

# V. Clinical Preventive Services

## Cholesterol Screening

High blood cholesterol (HBC) is a major risk factor for heart disease. Early detection of HBC is important for heart disease prevention and treatment. There is a *Healthy People 2010* national objective to increase the percentage of adults aged 18+ being screened for blood cholesterol within the preceding five years to 80.0% by 2010.<sup>2</sup>

The national trends for the percentages of adults who had blood cholesterol screening in last five years has been increasing since 1993 from 67.3% to 73.0% in 2005. Oklahoma percentages were slightly lower than the national statistics, but the percentages of Oklahoma adults with blood cholesterol screening in last five years have increased 9.4% from 64.3% to 71.0% in 1993-2005 (Figure V-1).

A strategy to achieve the 2010 objective is to increase awareness of the danger of HBC and

its risk factors. Demographic-specific information are particularly helpful for state public health officials to identify the subpopulations underutilizing HBC screening and to target their efforts in educating these subgroups.

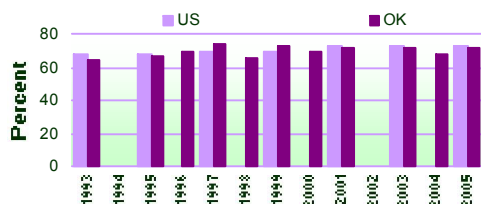
### **Cholesterol Check, Gender and Age**

Access and use of HBC screening were different among gender and age groups. In 2005, male adults were significantly more likely to report no blood cholesterol

The percentages of Oklahoma adults with blood cholesterol screening in last five years have increased 9.4% from 64.3% to 71.0% in 1993-2005.

**Figure V-1**

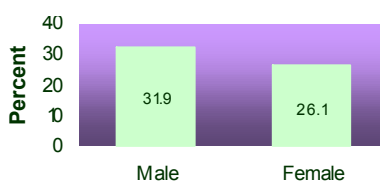
**Adults with No Cholesterol Check in Past Five Years, US and Oklahoma, 1993-2005**



\*No data for 1994 and 2002; No U.S. data for 1996, 1998, 2000, 2004

**Figure V-2**

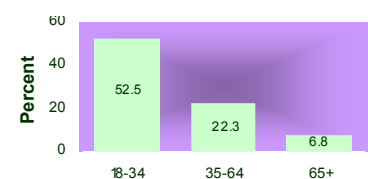
**Adults with No Cholesterol Check in Past Five Years by Gender, Oklahoma 2005**



**Adults Reporting No Cholesterol Check In Past 5 Years, Oklahoma 2005**

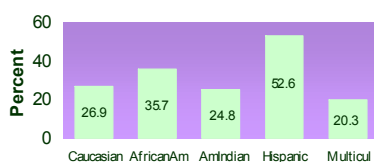
**Figure V-3**

**By Age Groups**



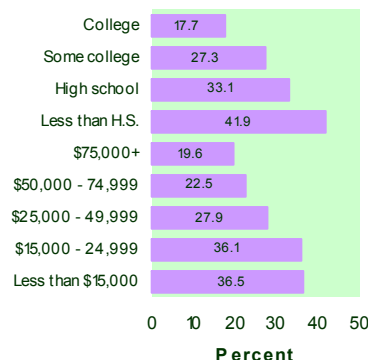
**Figure V-4**

**By Race / Ethnicity**



**Figure V-5**

**By Education and Annual Household Income level**



screening in last five years than female groups, 31.9% vs. 26.1% (Figure V-2). More than half, 52.5%, of the young Oklahoma adult ages 18-34 reported no blood cholesterol screening in last five years (Figure V-3), compared to only 6.8% of adults 65+ years.

Additionally, adults 65+ years who reported no blood cholesterol screening in last five years dropped nearly 34.6% from 10.4% in 2001 to 6.8% in 2005.

**Cholesterol Check, Race and Ethnicity**

Access to HBC screening varied by race and ethnic groups in 2005 (Figure V-4). Hispanics reported the largest proportion of adults with no blood cholesterol screening in last five years, 52.6%, as compared to the multicultural group, 20.3%. In addition, African American NH were 32.7% more likely to report no blood cholesterol screening in last five years than Caucasian NH, 35.7% vs. 26.9%, respectively.

**Cholesterol Check, Education and Household Income**

Education and annual household income were associated with no blood cholesterol screening in last five year in 2005. The highest prevalence of no blood cholesterol screening in last five years was among adults with high school or less education, 33.1%-41.9% (Figure V-5). Adults in the lowest education level were over twice as likely to report no blood cholesterol screening in last five years than college graduates. The largest proportions of adults with no blood cholesterol screening in last five years were from the lowest two incomes, 36.5% and 36.1%, respectively.

**Cholesterol Check and Marital Status**

Differences for blood cholesterol screening in last five years were also found by marital status in Oklahoma in 2005. The highest prevalence of no blood cholesterol screening in last five years was among adults that had never been married, 52.5%, followed by separated adults, 41.8% (Figure V-6).

In addition, persons that were a member of an unmarried couple were 64% more likely to report no blood cholesterol screening in last five years than married or divorced adults, 41.4% vs. 25.1% or 25.0%, respectively.

**Cholesterol Check and Employment Status**

Adults who identified themselves as students or out of work reported the highest prevalence of no blood cholesterol screening in last five years, 49.7% and 46.2%, respectively, as compared to the retired, 6.5% (Figure V-7). In addition, 87.1% of the students and 52.6% of the out of work adults were young adults between 18-34 years old.

**Cholesterol Check and Job Types**

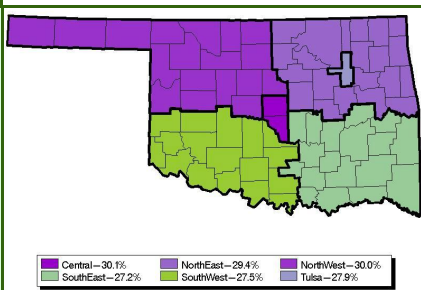
The highest prevalence of no blood cholesterol screening in last five years was among adults with heavy labor jobs, 46.6%, as compared to 28.6% among adults with mainly sitting or standing jobs (Figure V-8).

However, these results were more likely influenced by education and income factors.

**Cholesterol Check and Geographical Regions**

In 2005, adults in Central and Northwest regions of Oklahoma reported the highest prevalence of no blood cholesterol screening in last five years, 30.1% and 30.0%, respectively (Figure V-9).

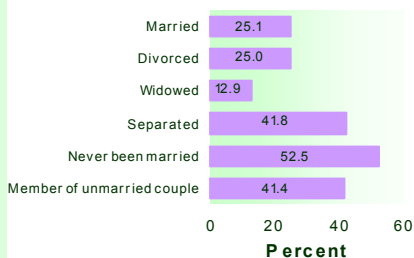
**Figure V-9**  
• By Region



**Adults with No Cholesterol Check In Past Five Years, Oklahoma 2005**

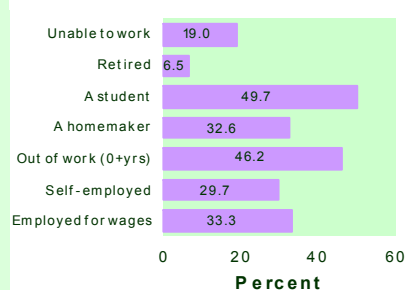
**Figure V-6**

• By Marital Status



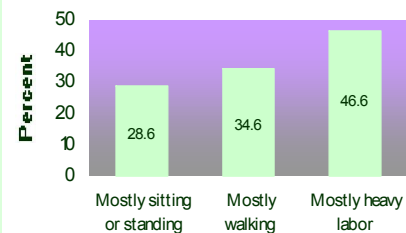
**Figure V-7**

• By Employment Status



**Figure V-8**

• By Job Type



# Immunization

## Influenza Vaccination

Vaccination is necessary for persons at high risk for complications from influenza (flu) and pneumococcal disease. In the 1990's, an estimated 36,000 deaths each year in the United States were attributed to influenza infection, with about 90% of deaths occurring among adults aged 65 years or more.<sup>32</sup>

The format of vaccination has evolved over the years. Traditionally, the flu vaccination, an inactivated vaccine (containing killed virus), is commonly given through injections to both healthy people and people with chronic medical conditions, age 6 months or older.<sup>33</sup>

Since 2003, a new flu vaccine has been licensed, called nasal-spray flu

vaccine (sometimes called LAIV for Live Attenuated Influenza Vaccine). The vaccine has live, weakened flu viruses that do not cause the flu. This type of vaccine is recommended only to non-pregnant, healthy people ages 5 to 49 years of age.<sup>34</sup>

The first part of this section covers the results on:

- flu vaccinations among adults ages 65+
- flu vaccinations among adults between

It is a national objective to achieve 90.0% coverage for influenza and pneumococcal vaccinations among non-institutionalized adults aged 65 and above by year 2010 (Objective 14-29b).<sup>2</sup>

### Adults Ages 65+ Reporting Influenza Vaccination in Past 12 Months

Figure V-10 US 2005

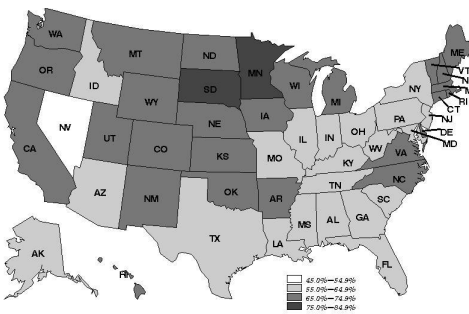
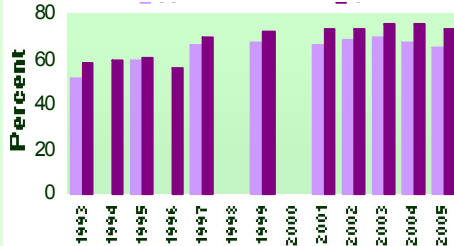


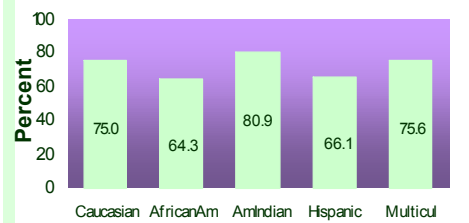
Figure V-11 US and Oklahoma, 1993-2005



\*No data for 1998, 2000; No U.S. data for 1994, 1996

Figure V-12

• By Race / Ethnicity, Oklahoma 2003-2005



18-64

- nasal spray flu vaccine, and, the second part will report the percentages of pneumococcal vaccination among adults ages 65+.

### Flu Vaccination among Adults Ages 65+

In 2005, the national influenza vaccination rate among persons 65+ years was nearly 66%. Two states, South Dakota and Minnesota, reported that over 75.0% of adults ages 65+ had flu shots; 25 other states reported 65.0%-74.9% elders with flu shots. Nevada had the lowest percentage of reported flu shots - 54.9% among adults 65+ (Figure V-10).

For the past 13 years since 1993, the proportion of Oklahoma non-institutionalized elders reporting having a flu vaccination in past 12 months were higher than the national average (see Figure V-11). In addition, the percentage receiving a flu shot among Oklahoma elders has increased 25.1% from 58.5% in 1993 to 73.2% in 2005.

Looking at data from last three years, the percentage receiving a flu shot among elders has dropped nearly 4.0% from 75.8% in 2003 to 73.2% in 2005 (Figure V-11). Oklahoma ranked 4<sup>th</sup> highest in the nation for the population percentage reporting a flu shot among elder adults ages 65+.

#### Flu Vaccination among Adults 65+ by Gender

In 2005, the proportion of male adults ages 65+, 74.4%, reported having a flu shot was slightly higher than their female cohorts, 72.3%.

#### Flu Vaccination among Adults 65+ by Race and Ethnicity

Rates of reported flu vaccinations varied by race / ethnicity in 2003-2005. American Indian NH ages 65+ reported the highest percentage of flu vaccination, 80.9%. African American NH elders, 64.3%, were significantly less likely to report having a flu shot than Caucasian NH, 75.0% (Figure V-12).

### Adults Ages 65+ Reporting Flu Vaccination, Oklahoma 2003-2005

Figure V-13

#### By Education and Annual Household Income Level

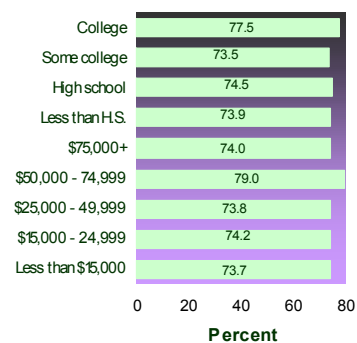


Figure V-14

#### By Marital Status

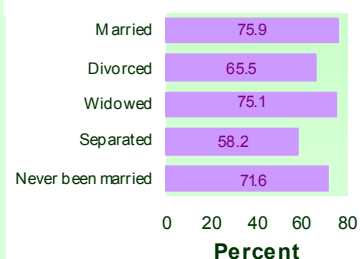
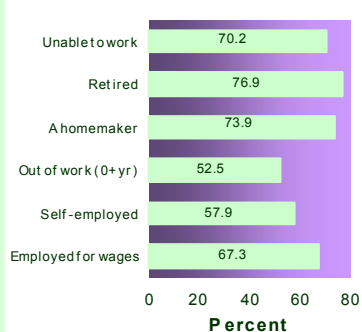


Figure V-15

#### By Employment Status



African American NH elders, 64.3%, were significantly less likely to report having a flu shot than Caucasian NH, 75.0%.

Married and widowed elders, 75.9% and 75.1%, respectively, were more likely to report having a flu shot in the past 12 months than divorced elders, 65.5%.

**Flu Vaccination among Adults 65+ by Education and Household Income**

There were no differences for flu shots among Oklahoma elders by education and household incomes, although elders with college degree and incomes \$50,000+ reported the highest percentage of flu shots, 77.5% and 78.6%, respectively (Figure V-13).

**Flu Vaccination among Adults 65+ by Marital Status**

Married and widowed elders, 75.9% and 75.1%, respectively, were more likely to report having a flu shot in the past 12 months than divorced elders, 65.5% (Figure V-14).

**Flu Vaccination among Adults 65+ by Employment Status**

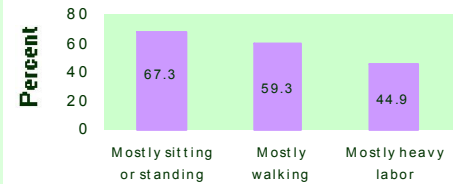
Retired elders reported the highest percentage of flu vaccinations in the past 12 months, 76.9%. In addition, retired elders were nearly 1.5 times more likely to report having flu shots than out of work elders (Figure V-15).

**Flu Vaccination among Adults 65+ by Job Types**

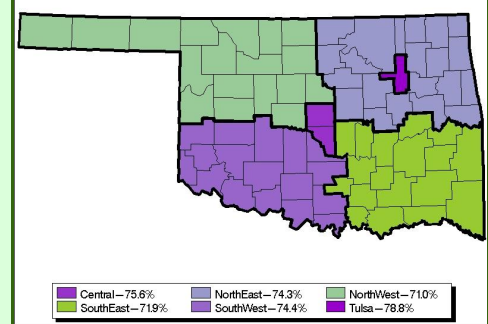
Elders with jobs involved sitting and standing, 67.3%, also reported higher percentage of flu shots than elders with walking, 59.3%, or heavy labor jobs, 44.9% (Figures V-16).

**Adults Ages 65+ Reporting Flu Shot, Oklahoma 2003-2005**

**Figure V-16**  
● By Job Types



**Figure V-17**  
● By Region



**Flu Vaccination among Adults 65+ by Geographical Regions**

Percentage of reported flu shots among elders in the Tulsa region, 78.8%, was 11.0% higher than that in the Northwest region, 71.0% (Figure V-17).

## Flu Vaccination Among Adults Ages 18-64

There was an unexpected shortage of the flu vaccine supply in the US in 2004-2005. Thus, CDC recommended flu vaccinations be given to specific priority groups such as:

- adults ages 65+,
- persons ages 2-64 years at high risk for flu complications,
- chronic-care facility patients,
- adults taking care of infants less than 6 months of age,
- health care workers with direct patient contact.<sup>35</sup>

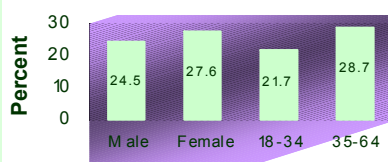
While the rate of flu shots in Oklahoma elders increased in the past few years, a 17.1% reduction of reported flu vaccination was seen among adults ages 18-64 from 41.5% in 2004 to 34.4% in 2005.

