

CANCER IN WYOMING

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Wyoming Department of Health



Wyoming
Department
of Health

Leading Causes of Death in WY

Cause of Death	2015	2016
Heart Disease	1,020	1,038
Cancer	924	955
Accidents/Injuries	393	362
Chronic Respiratory Disease	365	327
Stroke	195	206
Alzheimer's	151	136
Diabetes	134	112
Chronic Disease	59%	60%
Cancer	19%	20%



WY 2015 Cancer Incidence:

Prostate = 352

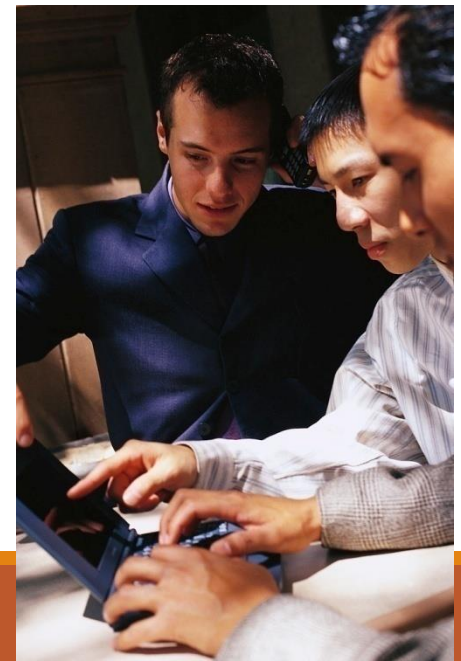
Breast = 346 (*340 Female, 6 Male*)

Lung = 276 (*145 Female, 131 Male*)

Colorectal = 196

Melanoma = 148

TOTAL = 2,577

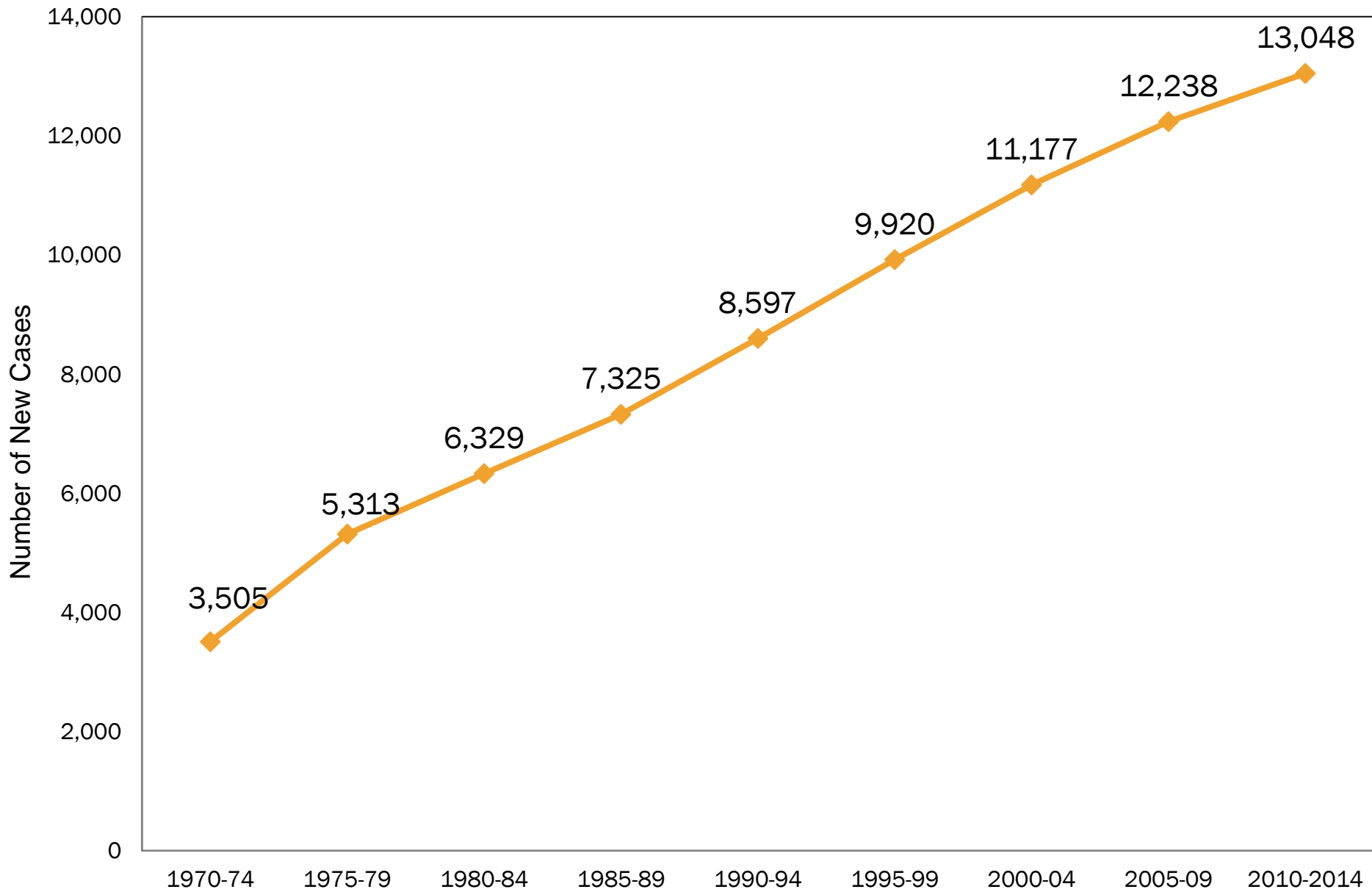


WY 2015 Cancer Mortality:

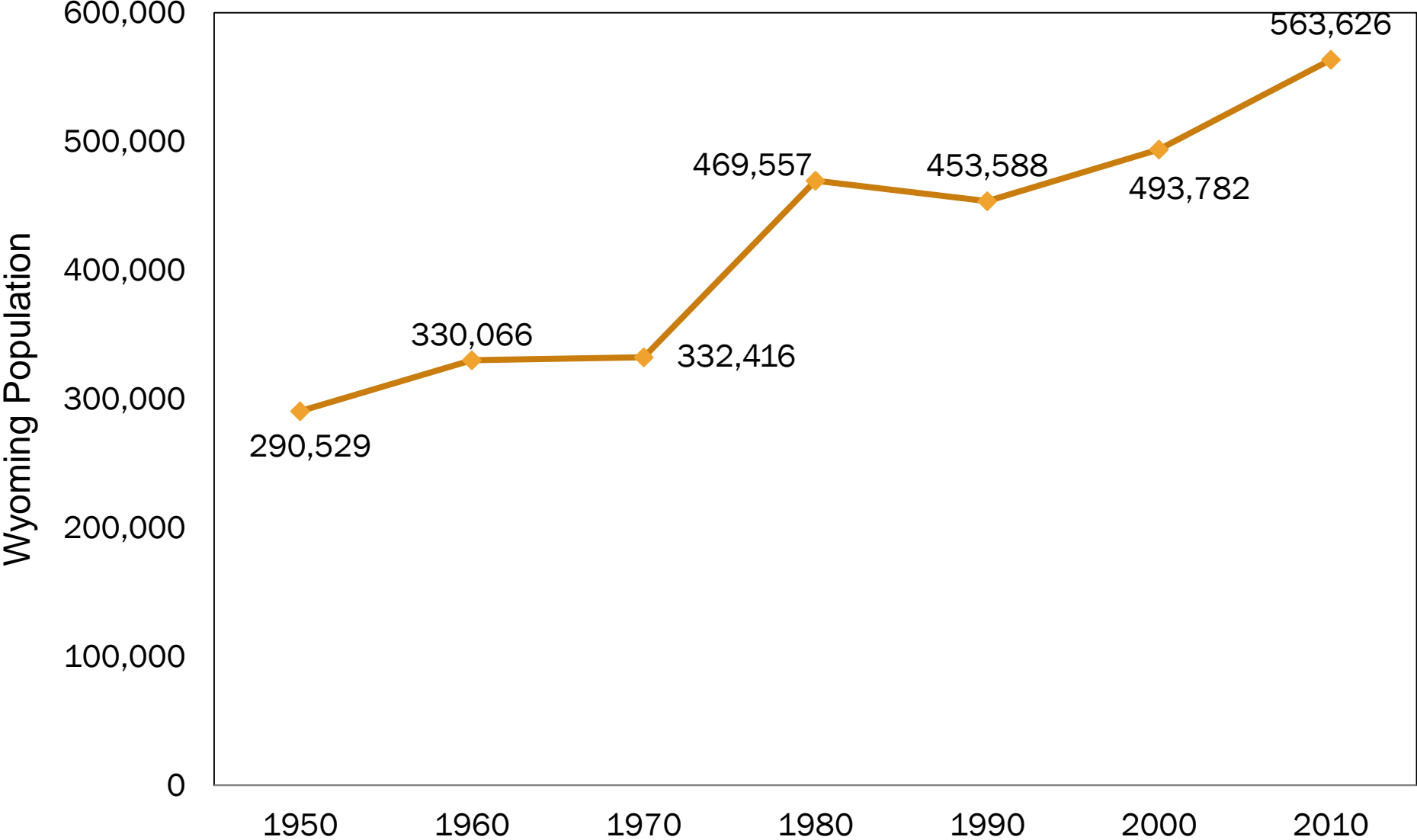
- Lung = 213 (*107 Female, 106 Male*)
- Colorectal = 90
- Ill-Defined = 72
- Breast = 71
- Pancreas = 67

