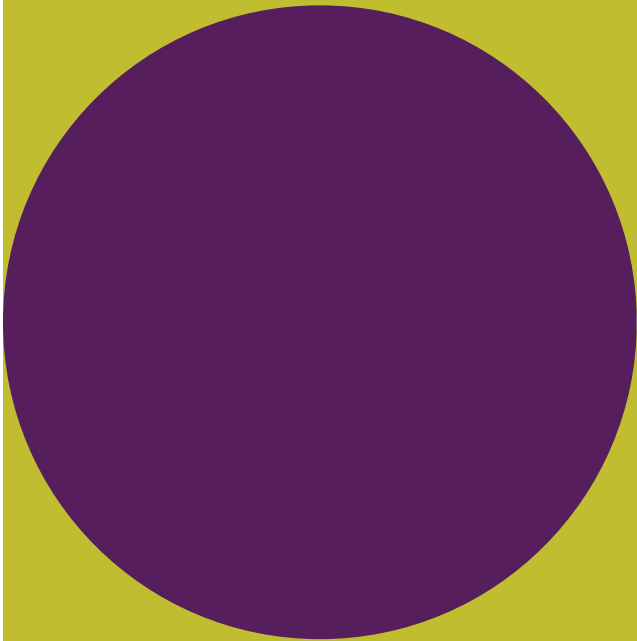
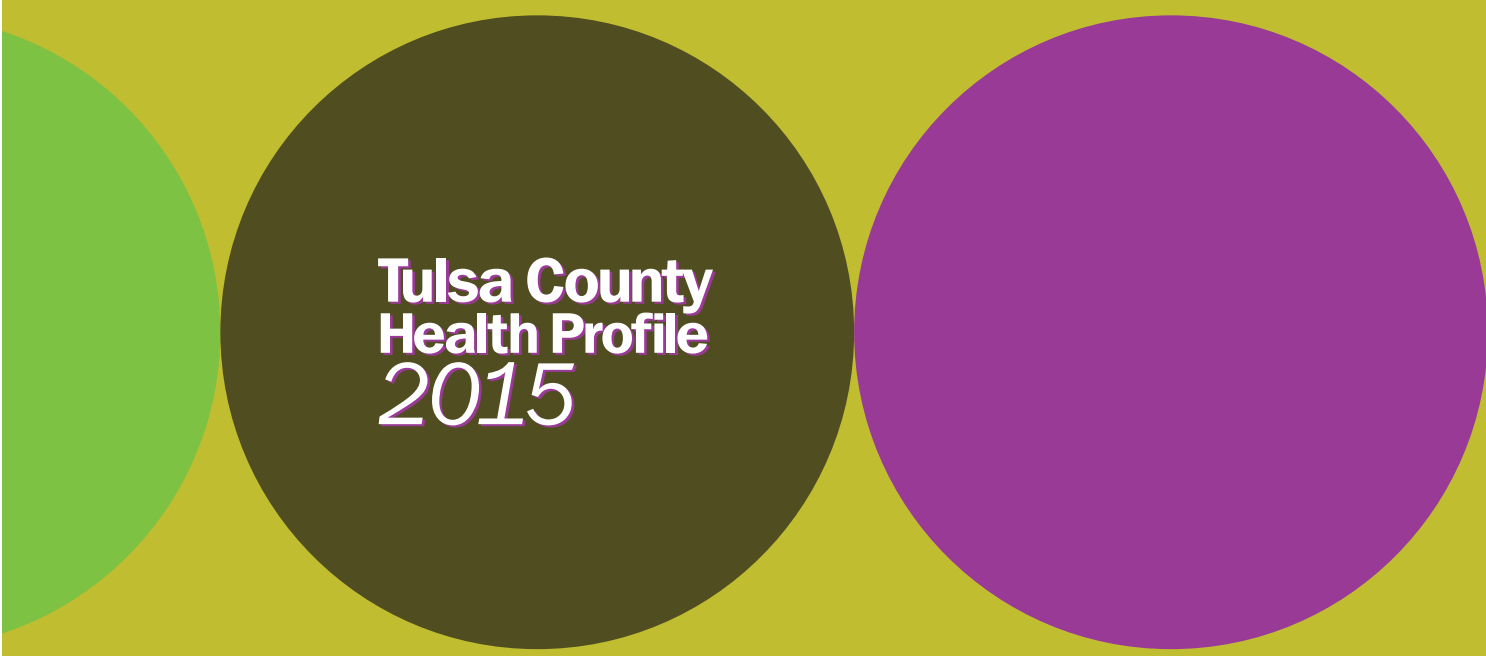


# Tulsa County Health Profile 2015







**Tulsa County  
Health Profile  
2015**

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# Director's Message

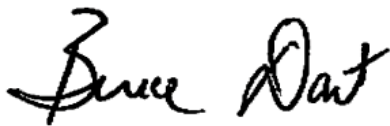
I am pleased to present the 2015 Tulsa County Health Profile. The Tulsa Health Department develops this report to provide a snapshot of health in our community comparable over the years. The goal of this document is to provide the public and our community partners with insight into the health and well-being of Tulsa County residents.

Many factors can influence health, including behavioral factors such as tobacco use, diet, physical activity, alcohol and drug use, and sexual behavior. This document combines data from a variety of validated sources in order to track the causes and trends of morbidity and mortality in Tulsa County.

The Tulsa County Health Profile, along with the Community Health Needs Assessment and the Community Health Improvement Plan, encourages collaborative efforts with community partners to promote prevention and improved health outcomes. It is an invaluable tool that can be used to highlight the trends and indicators that can affect our health, whether positively or negatively, and bring the community together to work towards improved outcomes. It is important that this document does not simply sit on a shelf. It should be used to develop strategies, improve policies, and promote effective collaboration and interventions that will have a lasting impact on the health status of Tulsa County residents.

It is our hope that you use the 2015 Tulsa County Health Profile to enhance your own efforts toward making a difference in our community. It is exciting to recognize the possibilities for improvement as we work toward providing programs and services to impact the community from the Tulsa Health Department. We look forward to working together for a healthier future and a healthier Tulsa County.

Sincerely,

A handwritten signature in black ink that reads "Bruce Dart". The signature is written in a cursive, flowing style.

Bruce Dart, Ph.D.  
Executive Director  
Tulsa Health Department

# Methodology

## ZIP Code Level

Many of the health indicators in this assessment are defined at the ZIP code level and are presented for all the ZIP codes that are completely or partially within Tulsa County. This more visual approach to data presentation is intended to promote easier identification of health concerns for specific areas of the county and therefore assist in targeting programs, resources and necessary intervention where they are most needed.

## Rates

This profile presents most of the information in the form of 'rates.' Rates allow for more accurate comparison to other populations and geographic areas. Rates are developed by taking the total number of events and dividing it by the total population (or population at risk of the event) in the same specific area. Rates in this profile are computed per 1,000 or 100,000 population. This report contains both crude and age-adjusted rates.

In general, areas of larger population can be expected to support more reliable rate calculations. Note that ZIP codes 74050, 74103, 74116, 74117, 74119, 74130 and 74131 all have populations less than 5,000. Caution should be exercised in interpreting data for these less populated areas as they can potentially result in misleading comparisons with other ZIP codes. In addition, the calculation of rates is not recommended when there are less than five indicator births or deaths due to confidentiality and reliability concerns.

## Data Breaks

When viewing a table or map, the data are grouped for presentation by natural breaks in the data sets. 'Natural breaks' is also the name of the default computer generated method of classifying data in the geographic information system software, ArcGIS, used to produce the maps presented in this report. This method of classification was developed by the cartographer George Jenks and creates classes according to clusters and gaps in the data. Use of natural breaks supports a user-friendly visual representation of the geographic distribution of risk factors and outcomes of health data in Tulsa County.

## Descriptive Statistics

This profile uses graphs, charts, maps, and narrative to statistically describe the factors that affect the health of the Tulsa County community. These statistics show patterns and general trends, without any effort to test hypotheses. The information presented includes both risk factors and health outcomes. Geographic and demographic areas of public health concern can be identified by evaluating data presented for each of the Tulsa County ZIP codes.

## Time Period

Data throughout the profile are generally included for the years 2011 – 2013, depending on the availability of data for the specific topic. Therefore, most data are rates over a three year period. ZIP code level population data which is used to calculate rates was obtained from 2011 – 2013 American Community Survey 5-year estimates. ACS 5-year estimates represent average characteristics over the 5-year period of time. These 5-year estimates are more reliable, especially for smaller population sizes.

# Methodology

## Comparative Data for Oklahoma and U.S.

Where possible, this profile includes comparative data for Tulsa County, Oklahoma and the United States. Additionally, Healthy People 2020 objectives were used as indicators for areas of improvement, where applicable. Healthy People provides science-based, 10-year national objectives for improving the health of all Americans.

## Overall ZIP Code Rating

This profile looks at numerous risk/outcome measures that give an indication of the health status of the community. The profile records the data by ZIP codes and each measure uses the same exact ZIP codes. ZIP codes are grouped into five data ranges using natural breaks in the overall data for each measure (see Data Breaks) and shaded accordingly in the presentation maps. Data groupings are assigned values of 1 through 5 with “1” (lightest shading) being the most favorable and “5” (darkest shading) indicating areas of greatest potential concern from a public health perspective. An average ZIP code rating is also computed that collapses the individual risk/outcome measures into a single summary statistic for each ZIP code and the tables are sorted according to this average rating.

## Changes from Previous Years

There were five changes/replacements to the 2015 Health Profile compared to previous health profiles: Female Householders, Teen Birth Rate Ages 15 – 17, Teen Birth Rate Ages 15 – 19, Life Expectancy, and Physicians & Dentists.

- *Female Householders*: This indicator is defined as the number of households headed by a female with related children less than 18 years of age, as a percentage of all households with related children less than 18 years of age. The previous health profiles defined the ‘Female-Headed Household’ indicator as the number of households headed by a female with her own children under 18, as a percentage of all households. This change led to an increased percentage of households that were defined as ‘Female Householders.’
- *Teen Birth Rate 15 – 17 and 15 – 19*: These two indicators replaced ‘Births to Teens Ages 15 – 17’ and ‘Births to Teens Ages 15 – 19’ in the previous health profiles. The new indicator is a rate and takes into account the number of female teens in that age group. The previous indicators reported the percentage of births that were to teens. This does not take into account the number of females in that age group within a specific population (location or demographic) and was more easily misinterpreted.
- *Life Expectancy*: The ‘Life Expectancy’ indicator replaced ‘Years of Potential Life Lost’ from the previous health profiles. Life expectancy generally refers to the average number of years a person may expect to live when they are born. It is based on age-specific death rates and is more easily interpreted and understood than years of potential life lost.
- *Physicians & Dentists*: The number of physicians and dentists in Tulsa County reported by ReferenceUSA decreased from 2014 – 2015. Per correspondence with the database company, they recently improved their medical records data source and the data is currently of a better quality.

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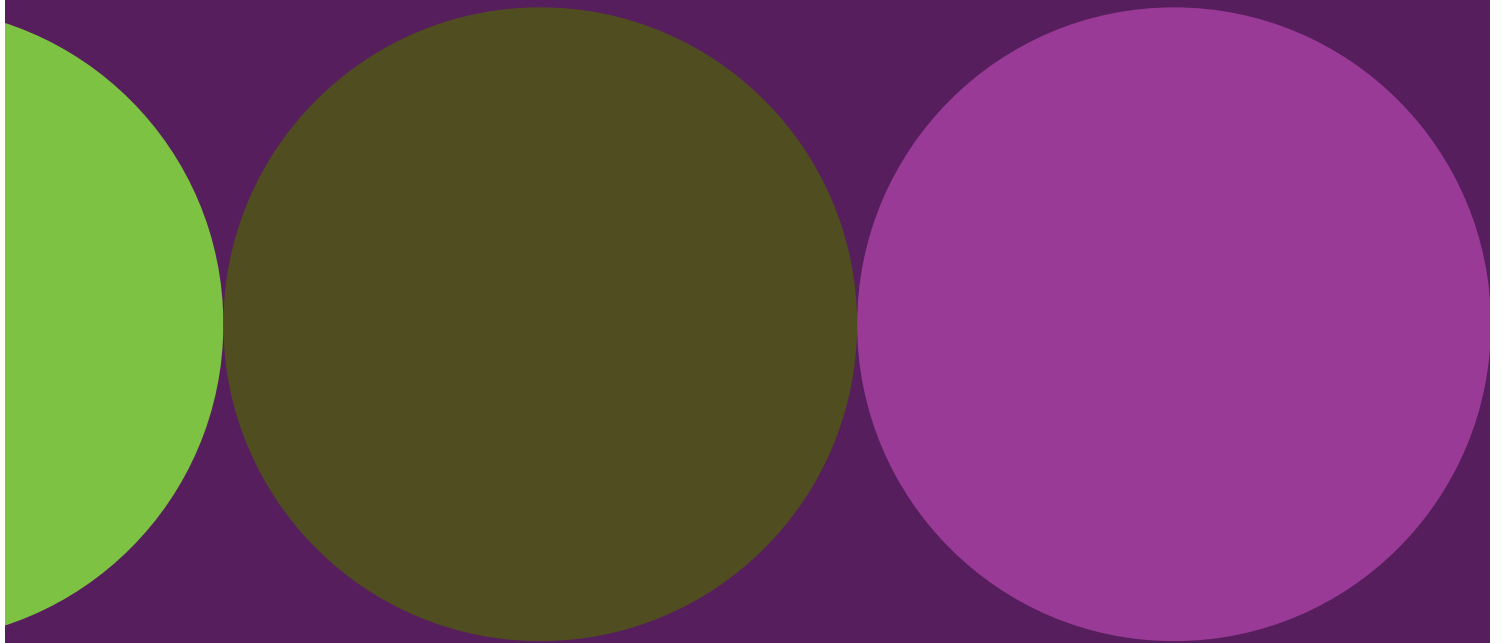
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# Demographics



# Total Population

The total population is presented simply as the number of individuals living in each ZIP code, according to the 2013 5-year population estimates by the American Community Survey.

## Why Is This Indicator Important?

The numeric size of the population is used as the basis for deriving many of the rates for the community health indicators presented later in this report, such as ZIP code specific rates and gender, age, and racial/ethnic specific rates.

## How Are We Doing?

Tulsa County had an estimated population of 609,610 individuals in 2013. Overall, the female population (51.2 percent) slightly exceeded the male population (48.8 percent). At lower age ranges, males outnumbered females; however, the opposite was true in older age groups. In fact, females comprised almost 60 percent of the population age 65 and older. Tulsa County's median age (35.3 years) was slightly younger than the state's median age (36.2 years) and the median age of the nation (37.3 years).

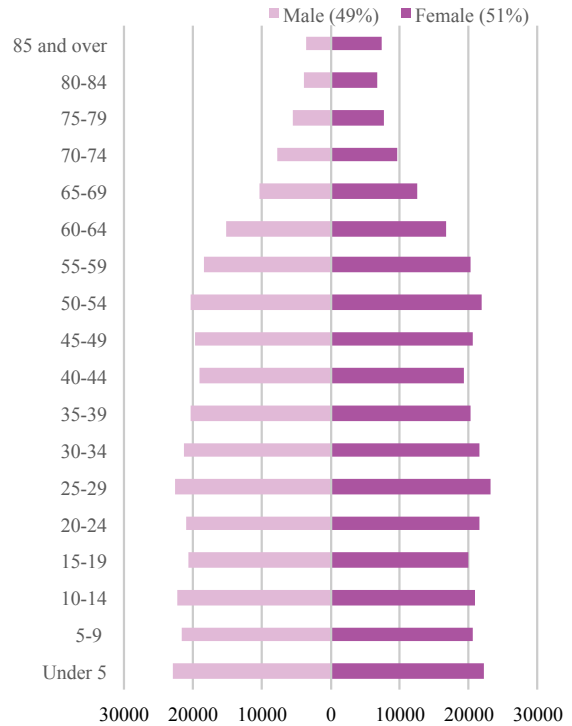
Whites comprised 72.0 percent of the population and blacks made up the largest minority race at 10.3 percent. Hispanics comprised 11.2 percent of the population in 2013, although that is potentially an underestimation because of undercounting of undocumented Hispanic immigrants. It should be noted that race and ethnicity are separate concepts. Individuals of Hispanic origin are those who indicate that their country of origin is Mexico, Puerto Rico, Cuba, Central or South America, or some other Hispanic origin, and can be of any race. Non-Hispanic refers to all people whose ethnicity is not Hispanic.

The ZIP codes with the highest population were 74012 in Broken Arrow and 74133 in south Tulsa. Together, these ZIP codes comprised 16.8 percent of the Tulsa County population. ZIP code 74055 in Owasso had the third largest population, although a portion of this ZIP code is in Rogers County.

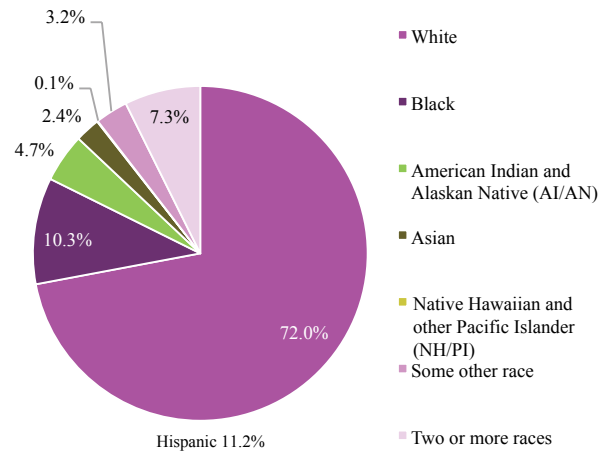
### Data Source:

American Community Survey 2013.

Population by Age and Gender  
Tulsa County | 2013

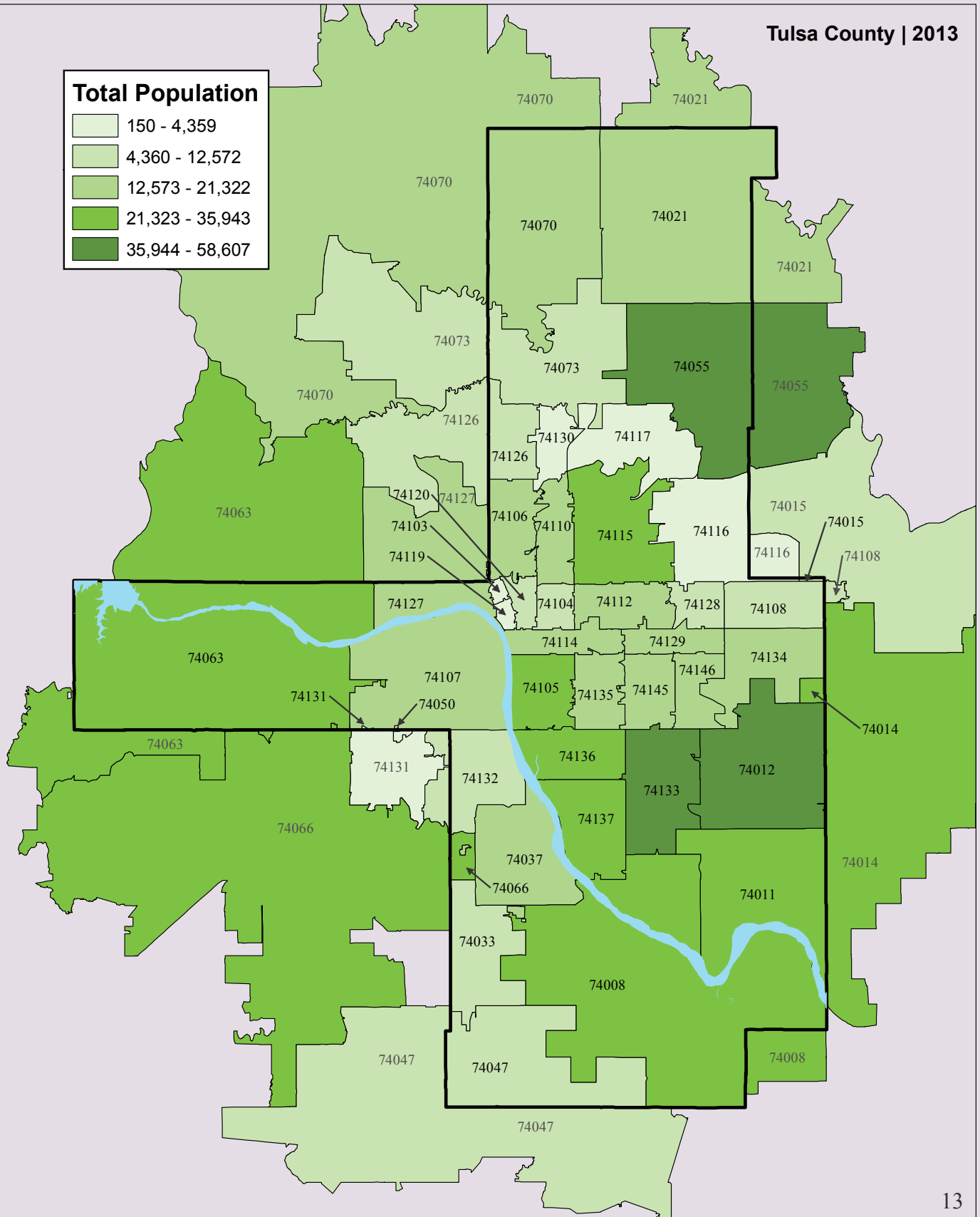
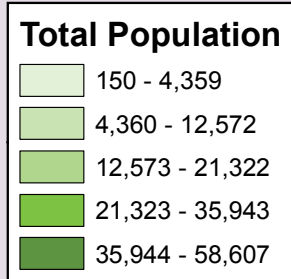


Total Population by Race  
Tulsa County | 2013



# Total Population

Tulsa County | 2013



# Population Change

This demographic indicator is presented as the percentage change in the population within each ZIP code from the 2010 Census to the 2013 American Community Survey 5-year estimates. There was minimal change in ZIP code boundaries in this intervening period.

## *Why Is This Indicator Important?*

Trends in general population growth and decline help target specific locations and/or demographic groups where public health efforts should be focused in order to ensure adequate access to community-based programs.

## *How Are We Doing?*

With the exception of Sperry, all cities in Tulsa County experienced growth from 2010 to 2013. Owasso was the fastest growing city, with a 5.7 percent increase in population from 2010 to 2013.

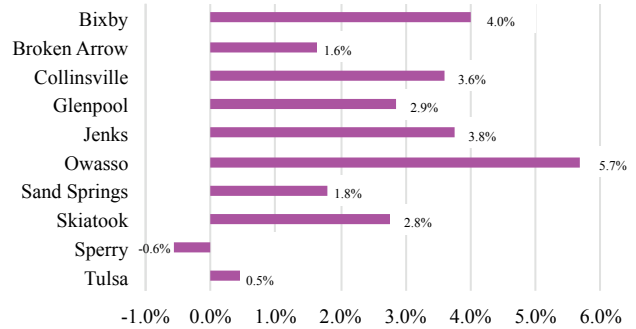
Although most racial and ethnic populations increased from 2010 to 2013, the black and American Indian/Alaskan Native minorities decreased. The most striking growth occurred in the population of two or more races, which was estimated to have a 27.6 percent increase from 2010 – 2013.

### *Data Source:*

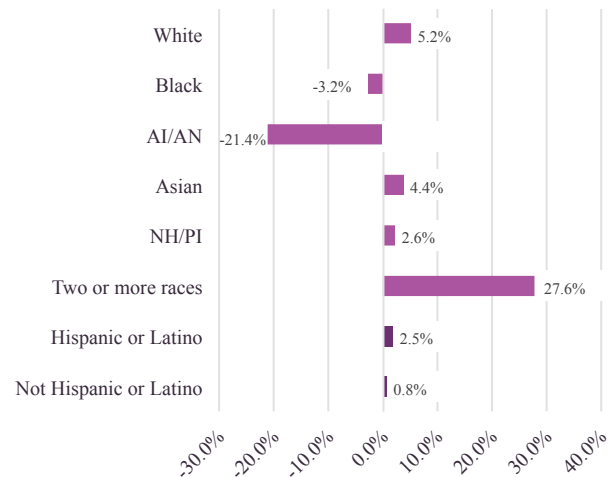
American Community Survey 2013.

U.S. Census Bureau: 2010 Census.

Population Change by Selected Cities  
2010 – 2013



Population Change by Race/Ethnicity  
Tulsa County | 2013





# Black Population

The distribution of the black population is expressed as the percentage of the total population within each ZIP code who reported being black, based on 2013 American Community Survey 5-year estimates.

## Why Is This Indicator Important?

There are many health inequalities that affect blacks and other minorities in the United States. Some apparent disparities include lower life expectancies and higher death and infant mortality rates.

## How Are We Doing?

Blacks were the largest minority race in Tulsa County with an estimated population of 62,729 in 2013. Data from 2013 indicated that blacks comprised 10.3 percent of Tulsa County's population, compared with 7.2 percent of Oklahoma and 12.6 percent of the nation.

Overall, 47.5 percent of blacks were male and 52.5 percent were female. Males slightly outnumbered females in the younger age groups, but this trend began to reverse after the teenage years. Females comprised 61 percent of the black population age 65 and over.

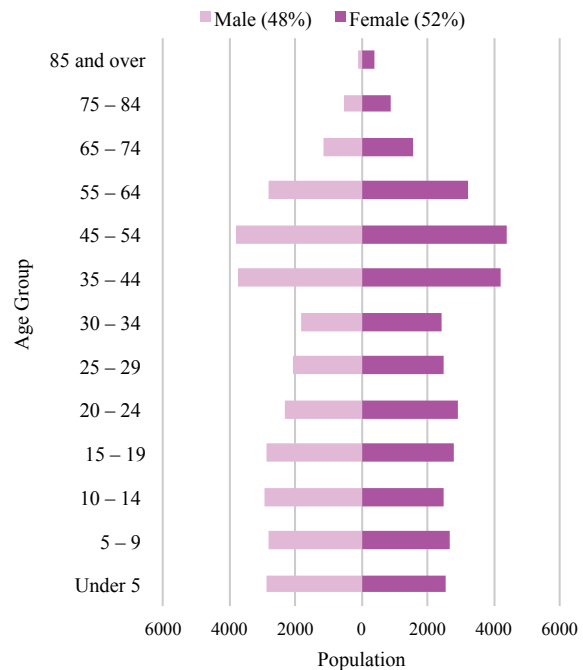
The black population was shown to reside primarily in the city of Tulsa, with the highest percentages in ZIP codes 74106 and 74126.

### Data Source:

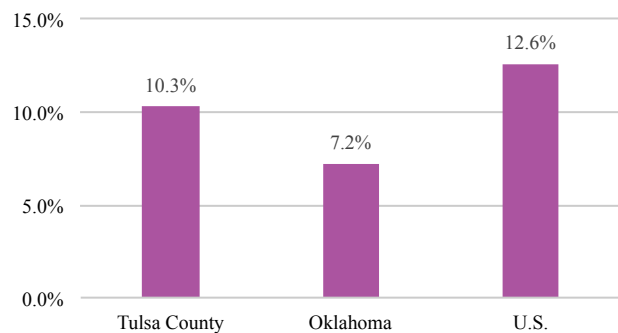
Minority Health: Black or African American Populations. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

American Community Survey 2013.

Black Population by Age and Gender  
Tulsa County | 2013



Black Population by Locality | 2013







# Hispanic Population

The distribution of the Hispanic population in Tulsa County is expressed as a percentage of the total population within each ZIP code who reported being Hispanic or Latino, based on 2013 American Community Survey 5-year estimates.

## Why Is This Indicator Important?

Based on U.S. Census data, the Hispanic population in Tulsa County has been increasing since 2000. However, there are many barriers which can lead to inequalities in health care and preventive services among this group, such as education and income. Health disparities among Hispanics include high rates of asthma, HIV/AIDS, and obesity. Hispanics also have a disproportionately higher uninsured rate compared to non-Hispanics.

## How Are We Doing?

According to the 2013 American Community Survey 5-year estimates, the Hispanic population numbered 68,260 in Tulsa County. However, due to the potential undercounting of undocumented Hispanic immigrants, the number was likely much higher. Overall, 53.2 percent of Hispanics were male and 46.8 percent were female. Hispanic males outnumbered females in all age groups below age 65.

In 2013, Hispanics comprised 11.2 percent of the Tulsa County population, which was higher than the state value of 9.1 percent, but lower than the U.S. percentage of 16.6 percent. Again, these were likely underestimates of the true size of the population.

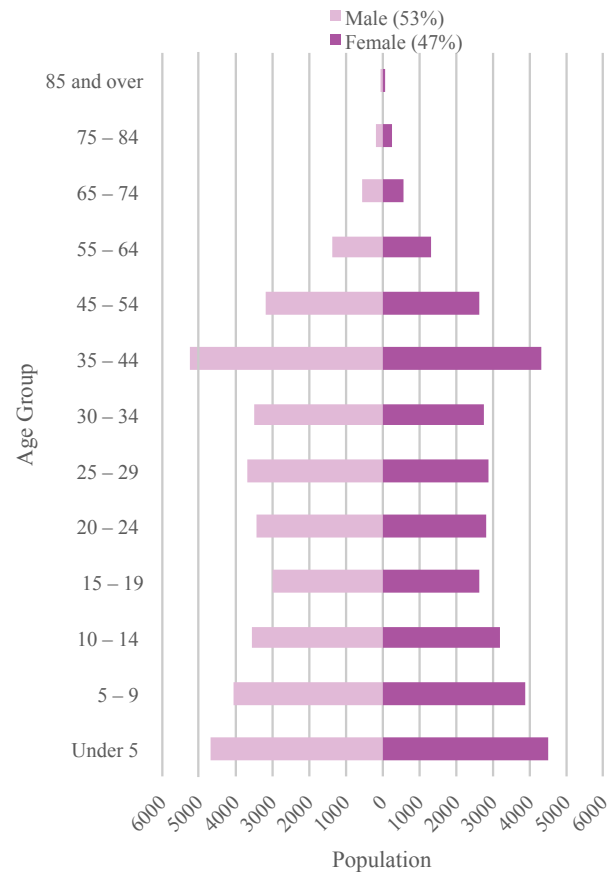
The Tulsa County ZIP codes with the highest percentages of Hispanics were 74146, 74116, 74128, 74115, and 74110.

### Data Source:

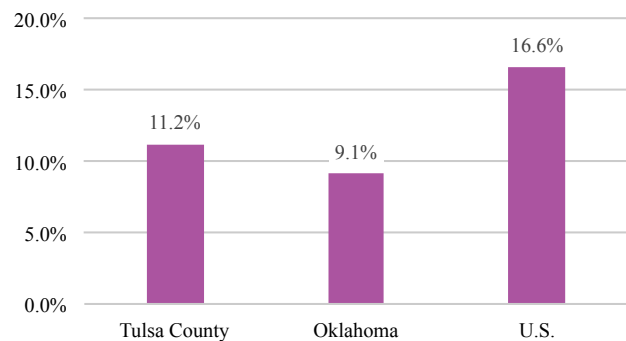
Minority Health: Hispanic or Latino Populations. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

American Community Survey 2013.

Hispanic Population by Age and Gender  
Tulsa County | 2013



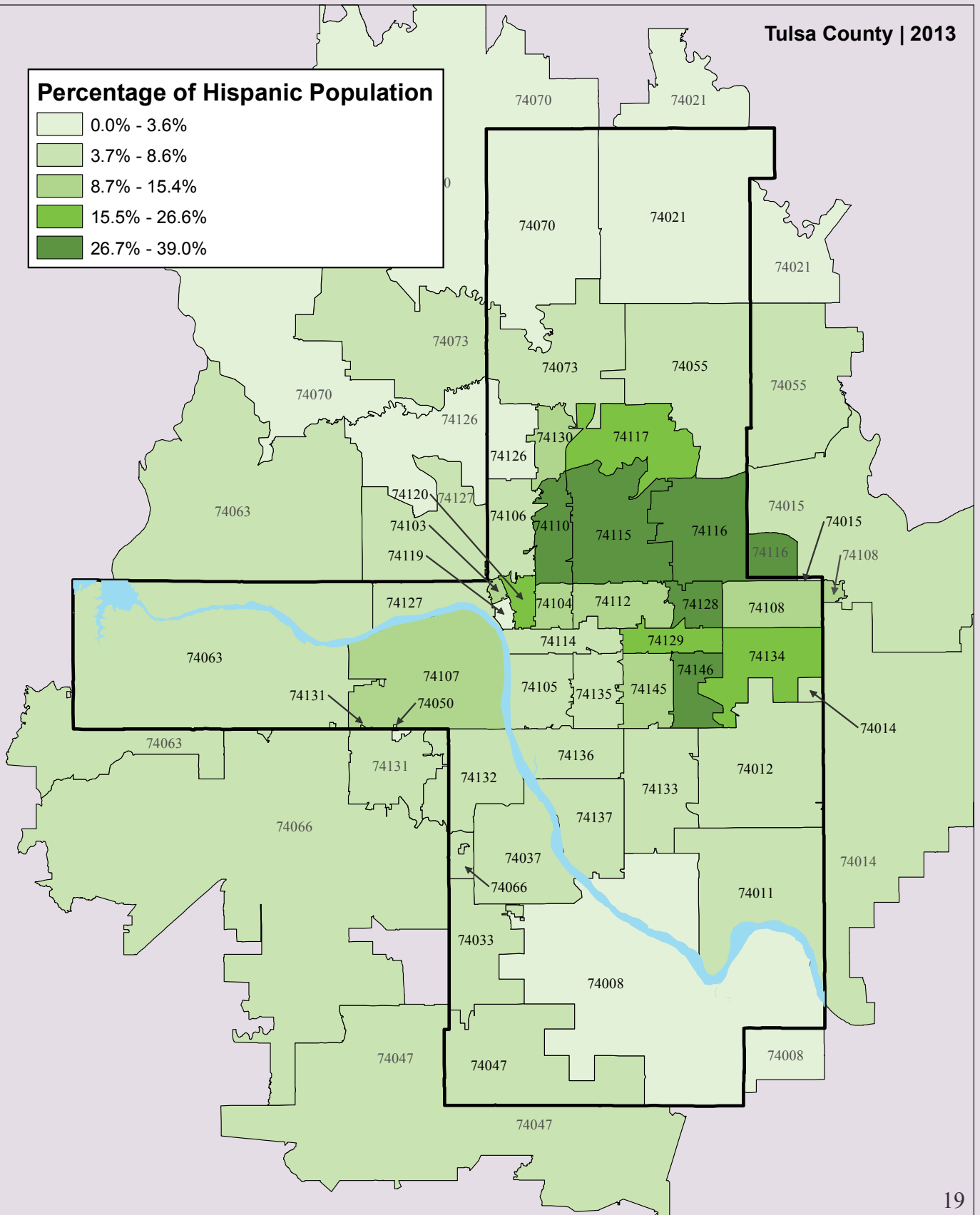
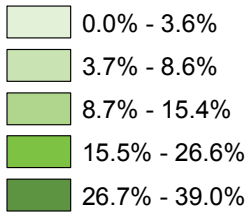
Hispanic Population by Locality | 2013



# Hispanic Population

Tulsa County | 2013

## Percentage of Hispanic Population



# Young Children Ages 0 – 4

This indicator is presented as the percentage of the total population ages 0 to 4 years, based on 2013 American Community Survey 5-year estimates.

## *Why Is This Indicator Important?*

Young children are especially vulnerable to unintentional injuries, lead poisoning, infectious diseases, and abuse and neglect, which are conditions that are largely preventable and open to public health interventions.

## *How Are We Doing?*

In 2013, there were approximately 45,272 children ages 0 to 4 years living in Tulsa County. The proportion of young children was highest among blacks (8.6 percent). Children in this age group made up 13.5 percent of the Hispanic population.

In 2013, Tulsa County had a higher proportion of young children (7.4 percent) than Oklahoma (7.0 percent) and the nation (6.4 percent).

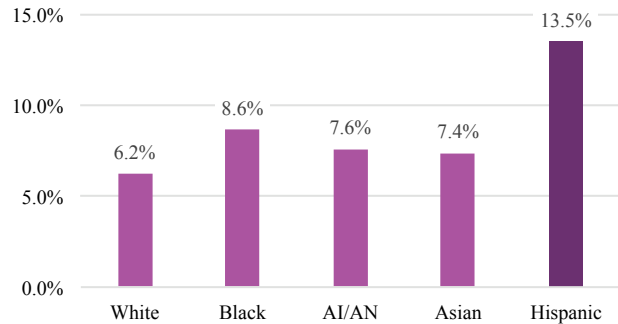
ZIP code 74116 had the highest percentage of children ages 0 – 4. Based on 2013 5-year estimates, there were no children ages 0 – 4 in ZIP codes 74103 and 74117.

### *Data Source:*

Parent Information: *Infants and Toddlers*. Centers for Disease Control and Prevention.  
Retrieved from: <http://www.cdc.gov/>

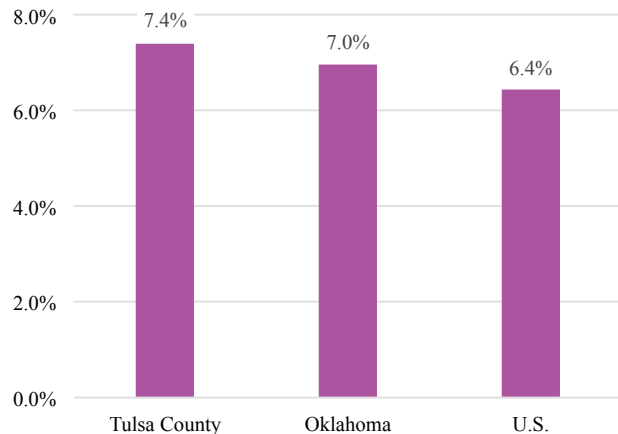
American Community Survey 2013.

Population Ages 0 – 4 by Race/Ethnicity\*  
Tulsa County | 2013

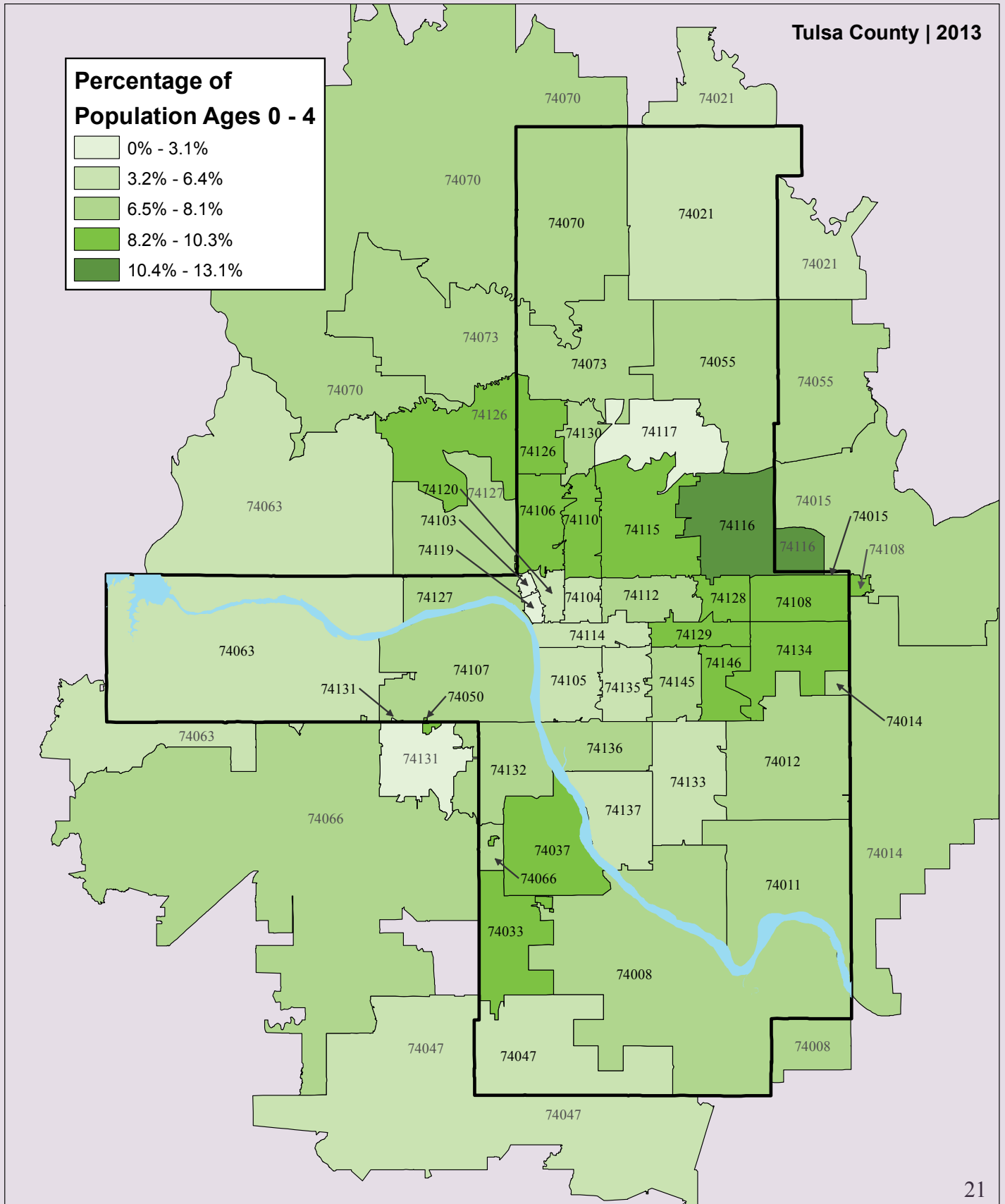


\*Graph shows value within each individual category (in this case, within racial or ethnic group); percentages will not add up to 100%. For example: Within the total white population of Tulsa County, 6.2 percent of these individuals are ages 0 – 4. Unless otherwise noted, all further column graphs follow this guideline.

Population Ages 0 – 4 by Locality | 2013



# Young Children Ages 0 – 4



# Population Ages 15 – 24

This indicator is presented as the percentage of the total population ages 15 – 24 years, based on 2013 American Community Survey 5-year estimates.

## *Why Is This Indicator Important?*

Adolescents and young adults are particularly sensitive to environmental influences, which makes them susceptible to risky behaviors and social problems that can determine their current health status and their risk for developing chronic diseases in adulthood. Examples of behaviors and social problems that often start or peak during these years include homicide, suicide, motor vehicle accidents, substance abuse, smoking, sexually transmitted diseases including HIV/AIDS, teen and unplanned pregnancies, and homelessness. Addressing the positive development of young people facilitates their adoption of healthy behaviors and helps to ensure a healthy and productive future adult population.

## *How Are We Doing?*

In 2013, this age group included 83,888 individuals, or 13.7 percent of the total population. Blacks had the highest proportion of individuals in this age group (17.4 percent), followed by American Indians/Alaskan Natives (16.6 percent). Individuals in this age group made up 17.4 percent of the Hispanic population.

In 2013, Tulsa County had a lower proportion of individuals ages 15 – 24 (13.7 percent) than Oklahoma (14.2 percent) and the U.S. (14.1 percent).

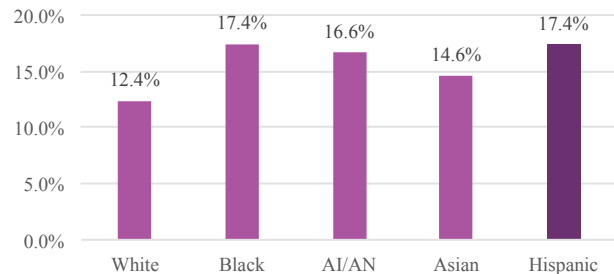
ZIP codes with the highest proportion of individuals ages 15 – 24 included 74050, 74104, and 74103.

### *Data Source:*

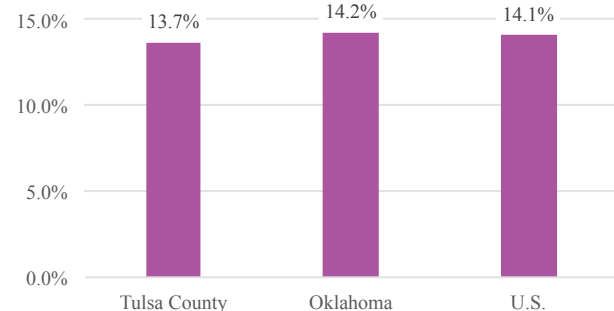
Healthy People 2020: Adolescent Health. U.S. Department of Health and Human Services.  
Retrieved from: <http://www.healthypeople.gov/>

American Community Survey 2013.

