



## Full Health Indicators Report

### HEALTH BEHAVIORS

**Report Area:** Custer County, OK

Alcohol Consumption	Physical Inactivity	Tobacco Usage - Former or Current Smokers
Alcohol Expenditures	Soda Expenditures	Tobacco Usage - Quit Attempt
Fruit/Vegetable Consumption	Tobacco Expenditures	
Fruit/Vegetable Expenditures	Tobacco Usage - Current Smokers	

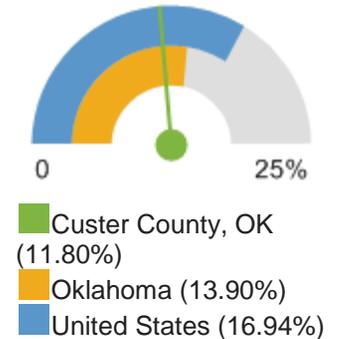
Health behaviors such as poor diet, a lack of exercise, and substance abuse contribute to poor health status.

### Alcohol Consumption

This indicator reports the percentage of adults aged 18 and older who self-report heavy alcohol consumption (defined as more than two drinks per day on average for men and one drink per day on average for women). This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

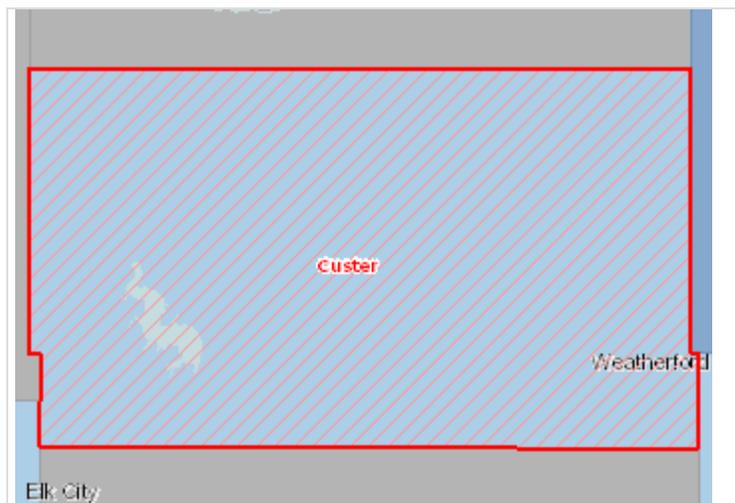
Report Area	Total Population Age 18	Estimated Adults Drinking Excessively	Estimated Adults Drinking Excessively (Crude Percentage)	Estimated Adults Drinking Excessively (Age-Adjusted Percentage)	Estimated Adults Drinking Excessively (Age-Adjusted Percentage)

Custer County, OK	20,926	2,197	10.50%	<b>11.80%</b>
Oklahoma	2,793,624	368,758	13.20%	13.90%
United States	232,556,016	38,248,349	16.45%	16.94%



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.



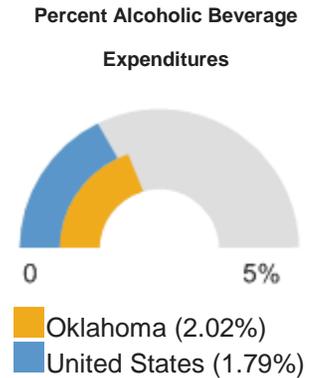
**Excessive Drinking, Percent of Adults Age 18 by County, BRFSS 2006-12**

- Over 22.0%
- 18.1 - 22.0%
- 14.1 - 18.0%
- Under 14.1%
- No Data or Data Suppressed
- Report Area

## Alcohol Expenditures

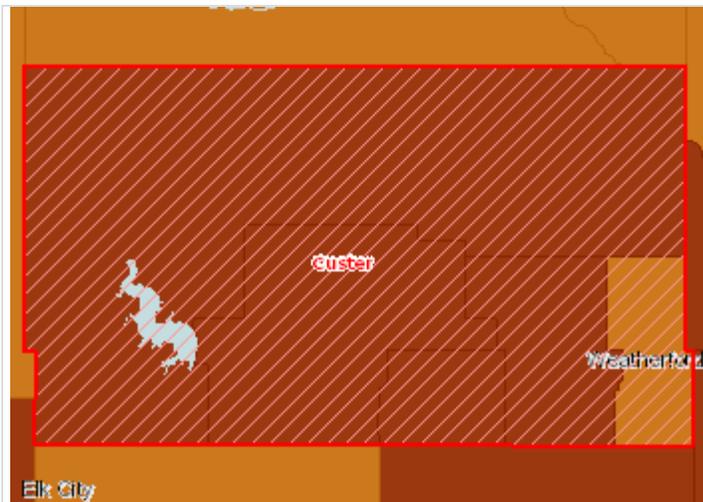
This indicator reports estimated expenditures for alcoholic beverages purchased at home, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as cirrhosis, cancers, and untreated mental and behavioral health needs.

Report Area	Average Total Household Expenditures (USD)	Average Household Alcoholic Beverage Expenditures (USD)	Alcoholic Beverage Expenditures, County Rank (In-State)	Alcoholic Beverage Expenditures, County Percentile	Percent Alcoholic Beverage Expenditures
Custer County, OK	no data	no data	75	97.40%	no data
Oklahoma	45,506	919	no data	no data	2.02%
United States	50,932	910	no data	no data	1.79%



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

Data Source: Nielsen, [Nielsen SiteReports](#): 2011. Source geography: Tract.



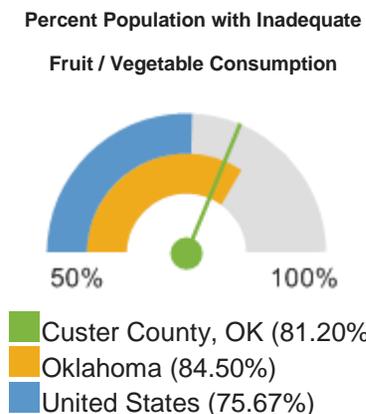
### Alcoholic Beverage Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2011

- Top 80th Percentile (Highest Expenditures)
- 60th - 80th Percentile
- 40th - 60th Percentile
- 20th - 40th Percentile
- Bottom 20th Percentile (Lowest Expenditures)
- No Data or Data Suppressed
- Report Area

## Fruit/Vegetable Consumption

In the report area an estimated 16,293, or 81.20% of adults over the age of 18 are consuming less than 5 servings of fruits and vegetables each day. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may cause of significant health issues, such as obesity and diabetes.

Report Area	Total Population Age 18	Estimated Population with Inadequate Fruit / Vegetable Consumption	Percent Population with Inadequate Fruit / Vegetable Consumption
Custer County, OK	20,065	16,293	81.20%
Oklahoma	2,709,105	2,289,194	84.50%
United States	227,279,010	171,972,118	75.67%



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](#): 2005-09. Accessed via the [Health Indicators Warehouse](#). Source geography: County.