TOTAL = 924

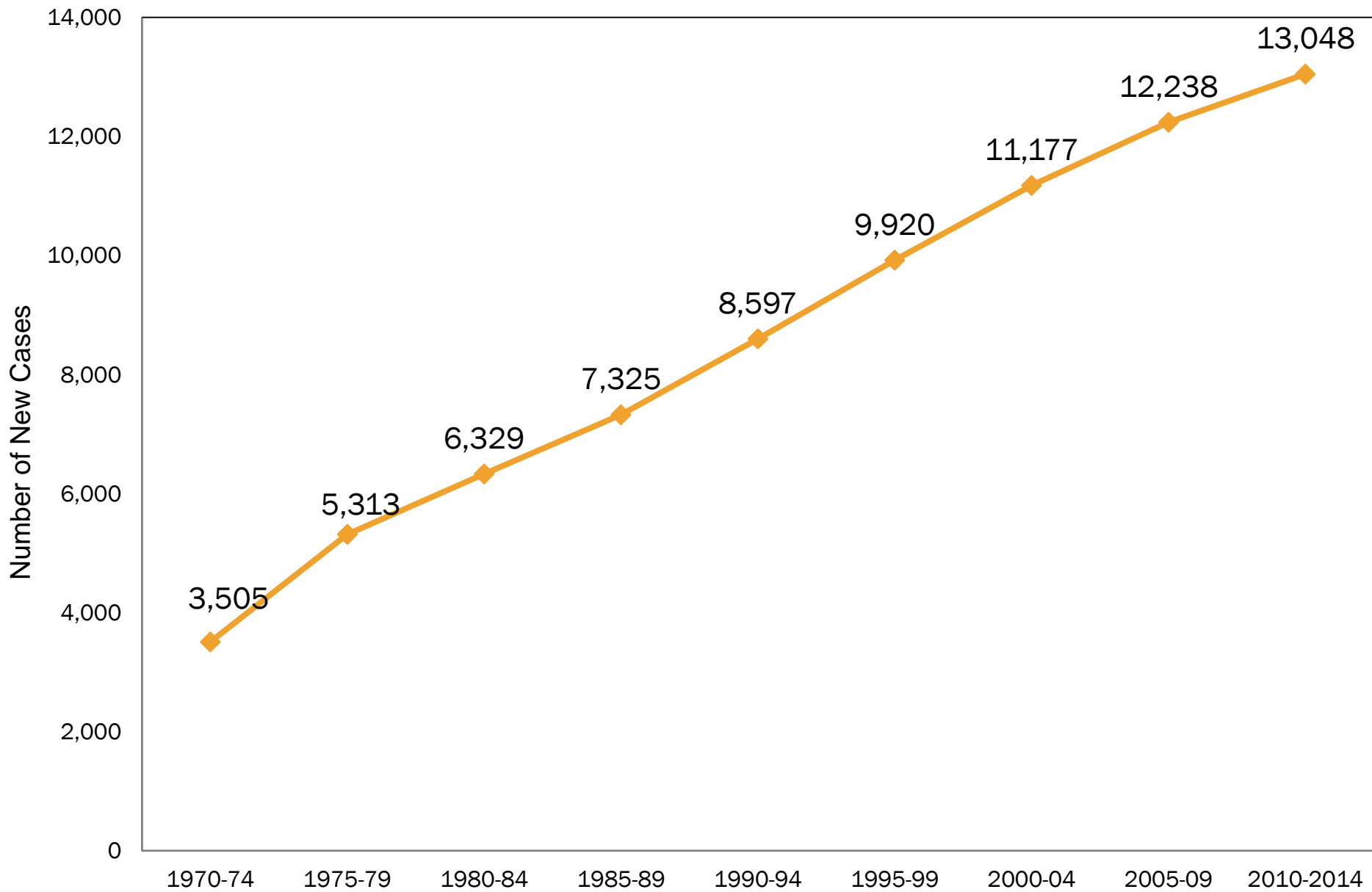
INCIDENCE COUNT - ALL CANCER SITES - 5 YEAR PERIODS



WY POPULATION

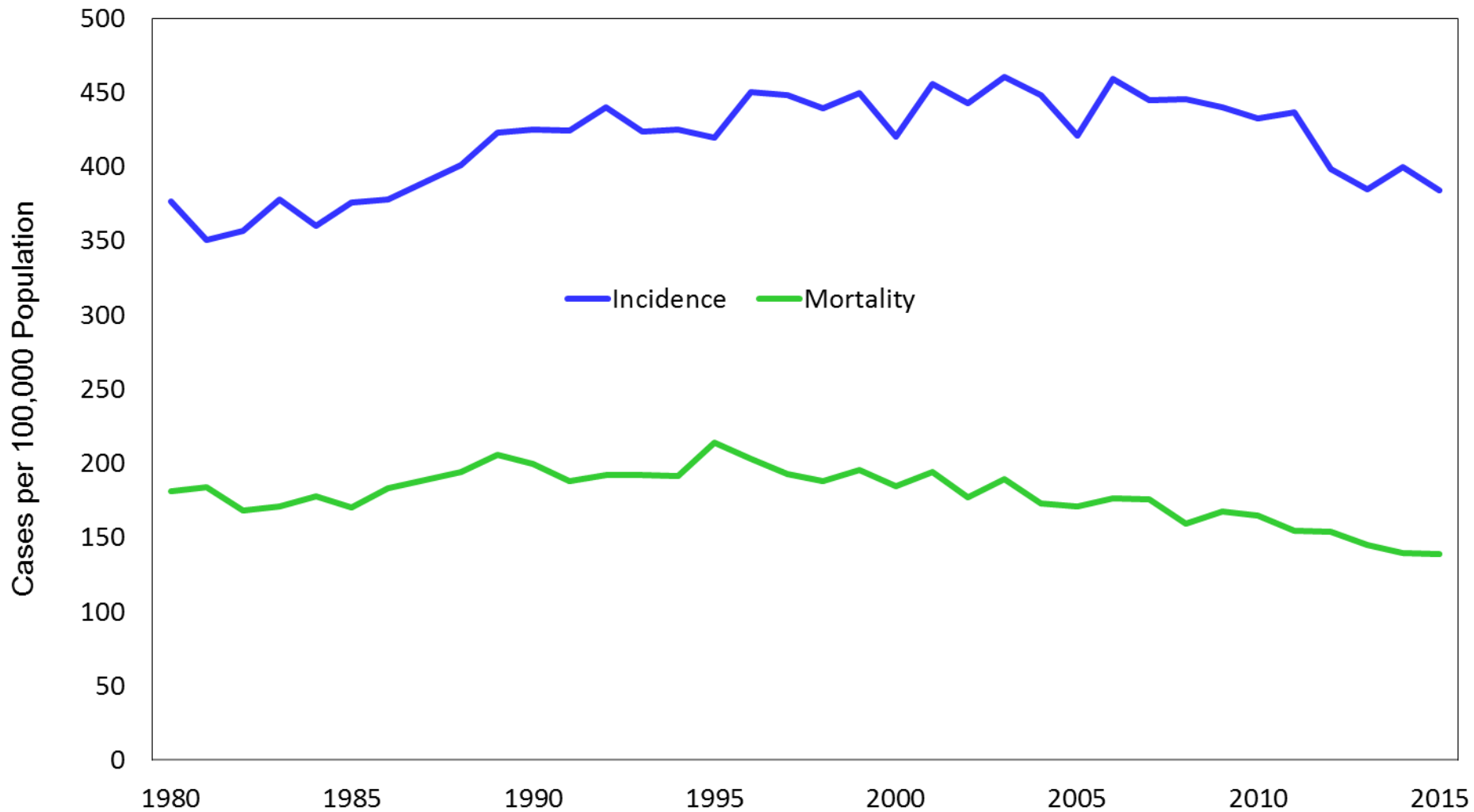


INCIDENCE COUNT - ALL CANCER SITES - 5 YEAR PERIODS



WY CANCER RATES - ALL SITES

Per 100,000 Population

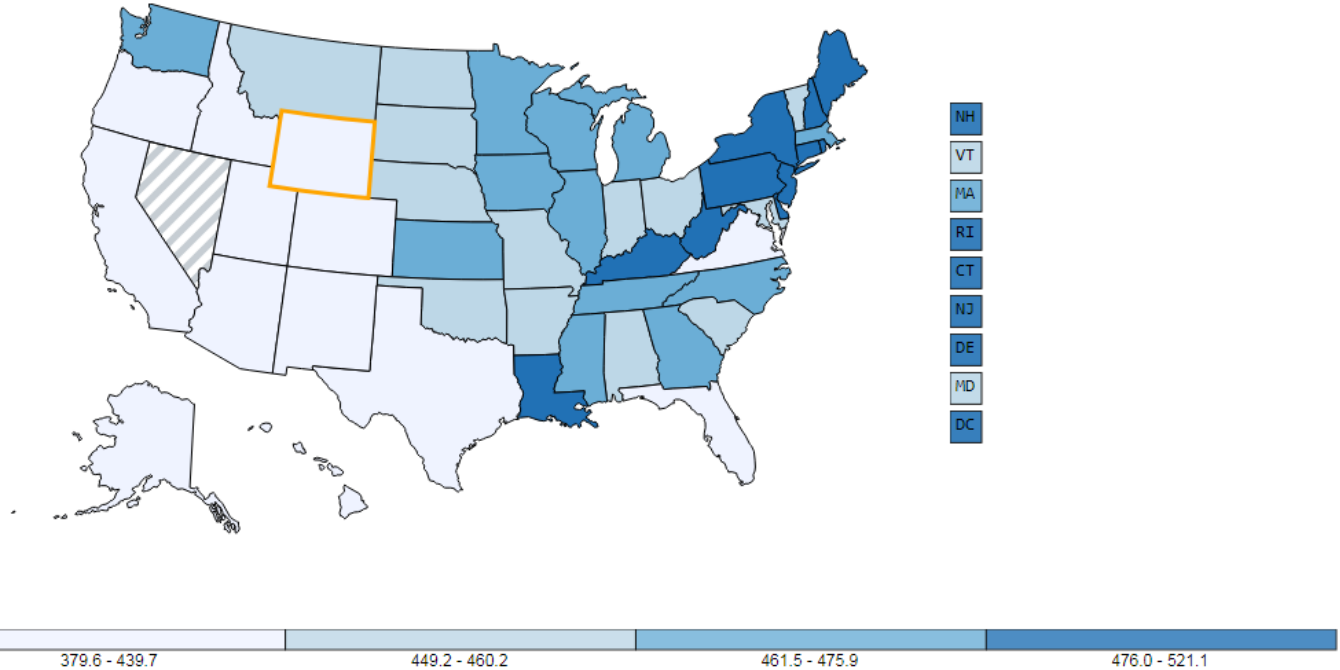


Incidence Rate per 100,000 Population of New Cancers in the United States, 2010-2014

Rate of New Cancers in the United States

All Types of Cancer, All Ages, All Races/Ethnicities, Male and Female
Rate per 100,000 people

[Map](#) [Table](#) [Chart](#) [Export](#)



Wyoming Rate = 410.7 (403.5-418.0)

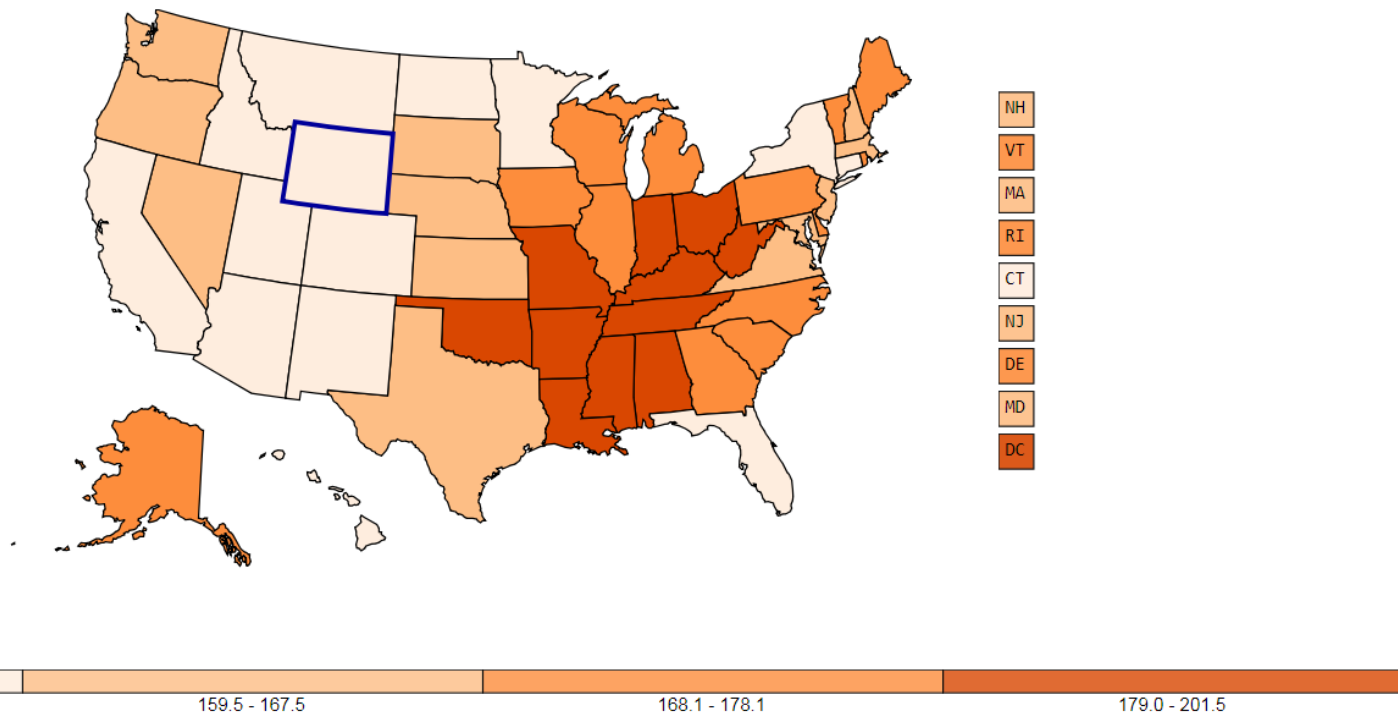
U.S. Rate = 452

Cancer Mortality Rate per 100,000 Population in the United States, 2010-2014

Rate of Cancer Deaths in the United States

All Types of Cancer, All Ages, All Races/Ethnicities, Male and Female
Rate per 100,000 people

Map Table Chart Export

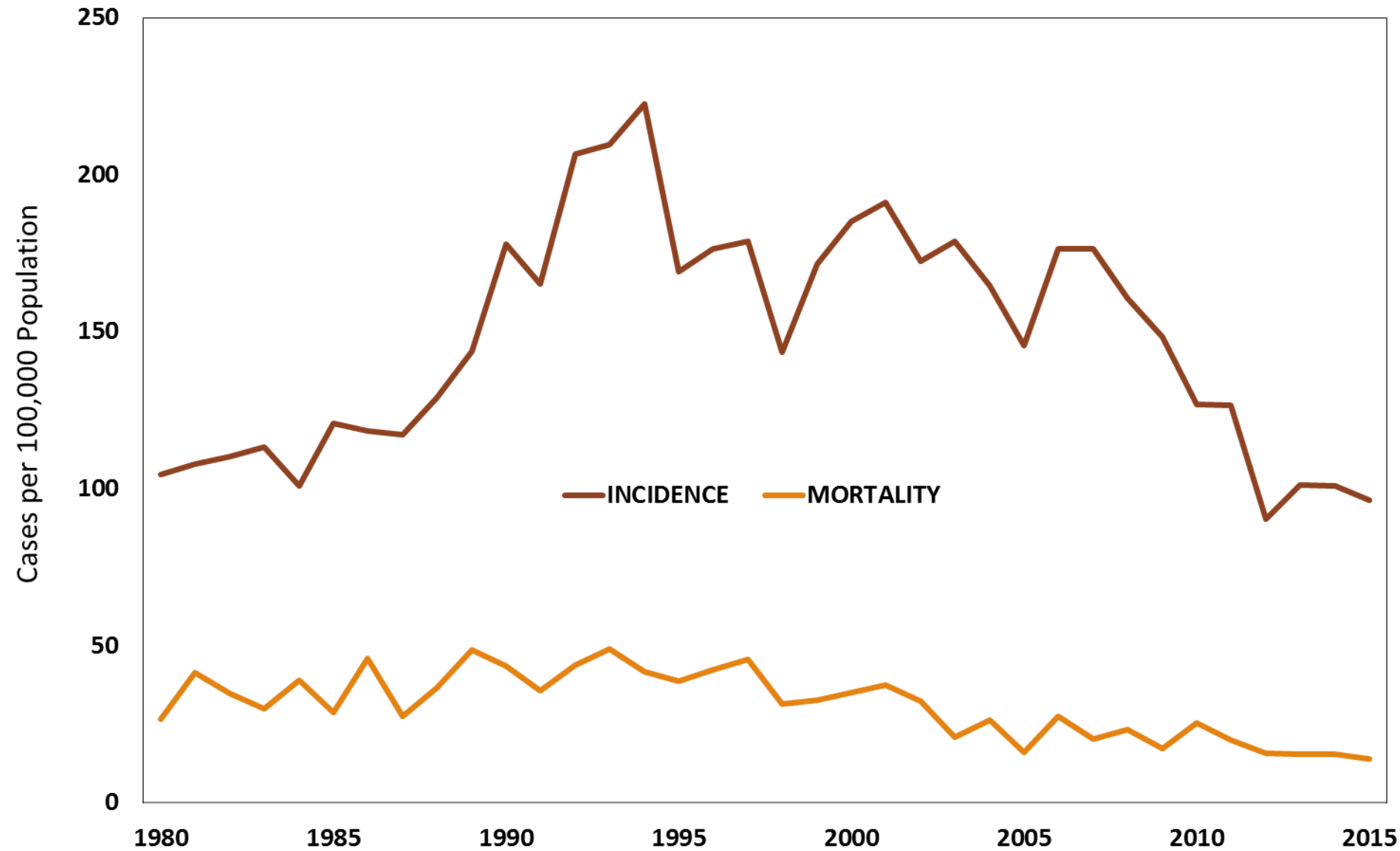


Wyoming Rate = 153.6 (149.2-158.1)

U.S. Rate = 166

WY CANCER RATES - PROSTATE

Per 100,000 Population

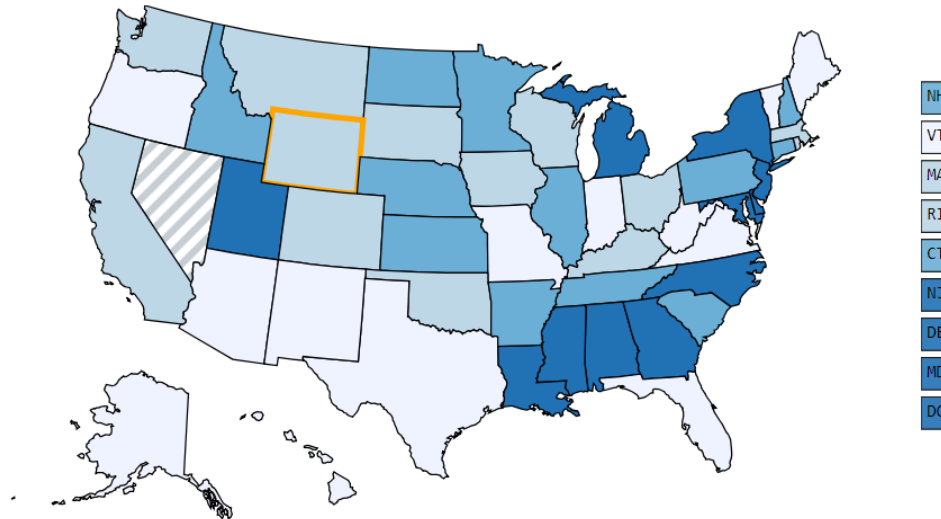


Incidence Rate per 100,000 Population of Prostate Cancer in the United States, 2010-2014

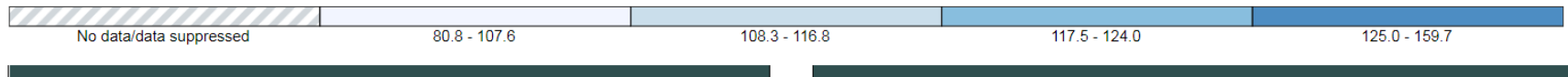
Rate of New Cancers in the United States

Prostate, All Ages, All Races/Ethnicities, Male
Rate per 100,000 men

[Map](#) [Table](#) [Chart](#) [Export](#)



Rate per 100,000 men

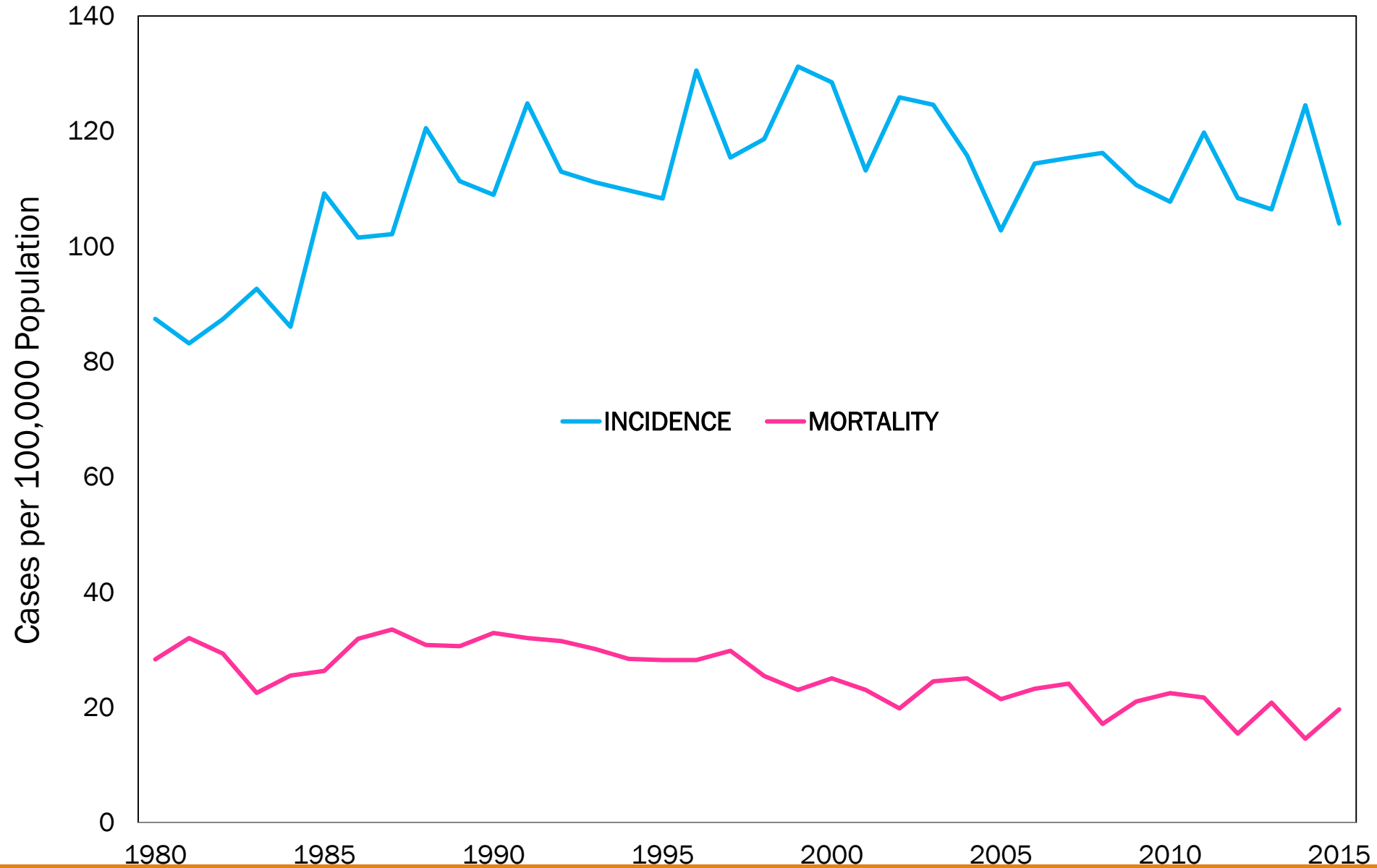


Wyoming Rate = 108.5 (103.4-113.8)