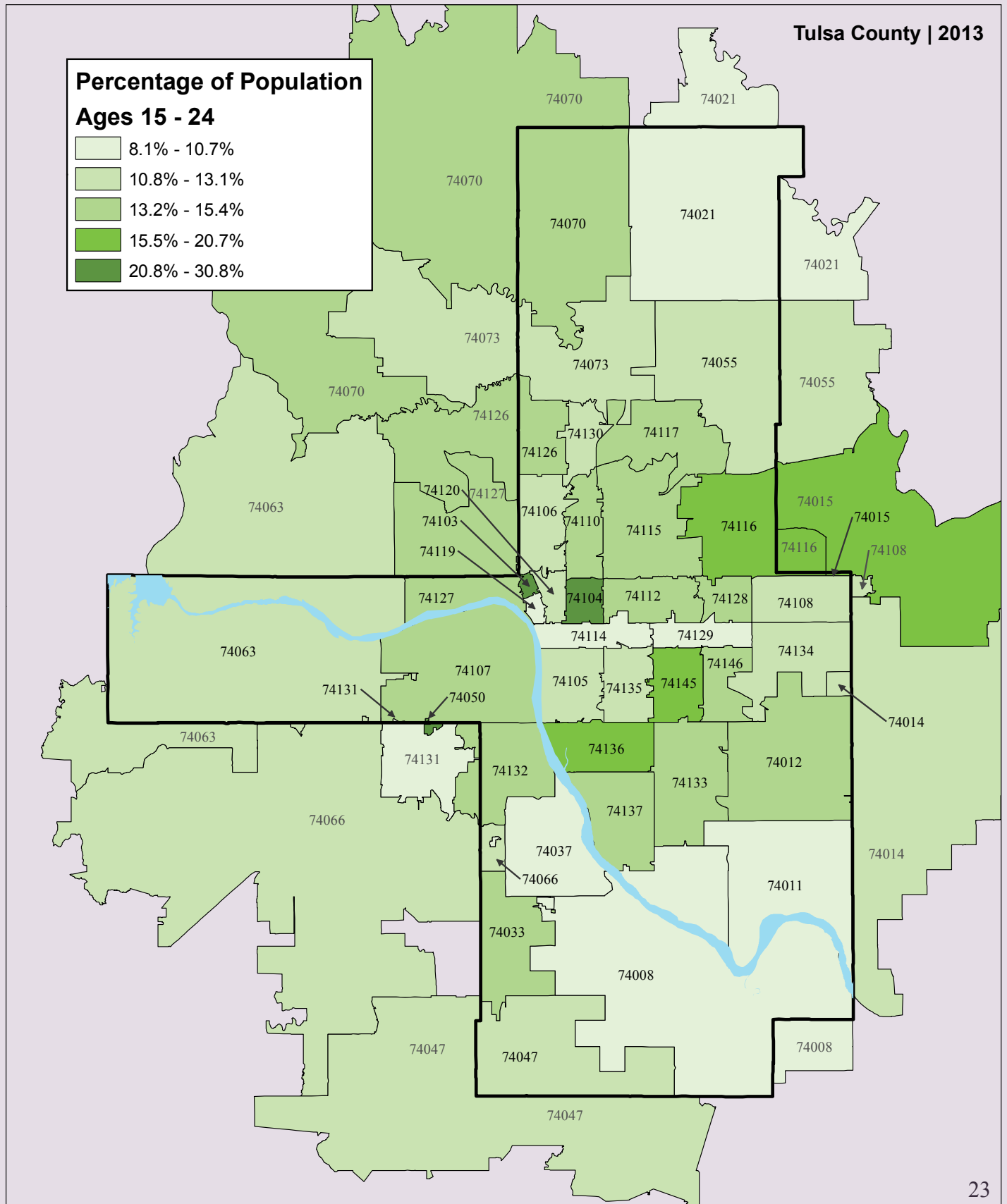
Population Ages 15 – 24 by Race/Ethnicity  
Tulsa County | 2013



Population Ages 15 – 24 by Locality | 2013



# Population Ages 15 – 24



# Population Ages 25 – 64

This indicator represents the percentage of the total population ages 25 – 64 years, based on 2013 American Community Survey 5-year estimates.

## *Why Is This Indicator Important?*

This age group represents working-age adults that significantly contribute to the work force and the economy. The health of this age group is especially important for a healthy and productive economy. Research indicates that employees are more productive in the workplace if they are both physically and mentally healthy.

## *How Are We Doing?*

In 2013, this age group numbered 320,526 individuals. Whites and Asians had a higher percentage of the population in this age group (54.4 percent and 56.0 percent, respectively) than the other races. Individuals in this age group accounted for 45.2 percent of the Hispanic population.

In 2013, 52.6 percent of Tulsa County residents were ages 25 – 64, compared to 51.3 percent of Oklahomans and 52.9 percent of the national population.

The ZIP codes with the highest percentage of individuals in this age group were 74103 and 74119 in the downtown Tulsa area.

### *Data Source:*

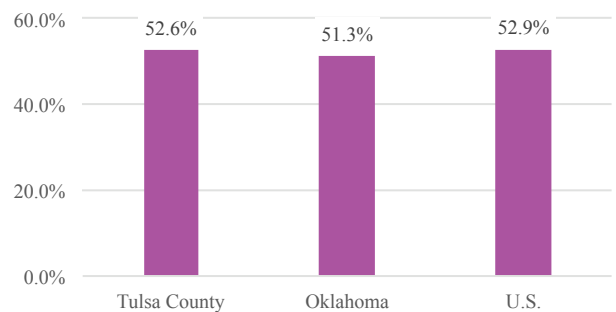
Workplace and Community Wellness. Trust for America's Health. Retrieved from: <http://healthyamericans.org/>

American Community Survey 2013.

Population Ages 25 – 64 by Race/Ethnicity  
Tulsa County | 2013



Population Ages 25 – 64 by Locality | 2013



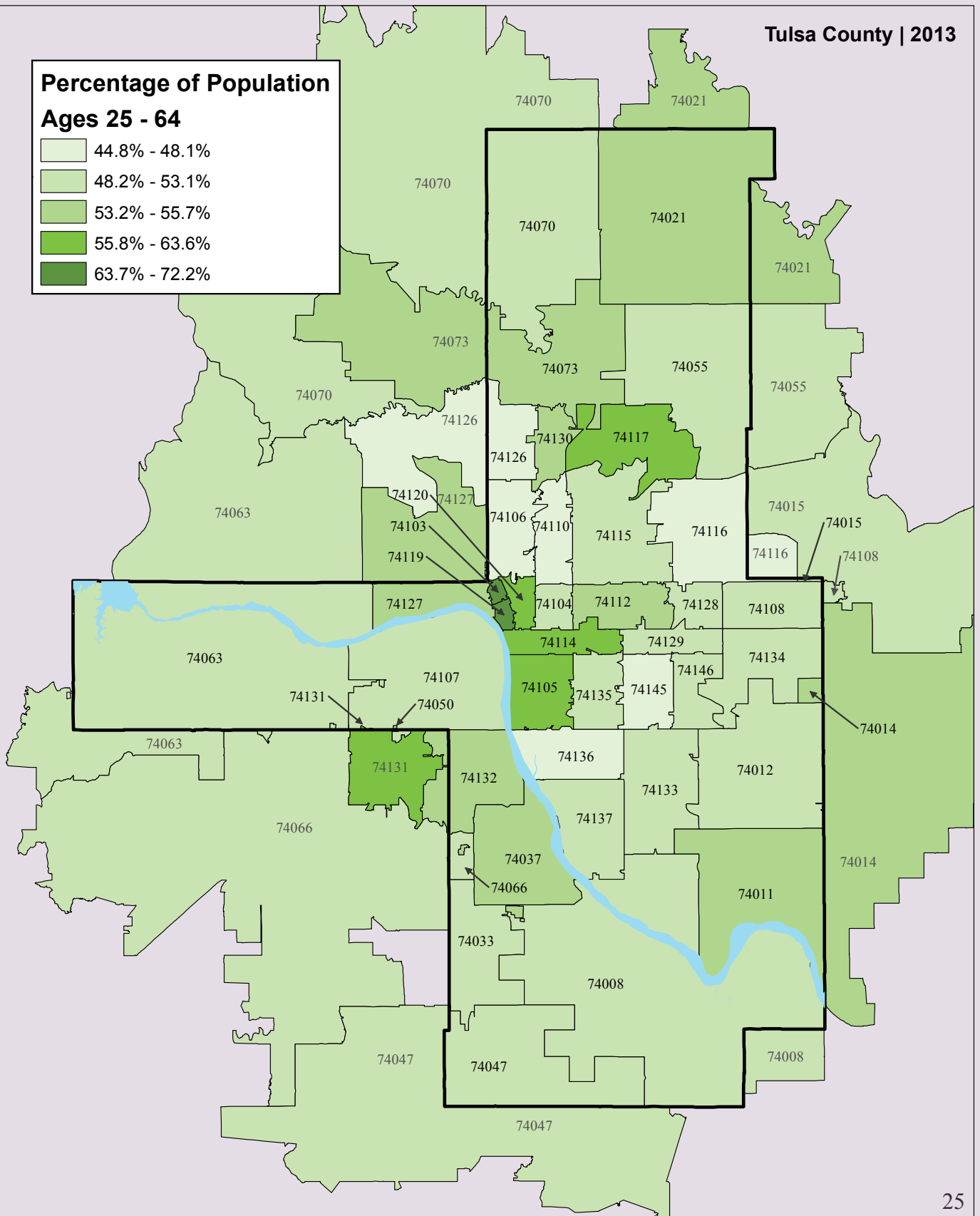
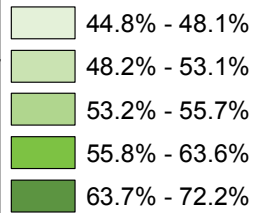


# Population Ages 25 – 64

Tulsa County | 2013

## Percentage of Population

### Ages 25 - 64



# Population Age 65 & Older

This indicator represents the percentage of the total population age 65 years and older, based on 2013 American Community Survey 5-year estimates.

## *Why Is This Indicator Important?*

Due to increased life expectancies, the proportion of adults age 65 and older is growing faster than ever before. Although life expectancy and overall health have both improved in recent years, there are still significant health disparities within this age group due to factors such as economic status, race, and gender. Many older adults struggle with chronic disease, falls, and mental health issues which can negatively impact their quality of life.

## *How Are We Doing?*

In 2013, Tulsa County had 75,072 residents age 65 and older. The proportion of the white population age 65 and older was significantly larger (14.7 percent) than the other races. Individuals in this age group made up only 2.5 percent of the Hispanic population.

In 2013, 12.3 percent of Tulsa County residents were age 65 and older, which was lower than both Oklahoma (13.8 percent) and the U.S. (13.4 percent).

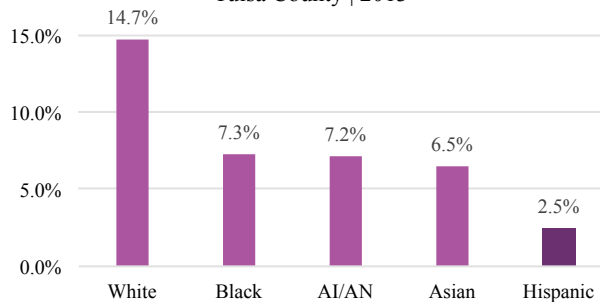
The ZIP codes with the highest percentage of individuals in this age group were 74117, 74114, 74135, and 74145.

### *Data Source:*

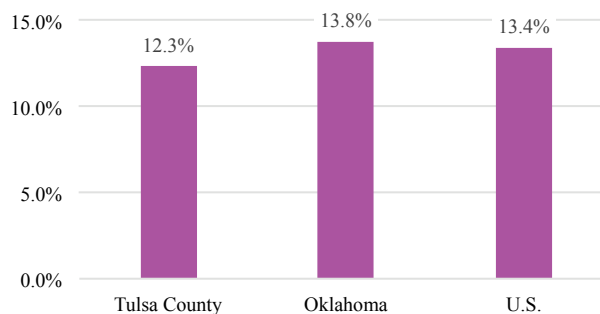
Health Aging Fact Sheet. National Council on Aging. Retrieved from: <http://www.ncoa.org/>

American Community Survey 2013.

Population Age 65 and Older by Race/Ethnicity  
Tulsa County | 2013



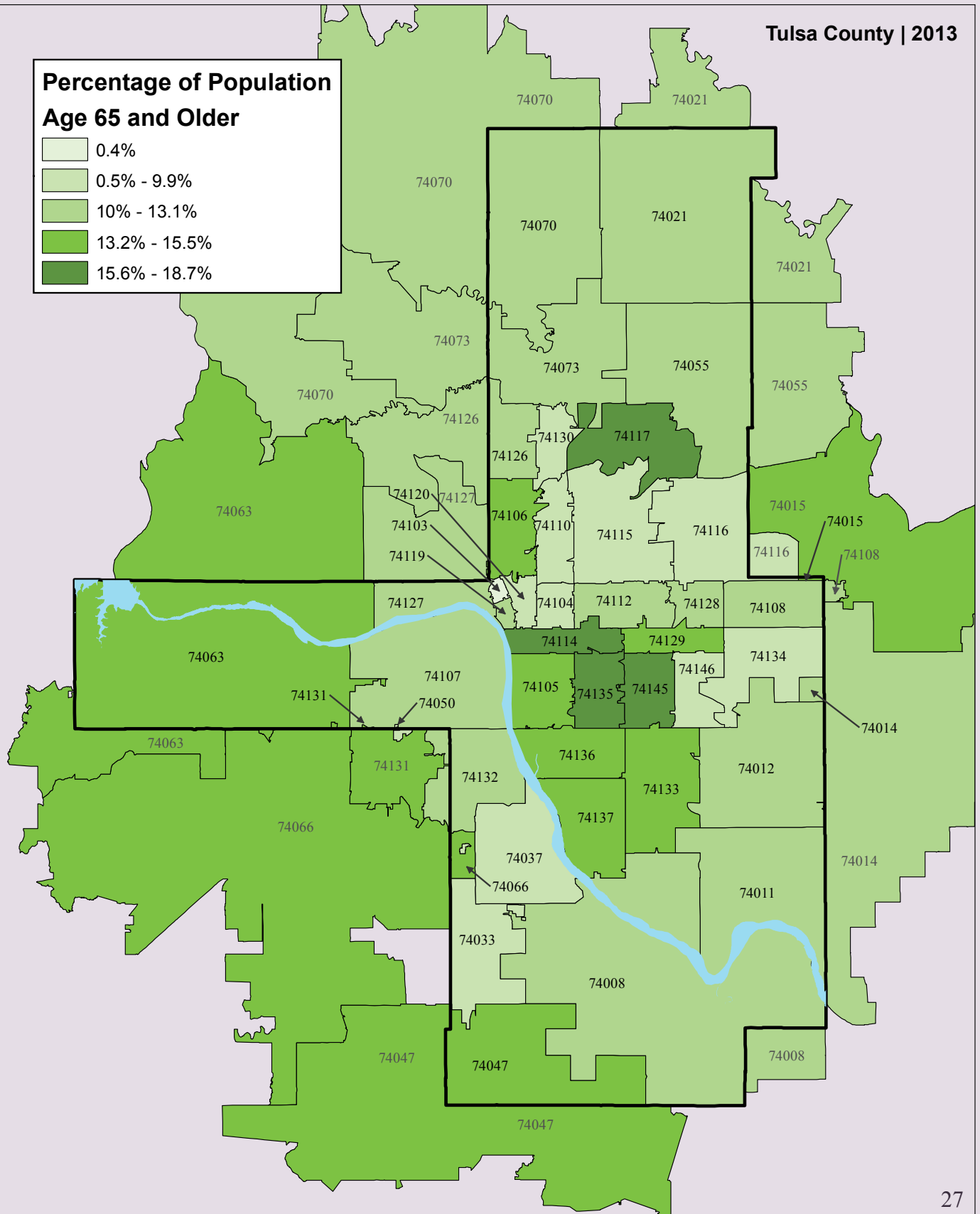
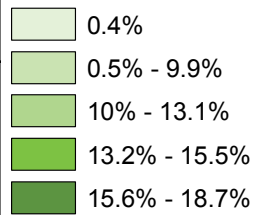
Population Age 65 and Older by Locality | 2013



# Population Age 65 & Older

Tulsa County | 2013

## Percentage of Population Age 65 and Older







**Socioeconomic**

# Median Household Income

The median household income is the mid-point in the range of reported household incomes. Half of households reported incomes above the median income and half of households reported incomes below the median income. Per capita income is the average income of each individual. These measures are both based on 2013 American Community Survey 5-year estimates.

## Why Is This Indicator Important?

Income is a common measure of socioeconomic status. Current income provides a direct measure of the quality of food, housing, leisure-time amenities, and health care an individual is able to acquire, as well as reflecting their relative position in society.

## How Are We Doing?

The estimated median household income for Tulsa County in 2013 was \$48,181. There was clear racial inequality among median household incomes, with white and Asian households having a median income of greater than \$50,000, while black households had a median income of less than \$30,000. Hispanic households had a median income of \$37,775.

Additionally, median household incomes increased with age until the 65 and older age group. This is most likely attributable to lower incomes after retirement.

Another measure of economic health, per capita income, showed that Tulsa County had a higher per capita income than Oklahoma in 2013 (\$27,676 compared to \$24,208). It was slightly lower than the per capita income of the United States as a whole (\$28,155).

The ZIP codes with the highest median household incomes were 74037, 74137, 74011, 74014, 74055, 74114, 74117, 74008, and 74021.

### Data Source:

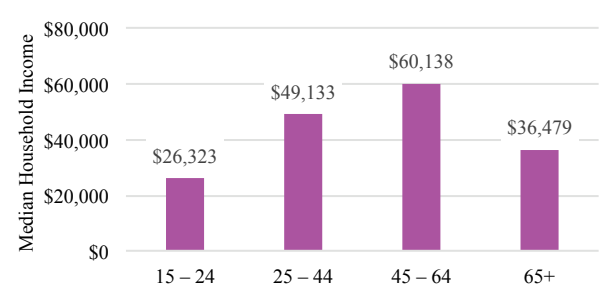
General Data Issues. *Healthy People 2010*. U.S. Department of Health and Human Services. Retrieved from: <http://www.cdc.gov/>

American Community Survey 2013.

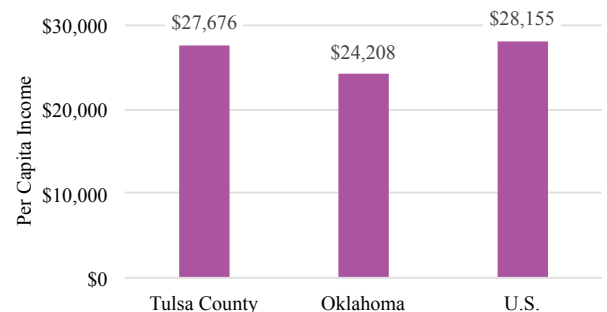
Median Household Income in the Past 12 Months by Race/Ethnicity  
Tulsa County | 2013



Median Household Income in the Past 12 Months by Age  
Tulsa County | 2013

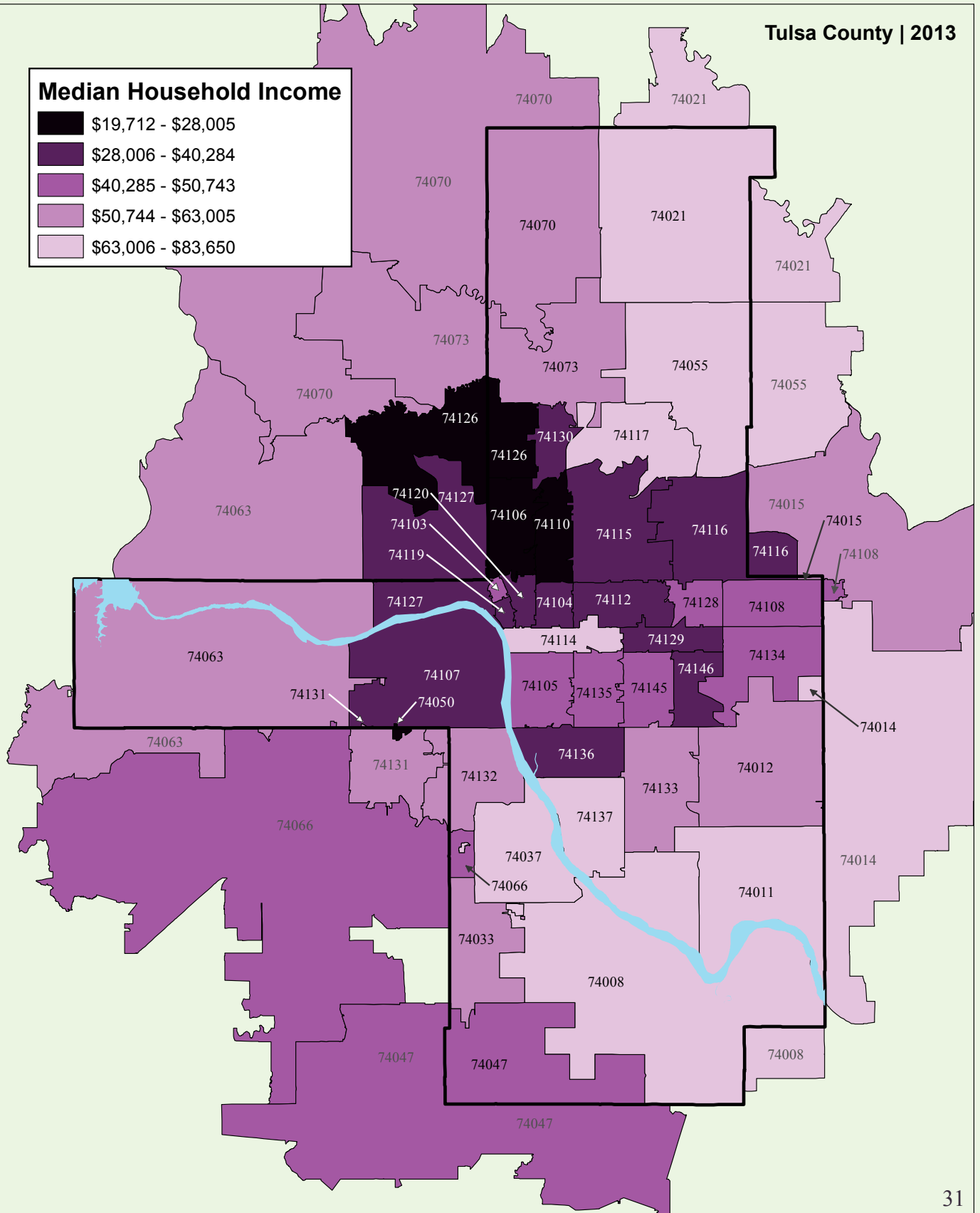
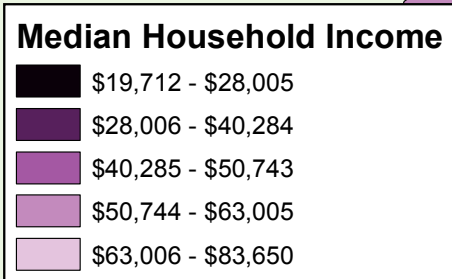


Per Capita Income in the Past 12 Months by Locality | 2013



# Median Household Income

Tulsa County | 2013



# Population Below Poverty

This indicator is the percentage of persons living below the federal poverty level in the past 12 months and is taken from the 2013 American Community Survey. The Census Bureau determines poverty levels using a set of income thresholds that vary by family size and composition. In 2013, the Census Bureau designated that the weighted average poverty threshold for a family of four was \$23,824.

## Why Is This Indicator Important?

Health outcomes are worse for individuals with low incomes than for their more affluent counterparts. Lower-income individuals experience higher rates of chronic illness, disease, and disabilities, and also die younger than those who have higher incomes. Individuals living in poverty are more likely than their affluent counterparts to experience fair or poor health, or suffer from conditions that limit their everyday activities. They also report higher rates of chronic conditions such as hypertension, high blood pressure, and elevated serum cholesterol, which can be predictors of more acute conditions in the future.

## How Are We Doing?

Estimates for 2013 stated that the poverty rate for Tulsa County was 15.9 percent. Racial disparity among those living in poverty was evident in Tulsa County. The 2013 American Community Survey showed that more than 30 percent of the black population lived below the poverty line, which was almost three times as great as the percentage of the white population. About twenty-eight percent of the Hispanic population lived below the poverty level.

With regard to age, the proportion of the population in poverty decreased as age increased. A total of 23.8 percent of Tulsa County residents under the age of 18 lived below the poverty level.

In 2013, the estimated poverty rate in Tulsa County (15.9 percent) was lower than Oklahoma (16.9 percent) but above the national rate (15.4 percent).

The ZIP codes with the highest percentages of residents living in poverty were 74103, 74106, 74050, 74126, 74110, and 74116.

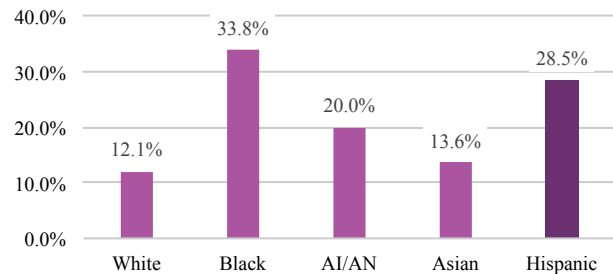
### Data Source:

U.S. Census Poverty Thresholds 2013.

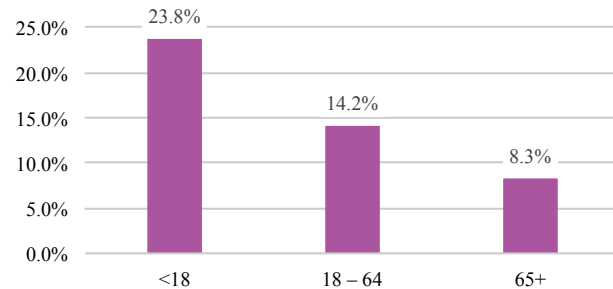
American Community Survey 2013.

Poverty in America: Economic Research Shows Adverse Impacts on Health Status and Other Social Conditions as well as the Economic Growth Rate (2007). United States Government Accountability Office. Retrieved from: <http://www.gao.gov/>

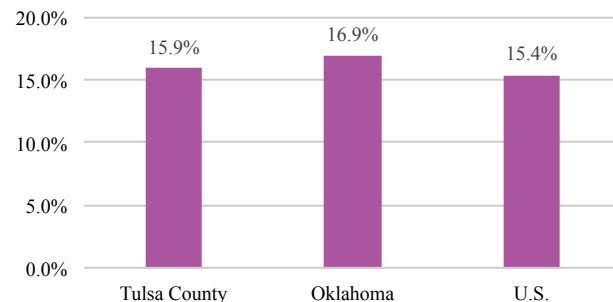
Population below Poverty in the Past 12 Months by Race/Ethnicity  
Tulsa County | 2013



Population below Poverty in the Past 12 Months by Age  
Tulsa County | 2013



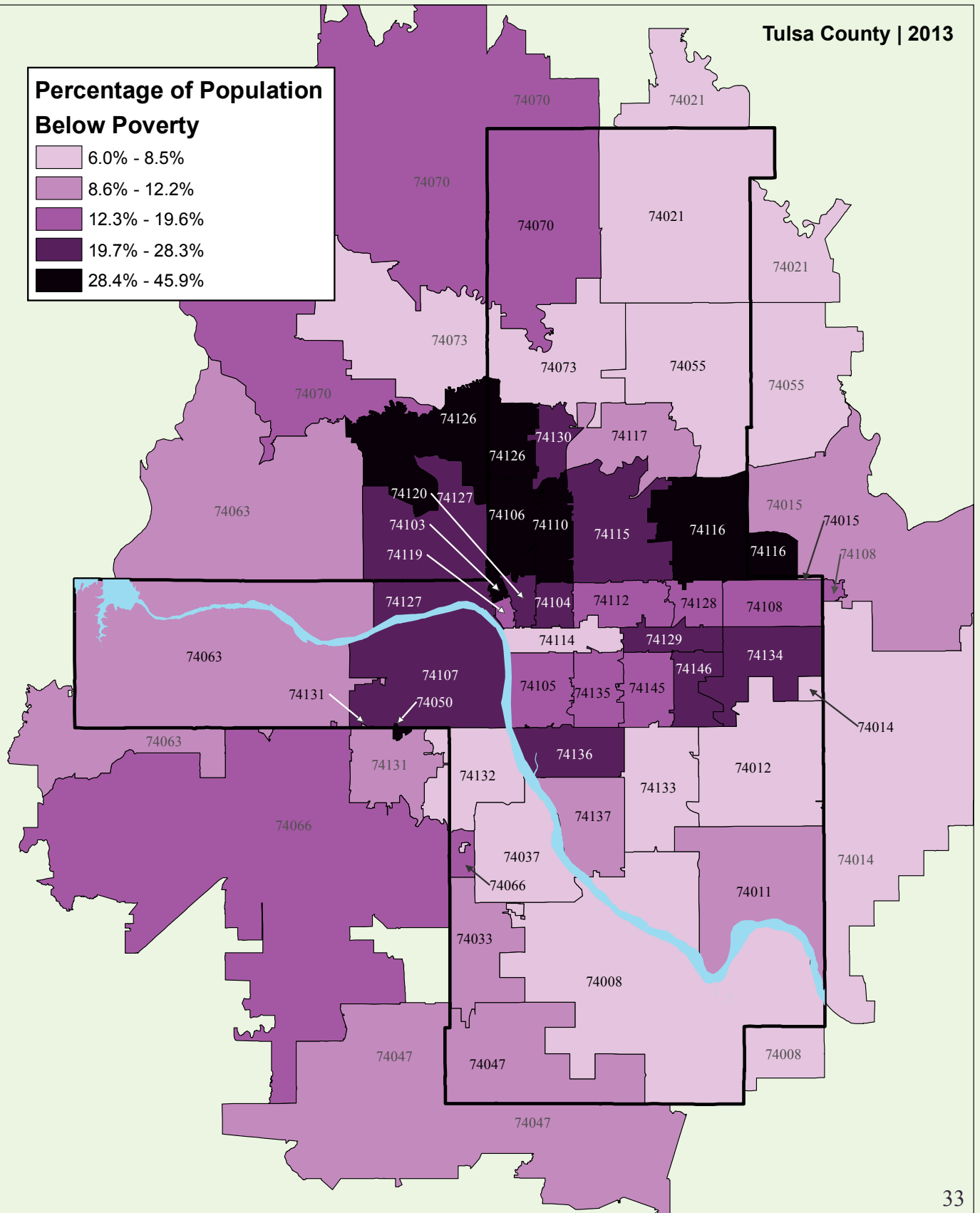
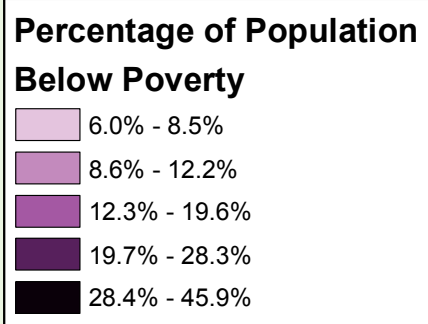
Population below Poverty in the Past 12 Months by Locality | 2013





# Population Below Poverty

Tulsa County | 2013



# Female Householders

This indicator is defined as a household headed by a female with related children less than 18 years of age, with no husband present. It is presented as a percentage of all households with related children less than 18 years of age, based on 2013 American Community Survey 5-year estimates.

## *Why Is This Indicator Important?*

Households headed by single women are more likely to be poor, which impacts the physical, mental, and educational outcomes of the children raised in these homes. Parents with limited economic resources face many obstacles to healthy living and opportunities for learning. The effects of living in a single-parent household go beyond the children; the mothers are also affected. Single mothers report higher levels of psychological distress, lower levels of perceived social support, and poorer eating habits, all of which affect their ability to parent.

## *How Are We Doing?*

According to the 2013 estimates, 29.5 percent of households with related children under age 18 in Tulsa County were headed by a female. A significant proportion (60.6 percent) of black households were headed by females with related children. In contrast, only 9.2 percent of Asian households were female-headed. Approximately 26 percent of Hispanic households with related children under 18 were headed by females.

Tulsa County had a higher percentage of female householders (29.5 percent) when compared to Oklahoma (26.7 percent) and the United States (26.4 percent).

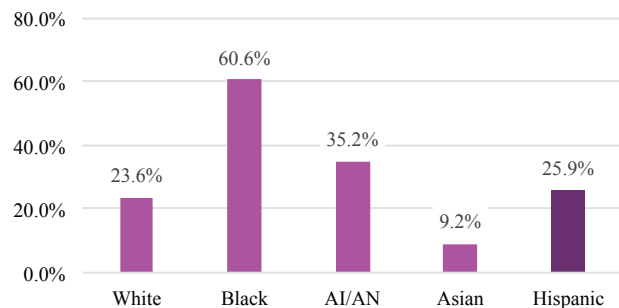
The ZIP codes with the highest percentage of female householders were 74106 and 74126.

### *Data Source:*

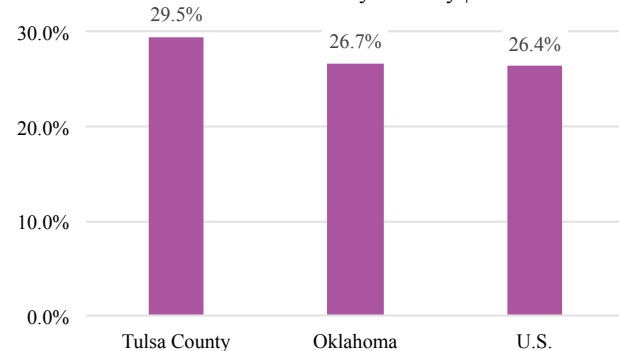
*Social Determinants. Putting Women's Health Care Disparities on The Map: Examining Racial and Ethnic Disparities at the State Level. The Henry J. Kaiser Family Foundation. Retrieved from: <http://kaiserfamilyfoundation.files.wordpress.com>*

*American Community Survey 2013.*

Female Householders by Race/Ethnicity  
Tulsa County | 2013

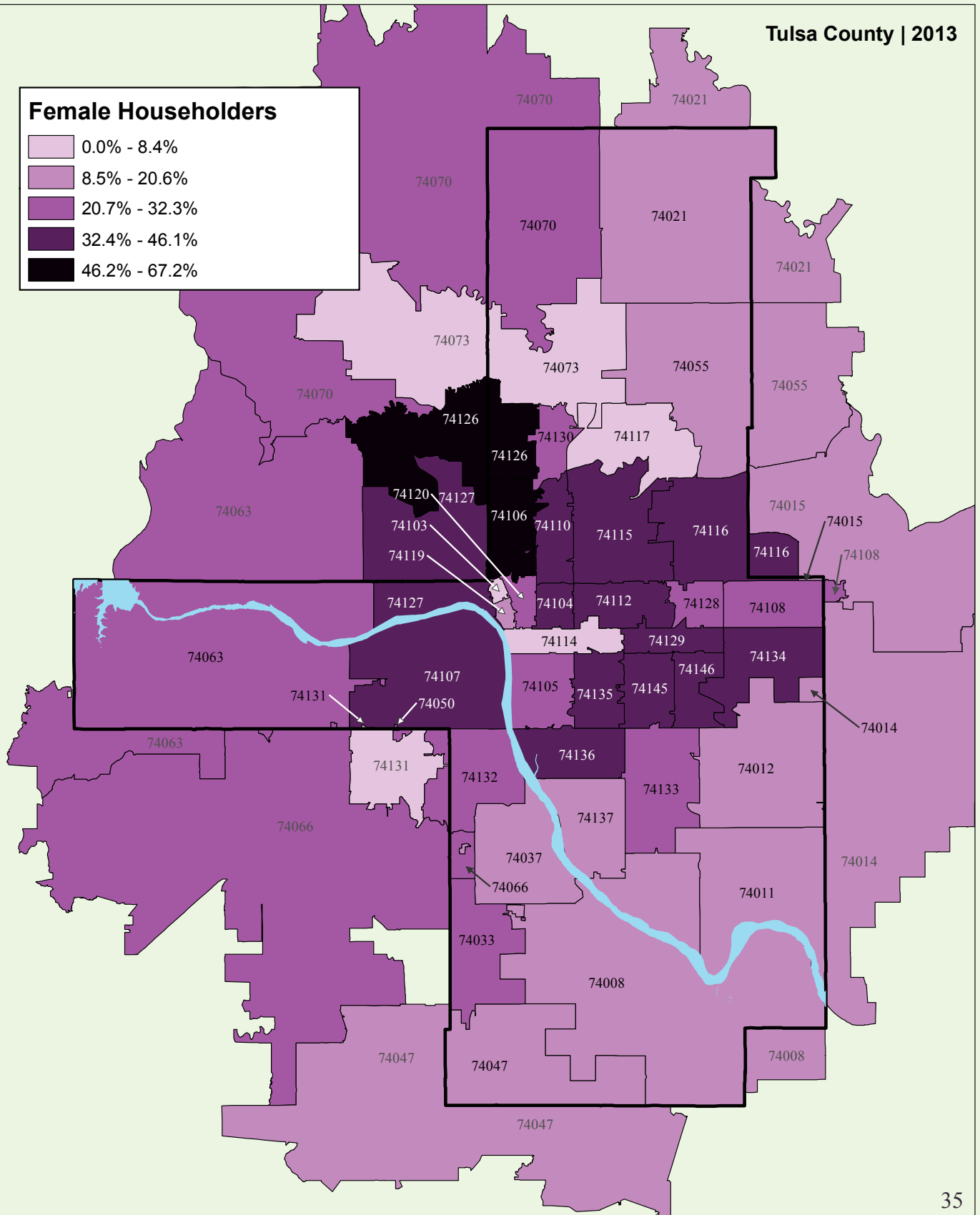
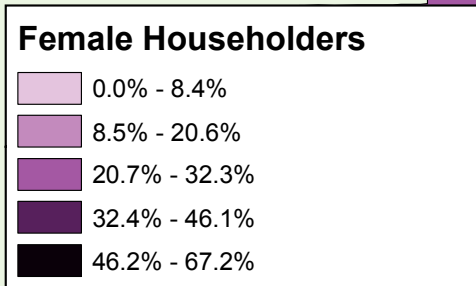


Female Householders by Locality | 2013



# Female Householders

Tulsa County | 2013



# Educational Attainment

Educational attainment is defined as completion of at least a high school education by the population age 25 and older. It is presented as a percentage of the total population age 25 and older, based on 2013 American Community Survey 5-year estimates.

## *Why Is This Indicator Important?*

Education is a basic component of socioeconomic status, because it shapes future occupational opportunities and earning potential. Education also provides knowledge and life skills that allow better-educated persons to more readily gain access to information and resources that promote health.

## *How Are We Doing?*

Tulsa County was estimated to have an overall educational attainment of 88.5 percent in 2013, according to the American Community Survey. This was highest in whites (90.3 percent), followed by blacks (87.9 percent). About 57 percent of Hispanics had a high school education or higher. With regard to gender, females had a higher educational attainment (89.3 percent) as compared to males (87.7 percent).

The 2013 estimates stated that the educational attainment for Tulsa County was 88.5 percent, which was higher than both Oklahoma (86.4 percent) and the U.S. (86.0 percent).

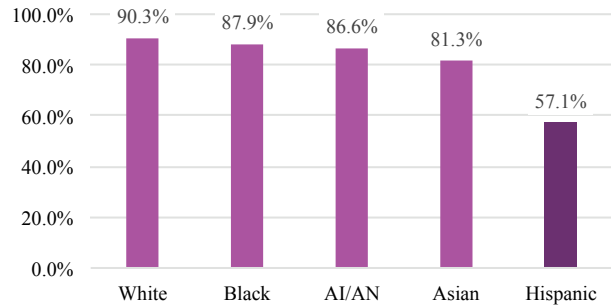
The ZIP codes with the highest educational attainment were 74114, 74137, 74037, 74133, 74105, and 74011.

### *Data Source:*

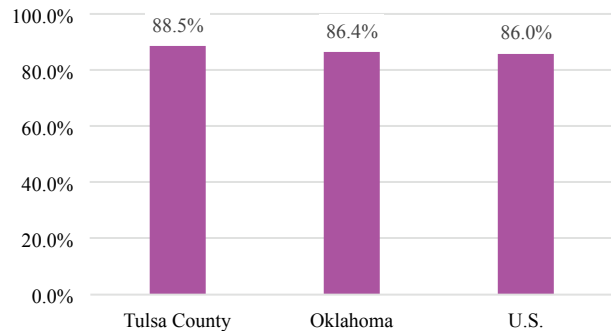
Telfair, J. & Shelton, T. Educational Attainment as a Social Determinant of Health. *North Carolina Medical Journal*. Retrieved from: <http://www.ncmedicaljournal.com/>

American Community Survey 2013.

Educational Attainment by Race/Ethnicity  
Tulsa County | 2013



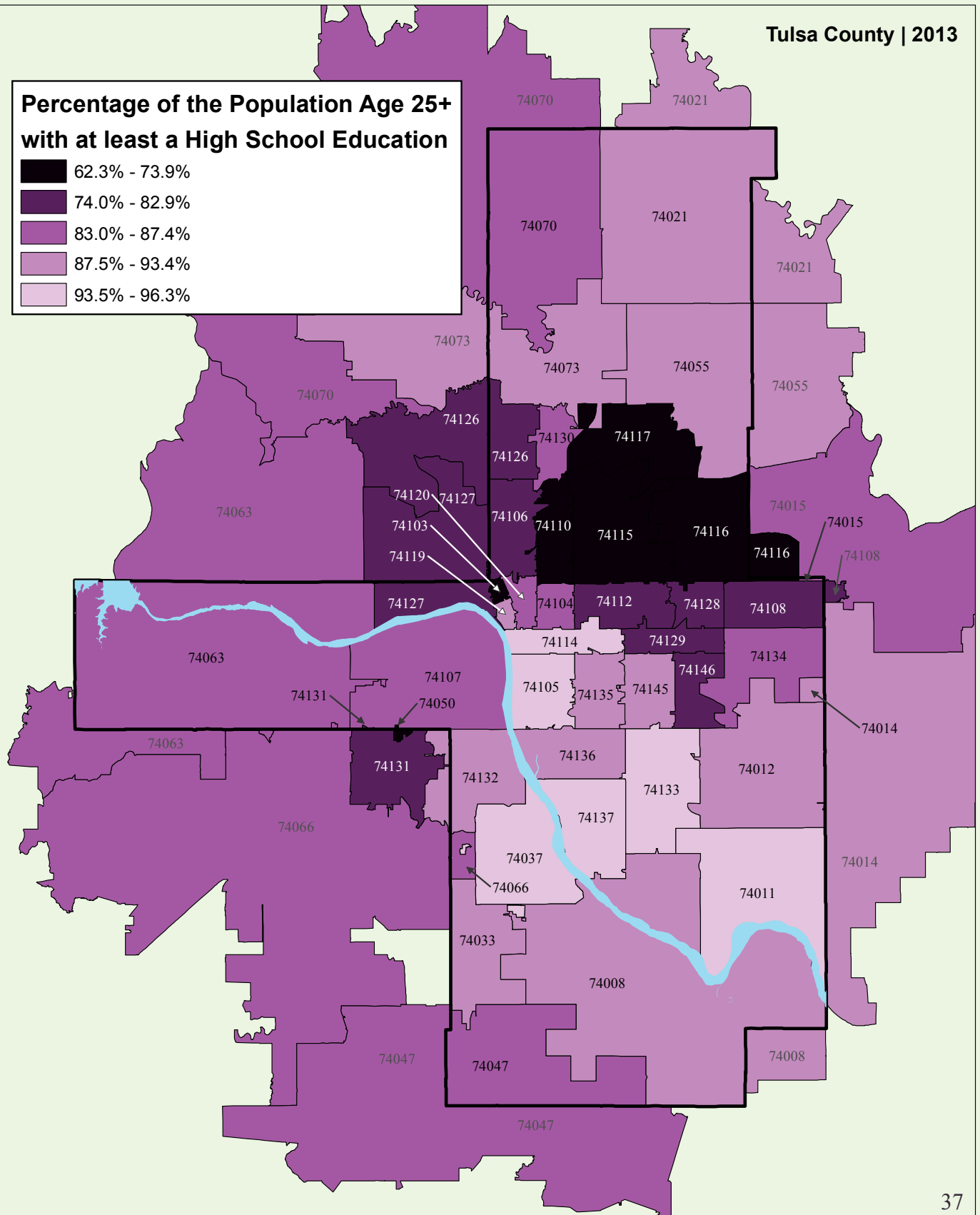
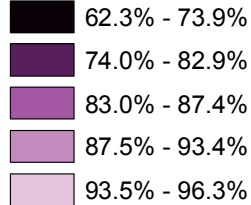
Educational Attainment by Locality | 2013



# Educational Attainment

Tulsa County | 2013

## Percentage of the Population Age 25+ with at least a High School Education



# Unemployment Rate

This indicator is presented as the percentage of the total civilian labor force (age 16 and older) that was unemployed in 2013, based on American Community Survey 5-year estimates (ZIP code and race/ethnicity data). Regional data (Tulsa County, Oklahoma, and U.S.) are based on information from the U.S. Department of Labor, Bureau of Labor Statistics. This is the source that is often reported by economists in the news as a measure of the health of the economy.

## Why Is This Indicator Important?

Health insurance is a major determinant of access to both preventive and acute health care. Most Americans rely on employer-provided insurance. Thus, unemployment affects their access to health services, due to both loss of employer-sponsored health insurance and reduced income. Unemployed adults have poorer mental and physical health than employed adults; this pattern is also found for insured and uninsured adults. Unemployed adults are less likely to receive needed medical care and prescription drugs due to cost than the employed in each insurance category.

## How Are We Doing?

The overall unemployment rate in 2013 for Tulsa County was 5.5 percent. This was slightly higher than Oklahoma (5.4 percent) but lower than the United States (7.4 percent). The unemployment rate in Tulsa County has been decreasing each year since peaking in 2010.

With regard to race, blacks in Tulsa County had an unemployment rate that was more than two times that of whites (14.4 percent compared to 5.9 percent). Asians had the lowest unemployment rate with 5.0 percent. The unemployment rate of Hispanics was 6.7 percent.

The ZIP codes with the highest rates of unemployment were 74126, 74103, 74130, 74050, and 74106.

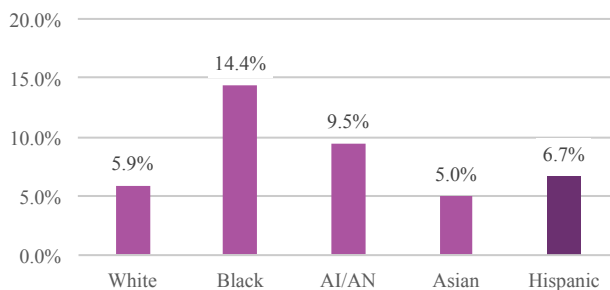
### Data Source:

Health and Access to Care among Employed and Unemployed Adults: United States, 2009–2010. National Center for Health Statistics. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

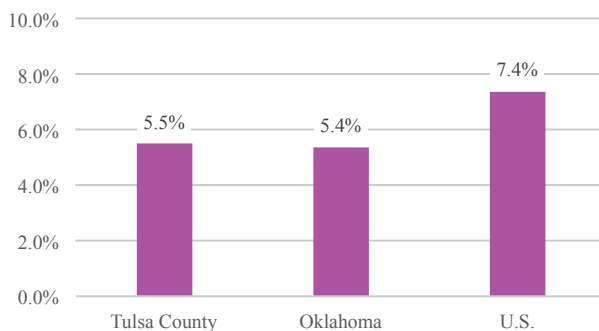
American Community Survey 2013.