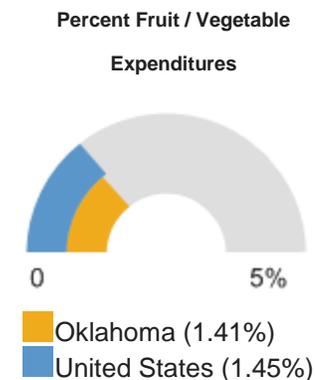
**Inadequate Fruit/Vegetable Consumption, Percent of Adults Age 18 by County, BRFSS 2005-09**

- Over 85.0%
- 80.1 - 85.0%
- 75.1 - 80.0%
- Under 75.1%
- No Data or Data Suppressed
- Report Area

## Fruit/Vegetable Expenditures

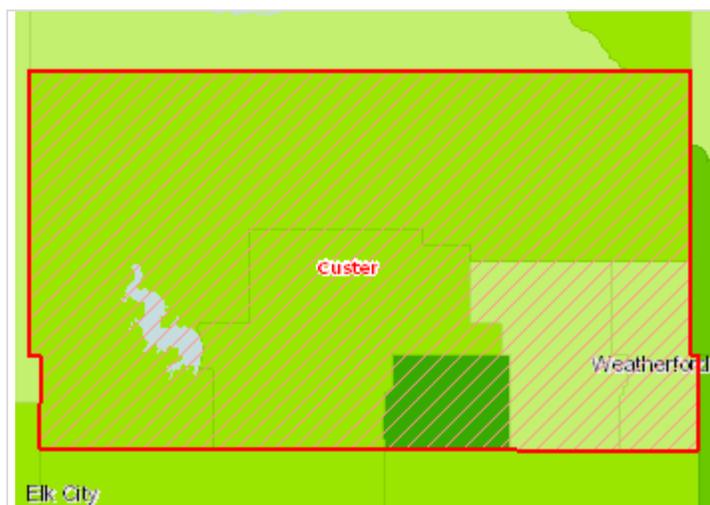
This indicator reports estimated expenditures for fruits and vegetables purchased for in-home consumption, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health, and because unhealthy eating habits may illustrate a cause of significant health issues, such as obesity and diabetes.

Report Area	Average Total Household Expenditures (USD)	Average Household Fruit / Vegetable Expenditures (USD)	Fruit / Vegetable Expenditures, County Rank (In-State)	Fruit / Vegetable Expenditures, County Percentile	Percent Fruit / Vegetable Expenditures
Custer County, OK	no data	no data	16	20.78%	no data
Oklahoma	45,506	644	no data	no data	1.41%
United States	50,932	737	no data	no data	1.45%



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

Data Source: Nielsen, [Nielsen SiteReports](#): 2011. Source geography: Tract.



**Fruit and Vegetable Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2011**

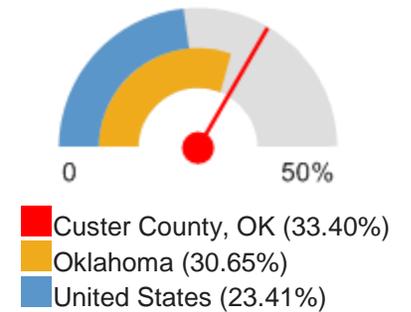
- Top 80th Percentile (Highest Expenditures)
- 60th - 80th Percentile
- 40th - 60th Percentile
- 20th - 40th Percentile
- Bottom 20th Percentile (Lowest Expenditures)
- No Data or Data Suppressed
- Report Area

## Physical Inactivity

Within the report area, 6,679 or 33.40% of adults aged 20 and older self-report no leisure time for activity, based on 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?". This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues, such as obesity and poor cardiovascular health.

Report Area	Total Population Age 20	Population with no Leisure Time Physical Activity	Percent Population with no Leisure Time Physical Activity
Custer County, OK	19,819	6,679	<b>33.40%</b>
Oklahoma	2,717,895	849,927	30.65%
United States	226,142,005	53,729,295	23.41%

Percent Population with no Leisure Time Physical Activity

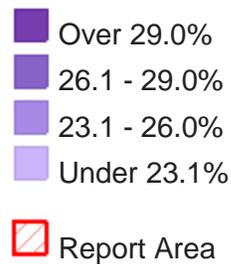


Note: This indicator is compared with the state average.

Data Source: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, [Diabetes Atlas: 2010](#). Source geography: County.

