



## COMMUNITY HEALTH NEEDS ASSESSMENT

Advancing Community Health and Well Being

# Full Health Indicators Report

## HEALTH OUTCOMES

**Report Area:** Custer County, OK

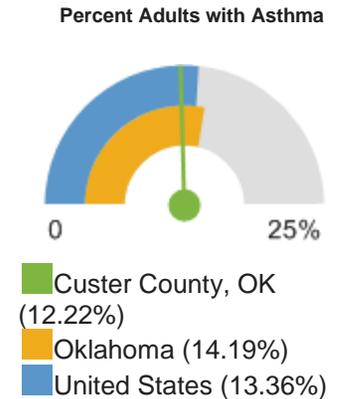
Asthma Prevalence	Heart Disease (Medicare Population)	Mortality - Lung Disease
Cancer Incidence - Breast	High Blood Pressure	Mortality - Motor Vehicle Accident
Cancer Incidence - Cervical	High Cholesterol (Adult)	Mortality - Pedestrian Accident
Cancer Incidence - Colon and Rectum	High Cholesterol (Medicare Population)	Mortality - Premature Death
Cancer Incidence - Lung	HIV Prevalence	Mortality - Stroke
Cancer Incidence - Prostate	Infant Mortality	Mortality - Suicide
Chlamydia Incidence	Low Birth Weight	Mortality - Unintentional Injury
Diabetes (Adult)	Mortality - Cancer	Obesity
Diabetes (Medicare Population)	Mortality - Heart Disease	Overweight
Gonorrhea Incidence	Mortality - Homicide	Poor Dental Health
Heart Disease (Adult)	Mortality - Ischaemic Heart Disease	Poor General Health

Measuring morbidity and mortality rates allows assessing linkages between social determinants of health and outcomes. By comparing, for example, the prevalence of certain chronic diseases to indicators in other categories (e.g., poor diet and exercise) with outcomes (e.g., high rates of obesity and diabetes), various causal relationship may emerge, allowing a better understanding of how certain community health needs may be addressed.

### Asthma Prevalence

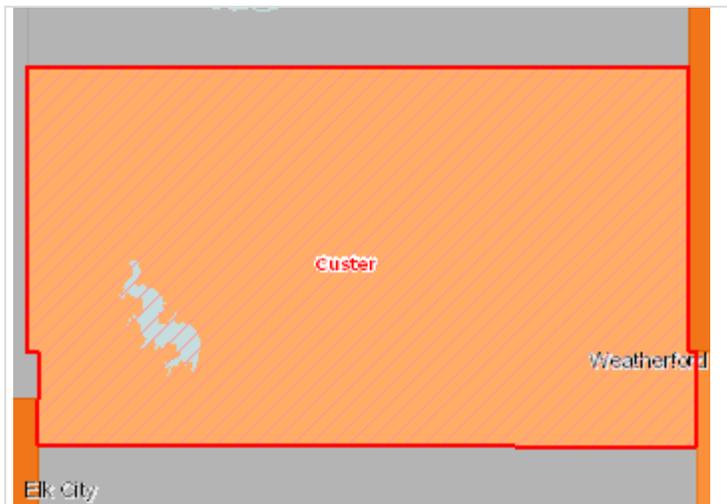
This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had asthma. This indicator is relevant because asthma is a prevalent problem in the U.S. that is often exacerbated by poor environmental conditions.

Report Area	Survey Population (Adults Age 18 )	Total Adults with Asthma	Percent Adults with Asthma
Custer County, OK	21,130	2,582	12.22%
Oklahoma	2,840,351	403,172	14.19%
United States	237,197,465	31,697,608	13.36%



Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#): 2011-12. Additional data analysis by [CARES](#). Source geography: County.



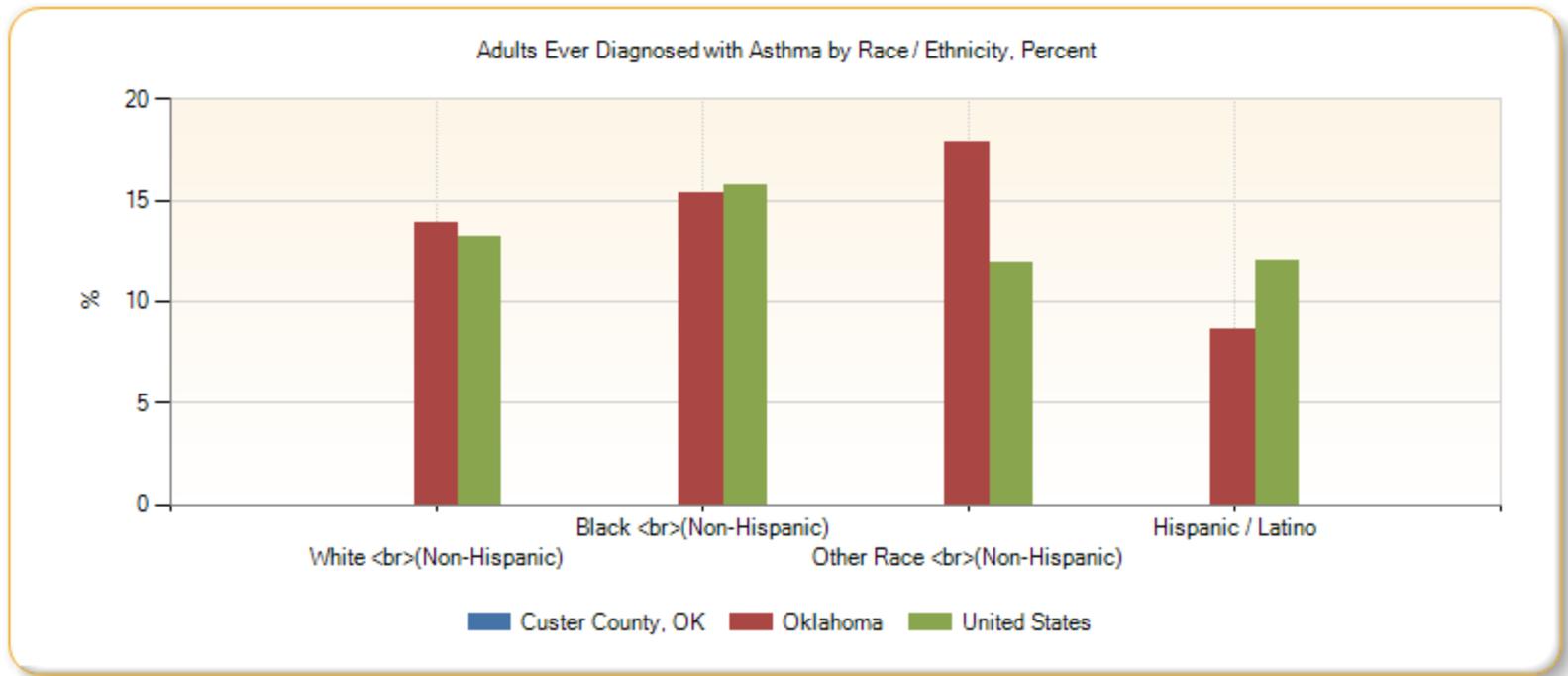
**Asthma (Diagnosed), Percent of Adults Age 18 by County, BRFSS 2011-12**

- Over 16.0%
- 13.1 - 16.0%
- 10.1 - 13.0%
- Under 10.1%
- No Data or Data Suppressed
- Report Area

**Adults Ever Diagnosed with Asthma by Race / Ethnicity, Percent**

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
Custer County, OK	no data	no data	no data	no data

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
Oklahoma	13.88%	15.32%	17.85%	8.66%
United States	13.19%	15.75%	11.90%	12.02%

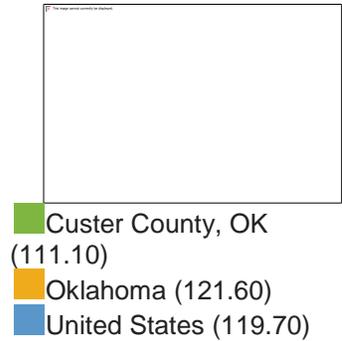


## Cancer Incidence - Breast

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with breast cancer adjusted to 2000 U.S. standard population age groups (Under Age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

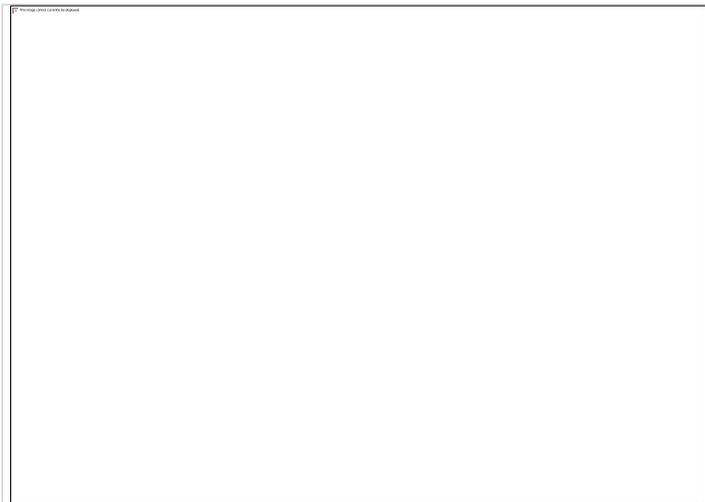
Report Area	Female Population, ACS 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Custer County, OK	13,578	16	111.10
Oklahoma	668,266	2,568	121.60
United States	154,566,544	207,458	119.70

Annual Incidence Rate  
(Per 100,000 Pop.)



Note: This indicator is compared with the state average.

Data Source: [State Cancer Profiles: 2006-10](#). Source geography: County.



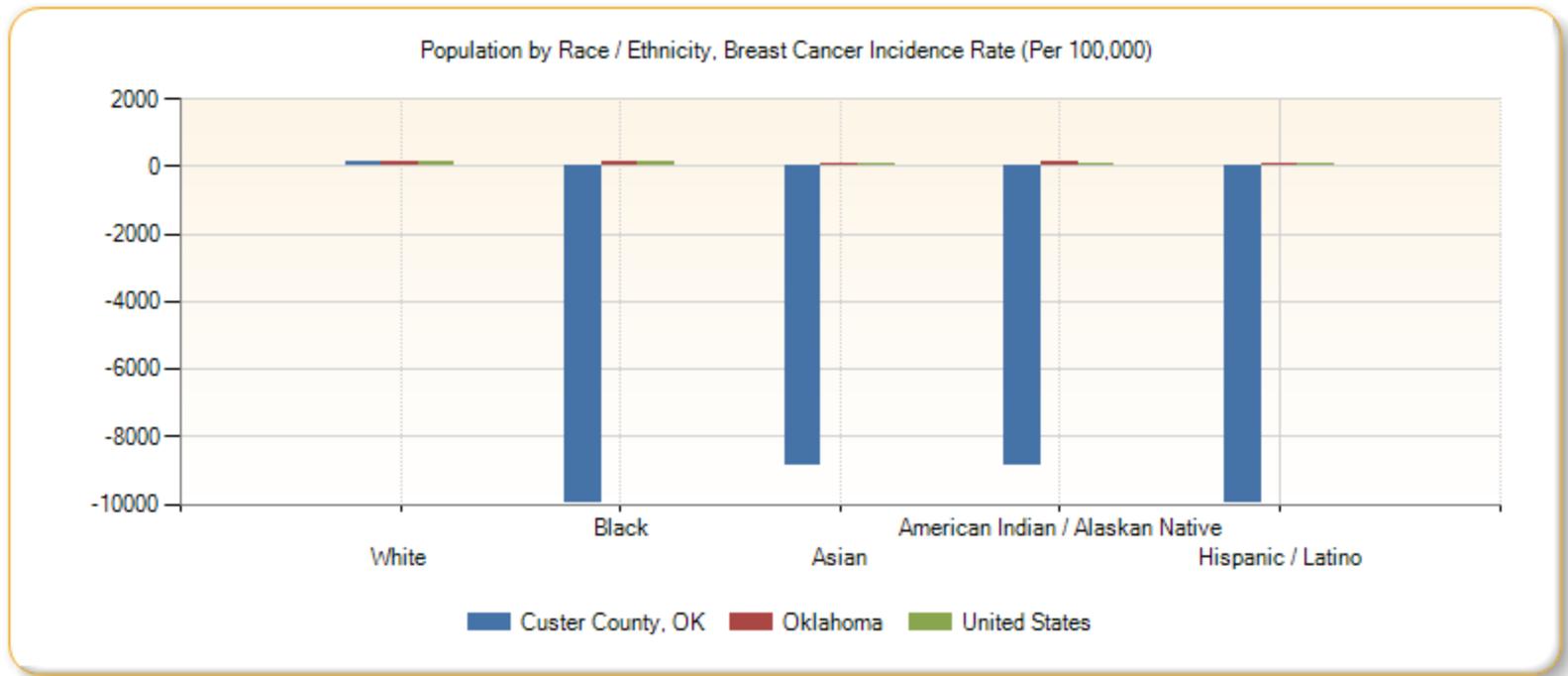
Breast Cancer, Incidence Rate (Per 100,000 Pop.) by County, State Cancer Profiles 2006-10

- Over 135.0
- 115.1 - 135.0
- 95.1 - 115.0
- Under 95.1
- No Data or Data Suppressed
- Report Area

Population by Race / Ethnicity, Breast Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	115.30	no data	suppressed	suppressed	no data

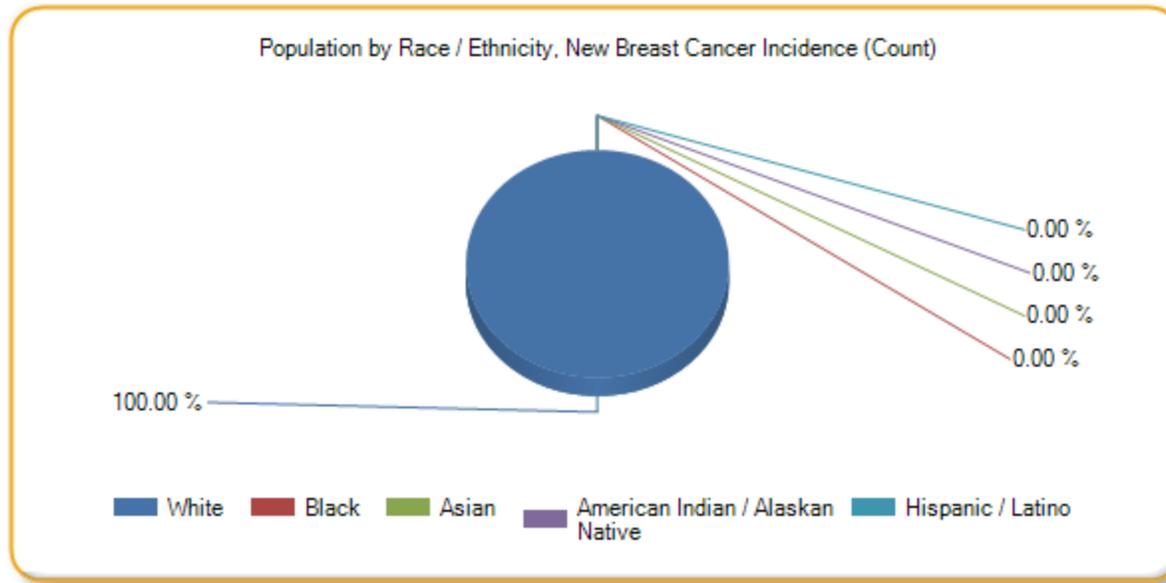
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Oklahoma	119.30	129.40	82.60	133.90	106.30
United States	120.70	117.90	83	64.40	90.50



**Population by Race / Ethnicity, New Breast Cancer Incidence (Count)**

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	15	no data	no data	no data	no data
Oklahoma	2,162	162	26	194	67

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
United States	174,757	22,918	6,607	949	14,396



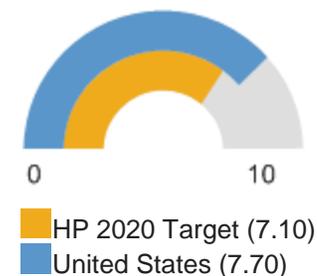
### Cancer Incidence - Cervical

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of females with cervical cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Female Population, ACS 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Custer County, OK	13,578	no data	no data
Oklahoma	668,266	190	<b>10.30</b>

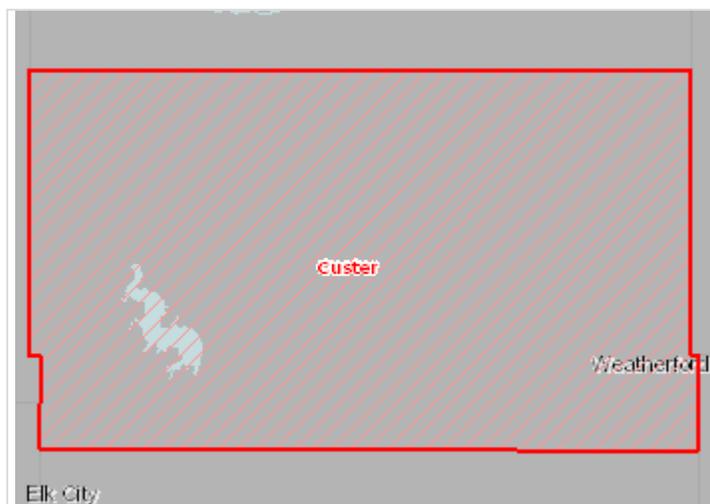
**Annual Incidence Rate  
(Per 100,000 Pop.)**

United States	154,566,544	12,390	<b>7.70</b>
<a href="#">HP 2020 Target</a>			<= 7.1



Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: [State Cancer Profiles](#); 2006-10. Source geography: County.



### Cervical Cancer, Incidence Rate (Per 100,000 Pop.) by County, State Cancer Profiles 2006-10

- Over 10.0
- 8.1 - 10.0
- 6.1 - 8.0
- Under 6.1
- No Data or Data Suppressed
- Report Area

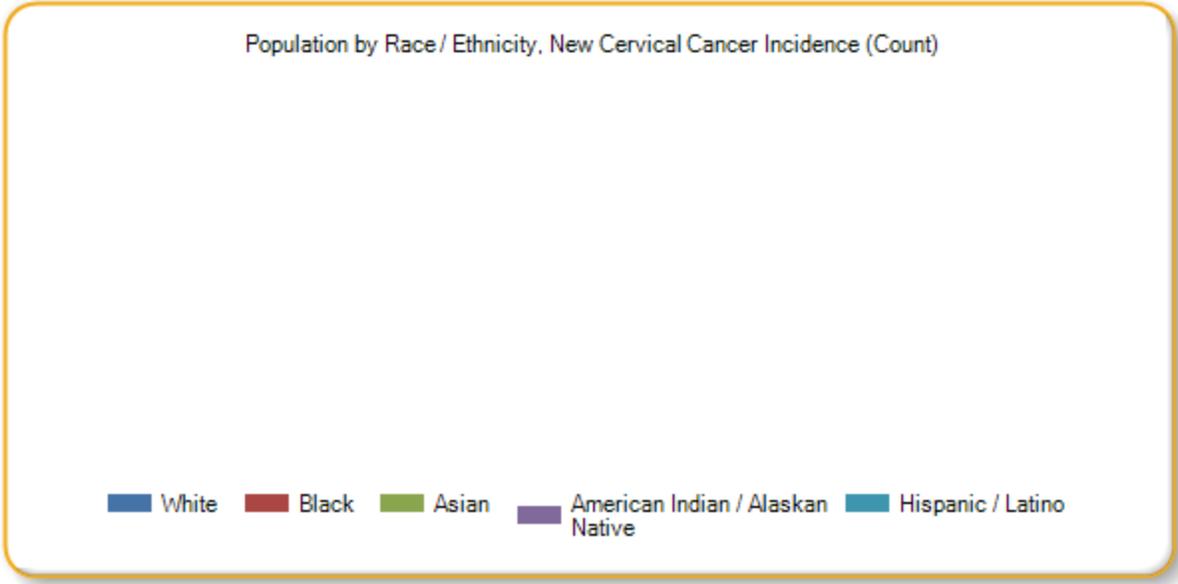
### Population by Race / Ethnicity, Cervical Cancer Incidence Rate (Per 100,000)

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	no data	no data	suppressed	suppressed	no data
Oklahoma	9.60	8.80	15	15.90	13.40
United States	7.50	2,350,588.20	6.60	6.40	10.80



**Population by Race / Ethnicity, New Cervical Cancer Incidence (Count)**

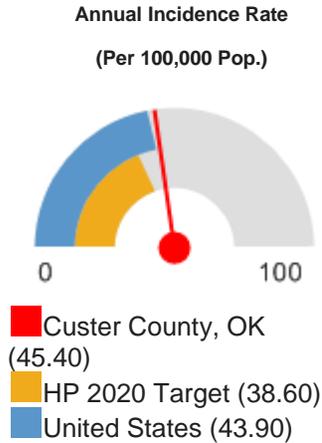
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	no data	no data	no data	no data	no data
Oklahoma	146	11	5	24	14
United States	9,522	1,998	538	108	2,006



**Cancer Incidence - Colon and Rectum**

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of colon and rectum cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Total Population, ACS 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Custer County, OK	26,824	13	<b>45.40</b>
Oklahoma	414,284	1,840	<b>46.50</b>
United States	303,965,280	141,281	<b>43.90</b>
<u>HP 2020 Target</u>			<= 38.6



*Note: This indicator is compared with the Healthy People 2020 Target.*

Data Source: [State Cancer Profiles: 2006-10](#). Source geography: County.

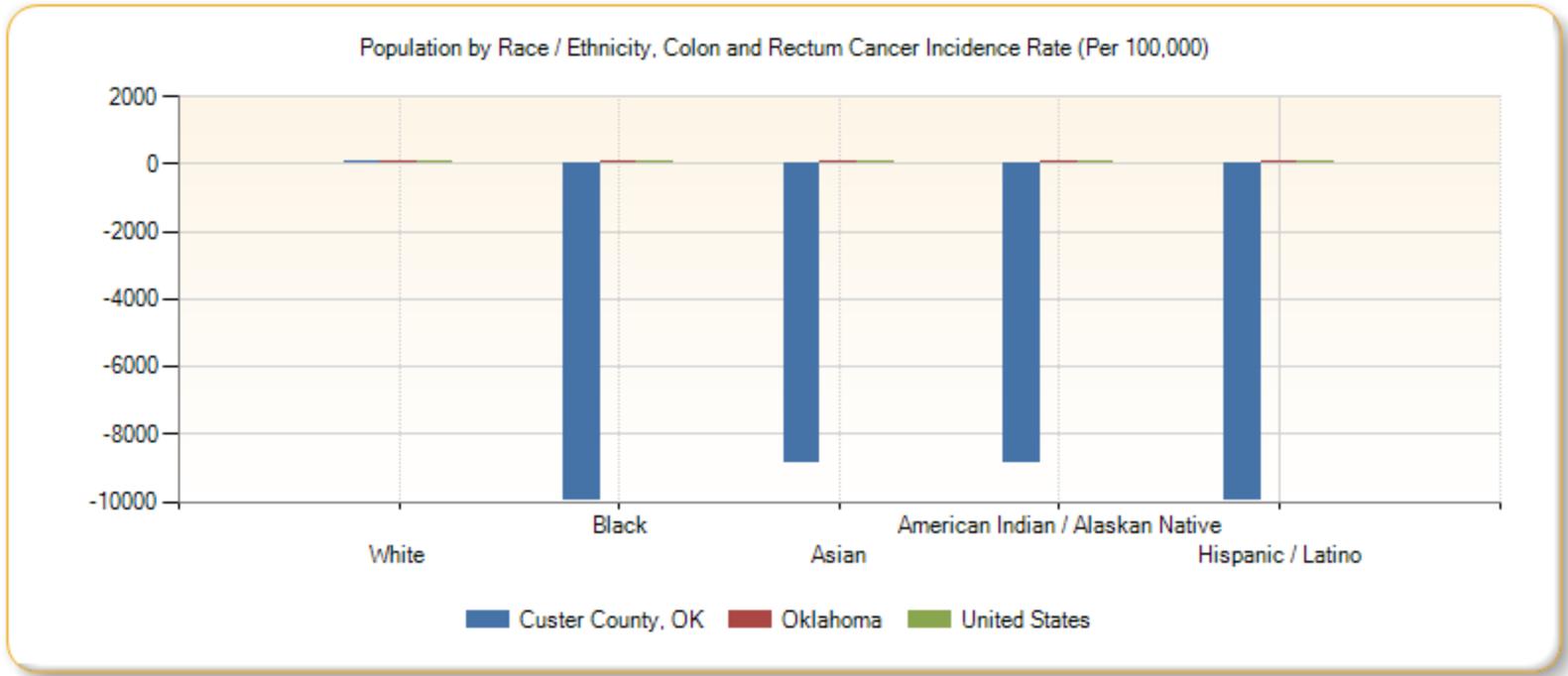


**Colo-Rectal Cancer, Incidence Rate (Per 100,000 Pop.) by County, State Cancer Profiles 2006-10**

- Over 53.0
- 47.1 - 53.0
- 41.1 - 47.0
- Under 41.1
- No Data or Data Suppressed
- Report Area

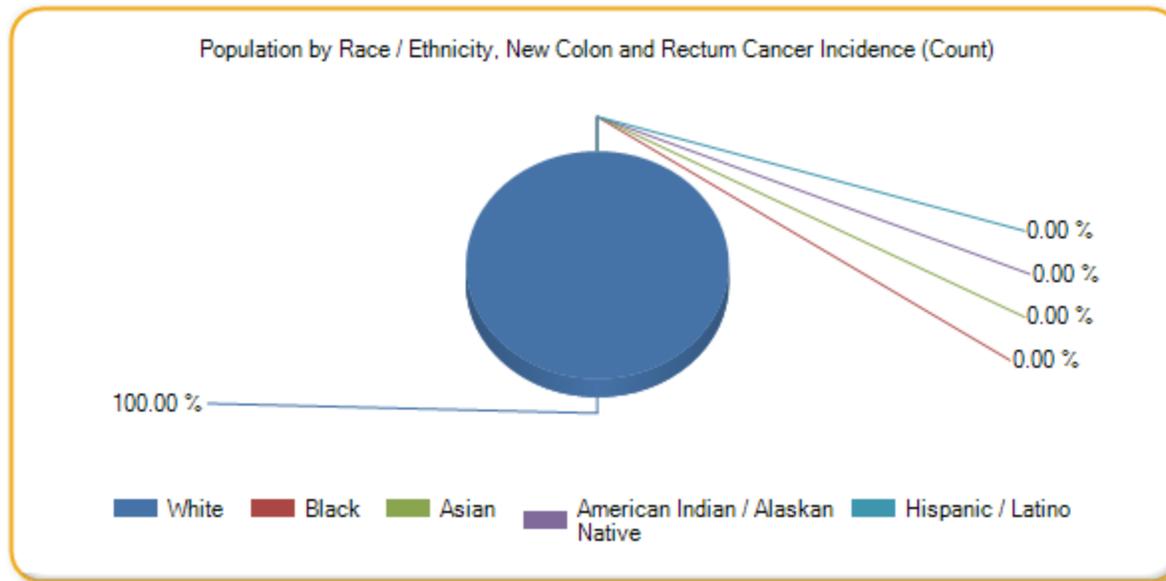
**Population by Race / Ethnicity, Colon and Rectum Cancer Incidence Rate (Per 100,000)**

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	39.40	no data	suppressed	suppressed	no data
Oklahoma	43.90	52.70	53.70	65.80	44.10
United States	42.70	52.50	34.70	31.30	38.70



**Population by Race / Ethnicity, New Colon and Rectum Cancer Incidence (Count)**

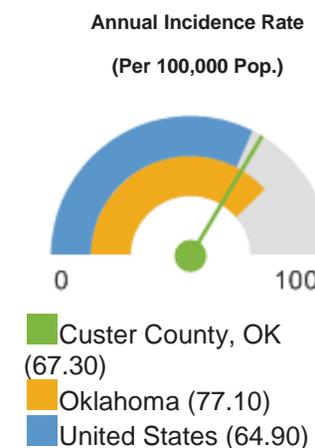
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	10	no data	no data	no data	no data
Oklahoma	1,516	115	23	166	45
United States	117,775	16,767	4,406	754	9,768



## Cancer Incidence - Lung

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of lung cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

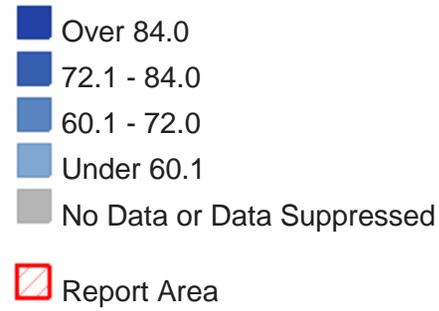
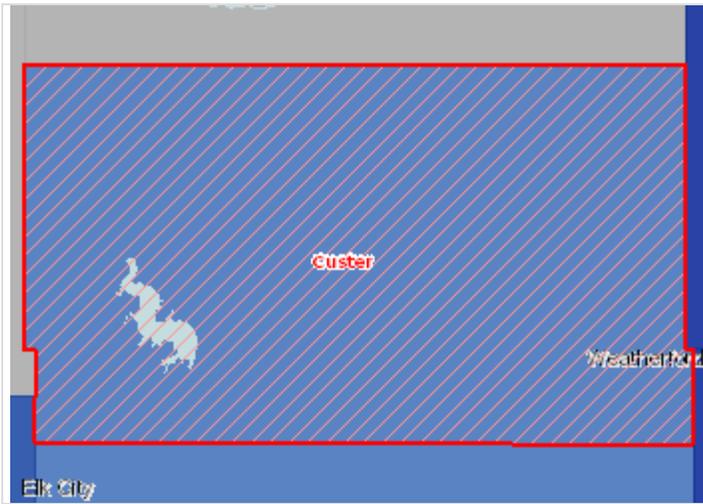
Report Area	Total Population, ACS 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Custer County, OK	26,824	19	<b>67.30</b>
Oklahoma	1,327,473	3,100	77.10
United States	303,965,280	208,652	64.90



Note: This indicator is compared with the state average.

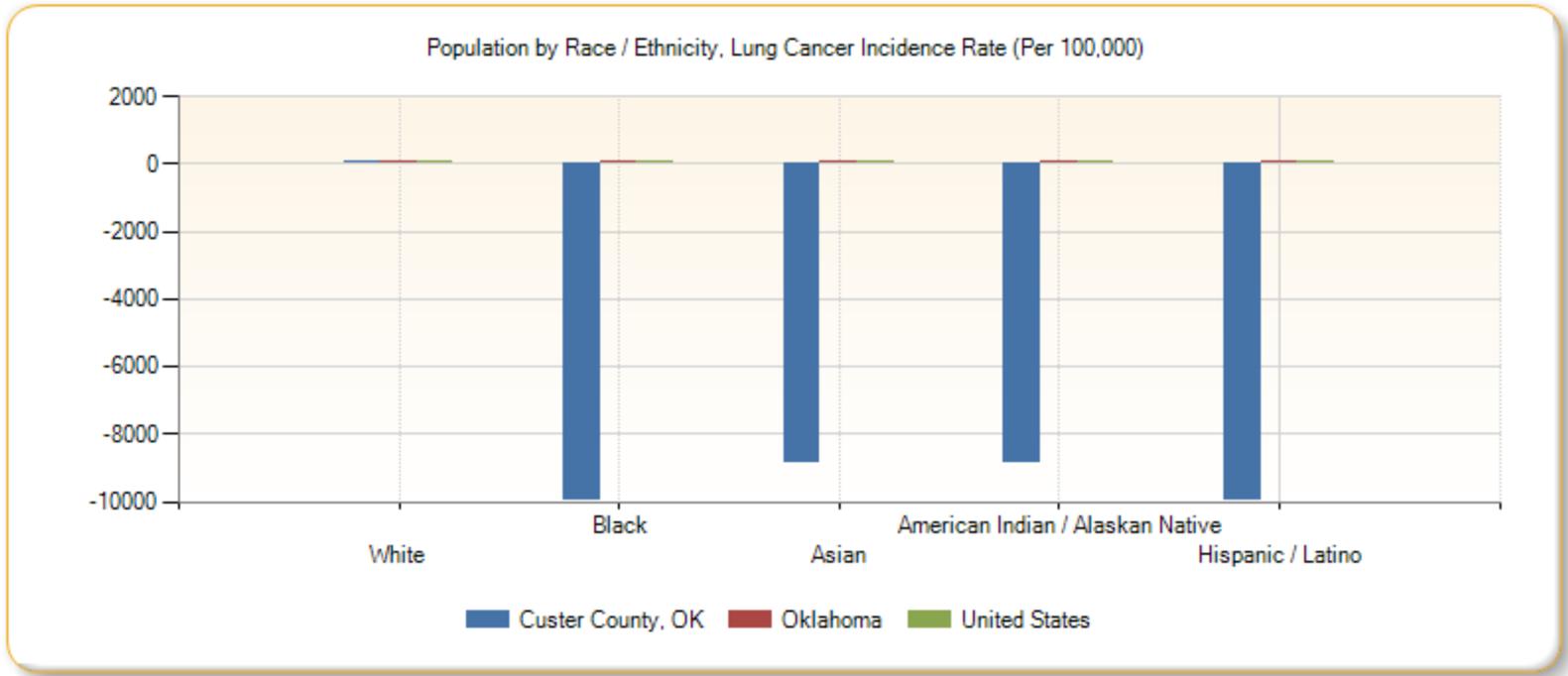
Data Source: [State Cancer Profiles](#); 2006-10. Source geography: County.

**Lung Cancer, Incidence Rate (Per 100,000 Pop.) by County, State Cancer Profiles 2006-10**



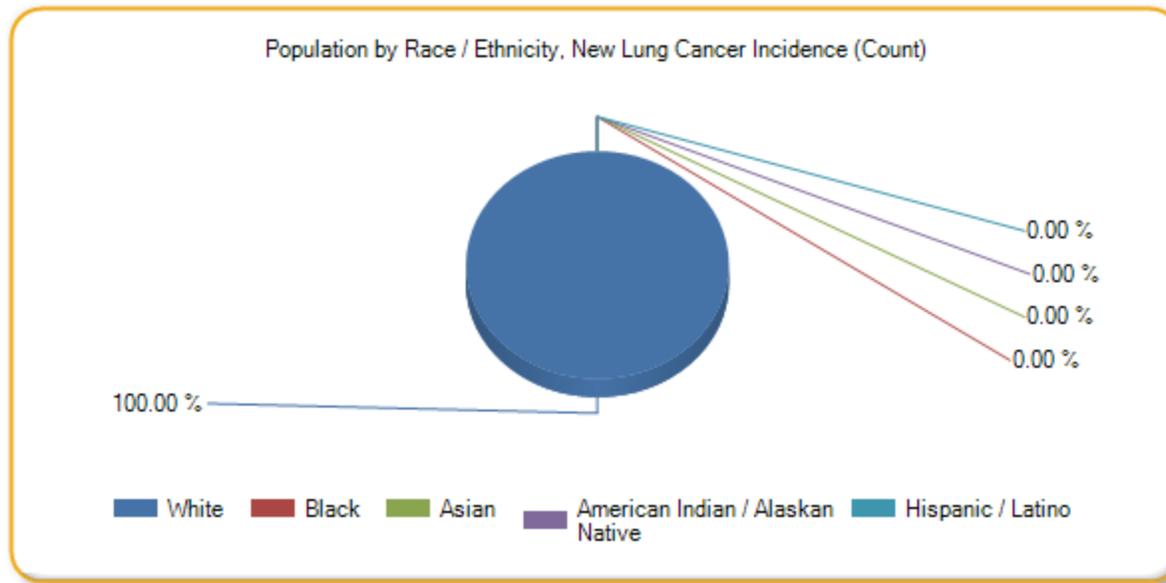
**Population by Race / Ethnicity, Lung Cancer Incidence Rate (Per 100,000)**

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	65.30	no data	suppressed	suppressed	no data
Oklahoma	75.20	76.70	50.50	105.10	44.70
United States	65.60	68.20	36.20	43.40	34.60



**Population by Race / Ethnicity, New Lung Cancer Incidence (Count)**

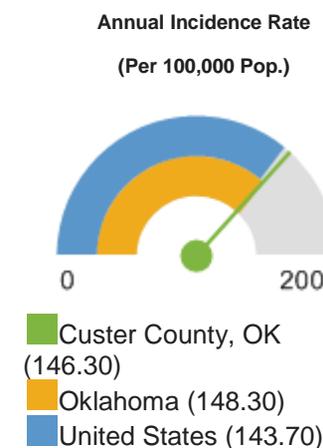
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	17	no data	no data	no data	no data
Oklahoma	2,650	163	22	257	41
United States	180,739	21,506	4,336	964	7,983



## Cancer Incidence - Prostate

This indicator reports the age adjusted incidence rate (cases per 100,000 population per year) of males with prostate cancer adjusted to 2000 U.S. standard population age groups (Under age 1, 1-4, 5-9, ..., 80-84, 85 and older). This indicator is relevant because cancer is a leading cause of death and it is important to identify cancers separately to better target interventions.

Report Area	Male Population, ACS 2006-2010	Annual Cancer Incidence, 2006-2010 Average	Annual Incidence Rate (Per 100,000 Pop.)
Custer County, OK	13,246	19	<b>146.30</b>
Oklahoma	659,207	2,723	148.30
United States	149,398,720	215,232	143.70



Note: This indicator is compared with the state average.

Data Source: [State Cancer Profiles](#); 2006-10. Source geography: County.