U.S. Department of Labor, Bureau of Labor Statistics (BLS) Local Area Unemployment Statistics (LAUS). [www.bls.gov](http://www.bls.gov)

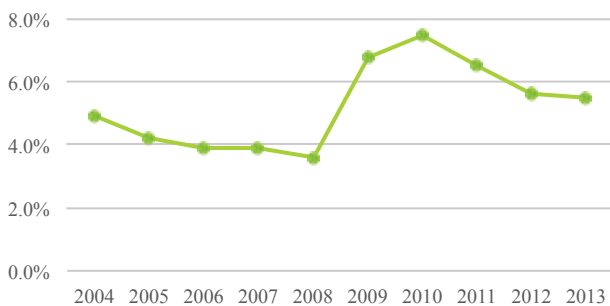
Civilian Labor Force Unemployed by Race/Ethnicity  
Tulsa County | 2013



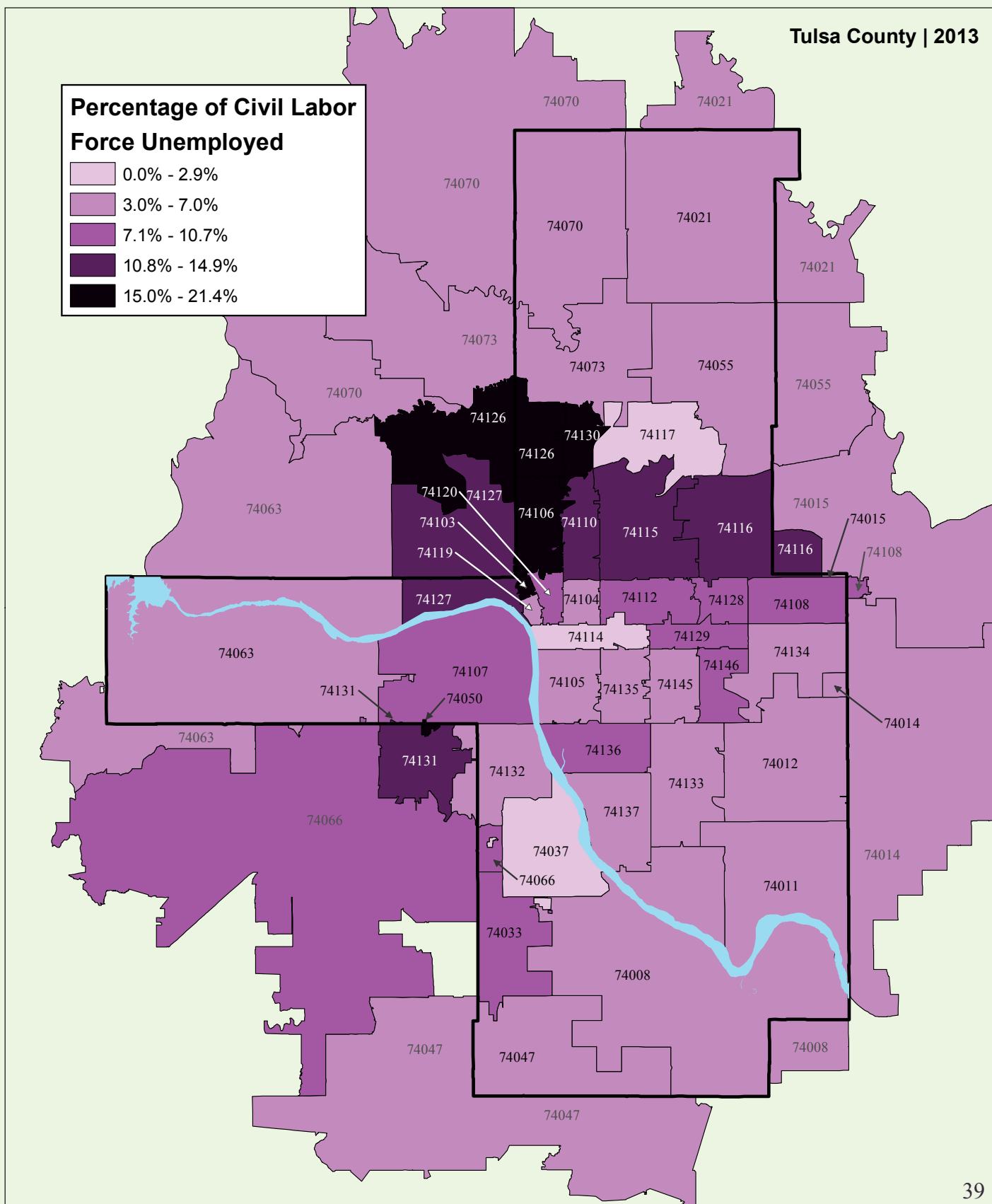
Unemployment by Locality | 2013

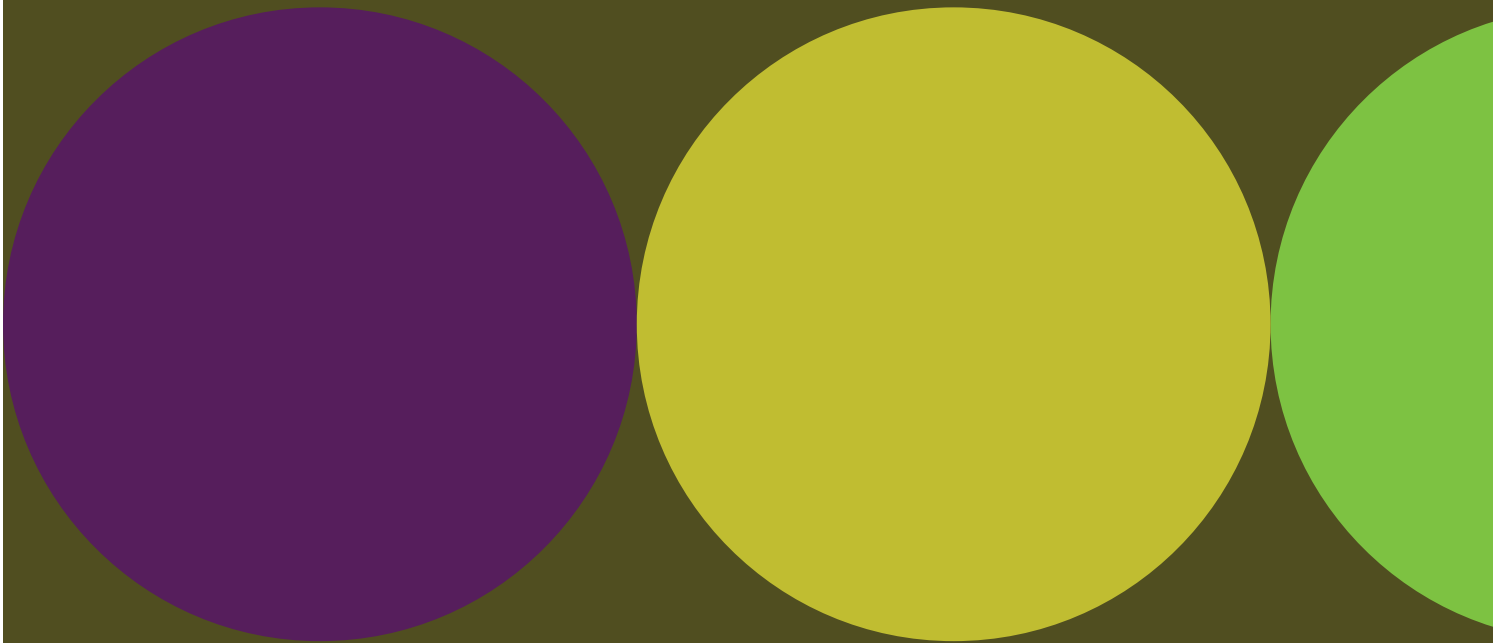


Unemployment  
Tulsa County | 2004 – 2013



# Unemployment Rate









# Maternal & Child Health

# Crude Birth Rate

The crude birth rate is the number of live births divided by the total population and multiplied by 1,000. It is called crude because it does not account for sex or age differences in the populations being compared. The crude birth rate is presented as the number of live births to Tulsa County residents per 1,000 persons, over the years 2011 – 2013.

## Why Is This Indicator Important?

The crude birth rate indicates where population growth is occurring naturally through reproduction.

## How Are We Doing?

There were 27,736 live births to Tulsa County residents from 2011 – 2013. Males comprised 51.2 percent of live births while females made up 48.8 percent. Birth rates were highest among Asian/Pacific Islanders (21.5 live births per 1,000 population) and lowest among whites and American Indians (14.4 and 14.7, respectively). The Hispanic birth rate (21.1) was higher than the non-Hispanic birth rate (14.2).

In 2013, Tulsa County's crude birth rate of 14.9 live births per 1,000 population was higher than the rate in Oklahoma (13.9) and the United States (12.4).

The ZIP codes with the highest birth rates were 74146, 74050, 74110, 74115, 74134, 74106, and 74116. The ZIP codes with the lowest birth rates were 74103 and 74119.

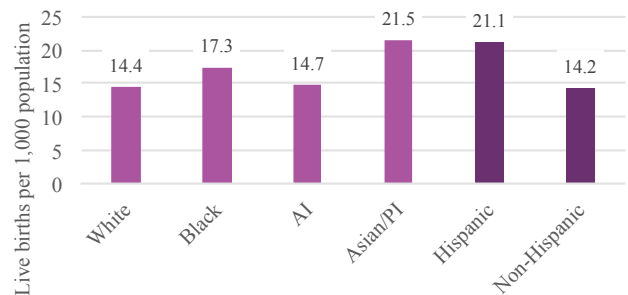
### Data Source:

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

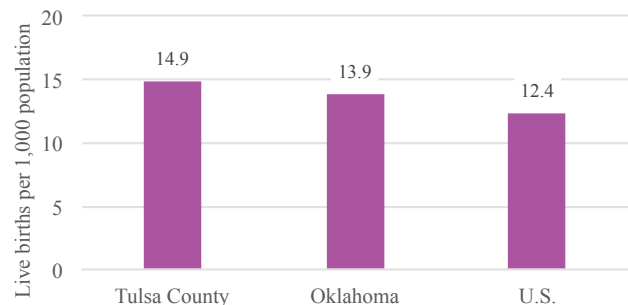
Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final Data for 2013. National Vital Statistics Reports; vol 64 no 1. Hyattsville, MD: National Center for Health Statistics. 2015.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

Crude Birth Rate by Race/Ethnicity of Mother  
Tulsa County | 2011 – 2013

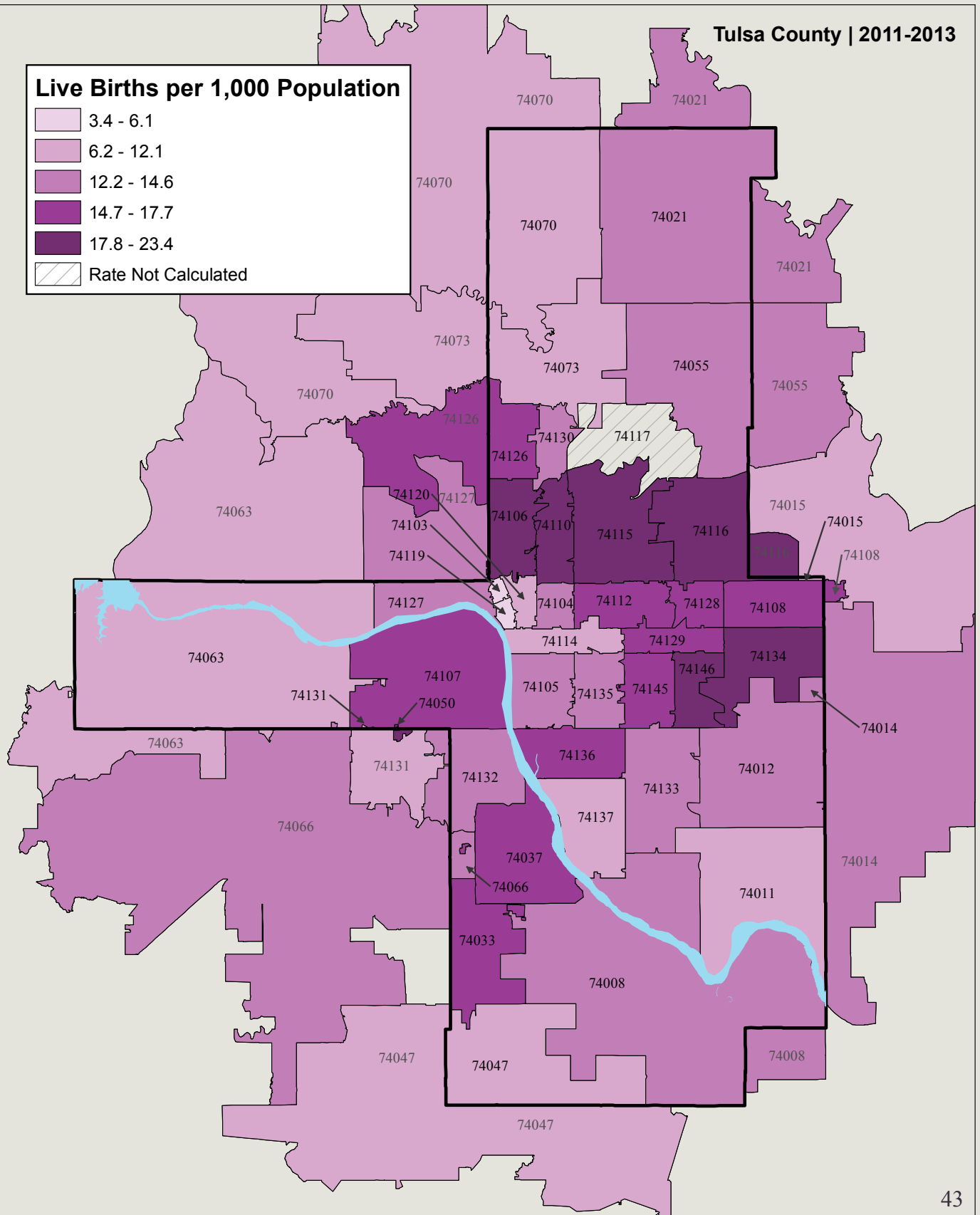
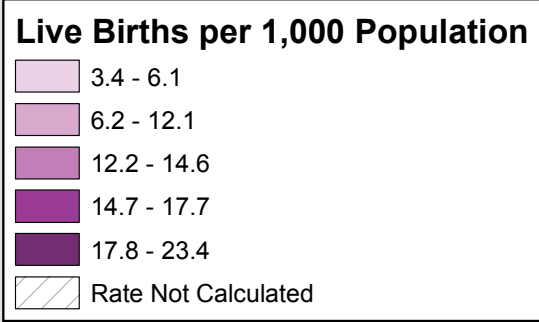


Crude Birth Rate by Locality | 2013



# Crude Birth Rate

Tulsa County | 2011-2013



# Fertility Rate

The fertility rate is presented as the number of live births to women ages 15 – 44 years per 1,000 females in this age group, over the years 2011 – 2013.

## Why Is This Indicator Important?

The fertility rate, which is calculated using only females of childbearing age, is a more sensitive indicator than the crude birth rate to show how the population may be growing naturally through reproduction. Sustained high fertility rates lead to a disproportionately young population, while sustained low fertility rates can lead to an aging population. Each of these scenarios requires planning and anticipation of current and future needs which can place burdens on certain social services.

## How Are We Doing?

The fertility rate for Tulsa County from 2011 – 2013 was 73.3 live births per 1,000 females ages 15 – 44 years. The fertility rate was highest among Asian/Pacific Islanders (84.7). Hispanics had a higher fertility rate than non-Hispanics (94.3 compared to 70.3)

In 2013, Tulsa County had a fertility rate of 72.2 live births per 1,000 females ages 15 – 44 years. This rate was higher than both Oklahoma (70.4) and the United States (62.5).

The ZIP codes with the highest fertility rates were 74146, 74115, and 74129.

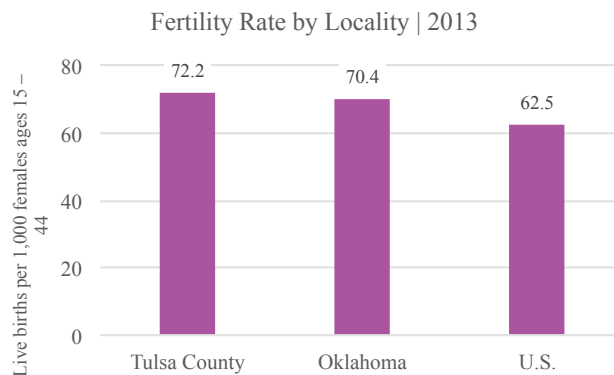
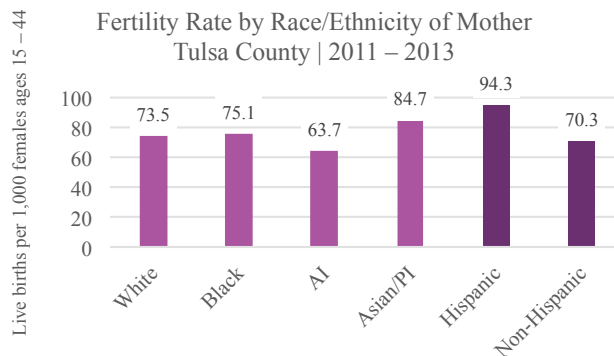
### Data Source:

Fertility and Birth Rates: Importance. Child Trends Data Bank. Retrieved from: <http://www.childtrends.org/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

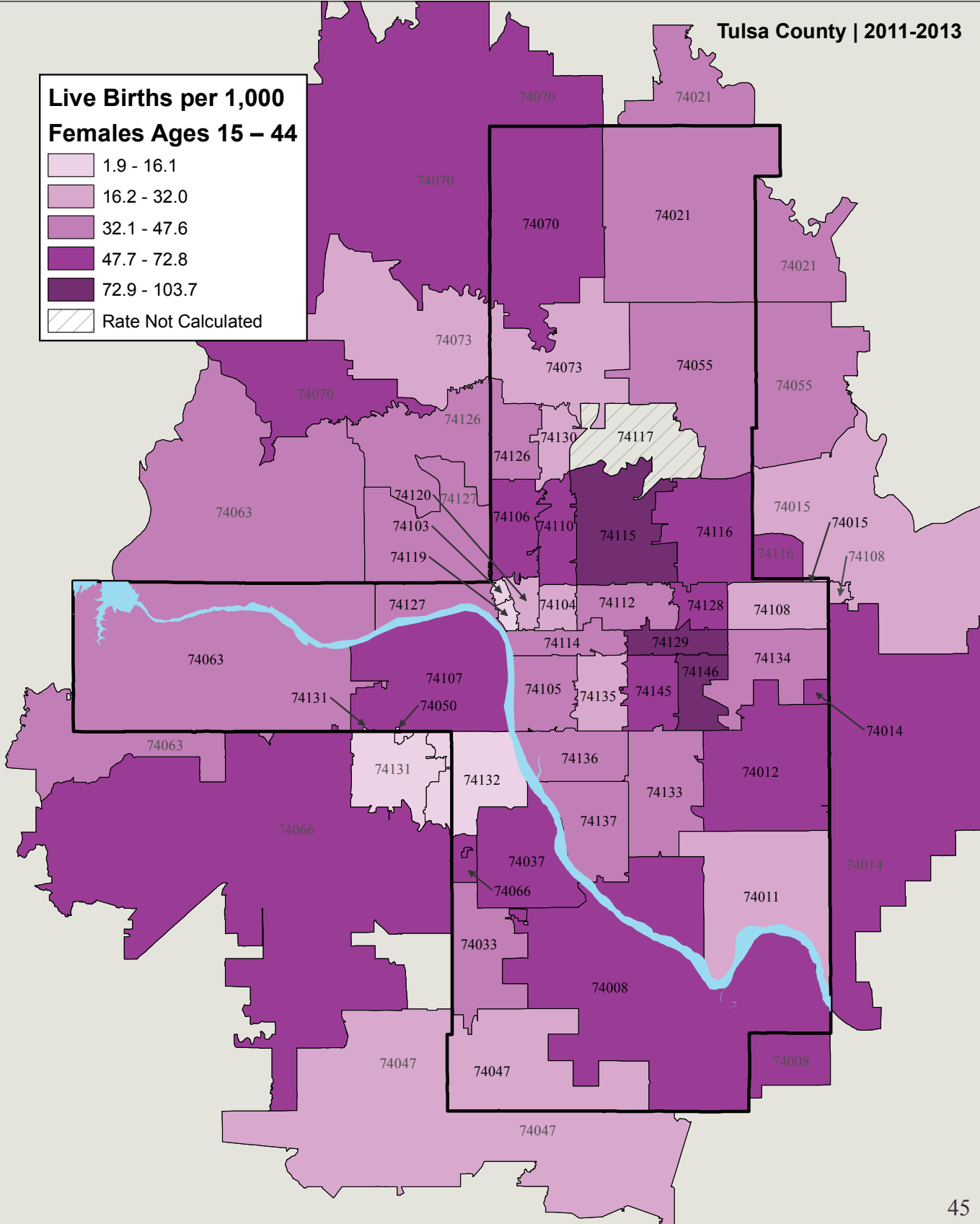
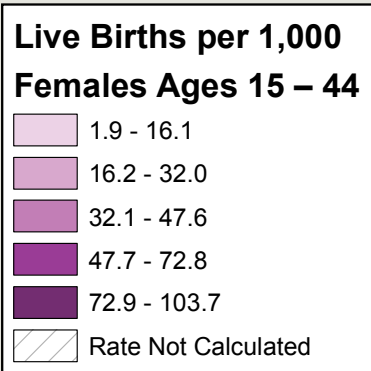
Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final Data for 2013. National Vital Statistics Reports; vol 64 no 1. Hyattsville, MD: National Center for Health Statistics. 2015.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.



# Fertility Rate

Tulsa County | 2011-2013



# Teen Birth Rate Ages 15 – 17

This indicator is presented as the number of live births to Tulsa County teenagers ages 15 – 17 per 1,000 females in this age group, over the years 2011 – 2013.

## *Why Is This Indicator Important?*

Although teen birth rates are declining, there are still significant disparities among racial and ethnic minorities, as well as socioeconomically disadvantaged youth of any race or ethnicity. Social and economic costs related to teen parents and childbirth include increased health care and foster care costs, increased high school dropout rates, and lower educational attainment for teen mothers and their children. The children of teen mothers are also more likely to be incarcerated at some time during adolescence, have more health problems, give birth as a teenager, and face unemployment as a young adult.

## *How Are We Doing?*

There were 757 births to Tulsa County teenagers ages 15 – 17 from 2011 – 2013, for a birth rate of 21.0 live births per 1,000 females ages 15 – 17. Blacks had the highest birth rate for teens ages 15 – 17 (32.1). Asian/Pacific Islanders had the lowest birth rate with 7.4 live births per 1,000 females ages 15 – 17. Additionally, the birth rate for Hispanic women in this age group was almost three times higher than that of non-Hispanic women (45.6 compared to 17.1).

In 2013, the teen birth rate (ages 15 – 17) in Tulsa County was 17.9 live births per 1,000 females ages 15 – 17. This was lower than Oklahoma (20.5) but higher than the United States (12.3).

The ZIP codes with the highest teen birth rates (ages 15 – 17) were 74128, 74110, 74146, and 74116.

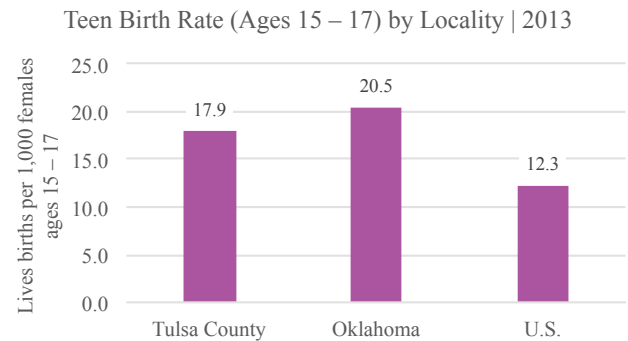
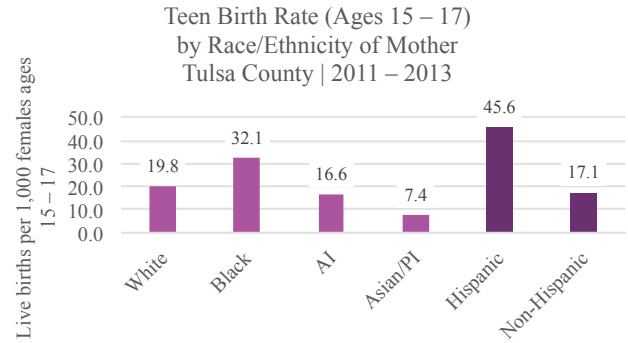
### *Data Source:*

Teen Pregnancy: About Teen Pregnancy. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information. Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

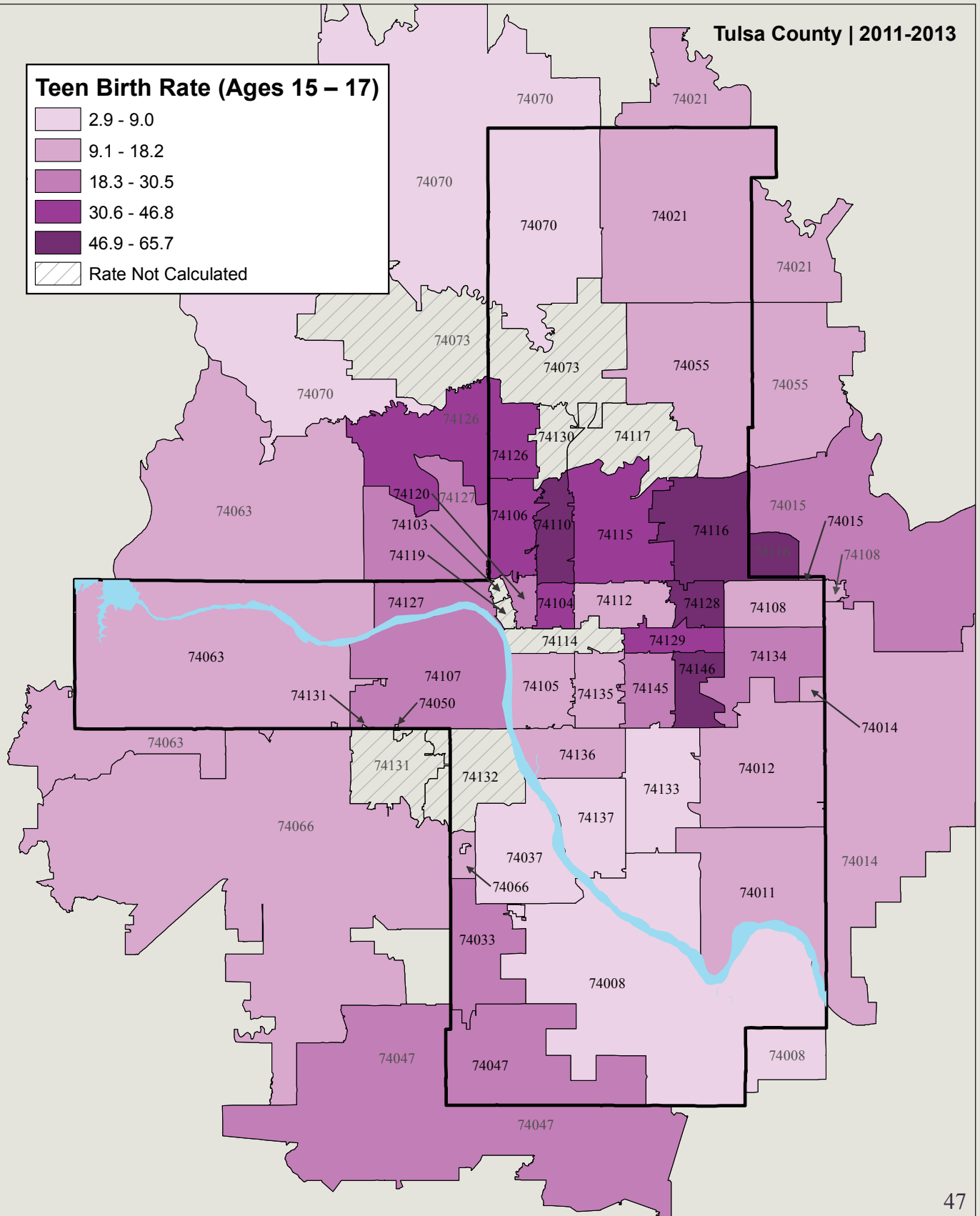
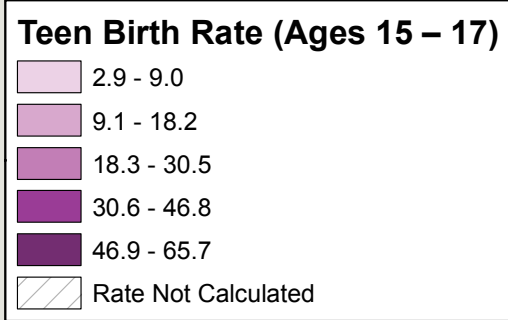
Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final Data for 2013. National Vital Statistics Reports; vol 64 no 1. Hyattsville, MD: National Center for Health Statistics. 2015.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.



# Teen Birth Rate Ages 15 - 17

Tulsa County | 2011-2013



# Teen Birth Rate Ages 15 – 19

This indicator is presented as the number of live births to Tulsa County teenagers ages 15 – 19 per 1,000 females in this age group, over the years 2011 – 2013.

## *Why Is This Indicator Important?*

Teen pregnancy can have negative health impacts on both the mother and the child. Infants born to teen mothers are at an increased risk of being born prematurely and at a low birth weight. They are also at a greater risk of infant mortality. Teen mothers are more likely to smoke during pregnancy and less likely to receive appropriate prenatal care. The children of teens are also more likely to depend on publicly provided healthcare.

## *How Are We Doing?*

There were 2,563 births to Tulsa County teens ages 15 – 19 from 2011 – 2013, for a birth rate of 43.7 live births per 1,000 females ages 15 – 19. Blacks had the highest birth rate for teenagers ages 15 – 19 (62.0). Asian/Pacific Islanders had the lowest birth rate with 19.0 live births per 1,000 females ages 15 – 19. Additionally, the birth rate for Hispanic women in this age group was higher than that of non-Hispanic women (68.2 compared to 39.7).

In 2013, the teen birth rate (ages 15 – 19) in Tulsa County was 37.3 live births per 1,000 females ages 15 – 19. This was lower than Oklahoma (42.9) but higher than the United States (26.5).

The ZIP codes with the highest teen birth rate (ages 15 – 19) were 74116, 74131, 74146, 74129, 74115, 74110, 74128, and 74106.

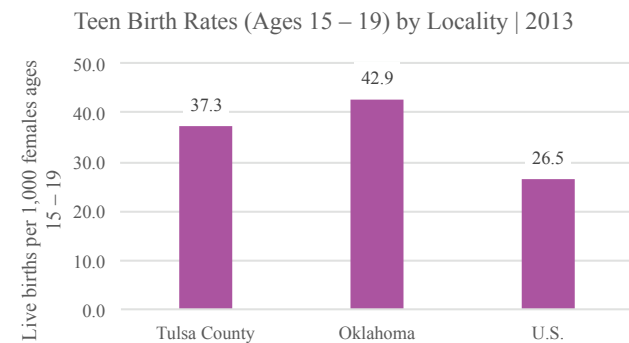
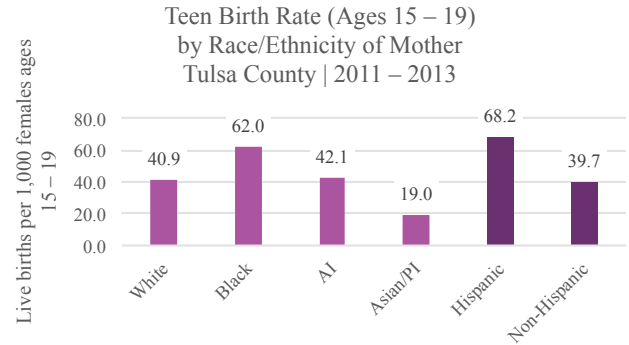
### *Data Source:*

*Teen Pregnancy and Other Health Issues. The National Campaign to Prevent Teen and Unplanned Pregnancy. Retrieved from: <http://www.thenationalcampaign.org/>*

*Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.*

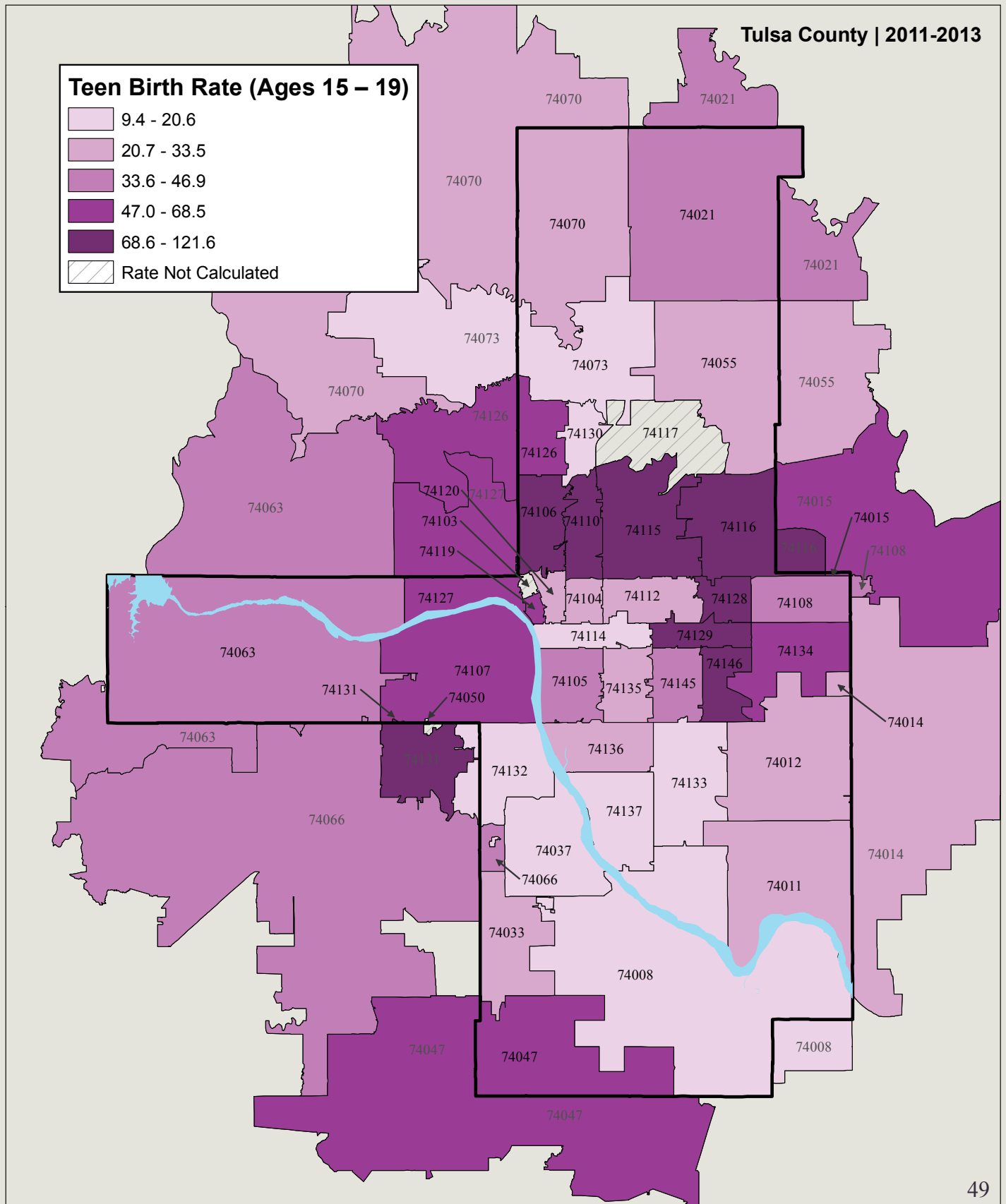
*Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final Data for 2013. National Vital Statistics Reports; vol 64 no 1. Hyattsville, MD: National Center for Health Statistics. 2015.*

*Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.*





# Teen Birth Rate Ages 15 – 19



# Late or No Prenatal Care

This indicator is defined as births to Tulsa County mothers who had no prenatal care or did not begin prenatal care until after the first trimester (greater than 12 weeks gestation). It is presented as a percentage of all births, over the years 2011 – 2013.

## Why Is This Indicator Important?

Prenatal care is medical attention for expecting mothers and their developing babies. It also includes the mother caring for herself by following her healthcare provider's advice, practicing good nutrition, getting plenty of rest, exercising sensibly, and avoiding things that could harm her or her baby, such as smoking and alcohol. Babies born to mothers who received late or no prenatal care are more likely to be born at a low birth weight and are more likely to die.

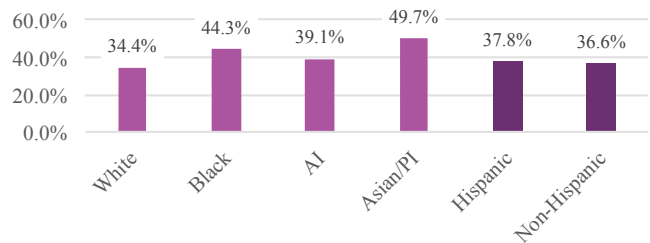
## How Are We Doing?

From 2011 – 2013, a total of 36.8 percent of Tulsa County mothers did not receive prenatal care or received delayed prenatal care (after the first trimester). Asian/Pacific Islanders had the highest percentage of late or no prenatal care (49.7 percent), followed by blacks (44.3 percent). Late or no prenatal care was lowest among white mothers (34.4 percent). Additionally, the percentage of late or no prenatal care for Hispanic mothers compared to non-Hispanic mothers was very similar (37.8 percent compared to 36.6 percent).

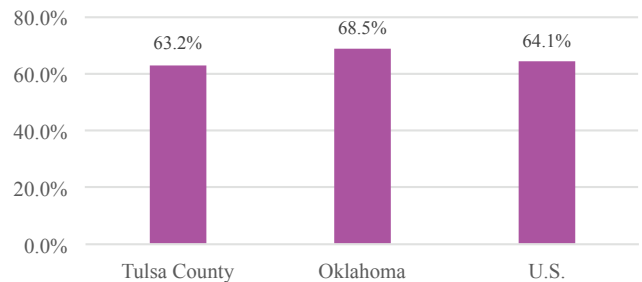
In 2013, 63.2 percent of Tulsa County mothers received prenatal care during the first trimester. This was lower than the rate of prenatal care in both Oklahoma (68.5 percent) and the United States (64.1 percent). Tulsa County, Oklahoma, and the U.S. all fell short of the Healthy People 2020 first trimester prenatal care goal of 77.9 percent.

The highest rates of late or no prenatal care were in ZIP codes 74103, 74106, and 74126.

Births with No First Trimester Prenatal Care by Race/Ethnicity of Mother  
Tulsa County | 2011 – 2013



Births with First Trimester Prenatal Care by Locality | 2013



### Data Source:

Maternal and Child Health: Prenatal Services. Health Resources and Services Administration. U.S. Department of Health and Human Services. Retrieved from: <http://mchb.hrsa.gov/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2007-2013, on CDC WONDER Online Database, January 2015. Retrieved from: <http://wonder.cdc.gov/natality-current.html>.

Maternal and Child Health. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.



# Tobacco Use During Pregnancy

Maternal smoking is defined as tobacco use during pregnancy, regardless of frequency/quantity of use or during what trimester(s). Tobacco use during pregnancy is expressed as a percentage of all Tulsa County births, over the years 2011 – 2013.

## Why Is This Indicator Important?

Prenatal tobacco use has been linked to pregnancy complications and poor birth outcomes, including low birth weight and preterm delivery, stillbirth, SIDS, and birth defects. Exposure to secondhand smoke can also cause health complications for mothers and infants.

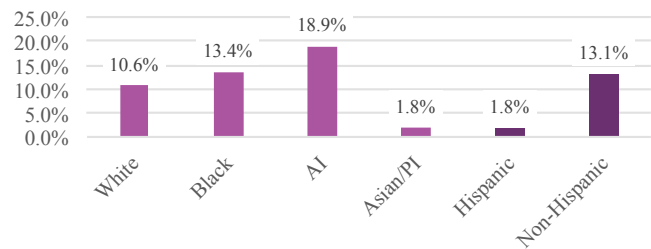
## How Are We Doing?

From 2011 – 2013, a total of 11.3 percent of births were to mothers who reported using tobacco during pregnancy. American Indian mothers had the highest rate of tobacco use during pregnancy (18.9 percent), followed by black mothers (13.4 percent). Asian/Pacific Islanders had the lowest rate, with 1.8 percent of mothers who reported tobacco use during pregnancy. Additionally, smoking during pregnancy was much higher in non-Hispanic mothers compared to Hispanic mothers (13.1 percent compared to 1.8 percent).

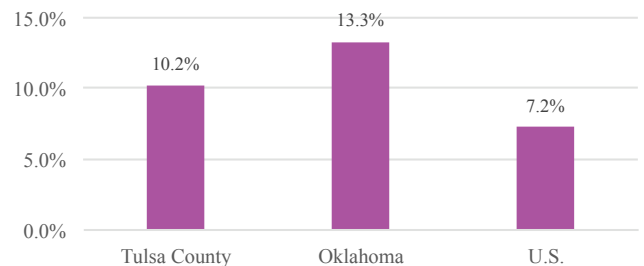
In 2013, the smoking rate among pregnant women in Tulsa County (10.2 percent) was lower than that of Oklahoma (13.3 percent) but higher than the United States (7.2 percent). The Healthy People 2020 national goal is to increase abstinence from cigarettes to 98.6 percent among pregnant women (or to reduce the percentage of pregnant women who smoke to 1.4 percent). None of these regions met this goal.

The ZIP codes with the highest rates of tobacco use during pregnancy were 74050, 74127, 74107, 74126, 74015, 74130, 74106, 74108, and 74115.

Births to Mothers who Smoked During Pregnancy by Race/Ethnicity of Mother  
Tulsa County | 2011 – 2013



Births to Mothers who Smoked During Pregnancy by Locality | 2013



### Data Source:

Reproductive Health: Tobacco Use and Pregnancy. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2007-2013, on CDC WONDER Online Database, January 2015. Retrieved from: <http://wonder.cdc.gov/natality-current.html>.

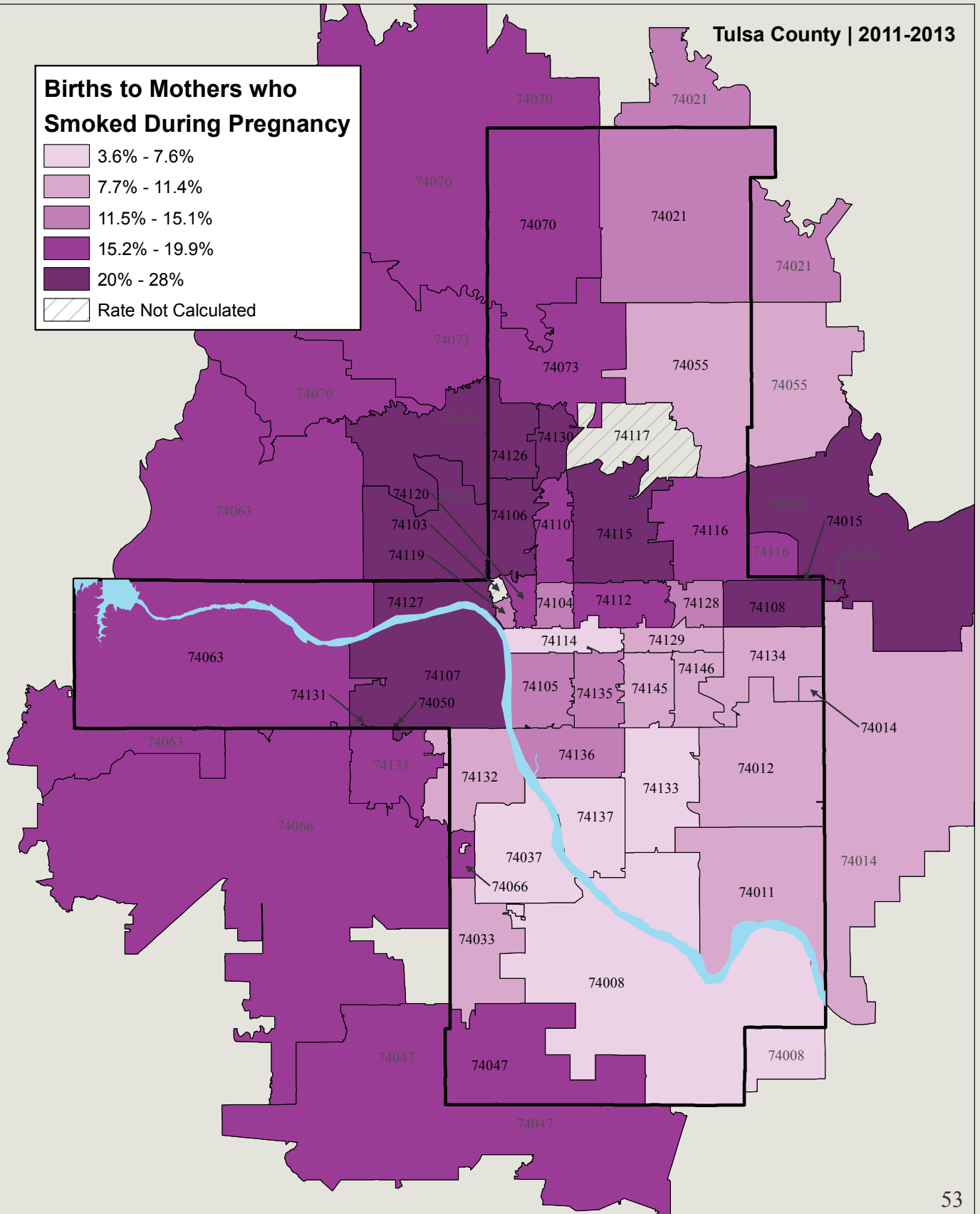
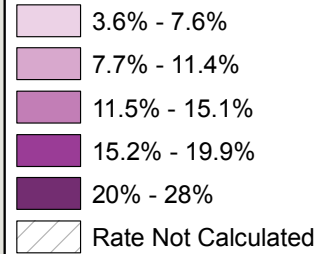
Maternal and Child Health. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

# Tobacco Use During Pregnancy

Tulsa County | 2011-2013

## Births to Mothers who Smoked During Pregnancy



# Premature Births

This indicator is defined as births that occur before the 37th week of pregnancy. It is presented as a percentage of all births to Tulsa County mothers, over the years 2011 – 2013.