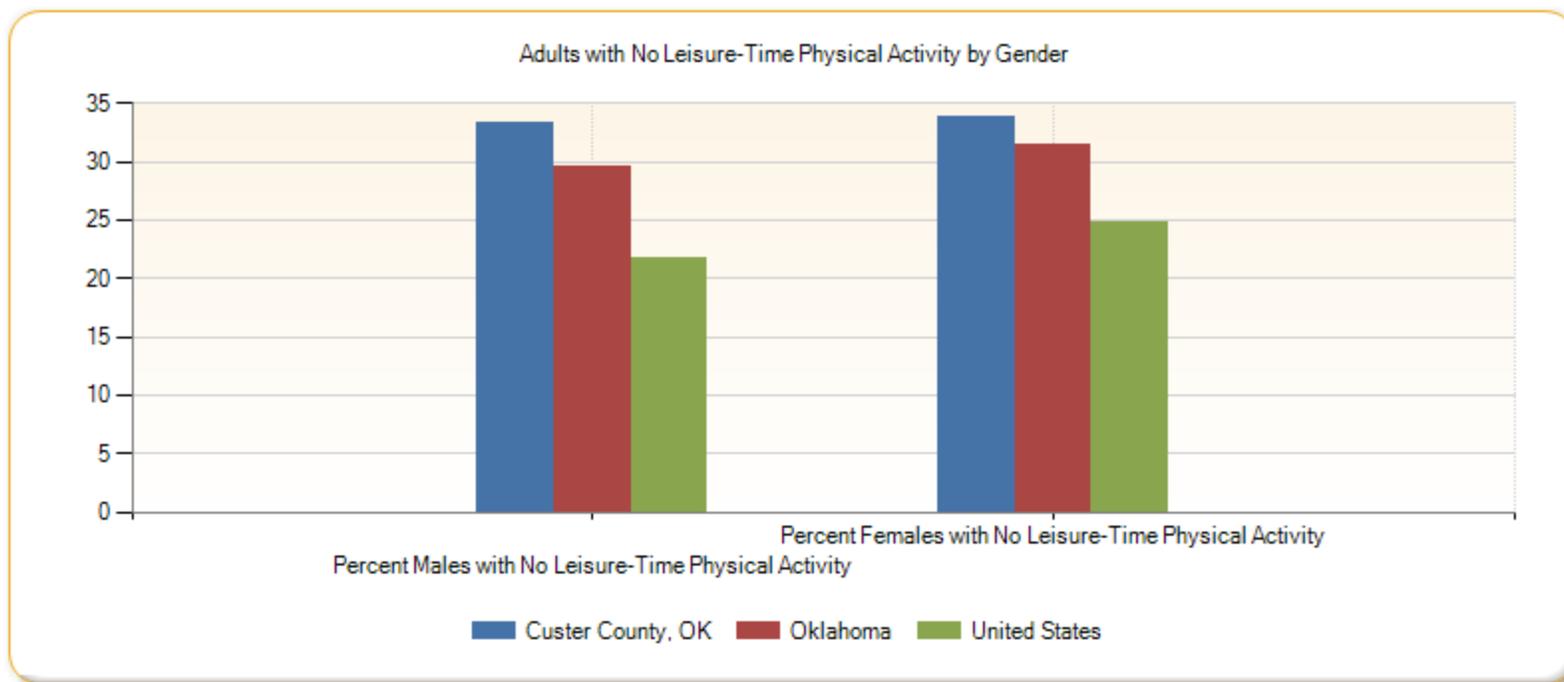


No Leisure-Time Physical Activity, Adults Age 20 , Percent by County, CDC NCCDPHP 2010



### Adults with No Leisure-Time Physical Activity by Gender

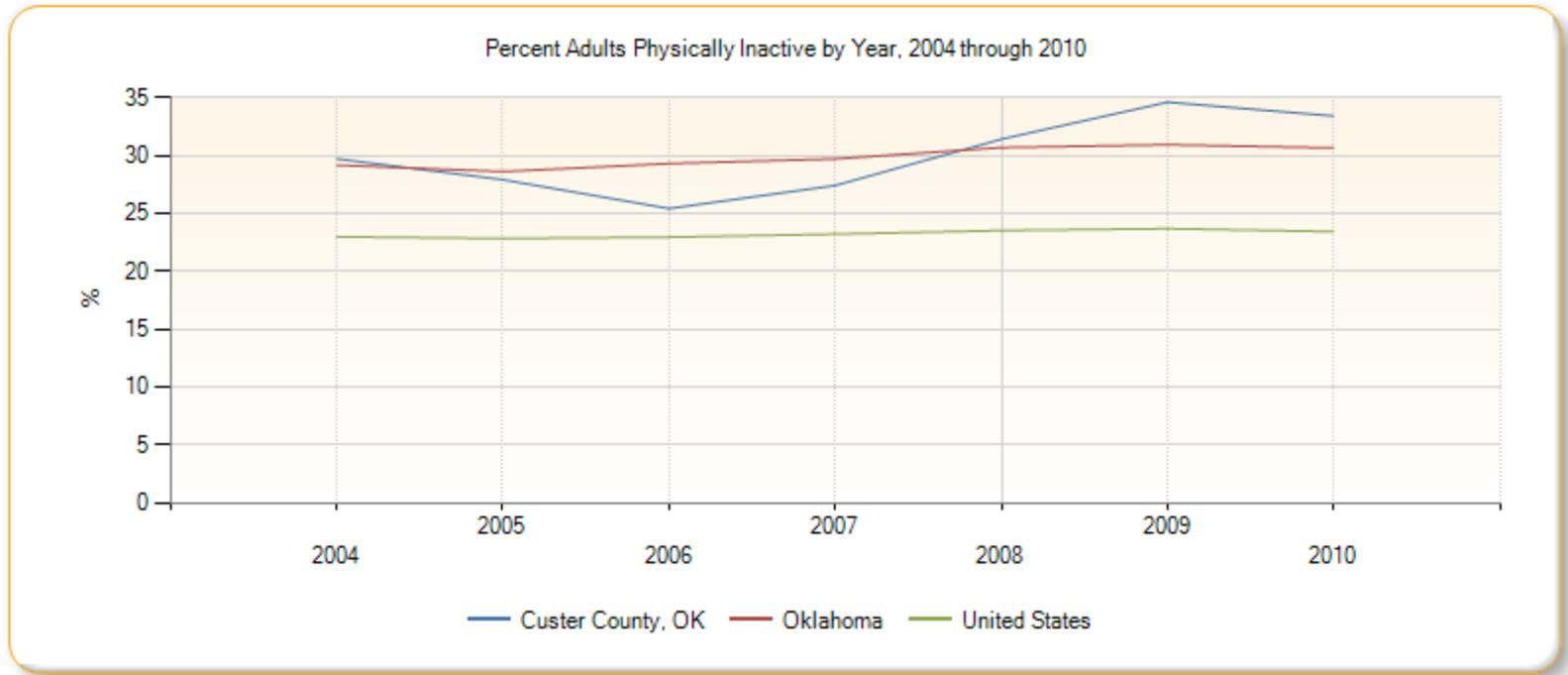
Report Area	Total Males with No Leisure-Time Physical Activity	Percent Males with No Leisure-Time Physical Activity	Total Females with No Leisure-Time Physical Activity	Percent Females with No Leisure-Time Physical Activity
Custer County, OK	3,048	33.30%	3,453	33.90%
Oklahoma	783,918	29.60%	901,674	31.49%
United States	47,761,489	21.75%	59,408,212	24.88%



### Percent Adults Physically Inactive by Year, 2004 through 2010

Report Area	2004	2005	2006	2007	2008	2009	2010
Custer County, OK	29.70%	27.90%	25.40%	27.40%	31.40%	34.60%	33.40%

Report Area	2004	2005	2006	2007	2008	2009	2010
Oklahoma	29.15%	28.60%	29.29%	29.70%	30.68%	30.92%	30.65%
United States	22.96%	22.82%	22.93%	23.20%	23.51%	23.67%	23.41%

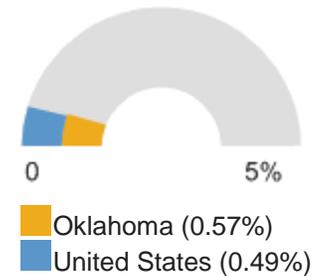


## Soda Expenditures

This indicator reports soft drink consumption by census tract by estimating expenditures for carbonated beverages, as a percentage of total household expenditures. This indicator is relevant because current behaviors are determinants of future health and this indicator may illustrate a cause of significant health issues such as diabetes and obesity.

