

Snapshots and Trends: 2013 Comparison of Maine Public Health Districts

**Presented By Tim Diomede
September 2013**



Hornby Zeller Associates, Inc.

Goals for the Presentation

- ❖ **I**ntroduce SEOW and the Community Profiles
- ❖ **R**eview basic demographic information
- ❖ **H**ighlight comparative snapshots and trends for key indicators
- ❖ **Q**uestions and comments

Purposes of State Epidemiological Outcomes Workgroup (SEOW)

- ❖ Promote data-driven decision-making
- ❖ Guide use of prevention resources
- ❖ Identify substance abuse patterns
- ❖ Establish and track substance abuse trends
- ❖ Detect emerging substances

Characteristics of the Community Profiles

Reports for eight Maine Public Health Districts (PHDs) include:

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

Characteristics of the Community Profiles

Each indicator includes:

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

Reports can be found at the following link:

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

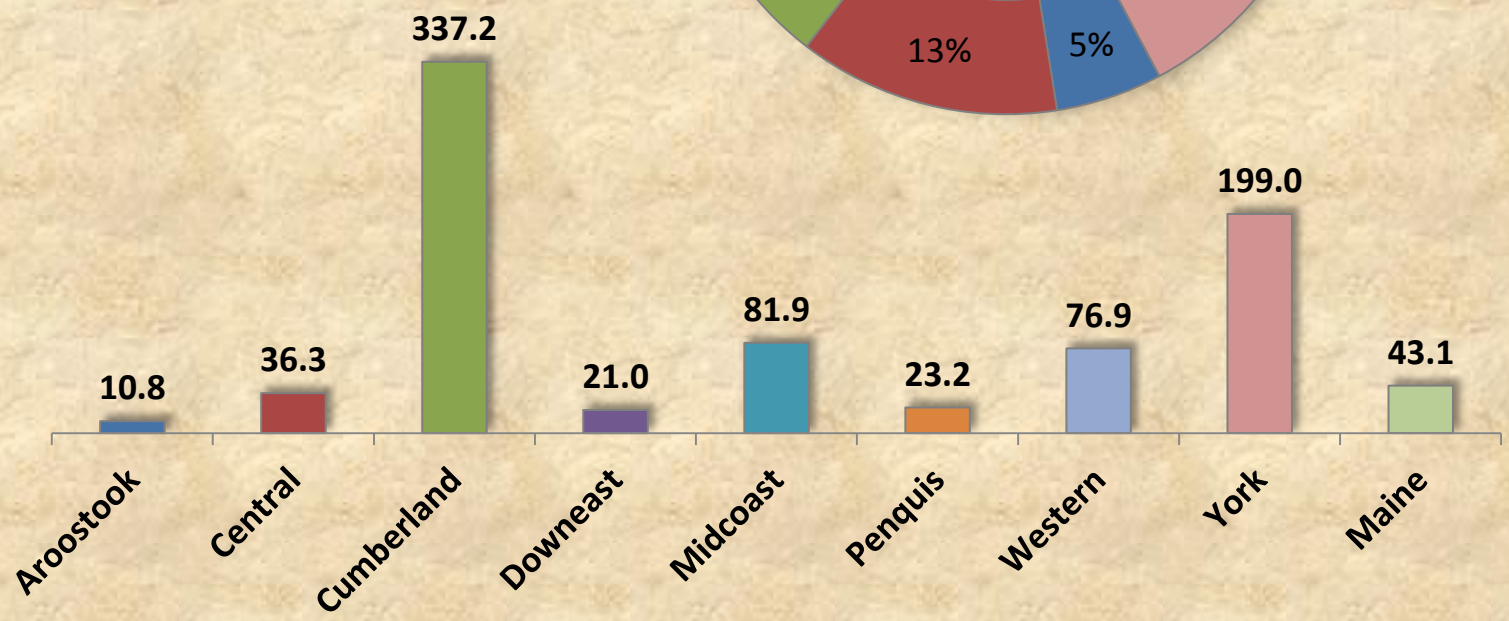
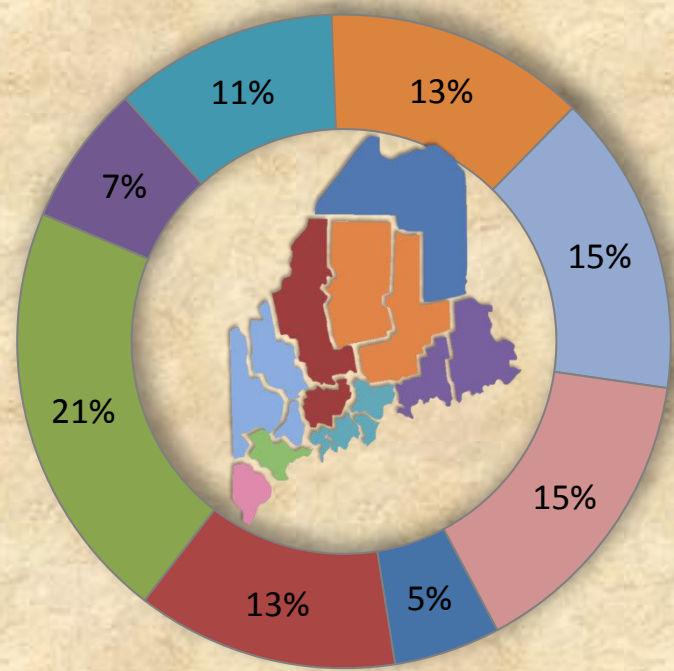
Demographics – *Quick Facts*

Percent of State Population and People Per Square Mile

(U.S. Census, 2012 Estimate)

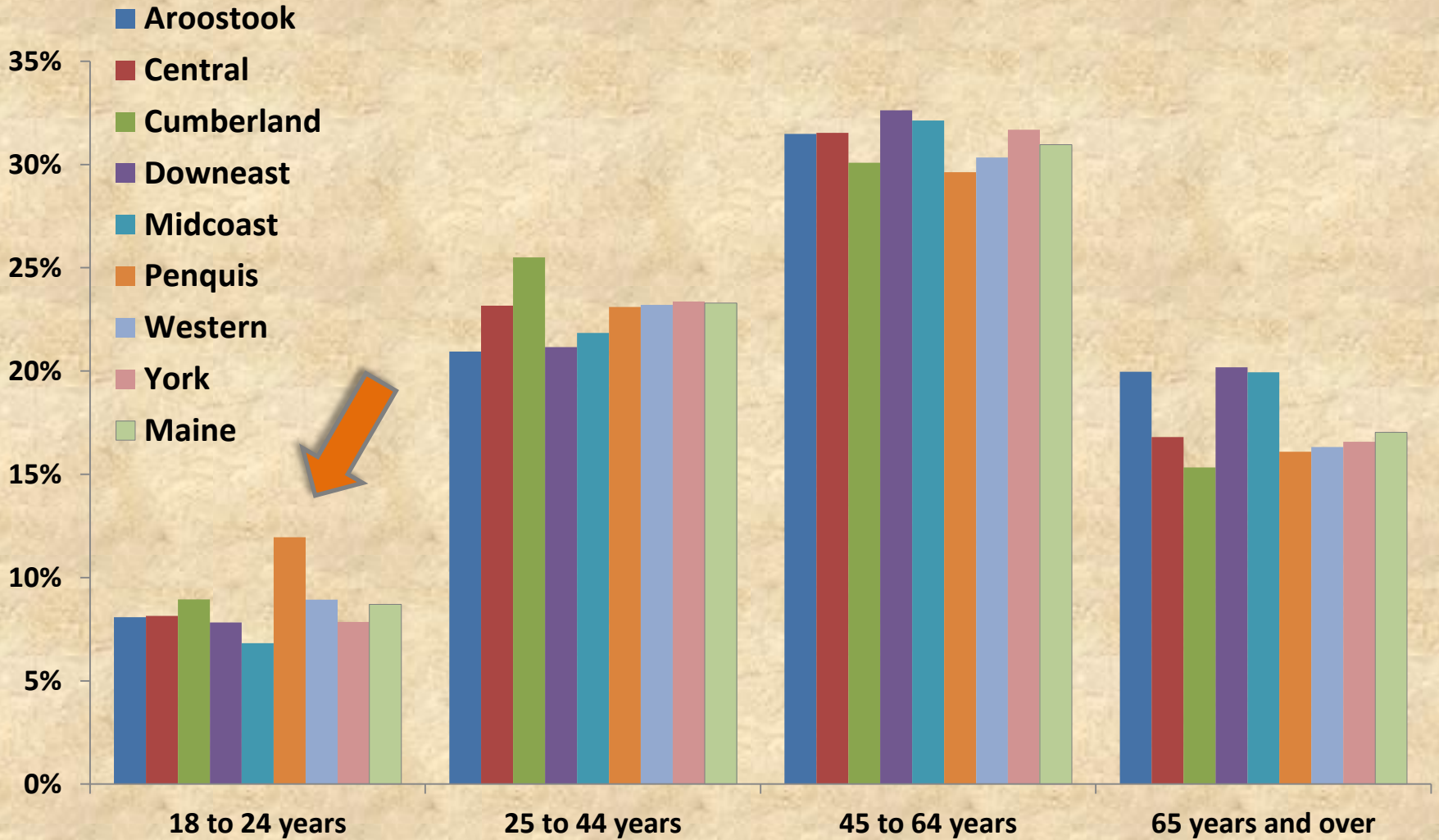
Majority of Mainers reside in the **southern half** of the state.

- Aroostook
- Central
- Cumberland
- Downeast
- Midcoast
- Penquis
- Western
- York
- Maine



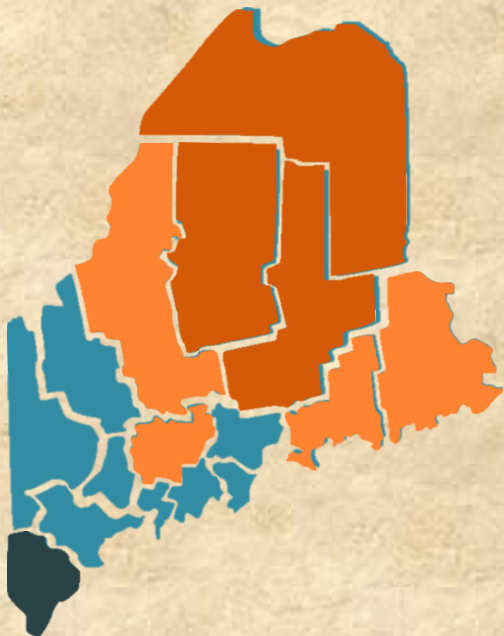
Population by Age Group as a Proportion of PHD

(U.S. Census, 2012 Estimate)

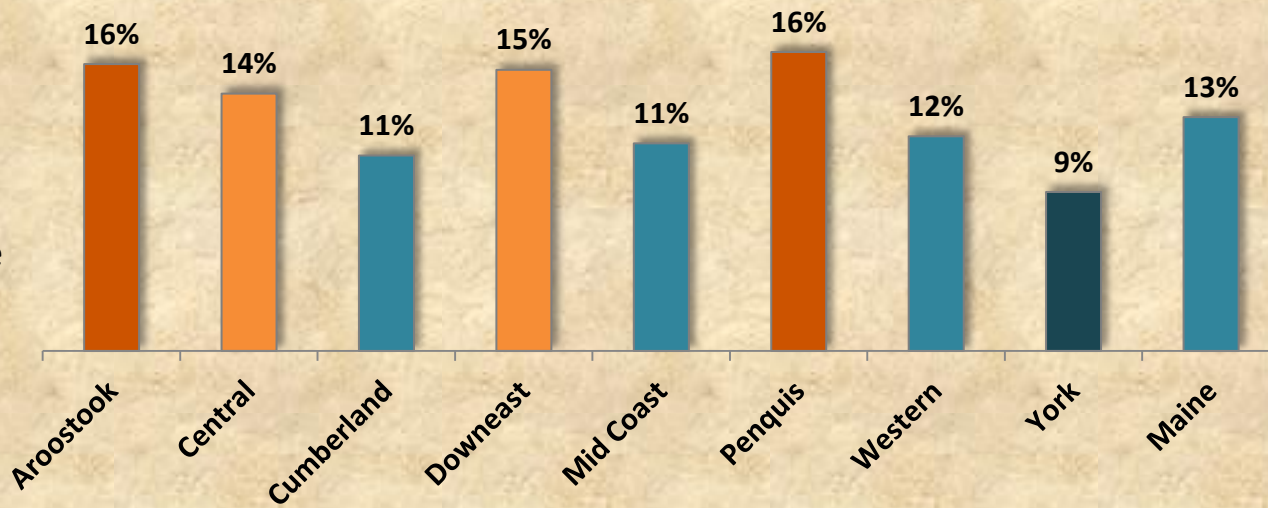
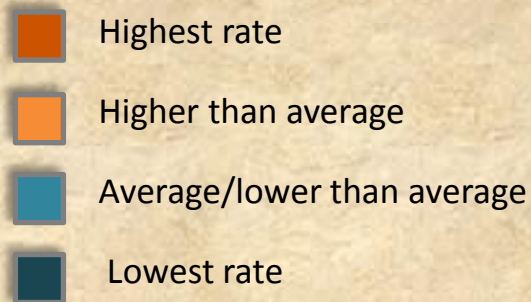


Percent Below Poverty

(U.S. Census, 2012 estimate)



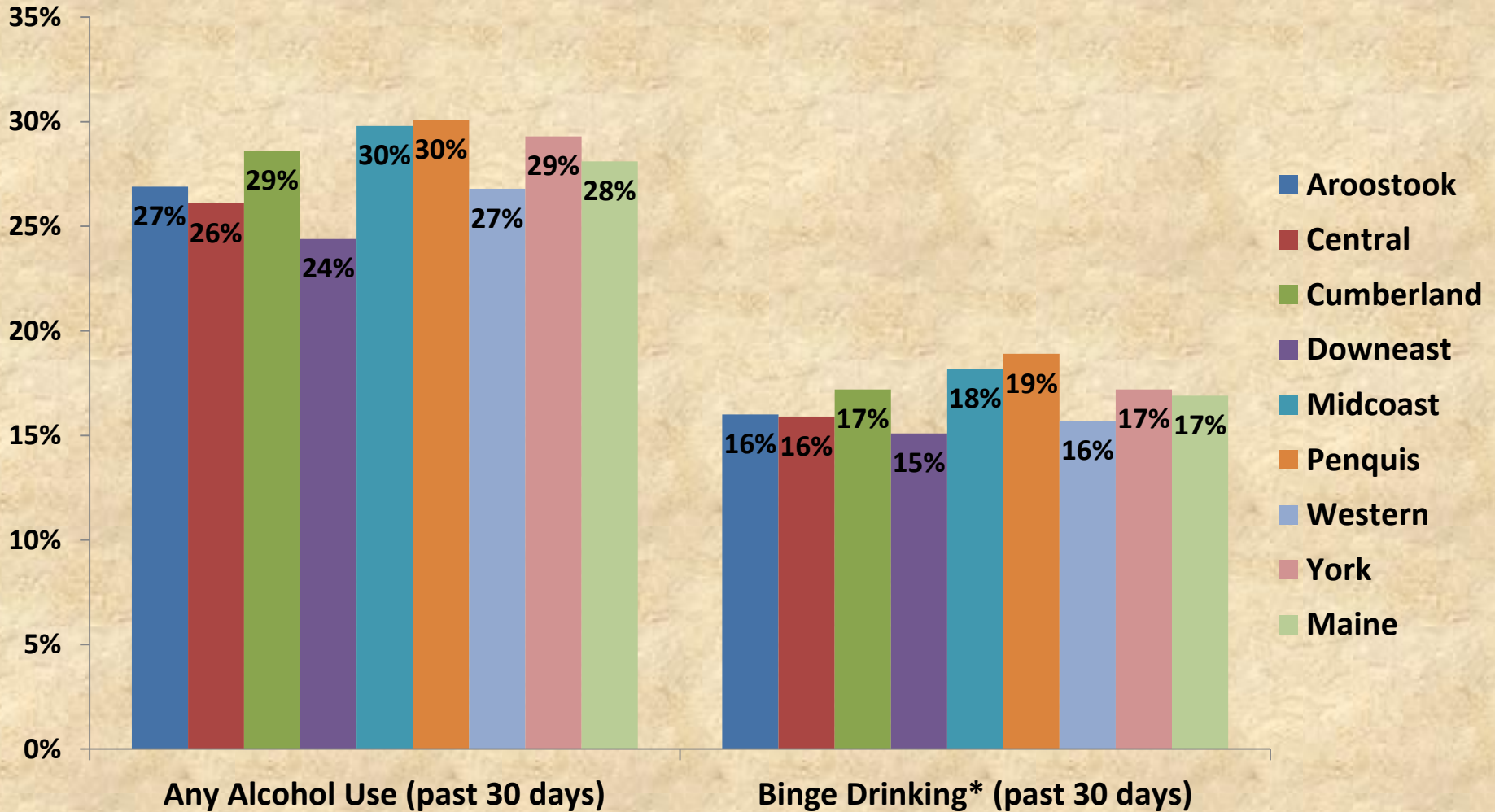
❖ About **one in six** residents in **Aroostook** and **Penquis** live below the **poverty** level.