## Why Is This Indicator Important?

Premature (preterm) birth is a leading cause of infant mortality and is a predictor for increased risk of illness and disability in all stages of life. Although the causes of preterm delivery are complex, risk factors include maternal age, race, low maternal income or socioeconomic status, infections, previous preterm birth, carrying more than one baby, high blood pressure during pregnancy, tobacco and alcohol use, substance abuse, late prenatal care, and obesity.

## How Are We Doing?

Overall, 12.4 percent of infants born to Tulsa County mothers were premature from 2011 – 2013. This was highest among black mothers (17.3 percent), followed by American Indian mothers (12.9 percent). The rate of premature births was lowest among mothers who were Asian/Pacific Islanders (9.2 percent). The percentage of premature births was slightly higher among non-Hispanic mothers compared to Hispanic mothers (12.7 percent compared to 11.3 percent).

In 2013, 11.7 percent of live births in Tulsa County were premature, compared to 10.5 percent in Oklahoma and 11.4 percent in the U.S. The Healthy People 2020 goal is to reduce the premature birth rate to 11.4 percent. Although Oklahoma and the U.S. met this target, Tulsa County did not.

The ZIP codes with the highest rates of premature birth were 74126, 74106, and 74120.

### Data Source:

Reproductive Health: Preterm Birth. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

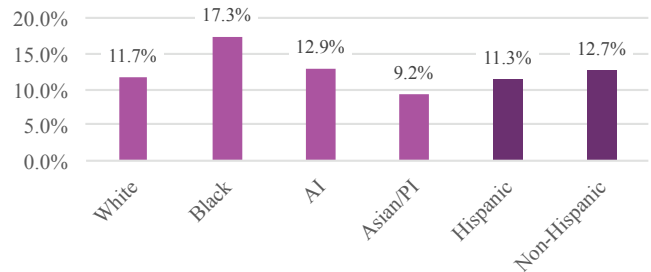
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final Data for 2013. National Vital Statistics Reports; vol 64 no 1. Hyattsville, MD: National Center for Health Statistics. 2015.

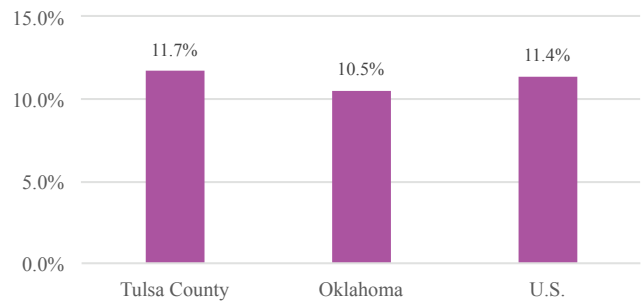
Maternal and Child Health. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

Premature Births by Race/Ethnicity of Mother  
Tulsa County | 2011 – 2013

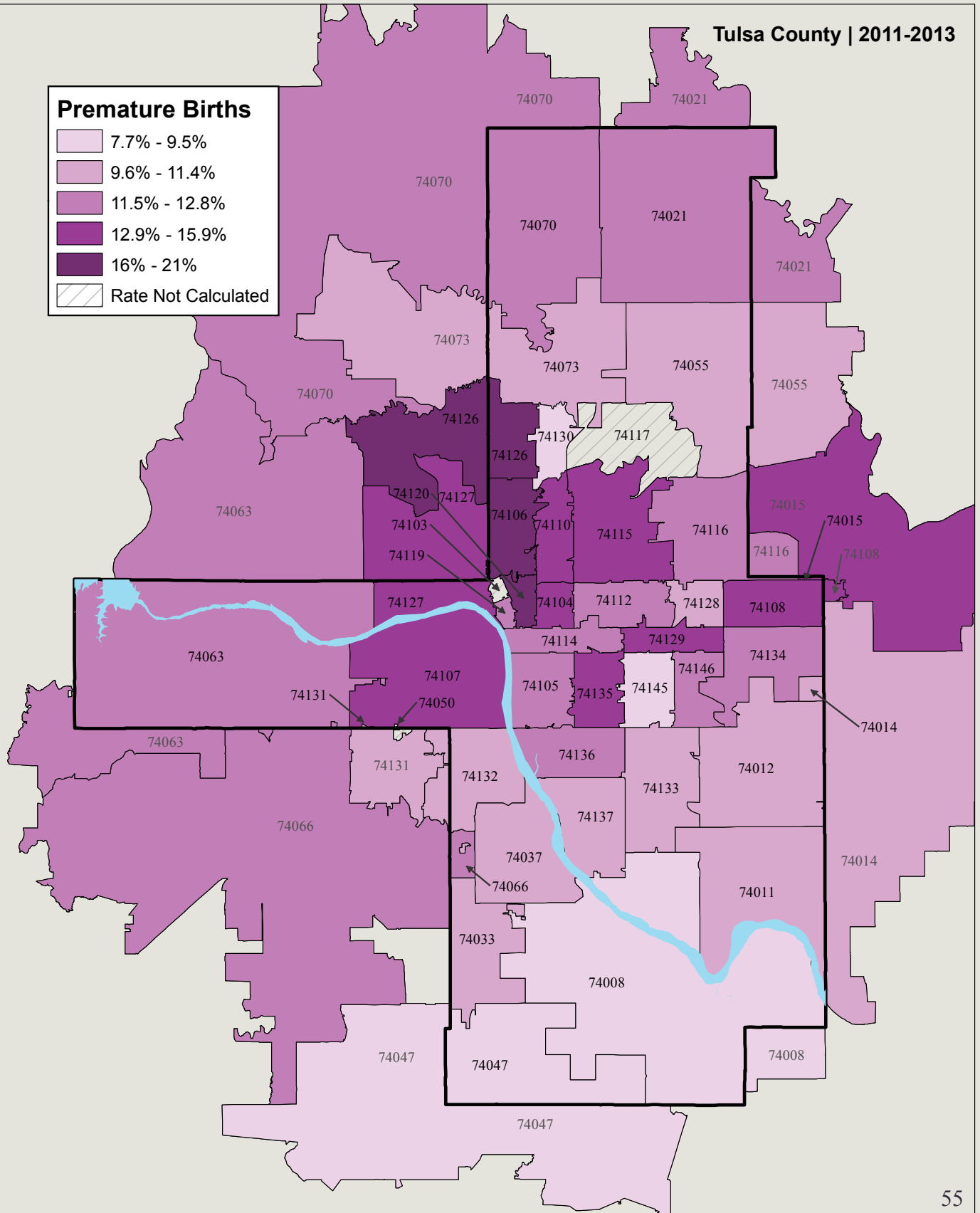
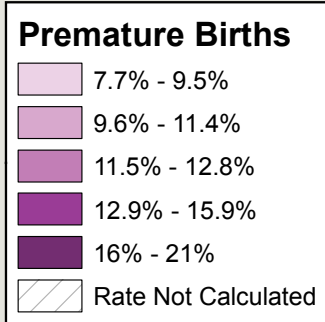


Premature Births by Locality | 2013



# Premature Births

Tulsa County | 2011-2013



# Low Birth Weight

Low birth weight is defined as infants who weigh less than 2,500 grams (5 pounds, 8 ounces) at birth. Very low birth weight is defined as infants who weigh less than 1,500 grams (3 pounds, 4 ounces). This indicator is expressed as a percentage of all births to Tulsa County mothers, over the years 2011 – 2013.

## Why Is This Indicator Important?

Low birth weight is the single most important factor affecting neonatal mortality and is a significant determinant of postneonatal mortality. Low birth weight infants who survive are at increased risk for health problems ranging from neurodevelopmental disabilities to respiratory disorders. Risk factors include smoking, alcohol use, lack of weight gain, age, low income, low education level, stress, domestic violence or other abuse, being unmarried, previous preterm birth, and exposure to air pollution or drinking water contaminated by lead. Prevention includes early and regular prenatal care to help identify conditions and behaviors that can result in low birth weight infants.

## How Are We Doing?

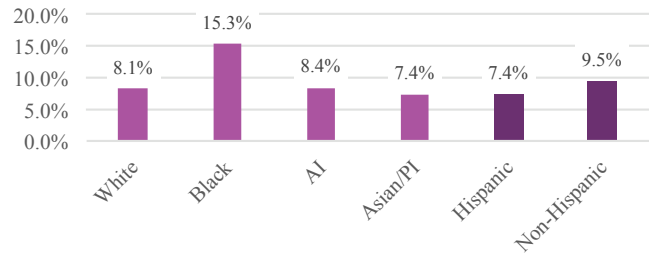
Overall, 9.1 percent of Tulsa County infants were born weighing less than 2,500 grams from 2011 – 2013. The percentage of very low birth weight (less than 1,500 grams) was 1.5 percent. Racial disparity was evident with black mothers having almost twice the percentage of low birth weight infants as white mothers (15.3 percent compared to 8.1 percent). The percentage of low birth weight infants was higher among non-Hispanic mothers (9.5 percent).

In 2013, 8.6 percent of infants in Tulsa County weighed less than 2,500 grams at birth. This was higher than both Oklahoma and the United States (8.1 percent and 8.0 percent, respectively). None of these regions met the Healthy People 2020 target of 7.8 percent.

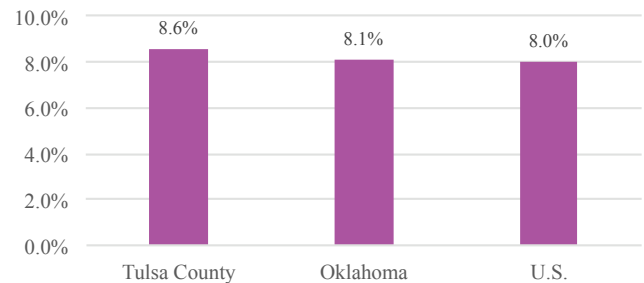
Additionally, 1.3 percent of infants in Tulsa County weighed less 1,500 grams at birth in 2013. This was very similar to both Oklahoma and the United States (1.4 percent each). All of these regions met the Healthy People 2020 target of 1.4 percent.

The ZIP codes with the highest rates of low birth weight infants were 74106 and 74126.

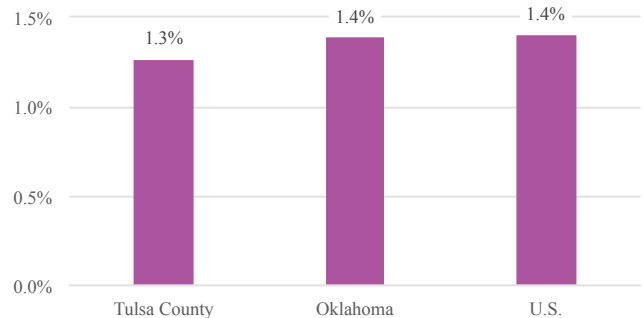
Low Birth Weight Births by Race/Ethnicity of Mother  
Tulsa County | 2011 – 2013



Low Birth Weight Births by Locality | 2013



Very Low Birth Weight Births by Locality | 2013



### Data Source:

Is Low Birth Weight a Health Problem? Pediatric and Pregnancy Nutrition Surveillance System. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

Low Birth Weight and the Environment. Centers for Disease Control and Prevention. Retrieved from: <http://ephtracking.cdc.gov/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Martin JA, Hamilton BE, Osterman MJK, et al. Births: Final Data for 2013. National Vital Statistics Reports; vol 64 no 1. Hyattsville, MD: National Center for Health Statistics. 2015.

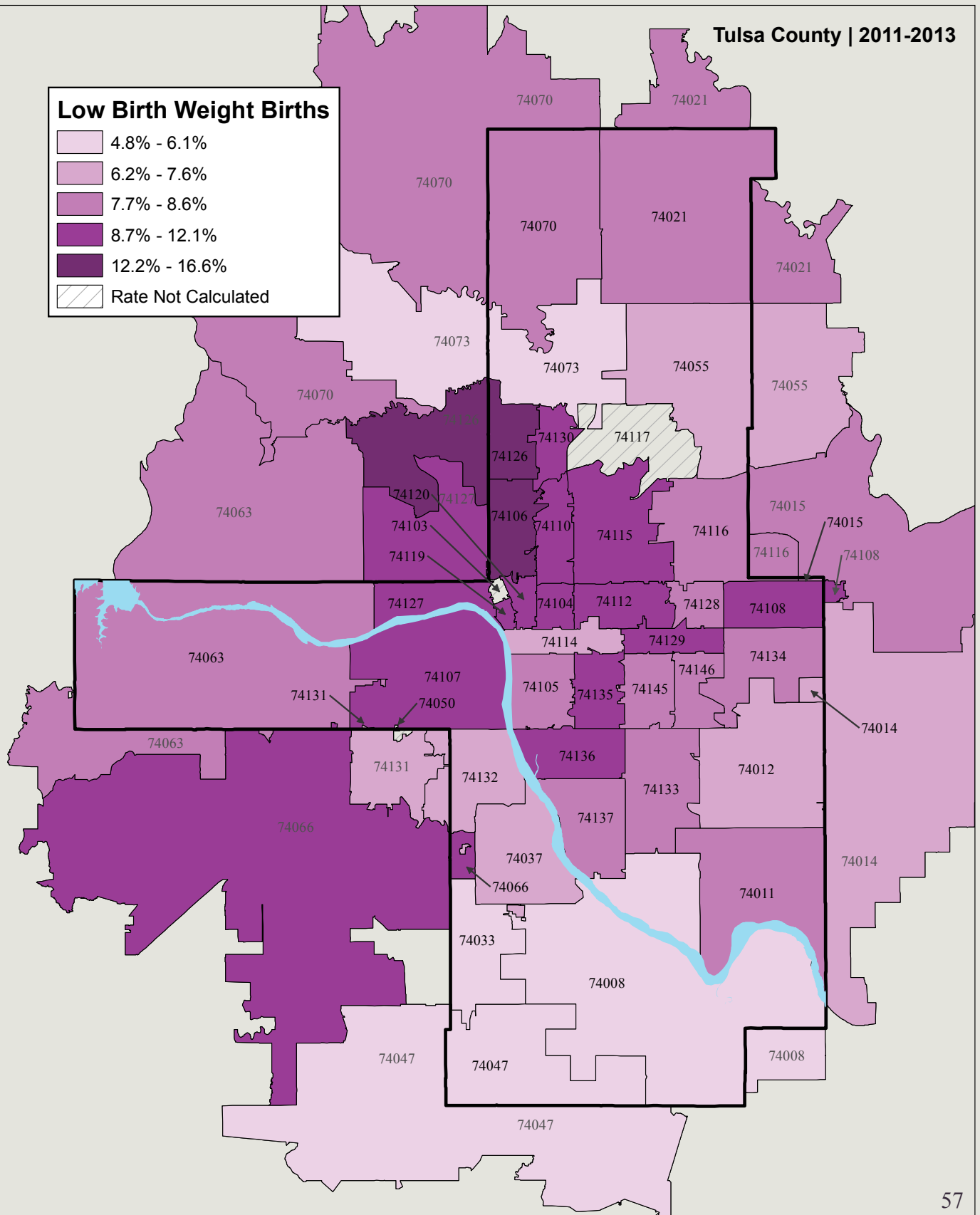
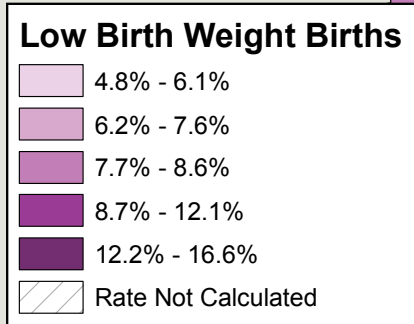
Maternal and Child Health. Healthy People 2020. Centers for Disease Control and Prevention. Retrieved from: <http://www.healthypeople.gov/>

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.



# Low Birth Weight

Tulsa County | 2011-2013



# Maternal Education

This indicator is presented as births to Tulsa County mothers with less than a high school diploma or equivalent (GED). It is presented as a percentage of all births, over the years 2011 – 2013.

## *Why Is This Indicator Important?*

Maternal education is related to the types of jobs an individual can obtain and to income, both of which affect opportunities for healthier living and the ability to access health care. A woman working full time and year-round with at least a high school education makes almost twice as much as a woman who has not earned her high school diploma or equivalent. Educational attainment is also correlated with health literacy, which impacts an individual's ability to communicate with health care providers, understand and follow instructions, and navigate the health care system. Women with less than a high school education also have poorer health outcomes, including higher rates of infant mortality, smoking, and diabetes than women with a high school diploma.

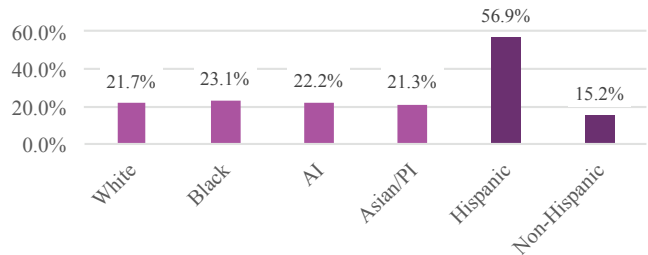
## *How Are We Doing?*

From 2011 – 2013, the percentage of birth mothers in Tulsa County with less than a 12th grade education was 21.9 percent. This percentage was relatively stable among races. However, the percentage of Hispanic mothers with less than a 12th grade education was almost four times higher than that of non-Hispanic mothers (56.9 percent compared to 15.2 percent).

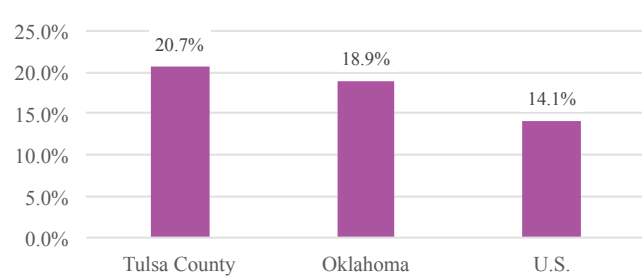
In 2013, 20.7 percent of Tulsa County birth mothers had less than a 12th grade education, compared to 18.9 percent in Oklahoma and 14.1 percent in the United States.

The ZIP codes with the highest rates of low maternal education were 74110, 74116, 74115, 74128, and 74146.

Mothers with < 12th Grade Education  
by Race/Ethnicity of Mother  
Tulsa County | 2011 – 2013



Mothers with < 12th Grade Education  
by Locality | 2013



### **Data Source:**

*Social Determinants. Putting Women's Health Care Disparities on The Map: Examining Racial and Ethnic Disparities at the State Level. The Henry J. Kaiser Family Foundation. Retrieved from: <http://kaiserfamilyfoundation.files.wordpress.com>*

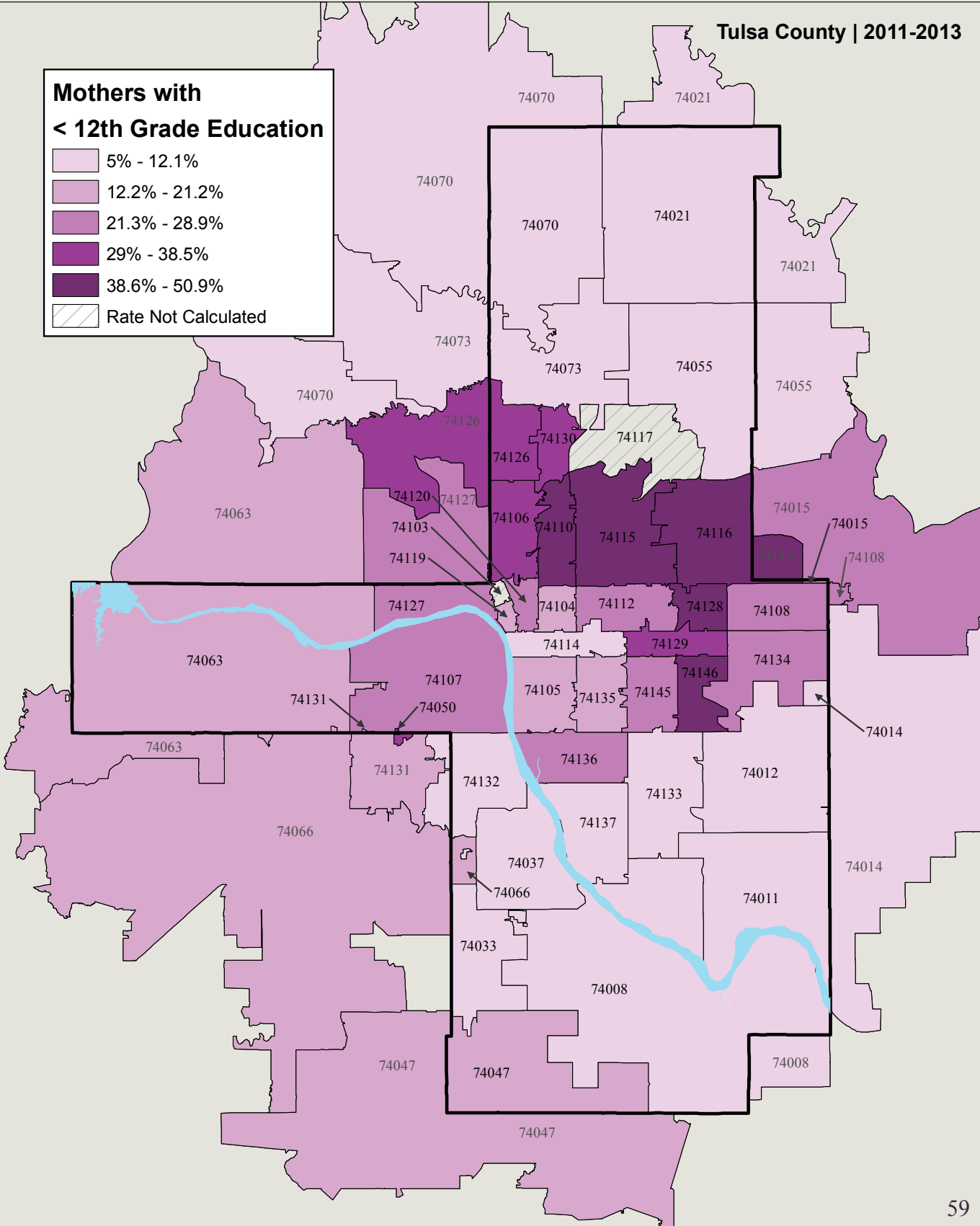
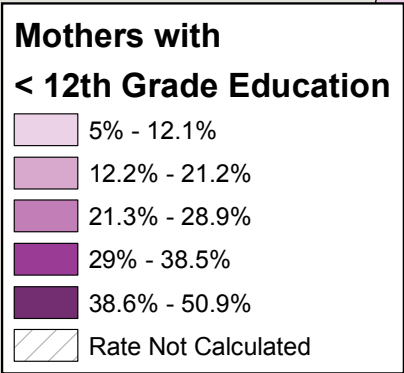
*Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.*

*United States Department of Health and Human Services (US DHHS), Centers for Disease Control and Prevention (CDC), National Center for Health Statistics (NCHS), Division of Vital Statistics, Natality public-use data 2007-2013, on CDC WONDER Online Database, January 2015. Retrieved from <http://wonder.cdc.gov/nativity-current.html>.*

*Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.*

# Maternal Education

Tulsa County | 2011-2013



# Births to Unmarried Women

Unmarried birth mothers include those who have never been married, are widowed, or are divorced. It also includes births to cohabitating parents. This indicator is presented as births to unmarried Tulsa County mothers as a percentage of all births, over the years 2011 – 2013.

## Why Is This Indicator Important?

Children born to unmarried mothers have higher rates of infant mortality and an increased likelihood of adverse birth outcomes such as low birth weight. They are also more likely to live in poverty than children of married mothers. As they reach adolescence, children of unmarried mothers are more likely to have low educational attainment, engage in sex at a younger age, and have a birth outside of marriage. In the U.S., a majority of unmarried births now occur to cohabitating parents; however, these children still experience higher levels of socioeconomic disadvantage and have poor behavioral and emotional outcomes compared to those born to married parents.

## How Are We Doing?

A total of 42.5 percent of births in Tulsa County were to unmarried mothers from 2011 – 2013. Births to unmarried mothers was highest among black mothers (77.3 percent), followed by American Indian mothers (53.7 percent). The rate was lowest among mothers who were Asian/Pacific Islanders (16.4 percent). A larger percentage of Hispanic mothers were unmarried compared to non-Hispanic mothers (51.3 percent compared to 40.9 percent).

In 2013, 42.1 percent of Tulsa County births were to unmarried mothers. This was almost the same as Oklahoma (42.2 percent). It was slightly higher than the national percentage (40.6 percent).

The ZIP codes with the highest percentage of births to unmarried women were 74106 and 74126.

### Data Source:

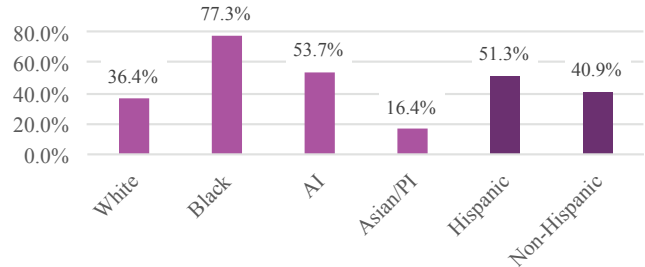
*Births to Unmarried Women.* Child Trends. Retrieved from: <http://www.childtrends.org/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information. *Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE).* Retrieved from: <http://www.health.ok.gov/ok2share>.

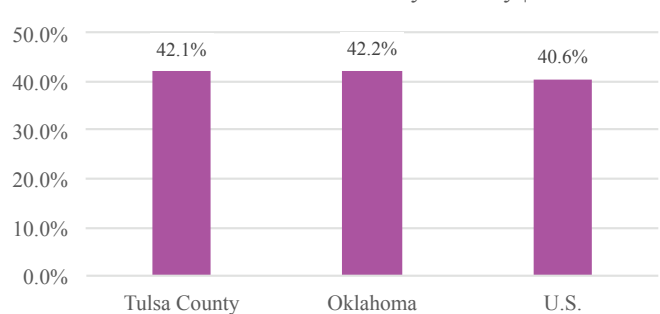
Martin JA, Hamilton BE, Osterman MJK, et al. *Births: Final Data for 2013.* National Vital Statistics Reports; vol 64 no 1. Hyattsville, MD: National Center for Health Statistics. 2015.

*Vital Statistics (2011 – 2013).* Center for Health Information. Oklahoma State Department of Health.

Births to Unmarried Women by Race/Ethnicity of Mother  
Tulsa County | 2011 – 2013

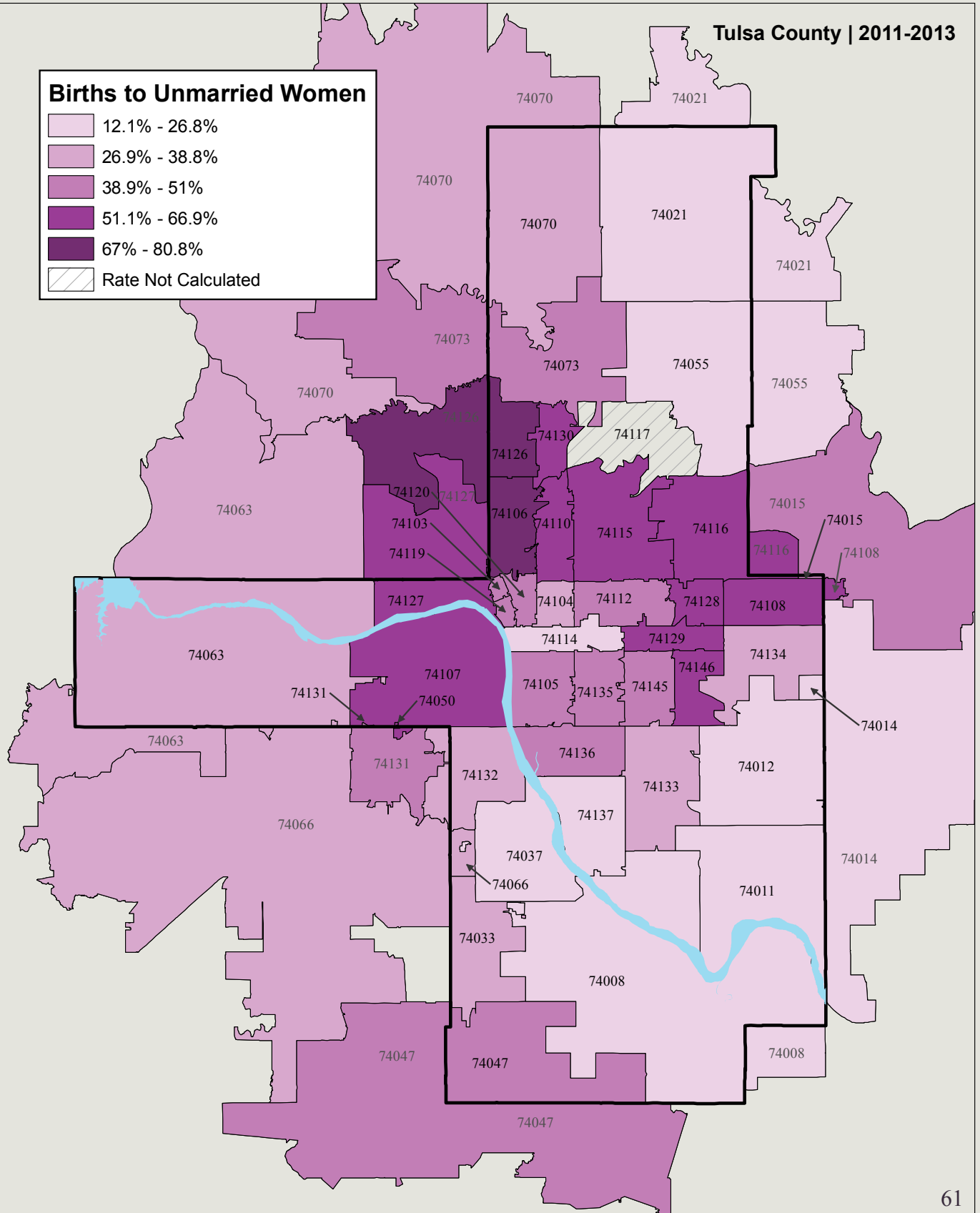
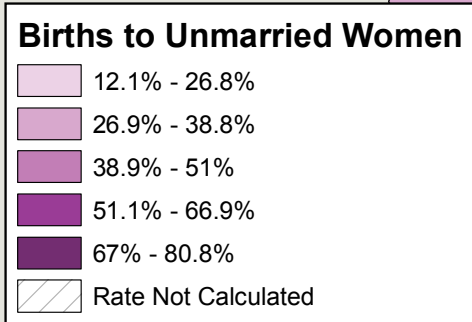


Births to Unmarried Women by Locality | 2013



# Births to Unmarried Women

Tulsa County | 2011-2013



# Infant Mortality Rate

Infant mortality is defined as the death of a child in the first year of life. The infant mortality rate is presented as the number of infant deaths per 1,000 live births, over the years 2011 – 2013.

## *Why Is This Indicator Important?*

Infant mortality is often used as an indicator to measure the health and well-being of a community because factors affecting the health of an entire population can also influence the mortality rate of infants. There are obvious disparities in infant mortality by age, race, and ethnicity of the mother. Some of the causes of infant mortality are serious birth defects, premature birth, SIDS, maternal complications of pregnancy, and injuries such as suffocation. Many of these factors can be influenced by good preconception and prenatal care for mothers.

## *How Are We Doing?*

Between 2011 and 2013, 205 Tulsa County infants died before the age of one, which was a rate of 7.4 deaths per 1,000 live births. Black infant mortality was three times higher than that of whites (16.5 deaths per 1,000 live births compared to 5.5 deaths per 1,000 live births). The infant mortality rate was slightly higher among non-Hispanics than Hispanics (7.5 compared to 6.7).

The infant mortality rate in Tulsa County in 2013 was 7.2 deaths per 1,000 live births. This was higher than Oklahoma (6.8) and the U.S. (6.0). The U.S. overall was the only region to meet the Healthy People 2020 target for infant mortality of 6.0 deaths per 1,000 live births.

The ZIP codes with the highest rates of infant mortality were 74108, 74135, and 74127.

### *Data Source:*

*Reproductive Health: Infant Mortality.* Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

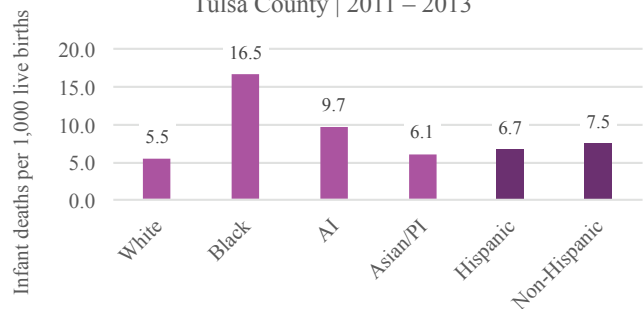
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, *Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE)*. Retrieved from: <http://www.health.ok.gov/ok2share>.

Kochanek KD, Murphy SL, Xu JQ, Arias E. *Mortality in the United States, 2013.* NCHS Data Brief, no 178. Hyattsville, MD: National Center for Health Statistics. 2014.

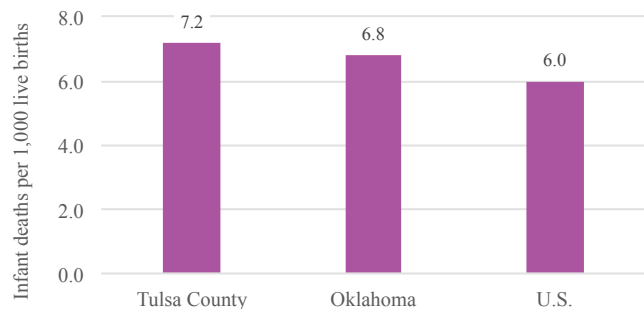
*Maternal and Child Health. Healthy People 2020.* U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

*Vital Statistics (2011 – 2013).* Center for Health Information. Oklahoma State Department of Health.

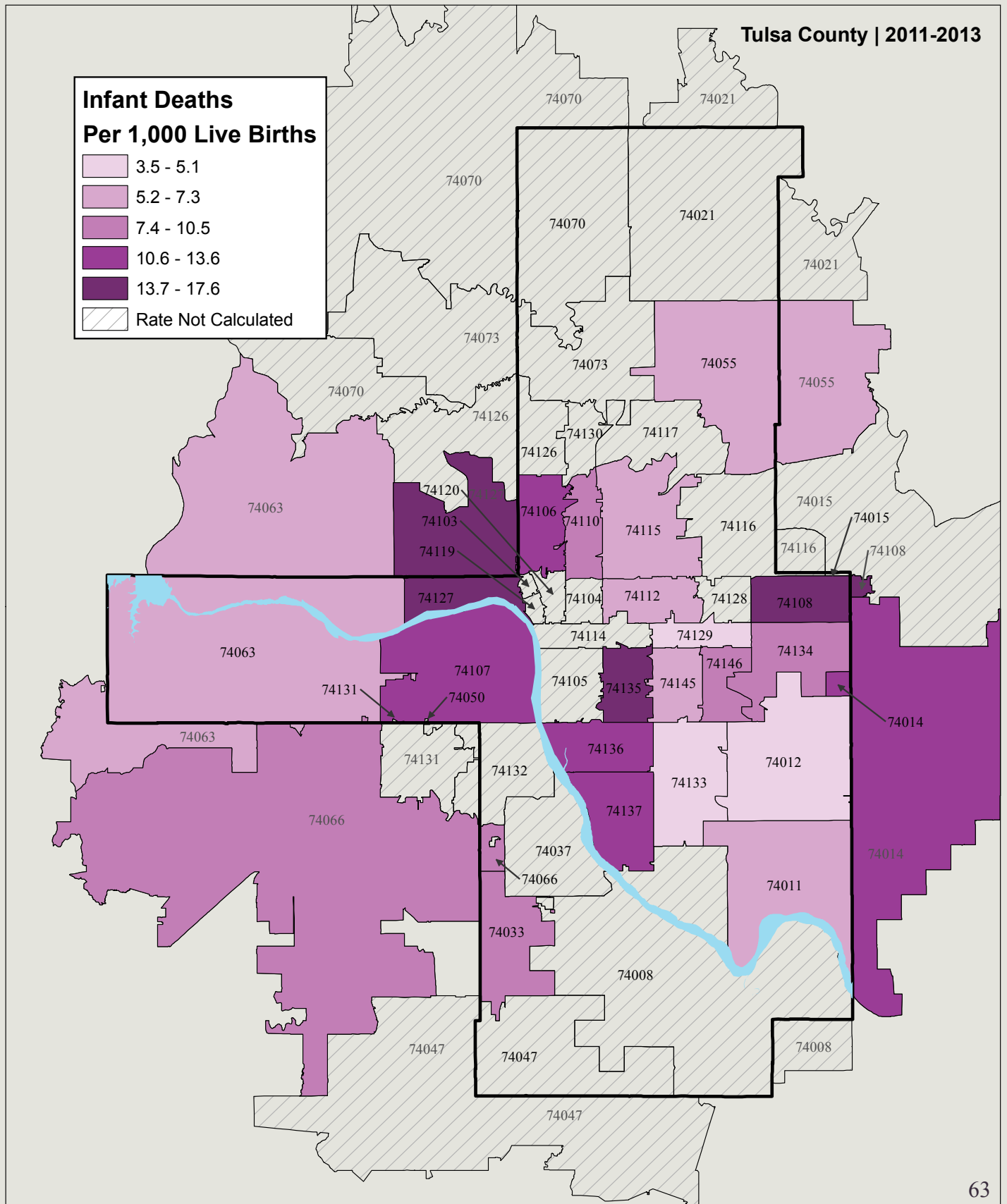
Infant Mortality Rate by Race/Ethnicity of Mother  
Tulsa County | 2011 – 2013



Infant Mortality Rate by Locality | 2013



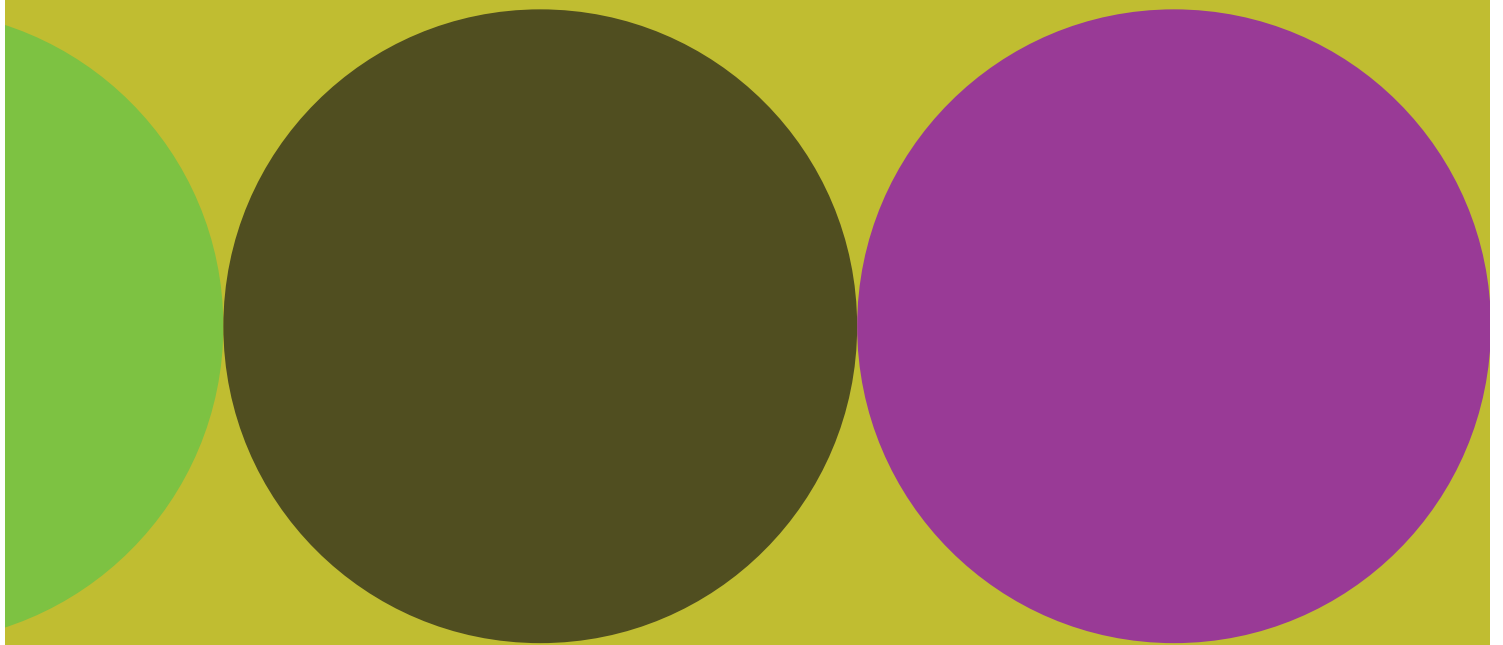
# Infant Mortality Rate





# Infectious Disease





# Chlamydia

This indicator is presented as incidence of chlamydia, or the number of newly reported cases per 100,000 population.

## Why Is This Indicator Important?

Chlamydia is a sexually transmitted disease (STD) caused by the bacterium *Chlamydia trachomatis*. It is the most commonly reported STD in Tulsa County. It is known as the “silent” disease because it is typically asymptomatic. Only about 30 percent of women experience symptoms and as many as 25 percent of men have no symptoms. If left untreated, however, chlamydia can cause serious health conditions, including short and long-term reproductive problems. Chlamydia can be transmitted to infants during birth and can result in eye infections which may lead to blindness.

## How Are We Doing?

In 2013, there were 3,395 new cases of chlamydia reported in Tulsa County, which is a rate of 545.5 cases per 100,000 population. The chlamydia incidence rate in Tulsa County was higher than the rate in Oklahoma (474.7 cases per 100,000 population) and in the United States (446.6 cases per 100,000 population).

From 2011 – 2013, the greatest percentage of new chlamydia cases were reported in adults ages 20 – 24 years (39.3 percent). The majority of cases were female (74.1 percent). With regard to race/ethnicity, the greatest percentage of new chlamydia cases were black (38.6 percent).

The ZIP codes with the highest incidence rates of chlamydia were 74106 and 74126.

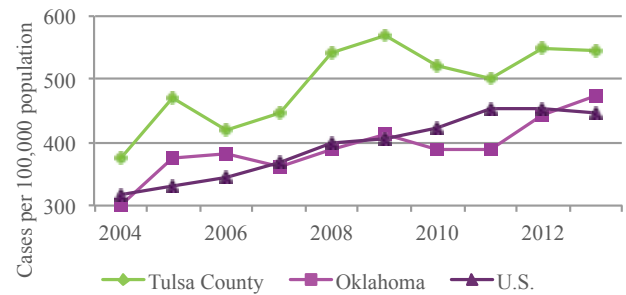
### Data Source:

Chlamydia Fact Sheet 2013. Oklahoma State Department of Health. Retrieved from: <http://www.ok.gov>

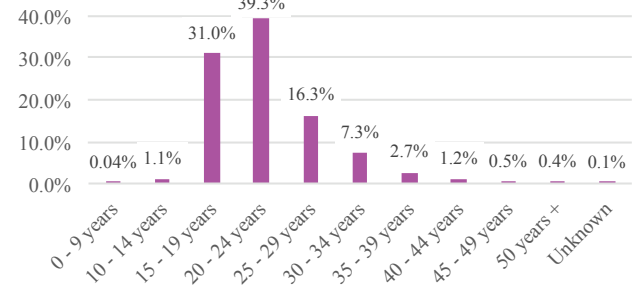
HIV/STD Service. Oklahoma State Department of Health.

STD Surveillance. Centers for Disease Control and Prevention.