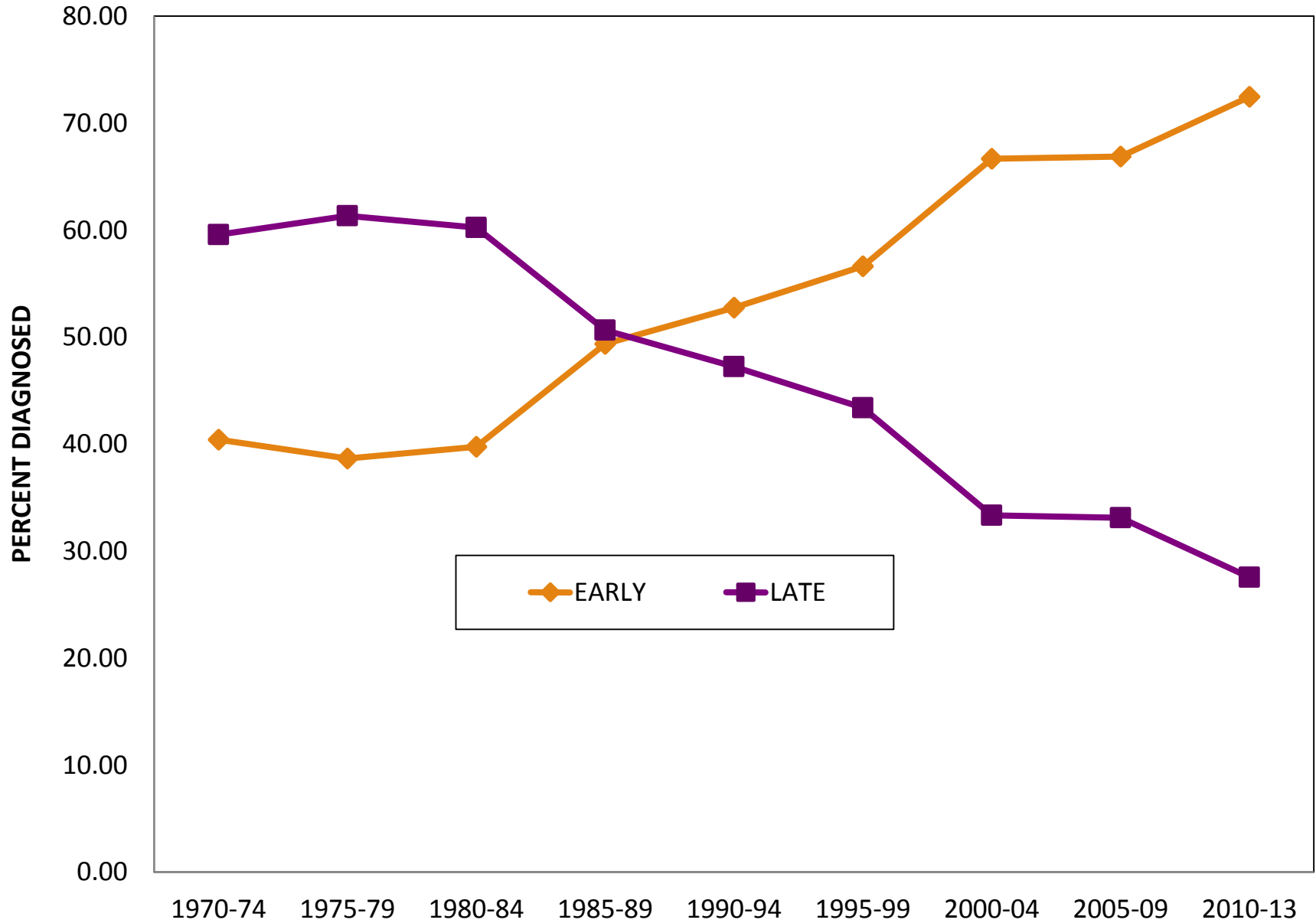
U.S. Rate = 115

WY CANCER RATES – BREAST (FEMALE)

Per 100,000 Population



WY BREAST CANCER DIAGNOSIS – EARLY v. LATE

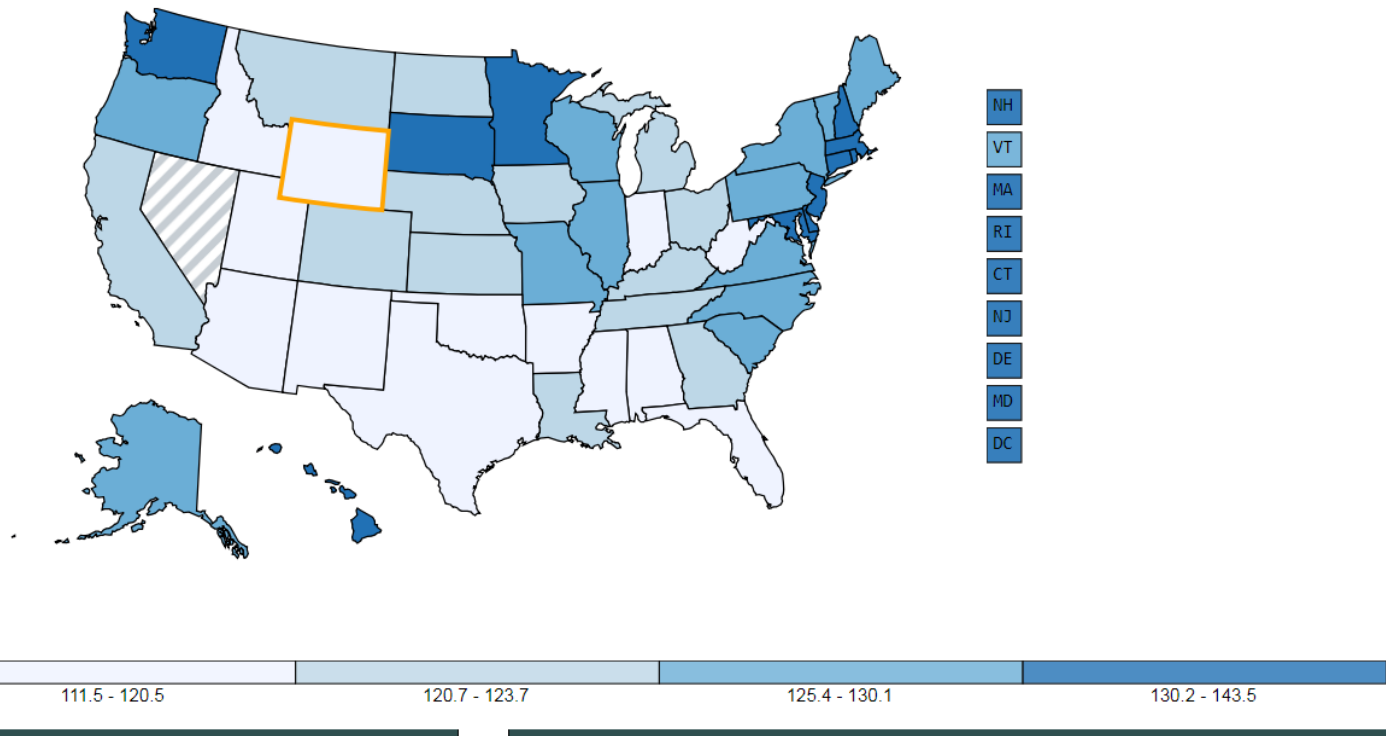


Incidence Rate per 100,000 Population of Female Breast Cancer in the United States, 2010-2014

Rate of New Cancers in the United States

Female Breast, All Ages, All Races/Ethnicities, Female
Rate per 100,000 women

Map Table Chart Export

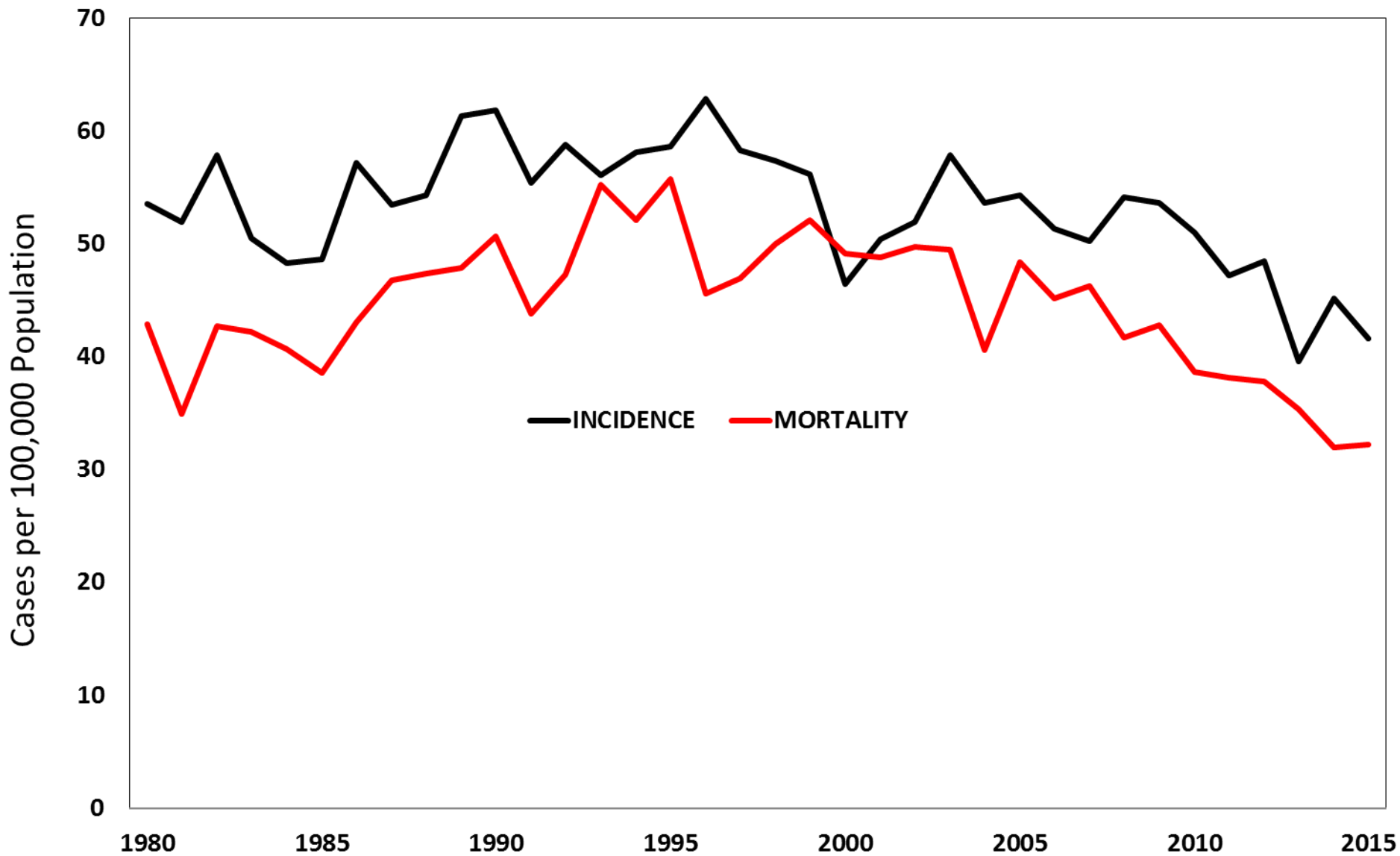


Wyoming Rate = 113.5 (108.2-119.0)

U.S. Rate = 124

WY CANCER RATES - LUNG

Per 100,000 Population

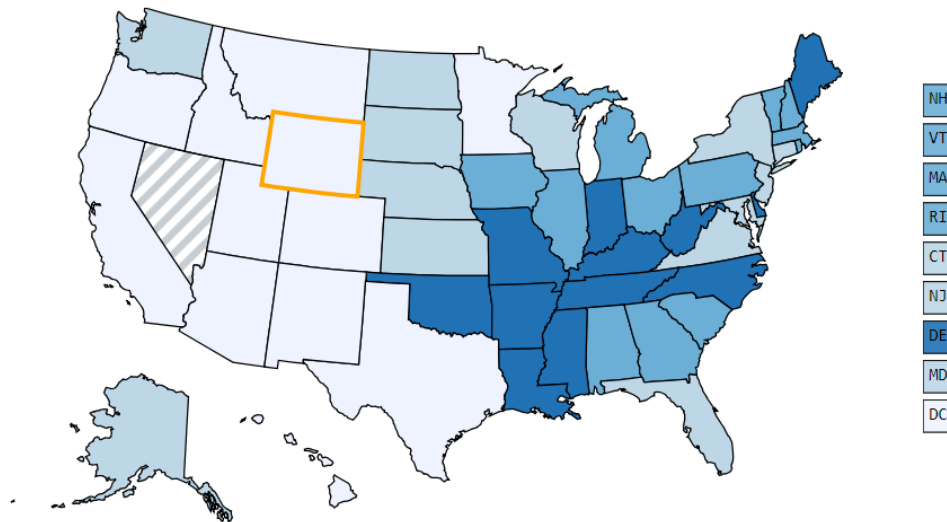


Incidence Rate per 100,000 Population of Lung Cancer in the United States, 2010-2014

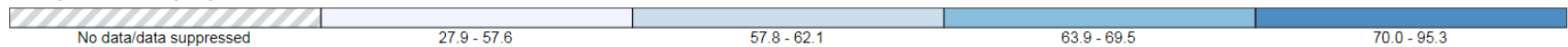
Rate of New Cancers in the United States

Lung and Bronchus, All Ages, All Races/Ethnicities, Male and Female
Rate per 100,000 people

Map Table Chart Export



Rate per 100,000 people

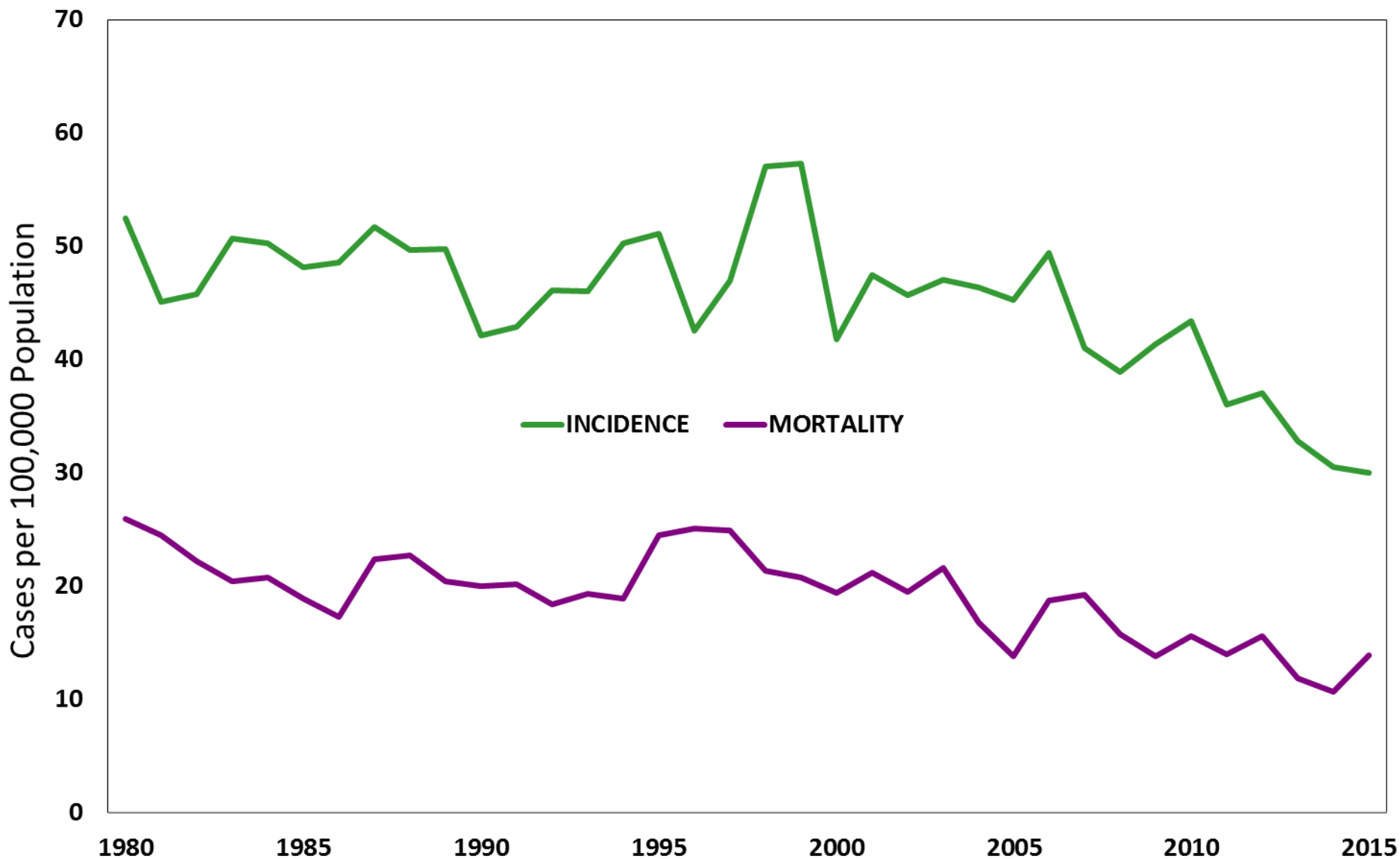


Wyoming Rate = 46.2 (43.8-48.7)