Consumption

Alcohol Use Among High School Students

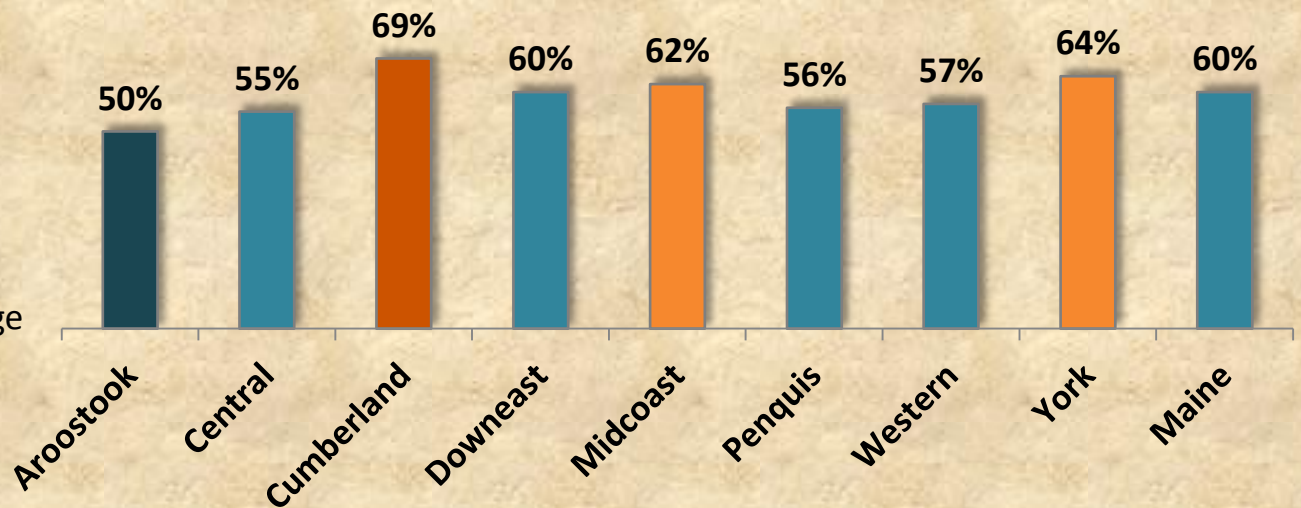
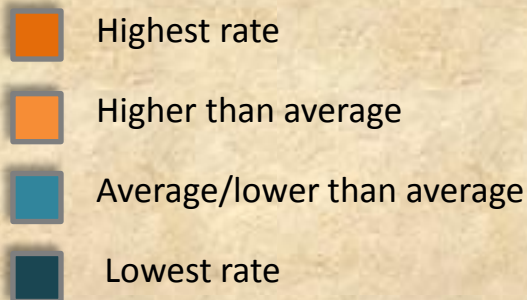
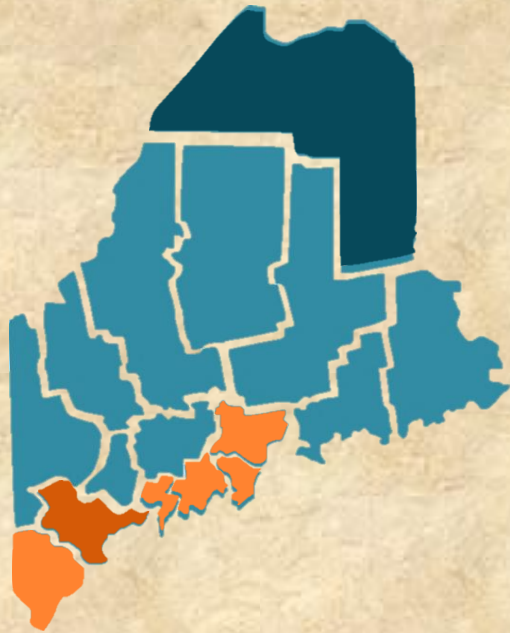
(MIYHS, 2011)



*Binge Drinking is defined as consuming five or more drinks in a row.

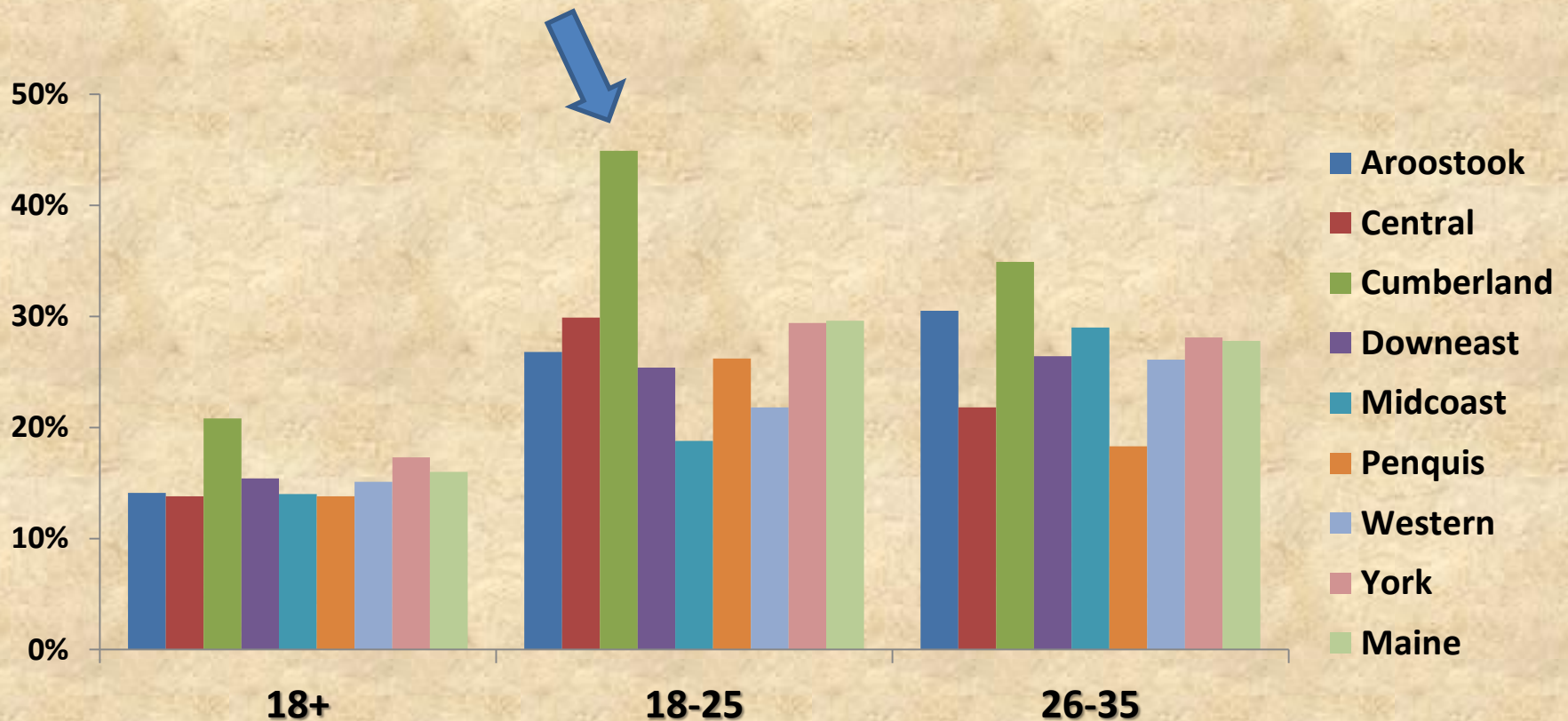
Percent of adults who reported drinking during past 30 days (BRFSS, 2011)

❖ Almost **seven in ten** adults in **Cumberland** drank in the past month.



Binge Drinking Among Adults in Past 30 days By Age Group (BRFSS, 2011)

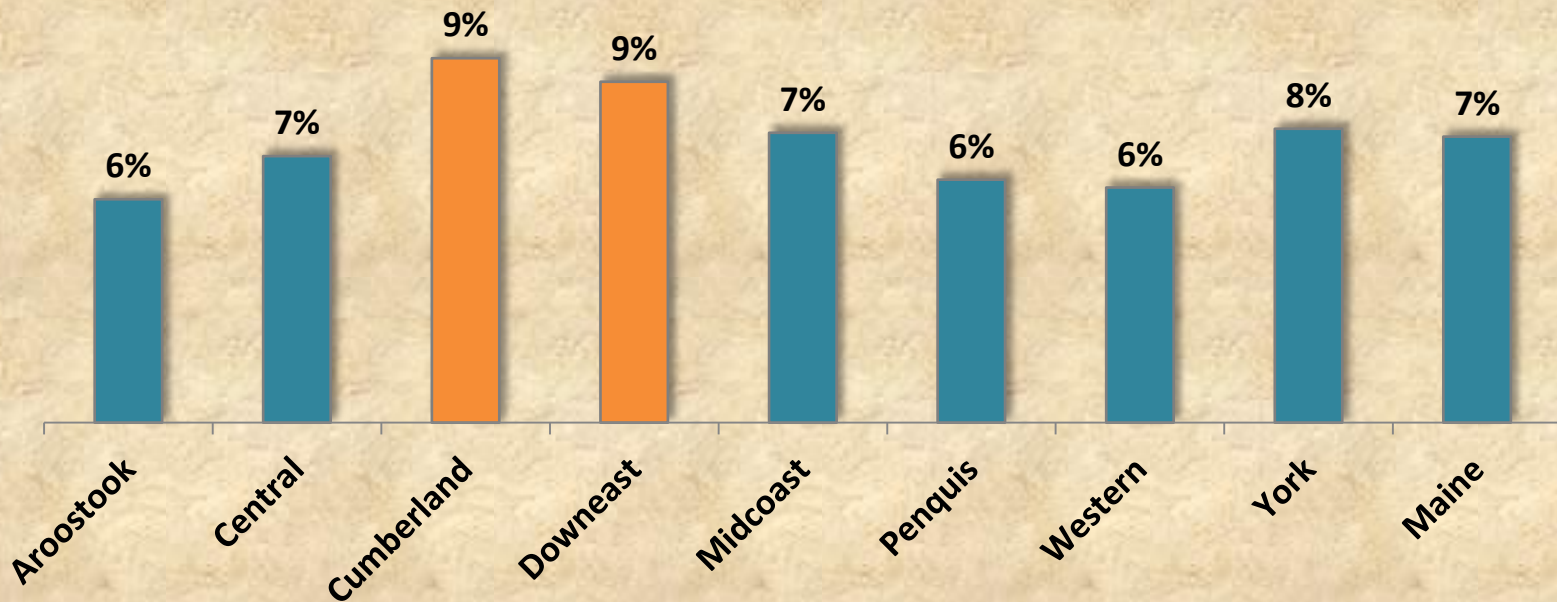
❖ **N**early **half** of the **18 to 25** year olds in **Cumberland** engaged in **binge** drinking within the past month.



Adults at Risk from Heavy Drinking* During Past 30 Days (BRFSS, 2011)



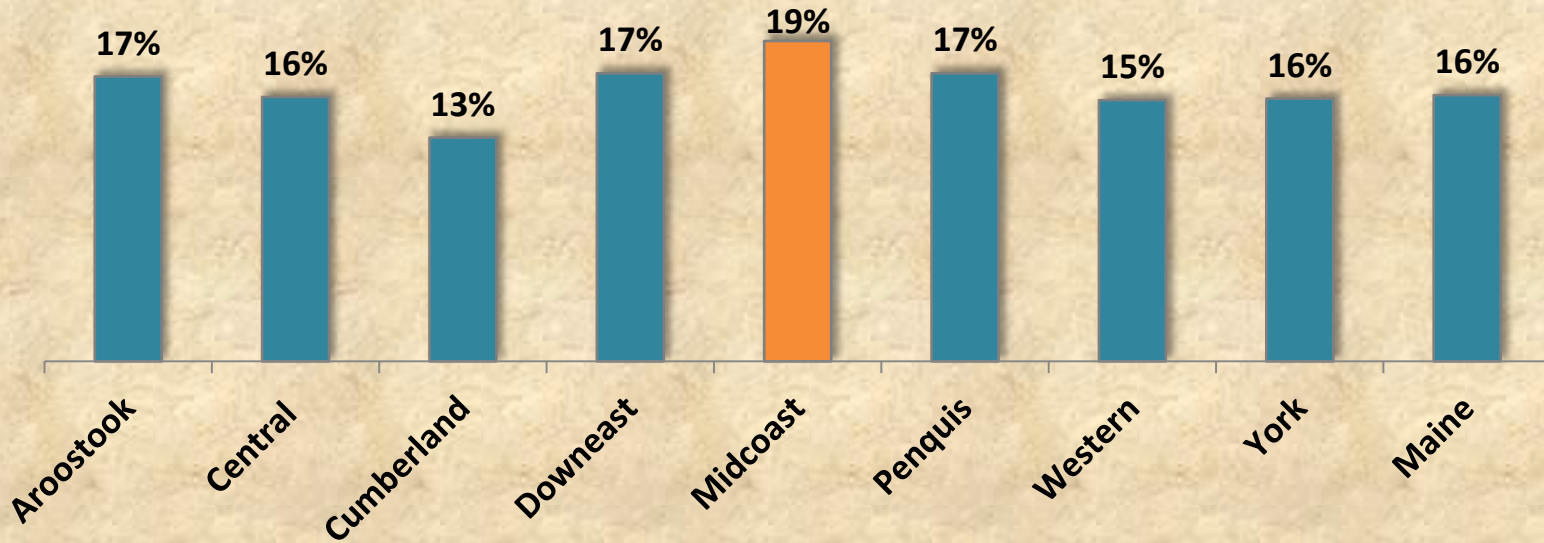
❖ Almost **one in ten** adults in **Cumberland** and **Downeast** were at risk for heavy drinking.



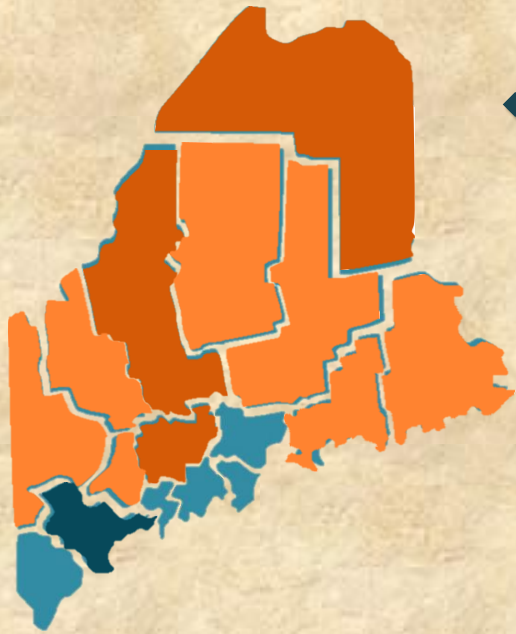
*At risk from heavy drinking = consuming two drinks per day for a man or one drink per day for a woman.

High School Cigarette Use Past 30 Days (MIYHS, 2011)

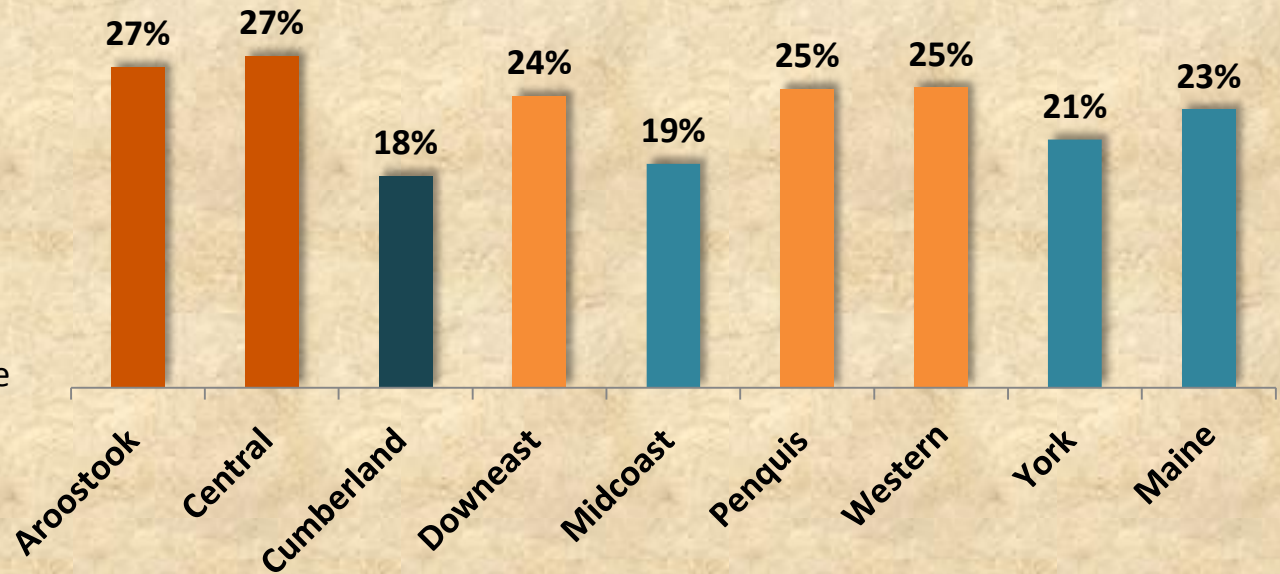
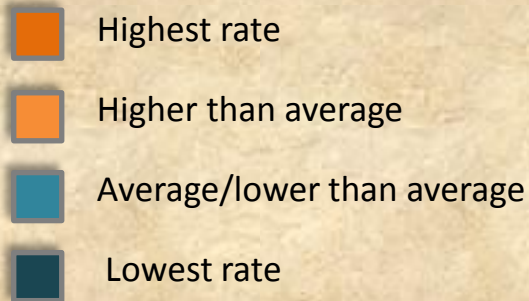
❖ **N**early **one** in **six** students in **Maine** had smoked **cigarettes** in the past 30 days.