Chlamydia Incidence Rates  
by Locality | 2004 – 2013

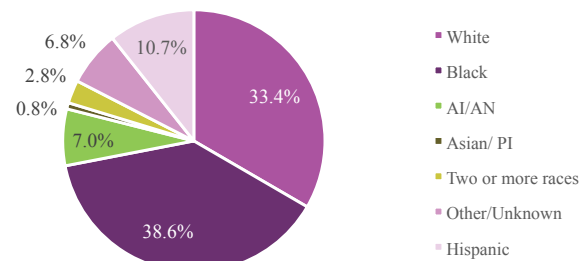


Chlamydia Cases by Age\*  
Tulsa County | 2011 – 2013

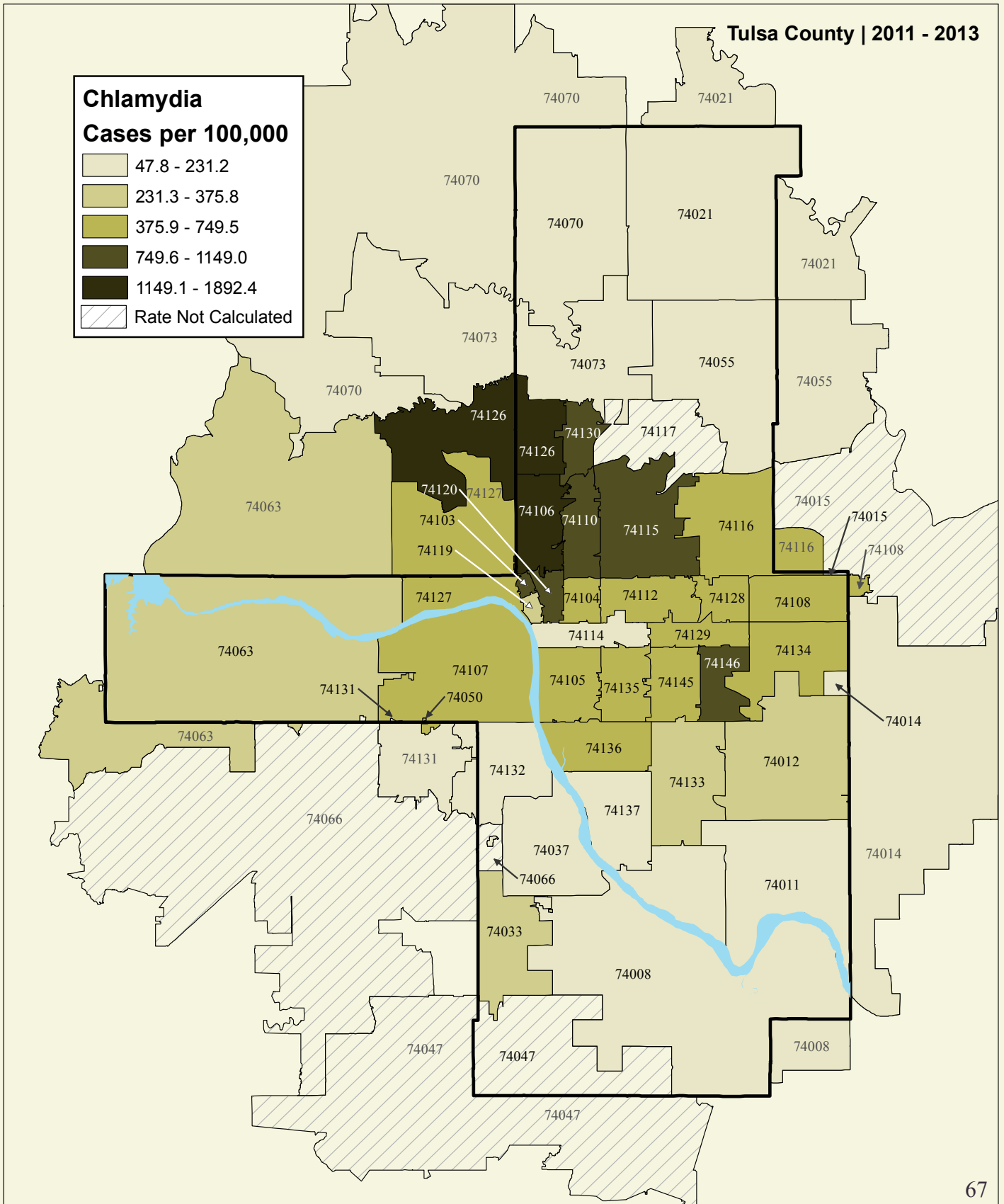


\*Graph shows percentage of total cases within each age group; percentages add up to 100%.

Chlamydia Cases by Race/Ethnicity  
Tulsa County | 2011 – 2013



# Chlamydia



# Gonorrhea

This indicator is presented as incidence of gonorrhea, or the number of newly reported cases per 100,000 population.

## Why Is This Indicator Important?

Gonorrhea is a sexually transmitted disease (STD) caused by *Neisseria gonorrhoeae*. It is the second most commonly reported STD in Tulsa County. Untreated gonorrhea can lead to severe and painful infections, and infertility in both men and women. A pregnant woman risks possible blindness and/or life-threatening infections for her baby.

## How Are We Doing?

In 2013, Tulsa County reported an incidence rate of 200.5 cases of gonorrhea per 100,000 population (1,248 total cases). This was an increase from the rate in 2012. In 2013, Tulsa County's gonorrhea incidence rate was higher than Oklahoma (137.7 cases per 100,000 population) and the United States (106.1 cases per 100,000 population).

From 2011 – 2013, the greatest percentage of new gonorrhea cases were reported in adults ages 20 – 24 years (35.4 percent). The majority of cases were female (60.1 percent). With regard to race/ethnicity, the majority of new gonorrhea cases were black (57.5 percent).

The ZIP codes with the highest incidence rates of gonorrhea were 74106, 74126, and 74103.

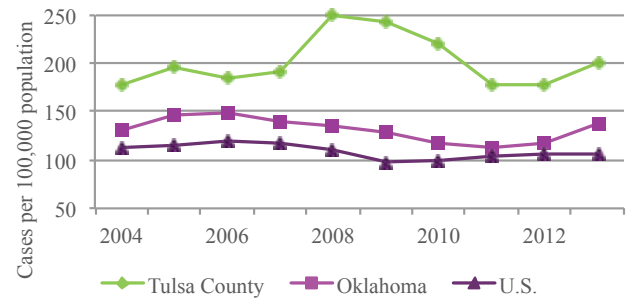
### Data Source:

Gonorrhea Fact Sheet 2013. Oklahoma State Department of Health. Retrieved from: <http://www.ok.gov>

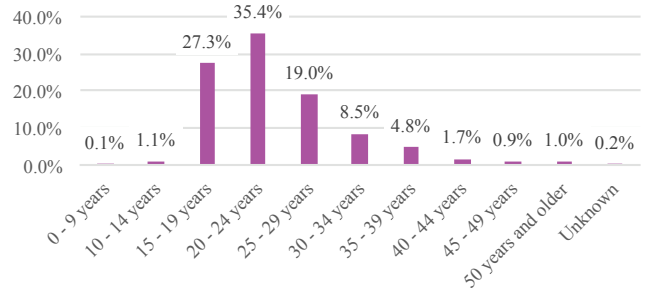
HIV/ STD Service. Oklahoma State Department of Health.

STD Surveillance. Centers for Disease Control and Prevention.

Gonorrhea Incidence Rate by Locality | 2004 – 2013

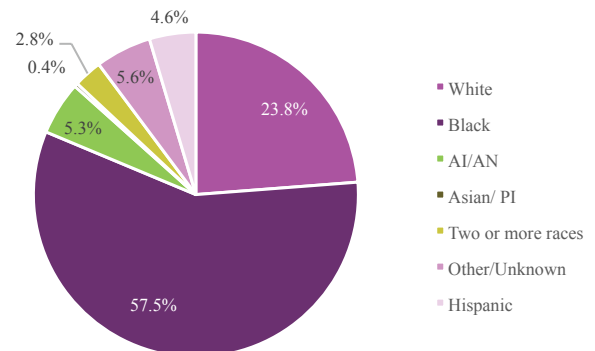


Gonorrhea Cases by Age\* Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each age group; percentages add up to 100%.

Gonorrhea Cases by Race/Ethnicity Tulsa County | 2011 – 2013





# Syphilis

This indicator is presented as incidence of syphilis, or the number of newly reported cases per 100,000 population. ZIP code and demographic data is reported for syphilis, all stages, while locality comparisons are reported for primary and secondary syphilis only.

## Why Is This Indicator Important?

Syphilis is a sexually transmitted disease (STD) caused by the bacterium *Treponema pallidum*. Syphilis is transmitted by direct contact with a syphilis sore or lesion (called a chancre). The primary stage of syphilis is generally characterized by a chancre that appears about 2 – 6 weeks after exposure. These sores typically disappear after a few weeks without treatment. However, without treatment, the infection can progress to the secondary stage, which generally starts with a rash anywhere on the body. Again, the symptoms will go away on their own, but without treatment infection can progress to latent and late stages of syphilis. Late stages of syphilis may result in damage to internal organs, muscle movement difficulty, paralysis, blindness, and dementia. This damage may cause death. Pregnant females who are infected may have miscarriages, premature births, stillbirths, or death of their newborns. Without treatment, infected babies can die or having lasting complications such as cataracts, deafness, or seizures.

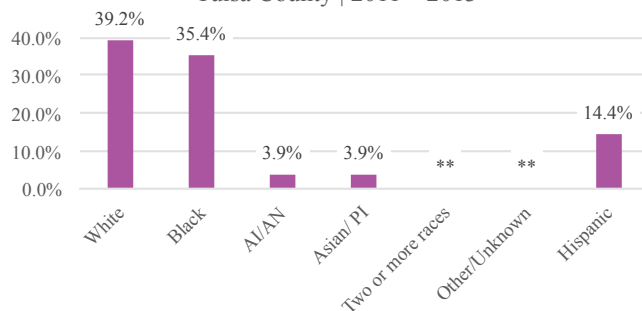
## How Are We Doing?

In 2013, there were 22 new cases of primary or secondary syphilis reported in Tulsa County, which is a rate of 3.5 cases per 100,000 population. The syphilis incidence rate in Tulsa County was higher than the rate in Oklahoma (3.1 cases per 100,000 population) but lower than the United States (5.5 cases per 100,000 population).

From 2011 – 2013, the greatest percentage of new syphilis cases (all stages) were reported in adults ages 25 – 29 years (19.9 percent). The majority of cases were male (80.1 percent). With regard to race/ethnicity, the greatest percentage were white (39.2 percent). Almost half of the cases reported from 2011 – 2013 were men who have sex with men (MSM).

The ZIP code with the highest incidence rate of syphilis (all stages) was 74106.

Syphilis Cases by Race/Ethnicity\*  
Tulsa County | 2011 – 2013



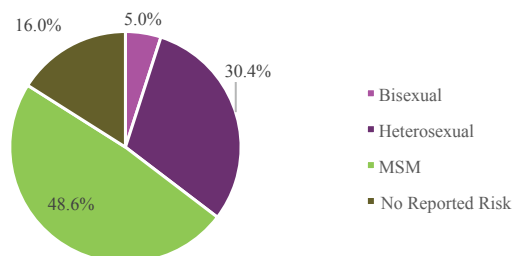
\*Graph shows percentage of total cases within each category; percentages add up to 100%.  
\*\*Data suppressed due to confidentiality concerns

Syphilis Cases by Age\*  
Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each category; percentages add up to 100%.

Syphilis Cases by Reported Risk  
Tulsa County | 2011 – 2013



### Data Source:

Syphilis Fact Sheet 2013. Oklahoma State Department of Health. Retrieved from: <http://www.ok.gov>

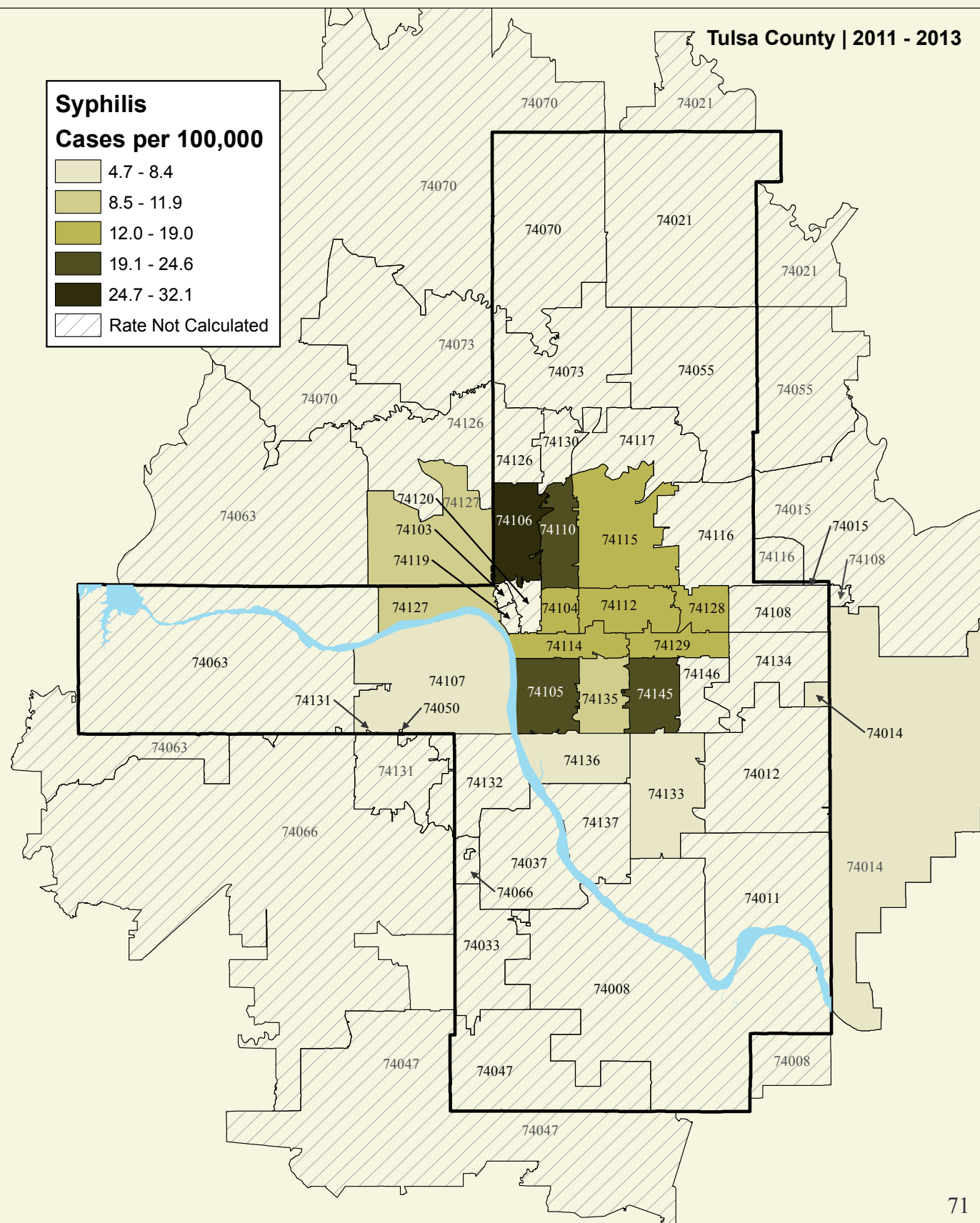
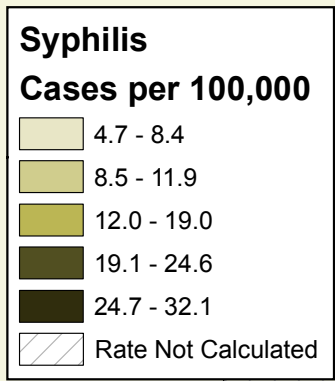
Syphilis- CDC Fact Sheet. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

HIV/ STD Service. Oklahoma State Department of Health.

STD Surveillance. Centers for Disease Control and Prevention.

# Syphilis

Tulsa County | 2011 - 2013



# HIV/AIDS

This indicator is presented as incidence of HIV infections or AIDS, or the number of newly reported cases per 100,000 population.

## Why Is This Indicator Important?

HIV is a virus spread through bodily fluids that affects the immune system. As HIV destroys specific cells in the immune system, the body loses the ability to fight off infections and disease, which leads to AIDS. In the United States, HIV is mainly spread through having unprotected sex or sharing injection drug equipment with someone who has HIV. HIV can be prevented by limiting the number of sexual partners, never sharing needles, and using condoms correctly and consistently. The CDC estimated that about 1.2 million people were living with HIV at the end of 2011, and about 14 percent did not know they were infected. Certain racial/ethnic groups, such as blacks, American Indians/Alaskan Natives, Asians and Hispanics/Latinos, are disproportionately affected compared to the general population.

## How Are We Doing?

In 2013, there were 115 new cases of HIV/AIDS reported in Tulsa County, which is a rate of 18.5 cases per 100,000 population. The HIV/AIDS incidence rate in Tulsa County was higher than the rate in Oklahoma (11.3 cases per 100,000 population).

From 2011 – 2013, the greatest percentage of new HIV/AIDS cases were reported in adults ages 20 – 29 years (39.6 percent). The majority of cases were male (85.2 percent). With regard to race, the majority of new HIV/AIDS cases were white (50.6 percent). Over half of the cases reported from 2011 – 2013 were men who have sex with men (MSM).

The ZIP codes with the highest incidence rates of HIV/AIDS were 74135, 74105, and 74104.

### Data Source:

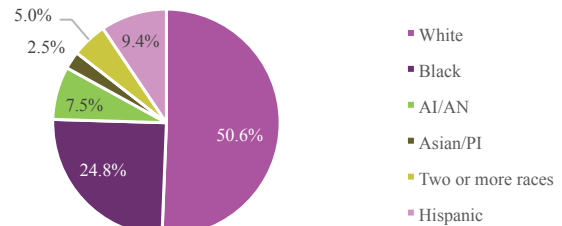
Newly Diagnosed HIV/AIDS Fact Sheet 2013. Oklahoma State Department of Health. Retrieved from: <http://www.ok.gov>

HIV Basics. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

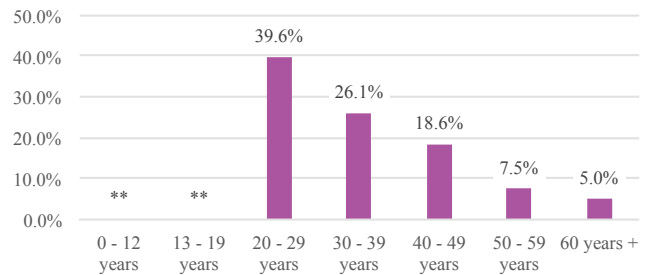
HIV/STD Service. Oklahoma State Department of Health.

STD Surveillance. Centers for Disease Control and Prevention.

HIV/AIDS Cases by Race/Ethnicity  
Tulsa County | 2011 – 2013

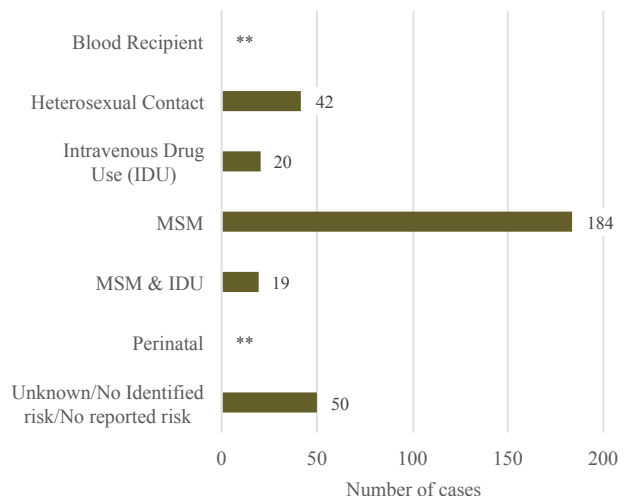


HIV/AIDS Cases by Age\*  
Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each category; percentages add up to 100%.  
\*\*Data suppressed due to confidentiality concerns

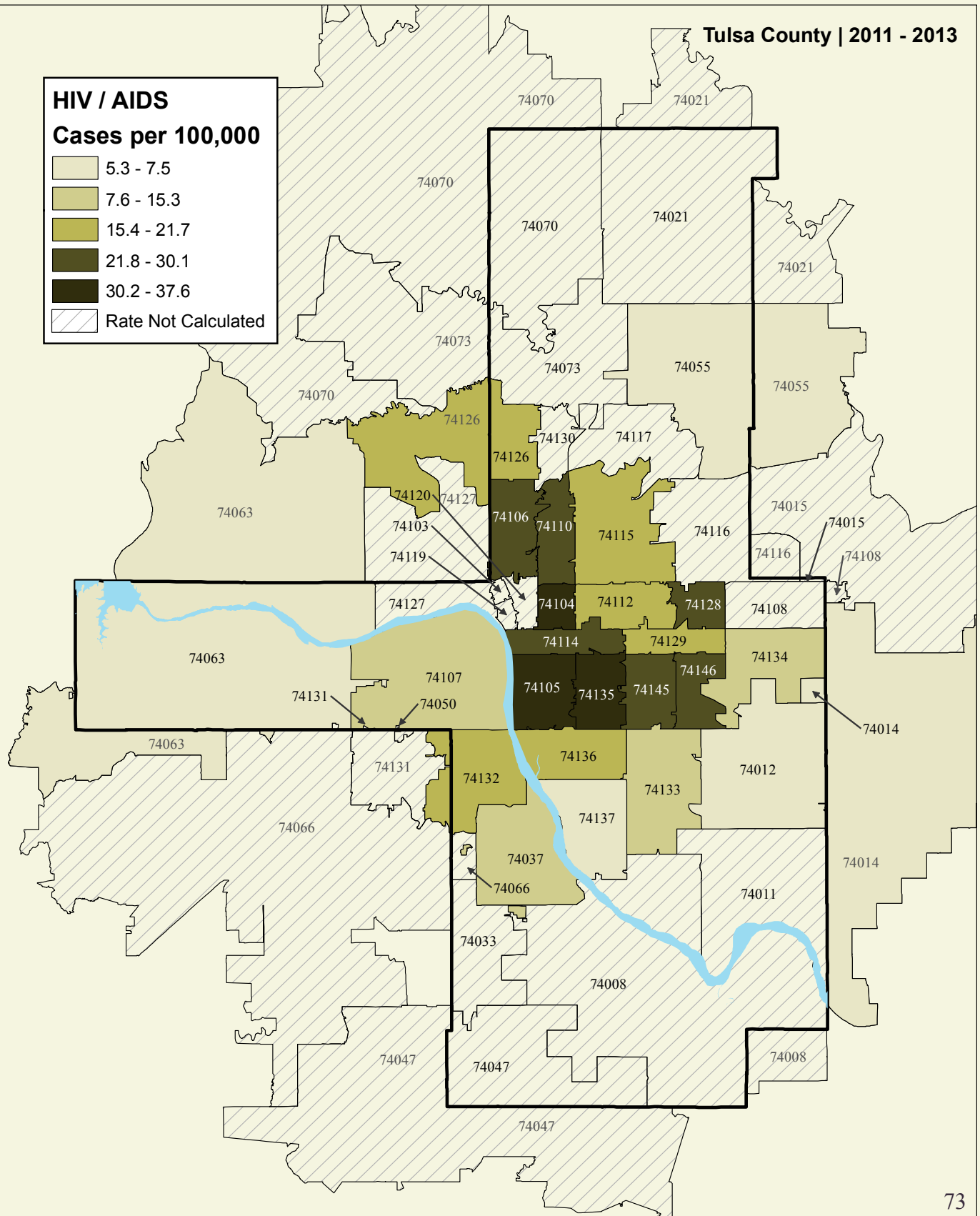
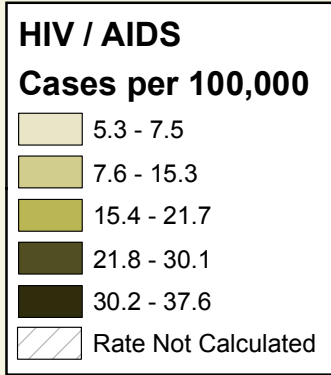
HIV/AIDS Cases by Risk Factor  
Tulsa County | 2011 – 2013





# HIV/AIDS

Tulsa County | 2011 - 2013



# Tuberculosis

This indicator is presented as incidence of tuberculosis, or the number of newly reported cases per 100,000 population.

## Why Is This Indicator Important?

Tuberculosis (TB) is a disease caused by the bacterium *Mycobacterium tuberculosis*. It usually affects the lungs, but can also attack other parts of the body such as the kidneys, spine, and brain. It is spread through the air when someone with TB of the lungs or throat coughs, sneezes, speaks, or sings. Individuals with TB are treated by taking several drugs for 6 – 12 months. It is very important to take the drugs exactly as prescribed, in order to lower the risk of becoming sick again or developing resistance to the drugs. Worldwide, over nine million individuals become sick with TB each year.

## How Are We Doing?

In 2013, the incidence rate of tuberculosis in Tulsa County was 2.0 new cases per 100,000 population. This was slightly higher than the rate in Oklahoma (1.9 new cases per 100,000). These regions did not meet the Healthy People 2020 goal of 1.0 new cases of tuberculosis per 100,000 individuals. The incidence of TB in Tulsa County decreased in 2013 after increasing from 2010 – 2012.

From 2011 – 2013, the greatest percentage of new TB cases were reported in adults ages 55 – 64 (22.4 percent). The majority of cases were male (57.1 percent). Additionally, the largest percentage were Asian (36.7 percent) and non-Hispanic (81.6 percent).

Because of confidentiality concerns due to a small number of cases in each ZIP code, cases were not mapped.

### Data Source:

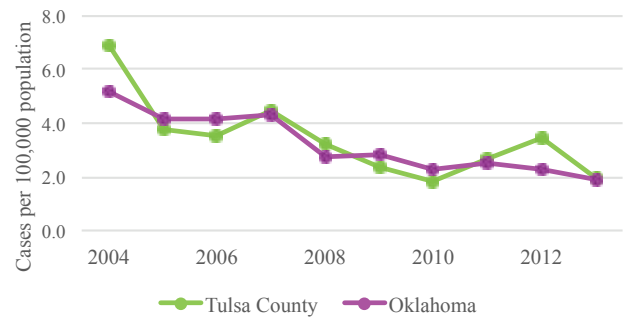
Tuberculosis Fact Sheet. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

Immunization and Infectious Disease. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

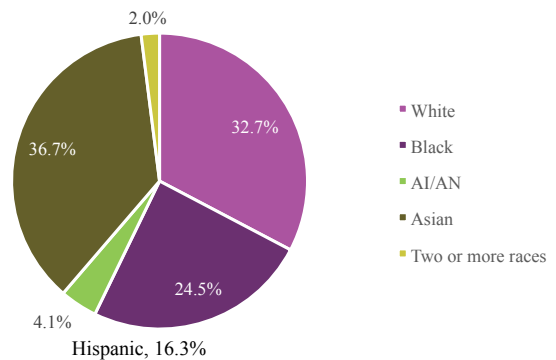
Tuberculosis Case Rates, 2009 – 2014. Oklahoma State Department of Health. Retrieved from: <http://www.ok.gov>

Acute Disease Service. Oklahoma State Department of Health.

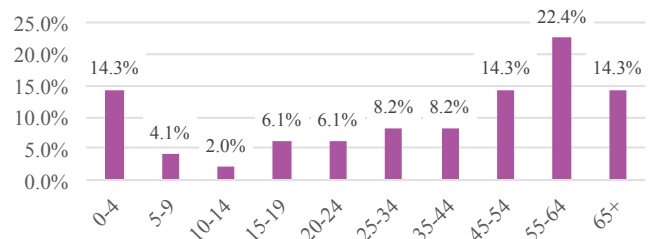
Tuberculosis Incidence Rate by Locality | 2004 – 2013



Tuberculosis Cases by Race/Ethnicity  
Tulsa County | 2011 – 2013



Tuberculosis Cases by Age\*  
Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each category; percentages add up to 100%.

# Hepatitis A

This indicator is presented as the number of reported cases of hepatitis A per 100,000 population.

## *Why Is This Indicator Important?*

Hepatitis A is an acute liver disease that can range in severity from a mild illness lasting a few weeks to a severe illness lasting several months. Hepatitis A is generally spread through ingestion of fecal matter from contact with objects, food, or drinks that have been contaminated by an infected person. Hepatitis A can also be spread through contaminated food or water and has been associated with restaurant outbreaks. Vaccination is the most effective way to prevent the transmission of hepatitis A.

## *How Are We Doing?*

There were less than ten cases of hepatitis A from 2011 – 2013. Because of confidentiality concerns, cases were not mapped or broken down by demographics.

In 2013, the hepatitis A incidence rate was 0.5 cases per 100,000 population, compared to 0.4 cases per 100,000 in Oklahoma. The most recent U.S. data available was 0.5 cases per 100,000 in 2012. None of these regions met the Healthy People target incidence of 0.3 cases per 100,000 population. The incidence rate in Tulsa County decreased in 2013 after increasing from 2011 – 2012.

### *Data Source:*

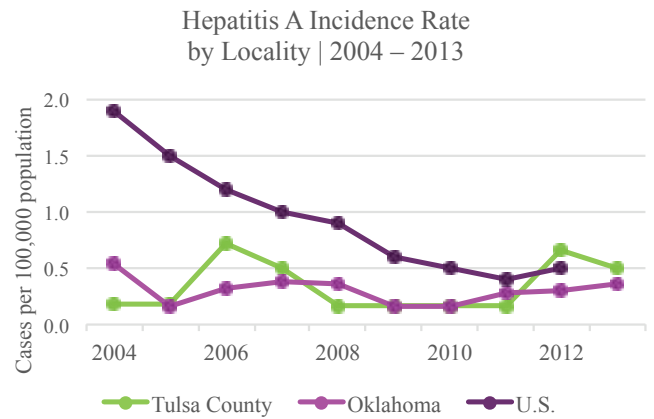
*Hepatitis A Fact Sheet.* Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

*Immunization and Infectious Disease. Healthy People 2020.* U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

*Acute Disease Service.* Oklahoma State Department of Health.

*National Notifiable Diseases Surveillance System.* Centers for Disease Control and Prevention.

*Viral Hepatitis Surveillance.* Centers for Disease Control and Prevention.



# Hepatitis B

This indicator is presented as the number of acute cases of hepatitis B per 100,000 population.

## *Why Is This Indicator Important?*

Hepatitis B is a contagious liver disease that can cause acute or chronic infection. The hepatitis B virus is 50 – 100 times more infectious than HIV and is usually spread through blood, semen, or other bodily fluids. Approximately 15 – 25 percent of individuals with chronic hepatitis B develop serious liver complications, including liver damage, cirrhosis, liver failure, and liver cancer. Each year, about 3,000 people die in the United States from hepatitis B-related liver disease.

## *How Are We Doing?*

There were 59 cases of acute hepatitis B in Tulsa County from 2011 – 2013. In 2013, the rate of hepatitis B was 2.0 cases per 100,000. The rate of acute hepatitis B has been decreasing in Tulsa County since 2009.

The rate of acute Hepatitis B in Tulsa County in 2013 was higher than in Oklahoma (1.1 cases per 100,000 population). The most recent U.S. data available was 0.9 cases per 100,000 population in 2012.

### *Data Source:*

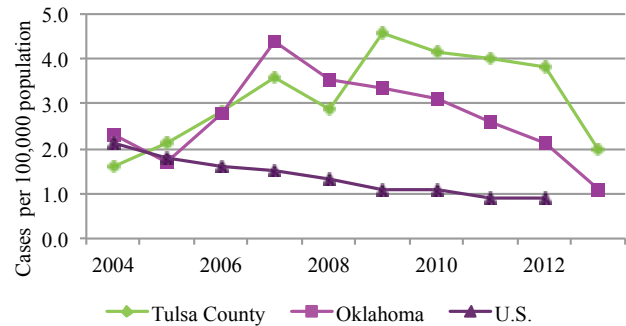
*Hepatitis B Fact Sheet. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>*

*HIV/STD Service. Oklahoma State Department of Health.*

*National Notifiable Diseases Surveillance System. Centers for Disease Control and Prevention.*

*Viral Hepatitis Surveillance. Centers for Disease Control and Prevention.*

Hepatitis B Incidence Rate  
by Locality | 2004 – 2013



# Hepatitis C

This indicator is presented as the number of cases of acute hepatitis C per 100,000 population.

## *Why Is This Indicator Important?*

Hepatitis C is a contagious liver disease that can cause acute or chronic infection. Approximately 75 – 85 percent of people who are infected with hepatitis C develop chronic (lifelong) infection. Hepatitis C is transmitted through contact with the blood of an infected person. Currently, most people become infected with hepatitis C by sharing needles or other equipment used to inject drugs. Hepatitis C (acute and chronic) accounts for the majority of the cases investigated by Tulsa Health Department epidemiologists.

## *How Are We Doing?*

There were 33 cases of acute hepatitis C in Tulsa County from 2011 – 2013. In 2013, the incidence rate of hepatitis C was 2.1 cases per 100,000 population. The rate of acute hepatitis C essentially stayed the same in 2013 compared to 2012 (2.1 cases per 100,000 in 2013 compared to 2.2 cases per 100,000 in 2012).

The incidence rate of hepatitis C in Tulsa County in 2013 was higher than the rate in Oklahoma (1.1 cases per 100,000 population). The most recent U.S. data available was 0.6 cases per 100,000 population in 2012. None of these regions met the Healthy People 2020 target incidence of 0.25 acute cases per 100,000 individuals.

### *Data Source:*

*Hepatitis C Fact Sheet. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>*

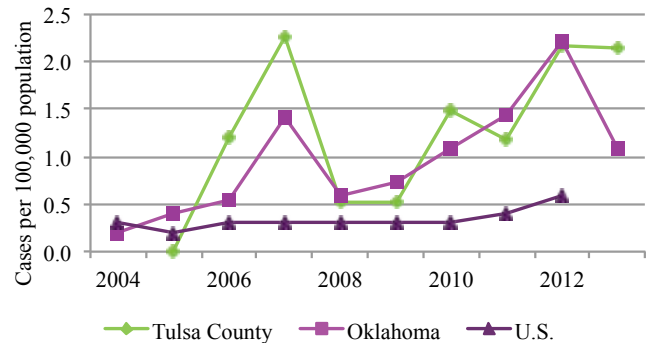
*Immunization and Infectious Disease. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>*

*HIV/STD Service. Oklahoma State Department of Health.*

*National Notifiable Diseases Surveillance System. Centers for Disease Control and Prevention.*

*Viral Hepatitis Surveillance. Centers for Disease Control and Prevention.*

Hepatitis C Incidence Rate  
by Locality | 2004 – 2013



# Foodborne Illness

This indicator includes reported cases of disease caused by the following bacteria—*Campylobacter* species, *Escherichia coli*, *Salmonella* species and *Listeria monocytogenes*. It is presented as the rate of the reported foodborne illness cases per 100,000 population, over the years 2011 – 2013.

## Why Is This Indicator Important?

Consumption of contaminated food causes an estimated 48 million foodborne illnesses and 3,000 deaths each year in the United States. Although everyone is at risk of getting a foodborne illness, certain populations, such as infants, young children, pregnant women, the elderly and individuals with weakened immune systems, are at a greater risk of developing more serious illness or death.

## How Are We Doing?

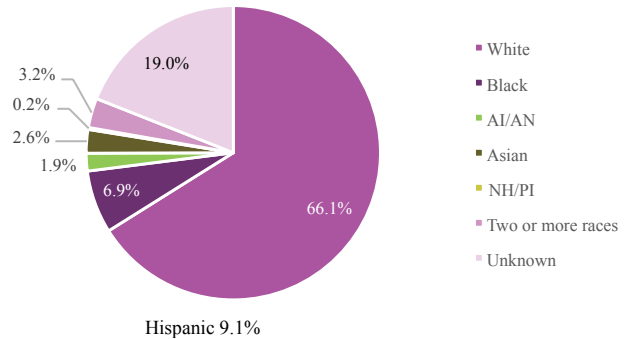
Of the 463 key foodborne illnesses diagnosed in Tulsa County from 2011 – 2013, 55 percent were Salmonellosis, 33 percent were Campylobacteriosis, and 12 percent were caused by *E. coli*. There were no cases of Listeriosis from 2011 – 2013. The majority of cases were white (66.1 percent) and the most common age group was under 5 years old (22.8 percent). Overall, a total of 9.1 percent of individuals with foodborne illnesses were Hispanic.

In 2013, the rates of Salmonellosis and Campylobacteriosis per 100,000 population in Tulsa County were both 10.8 cases per 100,000. These were both lower than the rates in Oklahoma overall, which were 23.7 and 12.5 cases per 100,000, respectively. Tulsa County met the Healthy People 2020 target of 11.4 cases of Salmonellosis per 100,000 individuals, but did not meet the target of 8.5 cases of Campylobacteriosis per 100,000 population. The rate of *E. coli* was 2.1 cases per 100,000 population. This was lower than the rate in Oklahoma (2.8 cases per 100,000).

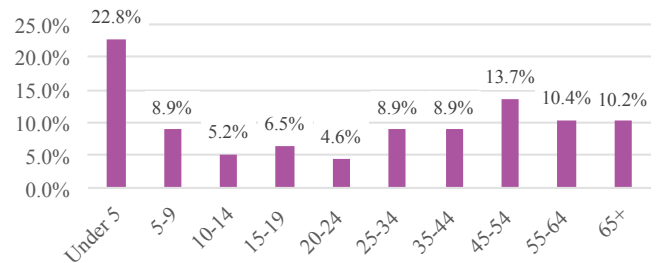
The rate of Salmonellosis decreased from 2011 – 2013, while the rate of Campylobacteriosis increased during the same time period. The rate of *E. coli* decreased in 2013 after increasing from 2009 – 2012.

The ZIP codes with the highest rates of foodborne illness were 74119, 74108, and 74146.

Key Foodborne Bacterial Illnesses by Race/Ethnicity  
Tulsa County | 2011 – 2013

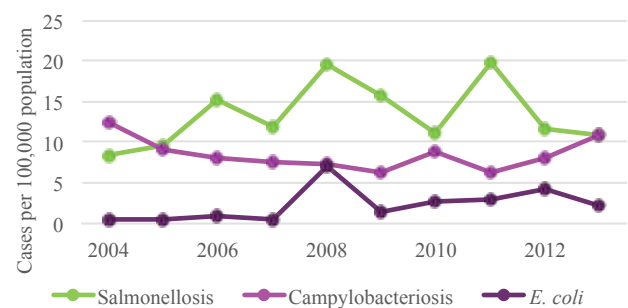


Key Bacterial Foodborne Illnesses by Age\*  
Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each category; percentages add up to 100%.

Key Bacterial Foodborne Illness Rates  
Tulsa County | 2004 – 2013



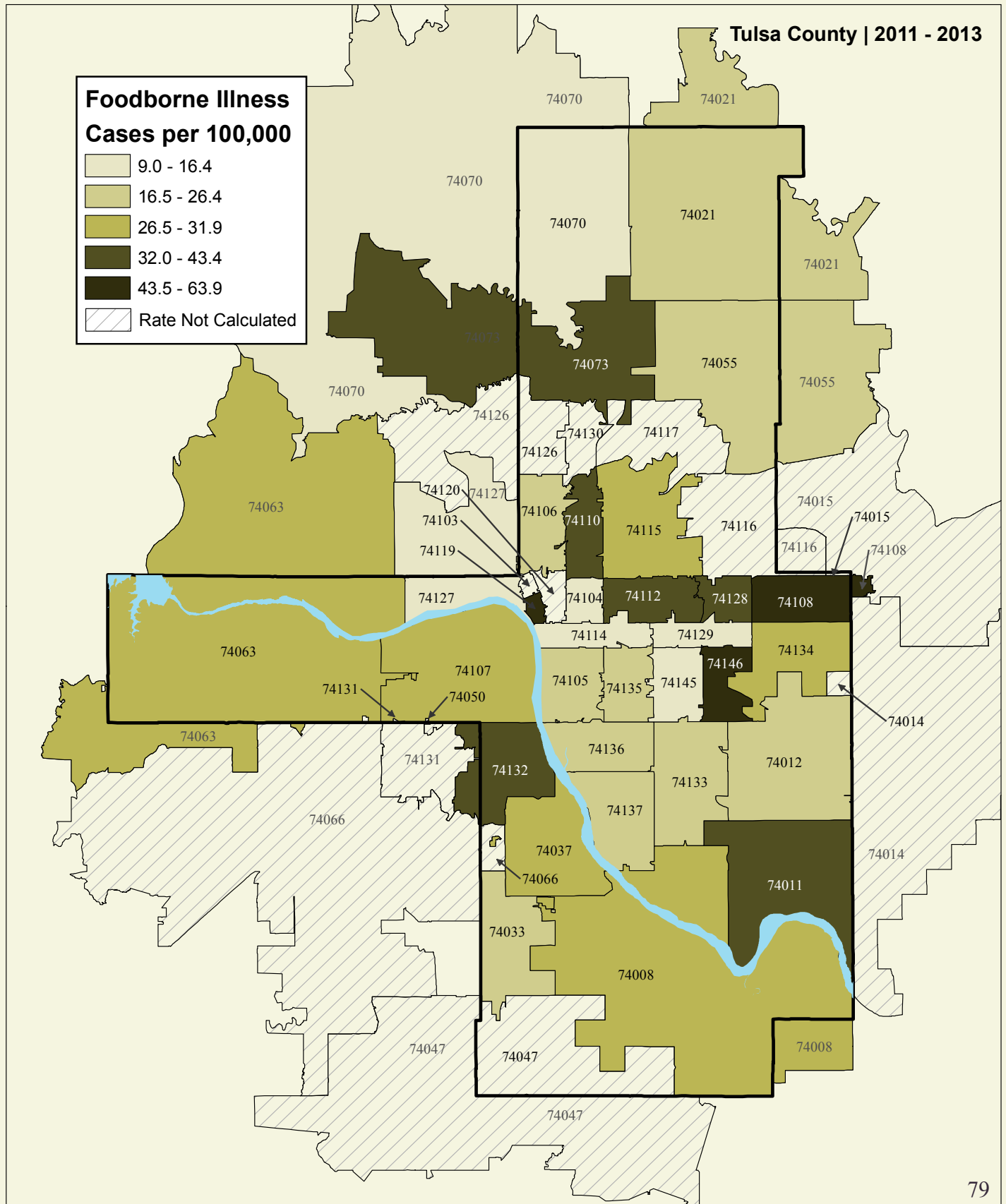
### Data Source:

Foodborne Illness. USDA Food Safety and Inspection Service. Retrieved from: <http://www.fsis.usda.gov>

Food Safety. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

Acute Disease Service. Oklahoma State Department of Health.

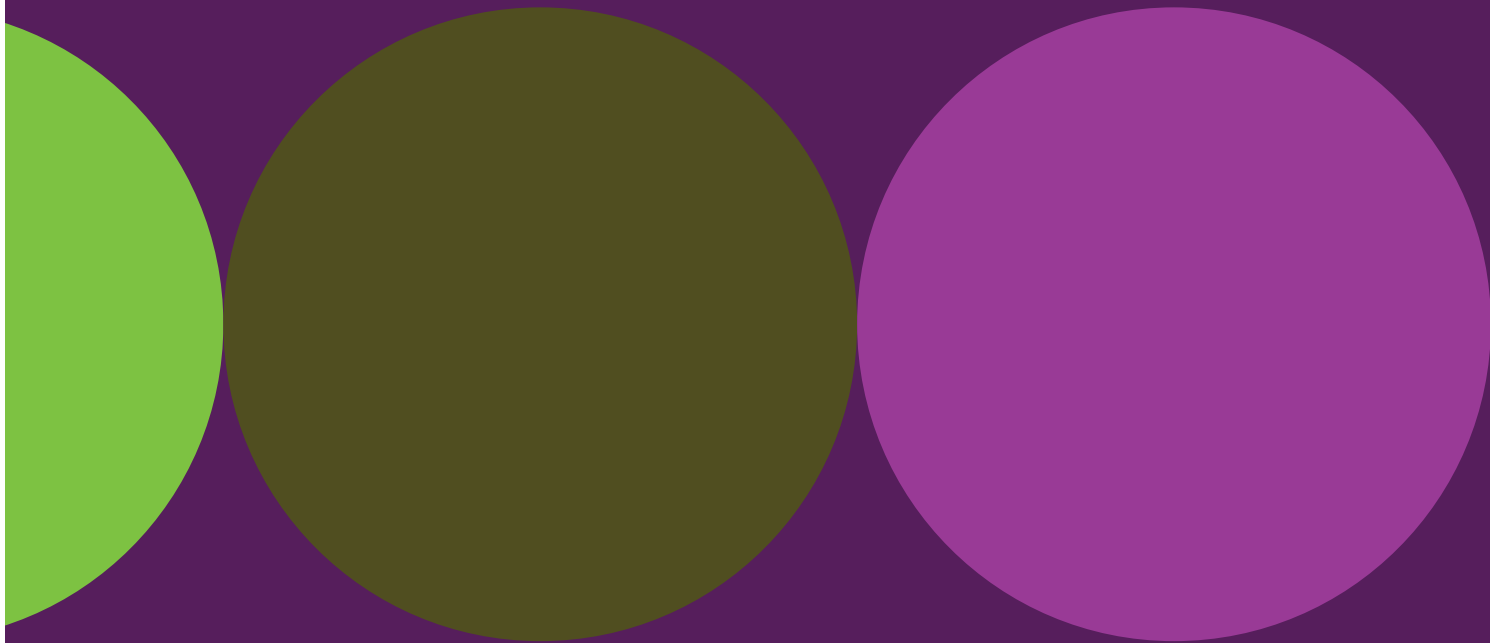
# Foodborne Illness





**Social &  
Mental  
Health**





# Mental Health Visits

This indicator is presented as the number of adults age 18 and older who received outpatient mental health services funded by Medicaid or Oklahoma Department of Mental Health and Substance Abuse Services per 1,000 population. Demographic data is presented for unique clients only, while ZIP code data is presented for all clients. It is important to note that this indicator does not include any mental health visits that were paid for through private insurance, self-pay, Veteran's Affairs, tribal healthcare, etc.