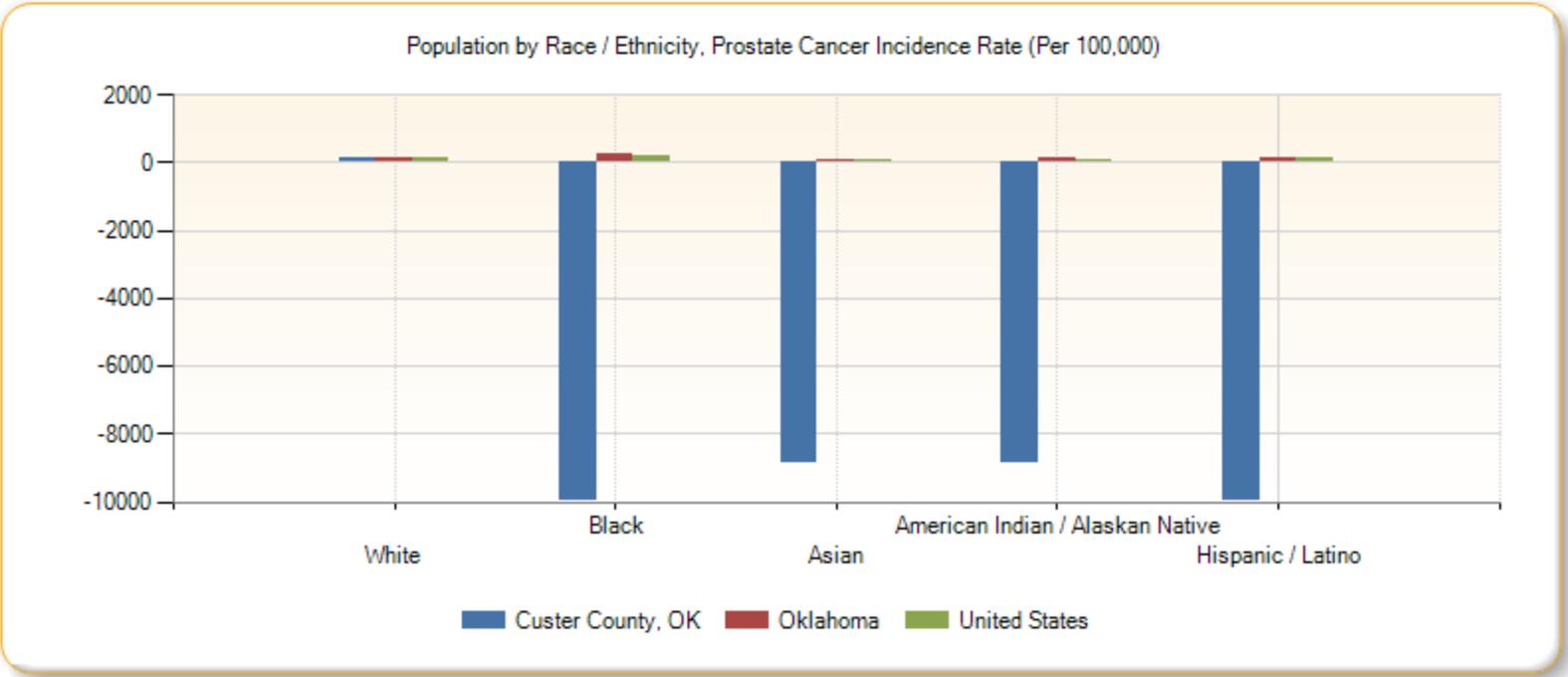


**Prostate Cancer, Incidence Rate (Per 100,000 Pop.) by County, State Cancer Profiles 2006-10**



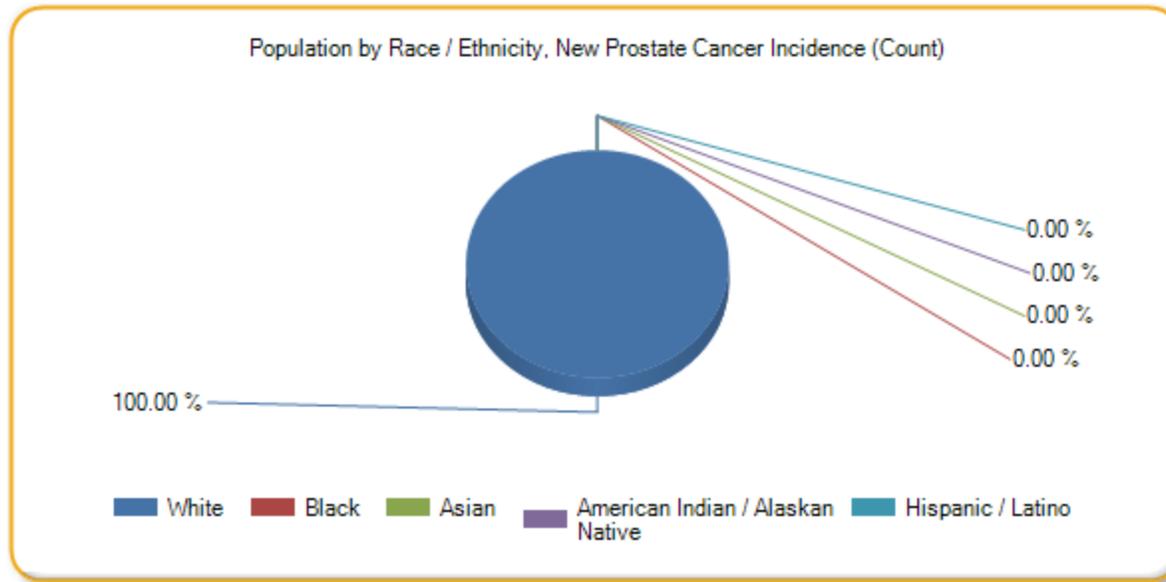
**Population by Race / Ethnicity, Prostate Cancer Incidence Rate (Per 100,000)**

Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	143.40	no data	suppressed	suppressed	no data
Oklahoma	137.60	250.20	86.70	152.70	113.10
United States	133.30	217.90	73.80	75.80	123.60



**Population by Race / Ethnicity, New Prostate Cancer Incidence (Count)**

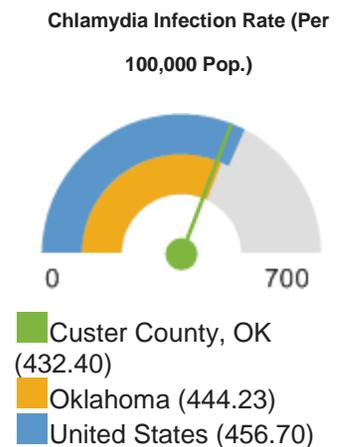
Report Area	White	Black	Asian	American Indian / Alaskan Native	Hispanic / Latino
Custer County, OK	18	no data	no data	no data	no data
Oklahoma	2,225	225	13	166	48
United States	171,991	30,367	4,018	778	13,248



## Chlamydia Incidence

This indicator reports incidence rate of chlamydia cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Report Area	Total Population	Total Chlamydia Infections	Chlamydia Infection Rate (Per 100,000 Pop.)
Custer County, OK	27,750	120	<b>432.40</b>
Oklahoma	3,791,508	16,843	444.23
United States	311,577,841	1,422,976	456.70

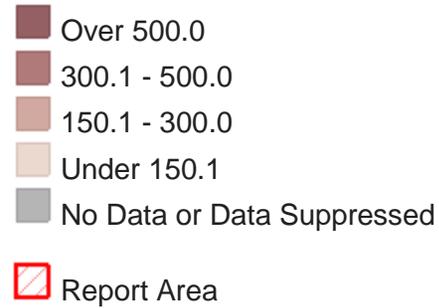
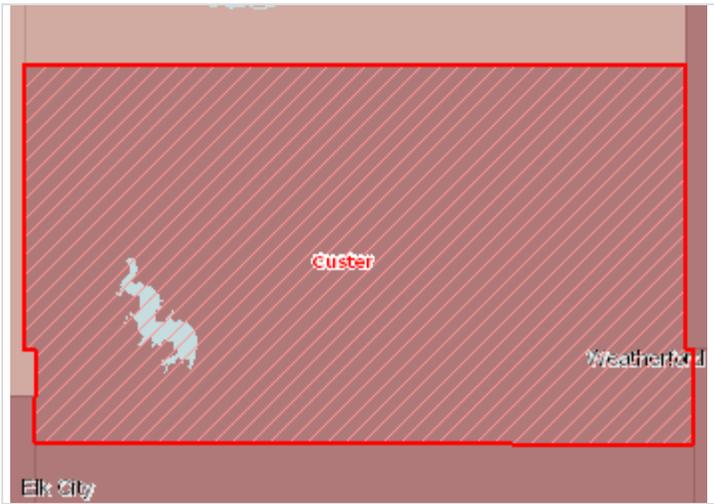


Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, [National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention](#):

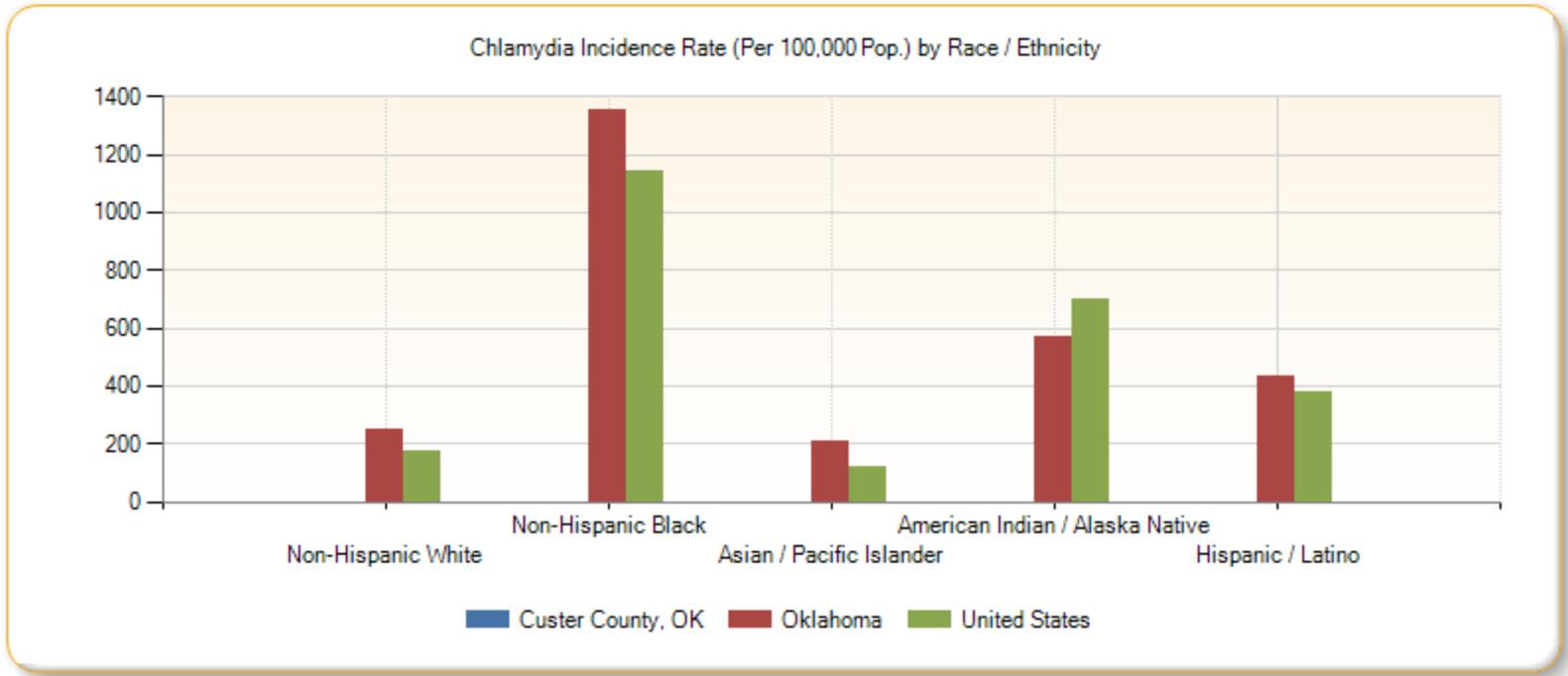
2012. Source geography: County.

### Chlamydia, Infection Rate per 100,000 Population by County, NCHHSTP 2012



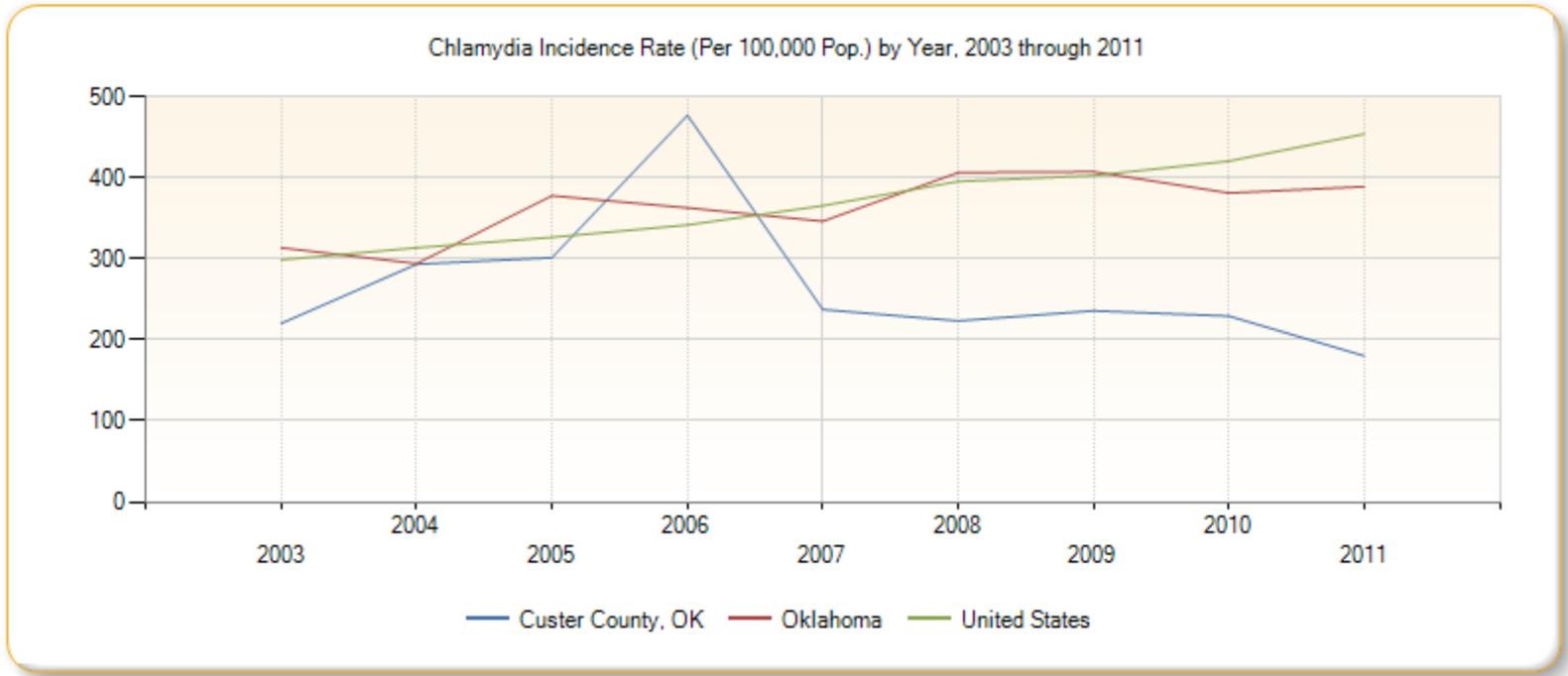
### Chlamydia Incidence Rate (Per 100,000 Pop.) by Race / Ethnicity

Report Area	Non-Hispanic White	Non-Hispanic Black	Asian / Pacific Islander	American Indian / Alaska Native	Hispanic / Latino
Custer County, OK	no data	no data	no data	no data	no data
Oklahoma	245.90	1,351.33	206.79	570.67	433.52
United States	171.72	1,140.79	118.80	696.20	377.52



**Chlamydia Incidence Rate (Per 100,000 Pop.) by Year, 2003 through 2011**

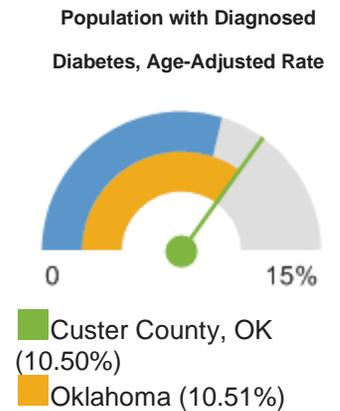
Report Area	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	220.30	293.30	301.50	477.20	237.40	223.40	235.80	229.30	180.20
Oklahoma	313.62	294.19	377.89	362.98	346.36	406.41	407.45	381.25	389.09
United States	298.78	313.66	326.59	341.74	365.50	395.54	402.72	420.56	454.12



## Diabetes (Adult)

This indicator reports the percentage of adults aged 20 and older who have ever been told by a doctor that they have diabetes. This indicator is relevant because diabetes is a prevalent problem in the U.S.; it may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population Age 20	Population with Diagnosed Diabetes	Population with Diagnosed Diabetes, Crude Rate	Population with Diagnosed Diabetes, Age-Adjusted Rate
Custer County, OK	19,843	2,143	10.80	<b>10.50</b>
Oklahoma	2,719,573	307,010	11.29	10.51



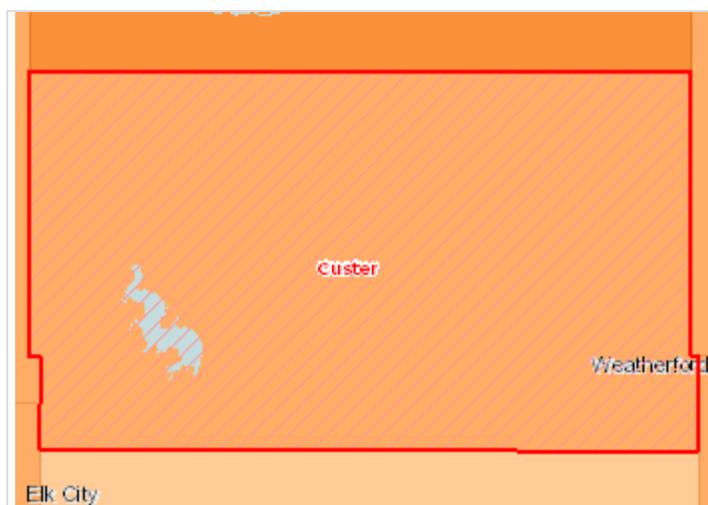
United States	228,834,127	21,876,232	9.56	8.95
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United States (8.95%)

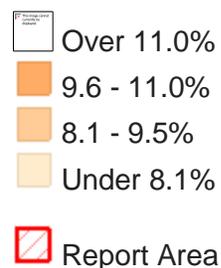
Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion,

[Diabetes Atlas: 2010](#). Source geography: County.

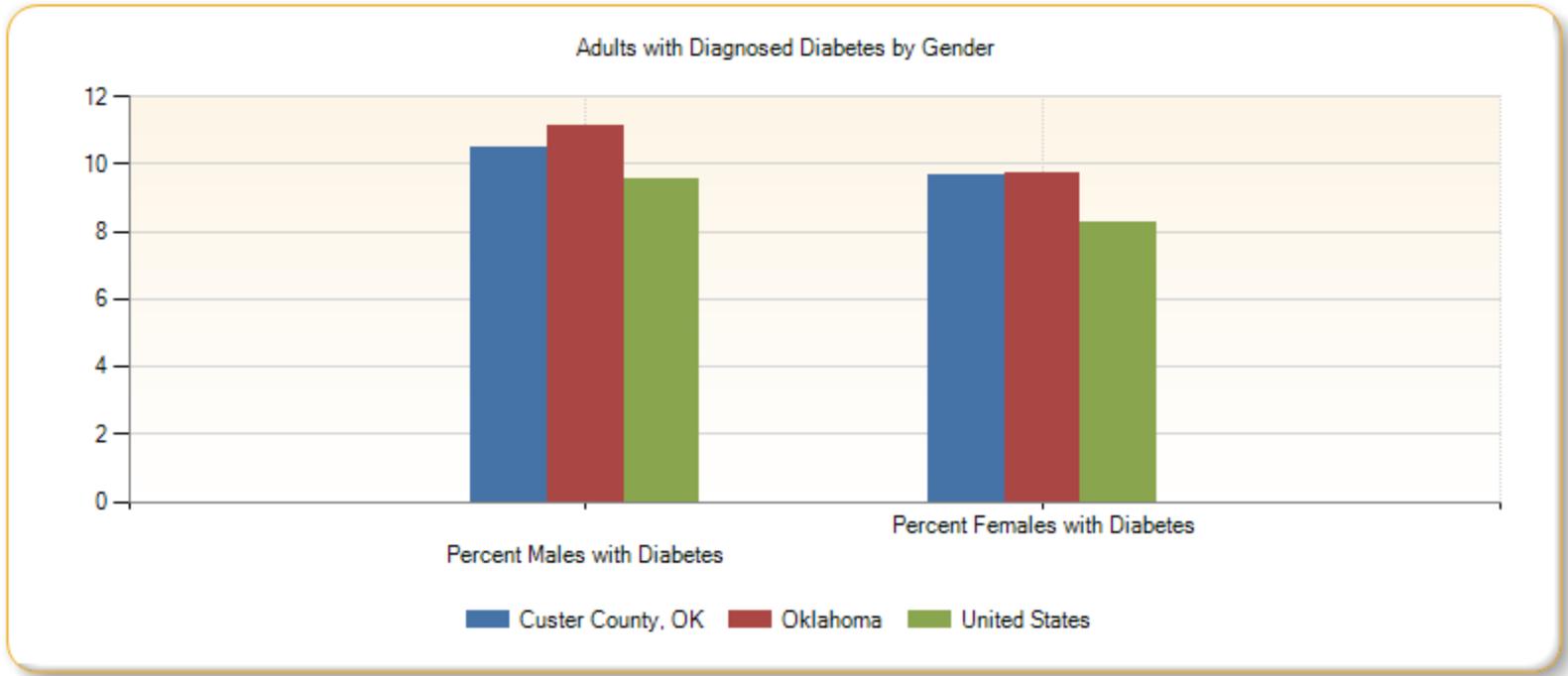


**Diabetes Prevalence, Percent of Adults Age 20 by County, CDC NCCDPHP 2010**



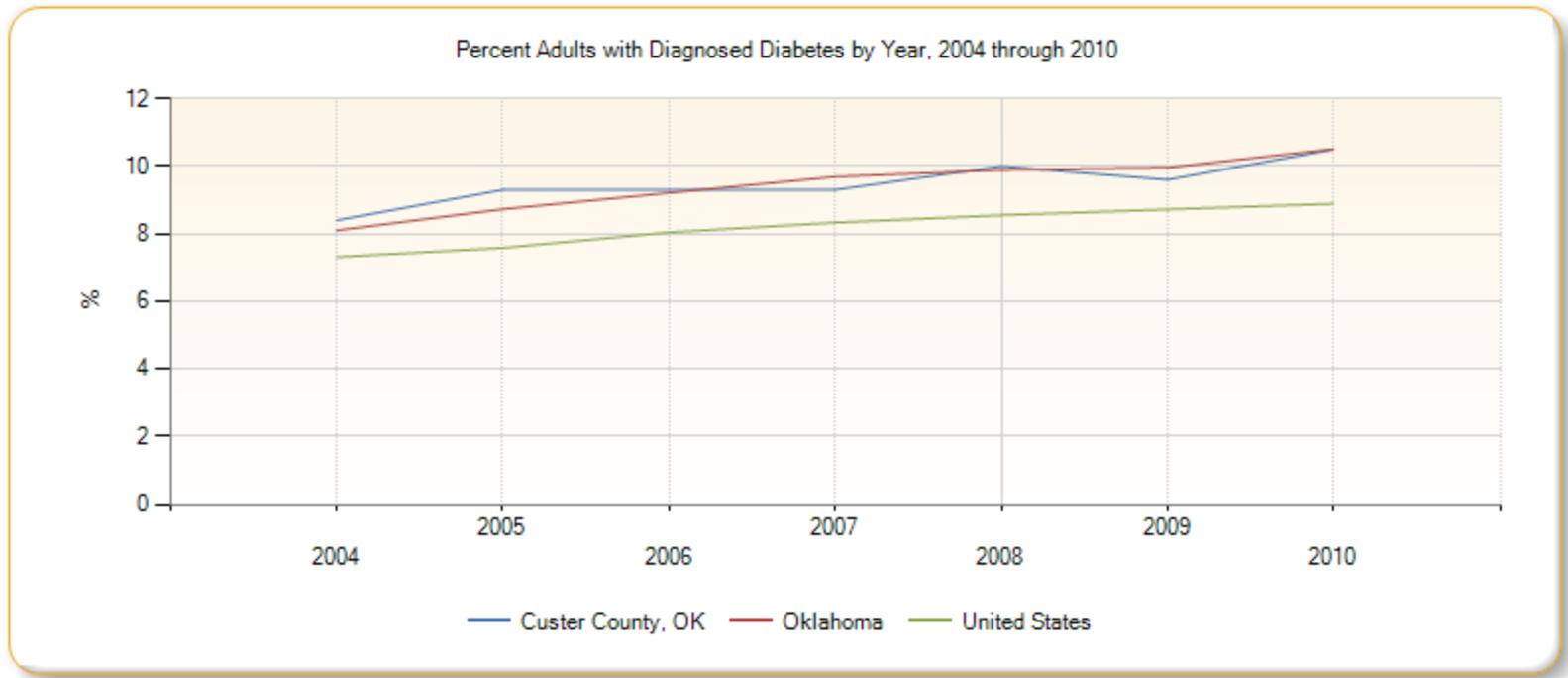
### Adults with Diagnosed Diabetes by Gender

Report Area	Total Males with Diabetes	Percent Males with Diabetes	Total Females with Diabetes	Percent Females with Diabetes
Custer County, OK	961	10.50%	1,016	9.70%
Oklahoma	301,685	11.14%	297,848	9.75%
United States	21,395,214	9.56%	21,148,216	8.28%



**Percent Adults with Diagnosed Diabetes by Year, 2004 through 2010**

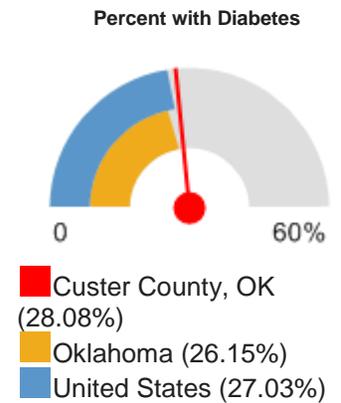
Report Area	2004	2005	2006	2007	2008	2009	2010
Custer County, OK	8.40%	9.30%	9.30%	9.30%	10%	9.60%	10.50%
Oklahoma	8.10%	8.73%	9.21%	9.69%	9.89%	9.96%	10.51%
United States	7.31%	7.58%	8.04%	8.33%	8.55%	8.72%	8.89%



### Diabetes (Medicare Population)

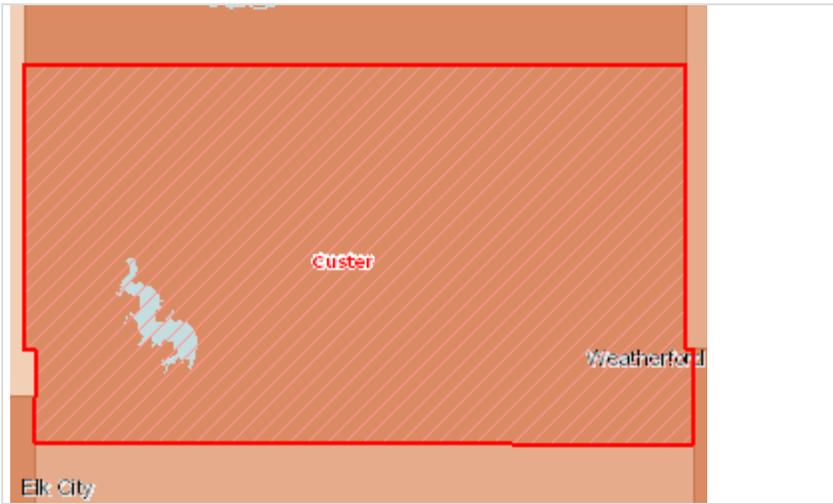
This indicator reports the percentage of the Medicare fee-for-service population with ischaemic heart disease.

Report Area	Total Medicare Beneficiaries	Beneficiaries with Diabetes	Percent with Diabetes
Custer County, OK	4,052	1,138	<b>28.08%</b>
Oklahoma	512,664	134,082	26.15%
United States	34,126,305	9,224,278	27.03%



Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: [Centers for Medicare and Medicaid Services](#): 2012. Source geography: County.



**Beneficiaries with Diabetes, Percent by County, CMS 2012**

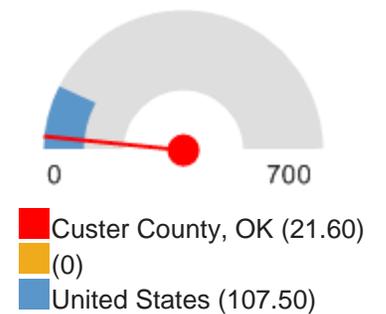
- Over 30.0%
- 27.1 - 30.0%
- 24.1 - 27.0%
- Under 24.1%
- No Data or Data Suppressed
- Report Area

## Gonorrhea Incidence

This indicator reports incidence rate of Gonorrhea cases per 100,000 population. This indicator is relevant because it is a measure of poor health status and indicates the prevalence of unsafe sex practices.

Report Area	Total Population	Total Gonorrhea Infections	Gonorrhea Infection Rate (Per 100,000 Pop.)
Custer County, OK	27,750	6	<b>21.60</b>
Oklahoma	no data	no data	no data
United States	311,466,046	334,826	107.50

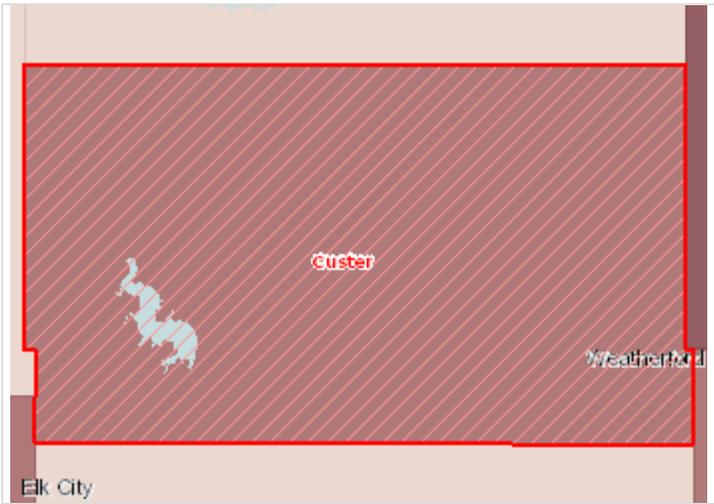
**Gonorrhea Infection Rate (Per 100,000 Pop.)**



*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, [National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention](#): 2012. Source geography: County.*

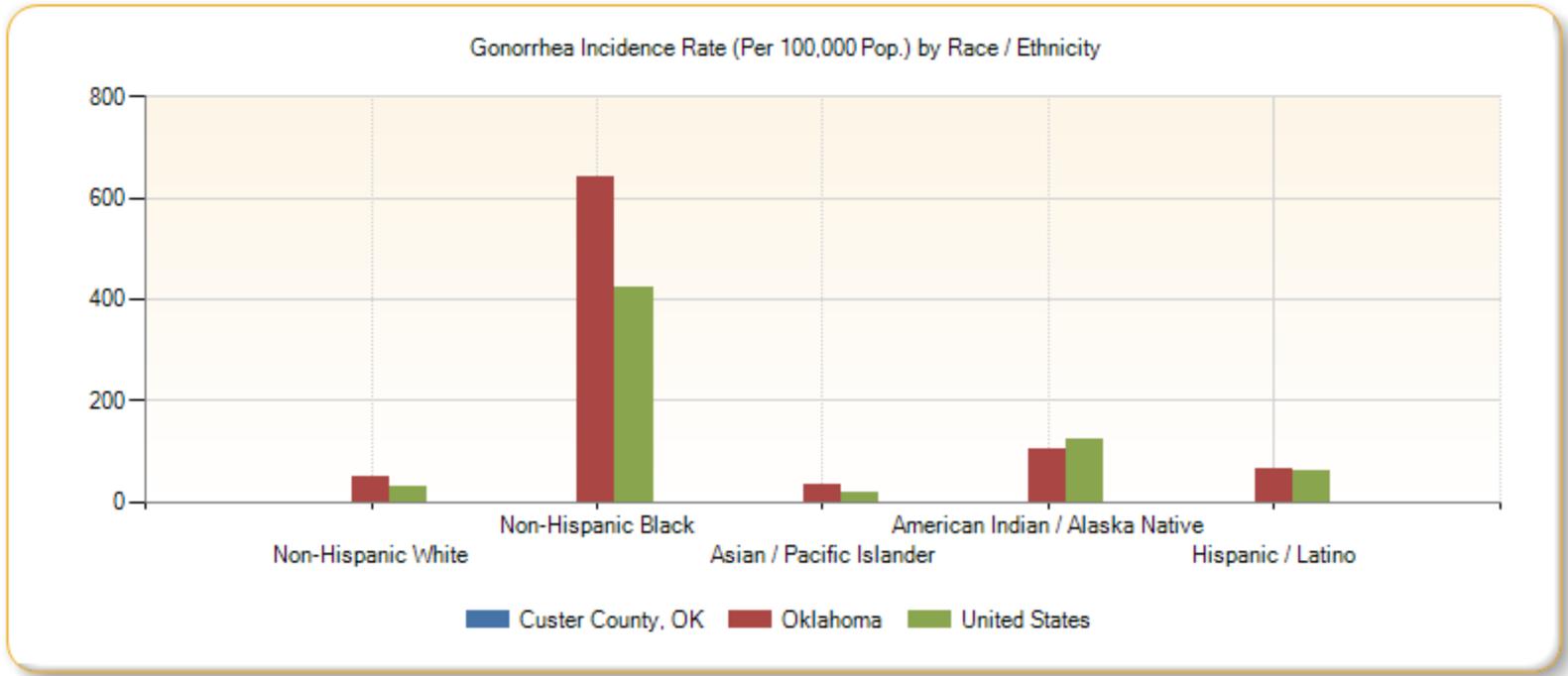
### Gonorrhea, Infection Rate per 100,000 Population by County, NCHHSTP 2012



- Over 80.0
- 20.1 - 80.0
- Under 20.1
- No Cases
- No Data or Data Suppressed
- Report Area

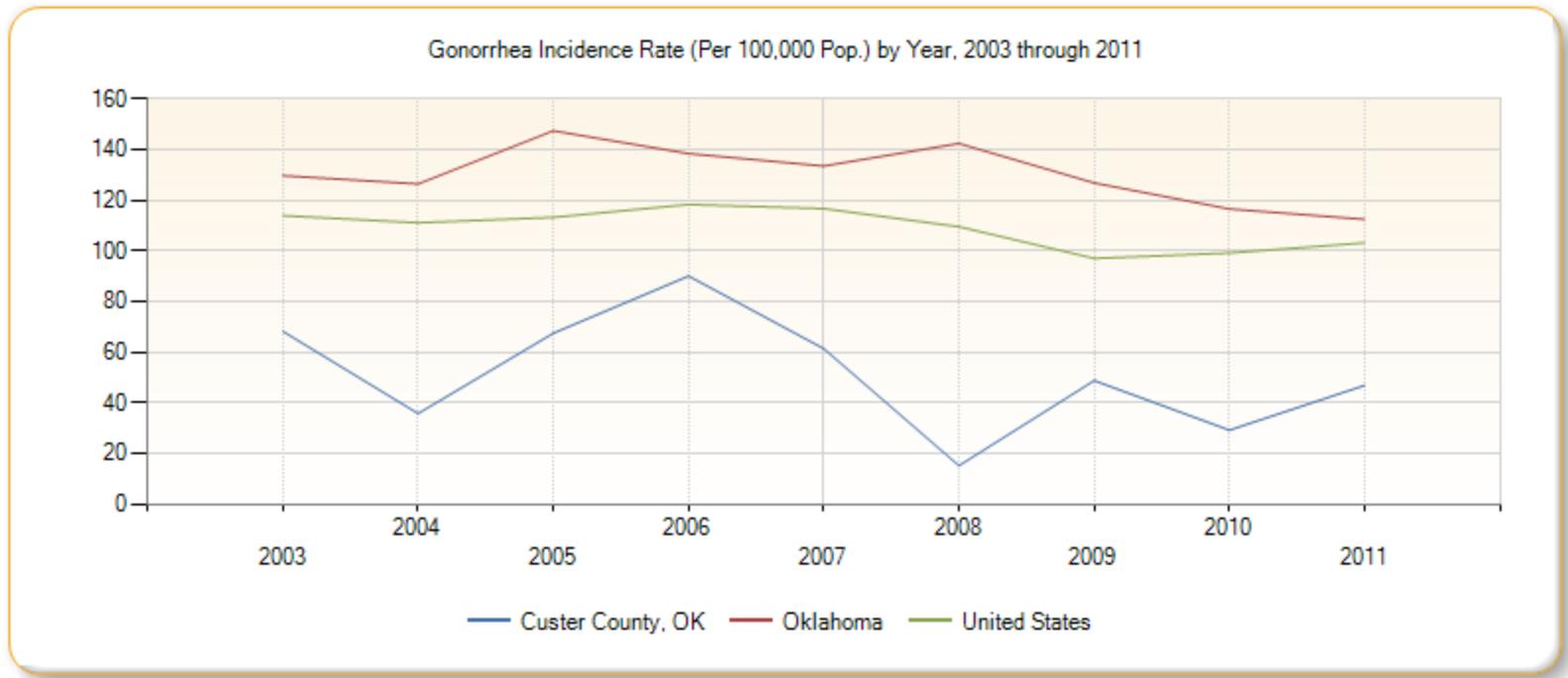
### Gonorrhea Incidence Rate (Per 100,000 Pop.) by Race / Ethnicity

Report Area	Non-Hispanic White	Non-Hispanic Black	Asian / Pacific Islander	American Indian / Alaska Native	Hispanic / Latino
Custer County, OK	no data	no data	no data	no data	no data
Oklahoma	49.27	641.59	33.39	104.47	65.88
United States	29.70	422.05	17.82	124.21	60.70



**Gonorrhea Incidence Rate (Per 100,000 Pop.) by Year, 2003 through 2011**

Report Area	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	68.10	35.70	67.40	90	61.30	15.10	48.70	29.10	46.80
Oklahoma	129.63	126.38	147.36	138.33	133.44	142.35	126.74	116.46	112.36
United States	113.82	111.02	113.17	118.23	116.63	109.46	96.96	99.08	103.09



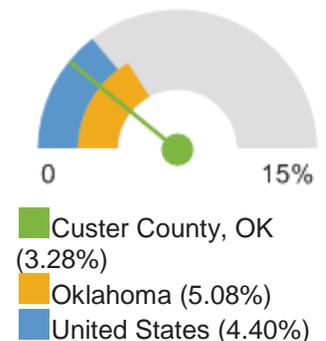
## Heart Disease (Adult)

685, or 3.28% of adults aged 18 and older who have ever been told by a doctor that they have coronary heart disease or angina. This indicator is relevant because coronary heart disease is a leading cause of death in the U.S. and is also related to high blood pressure, high cholesterol, and heart attacks.

