

Cancer in Maine:

Where have we been?

Where are we now?

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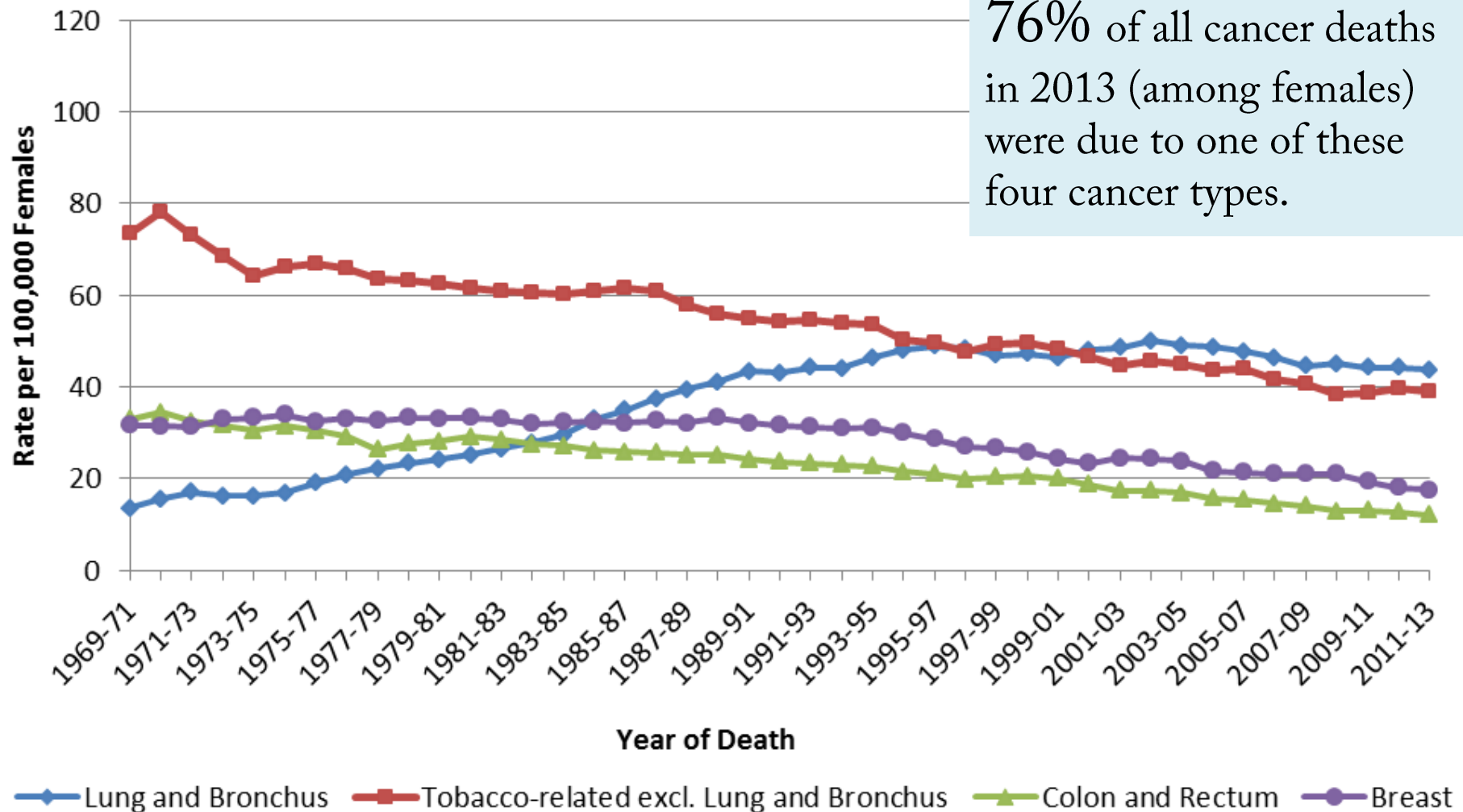
Center for Health Improvement

MaineHealth

Leading Causes of Cancer Deaths Among Females in Maine

Source: Maine CDC Cancer Registry (Annual Cancer Report 2016, page 47)

Cancer Mortality among Females, Maine 1969-2013

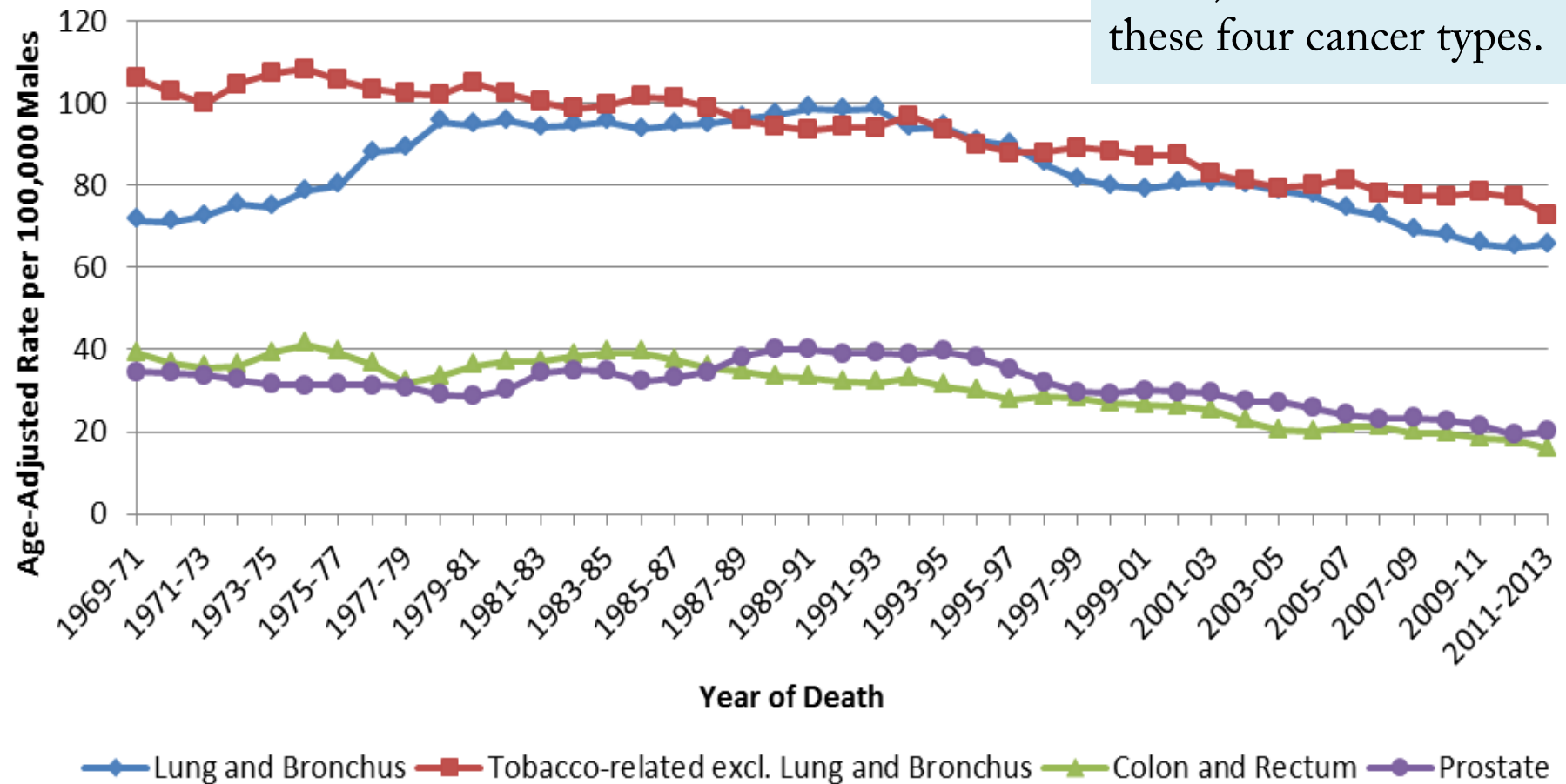


Leading Causes of Cancer Deaths Among Males in Maine

Source: Maine CDC Cancer Registry (Annual Cancer Report 2016, page 46)

Cancer Mortality among Males, Maine 1969-2013

82% of all cancer deaths in 2013 (among males) were due to one of these four cancer types.



All Cancer Mortality Rates- 2012-2014

(Age-adjusted rates, using U.S. population in 2013 as standard population)

10 Peer States: ★

Identified Using
SES & Rurality Metrics

➤ Age-

- % <18 yr. olds
- 65+ yr. olds

➤ % Population Live in Rural Communities

➤ Education Attainment Among 25+ yr. olds-

- % <HS
- % College (4 yrs.) or higher

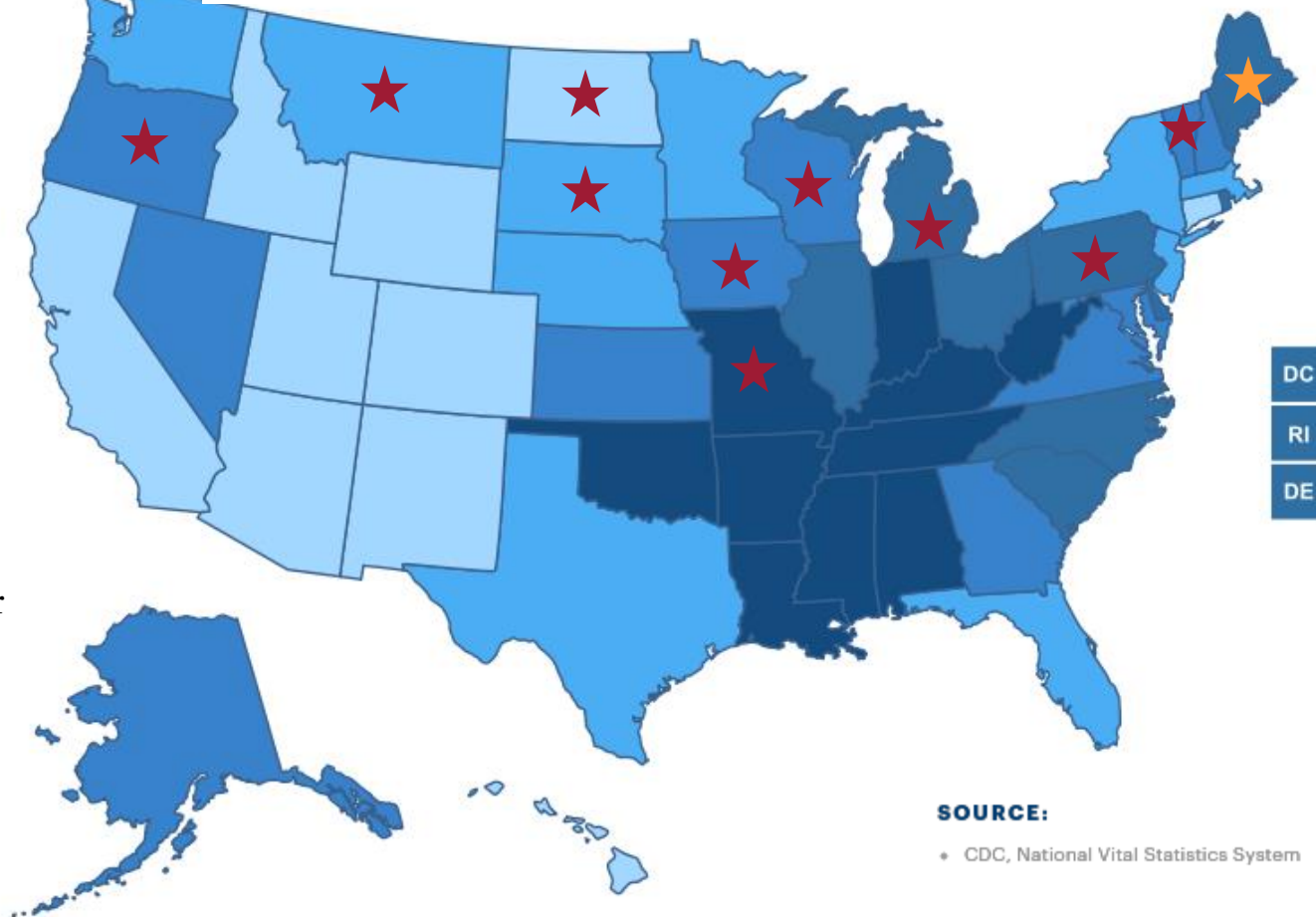
➤ Living In Poverty-

- % <18 yr. olds
- 65+ yr. olds

➤ Median Household Income

➤ Underemployment

Number of deaths due to all causes of cancer per 100,000 population



SOURCE:

• CDC, National Vital Statistics System

≤ 177.8

177.9 - 186.9

187.0 - 194.4

194.5 - 208.6

≥ 208.7

Mortality Due to All Types of Cancers Combined

Lowest Age-adjusted Mortality Rates in 2013-2015 were in:

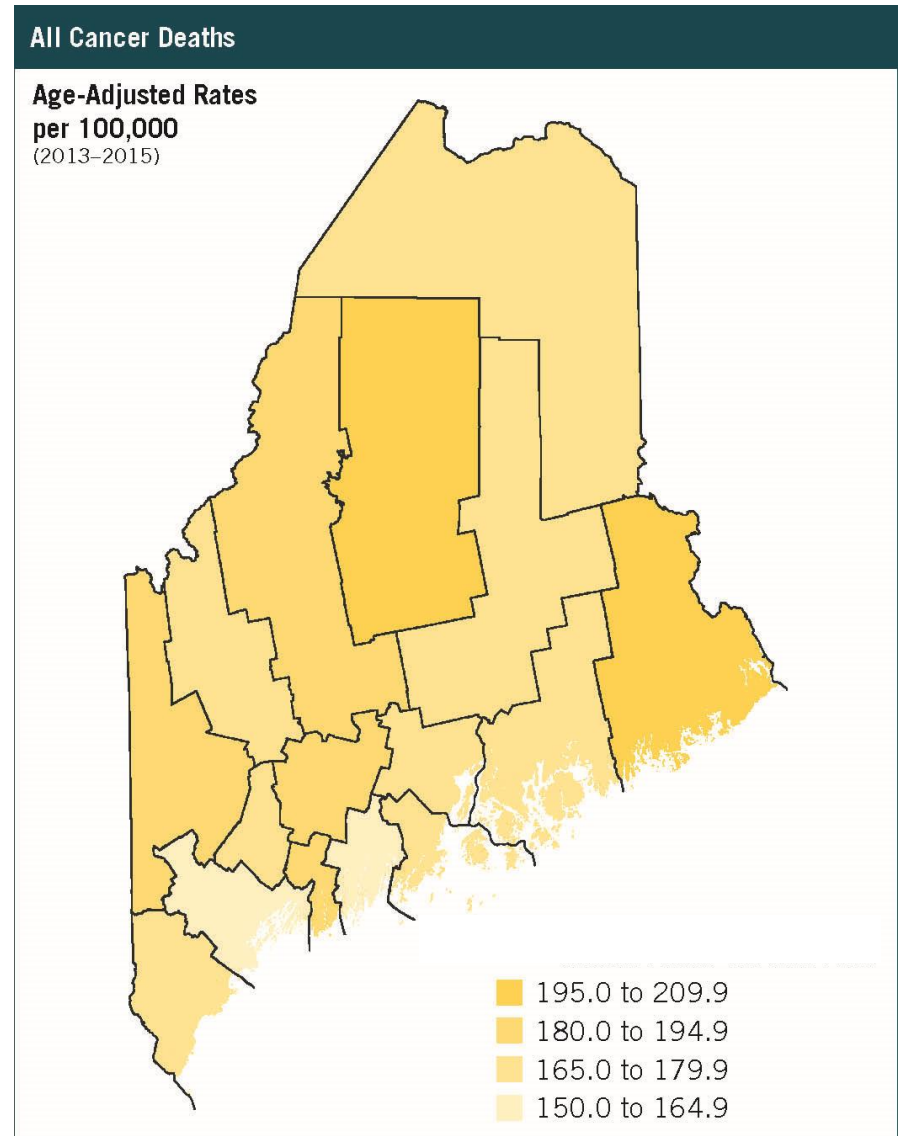
- Cumberland County
- Lincoln County

Cumberland County's rate is statistically significantly lower than rates in:

- Kennebec County
- Oxford County
- Piscataquis County
- Washington County
- Maine Statewide

Lincoln County's rate is statistically significantly lower than rate in:

- Washington County



Health Behaviors That Can Reduce Risk of Cancers

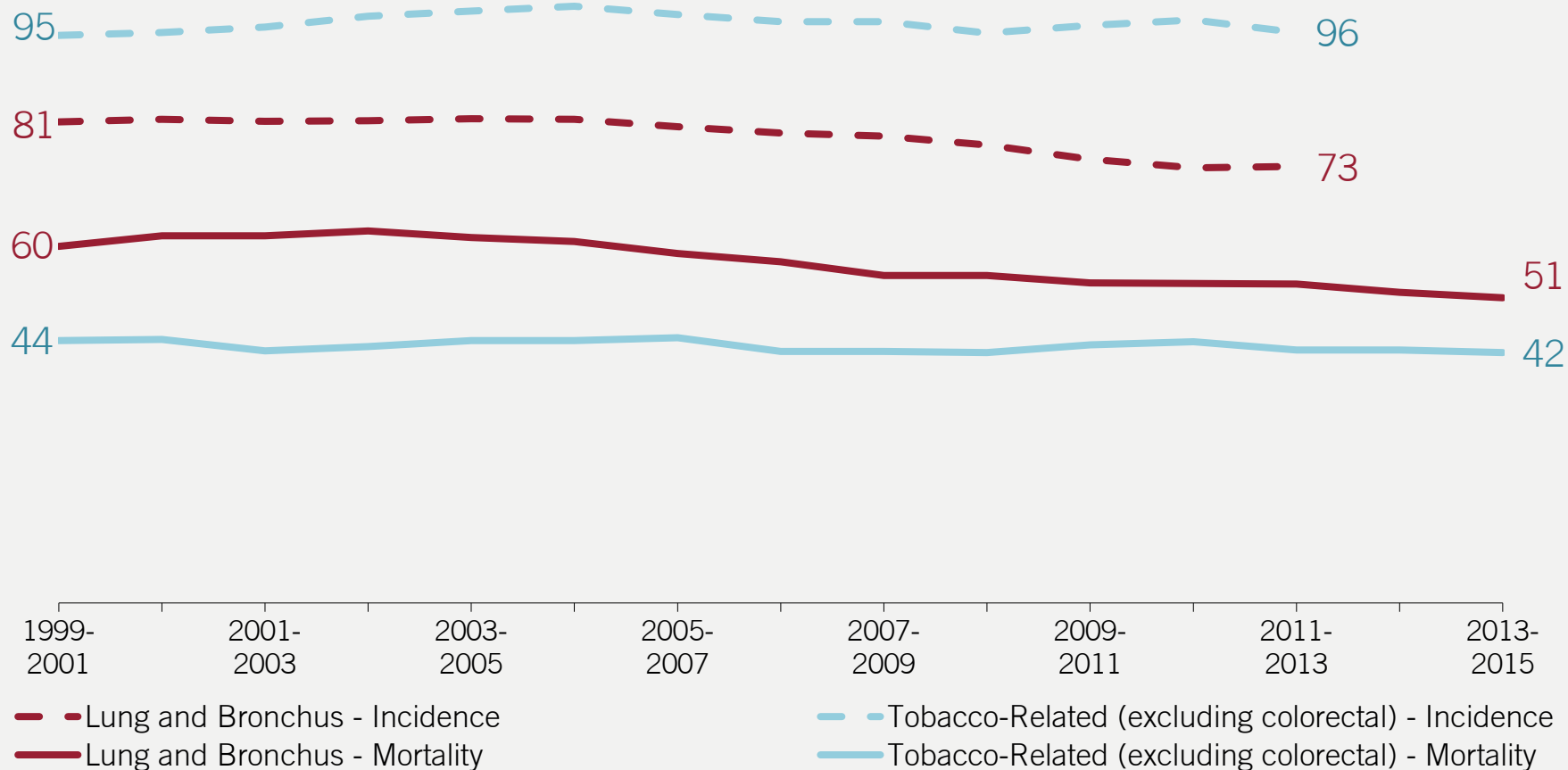
Sources: Maine Cancer Surveillance Report- 2009 (produced by the Maine Cancer Consortium); Updates via U.S. CDC website- May 2017

	Avoid Tobacco	Maintain Healthy Weight	Be Physically Active	Eat Healthy Diet	Limit Alcohol	Get Appropriate Screenings	Avoid Excessive Sun Exposure
Lung and Bronchus	•			•		•	
Colon and Rectum	•	•	•	•	•	•	
Breast (Females)		•	•	•	•	•	
Prostate (Males)				•		•	
Urinary Bladder	•			•			
Kidney & Renal Pelvis	•	•					
Pancreas	•	•		•			
Oral Cavity and Pharynx	•			•	•		•
Esophagus	•	•					
Liver/Intrahepatic Bile Duct	•						
Stomach	•			•			
Larynx	•						
Acute Myeloid Leukemia	•						
Cervix (Females)	•					•	
Uterus (Females)		•		•			
Melanoma							•

Cancer Incidence and Mortality in Maine

Lung & Other Tobacco-Related Cancers*: 3-Year Rolling Averages

Age-Adjusted Rates per 100,000 Population



*Tobacco Related Cancers -excludes Lung/bronchus and Colorectal cancers, includes cancers of the Oral Cavity/Pharynx, Esophagus, Stomach, Pancreas, Larynx, Cervix , Urinary Bladder, Kidney and Renal Pelvis, Acute Myeloid Leukemia, Liver, and Bladder

Tobacco-Related Cancers, by site- 2013

Source: Maine CDC Cancer Registry (Annual Cancer Report 2016, pages 5, 32)

 Maine Rate Statistically
Significantly Higher Than U.S.