## Why Is This Indicator Important?

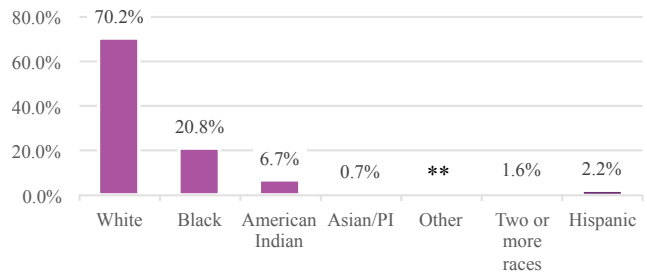
Mental health is a state of successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with challenges. It is essential to personal well-being, family and interpersonal relationships, and the ability to contribute to community or society. Mental health disorders are the leading cause of disability in the United States and Canada, accounting for 25 percent of all years of life lost to disability and premature mortality. Mental health and physical health are closely connected. Mental health plays a major role in people's ability to maintain good physical health. Mental illnesses, such as depression and anxiety, affect people's ability to participate in health-promoting behaviors. In turn, problems with physical health, such as chronic diseases, can have a serious impact on mental health and decrease a person's ability to participate in treatment and recovery.

## How Are We Doing?

From 2011 – 2013, there were a total of 44,148 unduplicated individuals who received outpatient mental health services in Tulsa County, which is a rate of 32.8 mental health visits per 1,000 population age 18 and older. When taking multiple visits into account (duplicate clients), there was a rate of 772.3 visits per 1,000 population.

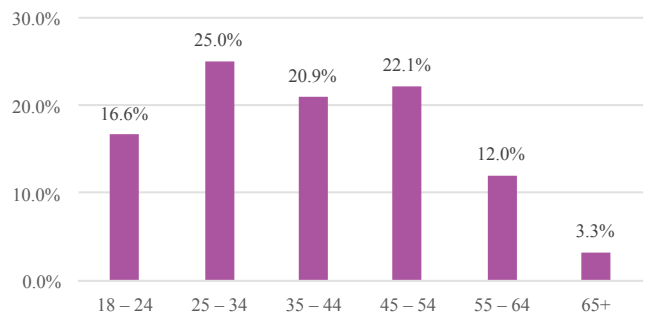
Females accounted for the majority of mental health visits (60.2 percent). Adults ages 25 – 34 made up one-quarter of mental health visits. With regard to race, about 70 percent of mental health visits were white individuals (70.2 percent). Non-Hispanics accounted for 97.8 percent of visits.

Mental Health Visits by Race/Ethnicity\*  
Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each category; percentages add up to 100%.  
\*\*Data suppressed due to confidentiality concerns

Mental Health Visits by Age\*  
Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each category; percentages add up to 100%.

The ZIP code with the highest rate of mental health visits was 74103. It is important to note that these rates include duplicate clients.

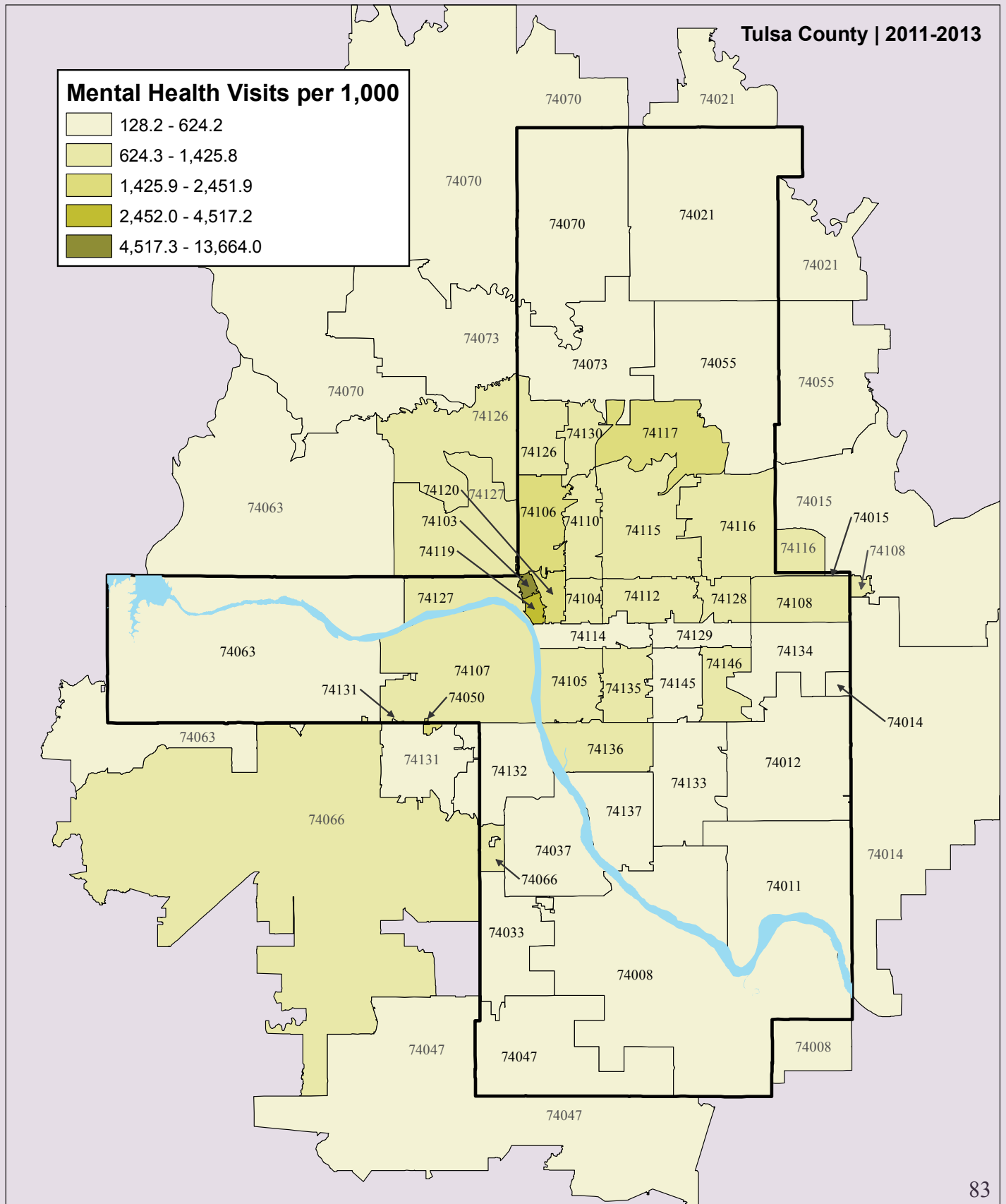
### Data Source:

Mental Health: Strengthening Our Response. World Health Organization. Retrieved from: <http://www.who.int>

Mental Health and Mental Disorders. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

Oklahoma Department of Mental Health and Substance Abuse Services. 2011 – 2013.

# Mental Health Visits



# Substance Abuse Visits

This indicator is presented as the number of adults age 18 and older who received outpatient substance abuse services funded by Medicaid or Oklahoma Department of Mental Health and Substance Abuse Services per 1,000 population. Outpatient services does not include social support groups such as Alcoholics Anonymous or Narcotics Anonymous, or inpatient rehab services. Demographic data is presented for unique clients only, while ZIP code data is presented for all clients. It is important to note that this indicator does not include any substance abuse visits that were paid for through private insurance, self-pay, Veteran's Affairs, tribal healthcare, etc.

## Why Is This Indicator Important?

In 2012, an estimated 23.1 million Americans age 12 and older needed treatment for substance abuse. Substance abuse generally refers to alcohol and both prescription and illegal drug abuse. Disorders related to substance abuse cause some of the highest rates of disability and disease burden in the U.S. This can result in high costs to families, employers, and publicly funded health care systems. Additionally, chronic diseases such as diabetes and heart disease can be caused by drug and alcohol use. Addressing the impact of substance use alone is estimated to cost Americans more than \$600 billion each year.

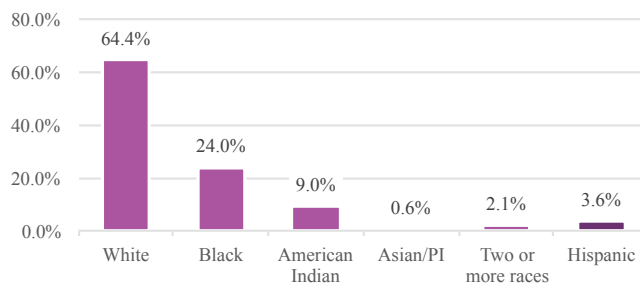
## How Are We Doing?

From 2011 – 2013, there were a total of 10,212 unduplicated individuals who received outpatient substance abuse services in Tulsa County, which is a rate of 7.6 substance abuse visits per 1,000 population age 18 and older. When taking multiple visits into account (duplicate clients), there was a rate of 179.5 visits per 1,000 population.

Females accounted for the majority of substance abuse visits (54.7 percent). Adults ages 25 – 34 made up over one-third of substance abuse visits (37.8 percent). With regard to race, almost two-thirds of mental health visits were white individuals (64.4 percent). Non-Hispanics accounted for 96.4 percent of visits.

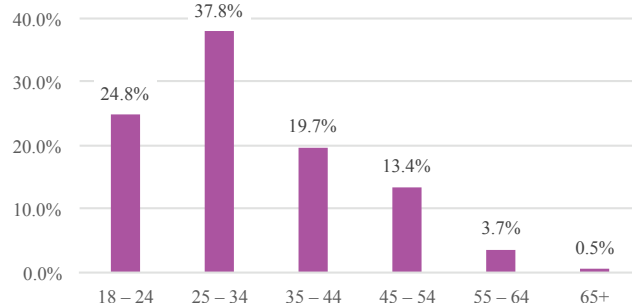
The ZIP codes with the highest rates of substance abuse visits were 74117 and 74050. It is important to note that these rates include duplicate clients.

Substance Abuse Visits by Race/Ethnicity\*  
Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each category; percentages add up to 100%.

Substance Abuse Visits by Age\*  
Tulsa County | 2011 – 2013



\*Graph shows percentage of total cases within each category; percentages add up to 100%.

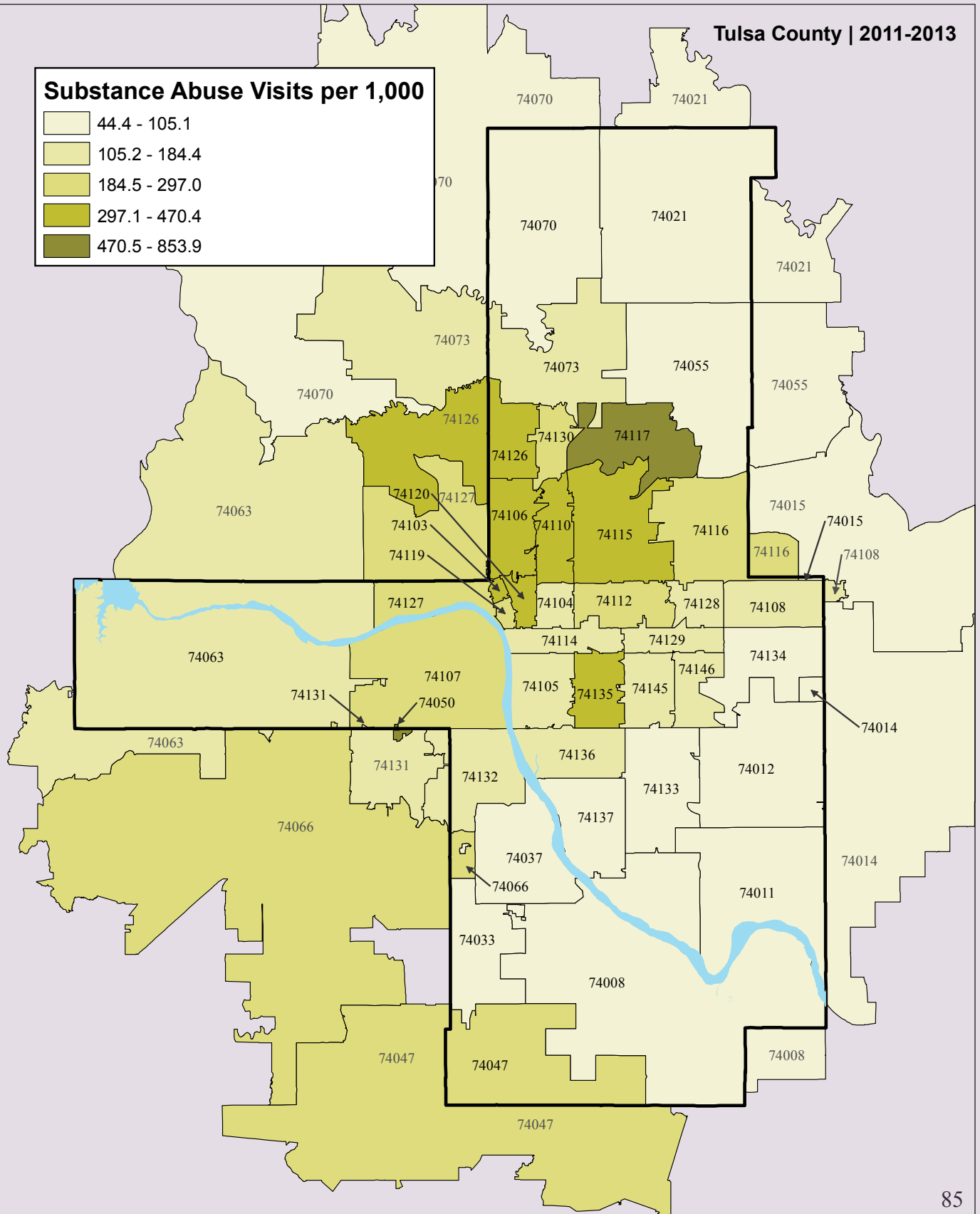
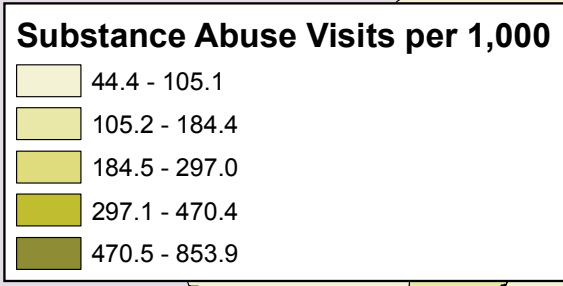
## Data Source:

Prevention of Substance Abuse and Mental Illness. Substance Abuse and Mental Health Services Administration. Retrieved from: <http://www.samhsa.gov>

Oklahoma Department of Mental Health and Substance Abuse Services. 2011 – 2013.

# Substance Abuse Visits

Tulsa County | 2011-2013



# Child Abuse & Neglect

The Oklahoma Department of Human Services (OKDHS) assesses all accepted reports of alleged child abuse and neglect and, if necessary, investigates the individuals responsible for the child's care. Investigations are conducted when the report contains allegations of serious threats to the child's safety, whereas assessments are conducted when the allegation of abuse or neglect does not constitute a serious or immediate threat to a child's health or safety. This indicator is presented as the number of confirmed cases of child abuse or neglect per 1,000 children. Please note that these rates reflect a duplicated count of children confirmed to be victims of child abuse and neglect.

## *Why Is This Indicator Important?*

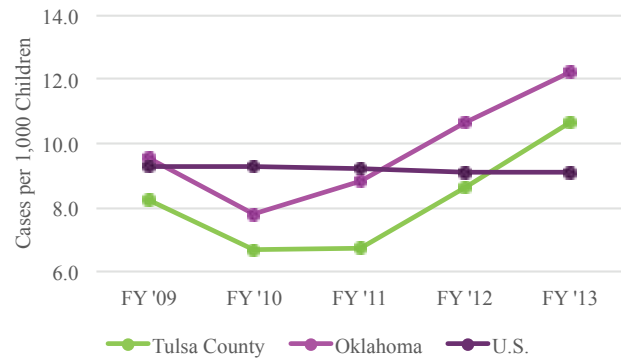
Healthy and safe environments are important to the well-being and development of children. Victims of child abuse are at higher risk of having a number of adverse outcomes throughout their life, including physical, psychological, and behavioral consequences. Physical consequences include abusive head trauma, impaired brain development, and poor physical health. Psychological consequences include difficulties during infancy, poor mental and emotional health, cognitive difficulties, and social difficulties. Behavioral consequences include difficulties during adolescence, juvenile delinquency, adult criminality, substance abuse, and abusive behavior.

## *How Are We Doing?*

From July 1, 2012 – June 30, 2013 (fiscal year 2013), there were a total of 11,702 reports of child abuse or neglect received in Tulsa County. After screening, 6,768 referrals were accepted for assessment or investigation.

Overall, there were 10.7 confirmed cases of child abuse or neglect per 1,000 children in Tulsa County during the 2013 fiscal year. The rate has been increasing since fiscal year 2011 when there were 6.7 confirmed cases per 1,000 children. During fiscal year 2013, Tulsa County had a lower rate of confirmed child abuse cases compared to Oklahoma (12.2 confirmed cases per 1,000 children) but higher than the United States (9.1 confirmed cases per 1,000 children).

Confirmed Child Abuse Rate  
by Locality | FY2009 – FY2013



### *Data Source:*

Long-Term Consequences of Child Abuse and Neglect Fact Sheet. Child Welfare Information Gateway. U.S. Department of Health and Human Services. Retrieved from: <https://www.childwelfare.gov>

Oklahoma Department of Human Services. Child Abuse and Neglect Statistics.

U.S. Department of Health and Human Services, Administration for Children and Families, Administration on Children, Youth and Families, Children's Bureau. (2015). Child maltreatment 2013. Retrieved from: <http://www.acf.hhs.gov>

# Homelessness

Each January, the agencies of the Tulsa City-County Continuum of Care and Homeless Services Network, in cooperation with the cities of Tulsa and Broken Arrow, conduct a one-night survey of homelessness (point-in-time survey). This count collects information about homeless persons sleeping in emergency shelters, transitional housing, or other sites, as well as the number of non-sheltered people. Starting in 2012, a local soup kitchen's breakfast (Iron Gate) was also added as a survey point for homeless individuals who had not already completed the survey. This indicator presents results from the 2013 point-in-time survey.

## Why Is This Indicator Important?

Homelessness is a growing public health problem. It is associated with behavioral, social and environmental risks that lead to poor health outcomes and often presents barriers to health care access. As a result of this, homeless people have a life expectancy that is estimated to be about 25 – 35 years shorter than the general population.

## How Are We Doing?

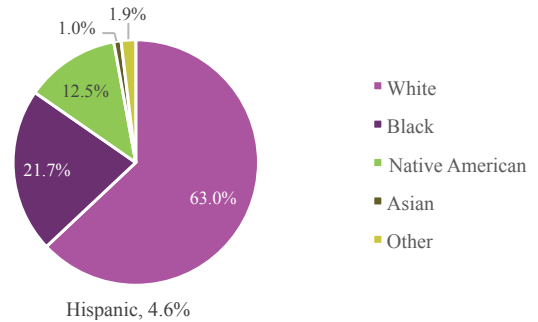
On January 30, 2013, there were 1,211 homeless persons in Tulsa County, 124 of which were under 18.

The majority of homeless adults were male (70.4 percent). Of the female respondents, 2.9 percent were pregnant at the time of the survey. The majority were white (63.0 percent) and non-Hispanic (95.4 percent). The primary age group reported was 51 – 65 (30.1 percent). When asked about length of homelessness, the largest percentage of individuals reported that they had been homeless for 1 – 6 months (28.7 percent).

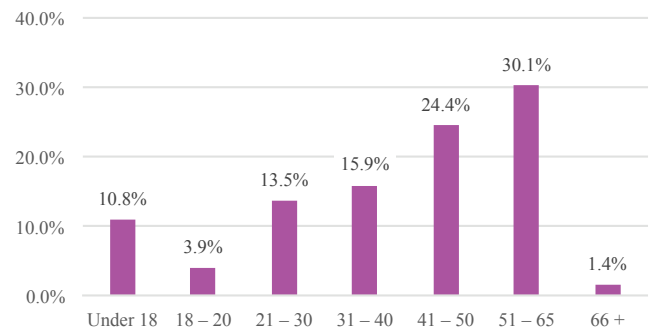
Respondents were asked about types of health conditions that they had experienced. The top responses were mental health diagnosis, physical disability, chronic illness, and substance abuse.

Survey respondents were asked to report the condition(s) that contributed to their homelessness. The top three reported conditions were job loss, asked to leave by family/friends, and mental health diagnosis. Respondents were also asked to report their top needed services. Housing placement was the top service needed, followed by transportation, dental services, and health care.

Homeless Persons by Race/Ethnicity  
Tulsa County | January 30, 2013

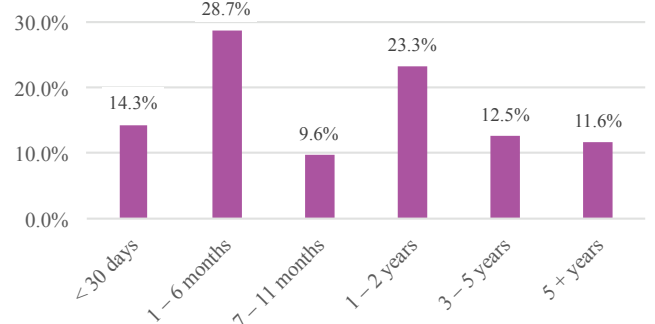


Homeless Persons by Age\*  
Tulsa County | January 30, 2013



\*Graph shows percentage of total homeless persons within each category; percentages add up to 100%.

Length of Homelessness\*  
Tulsa County | January 30, 2013



\*Graph shows percentage of total homeless persons within each category; percentages add up to 100%.

## Data Source:

Health Care and Homelessness. National Coalition for the Homeless. Retrieved from: <http://www.nationalhomeless.org>

Tulsa City- County Continuum of Care Point-in-Time Survey. 2013.

# Deaths From Suicide

The mortality rate from suicide is presented as the number of deaths from suicide per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## *Why Is This Indicator Important?*

Suicide was the ninth leading cause of death in Tulsa County from 2011 – 2013. Although the causes of suicide are complex and determined by multiple factors, the goal of suicide prevention is to reduce risk factors and increase factors that promote resilience (protective factors). Risk factors include family history of suicide or child maltreatment, previous suicide attempts, history of mental disorders and substance abuse, and barriers to mental health treatment. Protective factors include effective clinic care for mental, physical, and substance abuse disorders, family and community support, and easy access to a variety of clinical interventions and support for help seeking. Prevention aims to address all levels of influence (individual, relationship, community, and societal).

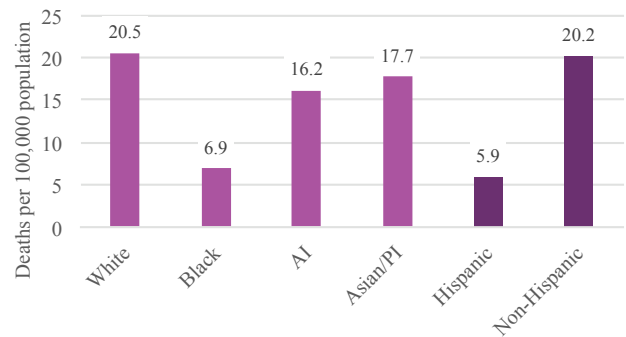
## *How Are We Doing?*

From 2011 – 2013, 317 Tulsa County residents committed suicide, which is an age-adjusted death rate of 18.7 deaths per 100,000 individuals. The suicide death rate was highest among whites (20.5 per 100,000). The rate was more than three times higher in non-Hispanics compared to Hispanics (20.2 compared to 5.9).

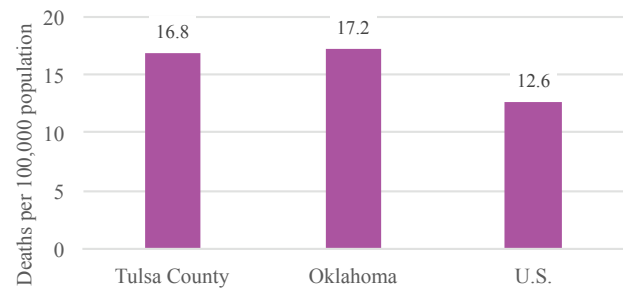
In 2013, Tulsa County had a suicide death rate of 16.8, which was lower than that of Oklahoma (17.2) but higher than the United States (12.6). None of these regions met the Healthy People 2020 goal of 10.2 deaths from suicide per 100,000 population.

The ZIP codes with the highest suicide death rates were 74116, 74120, and 74145.

Age-Adjusted Suicide Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Suicide Death Rate  
by Locality | 2013



### *Data Source:*

*Injury Prevention and Control: Suicide: Risk and Protective Factors.* Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

*Mental Health and Mental Disorders.* Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

*Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE).* Retrieved from: <http://www.health.ok.gov/ok2share>.

*Deaths: Final Data for 2013.* NSVR Volume 64, Number 2.

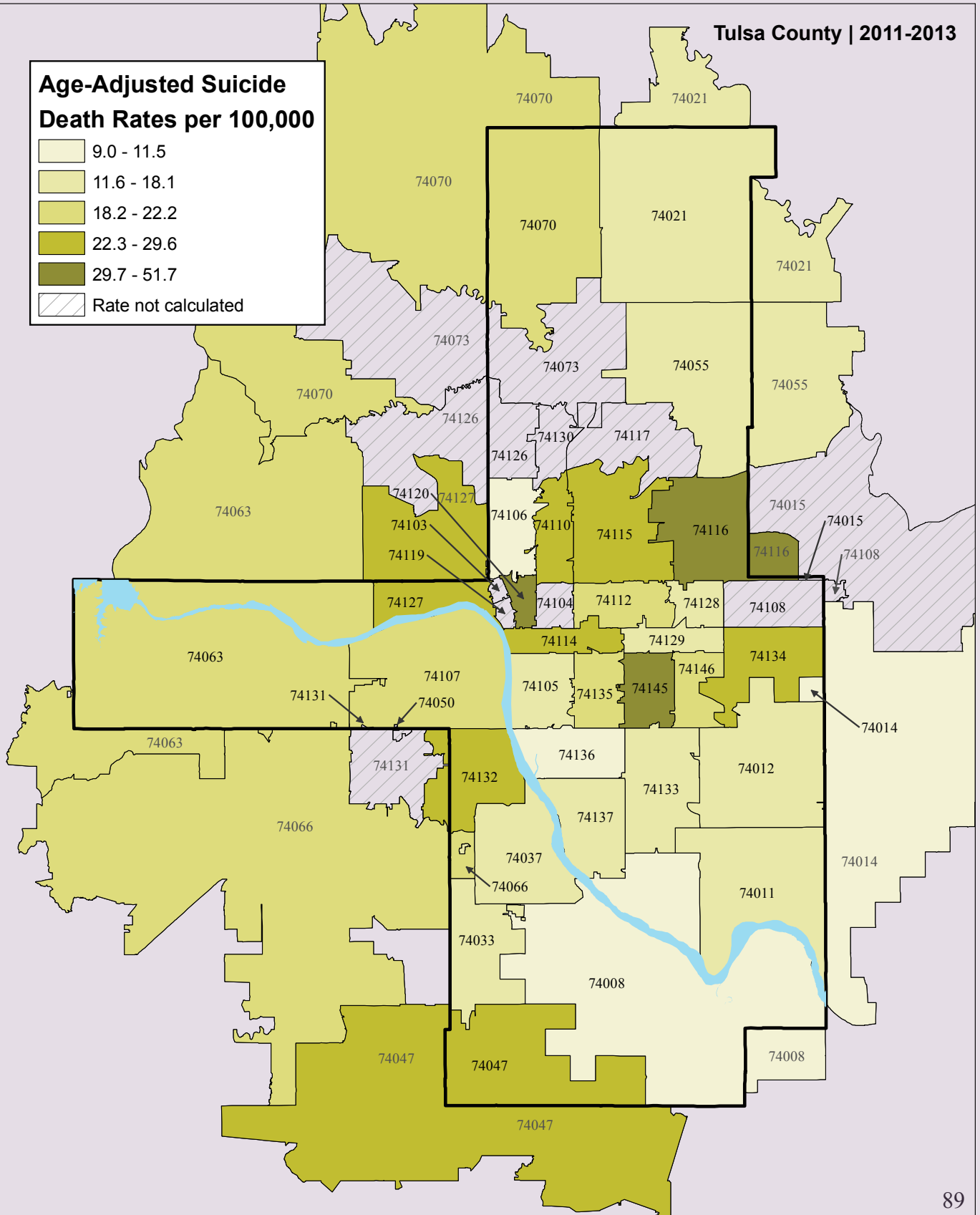
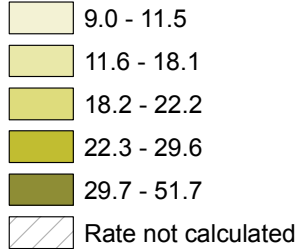
*Vital Statistics (2011 – 2013).* Center for Health Information. Oklahoma State Department of Health.



# Deaths From Suicide

Tulsa County | 2011-2013

## Age-Adjusted Suicide Death Rates per 100,000



# Deaths From Homicide

The mortality rate from homicide (murder) is presented as the number of deaths from homicide per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities. Rates were based on the residence of the victim, not the location of the crime.

## Why Is This Indicator Important?

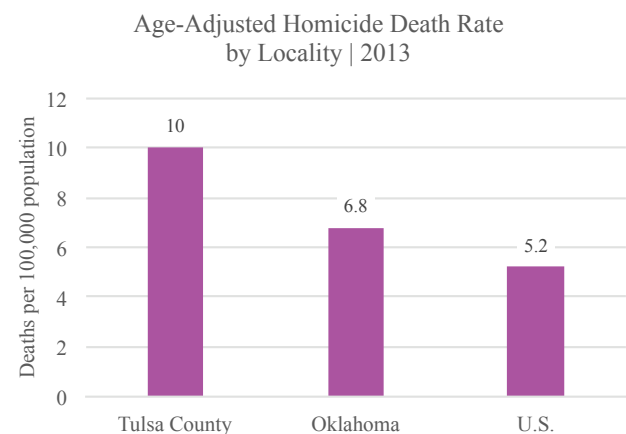
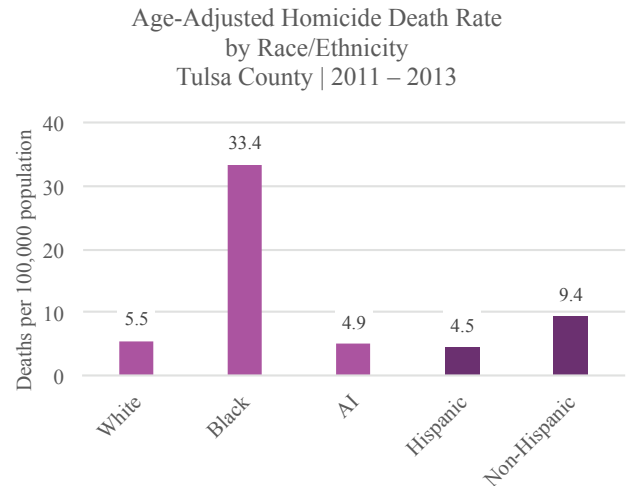
Over three-quarters of the total homicides during 2011 – 2013 were caused by assault with firearms. In the U.S., there are significant disparities in homicide deaths by age, race/ethnicity, and sex. The homicide rate is particularly high among young, black males. Additionally, homicide is tied with suicide as the second leading cause of death for 15 – 24 year olds in Tulsa County.

## How Are We Doing?

From 2011 – 2013, 164 Tulsa County residents were victims of homicide, which is an age-adjusted death rate of 8.9 deaths per 100,000 individuals. There was clear racial disparity, with blacks dying from homicide at a rate six times that of whites (33.4 compared to 5.5). The homicide death rate for non-Hispanics was about twice that of Hispanics (9.4 compared to 4.5). The age-adjusted rate for Asians/Pacific Islanders is not shown because it is based on a relatively small number of deaths.

In 2013, Tulsa County had a homicide death rate of 10.0, which was higher than that of Oklahoma (6.8) and the United States (5.2). The Healthy People 2020 national goal is to reduce the homicide death rate to 5.5 deaths per 100,000 population. The United States overall met this target, but Tulsa County and Oklahoma did not.

The ZIP codes with the highest overall homicide death rates were 74126, 74106, and 74110.



### Data Source:

Health Disparities in Homicides Fact Sheet. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

Injury Prevention and Control: Key Data and Statistics. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

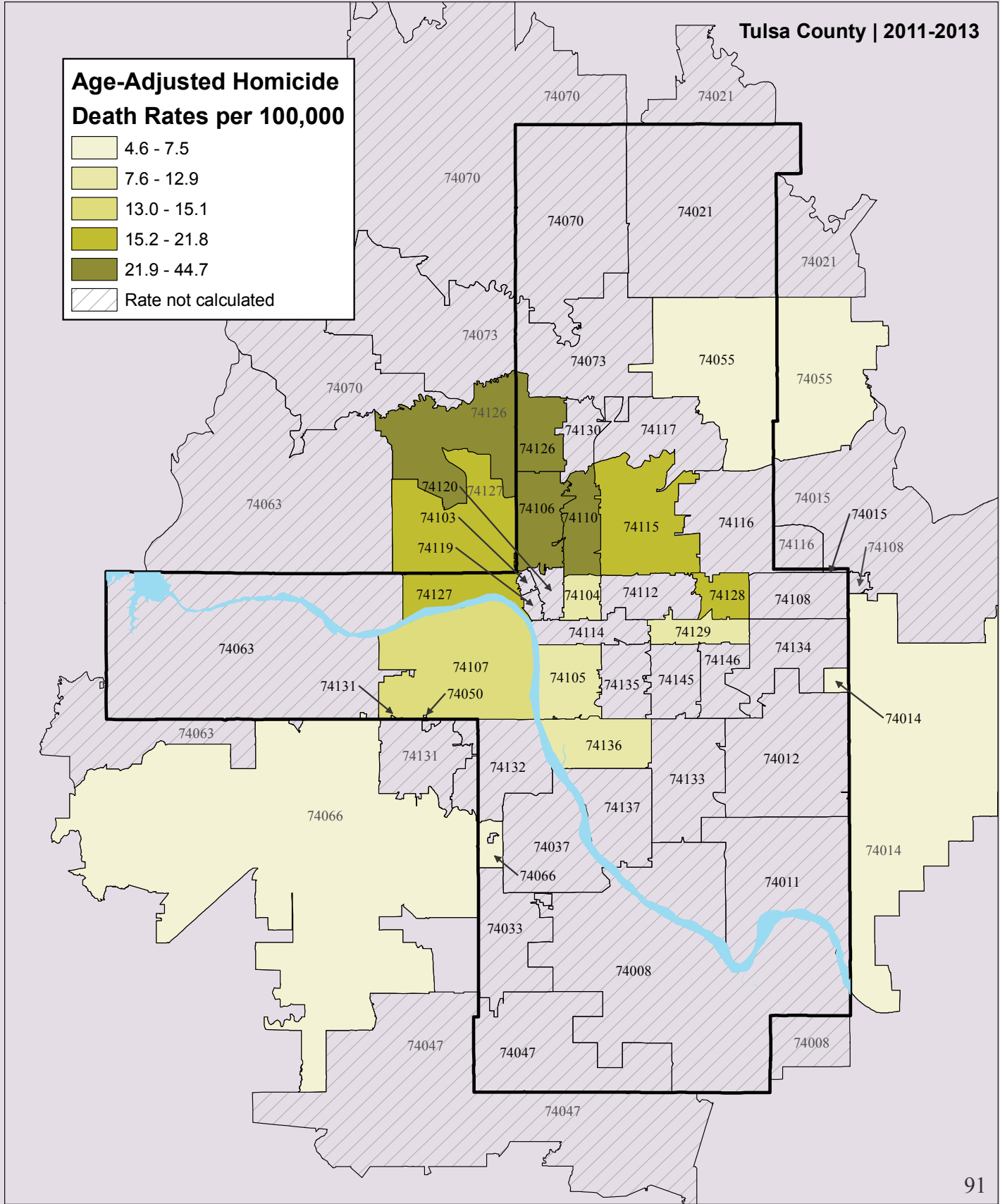
Injury and Violence Prevention. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information. Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

# Deaths From Homicide







# Mortality

# Deaths From All Causes

The mortality rate from all causes is presented as the number of deaths per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## Why Is This Indicator Important?

Mortality rates are important in the measurement of disease and health as it relates to public health planning. Analyzing trends in mortality in specific demographic groups over a period of time can reflect changes in health and highlight areas that need to be targeted through public health services and interventions.

## How Are We Doing?

There were 16,645 deaths in Tulsa County from 2011 – 2013. The top five causes of death were heart disease, cancer, chronic lower respiratory disease, accidents, and stroke. These top five causes were the same as the top five in the U.S. overall.

With regard to race and ethnicity, blacks had the highest age-adjusted death rate (1,155.8 per 100,000 population), followed by American Indians (1,045.6). Non-Hispanics had a higher age-adjusted death rate than Hispanics (882.1 compared to 508.2).

From 2004 – 2013, Tulsa County consistently had an age-adjusted death rate that was similar to Oklahoma but higher than the U.S. In 2013, the rate was 881.3 in Tulsa County, 910.6 in Oklahoma, and 731.9 in the U.S.

The ZIP codes with the highest overall mortality rates included 74103, 74126, 74130, 74106, 74110, 74115, and 74108.

### Data Source:

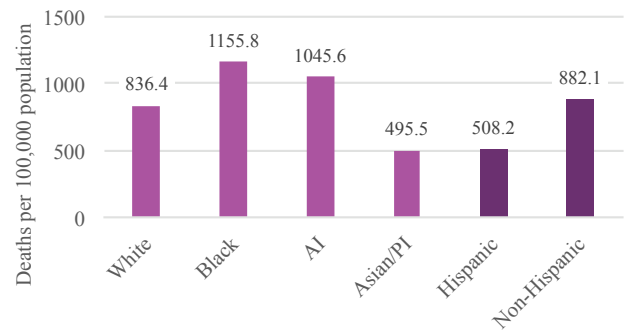
Why are Mortality Data Important? Australian Institute of Health and Welfare. Retrieved from: <http://www.aihw.gov>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

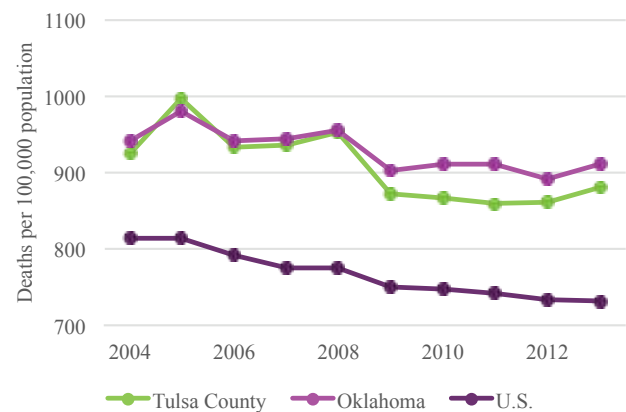
Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

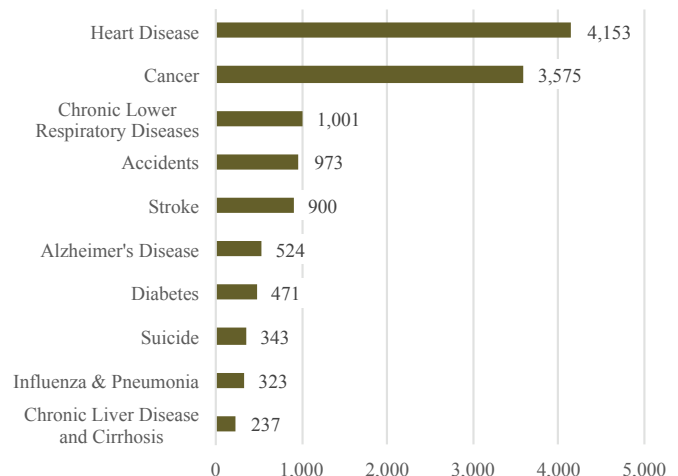
Age-Adjusted Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Death Rates  
by Locality | 2004 – 2013

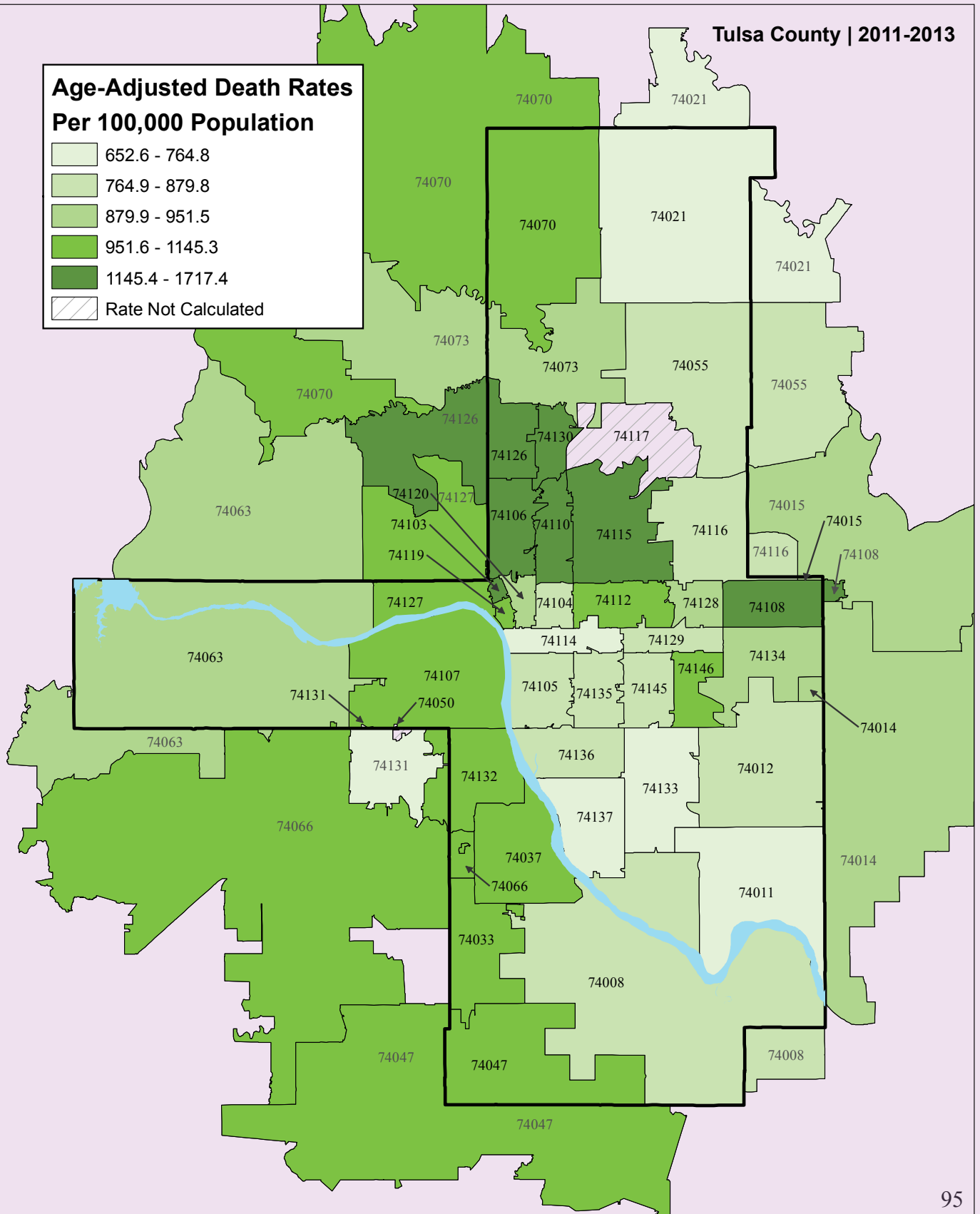
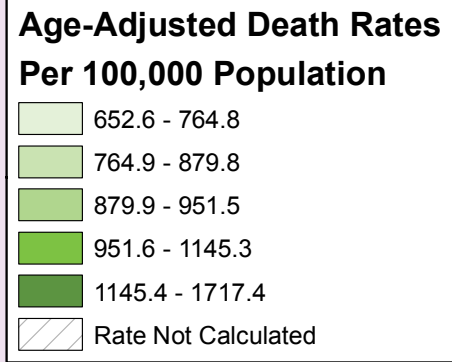


Top Ten Causes of Death  
Tulsa County | 2011 – 2013



# Deaths From All Causes

Tulsa County | 2011-2013



# Deaths From Heart Disease

The mortality rate from heart disease is presented as the number of deaths from heart disease per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## Why Is This Indicator Important?

Heart disease has been the number one cause of death for Tulsa County residents, as well as Oklahomans and United States residents, for many years. Risk factors for heart disease include conditions such as high cholesterol, high blood pressure and diabetes, behaviors such as tobacco use, poor diet, physical inactivity, obesity and excessive alcohol use, and genetic factors. Most of these risk factors can be controlled through healthy lifestyle choices, and well as medications when necessary.

## How Are We Doing?

From 2011 – 2013, the age-adjusted death rate from heart disease in Tulsa County was 214.3 deaths per 100,000 individuals. The heart disease death rate was highest in the American Indian/Alaskan Native and black populations (286.8 and 279.6, respectively). The heart disease death rate in non-Hispanics was more than twice that of Hispanics (218.1 compared to 92.2).

In 2013, Tulsa County had a heart disease death rate of 216.3, which was lower than that of Oklahoma (228.0). However, it was higher than the death rate in the United States, which was 169.8. None of these regions meet the Healthy People 2020 goal of 100.8 deaths per 100,000 population.

The ZIP codes with the highest overall heart disease death rates were 74103, 74126, 74108, 74130, 74106, and 74115.