Report Area	Survey Population (Adults Age 18 )	Total Adults with Heart Disease	Percent Adults with Heart Disease
Custer County, OK	20,912	685	<b>3.28%</b>
Oklahoma	2,825,960	143,494	5.08%
United States	236,406,904	10,407,185	4.40%

Note: This indicator is compared with the state average.

Percent Adults with Heart Disease



Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#): 2011-12. Additional data analysis by [CARES](#). Source geography: County.

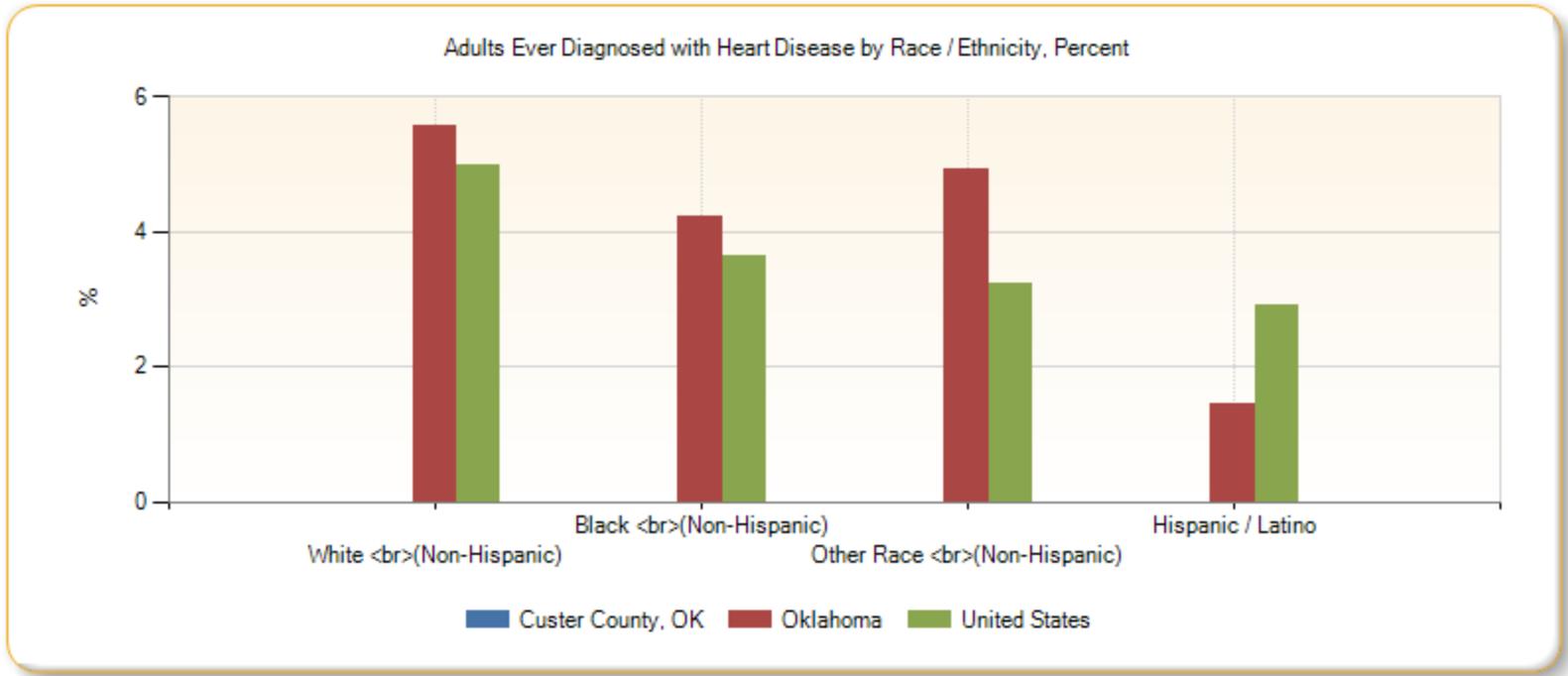


### Heart Disease (Diagnosed), Percent of Adults Age 18 by County, BRFSS 2011-12



### Adults Ever Diagnosed with Heart Disease by Race / Ethnicity, Percent

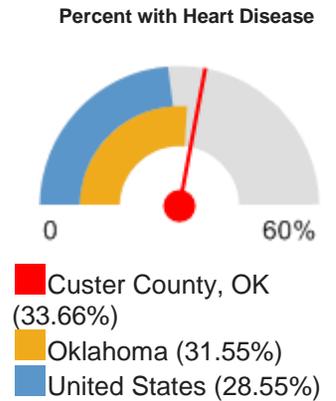
Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
Custer County, OK	no data	no data	no data	no data
Oklahoma	5.56%	4.22%	4.92%	1.44%
United States	4.99%	3.63%	3.23%	2.92%



### Heart Disease (Medicare Population)

This indicator reports the percentage of the Medicare fee-for-service population with ischaemic heart disease.

Report Area	Total Medicare Beneficiaries	Beneficiaries with Heart Disease	Percent with Heart Disease
Custer County, OK	4,052	1,364	<b>33.66%</b>
Oklahoma	512,664	161,757	31.55%
United States	34,126,305	9,744,058	28.55%



Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: [Centers for Medicare and Medicaid Services](#): 2012. Source geography: County.



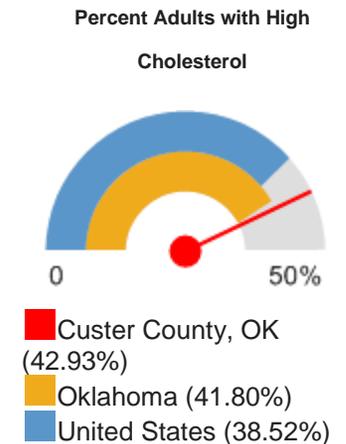
**Beneficiaries with Ischemic Heart Disease, Percent by County, CMS 2012**

- Over 32.0%
- 28.1 - 32.0%
- 24.1 - 28.0%
- Under 24.1%
- No Data or Data Suppressed
- Report Area

## High Cholesterol (Adult)

This indicator reports the percentage of adults aged 18 and older who self-report that they have ever been told by a doctor, nurse, or other health professional that they had high blood cholesterol.

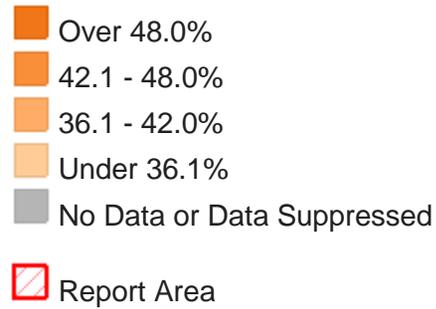
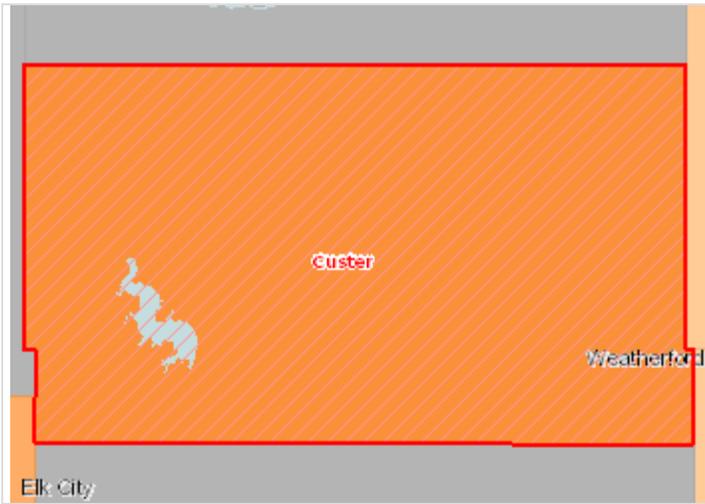
Report Area	Survey Population (Adults Age 18 )	Total Adults with High Cholesterol	Percent Adults with High Cholesterol
Custer County, OK	14,280	6,130	<b>42.93%</b>
Oklahoma	2,020,634	844,648	41.80%
United States	180,861,326	69,662,357	38.52%



*Note: This indicator is compared with the state average.*

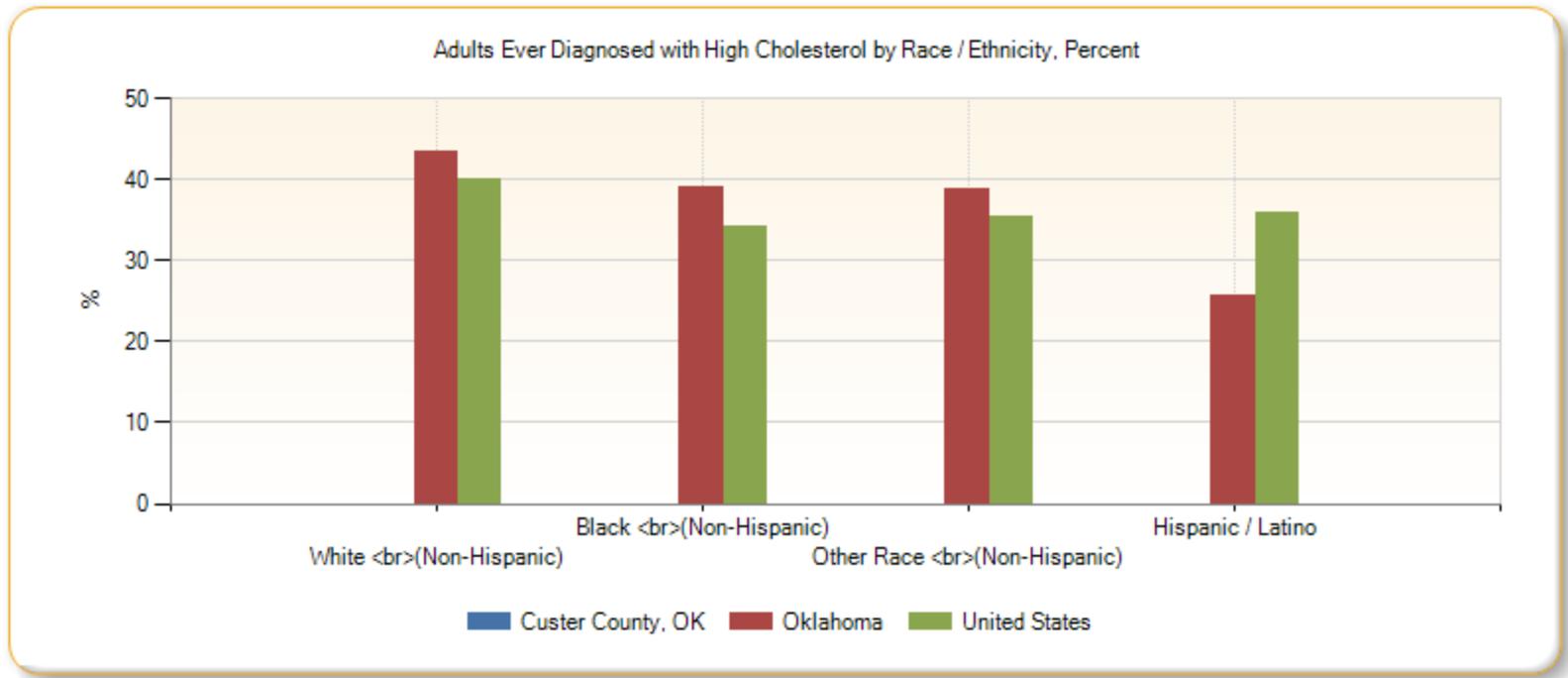
*Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#): 2011-12. Additional data analysis by [CARES](#). Source geography: County.*

### High Cholesterol (Diagnosed), Percent of Adults Age 18 by County, BRFSS 2011-12



### Adults Ever Diagnosed with High Cholesterol by Race / Ethnicity, Percent

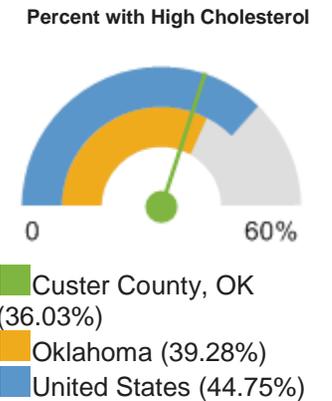
Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
Custer County, OK	no data	no data	no data	no data
Oklahoma	43.41%	39.18%	38.91%	25.73%
United States	39.95%	34.28%	35.42%	35.97%



### High Cholesterol (Medicare Population)

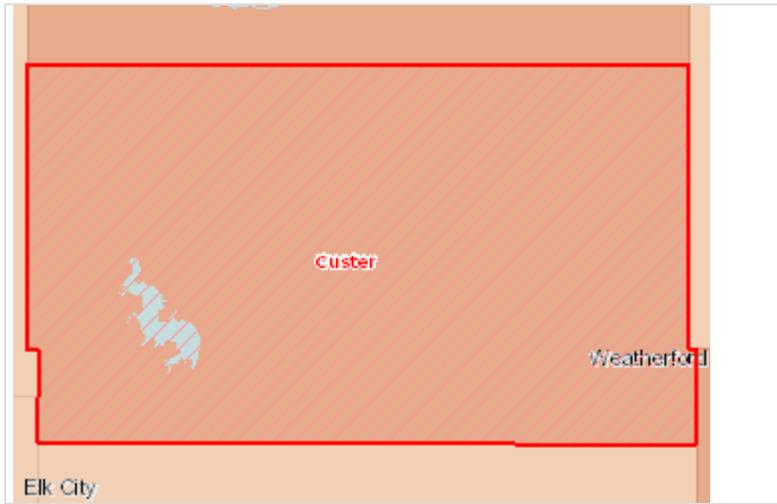
This indicator reports the percentage of the Medicare fee-for-service population with hyperlipidemia, which is typically associated with high cholesterol.

Report Area	Total Medicare Beneficiaries	Beneficiaries with High Cholesterol	Percent with High Cholesterol
Custer County, OK	4,052	1,460	36.03%
Oklahoma	512,664	201,352	39.28%
United States	34,126,305	15,273,052	44.75%



Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: [Centers for Medicare and Medicaid Services](#); 2012. Source geography: County.



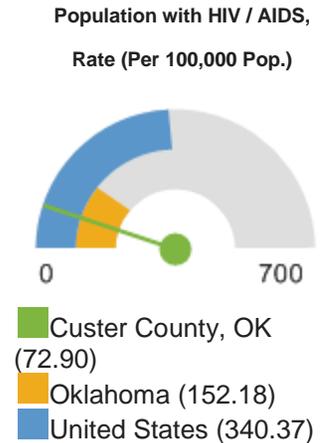
**Beneficiaries with High Cholesterol, Percent by County, CMS 2012**

- Over 48.0%
- 42.1 - 48.0%
- 36.1 - 42.0%
- Under 36.1%
- No Data or Data Suppressed
- Report Area

## HIV Prevalence

This indicator reports prevalence rate of HIV per 100,000 population. This indicator is relevant because HIV is a life-threatening communicable disease that disproportionately affects minority populations and may also indicate the prevalence of unsafe sex practices.

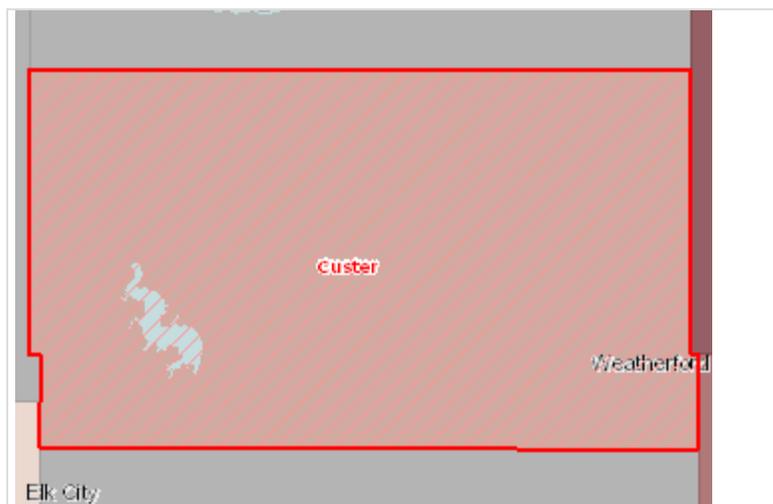
Report Area	Total Population	Population with HIV / AIDS	Population with HIV / AIDS, Rate (Per 100,000 Pop.)
Custer County, OK	22,843	17	<b>72.90</b>
Oklahoma	3,081,795	4,690	152.18
United States	509,288,471	1,733,459	340.37



*Note: This indicator is compared with the state average.*

*Data Source: Centers for Disease Control and Prevention, [National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention](#): 2010.*

*Source geography: County.*

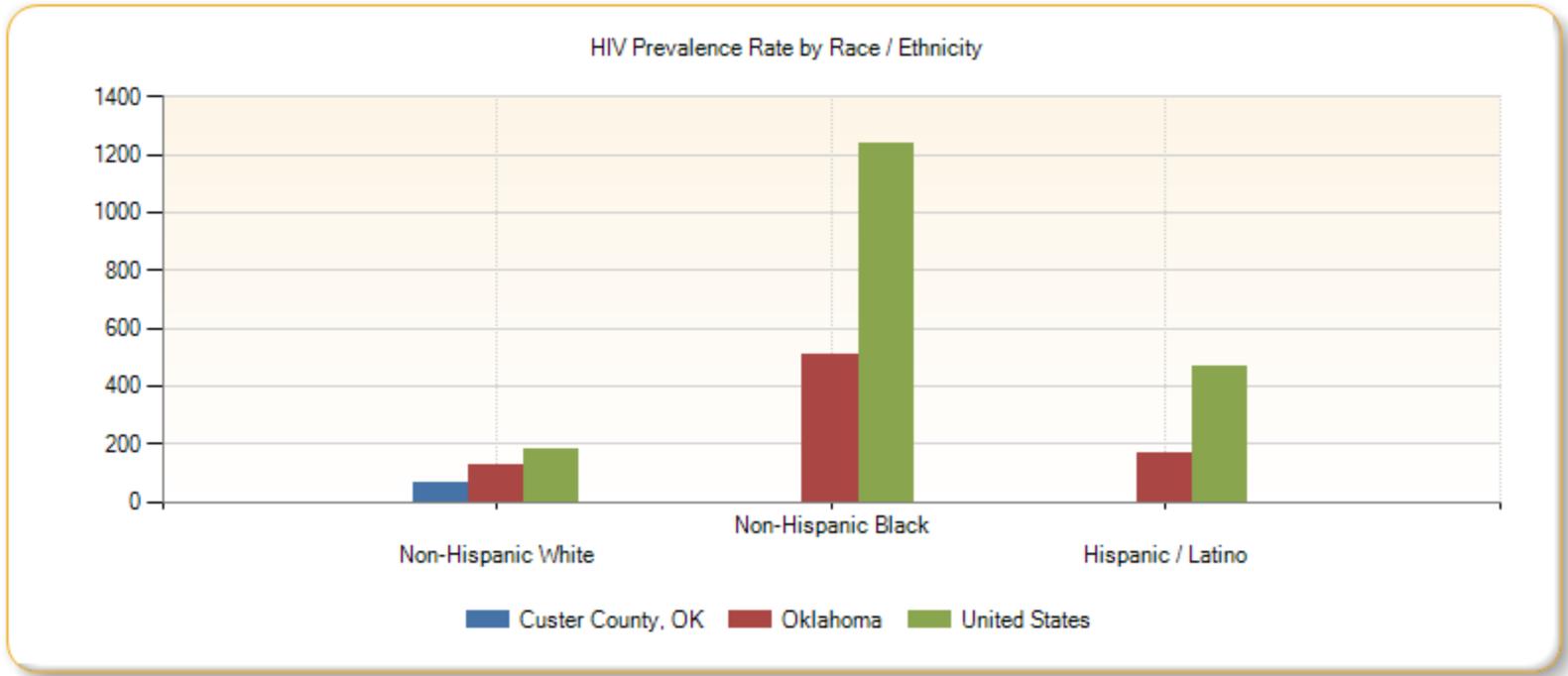


### HIV Prevalence, Rate (Per 100,000 Pop.) by County, NCHHSTP 2010



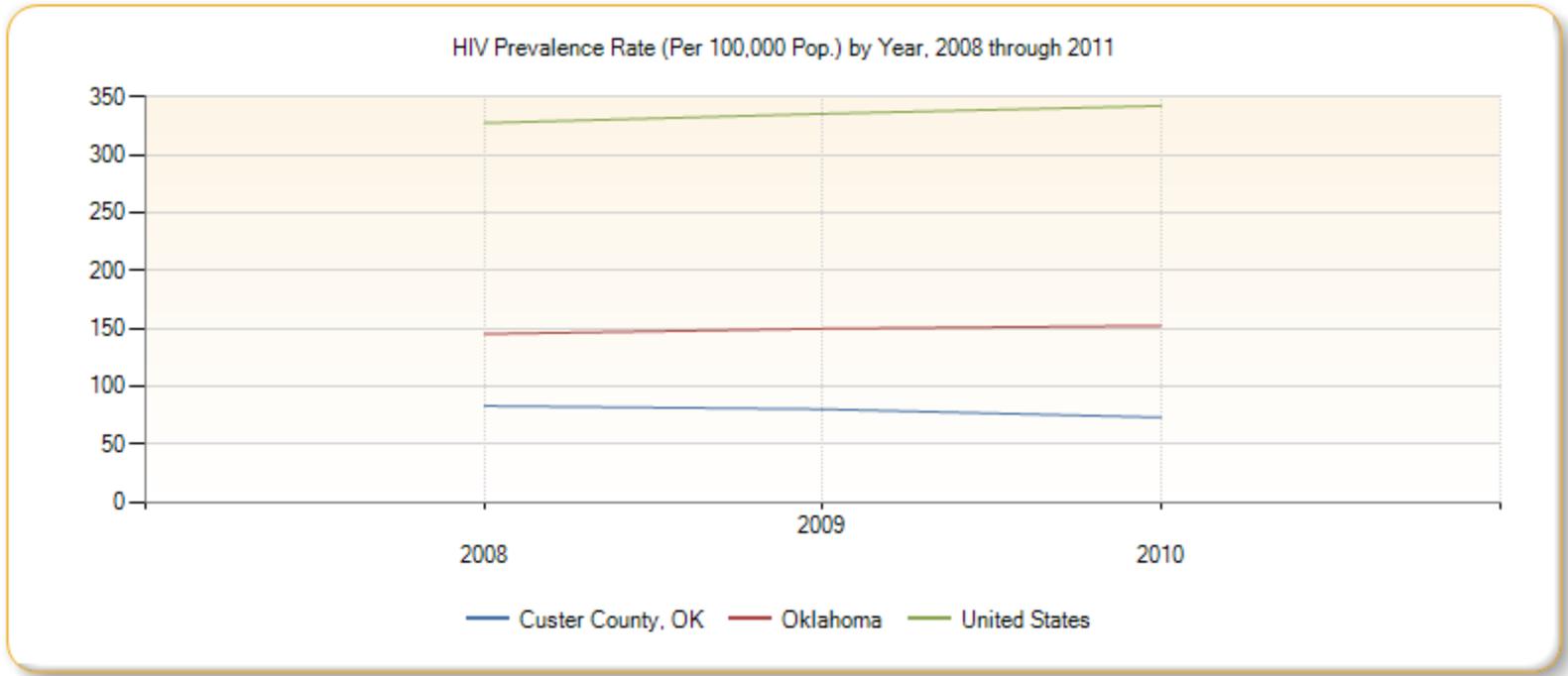
### HIV Prevalence Rate by Race / Ethnicity

Report Area	Non-Hispanic White	Non-Hispanic Black	Hispanic / Latino
Custer County, OK	62.50	no data	no data
Oklahoma	124.35	510.42	169.98
United States	180.16	1,235.54	464.11



**HIV Prevalence Rate (Per 100,000 Pop.) by Year, 2008 through 2011**

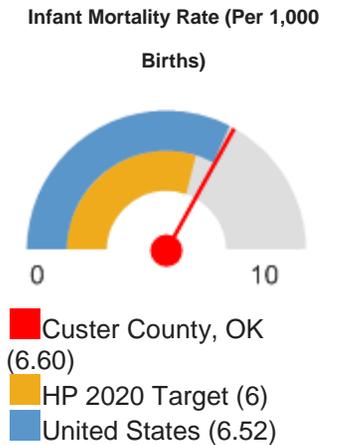
Report Area	2008	2009	2010
Custer County, OK	82.80	80.10	72.90
Oklahoma	145.04	149.65	152.18
United States	327.37	335.38	342.17



## Infant Mortality

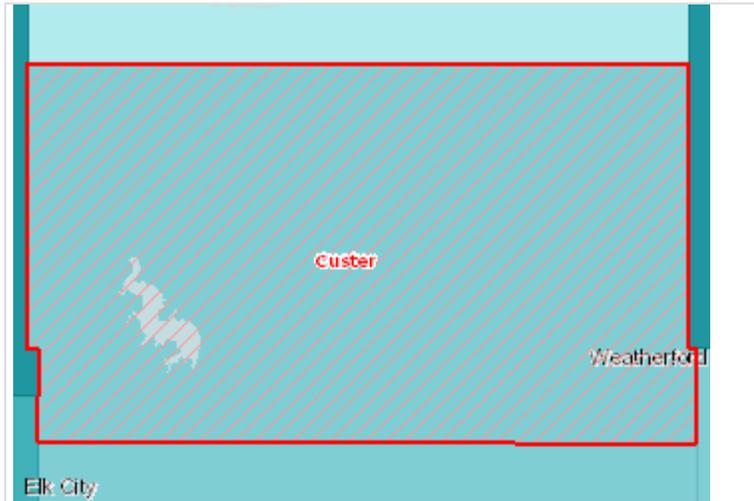
This indicator reports the rate of deaths to infants less than one year of age per 1,000 births. This indicator is relevant because high rates of infant mortality indicate the existence of broader issues pertaining to access to care and maternal and child health.

Report Area	Total Births	Total Infant Deaths	Infant Mortality Rate (Per 1,000 Births)
Custer County, OK	2,130	14	<b>6.60</b>
Oklahoma	272,495	2,125	<b>7.80</b>
United States	20,913,535	136,369	<b>6.52</b>
<a href="#">HP 2020 Target</a>			<= 6.0



Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: US Department of Health & Human Services, Health Resources and Services Administration, [Area Health Resource File](#): 2006-10. Source geography: County.

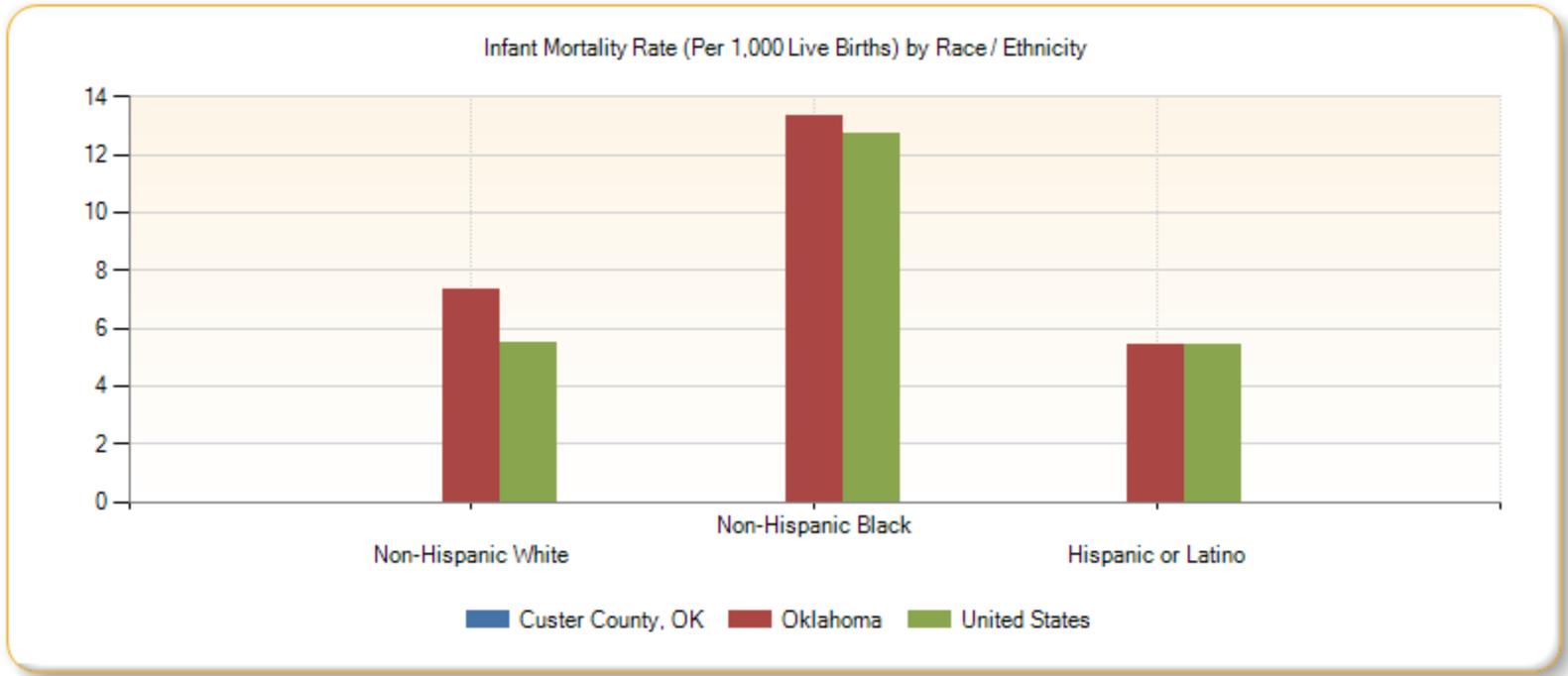


**Infant Mortality, Rate (Per 1,000 Live Births) by County, AHRF 2006-10**

- Over 10.0
- 8.1 - 10.0
- 5.1 - 8.0
- Under 5.1
- No Data or Data Suppressed
- Report Area

**Infant Mortality Rate (Per 1,000 Live Births) by Race / Ethnicity**

Report Area	Non-Hispanic White	Non-Hispanic Black	Hispanic or Latino
Custer County, OK	no data	no data	no data
Oklahoma	7.30	13.30	5.40
United States	5.50	12.70	5.40

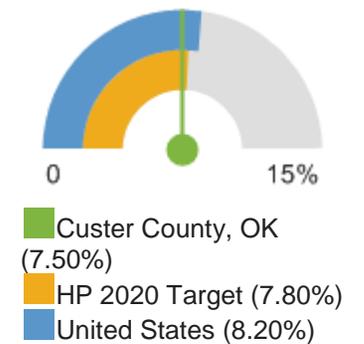


## Low Birth Weight

This indicator reports the percentage of total births that are low birth weight (Under 2500g). This indicator is relevant because low birth weight infants are at high risk for health problems. This indicator can also highlight the existence of health disparities.

Report Area	Total Live Births	Low Weight Births (Under 2500g)	Low Weight Births, Percent of Total
Custer County, OK	2,800	210	7.50%
Oklahoma	372,505	30,918	8.30%
United States	29,300,495	2,402,641	8.20%
<a href="#">HP 2020 Target</a>			<=7.8%

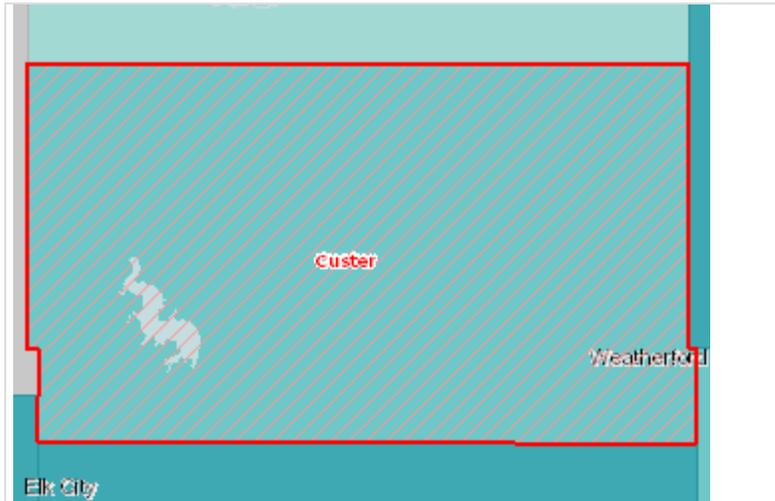
Low Weight Births, Percent of Total



Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2006-12. Accessed via [CDC WONDER](#).

Source geography: County.