U.S. Rate = 61

WY CANCER RATES - COLORECTAL

Per 100,000 Population

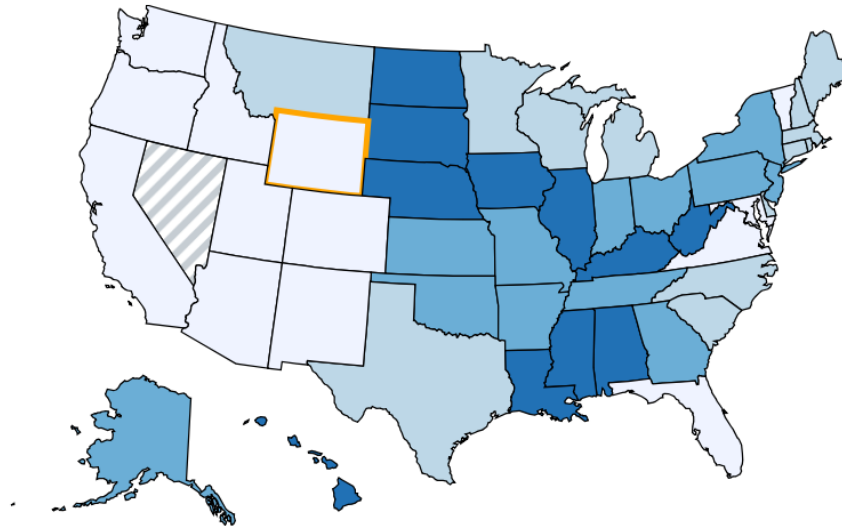


Incidence Rate per 100,000 Population of Colorectal Cancer in the United States, 2010-2014

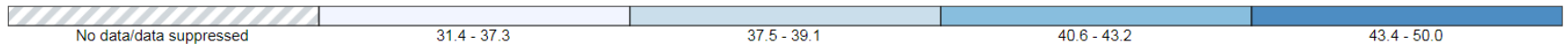
Rate of New Cancers in the United States

Colon and Rectum, All Ages, All Races/Ethnicities, Male and Female
Rate per 100,000 people

[Map](#) [Table](#) [Chart](#) [Export](#)



Rate per 100,000 people

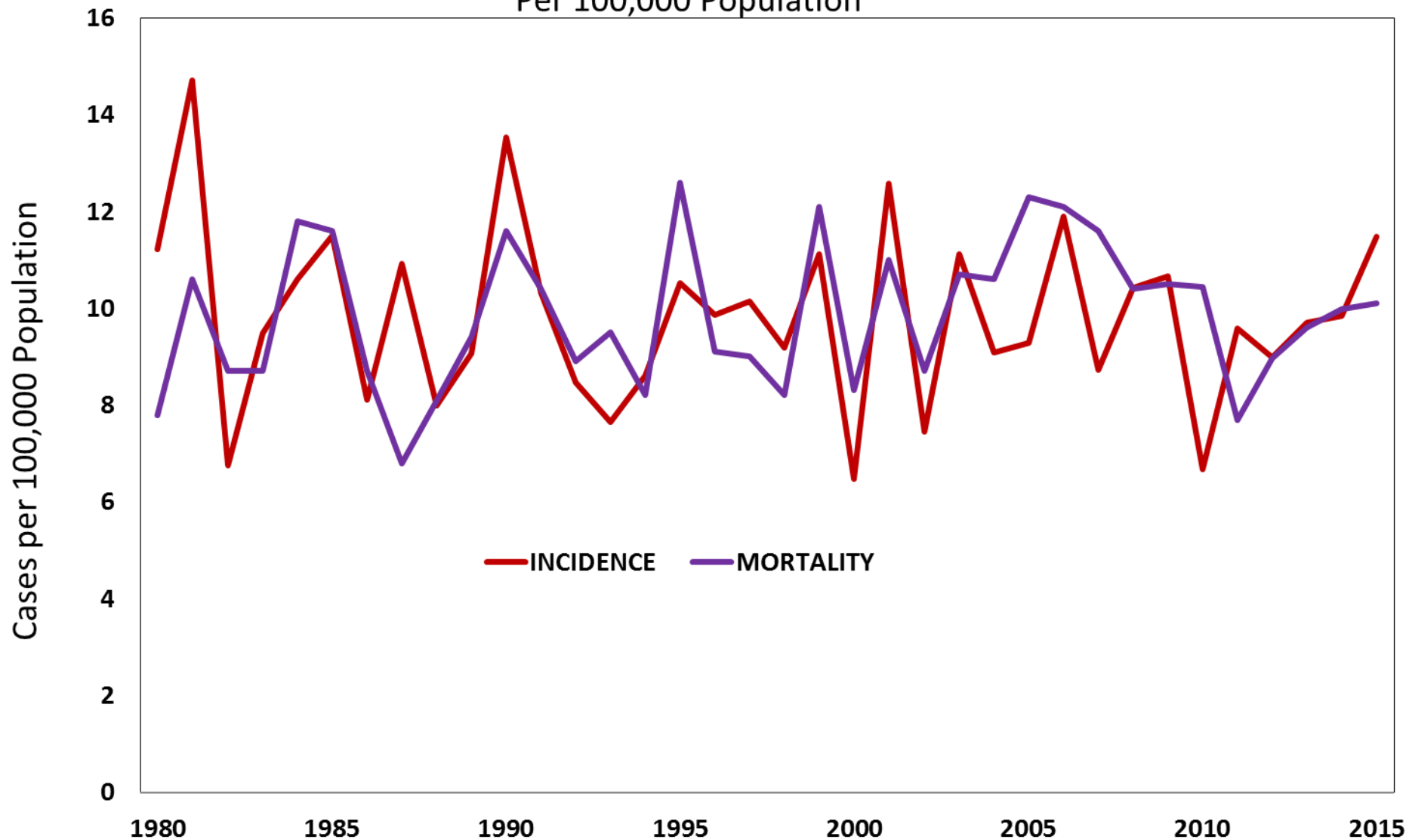


Wyoming Rate = 35.8 (33.7-38.1)

U.S. Rate = 40

WY CANCER RATES - PANCREAS



Per 100,000 Population

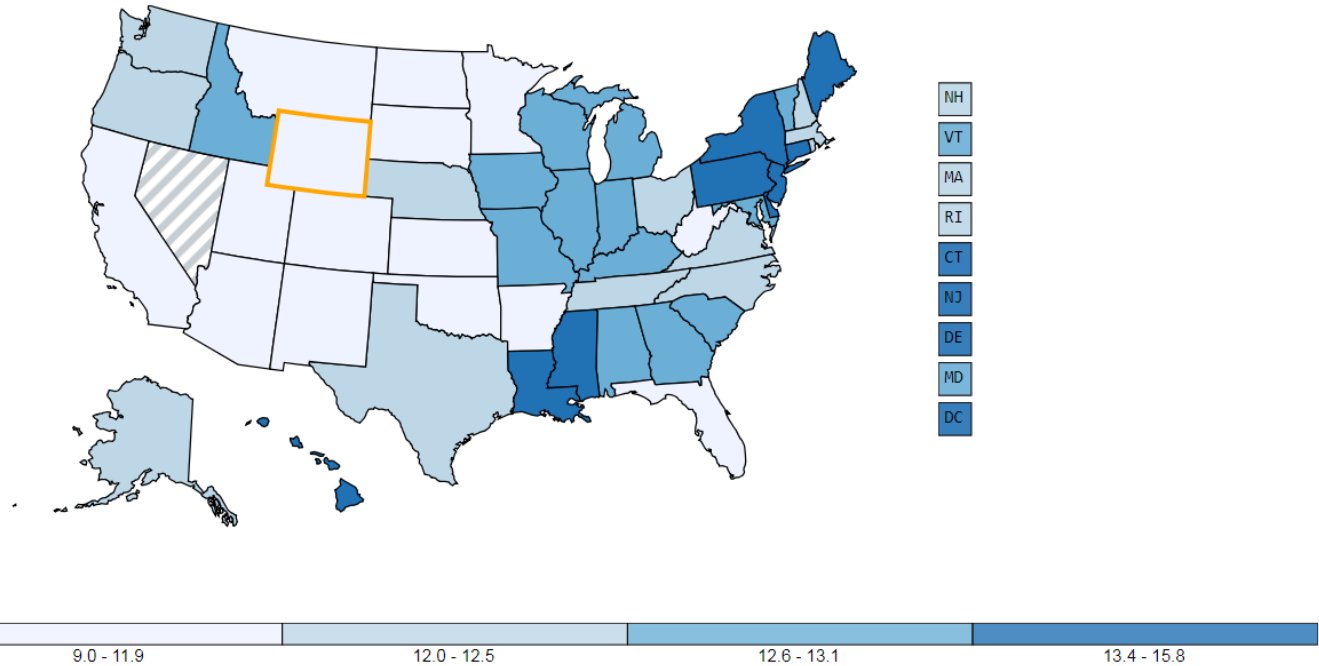


Incidence Rate per 100,000 Population of Pancreatic Cancer in the United States, 2010-2014

Rate of New Cancers in the United States

Pancreas, All Ages, All Races/Ethnicities, Male and Female
Rate per 100,000 people

 Map  Table  Chart  Export

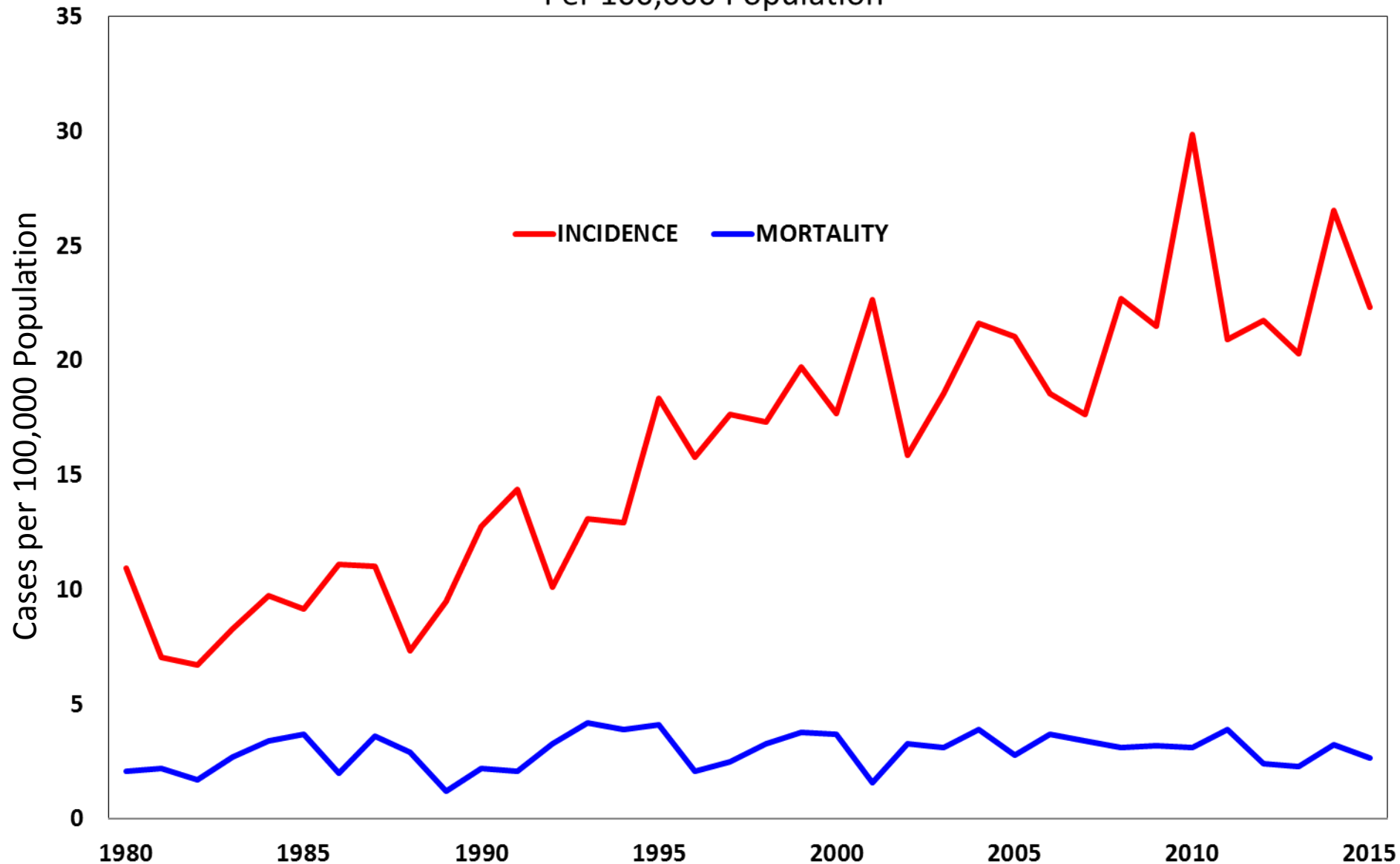


Wyoming Rate = 9.0 (7.9-10.1)

U.S. Rate = 13

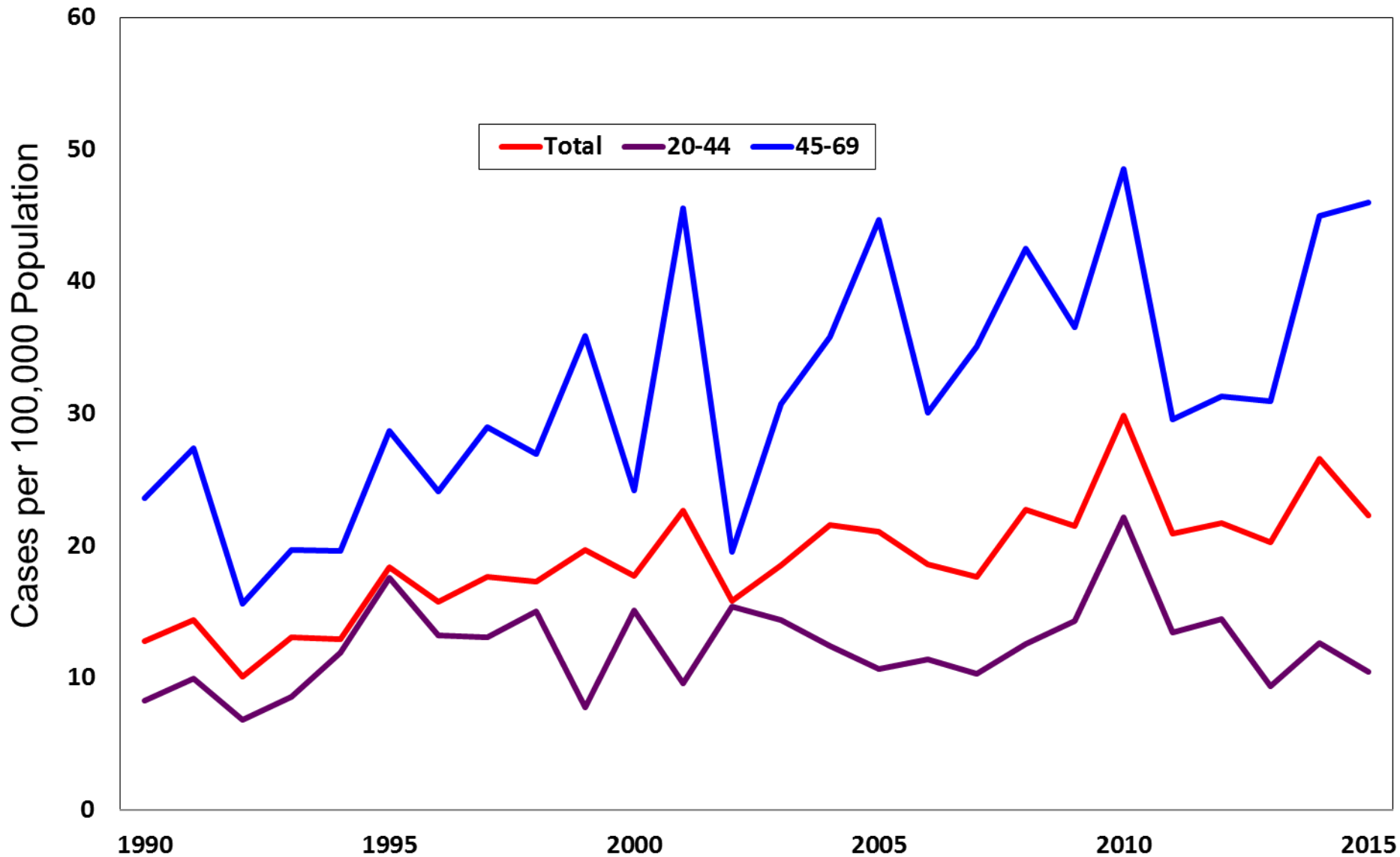
WY CANCER RATES - MELANOMA

Per 100,000 Population



WY CANCER INCIDENCE RATE - MELANOMA

Per 100,000 Population

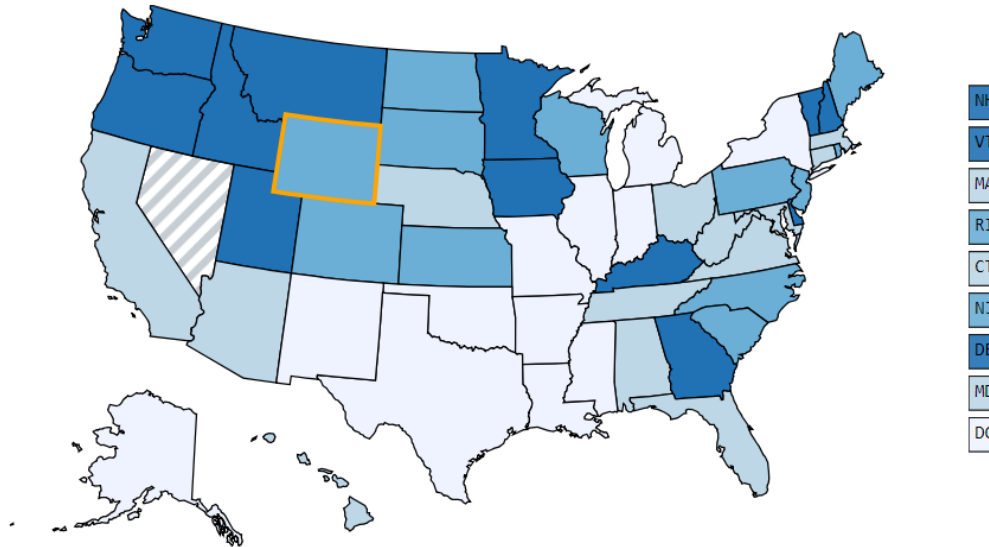


Incidence Rate per 100,000 Population of Melanoma in the United States, 2010-2014