Past Month Cigarette Use Among Adults (BRFSS, 2011)

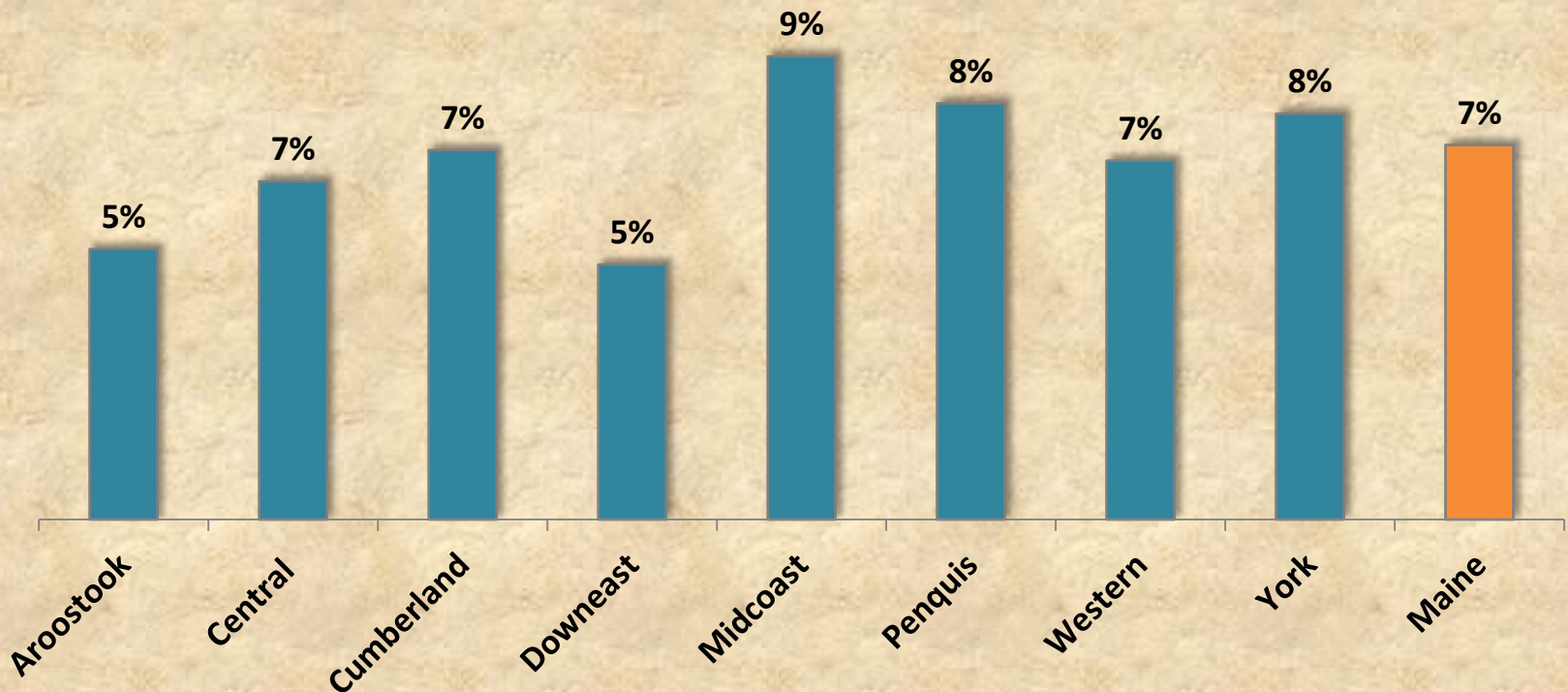


❖ More than **one in four** adults in **Aroostook** and **Central** PHD had smoked **cigarettes** in the past 30 days.

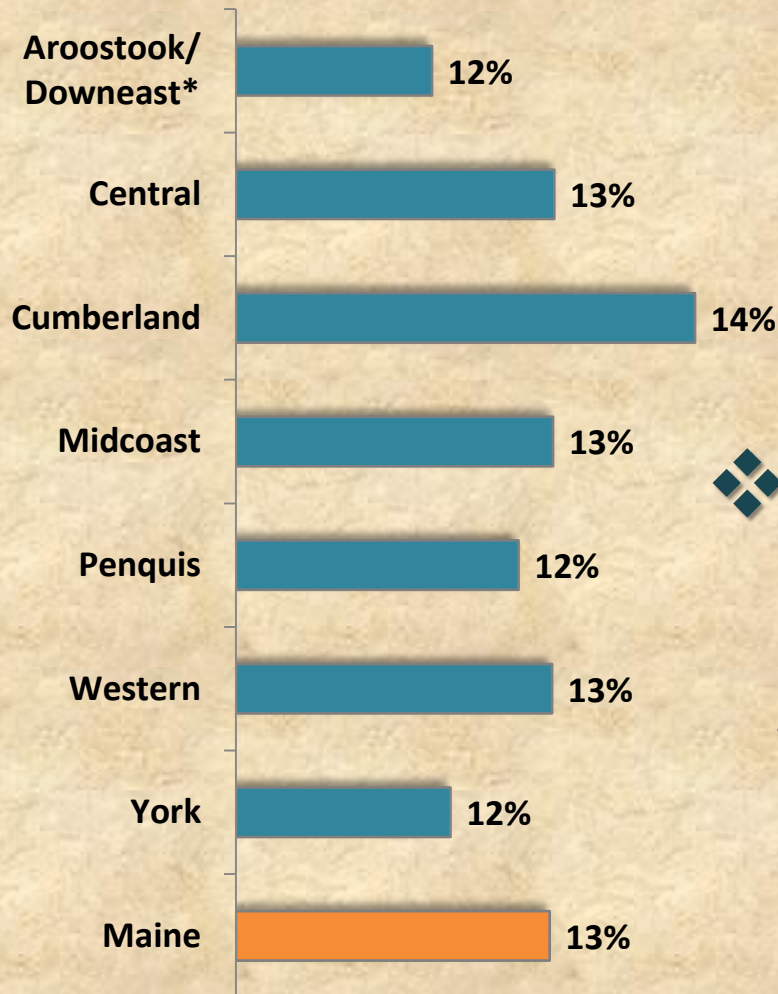


High School Prescription Drug Misuse Past 30 Days (MIYHS, 2011)

❖ **7%** of **Maine** students had reported misusing **Rx drugs**. Rates ranged from **5%** in **Downeast** to **9%** in **Midcoast**.



Non-medical Pain Reliever Use Within Past Year Among 18 to 25 Year Olds (NSDUH, 2008-10)

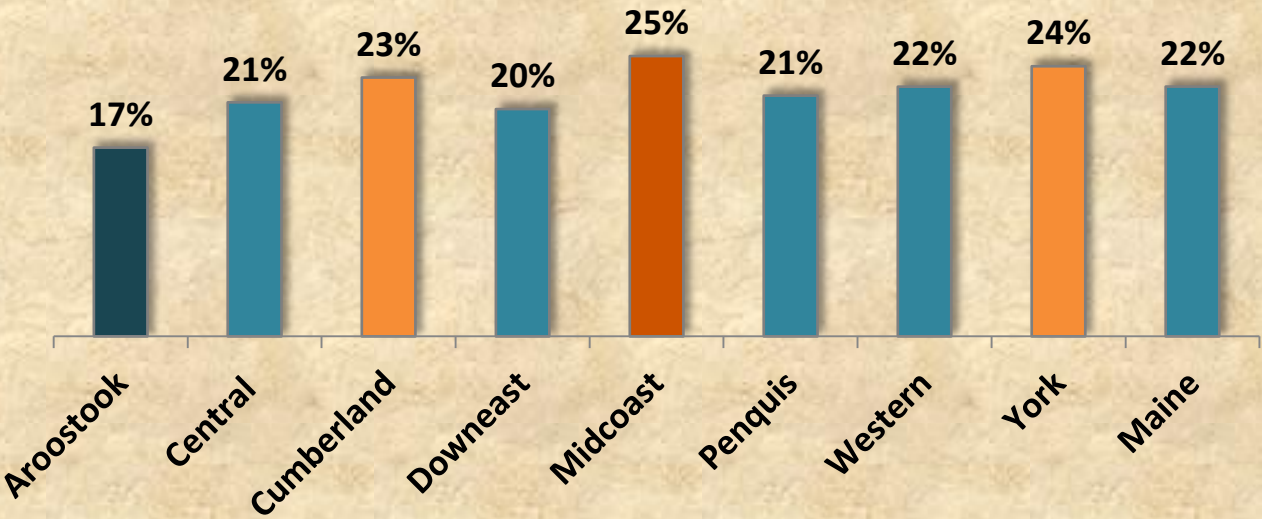
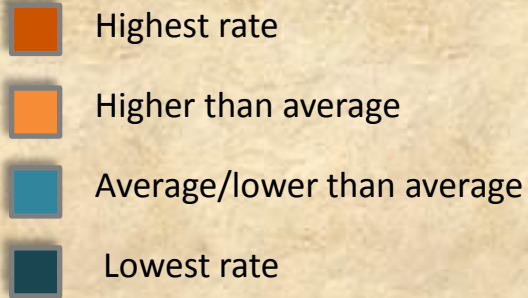
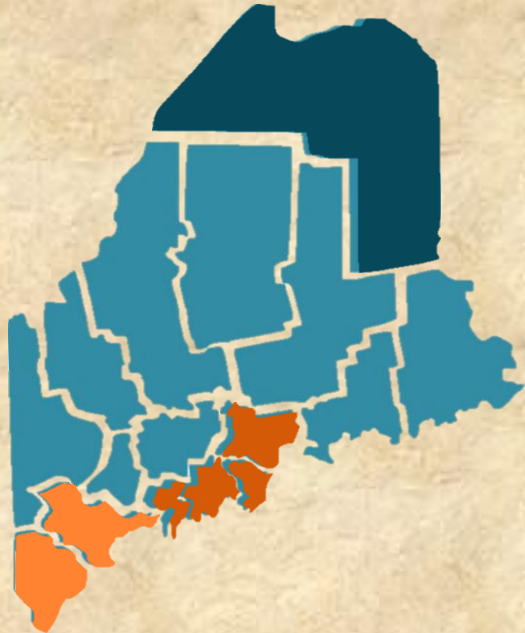


❖ **Almost one in seven** 18 to 25 year olds in **Maine** had misused **Pain Relievers** within the year. Rates ranged from **12% to 14%**.

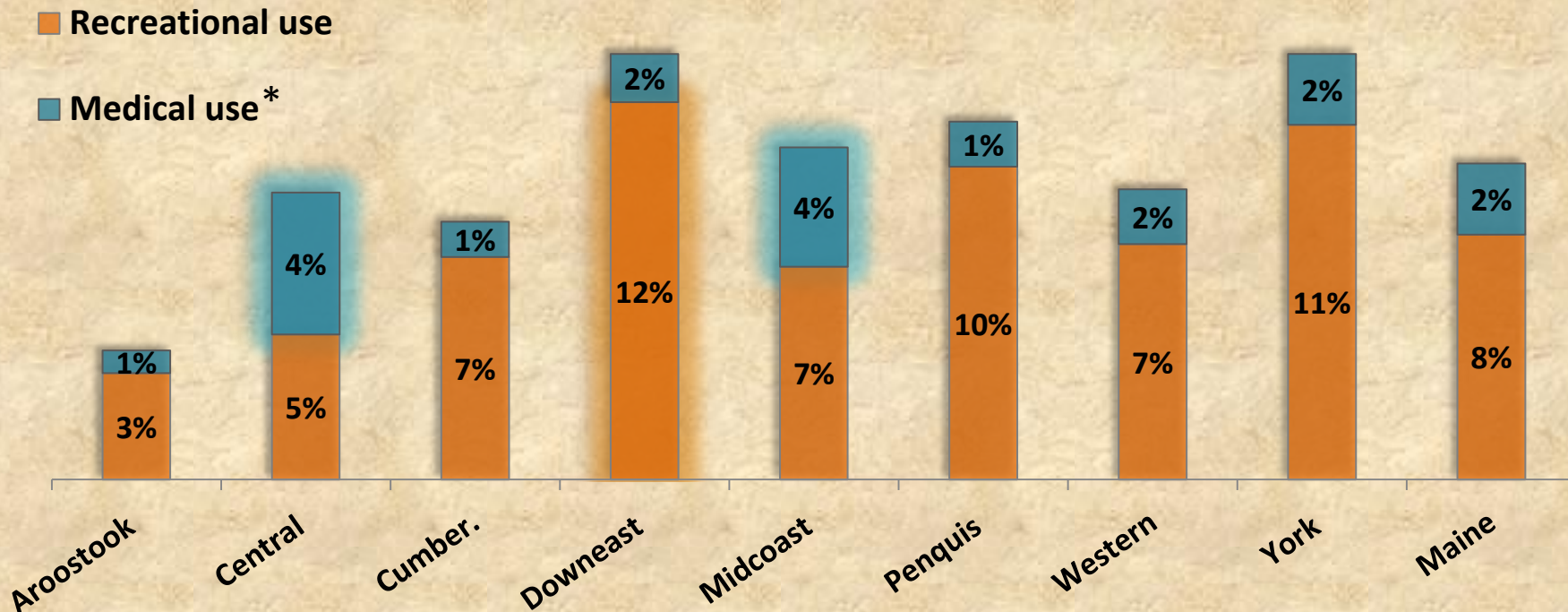
*Because of small sample sizes, survey data from Aroostook and Downeast have been combined

High School Marijuana Use Past 30 Days (MIYHS, 2011)

❖ **One in Four** students in **Midcoast** had used **marijuana** within the past month.



Percent of **adults** (18+) who have used **marijuana** during the past 30 days (BRFSS, 2011)



❖ **Downeast** had the highest rate of **recreational** use.

❖ **Central** and **Midcoast** had the highest rate of **Medical** use.

*Medical use of marijuana is expected to increase with the inception of medical marijuana laws.

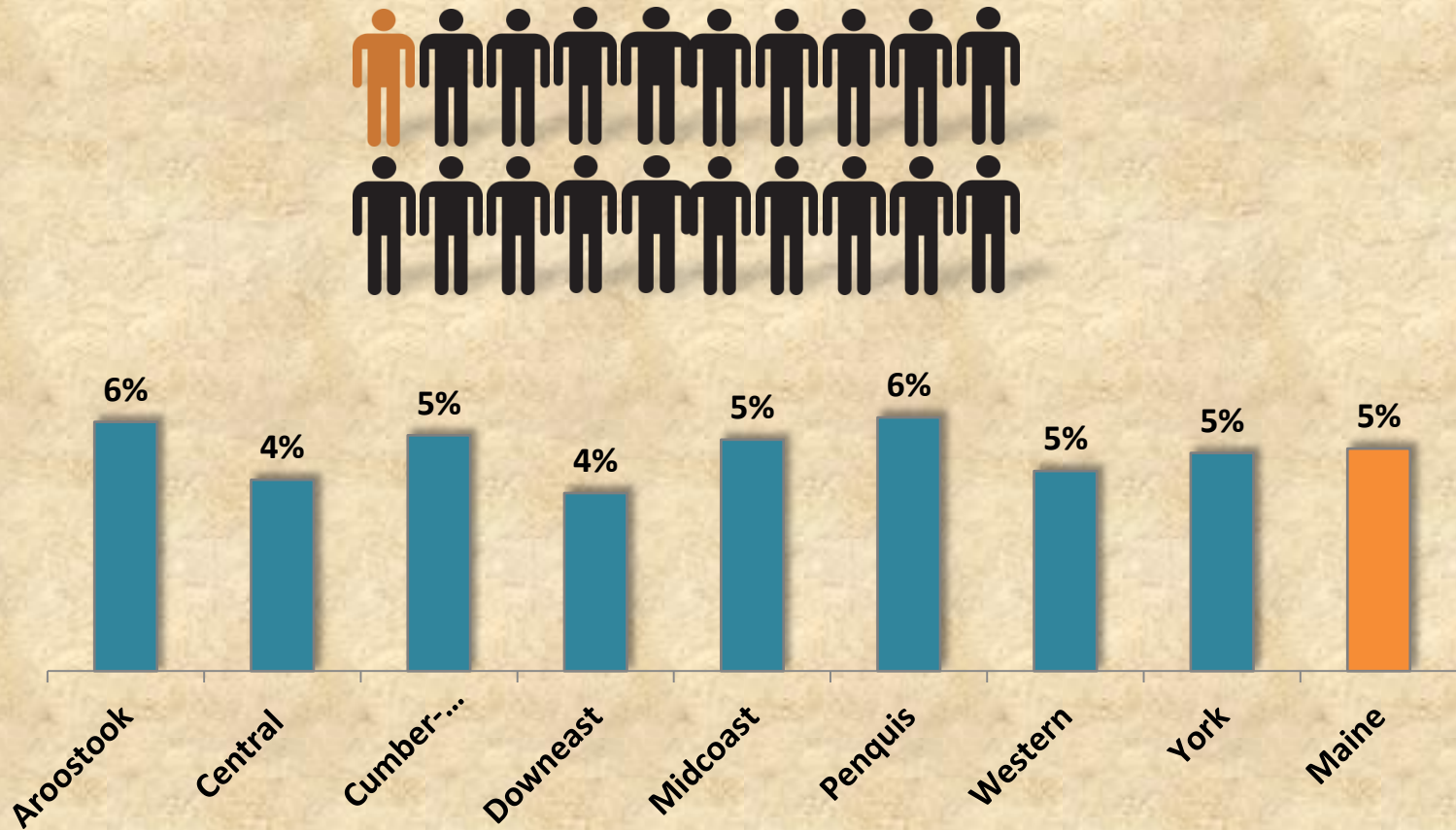
Consumption Summary

- ❖ Drinking among adults is more prevalent among southern regions along the coast and use (including binge drinking) among high school students is more common in Midcoast and Penquis.
- ❖ Binge drinking among adults is highest among Mainers 18 to 35, particularly in Maine's more populated Regions. Adults at risk from heavy drinking tend to be along the coastal regions of Maine.
- ❖ Cigarette smoking among adults and youth is more common among Northern and Central regions.
- ❖ Pain reliever misuse is most common among 18 to 25 year olds.
- ❖ High school marijuana use is most prevalent along the southern coastal regions of Maine.
- ❖ Adult recreational marijuana use is most prevalent along the coast. Medical use of marijuana is more common among the Central and Midcoast PHDs.