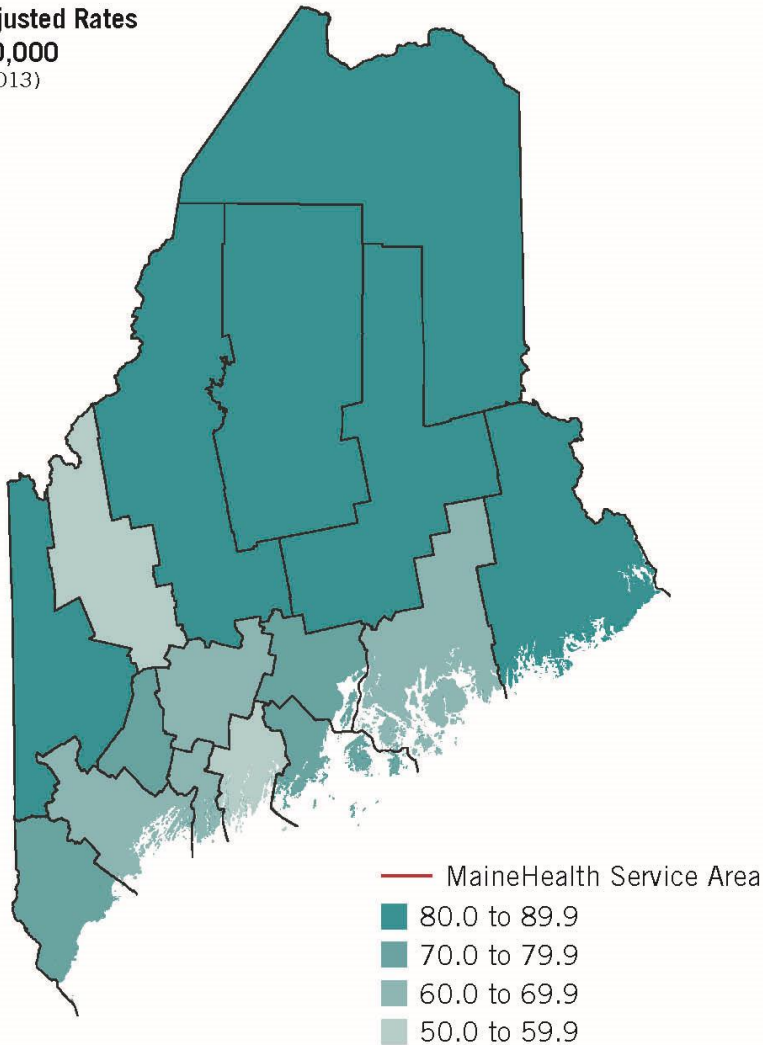
 Maine Rate Statistically
Significantly Lower Than U.S.

Tobacco-Related Cancers By site	Incidence Rate- 2013 (age-adjusted /100,000)		Mortality Rate- 2013 (age-adjusted/100,000)	
	Maine	U.S. Whites	Maine	U.S. Whites
Lung and Bronchus	74.8	60.4	55.1	44.1
Colon and Rectum **	37.4	37.6	12.5	14.1
Urinary Bladder	24.6	21.4	5.1	4.7
Kidney and Renal Pelvis **	15.5	16.1	4.1	4.0
Pancreas **	12.7	12.2	10.9	10.7
Oral Cavity and Pharynx	11.6	11.8	2.9	2.4
Esophagus	6.2	4.7	5.4	4.2
Liver and Intrahepatic Bile Duct	5.3	7.2	5.1	6.0
Stomach	4.9	5.8	1.7	2.8
Larynx	3.7	3.4	1.4	1.0
Acute Myeloid Leukemia	3.9	4.3	2.6	2.9
Cervix	5.9	7.0	1.3	2.2

Lung & Other Tobacco-Related Cancers: Incidence

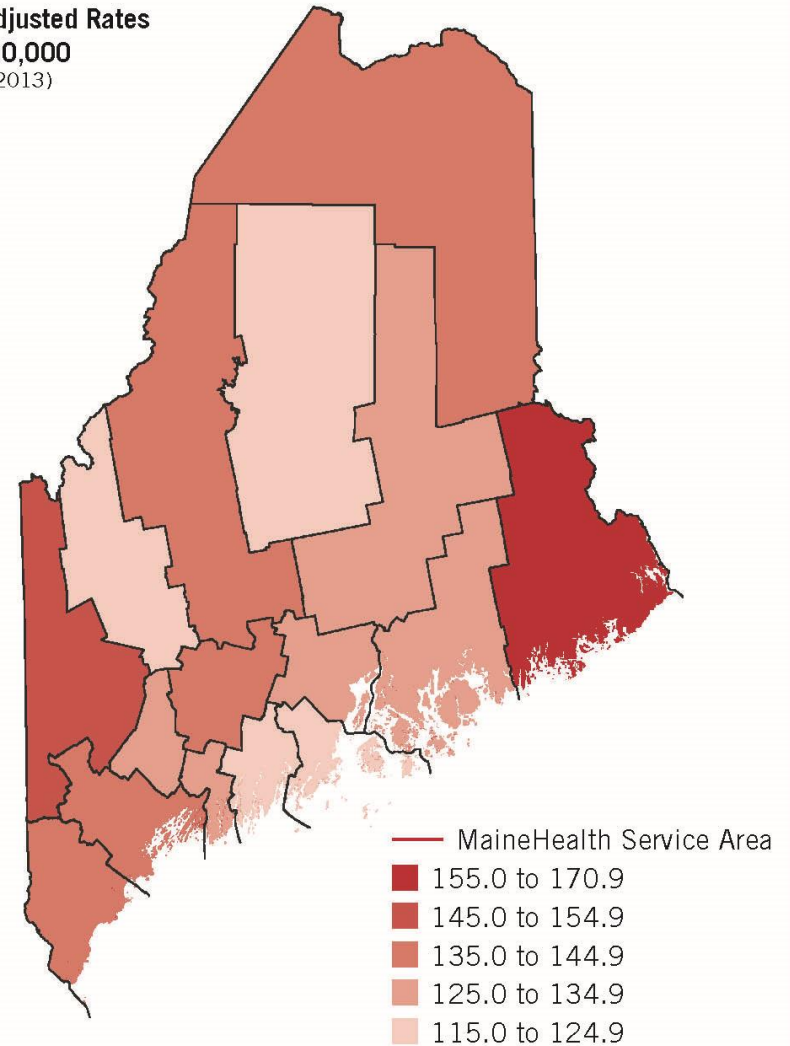
Lung Cancer Incidence

Age-Adjusted Rates
per 100,000
(2011–2013)



Other Tobacco-Related Cancers Incidence (Excluding Lung)

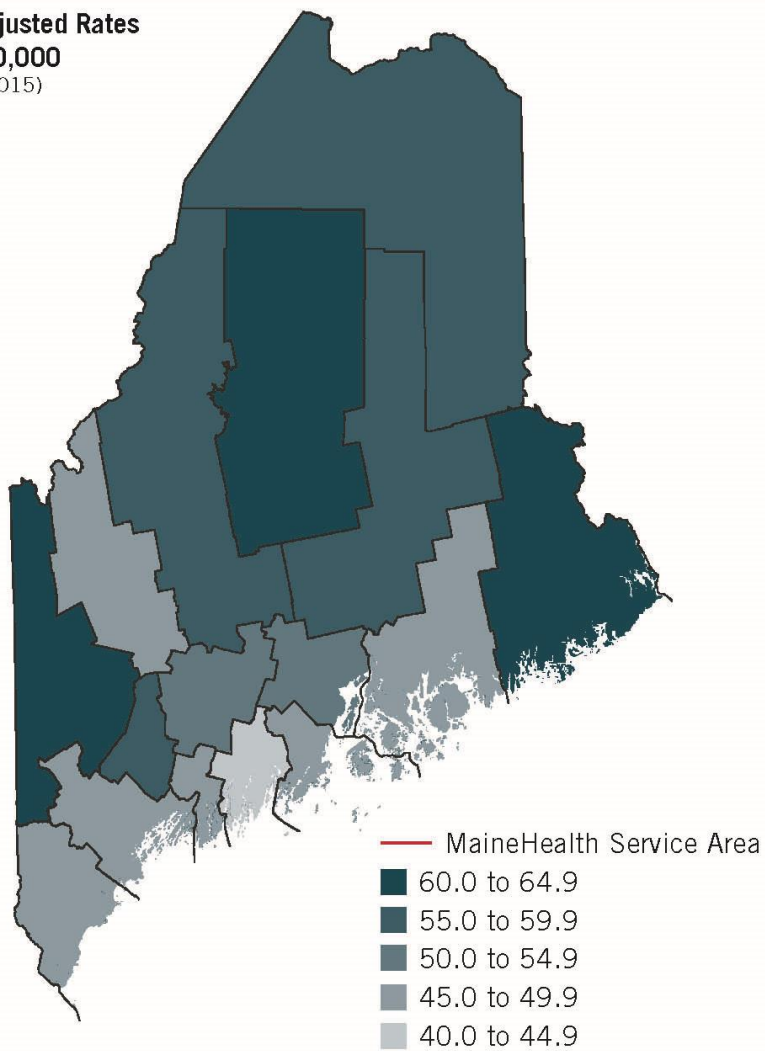
Age-Adjusted Rates
per 100,000
(2011–2013)



Lung & Other Tobacco-Related Cancers: Mortality

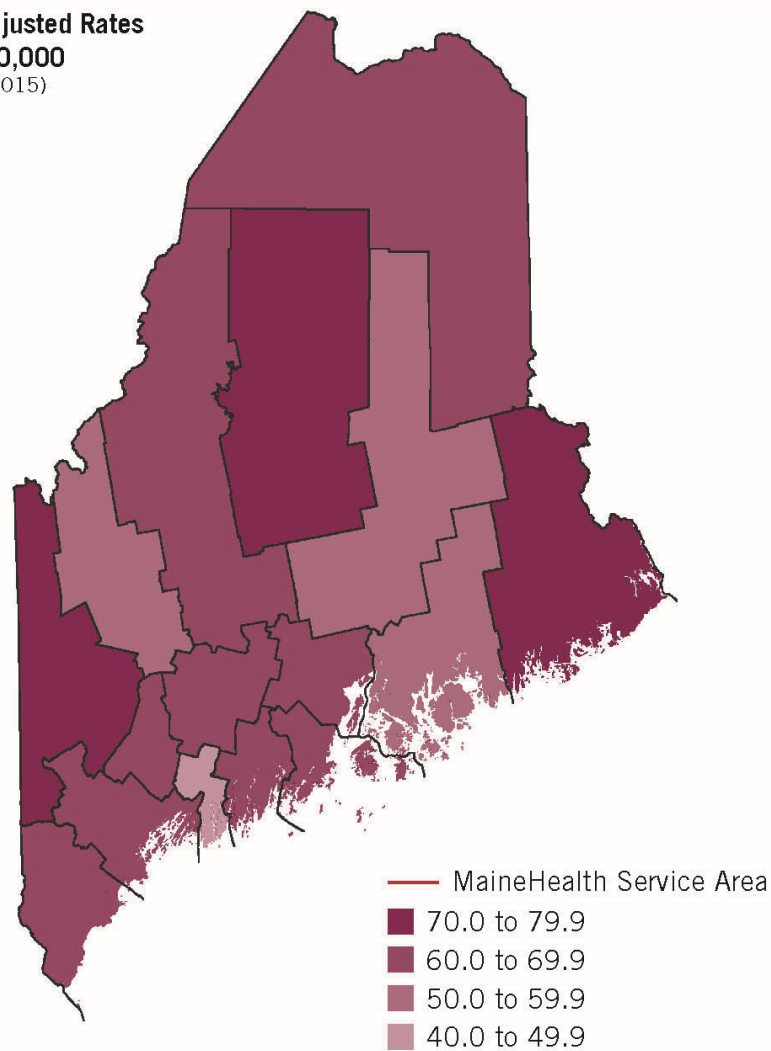
Lung Cancer Deaths

Age-Adjusted Rates
per 100,000
(2011–2015)



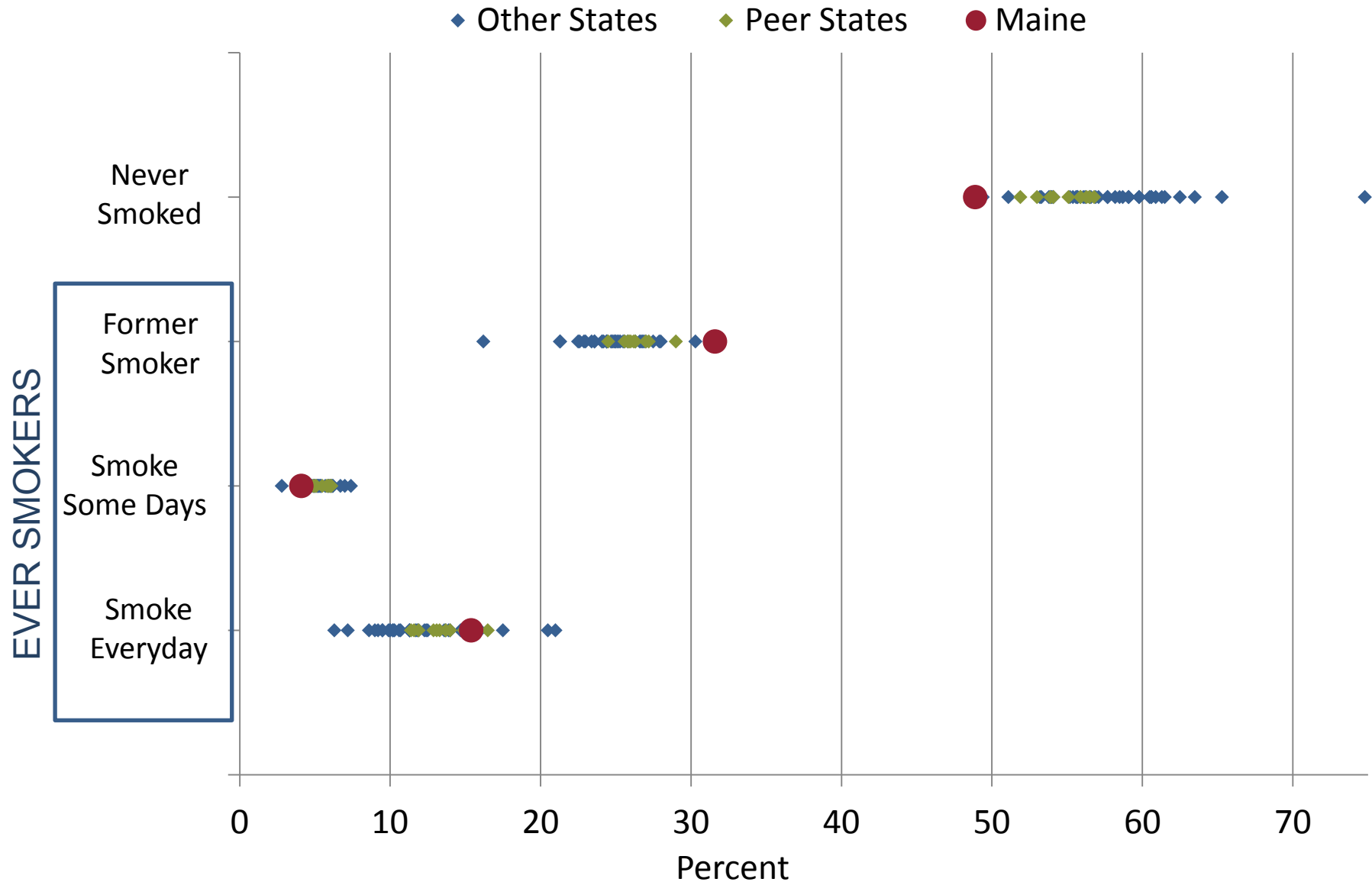
Other Tobacco-Related Cancers Deaths (Excluding Lung)

Age-Adjusted Rates
per 100,000
(2011–2015)



