2015. In 2013, students were asked: During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been taking illegal drugs such as marijuana? In 2015, students were asked: During the past 30 days, how many times did you ride in a car or other vehicle driven by someone who had been taking illegal drugs such as marijuana, cocaine, heroin, or LSD?*

**Indicator Description: ALCOHOL/DRUG-INVOLVED MOTOR VEHICLE CRASH RATE.** This indicator shows the number of motor vehicle crashes in which alcohol or drugs were a factor per 10,000 people. Due to new data collection regulations, crash rate data is no longer separated by alcohol and drugs. Alcohol and drugs are now combined into one rate. Alcohol/drug-involved crashes means that at least one driver had consumed alcohol or drugs prior to the crash. The rate per 10,000 allows us to see the frequency with which an occurrence shows up within a population over time, as well as make relative comparisons between small and large population areas.

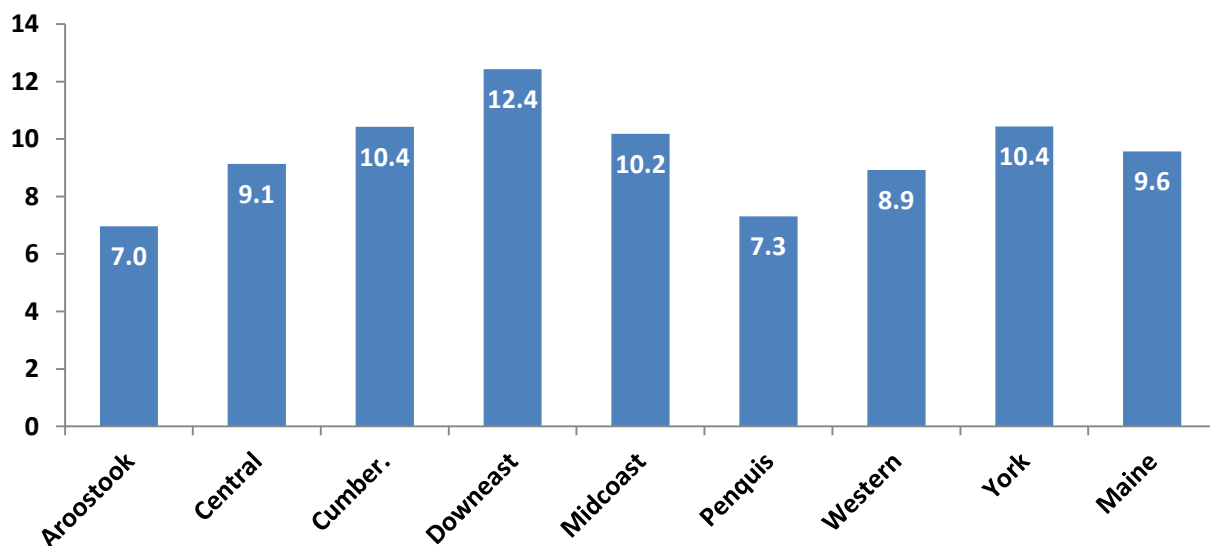
Operationalized as:  $\left(\frac{\# \text{ of alcohol/drug-involved crashes}}{\text{population}}\right) \times 10,000$

**Why Indicator is Important:** Motor vehicle crashes are the third-leading cause of traumatic brain injury (TBI) in the United States, with 14 percent of traumatic brain injuries occurring from motor vehicle crashes. Motor vehicle crashes were responsible for almost 20 percent of TBI-related deaths.<sup>1</sup> In 2009, the most recent data available, alcohol was attributed to 96 percent of the alcohol/drug-related crashes statewide.

**Data Source(s):** MDOT/MBHS, 2011–12 to 2015–16

**Summary:** Penquis’s rate of alcohol and/or drug related crashes decreased from 2011–12 (8.9 crashes per 10,000 residents) to 2015–16 (7.3 crashes per 10,000 residents). Although not shown, the number of alcohol/drug-related car crashes 2016 was 126.

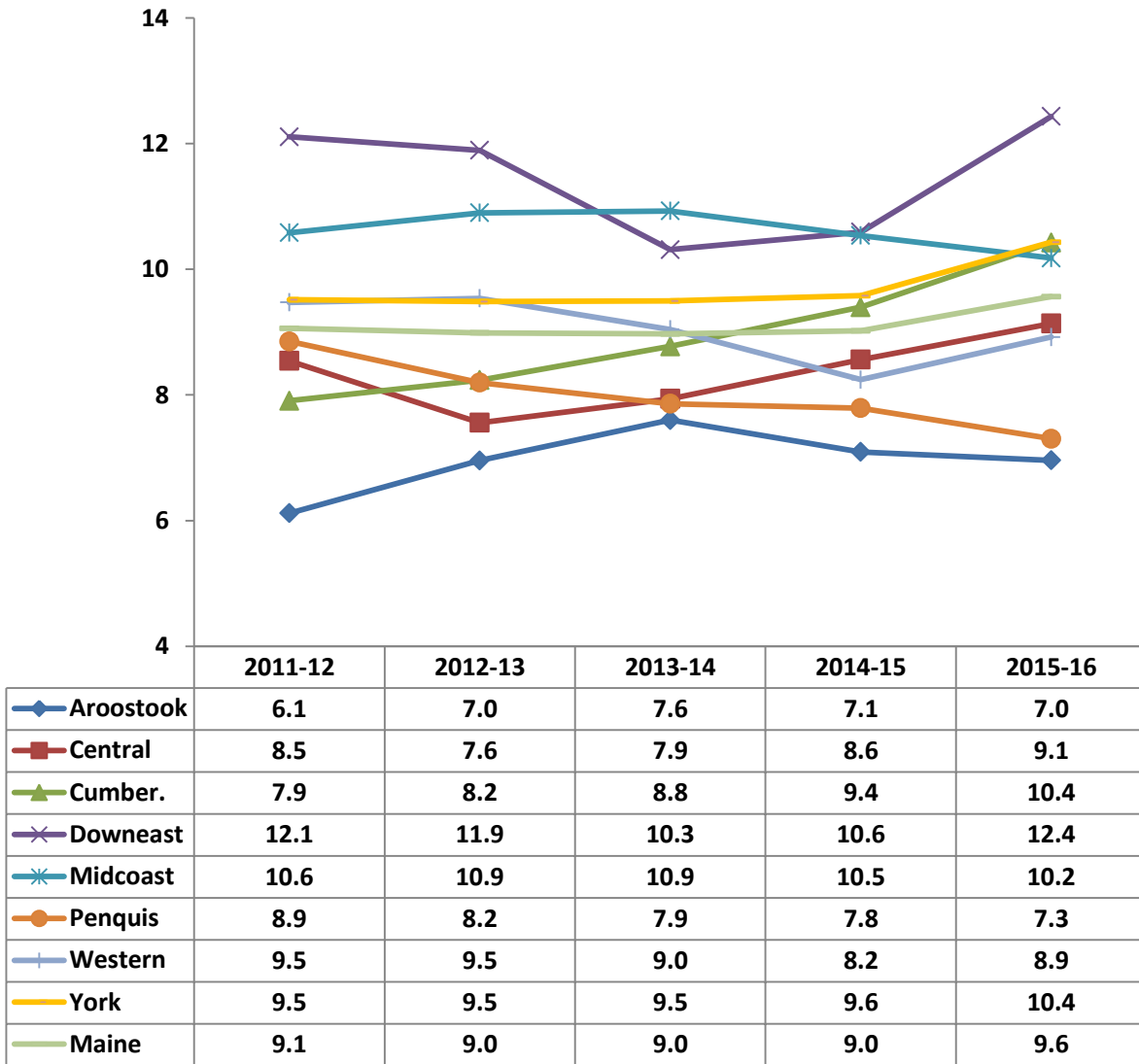
**Figure 36. Alcohol/Drug-related motor vehicle crash rate per 10,000, by Public Health District: 2015–16**



Source: MDOT/MBHS

<sup>1</sup> US Centers for Disease Control and Prevention. Retrieved 9/11/2017 from [https://www.cdc.gov/traumaticbraininjury/get\\_the\\_facts.html](https://www.cdc.gov/traumaticbraininjury/get_the_facts.html)

**Figure 37. Alcohol/Drug-related motor vehicle crash rate per 10,000, by Public Health District: 2011–12 to 2015–16**



Source: MDOT/MBHS

## Poison Center Calls

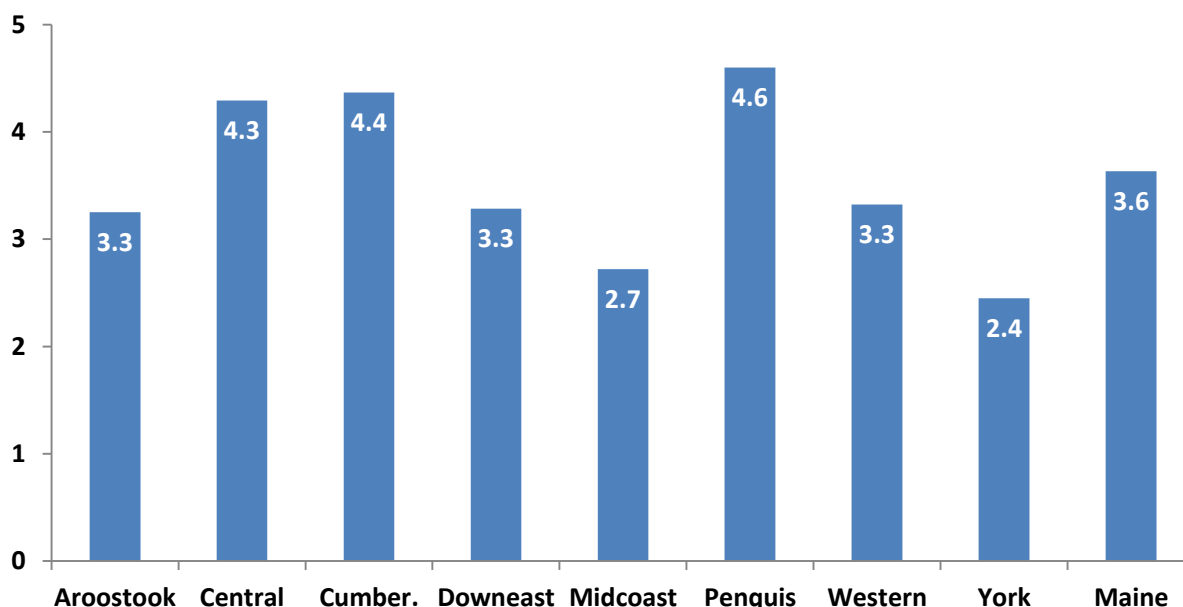
**Indicator Description: POISONING CASES DOCUMENTED BY THE POISON CENTER.** This measure reflects the rate of calls to the Northern New England Poison Center in which the Center determined that a poisoning occurred. These calls are for the state of Maine only. The Center reports poisonings in three categories: unintentional, meaning those that are accidental; suspected substance abuse cases, meaning cases where the Center believes the intent is for an individual to get high; and suspected suicides, meaning staff at the Center determine that the individual attempted suicide. The categories reflect the caller's self-report and are not considered clinical or medical diagnoses.

**Why Indicator is Important:** The exposure to and ingestion of damaging substances can have many physiologic side effects. Poisonings can be influenced by programs to prevent substance abuse, accidental poisoning, suicide and fatal interaction among medications.

**Data Source(s):** NNEPC, 2014–16, 2008–10 to 2014–16

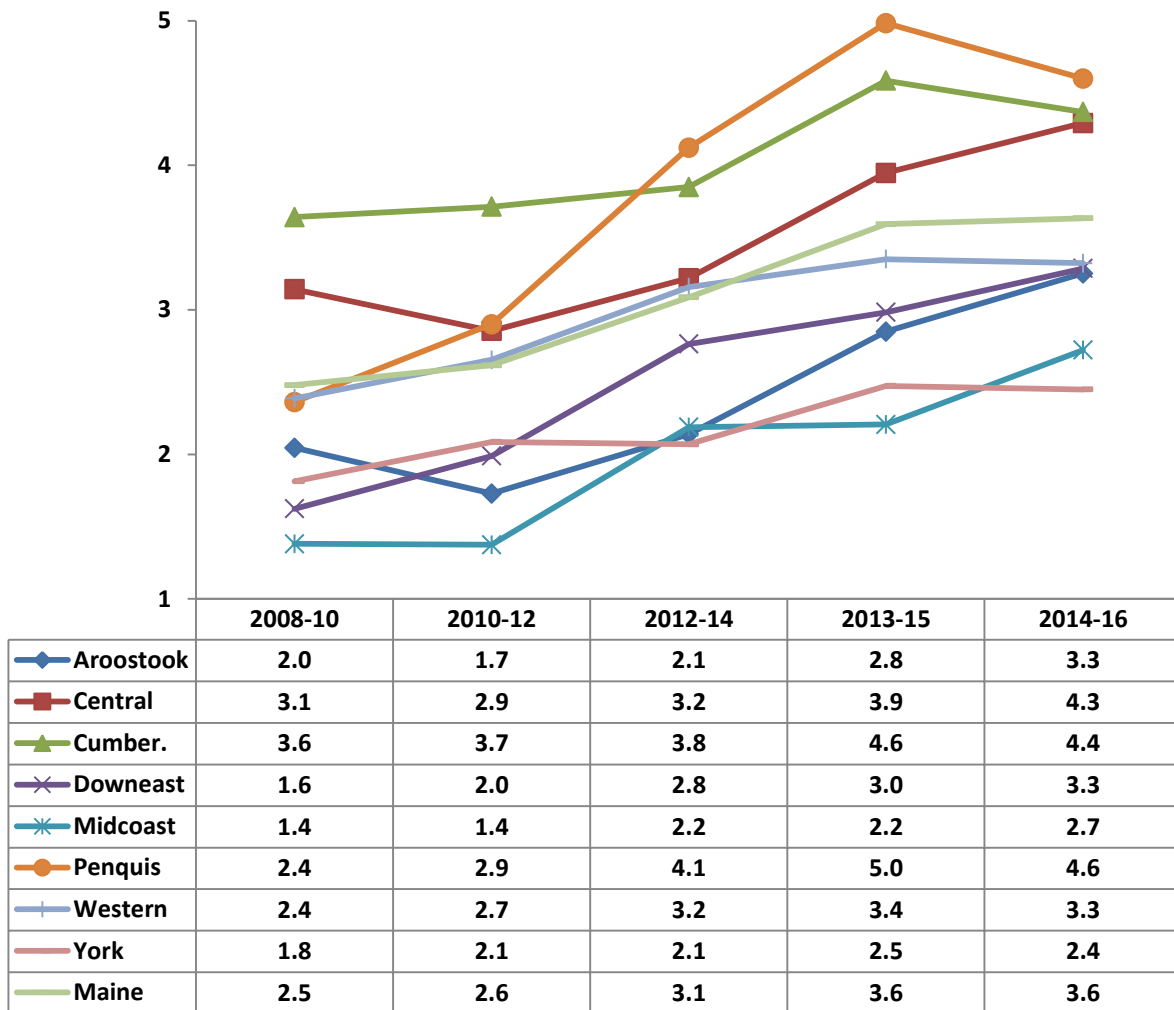
**Summary:** During the period of 2014–16 the Poison Center received 4.6 calls per 10,000 residents in Penquis that were suspected to be related to substance abuse; this was above the statewide rate (3.6 calls per 10,000 residents) and the highest rate observed among public health districts. The rate of poison center calls in Penquis suspected to involve substance abuse has been increasing since 2010–12 (2.4 calls per 10,000 residents).

**Figure 38. Number of calls suspected to be substance abuse reported to New England Poison Center 10,000 residents, by Public Health District: 2014–16**



Source: NNEPC

Figure 39. Number of calls suspected to be substance abuse reported to New England Poison Center per 10,000 residents, by Public Health District: 2008–10 to 2014–16



Source: NNEPC

## Overdoses and Related Deaths

**Indicator Description: OVERDOSES.** This indicator shows the rate of persons receiving help from Emergency Medical Services (EMS) related to an overdose.

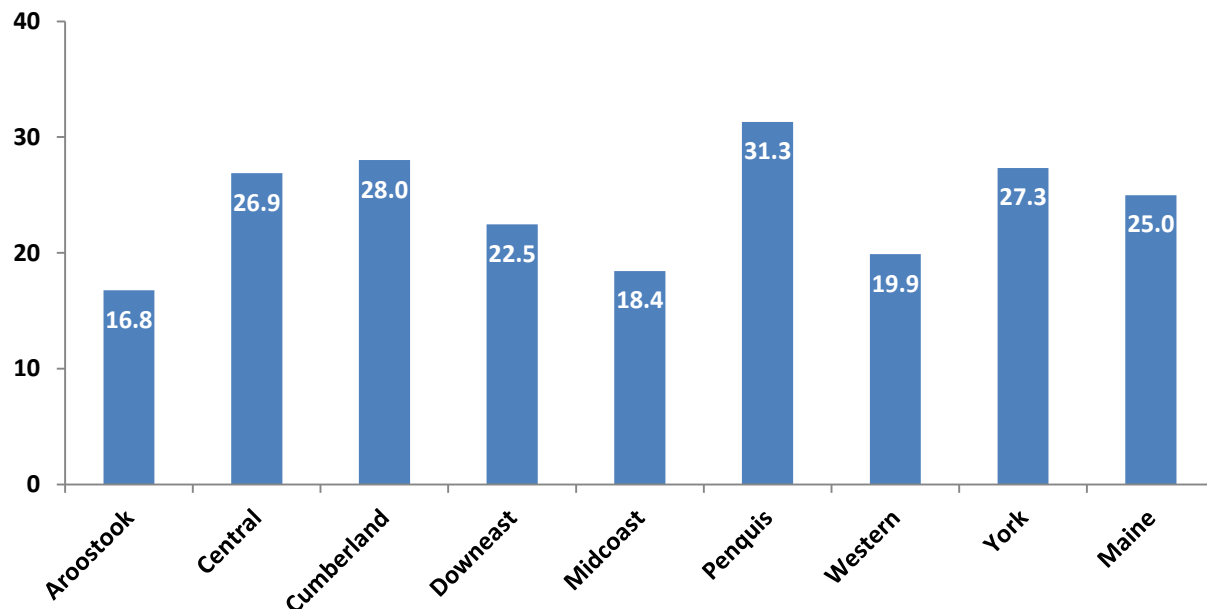
**Why Indicator is Important:** Overdosing on a substance can cause serious physical harm resulting in hospitalization and even death. Responding to overdoses also uses valuable EMS resources. The rate per 10,000 allows us to see the frequency with which an occurrence happens within a population over time, as well as make relative comparisons between small and large population areas. In this case, the base of 10,000 people was used due to small numbers.

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

**Data Source(s):** EMS, 2016, 2013–2016

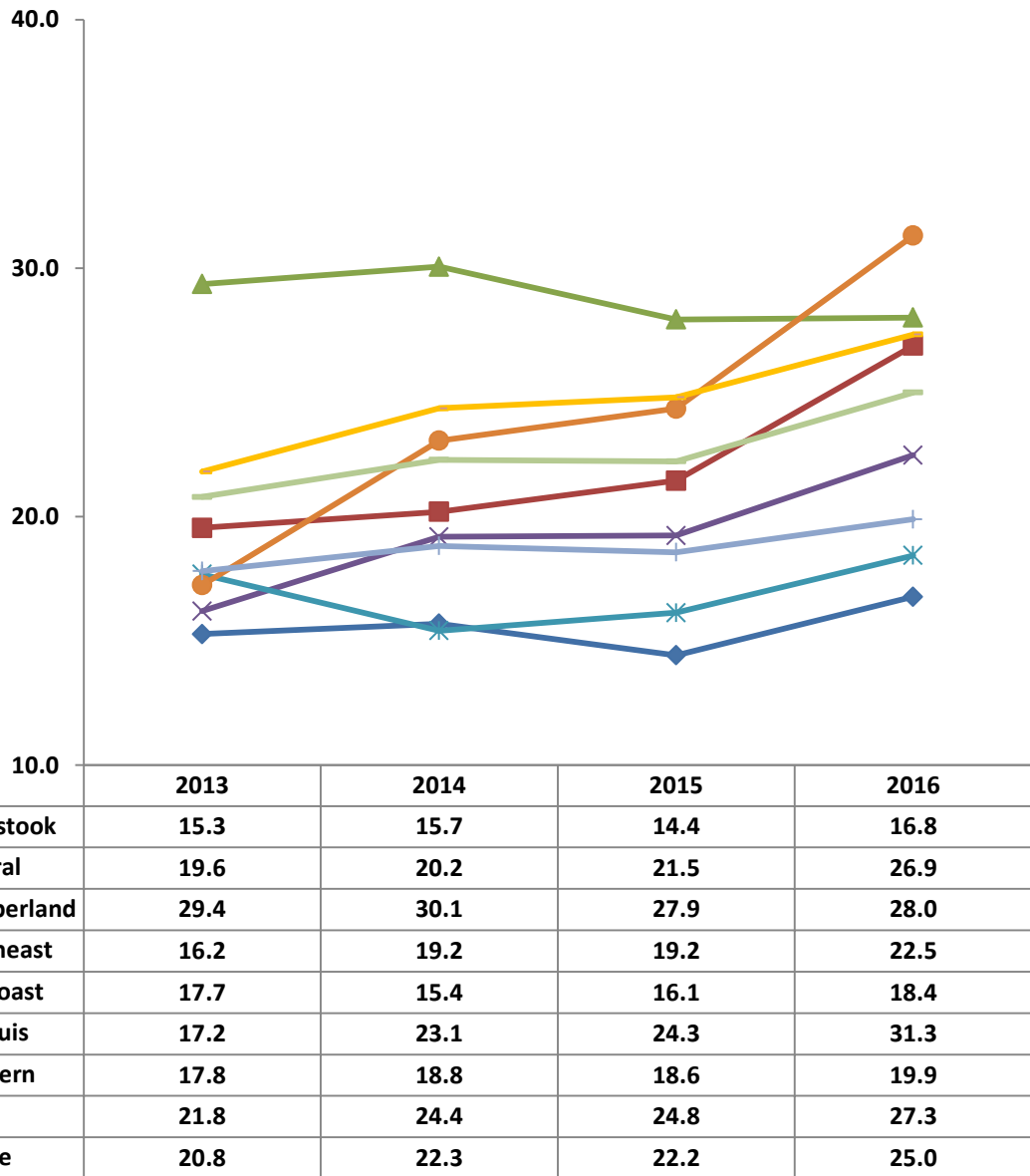
**Summary:** In 2016, Penquis had the highest rate of drug/medication overdose responses among public health districts with 31.3 per 10,000 residents. This was compared to the statewide rate of 25 drug/medication responses per 10,000 residents. The rate of overdose responses related to drug/medication in Penquis has increased dramatically over the past few years.

**Figure 40. Number of drug and/or medication-related overdose EMS responses per 10,000 residents, by Public Health District: 2016**



Source: Emergency Medical Services

**Figure 41. Number of overdose EMS responses due to drug and/or medication per 10,000 residents, by Public Health District: 2013–2016**



Source: Emergency Medical Services



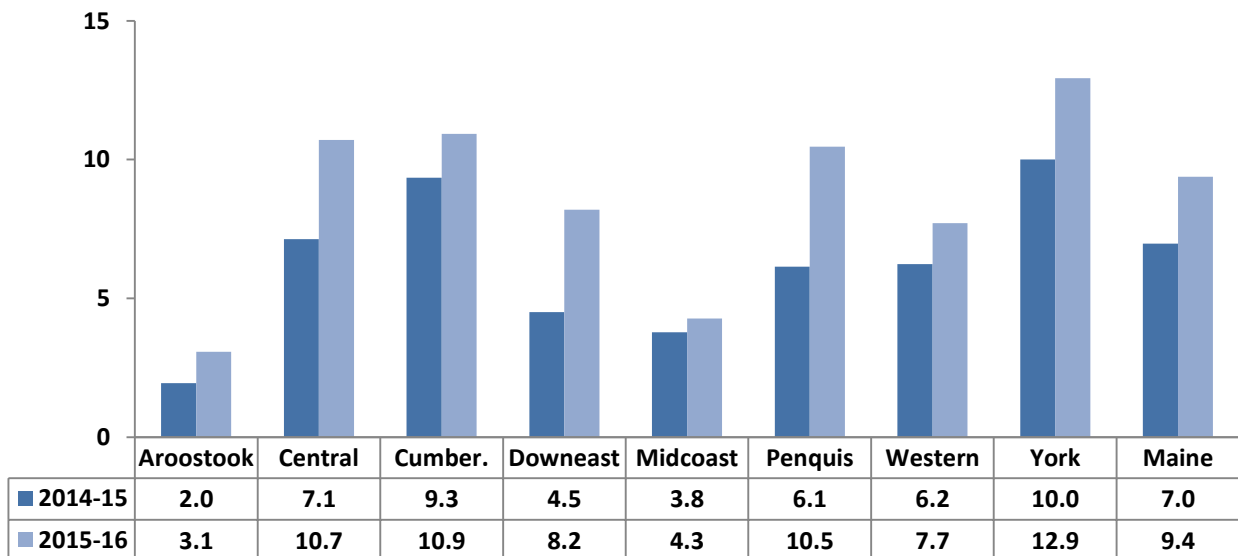
**Indicator Description: NALOXONE ADMINISTRATIONS.** This indicator shows the number of persons receiving naloxone administrations from Emergency Medical Services (EMS) related to an opioid overdose. Naloxone, also known as Narcan, is a medication administered to patients who have experienced an overdose related to an opioid (e.g., prescription painkillers, heroin, or morphine). This indicator includes instances where the opioid overdose is accidental (that is, not a result of intentional or recreational misuse).