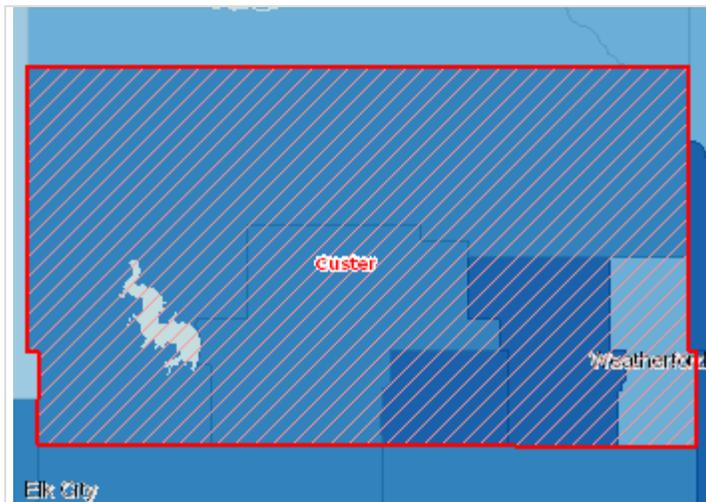
Report Area	Average Total Household Expenditures (USD)	Average Household Soda Expenditures (USD)	Soda Expenditures, County Rank (In-State)	Soda Expenditures, County Percentile	Percent Soda Expenditures
Custer County, OK	no data	no data	24	31.17%	no data
Oklahoma	45,506	258	no data	no data	0.57%
United States	50,932	252	no data	no data	0.49%

Percent Soda Expenditures



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

Data Source: Nielsen, [Nielsen SiteReports](#): 2011. Source geography: Tract.



Soda Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2011

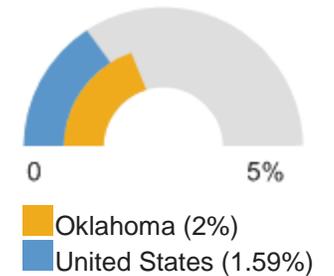
- Top 80th Percentile (Highest Expenditures)
- 60th - 80th Percentile
- 40th - 60th Percentile
- 20th - 40th Percentile
- Bottom 20th Percentile (Lowest Expenditures)
- No Data or Data Suppressed
- Report Area

## Tobacco Expenditures

This indicator reports estimated expenditures for cigarettes, as a percentage of total household expenditures. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

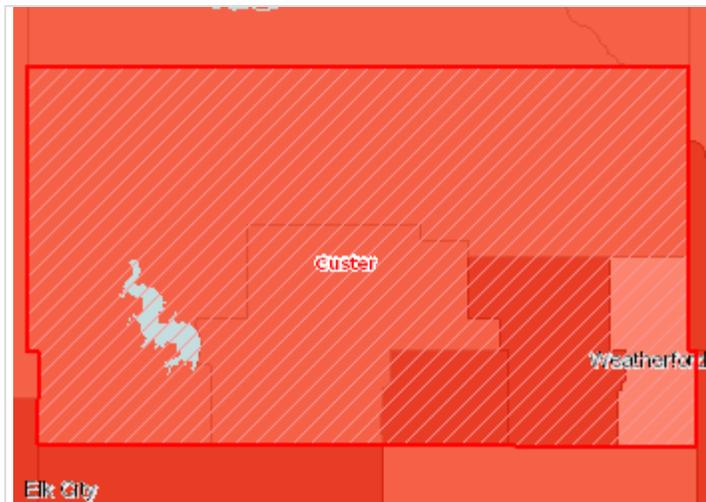
Report Area	Average Total Household Expenditures (USD)	Average Household Cigarette Expenditures (USD)	Cigarette Expenditures, County Rank (In-State)	Cigarette Expenditures, County Percentile	Percent Cigarette Expenditures
Custer County, OK	no data	no data	21	27.27%	no data
Oklahoma	45,506	910	no data	no data	2%
United States	50,932	810	no data	no data	1.59%

Percent Cigarette Expenditures



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

Data Source: Nielsen, [Nielsen SiteReports](#): 2011. Source geography: Tract.



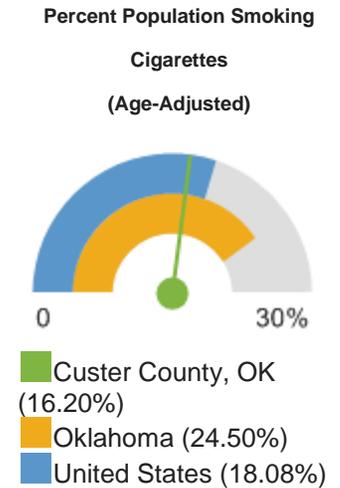
**Cigarette Expenditures, Percent of Total Expenditures, National Rank by Tract, Nielsen 2011**

- Top 80th Percentile (Highest Expenditures)
- 60th - 80th Percentile
- 40th - 60th Percentile
- 20th - 40th Percentile
- Bottom 20th Percentile (Lowest Expenditures)
- No Data or Data Suppressed
- Report Area

Tobacco Usage - Current Smokers

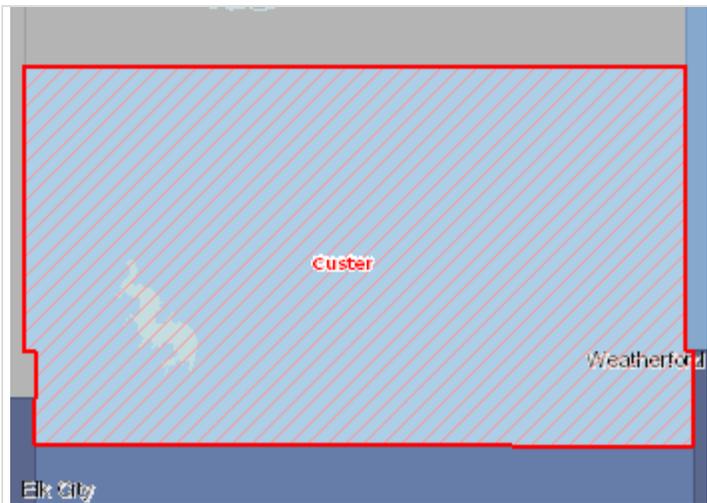
In the report area an estimated 3,390, or 16.20% of adults age 18 or older self-report currently smoking cigarettes some days or every day. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

Report Area	Total Population Age 18	Total Adults Regularly Smoking Cigarettes	Percent Population Smoking Cigarettes (Crude)	Percent Population Smoking Cigarettes (Age-Adjusted)
Custer County, OK	20,926	3,390	16.20%	<b>16.20%</b>
Oklahoma	2,793,624	673,263	24.10%	24.50%
United States	232,556,016	41,491,223	17.84%	18.08%



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.



**Current Smokers, Adult, Percent of Adults Age 18 by County, BRFSS 2006-12**

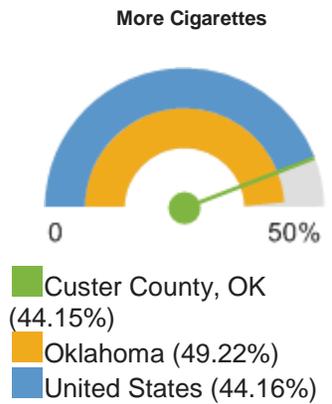
- Over 26.0%
- 22.1 - 26.0%
- 18.1 - 22.0%
- Under 18.1%
- No Data or Data Suppressed
- Report Area

### Tobacco Usage - Former or Current Smokers

In the report area, an estimated 9,290 adults, or 44.15%, report ever smoking 100 or more cigarettes. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease.