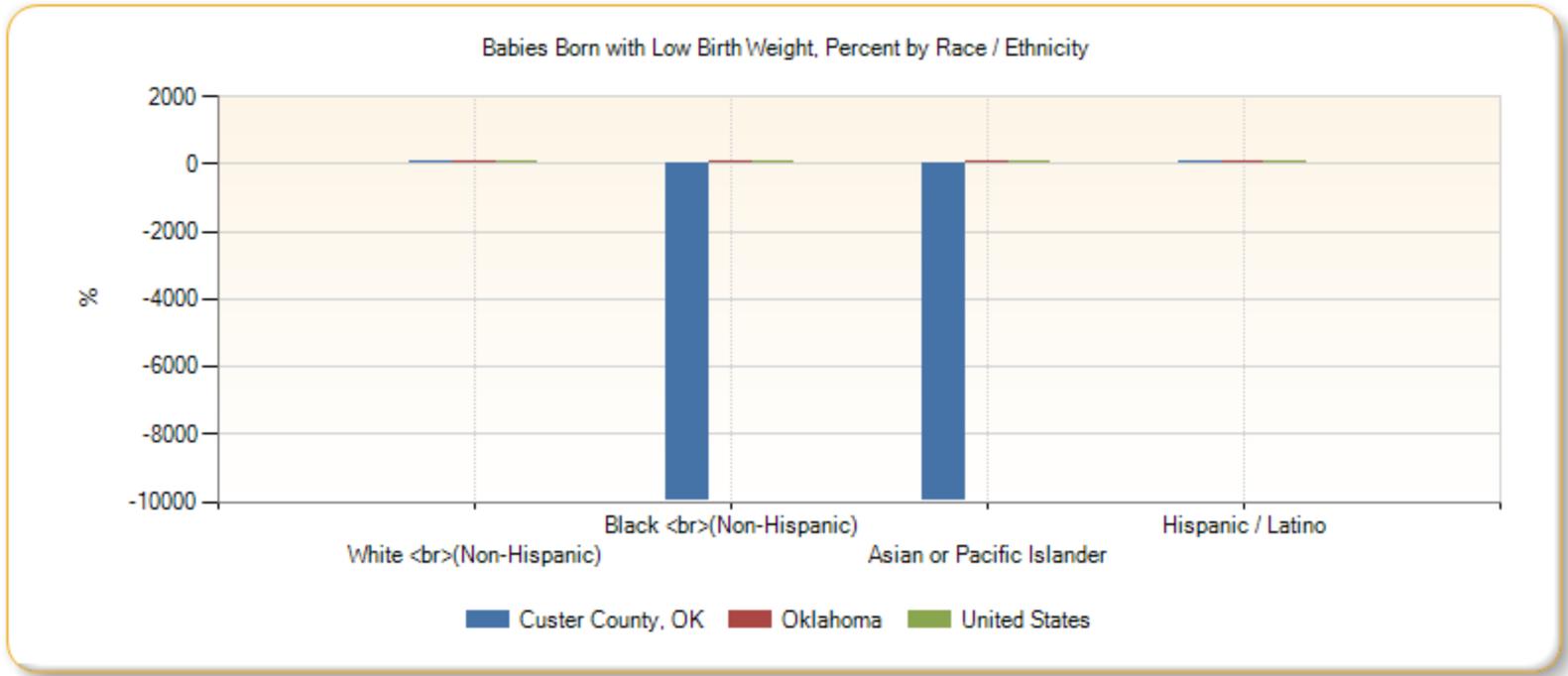


**Low Birth Weight, Percent of Live Births by County, NVSS 2006-12**



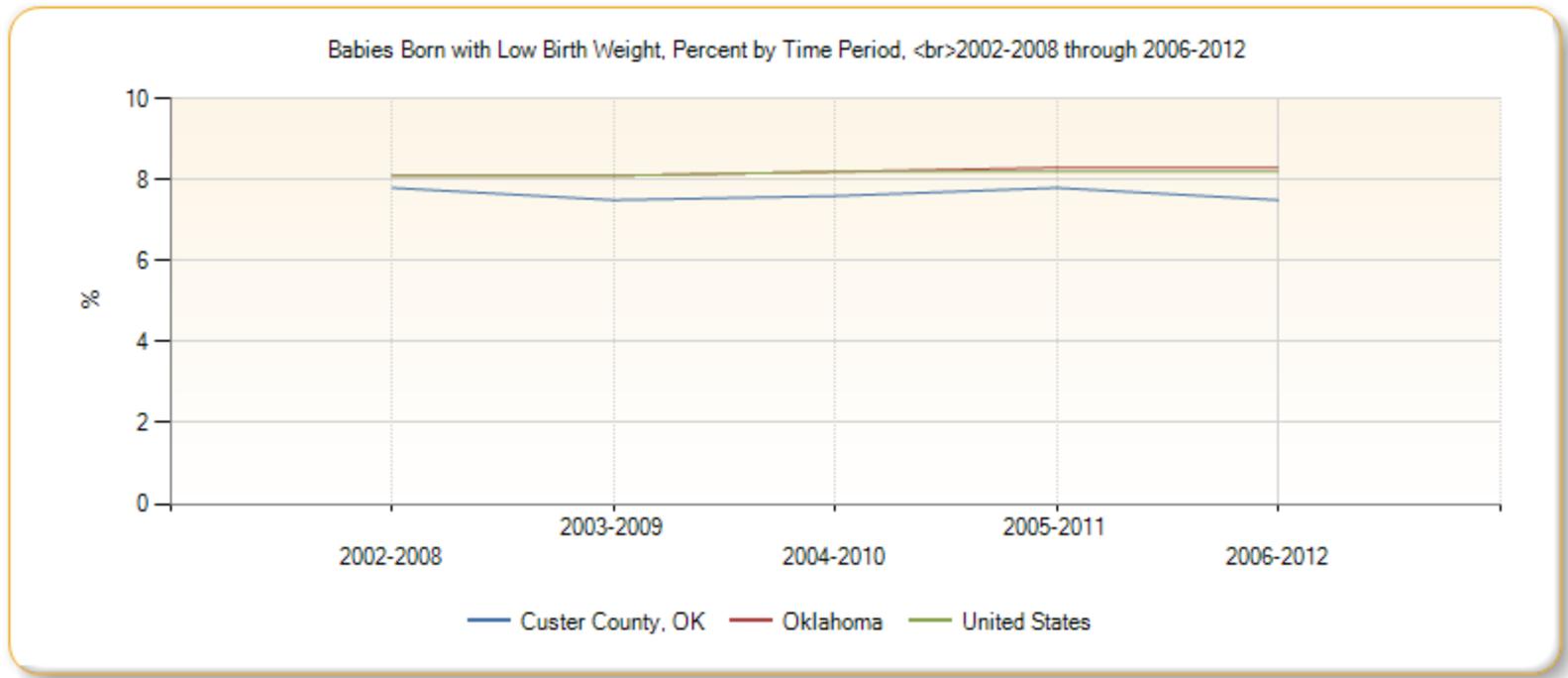
**Babies Born with Low Birth Weight, Percent by Race / Ethnicity**

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Asian or Pacific Islander	Hispanic / Latino
Custer County, OK	8.20%	no data	no data	6%
Oklahoma	7.90%	14.70%	7.50%	6.60%
United States	7.20%	13.60%	8.20%	7%



**Babies Born with Low Birth Weight, Percent by Time Period,  
2002-2008 through 2006-2012**

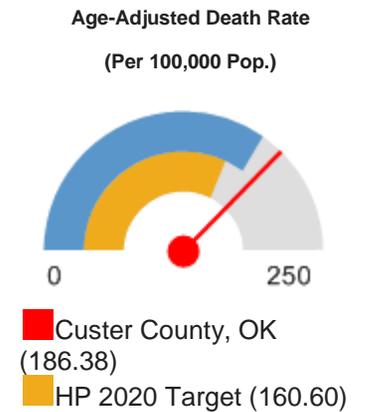
Report Area	2002-2008	2003-2009	2004-2010	2005-2011	2006-2012
Custer County, OK	7.80%	7.50%	7.60%	7.80%	7.50%
Oklahoma	8.10%	8.10%	8.20%	8.30%	8.30%
United States	8.10%	8.10%	8.20%	8.20%	8.20%



## Mortality - Cancer

This indicator reports the rate of death due to malignant neoplasm (cancer) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because cancer is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	54	199.74	<b>186.38</b>
Oklahoma	3,712,751	7,770	209.28	<b>192.61</b>
United States	306,486,831	569,481	185.81	<b>174.08</b>



[HP 2020 Target](#)

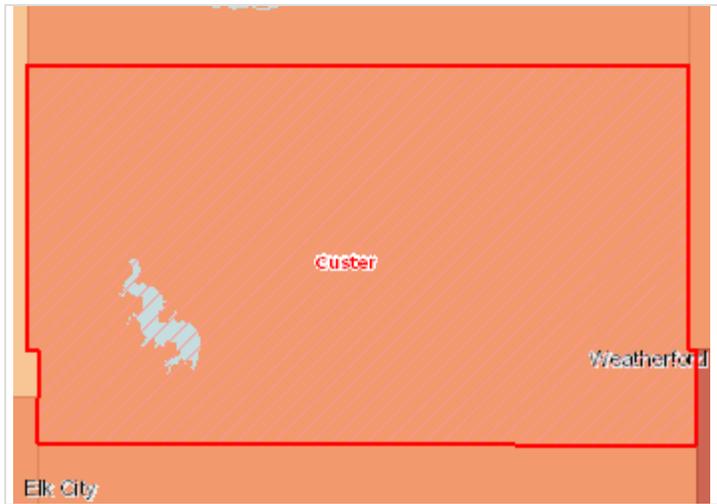
<= 160.6

United States (174.08)

Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#).

Source geography: County.

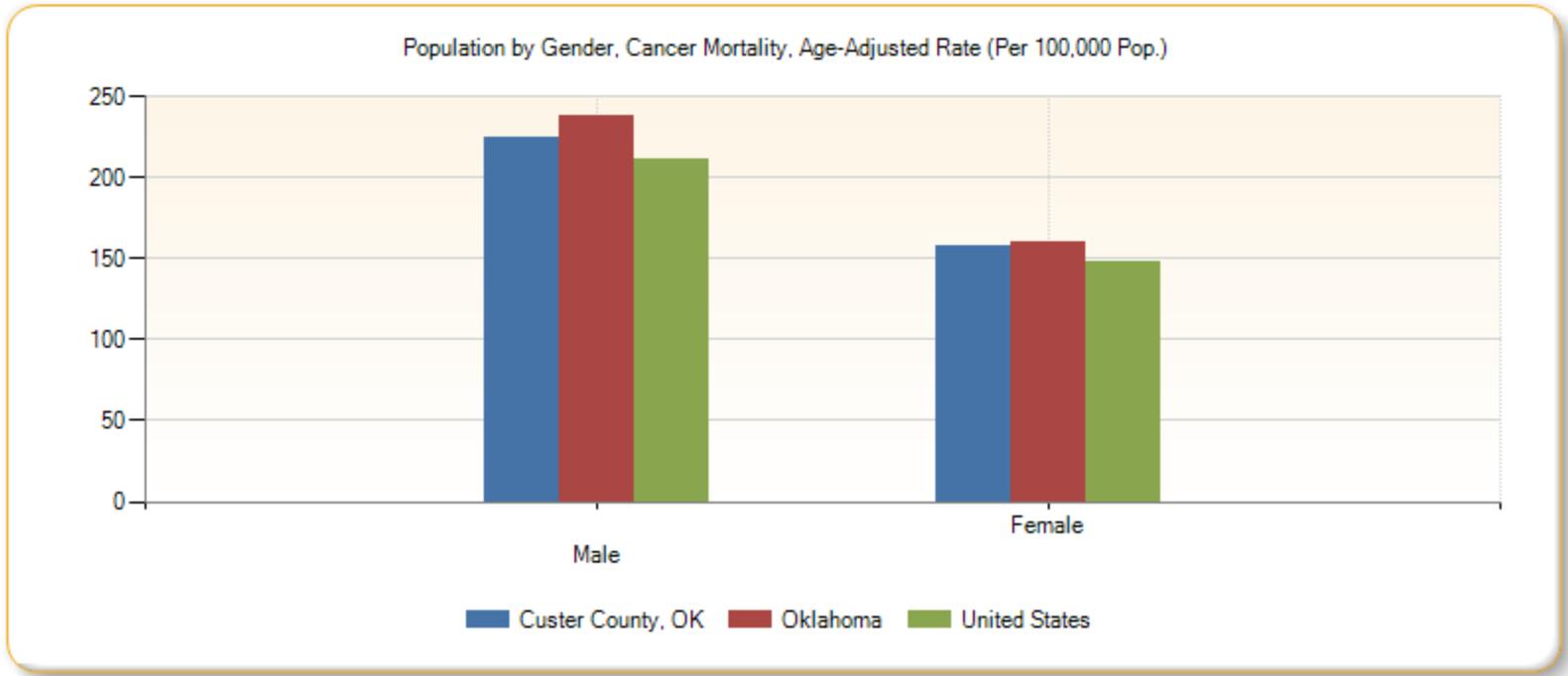


**Cancer Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, NVSS 2007-11**

- Over 200.0
- 180.1 - 200.0
- 160.1 - 180.0
- Under 160.1
- No Data or Data Suppressed
- Report Area

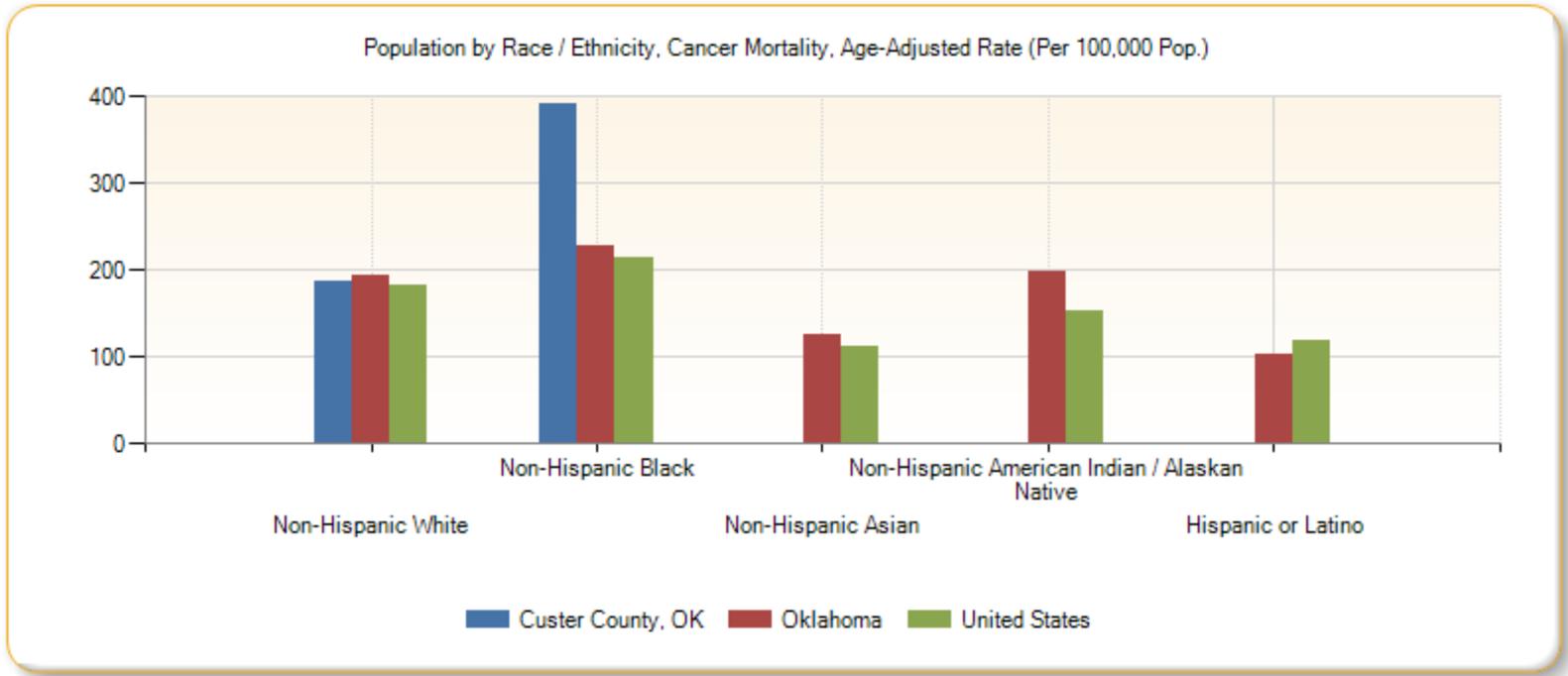
**Population by Gender, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Male	Female
Custer County, OK	224.06	157.08
Oklahoma	237.88	160.12
United States	211.52	147.92



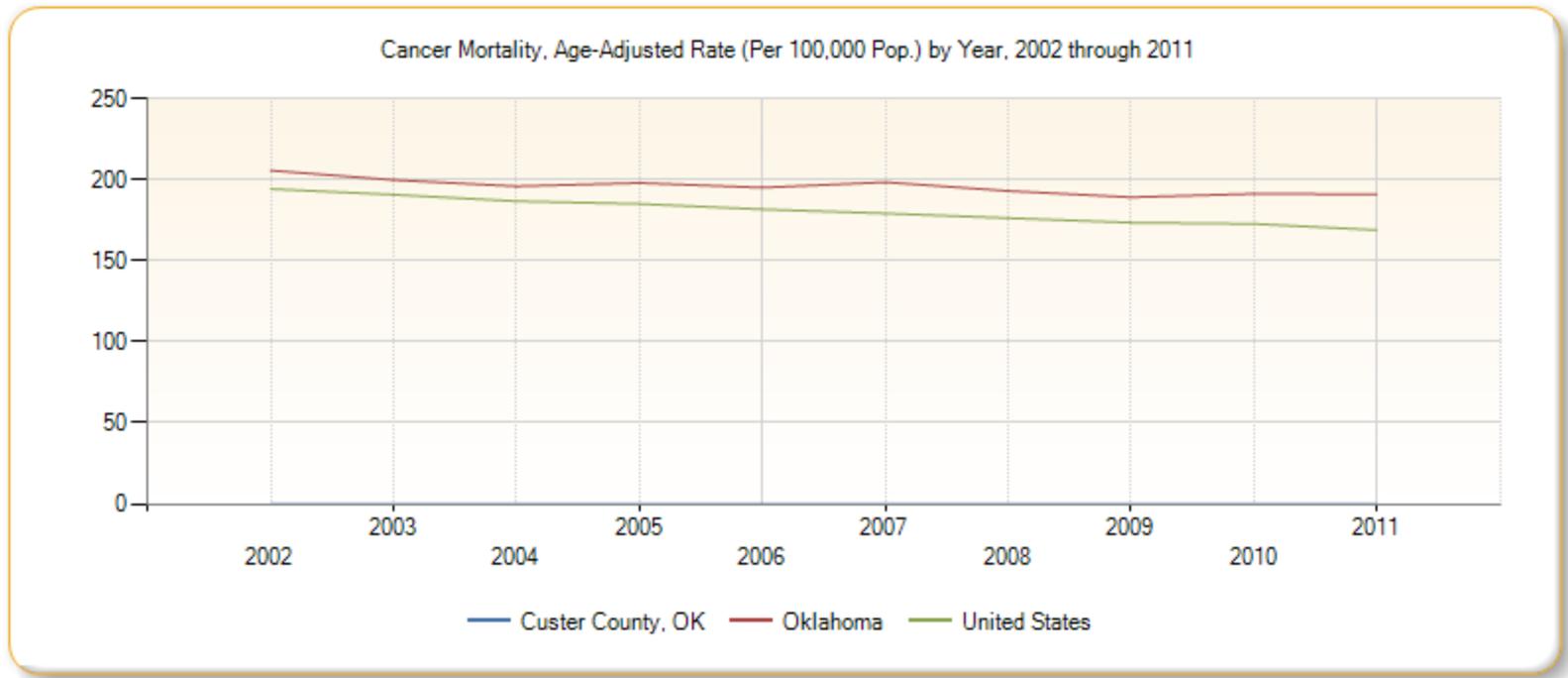
**Population by Race / Ethnicity, Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	186.31	391.52	no data	no data	no data
Oklahoma	193.76	226.78	124.34	199.10	103.74
United States	182.58	214.88	111.57	152.74	119.74



**Cancer Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

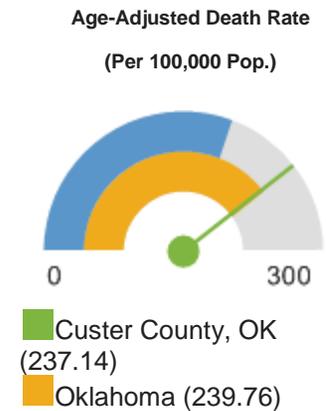
Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	205.74	199.84	196.03	198.03	195.18	198.48	193.13	189.24	191.32	191.05
United States	194.34	190.85	186.79	185.09	181.78	179.26	176.37	173.53	172.79	168.96



## Mortality - Heart Disease

Within the report area the rate of death due to coronary heart disease per 100,000 population is 237.14. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	74	271.24	<b>237.14</b>
Oklahoma	3,712,751	9,479	255.31	239.76
United States	306,486,831	605,315	197.50	184.55

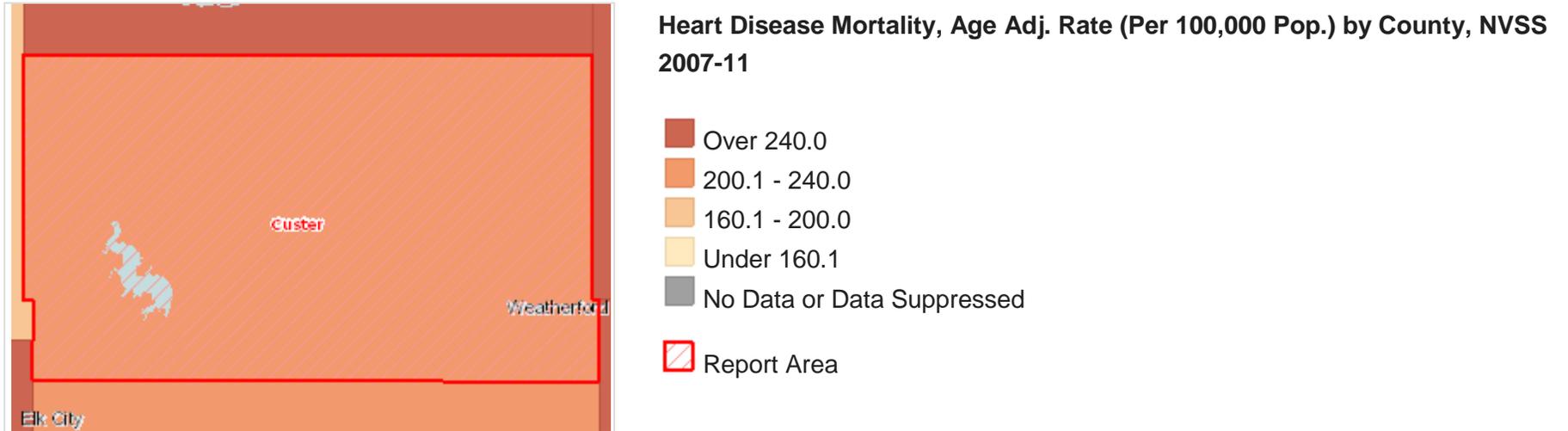


Note: This indicator is compared with the state average.

United States (184.55)

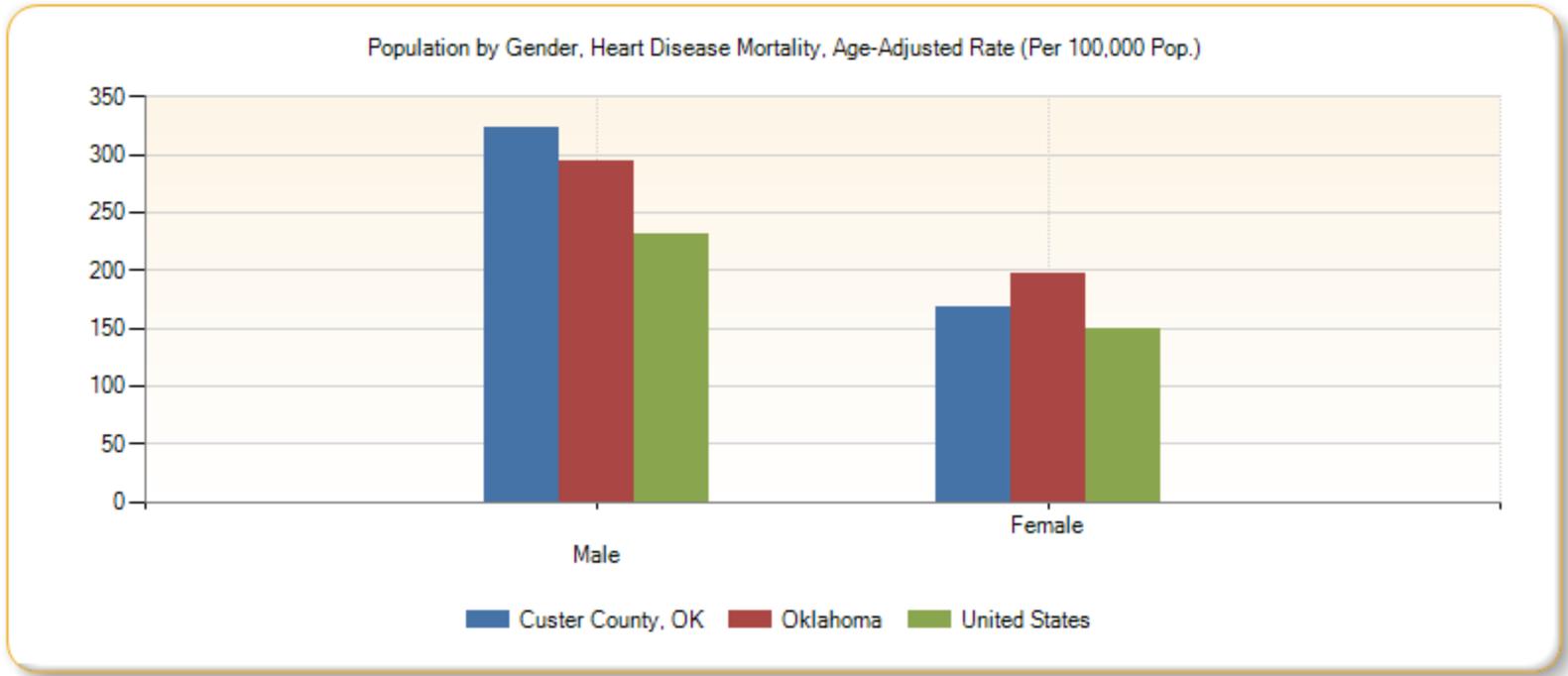
Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#).

Source geography: County.



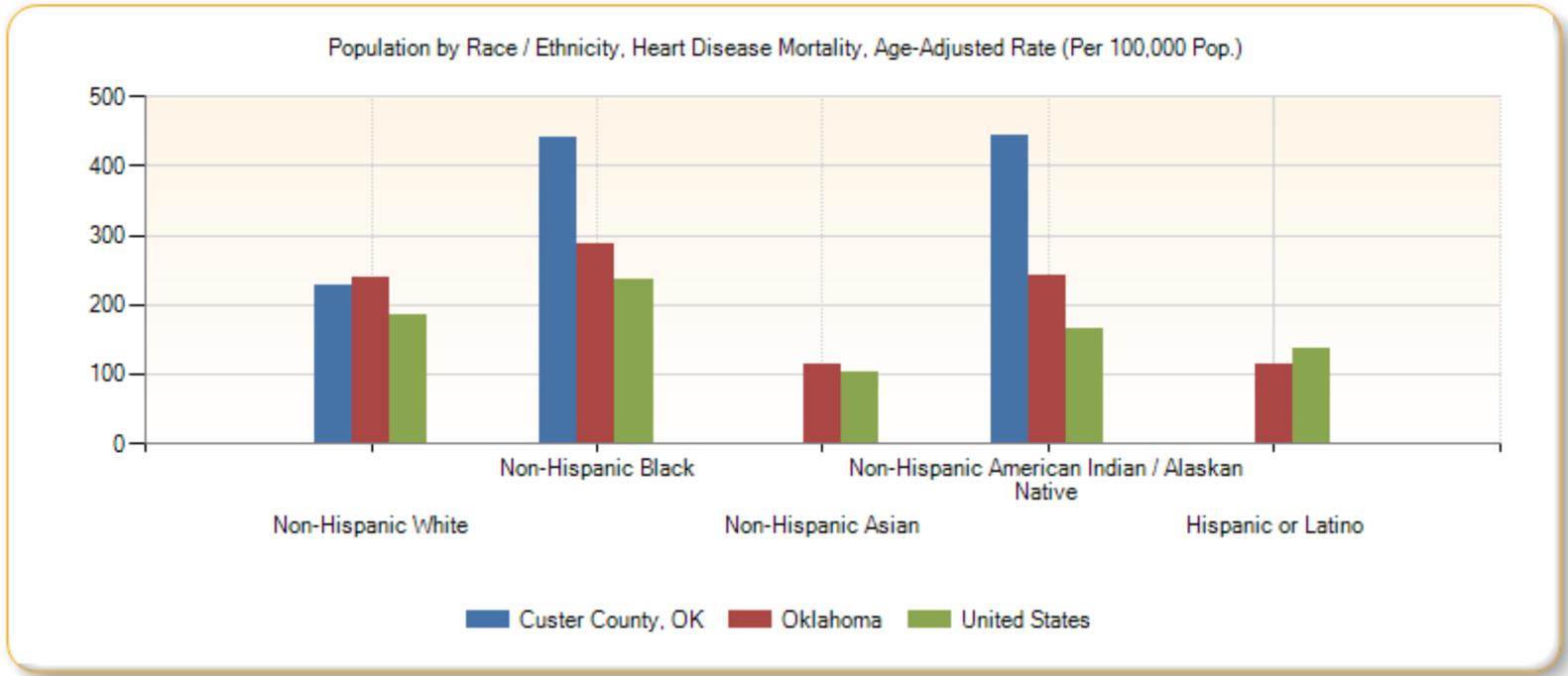
**Population by Gender, Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Male	Female
Custer County, OK	322.21	167.87
Oklahoma	293.63	196.31
United States	230.61	148.54



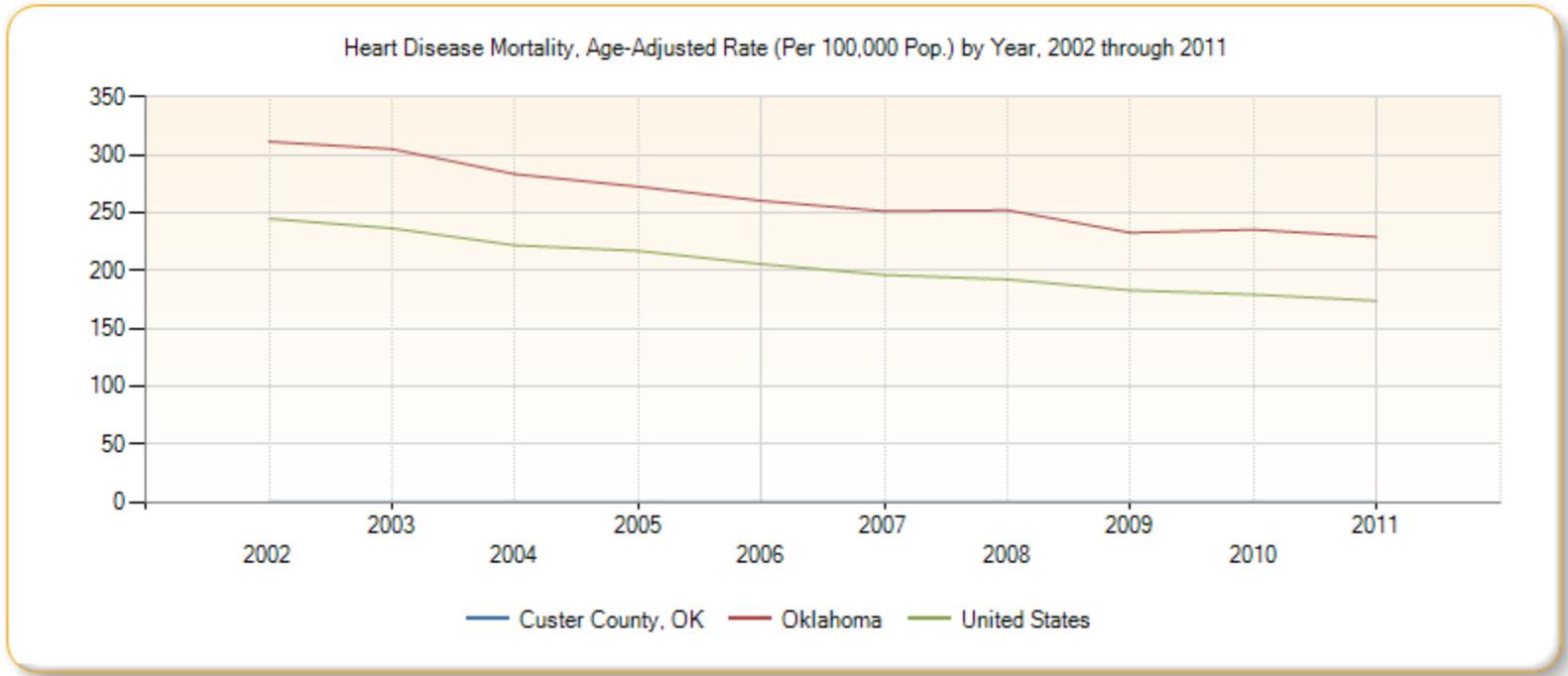
**Population by Race / Ethnicity, Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	228.81	441.37	no data	442.65	no data
Oklahoma	240.54	287.52	114.01	240.86	114.15
United States	185.11	237.60	102.64	164.23	135.98



**Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

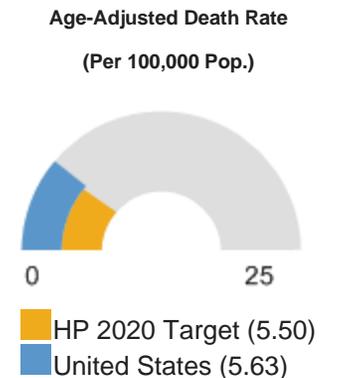
Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	311.29	304.89	283.15	272.37	260.12	251.14	252.02	232.55	235.20	228.84
United States	244.64	236.31	221.63	216.85	205.47	196.09	192.12	182.82	179.14	173.74



## Mortality - Homicide

This indicator reports the rate of death due to assault (homicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because homicide rate is a measure of poor community safety and is a leading cause of premature death.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	no data	no data	no data
Oklahoma	3,712,751	241	6.49	<b>6.58</b>
United States	306,486,831	17,097	5.58	<b>5.63</b>

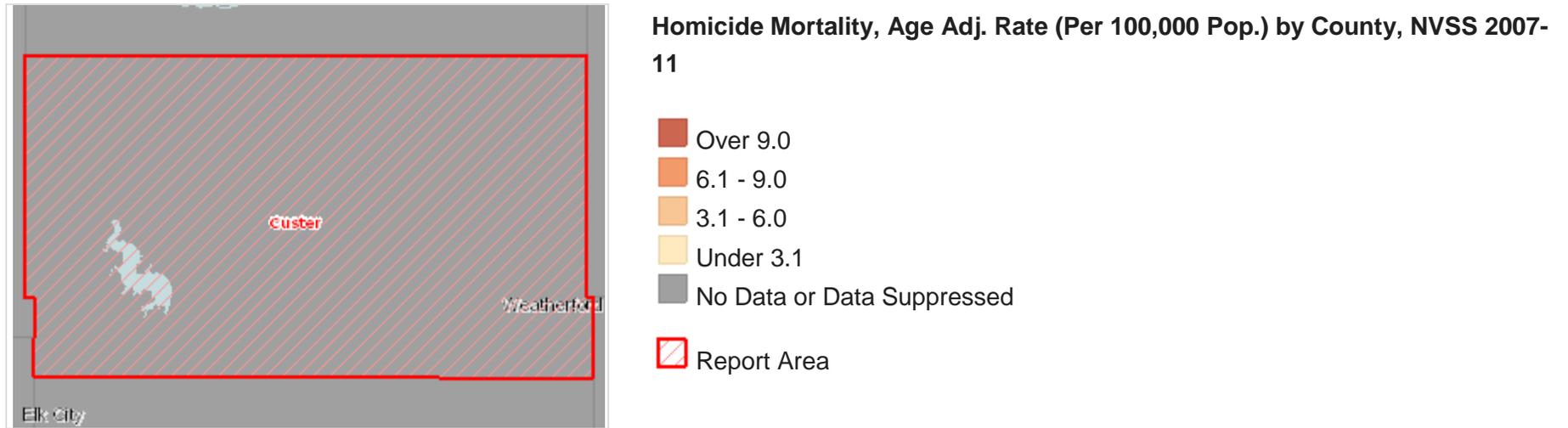


[HP 2020 Target](#)

<= 5.5

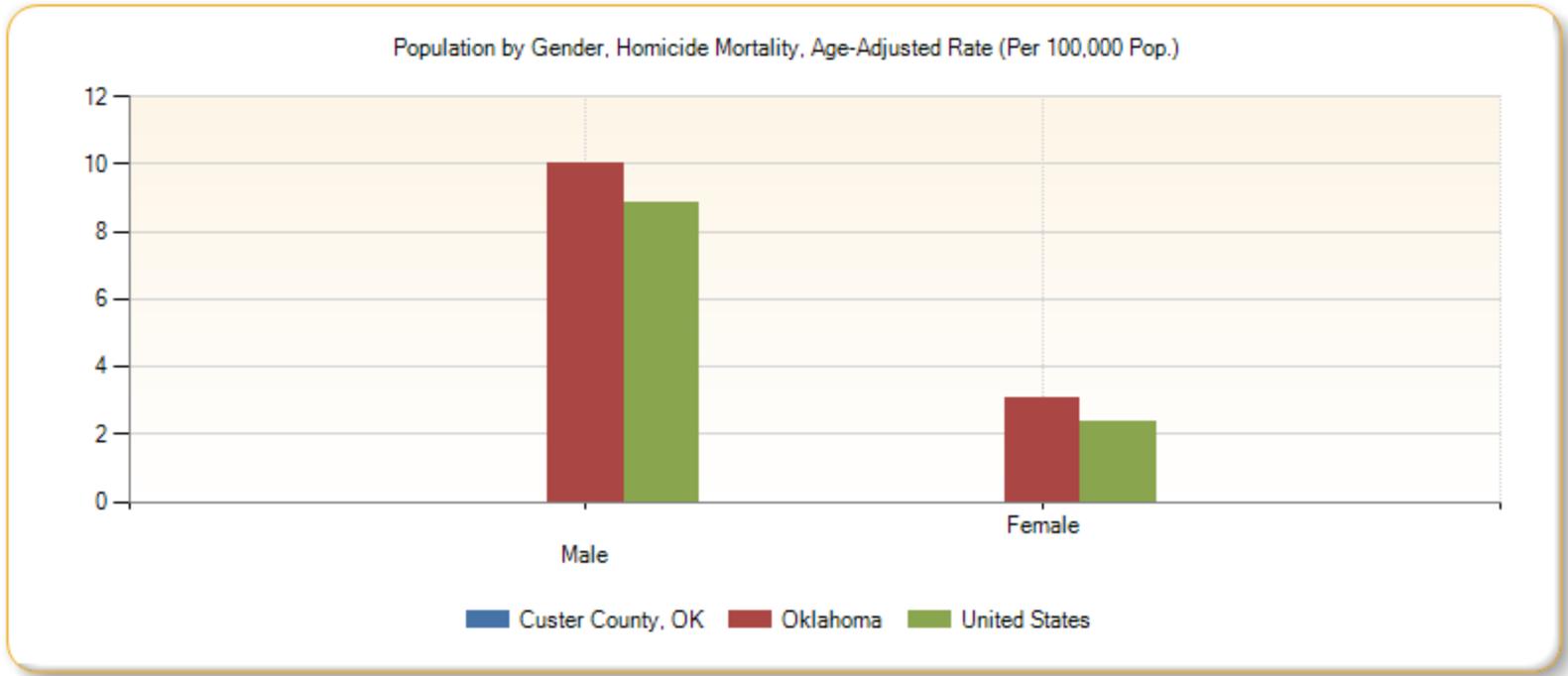
Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#). Source geography: County.