**Why Indicator is Important:** Overdosing on a substance can cause serious physical harm resulting in hospitalization and even death. Responding to overdoses also uses valuable EMS resources. It is worth stating that this indicator gives us a better sense of the overall prevalence of opioid overdoses, since it includes those that did not result in death.

**Data Source(s):** Emergency Medical Services, 2014–15 and 2015–16

**Summary:** In 2015–16, Penquis observed a rate of 10.5 naloxone administrations per 10,000 residents via overdose ambulance responses; this was higher than the statewide rate (9.4). Although not shown, naloxone administrations by EMS responders in Penquis more than doubled from 2014 (115) to 2015 (239).

**Figure 42. Naloxone\* administrations per 10,000 residents, by Public Health District: 2014–15 and 2015–16**



Source: Emergency Medical Services

\*Naloxone, also known as Narcan, is a medication administered to counter the effects of an overdose due to opioids.

**Indicator Description: DEATHS DUE TO OVERDOSE.** This measure reflects the number of deaths where the cause of death was directly related to the consumption of one or more substances. The measure excludes deaths where a substance may have been ingested prior to engaging in a behavior that resulted in death (e.g., drunk driving) or where lifetime substance use and abuse may have impacted health (e.g., alcohol-related cirrhosis). In order to preserve anonymity and strengthen validity, rates were calculated based on the sum of deaths per three year intervals. The rate per 10,000 allows us to see the frequency with which an occurrence happens within a population over time, as well as make relative comparisons between small and large population areas. In this case, the base of 10,000 people was used due to small numbers.

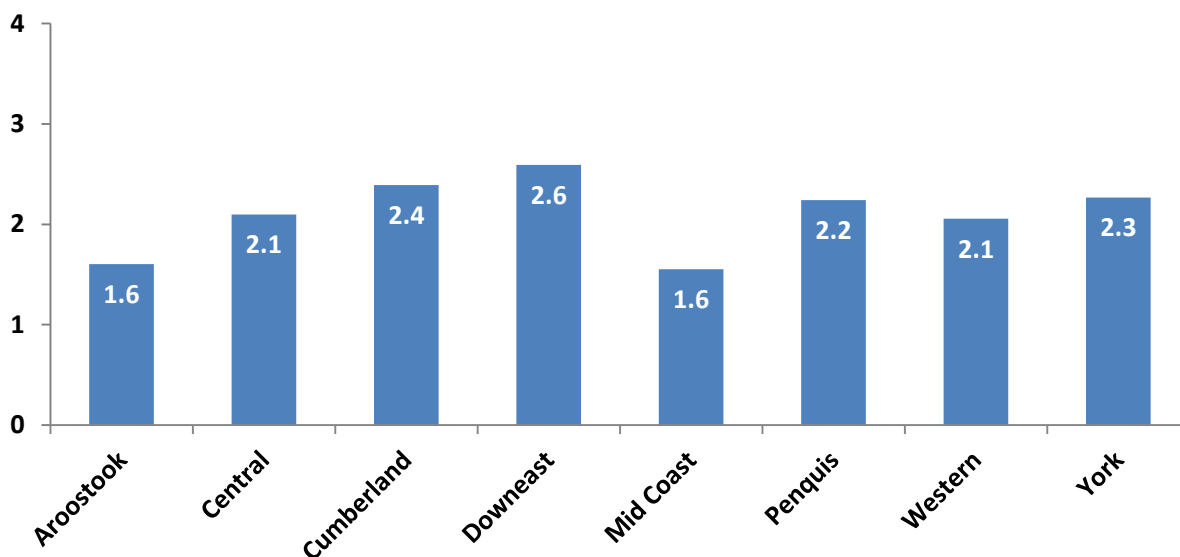
Operationalized as:  $\left(\frac{\# \text{ of overdose deaths}}{\text{population}}\right) \times 10,000$

**Why Indicator is Important:** 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):** Dr. Marcella Sorg, Margaret Chase Smith Policy Center at University of Maine, Office of the Chief Medical Examiner, 2014–16, 2010–12 to 2014–16

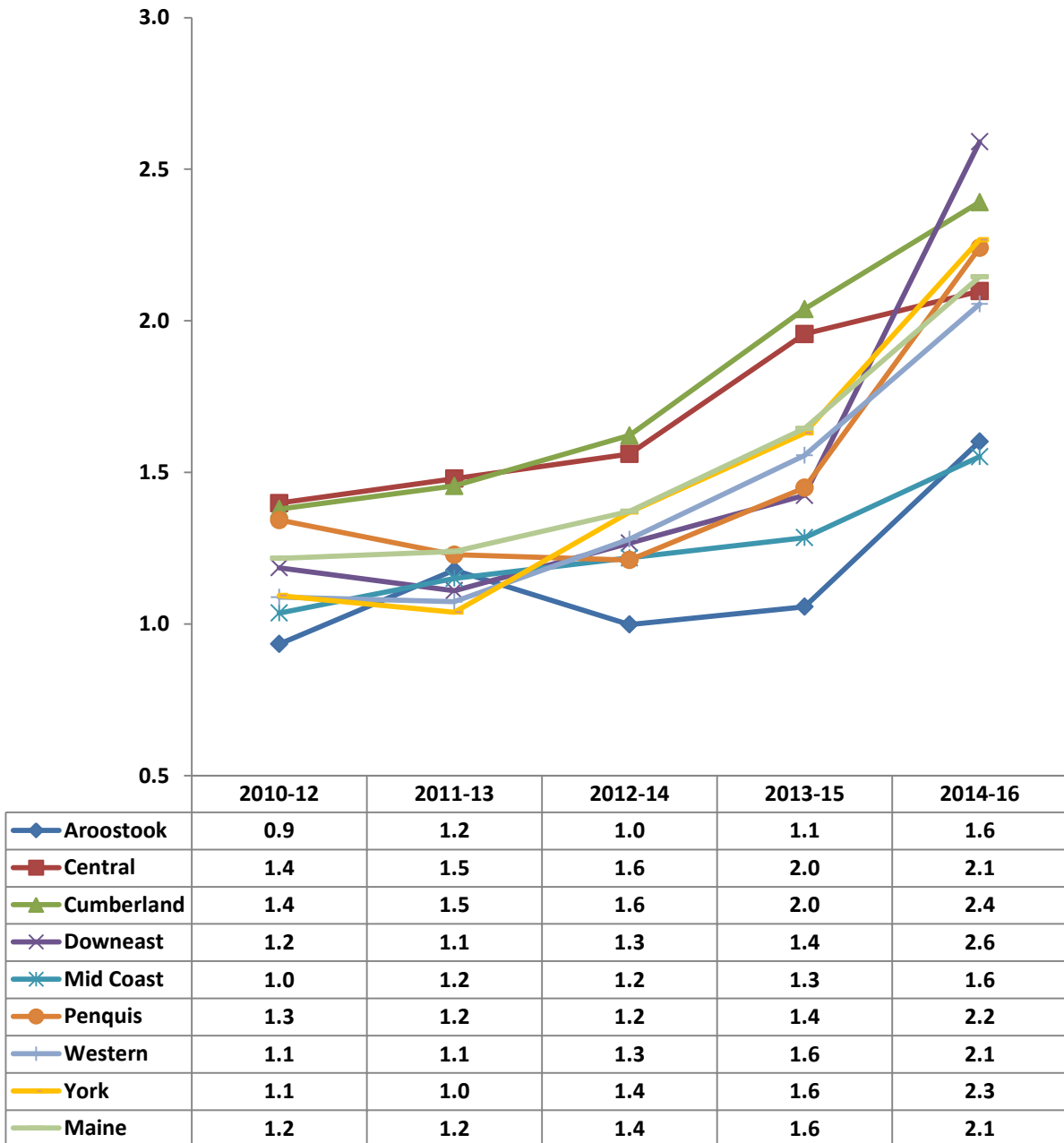
**Summary:** During 2014–16 (combined years), Penquis observed an average of 2.2 drug related overdose deaths per 10,000 residents; this was average among public health districts. Penquis has consistently observed some of the lowest rates since 2010–12 but has been steadily increasing over the past several years.

**Figure 43. Drug-related death rate per 10,000, by Public Health District: 2014–16**



Source: Dr. Marcella Sorg, Margaret Chase Smith Policy Center at University of Maine, Office of the Chief Medical Examiner

**Figure 44. Drug-related death rate per 10,000, by Public Health District:  
2010–12 to 2014–16**



Source: Dr. Marcella Sorg, Margaret Chase Smith Policy Center at University of Maine, Office of the Chief Medical Examiner

## Factors Contributing to Substance Use and Abuse

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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)<sup>2</sup>
- Perceived Risk of Being Caught (e.g., individuals’ belief that s/he will be caught by parents or police)<sup>3</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.

Nearly two thirds of high school students in Penquis indicated that it was easy to get alcohol and half felt they could easily obtain marijuana. Almost 80 percent of high school students indicated that there is a moderate-to-great risk of people harming themselves if they consume five or more drinks regularly, while just under half also reported a moderate-to-great risk of people harming themselves if they smoke marijuana once or twice a week. Penquis observed some of the highest rates of poison center calls requesting verification of opioids, benzodiazepines, as well as stimulants.

On a positive note, in recent years there has been a steady decrease in the percentage of students who felt it was easy to access alcohol or marijuana. In addition, fewer parents felt their teen could access alcohol without permission. Moreover, there has been an increase in the proportion of teens who felt they would be caught by their parents if they drank alcohol without permission.

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<sup>2</sup> Bonnie, R. J & O’Connell, M.E., Eds. (2004). *Reducing Underage Drinking: A Collective Responsibility*. The National Academies Press: Washington, DC.

<sup>3</sup> Birckmayer, J. D., Holder, H. D., Yacoubian, Jr., G. S., & Friend, K. B. (2004). A general causal model to guide alcohol, tobacco, and illicit drug prevention: assessing the research evidence. *Journal of Drug Education*, 34(2), 121-153.

## Availability and Accessibility

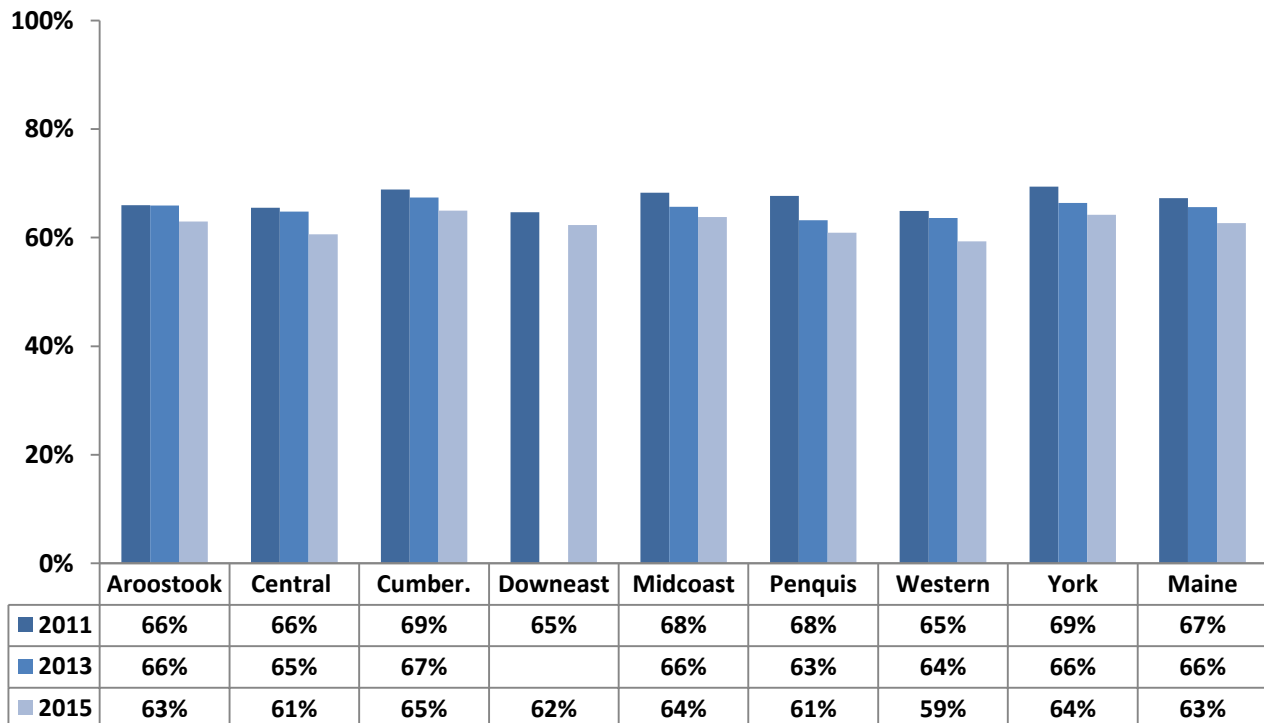
**Indicator Description: PERCEIVED EASE OF OBTAINING ALCOHOL BY UNDERAGE YOUTH.** This indicator reflects the percentage of high school students (grades 9 to 12) who reported that it would be easy or very easy for them to get alcohol if they wanted some.

**Why Indicator is Important:** In 2015, Maine high school students who reported that they thought alcohol was easy to obtain were nearly four times as likely to report consuming alcohol within the past month compared to students who did not think it was easy to obtain.

**Data Source(s):** MIYHS, 2011–2015

**Summary:** In 2015, 61 percent of high school students in Penquis indicated that it was easy to get alcohol; this is slightly lower than the statewide rate (63%). Rates among public health districts have declined since 2009.

**Figure 45. Percent of high school students by Public Health District who reported it was easy to get alcohol: 2011–2015**



Source: MIYHS

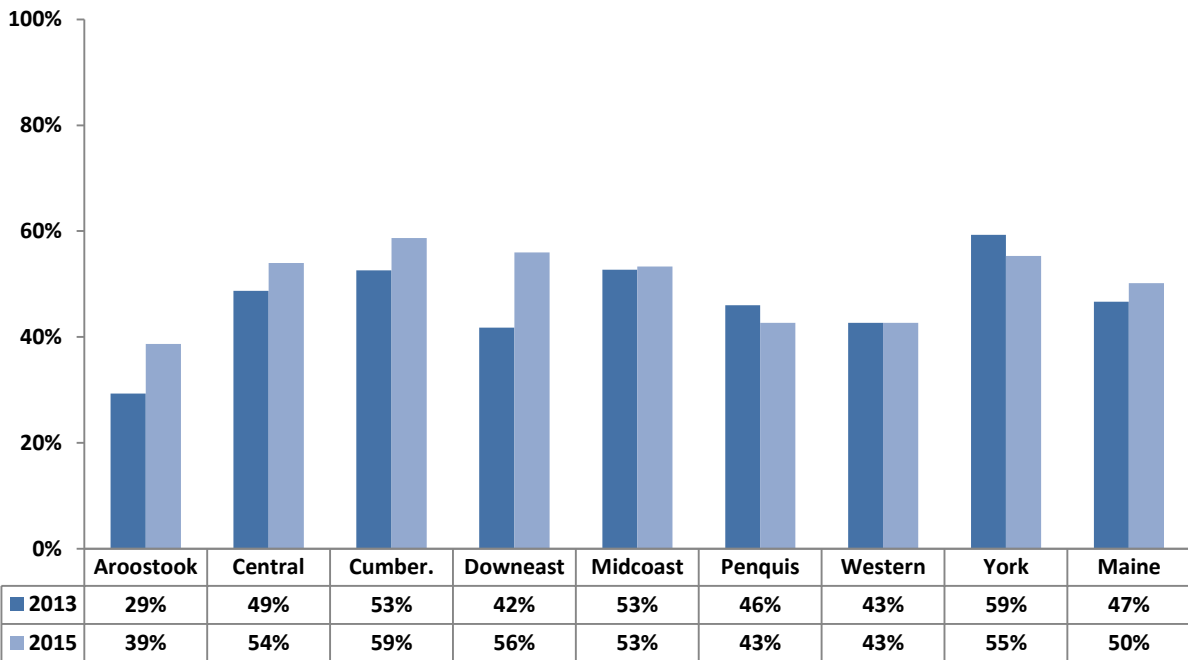
**Indicator Description: PARENT PERCEPTION OF ACCESSIBILITY OF ALCOHOL AT HOME.** This indicator measures the percentage of parents reporting that their teen would be able to access alcohol they had purchased without their knowledge. This data comes from the Maine Parent Survey administered by Pan Atlantic for the Maine Office of Substance of Abuse and Mental Health Services.

**Why Indicator is Important:** Easy access to alcohol at home is a major contributing factor to underage drinking.

**Data Source(s):** Parent Survey 2013 and 2015

**Summary:** In 2015, among parents of middle and high school youth, 43 percent felt it was possible for their children to access alcohol they had purchased without their knowledge; this was seven percentage points lower than the statewide average. Penquis’s rate decreased by three percentage points since 2013.

**Figure 46. Parent perception of accessibility of parent purchased alcohol without parental knowledge: 2013 and 2015**



Source: Parent Survey

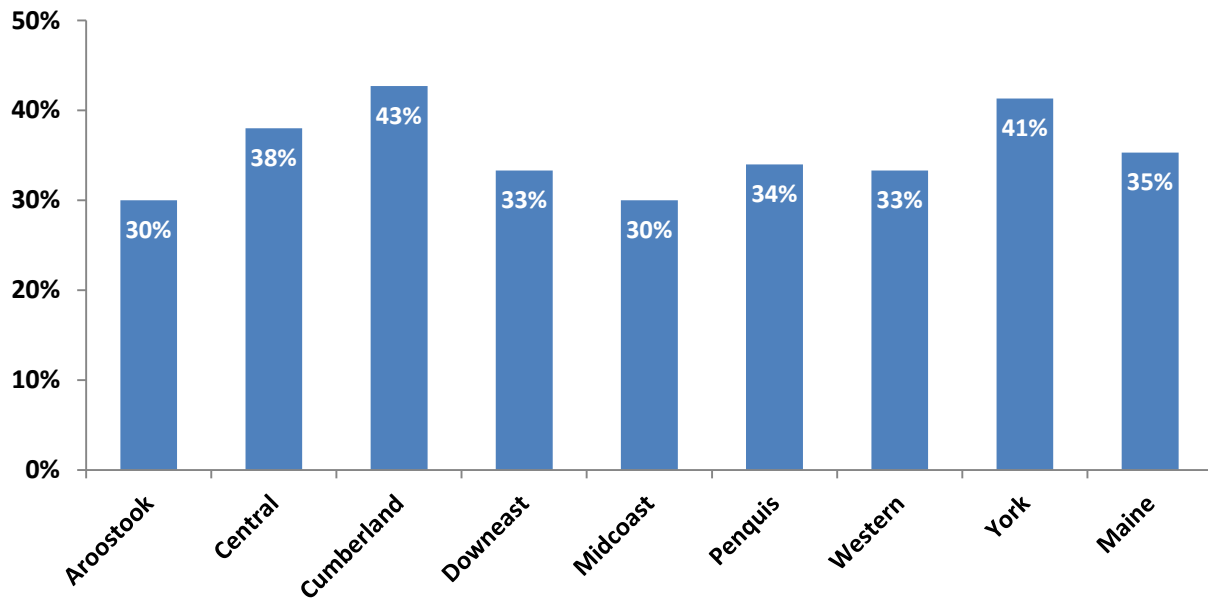
**Indicator Description: PARENT PERCEPTION OF ACCESSIBILITY OF RX DRUGS AT HOME.** This indicator measures the percentage of parents reporting that their teen would be able to access prescription medication (not prescribed to their child) without their knowledge. This question was first asked in 2015 Parent Survey. This data comes from the Maine Parent Survey administered by Pan Atlantic for the Maine Office of Substance of Abuse and Mental Health Services.

**Why Indicator is Important:** Easy access to prescription drugs at home is a major contributing factor to prescription drug misuse.

**Data Source(s):** Parent Survey 2015

**Summary:** More than a third (34%) of Penquis parents felt that, at home, their child would be able to access prescription medications that were not prescribed to the child, without permission. Penquis’s rate was similar to the statewide average (35%).

**Figure 47. Parent perception of teen accessibility of prescription drugs at home without parental knowledge: 2015**



Source: Parent Survey

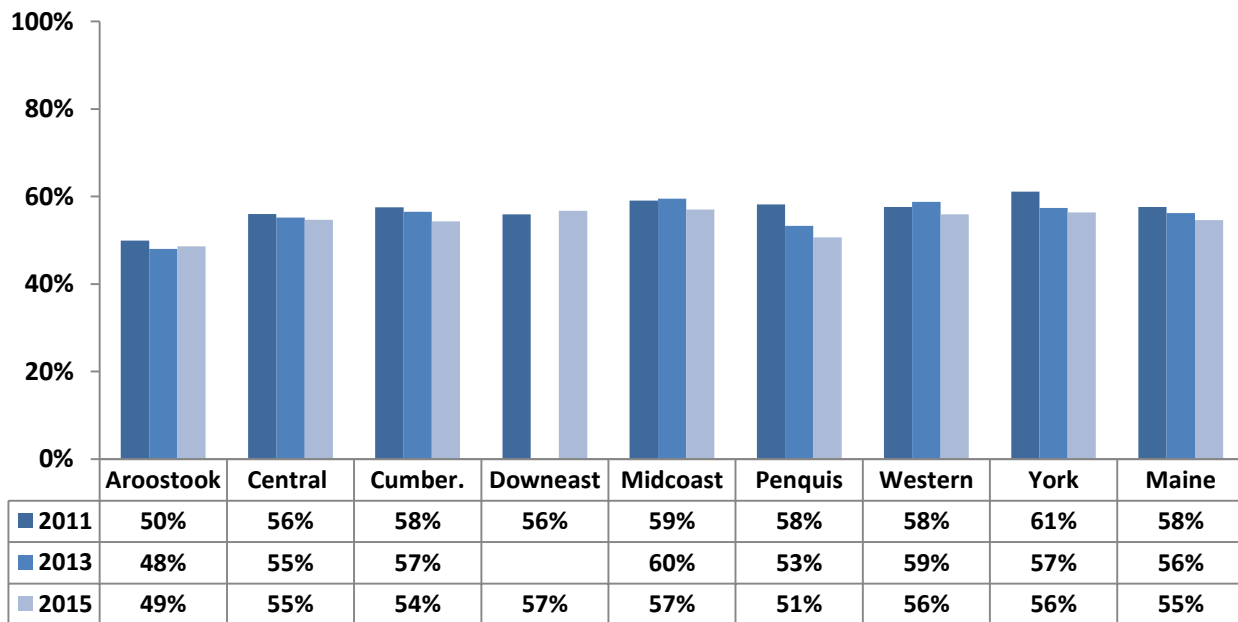
**Indicator Description: PERCEIVED EASE OF OBTAINING MARIJUANA BY YOUTH.** This indicator illustrates the percentage of high school students reporting it would be easy or very easy to obtain marijuana if they wanted it.

**Why Indicator is Important:** In 2015, Maine high school students who reported that they thought marijuana was easy to obtain were nearly nine times as likely to use marijuana in the past 30 days compared to their peers who thought it was difficult to obtain.

**Data Source(s):** MIYHS, 2011–2015

**Summary:** In 2015, 51 percent of high school students in Penquis indicated that it would be easy to get marijuana; this was lower than the statewide rate (55%). The rate of perceived accessibility of marijuana among high school students in Penquis decreased by seven percentage points since 2011 (58%).