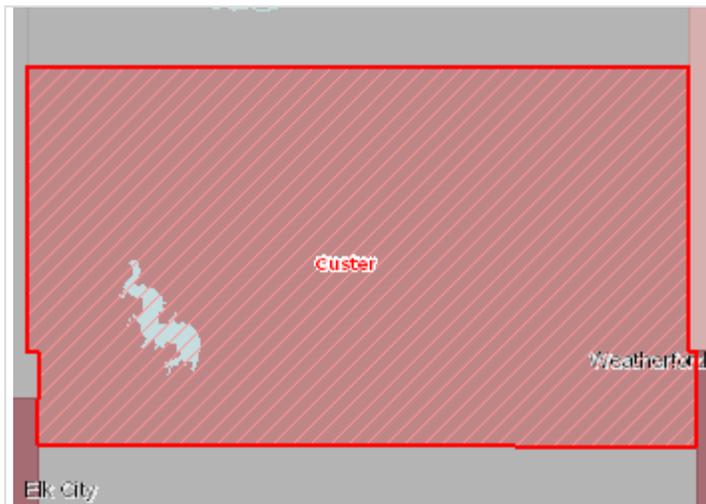
Report Area	Survey Population (Adults Age 18 )	Total Adults Ever Smoking 100 or More Cigarettes	Percent Adults Ever Smoking 100 or More Cigarettes
Custer County, OK	21,043	9,290	44.15%
Oklahoma	2,828,524	1,392,091	49.22%
United States	235,151,778	103,842,020	44.16%

Percent Adults Ever Smoking 100 or More Cigarettes

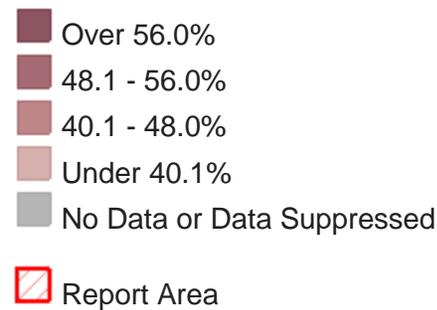


Note: This indicator is compared with the state average.

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



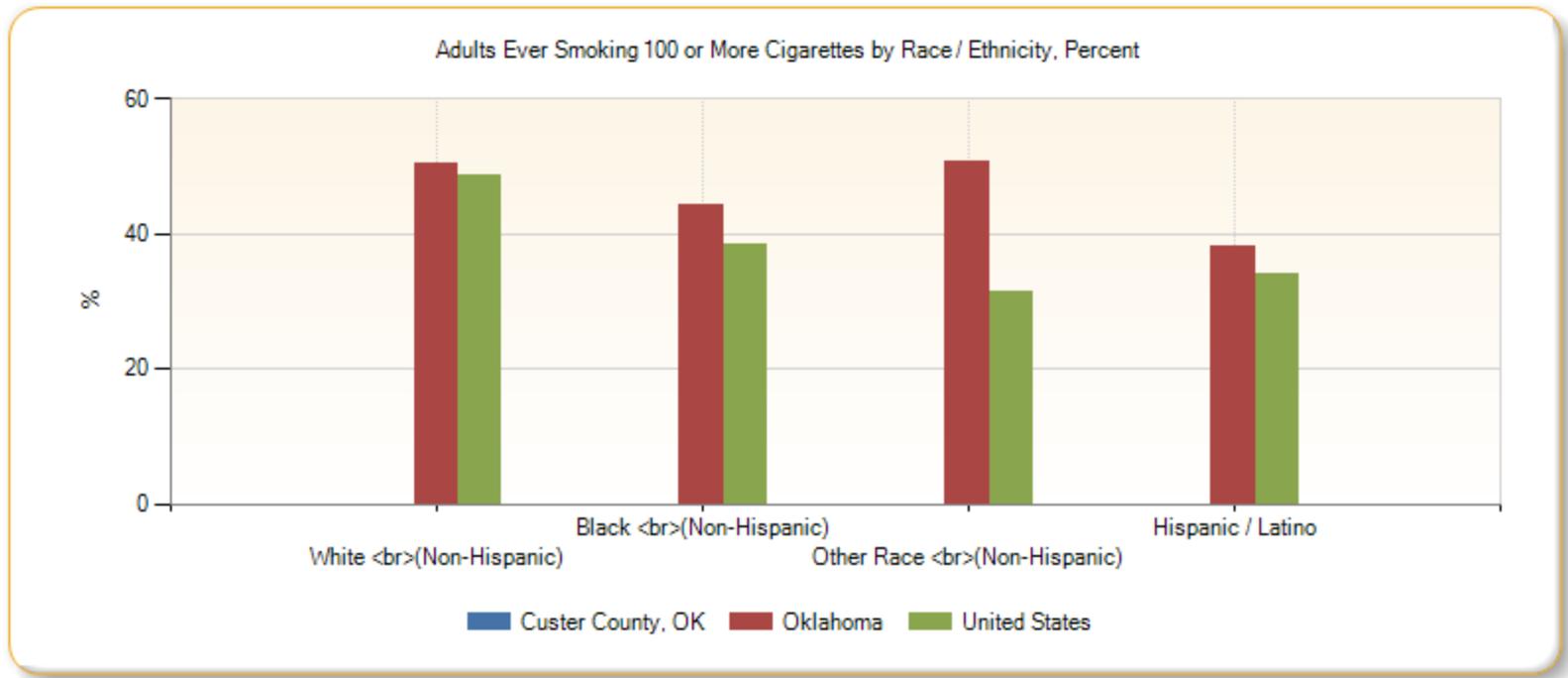
Adults Age 18 Smoking > 99 Cigarettes (Ever), Percent by County, BRFSS 2011-12



Adults Ever Smoking 100 or More Cigarettes by Race / Ethnicity, Percent

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
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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	50.30%	44.35%	50.76%	38.19%
United States	48.52%	38.34%	31.30%	34.17%

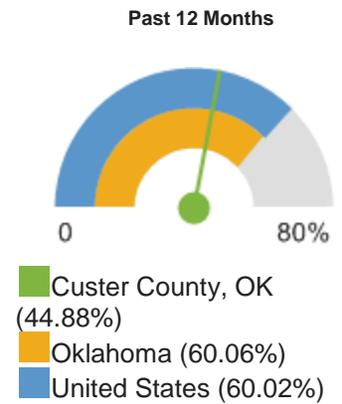


### Tobacco Usage - Quit Attempt

An estimated 44.88% of adult smokers in the report area attempted to quit smoking for at least 1 day in the past year. This indicator is relevant because tobacco use is linked to leading causes of death such as cancer and cardiovascular disease and supporting efforts to quit smoking may increase positive health outcomes.