### Flu Vaccination Among Adults Ages 18-64, Gender and Age

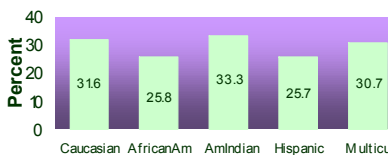
In 2005, the prevalence of flu shots was 12.7% higher among females ages 18-64, 27.6%, than males, 24.5%. The proportion of adults reporting a flu shot was highest among adults ages 35-64, 28.7%, as compared to adults ages 18-34, 21.7% in 2005 (Figure V-18).

## Adults Ages 18-64 Reporting Flu Vaccination

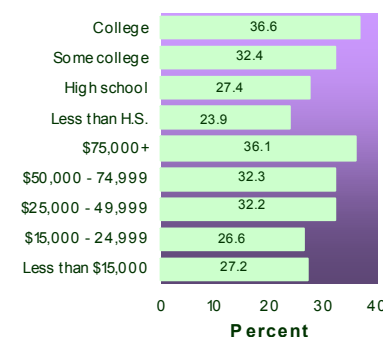
**Figure V-18**  
• By Gender and Age Group, Oklahoma 2005



**Figure V-19**  
• By Race / Ethnicity, Oklahoma 2003-2005



**Figure V-20**  
• By Education and Annual Household Income Level, Oklahoma 2003-2005



In 2005, the prevalence of flu shots among ages 18-64 was 12.7% higher among females, 27.6%, than males, 24.5%.

In 2003-2005, the highest percentage of reported flu shots was among American Indian NH ages 18-64, 33.3%.

College adults were 1.5 times more likely to report having a flu shot than their peers who had the lowest education.

**Flu Vaccination Among Adults Ages 18-64, Race and Ethnicity**

In 2003-2005, the highest percentage of reported flu shots was among American Indian NH ages 18-64, 33.3%. Caucasian NH and American Indians NH ages 18-64 years, 31.6% and 33.3%, respectively, were significantly more likely to report having flu shots than African Americans NH and Hispanic, 25.8 and 25.7%, respectively (Figure V-19).

**Flu Vaccination Among Adults Ages 18-64, Education and Household Income**

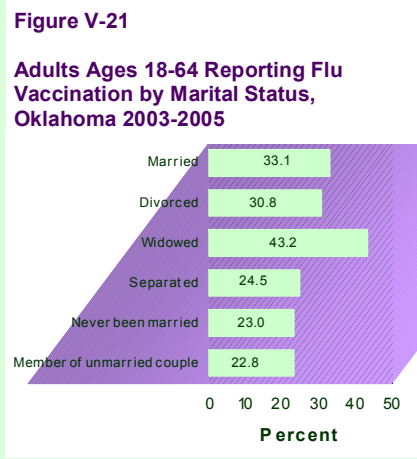
Receiving flu vaccinations was associated with education levels and annual household incomes in 2003-2005 (Figure V-20). Adults ages 64 and below with higher education and high incomes were significantly more likely to report having flu shots than their peers with lower education and lower incomes. College adults were 1.5 times more likely to report having flu shots than their peers who had the lowest education. Adults with the highest incomes were over 32.7% more likely to report having flu shots than their peers with the lowest incomes.

**Flu Vaccination Among Adults Ages 18-64 and Marital Status**

In 2003-2005, widows ages 18-64 were most likely to report having flu shots, 43.2%, followed by their cohorts who were married, 33.1%, and divorced, 30.8%. (Figure V-21). In addition, married and divorced adults ages 18-64 were nearly 1.5 times more likely to report having flu shots than single adults.

**Flu Vaccination Among Adults Ages 18-64 and Employment Status**

The retired, 52.1%, and unable to work adults ages below 65, 40.2%, were most likely to report having flu shots in 2003-2005 (Figure V-22).





**Flu Vaccination Among Adults Ages 18-64 and Job Types**

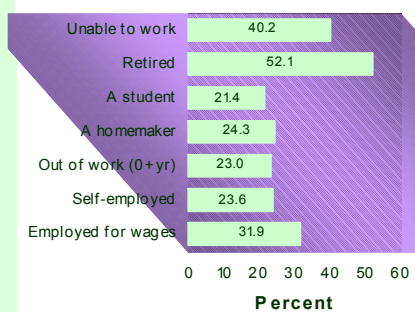
Adults ages below 65 with jobs that involved sitting and standing, 30.0%, were 23.0% more likely to report having flu shots than their counterparts with jobs that involved heavy labor, 24.4% (Figure V-23).

**Flu Vaccination Among Adults Ages 18-64 and Asthma**

Persons with asthma are more at risk for complications as a result of flu. In 2003-2005, Oklahoma adults 18-64 who had current diagnosed asthma, were 30.0% more likely to report having flu shots than their peers who had no current diagnosed asthma, 39.0% vs. 30.0%, respectively (Figure V-24).

**Adults Ages 18-64 Reporting Flu Vaccination, Oklahoma 2003-2005**

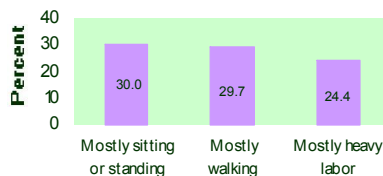
**Figure V-22**  
• **By Employment Status**



The retired, 52.1%, and 'unable to work' adults ages below 65, 40.2%, were most likely to report having flu shots in 2003-2005.

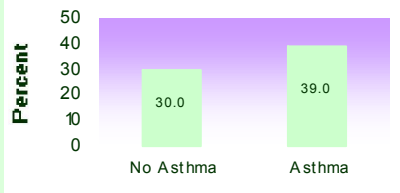
**Figure V-23**

• **By Job Type**



**Figure V-24**

• **By Current Asthma Status**



## Nasal Spray Flu Vaccination

In 2005, adults who use nasal spray flu vaccine increased 66.7%, to 25,300 adults, 1.0%.

In 2005, male adults ages 18-34, 1.4%, were significantly more likely to report nasal spray flu vaccine than female adults, 0.5%.

Nasal spray flu vaccine was approved for usage in 2003. Since then, BRFSS has surveyed Oklahoma adults using the question: *“During the past 12 months, have you had a flu vaccine that was sprayed in your nose?”* In 2004, an estimated 14,600 (0.6%) adults reported the use of nasal spray flu vaccine. In 2005, adults who use nasal spray flu vaccine increased 66.7%, to 25,300 adults, 1.0%.

### ***Nasal Spray Vaccine, Gender and Age***

In 2005, male adults ages 18-34, 1.4%, were significantly more likely to report nasal spray flu vaccine than female adults, 0.5%. Adults ages 18-34 reported the highest use of nasal spray flu vaccine, 1.6%, as compared to adults ages 35-64, 0.7%.

### ***Nasal Spray Vaccine, Education and Household Incomes***

Data from two years were combined for the following analysis as the sample sizes for a single year were too small to yield meaningful results. Nasal spray flu vaccine was most popular among college graduates and adults with some college education, 0.8%-0.9%, and among adults with the highest incomes, 0.8%-1.0% in 2004-2005.

### ***Nasal Spray Vaccine, Race and Ethnicity***

African American NH reported the highest percentage of nasal spray flu vaccine, 1.9%, followed by Multicultural NH, 1.2%. Caucasian NH reported the lowest nasal spray flu vaccine percentage, 0.6%.

### ***Nasal Spray Vaccine and Marital Status***

Nasal spray flu vaccine was similar among adults who had never been married, 0.9%, and married adults, 0.8%.

### ***Nasal Spray Vaccine and Employment Status***

Adults reporting nasal spray flu vaccine was higher among employed for wages group, 0.9%, as compared to 0.6% among the self-employed.

# Pneumococcal Vaccination

One of the national objectives of *Healthy People 2010* is to achieve 90.0% coverage for pneumococcal vaccinations, commonly known as “pneumonia shots”, among non-institutionalized adults ages 65 and above (Objective 14-29b).<sup>2</sup>

The percentage of reported pneumonia shots among adults ages 65+ in United States have increased each year for the past 13 years, and the percentages more than doubled from 29.6% in 1993 to 65.7% in 2005. The percentages of reported pneumonia shots among Oklahoma elders have been consistently higher than the national averages since 2001 and were at 71.1% in 2005 (Figure V-25).

### ***Pneumonia Vaccinations and Gender***

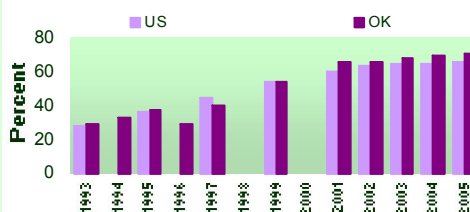
In 2003-2005, the proportion of males and females ages 65+ reporting ever having a pneumonia shot was around 70.0% (Figure V-26).

### ***Pneumonia Vaccinations, Education and Household Income***

Approximately two-thirds to three-fourths of elders across all education and household income levels reported they had pneumonia vaccinations in 2003-2005 (Figure V-27).

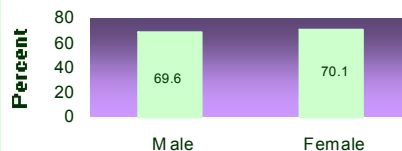
**Adults Ages 65+ Reporting Ever Having or Receiving Pneumonia Vaccination**

**Figure V-25**  
 • US and Oklahoma, 1993-2005

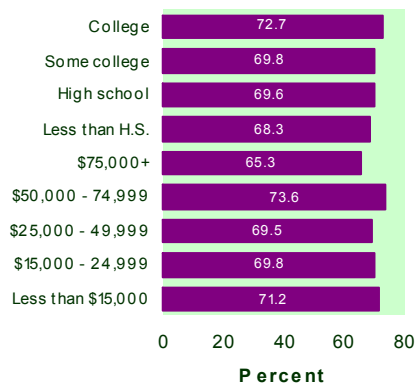


\*No data for 1998 & 2000; No US data for 1994 & 1996

**Figure V-26**  
 • By Gender, Oklahoma 2003-2005



**Figure V-27**  
 • By Education and Annual Household Income Level, Oklahoma 2003-2005



Caucasian NH elders, 70.2%, were significantly more likely to report having pneumonia vaccinations than African American NH elders, 58.4%.

Retired elders were more likely to report having a pneumonia shot, 72.0%, than elders who were self-employed, 60.2%, and employed for wages, 54.9%.

***Pneumonia Vaccination, Race and Ethnicity***

The highest prevalence of pneumonia vaccinations was among the Multicultural NH, 74.0%, and American Indians, 73.1%. In addition, Caucasian NH elders, 70.2%, were significantly more likely to report having pneumonia vaccinations than African American NH elders, 58.4% (Figure V-28).

***Pneumonia Vaccination and Marital Status***

The largest proportion of elders reporting pneumonia vaccinations was among the widowed, 72.2%. Married elders were 11.3% more likely than divorced elders to report having a pneumonia vaccinations (Figure V-29).

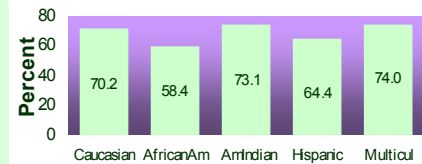
***Pneumonia Vaccination and Employment Status***

The lowest prevalence of pneumonia vaccinations was among out of work elders, 50.7%. Retired elders were more likely to report having a pneumonia vaccinations, 72.0%, than elders who were self-employed, 60.2%, and employed for wages, 54.9%. In addition, elders who were unable to work were nearly 1.5 times more likely to report having a pneumonia vaccination than elders who were employed for wages (Figure V-30).

**Adults Ages 65+ Reporting Ever Have Pneumonia Shot, Oklahoma 2003-2005**

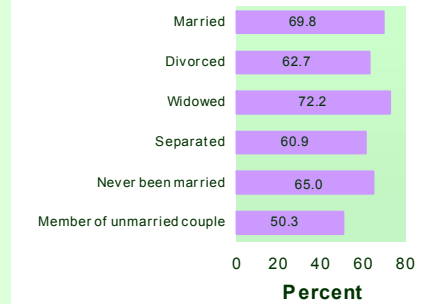
**Figure V-28**

**• By Race / Ethnicity**



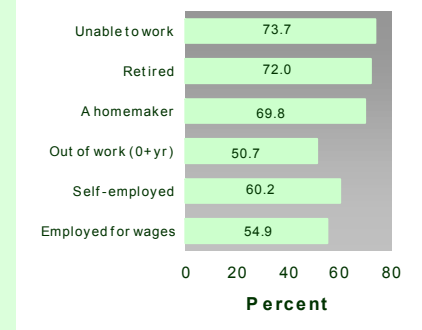
**Figure V-29**

**• By Marital Status**



**Figure V-30**

**• By Employment Status**



**Pneumonia Vaccination and Job Types**

The highest prevalence of pneumonia vaccinations was among elders with mostly walking jobs, 64.4% (Figure V-31). Adults with jobs dealing with mostly heavy labor reporting the lowest prevalence of pneumonia vaccinations, 54.1%.

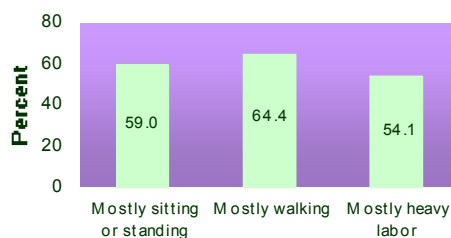
**Pneumonia Vaccination and Geographical Regions**

The largest proportion of elders reporting a pneumonia vaccinations was from the southwest region of Oklahoma, 73.9%. This region was 9.2% higher than the northwest region, which had the lowest percentage of pneumonia vaccinations, 68.2% (Figure V-32).

**Adults Ages 65+ Reporting Ever Had a Pneumonia Shot, Oklahoma 2003-2005**

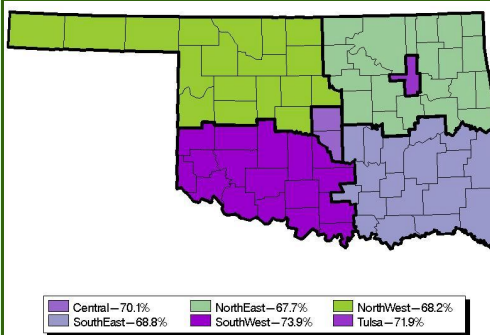
**Figure V-31**

• **By Job Types**



**Figure V-32**

• **By Region**



Adults with jobs dealing with mostly heavy labor reporting the lowest prevalence of pneumonia shots, 54.1%.

The largest proportion of elders reporting a pneumonia vaccinations was from the southwest region of Oklahoma, 73.9%.

# Breast Cancer Screening

Breast cancer is the most common disease among women and the second leading cause of cancer death.<sup>36</sup> In 2007, an estimated 178,480 women in America will be diagnosed with breast cancer and 40,460 women will die of this cancer.<sup>37</sup> This disease, if detected early, has a very high chance of survival - a five-year survival rate over 95.0%.<sup>38</sup>

Breast cancer screening had been in the BRFSS core module up to 2000. Since then, it was in the optional module every other year.

Although the item was not in the 2005 survey, results of breast cancer screening from 2002-2004 are covered in this report as it is one of the major preventive health measures.

In BRFSS, respondents were asked, "Have you ever had a mammogram?" and "How long has it been since you had your last mammogram?"

Results indicated that since 2000, the nation has succeeded in achieving the national goal of 70.0% self-reported mammogram check in last two years

One of the national *Healthy People 2010* goals is to achieve 70.0% mammogram test in the past two years among adults aged 40 years and over (Objective 03-13).<sup>2</sup>

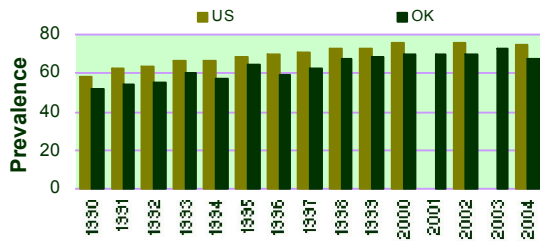
among women ages 40 years or older with intact cervix.