**Figure 48. Percent of high school students by Public Health District who reported it would be easy to get marijuana: 2011–2015**



Source: MIYHS



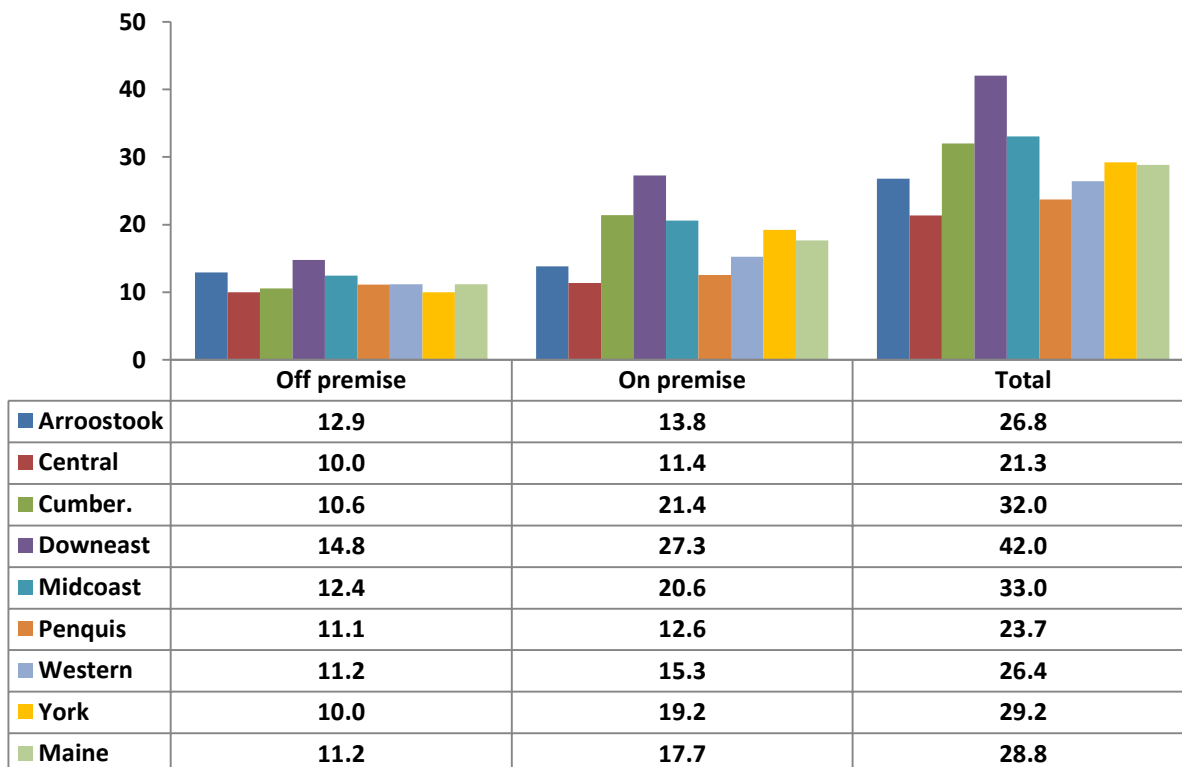
**Indicator Description: NUMBER OF ALCOHOL OUTLETS PER CAPITA.** This indicator reflects the number of active (as of July 2016) retail establishments selling alcohol per person. This includes both on-premise (e.g., bars, restaurants) and off-premise (e.g., convenience stores) establishments. It is calculated by dividing the number of retail establishments by the number of residents in the county (based on 2015 U.S. Census estimates).

**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>4</sup>

**Data Source(s):** DPS, Liquor Licensing and Compliance, 2017; U.S. Census, 2016

**Summary:** In 2017, Penquis observed a rate of 23.7 active liquor licensees per 10,000 people; this was lower than the statewide rate (28.8). Penquis’s rate of on-premise liquor licensees was slightly higher than its rate for off-premise licensees (12.6 compared to 11.1). Although not shown, as of August 2017, Penquis had 400 active liquor licensees (188 off-premise and 212 on-premise establishments).

**Figure 49. Number of active liquor licensees per 10,000 residents, by premise type and Public Health District: 2017**



Source: DPS/U.S. Census

<sup>4</sup> Grube, J. W., Gruenewald, P. J. & Chen, M. J. (2010). Community alcohol outlet density and underage drinking. *Addiction*, 105, 270-278.

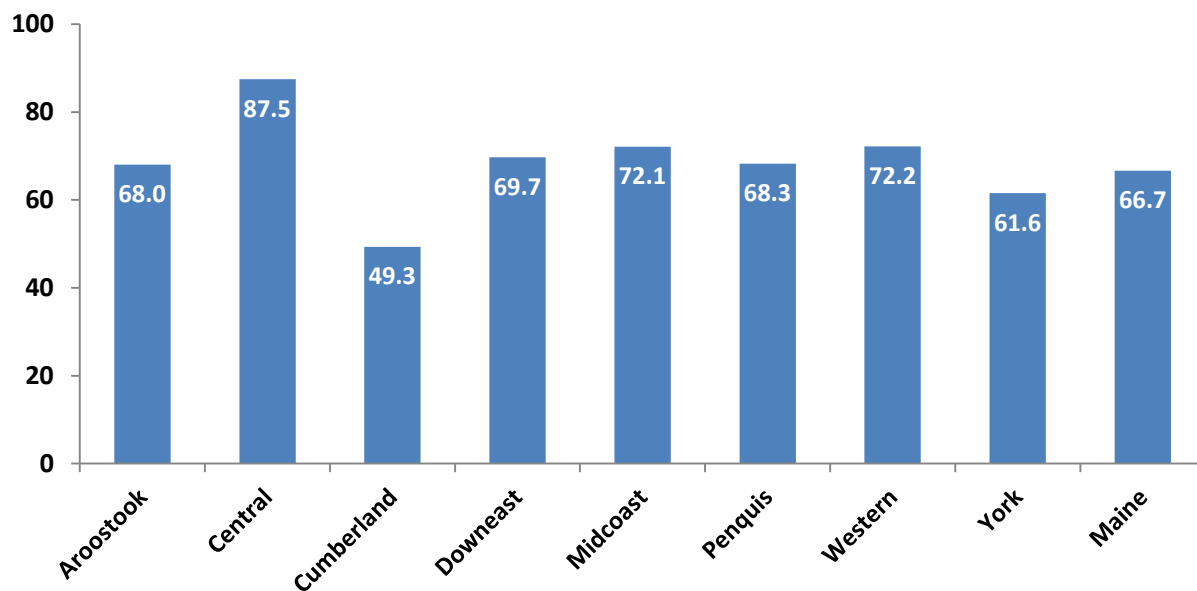
**Indicator Description: DISPENSED QUANTITY OF SCHEDULE II-IV DRUGS PER CAPITA.** These indicators reflect the dispensed quantity of narcotics, tranquilizers, and stimulants through prescriptions in Maine. This includes only prescription drugs that are classified “Schedule II-IV” drugs, meaning those with a higher potential for abuse and addiction. It is important to note that the dispensed quantity does not indicate the size or dosage of the pills associated with the prescription. All pharmacies in Maine report to the Prescription Monitoring Program.

**Why Indicator is Important:** The dispensed quantity *per capita* indicates the volume of prescription drugs 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, 2011–2015

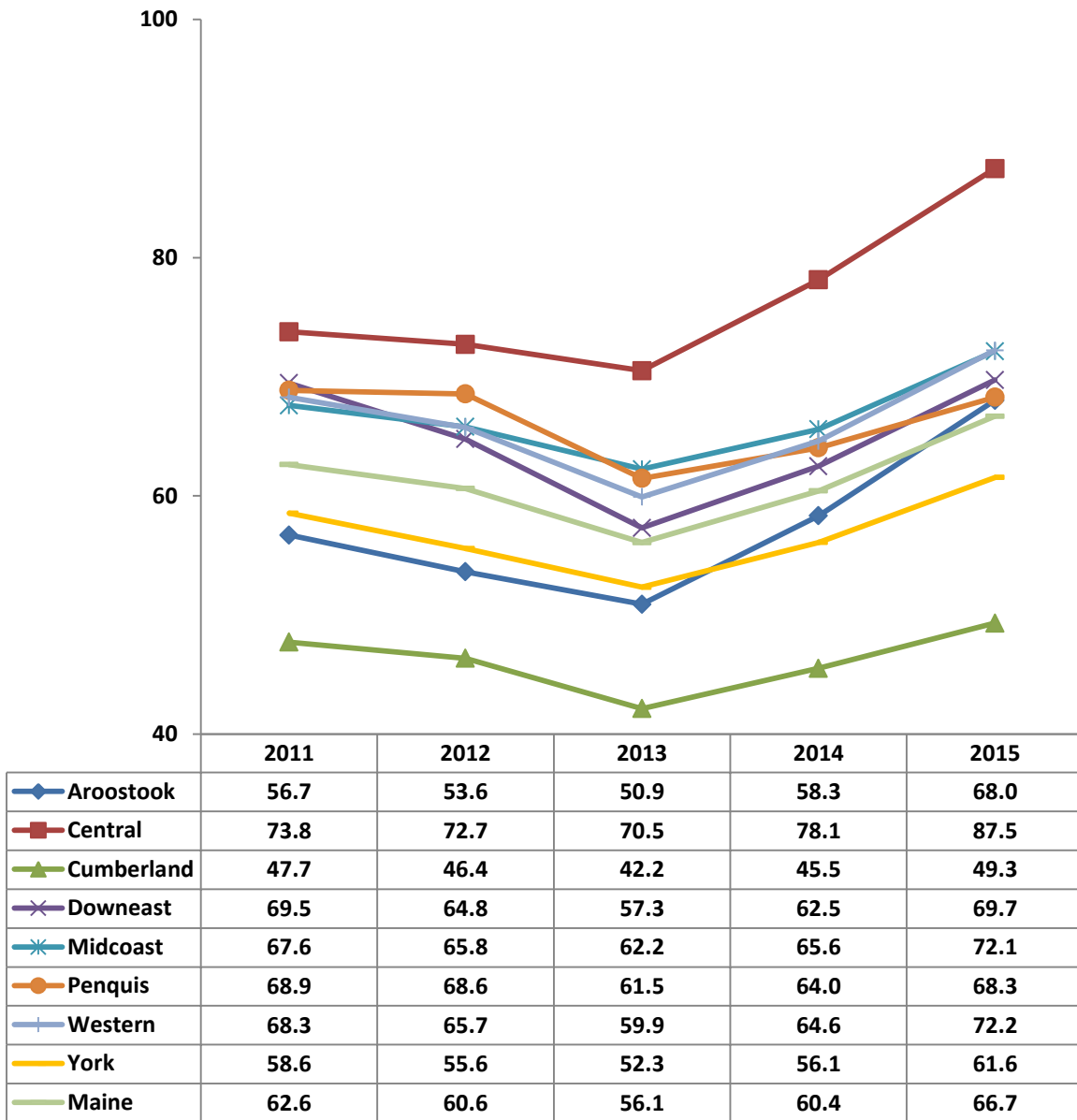
**Summary:** In 2015, the rate of dispensed quantity of narcotics *per capita* in Penquis was 68.3 units per person; this was slightly higher than the statewide rate of 66.7 narcotic units per person. In 2015, as with all public health districts, Penquis observed an uptick in the rate of narcotic units dispensed *per capita*. This increase was in part due to the changes in data collection and drug classification (see note below chart).

**Figure 50. Dispensed quantity of narcotics *per capita*, by Public Health District: 2015\***



Source: PMP

Figure 51. Dispensed quantity of narcotics *per capita*, by Public Health District: 2011–2015\*

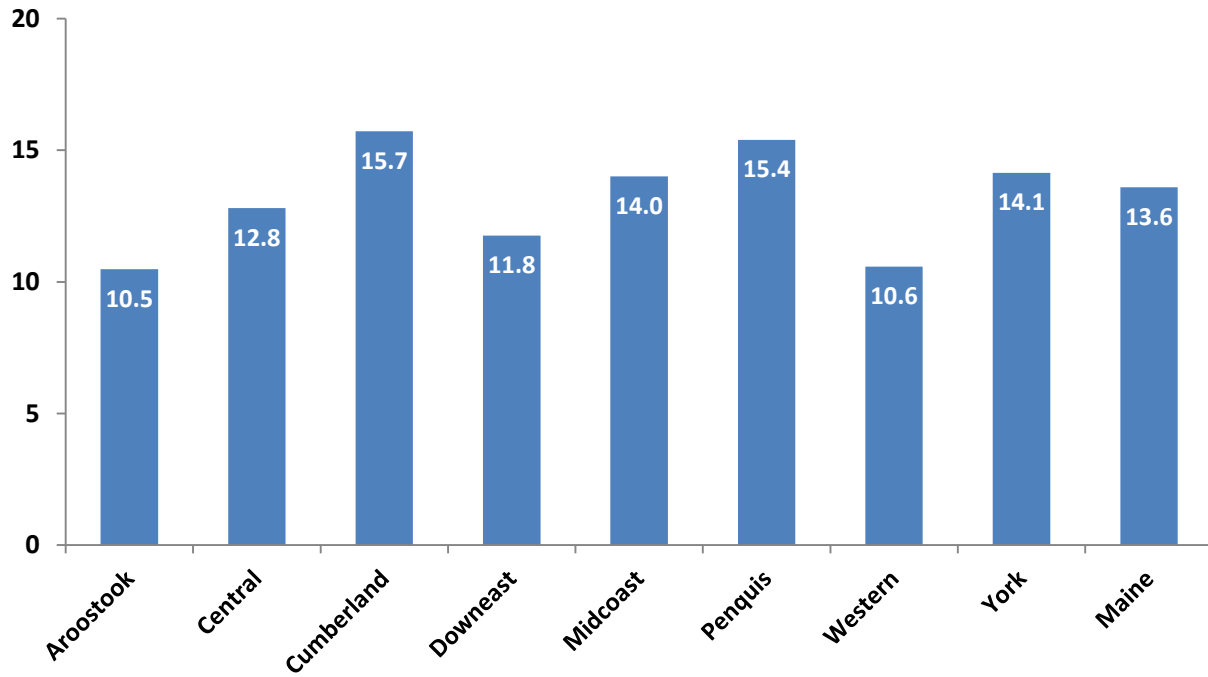


Source: PMP

\*The increase observed in 2014 in number of narcotic pills prescribed per capita was due in part to the inclusion of the previously unscheduled drug Tramadol (which became a Schedule II drug as of 8/18/2014) as well as the inclusion of data submitted via the Veterans Administration (as of 10/31/2014).

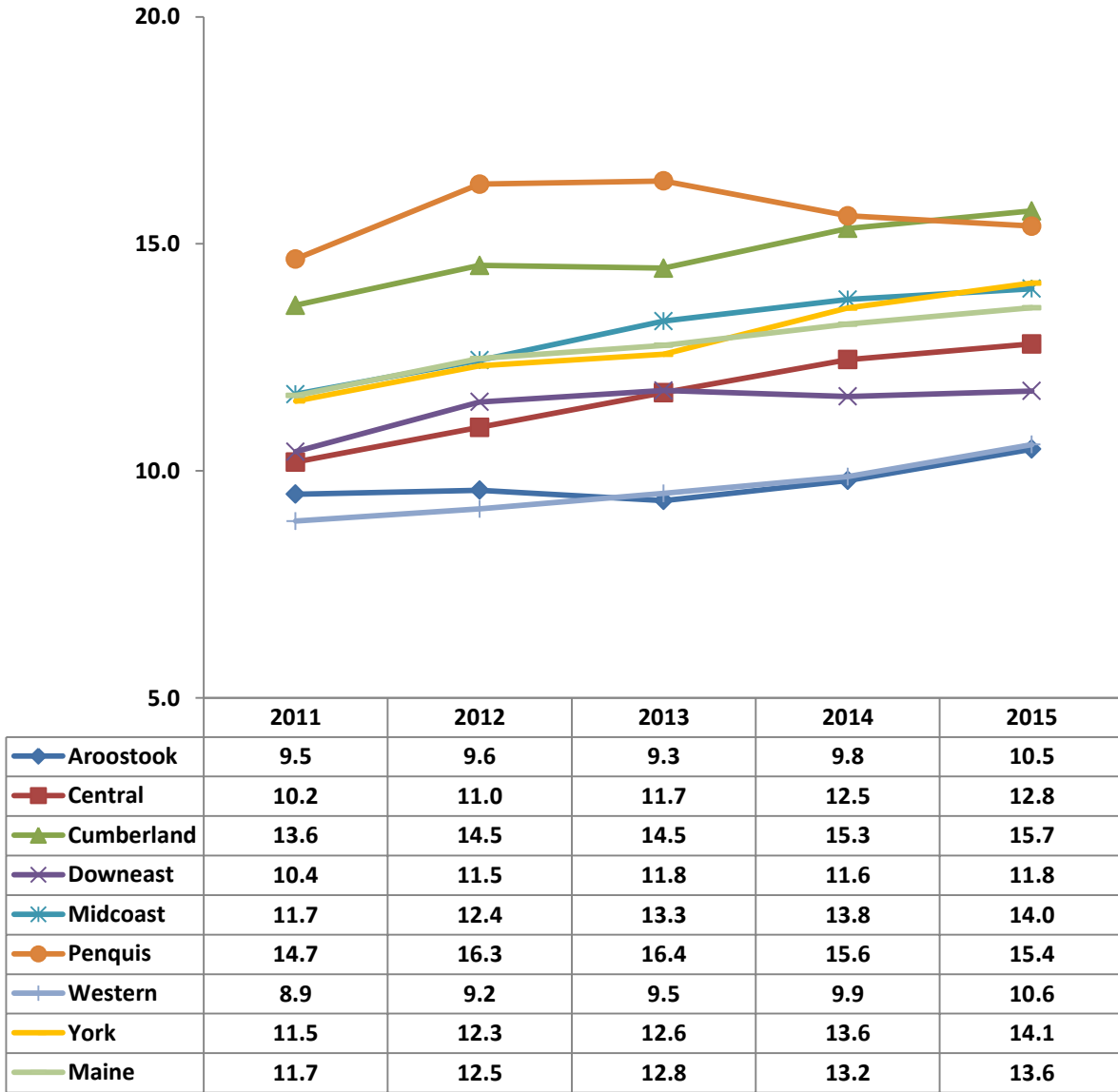
**Summary:** In 2015, the rate of the quantity of stimulants dispensed in Penquis was 15.4 units per person; this was the second highest rate among public health districts. For the past several years Penquis’s rate has remained high but relatively stable.

**Figure 52. Dispensed quantity of stimulants *per capita*, by Public Health District: 2015**



Source: PMP

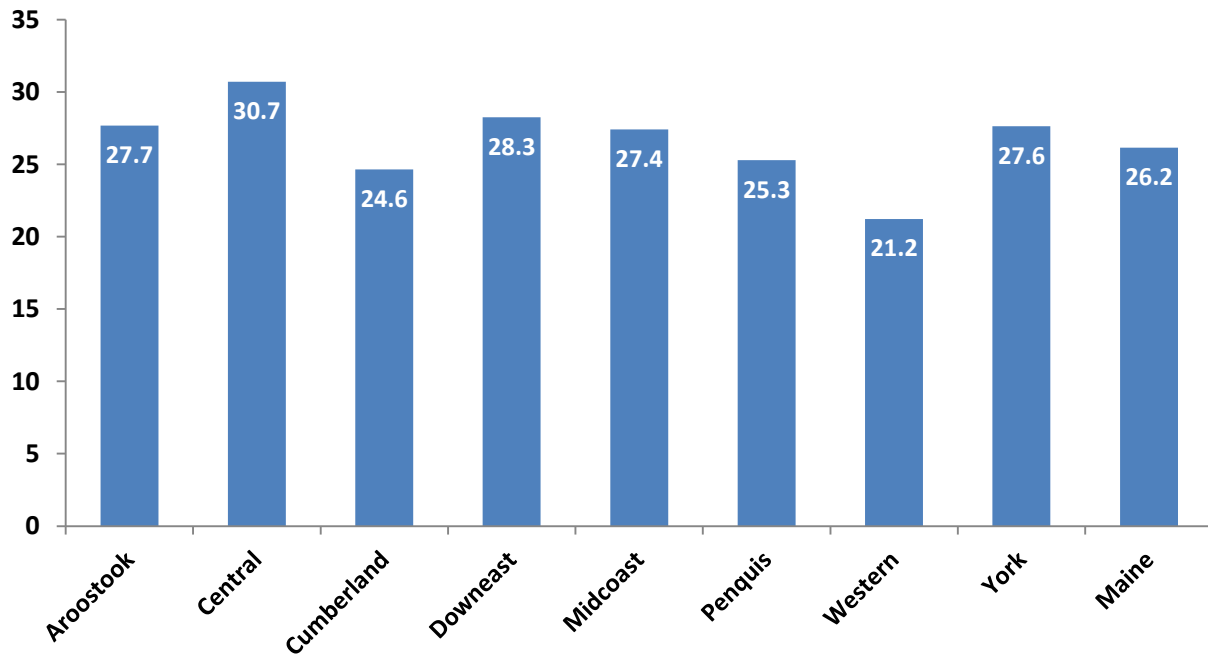
Figure 53. Dispensed quantity of stimulants *per capita*, by Public Health District: 2011–2015



Source: PMP

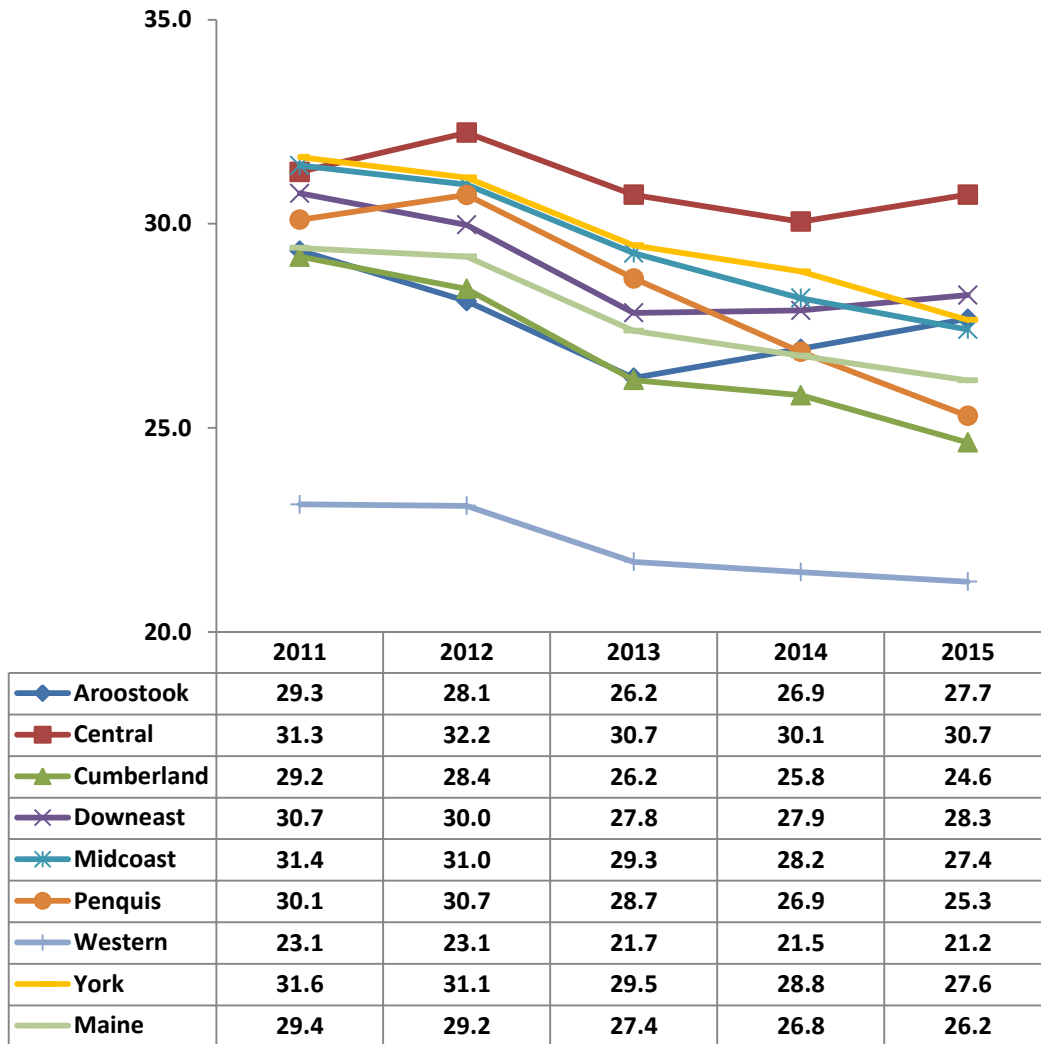
**Summary:** In 2015, the rate of the quantity of tranquilizers dispensed in Penquis was 25.3 pills per person; this was below the statewide average (26.2 units per person). The dispensed quantity rate for tranquilizers in Penquis has been steadily decreasing since 2012 (30.7 units per person).