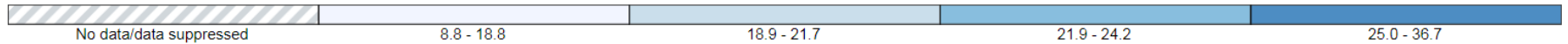
Rate of New Cancers in the United States

Melanomas of the Skin, All Ages, All Races/Ethnicities, Male and Female
Rate per 100,000 people

Map Table Chart Export



Rate per 100,000 people

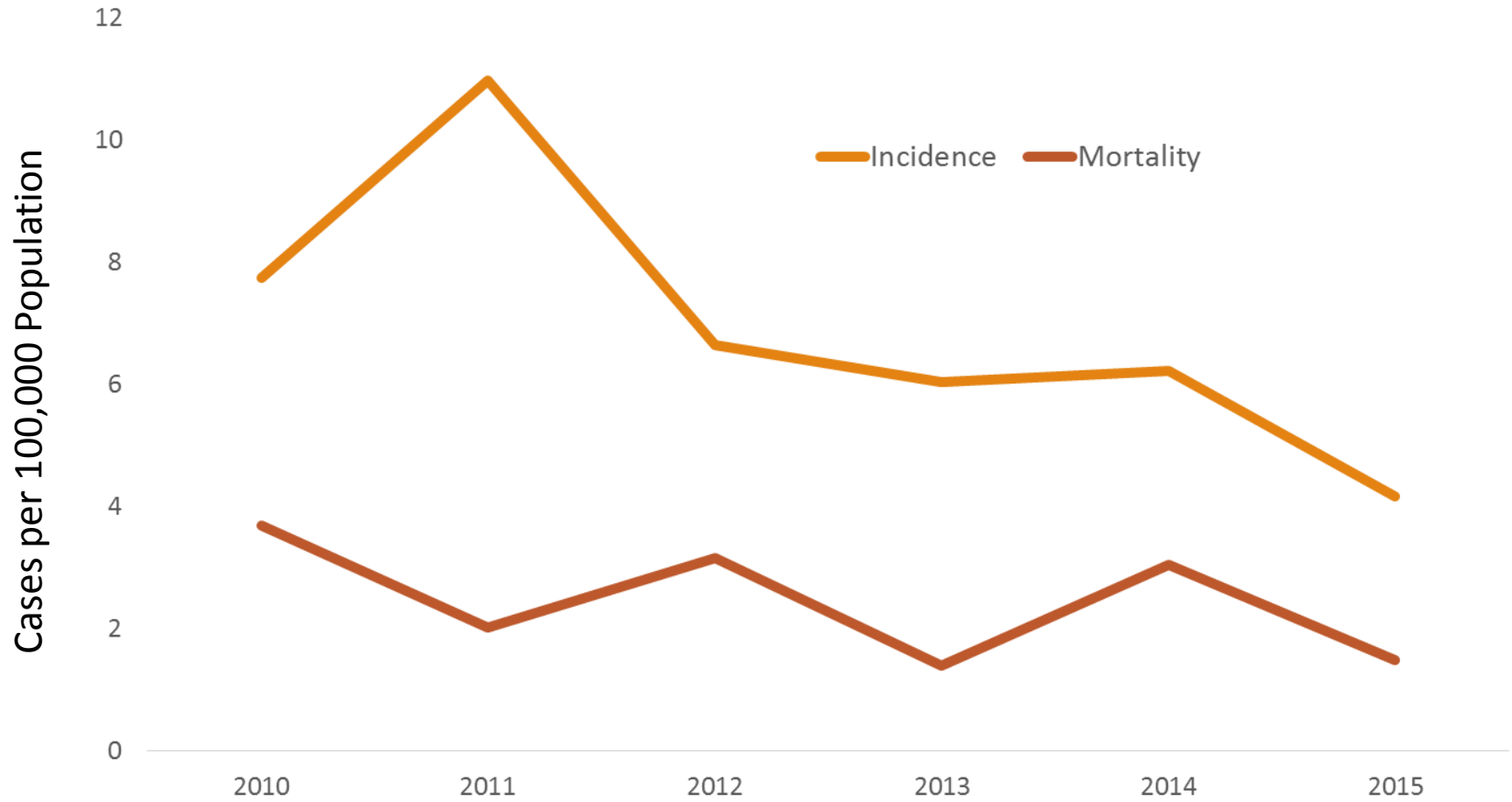


Wyoming Rate = 23.9 (22.2-25.8)

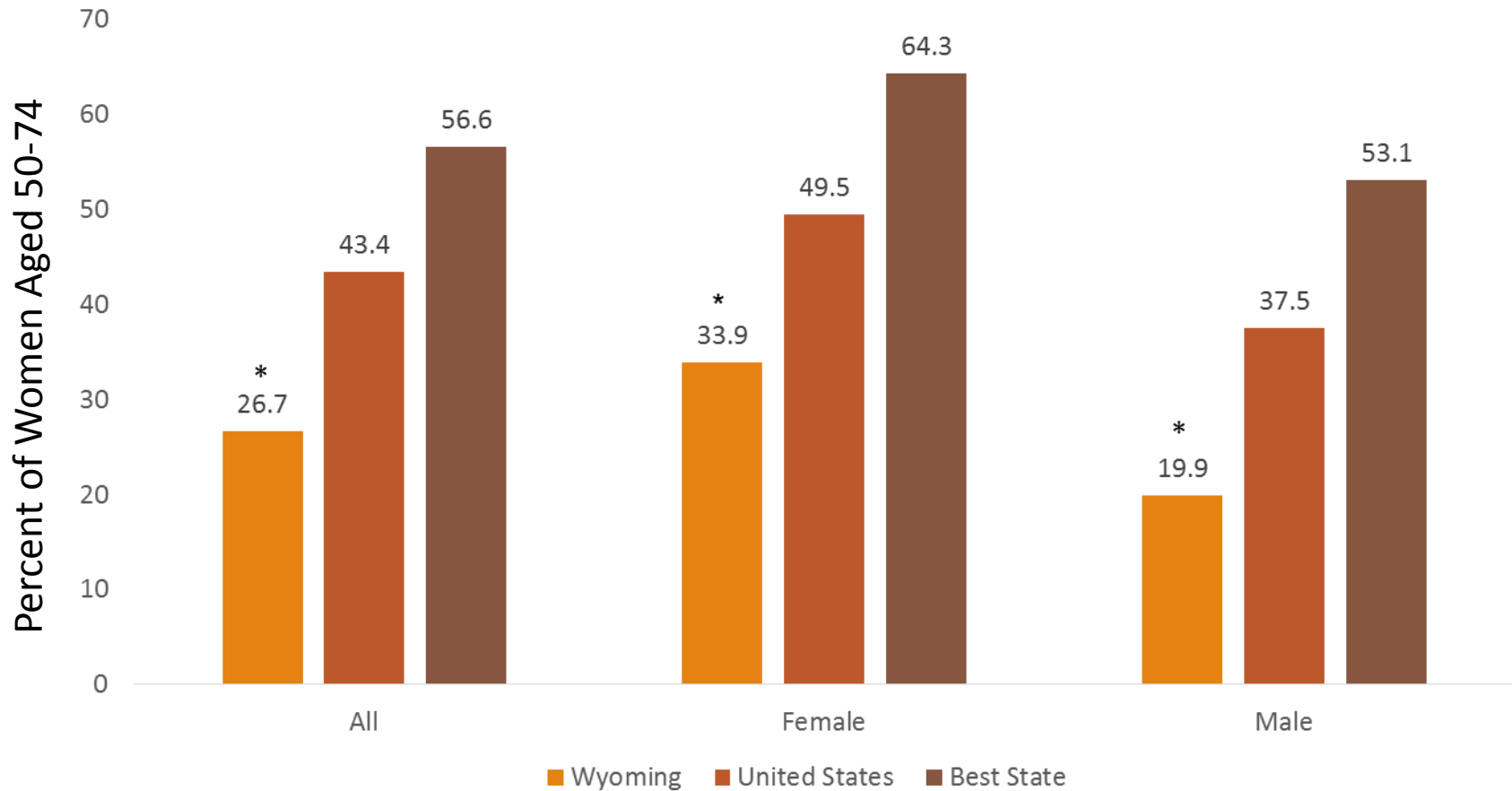
U.S. Rate = 21

WY CANCER RATES – CERVICAL CANCER

Per 100,000 Population



Percent of Adolescents Aged 13-17 Who Are Up-to-Date for HPV Vaccination — Wyoming, U.S., and Best State, 2016 (National Immunization Survey)



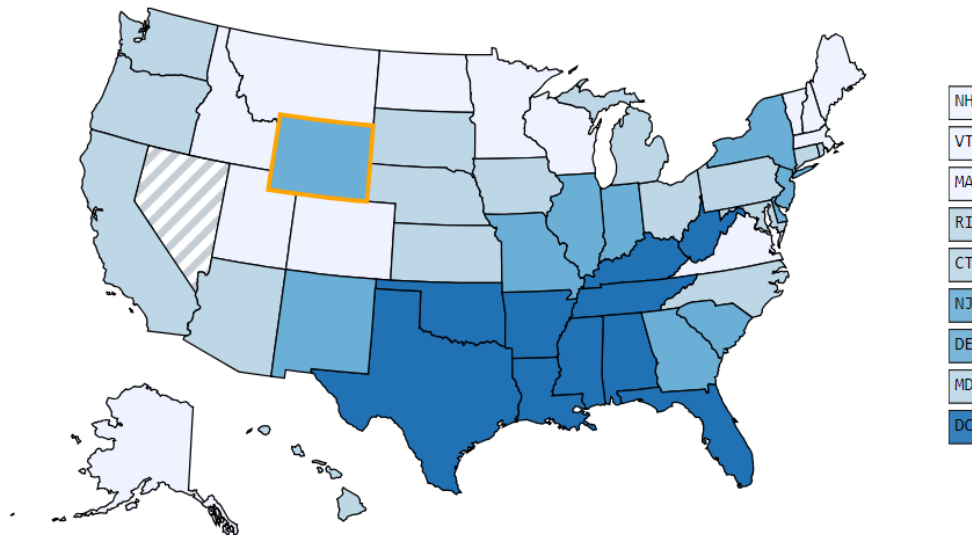
* Indicates Wyoming is different from the U.S.

Incidence Rate per 100,000 Population of Cervical Cancer in the United States, 2010-2014

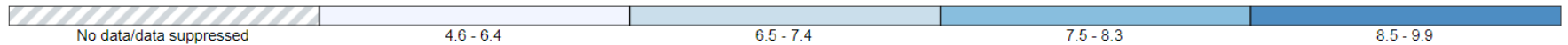
Rate of New Cancers in the United States

Cervix, All Ages, All Races/Ethnicities, Female
Rate per 100,000 women

[Map](#) [Table](#) [Chart](#) [Export](#)



Rate per 100,000 women



Wyoming Rate = 7.5 (6.1-9.1)

U.S. Rate = 8

Relative Survival by Cancer Type: Wyoming, 2007-2015 (All Ages Combined)

Relative Survival	12 months	24 months	36 months	48 months	60 months
All Sites	81.20%	73.90%	69.50%	65.90%	62.70%
Bladder w/in situ	88.20%	80.00%	76.50%	71.50%	68.00%
Brain/CNS	56.30%	39.40%	34.80%	28.40%	23.40%
Breast (Female)	97.30%	94.70%	90.70%	87.70%	85.00%
Cervical (Malignant only)	86.00%	77.10%	70.80%	63.80%	60.90%
Colorectal	81.60%	70.80%	64.60%	58.90%	55.30%
Kidney	86.70%	80.20%	74.10%	69.90%	63.90%
Leukemia	74.40%	68.10%	60.80%	55.80%	51.90%
Lung	40.50%	24.40%	18.40%	15.00%	12.00%
Melanoma	98.30%	95.70%	94.20%	91.80%	90.70%
Non Hodgkin	82.10%	76.00%	74.40%	69.30%	64.50%
Oral Cavity	86.60%	76.60%	68.20%	63.20%	58.10%
Ovary	78.20%	64.50%	50.60%	41.90%	36.20%
Pancreas	29.30%	15.60%	10.00%	6.20%	6.20%
Prostate	99.30%	98.40%	97.40%	96.30%	94.70%
Thyroid	97.90%	97.60%	95.90%	95.90%	92.30%
Uterine	93.50%	88.00%	83.00%	80.10%	74.60%

Relative Survival by Cancer Type: Wyoming, 2007-2015 (All Ages Combined)

Relative Survival	Wyoming 60 months 2007-2015	United States 60 months 2001-2013
All Sites	62.70%	66.0%
Bladder w/in situ	68.00%	75.6%
Brain/CNS	23.40%	32.3%
Breast (Female)	85.00%	88.9%
Cervical (Malignant only)	60.90%	67.8%
Colorectal	55.30%	63.8%
Kidney	63.90%	71.2%
Leukemia	51.90%	53.9%
Lung	12.00%	18.7%
Melanoma	90.70%	89.5%
Non Hodgkin	64.50%	67.7%
Oral Cavity	58.10%	60.1%
Ovary	36.20%	45.8%
Pancreas	6.20%	8.4%
Prostate	94.70%	97.8%
Thyroid	92.30%	96.8%
Uterine	74.60%	80.5%

COSTS - WY

	INPATIENT		OUT PATIENT	
	# Discharges	Cost	# Discharges	Cost
HEART DISEASE	11,776	\$456,217,985.19	12,136	\$74,980,663.36
CANCER	2,186	\$84,880,548.68	1,577	\$8,641,160.30
COPD	5,926	\$206,450,855.54	5,748	\$29,495,289.47
DIABETES	7,523	\$275,661,367.48	11,690	\$56,129,365.93
STROKE	1,056	\$39,964,915.54	639	\$6,032,500.69
TOTAL	28,467	\$1,063,175,672.43	31,790	\$175,878,979.75

Risk Factors

Several risk factors associated with Cancer

- **Physical Activity (too little)**
- **Poor Nutrition**
- **Smoking**
- **Age**