Consequences

Drinking and Driving Among High School Students (MIYHS, 2011)

❖ **One in twenty** students in **Maine** had reported **drinking** and **driving** within the past month. Rates ranged from **4%** to **6%**.

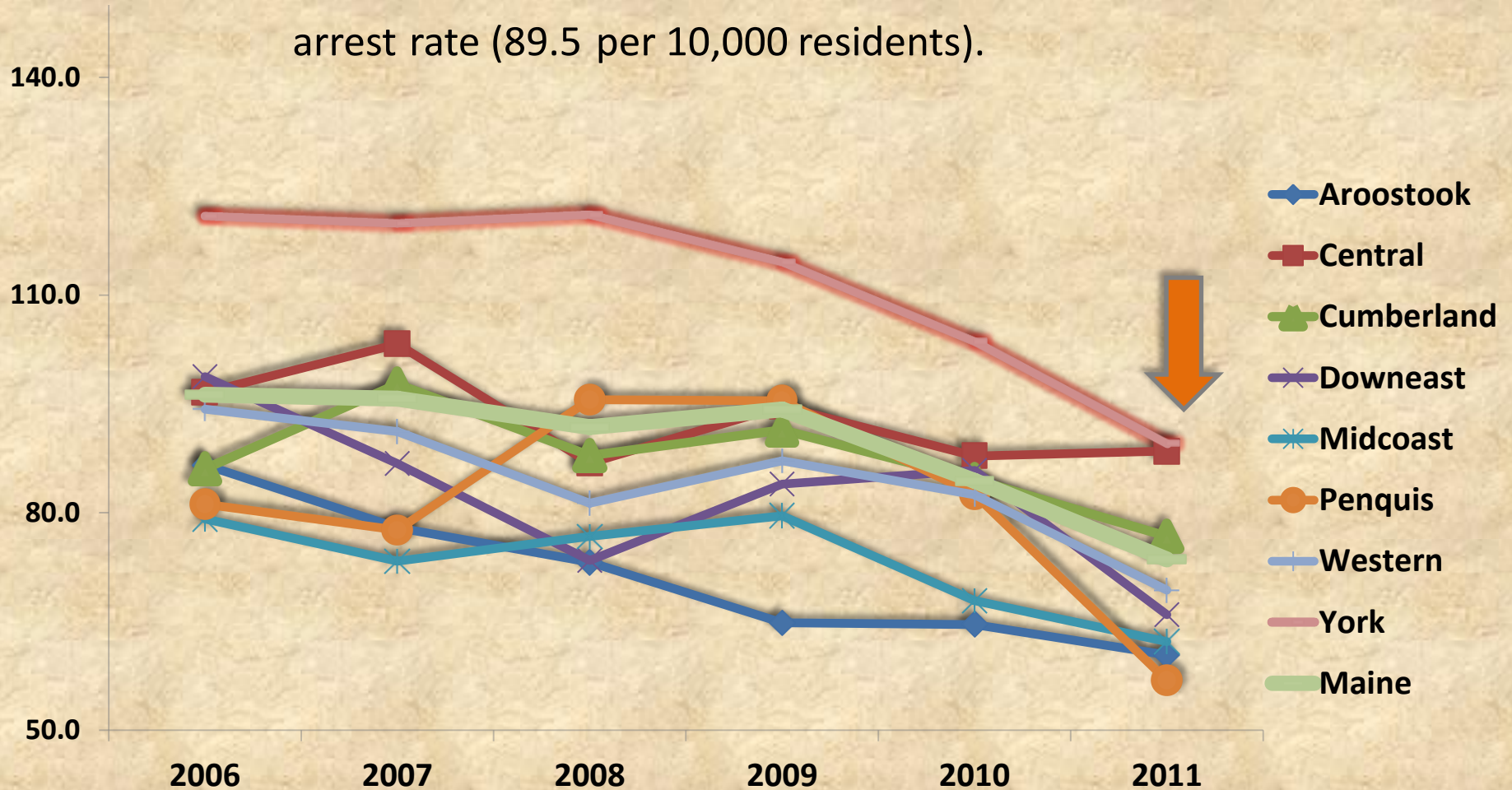


Alcohol-Related* Arrest Rate Per 10,000 Residents

(DPS-UCR, 2006-2011)



In 2011, **York** had the highest alcohol-related arrest rate (89.5 per 10,000 residents).

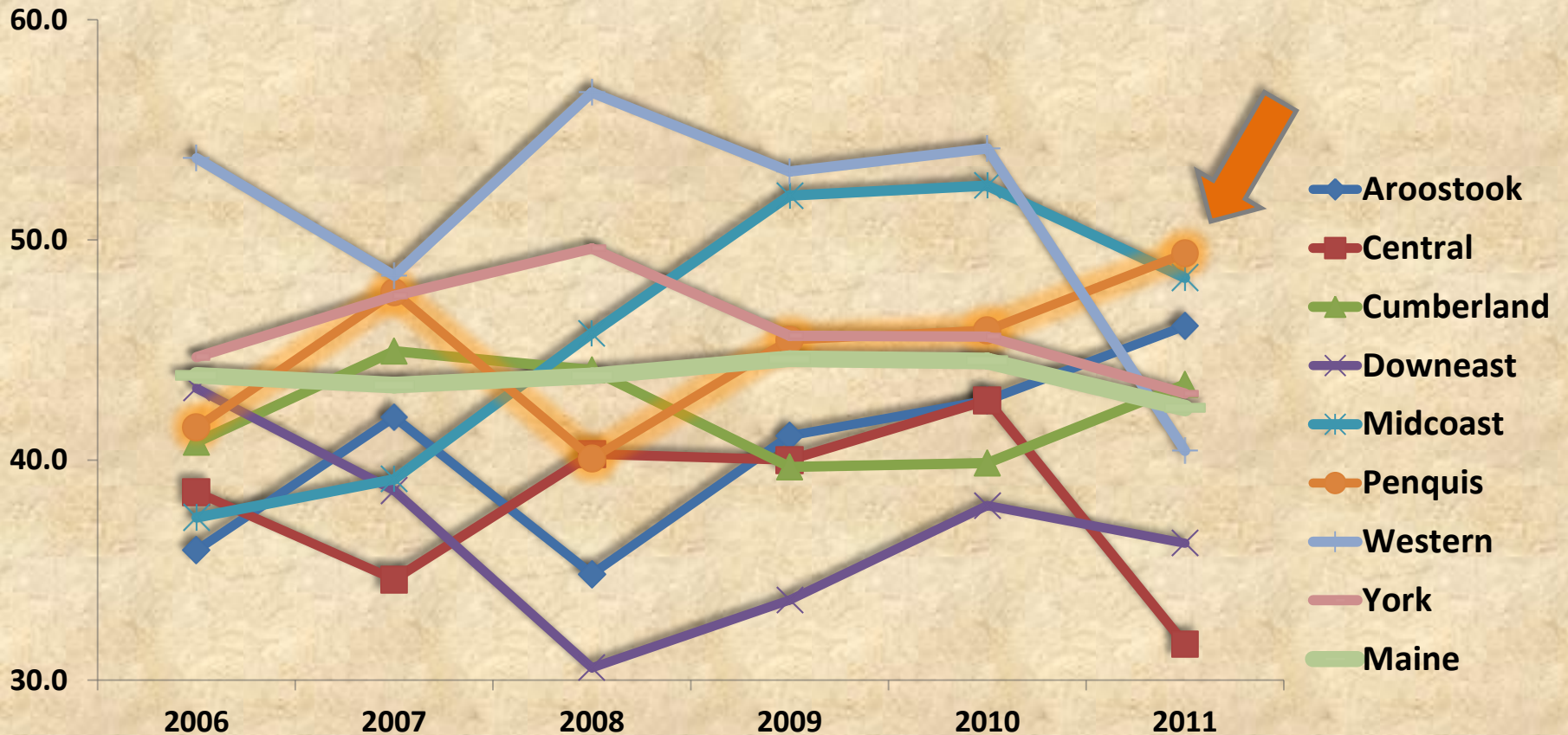


* Alcohol-related arrests include Operating Under the Influence (OUI), liquor law violations, and drunkenness.

Drug-Related* Arrest Rate Per 10,000 Residents

(DPS-UCR, 2006-2011)

❖ In 2011, **Penquis** had the highest **Drug-related** arrest rate (49.4 per 10,000 residents).

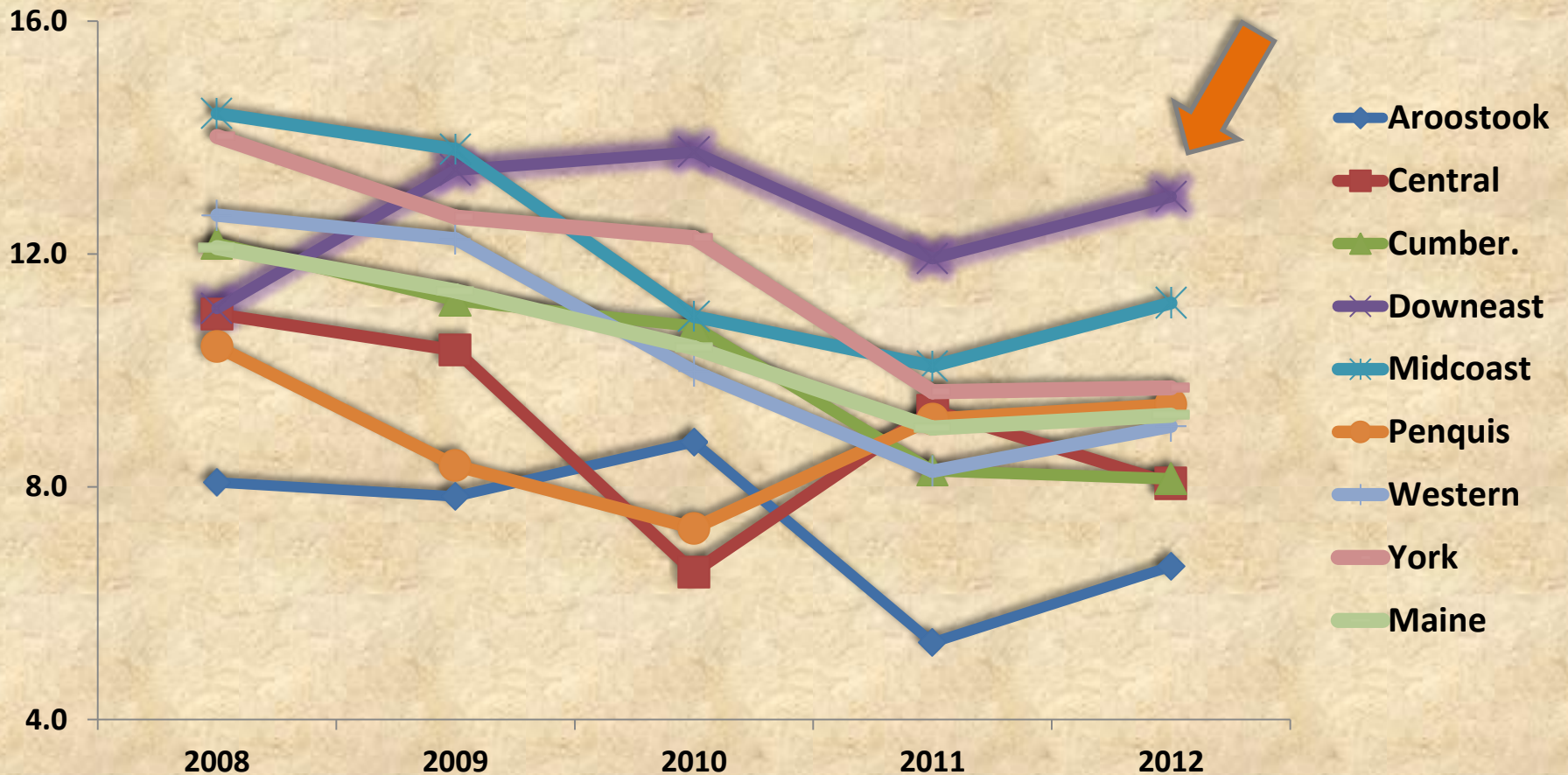


* Drug-related arrests include manufacturing, sales, and possession.

Alcohol/Drug-related* motor vehicle crash rate per 10,000

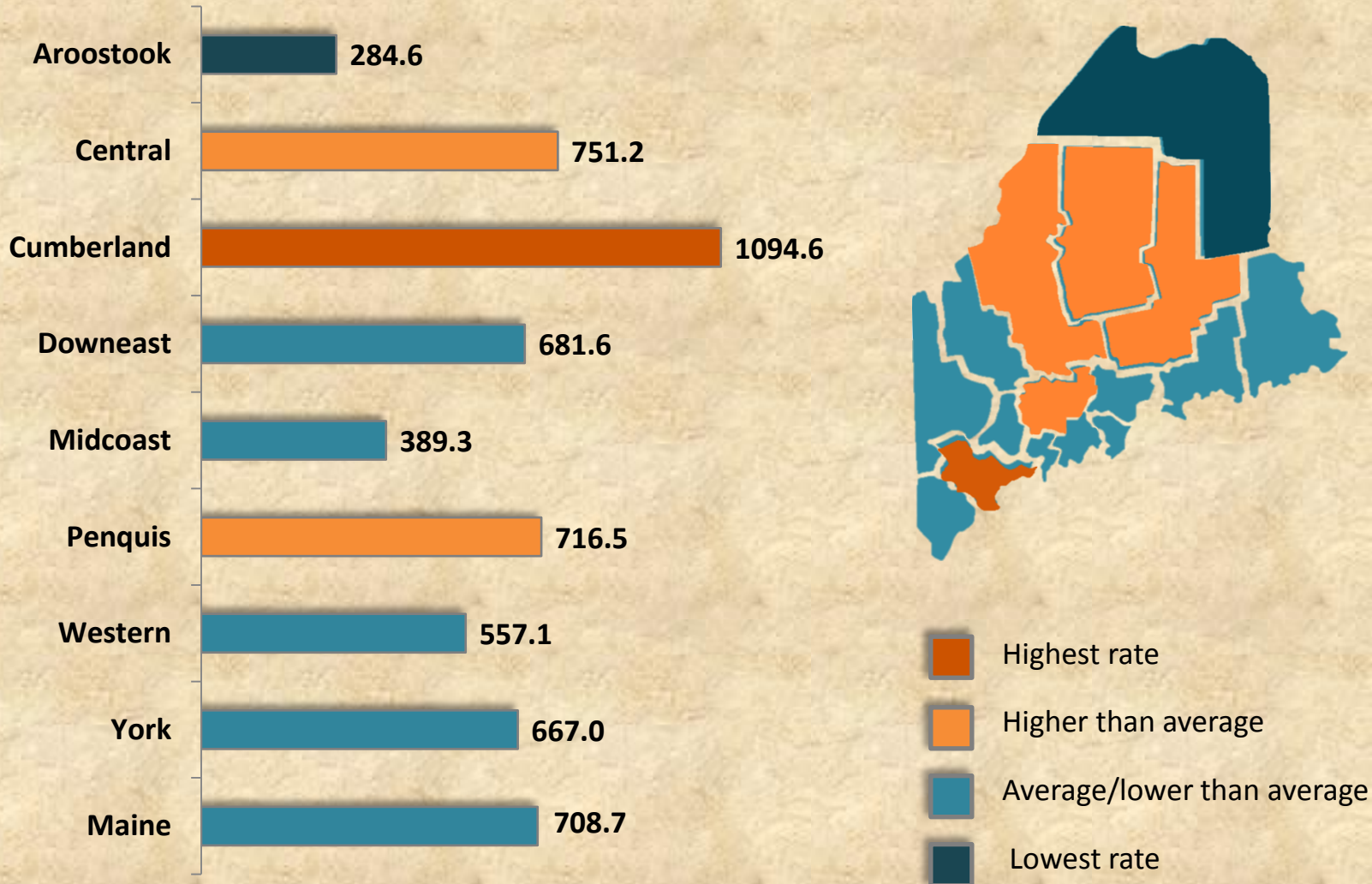
(MDOT/MBHS, 2008-2012)

❖ **Downeast** had the highest **alcohol/drug related crash** rate since 2009. In 2012, Downeast's rate was **13 per 10,000** residents)



*In 2009, alcohol was attributed to 96 percent of the alcohol/drug-related crashes statewide.