**Figure 54. Dispensed quantity of tranquilizers *per capita*, by Public Health District: 2015**



Source: PMP

Figure 55. Dispensed quantity of tranquilizers *per capita*, by Public Health District: 2011–2015



Source: PMP

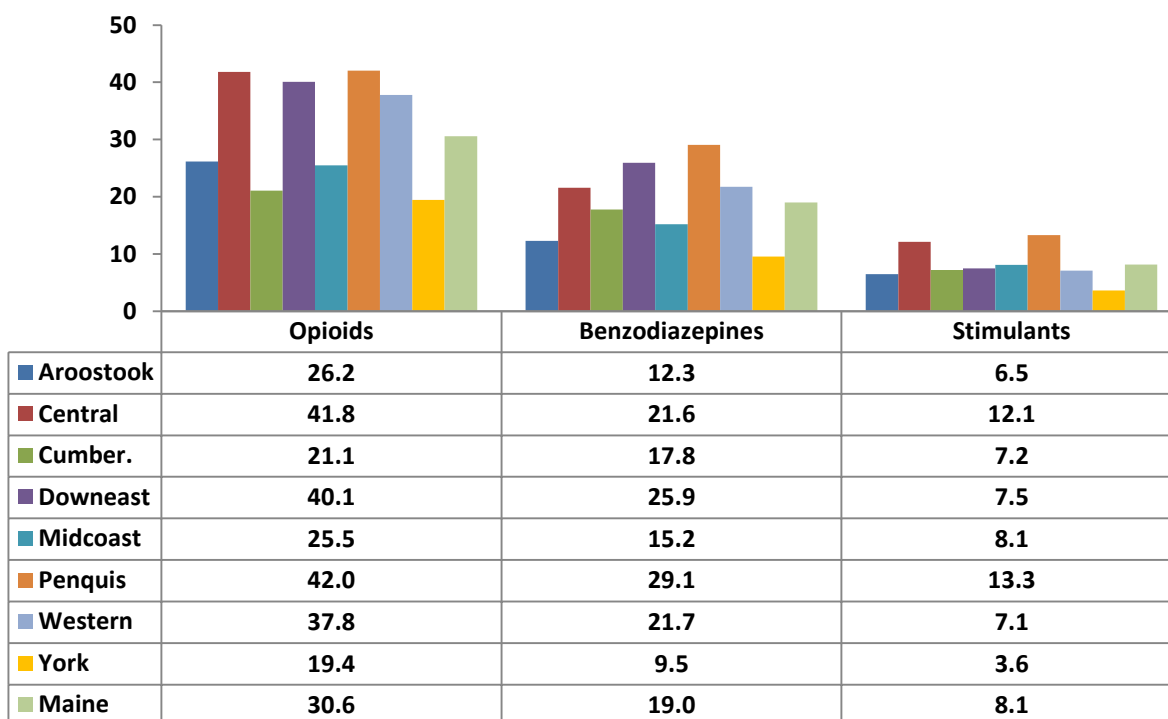
**Indicator Description: SUBSTANCES REQUESTED FOR VERIFICATION.** This indicator shows the rate of requests by non-law enforcement for medication verification through the Northern New England Poison Center. A person may call the NNEPC for many reasons, one being to help identify a medication or substance which another person has consumed or that has been found. The calls reflected in this indicator have been characterized by NNEPC as likely related to substance abuse, although NNEPC staffs do not make a formal or clinical assessment.

**Why Indicator is Important:** The increased volume of medication verification calls suggests a greater availability of those drugs in the community. This measure also suggests that there is a higher awareness among the community and parents for potential misuse of prescription pills which is prompting calls.

**Data Source(s):** NNEPC, 2014–16

**Summary:** During the period of 2014–16, most calls to NNEPC within Penquis requesting substance verification involved opioids (42 calls per 10,000 residents), followed by benzodiazepines (29.1 calls per 10,000 residents), and stimulants (13.3 calls per 10,000 residents). The rates for benzodiazepines and stimulants were the highest statewide. Although not shown, calls throughout the state requesting substance verification have been decreasing steadily within all drug types across public health districts for the past several years.

**Figure 56. Number of calls for medication verification reported to New England Poison Center per 10,000 residents, by drug type and Public Health District: 2014–16**



Source: NNEPC



## Perceived Risk and Harm

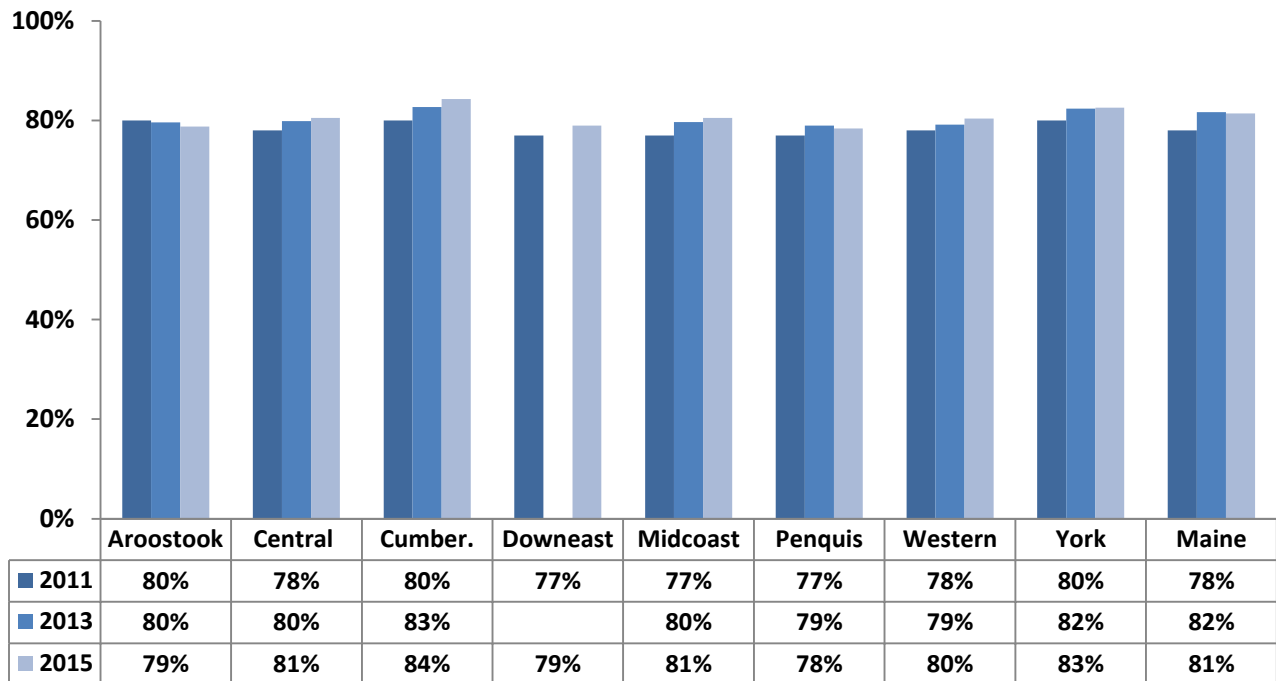
**Indicator Description: PERCEIVED RISK FROM BINGE DRINKING AMONG YOUTH.** This indicator reflects the percentage of individuals who perceive that there is moderate-to-great risk from drinking five or more drinks once or twice per week.

**Why Indicator is Important:** In 2015, Maine high school students who did not perceive a moderate to great risk of harm from binge drinking once or twice a week were twice as likely to drink in the past month as high school students who do perceive risk of harm.

**Data Source(s):** MIYHS, 2011–2015

**Summary:** From 2011 to 2015, the percentage of high school students in Penquis who indicated that there is a moderate-to-great risk of people harming themselves if they consume five or more drinks regularly increased slightly from 77 percent to 78 percent. This was three percentage points lower than the statewide average (81%).

**Figure 57. Percent of high school students by Public Health District who reported consuming five or more drinks once or twice per week as harmful: 2011–2015**



Source: MIYHS

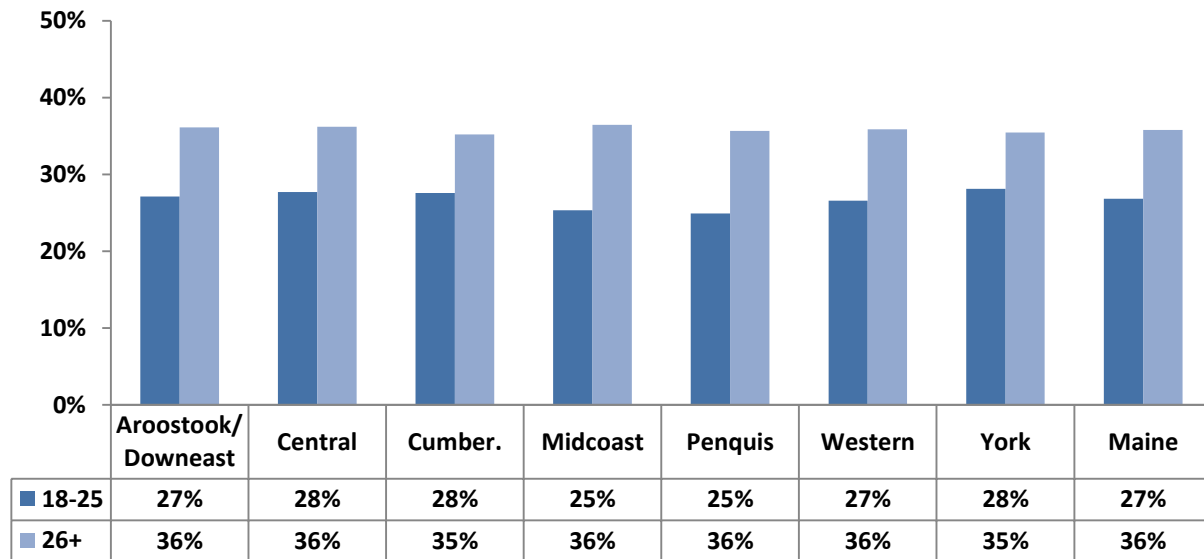
**Indicator Description: PERCEIVED RISK FROM BINGE DRINKING AMONG MAINERS.** This indicator reflects the percentage of Mainers age 18 and older who perceive that there is risk from consuming five or more drinks once or twice per week. Because of small sample sizes, survey data from multiple years must 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, 2012–14, 2008–10 to 2012–14

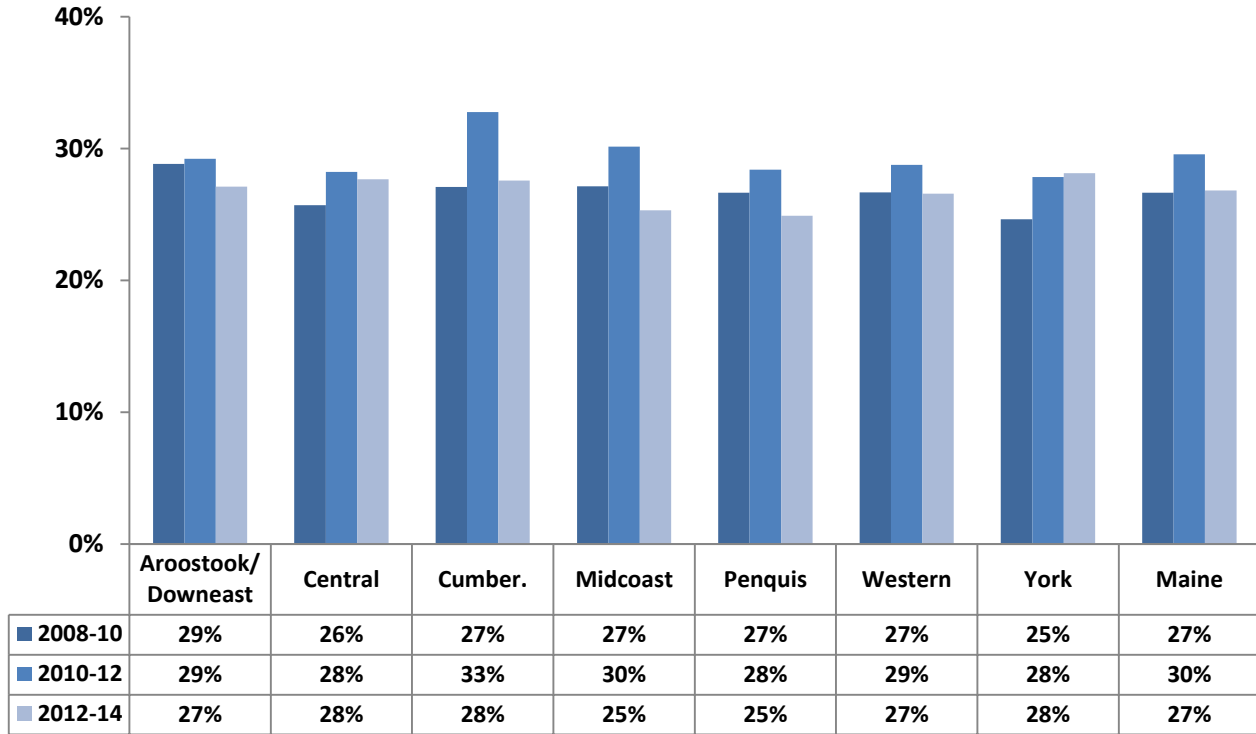
**Summary:** During the period 2012-14, Penquis residents ages 18 to 25 indicated the lowest perception of risk from binge drinking among age groups within the district at 25 percent, while those 26 and older had the highest such perception (36%). Penquis’s rates of perception are very similar to those of the state. Rates of perception of risk from binge drinking among Penquis residents 18 to 25 decreased by three percentage points since 2010-12 (28%).

**Figure 58. Percent of adults who perceive a great risk from binge drinking, by age group and Public Health District: 2012–14**



Source: NSDUH

Figure 59. Percent of 18 to 25 year olds who perceive a great risk from binge drinking, by Public Health District: 2008–10 to 2012–14



Source: NSDUH

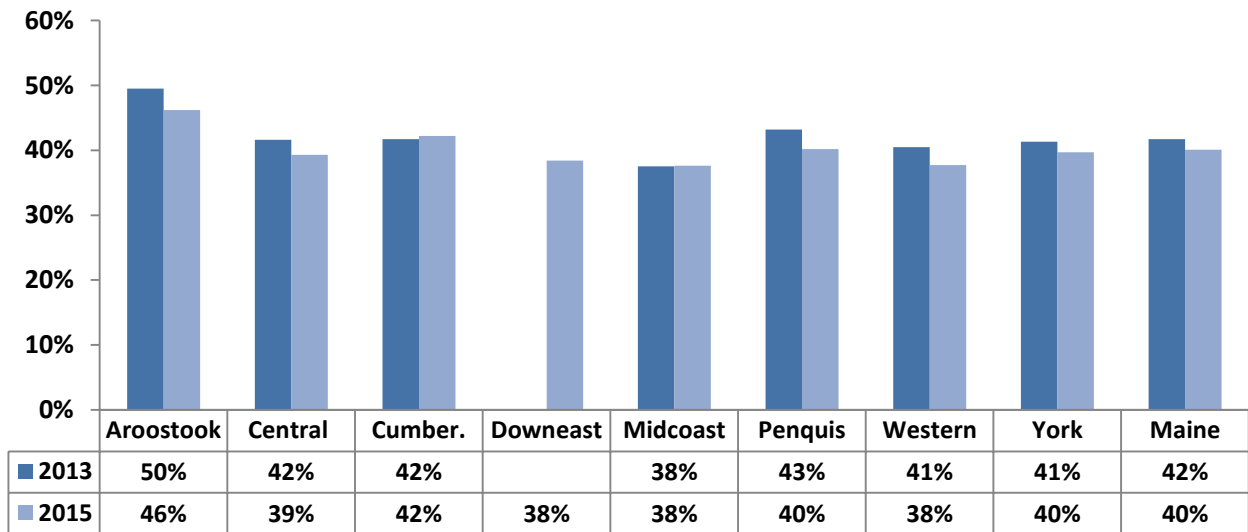
**Indicator Description: PERCEIVED RISK OF REGULAR MARIJUANA USE AMONG YOUTH.** This measure demonstrates the percentage of individuals who perceive a moderate-to-great risk of harm from smoking marijuana regularly.

**Why Indicator is Important:** High school students who do not believe there is moderate to great risk in smoking marijuana regularly are almost eight times as likely to smoke marijuana as their peers who do perceive risk of harm. A similar relationship exists between adult perceptions and consumption.

**Data Source(s):** MIYHS, 2013 and 2015

**Summary:** From 2013 to 2015, the percentage of high school students in Penquis who indicated that there is a moderate-to-great risk of people harming themselves if they smoke marijuana once or twice a week decreased three percentage points, from 43 percent to 40 percent.

**Figure 60. Percent of high school students by Public Health District who reported a risk of harm from smoking marijuana once or twice per week: 2013 and 2015**



Source: MIYHS

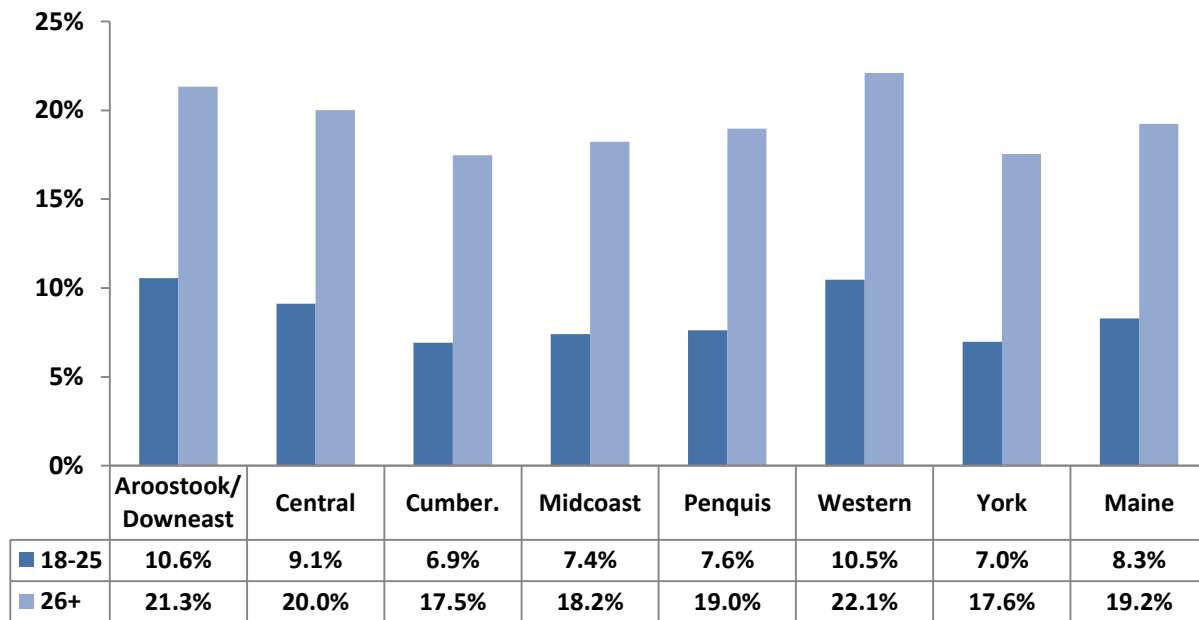
**Indicator Description: PERCEIVED RISK OF MARIJUANA USE AMONG ADULTS.** This measure demonstrates the percentage of Mainers over the age of 12 who perceive a risk of harm from smoking marijuana once a month. Because of small sample sizes, survey data from multiple years must be combined in order to 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, 2012–14, 2008–10 to 2012–14

**Summary:** In 2012-14, 18 to 25 year olds Penquis were less likely to perceive a risk of harm from smoking marijuana once a month when compared to those 26 and older (7.6% compared to 19.0%). The percentage of Penquis residents 18 to 25 who perceived a great risk from smoking marijuana once a month has steadily decreased since 2008-10 (14.6%).

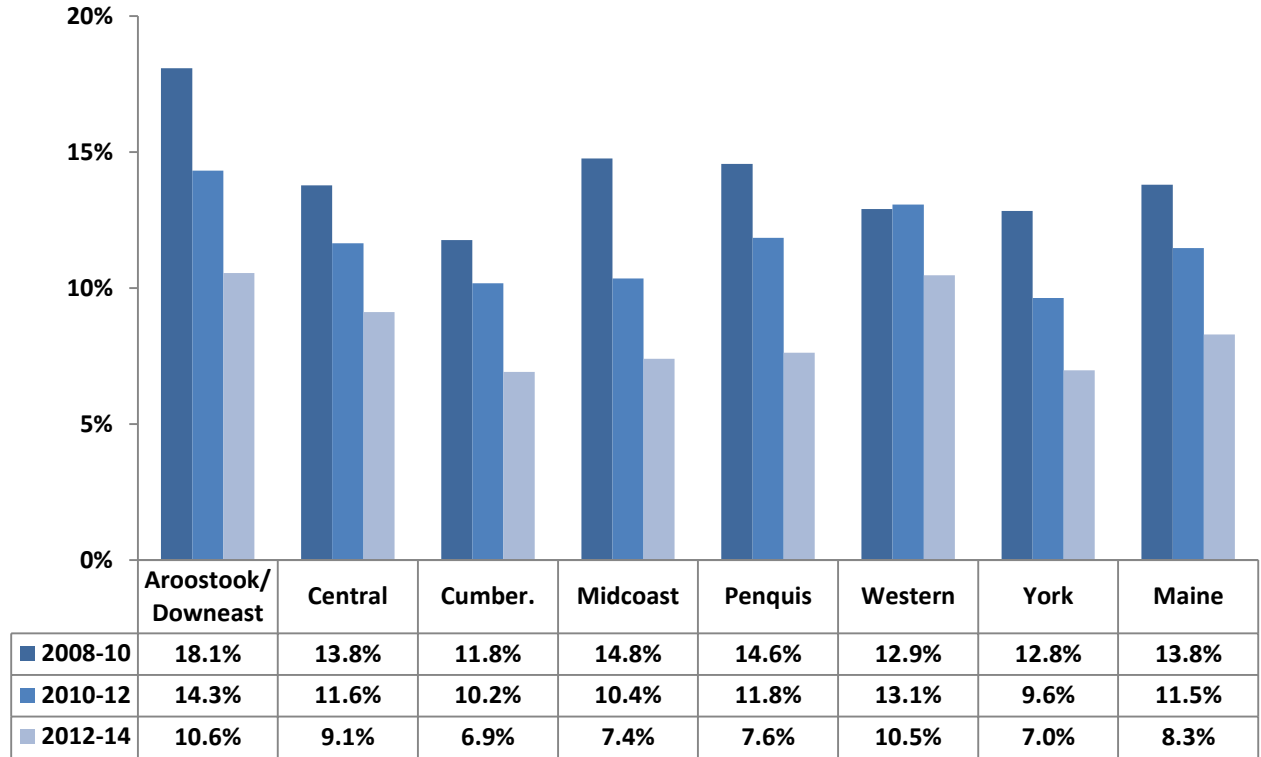
**Figure 61. Percent of adults who perceive a great risk from smoking marijuana once a month, by age group and Public Health District: 2012–14\***



Source: NSDUH

\*Due to small sample sizes estimates for Aroostook and Downeast have been combined.

**Figure 62. Percent of 18 to 25 year olds who perceive a great risk from smoking marijuana once a month, Public Health District: 2008–10 to 2012–14\***



Source: NSDUH

\*Due to small sample sizes estimates for Aroostook and Downeast have been combined.