### Data Source:

Heart Disease. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

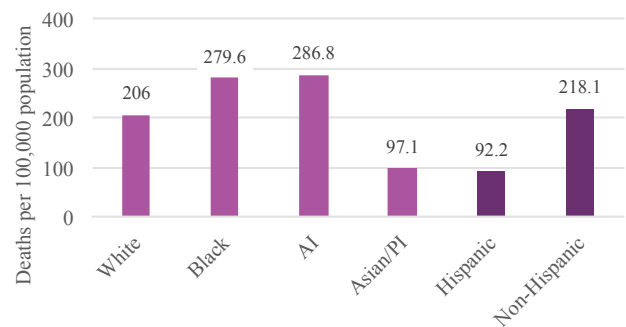
Heart Disease and Stroke. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information. Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

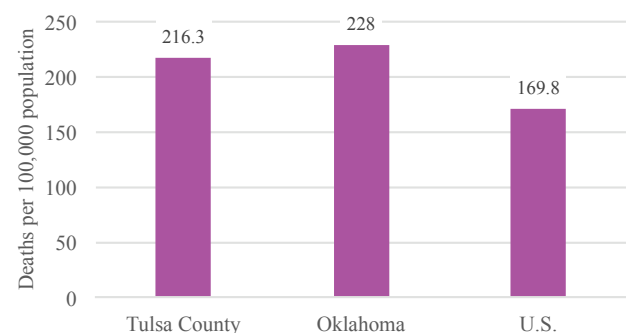
Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

Age-Adjusted Heart Disease Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Heart Disease Death Rate  
by Locality | 2013

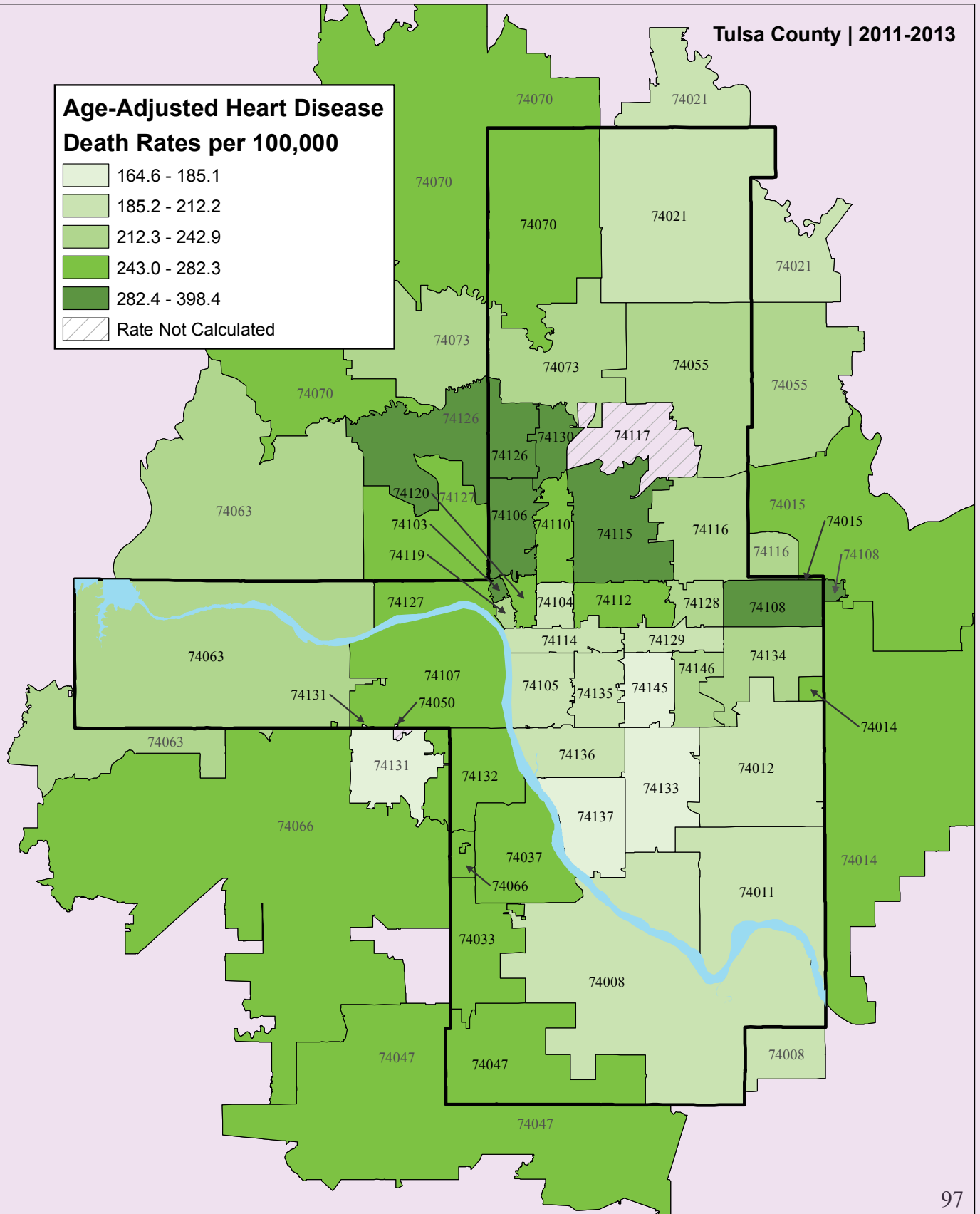
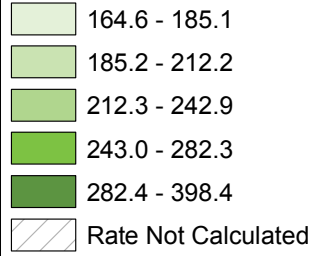




# Deaths From Heart Disease

Tulsa County | 2011-2013

## Age-Adjusted Heart Disease Death Rates per 100,000



# Deaths From Cancer

The mortality rate from cancer is presented as the number of deaths from all cancers per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## *Why Is This Indicator Important?*

Cancer was the second leading cause of death from 2011 – 2013. Continued advances in cancer research, detection, and treatment have resulted in a decline in both incidence and death rates for all cancers, although it is still one of the leading causes of death in the United States. More than half of all individuals who develop cancer will be alive in five years. Many cancers are preventable by reducing risk factors such as use of tobacco products, physical inactivity and poor nutrition, obesity, and UV light exposure. Other cancers can be prevented by getting vaccinated against human papillomavirus and hepatitis B virus.

## *How Are We Doing?*

From 2011 – 2013, the death rate due to cancer in Tulsa County was 185.7 deaths per 100,000 individuals. The cancer death rate was highest among blacks (269.3 deaths per 100,000). The cancer death rate was higher among non-Hispanics than Hispanics (188.2 compared to 112.7).

In 2013, the cancer mortality rate was 184.2 deaths per 100,000 population in Tulsa County. This was similar to Oklahoma (185.4) and higher than the United States (163.2). None of these regions met the Healthy People 2020 national goal of 160.6 cancer deaths per 100,000 individuals.

The ZIP code with the highest overall cancer death rate was 74103.

### *Data Source:*

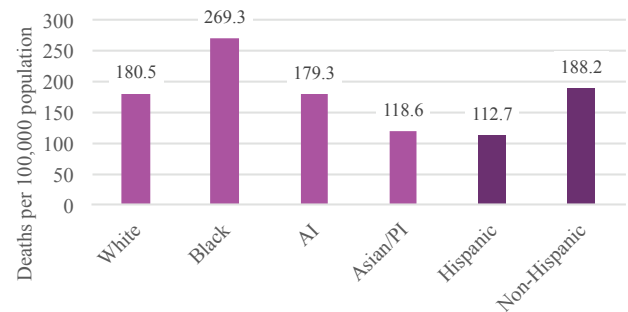
Cancer. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information. Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

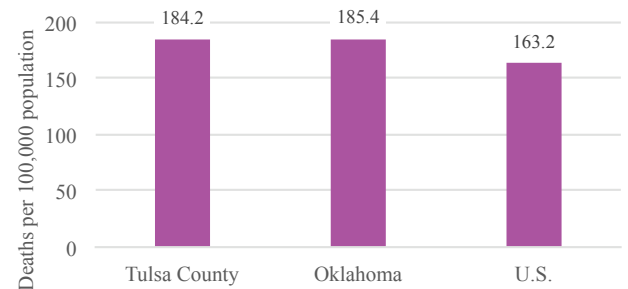
Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

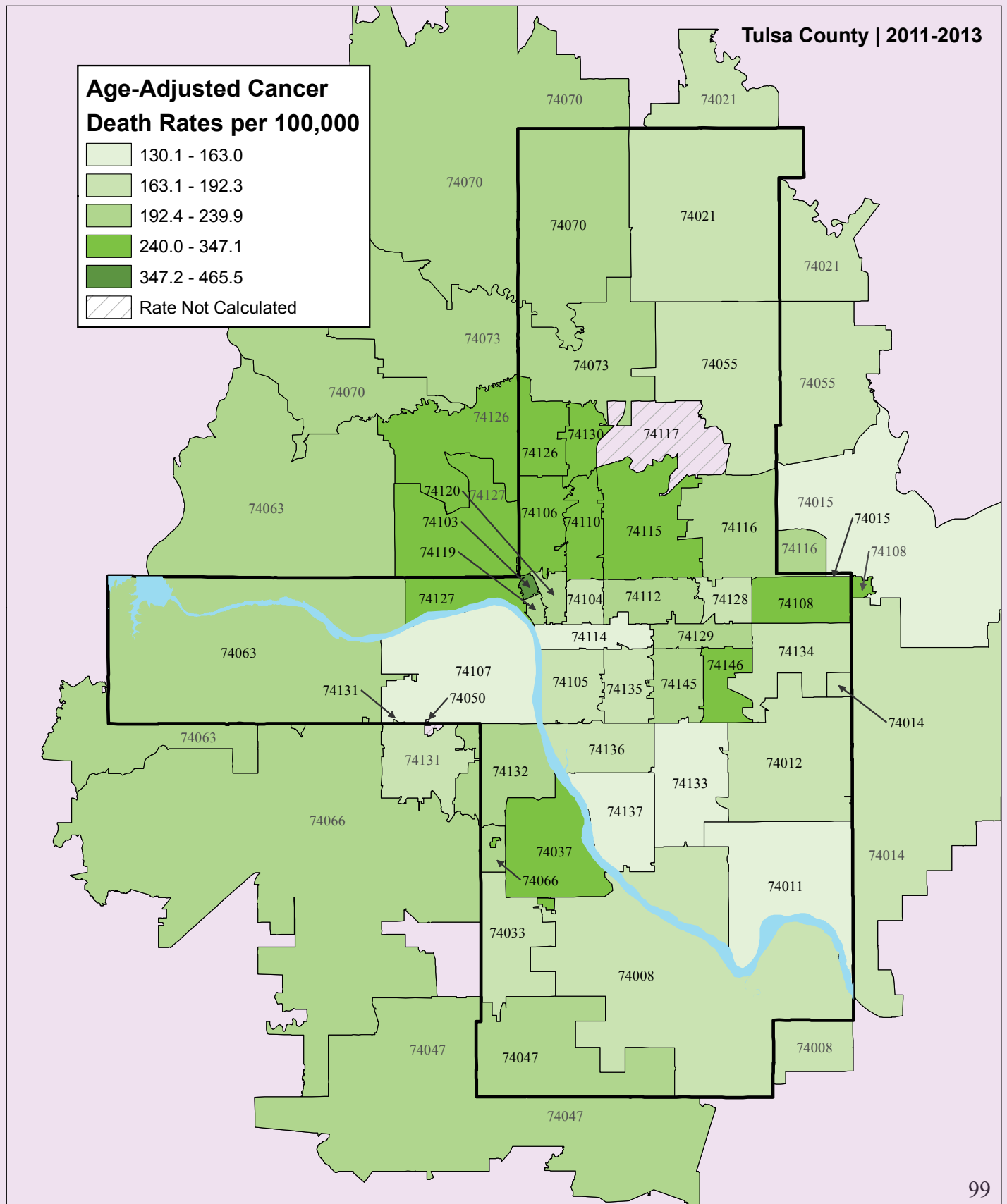
Age-Adjusted Cancer Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Cancer Death Rate  
by Locality | 2013



# Deaths From Cancer



# Deaths From Chronic Lower Respiratory Disease

Chronic lower respiratory disease (CLRD) includes chronic bronchitis and emphysema (collectively referred to as chronic obstructive pulmonary disease or COPD), and asthma. The death rate from CLRD is presented as the number of deaths from CLRD per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## Why Is This Indicator Important?

CLRD was the third leading cause of death in Tulsa County from 2011 – 2013. Tobacco smoke (including secondhand smoke) is a key factor for the development of COPD, although exposure to air pollutants, genetic factors, and respiratory factors can also play a role. Asthma causes repeated episodes of wheezing, breathlessness, chest tightness, and nighttime or early morning coughing. Asthma can be controlled through medication and avoiding the triggers that cause attacks. Triggers vary among individuals, but may include tobacco smoke, dust mites, air pollution, cockroach allergens, pets, mold, or smoke from burning wood or grass, as well as other triggers.

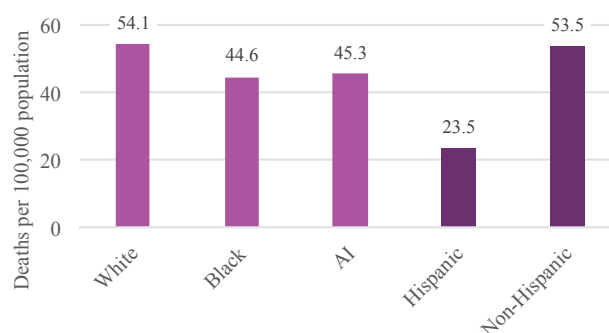
## How Are We Doing?

From 2011 – 2013, there were 1,001 deaths due to chronic lower respiratory disease in Tulsa County, which was an age-adjusted rate of 52.6 deaths per 100,000 individuals. The death rate due to CLRD was highest among whites (54.1). The CLRD death rate was more than twice as high in non-Hispanics than Hispanics (53.5 compared to 23.5). The age-adjusted rate for Asians/Pacific Islanders is not shown because it is based on a relatively small number of deaths.

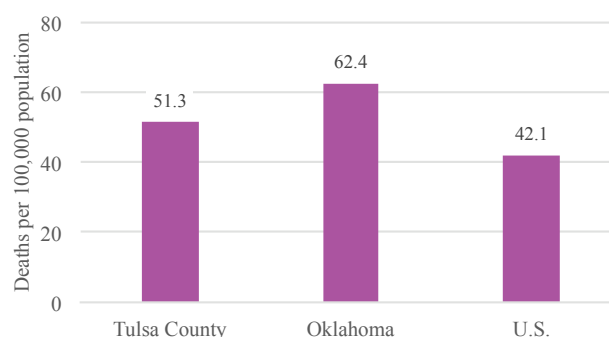
In 2013, the CLRD death rate was 51.3 deaths per 100,000 population in Tulsa County. This was lower than Oklahoma (62.4) but higher than the rate in the United States (42.1).

The ZIP code with the highest overall CLRD death rate was 74103.

Age-Adjusted CLRD Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted CLRD Death Rate  
by Locality | 2013



### Data Source:

Chronic Obstructive Pulmonary Disorder. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

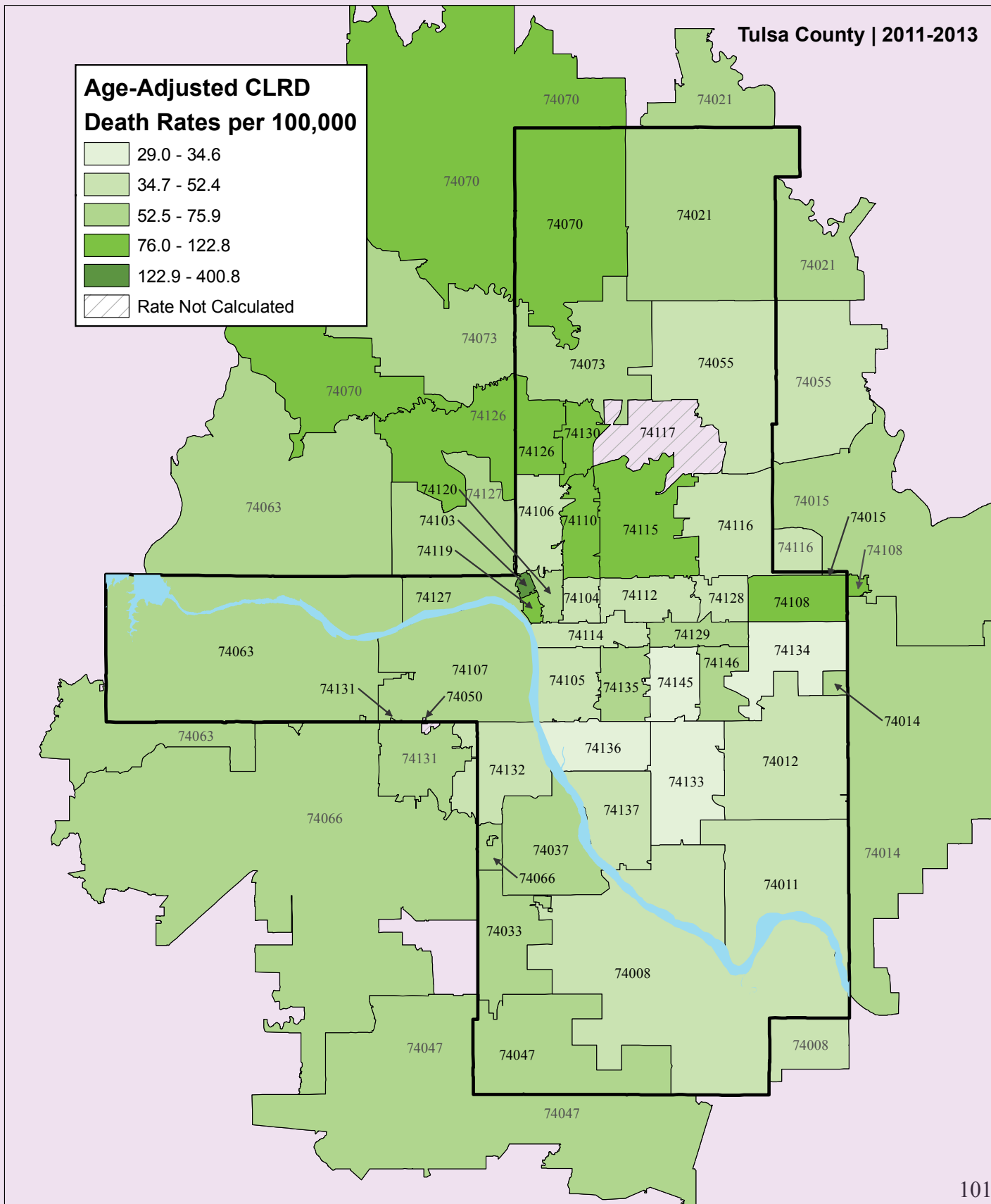
Asthma. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

# Deaths From Chronic Lower Respiratory Disease



# Deaths From All Accidents

Unintentional injuries (accidents) include motor vehicle accidents, accidental falls, drownings, fires, and poisonings. The death rate from unintentional injuries is the number of deaths from accidents per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## Why Is This Indicator Important?

Accidents were the fourth leading cause of death in Tulsa County from 2011 – 2013. However, accidents were the number one cause of death among all age groups under 45 with the exception of infants under 1. Motor vehicle accidents accounted for one quarter of all accident deaths. Motor vehicle safety prevention efforts often aim to improve car/booster seat and seat belt use and reduce impaired driving, as well as focus on high risk groups such as child passengers, teen drivers, and older adult drivers.

## How Are We Doing?

Accidents killed 973 Tulsa County residents from 2011 to 2013, for a death rate of 52.1 deaths per 100,000 individuals. With regard to race, the death rate was highest among American Indians (86.4 deaths per 100,000 population). The unintentional injury death rate was higher among non-Hispanics than Hispanics (53.5 compared to 31.2).

In 2013, Tulsa County had an age-adjusted unintentional injury death rate of 51.6. This was lower than Oklahoma (62.2) but higher than the U.S. (39.4). None of these regions met the Healthy People 2020 target of 36.0 deaths from unintentional injuries per 100,000 population.

The ZIP codes with the highest overall unintentional injury death rates were 74103, 74110, and 74115.

### Data Source:

Motor Vehicle Safety. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

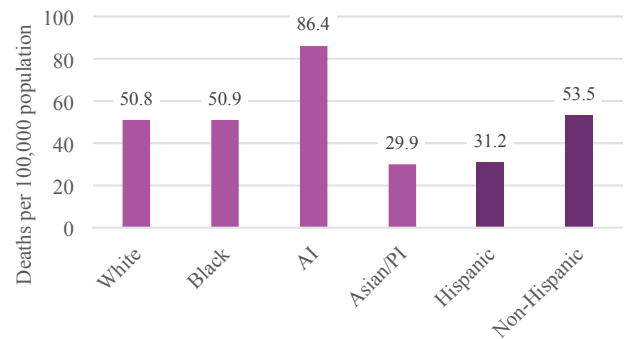
Injury and Violence Prevention. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

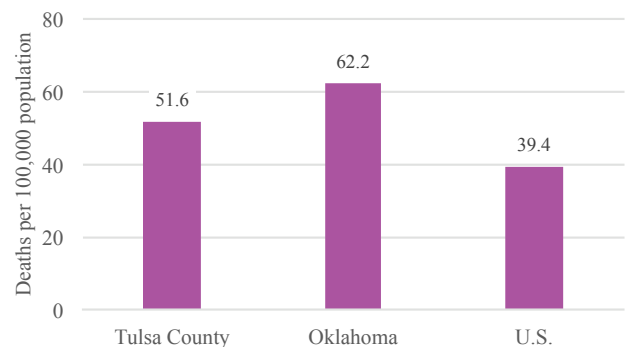
Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

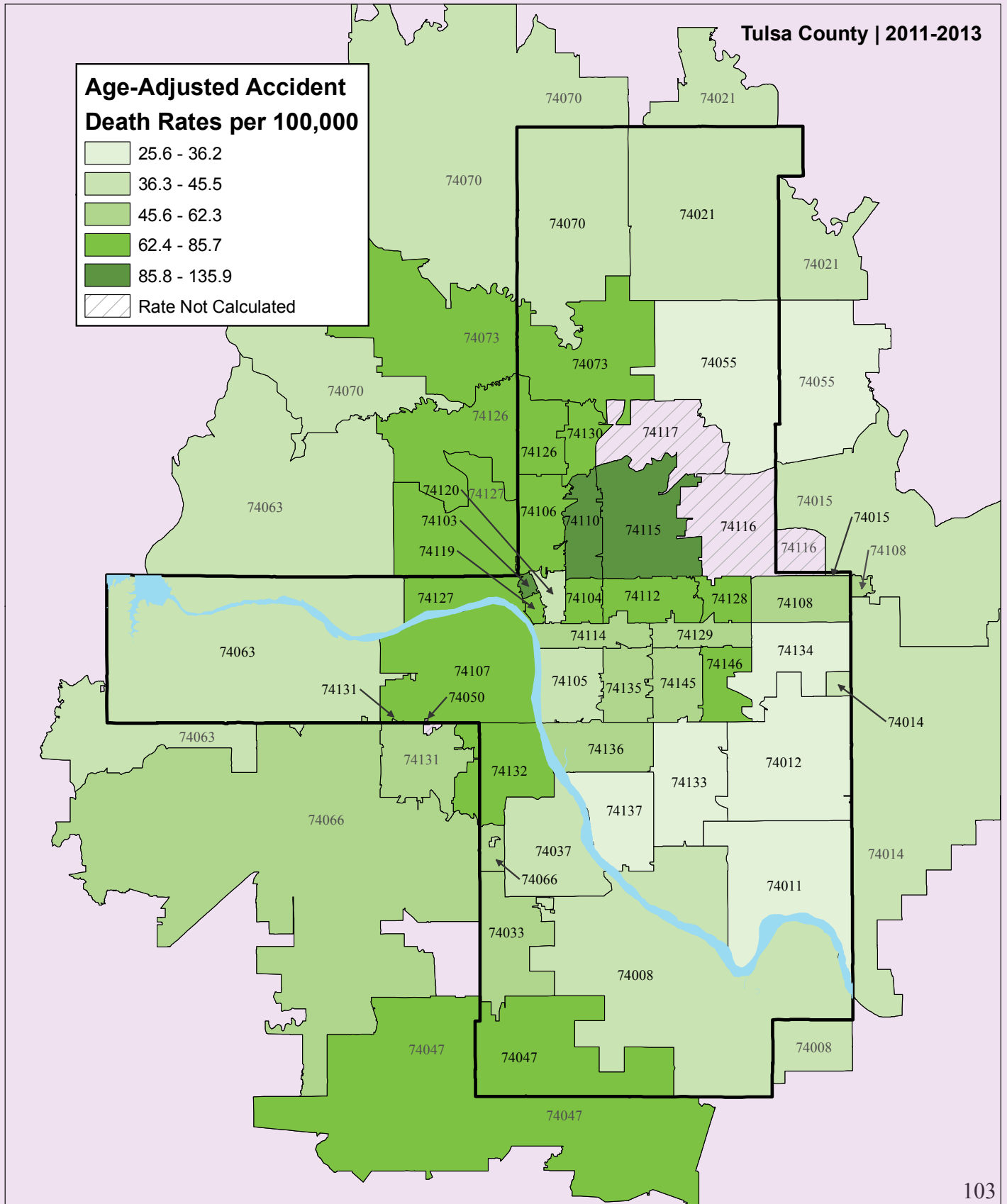
Age-Adjusted Unintentional Injury (Accident)  
Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Unintentional Injury (Accident)  
Death Rate by Locality | 2013



# Deaths From All Accidents



# Deaths From Stroke

The mortality rate from stroke (cerebrovascular disease) is presented as the number of deaths from stroke per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## *Why Is This Indicator Important?*

Stroke was the fifth leading cause of death from 2011 – 2013 in Tulsa County and is a major cause of long term disability. Major risk factors for stroke include medical conditions such as previous stroke or transient ischemic attack (mini-stroke), high blood pressure, high cholesterol, heart disease, diabetes and sickle cell disease, behaviors such as an unhealthy diet, physical inactivity, obesity, excessive alcohol and tobacco use, and genetic/demographic factors. Risk factors for stroke can be minimized by making healthy lifestyle choices and managing existing medical conditions appropriately.

## *How Are We Doing?*

From 2011 – 2013, the death rate due to stroke in Tulsa County was 46.9 deaths per 100,000 individuals. The stroke death rate was higher among blacks and American Indians as compared to other races (71.4 and 60.3, respectively). The stroke death rate among Hispanics was higher than non-Hispanics (63.0 compared to 46.6).

In 2013, the stroke mortality rate was 48.1 deaths per 100,000 population in Tulsa County. This was higher than both Oklahoma and the U.S. (44.5 and 36.2, respectively). The Healthy People 2020 national goal of 33.8 deaths per 100,000 population was not met by any of these regions.

The ZIP codes with the highest overall stroke death rates were 74106, 74073, 74126, and 74110.

### *Data Source:*

Stroke. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov>

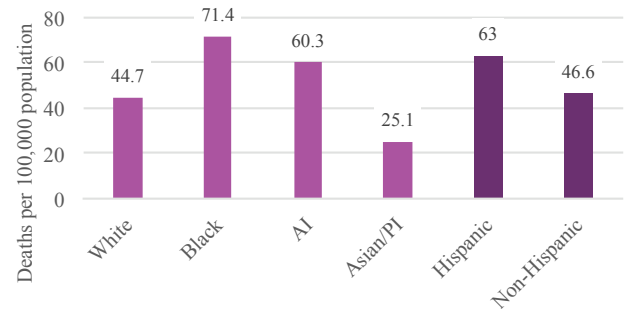
Heart Disease and Stroke. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

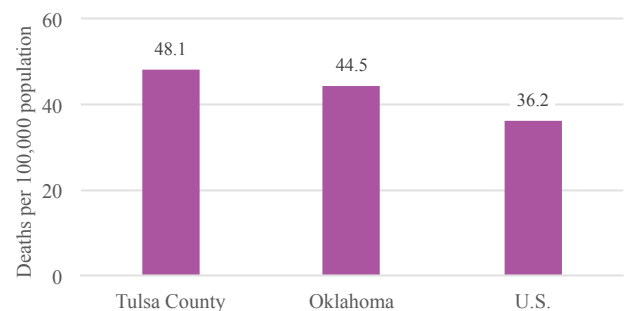
Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

Age-Adjusted Stroke Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



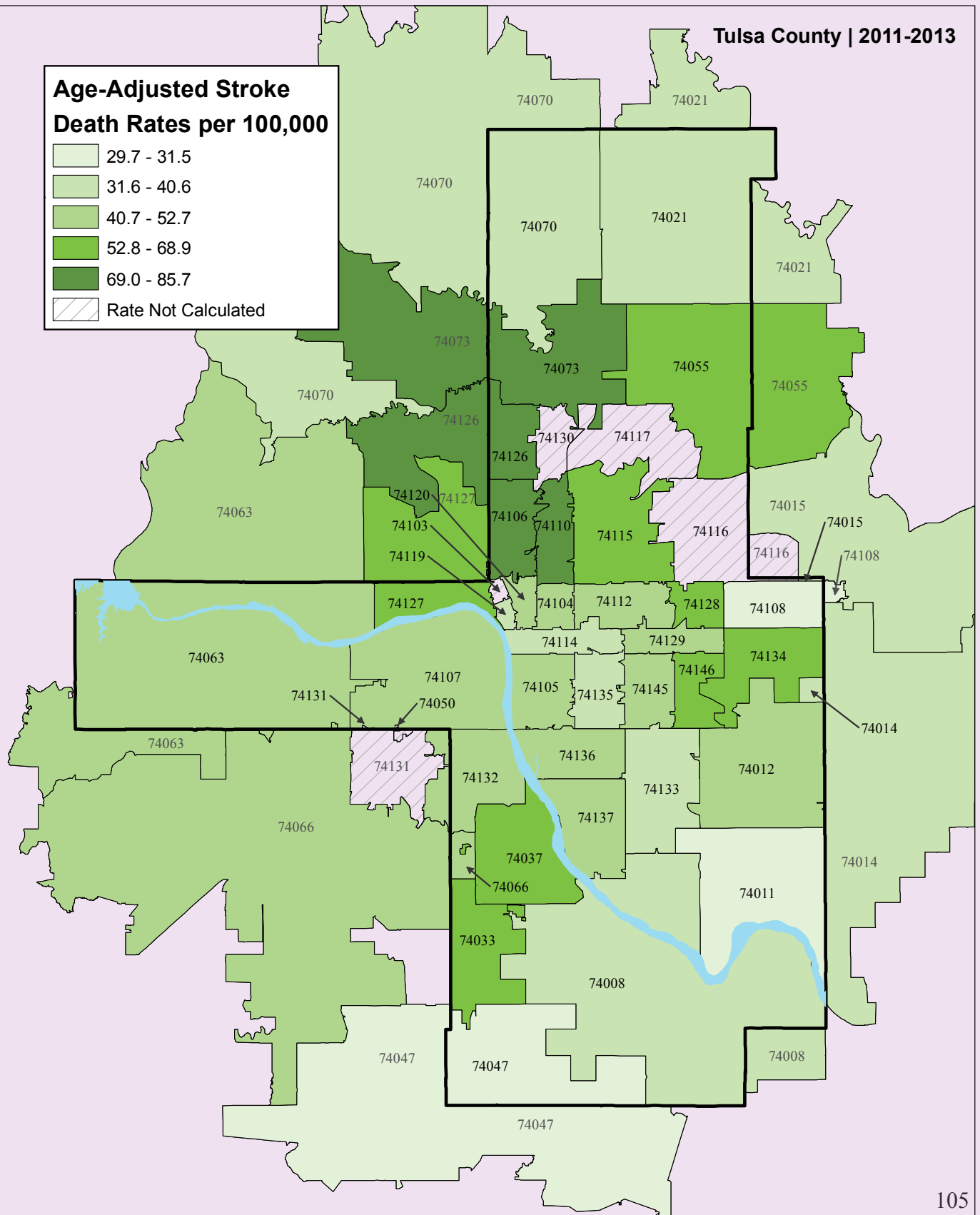
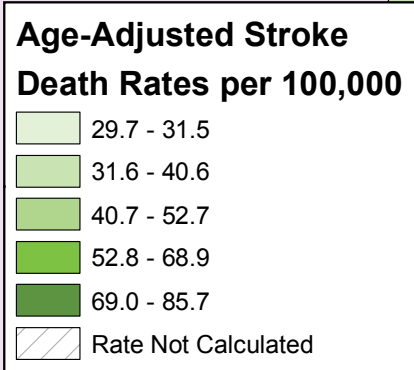
Age-Adjusted Stroke Death Rate by Locality | 2013





# Deaths From Stroke

Tulsa County | 2011-2013



# Deaths From Alzheimer's Disease

The Alzheimer's death rate is the number of deaths due to Alzheimer's disease per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## Why Is This Indicator Important?

Alzheimer's disease was the sixth leading cause of death in Tulsa County from 2011 – 2013. Experts suggest that up to 5.1 million Americans age 65 and older have Alzheimer's disease. These numbers are predicted to more than double by 2050 unless more effective ways to treat and prevent this disease are found. Risk factors for Alzheimer's disease include age, family history, and access to health services for prompt diagnosis.

## How Are We Doing?

From 2011 – 2013, the age-adjusted death rate due to Alzheimer's disease was 27.5 deaths per 100,000 individuals in Tulsa County. The age-adjusted death rate among blacks was almost triple that of American Indians (41.4 compared to 14.6). Non-Hispanics had a rate of 27.9 deaths per 100,000 individuals. The age-adjusted rate for Hispanics is not shown because it is based on a relatively small number of deaths.

In 2013, Tulsa County had an age-adjusted Alzheimer's death rate of 28.5. This was higher than both Oklahoma and the U.S. overall (27.6 and 23.5, respectively).

The ZIP codes with the highest overall Alzheimer's death rates were 74132, 74106, and 74126.

### Data Source:

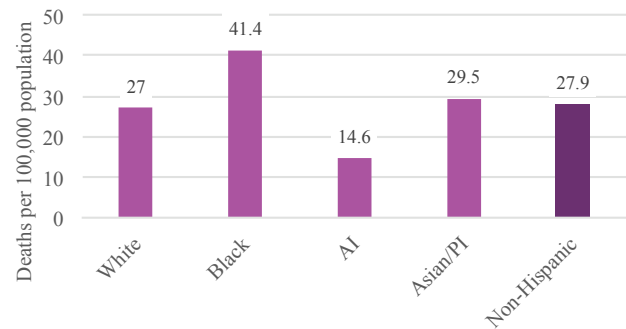
*Dementias, Including Alzheimer's Disease. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>*

*Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information. Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.*

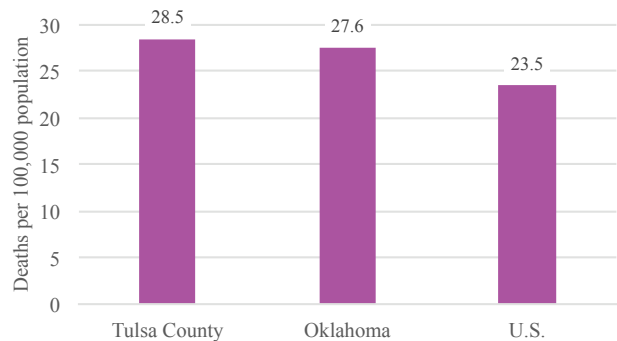
*Deaths: Final Data for 2013. NSVR Volume 64, Number 2.*

*Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.*

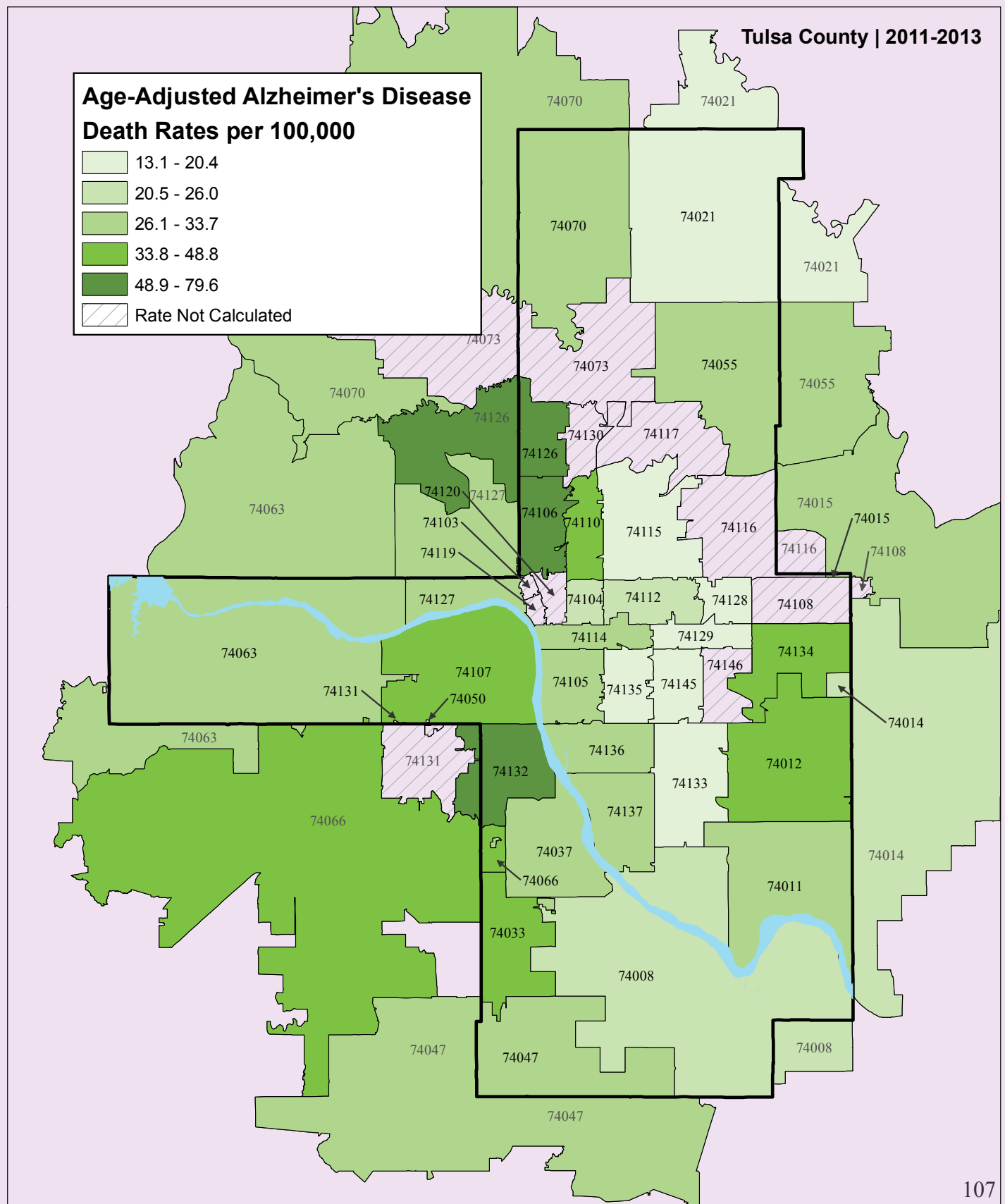
Age-Adjusted Alzheimer's Death Rate  
by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Alzheimer's Death Rate  
by Locality | 2013



# Deaths From Alzheimer's Disease



# Deaths From Diabetes

The diabetes death rate is the number of deaths due to diabetes mellitus per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## Why Is This Indicator Important?

Diabetes mellitus (commonly known as diabetes) was the seventh leading cause of death in Tulsa County from 2011 – 2013. Diabetes affects an estimated 23.6 million people in the United States and is also the seventh leading cause of death nationally. It lowers life expectancy by up to 15 years, increases the risk of heart disease by two to four times, and is the leading cause of kidney failure, lower limb amputations, and adult-onset blindness.

## How Are We Doing?

A total of 471 Tulsa County residents died from diabetes from 2011 – 2013. This was an age-adjusted rate of 24.9 deaths per 100,000 individuals. The age-adjusted death rate for blacks was more than double that of whites (54.1 compared to 21.0). The age-adjusted rate for Asians/Pacific Islanders is not shown because it is based on a relatively small number of deaths. The death rate was slightly higher in non-Hispanics compared to Hispanics (25.2 compared to 20.7).

In 2013, Tulsa County had an age-adjusted diabetes death rate of 28.3. This was lower than Oklahoma but higher than the United States (29.8 and 21.2, respectively). All of these regions met the Healthy People 2020 national goal of 66.6 deaths per 100,000 population.

The ZIP codes with the highest diabetes death rates were 74127, 74108, 74055, 74134, and 74106.

### Data Source:

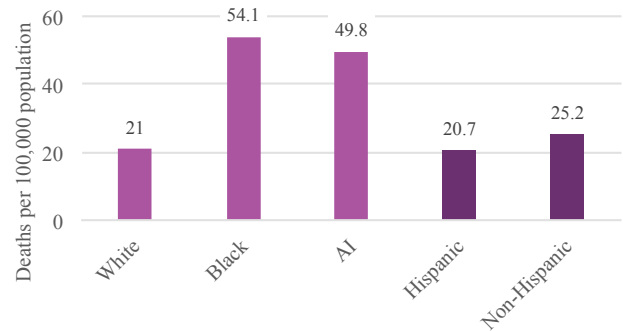
Diabetes. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

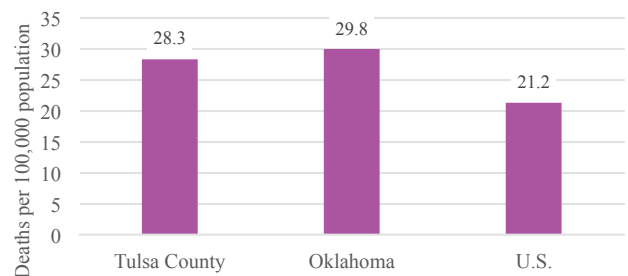
Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

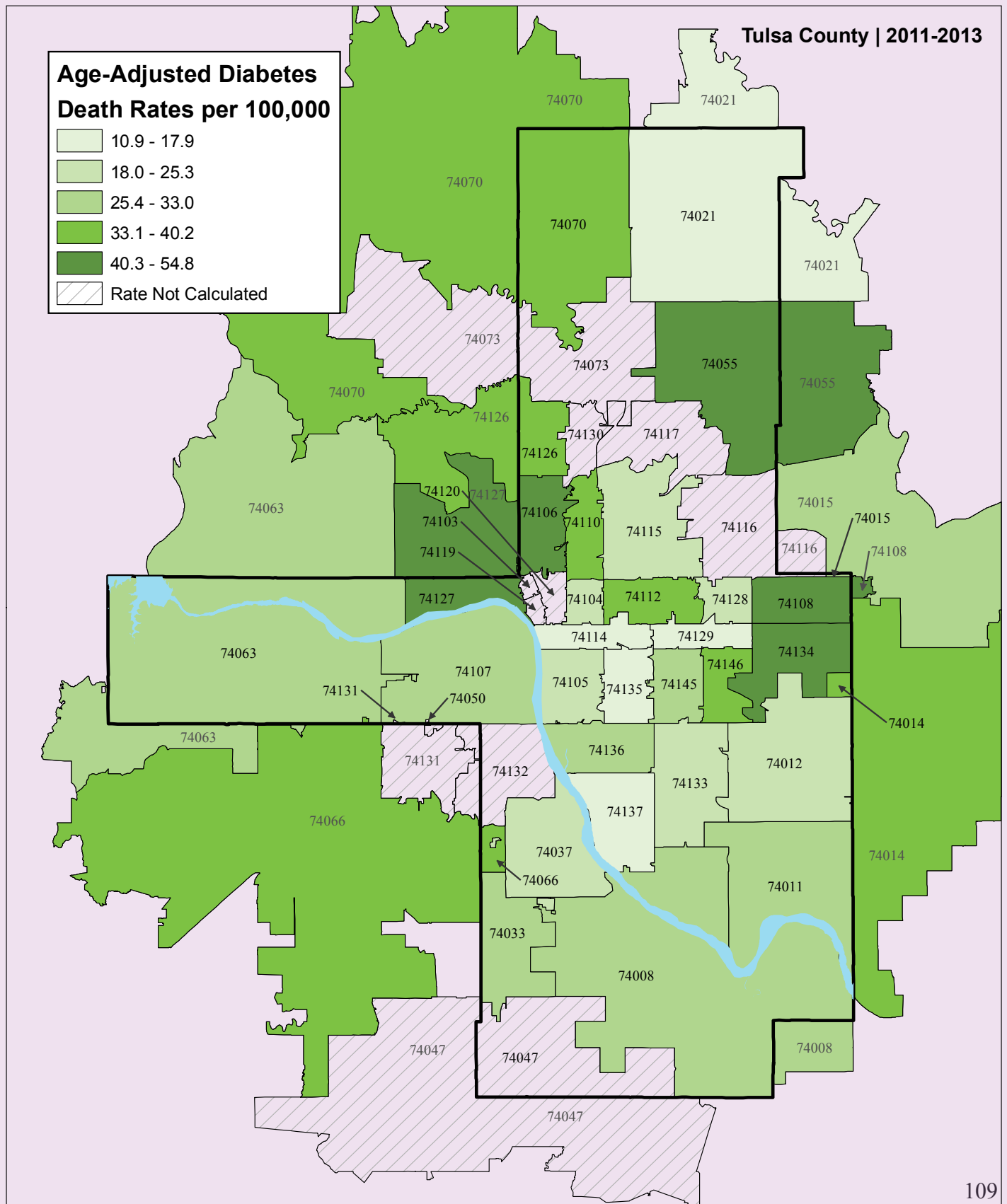
Age-Adjusted Diabetes Death Rate  
by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Diabetes Death Rate  
by Locality | 2013



# Deaths From Diabetes



# Deaths From Influenza & Pneumonia

The influenza/pneumonia death rate is the number of deaths due to either influenza or pneumonia per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## *Why Is This Indicator Important?*

Influenza/pneumonia was the ninth leading cause of death in Tulsa County from 2011 – 2013. Influenza is a highly contagious viral infection that often causes fever, headache, cough, chills, sore throat, nasal congestion, muscle aches, loss of appetite, and a general achy feeling. It can be complicated by pneumonia, which is a serious infection of the lungs. The air sacs fill with pus and other liquid, blocking oxygen from reaching the bloodstream. If there is too little oxygen in the blood, the body's cells cannot work properly, which can lead to death. Influenza/pneumonia can be especially dangerous in individuals who are immunocompromised, such as the elderly or persons with underlying medical conditions.