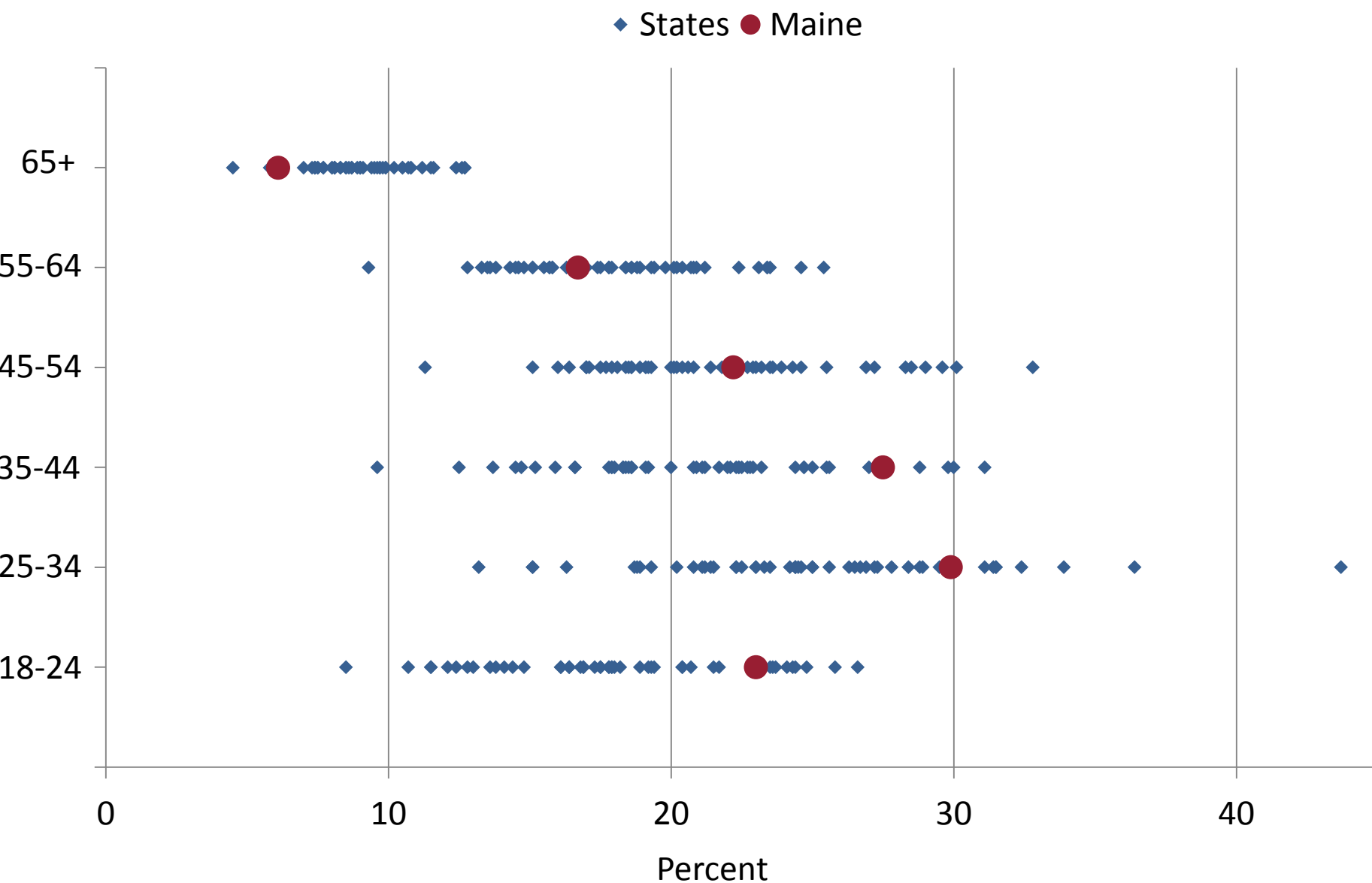
Smoking Status Among Adults in 50 States in 2015

Source: Behavioral Risk Factor Survey



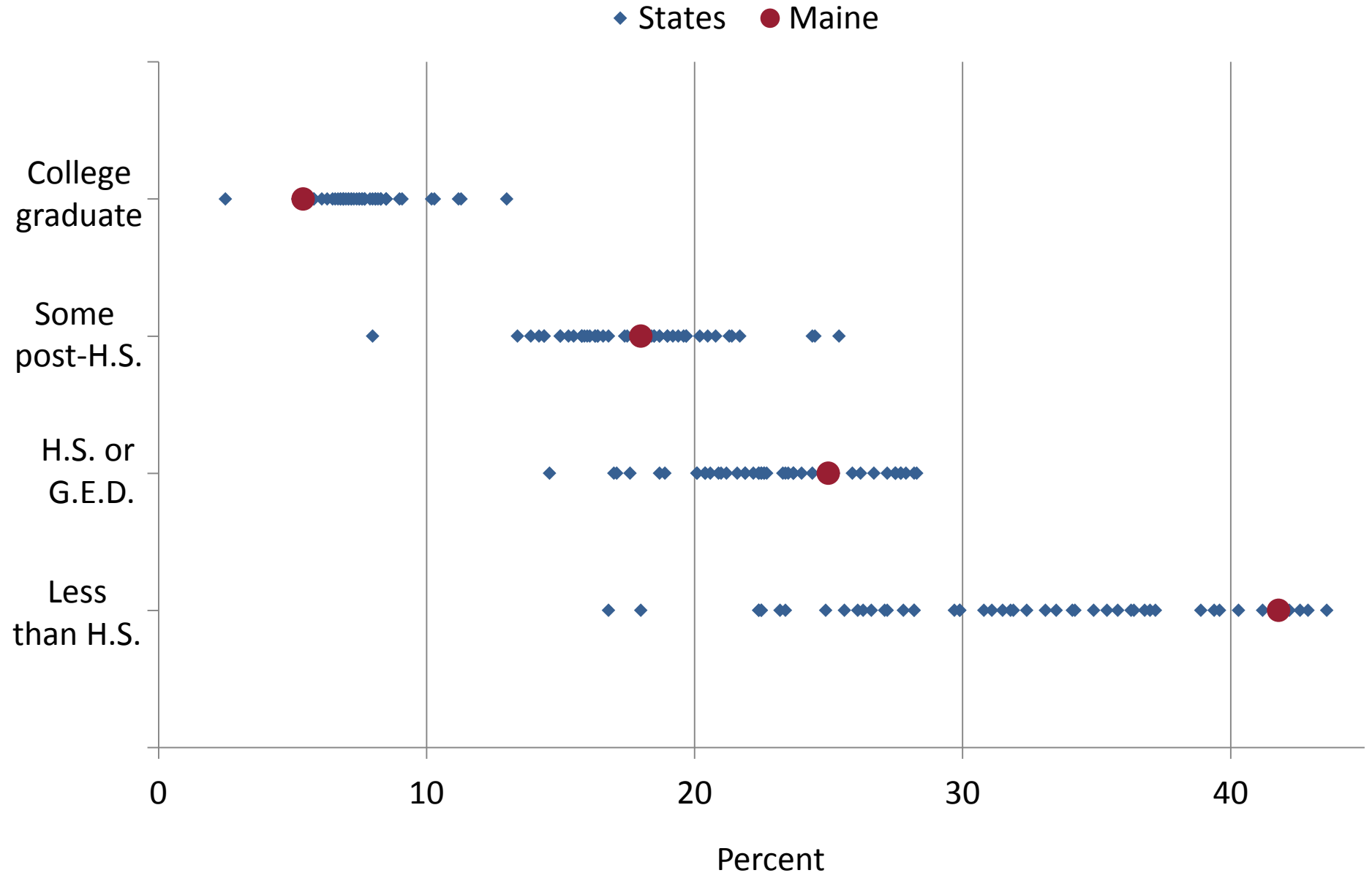
Adults Who Smoke Daily or Some Days by Age

Source: Behavioral Risk Factor Survey (2014)



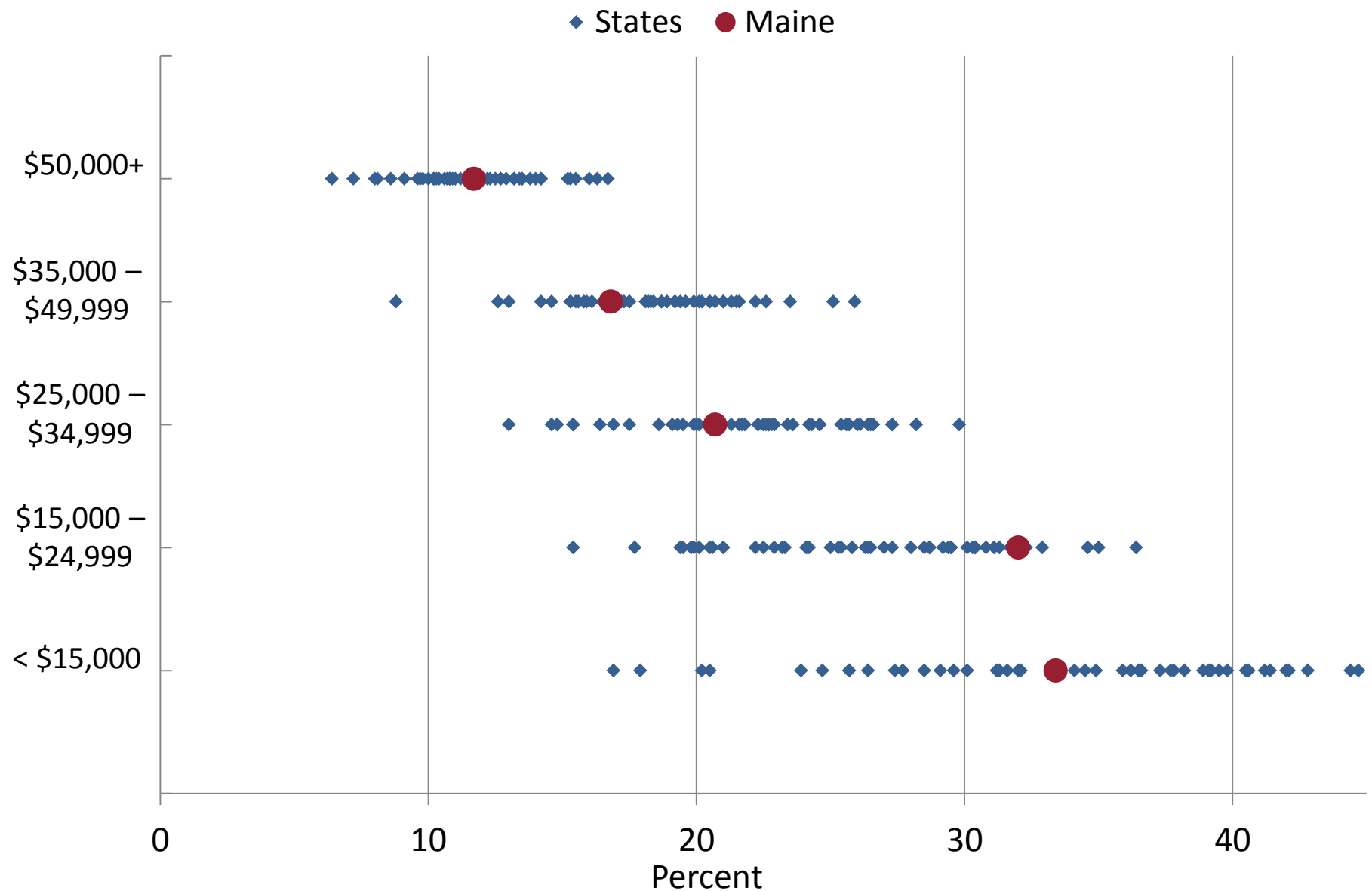
Adults Who Smoke Daily or Some Days by Education

Source: Behavioral Risk Factor Survey (2014)



Adults Who Smoke Daily or Some Days by Income

Source: Behavioral Risk Factor Survey (2014)

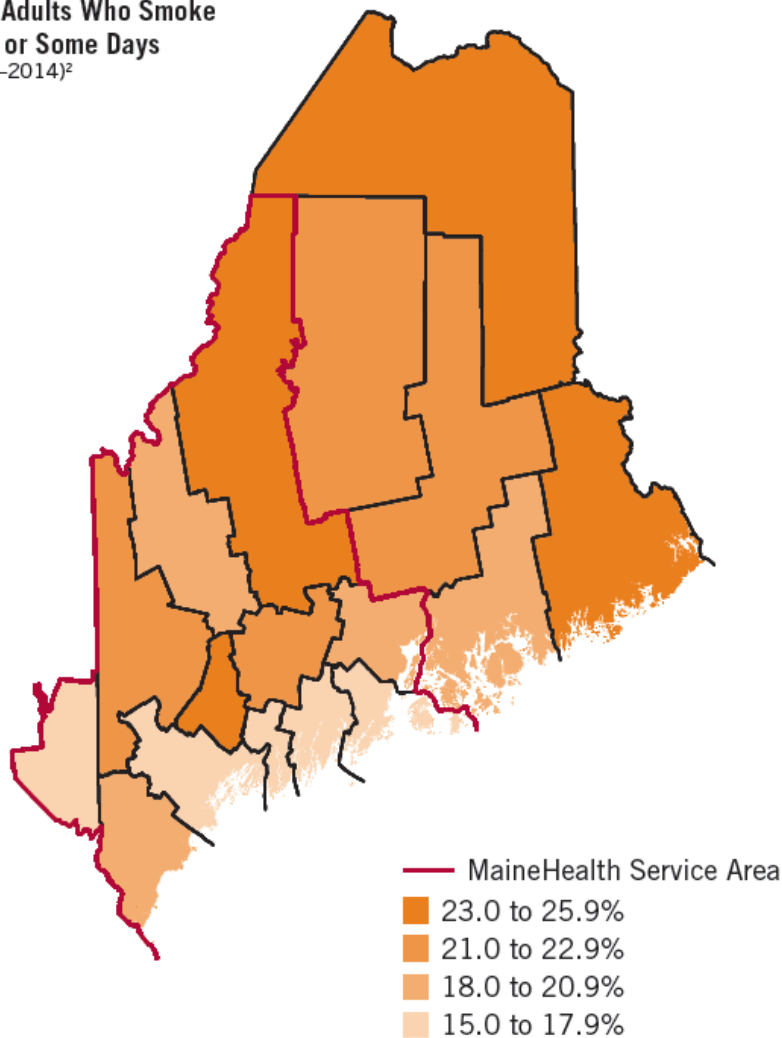


Tobacco Use Prevalence vs. Lung Cancer Incidence

Tobacco Use

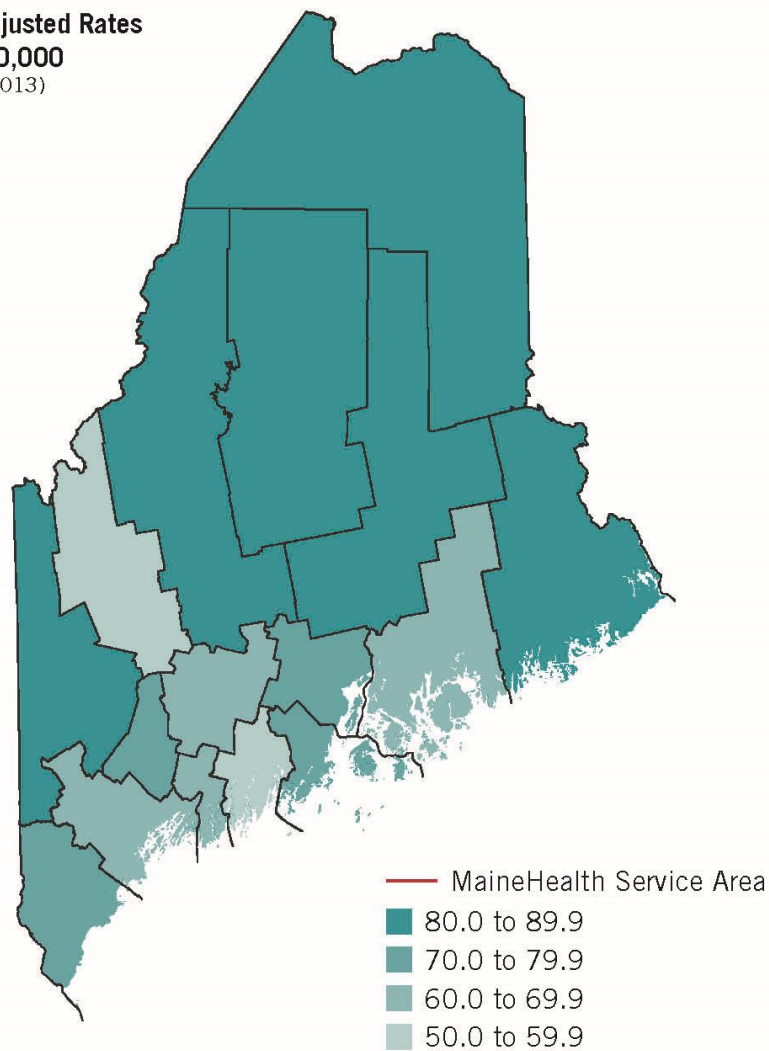
Figure 2

% of Adults Who Smoke
Daily or Some Days
(2012–2014)²



Lung Cancer Incidence

Age-Adjusted Rates
per 100,000
(2011–2013)



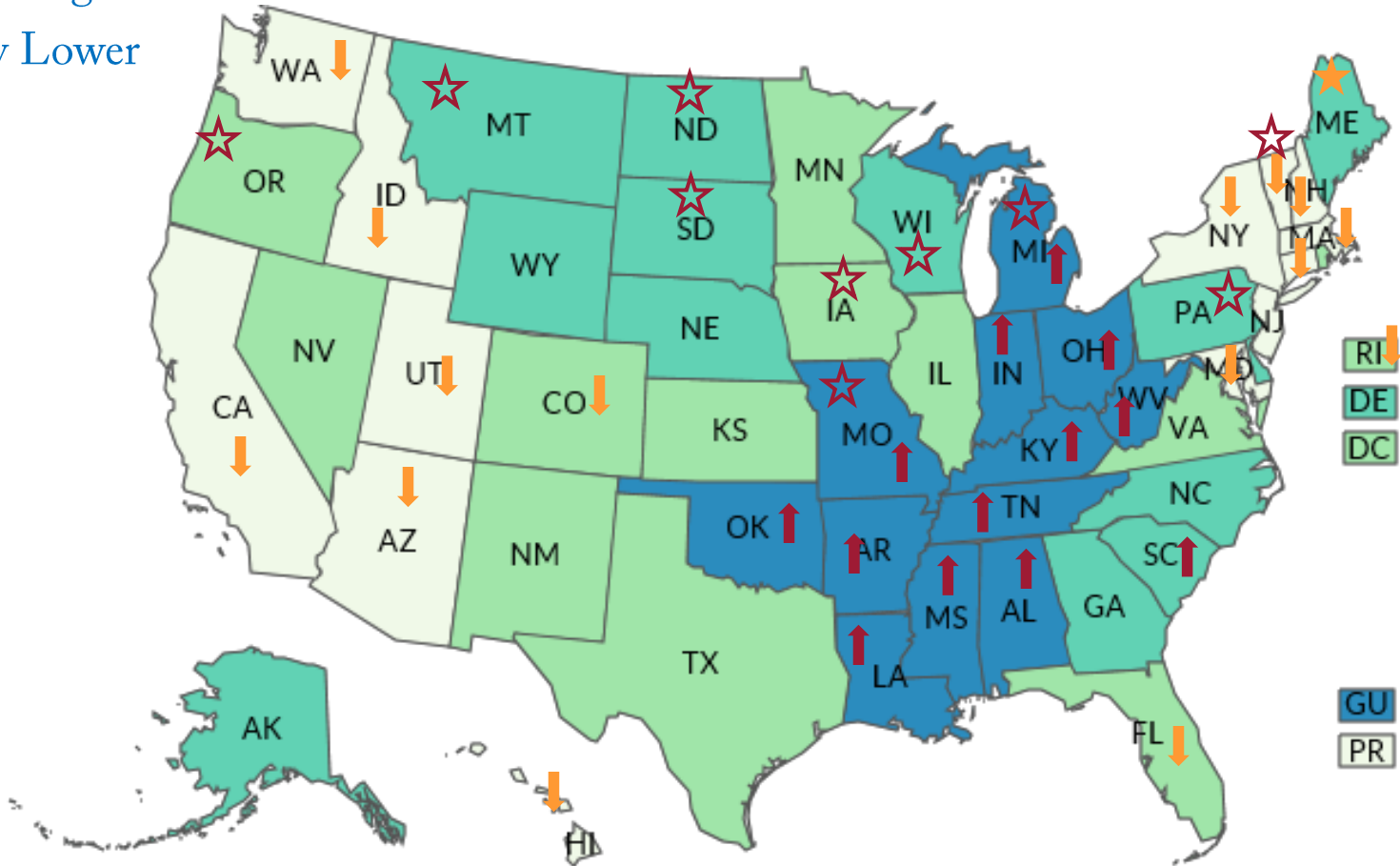
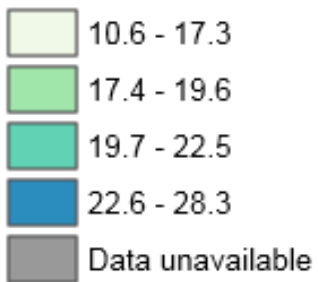
Adults Smoking Some Days or Every Day- 2012