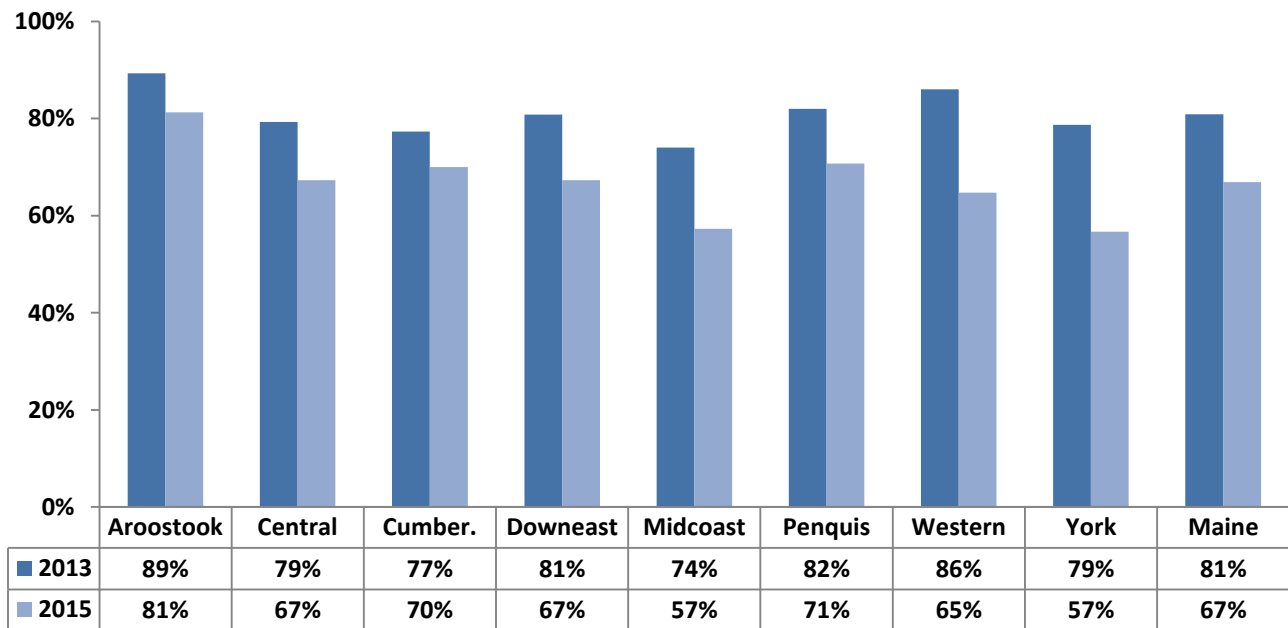
**Indicator Description: PARENTAL ATTITUDES REGARDING MARIJUANA USE.** This indicator reflects how parents felt about their teen using marijuana. Maine parents of teenagers (7<sup>th</sup> thru 12<sup>th</sup> graders) were asked to select the response that best described their attitude about marijuana use by their child. Response options were mutually exclusive.

**Why Indicator is Important:** Parental perceptions and permissive attitudes towards substance use can have a major effect in their child’s decision to use. As Maine observes changes in regulations and policies regarding marijuana use; cultural norms and beliefs around use are occurring as well.

**Data Source(s):** Parent Survey, 2013 and 2015

**Summary:** In 2015, nearly three quarters (71%) of parents in Penquis felt it was never okay for their teen to use marijuana; this was higher the statewide rate (67%). The rate of disapproval among parents concerning teen marijuana use has dropped by 11 percentage points since 2013 (77%).

**Figure 63. Parental attitudes regarding their teen using marijuana: 2013 and 2015**



Source: Parent Survey

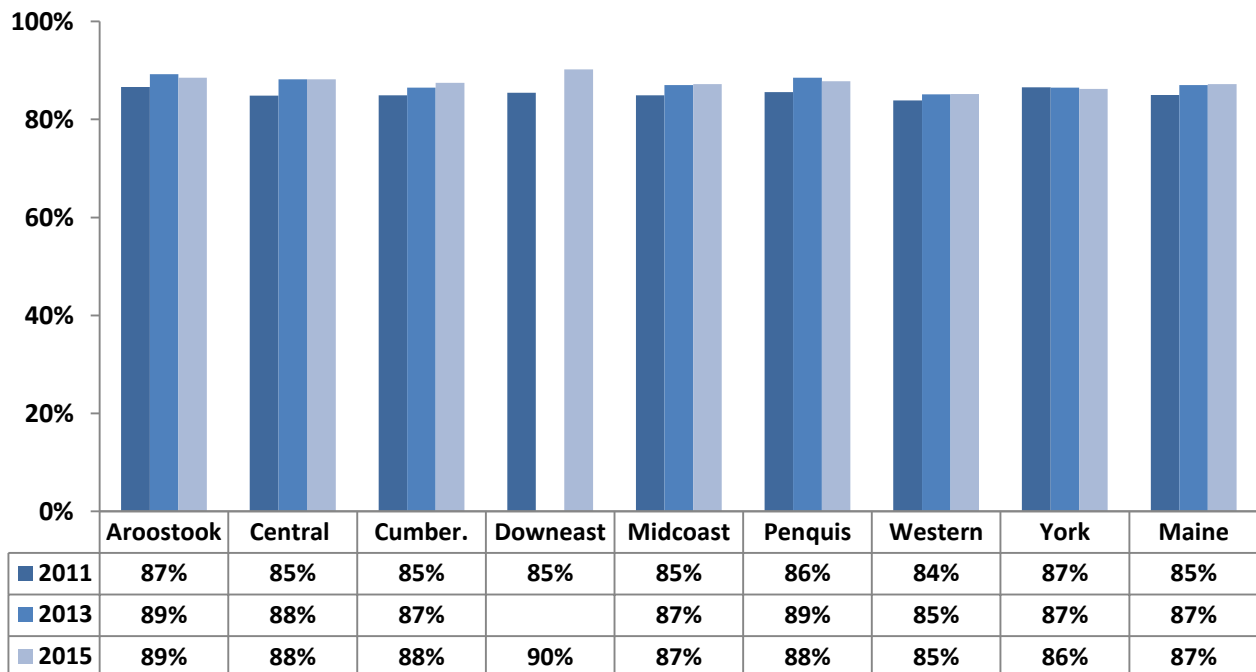
**Indicator Description: PERCEIVED RISK OF PRESCRIPTION DRUG MISUSE AMONG YOUTH.** This measure demonstrates the percentage of individuals who perceive a moderate-to-great risk of harm from taking a prescription drug that was not prescribed to them.

**Why Indicator is Important:** According to the 2015 statewide MIYHS, high school students who do not believe there is moderate-to-great risk in misusing prescription drugs are 4.6 times as likely to smoke marijuana as their peers who do perceive risk of harm.

**Data Source(s):** MIYHS, 2011–2015

**Summary:** Perception of risk from misusing prescription drugs among high school students in Penquis increased slightly from 86 percent in 2011 to 88 percent in 2015; this was similar to the statewide average (87%). In contrast, that means 12 percent of Penquis students did not think misusing prescription drugs was risky.

**Figure 64. Percent of high school students who reported a risk of harm from misusing prescription drugs, by Public Health District: 2011–2015**



Source: MIYHS



## Perceived Enforcement

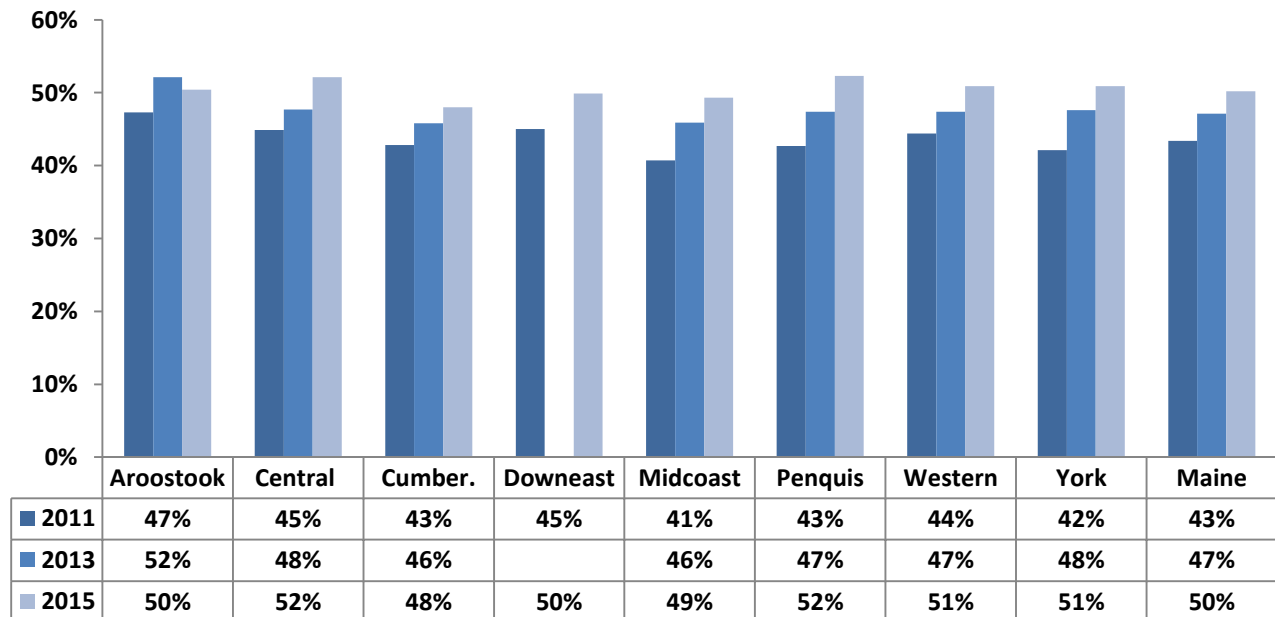
**Indicator Description: PERCEIVED RISK OF BEING CAUGHT FOR DRINKING ALCOHOL AMONG YOUTH.** This indicator reflects the percentage of high school students who reported that they would be caught by their parents or by police if they drank alcohol.

**Why Indicator is important:** According to the 2015 statewide MIYHS, high school students who believe they would not be caught by their parents are more than four times as likely to drink in the past month as compared to students who do think they will be caught.

**Data Source(s):** MIYHS, 2011–2015

**Summary:** In 2015, more than half (52%) of Penquis high school students thought they would be caught by their parents if they drank without parent’s knowledge; this in an increase of nine percentage points since 2011 (43%).

**Figure 65. Perceived risk among high school students in Penquis of being caught by parents for drinking alcohol: 2011–2015**



Source: MIYHS

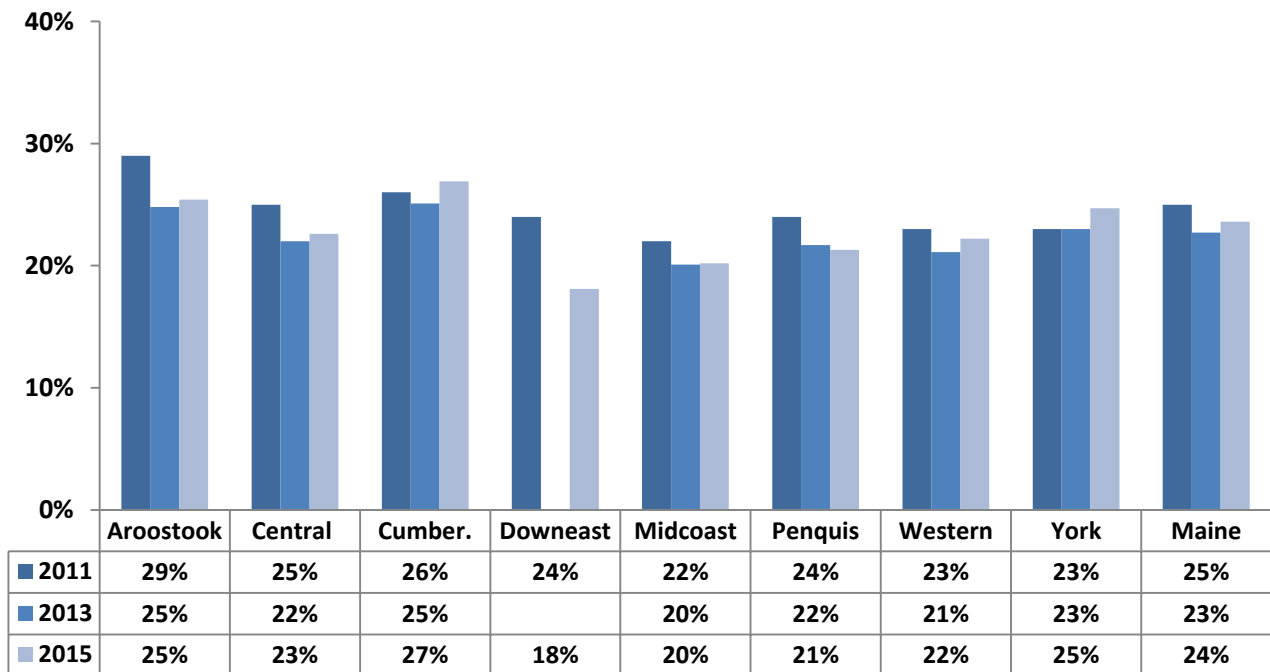
**Indicator Description: PERCEIVED RISK OF BEING CAUGHT FOR SMOKING MARIJUANA AMONG YOUTH.** This measure shows the percentage of high school students who reported that they thought they would be caught by police if they smoked marijuana.

**Why Indicator is Important:** High school students who believe they wouldn't be caught by the police were nearly five times as likely to smoke marijuana as their peers.

**Data Source(s):** MIYHS, 2011–2015

**Summary:** The percent of high school students in Penquis who indicated that they thought they would be caught by the police if they smoked marijuana declined from 2011 (24%) to 2015 (21%); this was lower than the statewide rate (24%). This means, however, that the vast majority of high school students do not perceive a risk of being caught by the police for smoking marijuana.

**Figure 66. Perceived risk among high school students of being caught by police for smoking marijuana, by Public Health District: 2011–2015**



Source: MIYHS

## Mental Health, Suicide and Co-occurring Disorders

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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 or drugs 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 hope that this will lead to better prevention and intervention.

One in five adults in Penquis report having ever been diagnosed with an anxiety disorder while a quarter report having ever been diagnosed with a depression disorder. In 2015, when last surveyed, more than a quarter of high school students felt sad or hopeless every day for two weeks and about one in seven high school students seriously considered attempting suicide within the past year. Rates of hopelessness as well as those of suicidal ideation among Penquis high school students have been increasing for the past several years.

## Depression and Anxiety

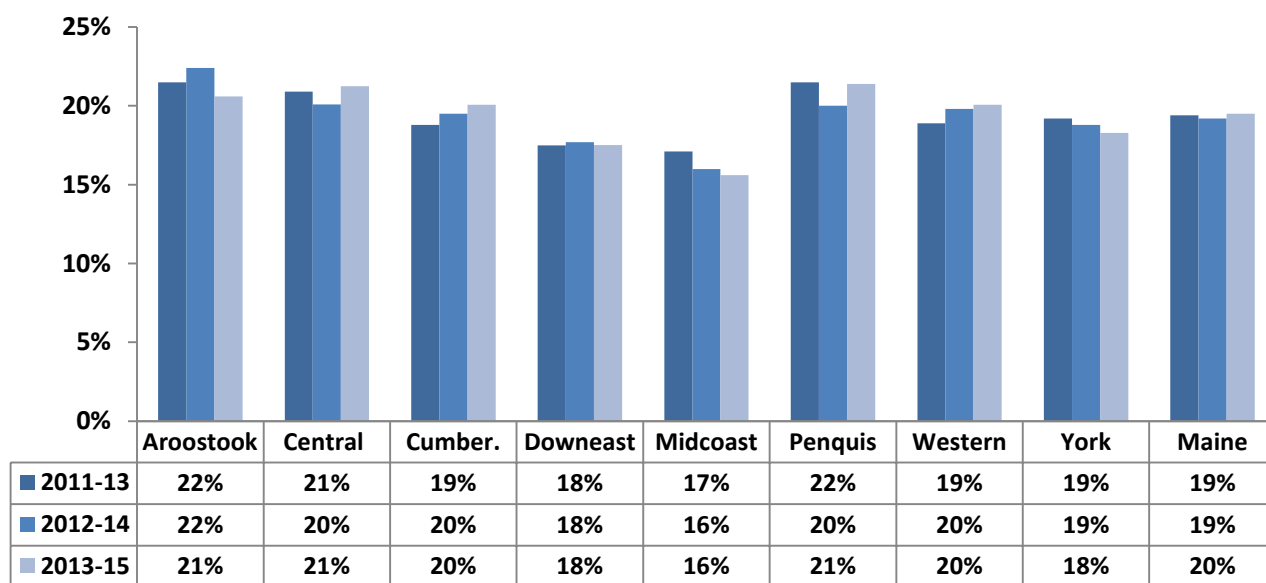
**Indicator Description: DIAGNOSIS OF ANXIETY AND DEPRESSION AMONG ADULTS.** This indicator examines the percentage of Maine residents age 18 and older who have ever been told by a doctor that they have a depressive or anxiety disorder.

**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, 2011–13 to 2013–15, 2012–3 to 2014-15

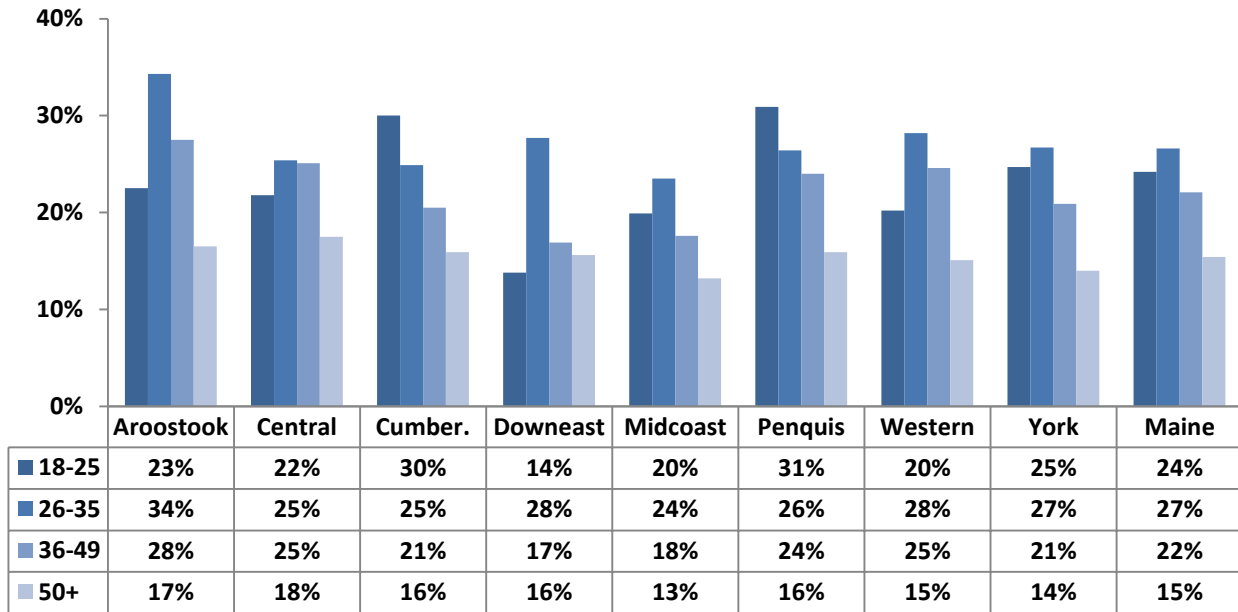
**Summary:** The rate of adults in Penquis reporting they have been diagnosed with an anxiety disorder decreased slightly from 2011–13 (22%) to 2013–15 (21%); the rate was consistent with the 2013–15 statewide rate (20%). During the 2012–15 time period, 18 to 25 year olds in Penquis had the highest rate of diagnosis of anxiety disorders (31%), followed by 26 to 35 year olds (26%), and 36 to 49 year olds (24%). A higher percentage of adult females had been diagnosed with an anxiety disorder than adult males (27% as compared to 14%).

**Figure 67. Percent of adults who have ever been told they have an anxiety disorder, by Public Health District: 2011–13 to 2013–15**



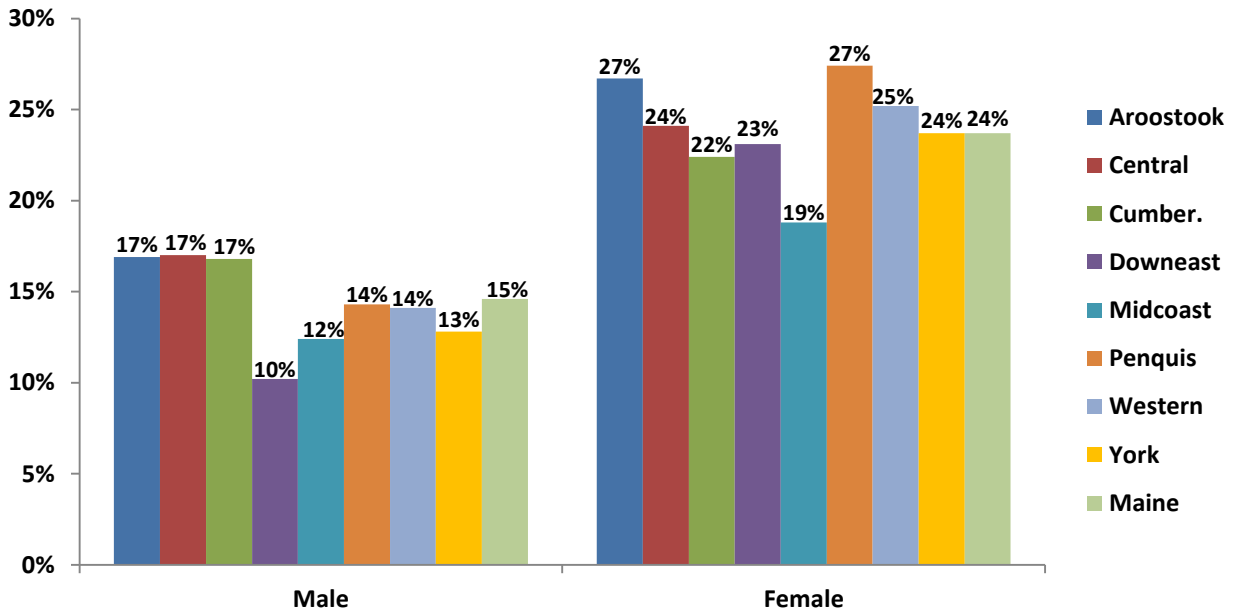
Source: BRFSS

Figure 68. Percent of adults who have ever been told they have an anxiety disorder, by age and Public Health District: 2012–15



Source: BRFSS

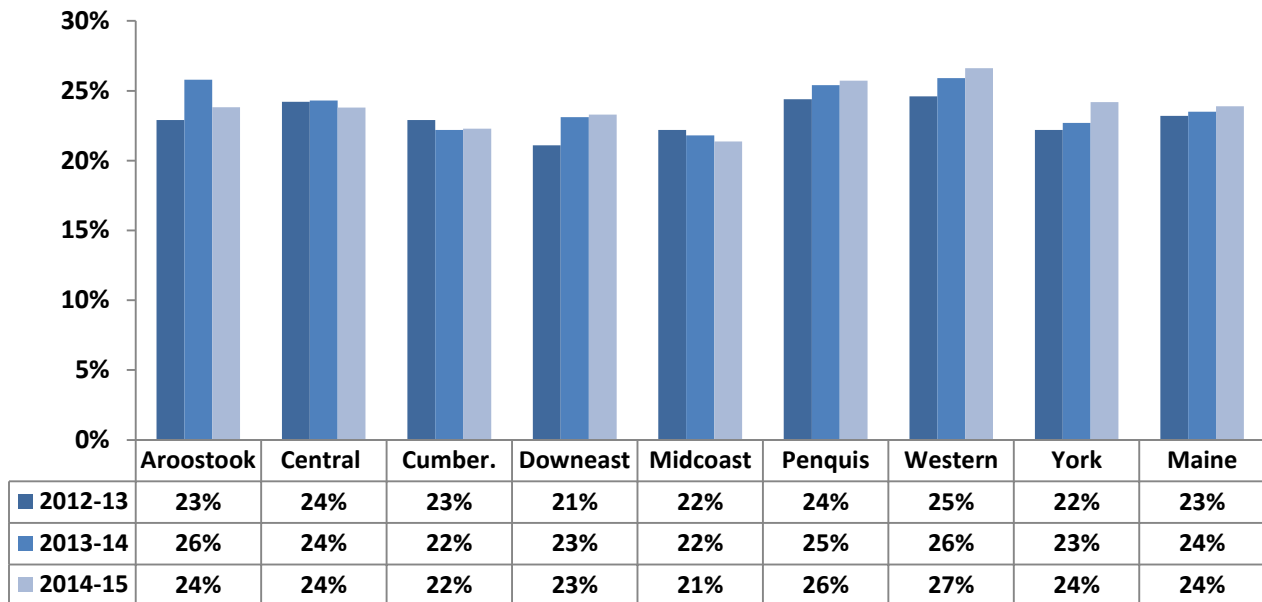
Figure 69. Percent of adults who have ever been told they have an anxiety disorder, by gender and Public Health District: 2012–15



Source: BRFSS

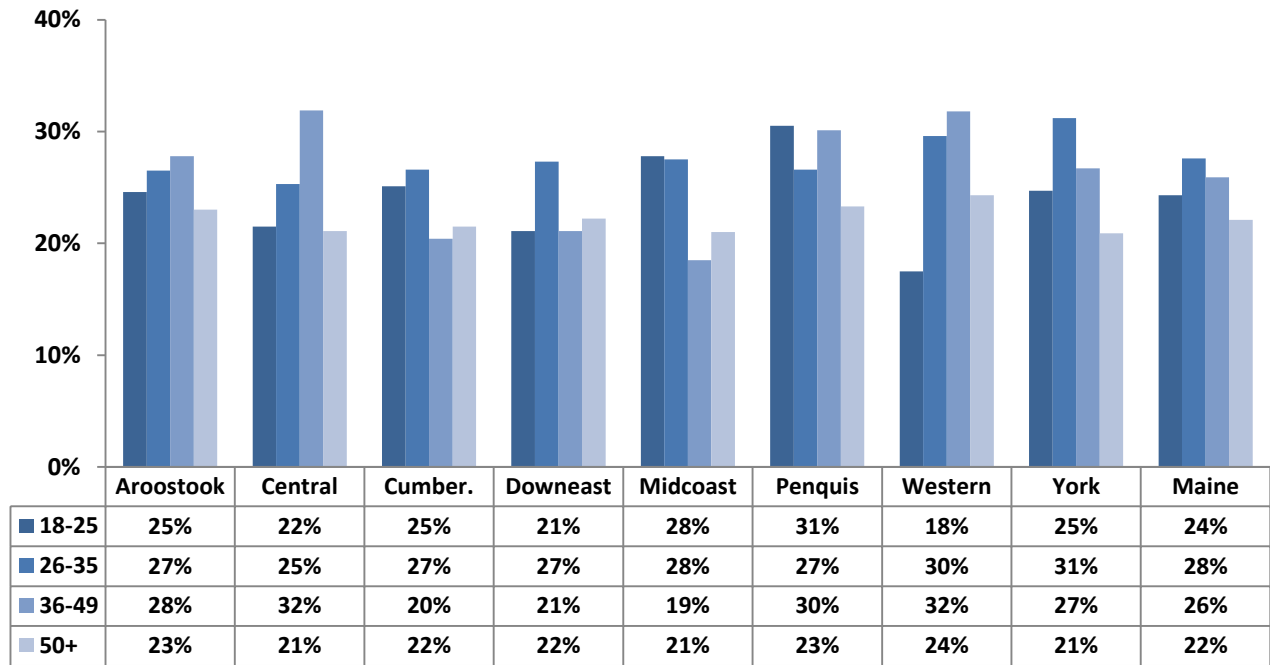
**Summary:** The rate of adults in Penquis reporting they have been diagnosed with a depression disorder increased slightly from 2011–13 (24%) to 2013–15 (26%); the rate was above with the 2014–15 statewide rate (24%). During the 2012–15 time period, 18 to 25 year olds in Penquis had the highest rate of diagnosis of depression disorders (31%, the highest rate observed statewide), followed by 36 to 49 year olds (30%), and 26 to 35 year olds (27%). A higher percentage of adult females had been diagnosed with a depression disorder than adult males (32% as compared to 19%).