The national percentages of self-reported mammogram check in last two years among women ages 40 years or older with intact cervix have increased nearly 28.0% from 58.3% in 1990 to 74.6% in 2004. Oklahoma numbers, though slightly lower than the national statistics, have shared a similar increasing trend, rising from 51.6% in 1990 to 67.6% in 2004 (Figure V-33).

**Women Ages 40+ Reporting Mammogram in Past Two Years**

**Figure V-33**

- US and Oklahoma, 1990 - 2004

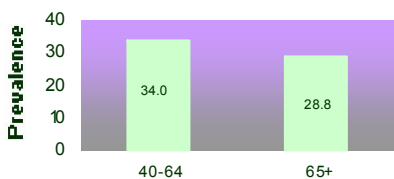


\*No U.S. data for 2001 & 2003

**Women Ages 40+ Reporting No Mammogram in Past Two Years, Oklahoma 2004**

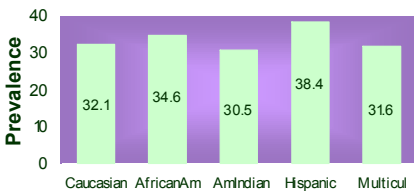
**Figure V-34**

• **By Age Group**



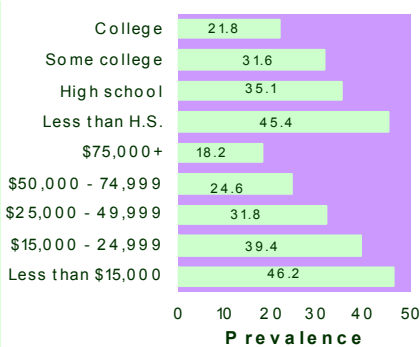
**Figure V-35**

• **By Race / Ethnicity**



**Figure V-36**

• **By Education and Annual Household Income Level**



**Mammogram and Age**

In 2004, the percentage of no mammogram check in last two years among women ages 40 years or older with intact cervix were higher among adults ages 40-64 than among women ages 65+, 34.0% vs. 28.8%, respectively (Figure V-34).

**Mammogram, Race and Ethnicity**

Hispanics reported the highest percentage of no mammogram check in last two years among women ages 40 years or older with intact cervix, 38.4%, followed by African American NH, 34.6% (Figure V-35).

**Mammogram, Education and Household Income**

Mammogram check in last two years among women ages 40 years or older with intact cervix was associated with education levels and annual household income in 2004 (Figure V-36). The higher the education and incomes, the less likely they are to report no mammogram check in last two years among women ages 40 years or older with intact cervix. In addition, the highest percentages of no mammogram check in last two years among women ages 40 years or older with intact cervix were among the least educated, 45.4%, and the lowest income group, 46.2%.

Hispanics reported the highest percentage of no mammogram check in last two years among women ages 40 years or older with intact cervix, 38.4%, followed by African American NH, 34.6%.

Women out of work have the highest percentage of no mammogram check in last two years among women ages 40 years or older with intact cervix, 51.4%.

**Mammogram and Marital Status**

The largest proportion of no mammogram check in last two years among women ages 40 years or older with intact cervix was among the divorced, 45.2%, separated, 42.3%, and never married women, 41.2% (Figure V-37). Divorced women were 1.6 times more likely to report no mammogram check in last two years among women ages 40 years or older with intact cervix than married or widowed women (Figure V-37).

**Mammogram and Employment Status**

Women out of work had the highest percentage of no mammogram check in last two years among women ages 40 years or older with intact cervix at 51.4%. In addition, no mammogram check in last two years among women ages 40 years or older with intact cervix was most likely reported among self-employed and unable to work groups than among retired women (Figure V-38).

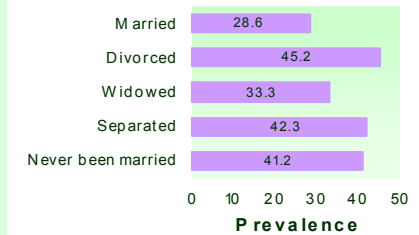
**Mammogram and Health Insurance**

Women without health insurance were two times more likely to have no mammogram check in last two years among women ages 40 years or older with intact cervix than insured women, 60.8% vs. 26.7%, respectively (Figure V-39).

**Women Aged 40+ Reporting No Mammogram in Past Two Years, Oklahoma 2004**

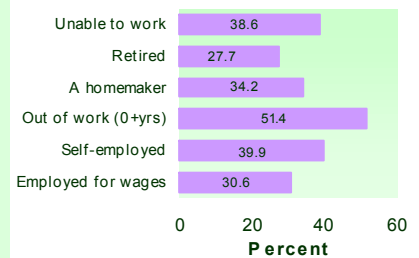
**Figure V-37**

**By Marital Status**



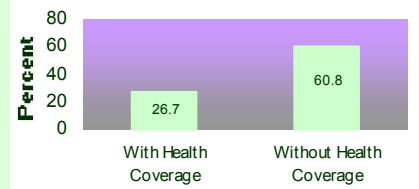
**Figure V-38**

**By Employment Status**



**Figure V-39**

**By Health Insurance Coverage**





# Pap Test

Cervical cancer is a preventable disease and the prognosis is good when caught and detected early.<sup>39</sup> Despite the preventive nature of this disease, 3,670 women each year die of cervical cancer in the United States.<sup>39</sup> One strategy to prevent death from this disease is to heighten the awareness of this disease and promote women's access to pap tests.

A pap test is a test for cancer of the cervix. While the national statistics for self-reported no pap test in past three years among women ages 18 and over decreased 11.3% from 15.9% in 1992 to 14.1% in 2004, Oklahoma trends showed a 14.0% increase in no pap test in past three years among women ages 18 and over from 15.0% in 1992 to 17.1% in 2004 (Figure V-40).

It is one of the national objectives that 90% of women aged 18+ will receive a pap test within three years (Objective 03-11b).<sup>2</sup>

## Pap Test and Age

Differences of no pap test in past three years among women ages 18 and over existed in Oklahoma by age (Figures V-41) in 2004. The largest proportion of adults 18+ reporting no pap test in last three years was among elders ages 65+, 35.7%.

## Pap Test, Education and Household Income

The prevalence of no pap test in past three years among women ages 18 and over was nearly three times higher among adults with the lowest education, 26.1%, as compared to the college graduates, 9.0% (Figure V-42). The proportion of no pap test in past three years among women ages 18 and over was largest among adults

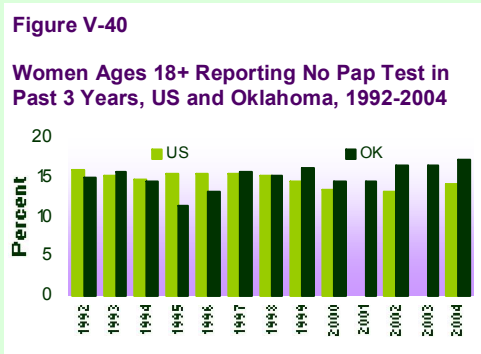


Figure V-41

Women Ages 18+ Reporting No Pap Test in Past Three Years by Age, Oklahoma 2004

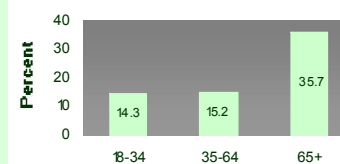
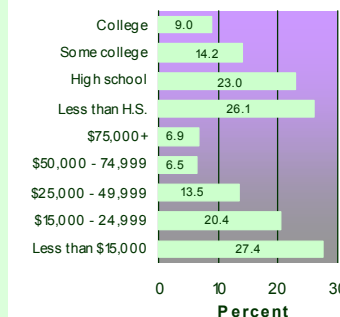


Figure V-42

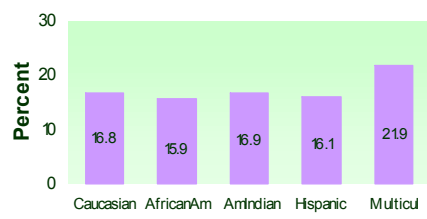
By Education and Annual Household Income Level



**Women Ages 18+ Reporting No Pap Test in Past Three Years, Oklahoma 2004**

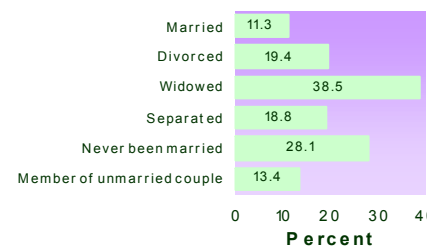
**Figure V-43**

**By Race / Ethnicity**



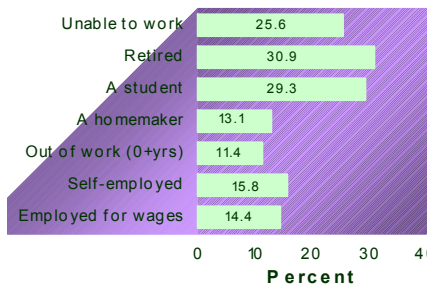
**Figure V-44**

**By Marital Status**



**Figure V-45**

**By Employment Status**



with the lowest household incomes, 27.4%.

**Pap Test, Race and Ethnicity**

The highest prevalence of no pap test in past three years among women ages 18 and over was among the Multicultural NH women, 21.9% (Figure V-43). No pap test in past three years among women ages 18 and over ranged 15.9%-16.9% for all other races or ethnic group.

**Pap Test and Marital Status**

The highest prevalence of no pap test in past three years among women ages 18 and over was among widowed

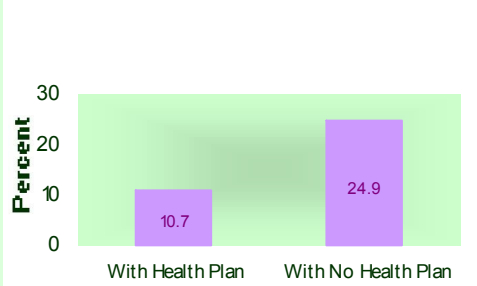
women, 38.5%, followed by never been married adults, 28.1% (Figure V-44). No pap test in past three years among women ages 18 and over was twice as likely to be reported among single women than married women (Figure V-44).

**Pap Test and Employment Status**

The highest prevalence of no pap test in past three years among women ages 18 and over in Oklahoma was among the retired women, 30.9%, followed by students, 29.3%. Women who identified themselves as students and retired were twice as likely to report no pap test in past three years than women employed for wages or out of work (Figure V-45).

**Figure V-46**

**By Health Insurance Plan**



In addition, the proportion of Oklahoma women ages 18+ who had no health insurance was over twice as likely to report no pap test in past three years than those with health insurance (Figure V-46).

## Prostate Cancer Screening - PSA Test

Prostate cancer strikes 1 in 6 men.<sup>40</sup> Over 80% of the prostate cancer cases diagnosed were among men ages 65 and above.<sup>41</sup> Treatment is more effective when this disease is detected at an early-stage.

One strategy to increase awareness of prostate cancer and its early detection is to encourage men to participate in PSA (prostate-specific antigen) blood test.<sup>41</sup> Since 2001, BRFSS surveyed the respondents in alternate years to determine the proportions of men ages 40+ who had taken the PSA test and their associations with demographic information.

Comparing results from 2004 to 2001 and 2002, the prevalence of reported no PSA test in the past two years among men ages 40+ remained relatively stable across the nation, 46.1%-47.9%, and in Oklahoma, 43.8%-47.3% (Figure V-47).

### PSA Test and Age

More than half of the men, 58.4%, between ages 40-64 reported no PSA test in the past two years, while 1 in 4 men ages 65+ did so in 2004 (Figure V-48).

### PSA Test, Race and Ethnicity

African American men are commonly cited as having higher rates of prostate cancer in the literature, as compared to Caucasian men.<sup>41</sup> Caucasians and African Americans in Oklahoma had similar rates of no PSA test in the past two years among men ages 40+, 47.8% vs. 46.8%, respectively (Figure V-49).

Men Ages 40+ Reporting No PSA Test in Past Two Years, Oklahoma 2004

Figure V-47

● Oklahoma and US, 2001-2004

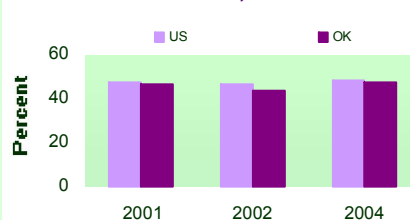


Figure V-48

● By Age Groups

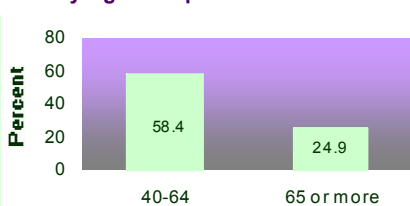
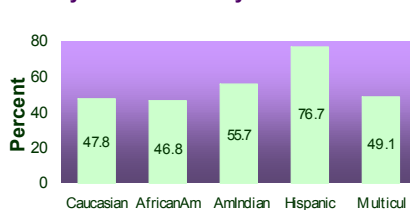


Figure V-49

● By Race / Ethnicity



The highest prevalence of no PSA test in the past two years among men ages 40+ was among the Hispanics, 76.7%. No PSA test in the past two years among men ages 40+ was more likely reported in Hispanics than Caucasians NH or African Americans NH.

**PSA Test, Education and Household Income**

Access to PSA test was also associated with education and annual household income levels. No PSA test in the past two years among men ages 40+ was 1.4 times more common in the lowest education group, 62.3%, as compared to the college graduates, 43.3%. Likewise, no PSA test in the past two years among men ages 40+ was more likely reported in the lower income groups, 58.9%-62.9%, as compared to the wealthier groups, 42.2%-43.6% (Figure V-50).

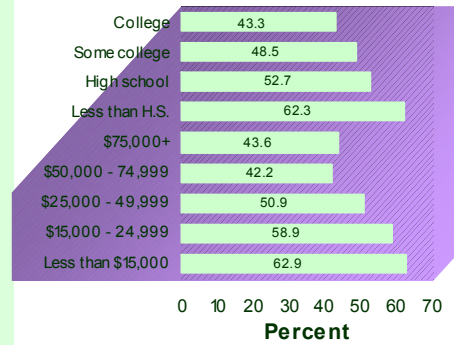
**PSA Test and Marital Status**

The highest proportions of men 40+ reporting no PSA test in the past two years was 74.0%, among the never been married. In addition, the percentage of no PSA test in the past two years among men ages 40+ was significantly higher in divorced men, 61.9%, than married or widowed groups, 46.4% or 44.4%, respectively (Figure V-51).

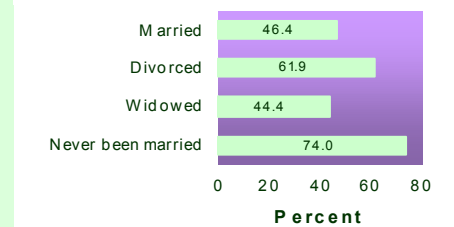
Oklahoma percentages of no PSA test in the past two years among men ages 40+ were slightly lower than the nation averages, 47.3% vs. 47.9% respectively in 2005.

**Men Ages 40+ Reporting No PSA Test in Past 2 Years, Oklahoma 2004**

**Figure V-50**  
• **By Education Levels and Annual Household Income**



**Figure V-51**  
• **By Marital Status**



**PSA Test and Employment Status**

The largest proportion of no PSA test in the past two years among men ages 40+ was among the out of work, 73.1%. In addition, no PSA test in the past two years among men ages 40+ was over twice as likely reported among the unable to work, 62.1%, than the retired, 26.1% (Figure V-52).

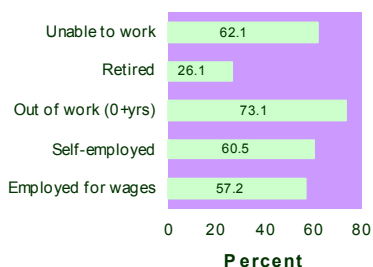
**PSA Test and Health Insurance Coverage**

The percentage of reported no PSA test in the past two years among men ages 40+ was 1.7 times higher for those without health insurance coverage than those with health insurance, 86.6% vs. 52.0% (Figure V-53).