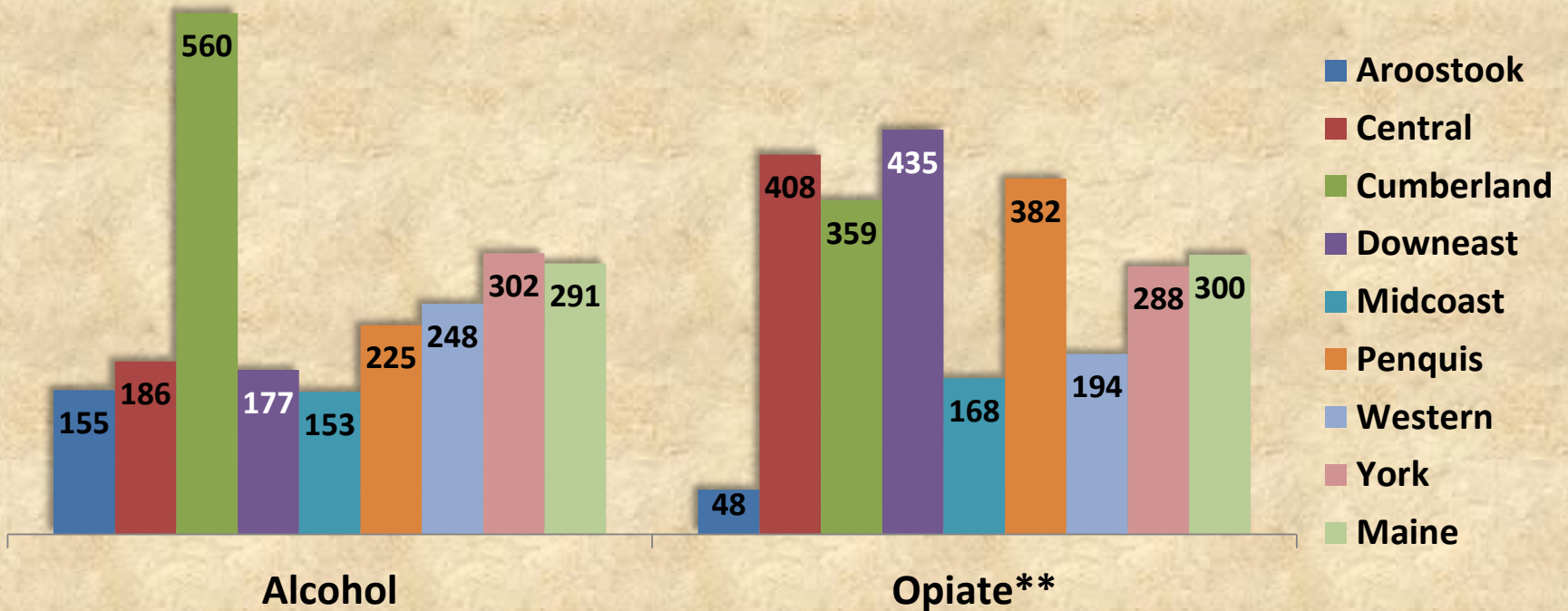
Outpatient* Hospital Admissions Related to Substance Use** Per 10,000 Residents (MHDO, 2011)



*"Outpatient" refers to patients who receive treatment at a hospital or clinic but are not admitted overnight.

**Visits may involve multiple substances

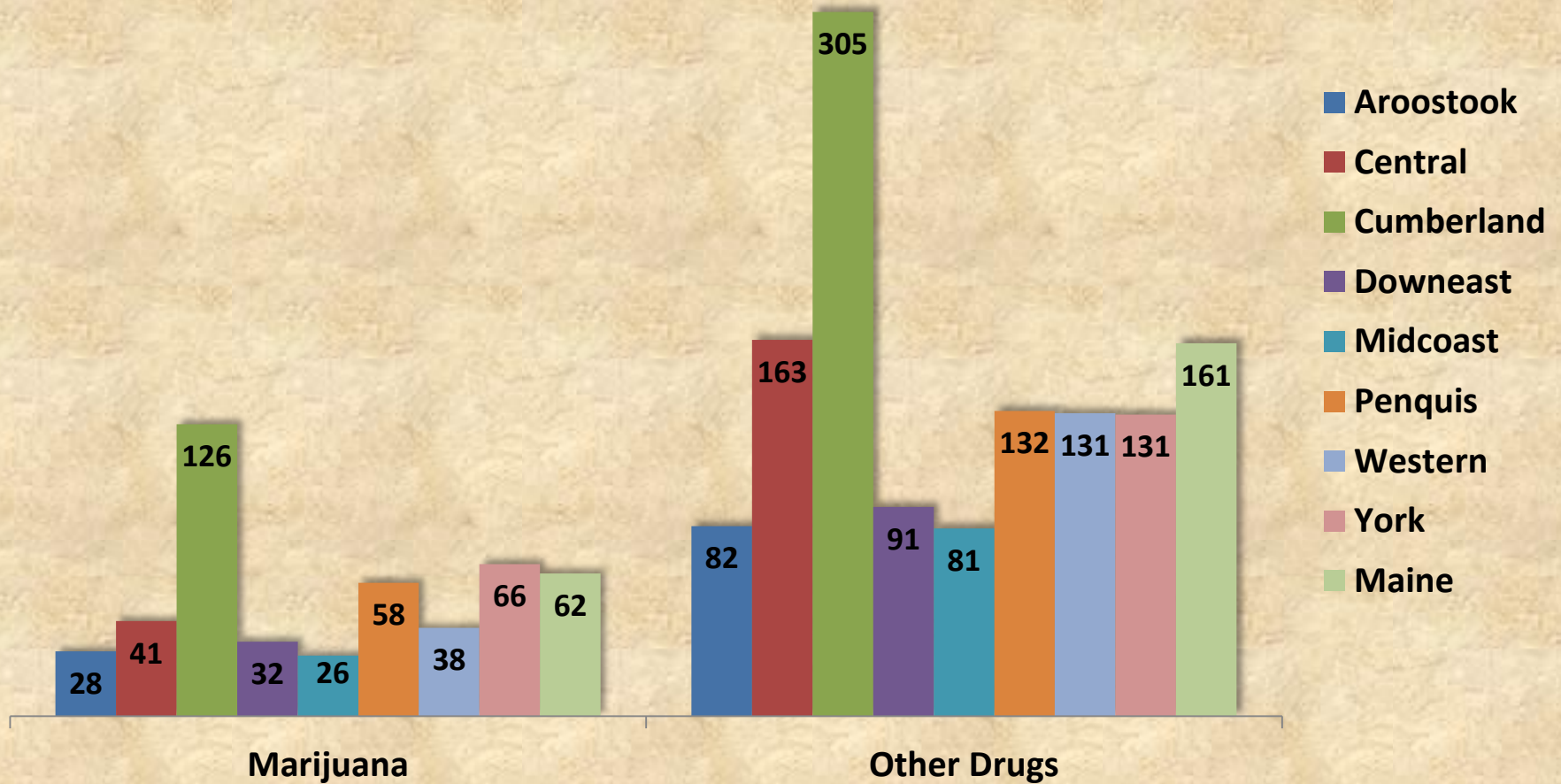
Outpatient Hospital Admissions Related to Substance Use* Per 10,000 Residents, by Drug Type (MHDO, 2011)



*Visits may involve multiple substances

**Includes prescription narcotics, methadone, and heroin.

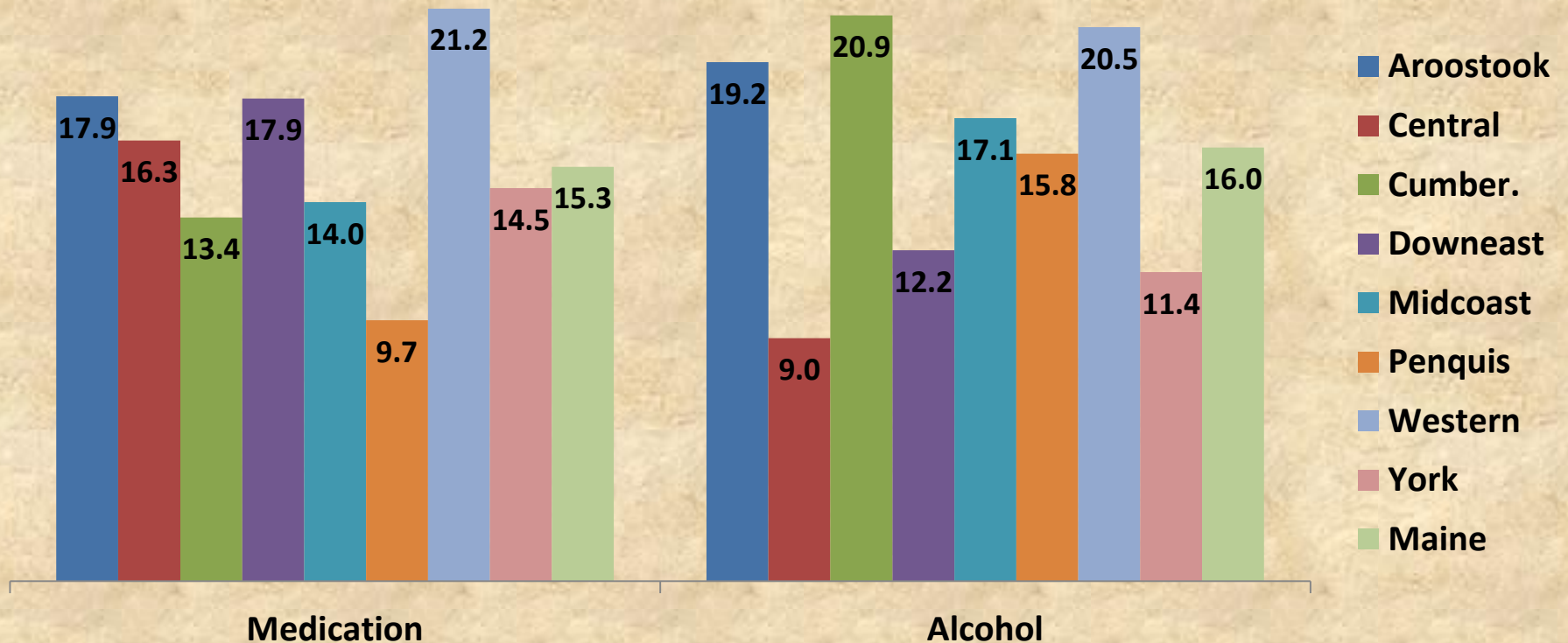
Outpatient Hospital Admissions Related to Substance Use* Per 10,000 Residents, by Drug Type (MHDO, 2011)



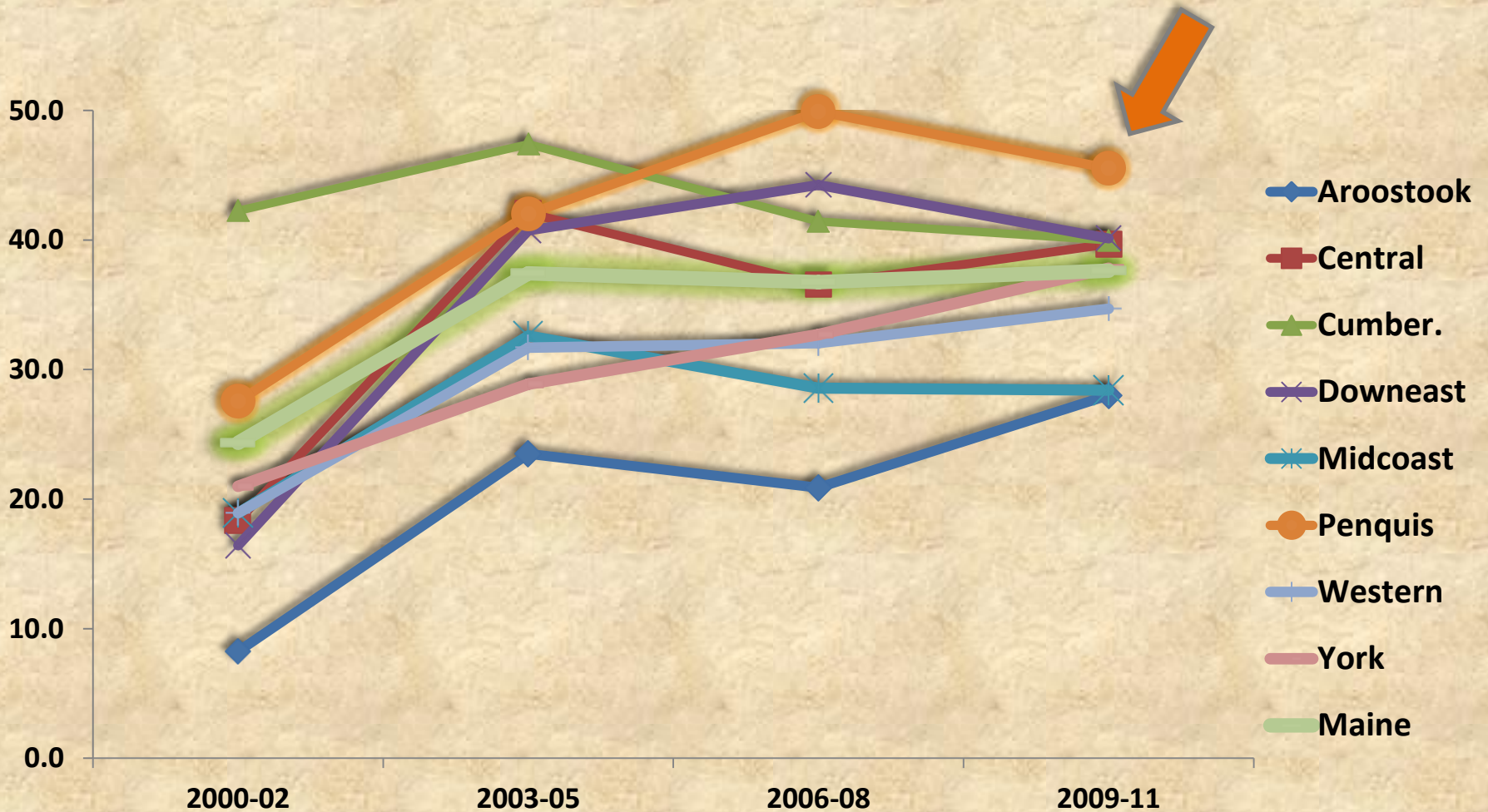
*Visits may involve multiple substances

Emergency Medical Services Overdose Responses Per 10,000 Residents, by Primary Type of Substance Involved

(EMS, 2012)



Drug-related Death Rate Per 100,000 (OCME, 2000-02 to 2009-11)



Consequence Summary

- ❖ **O**ne in twenty students reported drinking and driving – Rates among PHDs did not vary much.
- ❖ **O**verall, alcohol-related arrests have been declining among PHDs since 2006 and more common among more populated regions.
- ❖ **R**ecently, drug related arrest rates have increased among the Penquis, Aroostook, and Cumberland PHDs.
- ❖ **A**ll PHDs, with the exception of Downeast, have seen a decrease in the rate of alcohol/drug related crashes since 2008. Rates were highest among the Downeast and Midcoast.