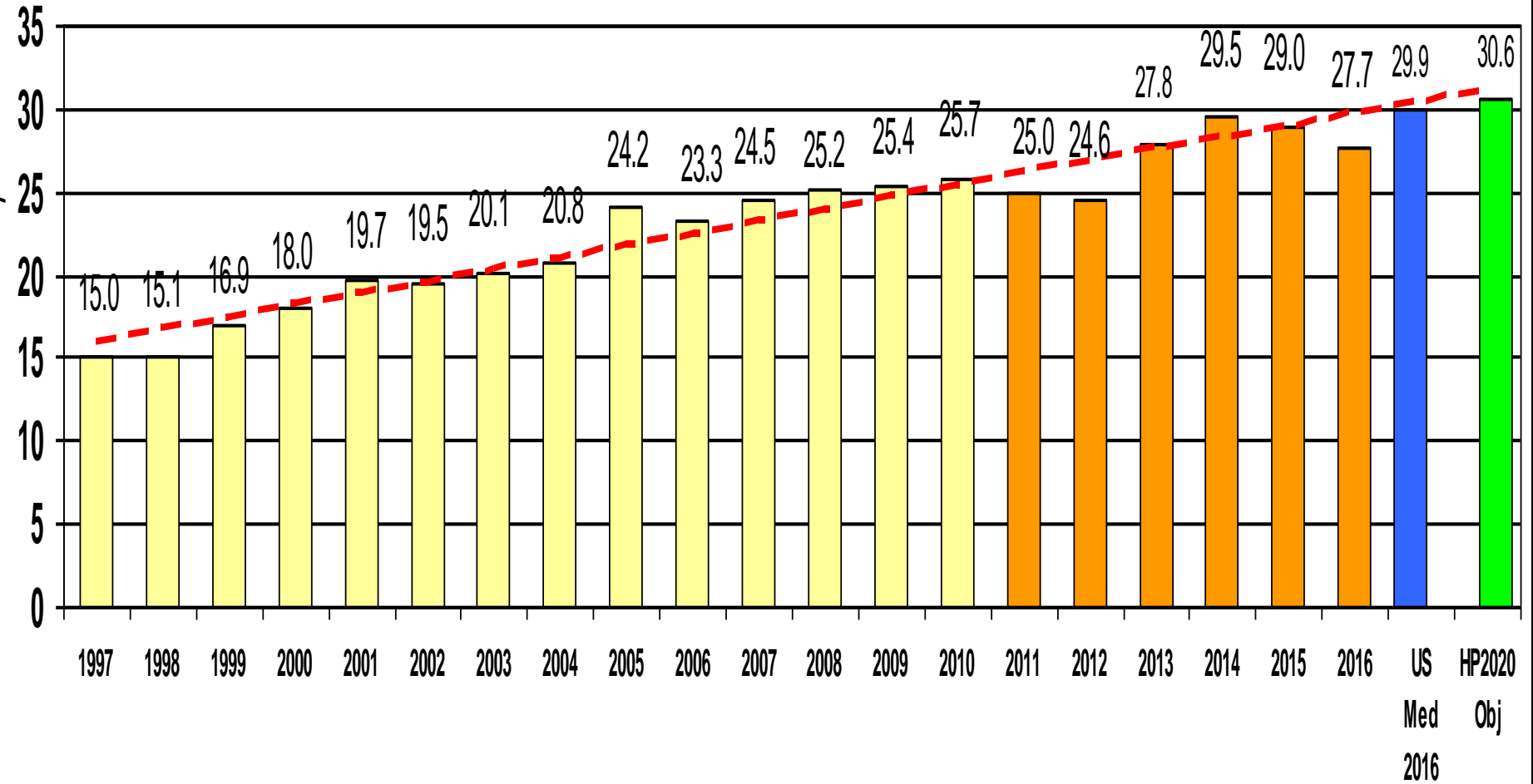
Mom said
Go play outside

the main difference between
Europe and USA



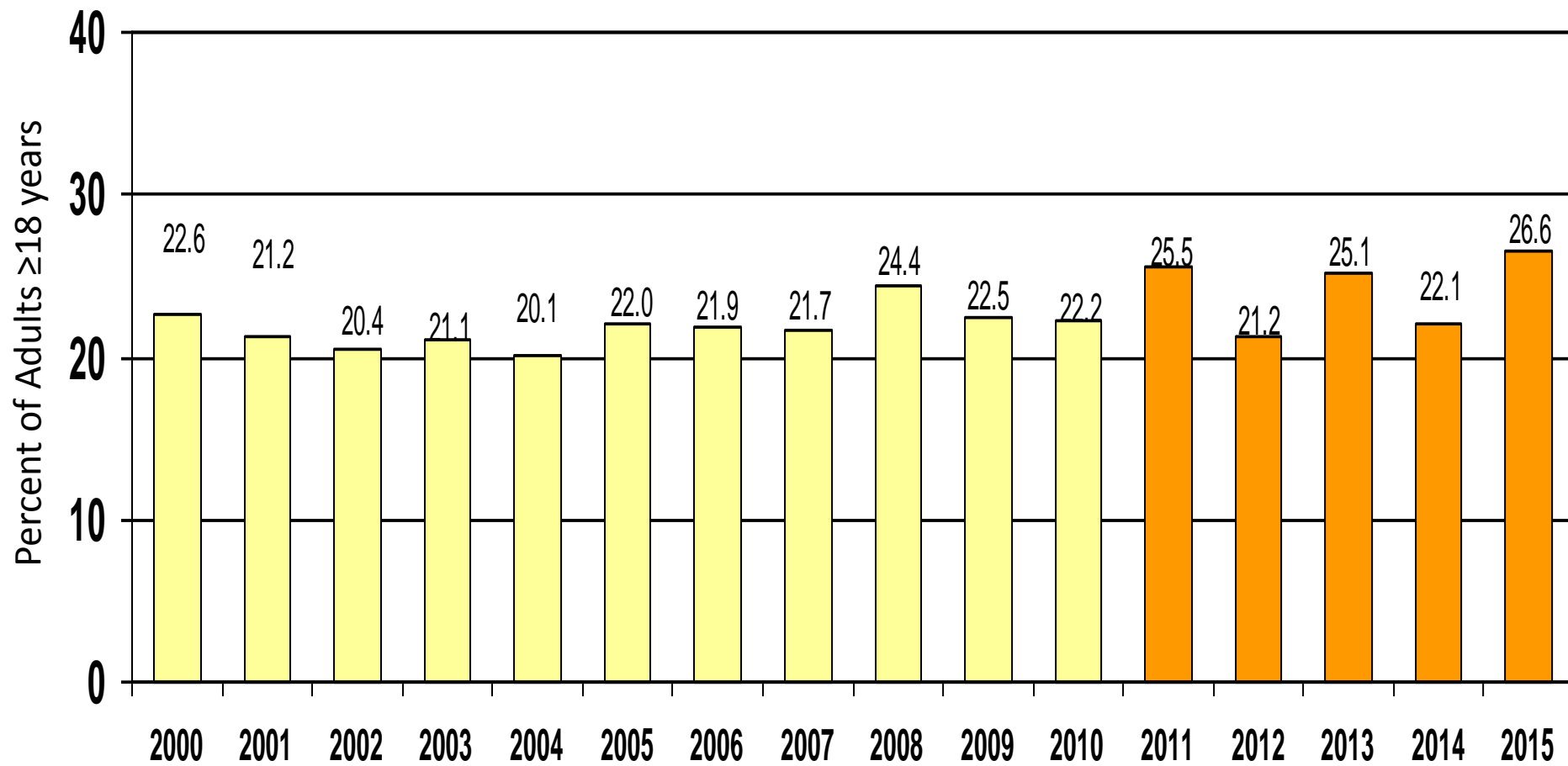
Obesity by Year, WY BRFSS

Percent



No Leisure Time Physical Activity by Year, WY BRFSS

Percent

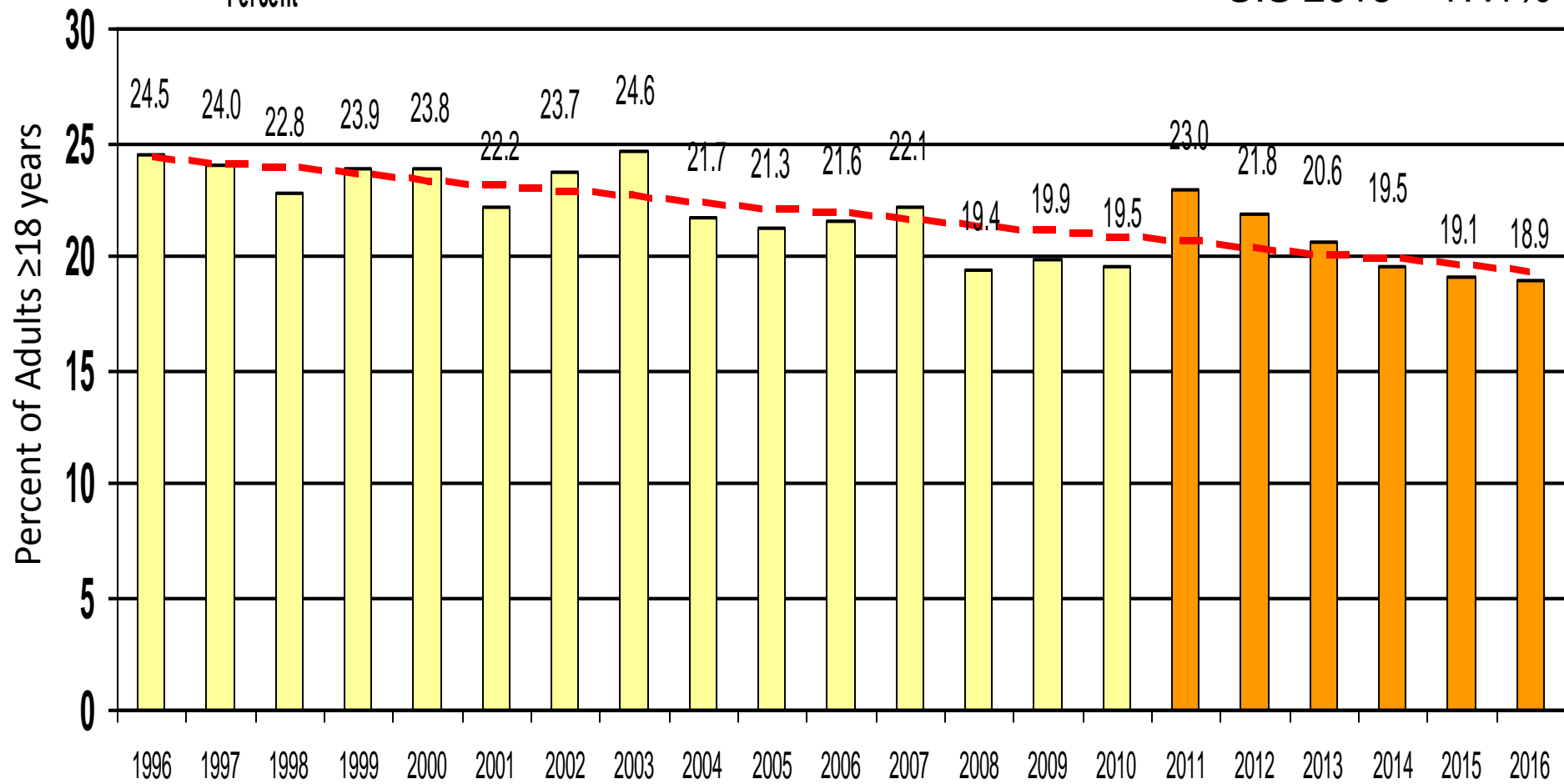




Current Smoking by Year, WY BRFSS

Percent

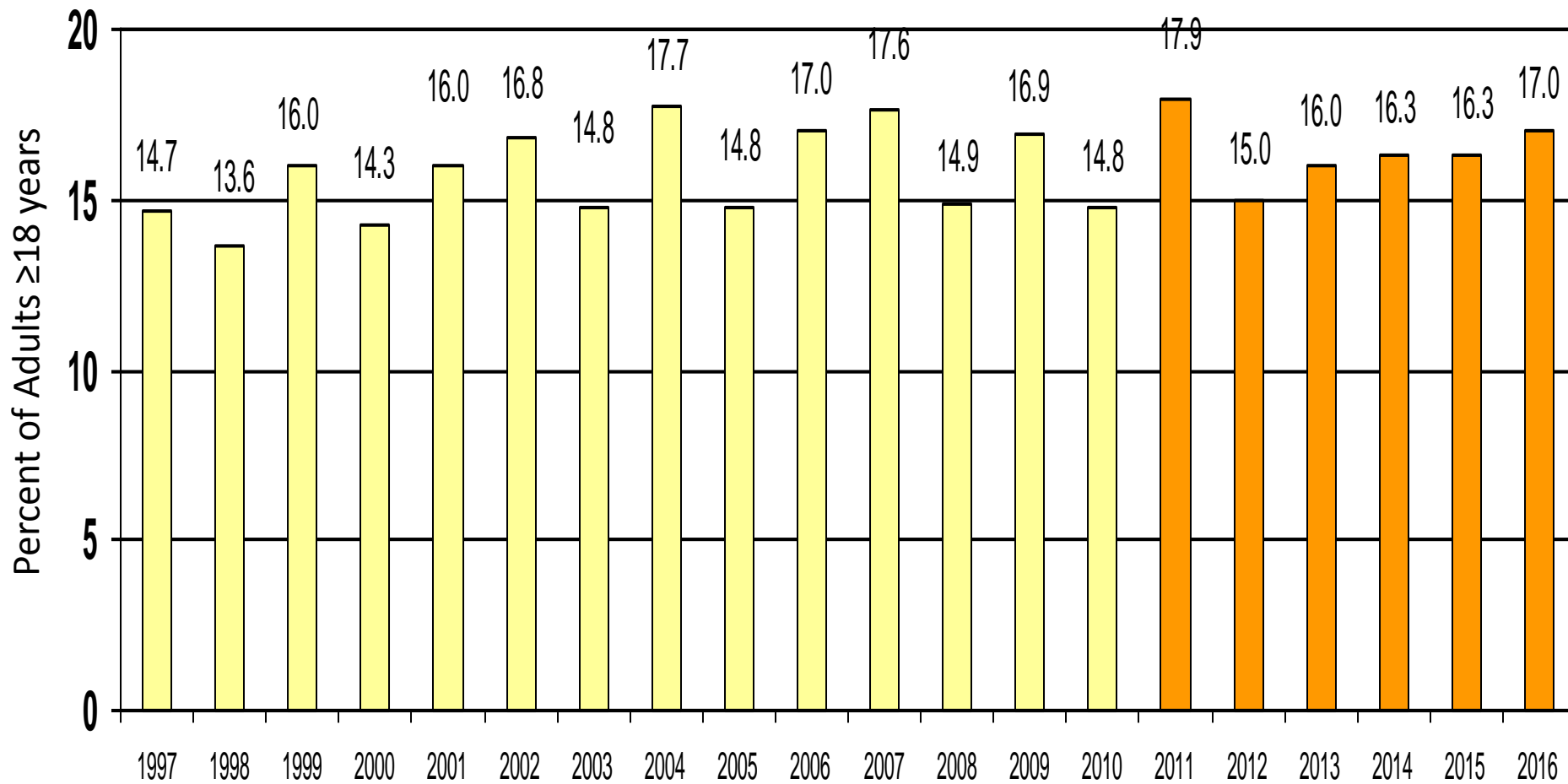
U.S 2016 = 17.1%



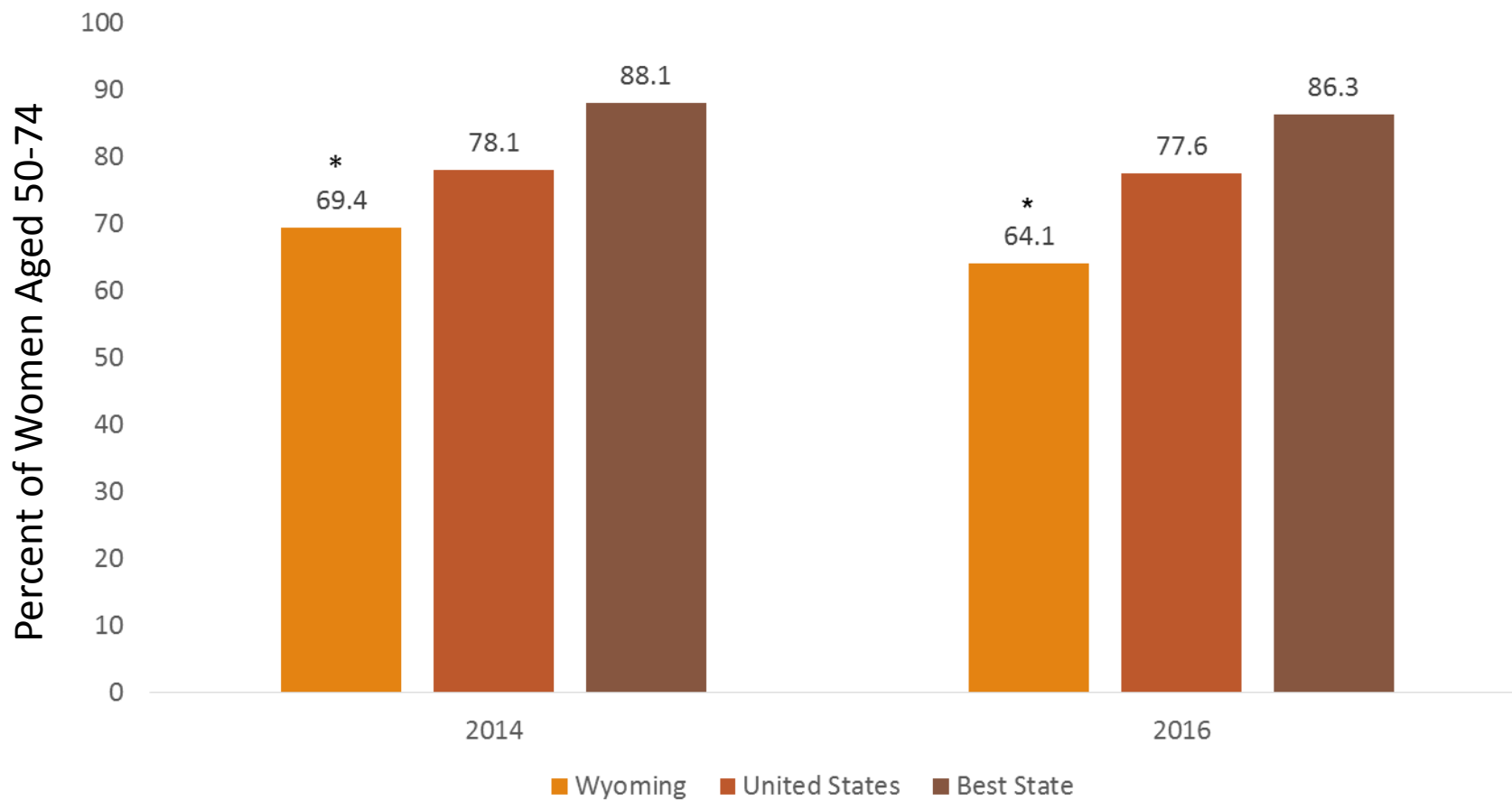
Male Smokeless Tobacco Use by Year, WY BRFSS