Behavioral Risk Factor Surveillance Survey

2012 Rates Significantly
Different than Maine Rate

↑ Significantly Higher
↓ Significantly Lower

10 Peer States: ☆
Based on SES & Rurality



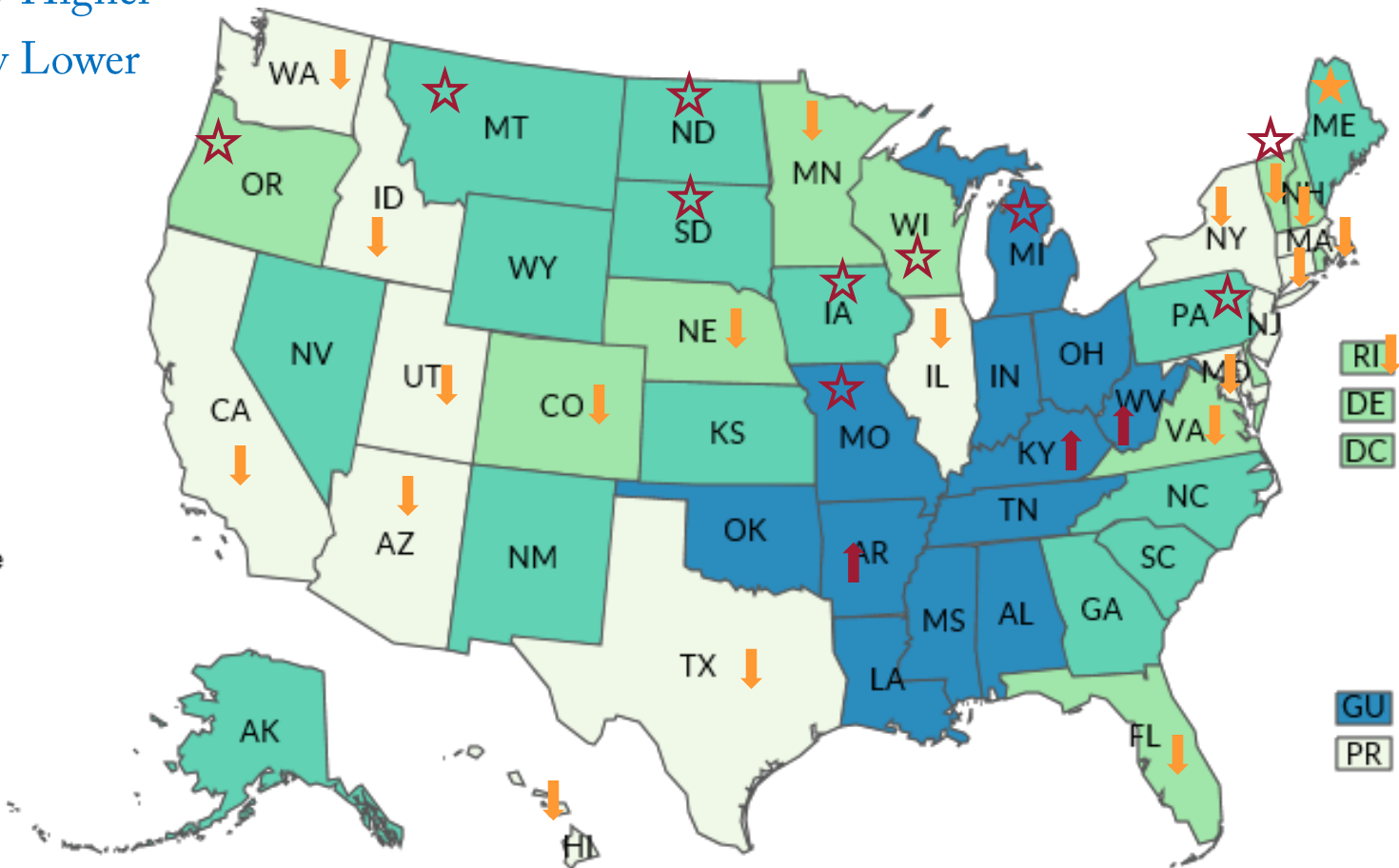
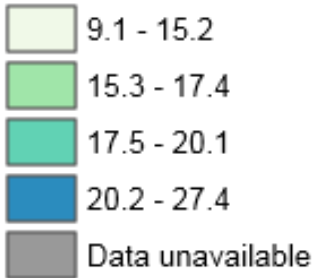
Adults Smoking Some Days or Every Day- 2015

Behavioral Risk Factor Surveillance Survey

2015 Rates Significantly
Different than Maine Rate

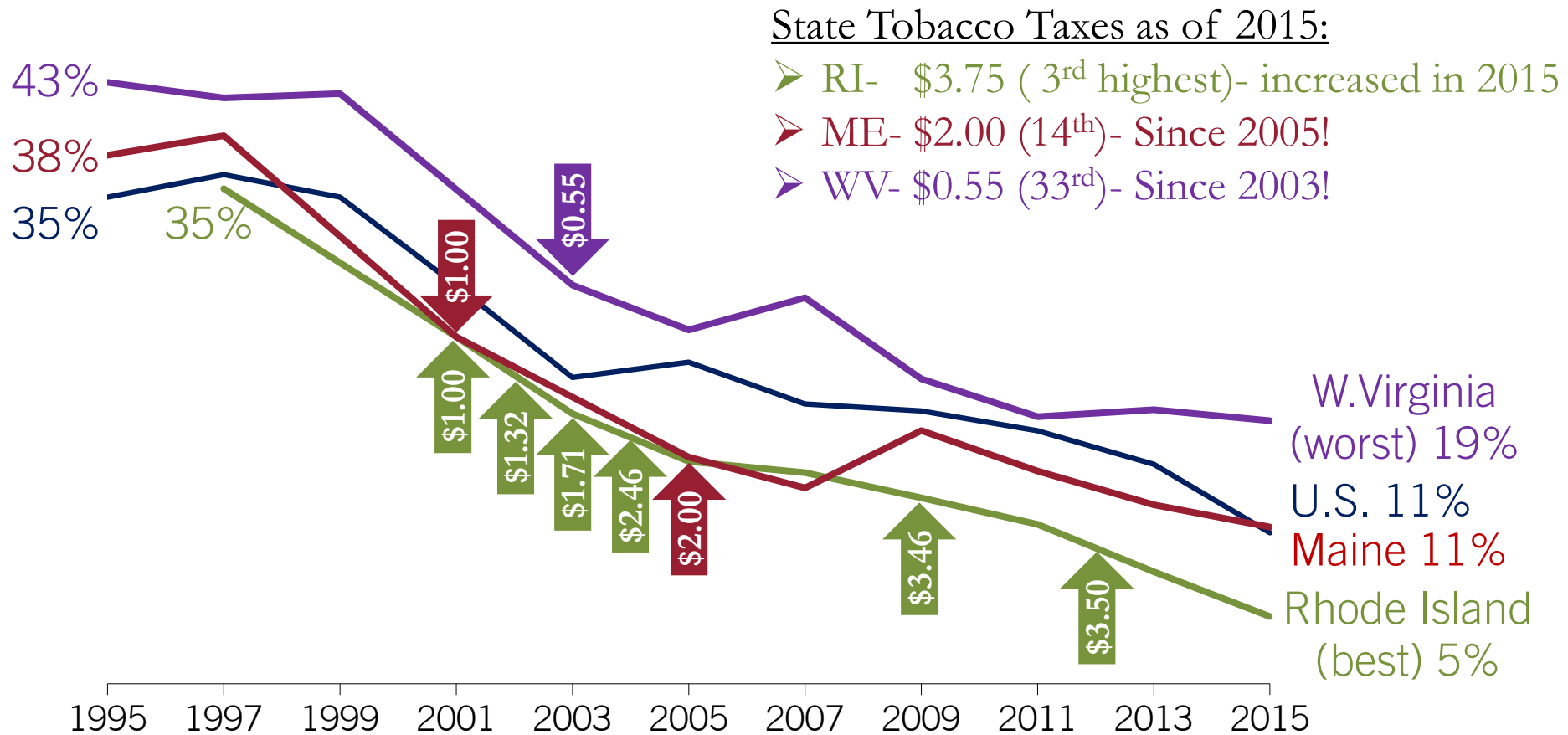
10 Peer States: ☆
Based on SES & Rurality

↑ Significantly Higher
↓ Significantly Lower

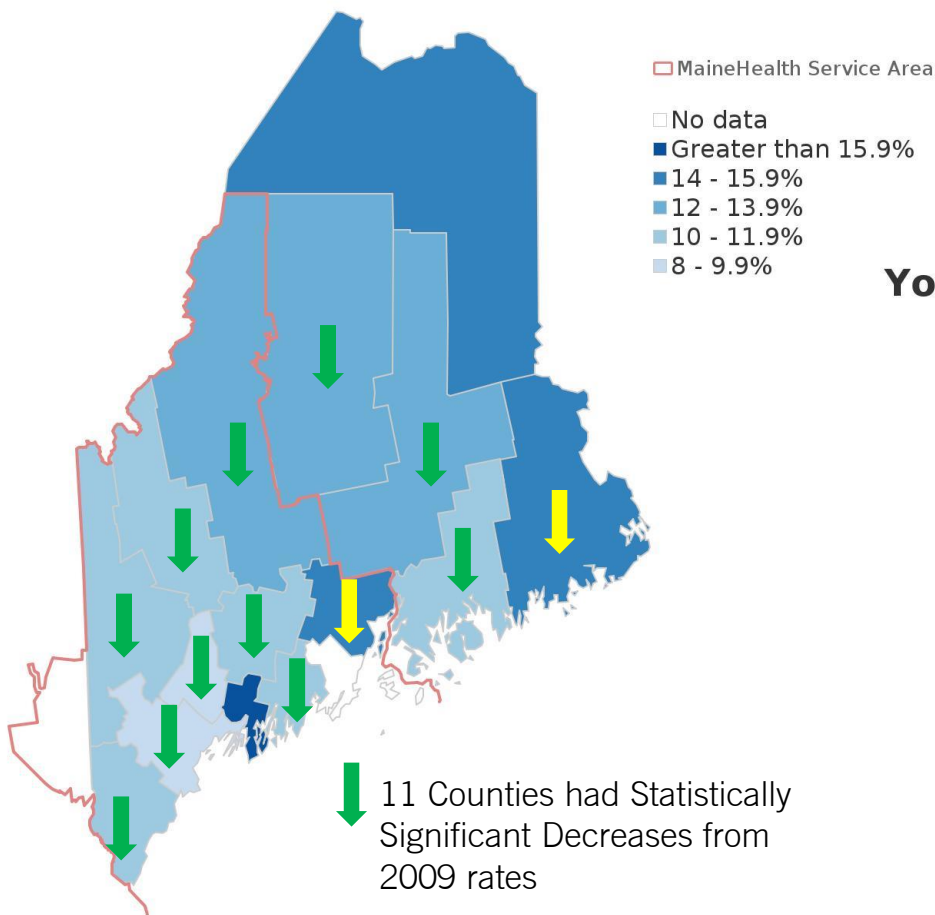


How Maine Compares to the U.S.

Percent of High School Students who Smoked Cigarettes on at least 1 day during 30 days before the survey



Youth - Cigarette Use in Last Month (2015)



↓ 11 Counties had Statistically Significant Decreases from 2009 rates

↓ In Waldo and Washington Counties the trend data suggests the smoking rates may be declining, even though 2015 rates were not significantly lower than in 2009.

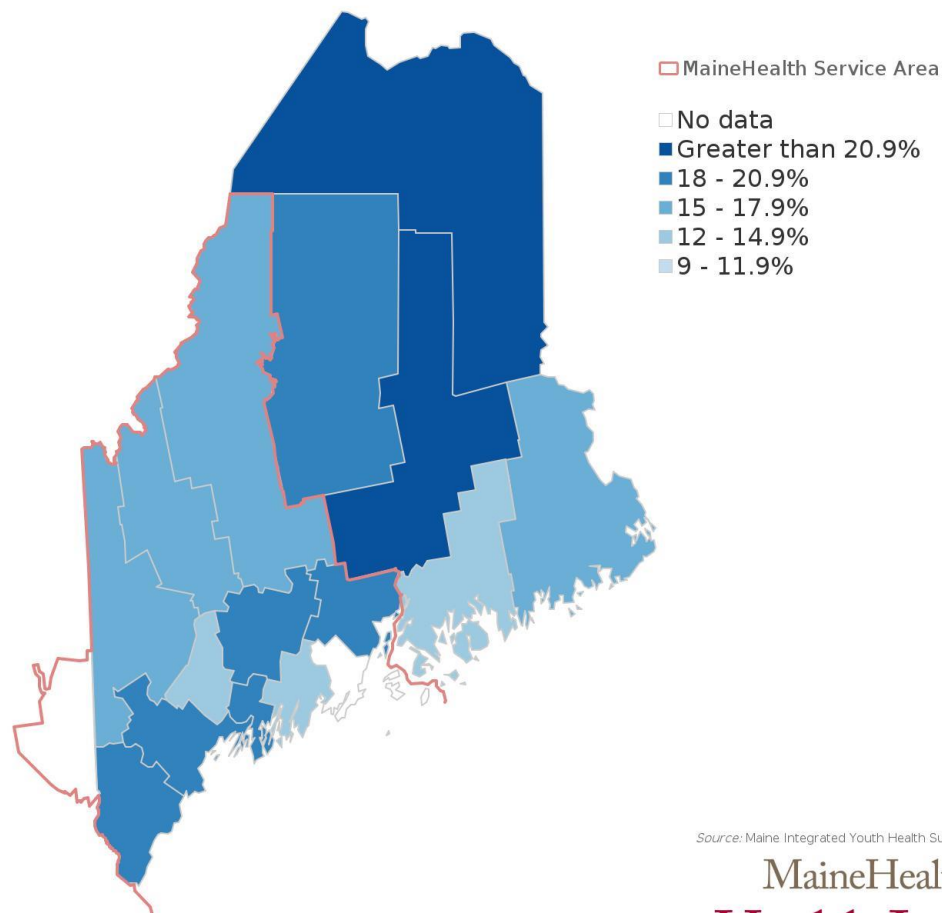
⊘ However, in Aroostook and Sagadahoc Counties, there was little difference in the youth smoking rates from 2009 to 2015.

Maine Statewide Rates- Youth Smoking

2009: 17.6% (16.8-18.5%)

2015: 10.7% (10.0-11.4%)

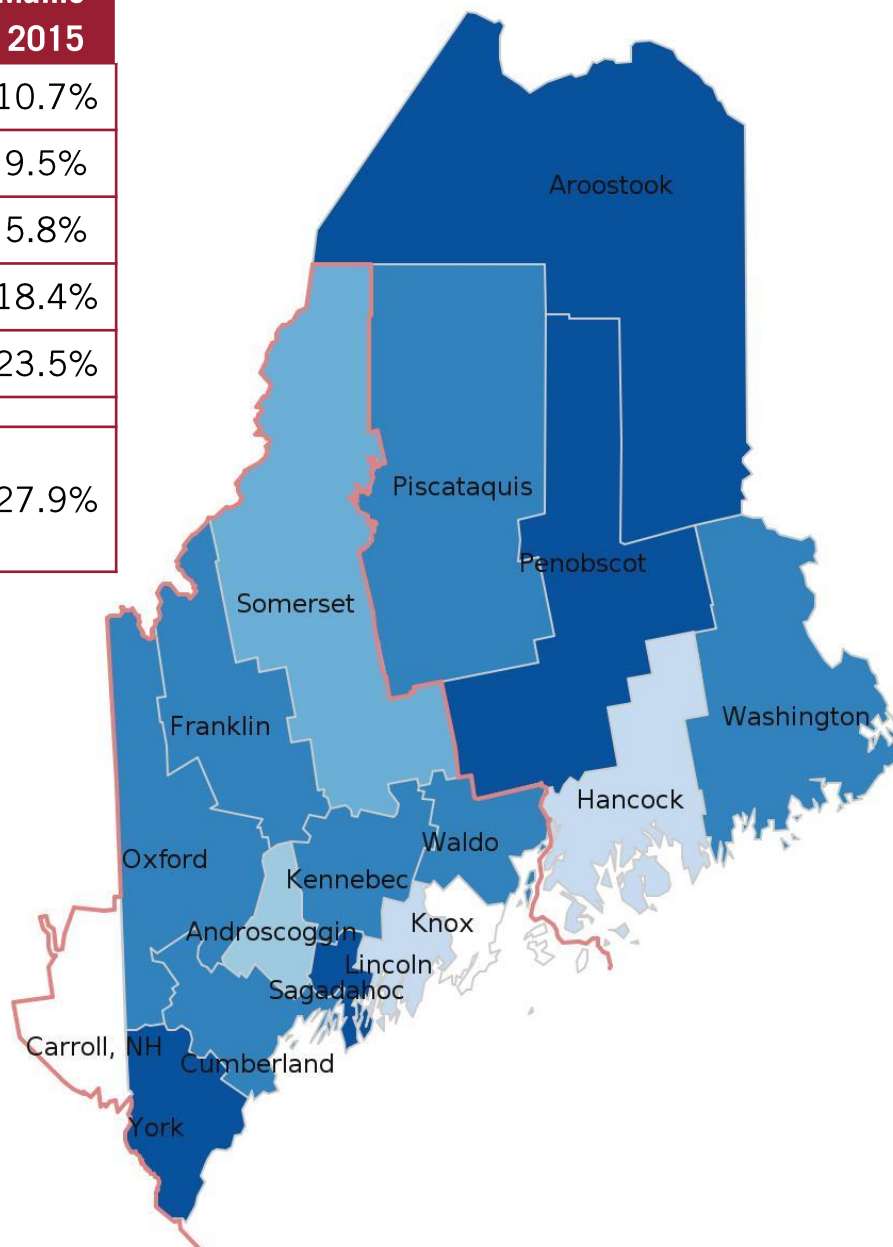
Youth - Electronic Vapor Product in Past Month (2015)



Source: Maine Integrated Youth Health Survey (MIYHS)

Youth - Percent of High School Student Exposed to Any* Form of Tobacco (2015)

Use in Past 30 days	Maine-2015
Cigarettes	10.7%
Cigar/cigarillo	9.5%
Smokeless Tobacco	5.8%
Electronic Vapor Product	18.4%
Any of the above	23.5%
Smoked 1st cig. When <13 yrs- Among those ever smoked	27.9%



□ MaineHealth Service Area

***Percent who smoked cigarettes or cigars, used electronic vapor products, or chewing tobacco, snuff or dip in the past 30 days**