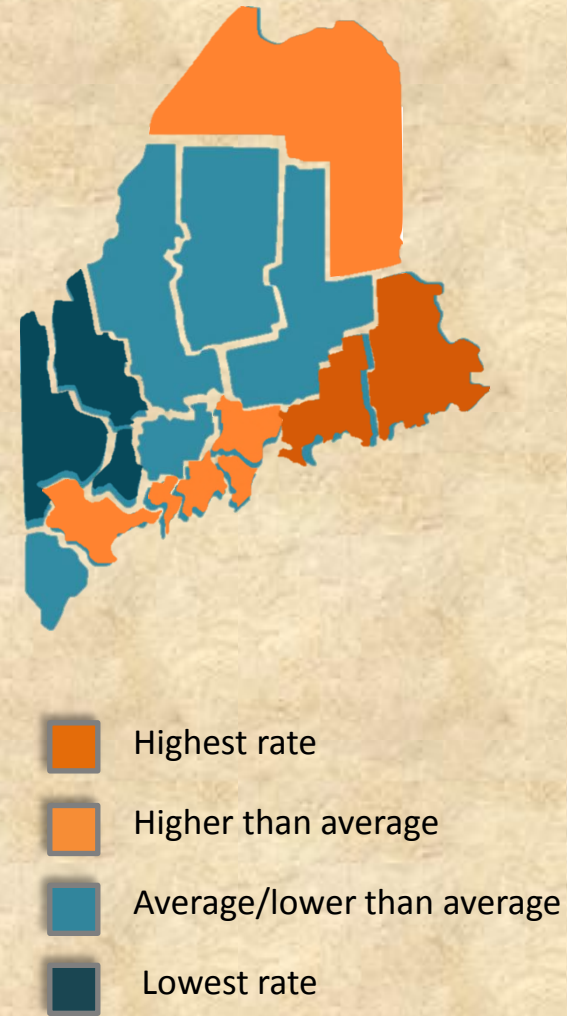
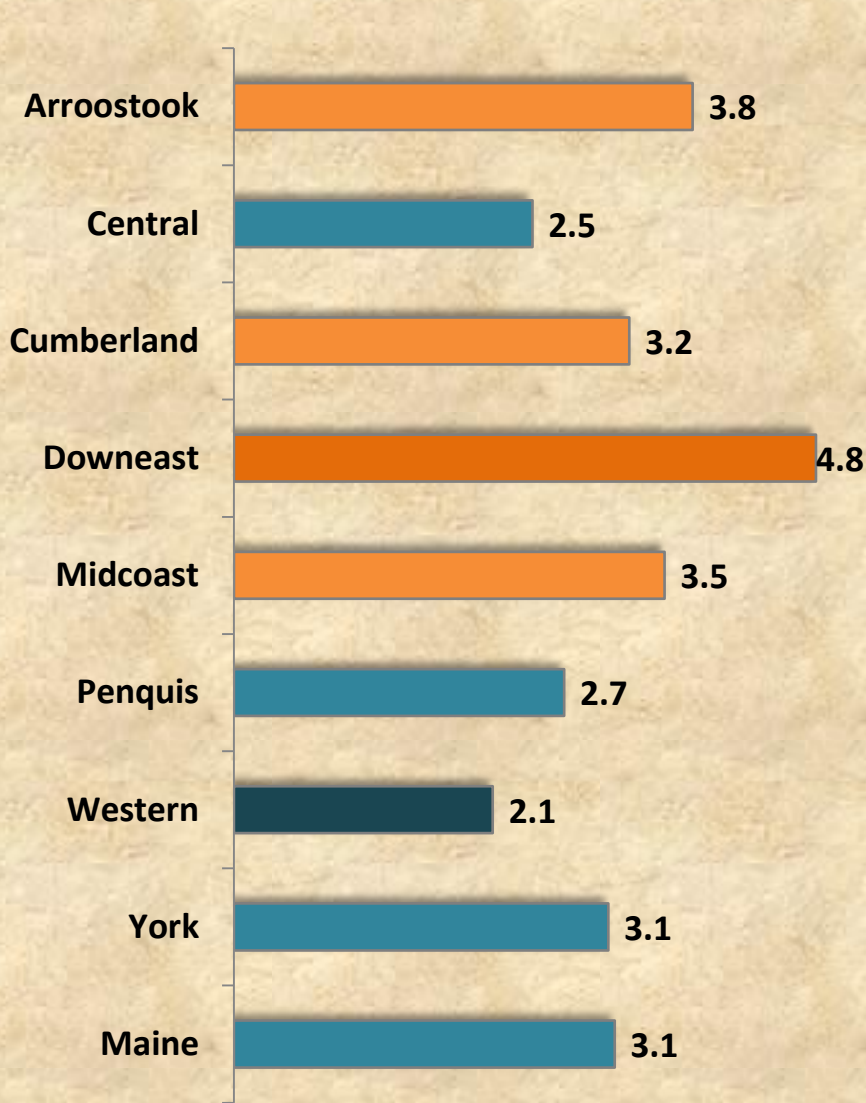
Consequence Summary (cont.)

- ❖ **O**utpatient hospital admissions rates are highest among the Cumberland, Central, and Penquis PHDs. Alcohol-related admission rates were highest in densely populated areas, particularly Cumberland. Opiate related rates were higher in southern, central, and eastern Maine.
- ❖ **R**ates for EMS medication-related overdose responses were highest in more rural/isolated regions. Alcohol-related overdose calls were highest among the Cumberland, Western, and Aroostook PHDs.
- ❖ **D**rug related death rates were highest among southern, central, and eastern regions. Overall, death rates have been rising steadily since 2000.

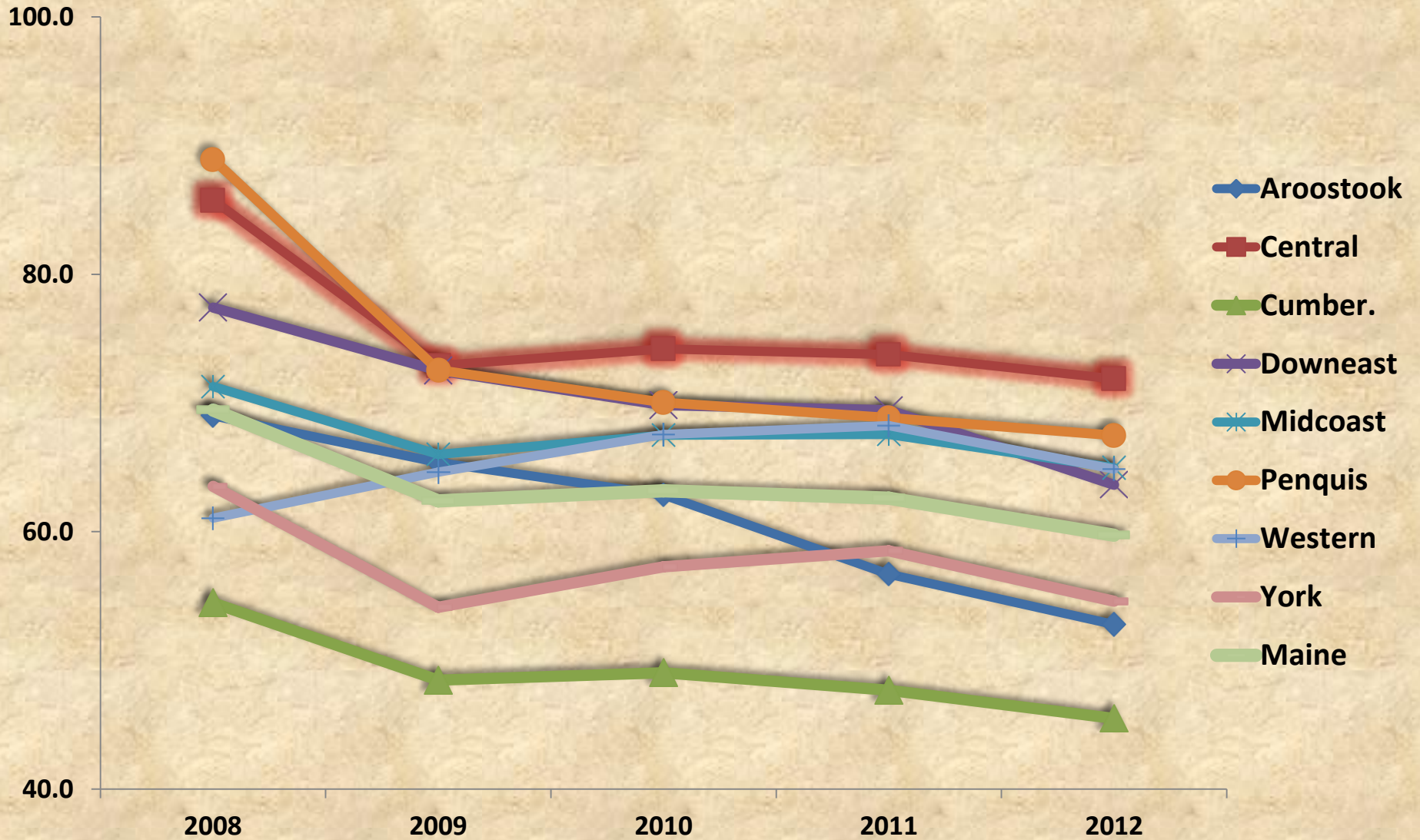
Contributing Factors

Number of Liquor Licensees Per 1,000 Residents

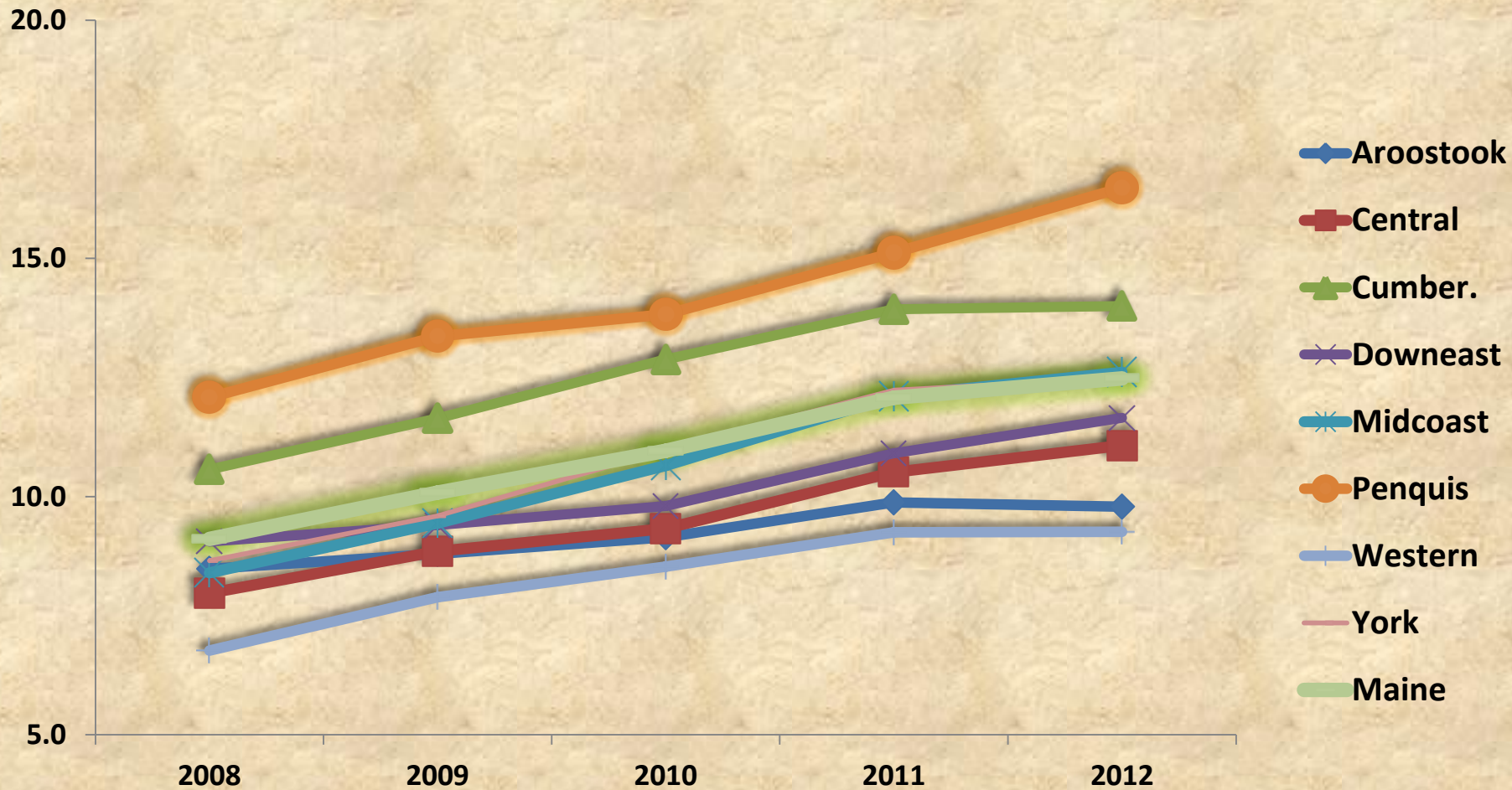
(DPS and U.S. Census, 2013)



The dispensed quantity of narcotics per capita (PMP, 2008 -2012)

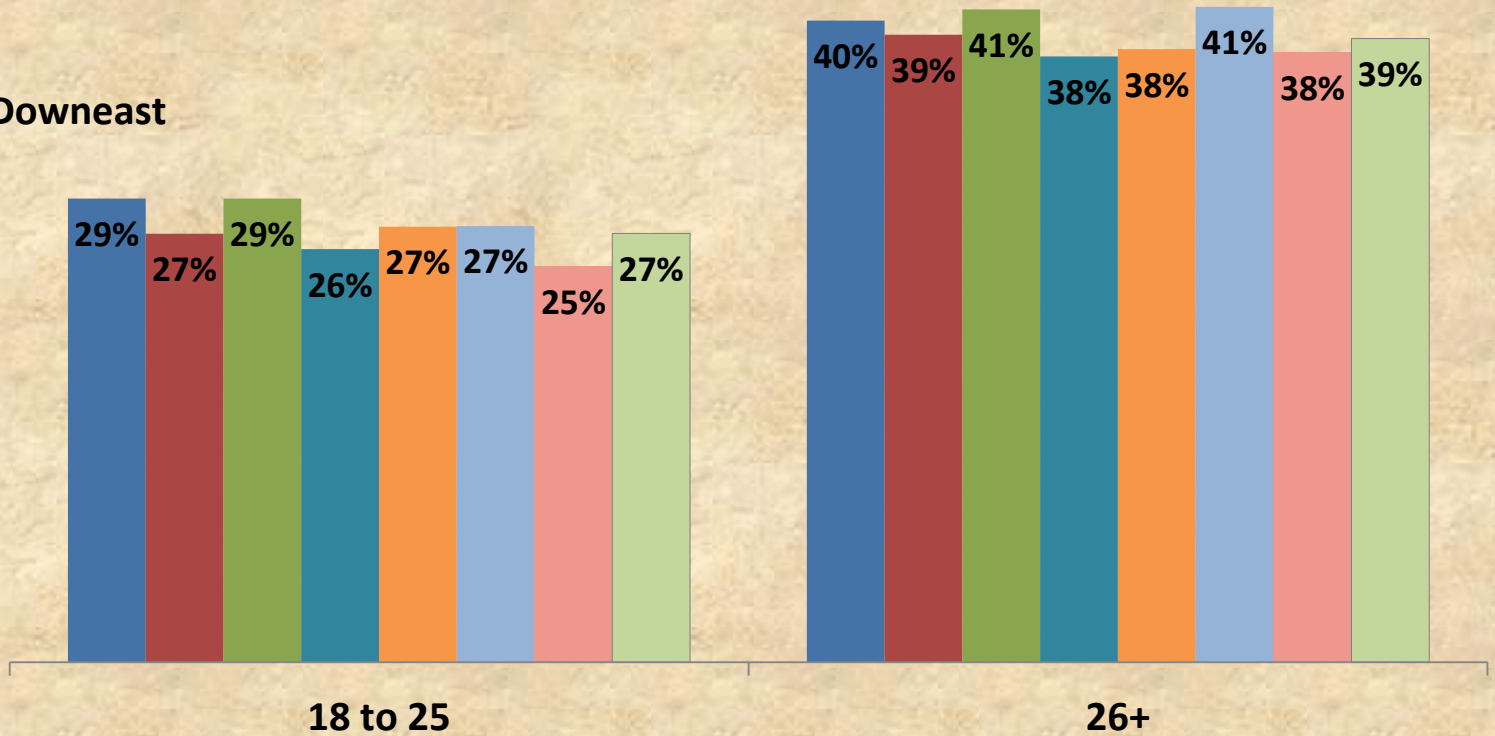


Dispensed Quantity of Stimulants Per Capita (PMP, 2008-2012)



Perception of Risk From Binge Drinking By Age Group Among (NSDUH, 2008-10)

- Aroostook/Downeast
- Central
- Cumberland
- Midcoast
- Penquis
- Western
- York
- Maine



Risk and Protective Factors

(MIYHS, 2011)

	State Rate	Lowest Rate	Highest Rate
<i>Ease of access to alcohol</i>	67%	65% (Downeast, Western)	69% (Cumberland)
<i>Ease of access to marijuana</i>	58%	50% (Aroostook)	61% (York)
<i>Perception of harm from misusing Rx drugs</i>	85%	84% (Western)	87% (Aroostook)
<i>Perception of harm from binge drinking (1-2 times/wk)</i>	78%	77% (Downeast, Midcoast, Penquis)	80% (Aroostook, Cumberland, York)
<i>Perception of harm from smoking marijuana on a regular basis</i>	56%	53% (Midcoast)	64% (Aroostook)
<i>Perception of parent's feelings of wrongness for child smoking marijuana</i>	86%	83% (Midcoast)	90% (Aroostook)

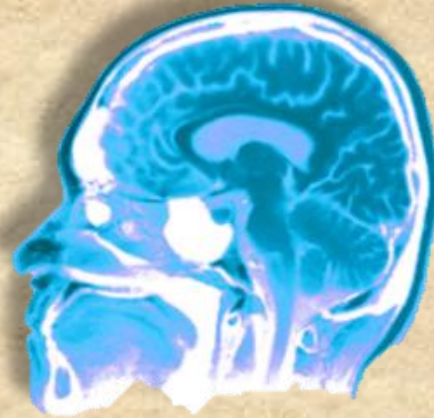
Contributing Factors Summary

- ❖ The highest rates of liquor licensees are in Northern and Coastal Maine.
- ❖ Dispensed quantity of narcotics per capita has been gradually decreasing (highest rate in Central and Penquis) while quantity of stimulants has been increasing (highest rates in Penquis and Cumb.).
- ❖ One in four 18 to 25 year olds perceive a risk from binge drinking.
- ❖ Well over half of students felt alcohol and marijuana were easy to get. Cumberland held the highest rate of accessibility for alcohol and York had the highest rate for marijuana.
- ❖ Perception of getting caught by parents for drinking was lowest among the Midcoast and York PHDs and highest in Aroostook.

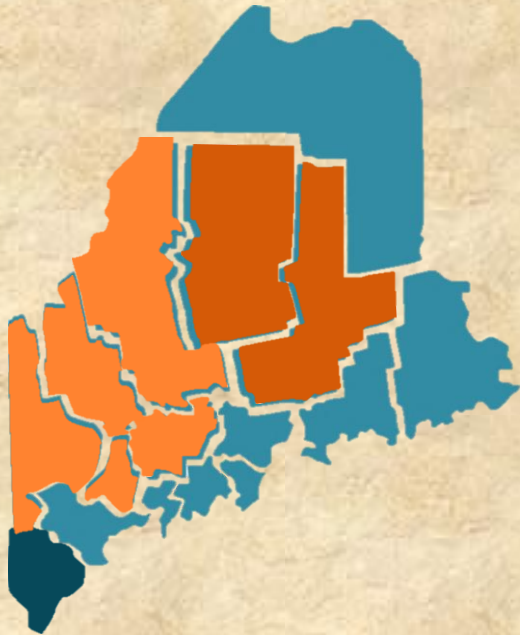
Contributing Factors Summary (cont.)