Percent

U.S 2016 = 7.2%

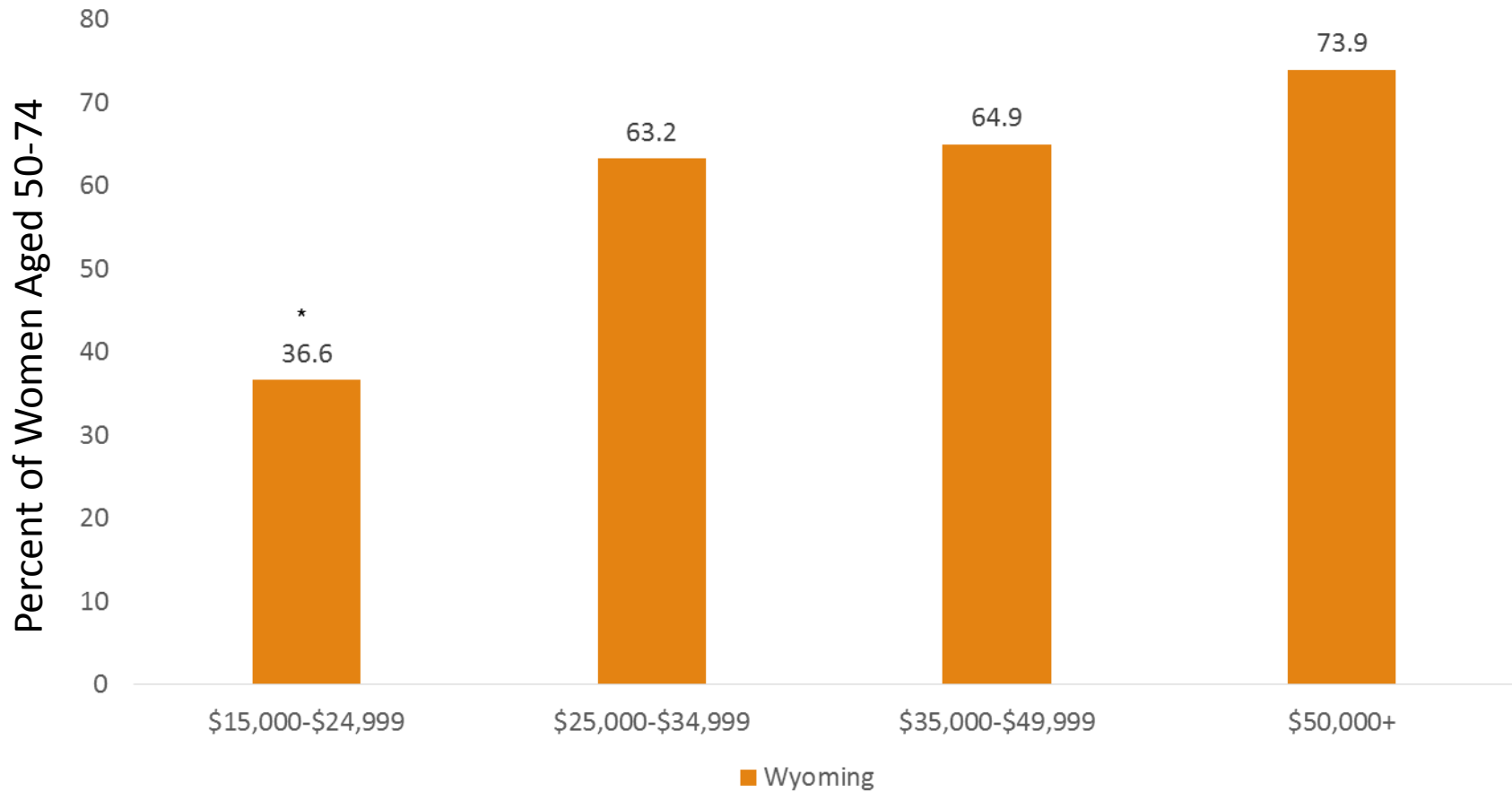


Percent of Women Aged 50-74 Who Had a Mammogram in the Past Two Years — Wyoming, U.S., and Best State, 2014-2016 (BRFSS)

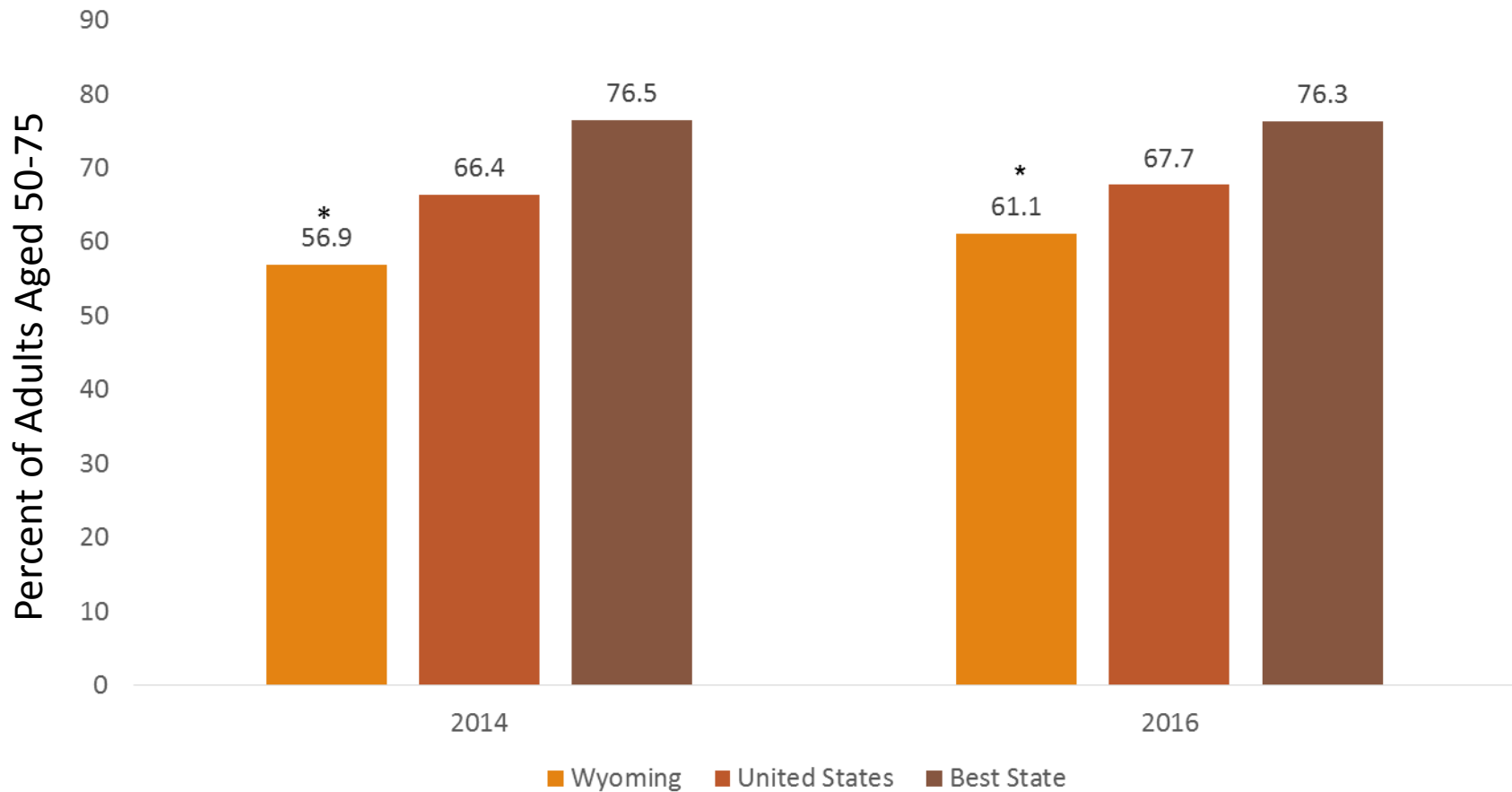


* Indicates Wyoming is different from the U.S.

Percent of Women Aged 50-74 Who Had a Mammogram in the Past Two Years by Household Income — Wyoming, 2016 (BRFSS)

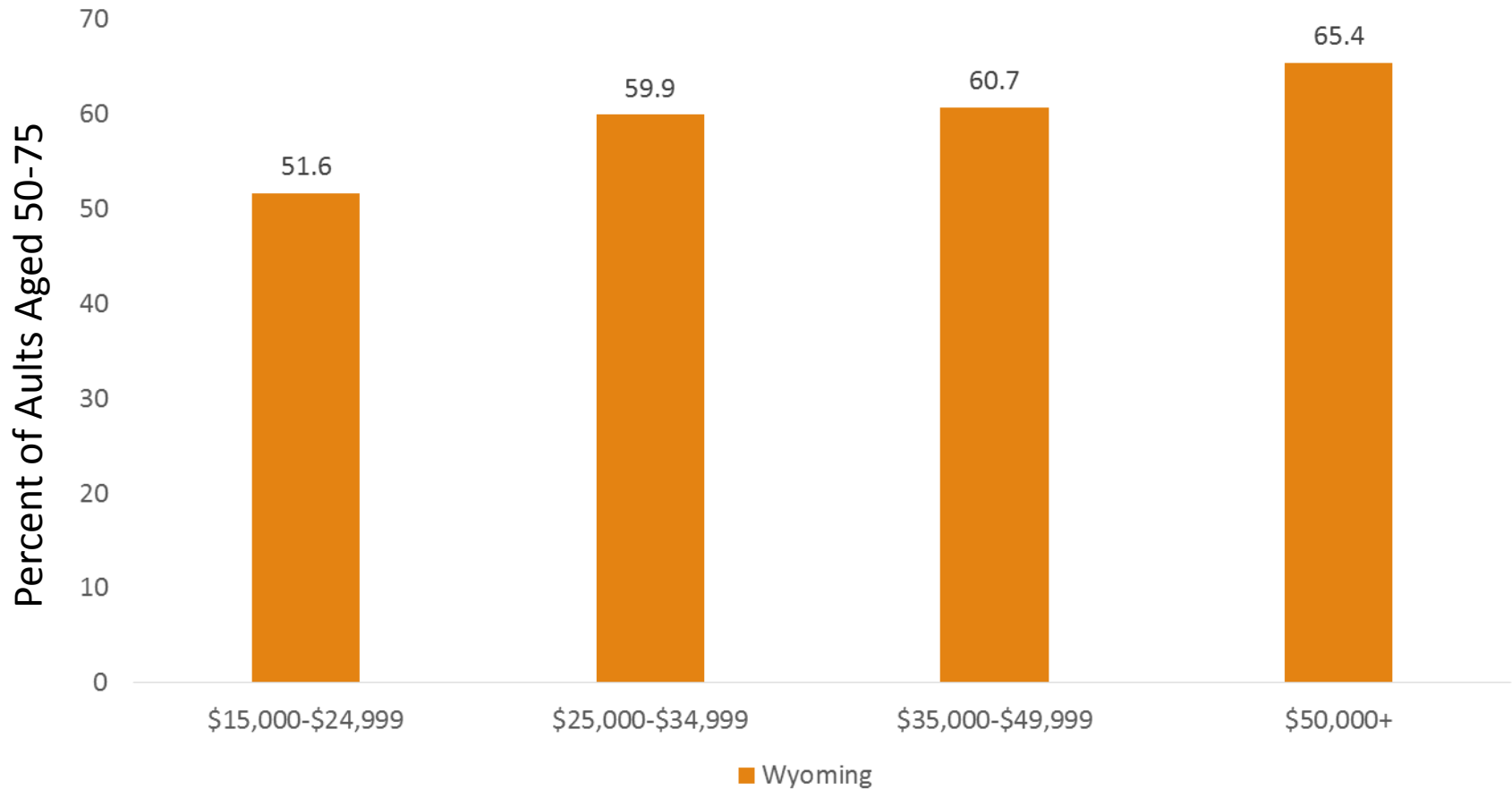


Percent of Adults Aged 50-75 Who Fully Met USPSTF Recommendations for Colorectal Cancer Screening — Wyoming, U.S., and Best State, 2014-2016 (BRFSS)

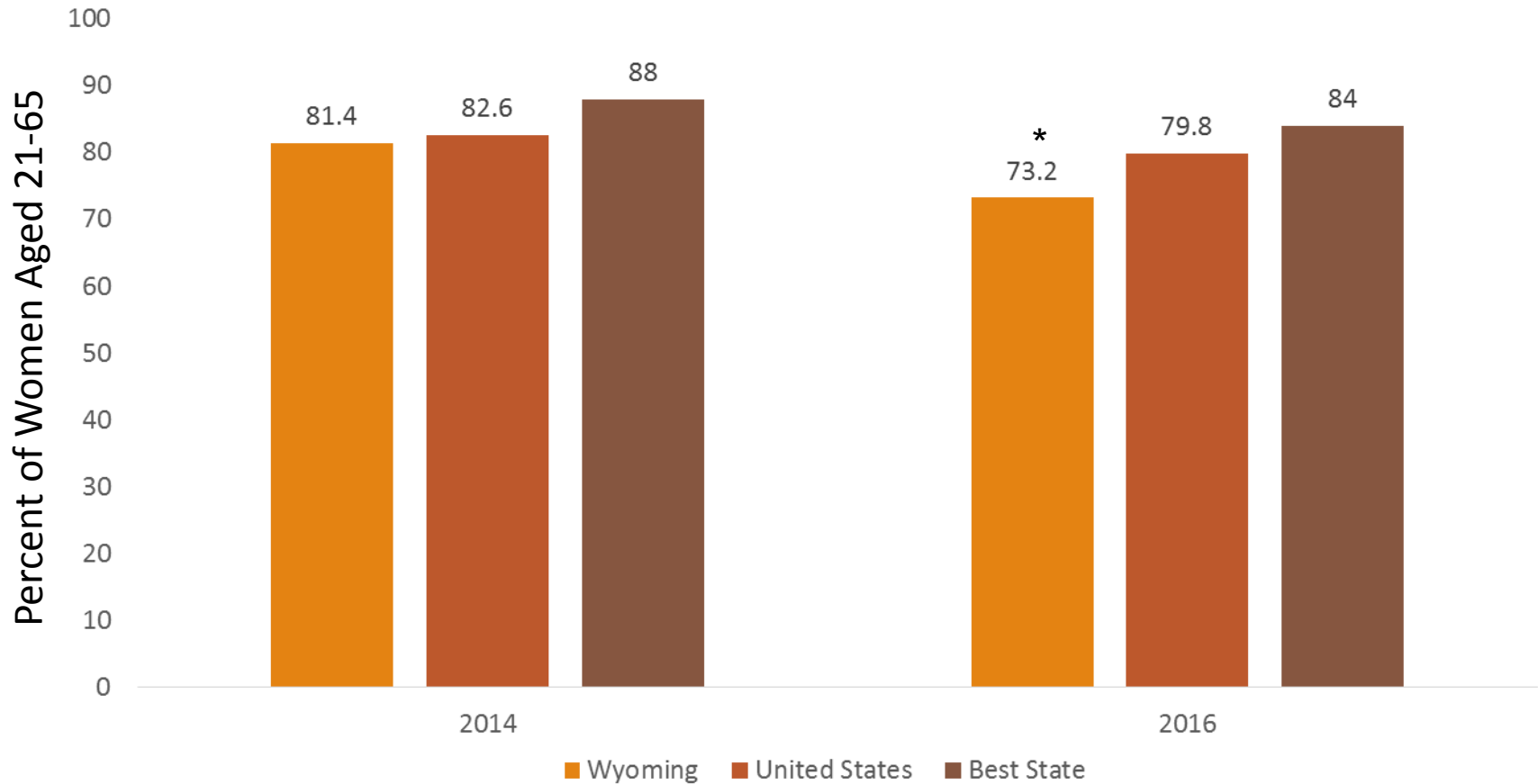


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Percent of Adults Aged 50-75 Who Fully Met USPSTF Recommendations for Colorectal Cancer Screening by Household Income — Wyoming, 2016 (BRFSS)