□ No data

■ Greater than 24.9%

■ 23 - 24.9%

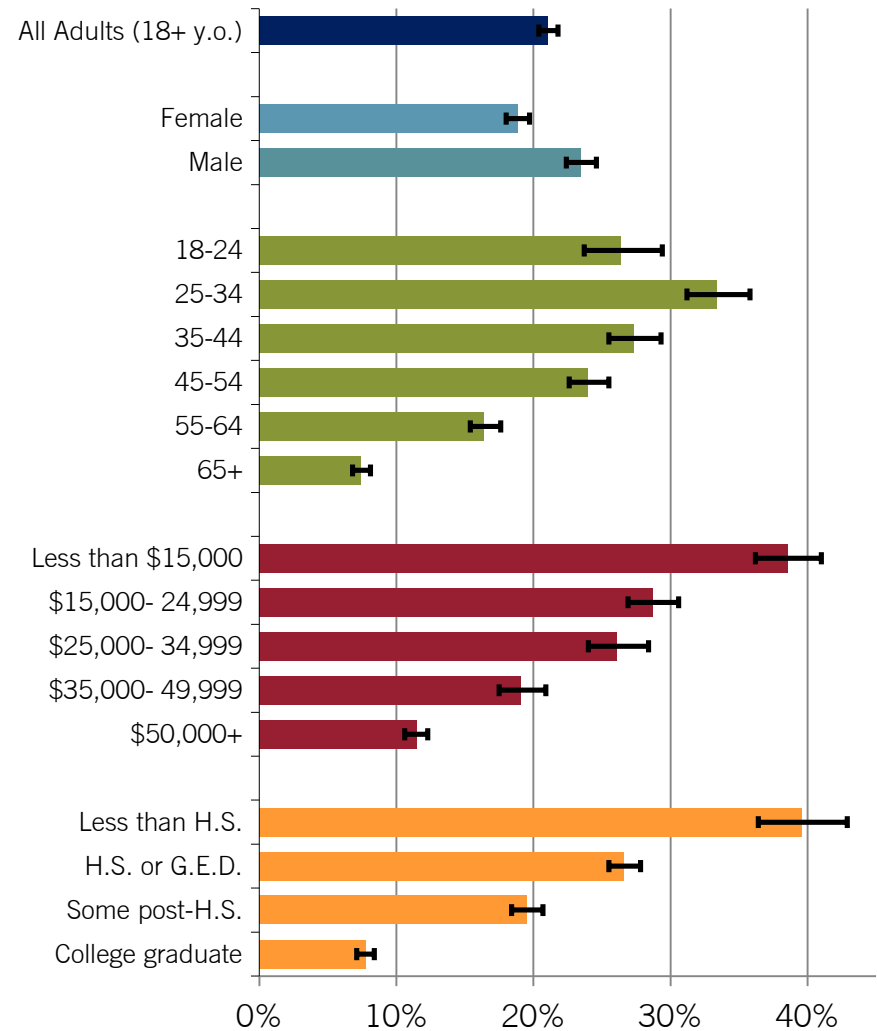
■ 21 - 22.9%

■ 18 - 20.9%

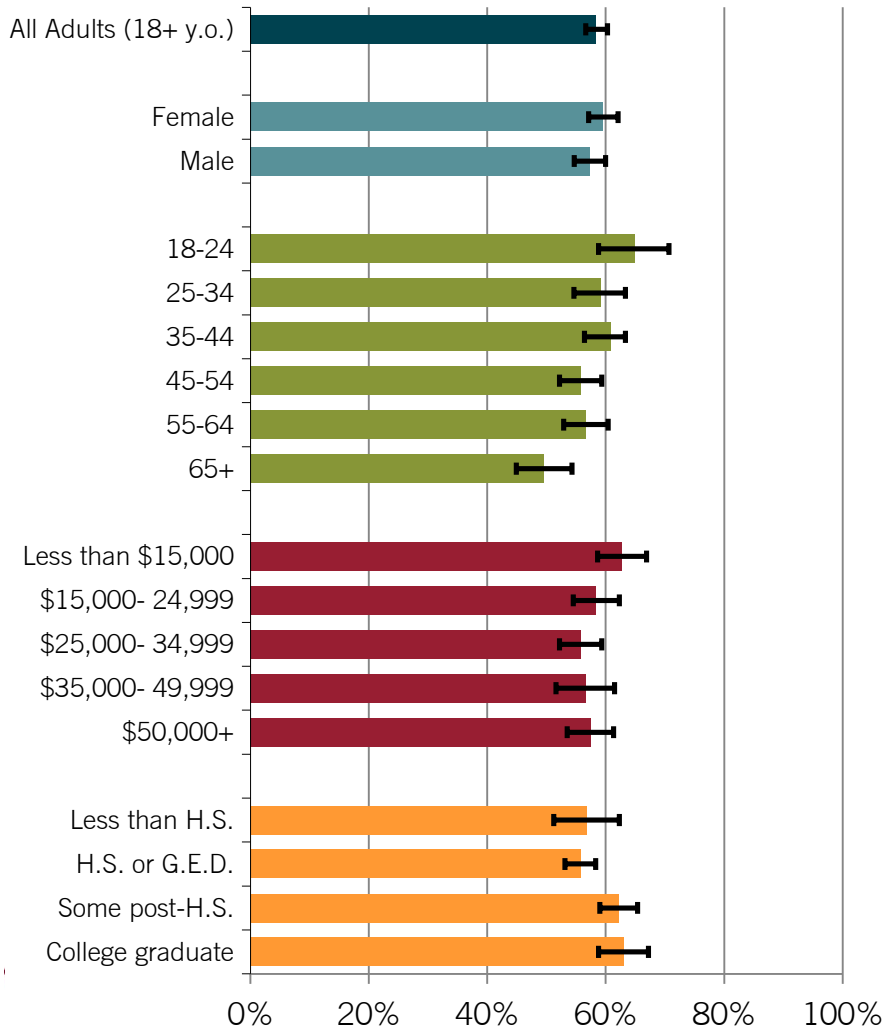
■ 16 - 17.9%

Patterns of Prevalence and Quitting Not Same

Percent Who Smoke- 2011-2013



Percent Who Made Quit Attempt- 2011-2013

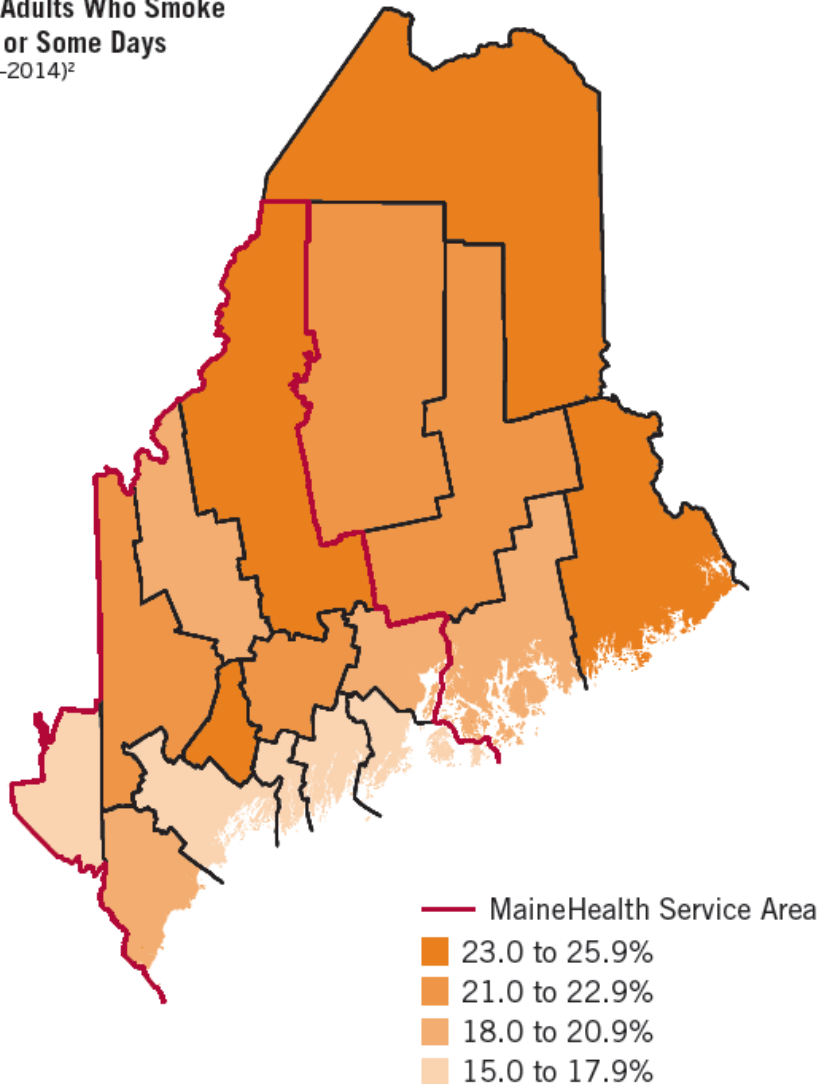


Patterns of Prevalence and Quitting Not Same

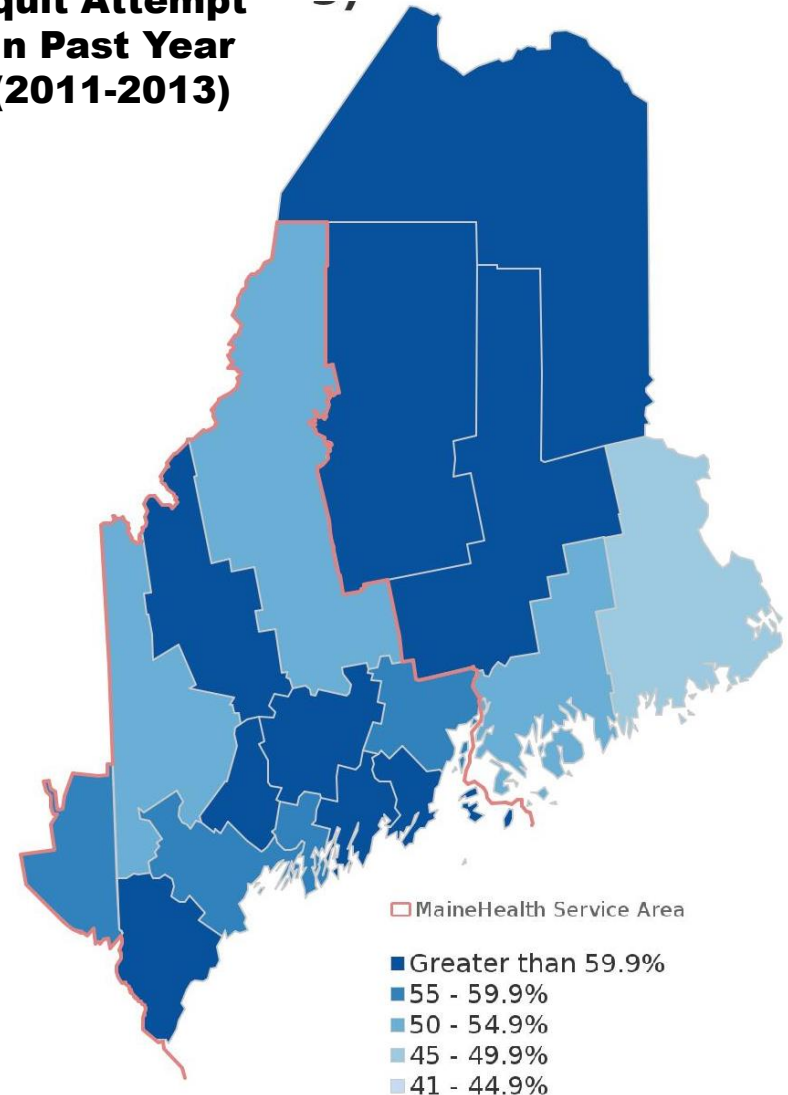
Tobacco Use

Figure 2

% of Adults Who Smoke
Daily or Some Days
(2012-2014)²



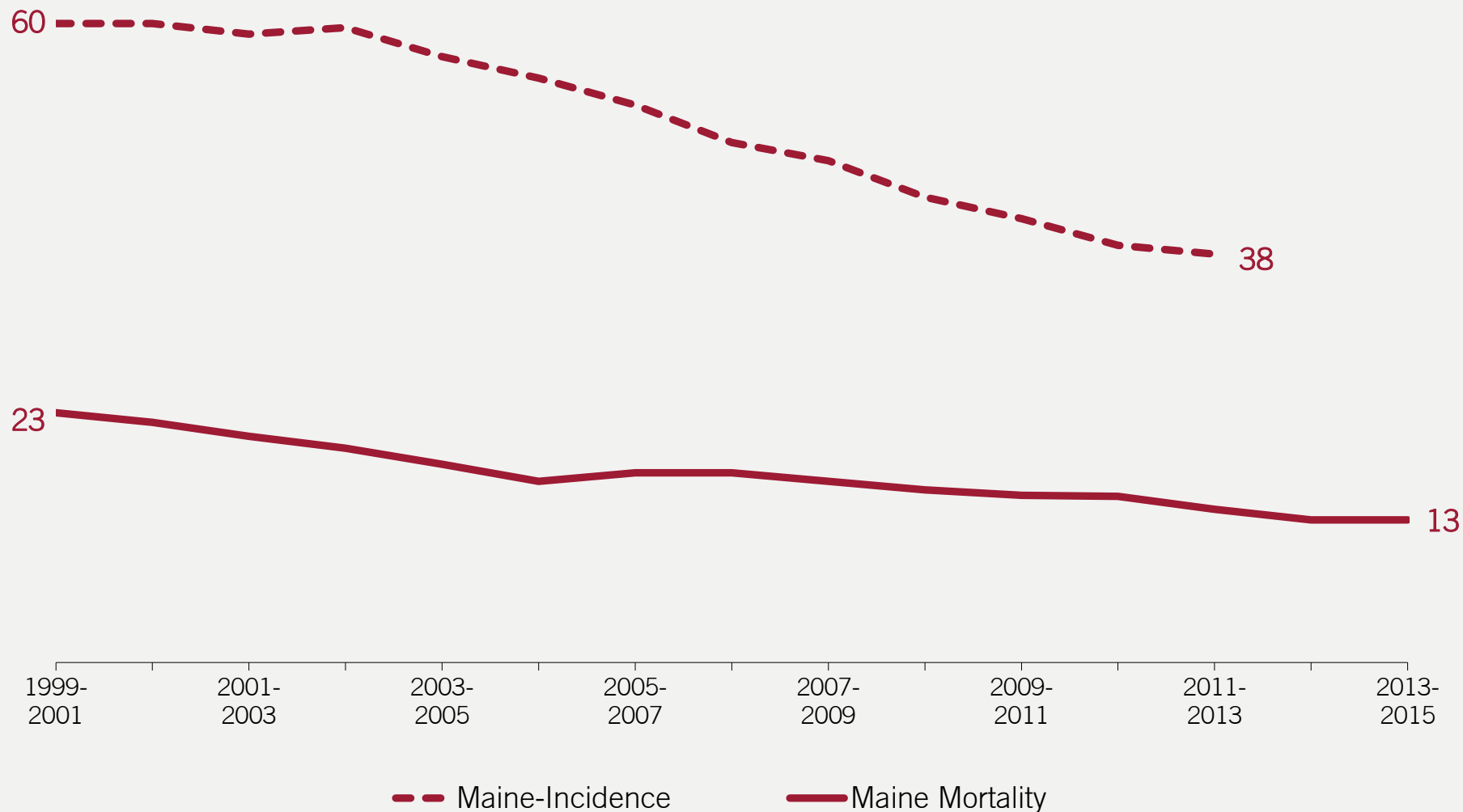
**Made serious
quit Attempt
in Past Year
(2011-2013)**



Cancer Incidence and Mortality in Maine

Colorectal Cancer: 3-Year Rolling Averages

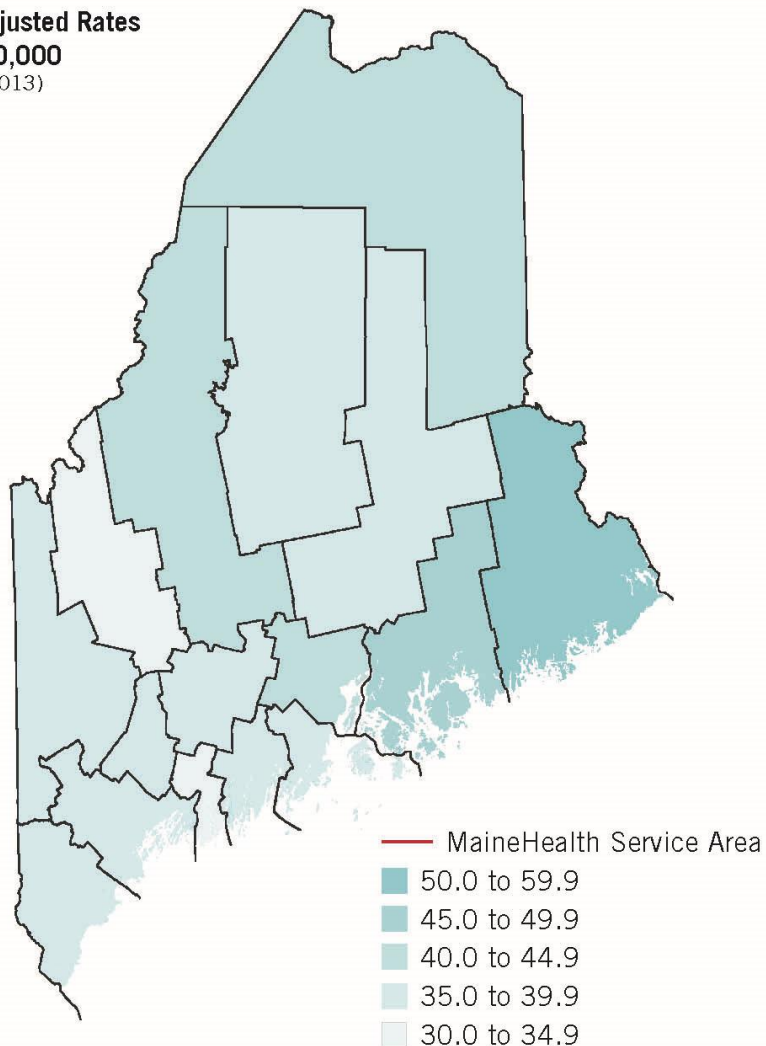
Age-Adjusted Rates per 100,000 Population