- ❖ **A**lmost nine out of ten students felt their parents would think it was wrong for them to smoke marijuana. Rates were lowest in the southern half of Maine.
- ❖ **O**ver three quarters of students felt misusing prescriptions drugs as well as binge drinking is harmful while only half of students felt smoking marijuana on a regular basis was harmful.

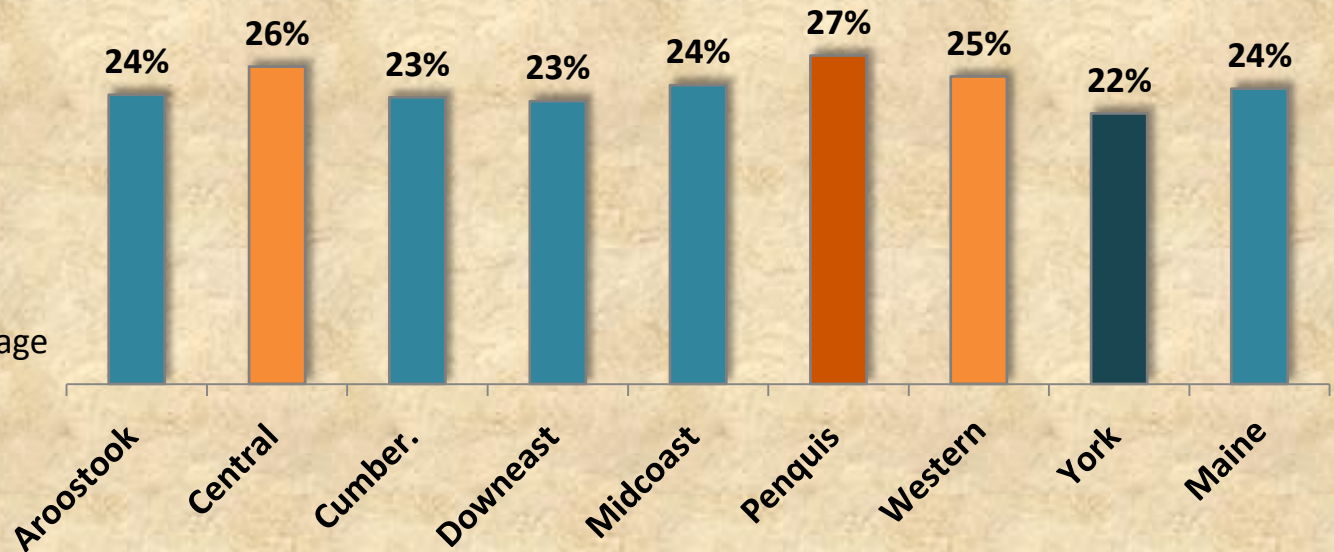
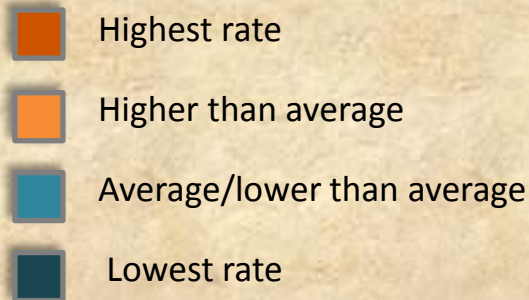
Mental Health



Diagnosed Depression Among Adults (BRFSS, 2011)

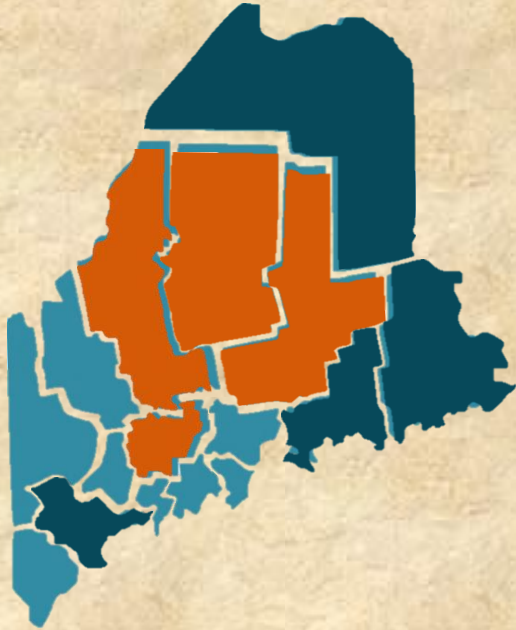


❖ More than **one** in **four** adults in **Penquis** have been diagnosed with **depression**.

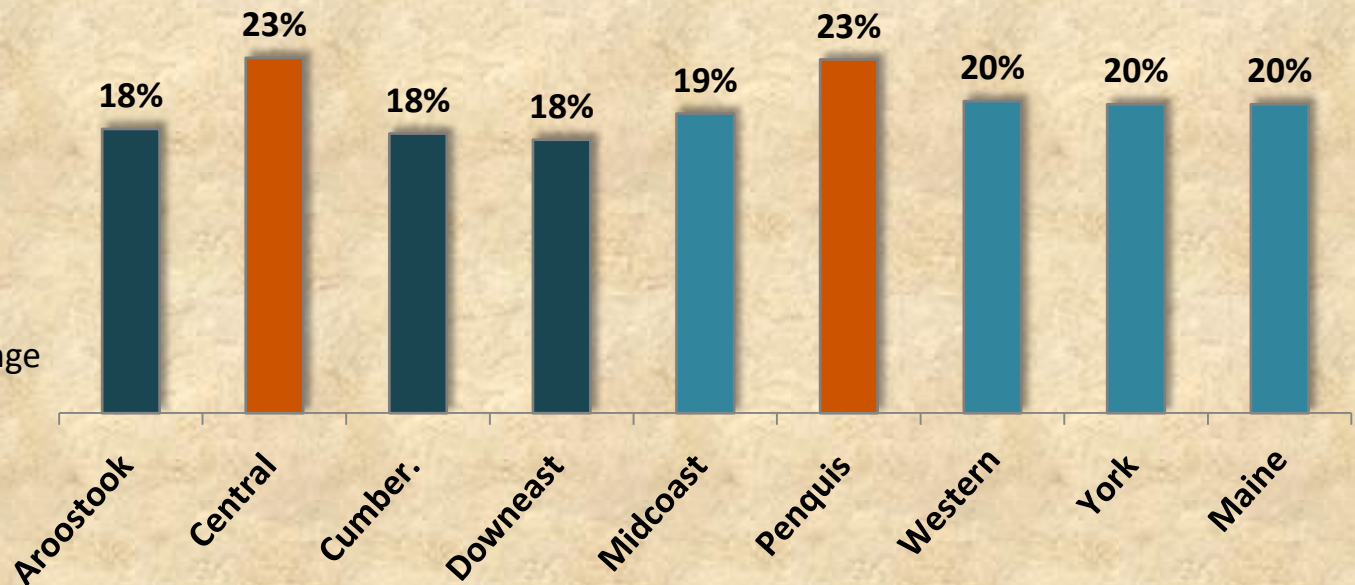
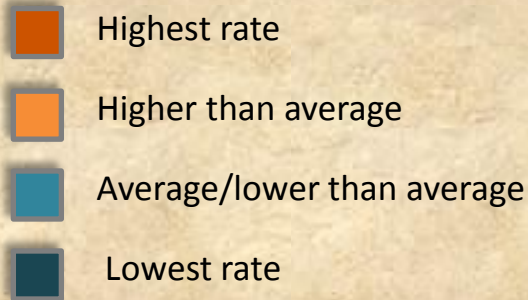


Diagnosed Anxiety Among Adults

(BRFSS, 2011)



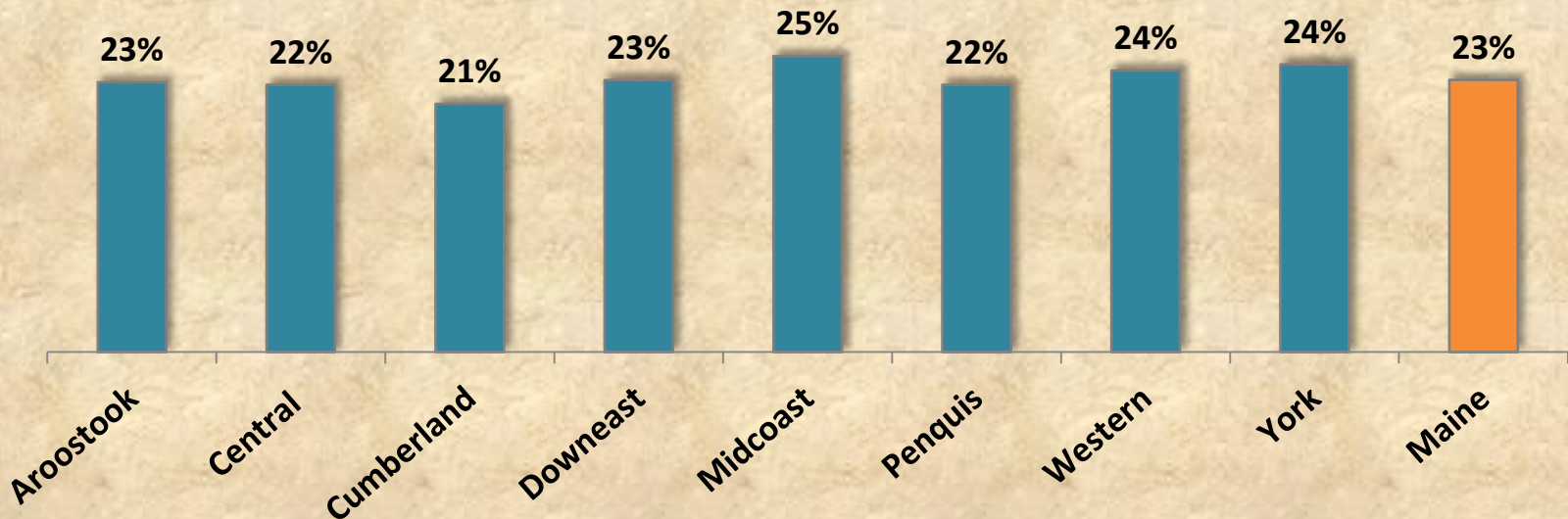
❖ **A**lmost **one in four** adults in **Penquis** and **Central** have been diagnosed with **depression**.



Depression* Among High School Students

(MIYHS, 2011)

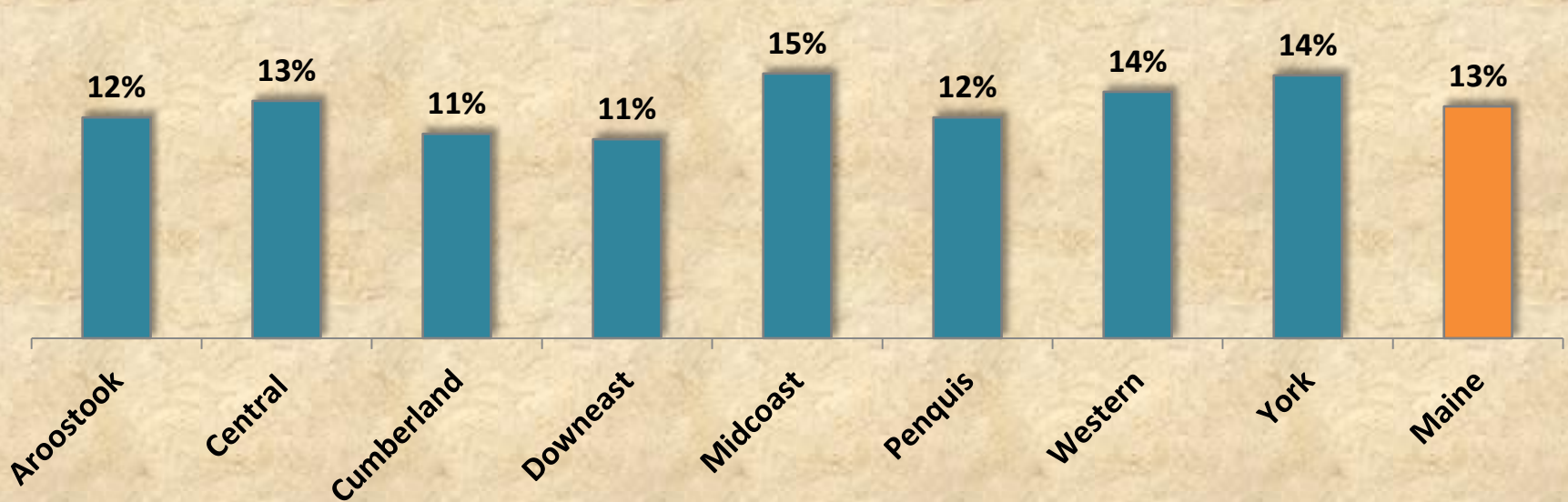
❖ Almost **one in four** students in **Maine** have experienced symptoms of **depression**. Rates ranged from **21%** to **25%**.



*Felt sad or hopeless almost every day for two weeks or more in a row during the past year.

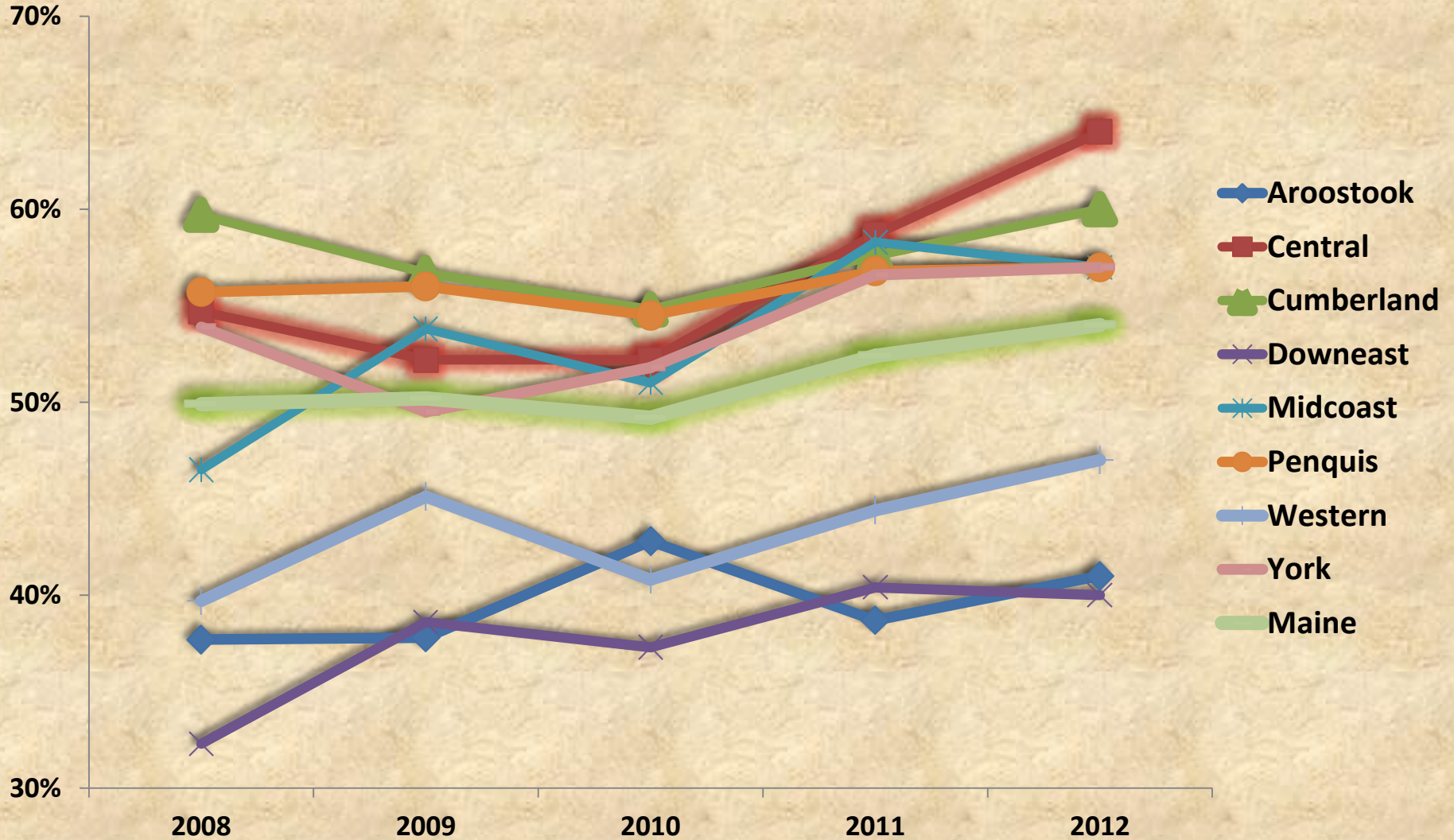
Suicide Ideation* Among High School Students (MIYHS, 2011)

❖ More than **one in ten** students in **Maine** have seriously **considered suicide**. Rates ranged from **11%** to **15%**.