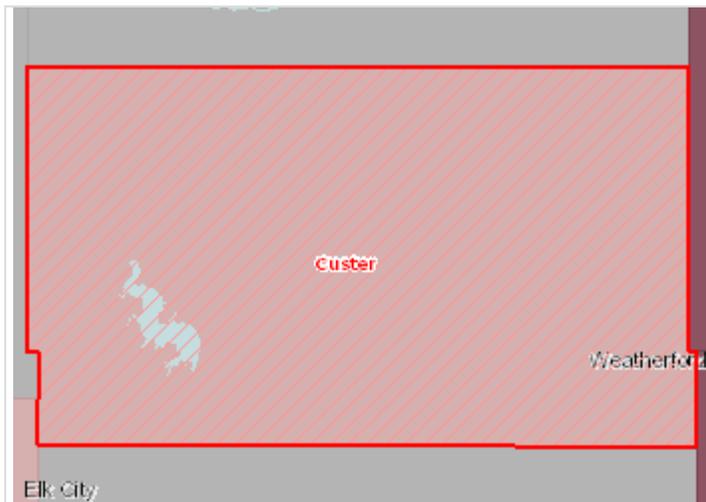
Report Area	Survey Population (Smokers Age 18 )	Total Smokers with Quit Attempt in Past 12 Months	Percent Smokers with Quit Attempt in Past 12 Months
Custer County, OK	5,498	2,468	44.88%
Oklahoma	696,201	418,156	60.06%
United States	45,526,654	27,323,073	60.02%

Percent Smokers with Quit Attempt in

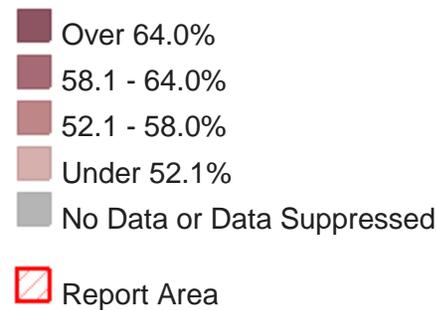


Note: This indicator is compared with the state average.

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



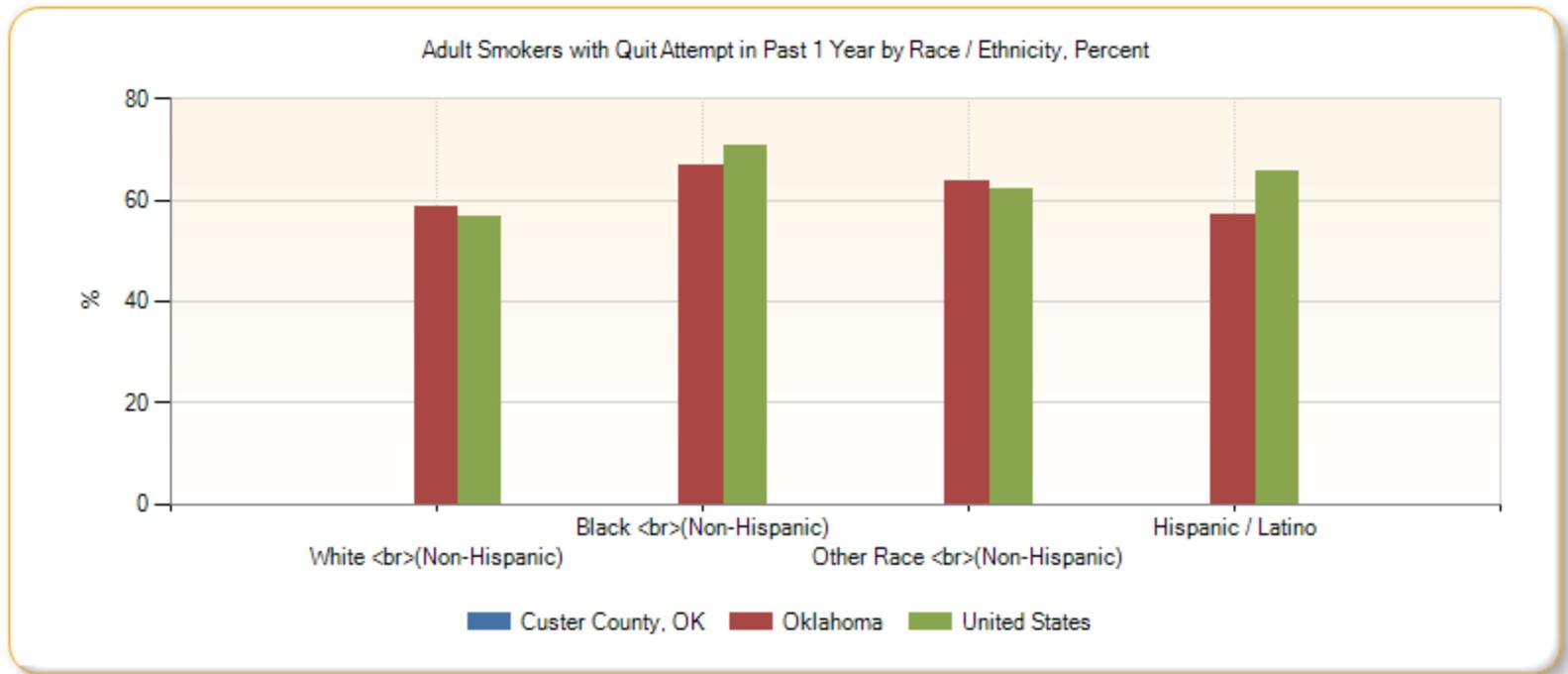
Smokers Who Quit / Attempted to Quit in Past 12 Months, Percent by County, BRFSS 2011-12



Adult Smokers with Quit Attempt in Past 1 Year by Race / Ethnicity, Percent

Report Area	White (Non-Hispanic)	Black (Non-Hispanic)	Other Race (Non-Hispanic)	Hispanic / Latino
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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	58.80%	66.98%	63.67%	56.94%
United States	56.63%	70.87%	62.26%	65.83%



## FOOTNOTES

### Alcohol Consumption

#### 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 question:

*"One drink is equivalent to a 12-ounce beer, a 5-ounce glass of wine, or a drink with one shot of liquor. During the past 30 days, on the days when you drank, about how many drinks did you drink on the average?"*

Respondents are considered heavy drinkers if they were male and reported having more than 2 drinks per day, or females that reported having more than 1 drink per day. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

$$[\text{Heavy Drinkers}] = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}] .$$

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.