Lung & Other Tobacco-Related Cancers: Incidence

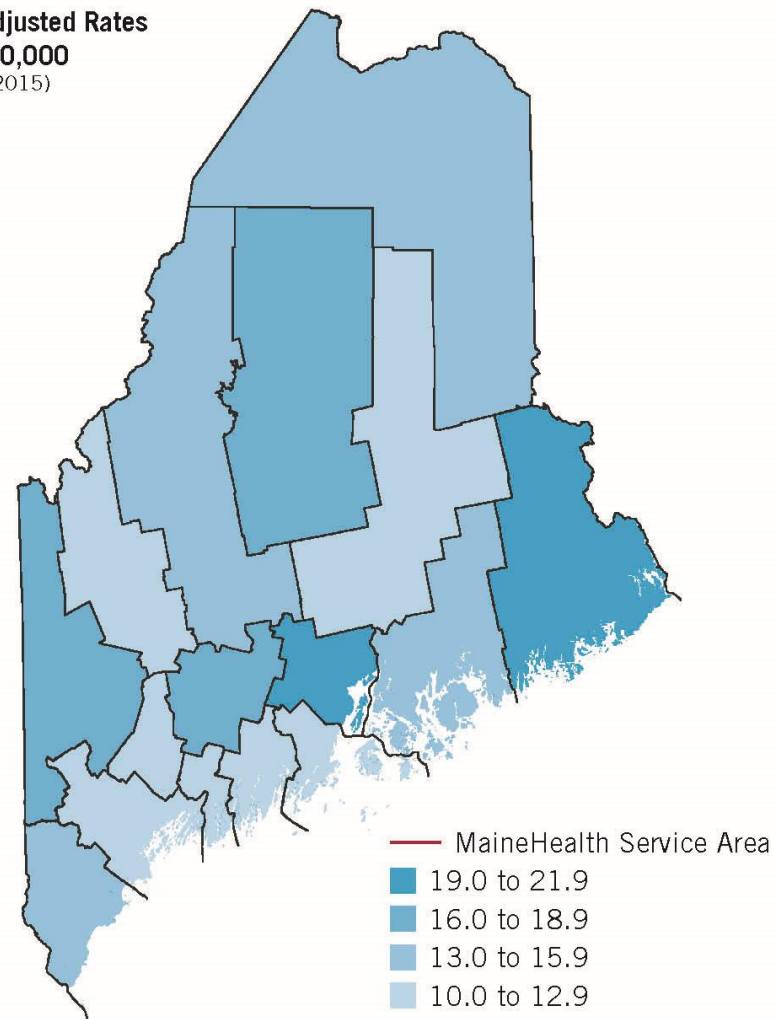
Colorectal Cancer Incidence

Age-Adjusted Rates
per 100,000
(2011–2013)



Colorectal Cancer Deaths

Age-Adjusted Rates
per 100,000
(2011–2015)

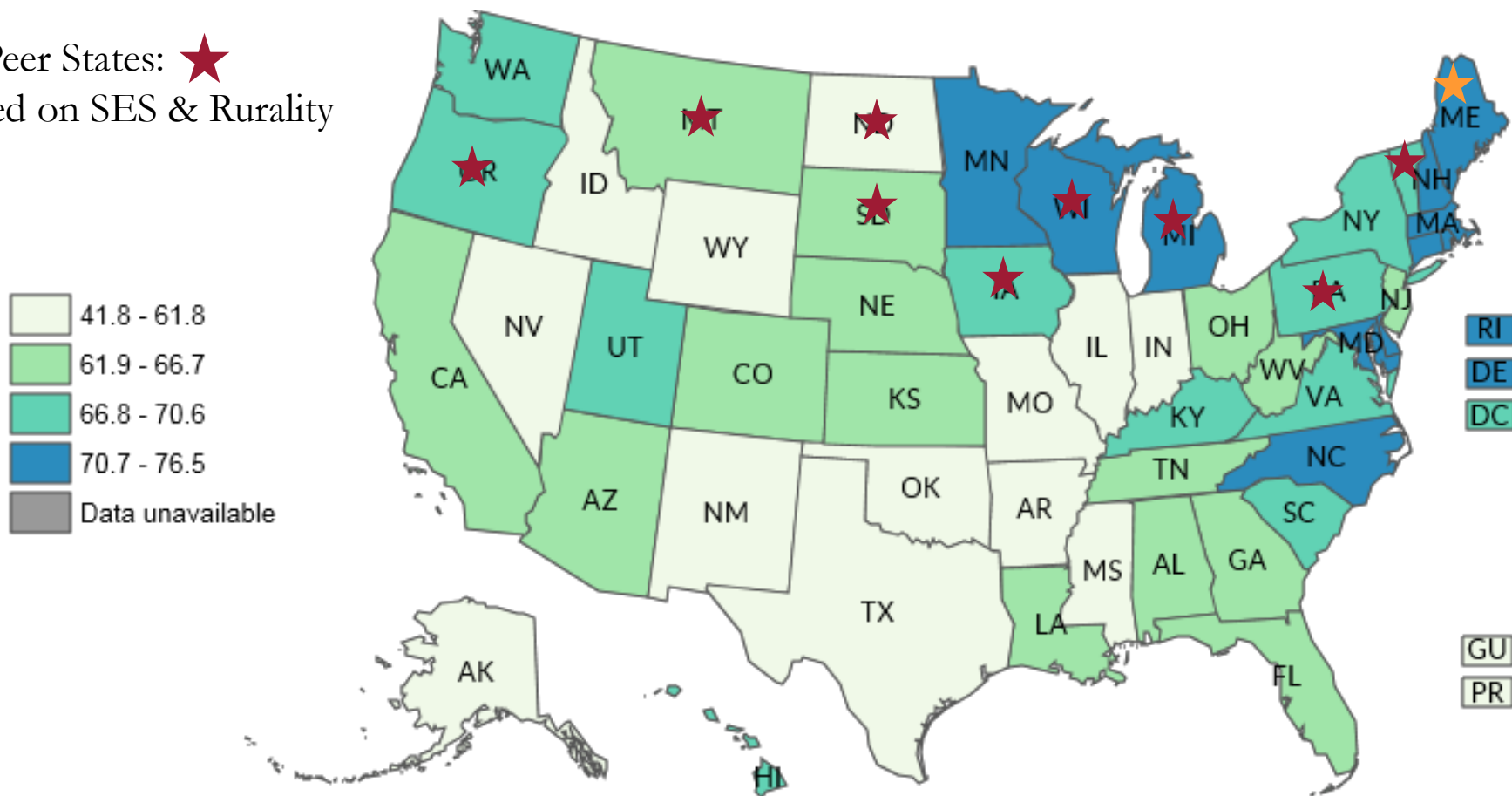


Colorectal Cancer Screening- 2014

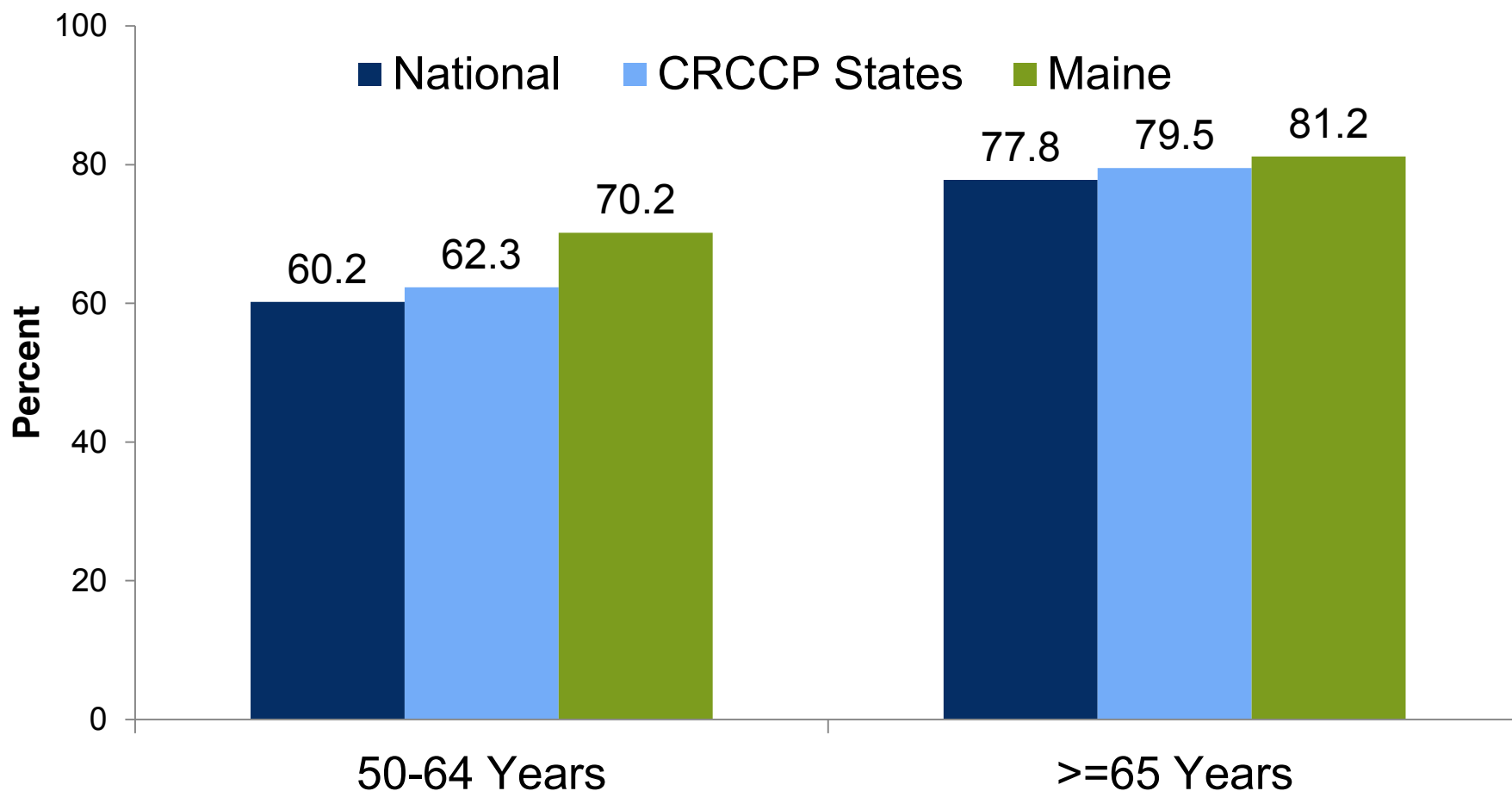
% aged 50-75 met U.S. Preventive Services Task Force recommendations

Source: Behavioral Risk Factor Surveillance Survey

10 Peer States: ★
Based on SES & Rurality

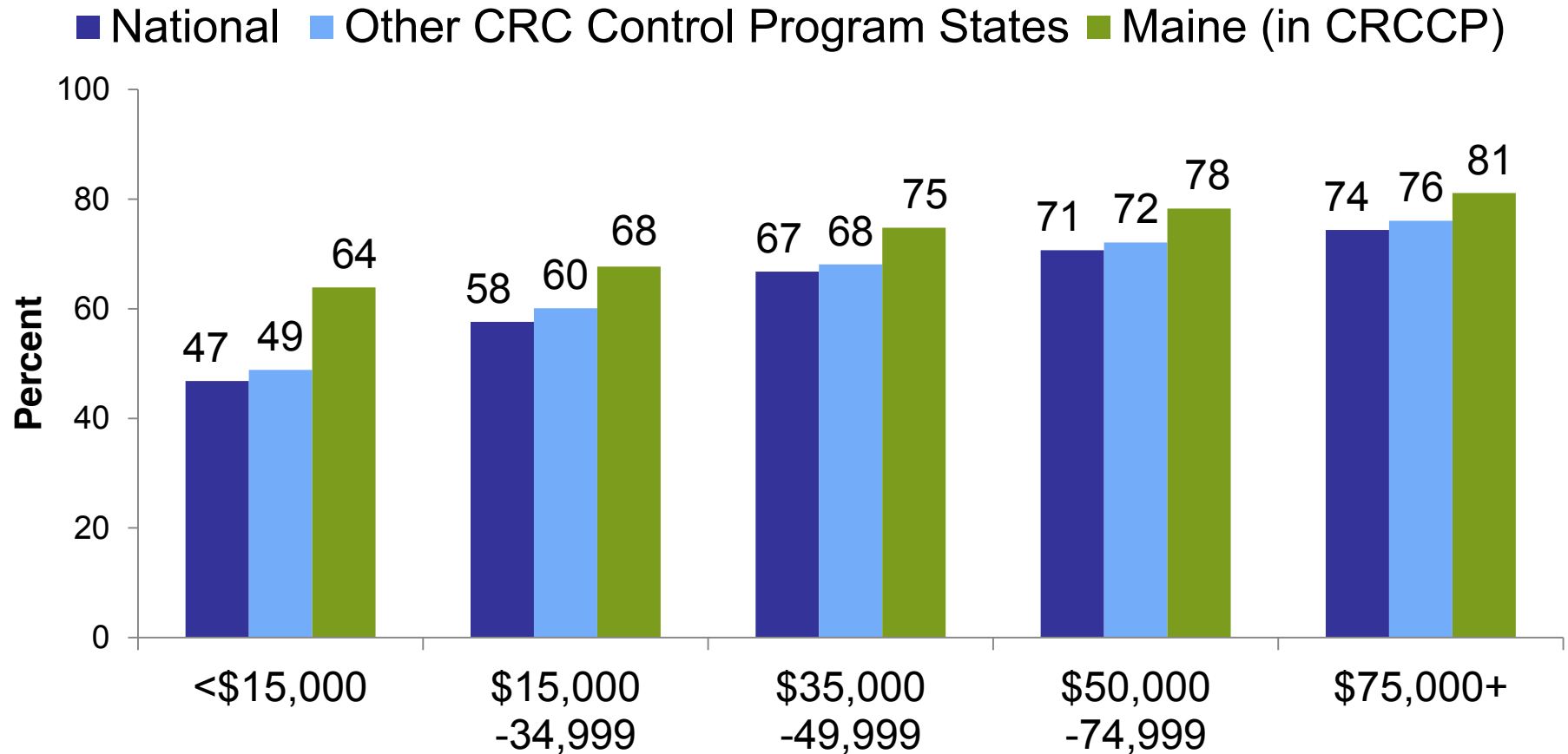


CRC Screening by Age, 2012^a



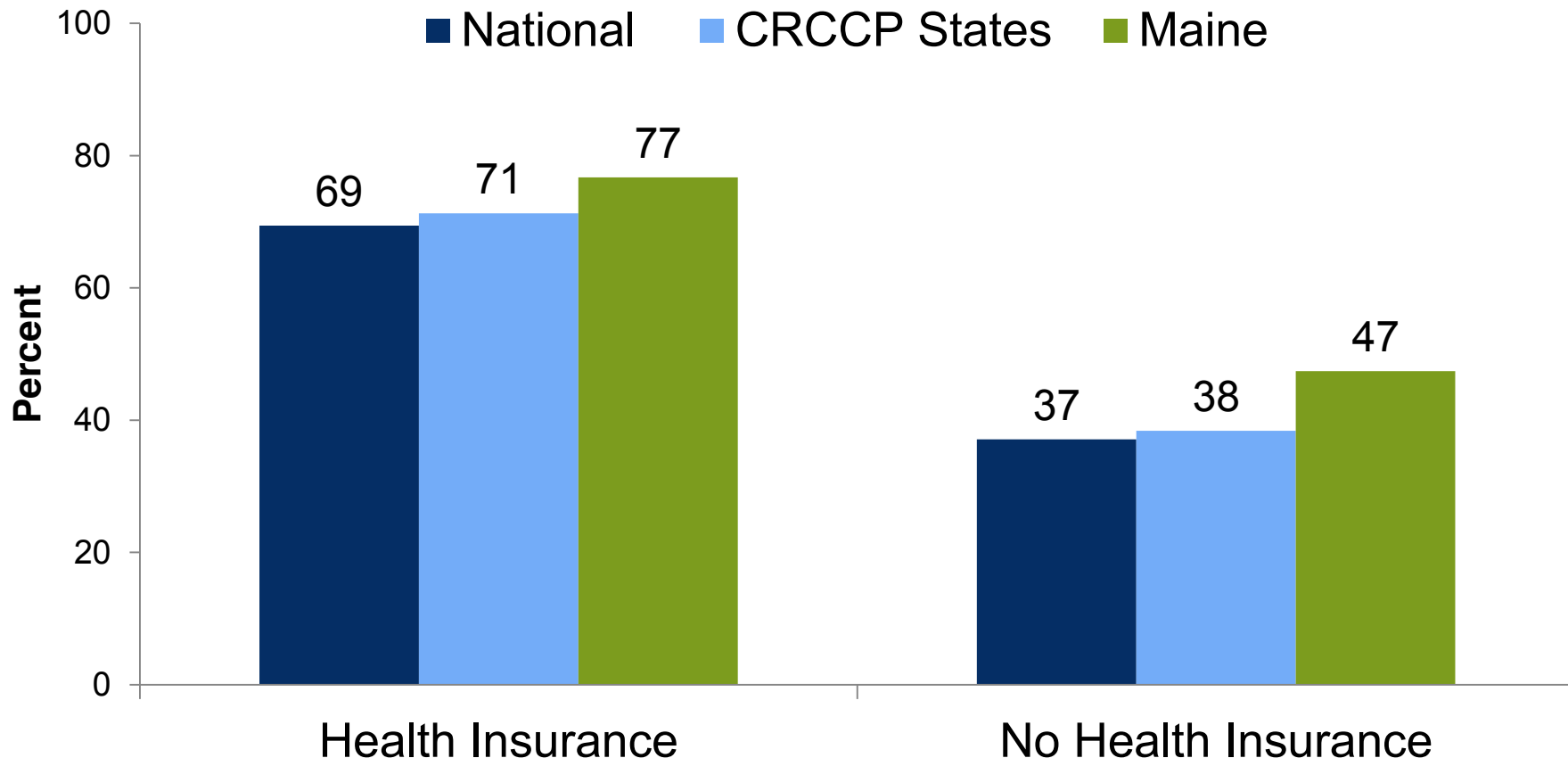
^a Combined. Percentages reported for adults aged 50-75 years. (Source: Behavioral Risk Factor Surveillance System, Department of Health and Human Services, Centers for Disease Control and Prevention, 2012.) Data are suppressed if groups have fewer than 50 observations.