**Men Ages 40+ Reporting No PSA Test in Past 2 Years, Oklahoma 2004**

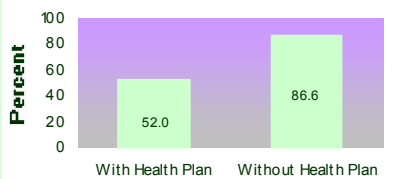
**Figure V-52**

• **By Employment Status**



**Figure V-53**

• **By Health Insurance Plan**



No PSA test in the past two years among men ages 40+ was 1.4 times more common in the lowest education group, 62.3%, as compared to the college graduates, 43.3%.

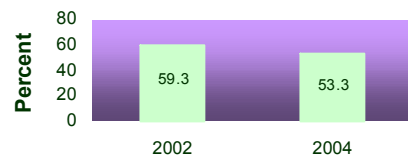
# Colorectal Screening

Colon cancer is the second leading cause of cancer-related deaths in America.<sup>42</sup> Early detection of colon cancer greatly enhances the prognosis and decreases the mortality due to this disease.

## Adults Ages 50+ Reporting No Sigmoidoscopy or Colonoscopy

Figure V-54

- By Year 2002, 2004



Doctors recommended routine colon cancer screening for adults ages 50 or more in one or a combination of the following measures: an annual blood stool test, a sigmoidoscopy every 5 years or a colonoscopy every 10 years.<sup>43</sup>

A blood stool test is commonly a home-used kit to determine whether the stool contains blood.<sup>44</sup>

Sigmoidoscopy and colonoscopy are tests performed by a doctor by inserting a tube in the rectum to examine the colon for signs of cancer or other health problems.<sup>44</sup>

In 2002 and 2004, BRFSS surveyed adults ages  $\geq 50$  to determine if they had ever received a blood stool test, or a sigmoidoscopy or colonoscopy.

Although Oklahoma statistics have not achieved the national 2010 standard of 50.0% screened, there was a roughly 11% decrease in the proportions of adults ages 50+ reporting never having a sigmoidoscopy or colonoscopy (Figures V-54), and a 1.2% decrease for no blood stool test in past two years.

## Adults Ages 50+ Reporting No Sigmoidoscopy or Colonoscopy, Oklahoma 2004

Figure V-55

- By Year and Gender

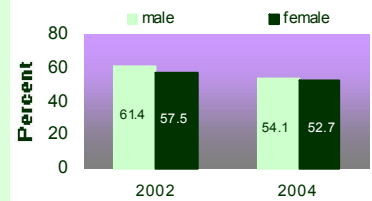
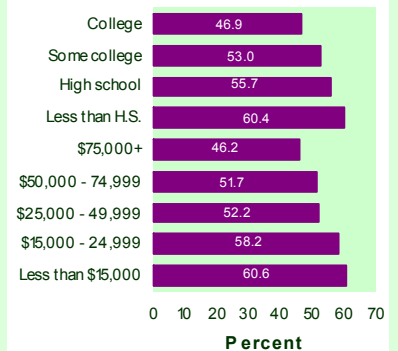


Figure V-56

- By Education and Annual Household Income, Oklahoma 2004



One of the *Healthy People 2010* objectives is to increase the proportion of adults ever receiving a colorectal cancer screening examination (Objective 3-12B) to 50.0%.<sup>2</sup>

**Colorectal Screening, Gender and Age**

In 2004, the decrease in percentages of never having a sigmoidoscopy or colonoscopy was seen in both male and female ages 50+, although males reported slightly higher never having a sigmoidoscopy or colonoscopy, 57.5%, compared to females, 52.7% (Figure V-55). There were, however, no gender differences for no blood stool test in the past two years in Oklahoma, roughly 77%.

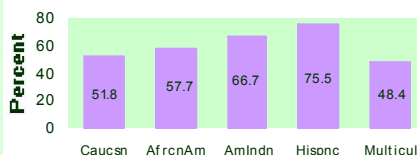
**Colorectal Screening, Education and Household Income**

There was a gradual increase in the proportions of Oklahoma adults ages 50+ reporting never having a sigmoidoscopy or colonoscopy as the education level decreased (Figure V-56). Adults ages 50+ with lower education, i.e. less than high school were significantly more likely to report never having a sigmoidoscopy or colonoscopy than those with college, 60.4% vs. 46.9%, respectively.

The highest percentage of never having a sigmoidoscopy or colonoscopy was among adults with the lowest household incomes, 60.6%, as compared to the wealthiest, 46.2% (Figure V-56). Majority of adults, 72.5%-80.7%, across all education levels and in each household income level reported no blood stool test in the past two years in 2004.

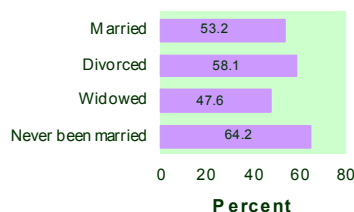
**Adults Ages 50+ Reporting No Sigmoidoscopy or Colonoscopy, Oklahoma 2004**

**Figure V-57**  
● By Race / Ethnicity



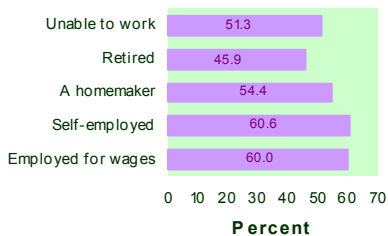
**Figure V-58**

● By Marital Status



**Figure V-59**

● By Employment Status



The largest proportion of adults ages 50+ reporting no sigmoidoscopy or colonoscopy was among the self-employed, 60.6%,

Divorced adults ages 50+ was significantly more likely to report never having a sigmoidoscopy or colonoscopy or no blood stool test in the past two years than married adults.

### ***Colorectal Screening, Race and Ethnicity***

The highest prevalence of never having a sigmoidoscopy or colonoscopy for adults ages 50+ was among Hispanics, 75.5% (Figure V-57). In addition, American Indians NH ages 50+ were more likely to report never having a sigmoidoscopy or colonoscopy than their Caucasian NH and Multicultural NH cohorts, 66.7% vs. 51.8% and 48.4%, respectively.

The percentages of no blood stool test in the past two years among adults ages 50+ in each race / ethnicity ranged between 72.1% - 82.5%. In addition, Hispanics reported the highest percentage of no blood stool test in the past two years, 82.5%.

### ***Colorectal Screening, Marital Status***

The percentage of reported never having a sigmoidoscopy or colonoscopy was highest among never been married adults ages 50+, 64.2% (Figure V-58). In addition, divorced adults ages 50+ was significantly more likely to report never having a sigmoidoscopy or colonoscopy or no blood stool test in the past two years than married adults.

The proportion of adults ages 50+ with no blood stool test in the past two years was largest among divorced adults, 80.6%. The percentages in three other marital status (married, widowed, and never been married) ranged from 74.3% to 77.9%.

### ***Colorectal Screening and Employment Status***

The largest proportion of adults ages 50+ reporting never having a sigmoidoscopy or colonoscopy was among the self-employed, 60.6%, and employed for wages, 60.0% (Figure V-59). The percentage of no blood stool test in the past two years among adults ages 50+ was highest among the unable to work and employed for wages, 80.6% and 80.9%, respectively.



Adults Ages 50+ Reporting No Blood Stool Test in Past Two Years, Oklahoma 2004

Figure V-60

- By Year

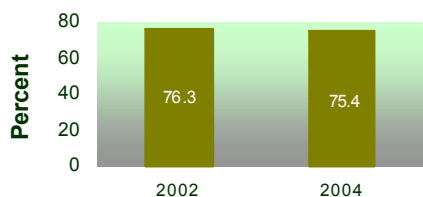


Figure V-63

- By Race / Ethnicity

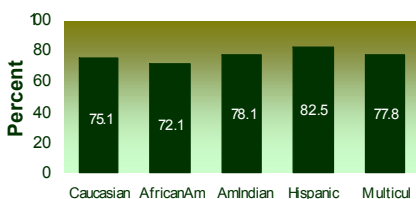


Figure V-61

- By Year and Gender

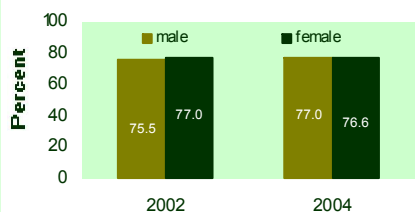


Figure V-64

- By Marital Status

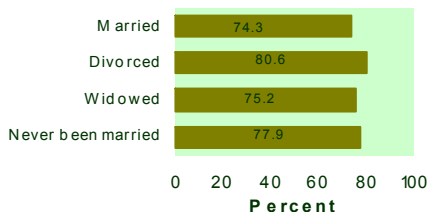


Figure V-62

- By Education and Annual Household Income

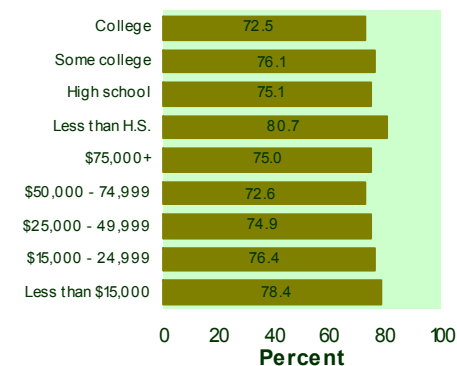
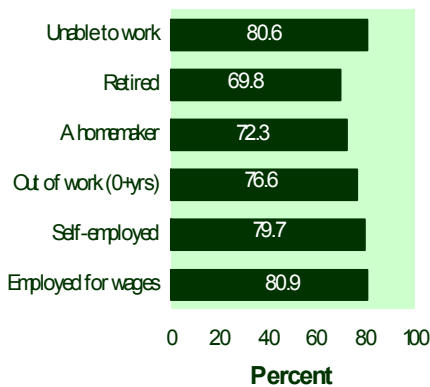


Figure V-65

- By Employment Status



The proportion of adults ages 50+ with no blood stool test in the past two years was largest among divorced adults, 80.6%.

# Dentist Visit

## Adults Ages 18+ Reporting No Dentist Visit in Past Year, Oklahoma 2004

Figure V-67

• **By Gender and Age Groups**

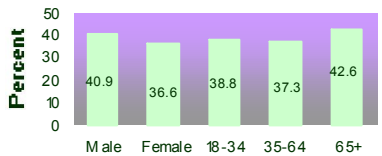


Figure V-68

• **By Race / Ethnicity**

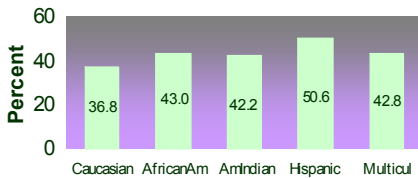
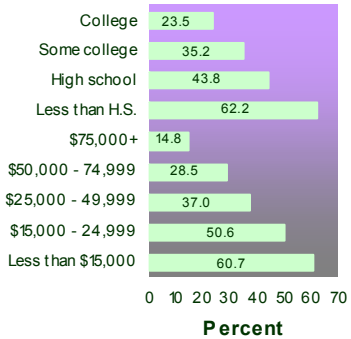


Figure V-69

• **By Education and Annual Household Income**



It is one of *Healthy People 2010* objectives (Objective 21-10) to increase the proportion of adults who use the oral health care system every year.<sup>2</sup>

In 2002 and 2004, Oklahoma BRFSS asked respondents regarding their oral health, “How long has it been since you last visited a dentist or a dental clinic for any reason?” and “How long has it been since you had your teeth cleaned by a dentist or dental hygienist or dental clinic visits within the year preceding the survey.

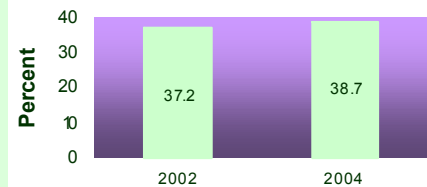
More Oklahoma adults were reporting no dentist visit in past year in 2004 than in 2002, 38.7% vs. 37.2%, respectively, roughly a 4.0% increase (Figure V-66).

### Dentist Visit, Gender and Age

Male adults were more likely to report no dentist visit in past year than female adults, 40.9% vs. 36.6%, respectively. Adults ages 35-64 were less likely to report no dentist visit in past year than persons aged 65 and over, 37.3% vs. 42.6%, respectively (Figure V-67).

Figure V-66

### Adults Reporting No Dentist Visit in Past Year by Year, Oklahoma 2002, 2004



### Dentist Visit, Race and Ethnicity

The highest prevalence of no dentist visit in past year was among the Hispanics, 50.6%, who were 37.5% more likely to report no dentist visit in past year than Caucasians NH, 36.8% (Figure V-68).

### Dentist Visit, Education and Household Income

Adults with the lowest education were nearly three times more likely to report no dentist visit in past year, 62.2%, than adults with the highest education, 23.5% (Figure V-69).

No dentist visit in past year was also associated with household incomes. More than half of Oklahoma adults with the lowest annual incomes reported no dentist visit in past year, 60.7%, as compared to adults with the highest incomes, 14.8% (Figure V-69).

**Dentist Visit and Marital Status**

The highest proportion of no dentist visit in past year was among members of the unmarried couple, 58.5%. In addition, adults self-identified as separated or widowed were more likely to report no dentist visit in past year, 48.7%-53.3%, compared to married and never been married adults, 34.9%-36.1% (Figure V-70).

**Dentist Visit and Employment Status**

The highest prevalence of reported no dentist visit in past year was among adults unable to work, 57.3%. Adults reporting unable to work or out of work, 52.6%-57.3%,

were two times more likely to report no dentist visit in past year than adults who were students, 25.6% (Figure V-71).

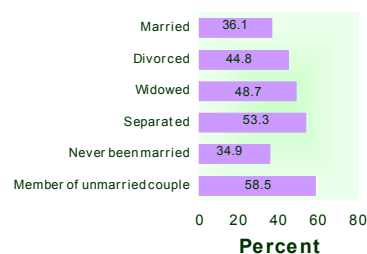
**Dentist Visit and Health Insurance Coverage**

More than half of the adults who had no health insurance coverage reported no dentist visit in past year, 58.9%, compared to only one in three adults who had health insurance coverage, 33.2% (Figure V-72).