## Alcohol Expenditures

### **Data Background**

Nielsen is a publically held information company and a primary supplier of consumer spending data around the world, using both statistical analysis and field sampling techniques to produce accurate and timely information. Published annually, SiteReports provide market analysis to Nielsen customers at multiple geographic levels, spanning a wide range of topics including population demographics, household spending, and market potential. The SiteReports Consumer Buying Power (CBP) database is created using statistical models estimated from the Bureau of Labor Statistics' Consumer Expenditure Surveys (CEX). This survey provides information on the buying habits of American consumers, including expenditures, income, and other characteristics of the consumer unit (families and single consumers). The Consumer Expenditure Survey consists of two surveys: the quarterly Interview survey and the weekly Diary Survey. The surveys target the total non-institutionalized population (urban and rural) of the United States. The data is collected from the independent quarterly interview and weekly diary surveys of approximately 7,500 sample households. Each survey has its own independent sample, and each collects data on household income and socioeconomic characteristics. The current Nielsen Consumer Buying Power data uses a rolling five years of data from the Consumer Expenditure Survey, administered from 2005 through 2009. In addition to this data, the Nielsen Consumer Buying Power database also incorporates information from the following sources:

- Nielsen Demographic Update
- Nielsen Cartographics
- U.S. Census Bureau: Census of Retail Trade

For more information, please visit the [Nielsen SiteReports](#) website.

### **Methodology**

Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen *Consumer Buying Power (CBP)* SiteReports. Tract-level and county-level expenditure estimates are proprietary Nielsen data restricted from public distribution and subject to terms of use agreements. Indicator data tables contain state and national ranks for counties, and percent expenditure estimates based on aggregated tract-level data. The percent expenditure figures calculated for custom geographic areas can be expressed using the following formula:

$$\text{Percent Expenditures} = [\text{Category Expenditures}] / [\text{Total Area Expenditures}] * 100$$

To generate acceptable county-level output for indicator report pages, percent expenditures for each food-at-home category were sorted and ranked by county. Each county's within-state rank and that rank's percentile are displayed in the indicator data table. This information is not available for custom geographic areas, for states, or for the total United States. County percentiles are

calculated using the following formula:

$$\text{Percentile} = [\text{County Within State Rank}] / [\text{Total Number of Counties in State}] * 100$$

To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile. Definitions for food-at-home categories used for consumer spending indicators are based on categories in the BLS Consumer Expenditure Survey (CEX), and are listed below.

- Soft drinks: *Soft drink expenditures included in this category are any non-alcoholic carbonated beverages purchased for consumption at home. Soft drinks purchased at restaurants and other dining establishments are not included.*
- Alcoholic beverages: *Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included.*
- Fruit and vegetables: *Fruit and vegetables expenditures included in this category are all fresh, frozen and canned fruits and vegetables purchased for consumption at home.*
- Tobacco: *Tobacco expenditures included in this category are cigarettes only; cigars and other tobacco products are not included.*

Further details about the analysis used by Nielsen group can be found in the [Consumer Buying Power Methodology](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

## Fruit/Vegetable Consumption

### 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](#).*

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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 2005-2009 from Behavioral Risk Factor Surveillance System (BRFSS) prevalence data, which is housed in the Health Indicator Warehouse. Data are based on the percentage of respondents who report regularly consuming five or more servings of fruits or vegetables each week. Fried potatoes and chips are excluded. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adults consuming 5 servings) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

$$[\text{Population Consuming 5 Servings}] = ([\text{Indicator Percentage}] / 100) * [\text{Total Population}].$$

Adult population figures used in the data tables are acquired from the American Community Survey (ACS) 2005-2009 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.

## Fruit/Vegetable Expenditures

### Data Background

Nielsen is a publically held information company and a primary supplier of consumer spending data around the world, using both statistical analysis and field sampling techniques to produce accurate and timely information. Published annually, SiteReports provide market analysis to Nielsen customers at multiple geographic levels, spanning a wide range of topics including population demographics, household spending, and market potential. The SiteReports Consumer Buying Power (CBP) database is created

using statistical models estimated from the Bureau of Labor Statistics' Consumer Expenditure Surveys (CEX). This survey provides information on the buying habits of American consumers, including expenditures, income, and other characteristics of the consumer unit (families and single consumers). The Consumer Expenditure Survey consists of two surveys: the quarterly Interview survey and the weekly Diary Survey. The surveys target the total non-institutionalized population (urban and rural) of the United States. The data is collected from the independent quarterly interview and weekly diary surveys of approximately 7,500 sample households. Each survey has its own independent sample, and each collects data on household income and socioeconomic characteristics. The current Nielsen Consumer Buying Power data uses a rolling five years of data from the Consumer Expenditure Survey, administered from 2005 through 2009. In addition to this data, the Nielsen Consumer Buying Power database also incorporates information from the following sources:

- Nielsen Demographic Update
- Nielsen Cartographics
- U.S. Census Bureau: Census of Retail Trade

For more information, please visit the [Nielsen SiteReports](#) website.

## Methodology

Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen *Consumer Buying Power (CBP)* SiteReports. Tract-level and county-level expenditure estimates are proprietary Nielsen data restricted from public distribution and subject to terms of use agreements. Indicator data tables contain state and national ranks for counties, and percent expenditure estimates based on aggregated tract-level data. The percent expenditure figures calculated for custom geographic areas can be expressed using the following formula:

$$\text{Percent Expenditures} = [\text{Category Expenditures}] / [\text{Total Area Expenditures}] * 100$$

To generate acceptable county-level output for indicator report pages, percent expenditures for each food-at-home category were sorted and ranked by county. Each county's within-state rank and that rank's percentile are displayed in the indicator data table. This information is not available for custom geographic areas, for states, or for the total United States. County percentiles are calculated using the following formula:

$$\text{Percentile} = [\text{County Within State Rank}] / [\text{Total Number of Counties in State}] * 100$$

To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile. Definitions for food-at-home categories used for consumer spending indicators are based on categories in the BLS Consumer Expenditure Survey (CEX), and are listed below.

- *Soft drinks: Soft drink expenditures included in this category are any non-alcoholic carbonated beverages purchased for consumption at home. Soft drinks purchased at restaurants and other dining establishments are not included.*

- Alcoholic beverages: *Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included.*
- Fruit and vegetables: *Fruit and vegetables expenditures included in this category are all fresh, frozen and canned fruits and vegetables purchased for consumption at home.*
- Tobacco: *Tobacco expenditures included in this category are cigarettes only; cigars and other tobacco products are not included.*

Further details about the analysis used by Nielsen group can be found in the [Consumer Buying Power Methodology](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

## Physical Inactivity

### 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.

## Soda Expenditures

### Data Background

Nielsen is a publically held information company and a primary supplier of consumer spending data around the world, using both statistical analysis and field sampling techniques to produce accurate and timely information. Published annually, SiteReports provide market analysis to Nielsen customers at multiple geographic levels, spanning a wide range of topics including population demographics, household spending, and market potential. The SiteReports Consumer Buying Power (CBP) database is created using statistical models estimated from the Bureau of Labor Statistics' Consumer Expenditure Surveys (CEX). This survey provides information on the buying habits of American consumers, including expenditures, income, and other characteristics of the consumer unit (families and single consumers). The Consumer Expenditure Survey consists of two surveys: the quarterly Interview survey and the weekly Diary Survey. The surveys target the total non-institutionalized population (urban and rural) of the United States. The data is collected from the independent quarterly interview and weekly diary surveys of approximately 7,500 sample households. Each survey has its own independent sample, and each collects data on household income and socioeconomic characteristics. The current Nielsen Consumer Buying Power data uses a rolling five years of data from the Consumer Expenditure Survey, administered from 2005 through 2009. In addition to this data, the Nielsen Consumer Buying Power database also incorporates information from the following sources:

- Nielsen Demographic Update
- Nielsen Cartographics
- U.S. Census Bureau: Census of Retail Trade

For more information, please visit the [Nielsen SiteReports](#) website.