*students who reported that they seriously considered attempting suicide during the past year

Co-occurring* Mental Health and Substance Abuse (TDS, 2008-2012)



*Individuals admitted for substance abuse treatment that also had a mental health diagnosis

Mental Health Summary

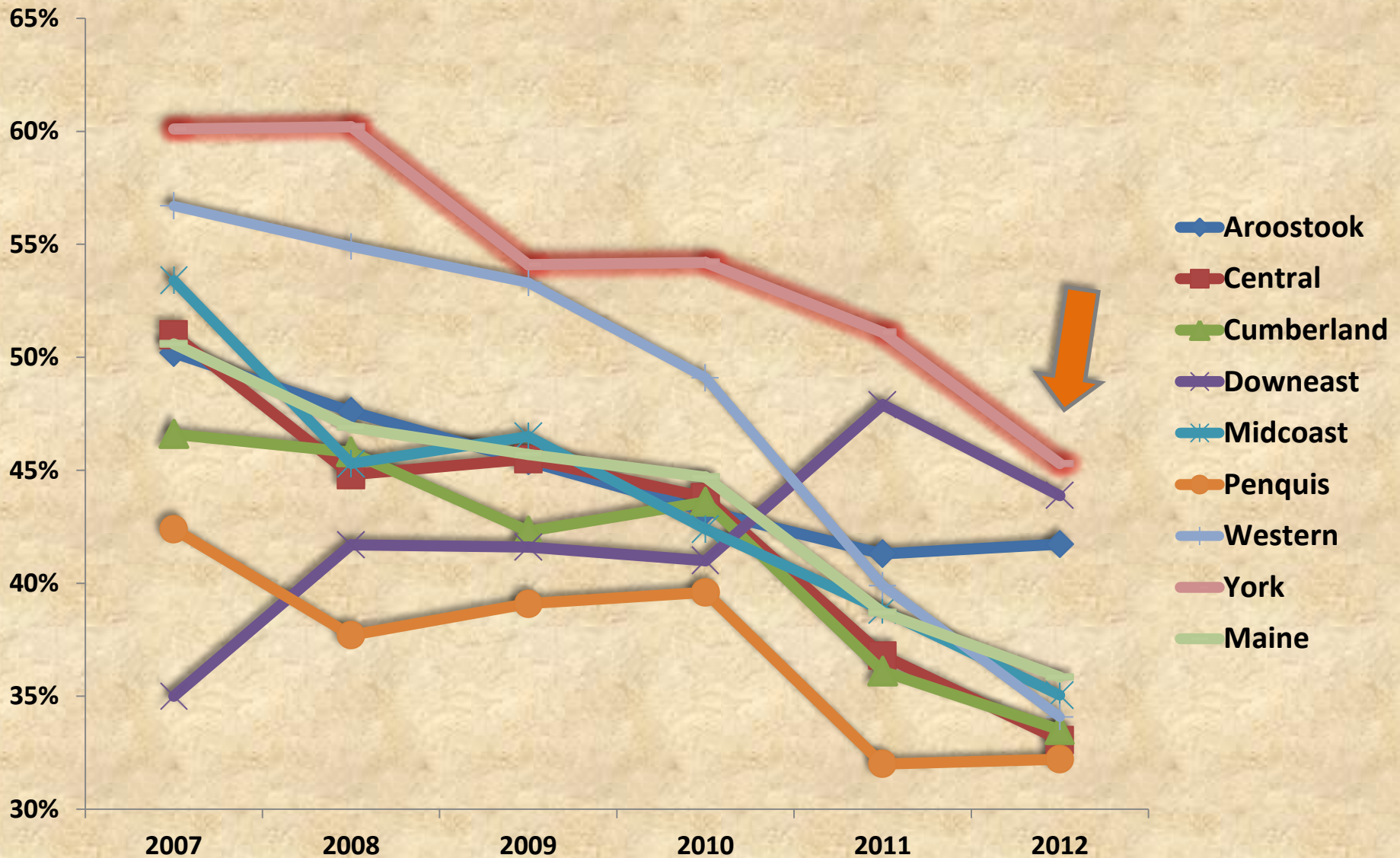
- ❖ **M**ore than one in four adults have been diagnosed with depression. Rates are highest among the central and western regions in Maine.
- ❖ **O**ne in five adults have been diagnosed with anxiety. Rates were highest among the Central and Penquis PHDs.
- ❖ **A**bout one in four students in Maine have experienced depression within the past year. Rates did not vary much among PHDs.
- ❖ **M**ore than one in ten students had seriously considered attempting suicide within the past year. Rates were slightly higher among the Midcoast, Western, and York PHDs.
- ❖ **C**o-occurring mental health and substance abuse treatment rates have been gradually increasing among all PHDs since 2008. In recent years, rates were highest among the Central and Cumberland PHDs.

Treatment



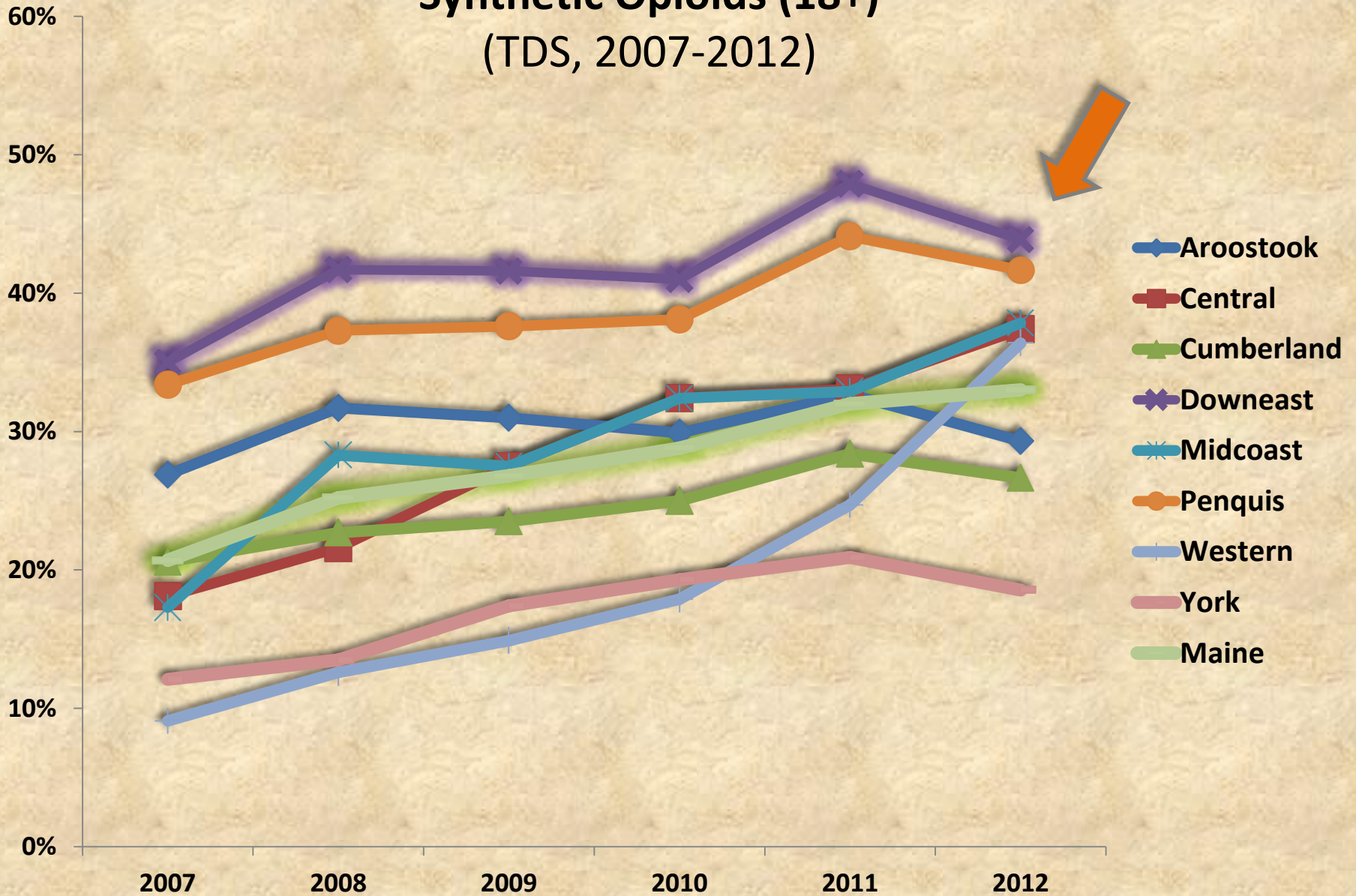
Primary Treatment Admissions Related to Alcohol (18+)

(TDS, 2008-2012)



Primary Treatment Admissions Related to Synthetic Opioids (18+)

(TDS, 2007-2012)

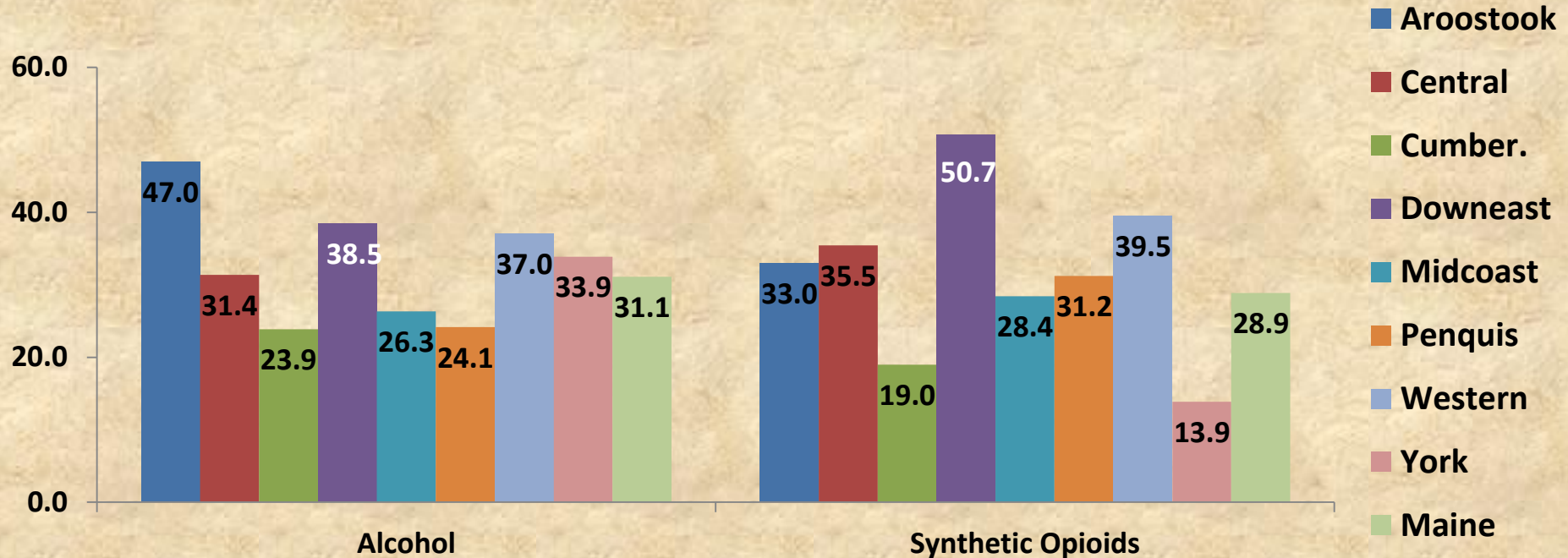


Primary Drug Treatment Admissions per 10,000 Residents by Substance (18+)

(TDS, 2011)

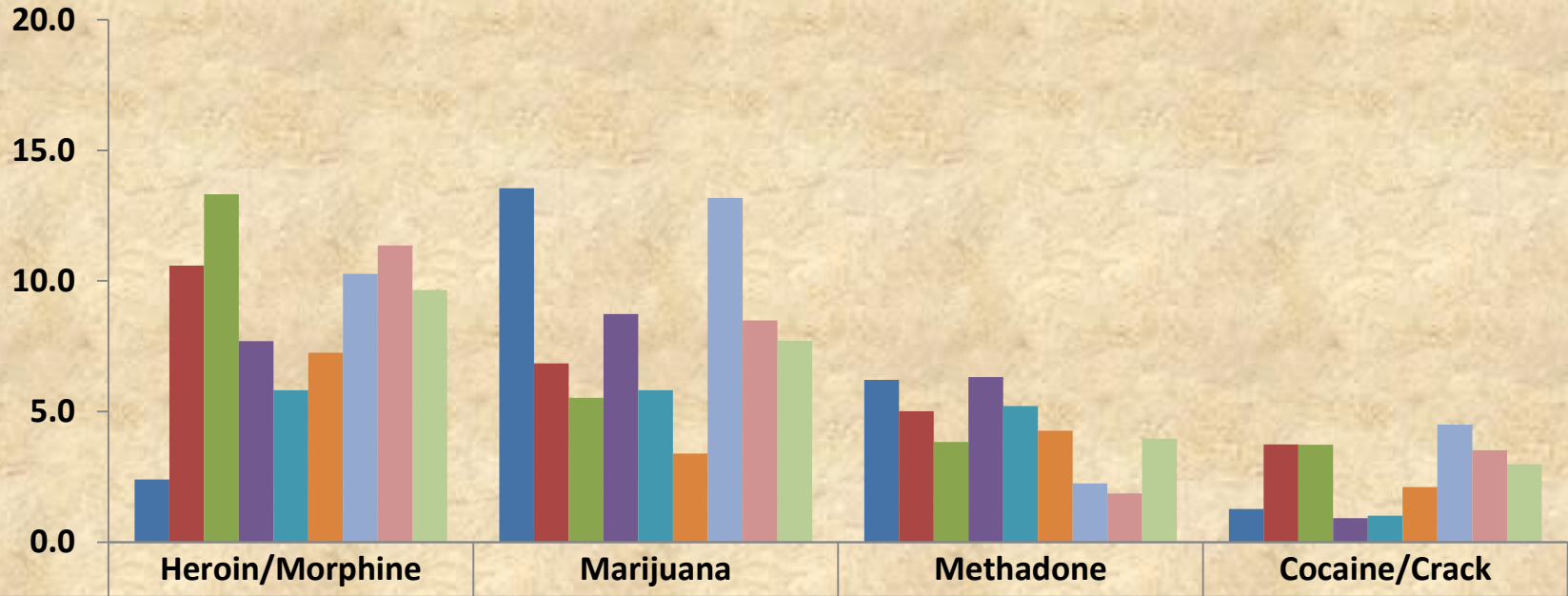
❖ **Aroostook** and **Downeast** had the highest rate of **alcohol** related primary treatment admissions

❖ **Downeast** and **Western** had the highest rate of **synthetic opioid** related primary treatment admissions



Primary Drug Admissions Per 10,000 Residents, by Substance (18+)

(TDS, 2012)



	Heroin/Morphine	Marijuana	Methadone	Cocaine/Crack
■ Aroostook	2.4	13.5	6.2	1.3
■ Central	10.6	6.8	5.0	3.7
■ Cumber.	13.3	5.5	3.8	3.7
■ Downeast	7.7	8.7	6.3	0.9
■ Midcoast	5.8	5.8	5.2	1.0
■ Penquis	7.2	3.4	4.3	2.1
■ Western	10.3	13.2	2.2	4.5
■ York	11.4	8.5	1.9	3.5
■ Maine	9.7	7.7	4.0	3.0

Treatment Summary

- ❖ Alcohol continues to be the most common substance sought for treatment. Synthetic Opioids are the second most common substance for primary treatment admissions, followed by heroin/morphine, marijuana, methadone, and cocaine/crack.
- ❖ With the exception of Downeast, the proportions of adult primary treatment admissions due to alcohol have been decreasing since 2007. Recently, rates have been highest among the Western, Downeast, and Aroostook PHDs.
- ❖ All PHDs have seen an increase in the proportion of adult primary treatment admissions related to synthetic opioids since 2007. These rates have been led by the Downeast and Penquis PHDs.

Treatment Summary (cont.)

- ❖ Aroostook and Downeast had the highest rate per 10,000 residents concerning primary treatment admissions for alcohol.
- ❖ Downeast and Western had the highest rate per 10,000 residents involving primary treatment admissions for synthetic opioids.
- ❖ Heroin/morphine primary treatment admission rates per 10,000 were highest among Maine's most populated regions.
- ❖ Marijuana rates were highest among the Aroostook and Western PHDs, Methadone rates were highest among Downeast and Aroostook PHDs, and cocaine/crack rates were highest among Maine's more densely populated PHDs.

Conclusion

- ❖ Alcohol and Marijuana are most commonly used as well as perceived accessible in southern and coastal regions – especially younger generations (~14 to 35)
- ❖ Consequence data seems to correlate with regions where substance use is most common.
- ❖ Cigarette use is most prevalent in the Northern half of Maine.
- ❖ Rx misuse is most common among 18 to 25 year olds.
- ❖ Alcohol is most available across southern and coastal regions of Maine.
- ❖ Availability of opiates is decreasing but treatment admissions are still rising.
- ❖ Perceptions of harm from substances are down among young adults, particularly those regarding marijuana.
- ❖ Depression and Anxiety among adults are more common in central and western regions of Maine.

Questions/Comments?

Timothy Diomedede
SEOW Coordinator/Data Analyst
Office of Substance Abuse
Timothy.Diomedede@maine.gov

Reports can be found at the following
link:

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