CRC Screening by Income, 2012^a



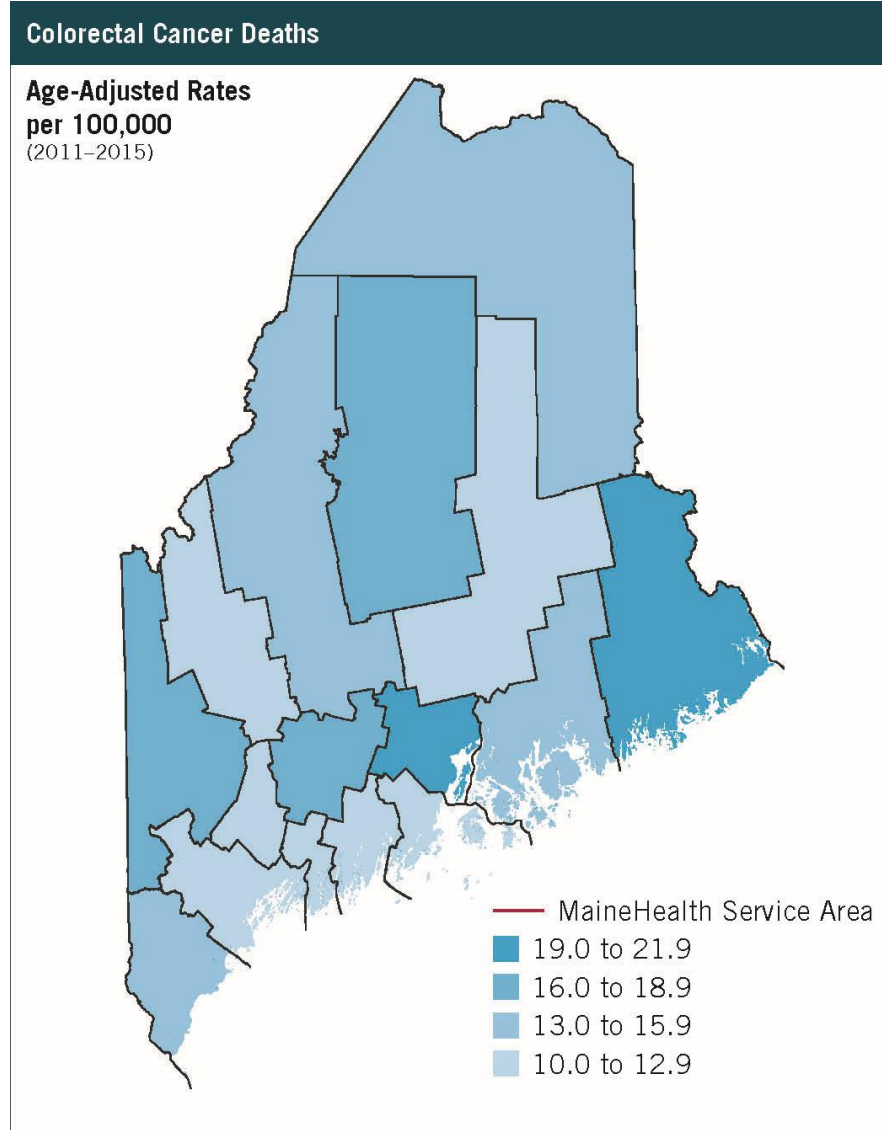
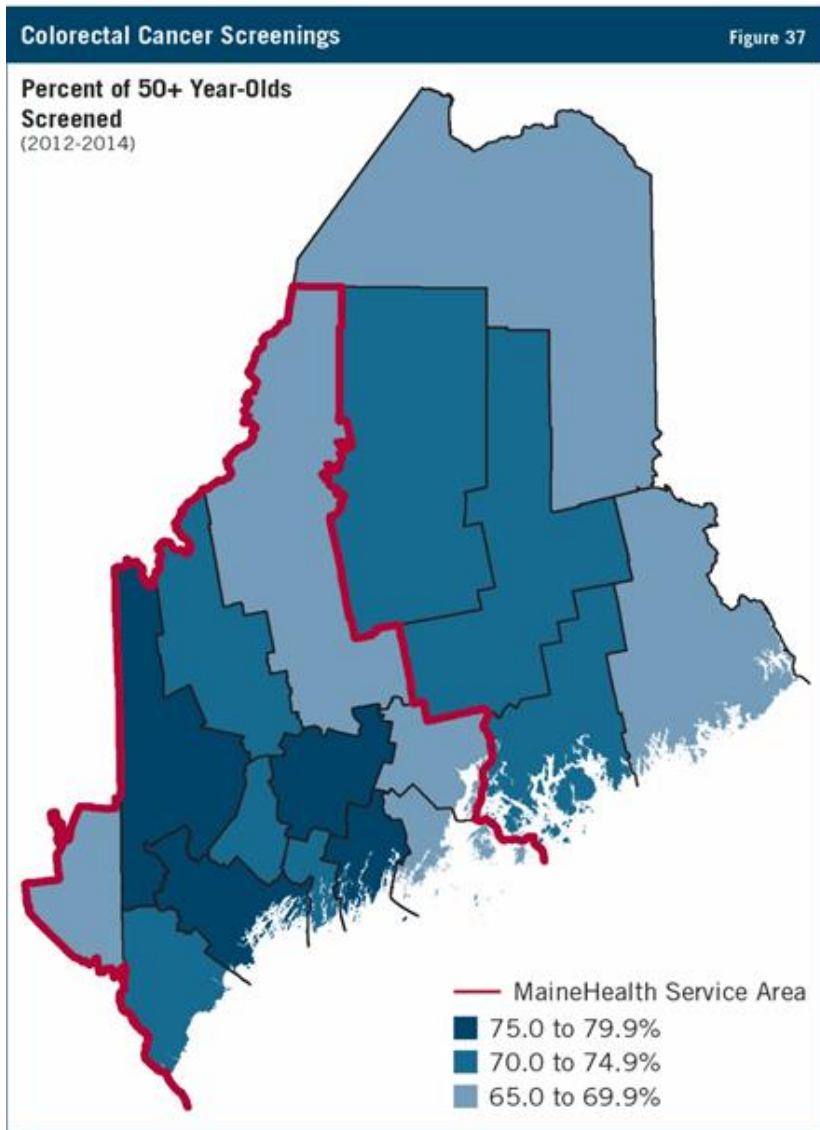
^a Combined. Percentages reported for adults aged 50-75 years. (Source: Behavioral Risk Factor Surveillance System, Department of Health and Human Services, Centers for Disease Control and Prevention, 2012.) Data are suppressed if groups have fewer than 50 observations.

CRC Screening by Insurance Status, 2012^a



^a Combined. Percentages reported for adults aged 50-75 years. (Source: Behavioral Risk Factor Surveillance System, Department of Health and Human Services, Centers for Disease Control and Prevention, 2012.) Data are suppressed if groups have fewer than 50 observations.

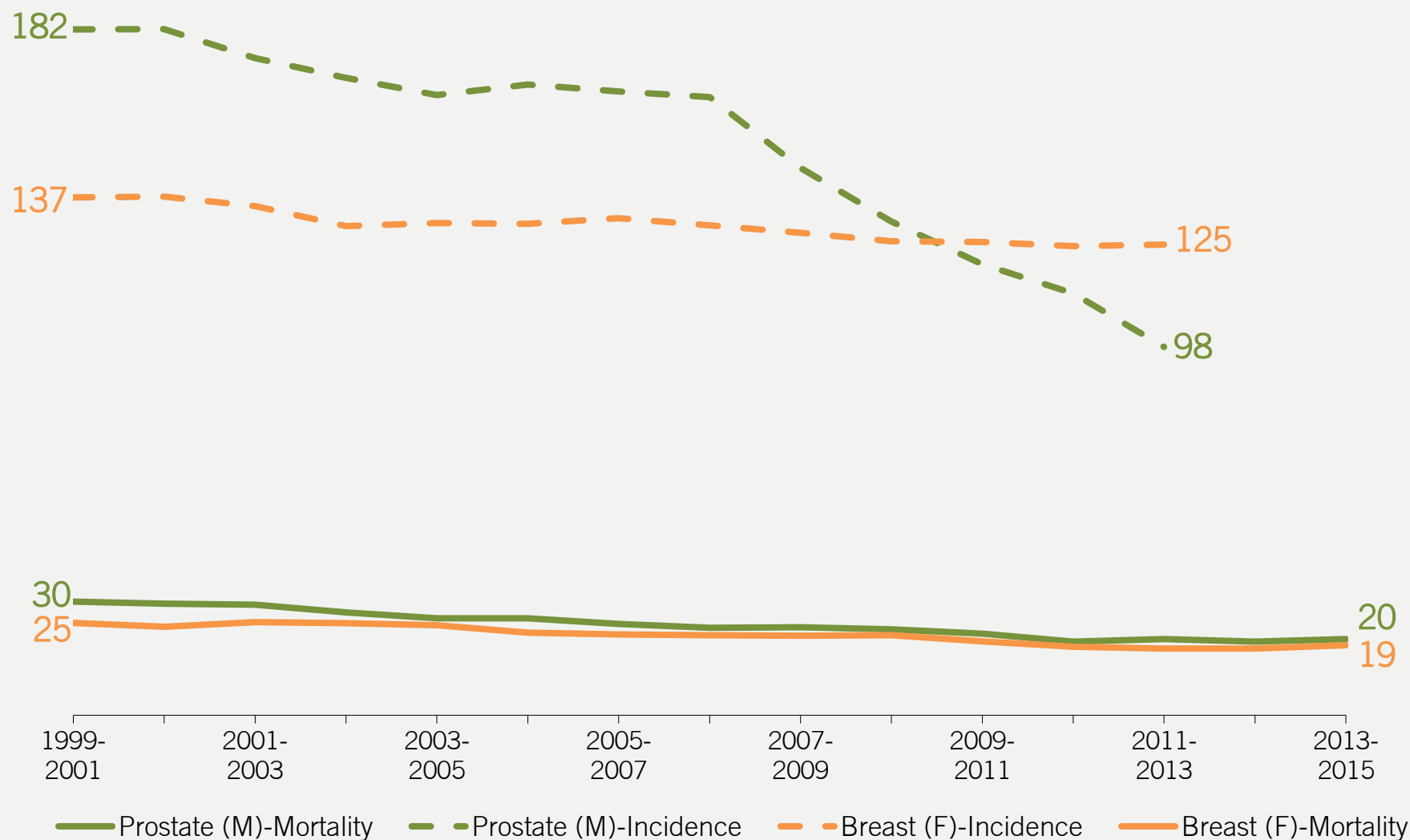
Colorectal Cancer: Percent Screened vs. Mortality



Cancer Incidence and Mortality in Maine

Prostate and Breast Cancers: 3-Year Rolling Averages

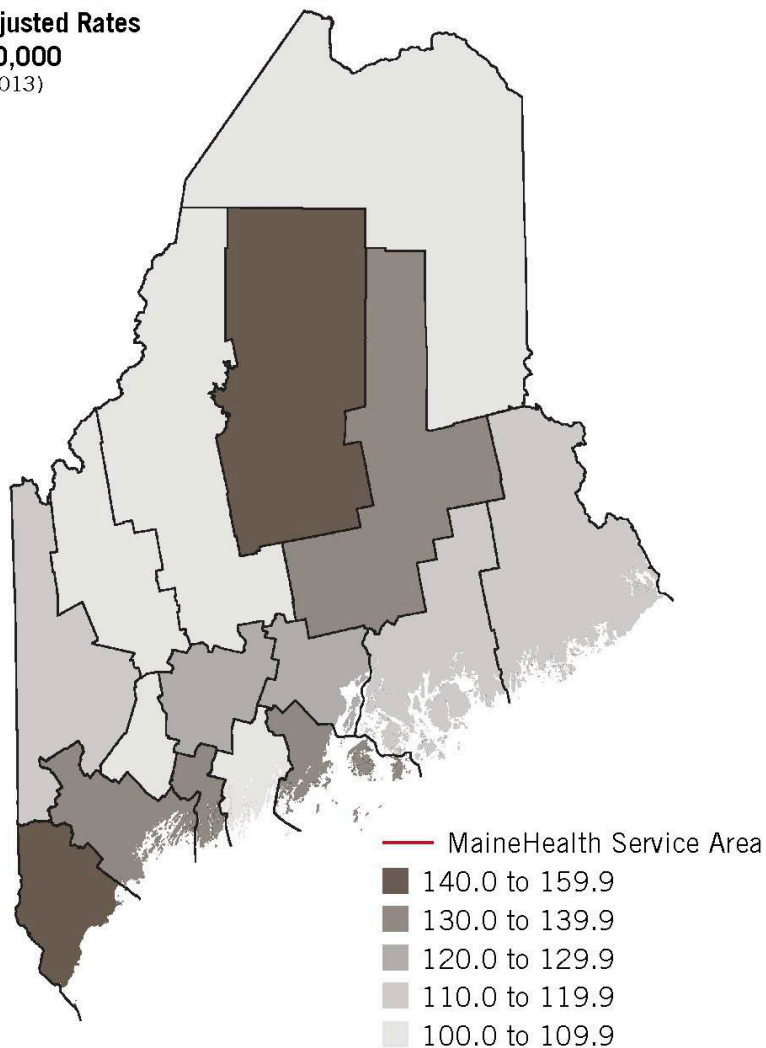
Age-Adjusted Rates per 100,000 Population



Breast Cancer Incidence & Mortality

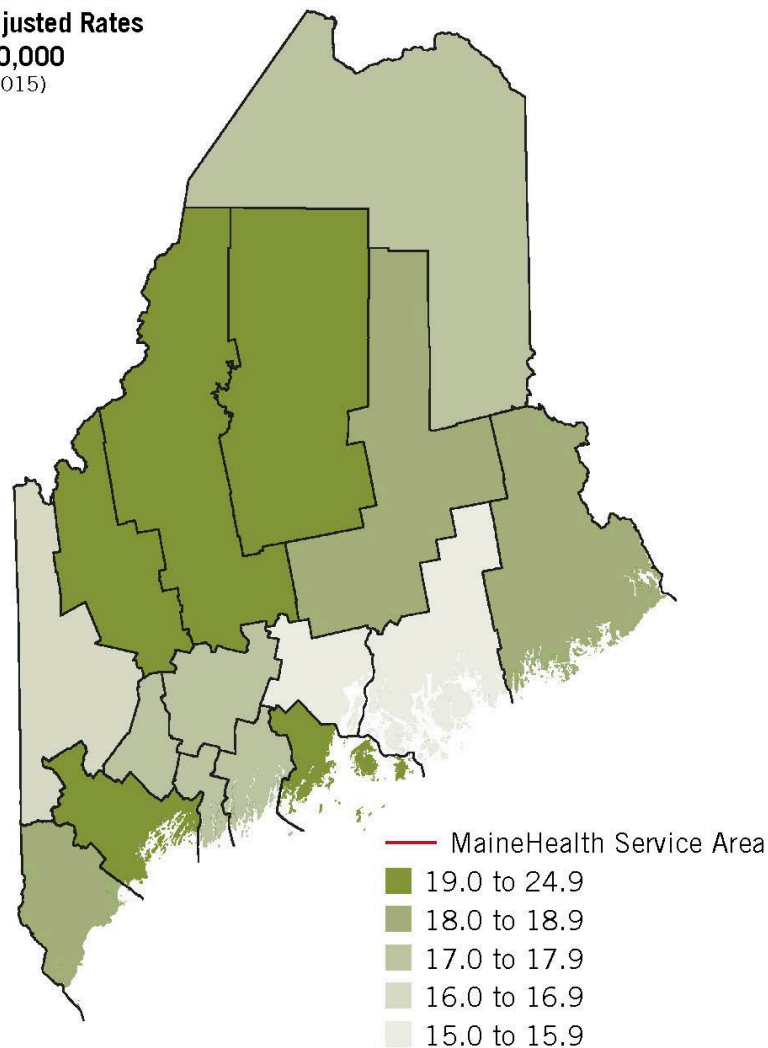
Breast Cancer Incidence

Age-Adjusted Rates
per 100,000
(2011–2013)



Breast Cancer Deaths

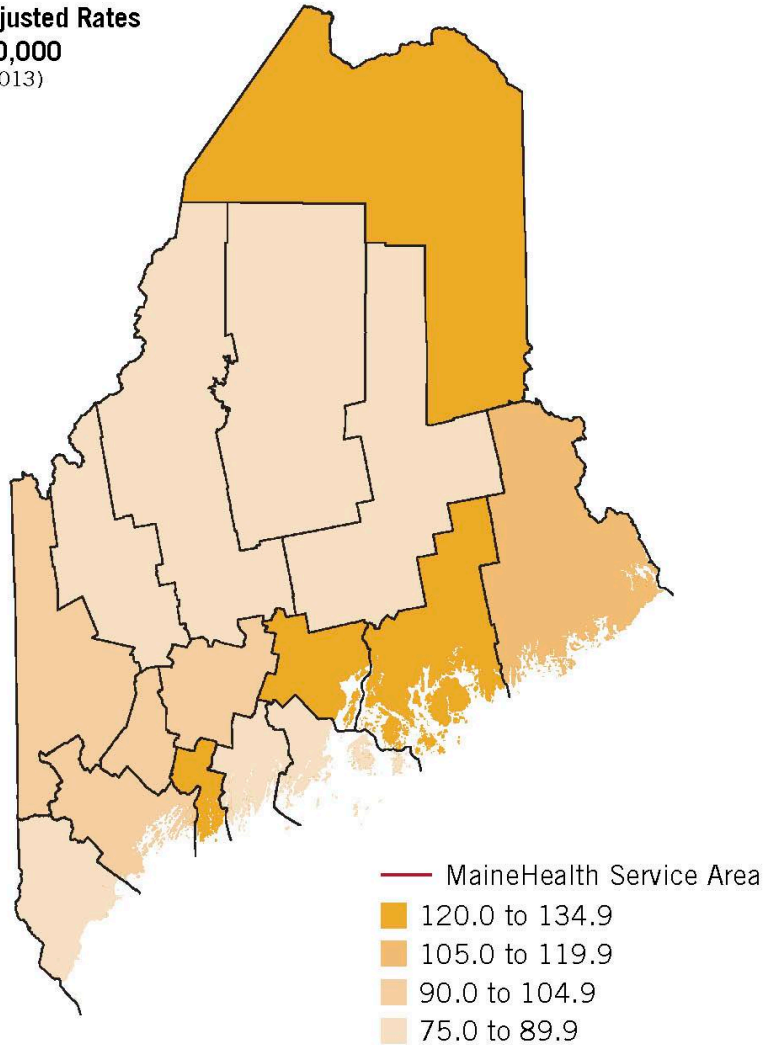
Age-Adjusted Rates
per 100,000
(2010–2015)



Prostate Cancer Incidence & Mortality

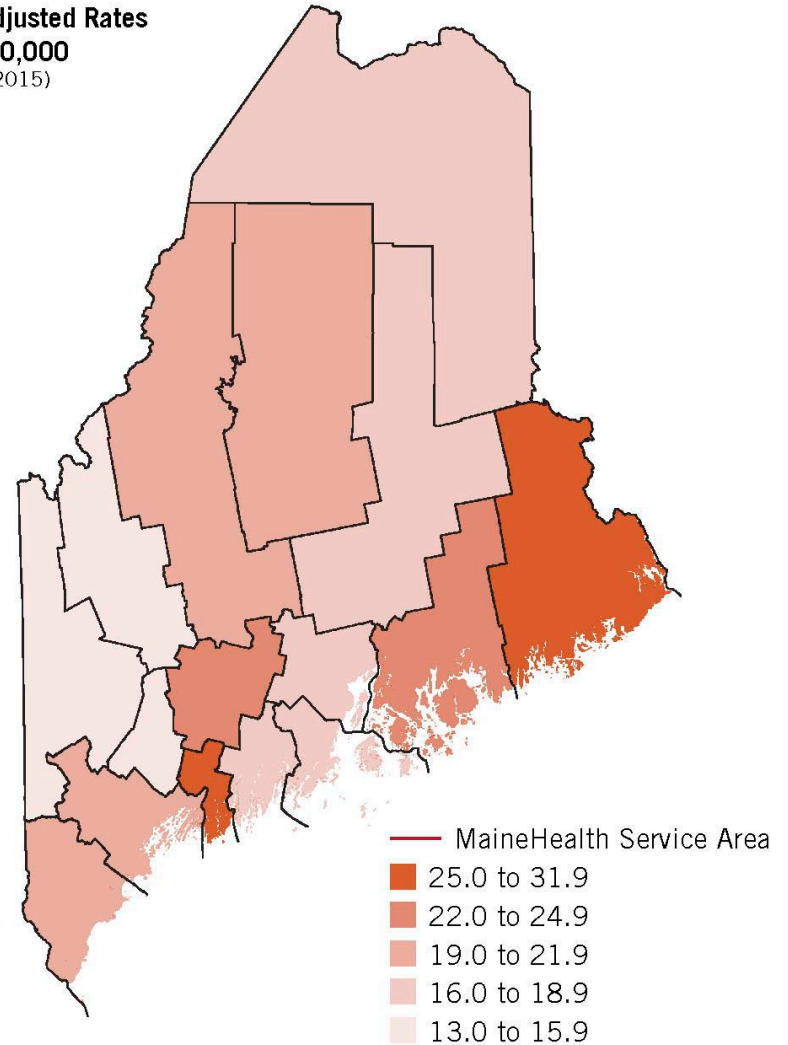
Prostate Cancer Incidence

Age-Adjusted Rates
per 100,000
(2011–2013)