**Figure 70. Percent of adults who have ever been told they have a depression disorder, by Public Health District: 2012–13 to 2014–15**



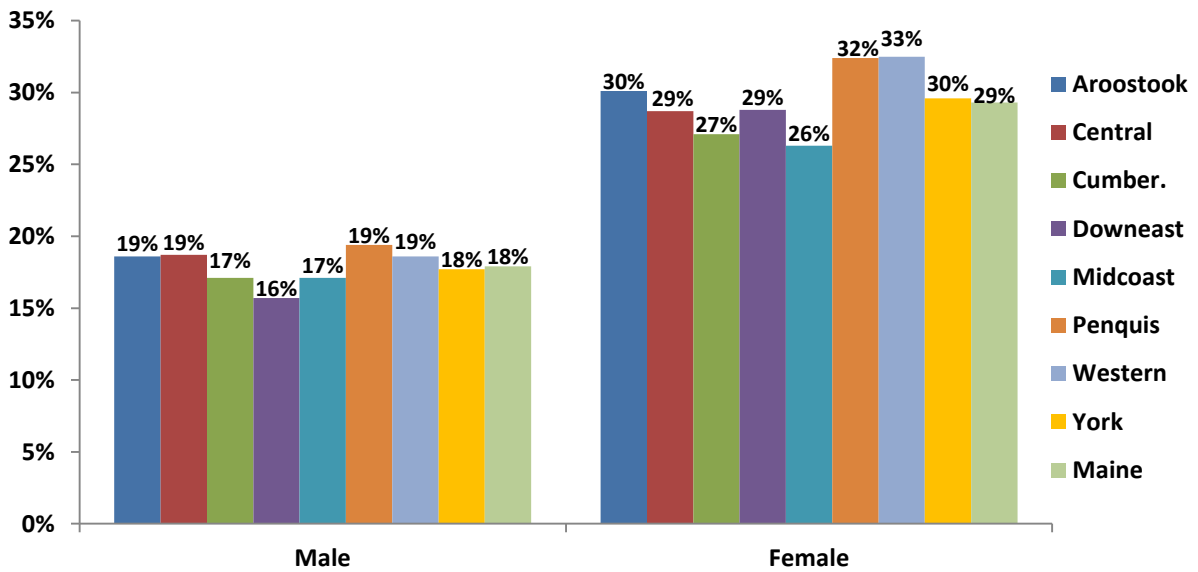
Source: BRFSS

Figure 71. Percent of adults who have ever been told they have a depression disorder, by age and Public Health District: 2013–15



Source: BRFSS

Figure 72. Percent of adults who have ever been told they have a depression disorder, by gender and Public Health District: 2013–15



Source: BRFSS

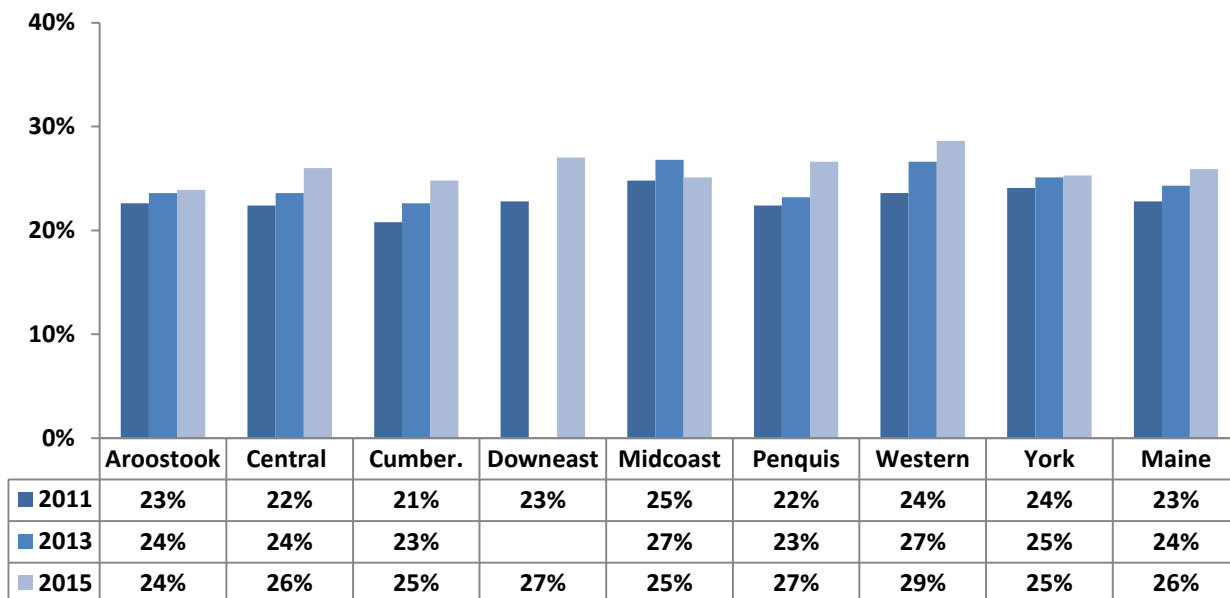
**Indicator Description: DEPRESSION AMONG YOUTH.** This indicator measures the percentage of high school students reporting they felt sad or hopeless almost every day for two weeks in a row during the past year.

**Why Indicator is Important:** Experiencing depression in the past year is associated with higher rates of substance abuse. According to the 2013 MIYHS, students who reported feeling hopeless or sad for at least two weeks within the past twelve months were almost twice as likely to have used marijuana or to have engaged in binge drinking in the past 30 days, and three times as likely to have misused prescription drugs during the past 30 days. Among youth, depression is also associated with problems with relationships and academic achievement.

**Data Source(s):** MIYHS, 2011–2015

**Summary:** In 2015, 27 percent of high school students in Penquis indicated that they felt sad or hopeless every day for two weeks or more in a row during the past year. This was an increase of five percentage points since 2011 and similar to the statewide rate (26%).

**Figure 73. Felt sad or hopeless almost every day for two weeks or more in a row during the past year, by Public Health District: 2011–2015**



Source: MIYHS



**Indicator Description: INFORMATION CALLS FOR MENTAL HEALTH AND HUMAN SERVICES.**

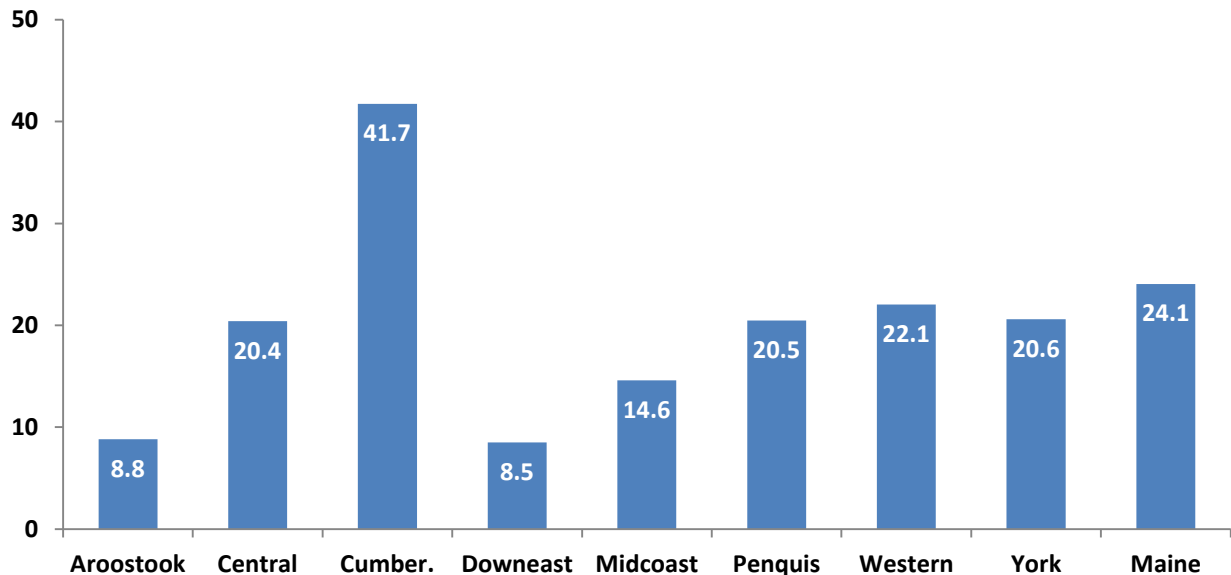
2-1-1 Maine is a telephone and internet service that provides information and referrals to health and human services. This indicator reflects the number of calls received by 2-1-1 Maine by the type of service requested.

**Why Indicator is Important:** The data collected from each call provides valuable information serving as a barometer of health and human service needs in the state.

**Data Source(s):** 2-1-1 Maine, 2012–2016

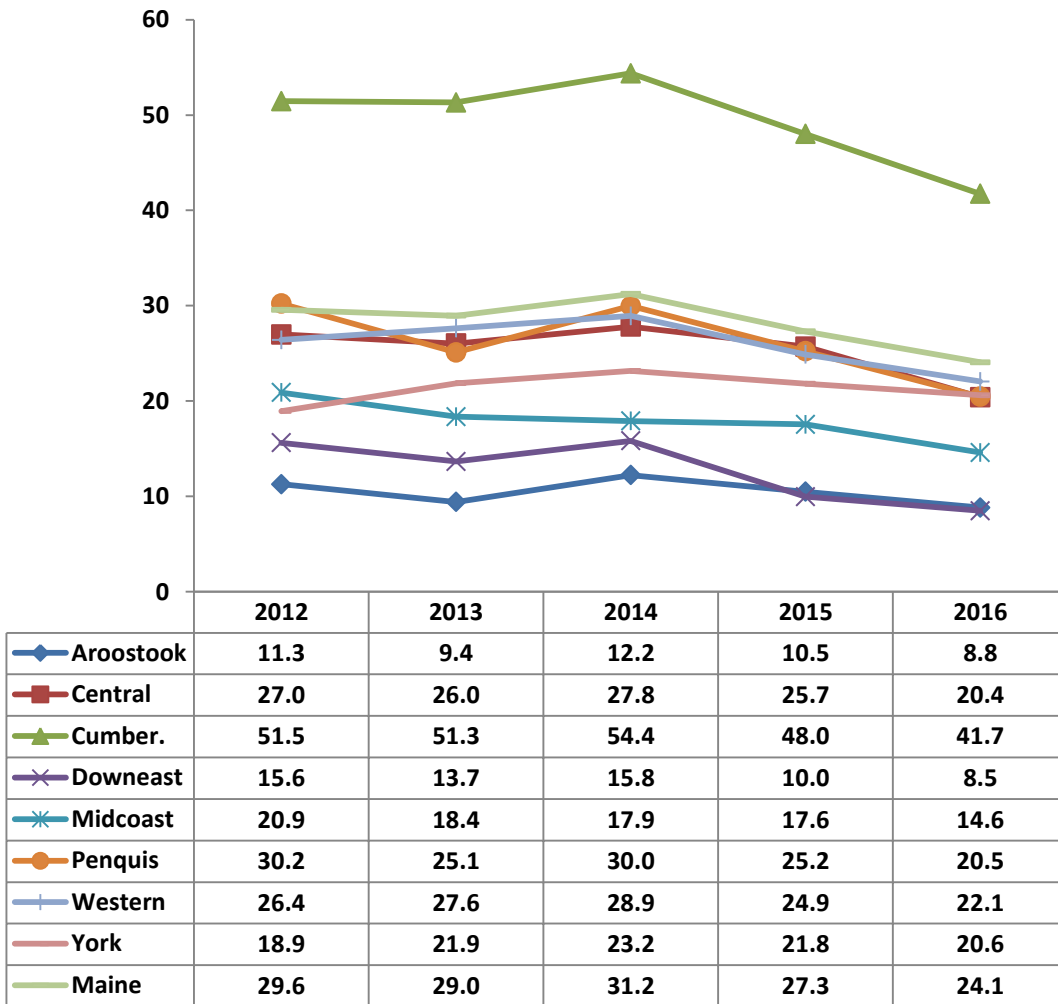
**Summary:** In 2016, Penquis observed 20.5 2-1-1 Maine referral calls related to mental health services per 10,000 residents; this was lower than the statewide rate (24.1 calls per 10,000 residents).

**Figure 74. Number of 2-1-1 Maine referral calls related to mental health services per 10,000 residents, by Public Health districts: 2016**



Source: 2-1-1 Maine

Figure 75. Number of 2-1-1 Maine referral calls related to mental health services per 10,000 residents, by public health districts: 2012–2016



Source: 2-1-1 Maine

## Suicide and Suicidal Ideation

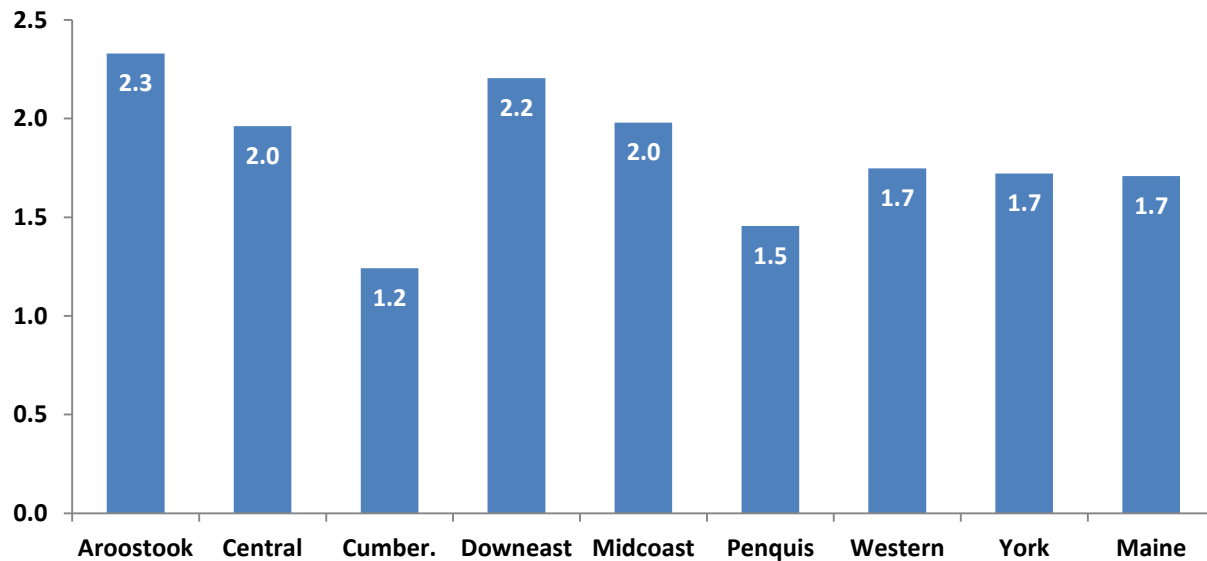
**Indicator Description: RATE OF SUICIDE DEATHS.** Every death in Maine has a recorded cause. This indicator examines deaths that were classified as a suicide. In this case, a rate per 10,000 of the state population is used to compare the prevalence across certain populations.

**Why Indicator is Important:** Although not the leading cause of death, substance use and abuse is often a factor in suicides. For example, the CDC’s National Violent Death Reporting System has estimated that nationally, 14 percent of suicides are attributable to alcohol.<sup>5</sup>

**Data Source(s):** ODRVS, 2014–15, 2011–13 to 2014–16

**Summary:** During the three year period 2014–16, Penquis reported an average of 1.5 suicide deaths per 10,000 residents per year; this was the second lowest rate among public health districts. Although not shown, there were 31 suicide deaths in Penquis in 2015 and 23 in 2016.

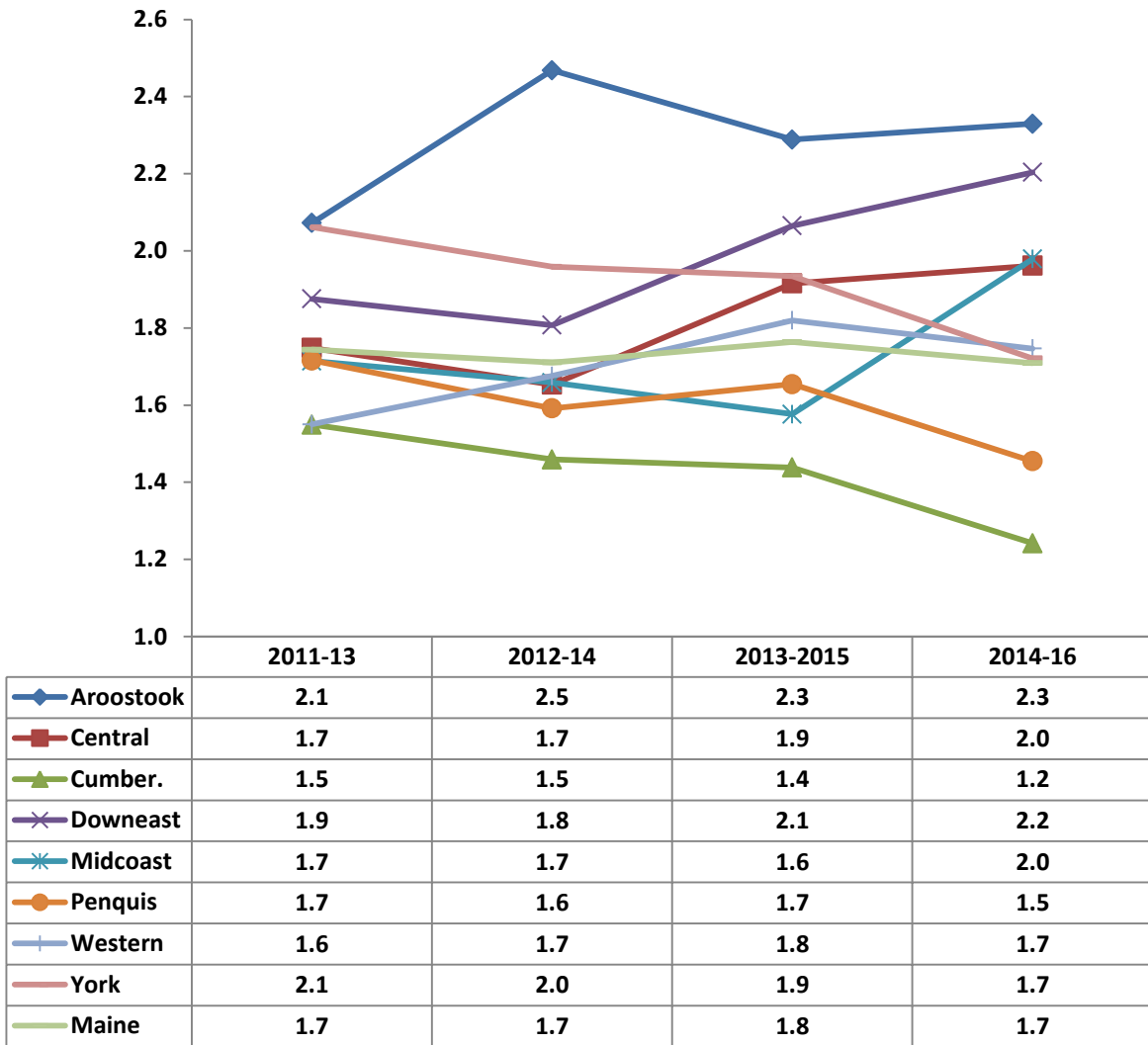
**Figure 76. Number of suicide deaths per 10,000 residents, by Public Health District: 2014–16**



Source: ODRVS

<sup>5</sup> Centers for Disease Control and Prevention. (2011). Suicides due to alcohol and/or drug overdose: a data brief from the National Violent Death Reporting System. *Atlanta (GA): The Centers.*

**Figure 77. Number of suicide deaths per 10,000 residents, by Public Health District: 2011–13 to 2014–16**



Source: ODRVS

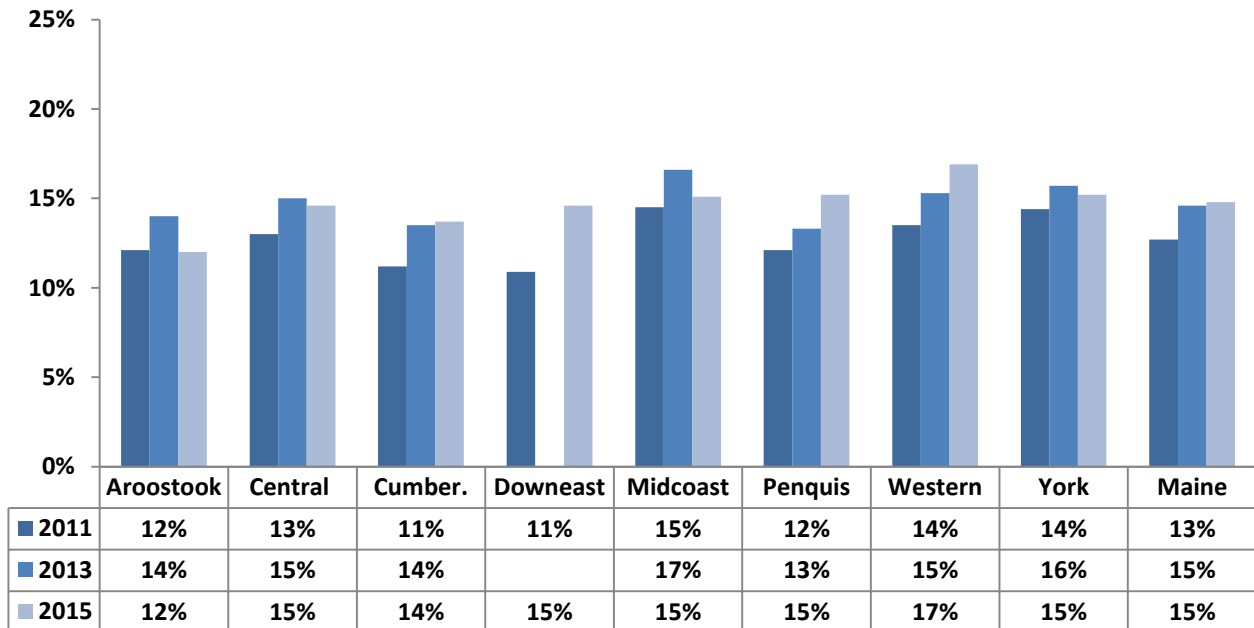
**Indicator Description: SUICIDAL IDEATION AMONG YOUTH.** This measure examines the percentage of high school students who reported that they seriously considered attempting suicide during the past year.