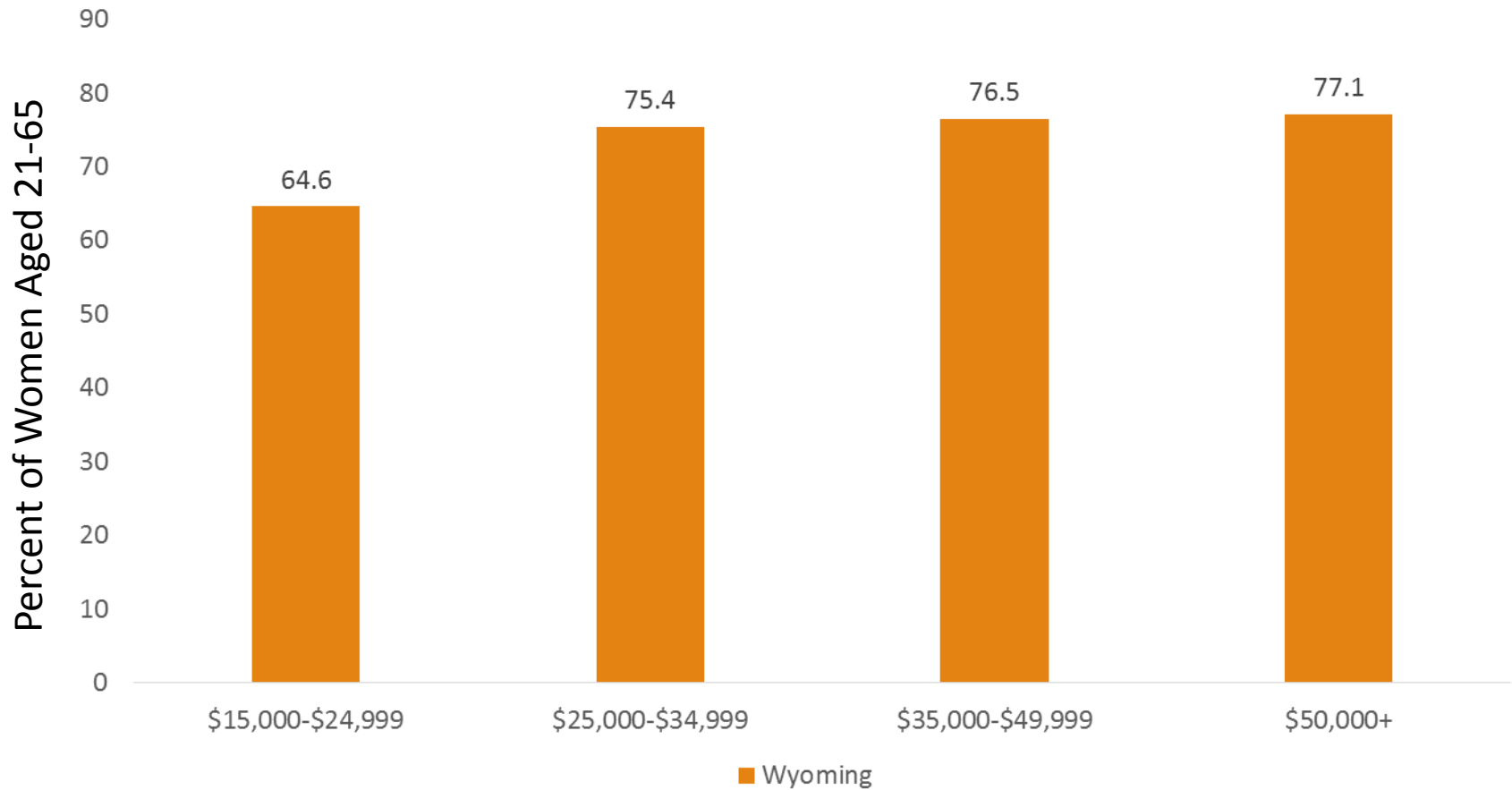


Percent of Women Aged 21-65 Who Had a Pap Test in the Past Three Years — Wyoming, U.S., and Best State (BRFSS)

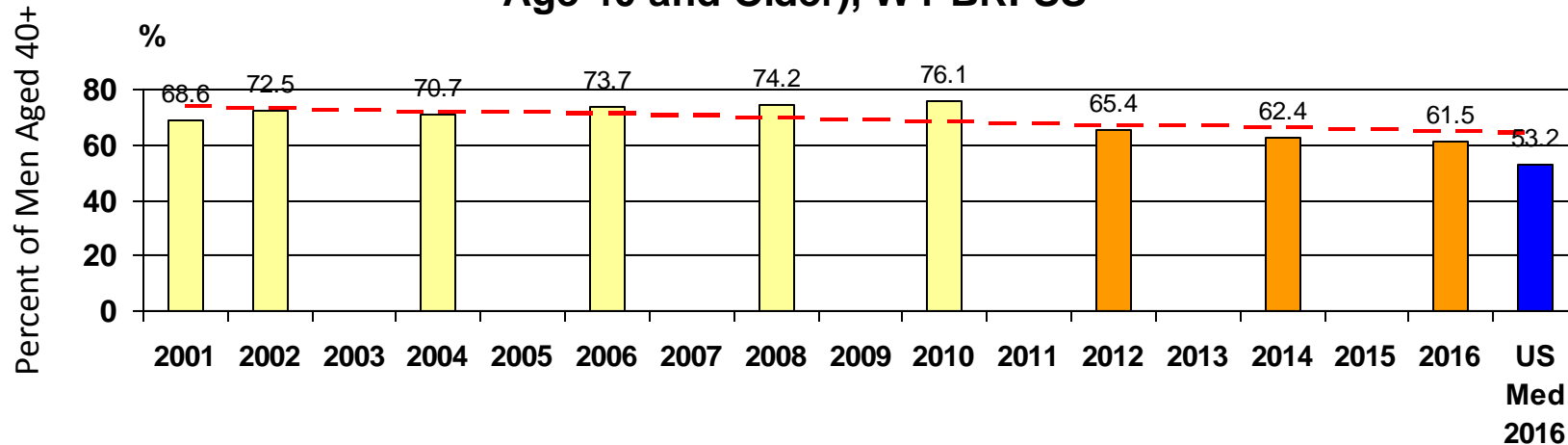


* Indicates Wyoming is different from the U.S.

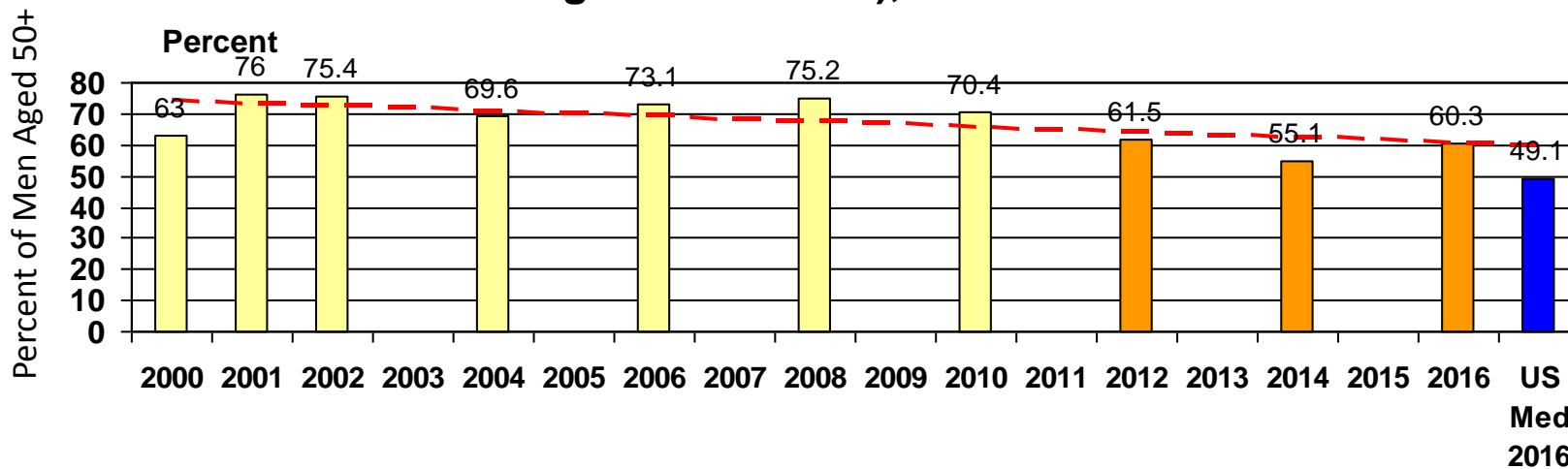
Women Aged 21-65 Who Had a Pap Test in the Past Three Years by Household Income — Wyoming, 2016 (BRFSS)



PSA Test Ever by Year (of Men Age 40 and Older), WY BRFSS



PSA Test in Past 2 Years by Year (of Men Age 50 and Older), WY BRFSS



Lung Cancer Screening – United States, 2010-2015

	2010 NHIS	2015 NHIS
Number Eligible for Screening	8,456,800	6,819,500
Number Receiving Screening	276,700	262,700
Percent Screened (Confidence Interval)	3.3 (2.3-4.7)	3.9 (2.4-6.2)

According to data from the National Health Interview Survey, only a small percentage of eligible smokers are receiving low-dose computed tomography for lung cancer screening

QUESTIONS?



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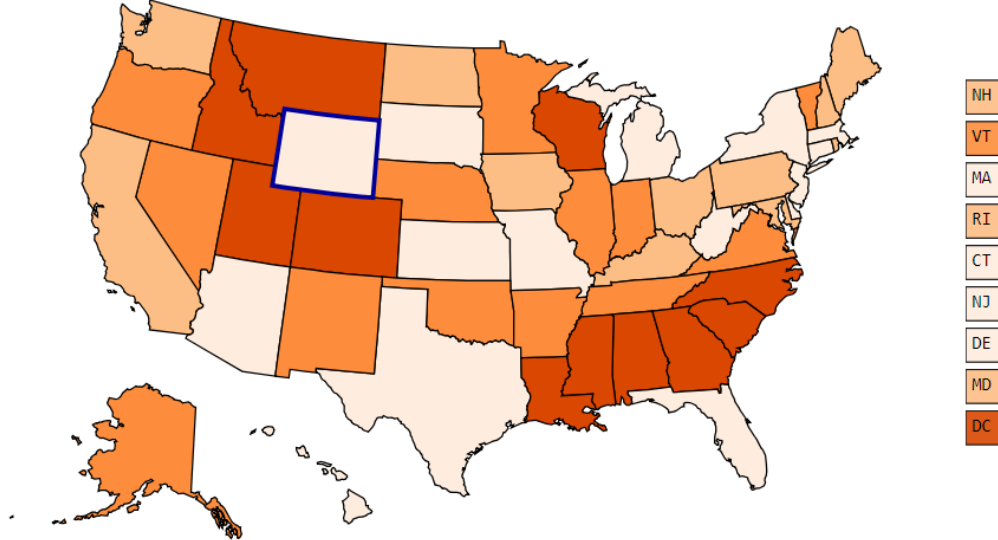
**“What fits your busy schedule better,
exercising one hour a day or being
dead 24 hours a day?”**

Prostate Cancer Mortality Rate per 100,000 Population in the United States, 2010-2014

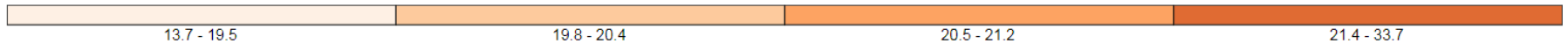
Rate of Cancer Deaths in the United States

Prostate, All Ages, All Races/Ethnicities, Male
Rate per 100,000 men

- Map
- Table
- Chart
- Export



Rate per 100,000 men



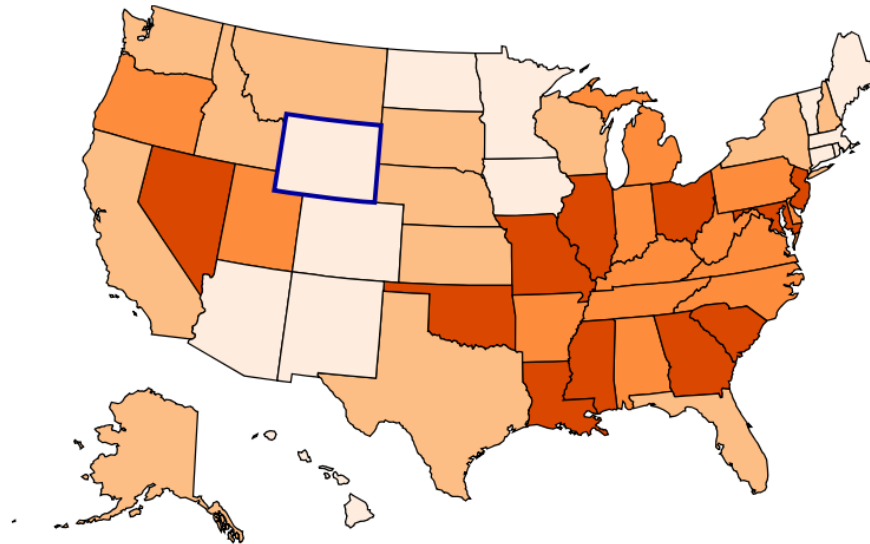
Wyoming Rate = 1.8 (16.2-21.1)
U.S. Rate = 20

Female Breast Cancer Mortality Rate per 100,000 Population in the United States, 2010-2014

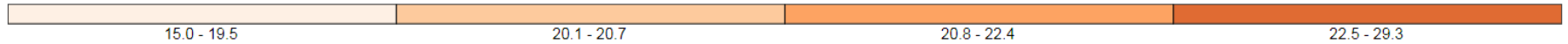
Rate of Cancer Deaths in the United States

Female Breast, All Ages, All Races/Ethnicities, Female
Rate per 100,000 women

Map Table Chart Export



Rate per 100,000 women



Wyoming Rate = 19.0 (16.9-21.2)

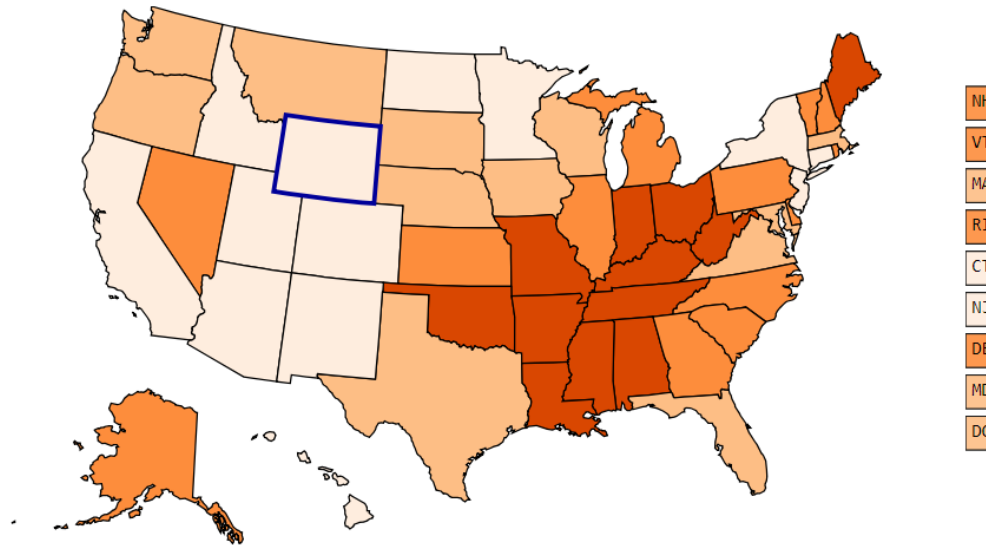
U.S. Rate = 21

Lung Cancer Mortality Rate per 100,000 Population in the United States, 2010-2014

Rate of Cancer Deaths in the United States

Lung and Bronchus, All Ages, All Races/Ethnicities, Male and Female
Rate per 100,000 people

Map Table Chart Export



Rate per 100,000 people



Wyoming Rate = 36.7 (34.5-38.9)

U.S. Rate = 45