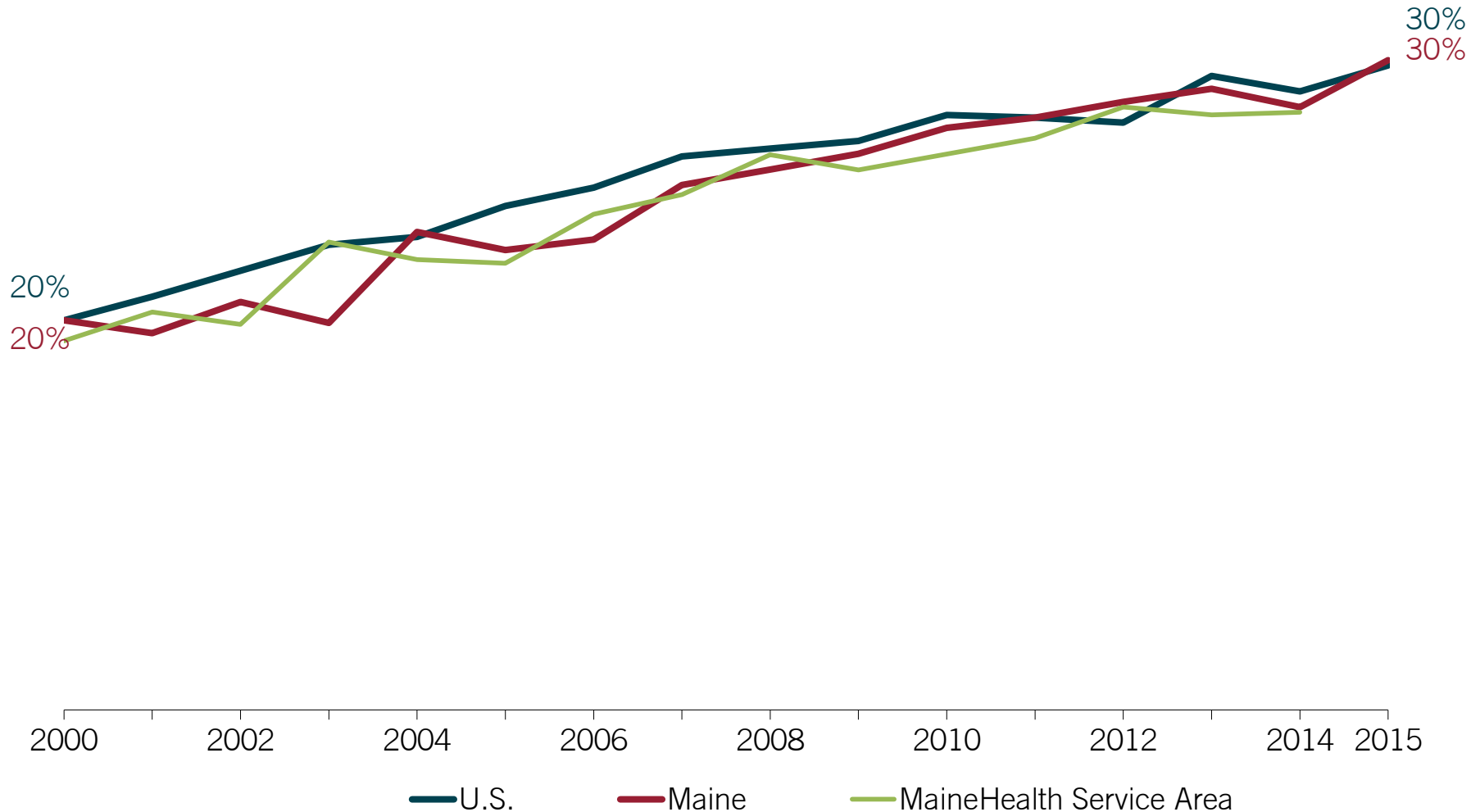
Prostate Cancer Deaths

Age-Adjusted Rates
per 100,000
(2010–2015)



How Maine Compares to the U.S.

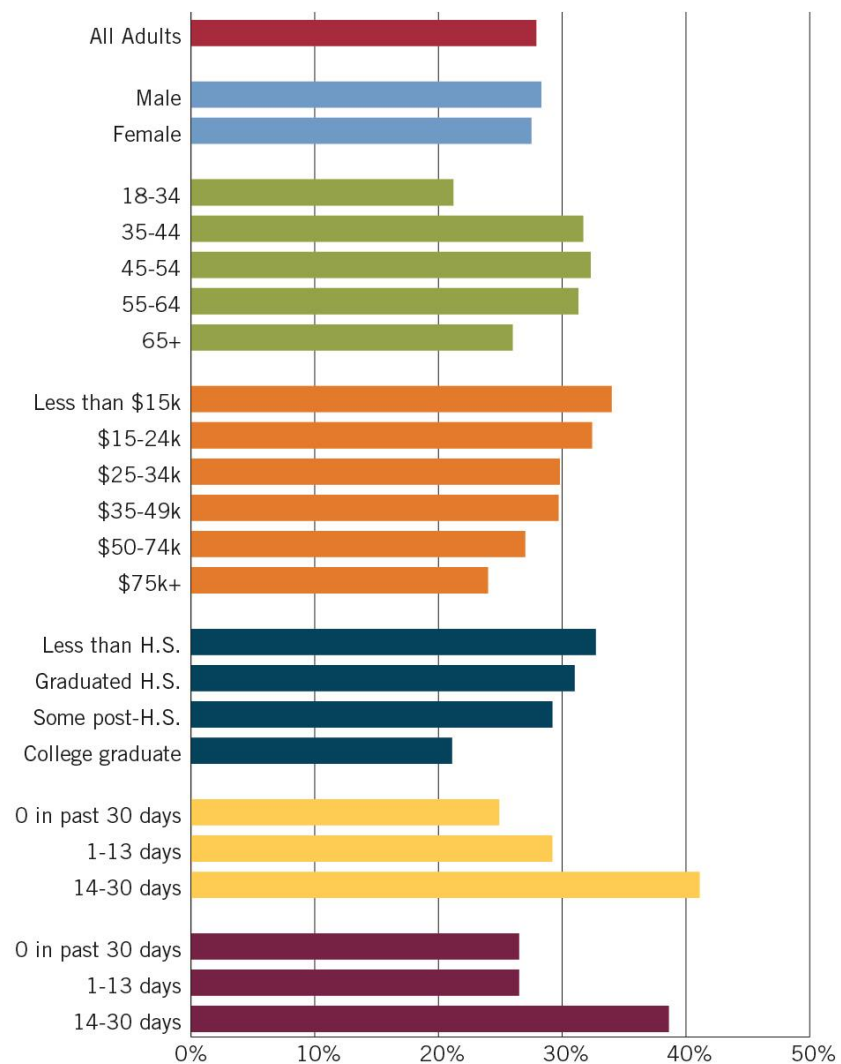
Percent of Adults With Obesity - Body Mass Index ≥ 30



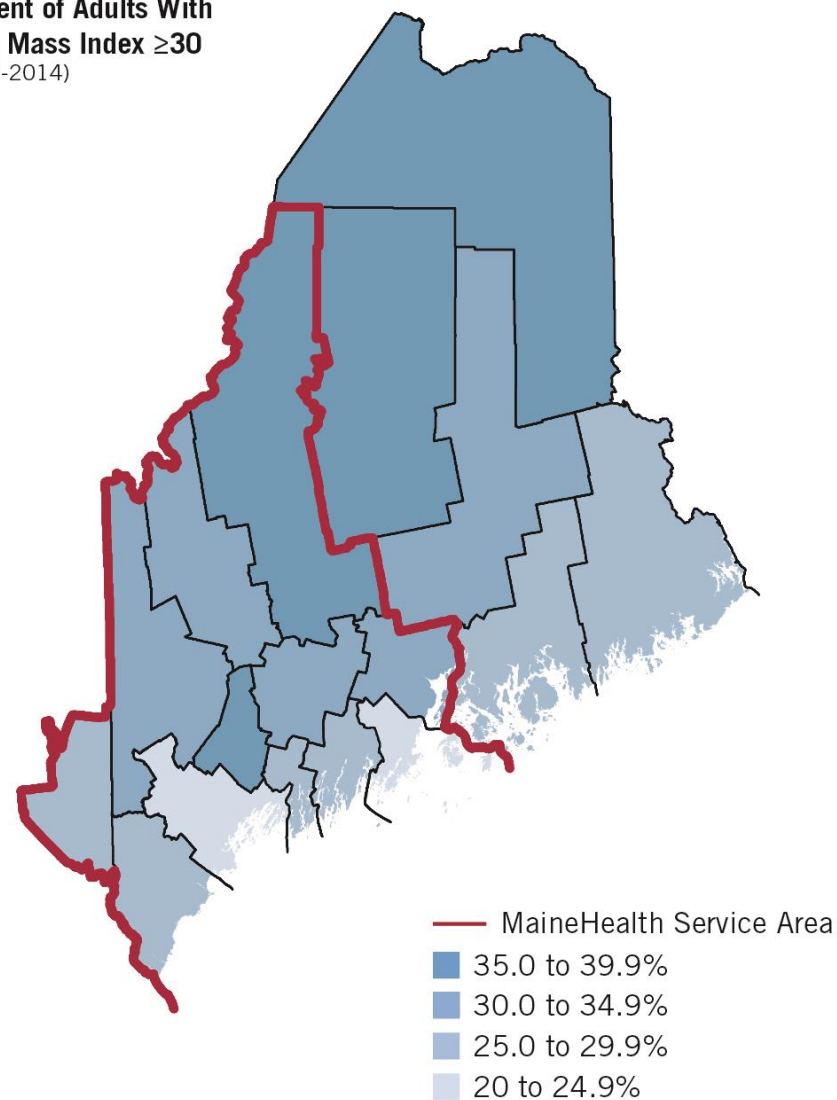
Percent With Obesity

2012-2014

Gender Age Income Education
Days that physical health was not good Days that mental health was not good

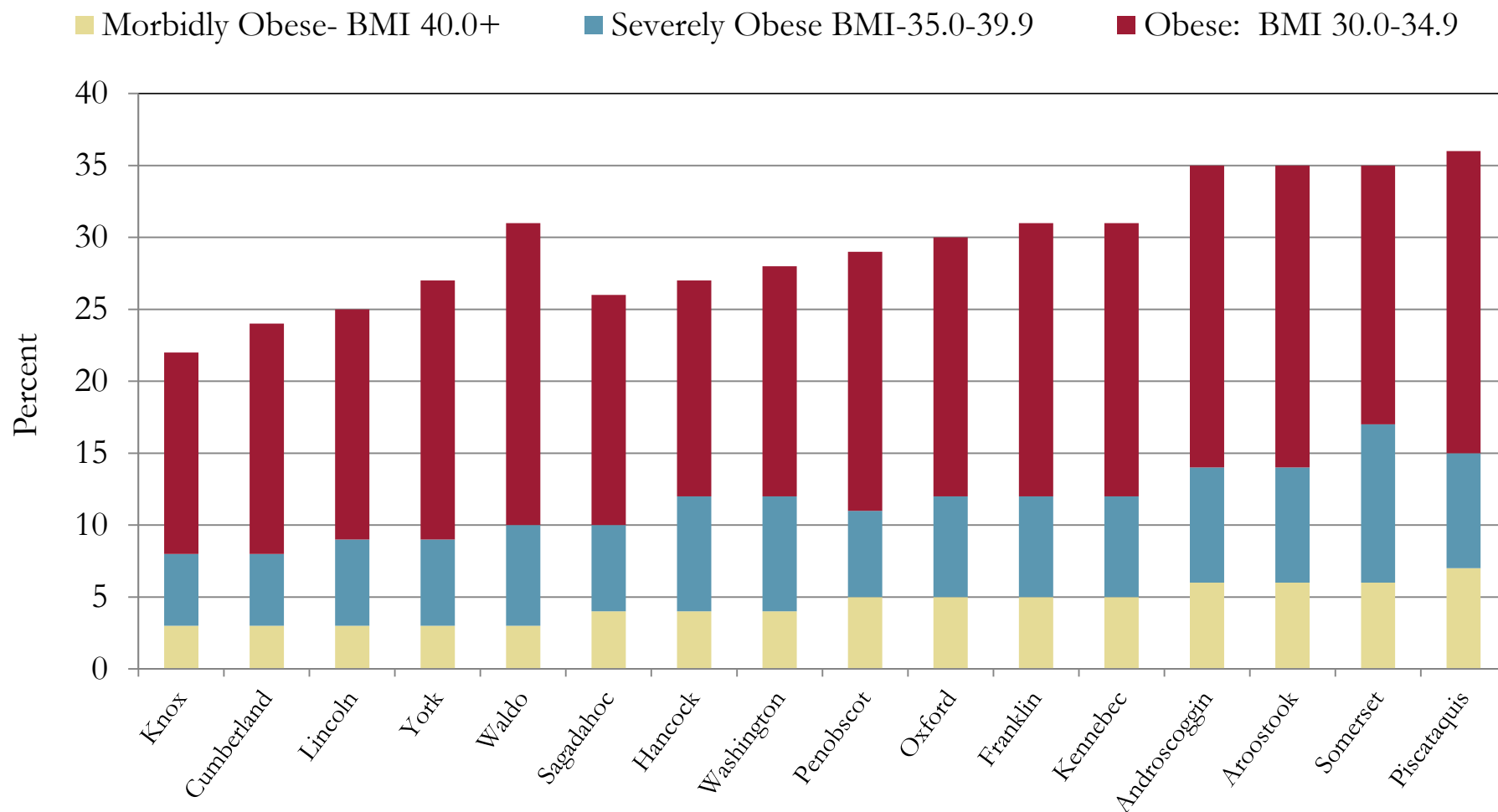
Obesity^xPercent of Adults With
Body Mass Index ≥ 30

(2012-2014)



Percent of Adults Who Are Obese in Maine Counties by Body Mass Index Categories

Behavioral Risk Factor Surveillance System (2012-2014) *estimated percent*

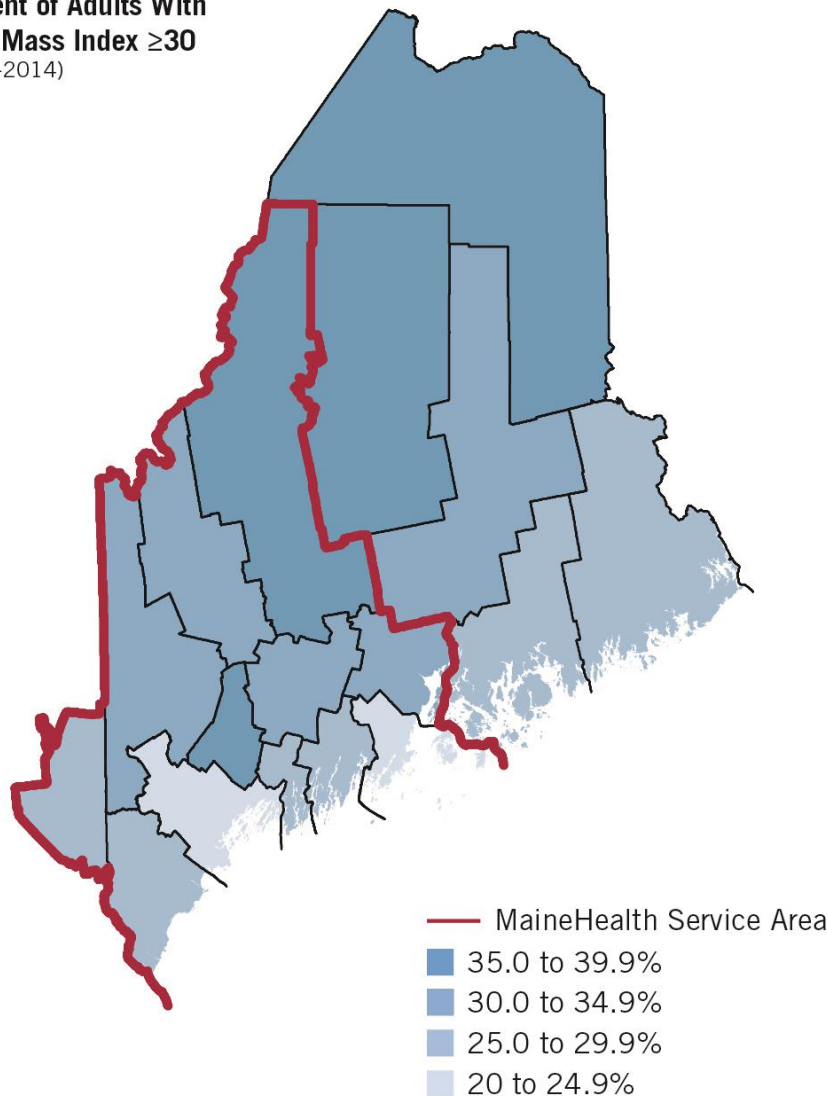


Obesity Prevalence- Adults and High School Students

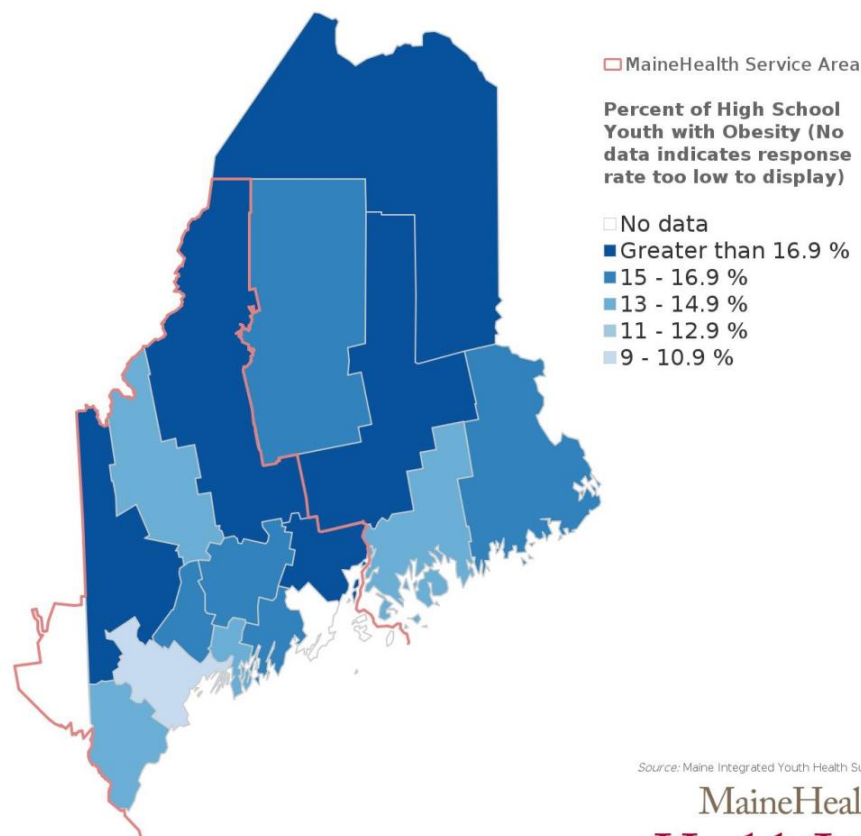
Obesity^x

Figure 10

**Percent of Adults With
Body Mass Index ≥ 30**
(2012-2014)



**Youth Obesity - High School Youth With Obesity
(2015)**



Source: Maine Integrated Youth Health Survey (MIYHS)

MaineHealth
Health Index

MaineHealth

Questions and
comments?

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