**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, 2011–2015

**Summary:** The percentage of Penquis high school students who seriously considered attempting suicide during the past year increased from 12 percent in 2011 to 15 percent in 2015. This was on par with the statewide average.

**Figure 78. Percent of high school students who considered suicide during the past year, by Public Health District: 2011–2015**



Source: MIYHS

## Treatment Admissions for Substance Abuse

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Mainers continue to seek out treatment for abuse involving a wide array of substances besides alcohol; in 2016, the state of Maine observed 3,552 clients admitted for alcohol as the primary substance. This was followed by heroin (2,746) and synthetic opiates (2,146).

In Penquis, about a third of all primary treatment admissions were related to alcohol and more than one in four were related to heroin/morphine. Over the past five years, the number of primary admissions in Penquis due to heroin/morphine nearly tripled.

## Treatment Admissions

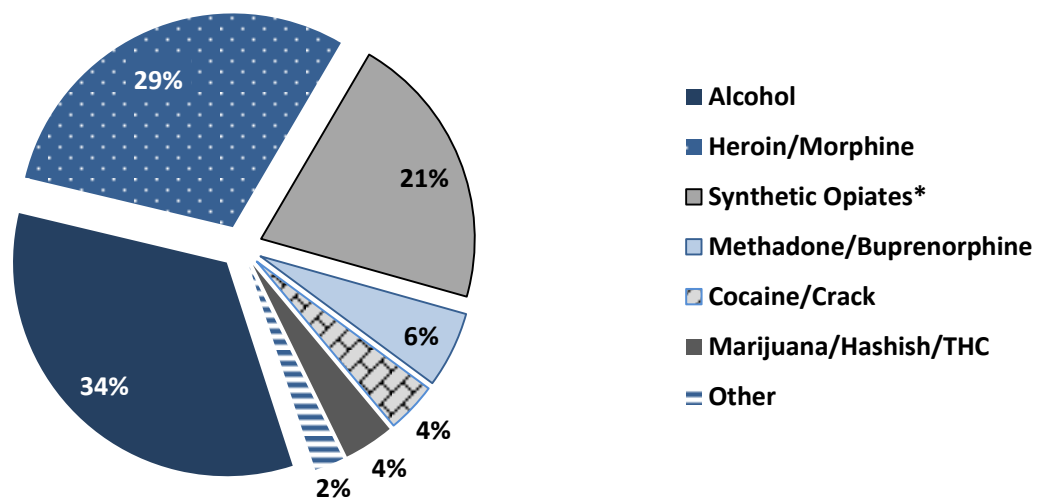
**Indicator Description: PRIMARY TREATMENT ADMISSIONS.** This indicator reflects substance abuse treatment admissions in which a substance was listed as the primary reason for admission. The following analysis excludes admissions for shelter/detoxification services as well as those who were identified as co-affected or codependents (*e.g.*, spouse, child, sibling) of the client who was receiving treatment. The following data include duplicate admissions, meaning that a unique individual/client could be counted multiple times if they were admitted more than once during the year.

**Why Indicator is Important:** Treatment admissions data provide an indication of service usage and the impact of substance use on the behavioral healthcare system. Treatment admissions data are not a good indicator of substance use, abuse or dependence.

**Data Source(s):** WITS, 2012–2016

**Summary:** In 2016, 34 percent of all primary treatment admissions in Penquis were related to alcohol, followed by heroin/morphine (29%), synthetic opiates<sup>6</sup> (21%), and methadone/buprenorphine (6%). The proportion of primary admissions related to alcohol in Penquis has been steady since 2012, while the percentage of primary admissions due to heroin/morphine has increased dramatically.

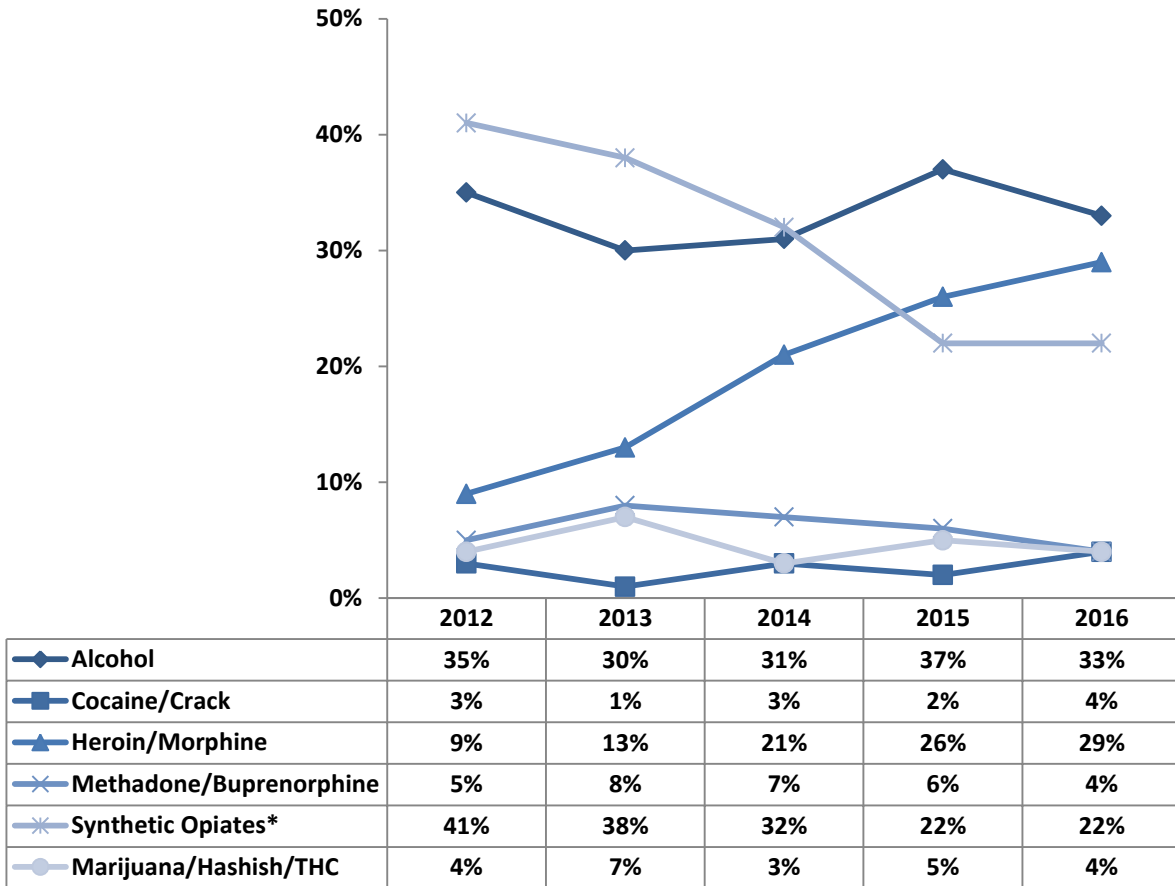
**Figure 79. Percentage of primary drug admissions in Penquis, by drug type: 2016**



Source: WITS

<sup>6</sup> \* "Synthetic opioids" excludes methadone and buprenorphine.

Figure 80. Percentage of primary drug admissions in Penquis, by drug type: 2012–2016



Source: WITS

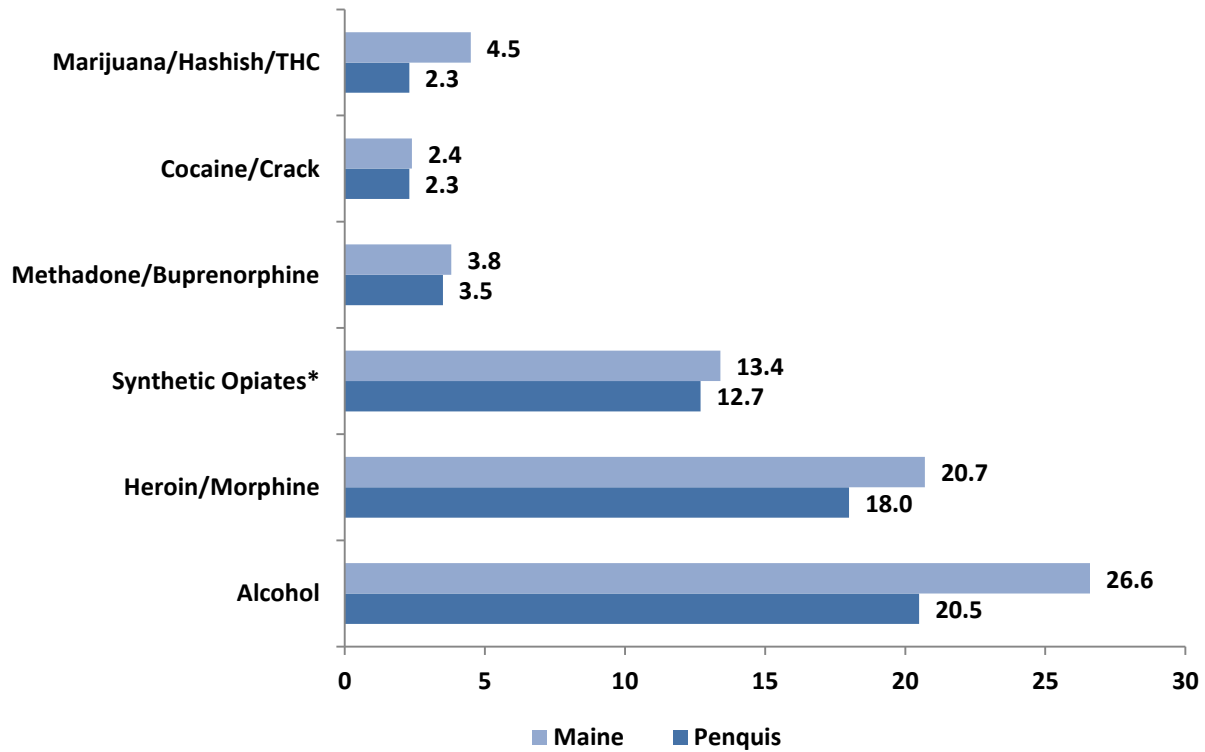
\*Synthetic Opioids excludes methadone/buprenorphine

\*\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.



**Summary:** In 2016, Penquis observed 20.5 primary admissions per 10,000 residents related to alcohol; this was followed by heroin/morphine (18 per 10,000), synthetic opiates (12.7 per 10,000), and cocaine/crack (2.3 per 10,000). Penquis had a notably lower rate of primary admissions involving heroin/morphine compared to the state (20.7 per 10,000).

**Figure 81. Primary treatment admissions per 10,000 residents in Penquis and Maine: 2016**



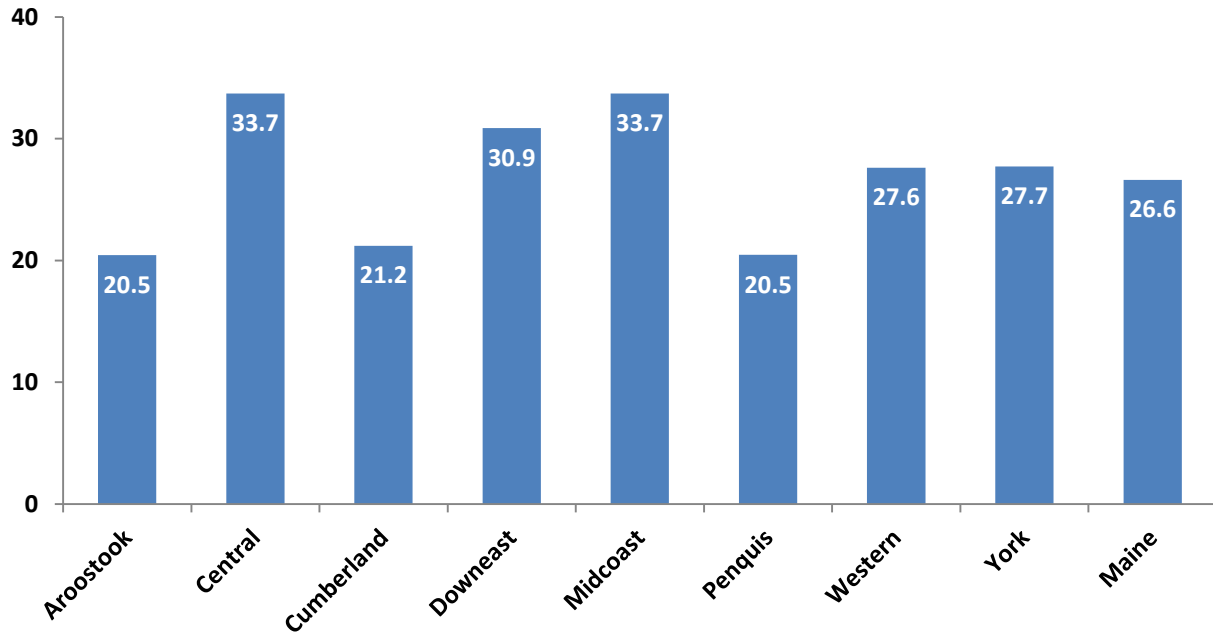
Source: WITS

\*Excludes methadone/buprenorphine

\*\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.

**Summary:** In 2016, Penquis observed the lowest rate among public health districts of primary treatment admissions due to alcohol (20.5 admissions per 10,000 residents). As with most public health districts, Penquis has observed a decreasing rate of primary admissions related to alcohol for the past several years.

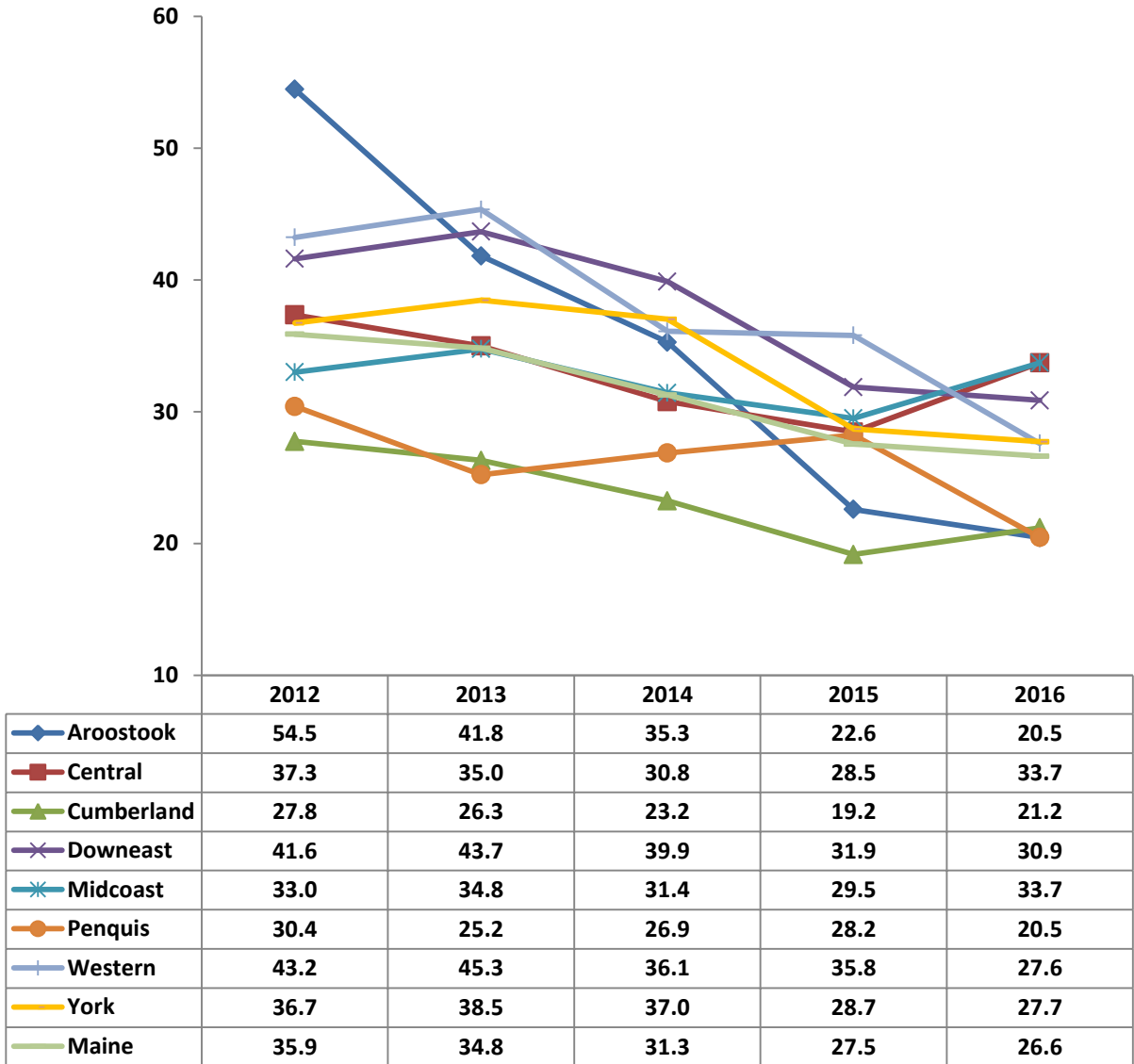
**Figure 82. Primary admissions related to alcohol per 10,000 residents, by Public Health District and drug type: 2016**



Source: WITS

\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.

Figure 83. Primary admissions related to alcohol per 10,000 residents, by Public Health District and drug type: 2012–2016

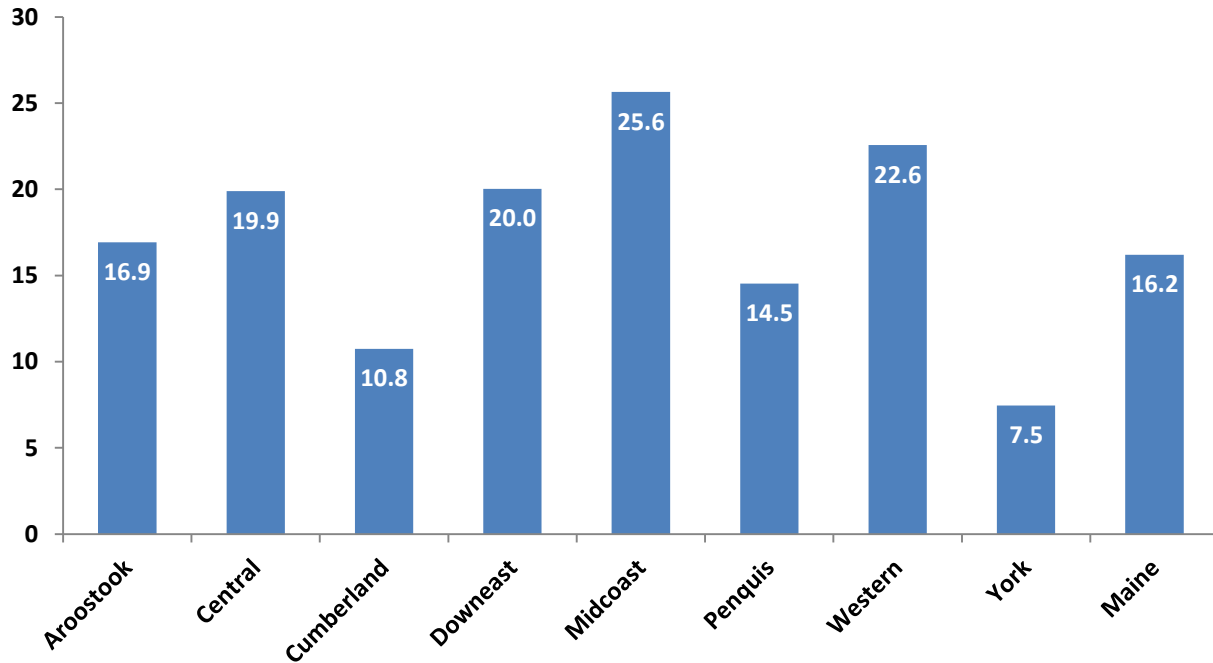


Source: WITS

\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.

**Summary:** In 2016, Penquis had the third lowest rate of primary treatment admissions related to synthetic opiates (14.5 admissions per 10,000 residents). The rate of primary admissions related to synthetic opioids in Penquis has been decreasing since 2011 (37.2 admissions per 10,000 residents).

**Figure 84. Primary admissions related to synthetic opiates\* per 10,000, by Public Health District: 2016**

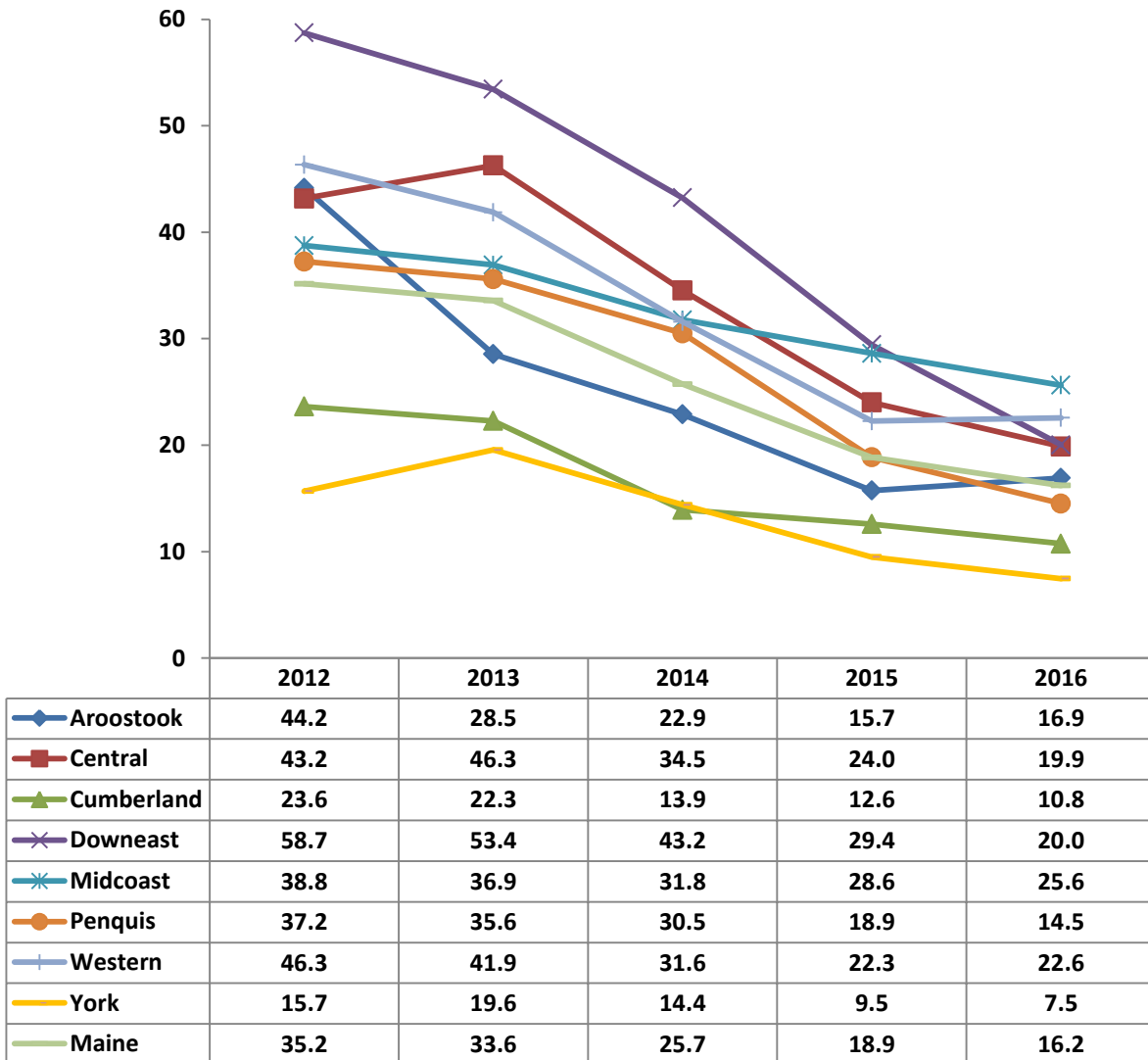


Source: WITS

\*\*Synthetic opiates exclude methadone, but include buprenorphine.