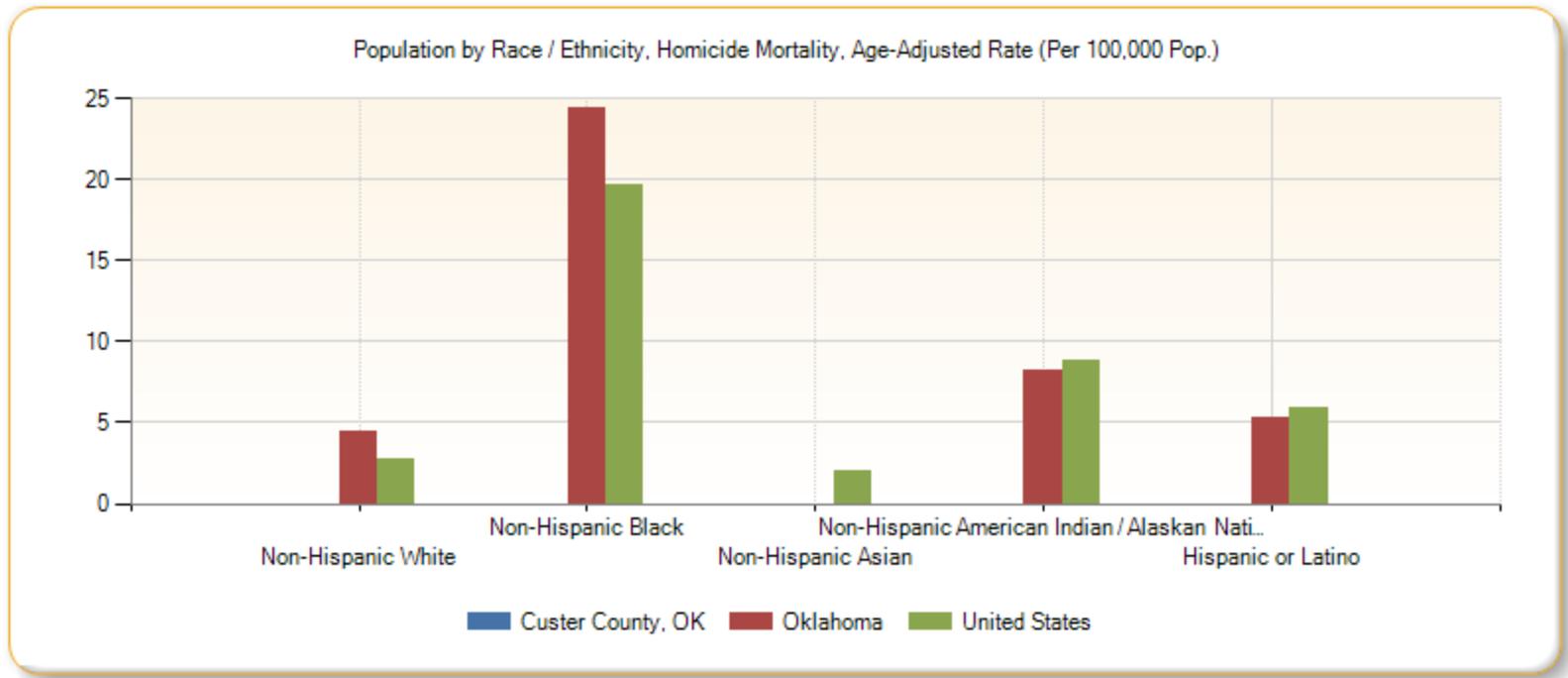
**Population by Gender, Homicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Male	Female
Custer County, OK	no data	no data
Oklahoma	10.05	3.06
United States	8.87	2.36



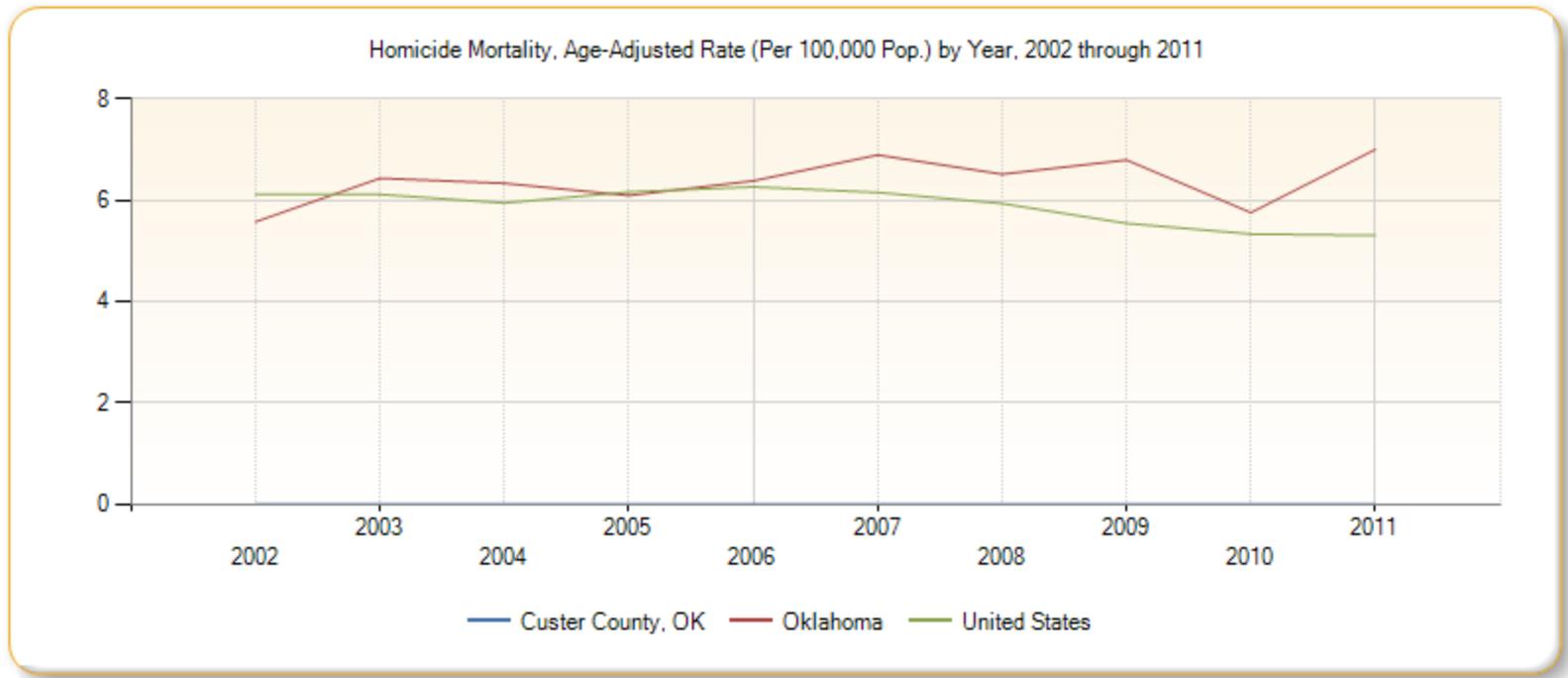
**Population by Race / Ethnicity, Homicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	no data	no data	no data	no data	no data
Oklahoma	4.47	24.39	no data	8.26	5.24
United States	2.68	19.67	2.04	8.84	5.90



**Homicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

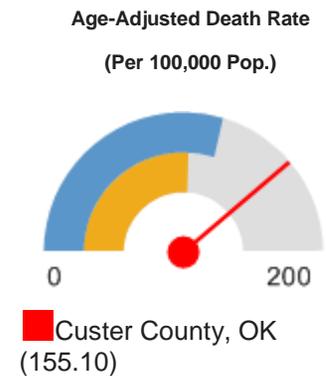
Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	5.57	6.43	6.33	6.09	6.38	6.89	6.51	6.79	5.75	7
United States	6.11	6.11	5.94	6.16	6.26	6.15	5.93	5.54	5.33	5.30



### Mortality - Ischaemic Heart Disease

Within the report area the rate of death due to coronary heart disease per 100,000 population is 155.10. This rate is greater than than the Healthy People 2020 target of less than or equal to 103.4. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because heart disease is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	48	176.89	<b>155.10</b>
Oklahoma	3,712,751	6,283	169.22	<b>158.41</b>
United States	306,486,831	390,568	127.43	<b>118.96</b>



[HP 2020 Target](#)

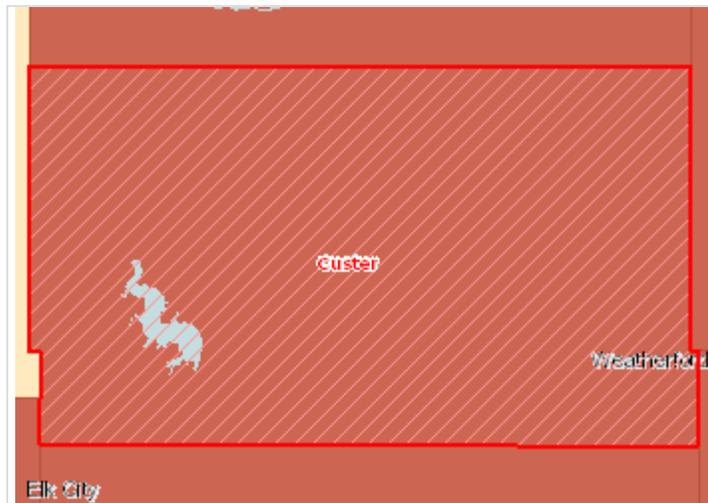
<= 103.4

HP 2020 Target (103.40)  
United States (118.96)

Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#).

Source geography: County.

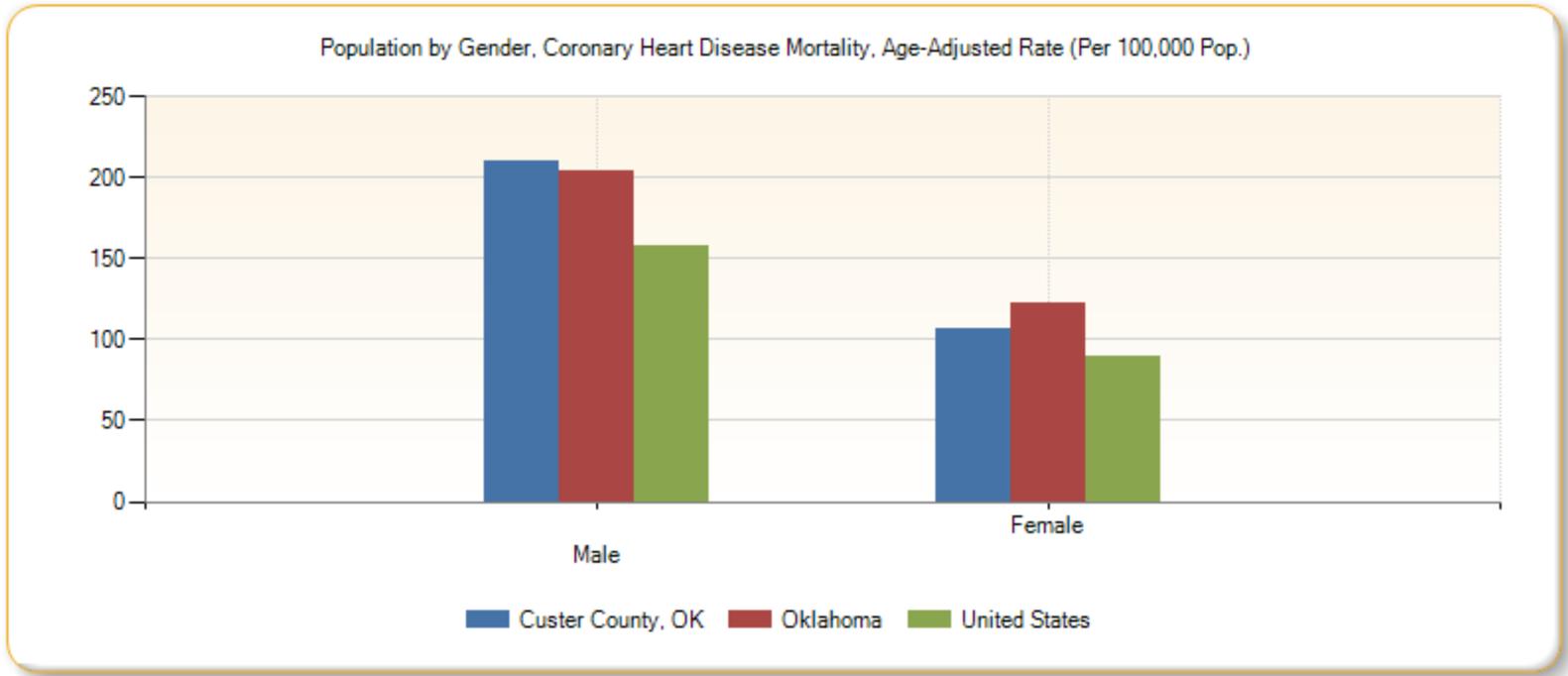


### Ischaemic Heart Disease Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, NVSS 2007-11

- Over 150.0
- 120.1 - 150.0
- 100.1 - 120.0
- Under 100.1
- No Data or Data Suppressed
- Report Area

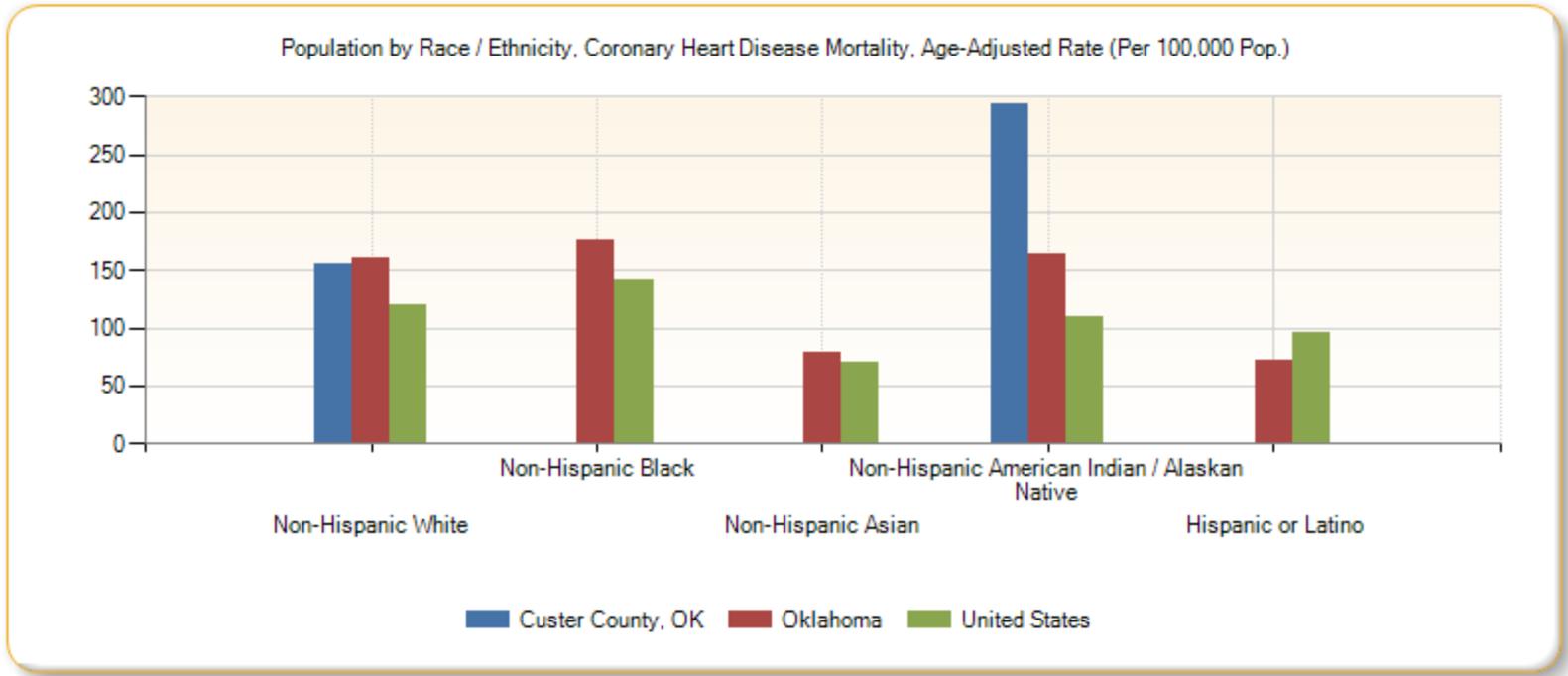
### Population by Gender, Coronary Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Custer County, OK	210.40	107.09
Oklahoma	204.05	122.43
United States	157.16	89.72



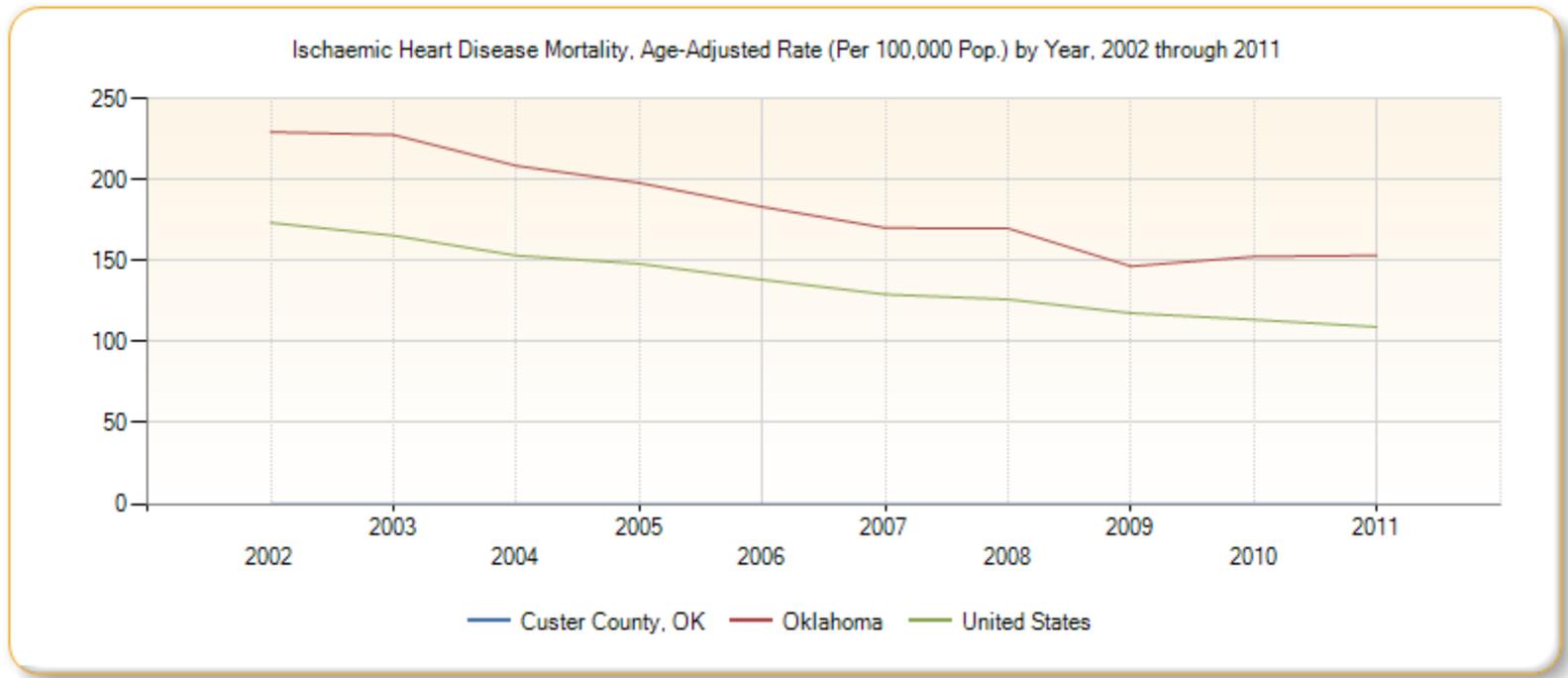
**Population by Race / Ethnicity, Coronary Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	154.82	no data	no data	293.25	no data
Oklahoma	159.74	176.53	78.02	164.08	71.69
United States	120.31	141	70.65	108.56	95.22



**Ischaemic Heart Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

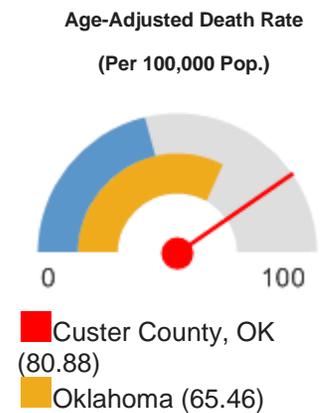
Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	229.47	227.76	208.59	198.05	183.26	170.24	169.99	146.61	152.60	153.34
United States	173.50	165.55	153.24	148.15	138.33	129.24	126.14	117.72	113.65	109.18



## Mortality - Lung Disease

This indicator reports the rate of death due to chronic lower respiratory disease per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because lung disease is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	24	86.97	<b>80.88</b>
Oklahoma	3,712,751	2,606	70.20	65.46
United States	306,486,831	137,478	44.86	42.67

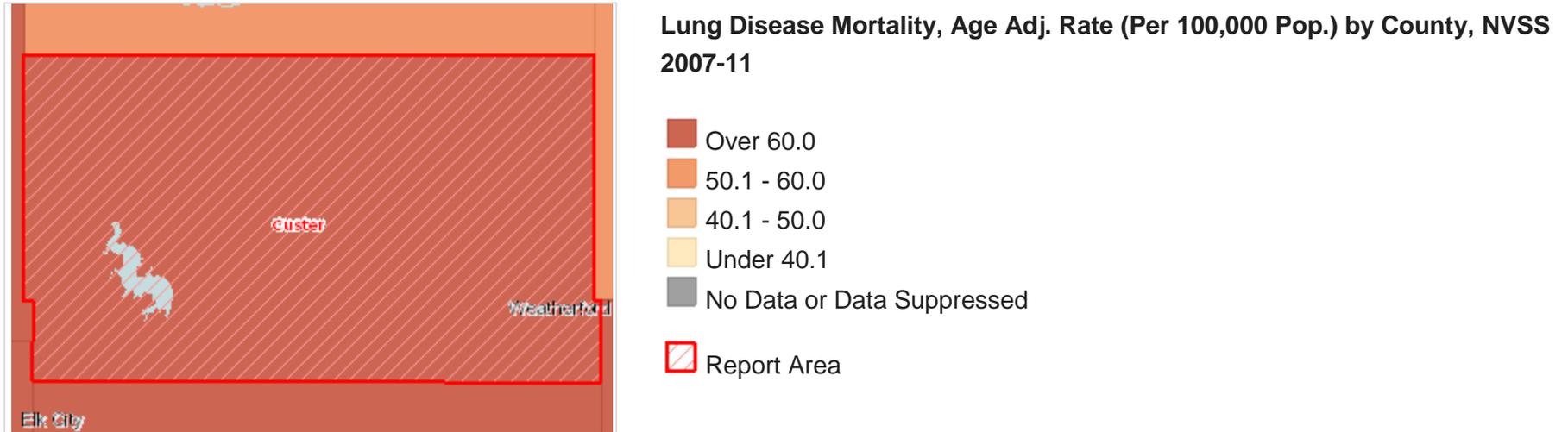


Note: This indicator is compared with the state average.

United States (42.67)

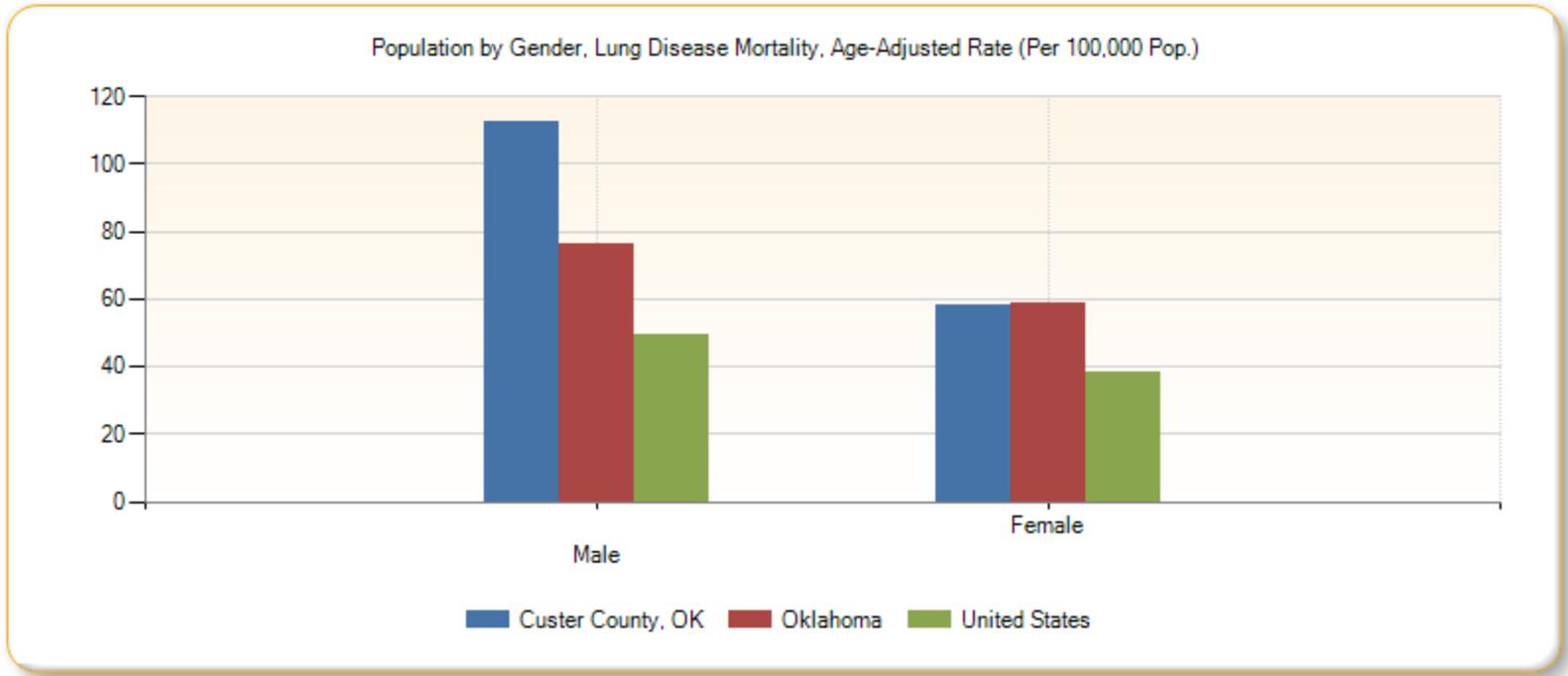
Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#).

Source geography: County.



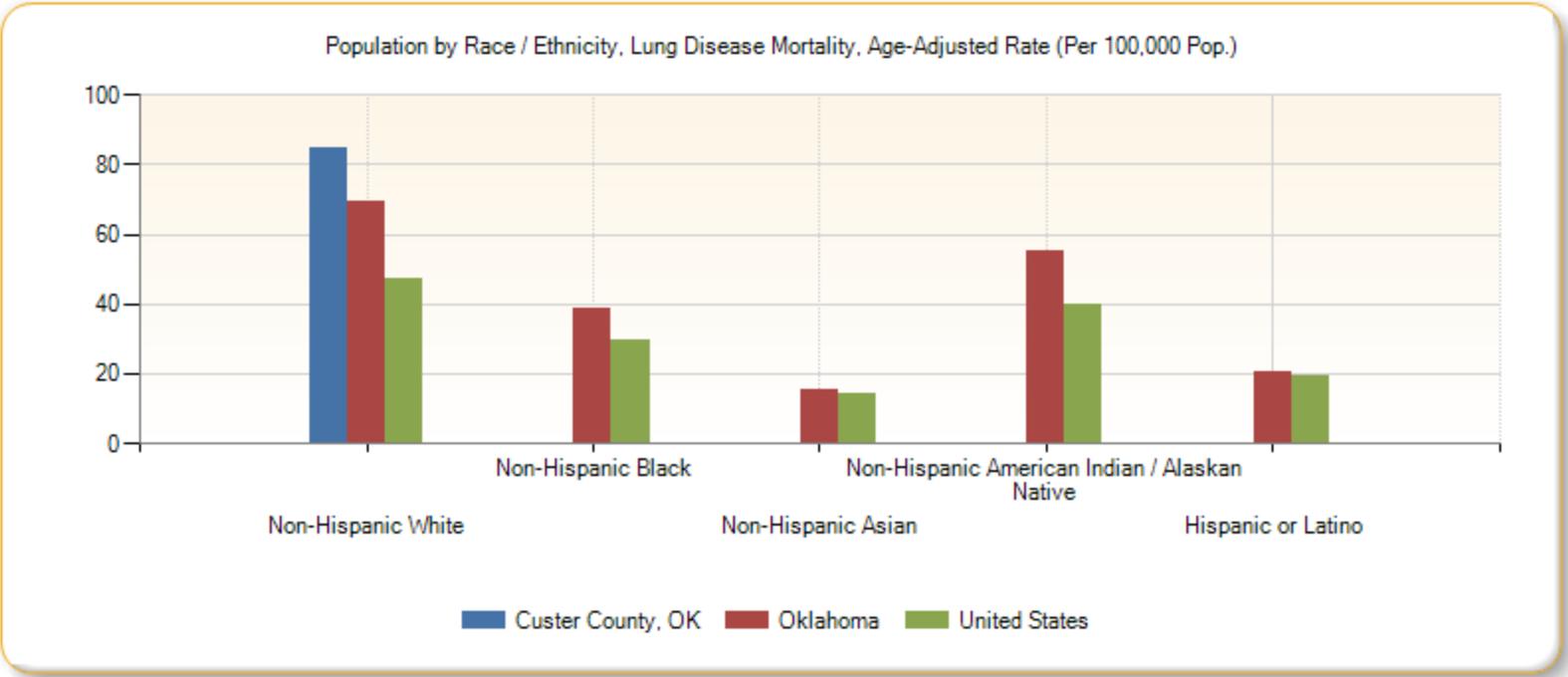
**Population by Gender, Lung Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Male	Female
Custer County, OK	112.44	58.13
Oklahoma	76.36	58.58
United States	49.57	38.24



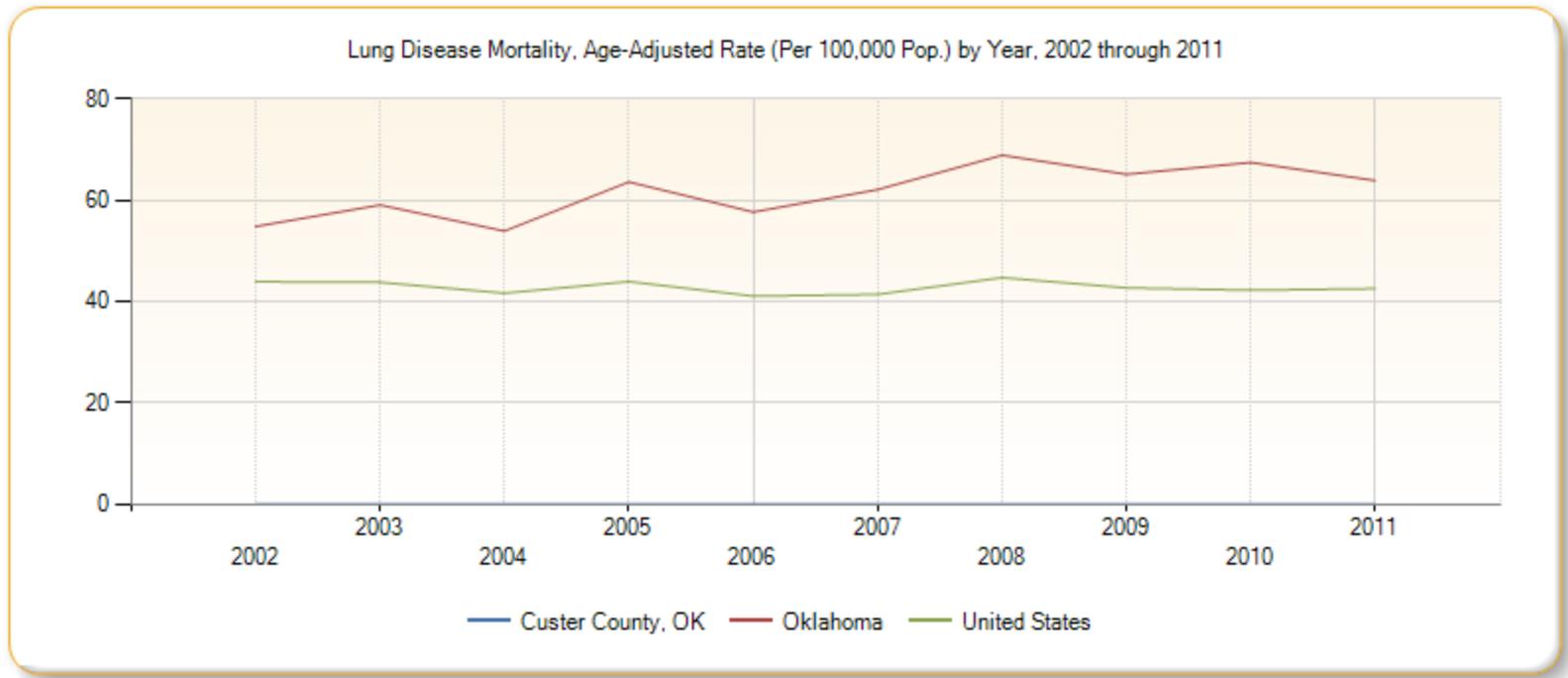
**Population by Race / Ethnicity, Lung Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	84.49	no data	no data	no data	no data
Oklahoma	69.18	38.80	15.52	55.15	20.44
United States	47.07	29.93	14.54	39.61	19.62



**Lung Disease Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

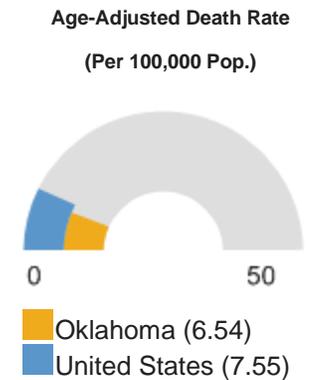
Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	54.78	59.02	53.88	63.56	57.63	62.06	68.85	65.07	67.41	63.84
United States	43.88	43.74	41.61	43.89	41.01	41.35	44.67	42.65	42.18	42.51



## Mortality - Motor Vehicle Accident

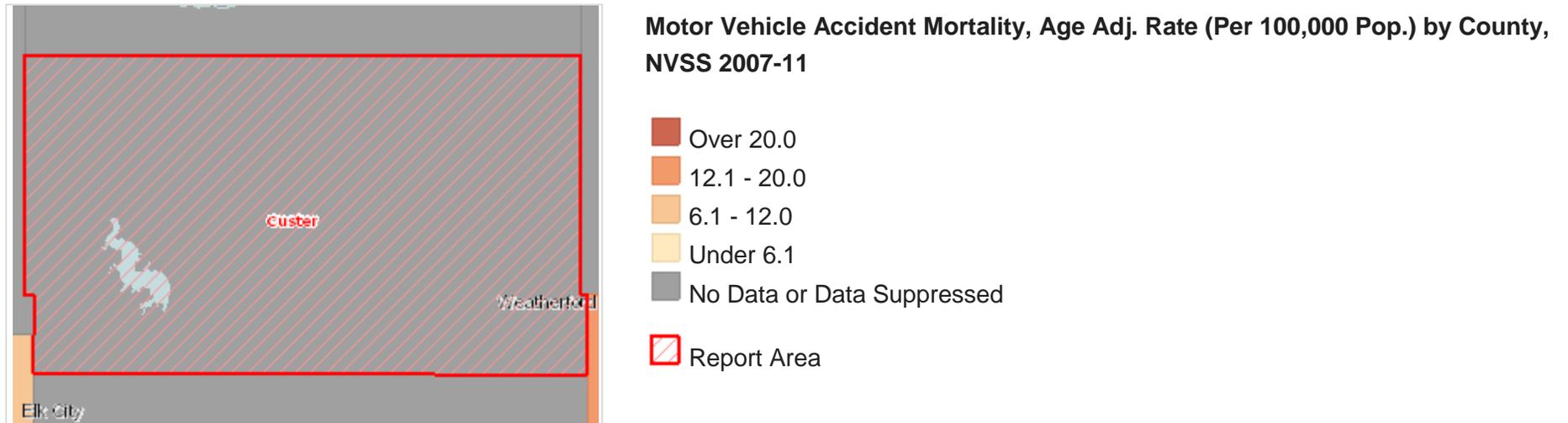
This indicator reports the rate of death due to motor vehicle crashes per 100,000 population, which include collisions with another motor vehicle, a nonmotorist, a fixed object, and a non-fixed object, an overturn, and any other non-collision. This indicator is relevant because motor vehicle crash deaths are preventable and they are a cause of premature death.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	no data	no data	no data
Oklahoma	3,712,751	243	6.55	6.54
United States	306,486,831	23,559	7.69	7.55



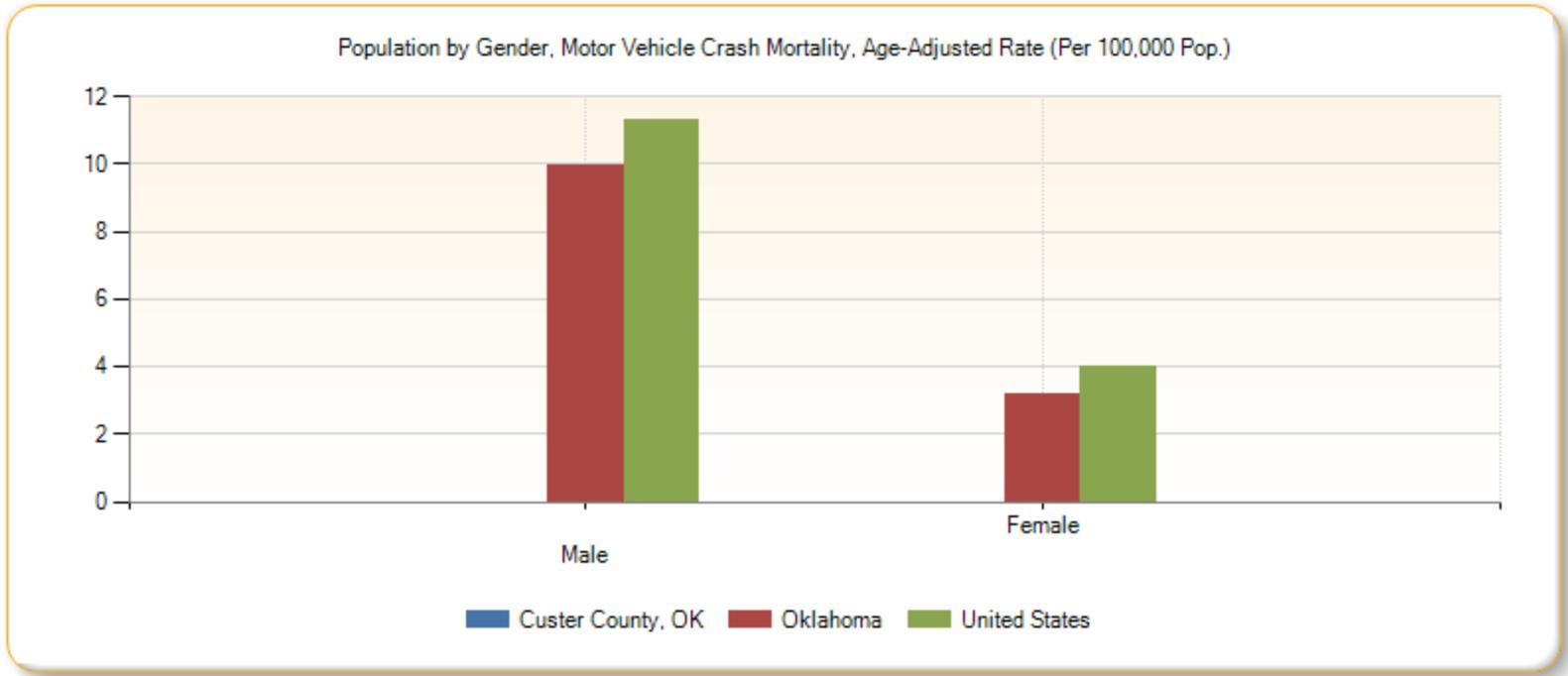
Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#). Source geography: County.