**Adults Ages 18+ Reporting No Dentist Visit in Past Year, Oklahoma 2004**

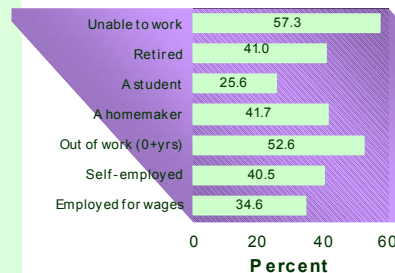
**Figure V-70**

**By Marital Status**



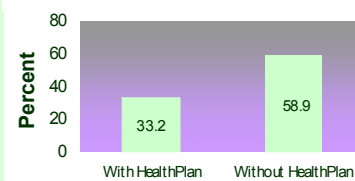
**Figure V-71**

**By Employment Status**



**Figure V-72**

**By Health Insurance Plan**



# County Information

		Fair or Poor General Health, Adult 18+, OK 2003-2005		Mental Health Not Good >= 15 days, Adult 18+, OK 2003-2005		Physical Health Not Good >= 15 days, Adult 18+, OK 2003-2005		Reported No Health Plan, Adult < 65, OK, 2003-2005	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI
NW	Alfalfa								
	Beaver								
	Blaine	24.7	(13.9 - 35.5)	7.5	(0.6 - 14.3)	14.4	(6.3 - 22.5)	22.9	(11.2 - 34.5)
	Canadian	11.7	(8.8 - 14.4)	8.2	(5.7 - 10.6)	7.2	(5.0 - 9.4)	17.7	(12.7 - 22.5)
	Cimarron								
	Custer	17.9	(12.1 - 23.6)	11.6	(7.1 - 15.9)	10.4	(6.2 - 14.4)	20.7	(11.8 - 29.4)
	Dewey	14.0	(3.6 - 24.3)			12.1	(2.9 - 21.2)		
	Ellis								
	Garfield	17.4	(14.3 - 20.4)	9.7	(7.3 - 11.9)	12.8	(9.9 - 15.6)	25.9	(20.2 - 31.5)
	Grant								
	Harper								
	Kingfisher	19.7	(12.2 - 27.1)	12.8	(6.6 - 19.0)	6.3	(1.7 - 10.8)	27.1	(15.9 - 38.2)
	Logan	14.6	(10.6 - 18.6)	8.5	(4.8 - 12.2)	4.3	(1.6 - 7.0)	18.8	(13.0 - 24.5)
	Major	15.7	(6.3 - 25.1)			10.7	(2.5 - 18.8)		
	Roger	20.7	(3.6 - 37.8)	12.6	(0.0 - 25.9)	10.3	(0.0 - 21.4)	19.5	(4.8 - 34.0)
	Texas	16.7	(9.8 - 23.4)	6.2	(3.2 - 9.1)	5.9	(3.1 - 8.6)	29.6	(18.7 - 40.3)
Woods	23.1	(7.0 - 39.0)	12.7	(3.8 - 21.5)	13.2	(2.1 - 24.2)			
Woodward	16.0	(9.4 - 22.6)	14.8	(8.5 - 20.9)	11.9	(6.1 - 17.6)	25.2	(15.4 - 35.0)	
NE	Adair	33.1	(26.3 - 39.7)	13.0	(8.0 - 17.9)	21.0	(13.9 - 28.1)	30.2	(20.2 - 40.0)
	Cherokee	23.9	(19.3 - 28.4)	11.8	(8.2 - 15.3)	14.2	(10.4 - 17.8)	34.0	(25.0 - 42.8)
	Craig	24.3	(17.1 - 31.4)	8.8	(4.3 - 13.1)	12.9	(6.2 - 19.5)	31.5	(18.5 - 44.4)
	Creek	16.1	(11.7 - 20.5)	10.1	(7.0 - 13.1)	10.8	(7.3 - 14.2)	22.7	(17.3 - 27.9)
	Delaware	24.1	(18.8 - 29.4)	14.1	(10.1 - 18.0)	17.4	(13.0 - 21.7)	29.8	(23.5 - 36.0)
	Kay	19.0	(14.8 - 23.1)	9.6	(5.7 - 13.3)	12.4	(8.2 - 16.5)	31.9	(23.4 - 40.2)
	Lincoln	20.2	(15.4 - 24.9)	13.2	(8.4 - 17.9)	15.2	(10.8 - 19.5)	23.6	(17.2 - 29.9)
	Mayes	23.4	(17.5 - 29.2)	11.2	(7.3 - 14.9)	12.2	(8.4 - 15.9)	23.7	(16.3 - 31.0)
	Muskogee	23.2	(19.4 - 26.9)	11.8	(8.6 - 14.8)	15.9	(12.3 - 19.3)	30.1	(23.7 - 36.4)
	Noble	25.6	(14.4 - 36.7)	12.5	(2.4 - 22.4)	14.8	(6.7 - 22.8)	22.2	(9.5 - 34.7)
	Nowata	23.4	(15.3 - 31.4)	9.9	(3.2 - 16.5)	8.3	(3.0 - 13.5)	24.2	(11.4 - 36.9)
	Okfuskee	25.7	(15.6 - 35.7)	13.9	(6.1 - 21.7)	13.5	(6.1 - 20.8)	43.1	(25.2 - 60.9)
	Okmulgee	23.0	(18.3 - 27.6)	10.4	(6.9 - 13.9)	12.2	(8.3 - 16.1)	30.1	(20.4 - 39.6)
	Osage	22.6	(16.4 - 28.8)	11.3	(6.7 - 15.8)	14.1	(9.1 - 18.9)	28.0	(19.4 - 36.4)
	Ottawa	27.8	(21.1 - 34.4)	14.6	(8.5 - 20.5)	17.9	(11.8 - 23.8)	34.3	(25.8 - 42.7)
	Pawnee	30.1	(19.4 - 40.8)	6.2	(1.2 - 11.1)	19.5	(9.8 - 29.2)	27.6	(12.3 - 42.9)
	Payne	19.1	(13.6 - 24.5)	10.5	(6.2 - 14.8)	8.3	(5.6 - 11.0)	23.2	(16.2 - 30.0)
	Rogers	17.5	(13.9 - 21.1)	10.5	(7.8 - 12.9)	10.5	(7.4 - 13.5)	20.3	(15.7 - 24.8)
	Sequoyah	28.4	(22.1 - 34.6)	16.9	(11.7 - 22.1)	19.9	(14.7 - 25.0)	29.0	(21.3 - 36.6)
	Wagoner	16.0	(11.9 - 20.0)	10.1	(6.7 - 13.3)	9.6	(6.8 - 12.3)	22.5	(16.4 - 28.5)
Washington	19.6	(15.6 - 23.6)	10.1	(6.9 - 13.2)	13.9	(9.9 - 17.7)	25.0	(18.6 - 31.4)	

\*Note: If county data are missing, sample size was too small to calculate.

		Fair or Poor General Health, Adult 18+, OK 2003-2005		Mental Health Not Good >= 15 days, Adult 18+, OK 2003-2005		Physical Health Not Good >= 15 days, Adult 18+, OK 2003-2005		Reported No Health Plan, Adult < 65, OK, 2003-2005	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI
SW	Beckham	22.6	(15.0 - 29.9)	10.3	(5.1 - 15.3)	21.5	(12.6 - 30.3)	32.4	(19.9 - 44.9)
	Caddo	20.0	(12.8 - 27.1)	14.5	(9.5 - 19.4)	16.2	(10.4 - 21.8)	20.3	(10.7 - 29.9)
	Carter	21.1	(16.1 - 26.1)	11.0	(7.6 - 14.3)	12.0	(8.1 - 15.9)	25.0	(17.6 - 32.4)
	Comanche	17.7	(15.3 - 20.1)	10.2	(8.1 - 12.2)	10.7	(8.7 - 12.6)	19.1	(15.3 - 22.7)
	Cotton								
	Garvin	24.1	(17.3 - 30.9)	15.4	(8.9 - 21.9)	17.4	(10.8 - 23.9)	33.9	(24.2 - 43.5)
	Grady	16.9	(12.7 - 21.0)	11.0	(6.8 - 15.1)	13.7	(9.8 - 17.4)	23.6	(17.9 - 29.3)
	Greer								
	Harmon								
	Jackson	18.0	(11.8 - 24.1)	6.7	(2.6 - 10.8)	12.0	(7.1 - 16.9)	19.2	(12.0 - 26.3)
	Jefferson	22.3	(13.0 - 31.5)			7.2	(0.0 - 14.4)		
	Kiowa	28.1	(16.0 - 40.1)	12.4	(2.7 - 22.0)	11.1	(4.7 - 17.4)	33.1	(12.7 - 53.4)
	Love	32.8	(17.4 - 48.0)	19.3	(6.3 - 32.2)	10.1	(1.1 - 18.9)		
	McClain	13.8	(8.5 - 19.1)	7.9	(3.4 - 12.3)	6.5	(2.6 - 10.2)	25.4	(16.4 - 34.2)
	Stephens	22.9	(17.5 - 28.3)	11.7	(6.3 - 17.0)	12.2	(7.8 - 16.5)	27.3	(20.4 - 34.0)
Tillman	26.7	(13.1 - 40.2)	27.3	(7.7 - 46.8)	20.2	(8.4 - 31.9)			
Washita	18.4	(9.4 - 27.2)	9.5	(0.3 - 18.5)	6.2	(0.7 - 11.6)			
SE	Atoka	17.4	(8.3 - 26.5)	15.0	(5.5 - 24.4)	6.7	(0.0 - 13.3)	48.7	(33.7 - 63.6)
	Bryan	27.0	(19.0 - 35.0)	16.1	(8.5 - 23.5)	16.2	(9.4 - 23.0)	29.4	(19.2 - 39.6)
	Choctaw	26.2	(15.1 - 37.2)	13.2	(5.0 - 21.2)	11.5	(4.3 - 18.5)	39.2	(25.9 - 52.3)
	Coal								
	Haskell	26.6	(16.5 - 36.5)	13.9	(4.4 - 23.2)	15.9	(8.0 - 23.8)	28.0	(19.9 - 36.0)
	Hughes	27.0	(15.1 - 38.9)	15.2	(6.4 - 23.9)	15.4	(7.7 - 23.0)	36.6	(23.3 - 49.8)
	Johnston	33.2	(22.1 - 44.2)	18.3	(6.6 - 29.9)	17.0	(8.0 - 26.0)	22.4	(9.5 - 35.2)
	Latimer	33.1	(19.1 - 47.0)	10.6	(3.6 - 17.5)	17.6	(9.3 - 25.8)	27.9	(13.2 - 42.6)
	Le Flore	25.1	(20.5 - 29.7)	14.8	(10.2 - 19.4)	15.5	(11.1 - 19.9)	35.3	(26.5 - 44.0)
	McCurtain	25.4	(19.4 - 31.2)	12.3	(6.8 - 17.6)	16.6	(11.1 - 22.0)	32.1	(22.8 - 41.2)
	McIntosh	25.2	(19.2 - 31.0)	18.0	(10.7 - 25.2)	17.6	(12.5 - 22.6)	32.7	(22.1 - 43.1)
	Marshall	19.0	(11.7 - 26.1)	12.6	(3.1 - 22.0)	14.1	(3.3 - 24.8)	21.9	(8.2 - 35.4)
	Murray	33.7	(22.7 - 44.6)	12.8	(3.8 - 21.8)	14.9	(7.6 - 22.0)	16.1	(7.4 - 24.7)
	Pittsburg	28.9	(23.1 - 34.7)	15.8	(11.0 - 20.4)	17.9	(12.8 - 22.9)	28.3	(20.8 - 35.6)
	Pontotoc	21.9	(15.5 - 28.3)	11.9	(6.9 - 16.7)	11.9	(8.0 - 15.7)	25.3	(17.9 - 32.6)
	Pottawatomie	20.0	(16.1 - 23.7)	13.8	(10.2 - 17.2)	13.9	(10.4 - 17.3)	25.8	(21.3 - 30.3)
Pushmataha	34.4	(22.4 - 46.3)	17.4	(8.4 - 26.3)	18.9	(12.1 - 25.5)	32.2	(15.2 - 49.2)	
Seminole	25.4	(18.4 - 32.4)	9.7	(5.8 - 13.5)	12.1	(7.1 - 17.0)	45.9	(36.0 - 55.6)	
C	Cleveland	10.5	(8.8 - 12.1)	10.6	(8.1 - 13.0)	8.7	(6.9 - 10.5)	15.9	(13.0 - 18.7)
	Oklahoma	16.8	(15.1 - 18.3)	10.3	(8.9 - 11.5)	8.8	(7.9 - 9.6)	25.3	(22.5 - 28.0)
T	Tulsa	15.0	(13.6 - 16.3)	9.9	(8.4 - 11.3)	9.4	(8.4 - 10.4)	20.4	(18.2 - 22.5)

\*Note: If county data are missing, sample size was too small to calculate.

		Reported Diabetes, Adult 18+, OK, 2003-2005		Doctor Diagnosed CVD, Adult 18+, OK, 2004-2005		Doctor Diagnosed High BP, Adult 18+, OK, 2003-2005		Reported Arthritis, Adult 18+, OK, 2003-2005	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI
NW	Alfalfa								
	Beaver								
	Blaine	8.6	(1.8 - 15.3)	15.4	(3.5 - 27.4)	41.1	(25.8 - 56.2)	34.1	(22.7 - 45.5)
	Canadian	6.0	(3.8 - 8.0)	5.4	(3.4 - 7.4)	26.9	(22.6 - 31.1)	23.0	(19.8 - 26.0)
	Cimarron								
	Custer	10.8	(6.7 - 14.8)	7.6	(3.1 - 12.1)	39.3	(32.0 - 46.5)	29.4	(22.8 - 36.0)
	Dewey								
	Ellis								
	Garfield	7.5	(5.8 - 9.0)	8.7	(6.6 - 10.9)	29.9	(25.1 - 34.6)	28.9	(25.4 - 32.3)
	Grant								
	Harper								
	Kingfisher	4.7	(0.2 - 9.1)	10.4	(1.4 - 19.3)	32.3	(18.3 - 46.2)	33.5	(22.7 - 44.3)
	Logan	6.3	(3.3 - 9.2)	8.5	(4.3 - 12.7)	28.1	(20.0 - 36.0)	26.0	(20.8 - 31.1)
	Major	11.0	(1.0 - 20.9)					34.3	(18.1 - 50.3)
	Roger	9.9	(0.0 - 20.8)	17.5	(0 - 37.7)			34.8	(16.5 - 53.0)
Texas	3.8	(1.6 - 6.0)	7.9	(0.6 - 15.1)	20.9	(13.8 - 27.9)	19.7	(12.7 - 26.6)	
Woods	3.9	(0.0 - 8.3)					36.2	(22.2 - 50.2)	
Woodward	12.4	(5.4 - 19.2)	10.9	(3.4 - 18.3)	29.2	(19.5 - 38.8)	38.9	(30.8 - 47.0)	
NE	Adair	12.3	(7.7 - 16.8)	15.6	(10.4 - 20.9)	53.4	(42.8 - 63.9)	42.5	(34.4 - 50.5)
	Cherokee	10.3	(5.6 - 15.0)	9.1	(5.9 - 12.3)	31.3	(22.2 - 40.3)	29.1	(23.3 - 34.8)
	Craig	10.3	(4.5 - 16.0)	14.2	(6.9 - 21.5)	34.5	(21.3 - 47.6)	36.2	(25.0 - 47.2)
	Creek	6.9	(4.5 - 9.2)	11.5	(8.1 - 14.9)	31.0	(23.2 - 38.8)	30.2	(25.6 - 34.8)
	Delaware	9.3	(6.3 - 12.1)	10.6	(6.9 - 14.2)	23.8	(18.2 - 29.2)	31.6	(26.6 - 36.5)
	Kay	11.9	(7.7 - 16.0)	11.4	(7.4 - 15.4)	30.7	(23.6 - 37.8)	28.5	(22.6 - 34.3)
	Lincoln	7.9	(4.8 - 10.8)	15.1	(9.9 - 20.4)	24.6	(14.7 - 34.4)	30.4	(22.6 - 38.0)
	Mayes	10.5	(6.3 - 14.7)	15.4	(8.8 - 22.1)	28.1	(20.1 - 36.1)	35.2	(27.8 - 42.5)
	Muskogee	10.8	(7.9 - 13.6)	12.5	(9.4 - 15.7)	33.6	(25.3 - 41.7)	31.6	(27.4 - 35.7)
	Noble	11.6	(2.0 - 21.1)	13.5	(4.4 - 22.5)			41.1	(29.4 - 52.8)
	Nowata	10.0	(4.1 - 15.8)	13.3	(6.8 - 19.8)			32.9	(22.3 - 43.5)
	Okfuskee	14.7	(5.2 - 24.1)	10.3	(0.4 - 20.2)	40.8	(25.1 - 56.5)	43.9	(29.9 - 57.8)
	Okmulgee	11.7	(7.2 - 16.2)	12.5	(7.9 - 17.1)	31.0	(20.7 - 41.2)	31.3	(24.8 - 37.8)
	Osage	11.2	(7.0 - 15.3)	9.7	(4.5 - 15.0)	46.3	(37.6 - 54.9)	37.7	(31.1 - 44.1)
	Ottawa	11.9	(8.4 - 15.3)	12.8	(9.0 - 16.6)	33.0	(25.0 - 41.0)	28.3	(21.7 - 34.7)
	Pawnee	9.5	(3.7 - 15.3)	19.7	(6.2 - 33.3)	41.2	(24.2 - 58.1)	42.9	(30.2 - 55.4)
	Payne	7.6	(4.5 - 10.5)	9.9	(6.6 - 13.3)	25.9	(20.1 - 31.6)	22.5	(17.6 - 27.3)
	Rogers	9.5	(6.2 - 12.7)	6.2	(3.9 - 8.4)	30.5	(24.8 - 36.1)	27.3	(22.4 - 32.0)
	Sequoyah	6.3	(4.0 - 8.5)	12.5	(9.2 - 15.8)	39.5	(31.0 - 47.7)	39.6	(33.6 - 45.5)
	Wagoner	7.9	(5.1 - 10.7)	7.7	(5.7 - 9.8)	32.6	(26.2 - 38.9)	31.6	(26.7 - 36.4)
Washington	12.1	(8.9 - 15.3)	12.3	(8.0 - 16.6)	34.1	(27.0 - 41.1)	37.0	(32.0 - 41.8)	

\*Note: If county data are missing, sample size was too small to calculate.