\*\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.

Figure 85. Primary admissions related to other synthetic opiates per 10,000, by Public Health District: 2012–2016



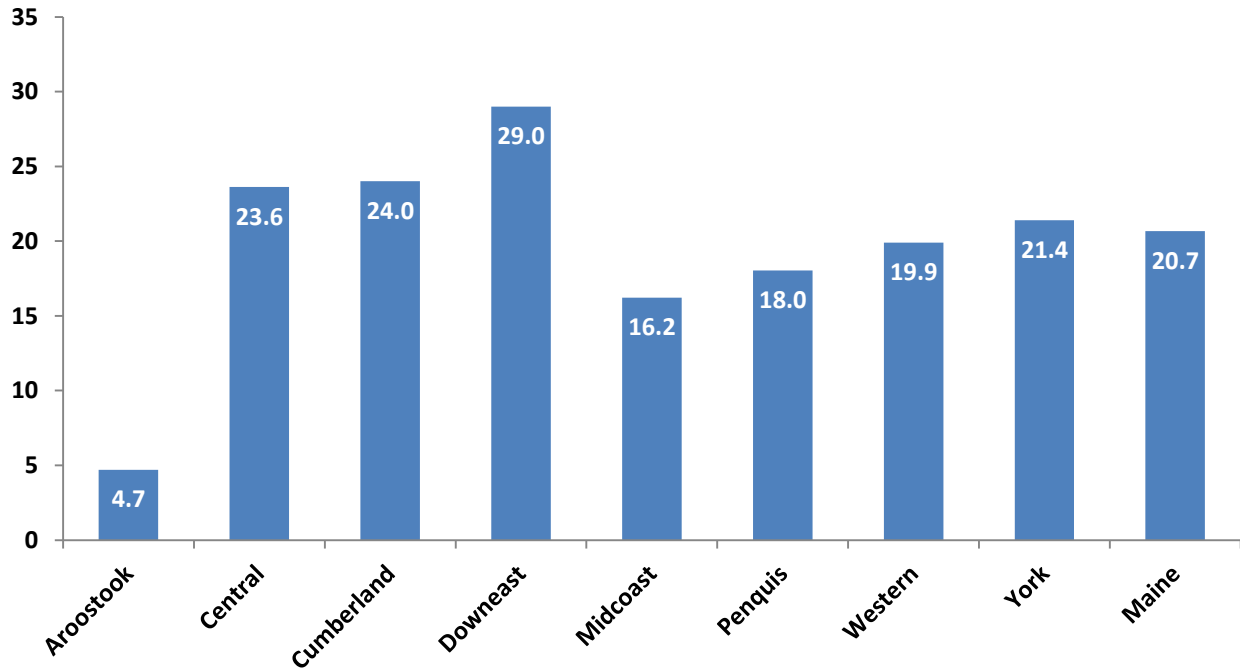
Source: WITS

\*\*Synthetic opiates exclude methadone, but include buprenorphine.

\*\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.

**Summary:** In 2016, Penquis observed the third lowest rate of primary admissions related to heroin/morphine (18 admissions per 10,000 residents). After observing an increase from 2012 to 2015, the number of primary admissions in Penquis due to heroin/morphine decreased slightly from 2015 to 2016.

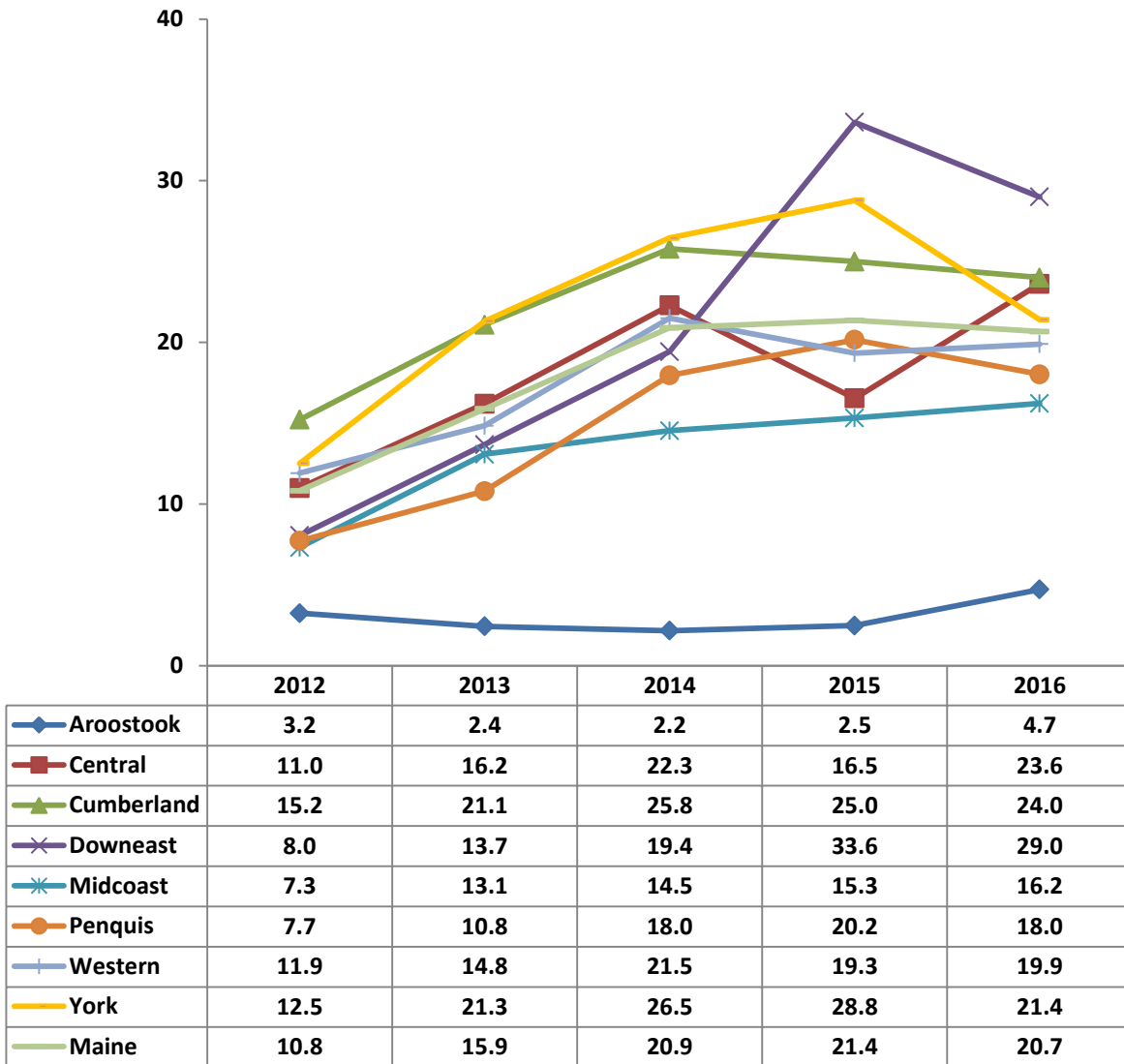
**Figure 86. Primary admissions related to heroin/morphine per 10,000 residents, by Public Health District and drug type: 2016**



Source: WITS

\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.

Figure 87. Primary admissions related to heroin/morphine per 10,000 residents, by Public Health District and drug type: 2012–2016

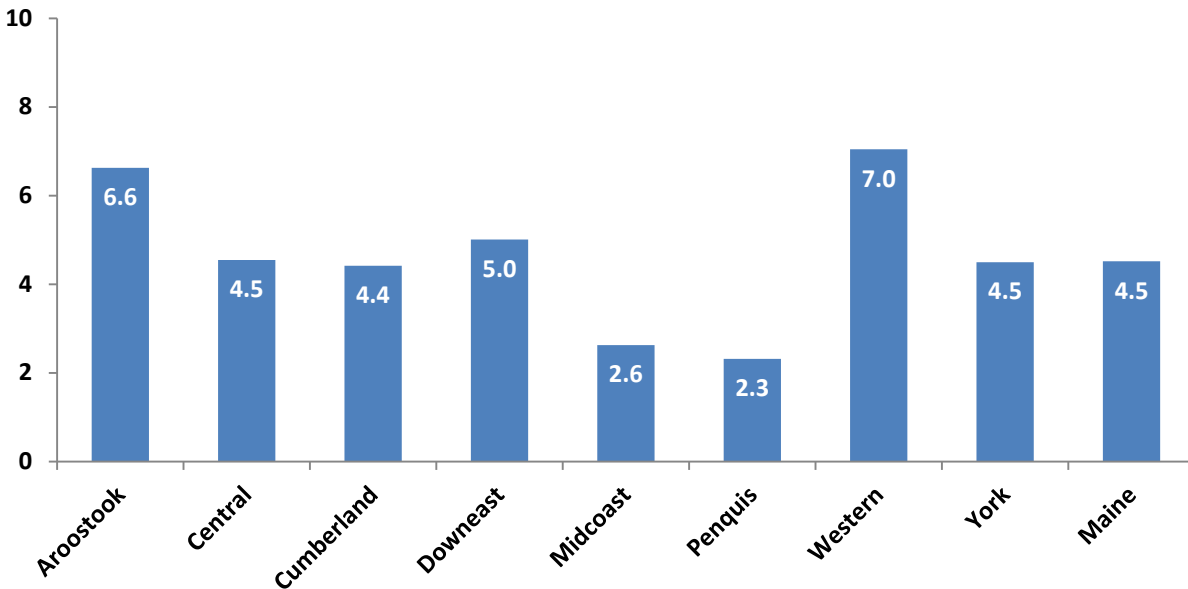


Source: WITS

\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.

**Summary:** From 2012 to 2016, Penquis observed the lowest rate of primary treatment admissions related to marijuana among public health districts. Over the past several years, Penquis has observed a consistently low rate of primary admissions due to marijuana; decreasing from 3.9 per 10,000 in 2012 to 2.3 per 10,000 in 2016, roughly half the statewide average.

**Figure 88. Primary admissions related to marijuana per 10,000 residents, by Public Health District and drug type: 2016**

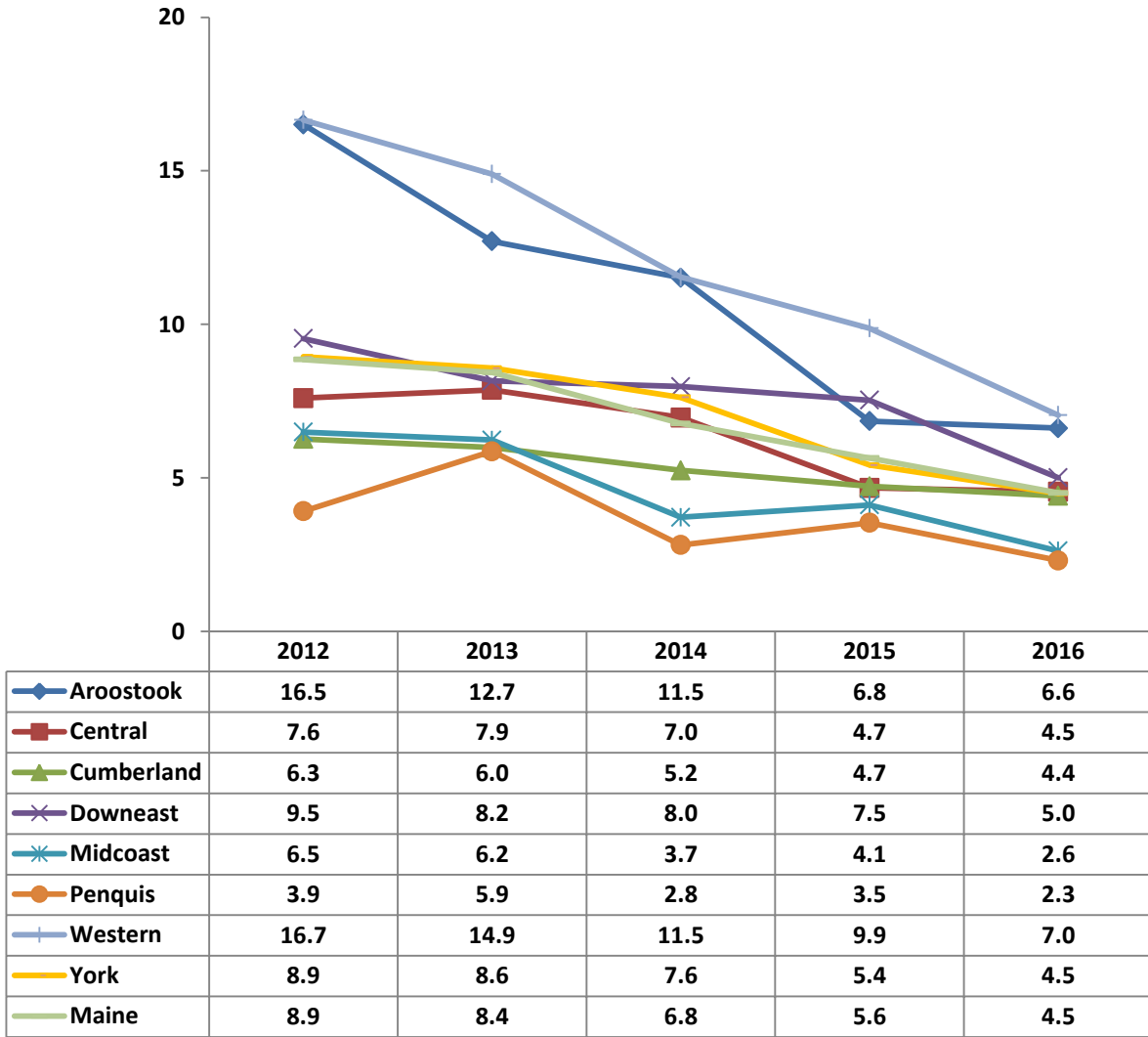


Source: WITS

\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.



**Figure 89. Primary admissions related to marijuana per 10,000 residents, by Public Health District and drug type: 2012–2016**



Source: WITS

\*WITS system is not static; therefore 2017 numbers may be lower than true counts. Data were retrieved 7/8/2017.

## Appendix: Data Sources

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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, and retrieval or contact information. The report includes data that were available through May 2017.

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 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. The most recent data available are from 2015. Due to methodological changes in weighting and sampling, data prior to 2011 cannot be trended with more current data. In some instances, multiple years of data are combined in efforts to produce more reliable estimates. **Contact:** Melissa Damren, Maine BRFSS Coordinator; [melissa.damren@maine.gov](mailto:melissa.damren@maine.gov); (207) 287-1420.

***Maine Department of Public Safety (DPS), Bureau of Highway Safety (BHS), Maine Department of Transportation (MDOT).*** The Bureau of Highway Safety is responsible for tracking all fatalities that occur on Maine's highways and reporting this information through the Fatal Analysis Reporting System (FARS). The data represented provides information on highway crashes and fatalities. Much of this information is gathered from the FARS system, which records data on fatal crashes in Maine for input into a larger national record-keeping system of statistical data. FARS data is also used by BHS and the Maine State Police to analyze enforcement priorities and schedules. Impaired driving is one of the most serious traffic risks facing the nation, killing thousands every year. **Contact:** For FARS data, contact Lauren Stewart, Highway Safety Director; [lauren.v.stewart@maine.gov](mailto:lauren.v.stewart@maine.gov); (207) 626-3841. For all other crash data, contact Duane Brunell, Safety Performance Analysis Manager; [duane.brunell@maine.gov](mailto:duane.brunell@maine.gov); (207) 624-3278.

**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 2015. 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)

For UCR statistical purposes, “arrests” also include those persons cited or summonsed for criminal acts in lieu of actual physical custody. These forms categorize the arrests by offense classification (both Part I and Part II crimes), and by age, sex and race. The same individual may be arrested several times over a period of time; each separate arrest is counted. A person may be arrested on several charges at one time; only one arrest is counted and is listed under the most serious charge. For UCR purposes, a juvenile is counted as “arrested” when the circumstances are such that if he or she were an adult, an arrest would result; in fact, there may not have been a formal charge.

**Maine Drug Enforcement Agency (MDEA).** The MDEA through its regional multi-jurisdictional task forces is the lead state agency in confronting drug trafficking crime. The data included in this report represents those arrested for a drug offense but does not indicate what other drug(s) may have been seized. For example, a person may be arrested for the sale of cocaine but also be in possession of oxycodone and marijuana. It is important to note that arrests and multi-jurisdictional drug enforcement are resource-dependent; such funds fluctuate from year to year, and must be reallocated to combat highest priority threats. **Contact:** Roy E. McKinney, Director; [roy.e.mckinney@maine.gov](mailto:roy.e.mckinney@maine.gov); (207) 626-3852.

**Maine Emergency Medical Services (EMS).** Maine EMS is a bureau within the Maine Department of Public Safety (DPS) and is responsible for the coordination and integration of all state activities concerning Emergency Medical Services and the overall planning, evaluation, coordination, facilitation and regulation of EMS systems. EMS collects data statewide from the 272 licensed ambulance and non-transporting services. It is mandated that services submit an electronic patient care report to Maine EMS within one business day of patient contact. Data are compiled upon request. **Contact:** Timothy Nangle, Maine Emergency Medical Services; [timothy.e.nangle@maine.gov](mailto:timothy.e.nangle@maine.gov); (207) 626-3860.

**Maine Integrated Youth Health Survey (MIYHS).** The MIYHS is a statewide survey administered biennially since 2009 through a collaborative partnership between Maine Department of Health and Human Services and Maine Department of Education. Its purpose is to quantify the health-related behaviors and attitudes of 5th through 12th graders by direct student survey. 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. MIYHS defines binge-drinking as consuming five or more drinks in a row. As of the date of this report, the most recent data available are from

2015. **Contact:** Reid Plimpton, Center for Disease Control and Prevention  
[reid.plimpton@maine.gov](mailto:reid.plimpton@maine.gov); (207) 287-5084

**Maine Office of the Chief Medical Examiner.** The Maine Office of the Chief Medical Examiner investigates all deaths associated with drug overdose. Analysis of these cases is currently funded by the Office of Attorney General. The death data are reported on an annual basis after cases are finalized, and released through the Attorney General's Office. Drug categories reported to SEOW include methadone, cocaine, benzodiazepines, oxycodone, fentanyl, and heroin/morphine. **Contact:** Dr. Marcella Sorg, Director, Rural Drug & Alcohol Research Program, Margaret Chase Smith Policy Center, University of Maine [mhsorg@maine.edu](mailto:mhsorg@maine.edu).

**National Survey on Drug 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 NSDUH 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 state level are available from 2014–15.

Older data are included for trending and comparative purposes. In 2015, a number of changes were made to the NSDUH questionnaire and data collection procedures resulting in the establishment of a new baseline for a number of measures. Therefore, estimates for several measures included in prior reports are not available. For details, see Section A of the “2014–2015 NSDUH: Guide to State Tables and Summary of Small Area Estimation Methodology” at <http://www.samhsa.gov/data/>.

NSDUH defines Illicit Drugs as marijuana/hashish, cocaine (including crack), heroin, hallucinogens, inhalants, or any prescription-type psychotherapeutic used non-medically; Binge Alcohol Use as drinking five or more drinks on the same occasion (*i.e.*, at the same time or within a couple of hours of each other) on at least one day in the past 30 days; Dependence or abuse based on definitions found in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV); and Serious Mental Illness (SMI) as a diagnosable mental, behavioral, or emotional disorder that met the criteria found in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) and resulted in functional impairment that substantially interfered with or limited one or more major life activities. Retrieval: <http://www.samhsa.gov/data/population-data-nsduh/reports>.

**Northern New England Poison Center (NNEPC).** The Northern New England Poison Center provides services to Maine, New Hampshire, and Vermont. A poisoning case represents a single individual's contact with a potentially toxic substance. Intentional poisoning includes those related to substance abuse, suicide and misuse. Data include the number of confirmed cases where exposures are judged to be substance abuse-related (*i.e.*, an individual's attempt to get high). NNEPC collects detailed data on specific substances involved in poisonings, including the

categories of stimulants/street drugs, alcohol, opioids, asthma/cold and cough, benzodiazepines, antidepressants, and pharmaceuticals, as well as other substances.

The category of stimulants/street drugs includes marijuana and other cannabis, amphetamine and amphetamine-like substances, cocaine (salt and crack), amphetamine/dextroamphetamine, caffeine tablets/capsules, ecstasy, methamphetamine, GHB, and other/unknown stimulants/street drugs. The category alcohol includes alcohol-containing products such as mouthwash. The opioid category includes Oxycodone, Hydrocodone, buprenorphine, methadone, tramadol, morphine, propoxyphene, codeine, hydromorphone, stomach opioids, Meperidine (Demerol), heroin, Fentanyl, and other/unknown opioids. Data available from the poison center are reported on a continual daily basis and are included through December 2015. These data are only reflective of cases in which the Poison Center was contacted. **Contact:** Colin Smith, Northern New England Poison Center; [SMITHC12@mmc.org](mailto:SMITHC12@mmc.org); (207) 662-7085.

***Office of Child and Family Services (OCFS), Maine Automated Child Welfare Information System (MACWIS).*** The Office of Child and Family Services (OCFS) supports Maine's children and their families by providing Children's Behavioral Health, Child Welfare, Early Childhood, and Preventive services. The Maine Child Welfare Information System (MACWIS) serves as the single repository for all Maine child welfare information to assist Office of Child and Family Services (OCFS) workers in the recording, tracking, and processing of child welfare functions. MACWIS is the single repository for all electronic child welfare information. It actively manages 985,686 identified persons and 32,653 resources in the system; **Contact:** Lori Geiger, Information Service Manager; [lori.geiger@maine.gov](mailto:lori.geiger@maine.gov); (207)-624-7911.

***Office of Data, Research and Vital Statistics (DRVS).*** DRVS is a program within the Maine CDC. The death certificates are the source documents for the data on the vital events in Maine. The data include Maine resident deaths in which the death certificate included any mention that alcohol or drug use may have had a role. Data include unintentional, self-inflicted, assault and undetermined intent deaths. **Contact:** Patricia Lech, Office of Data, Research and Vital Statistics; [patricia.lech@maine.gov](mailto:patricia.lech@maine.gov); (207) 287-5806.

***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 (opiate agonists), sedatives, and stimulants. Prescription counts do not reflect amounts in terms of dosage or quantity of pills, but rather represent the volume of active prescriptions during the time period. The counts included in this report represent the number of prescriptions filled between 2012 and 2016. **Contact:** Office of Substance Abuse and Mental Health Services; [SAMHS.PMP@maine.gov](mailto:SAMHS.PMP@maine.gov); (207) 287-2595.

***Web Infrastructure for Treatment Services (WITS).*** WITS does not capture data from all treatment facilities or services provided in Maine and therefore is not a complete representation of ALL substance use treatment services provided in Maine. WITS is the State system that all licensed substance abuse treatment agencies are required by licensing rule to submit all substance abuse treatment services rendered into. However there are many

organizations and private practitioners such as primary care practitioners and independent substance use licensed counselors who are not mandated to enter data in to the system. 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. It is important to note that the WITS system is not static; therefore 2016 numbers may be artificially low. Drug categories included in this report are alcohol, marijuana, cocaine, heroin, synthetic opiates, methadone/buprenorphine and benzodiazepines. **Contact:** Anne Rogers, Substance Abuse and Mental Health Services; [Anne.Rogers@maine.gov](mailto:Anne.Rogers@maine.gov) (207) 287-2818.

**2-1-1 Maine.** 2-1-1 Maine is a free, confidential resource for individuals to connect to thousands of health and human services in Maine. 2-1-1 Maine maintains a statewide directory of resources including services for substance abuse, mental health, gambling addiction, housing, childcare and more. Individuals can contact 2-1-1 Maine and access needed information and referrals by calling 2-1-1 and speaking with a trained specialist in Maine, by texting their zip code to 898-211 and communicating with a Maine-based specialist, or by visiting [www.211maine.org](http://www.211maine.org). 2-1-1 Maine's Contact Center operates 24 hours a day, seven days a week, 365 days a year. 2-1-1 Maine is a collaborative effort of the Maine Department of Health and Human Services, the United Ways of Maine, and The Opportunity Alliance as the Contact Center partner. **Contact:** [info@211maine.org](mailto:info@211maine.org); Dial 2-1-1 or 1-866-811-5695; Text your zip code to 898-211.

**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>

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*Paul R. LePage, Governor*

*Ricker Hamilton, Acting Commissioner*

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