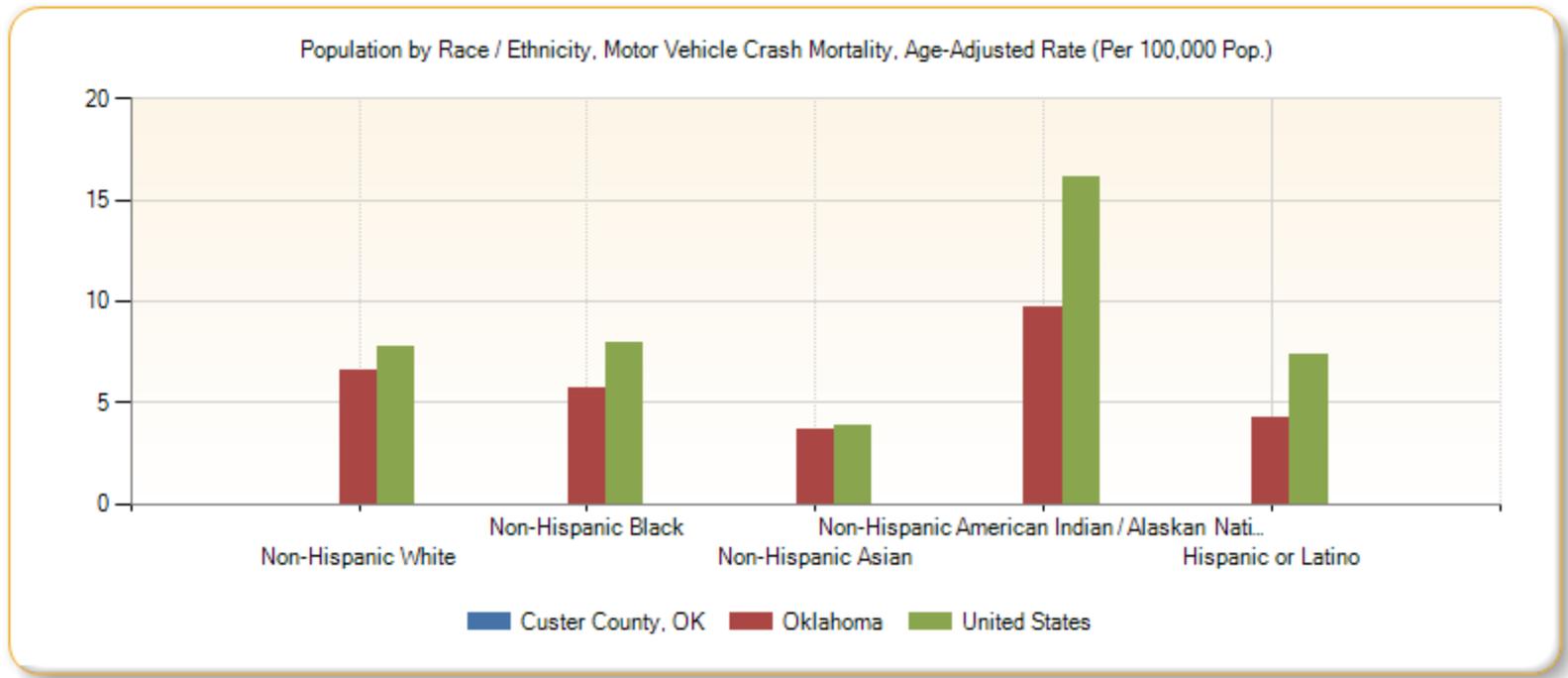
**Population by Gender, Motor Vehicle Crash Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Male	Female
Custer County, OK	no data	no data
Oklahoma	9.98	3.21
United States	11.30	4.02



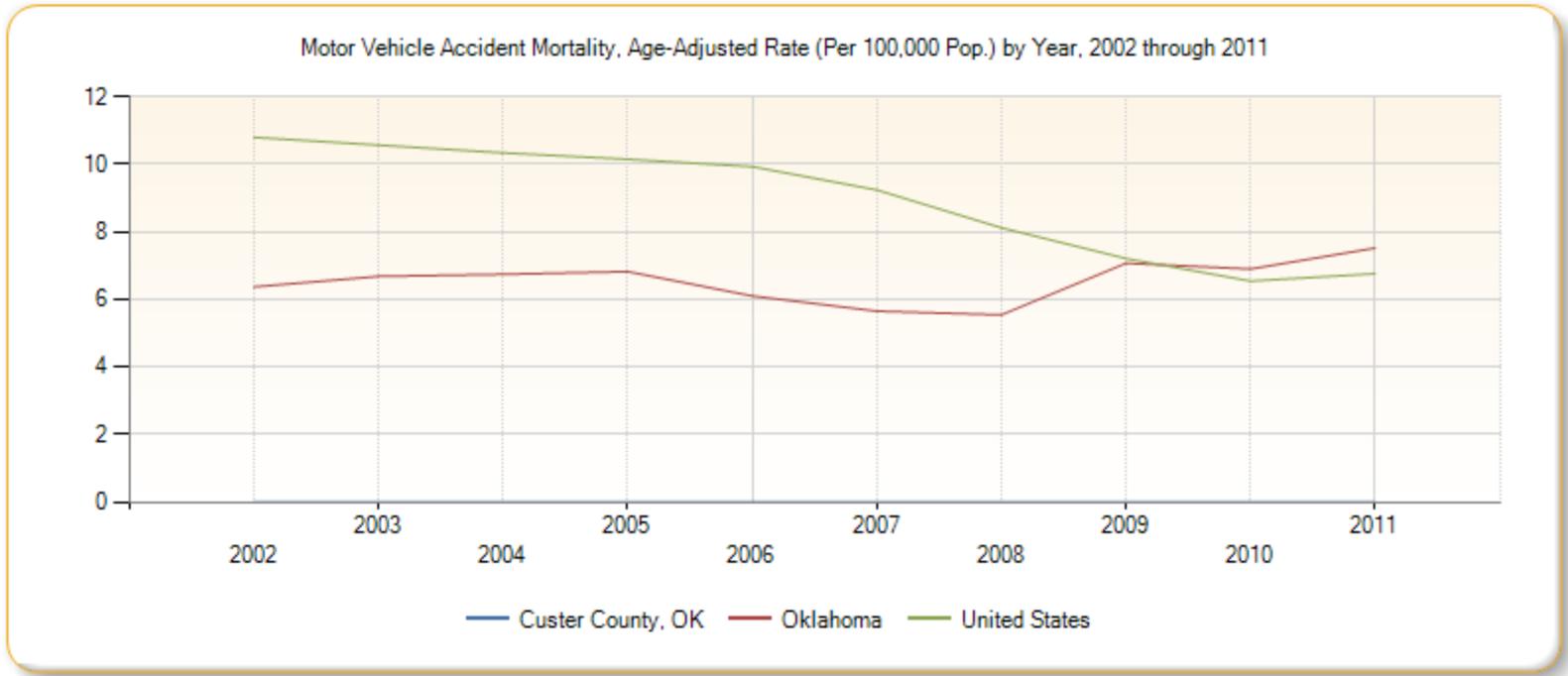
**Population by Race / Ethnicity, Motor Vehicle Crash Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	no data	no data	no data	no data	no data
Oklahoma	6.59	5.72	3.69	9.72	4.22
United States	7.77	7.96	3.82	16.08	7.34



**Motor Vehicle Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

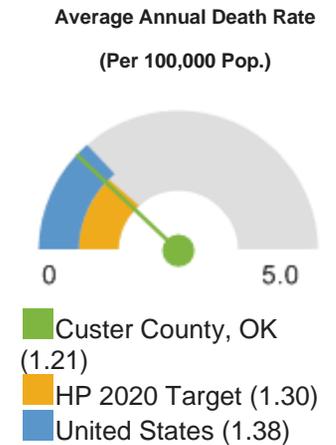
Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	6.37	6.68	6.74	6.82	6.10	5.65	5.54	7.07	6.90	7.52
United States	10.80	10.57	10.34	10.15	9.93	9.24	8.12	7.21	6.54	6.76



### Mortality - Pedestrian Accident

This indicator reports the rate of pedestrians killed by motor vehicles per 100,000 population. This indicator is relevant because pedestrian-motor vehicle crash deaths are preventable and they are a cause of premature death.

Report Area	Total Deaths, 2008-2010	Average Annual Deaths, 2008-2010	Average Annual Death Rate (Per 100,000 Pop.)
Custer County, OK	1	0	1.21
Oklahoma	143	47	1.20
United States	12,750	4,250	1.38

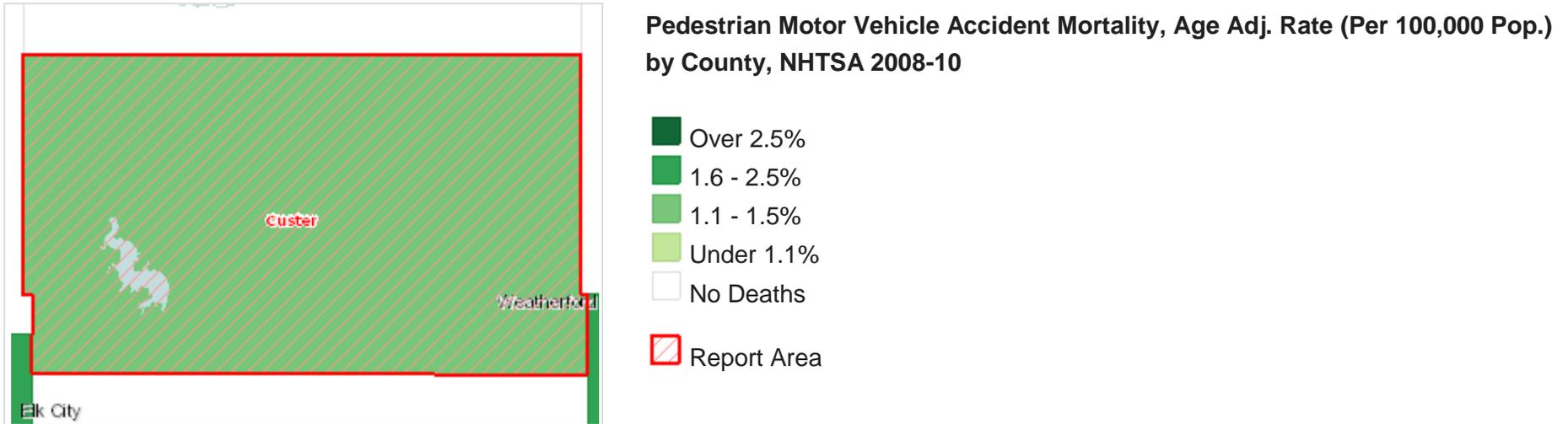


[HP 2020 Target](#)

<= 1.3

Note: This indicator is compared with the Healthy People 2020 Target. Data breakout by demographic groups are not available.

Data Source: US Department of Transportation, [National Highway Traffic Safety Administration](#): 2008-10. Source geography: County.



## Mortality - Premature Death

This indicator reports Years of Potential Life Lost (YPLL) before age 75 per 100,000 population for all causes of death, age-adjusted to the 2000 standard. YPLL measures premature death and is calculated by subtracting the age of death from the 75 year benchmark. This indicator is relevant because a measure of premature death can provide a unique and comprehensive look at overall health status.

Report Area	Total Population, 2008-2010 Average	Total Premature Deaths, 2008-2010 Average	Total Years of Potential Life Lost, 2008-2010 Average	Years of Potential Life Lost, Rate per 100,000 Population
Custer County, OK	27,750	121	2,480	8,938
Oklahoma	3,791,508	17,584	353,613	9,326

Years of Potential Life Lost, Rate per 100,000 Population

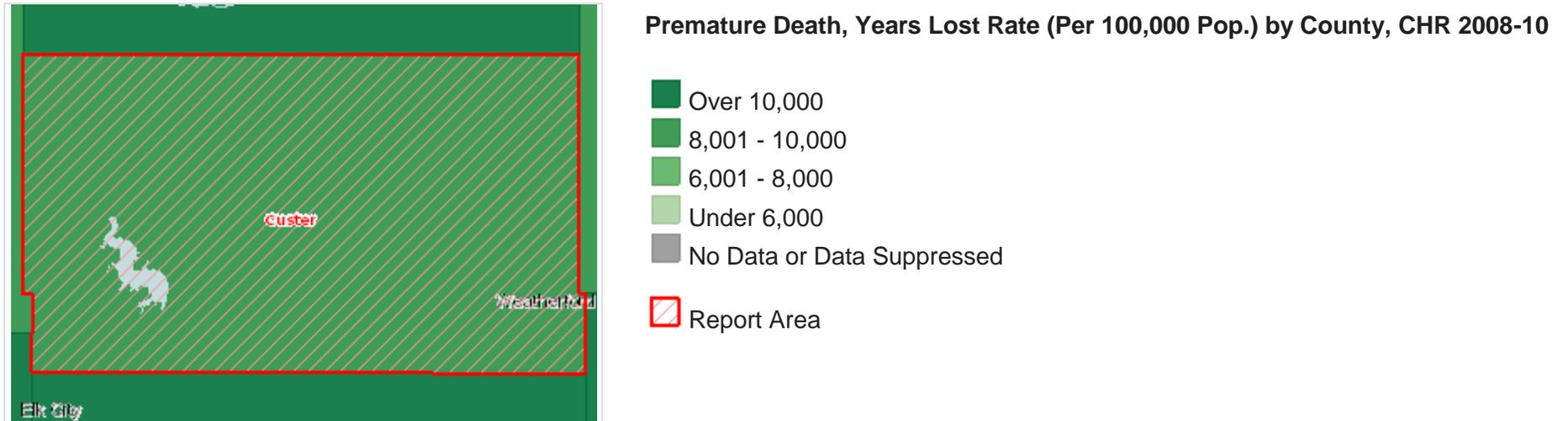


United States	311,616,188	1,074,667	21,327,690	6,851
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(8,938)  
■ Oklahoma (9,326)  
■ United States (6,851)

Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

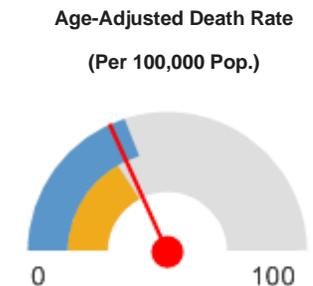
Data Source: University of Wisconsin Population Health Institute, [County Health Rankings](#): 2008-10. Source geography: County.



## Mortality - Stroke

Within the report area there are an estimated 36.46 deaths due to cerebrovascular disease (stroke) per 100,000 population. This is greater than than the Healthy People 2020 target of less than or equal to 33.8. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because stroke is a leading cause of death in the United States.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	11	42.01	<b>36.46</b>
Oklahoma	3,712,751	2,002	53.92	<b>51.13</b>



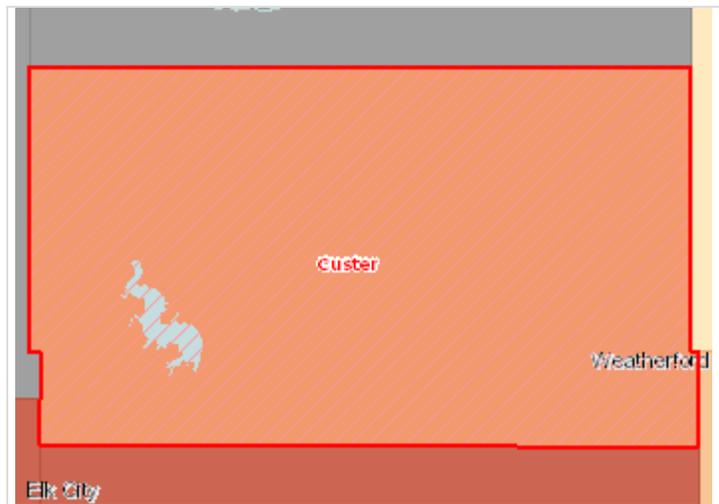
United States	306,486,831	131,470	42.90	<b>40.39</b>
<a href="#">HP 2020 Target</a>				<= 33.8

- Custer County, OK (36.46)
- HP 2020 Target (33.80)
- United States (40.39)

Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#).

Source geography: County.

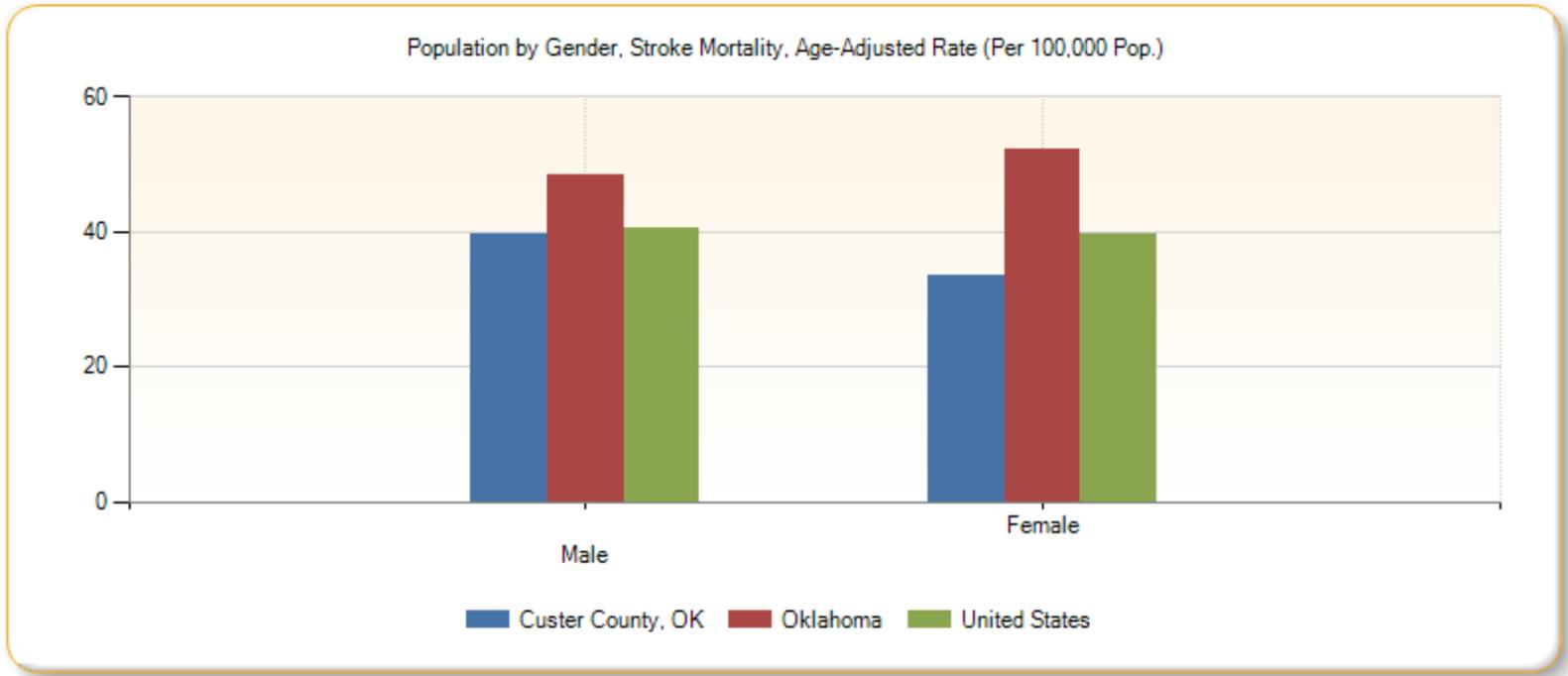


**Stroke Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, NVSS 2007-11**

- Over 36.0
- 28.1 - 36.0
- 20.1 - 28.0
- Under 20.1
- No Data or Data Suppressed
- Report Area

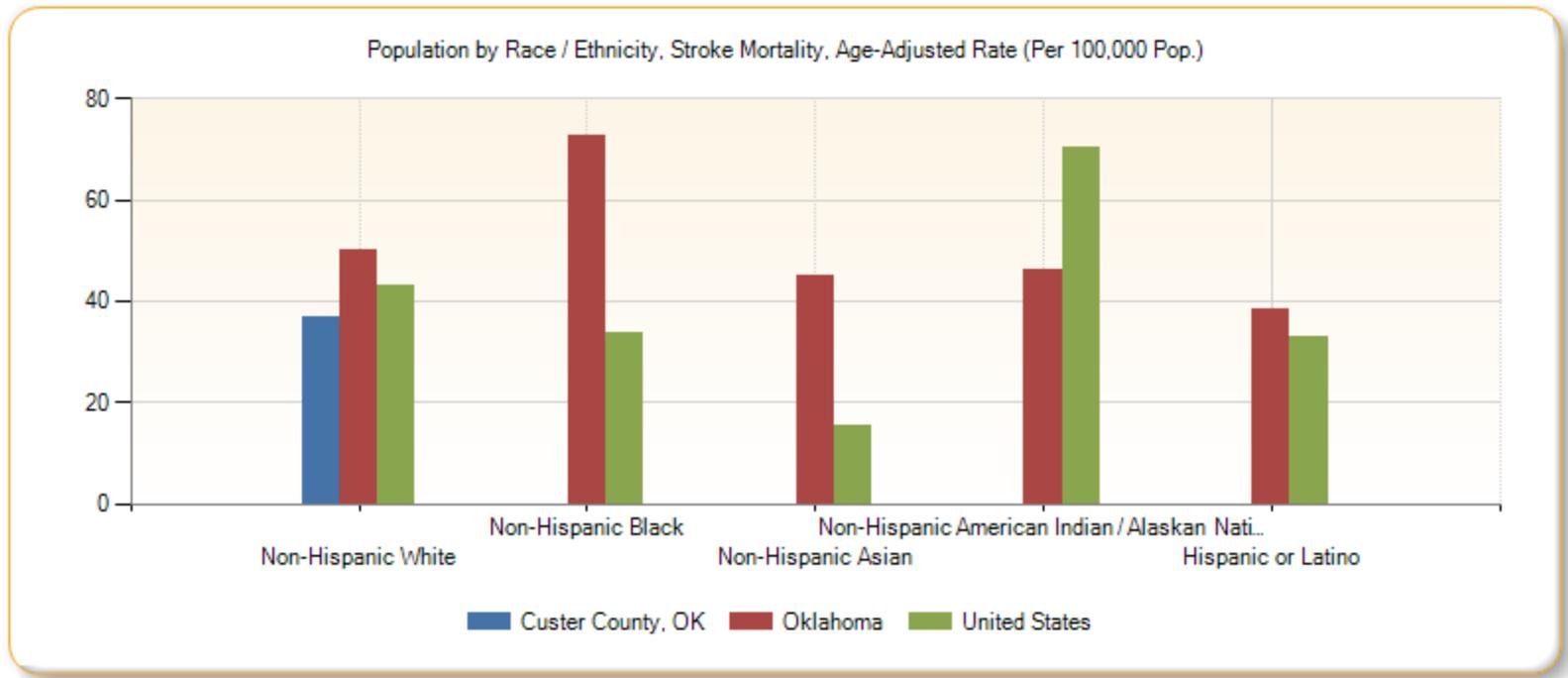
**Population by Gender, Stroke Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Male	Female
Custer County, OK	39.67	33.37
Oklahoma	48.48	52.12
United States	40.51	39.62



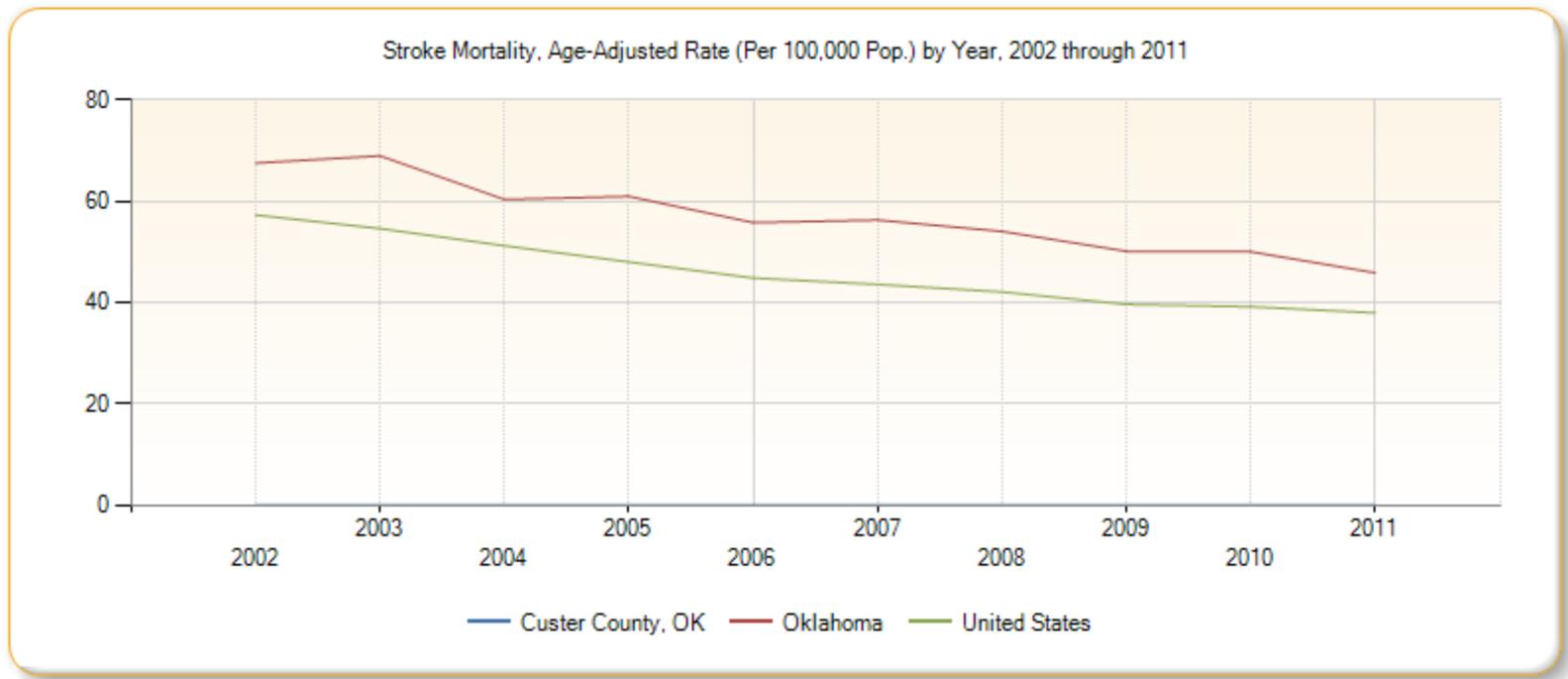
**Population by Race / Ethnicity, Stroke Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	36.81	no data	no data	no data	no data
Oklahoma	50.15	72.63	44.89	46.28	38.50
United States	42.93	33.86	15.56	70.31	32.88



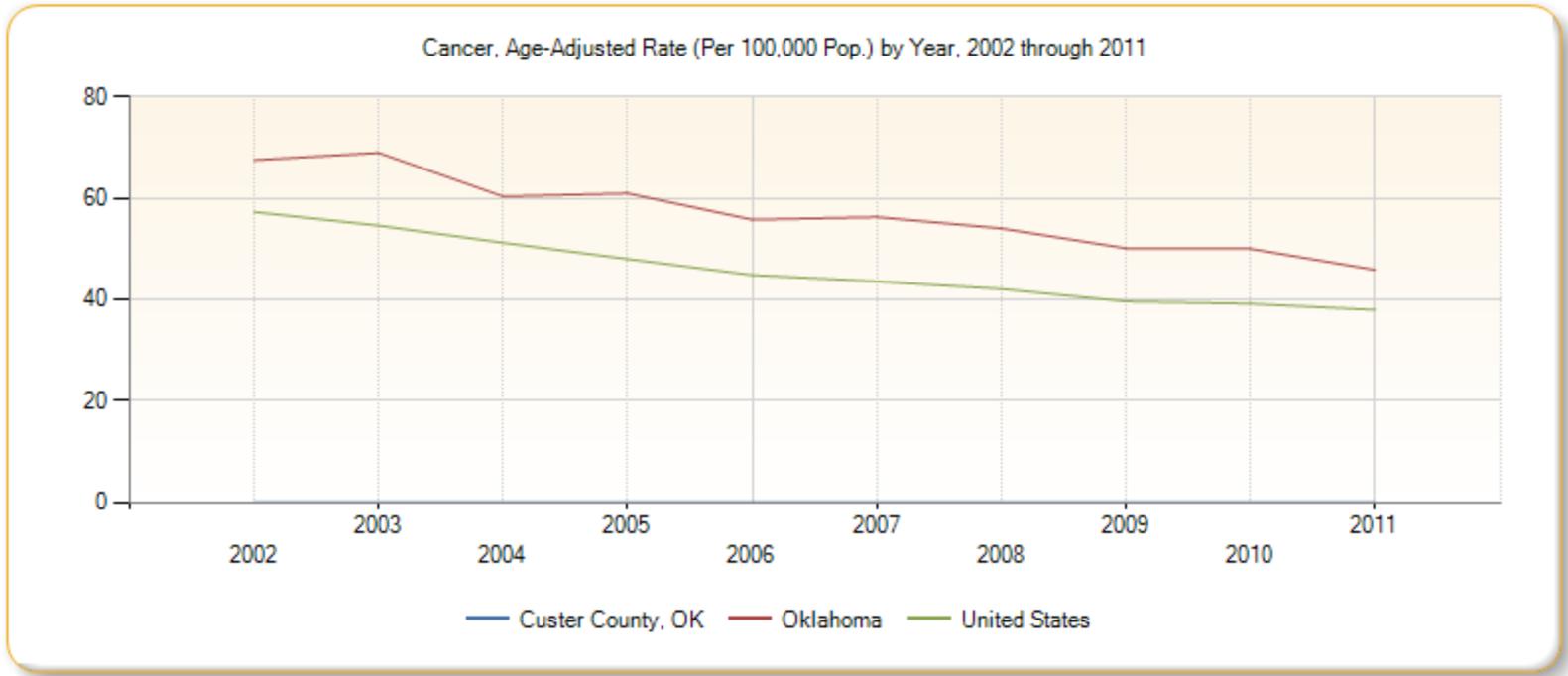
Stroke Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011

Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	67.50	68.93	60.31	60.92	55.72	56.24	54	50.08	49.97	45.82
United States	57.24	54.57	51.18	47.96	44.80	43.52	42.05	39.59	39.13	37.90



**Cancer, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

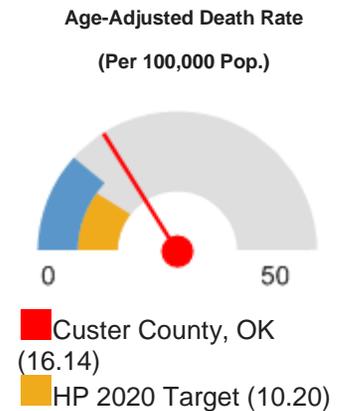
Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	67.50	68.93	60.31	60.92	55.72	56.24	54	50.08	49.97	45.82
United States	57.24	54.57	51.18	47.96	44.80	43.52	42.05	39.59	39.13	37.90



## Mortality - Suicide

This indicator reports the rate of death due to intentional self-harm (suicide) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because suicide is an indicator of poor mental health.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	4	13.27	<b>16.14</b>
Oklahoma	3,712,751	597	16.07	<b>16.12</b>
United States	306,486,831	37,085	12.10	<b>11.82</b>



[HP 2020 Target](#)

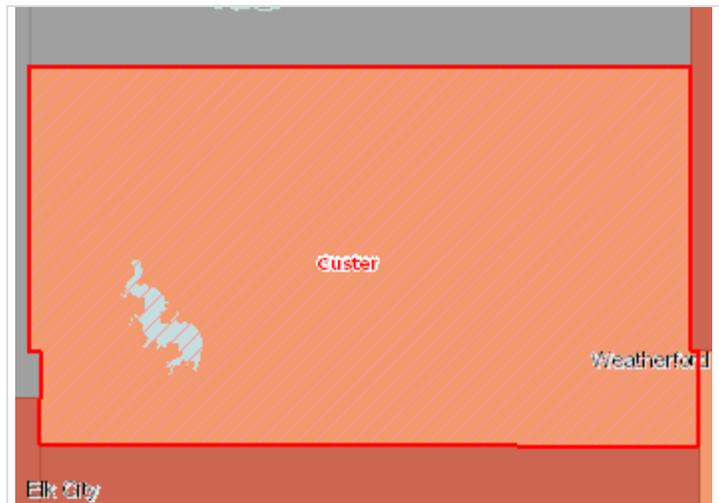
<= 10.2

United States (11.82)

Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#).

Source geography: County.