		Reported Diabetes, Adult 18+, OK, 2003-2005		Doctor Diagnosed CVD, Adult 18+, OK, 2004-2005		Doctor Diagnosed High BP, Adult 18+, OK, 2003-2005		Reported Arthritis, Adult 18+, OK, 2003-2005	
		%	95% CI	%	95% CI	%	CI	%	CI
SW	Beckham	11.5	(5.4 - 17.4)	10.1	(3.3 - 16.9)	25.3	(13.7 - 36.7)	33.7	(24.2 - 43.1)
	Caddo	12.3	(7.1 - 17.3)	12.1	(5.5 - 18.7)	34.1	(23.8 - 44.2)	32.5	(23.7 - 41.2)
	Carter	7.3	(4.8 - 9.7)	11.7	(8.8 - 14.6)	32.6	(25.6 - 39.5)	32.2	(25.5 - 38.8)
	Comanche	8.0	(6.2 - 9.6)	9.9	(7.9 - 11.9)	28.9	(22.3 - 35.5)	28.2	(24.0 - 32.3)
	Cotton								
	Garvin	7.9	(4.2 - 11.5)	14.6	(6.7 - 22.5)	32.5	(21.8 - 43.1)	38.4	(29.5 - 47.2)
	Grady	5.9	(3.4 - 8.2)	5.8	(1.8 - 9.7)	25.6	(19.9 - 31.2)	28.2	(23.0 - 33.4)
	Greer								
	Harmon								
	Jackson	12.2	(6.8 - 17.5)	12.0	(4.7 - 19.3)	33.6	(22.9 - 44.2)	29.9	(23.5 - 36.2)
	Jefferson	11.8	(1.7 - 21.8)					39.7	(27.1 - 52.2)
	Kiowa	16.4	(7.0 - 25.7)	16.7	(8.5 - 24.8)	31.9	(17.4 - 46.3)	34.5	(21.8 - 47.2)
	Love	16.5	(3.2 - 29.7)	18.6	(0 - 37.7)			38.4	(21.1 - 55.7)
	McClain	6.5	(2.7 - 10.1)	7.6	(3.2 - 12.1)	26.1	(17.0 - 35.0)	26.5	(19.1 - 33.8)
	Stephens	9.5	(6.1 - 12.7)	10.3	(4.7 - 15.8)	32.5	(26.0 - 38.8)	37.4	(32.5 - 42.2)
Tillman	13.5	(5.4 - 21.5)					37.2	(20.0 - 54.2)	
Washita	7.3	(0.8 - 13.8)					23.5	(13.2 - 33.7)	
SE	Atoka	5.8	(1.0 - 10.5)					28.6	(16.5 - 40.7)
	Bryan	12.1	(7.4 - 16.6)	14.4	(7.7 - 21.1)	35.0	(25.9 - 44.0)	36.5	(28.5 - 44.3)
	Choctaw	9.4	(3.0 - 15.7)	9.9	(2.3 - 17.5)	29.8	(18.2 - 41.3)	34.9	(24.7 - 45.1)
	Coal								
	Haskell	6.5	(0.2 - 12.6)	11.4	(0 - 24.4)	26.6	(16.9 - 36.1)	28.9	(18.8 - 39.0)
	Hughes	8.5	(3.5 - 13.4)	10.8	(1.1 - 20.5)	32.1	(20.7 - 43.5)	39.8	(26.7 - 52.8)
	Johnston	11.0	(1.2 - 20.7)	14.3	(2.9 - 25.6)			40.6	(27.4 - 53.7)
	Latimer	13.6	(5.2 - 21.9)	11.3	(3.8 - 18.7)			40.2	(26.1 - 54.2)
	Le Flore	10.8	(6.9 - 14.6)	9.8	(6.6 - 13.0)	25.6	(17.8 - 33.3)	34.2	(28.5 - 39.8)
	McCurtain	7.6	(2.4 - 12.6)	11.1	(5.7 - 16.5)	32.9	(25.7 - 39.9)	30.5	(24.0 - 36.8)
	McIntosh	11.4	(7.1 - 15.5)	13.8	(9.6 - 17.9)	34.1	(22.2 - 46.0)	37.5	(30.5 - 44.3)
	Marshall	4.6	(1.1 - 8.1)	9.2	(3.8 - 14.6)	27.8	(12.5 - 43.0)	29.4	(18.3 - 40.3)
	Murray	10.7	(3.5 - 17.9)	17.7	(9.0 - 26.4)	20.8	(12.0 - 29.4)	41.3	(27.6 - 54.9)
	Pittsburg	8.1	(5.8 - 10.4)	12.8	(10.0 - 15.5)	36.6	(24.8 - 48.4)	38.0	(32.1 - 43.8)
	Pontotoc	7.9	(3.5 - 12.2)	14.7	(5.9 - 23.6)	32.4	(26.2 - 38.4)	27.3	(22.0 - 32.6)
Pottawatomie	9.6	(6.9 - 12.2)	10.3	(7.3 - 13.3)	25.8	(20.4 - 31.2)	34.2	(30.6 - 37.7)	
Pushmataha	7.5	(0.2 - 14.7)	9.2	(1.2 - 17.3)	29.6	(15.5 - 43.7)	49.9	(36.8 - 62.9)	
Seminole	8.0	(4.7 - 11.2)	10.3	(4.0 - 16.6)	35.6	(26.9 - 44.2)	39.7	(29.9 - 49.4)	
C	Cleveland	4.8	(3.5 - 6.0)	5.9	(4.2 - 7.6)	24.7	(21.2 - 28.1)	25.0	(22.2 - 27.6)
	Oklahoma	6.9	(5.8 - 7.9)	7.8	(6.5 - 9.1)	25.3	(23.3 - 27.2)	24.0	(22.1 - 25.8)
T	Tulsa	7.5	(6.5 - 8.5)	8.3	(7.1 - 9.5)	25.9	(23.6 - 28.2)	27.0	(25.3 - 28.6)

\*Note: If county data are missing, sample size was too small to calculate.

		Reported Current Asthma, Adult 18+, OK, 2003-2005		Doctor Diagnosed High Cholesterol, Adult 18+, OK 2003-2005		Reported Currently Smoking, Adult 18+, OK, 2003-2005	
		%	95% CI	%	95% CI	%	95% CI
NW	Alfalfa						
	Beaver						
	Blaine	7.5	(2.5 - 12.4)	30.7	(18.9 - 42.5)	34.8	(21.3 - 48.2)
	Canadian	6.6	(4.3 - 8.7)	32.9	(28.1 - 37.7)	22.6	(18.0 - 27.0)
	Cimarron						
	Custer	6.7	(3.3 - 10.0)	29.7	(24.5 - 34.8)	24.5	(18.2 - 30.6)
	Dewey					24.3	(6.4 - 42.1)
	Ellis						
	Garfield	6.8	(4.5 - 8.9)	35.0	(30.1 - 39.7)	25.8	(21.3 - 30.2)
	Grant						
	Harper						
	Kingfisher	11.7	(4.1 - 19.2)	37.7	(26.4 - 48.9)	23.0	(13.2 - 32.7)
	Logan	7.8	(4.4 - 11.0)	38.6	(32.1 - 45.0)	21.2	(14.4 - 27.8)
	Major					6.2	(0.3 - 12.0)
	Roger	8.8	(0.0 - 22.3)	31.3	(9.4 - 53.1)	32.7	(10.4 - 54.9)
	Texas	5.0	(1.8 - 8.0)	20.0	(12.1 - 27.7)	19.4	(12.4 - 26.3)
Woods	9.9	(3.0 - 16.7)	17.5	(5.5 - 29.4)	32.1	(19.4 - 44.7)	
Woodward	5.6	(1.1 - 10.0)	45.1	(35.2 - 55.0)	22.9	(15.9 - 29.9)	
NE	Adair	11.2	(5.9 - 16.4)	35.0	(26.0 - 43.8)	26.7	(20.1 - 33.2)
	Cherokee	8.4	(5.4 - 11.3)	35.8	(29.5 - 41.9)	27.8	(23.4 - 32.0)
	Craig	10.7	(3.0 - 18.2)	33.3	(22.6 - 43.9)	30.8	(22.7 - 38.9)
	Creek	11.8	(8.0 - 15.5)	35.3	(28.4 - 42.2)	23.6	(19.0 - 28.0)
	Delaware	6.1	(4.0 - 8.0)	36.3	(27.4 - 45.1)	31.3	(25.2 - 37.3)
	Kay	9.4	(5.8 - 13.0)	37.2	(30.8 - 43.5)	24.2	(18.7 - 29.5)
	Lincoln	12.7	(7.6 - 17.7)	38.0	(30.8 - 45.1)	26.3	(19.7 - 32.8)
	Mayes	8.2	(4.9 - 11.4)	44.4	(38.0 - 50.6)	24.0	(19.1 - 28.9)
	Muskogee	9.0	(6.1 - 11.8)	37.6	(30.8 - 44.3)	27.0	(22.0 - 31.9)
	Noble	12.6	(4.4 - 20.8)	37.8	(25.5 - 50.0)	26.2	(17.6 - 34.7)
	Nowata	7.0	(1.4 - 12.6)	43.6	(35.5 - 51.5)	24.8	(14.6 - 34.8)
	Okfuskee	11.3	(3.3 - 19.1)	29.9	(16.3 - 43.4)	35.7	(23.7 - 47.5)
	Okmulgee	7.2	(2.9 - 11.5)	42.9	(34.9 - 50.8)	26.9	(20.8 - 32.8)
	Osage	6.3	(2.7 - 9.7)	33.3	(27.1 - 39.3)	28.5	(21.3 - 35.6)
	Ottawa	12.7	(7.3 - 17.9)	42.2	(35.5 - 48.7)	29.7	(22.3 - 37.1)
	Pawnee	8.4	(0.6 - 16.2)	40.5	(26.7 - 54.1)	46.5	(35.5 - 57.3)
	Payne	8.3	(4.7 - 11.9)	33.4	(27.4 - 39.3)	21.9	(17.1 - 26.7)
	Rogers	8.7	(5.7 - 11.6)	35.0	(29.1 - 40.7)	24.1	(19.2 - 28.8)
	Sequoyah	11.9	(7.8 - 15.9)	39.6	(33.3 - 45.8)	30.7	(25.1 - 36.3)
	Wagoner	6.6	(3.9 - 9.1)	37.0	(29.7 - 44.1)	22.1	(16.9 - 27.2)
Washington	8.1	(5.5 - 10.6)	42.4	(34.9 - 49.8)	28.6	(24.1 - 33.1)	

\*Note: If county data are missing, sample size was too small to calculate.



		Reported Current Asthma, Adult 18+, OK, 2003-2005		Doctor Diagnosed High Cholesterol, Adult 18+, OK 2003-2005		Reported Currently Smoking, Adult 18+, OK, 2003-2005	
		%	CI	%	CI	%	CI
SW	Beckham	16.8	(8.0 - 25.4)	35.7	(24.8 - 46.6)	26.8	(18.0 - 35.6)
	Caddo	10.9	(4.9 - 16.7)	34.1	(26.0 - 42.1)	24.0	(15.5 - 32.4)
	Carter	8.8	(5.5 - 12.1)	33.5	(26.9 - 39.9)	28.2	(22.4 - 33.8)
	Comanche	7.1	(5.2 - 8.9)	32.5	(28.2 - 36.8)	27.6	(23.8 - 31.2)
	Cotton						
	Garvin	11.8	(6.3 - 17.2)	37.4	(27.3 - 47.3)	28.6	(20.3 - 36.8)
	Grady	9.1	(5.6 - 12.4)	31.3	(25.9 - 36.6)	21.0	(15.8 - 26.1)
	Greer						
	Harmon						
	Jackson	6.6	(3.0 - 10.1)	25.3	(16.5 - 33.9)	20.3	(14.3 - 26.1)
	Jefferson					30.4	(15.8 - 44.9)
	Kiowa	6.3	(1.2 - 11.3)	39.5	(24.8 - 54.1)	22.0	(11.2 - 32.8)
	Love	16.3	(2.1 - 30.3)	54.7	(39.8 - 69.5)	34.9	(19.0 - 50.8)
	McClain	6.6	(2.9 - 10.2)	39.9	(31.3 - 48.5)	22.5	(14.9 - 29.9)
	Stephens	13.4	(9.0 - 17.7)	38.1	(31.0 - 45.1)	26.7	(20.7 - 32.6)
	Tillman	7.1	(0.5 - 13.6)	32.2	(16.4 - 47.9)	39.5	(20.0 - 58.9)
Washita	7.3	(0.2 - 14.3)	41.6	(27.3 - 55.8)	22.1	(9.4 - 34.7)	
SE	Atoka	5.6	(1.3 - 9.8)	51.6	(35.1 - 68.1)	34.2	(20.1 - 48.3)
	Bryan	5.2	(2.2 - 8.0)	42.2	(33.2 - 51.1)	34.4	(25.2 - 43.6)
	Choctaw	6.8	(0.1 - 13.4)	23.9	(11.4 - 36.4)	25.8	(13.5 - 38.0)
	Coal						
	Haskell	15.5	(5.3 - 25.5)	37.2	(22.4 - 51.9)	25.8	(14.1 - 37.3)
	Hughes	3.3	(0.8 - 5.8)	34.9	(24.5 - 45.1)	33.9	(21.1 - 46.6)
	Johnston	9.1	(2.4 - 15.7)	41.8	(24.2 - 59.4)	21.0	(9.4 - 32.6)
	Latimer	6.7	(0.0 - 13.4)	26.8	(14.2 - 39.2)	33.1	(16.0 - 50.2)
	Le Flore	8.2	(3.8 - 12.4)	34.4	(25.7 - 43.0)	27.7	(22.8 - 32.6)
	McCurtain	5.5	(2.1 - 8.7)	42.5	(33.1 - 51.8)	25.9	(18.9 - 32.7)
	McIntosh	11.3	(6.0 - 16.4)	44.1	(34.2 - 54.0)	29.6	(20.5 - 38.6)
	Marshall	17.1	(2.5 - 31.5)	35.4	(21.7 - 49.0)	29.1	(14.2 - 44.0)
	Murray	5.3	(1.3 - 9.2)	37.4	(23.3 - 51.3)	36.4	(23.8 - 48.9)
	Pittsburg	8.4	(5.0 - 11.6)	38.0	(32.3 - 43.6)	30.3	(22.7 - 37.8)
	Pontotoc	9.6	(5.3 - 13.8)	35.0	(27.4 - 42.5)	32.8	(24.9 - 40.5)
	Pottawatomie	10.0	(7.0 - 12.9)	38.7	(32.6 - 44.6)	25.4	(21.0 - 29.6)
Pushmataha	5.2	(1.0 - 9.2)	38.6	(26.2 - 50.9)	37.1	(25.4 - 48.7)	
Seminole	10.9	(2.2 - 19.6)	40.9	(30.9 - 50.7)	41.2	(30.8 - 51.5)	
C	Cleveland	8.1	(6.0 - 10.1)	31.8	(28.1 - 35.3)	21.7	(18.6 - 24.8)
	Oklahoma	8.0	(6.6 - 9.2)	34.0	(31.6 - 36.3)	25.0	(23.0 - 26.9)
T	Tulsa	6.6	(5.7 - 7.4)	35.4	(33.1 - 37.6)	22.3	(20.4 - 24.0)

\*Note: If county data are missing, sample size was too small to calculate.