## Methodology

Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen *Consumer Buying Power (CBP)* SiteReports. Tract-level and county-level expenditure estimates are proprietary Nielsen data restricted from public distribution and subject to terms of use agreements. Indicator data tables contain state and national ranks for counties, and percent expenditure estimates based on aggregated tract-level data. The percent expenditure figures calculated for custom geographic areas can be expressed using the following formula:

$$\text{Percent Expenditures} = [\text{Category Expenditures}] / [\text{Total Area Expenditures}] * 100$$

To generate acceptable county-level output for indicator report pages, percent expenditures for each food-at-home category were sorted and ranked by county. Each county's within-state rank and that rank's percentile are displayed in the indicator data table. This information is not available for custom geographic areas, for states, or for the total United States. County percentiles are calculated using the following formula:

$$\text{Percentile} = [\text{County Within State Rank}] / [\text{Total Number of Counties in State}] * 100$$

To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile. Definitions for food-at-home categories used for consumer spending indicators are based on categories in the BLS Consumer Expenditure Survey (CEX), and are listed below.

- *Soft drinks: Soft drink expenditures included in this category are any non-alcoholic carbonated beverages purchased for consumption at home. Soft drinks purchased at restaurants and other dining establishments are not included.*
- *Alcoholic beverages: Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included.*
- *Fruit and vegetables: Fruit and vegetables expenditures included in this category are all fresh, frozen and canned fruits and vegetables purchased for consumption at home.*
- *Tobacco: Tobacco expenditures included in this category are cigarettes only; cigars and other tobacco products are not included.*

Further details about the analysis used by Nielsen group can be found in the [Consumer Buying Power Methodology](#).

## Notes

## Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

## Tobacco Expenditures

### Data Background

Nielsen is a publically held information company and a primary supplier of consumer spending data around the world, using both statistical analysis and field sampling techniques to produce accurate and timely information. Published annually, SiteReports provide market analysis to Nielsen customers at multiple geographic levels, spanning a wide range of topics including population demographics, household spending, and market potential. The SiteReports Consumer Buying Power (CBP) database is created using statistical models estimated from the Bureau of Labor Statistics' Consumer Expenditure Surveys (CEX). This survey provides information on the buying habits of American consumers, including expenditures, income, and other characteristics of the consumer unit (families and single consumers). The Consumer Expenditure Survey consists of two surveys: the quarterly Interview survey and the weekly Diary Survey. The surveys target the total non-institutionalized population (urban and rural) of the United States. The data is collected from the independent quarterly interview and weekly diary surveys of approximately 7,500 sample households. Each survey has its own independent sample, and each collects data on household income and socioeconomic characteristics. The current Nielsen Consumer Buying Power data uses a rolling five years of data from the Consumer Expenditure Survey, administered from 2005 through 2009. In addition to this data, the Nielsen Consumer Buying Power database also incorporates information from the following sources:

- Nielsen Demographic Update
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- U.S. Census Bureau: Census of Retail Trade

For more information, please visit the [Nielsen SiteReports](#) website.

### Methodology

Census tract level average and aggregated total household expenditures and category expenditures were acquired from the 2011 Nielsen *Consumer Buying Power (CBP)* SiteReports. Tract-level and county-level expenditure estimates are proprietary Nielsen data restricted from public distribution and subject to terms of use agreements. Indicator data tables contain state and national ranks for counties, and percent expenditure estimates based on aggregated tract-level data. The percent expenditure figures calculated for custom geographic areas can be expressed using the following formula:

$$\text{Percent Expenditures} = [\text{Category Expenditures}] / [\text{Total Area Expenditures}] * 100$$

To generate acceptable county-level output for indicator report pages, percent expenditures for each food-at-home category were sorted and ranked by county. Each county's within-state rank and that rank's percentile are displayed in the indicator data table. This information is not available for custom geographic areas, for states, or for the total United States. County percentiles are calculated using the following formula:

$$\text{Percentile} = [\text{County Within State Rank}] / [\text{Total Number of Counties in State}] * 100$$

To generate acceptable map output in compliance with the Nielsen terms of use agreement, percent expenditures for each tract were sorted and ranked; quintiles were assigned to each tract based on national rank and symbolized within the map. Additional attributes include each tract's within-state rank and quintile. Definitions for food-at-home categories used for consumer spending indicators are based on categories in the BLS Consumer Expenditure Survey (CEX), and are listed below.

- *Soft drinks: Soft drink expenditures included in this category are any non-alcoholic carbonated beverages purchased for consumption at home. Soft drinks purchased at restaurants and other dining establishments are not included.*
- *Alcoholic beverages: Alcohol expenditures included in this category are any beer, wine, and liquor purchased for consumption at home. Alcohol purchased at restaurants and bars is not included.*
- *Fruit and vegetables: Fruit and vegetables expenditures included in this category are all fresh, frozen and canned fruits and vegetables purchased for consumption at home.*
- *Tobacco: Tobacco expenditures included in this category are cigarettes only; cigars and other tobacco products are not included.*

Further details about the analysis used by Nielsen group can be found in the [Consumer Buying Power Methodology](#).

## Notes

### Race and Ethnicity

Statistics by race and ethnicity are not provided for this indicator.

## Tobacco Usage - Current Smokers

### 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. Data are based on the percentage of respondents answering the following question:

*"Do you now smoke cigarettes every day, some days, or not at all?"*

Respondents are considered smokers if they reported smoking every day or some days. Percentages are age-adjusted and only pertain to the non-institutionalized population aged 18 and up. Population numerators (number of adult smokers) are not provided in the Health Indicator Warehouse data tables and were generated using the following formula:

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

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.

## Tobacco Usage - Former or Current Smokers

### 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 smoked at least 100 cigarettes in your entire life?"* 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.

Tobacco Usage - Quit Attempt

## 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:

*"During the past 12 months, have you stopped smoking for one day or longer because you were trying to quit smoking?"*

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.

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