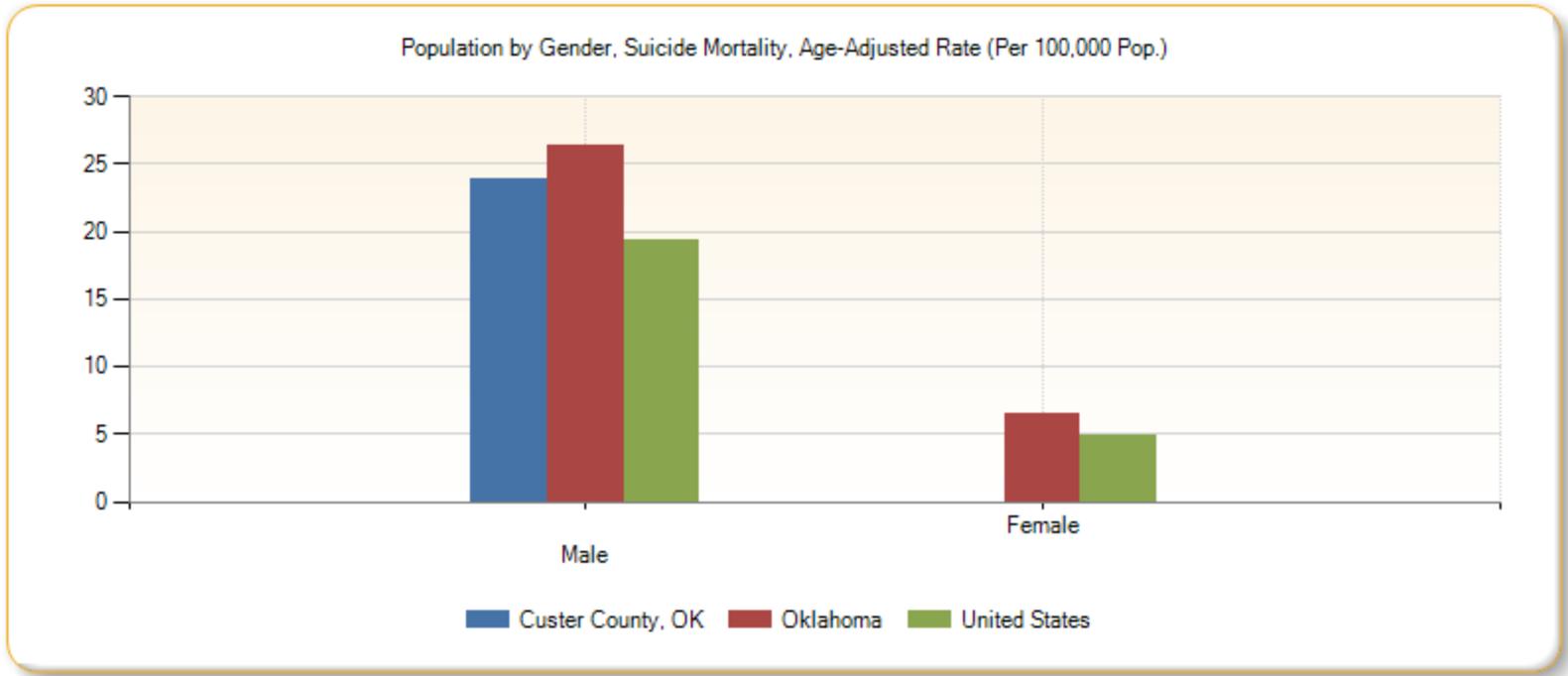


**Suicide Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, NVSS 2007-11**

- Over 18.0
- 14.1 - 18.0
- 11.1 - 14.0
- Under 11.1
- No Data or Data Suppressed
- Report Area

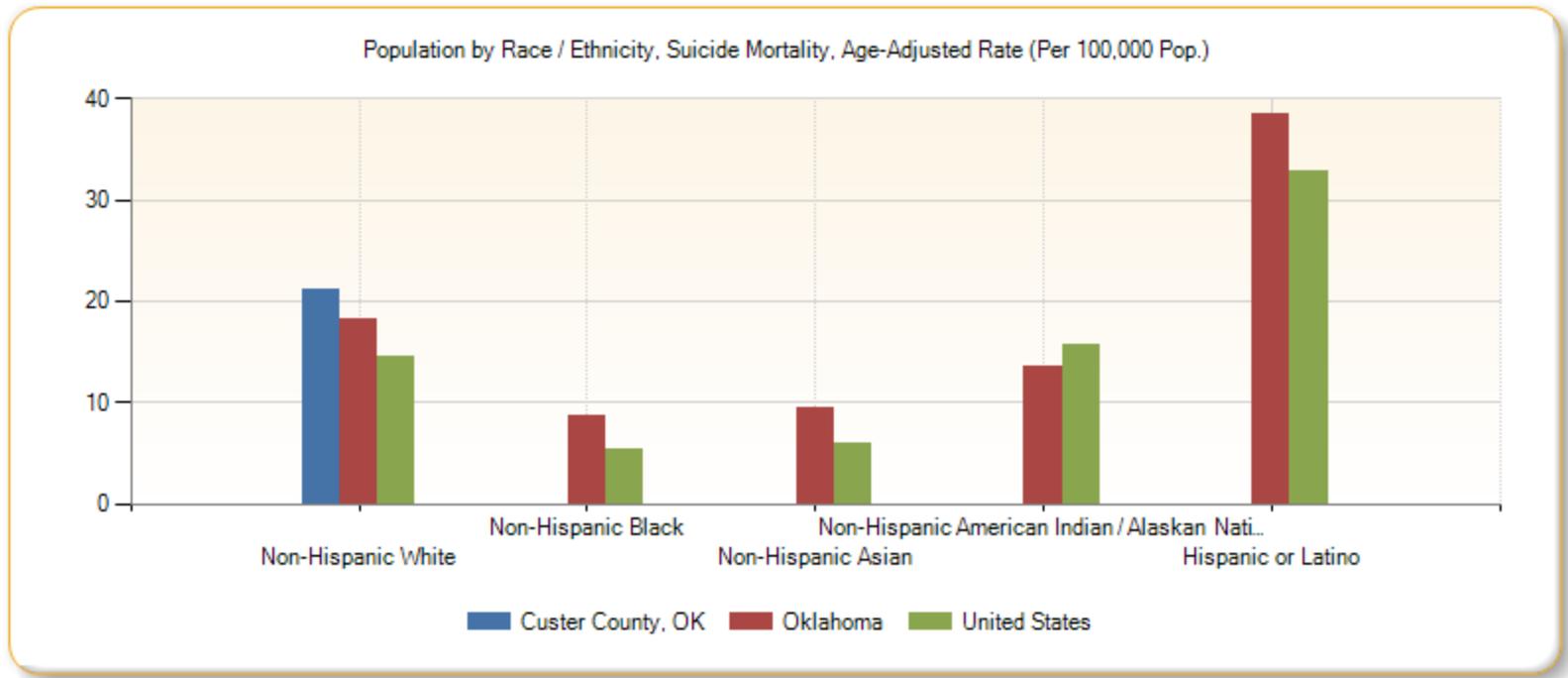
**Population by Gender, Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Male	Female
Custer County, OK	23.93	no data
Oklahoma	26.30	6.49
United States	19.35	4.89



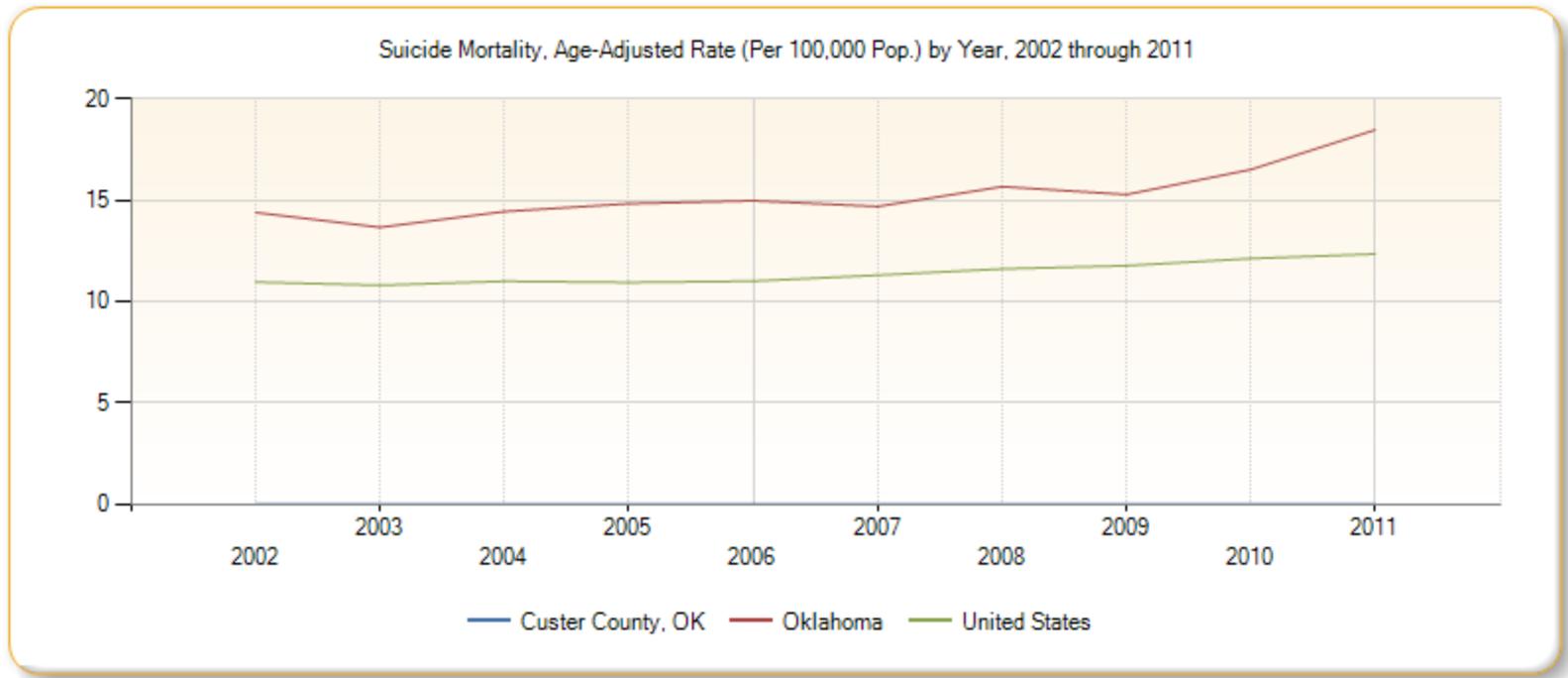
**Population by Race / Ethnicity, Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	21.11	no data	no data	no data	no data
Oklahoma	18.16	8.62	9.43	13.55	38.50
United States	14.55	5.34	5.96	15.71	32.88



**Suicide Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

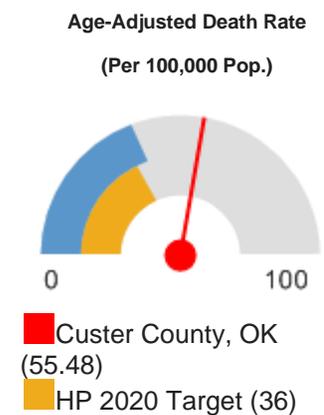
Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	14.38	13.65	14.43	14.82	14.97	14.68	15.66	15.27	16.51	18.47
United States	10.95	10.79	10.99	10.93	11	11.29	11.60	11.76	12.11	12.34



## Mortality - Unintentional Injury

This indicator reports the rate of death due to unintentional injury (accident) per 100,000 population. Figures are reported as crude rates, and as rates age-adjusted to year 2000 standard. Rates are resummarized for report areas from county level data, only where data is available. This indicator is relevant because accidents are a leading cause of death in the U.S.

Report Area	Total Population	Average Annual Deaths, 2007-2011	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate (Per 100,000 Pop.)
Custer County, OK	27,135	16	57.49	<b>55.48</b>
Oklahoma	3,712,751	2,220	59.80	<b>59.27</b>
United States	306,486,831	122,185	39.87	<b>38.85</b>



[HP 2020 Target](#)

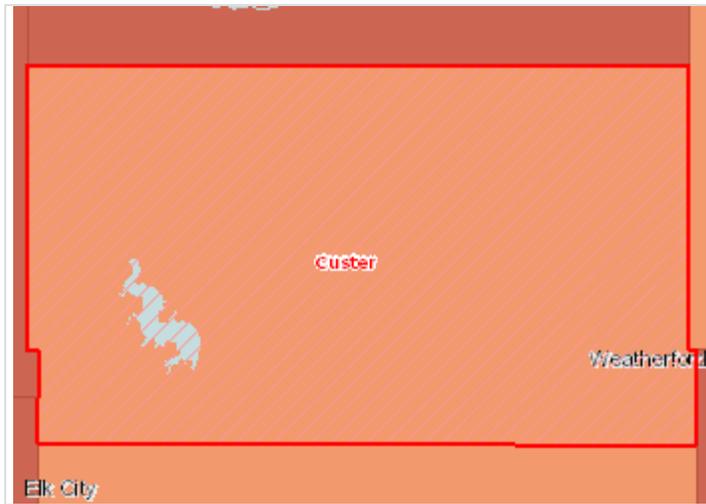
<= 36.0

United States (38.85)

Note: This indicator is compared with the Healthy People 2020 Target.

Data Source: Centers for Disease Control and Prevention, [National Vital Statistics System](#): 2007-11. Accessed via [CDC WONDER](#).

Source geography: County.

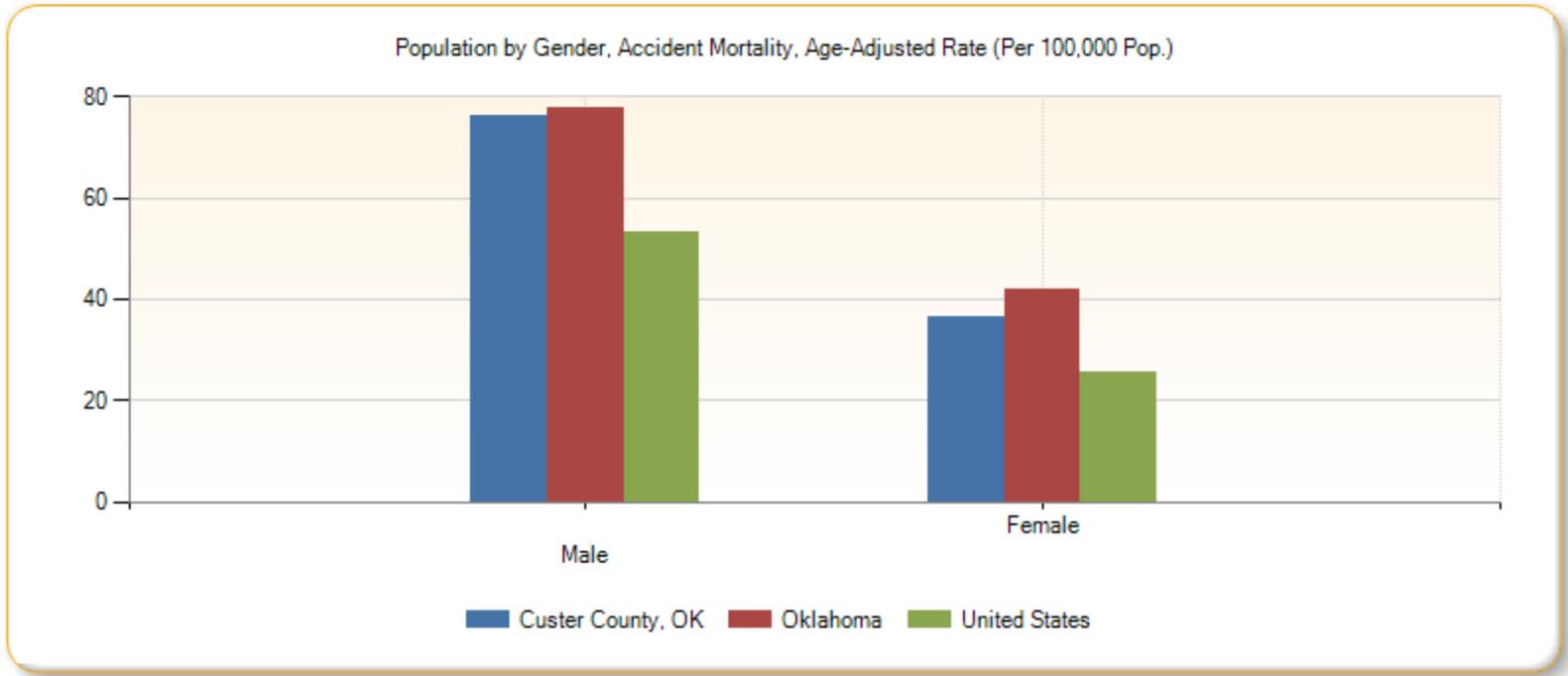


### Unintentional Injury (Accident) Mortality, Age Adj. Rate (Per 100,000 Pop.) by County, NVSS 2007-11



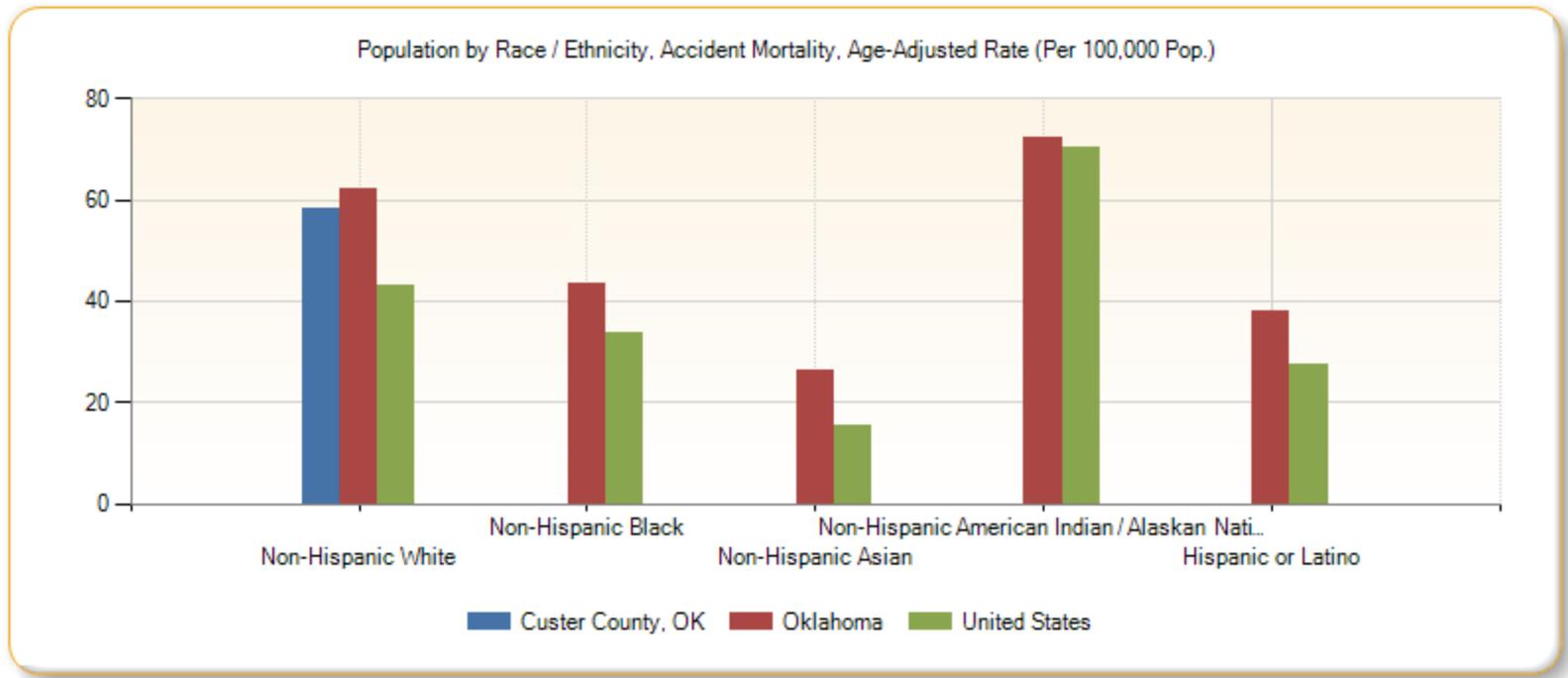
### Population by Gender, Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.)

Report Area	Male	Female
Custer County, OK	76.03	36.51
Oklahoma	77.89	41.82
United States	53.19	25.67



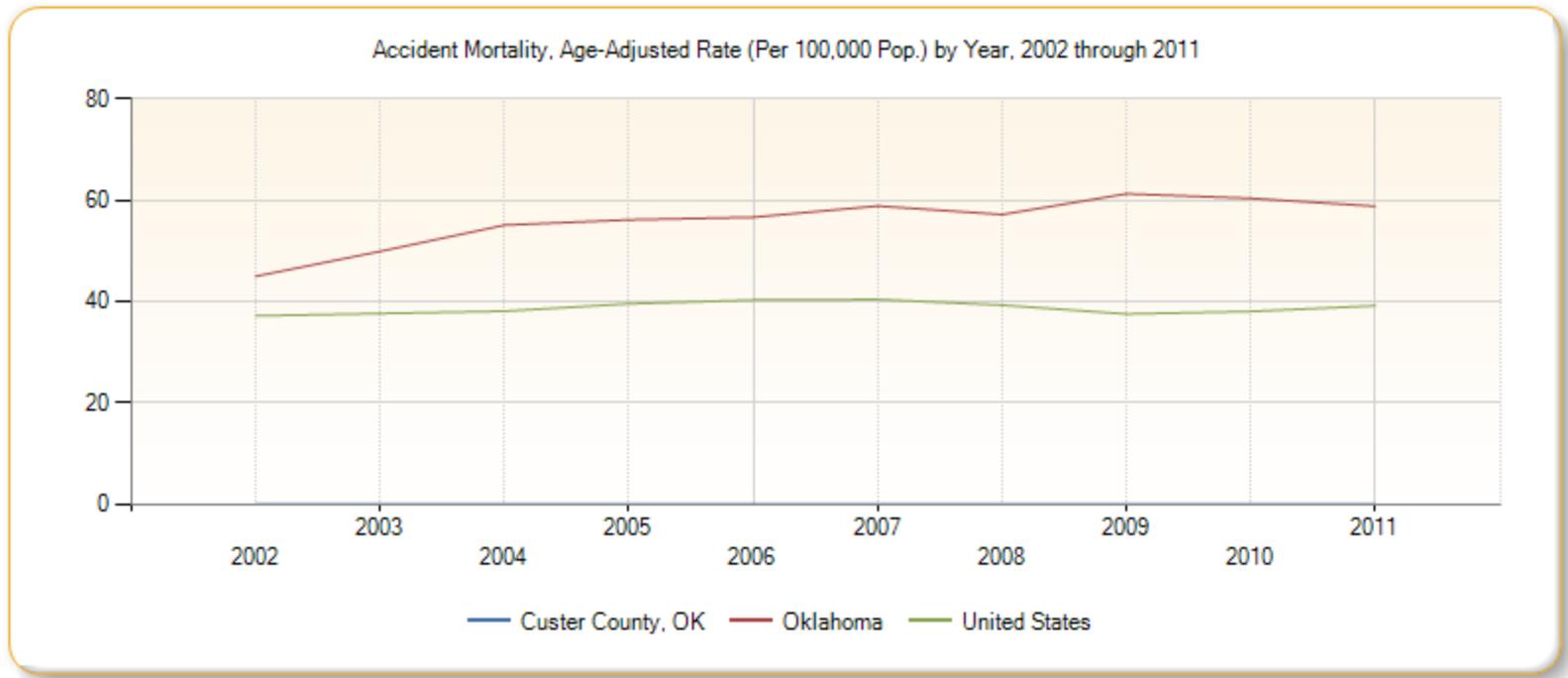
**Population by Race / Ethnicity, Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.)**

Report Area	Non-Hispanic White	Non-Hispanic Black	Non-Hispanic Asian	Non-Hispanic American Indian / Alaskan Native	Hispanic or Latino
Custer County, OK	58.44	no data	no data	no data	no data
Oklahoma	62.07	43.29	26.43	72.41	38.09
United States	42.93	33.86	15.56	70.31	27.38



**Accident Mortality, Age-Adjusted Rate (Per 100,000 Pop.) by Year, 2002 through 2011**

Report Area	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Custer County, OK	no data									
Oklahoma	44.93	49.86	55.04	56.10	56.60	58.81	57.15	61.22	60.32	58.77
United States	37.12	37.59	38.06	39.51	40.24	40.36	39.25	37.49	37.99	39.13

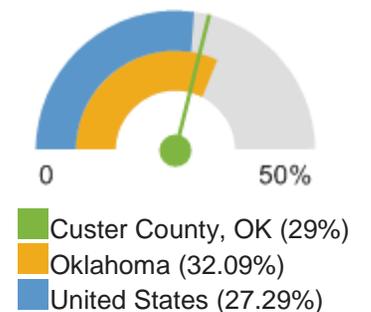


## Obesity

29% of adults aged 20 and older self-report that they have a Body Mass Index (BMI) greater than 30.0 (obese) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

Report Area	Total Population Age 20	Adults with BMI > 30.0 (Obese)	Percent Adults with BMI > 30.0 (Obese)
Custer County, OK	19,862	5,740	29%
Oklahoma	2,719,451	872,231	32.09%
United States	226,126,076	62,144,711	27.29%

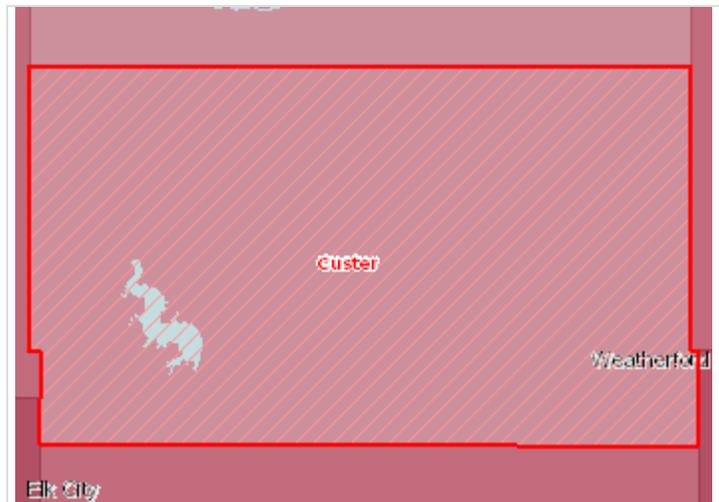
Percent Adults with BMI > 30.0 (Obese)



Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion,

*Diabetes Atlas: 2010. Source geography: County.*

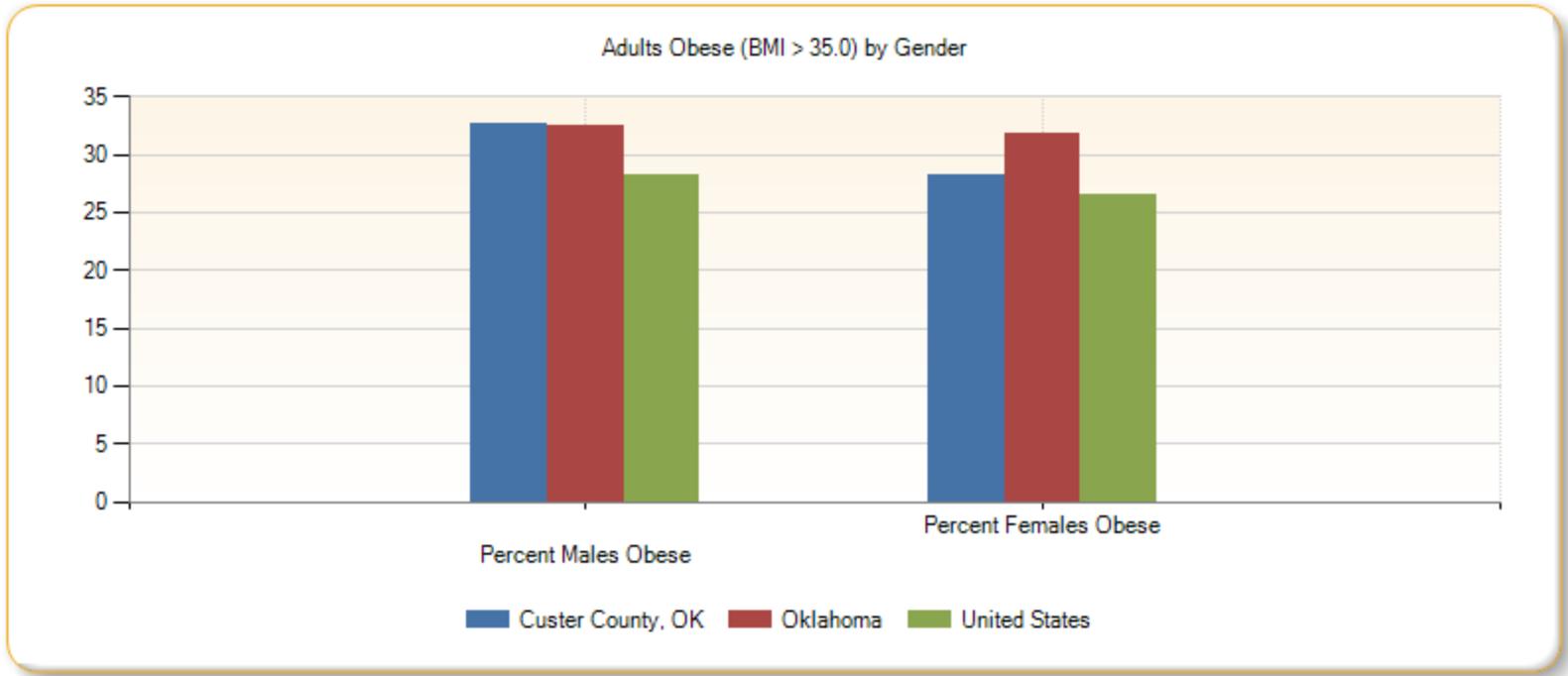


**Obese (BMI  $\geq$  30), Adults Age 20 , Percent by County, CDC NCCDPHP 2010**

- Over 34.0%
- 30.1 - 34.0%
- 26.1 - 30.0%
- Under 26.1%
- Report Area

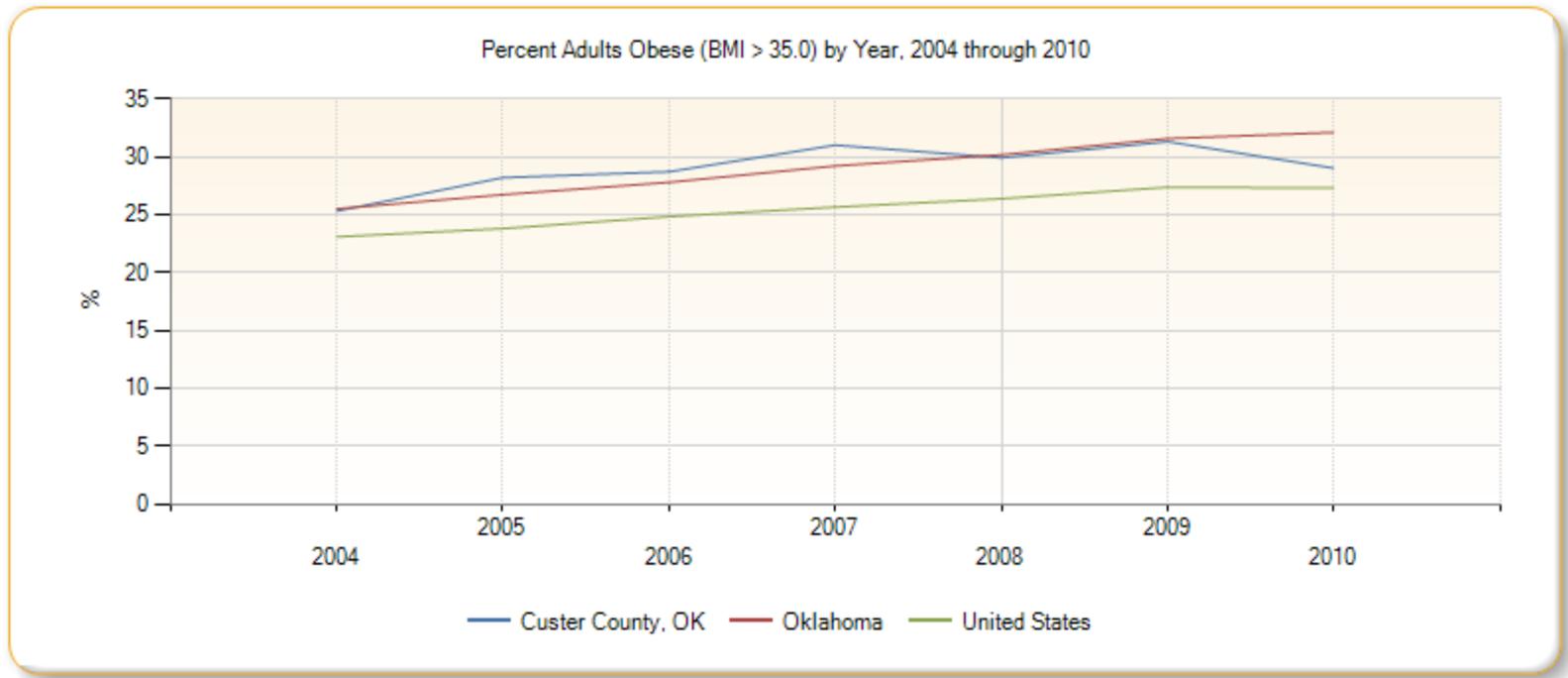
**Adults Obese (BMI > 35.0) by Gender**

Report Area	Total Males Obese	Percent Males Obese	Total Females Obese	Percent Females Obese
Custer County, OK	2,983	32.60%	2,796	28.20%
Oklahoma	855,016	32.49%	879,154	31.71%
United States	62,091,071	28.21%	62,125,142	26.45%



**Percent Adults Obese (BMI > 35.0) by Year, 2004 through 2010**

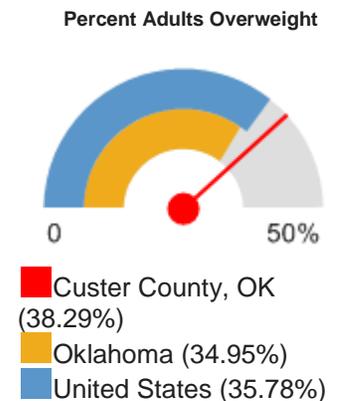
Report Area	2004	2005	2006	2007	2008	2009	2010
Custer County, OK	25.30%	28.18%	28.70%	31%	29.90%	31.30%	29%
Oklahoma	25.49%	26.71%	27.78%	29.20%	30.16%	31.56%	32.09%
United States	23.07%	23.79%	24.82%	25.64%	26.36%	27.35%	27.29%



## Overweight

38.29% of adults aged 18 and older self-report that they have a Body Mass Index (BMI) between 25.0 and 30.0 (overweight) in the report area. Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues.

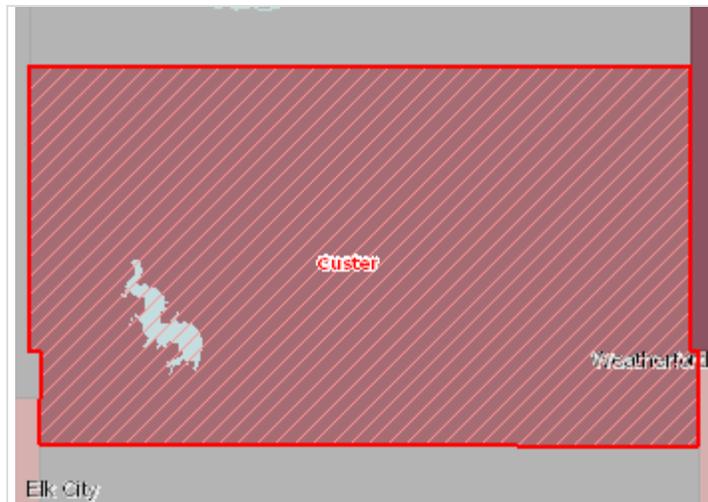
Report Area	Survey Population (Adults Age 18 )	Total Adults Overweight	Percent Adults Overweight
Custer County, OK	20,288	7,768	<b>38.29%</b>
Oklahoma	2,730,646	954,311	34.95%
United States	224,991,207	80,499,532	35.78%



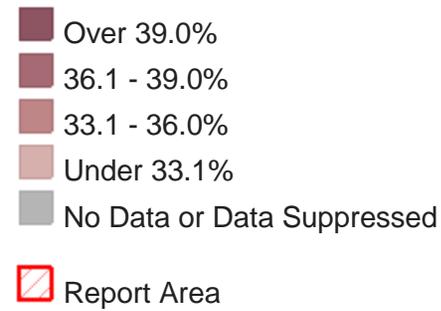
Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#): 2011-12. Additional data

analysis by [CARES](#). Source geography: County.

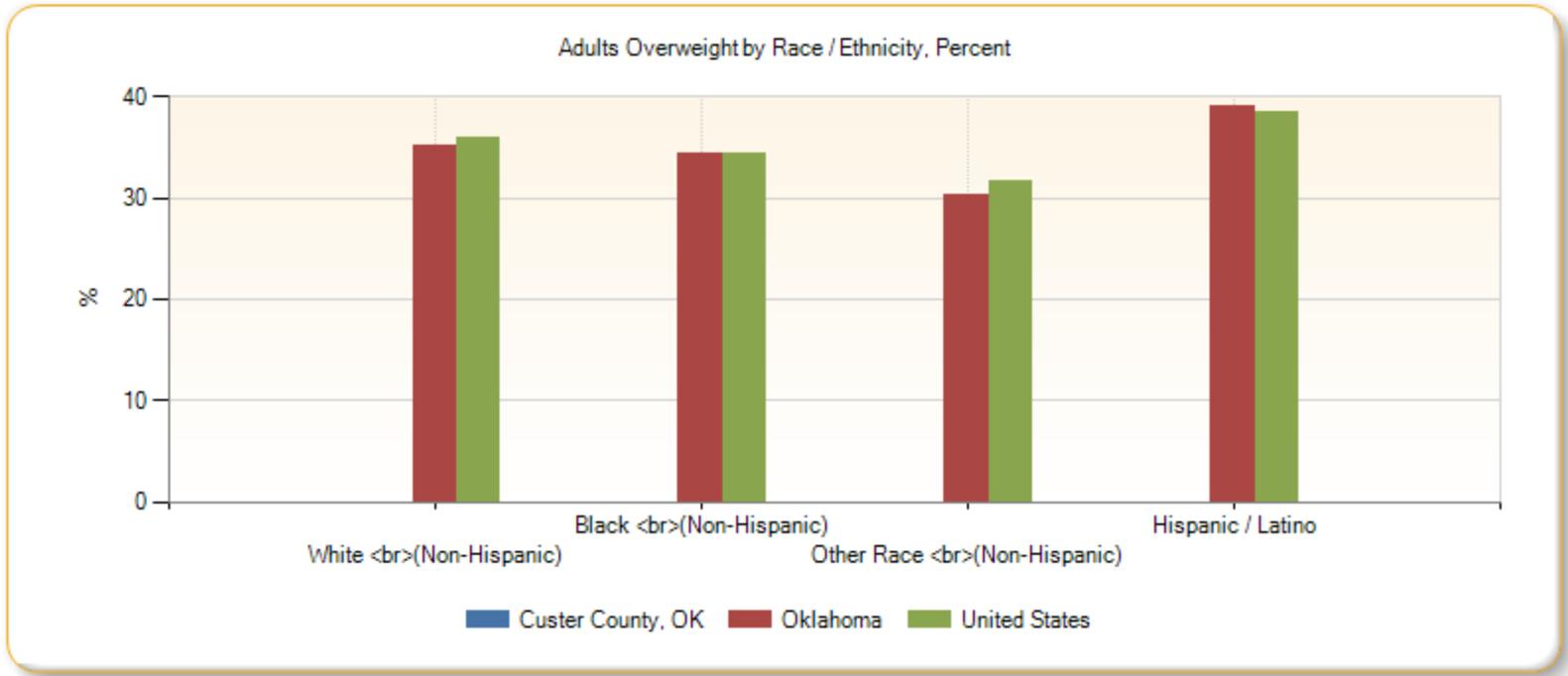


**Overweight (BMI 25.0-29.9), Adults Age 18 , Percent by County, BRFSS 2011-12**



**Adults Overweight by Race / Ethnicity, Percent**

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
Custer County, OK	no data	no data	no data	no data
Oklahoma	35.19%	34.34%	30.24%	39.05%
United States	35.85%	34.31%	31.61%	38.43%

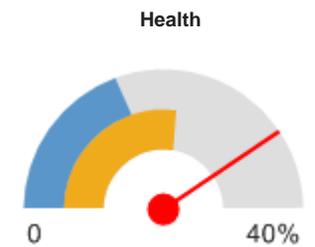


## Poor Dental Health

This indicator reports the percentage of adults age 18 and older who self-report that six or more of their permanent teeth have been removed due to tooth decay, gum disease, or infection. This indicator is relevant because it indicates lack of access to dental care and/or social barriers to utilization of dental services.

Report Area	Total Population (Age 18 )	Total Adults with Poor Dental Health	Percent Adults with Poor Dental Health
Custer County, OK	20,722	6,728	<b>32.47%</b>
Oklahoma	2,793,624	608,605	21.79%
United States	235,375,690	36,842,620	15.65%

Percent Adults with Poor Dental Health

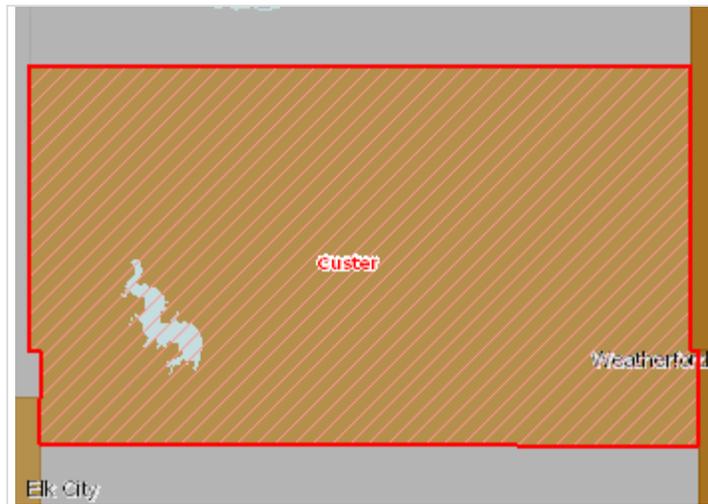


■ Custer County, OK (32.47%)  
 ■ Oklahoma (21.79%)

Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#): 2006-10. Additional data analysis by [CARES](#). Source geography: County.