		Reported Binge Drinking, Adult 18+, OK, 2003-2005		Reported Chronic Drinking, Adult 18+, OK, 2003-2005		Reported No LTPA, Adult 18+, OK, 2003-2005	
		%	95% CI	%	95% CI	%	95% CI
NW	Alfalfa						
	Beaver						
	Blaine	23.2	(10.5 - 35.8)			43.4	(31.8 - 54.8)
	Canadian	15.4	(11.3 - 19.4)	5.7	(3.0 - 8.4)	23.3	(19.5 - 27.0)
	Cimarron						
	Custer	6.2	(2.2 - 10.0)			29.6	(21.5 - 37.6)
	Dewey					35.8	(22.8 - 48.7)
	Ellis						
	Garfield	9.4	(5.2 - 13.5)	3.2	(1.1 - 5.1)	27.6	(22.5 - 32.6)
	Grant						
	Harper						
	Kingfisher	12.4	(4.2 - 20.5)			32.9	(23.6 - 42.2)
	Logan	7.6	(3.1 - 11.9)	1.8	(0.0 - 3.5)	29.9	(24.0 - 35.8)
	Major					36.6	(23.0 - 50.2)
	Roger	20.9	(4.1 - 37.7)			36.6	(17.5 - 55.6)
	Texas	16.6	(7.9 - 25.3)			26.1	(19.5 - 32.6)
	Woods	18.3	(4.7 - 31.7)			30.2	(12.7 - 47.5)
Woodward	12.6	(6.0 - 19.2)			29.3	(21.6 - 36.8)	
NE	Adair	8.3	(3.9 - 12.6)	3.0	(0.3 - 5.5)	46.8	(36.9 - 56.5)
	Cherokee	13.9	(8.7 - 19.0)	4.4	(1.8 - 6.9)	30.4	(23.8 - 37.0)
	Craig	14.2	(7.0 - 21.4)			40.1	(31.8 - 48.2)
	Creek	7.9	(4.4 - 11.3)	2.9	(0.7 - 5.1)	34.9	(28.2 - 41.5)
	Delaware	9.9	(6.4 - 13.3)	2.3	(1.1 - 3.5)	36.8	(30.9 - 42.6)
	Kay	11.1	(4.8 - 17.3)	3.2	(1.1 - 5.2)	26.8	(21.1 - 32.5)
	Lincoln	11.0	(5.8 - 16.0)	2.8	(0.6 - 5.0)	34.9	(28.4 - 41.4)
	Mayes	9.6	(5.2 - 13.7)	1.5	(0.6 - 2.2)	31.1	(23.9 - 38.2)
	Muskogee	10.5	(7.2 - 13.7)	3.8	(1.3 - 6.3)	37.0	(31.9 - 41.9)
	Noble					31.1	(21.4 - 40.8)
	Nowata	8.3	(1.2 - 15.4)	7.8	(0.0 - 17.8)	31.7	(21.6 - 41.7)
	Okfuskee	5.6	(0.3 - 10.8)			39.3	(25.8 - 52.6)
	Okmulgee	7.1	(2.9 - 11.2)	5.1	(1.6 - 8.4)	37.4	(29.0 - 45.8)
	Osage	9.2	(5.4 - 12.9)	3.2	(0.8 - 5.6)	36.2	(29.7 - 42.5)
	Ottawa	11.6	(5.8 - 17.3)	5.2	(0.1 - 10.1)	27.8	(21.0 - 34.5)
	Pawnee	9.5	(1.1 - 17.8)			40.3	(29.7 - 50.9)
	Payne	17.3	(12.2 - 22.3)	3.6	(0.4 - 6.6)	25.2	(20.1 - 30.2)
	Rogers	13.2	(8.6 - 17.6)	3.2	(1.8 - 4.5)	29.7	(24.7 - 34.6)
	Sequoyah	10.7	(6.5 - 14.9)	3.9	(1.1 - 6.6)	30.8	(25.4 - 36.2)
	Wagoner	10.2	(5.9 - 14.4)	2.3	(0.5 - 4.0)	26.2	(21.4 - 30.9)
Washington	10.2	(4.9 - 15.4)	3.9	(0.3 - 7.3)	30.7	(25.6 - 35.6)	

\*Note: If county data are missing, sample size was too small to calculate.

		Reported Binge Drinking, Adult 18+, OK, 2003-2005		Reported Chronic Drinking, Adult 18+, OK, 2003-2005		Reported No LTPA, Adult 18+, OK, 2003-2005	
		%	CI	%	CI	%	CI
SW	Beckham	12.0	(4.9 - 19.1)			40.2	(30.2 - 50.0)
	Caddo	12.8	(5.2 - 20.3)			31.6	(24.8 - 38.4)
	Carter	12.1	(7.0 - 17.2)	6.0	(1.7 - 10.3)	36.1	(29.7 - 42.5)
	Comanche	12.9	(9.6 - 16.1)	4.3	(2.4 - 6.1)	28.7	(25.0 - 32.3)
	Cotton						
	Garvin	14.2	(4.9 - 23.4)			35.6	(26.0 - 45.2)
	Grady	10.1	(5.3 - 14.8)	3.5	(0.9 - 6.0)	27.0	(21.2 - 32.7)
	Greer						
	Harmon						
	Jackson	7.9	(2.7 - 12.9)			32.0	(24.0 - 39.8)
	Jefferson	11.1	(0.0 - 22.1)			27.8	(11.9 - 43.6)
	Kiowa					26.4	(14.5 - 38.3)
	Love	11.5	(3.0 - 19.8)			30.5	(16.7 - 44.2)
	McClain	12.1	(4.9 - 19.3)			29.2	(22.9 - 35.4)
Stephens	5.7	(2.1 - 9.1)	3.3	(0.5 - 6.1)	36.4	(29.9 - 42.9)	
Tillman	21.7	(0.5 - 42.9)			37.1	(19.3 - 54.8)	
Washita					28.5	(12.7 - 44.2)	
SE	Atoka					28.4	(15.8 - 40.9)
	Bryan	10.1	(4.8 - 15.2)			31.4	(24.2 - 38.5)
	Choctaw	8.6	(0.7 - 16.4)			29.1	(18.0 - 40.0)
	Coal						
	Haskell	10.3	(4.0 - 16.6)			33.5	(21.5 - 45.5)
	Hughes	15.7	(7.3 - 24.0)			33.7	(22.7 - 44.6)
	Johnston	12.6	(6.3 - 18.8)			31.1	(19.3 - 42.8)
	Latimer	14.7	(0.0 - 29.5)			26.9	(15.2 - 38.6)
	Le Flore	8.3	(4.7 - 11.8)			29.3	(23.0 - 35.5)
	McCurtain	11.3	(5.6 - 16.9)	2.6	(0.0 - 5.3)	35.3	(27.9 - 42.6)
	McIntosh	9.1	(2.0 - 16.2)	3.6	(0.0 - 8.1)	37.1	(28.1 - 45.9)
	Marshall	11.2	(0.0 - 23.8)			35.8	(22.1 - 49.4)
	Murray	16.0	(6.8 - 25.0)			29.3	(19.7 - 38.8)
	Pittsburg	11.5	(6.7 - 16.2)	4.9	(1.4 - 8.3)	32.4	(26.2 - 38.5)
	Pontotoc	19.6	(12.9 - 26.1)	3.7	(0.9 - 6.5)	28.4	(23.5 - 33.2)
	Pottawatomie	10.3	(7.0 - 13.5)	3.3	(1.4 - 5.1)	31.7	(27.2 - 36.2)
	Pushmataha	16.7	(9.2 - 24.1)			32.0	(17.9 - 45.9)
Seminole	17.6	(8.9 - 26.2)	6.2	(0.0 - 13.0)	29.6	(22.8 - 36.2)	
C	Cleveland	12.9	(9.9 - 15.8)	4.6	(3.0 - 6.2)	23.7	(20.4 - 26.9)
	Oklahoma	16.0	(13.9 - 18.0)	4.1	(3.3 - 4.9)	29.4	(27.0 - 31.7)
T	Tulsa	14.8	(12.7 - 16.8)	4.5	(3.6 - 5.3)	24.6	(22.7 - 26.4)

\*Note: If county data are missing, sample size was too small to calculate.

		Overweight, Adult 18+, OK, 2003-2005		Obese, Adult 18+, OK, 2003-2005		Cholesterol Checked >= 5 Years or Never, Adults 18+, OK 2003-2005		Flu Shot in 1 Year, Adult 65+, OK 2003-2005	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI
NW	Alfalfa	21.3	(11.7 - 30.9)	33.3	(22.7 - 43.9)				
	Beaver	48.4	(35.1 - 61.5)	24.0	(14.3 - 33.5)				
	Blaine	31.5	(22.1 - 40.8)	35.4	(25.6 - 45.2)	33.6	(22.2 - 44.8)		
	Canadian	36.9	(33.4 - 40.3)	22.1	(19.0 - 25.2)	31.7	(26.7 - 36.6)	70.4	(61.1 - 79.6)
	Cimarron								
	Custer	40.2	(33.7 - 46.6)	21.3	(16.0 - 26.4)	22.6	(15.6 - 29.6)	80.0	(70.1 - 89.7)
	Dewey	41.6	(26.6 - 56.6)	30.2	(17.0 - 43.2)				
	Ellis	52.6	(38.0 - 67.1)	14.7	(5.0 - 24.2)				
	Garfield	37.7	(33.7 - 41.5)	27.6	(24.0 - 31.0)	24.7	(20.1 - 29.2)	71.9	(63.1 - 80.6)
	Grant	36.4	(23.5 - 49.1)	27.9	(14.7 - 40.9)				
	Harper								
	Kingfisher	35.6	(27.1 - 43.9)	24.7	(18.4 - 30.8)	31.4	(21.9 - 40.7)		
	Logan	34.8	(29.3 - 40.1)	26.9	(22.2 - 31.6)	24.1	(17.7 - 30.4)	71.9	(60.4 - 83.2)
	Major	33.0	(20.7 - 45.2)	41.6	(27.8 - 55.3)	25.9	(12.7 - 39.0)		
	Roger	54.6	(39.9 - 69.2)	23.8	(10.3 - 37.2)	18.4	(7.0 - 29.7)		
	Texas	46.2	(38.6 - 53.7)	17.7	(13.5 - 21.7)	41.2	(30.1 - 52.2)		
	Woods	41.9	(31.9 - 51.9)	18.5	(11.0 - 26.0)	28.3	(10.7 - 45.8)		
Woodward	30.5	(23.7 - 37.2)	29.0	(22.4 - 35.5)	27.5	(19.4 - 35.6)	67.6	(55.3 - 79.8)	
NE	Adair	31.7	(25.3 - 38.0)	30.1	(23.9 - 36.2)	30.3	(21.5 - 39.1)	67.6	(54.9 - 80.1)
	Cherokee	34.4	(29.2 - 39.4)	26.1	(21.4 - 30.7)	30.4	(23.8 - 36.8)	71.0	(59.7 - 82.3)
	Craig	41.2	(33.7 - 48.6)	22.7	(16.0 - 29.2)	34.7	(24.0 - 45.2)	70.8	(56.3 - 85.2)
	Creek	35.6	(31.1 - 39.9)	25.7	(21.9 - 29.5)	31.4	(25.2 - 37.6)	72.3	(63.3 - 81.2)
	Delaware	41.2	(36.3 - 45.9)	24.1	(19.5 - 28.5)	34.2	(28.5 - 39.9)	74.2	(66.1 - 82.2)
	Kay	38.4	(33.5 - 43.2)	23.4	(18.7 - 27.9)	30.3	(22.0 - 38.5)	71.1	(62.9 - 79.1)
	Lincoln	36.9	(31.0 - 42.6)	30.4	(24.5 - 36.2)	23.8	(17.5 - 29.9)	87.6	(79.2 - 95.8)
	Mayes	43.8	(37.9 - 49.6)	22.7	(17.5 - 27.8)	28.6	(20.4 - 36.6)	79.8	(69.4 - 90.0)
	Muskogee	31.1	(27.5 - 34.5)	27.3	(24.0 - 30.5)	31.1	(25.5 - 36.6)	70.2	(60.3 - 80.1)
	Noble	40.1	(29.0 - 51.0)	23.9	(14.9 - 32.7)	11.3	(3.6 - 18.9)		
	Nowata	34.0	(25.1 - 42.8)	29.1	(19.5 - 38.7)	21.1	(11.9 - 30.2)	65.6	(51.9 - 79.1)
	Okfuskee	42.7	(32.5 - 52.9)	21.8	(14.0 - 29.4)	31.8	(20.9 - 42.6)		
	Okmulgee	30.7	(25.7 - 35.6)	29.0	(23.1 - 34.8)	33.3	(24.6 - 41.9)	68.7	(57.4 - 79.9)
	Osage	35.7	(30.4 - 41.0)	29.9	(24.7 - 35.1)	25.7	(17.1 - 34.2)	64.6	(53.6 - 75.4)
	Ottawa	36.6	(30.5 - 42.6)	25.4	(19.4 - 31.4)	32.9	(25.6 - 40.1)	72.5	(62.9 - 81.9)
	Pawnee	43.0	(32.7 - 53.2)	24.1	(16.4 - 31.6)	36.3	(23.9 - 48.7)		
	Payne	34.2	(29.7 - 38.6)	20.4	(16.5 - 24.2)	34.2	(29.2 - 39.1)	78.4	(67.7 - 89.1)
	Rogers	39.4	(35.0 - 43.6)	21.9	(18.1 - 25.5)	27.4	(21.6 - 33.0)	78.8	(71.0 - 86.4)
	Sequoyah	36.3	(31.2 - 41.3)	28.9	(24.5 - 33.1)	29.8	(23.4 - 36.1)	79.6	(69.6 - 89.5)
	Wagoner	38.7	(34.1 - 43.1)	25.5	(21.7 - 29.2)	25.0	(19.4 - 30.5)	77.3	(67.1 - 87.4)
Washington	37.4	(33.1 - 41.5)	20.3	(16.6 - 23.9)	30.1	(24.2 - 36.0)	80.7	(74.9 - 86.3)	

\*Note: If county data are missing, sample size was too small to calculate.

		Overweight, Adult 18+, OK, 2003-2005		Obese, Adult 18+, OK, 2003-2005		Cholesterol Checked >= 5 Years or Never, Adults 18+, OK 2003-2005		Flu Shot in 1 Year, Adult 65+, OK 2003-2005	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI
SW	Beckham	36.3	(28.4 - 44.2)	21.9	(15.7 - 27.9)	33.1	(19.7 - 46.4)		
	Caddo	34.8	(28.3 - 41.1)	30.1	(25.0 - 35.2)	33.3	(23.6 - 42.8)	76.4	(64.2 - 88.5)
	Carter	43.6	(38.5 - 48.7)	20.9	(17.6 - 24.1)	28.6	(22.2 - 34.9)	72.6	(65.4 - 79.7)
	Comanche	37.3	(34.3 - 40.1)	22.8	(19.7 - 25.9)	25.6	(22.4 - 28.7)	74.5	(67.3 - 81.6)
	Cotton	39.0	(25.5 - 52.4)	27.2	(9.9 - 44.4)				
	Garvin	36.2	(29.1 - 43.3)	25.6	(19.0 - 32.2)	32.2	(22.2 - 42.1)	79.0	(68.8 - 89.1)
	Grady	40.5	(35.9 - 45.0)	24.4	(20.0 - 28.7)	33.5	(27.0 - 39.9)	79.5	(67.9 - 90.9)
	Greer	44.1	(30.5 - 57.6)	23.3	(12.2 - 34.3)				
	Harmon								
	Jackson	36.4	(29.4 - 43.3)	24.7	(18.8 - 30.5)	29.1	(19.0 - 39.1)		
	Jefferson	36.7	(24.7 - 48.5)	24.0	(12.7 - 35.2)	23.7	(7.3 - 39.9)		
	Kiowa	37.2	(27.1 - 47.2)	31.8	(22.8 - 40.8)	26.2	(14.3 - 38.1)		
	Love	38.1	(27.4 - 48.8)	27.8	(18.1 - 37.4)	20.2	(7.8 - 32.5)		
	McClain	36.7	(31.4 - 41.8)	24.3	(18.5 - 30.0)	37.8	(28.5 - 47.0)		
	Stephens	32.8	(28.2 - 37.1)	28.8	(23.8 - 33.6)	21.0	(16.2 - 25.8)	77.1	(67.3 - 86.7)
Tillman	38.8	(26.1 - 51.5)	27.2	(17.3 - 37.0)	22.5	(8.5 - 36.4)			
Washita	39.2	(29.7 - 48.6)	24.4	(15.7 - 32.9)	23.6	(10.8 - 36.4)			
SE	Atoka	34.8	(24.9 - 44.5)	21.4	(13.6 - 29.0)	36.7	(20.9 - 52.3)		
	Bryan	36.5	(30.8 - 42.1)	18.6	(13.9 - 23.2)	24.6	(17.8 - 31.2)	65.6	(51.3 - 79.7)
	Choctaw	40.2	(31.7 - 48.5)	22.5	(14.9 - 30.0)	28.8	(18.5 - 39.1)		
	Coal	32.6	(15.3 - 49.8)	33.4	(16.9 - 49.7)				
	Haskell	38.3	(28.7 - 47.7)	25.6	(19.3 - 31.7)	26.2	(13.5 - 38.7)		
	Hughes	38.7	(29.3 - 47.9)	21.3	(14.5 - 28.0)	25.8	(12.8 - 38.7)		
	Johnston	38.6	(29.1 - 48.0)	29.3	(19.2 - 39.2)	28.0	(15.8 - 40.0)		
	Latimer	31.8	(22.5 - 41.0)	30.3	(20.1 - 40.3)	26.3	(12.9 - 39.7)		
	Le Flore	39.4	(33.1 - 45.5)	25.2	(20.6 - 29.8)	34.5	(27.2 - 41.7)	74.9	(63.1 - 86.5)
	McCurtain	39.2	(33.1 - 45.1)	29.2	(23.6 - 34.6)	34.8	(25.6 - 43.9)	61.4	(44.3 - 78.4)
	McIntosh	37.1	(29.6 - 44.5)	24.9	(18.8 - 30.9)	26.6	(18.5 - 34.7)	71.7	(57.4 - 85.9)
	Marshall	26.0	(17.3 - 34.6)	36.5	(26.7 - 46.2)	24.0	(13.0 - 34.9)		
	Murray	34.5	(26.6 - 42.2)	20.5	(13.0 - 27.9)	28.1	(17.3 - 38.9)		
	Pittsburg	34.5	(29.5 - 39.4)	26.3	(22.0 - 30.5)	28.5	(21.9 - 34.9)	79.5	(71.5 - 87.4)
	Pontotoc	37.8	(31.8 - 43.6)	26.2	(20.8 - 31.4)	25.7	(18.6 - 32.7)	75.3	(62.2 - 88.3)
	Pottawatomie	33.3	(29.4 - 37.2)	26.2	(22.8 - 29.5)	30.8	(26.6 - 34.9)	73.9	(66.9 - 80.8)
Pushmataha	37.8	(28.2 - 47.2)	24.7	(15.7 - 33.5)	30.1	(14.6 - 45.5)			
Seminole	34.9	(29.5 - 40.1)	30.0	(23.7 - 36.3)	33.9	(25.0 - 42.6)			
C	Cleveland	35.8	(32.5 - 38.9)	20.0	(17.7 - 22.2)	32.0	(28.1 - 35.7)	75.6	(69.1 - 82.0)
	Oklahoma	35.1	(33.4 - 36.6)	21.9	(20.3 - 23.4)	32.0	(29.6 - 34.3)	75.7	(71.7 - 79.5)
T	Tulsa	37.8	(35.9 - 39.6)	21.3	(19.8 - 22.7)	27.3	(25.2 - 29.2)	78.8	(75.5 - 82.0)

\*Note: If county data are missing, sample size was too small to calculate.