United States (15.65%)

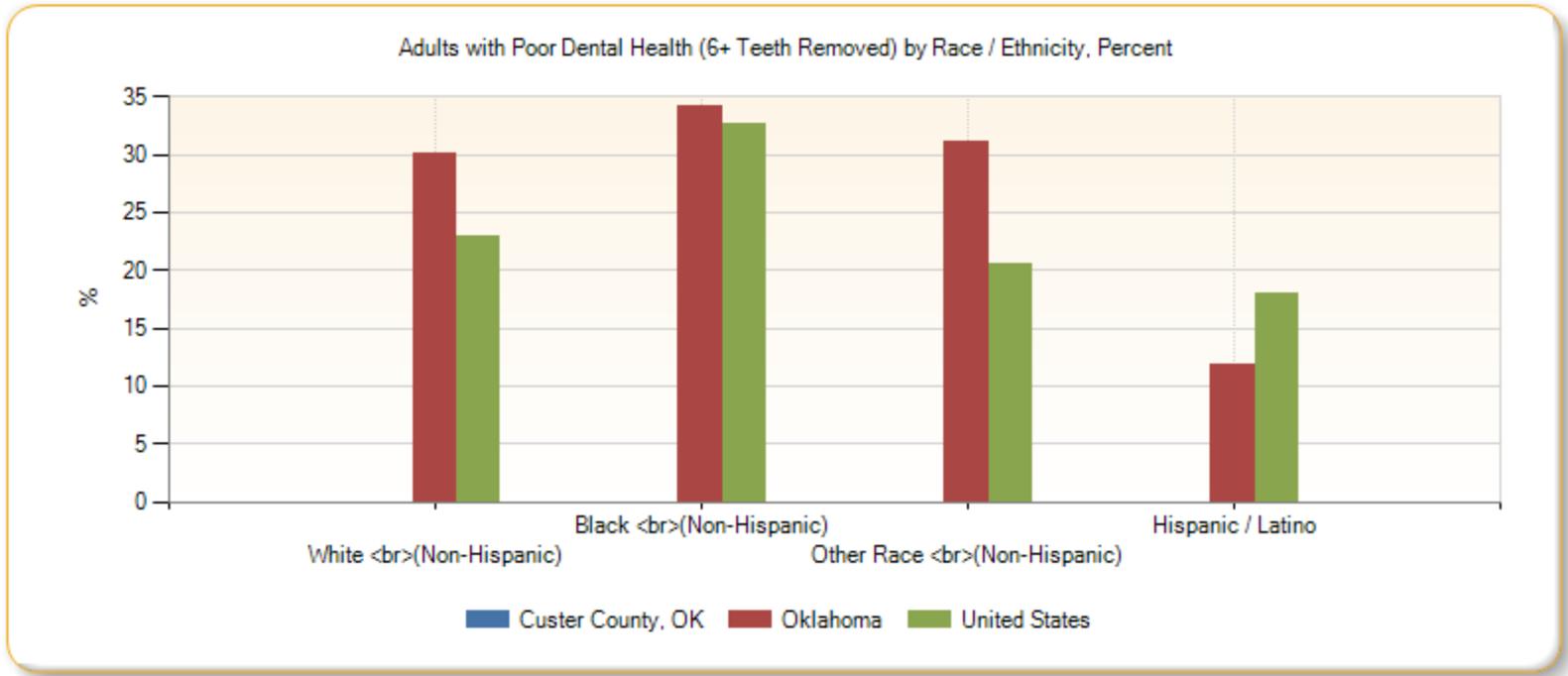


### Adults Age 18 Without Dental Exam in Past 12 Months, Percent by County, BRFSS 2006-10



### Adults with Poor Dental Health (6 Teeth Removed) by Race / Ethnicity, Percent

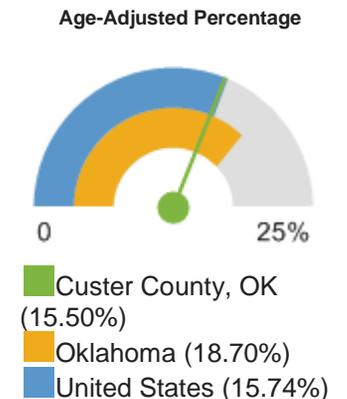
Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
Custer County, OK	no data	no data	no data	no data
Oklahoma	30.16%	34.25%	31.08%	11.79%
United States	22.98%	32.63%	20.47%	18.05%



## Poor General Health

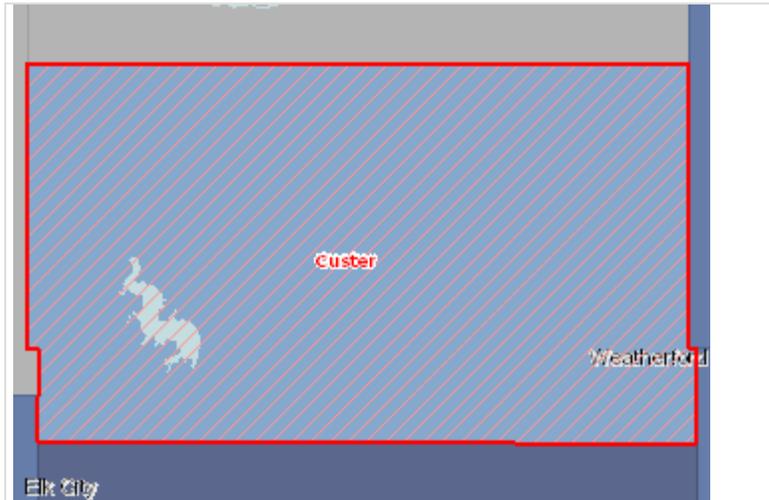
Within the report area 16.60% of adults age 18 and older self-report having poor or fair health in response to the question "Would you say that in general your health is excellent, very good, good, fair, or poor?". This indicator is relevant because it is a measure of general poor health status.

Report Area	Total Population Age 18	Estimated Population with Poor or Fair Health	Crude Percentage	Age-Adjusted Percentage
Custer County, OK	20,926	3,474	16.60%	15.50%
Oklahoma	2,793,624	547,550	19.60%	18.70%
United States	232,556,016	37,766,703	16.24%	15.74%



Note: This indicator is compared with the state average. Data breakout by demographic groups are not available.

Data Source: Centers for Disease Control and Prevention, [Behavioral Risk Factor Surveillance System](#): 2006-12. Accessed via the [Health Indicators Warehouse](#). Source geography: County.



**Adults with Poor or Fair Health, Percent by County, BRFSS 2006-12**



## FOOTNOTES

### Asthma Prevalence

#### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

“... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households.”

Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2011-2012. Percentages are generated based on valid responses to the following questions:

*"Have you ever been told by a doctor, nurse, or health professional that you have Asthma?"*

This indicator represents the percentage of those persons who answered "yes". Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population using the methods described in the BRFSS Comparability of Data documentation.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Cancer Incidence - Breast

### Data Background

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data

have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) website.

## Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2006-10 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:

$$Adj. Population = ( [Cancer Incidence] / ([Adj. Incidence Rate] / 100,000) )$$

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

$$Adj. Incidence Rate = 100,000 * ([Cancer Incidence] / [Adj. Population])$$

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
4. Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

## **Race and Ethnicity**

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

## **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Cancer Incidence - Cervical

### **Data Background**

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) website.

### **Methodology**

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2006-10 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total

populations are first back-calculated using the following formula:

$$\text{Adj. Population} = ( [\text{Cancer Incidence}] / ([\text{Adj. Incidence Rate}] / 100,000) )$$

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

$$\text{Adj. Incidence Rate} = 100,000 * ([\text{Cancer Incidence}] / [\text{Adj. Population}])$$

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
4. Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Cancer Incidence - Colon and Rectum

### Data Background

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) website.

## Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2006-10 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:

$$Adj. Population = ( [Cancer Incidence] / ([Adj. Incidence Rate] / 100,000) )$$

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

$$Adj. Incidence Rate = 100,000 * ([Cancer Incidence] / [Adj. Population])$$

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
4. Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic

Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

### **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Cancer Incidence - Lung

### **Data Background**

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) website.

### **Methodology**

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2006-10 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:

$$Adj. Population = ( [Cancer Incidence] / ([Adj. Incidence Rate] / 100,000) )$$

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

$$\text{Adj. Incidence Rate} = 100,000 * ([\text{Cancer Incidence}] / [\text{Adj. Population}])$$

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
4. Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Cancer Incidence - Prostate

### Data Background

The State Cancer Profiles website provides statistics to help guide and prioritize cancer control activities at the state and local levels. State Cancer Profiles are a collaborative effort of the National Cancer Institute (NCI) and the Centers for Disease Control and Prevention (CDC). The incidence rates tables accessed through the State Cancer Profiles web site provide incidence statistics compiled from state and local cancer registries. Statistics are available for those states with cancer registries whose data have met the criteria required for inclusion in the US Cancer Statistics. Data is provided for use in assessing the burden and risk for a major cancer site for the US overall or for a selected state and its counties.

State-based cancer registries are data systems that collect, manage, and analyze data about cancer cases and cancer deaths. In each state, medical facilities (including hospitals, physicians' offices, therapeutic radiation facilities, freestanding surgical centers, and pathology laboratories) report these data to a central cancer registry. State cancer registries receive funding and program

guidance through the CDC's National Program of Cancer Registries and the National Cancer Institute's Surveillance, Epidemiology and End Results (SEER) program.

For more information, please visit the [State Cancer Profiles](#) website.

## Methodology

Annual incidence rates are acquired for all US states and counties as an average for years 2006-2010 from the [State Cancer Profiles: Incidence Rates](#) data tables. This source provides the average annual incidence of new cancer cases, as well as incidence rates, age adjusted to the 2000 US standard population. The new case counts (incidence) used to generate the State Cancer Profiles data tables are provided by the National Program of Cancer Registries Cancer Surveillance System (NPCR-CSS), the Centers for Disease Control and Prevention, and by the National Cancer Institute's Surveillance, Epidemiology, and End Results (SEER) Program. The population data displayed in the report summary tables are based on American Community Survey 2006-10 5-year estimates and are shown for reference only.

In order to perform aggregate (multi-county or service area) incidence rate estimates with the data provided, age-adjusted total populations are first back-calculated using the following formula:

$$\text{Adj. Population} = ( [\text{Cancer Incidence}] / ([\text{Adj. Incidence Rate}] / 100,000) )$$

This estimated population figure is then used in the formula to re-calculate age-adjusted cancer rates as follows:

$$\text{Adj. Incidence Rate} = 100,000 * ([\text{Cancer Incidence}] / [\text{Adj. Population}])$$

For more information about the State Cancer Profiles data, including age-adjustment and data suppression, please visit the [SEER\\*Stat](#) website.

## Notes

### Data Limitations

1. Data is not available for the state of Kansas because of state legislation and regulations which prohibit the release of county level data to outside entities.
2. Data is not available for the state of Minnesota.
3. Data for Ohio counties are acquired from [CDC WONDER](#). Data are estimates based on metropolitan areas which consist of multiple counties.
4. Data for the state of Michigan do not include cases diagnosed in other states because data exchange agreements prohibit the release of data to third parties.

### Race and Ethnicity

Cancer statistics from the State Cancer Profiles database are reported by race alone (White, Black, Amer. Indian/AK Native, and Asian) or by ethnicity alone (Hispanic), or for the white Hispanic and white non-Hispanic population. NHIA (NAACCR Hispanic Identification Algorithm) was used to determine Hispanic ethnicity. See the *Technical Notes* section of the [2003 United States Cancer Statistics Report](#) for more information.

## **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the number of cases is less than 16 (for each county/cancer/population group combination) over the time period monitored, or when the total population (per race-ethnicity-sex grouping) of the report area is less than 50,000

## Chlamydia Incidence

### **Data Background**

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

### **Methodology**

Cases of a given STD refer to confirmed diagnoses during a given time period. For example, the 2010 data on gonorrhea infection would include persons with laboratory-confirmed infection diagnosed between January 1, 2010 and December 31, 2010, and reported to CDC through June 8, 2011. Rates per 100,000 population were calculated for each STD. The population denominators used to compute these rates for the 50 states and the District of Columbia were based on the National Center for Health Statistics (NCHS) bridged-race population counts for the 2000–2010. These estimates are a modification of the U.S. Census Bureau population estimates in which the 31 race categories used by the Census Bureau are bridged into the five race/ethnicity groups that have been historically used to report race data for STD cases. Each rate was calculated by dividing the number of cases for the calendar year by the population for that calendar year and then multiplying the number by 100,000.

For more information, visit the [NCHHSTP Atlas](#) and click on the “About these data and footnotes” link.

### **Notes**

#### **Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories by state departments of health based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Data reported from the CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) is available by combined race and ethnicity, and is reported only for state and national data summaries. County level statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available from a local source.

## Diabetes (Adult)

### **Data Background**

The Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion monitors the health of the Nation and produces publically available data to promote general health. The division maintains the Diabetes Data and Trends data system, which includes the National Diabetes Fact Sheet and the National Diabetes Surveillance System. These programs provide resources documenting the public health burden of diabetes and its complications in the United States. The surveillance system also includes county-level estimates of diagnosed diabetes and selected risk factors for all U.S. counties to help target and optimize the resources for diabetes control and prevention.

*Citation: [Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions \(FAQ\). \(2012\).](#)*

## Methodology

Data for total population and estimated obese population data are acquired from the County Level Estimates of Diagnosed Diabetes, a service of the Centers for Disease Control and Prevention's National Diabetes Surveillance Program. Diabetes and other risk factor prevalence is estimated using the following formula:

$$\text{Percent Prevalence} = [\text{Risk Factor Population}] / [\text{Total Population}] * 100.$$

All data are estimates modeled by the CDC using the methods described below:

The National Diabetes Surveillance system produces data estimating the prevalence of diagnosed diabetes and population obesity by county using data from [CDC's Behavioral Risk Factor Surveillance System](#) (BRFSS) and data from the [U.S. Census Bureau's Population Estimates Program](#). The BRFSS is an ongoing, monthly, state-based telephone survey of the adult population. The survey provides state-specific information on behavioral risk factors and preventive health practices. Respondents were considered to have diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes. Respondents were considered obese if their body mass index was 30 or greater. Body mass index (weight [kg]/height [m]<sup>2</sup>) was derived from self-report of height and weight. Respondents were considered to be physically inactive if they answered "no" to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. For example, 2003, 2004, and 2005 were used for the 2004 estimate and 2004, 2005, and 2006 were used for the 2005 estimate. Estimates were restricted to adults 20 years of age or older to be consistent with population estimates from the U.S. Census Bureau. The U.S. Census Bureau provides year-specific county population estimates by demographic characteristics—age, sex, race, and Hispanic origin. .

The county-level estimates were based on indirect model-dependent estimates. The model-dependent approach employs a statistical model that "borrows strength" in making an estimate for one county from BRFSS data collected in other counties. Bayesian multilevel modeling techniques were used to obtain these estimates. Separate models were developed for each of the four census regions: West, Midwest, Northeast and South. Multilevel Poisson regression models with random effects of demographic variables (age 20–44, 45–64, 65 ; race; sex) at the county-level were developed. State was included as a county-level covariate.

*Citation: [Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions \(FAQ\). \(2012\).](#)*

Rates were age adjusted by the CDC for the following three age groups: 20-44, 45-64, 65 . Additional information, including the complete methodology and data definitions, can be found at the CDC's [Diabetes Data and Trends](#) website.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Diabetes (Medicare Population)

### Data Background

The Centers for Medicare & Medicaid Services (CMS), a branch of the Department of Health and Human Services (HHS), is the federal agency that runs the Medicare Program and monitors Medicaid programs offered by each state. Medicare is a type of federally-funded health insurance available to disabled persons and the population age 65 and older. CMS provides various data on the Medicare population based on claims and enrollment data.

### Methodology

Indicator percentages are acquired for 2012 from Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Warehouse. The data used in the chronic condition reports are based upon CMS administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Beneficiaries who died during the year are included up to their date of death if they meet the other inclusion criteria. Chronic condition prevalence estimates are calculated by CMS by taking the beneficiaries with a particular condition divided by the total number of beneficiaries in our fee-for-service population, expressed as a percentage. For more information and to view the original data, please visit the CMS [Chronic Conditions](#) web page.

## Gonorrhea Incidence

### Data Background

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

### Methodology

Cases of a given STD refer to confirmed diagnoses during a given time period. For example, the 2010 data on gonorrhea infection would include persons with laboratory-confirmed infection diagnosed between January 1, 2010 and December 31, 2010, and reported to CDC through June 8, 2011. Rates per 100,000 population were calculated for each STD. The population denominators used to compute these rates for the 50 states and the District of Columbia were based on the National Center for Health Statistics (NCHS) bridged-race population counts for the 2000–2010. These estimates are a modification of the U.S. Census Bureau population estimates in which the 31 race categories used by the Census Bureau are bridged into the five

race/ethnicity groups that have been historically used to report race data for STD cases. Each rate was calculated by dividing the number of cases for the calendar year by the population for that calendar year and then multiplying the number by 100,000.

For more information, visit the [NCHHSTP Atlas](#) and click on the “About these data and footnotes” link.

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state departments of health based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Data reported from the CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) is available by combined race and ethnicity, and is reported only for state and national data summaries. County level statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available from a local source.

## Heart Disease (Adult)

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

“... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2011-2012. Percentages are generated based on valid responses to the following questions:

*" Has a doctor, nurse, or other health professional ever told you that you had any of the following:*

- Ever told you had a heart attack, also called myocardial infarction?*
- Ever told you had angina or coronary heart disease?*
- Ever told you had a stroke?"*

This indicator represents the percentage of those persons who answered that “yes”, they have been diagnosed with angina or coronary heart disease. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population using the methods described in the BRFSS Comparability of Data documentation.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Heart Disease (Medicare Population)

### Data Background

The Centers for Medicare & Medicaid Services (CMS), a branch of the Department of Health and Human Services (HHS), is the federal agency that runs the Medicare Program and monitors Medicaid programs offered by each state. Medicare is a type of federally-funded health insurance available to disabled persons and the population age 65 and older. CMS provides various data on the Medicare population based on claims and enrollment data.

### Methodology

Indicator percentages are acquired for 2012 from Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Warehouse. The data used in the chronic condition reports are based upon CMS administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Beneficiaries who died during the year are included up to their date of death if they meet the other inclusion criteria. Chronic condition prevalence estimates are calculated by CMS by taking the beneficiaries with a particular condition divided by the total number of beneficiaries in our fee-for-service population, expressed as a percentage. For more information and to view the original data, please visit the CMS [Chronic Conditions](#) web page.

## High Cholesterol (Adult)

## Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

“... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## High Cholesterol (Medicare Population)

### Data Background

The Centers for Medicare & Medicaid Services (CMS), a branch of the Department of Health and Human Services (HHS), is the federal agency that runs the Medicare Program and monitors Medicaid programs offered by each state. Medicare is a type of federally-funded health insurance available to disabled persons and the population age 65 and older. CMS provides various data on the Medicare population based on claims and enrollment data.

### Methodology

Indicator percentages are acquired for 2012 from Centers for Medicare and Medicaid Services (CMS) Chronic Conditions Warehouse. The data used in the chronic condition reports are based upon CMS administrative enrollment and claims data for Medicare beneficiaries enrolled in the fee-for-service program. Beneficiaries who died during the year are included up to their date of death if they meet the other inclusion criteria. Chronic condition prevalence estimates are calculated by CMS by taking the beneficiaries with a particular condition divided by the total number of beneficiaries in our fee-for-service population, expressed as a percentage. For more information and to view the original data, please visit the CMS [Chronic Conditions](#) web page.

## HIV Prevalence

### Data Background

The National Center for HIV/AIDS, Viral Hepatitis, Sexually Transmitted Disease (STD), and Tuberculosis (TB) Prevention (NCHHSTP) is the branch of the Centers for Disease Control and Prevention (CDC) responsible for public health surveillance, prevention research, and programs to prevent and control HIV and AIDS, other STDs, viral hepatitis, and TB. NCHHSTP

developed a set of indicators to monitor the prevalence and track its progress toward ending these diseases in each state, and regularly reports its progress. The NCHHSTEP program includes data from new patient case reports from 56 areas (all 50 states, the District of Columbia, American Samoa, Guam, the Northern Mariana Islands, Puerto Rico, and the U.S. Virgin Islands).

## **Methodology**

Cases of a given STD refer to confirmed diagnoses during a given time period. For example, the 2010 data on gonorrhea infection would include persons with laboratory-confirmed infection diagnosed between January 1, 2010 and December 31, 2010, and reported to CDC through June 8, 2011. Rates per 100,000 population were calculated for each STD. The population denominators used to compute these rates for the 50 states and the District of Columbia were based on the National Center for Health Statistics (NCHS) bridged-race population counts for the 2000–2010. These estimates are a modification of the U.S. Census Bureau population estimates in which the 31 race categories used by the Census Bureau are bridged into the five race/ethnicity groups that have been historically used to report race data for STD cases. Each rate was calculated by dividing the number of cases for the calendar year by the population for that calendar year and then multiplying the number by 100,000.

For more information, visit the [NCHHSTP Atlas](#) and click on the “About these data and footnotes” link.

## **Notes**

### **Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories by state departments of health based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Data reported from the CDC National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (NCHHSTP) is available by combined race and ethnicity, and is reported only for state and national data summaries. County level statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available from a local source.

## Infant Mortality

### **Data Background**

The Area Health Resource File (AHRF) is a database of information about the U.S. health care system, maintained and released annually by the U.S. Health and Human Services (HHS) Health Resources and Services Administration (HRSA). The AHRF contains more than 6,000 variables, aggregated for each of the nation's counties. The ARF contains information on health facilities, health professions, health status, economic activity, health training programs, measures of resource scarcity, and socioeconomic and environmental characteristics. In addition, the basic file contains geographic codes and descriptors which enable it to be linked to many other files and to aggregate counties into various geographic groupings.

The ARF integrates data from numerous primary data sources including: the American Hospital Association, the American Medical Association, the American Dental Association, the American Osteopathic Association, the Bureau of the Census, the Centers for Medicare and Medicaid Services (formerly Health Care Financing Administration), Bureau of Labor Statistics, National Center for Health Statistics and the Veteran's Administration.

For more information, please visit HRSA's [Area Health Resource File](#) website.

## Methodology

Total births and infant mortality rates are 5-year averages acquired from the 2012 Health Resources and Services Administration (HRSA) Area Resource File (ARF). Total infant deaths are back-calculated based on these figures. Mortality rates represent the number of deaths to infants under age 1 per 1,000 total live births, based on the following formula:

$$\text{Rate} = [\text{Total Deaths Under Age 1}] / [\text{Total Births}] * 1,000$$

The ARF documentation states the following about the infant mortality data:

*The NCHS Mortality Data were obtained from the National Center for Health Statistics Detail Mortality data files, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. The number of infant deaths for a county are based on place of residence; non residents of the US are excluded. Averages are provided rather than actual data for each year because of data use restrictions required by NCHS beginning with 1989 data.*

For additional information, please review the documentation for the HRSA ARF, available for download [here](#).

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state departments of health based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Data reported from the CDC is available by combined race and ethnicity, and is reported here only for state and national data summaries. County level statistics by race and ethnicity are not provided for this indicator due to sample size limitations. Detailed race/ethnicity data may be available from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when there are fewer than 10 cases in the numerator (for each county / population group combination) over the report period.

## Low Birth Weight

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

## Methodology

Counts for this indicator represent the annual average births over the 7-year period 2003-2009. Original data was tabulated by the CDC based on information reported on each birth certificate. Rates represent the number of births weighing less than 2,500 grams per 100 live births based on the following formula:

$$\text{Rate} = [\text{Births Weighting} < 2500\text{g}] / [\text{Total Births}] * 100$$

Data was acquired from the Health Indicators Warehouse. For more information about this source, including data inclusion requirements and subject definitions, please visit the [Health Indicator Warehouse indicator page](#) or refer to the NVSS [natality public use file documentation](#).

## Notes

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported separately for race alone and for ethnicity alone in order to maintain large enough sample sizes for the inclusion of small counties in the disaggregated data tables.

## Mortality - Cancer

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Heart Disease

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

## Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00-I09, I11, I13, I20-I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-

Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Homicide

### **Data Background**

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### **Methodology**

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00-I09, I11, I13, I20-I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

### **Notes**

#### **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is

less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### **Trends Over Time**

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### **Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Ischaemic Heart Disease

### **Data Background**

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### **Methodology**

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69

- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00-I09, I11, I13, I20-I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Lung Disease

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases

(ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Motor Vehicle Accident

### **Data Background**

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### **Methodology**

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

### **Notes**

#### **Data Suppression**

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

## Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

## Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Pedestrian Accident

### Data Background

The National Highway Traffic Safety Administration (NHTSA) is a branch of the Department of Transportation and is dedicated to achieving the highest standards of excellence in motor vehicle and highway safety. The NHTSA is responsible for enforcing Federal Motor Vehicle Safety Standards as well as regulations for motor vehicle theft resistance and fuel economy. With the help of various reporting systems, the NHTSA provides annual reports and data releases on transportation related fatalities, crash statistics, driver registration, and other information.

### Methodology

Crash-related data was acquired using the Fatality Analysis Reporting System (FARS) web-based query tool. Fatalities for non-vehicle occupants (pedestrians) were aggregated by county for years 2008-2010 to obtain a total fatality count. Pedestrian death figures do not include fatalities to bicyclists or persons on personal conveyances (scooters, skateboards). Three years of data were averaged to produce an annual fatality figure for each county ( $[Total\ Deaths] / 3$ ). Population data was acquired from the U.S. Census Bureau's 2010 decennial census. Motor-vehicle mortality rates are reported as the average annual fatalities per 100,000 population using the following formula:

$$\text{Mortality Rate} = [\text{Average Annual Deaths}] / [\text{Total Population}] * 100,000.$$

Original motor vehicle crash data may be accessed using the [FARS query tool](#).

## Mortality - Premature Death

### Data Background

The County Health Rankings (CHR) is a data service of the [University of Wisconsin Population Health Institute](#) which measures the health of nearly all counties in the nation and ranks them within states. CHR has been published for the nation's counties annually since 2010, expanding on similar work specific to Wisconsin since 2003. Rankings are compiled using county-level measures from a variety of national and state data sources. These measures are standardized and combined using scientifically-

informed weights. County Health Rankings is a free public service, providing their wealth of their rankings and source data to the public for download.

For more information and to explore the original data, please visit the [County Health Rankings](#) website.

## Methodology

Years of potential life lost (YPLL) data was acquired from the University of Wisconsin's County Health Rankings (CHR). Potential life lost is defined by CHR as a death occurring before the age of 75. CHR uses 2008 - 2010 three year averages from the [National Vital Statistic System](#) (NVSS) as the basis for their calculation. NVSS data is compiled from state death records and maintained by the Centers for Disease Control and Prevention. Age-stratified NVSS data is used to calculate the total years of potential life lost to all persons under age 75, by county, using the following formula:

$$\text{YPLL} = [ 75 * (\text{Number of Deaths Under Age 75}) ] - [ \text{SUM (Age at Death)} ]$$

To further illustrate, a person dying at age 50 would contribute 25 years of life lost to the YPLL index. YPLL is age-adjusted to the 2000 U.S. population to allow comparison between counties and is reported as a rate per 100,000 people. For more information, please review the County Health Rankings [Premature Death](#) indicator information.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Mortality - Stroke

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00-I09, I11, I13, I20-I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Suicide

### Data Background

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

## Methodology

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79
- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US;

county-level data is not provided due to data suppression / low numerator counts.

### **Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Mortality - Unintentional Injury

### **Data Background**

The Division of Vital Statistics is a branch of the Centers for Disease Control and Prevention (CDC) National Center for Health Statistics (NCHS) responsible for maintaining birth and death records for the nation. Data are compiled for the National Vital Statistics System (NVSS) through a joint effort between the NCHS and various state and local health agencies, who are responsible for registering vital events – births, deaths, marriages, divorces, and fetal deaths. NVSS statistics are released annually in various data warehouses, including [CDC WONDER](#), [VitalStats](#), and the [Health Indicator Warehouse](#).

### **Methodology**

County population figures and death statistics are acquired using CDC WONDER from the Underlying Cause of Death database. Conditions were queried for years 2006-2010 based on a selection of codes from the International Classification of Diseases (ICD), Version 10. The ICD-10 is the current global health information standard for mortality and morbidity statistics. The ICD has been maintained by the World Health Organization since its conception in 1948. A searchable, detailed list of current ICD-10 Codes (Version 2010) is available from the [World Health Organization](#).

Mortality rates were acquired from the source age-adjusted to the year 2000 U.S. standard. To recalculate age-adjusted mortality rates for unique service areas and aggregated county groupings, the following formula was used:

$$\text{Mortality Rate} = [\text{SUM}(\text{Total Population}) * ((\text{Age-Adjusted Rate})/100,000)] / [\text{SUM}(\text{Total Population})] * 100,000.$$

The specific codes used for reported mortality indicators are listed below.

- Assault (homicide): U01-U02, X85-Y09, Y87.1
- Cerebrovascular disease (stroke): I60-I69
- Coronary (ischaemic) heart disease: I20-I25
- Chronic lower respiratory disease: J40-J47
- Heart disease: I00–I09, I11, I13, I20–I51
- Intentional self-harm (suicide): U03, X60-X84, Y87.0
- Malignant neoplasm (cancer): C00-C97
- Motor vehicle accident: V01-V79

- Unintentional injury (accident): V01-X59, Y85-Y86

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of cases is less than 10 (for each county/cause of death/population group) over the time period monitored. Rates should be considered unreliable when calculated with a numerator (number of cases) less than 20.

### Trends Over Time

Trends over time are produced using single-year mortality data from the CDC WONDER query system. Use caution when comparing single-year mortality rates with 5-year aggregate mortality rates. Trend data is available for states and for the total US; county-level data is not provided due to data suppression / low numerator counts.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories by state vital statistics registries based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. All mortality statistics from the CDC WONDER databases are available by race alone (White, Black, Amer. Indian/AK Native, and Asian) ethnicity alone (Hispanic, Non-Hispanic), or by combined race and ethnicity. Data is reported here in combination, and thus may be subject to higher suppression than if reported separately.

## Obesity

### Data Background

The Centers for Disease Control and Prevention's National Center for Chronic Disease Prevention and Health Promotion monitors the health of the Nation and produces publically available data to promote general health. The division maintains the Diabetes Data and Trends data system, which includes the National Diabetes Fact Sheet and the National Diabetes Surveillance System. These programs provide resources documenting the public health burden of diabetes and its complications in the United States. The surveillance system also includes county-level estimates of diagnosed diabetes and selected risk factors for all U.S. counties to help target and optimize the resources for diabetes control and prevention.

*Citation: [Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions \(FAQ\). \(2012\).](#)*

### Methodology

Data for total population and estimated obese population data are acquired from the County Level Estimates of Diagnosed Diabetes, a service of the Centers for Disease Control and Prevention's National Diabetes Surveillance Program. Diabetes and other risk factor prevalence is estimated using the following formula:

$$\text{Percent Prevalence} = [\text{Risk Factor Population}] / [\text{Total Population}] * 100.$$

All data are estimates modeled by the CDC using the methods described below:

The National Diabetes Surveillance system produces data estimating the prevalence of diagnosed diabetes and population obesity by county using data from [CDC's Behavioral Risk Factor Surveillance System](#) (BRFSS) and data from the [U.S. Census Bureau's Population Estimates Program](#). The BRFSS is an ongoing, monthly, state-based telephone survey of the adult population. The survey provides state-specific information on behavioral risk factors and preventive health practices. Respondents were considered to have diabetes if they responded "yes" to the question, "Has a doctor ever told you that you have diabetes?" Women who indicated that they only had diabetes during pregnancy were not considered to have diabetes. Respondents were considered obese if their body mass index was 30 or greater. Body mass index (weight [kg]/height [m]<sup>2</sup>) was derived from self-report of height and weight. Respondents were considered to be physically inactive if they answered "no" to the question, "During the past month, other than your regular job, did you participate in any physical activities or exercises such as running, calisthenics, golf, gardening, or walking for exercise?"

Three years of data were used to improve the precision of the year-specific county-level estimates of diagnosed diabetes and selected risk factors. For example, 2003, 2004, and 2005 were used for the 2004 estimate and 2004, 2005, and 2006 were used for the 2005 estimate. Estimates were restricted to adults 20 years of age or older to be consistent with population estimates from the U.S. Census Bureau. The U.S. Census Bureau provides year-specific county population estimates by demographic characteristics—age, sex, race, and Hispanic origin. .

The county-level estimates were based on indirect model-dependent estimates. The model-dependent approach employs a statistical model that “borrows strength” in making an estimate for one county from BRFSS data collected in other counties. Bayesian multilevel modeling techniques were used to obtain these estimates. Separate models were developed for each of the four census regions: West, Midwest, Northeast and South. Multilevel Poisson regression models with random effects of demographic variables (age 20–44, 45–64, 65 ; race; sex) at the county-level were developed. State was included as a county-level covariate.

*Citation: [Centers for Disease Control and Prevention, Diabetes Data & Trends: Frequently Asked Questions \(FAQ\). \(2012\).](#)*

Rates were age adjusted by the CDC for the following three age groups: 20-44, 45-64, 65 . Additional information, including the complete methodology and data definitions, can be found at the CDC's [Diabetes Data and Trends](#) website.

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

## Overweight

### Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

“... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households. ”

Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2011-2012. Percentages are generated based on valid responses to the following questions:

*"About how much do you weigh without shoes?" and "About how tall are you without shoes?"*

These responses were combined to determine a respondent's Body Mass Index (BMI). BMI is calculated as weight in kilograms divided by height in meters squared. Persons with a BMI from 25.0-29.9 are considered overweight.

Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population using the methods described in the BRFSS Comparability of Data documentation.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the Behavioral Risk Factor Surveillance System home page.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### Race and Ethnicity

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Data Background

The Behavioral Risk Factor Surveillance System (BRFSS) is

“... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC. BRFSS annual survey data are publically available and maintained on the CDC's BRFSS [Annual Survey Data](#) web page.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

## Methodology

Indicator percentages are acquired from analysis of annual survey data from the Behavioral Risk Factor Surveillance System (BRFSS) for years 2006-2010. Percentages are generated based on valid responses to the following questions:

*>" How many of your permanent teeth have been removed because of tooth decay or gum disease? Include teeth lost to infection, but do not include teeth lost for other reasons, such as injury or orthodontics. (If wisdom teeth are removed because of tooth decay or gum disease, they should be included in the count for lost teeth)."*

This indicator represents the percentage of respondents who indicated that they had 6 or more, including all of their permanent teeth extracted. Data only pertain to the non-institutionalized population aged 18 and up and are weighted to reflect the total county population, including non-respondents, using the methods described in the BRFSS Comparability of Data documentation. Population numerators (estimated number of adults exercising each risk behavior) are not provided in the annual survey data and were generated for the data tables using the following formula:

$$\text{Adults Poor Dental Health} = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

The population figures used for these estimates are acquired from the American Community Survey (ACS) 2006-2010 five year estimates.

Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#) are available on the BRFSS web site.

## Notes

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons

sampled (for each geographic area / population group combination) over the survey period is less than 20. Data are unreliable when the total number of persons sampled over the survey period is less than 50. Confidence intervals are available when exploring the data through the map viewer.

### **Race and Ethnicity**

Race and ethnicity (Hispanic origin) are collected as two separate categories in the Behavioral Risk Factor Surveillance System (BRFSS) interview surveys based on methods established by the U.S. Office of Management and Budget (OMB) in 1997. Before the raw survey data files are released, self-identified race and ethnicity variables are recoded by National Center for Health Statistics (NCHS) analysts into the following categories: White, Non-Hispanic; Black, Non-Hispanic; Multiple Race, Non-Hispanic; Other Race, Non-Hispanic; and Hispanic or Latino. Due to sample size constraints, race and ethnicity statistics are only reported at the state and national levels.

## Poor General Health

### **Data Background**

The Behavioral Risk Factor Surveillance System (BRFSS) is

“... a collaborative project of the Centers for Disease Control and Prevention (CDC) and U.S. states and territories. The BRFSS, administered and supported by CDC's Behavioral Risk Factor Surveillance Branch, is an ongoing data collection program designed to measure behavioral risk factors for the adult population (18 years of age or older) living in households.”

*Citation: Centers for Disease Control and Prevention, Office of Surveillance, Epidemiology, and Laboratory Services. [Overview: BRFSS 2010](#).*

The health characteristics estimated from the BRFSS include data pertaining to health behaviors, chronic conditions, access and utilization of healthcare, and general health. Surveys are administered to populations at the state level and then delivered to the CDC and tabulated into county estimates by the BRFSS analysis team. Annual risk factor prevalence data are released for those geographic areas with 50 or more survey results and 10,000 or more total population (50 States, 170 Cities and Counties) in order to maintain the accuracy and confidentiality of the data. Multi-year estimates are produced by the NCHS to expand the coverage of data to approximately 2500 counties. These estimates are housed in the [Health Indicator Warehouse](#), the official repository of the nation's health data.

For more information on the BRFSS survey methods, or to obtain a copy of the survey questionnaires, please visit [the Behavioral Risk Factor Surveillance System](#) home page.

### **Methodology**

Indicator percentages are acquired for years 2006-2012 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Percentages are generated based on the valid responses to the following questions:

*"Would you say that in general your health is - Excellent, Very Good, Good, Fair, or Poor?"*

Respondents that indicated they had poor overall health are included in the count. Percentages are age-adjusted and only pertain to the non-institutionalized population over age 18. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

$$[\text{Persons with Poor Health}] = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2007-2011 five year estimates. Additional detailed information about the BRFSS, including questionnaires, data collection procedures, and [data processing methodologies](#), are available on the BRFSS web site. For additional information about the multi-year estimates, please visit the [Health Indicator Warehouse](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator from the data source. Detailed race/ethnicity data may be available at a broader geographic level, or from a local source.

### Data Suppression

Suppression is used to avoid misinterpretation when rates are unstable. Data is suppressed when the total number of persons sampled (for each geographic area / population group combination) over the survey period is less than 50, or when the standard error of the estimate exceeds 10% of the calculated value.