		Ever Had Pneumonia Shot, Adult 65+, OK 2003-2005		No Dentist Visit in 1 Year, Adult 18+ OK 2002, 2004		No Mammogram in 2 Years, Women 40+ OK 2002, 2004		No Pap Test in 3 Years, Women 18+ OK 2002, 2004	
		%	95% CI	%	95% CI	%	95% CI	%	95% CI
NW	Alfalfa								
	Beaver								
	Blaine			50.6	(32.5 - 68.6)				
	Canadian	68.0	(58.3 - 77.5)	25.0	(19.2 - 30.6)	19.4	(12.7 - 26.1)	8.9	(3.3 - 14.5)
	Cimarron								
	Custer	75.7	(65.4 - 85.9)	28.5	(18.9 - 37.9)	38.4	(26.2 - 50.5)		
	Dewey								
	Ellis								
	Garfield	73.3	(66.1 - 80.3)	42.0	(36.9 - 47.0)	35.7	(29.8 - 41.6)	17.2	(9.4 - 25.0)
	Grant								
	Harper								
	Kingfisher			35.1	(23.7 - 46.4)				
	Logan	63.6	(52.1 - 75.0)	45.6	(37.5 - 53.6)	31.1	(17.4 - 44.7)	21.0	(11.2 - 30.7)
	Major								
	Roger								
Texas			32.6	(19.9 - 45.3)					
Woods			34.4	(21.2 - 47.5)					
Woodward	73.0	(60.3 - 85.6)	40.6	(30.7 - 50.4)	45.7	(26.3 - 64.9)			
NE	Adair	57.5	(39.7 - 75.2)	56.7	(41.9 - 71.4)				
	Cherokee	72.8	(60.9 - 84.6)	45.2	(33.4 - 56.9)	50.0	(36.1 - 63.8)	28.7	(11.6 - 45.7)
	Craig	64.3	(46.7 - 81.8)	42.5	(26.7 - 58.1)				
	Creek	64.0	(52.6 - 75.3)	40.6	(33.6 - 47.5)	27.5	(19.8 - 35.0)	19.9	(10.1 - 29.7)
	Delaware	73.6	(65.1 - 82.0)	40.7	(30.6 - 50.8)	40.2	(28.1 - 52.3)		
	Kay	60.3	(50.4 - 70.0)	47.4	(38.7 - 55.9)	43.8	(31.9 - 55.5)	26.3	(13.9 - 38.5)
	Lincoln	82.4	(70.8 - 94.0)	37.0	(29.5 - 44.4)	28.0	(14.3 - 41.7)		
	Mayes	74.8	(61.6 - 87.8)	44.5	(35.5 - 53.4)	34.6	(21.8 - 47.2)		
	Muskogee	67.1	(59.9 - 74.1)	42.1	(34.1 - 50.1)	28.1	(19.0 - 37.0)	23.6	(15.9 - 31.1)
	Noble			43.0	(24.0 - 61.8)				
	Nowata	51.8	(38.3 - 65.1)						
	Okfuskee								
	Okmulgee	64.1	(52.0 - 76.1)	39.8	(29.0 - 50.5)	28.1	(15.4 - 40.7)		
	Osage	56.8	(45.2 - 68.3)	39.1	(30.8 - 47.3)	36.8	(23.3 - 50.2)	16.7	(5.8 - 27.5)
	Ottawa	72.9	(61.9 - 83.8)	56.8	(46.0 - 67.4)	35.0	(19.5 - 50.5)		
	Pawnee			48.9	(34.6 - 63.2)				
	Payne	66.7	(56.2 - 77.0)	38.1	(30.1 - 46.0)	28.0	(17.6 - 38.4)	14.4	(5.0 - 23.7)
	Rogers	70.4	(60.5 - 80.3)	38.6	(29.6 - 47.5)	29.7	(20.1 - 39.1)	15.5	(8.0 - 22.8)
	Sequoyah	65.3	(52.3 - 78.1)	41.8	(32.0 - 51.5)	33.1	(21.4 - 44.6)	13.8	(5.7 - 21.8)
	Wagoner	64.9	(55.7 - 74.1)	42.6	(34.3 - 50.8)	32.0	(19.6 - 44.2)	13.0	(4.3 - 21.5)
Washington	74.8	(66.4 - 83.0)	37.6	(30.6 - 44.5)	31.4	(21.8 - 40.8)	10.5	(5.7 - 15.1)	

\*Note: If county data are missing, sample size was too small to calculate.

		Ever Had Pneumonia Shot, Adult 65+, OK, 2003-2005		No Dentist Visit in 1 Year, Adult 18+ OK 2002, 2004		No Mammogram in 2 Years, Women 40+ OK 2002, 2004		No Pap Test in 3 Years, Women 18+ OK 2002, 2004	
		%	CI	%	95% CI	%	95% CI	%	95% CI
SW	Beckham			35.5	(22.1 - 48.7)				
	Caddo	73.6	(57.9 - 89.2)	46.6	(37.5 - 55.7)	30.1	(17.5 - 42.5)		
	Carter	69.9	(59.4 - 80.2)	44.8	(35.7 - 53.7)	47.6	(35.3 - 59.8)	21.8	(10.9 - 32.6)
	Comanche	73.9	(65.7 - 82.0)	30.5	(25.3 - 35.6)	26.6	(19.8 - 33.2)	8.3	(4.4 - 12.0)
	Cotton								
	Garvin	72.7	(59.1 - 86.2)	46.2	(35.0 - 57.4)	34.1	(22.3 - 45.7)	23.3	(10.8 - 35.8)
	Grady	76.2	(64.8 - 87.6)	44.4	(34.6 - 54.1)	27.1	(17.8 - 36.3)	12.5	(7.2 - 17.7)
	Greer								
	Harmon								
	Jackson			37.3	(28.0 - 46.4)			8.0	(1.5 - 14.4)
	Jefferson								
	Kiowa			46.6	(28.3 - 64.7)				
	Love								
	McClain			38.2	(26.8 - 49.5)				
Stephens	79.0	(69.6 - 88.3)	33.8	(26.2 - 41.2)	35.6	(24.3 - 46.7)	28.6	(15.3 - 41.7)	
Tillman									
Washita									
SE	Atoka								
	Bryan	77.2	(65.1 - 89.2)	41.5	(31.7 - 51.2)	36.8	(24.0 - 49.5)		
	Choctaw			38.6	(26.9 - 50.2)				
	Coal								
	Haskell			50.3	(38.8 - 61.7)				
	Hughes			56.8	(44.8 - 68.7)				
	Johnston								
	Latimer								
	Le Flore	70.7	(57.7 - 83.6)	42.2	(32.2 - 52.1)	26.4	(13.7 - 39.1)	22.6	(7.7 - 37.3)
	McCurtain	73.5	(60.5 - 86.3)	45.9	(34.2 - 57.6)	46.3	(29.5 - 63.0)	17.6	(8.3 - 26.9)
	McIntosh	59.4	(45.8 - 72.9)	42.8	(28.2 - 57.3)				
	Marshall			51.4	(36.7 - 66.0)				
	Murray			35.2	(19.2 - 51.0)				
	Pittsburg	81.9	(74.0 - 89.7)	43.3	(34.7 - 51.8)	35.3	(24.5 - 45.9)	19.4	(6.4 - 32.2)
	Pontotoc	66.7	(57.3 - 76.0)	41.9	(31.8 - 51.8)	27.5	(14.0 - 40.9)		
Pottawatomie	68.3	(61.0 - 75.5)	39.6	(32.3 - 46.7)	27.8	(19.0 - 36.4)	15.7	(8.8 - 22.5)	
Pushmataha			39.0	(21.0 - 56.9)					
Seminole			60.4	(47.1 - 73.7)	33.9	(22.0 - 45.6)			
C	Cleveland	74.3	(67.6 - 80.9)	28.5	(23.8 - 33.2)	24.5	(20.2 - 28.7)	18.1	(11.8 - 24.3)
	Oklahoma	69.3	(65.8 - 72.7)	35.0	(32.4 - 37.4)	28.9	(25.7 - 32.0)	17.0	(13.2 - 20.7)
T	Tulsa	71.9	(68.6 - 75.1)	34.4	(31.7 - 36.9)	25.1	(21.0 - 29.1)	13.2	(10.5 - 15.7)

\*Note: If county data are missing, sample size was too small to calculate.

		No PSA in 2 years, Men 40+, OK 2002, 2004		Never Had Sigmoid or Colonoscopy, Adult 50+, OK 2002, 2004		No Blood Stool Test in 2 years, Adult 50+, OK 2002, 2004	
		%	95% CI	%	95% CI	%	95% CI
NW	Alfalfa						
	Beaver						
	Blaine						
	Canadian	48.7	(36.2 - 61.1)	59.7	(52.5 - 66.8)	77.0	(71.2 - 82.8)
	Cimarron						
	Custer			57.0	(43.0 - 70.8)	78.3	(67.7 - 88.9)
	Dewey						
	Ellis						
	Garfield	48.7	(36.5 - 60.9)	56.1	(47.1 - 65.0)	79.9	(73.4 - 86.3)
	Grant						
	Harper						
	Kingfisher						
	Logan			54.0	(40.7 - 67.1)	81.2	(71.5 - 90.8)
	Major						
Roger							
Texas							
Woods							
Woodward			68.3	(54.5 - 81.9)	78.3	(67.0 - 89.5)	
NE	Adair			80.9	(72.1 - 89.6)	86.7	(75.8 - 97.4)
	Cherokee			59.1	(45.8 - 72.2)	82.7	(71.3 - 94.0)
	Craig						
	Creek	54.9	(41.2 - 68.6)	58.5	(47.9 - 69.0)	74.1	(63.9 - 84.3)
	Delaware			54.5	(44.5 - 64.5)	79.7	(71.4 - 88.0)
	Kay	36.9	(22.4 - 51.2)	60.8	(50.8 - 70.6)	76.1	(68.9 - 83.1)
	Lincoln			49.4	(33.8 - 64.9)	86.1	(76.5 - 95.5)
	Mayes			55.4	(39.8 - 70.8)	66.4	(54.8 - 78.0)
	Muskogee	58.2	(46.6 - 69.7)	46.9	(38.1 - 55.6)	73.4	(65.3 - 81.4)
	Noble						
	Nowata						
	Okfuskee						
	Okmulgee			61.7	(51.4 - 71.8)	89.4	(83.0 - 95.8)
	Osage	58.8	(44.4 - 73.0)	59.4	(46.4 - 72.3)	77.4	(67.2 - 87.4)
	Ottawa			60.4	(50.4 - 70.4)	78.2	(68.0 - 88.3)
	Pawnee						
	Payne	33.4	(20.5 - 46.1)	49.3	(38.7 - 59.9)	78.3	(68.9 - 87.6)
	Rogers	59.6	(44.5 - 74.5)	52.9	(43.4 - 62.3)	61.7	(52.2 - 71.1)
	Sequoyah			60.6	(48.7 - 72.4)	74.1	(62.8 - 85.3)
	Wagoner	44.9	(29.9 - 59.7)	55.3	(46.4 - 64.0)	70.3	(62.7 - 77.8)
Washington	54.5	(38.7 - 70.1)	50.9	(40.5 - 61.2)	75.5	(66.8 - 84.1)	

\*Note: If county data are missing, sample size was too small to calculate.



		No PSA in 2 years, Men 40+, OK 2002, 2004		Never Had Sigmoid Colonoscopy, Adult 50+, OK 2002, 2004		No Blood Stool Test in 2 years, Adult 50+, OK 2002, 2004	
		%	95% CI	%	95% CI	%	95% CI
SW	Beckham						
	Caddo			57.4	(44.2 - 70.5)	71.5	(57.6 - 85.4)
	Carter			61.2	(48.3 - 74.0)	87.0	(78.6 - 95.3)
	Comanche	33.4	(22.3 - 44.4)	55.7	(48.7 - 62.6)	79.5	(72.7 - 86.2)
	Cotton						
	Garvin			53.0	(38.5 - 67.5)	81.6	(72.3 - 90.8)
	Grady			48.5	(35.9 - 61.0)	69.8	(61.2 - 78.3)
	Greer						
	Harmon						
	Jackson			62.4	(49.4 - 75.4)	83.8	(70.9 - 96.5)
	Jefferson						
	Kiowa						
	Love						
	McClain			52.6	(34.1 - 71.0)	74.0	(60.2 - 87.7)
	Stephens	47.7	(33.1 - 62.2)	60.2	(50.0 - 70.3)	71.6	(64.2 - 78.9)
Tillman							
Washita							
SE	Atoka						
	Bryan			54.5	(35.6 - 73.2)	71.9	(58.3 - 85.3)
	Choctaw						
	Coal						
	Haskell						
	Hughes						
	Johnston						
	Latimer						
	Le Flore	53.8	(36.8 - 70.8)	58.1	(46.4 - 69.7)	69.9	(60.4 - 79.2)
	McCurtain			64.9	(50.0 - 79.7)	81.3	(71.7 - 90.7)
	McIntosh			44.8	(28.6 - 60.9)	66.6	(47.9 - 85.1)
	Marshall						
	Murray						
	Pittsburg			66.1	(57.5 - 74.6)	73.5	(65.1 - 81.8)
	Pontotoc			49.6	(35.2 - 64.0)	83.1	(73.8 - 92.3)
Pottawatomie	53.2	(41.1 - 65.2)	57.6	(50.5 - 64.7)	81.4	(75.5 - 87.1)	
Pushmataha							
Seminole			68.4	(54.9 - 81.7)	94.9	(87.7 - 100.0)	
C	Cleveland	51.5	(44.0 - 58.9)	52.0	(44.9 - 59.0)	74.9	(68.6 - 81.0)
	Oklahoma	43.1	(38.2 - 47.9)	56.7	(52.1 - 61.2)	79.5	(76.5 - 82.4)
T	Tulsa	47.0	(42.5 - 51.4)	49.6	(44.9 - 54.2)	62.3	(58.6 - 65.9)

\*Note: If county data are missing, sample size was too small to calculate.

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