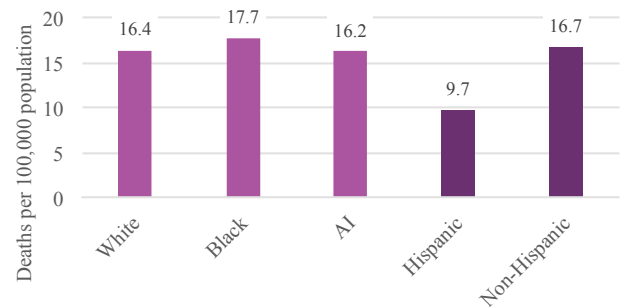
## *How Are We Doing?*

There were 323 deaths attributed to influenza/pneumonia among Tulsa County residents from 2011 – 2013, which was an age-adjusted rate of 16.5 deaths per 100,000 individuals. Age-adjusted death rates were very similar among races. The age-adjusted rate for Asians/Pacific Islanders is not shown because it is based on a relatively small number of deaths. The age-adjusted death rate was higher in non-Hispanics compared to Hispanics (16.7 compared to 9.7).

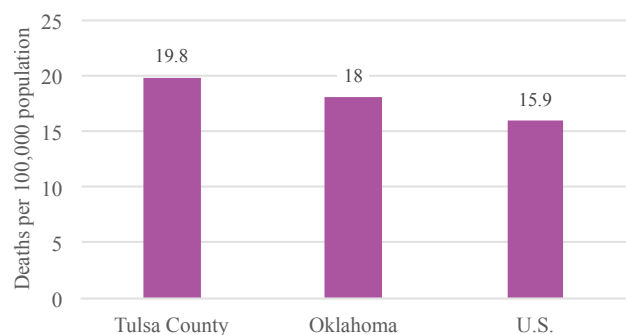
In 2013, Tulsa County had an age-adjusted influenza/pneumonia death rate of 19.8 deaths per 100,000 population. This was higher than both Oklahoma and the United States (18.0 and 15.9 respectively).

The ZIP codes with the highest overall influenza/pneumonia death rates were 74119, 74047, 74134, 74110, 74126, and 74128.

Age-Adjusted Influenza/Pneumonia Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Influenza/Pneumonia Death Rate by Locality | 2013



### **Data Source:**

*Influenza and Pneumonia.* American Lung Association. Retrieved from: <http://www.lung.org>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

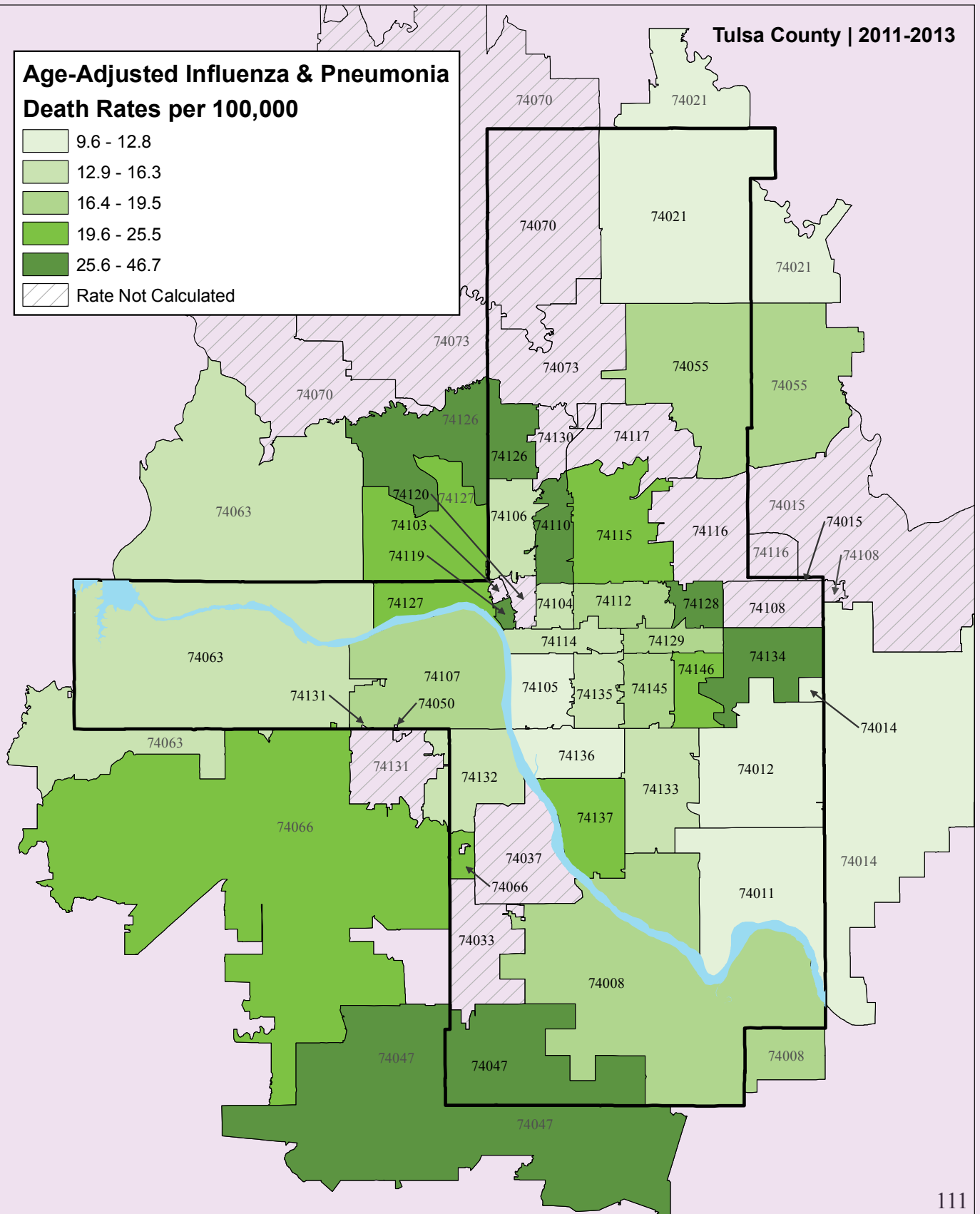
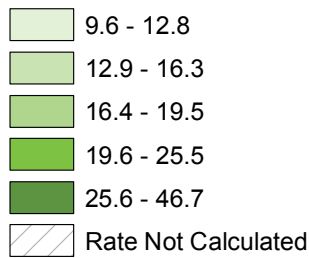
Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.

# Deaths From Influenza & Pneumonia

Tulsa County | 2011-2013

## Age-Adjusted Influenza & Pneumonia Death Rates per 100,000



# Deaths From Chronic Liver Disease & Cirrhosis

The chronic liver disease and cirrhosis death rate is the number of deaths due to either chronic liver disease or cirrhosis per 100,000 population, over the years 2011 – 2013. The rates were age-adjusted to account for differences in age distribution among localities, ZIP codes, and races/ethnicities.

## Why Is This Indicator Important?

Chronic liver disease is characterized by the gradual destruction of liver tissue over time and includes both cirrhosis and fibrosis of the liver. Chronic liver disease can be caused in a variety of ways, such as by viruses like hepatitis B and C, or from drugs, poisons, or drinking too much alcohol. As cirrhosis and fibrosis of the liver occur, scar tissue replaces normal functioning liver tissue which limits blood flow through the liver. As this function is lost, nutrients, hormones, drugs, and poisons are not processed effectively by the liver. Additionally, the production of proteins and other substances in the liver is inhibited.

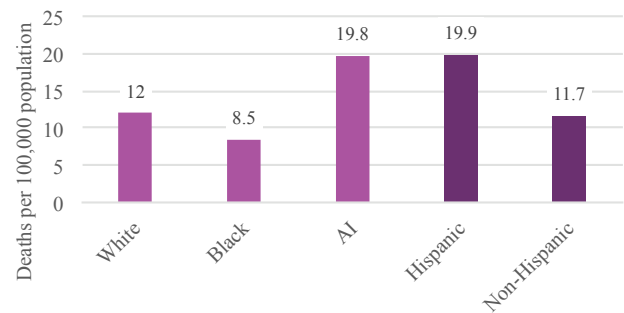
## How Are We Doing?

There were 237 deaths attributed to chronic liver disease or cirrhosis among Tulsa County residents from 2011 – 2013, which was an age-adjusted rate of 11.9 deaths per 100,000 individuals. The age-adjusted death rate among American Indians was more than double the rate among blacks. The age-adjusted rate for Asians/Pacific Islanders is not shown because it is based on a relatively small number of deaths. The age-adjusted death rate was higher in Hispanics than non-Hispanics (19.9 compared to 11.7).

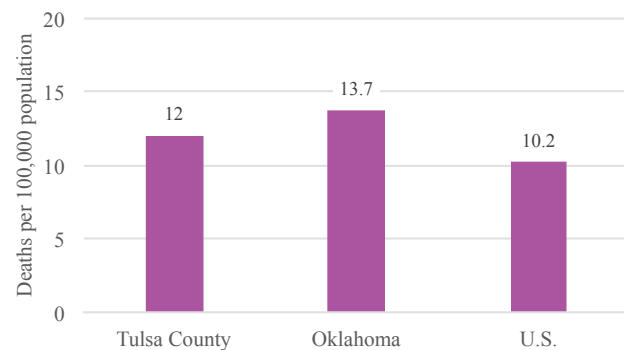
In 2013, Tulsa County had an age-adjusted chronic liver disease and cirrhosis death rate of 12.0 deaths per 100,000 population. This was lower than Oklahoma but higher than the United States (13.7 and 10.2 respectively).

The ZIP codes with the highest overall chronic liver disease and cirrhosis death rates were 74115, 74107, 74146, and 74104.

Age-Adjusted Chronic Liver Disease & Cirrhosis Death Rate by Race/Ethnicity  
Tulsa County | 2011 – 2013



Age-Adjusted Chronic Liver Disease & Cirrhosis Death Rate by Locality | 2013



### Data Source:

Chronic Liver Disease/Cirrhosis. Johns Hopkins Medicine Health Library. Retrieved from <http://www.hopkinsmedicine.org/>

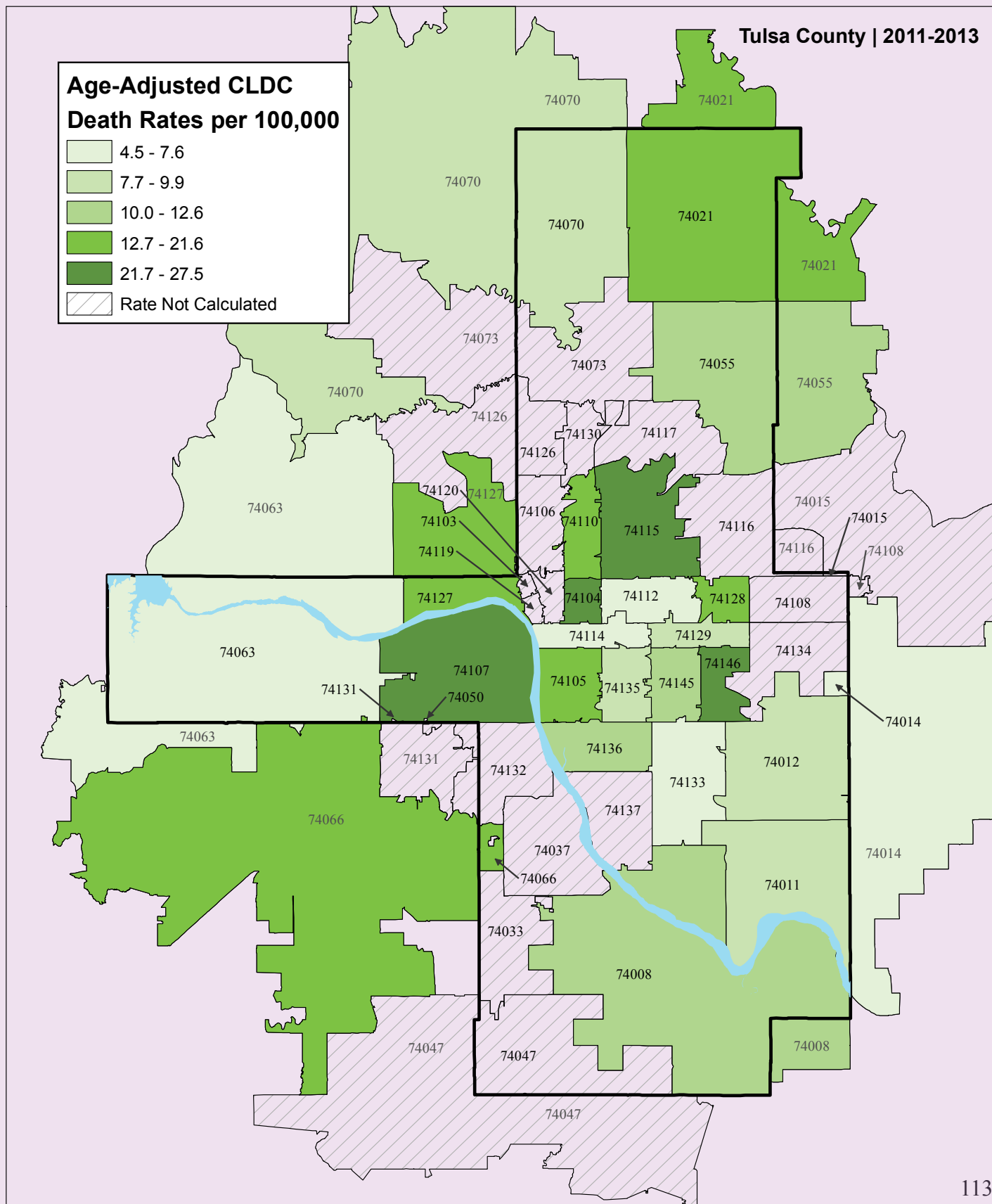
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2011 to 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Deaths: Final Data for 2013. NSVR Volume 64, Number 2.

Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.



# Deaths From Chronic Liver Disease & Cirrhosis



# Life Expectancy

Life expectancy is the average additional number of years a person can expect to live at a certain age. The term ‘life expectancy’ is generally referring to the average number of years a person may expect to live when they are born. Here, the three-year totals for life expectancy at birth are given for each ZIP code.

## *Why Is This Indicator Important?*

Life expectancy trends, along with other health indicators, can help public health officials identify health disparities in the community and measure health improvement outcomes. Health officials can use this information to implement health policies and interventions to target issues that negatively and positively impact health within the community.

THD and community partners are continuing to work together on life expectancy research. Future analyses will examine the impact of socioeconomic factors on life expectancy. Additionally, future analyses will explore the economic value of public health resources and health care expenditures on improved life expectancy outcomes.

## *How Are We Doing?*

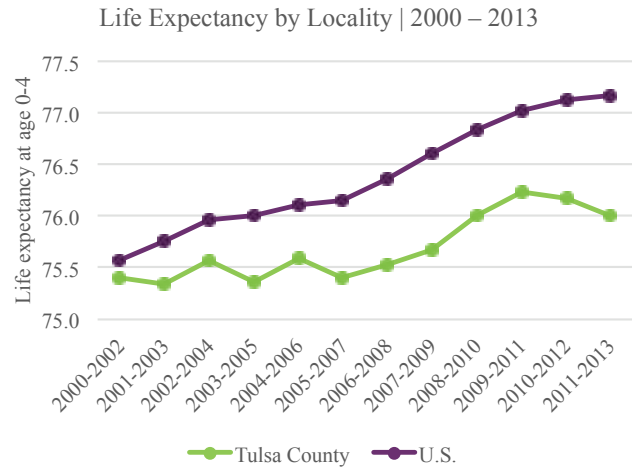
From 2011 – 2013, Tulsa County residents had a life expectancy of 76.0 years. This was lower than the United States (77.2 years). Additionally, even though both Tulsa County and national life expectancies have increased since 2000 – 2002, the national life expectancy has increased 2.1 percent while Tulsa County’s life expectancy has increased only 0.8 percent.

The ZIP codes 74133, 74137, 74011, 74131, 74114, 74021, and 74012 had the best life expectancies in 2011 – 2013, while ZIP codes 74130, 74110, 74126, 74106, 74115, 74127, and 74108 had the worst life expectancies.

### *Data Sources*

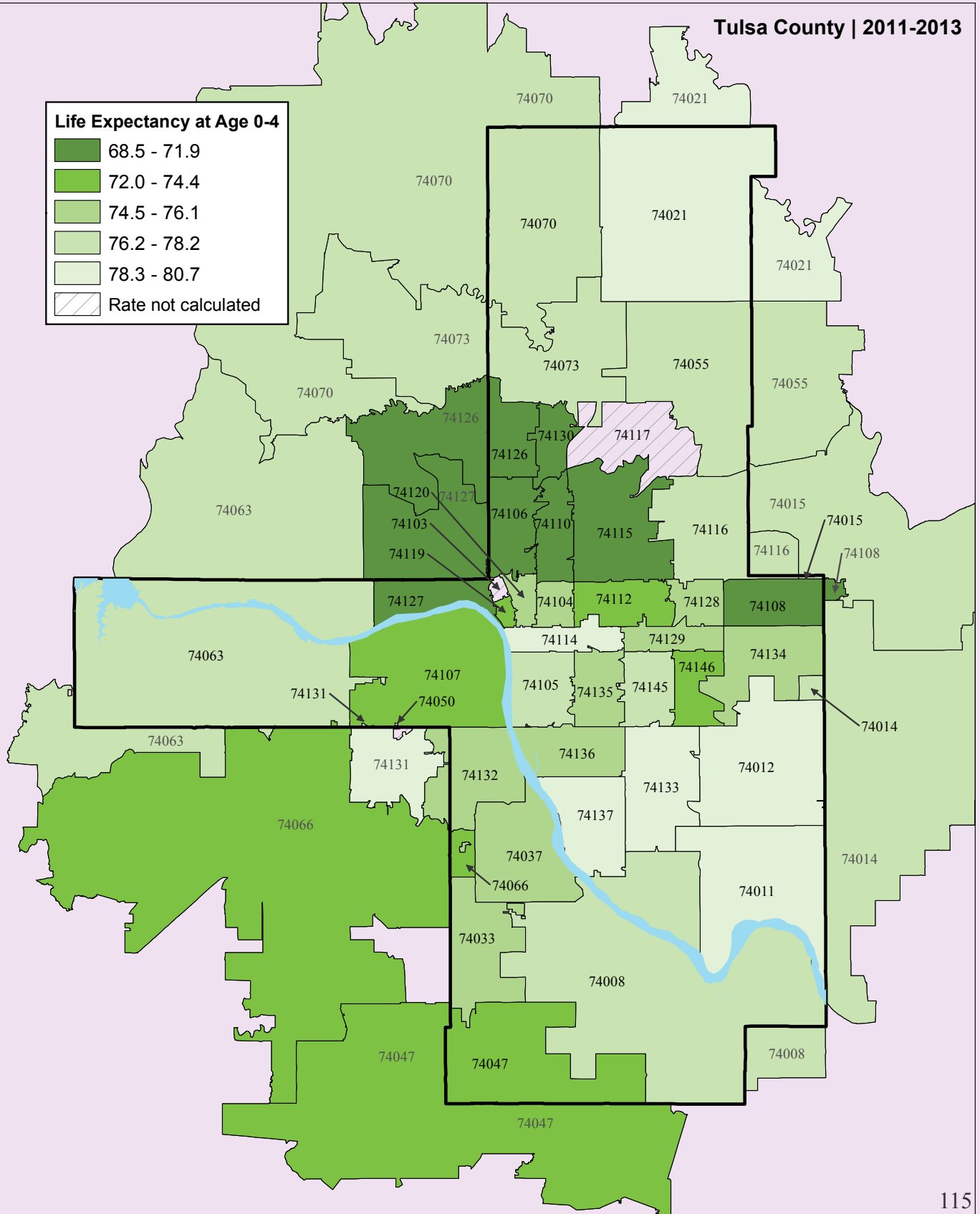
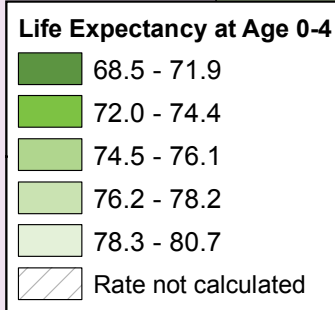
*Vital Statistics (2011 – 2013). Center for Health Information. Oklahoma State Department of Health.*

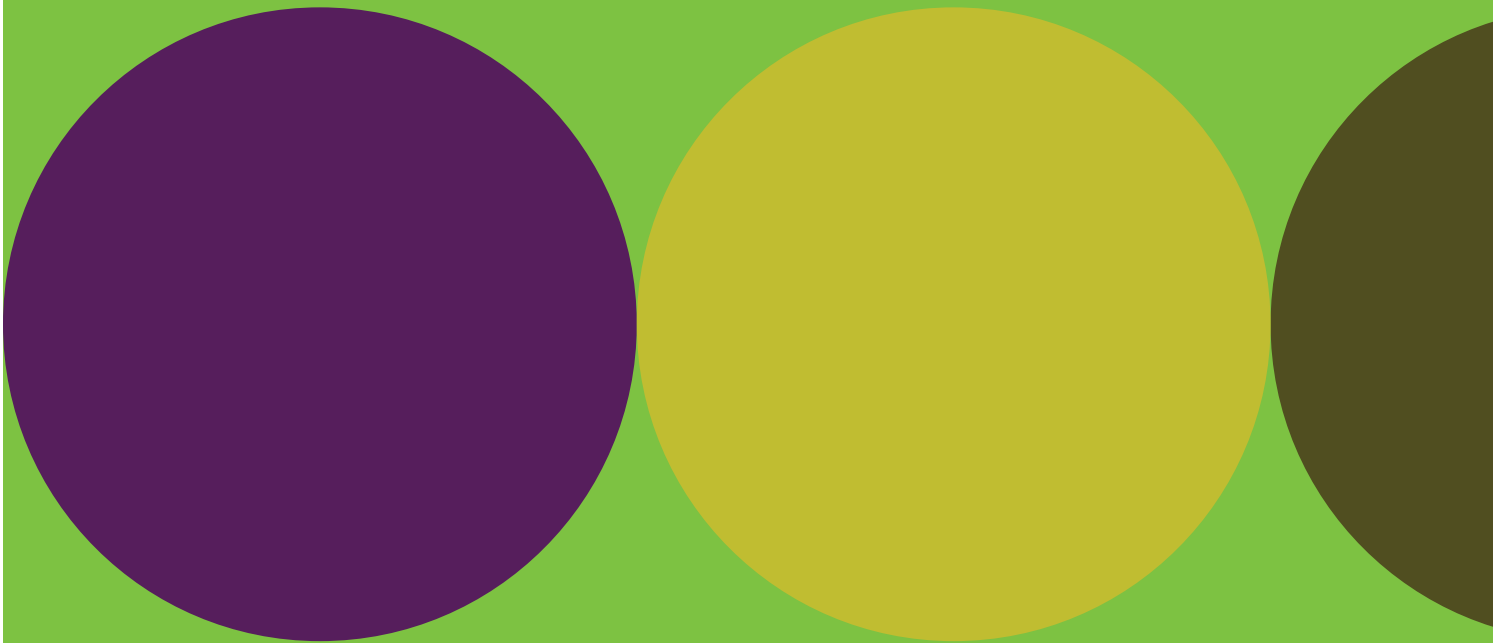
*Deaths: Final Data for 2013. NSVR Volume 64, Number 2.*



# Life Expectancy

Tulsa County | 2011-2013







**Health Care  
Access**

# Hospital Utilization

This indicator is an estimate of the use of acute care hospitals by Tulsa County residents during 2013. An acute care hospital is a short-term hospital (generally less than 30 days) where a patient is treated for a brief but severe episode of illness, for conditions that are the result of disease or trauma, and during recovery from surgery. It is presented as the number of hospital discharges per 1,000 population.

## Why Is This Indicator Important?

Hospital inpatient utilization data give an indication of the magnitude and types of illnesses experienced by a population. It also identifies trends in age, gender, and race/ethnicity distributions among those who are admitted to the hospital. Changes in utilization trends may also reflect technological advances and efforts to shift care to outpatient services.

## How Are We Doing?

The overall hospital utilization rate for Tulsa County in 2013 was 124.6 discharges per 1,000 population. This was slightly higher than the rate in Oklahoma, which was 119.9 discharges per 1,000 population. Females accounted for the majority of hospital discharges (59.6 percent). By race, whites made up the majority of discharges (70.8 percent), followed by blacks (13.5 percent). The largest percentage of hospital stays were paid for by Medicare (36.9 percent), followed by private insurance (26.6 percent) and Medicaid (25.1 percent).

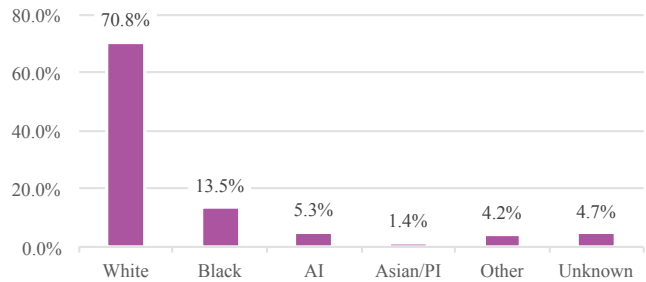
Conditions related to pregnancy, childbirth, and the puerperium made up 12.5 percent of all hospital stays in 2013. The puerperium refers to the six weeks following childbirth. Circulatory conditions were the second most common reason for hospitalization (11.7 percent). This includes heart diseases such as congestive heart failure, heart attack, coronary artery disease, and irregular heartbeat.

Hospital discharges were highest in ZIP code 74103.

### Data Source:

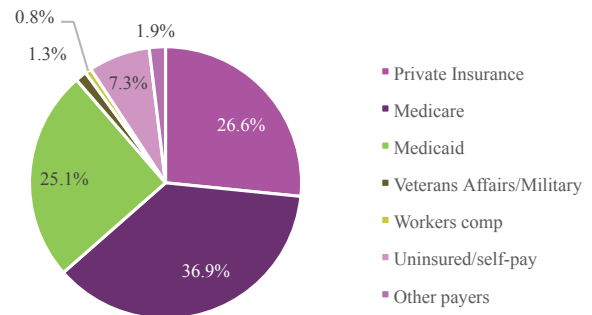
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Oklahoma Inpatient Discharge Data 2013, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from <http://www.health.ok.gov/ok2share>.

Hospital Utilization by Race\*  
Tulsa County | 2013

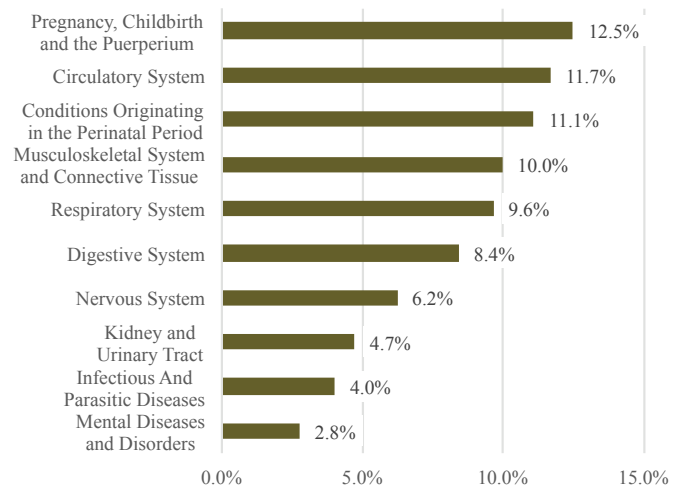


\*Graph shows percentage of total hospital discharges within each category; percentages add up to 100%

Primary Payer for Hospital Discharges  
Tulsa County | 2013

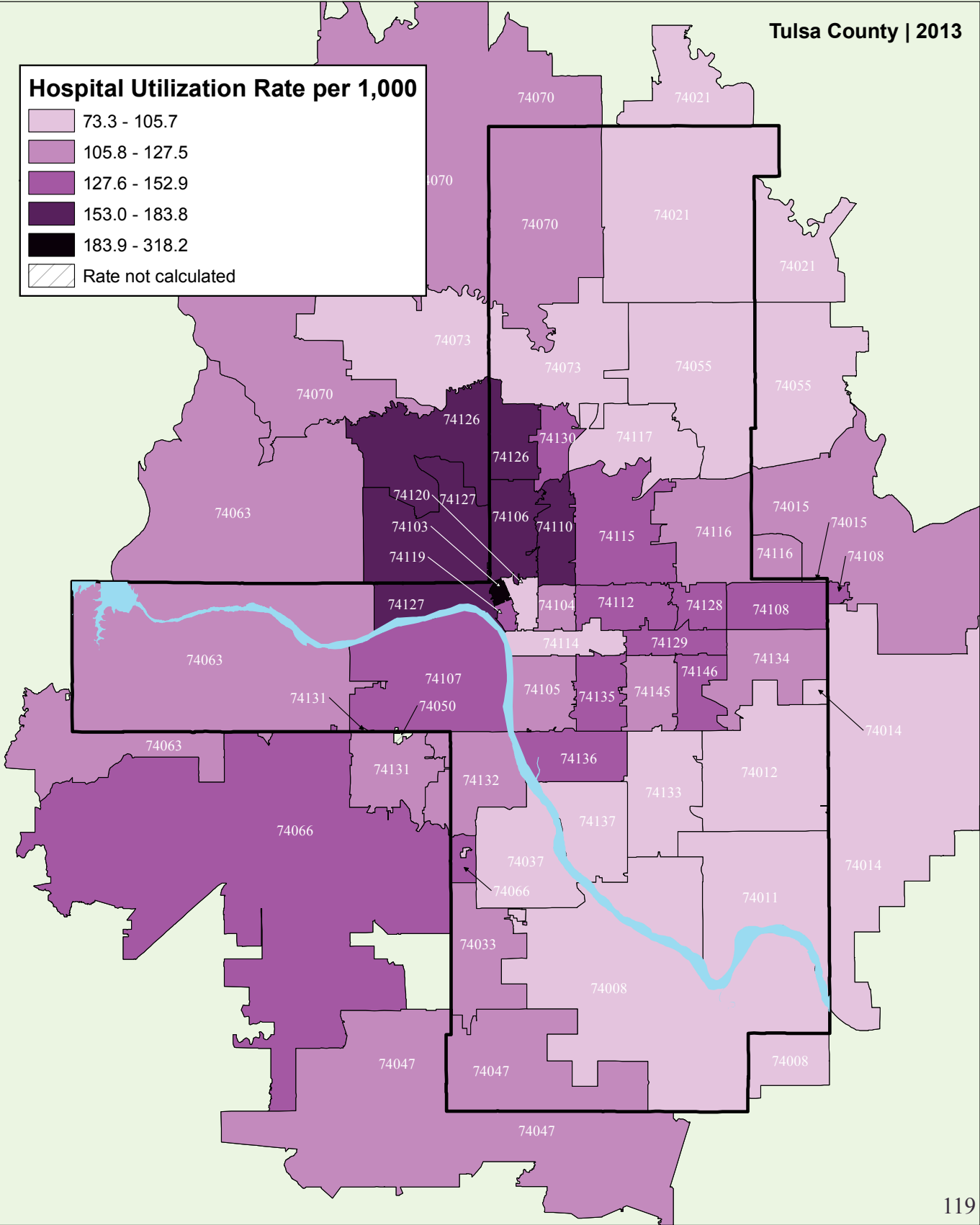
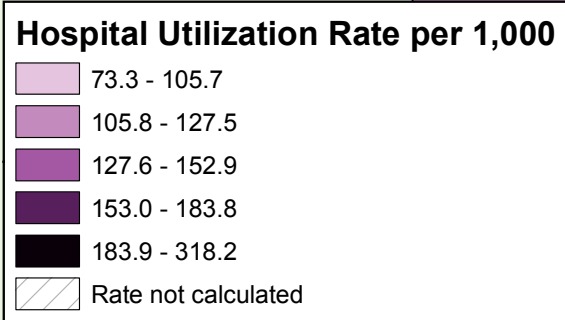


Top Ten Major Disease Categories for Hospital Discharges  
Tulsa County | 2013



# Hospital Utilization

Tulsa County | 2013



# Emergency Room Visits

This indicator is the number of emergency room (ER) visits to the nine Tulsa County hospitals in 2013. It is presented as a rate per 1,000 population. It is important to note that while all of the hospitals are in Tulsa County, there may be patients from outside counties. Demographic and locality rates reflect these additional individuals. ZIP code rates are calculated using only those individuals who reside in that ZIP code.

## Why Is This Indicator Important?

Lack of access to adequate and timely health care services can lead to increased use of the hospital ER as a source of primary care. According to the CDC, uninsured adults were more likely than those with private health insurance or a public health plan to visit the emergency room due to having no other place to go. This can place unnecessary strain on the hospital ER.

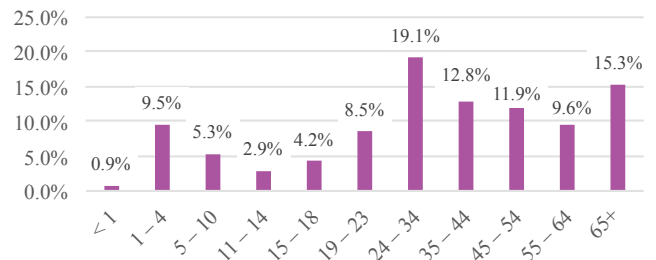
## How Are We Doing?

In 2013, almost 298,000 visits were made to the nine Tulsa County ERs for an approximate overall rate of 489 visits per 1,000 population. This is likely an overestimate for county residents for two reasons: ZIP code information was unknown for almost 11 percent of visits, and at least seven percent of visits were from individuals who lived in ZIP codes that are not within Tulsa County. Adults ages 24 – 34 accounted for the largest percentage of emergency room visits (19.1 percent), followed by adults age 65+ (15.3 percent).

Tulsa County's rate of 489 visits per 1,000 population was higher than both Oklahoma and the United States. ER visit rates were 486 and 423 per 1,000 population for Oklahoma and the United States, respectively.

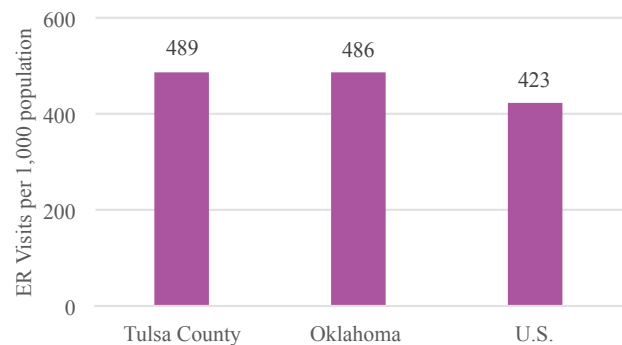
The highest rate of emergency room visits was in ZIP code 74103.

Emergency Room Visits by Age\*  
Tulsa County | 2013



\*Graph shows percentage of total emergency room visits within each category; percentages add up to 100%

Emergency Room Visit Rate by Locality | 2013



## Data Source:

Gindi RM, Cohen RA, Kirzinger WK. Emergency room use among adults aged 18 – 64. Early release of estimates from the National Health Interview Survey, January – June 2011. National Center for Health Statistics. May 2012. Retrieved from: <http://www.cdc.gov/>

Tulsa Area Syndromic Surveillance System (TASSS). Tulsa Health Department.

Hospital Emergency Room Visits per 1,000 Population. Kaiser Family Foundation. 2013. Retrieved from: <http://kff.org/>





# Medicaid

Medicaid is an entitlement program that provides medical benefits to low-income individuals and families who have inadequate or no health insurance. This indicator is presented as the percentage of the population enrolled in Medicaid in 2013.

## *Why Is This Indicator Important?*

Medicaid provides health coverage for certain low-income individuals, such as families and children, pregnant women, the elderly, and people with disabilities. It covers one in five Americans, including more than one in three children and 40 percent of all births. Medicaid coverage of children and pregnant women has led to increased access to care and improved child health and birth outcomes. Relative to the uninsured, adults with Medicaid have increased access to preventive and primary care, reduced out-of-pocket burdens, and they are less likely to forgo care due to cost. However, provider shortages and low provider participation in Medicaid, particularly among specialists, are a major concern.

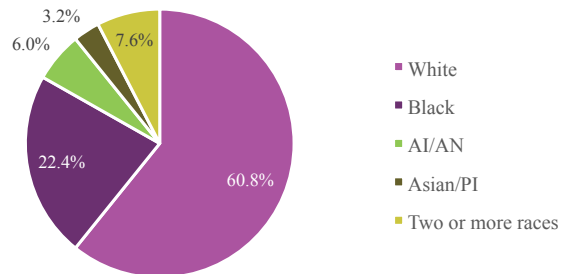
## *How Are We Doing?*

Tulsa County had 157,240 unduplicated Medicaid enrollees during 2013, which represents 25.8 percent of the total population. This was the same as the percentage of Oklahoma residents (25.8 percent). In December 2014, an estimated 22.0 percent of the U.S. population was enrolled in Medicaid. U.S. data was not available for 2013 due to changes in Medicaid eligibility and enrollment during the Affordable Care Act open enrollment period from October 2013 – February 2014.

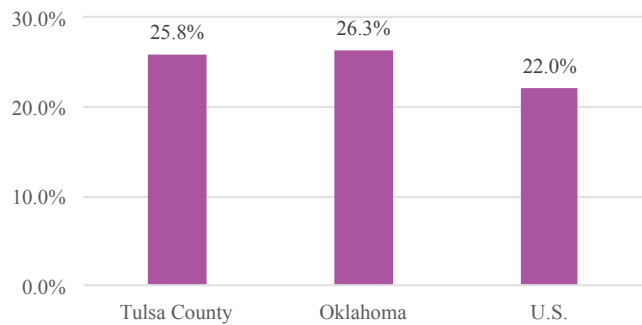
In 2013, the majority of Medicaid enrollees were white (60.8 percent), followed by 22.4 percent who were black.

The ZIP codes with the highest percentages of Medicaid enrollees were 74106, 74126, 74110, 74127, 74146, and 74115.

Medicaid Enrollees by Race  
Tulsa County | 2013



Medicaid Enrollees by Locality\*



\*Tulsa County and Oklahoma data is for 2013; U.S. data is for 2014

### *Data Source:*

Medicaid: A Primer. The Kaiser Commission on Medicaid and the Uninsured. Retrieved from <http://kaiserfamilyfoundation.files.wordpress.com/>

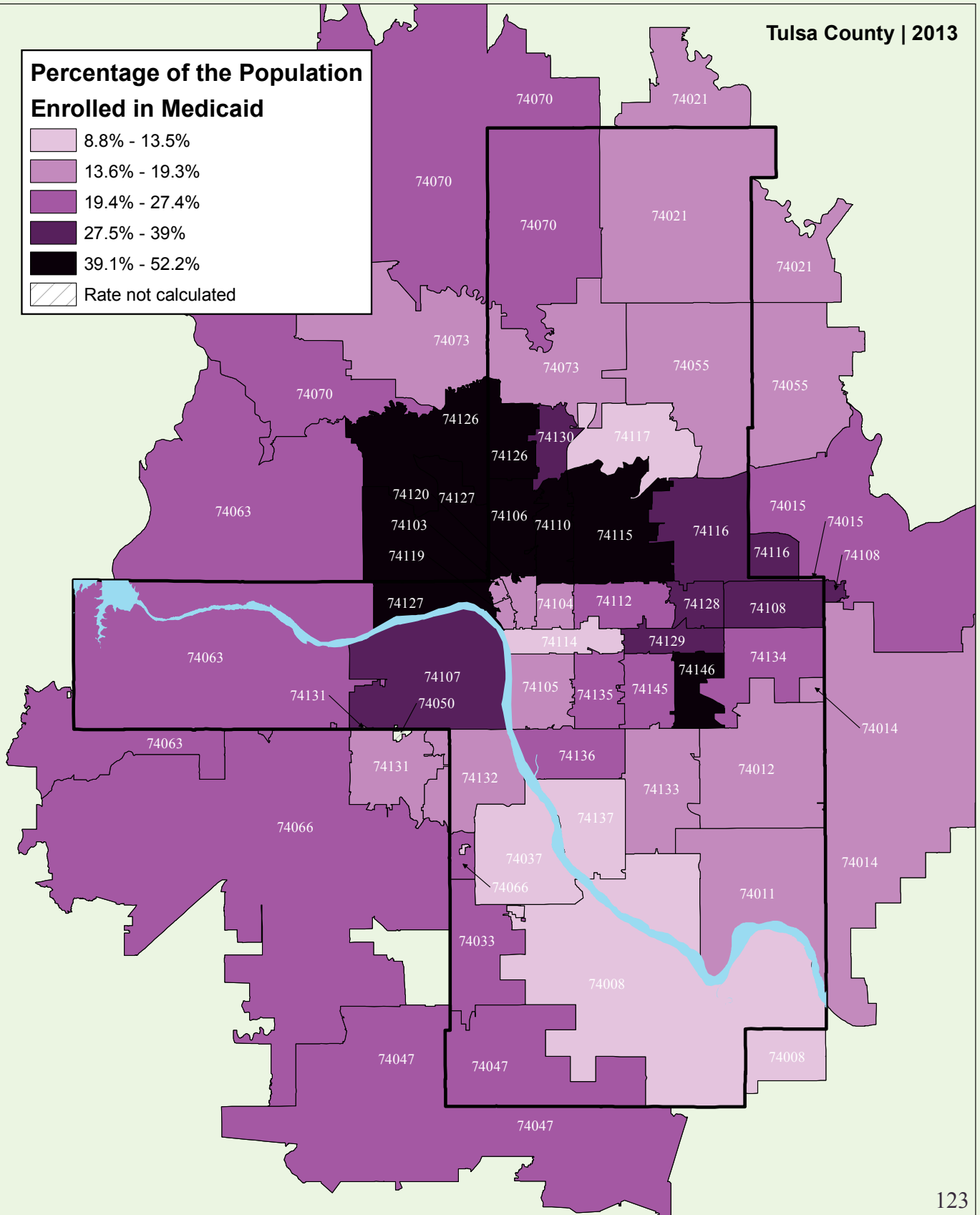
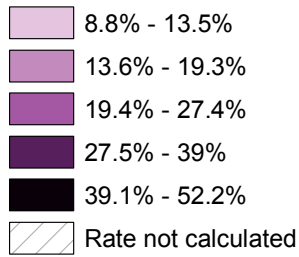
Oklahoma Health Care Authority (OHCA). 2013.

Medicaid & CHIP: December 2014 Monthly Applications, Eligibility Determinations and Enrollment Report. Centers for Medicare & Medicaid Services. February 2015.

# Medicaid

Tulsa County | 2013

## Percentage of the Population Enrolled in Medicaid



# Physicians & Dentists

A list of Tulsa County physicians and dentists and their location of practice was obtained from the database ReferenceUSA. Reference USA is an internet-based reference service that compiles data from a number of sources including state licensing information.

## *Why Is This Indicator Important?*

For many people, having good access to health care means having a regular doctor, being able to schedule timely appointments, and being able to find new doctors when needed. Good access to doctors is especially important for people with Medicare—seniors and adults with permanent disabilities—because they are significantly more likely than others to need healthcare services.

## *How Are We Doing?*

In 2015, there was a rate of 4.7 physicians and dentists per 1,000 population in Tulsa County. Address mapping of these physicians and dentists showed that the largest numbers of providers were located in ZIP codes 74136 and 74104. Many of these physicians and dentists were located in the complexes near Saint Francis Hospital (ZIP code 74136) and near Hillcrest Medical Center and St. John Medical Center (ZIP code 74104).

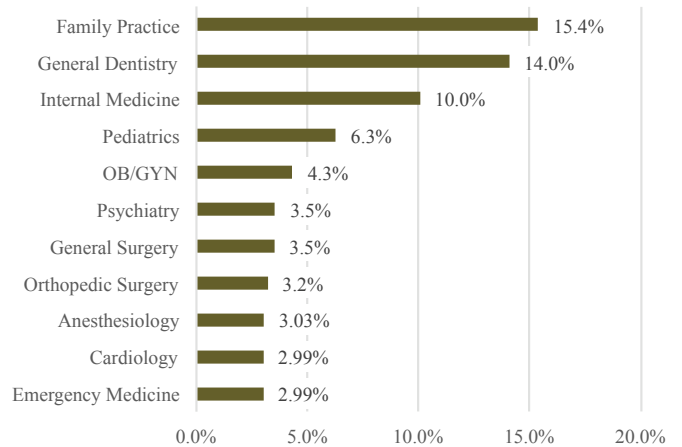
Within Tulsa County, 86.0 percent of providers were physicians or surgeons, while 14.0 percent were dentists. The top specialties among providers were Family Practice (15.4 percent), General Dentistry (14.0 percent) and Internal Medicine (10.0 percent).

### *Data Source:*

Boccuti, C., Swoope, C., Damico, A., & Neuman, P. (Dec 2013). *Medicare Patients' Access to Physicians: A Synthesis of the Evidence*. The Henry J. Kaiser Family Foundation. Retrieved from: <http://kaiserfamilyfoundation.files.wordpress.com/>

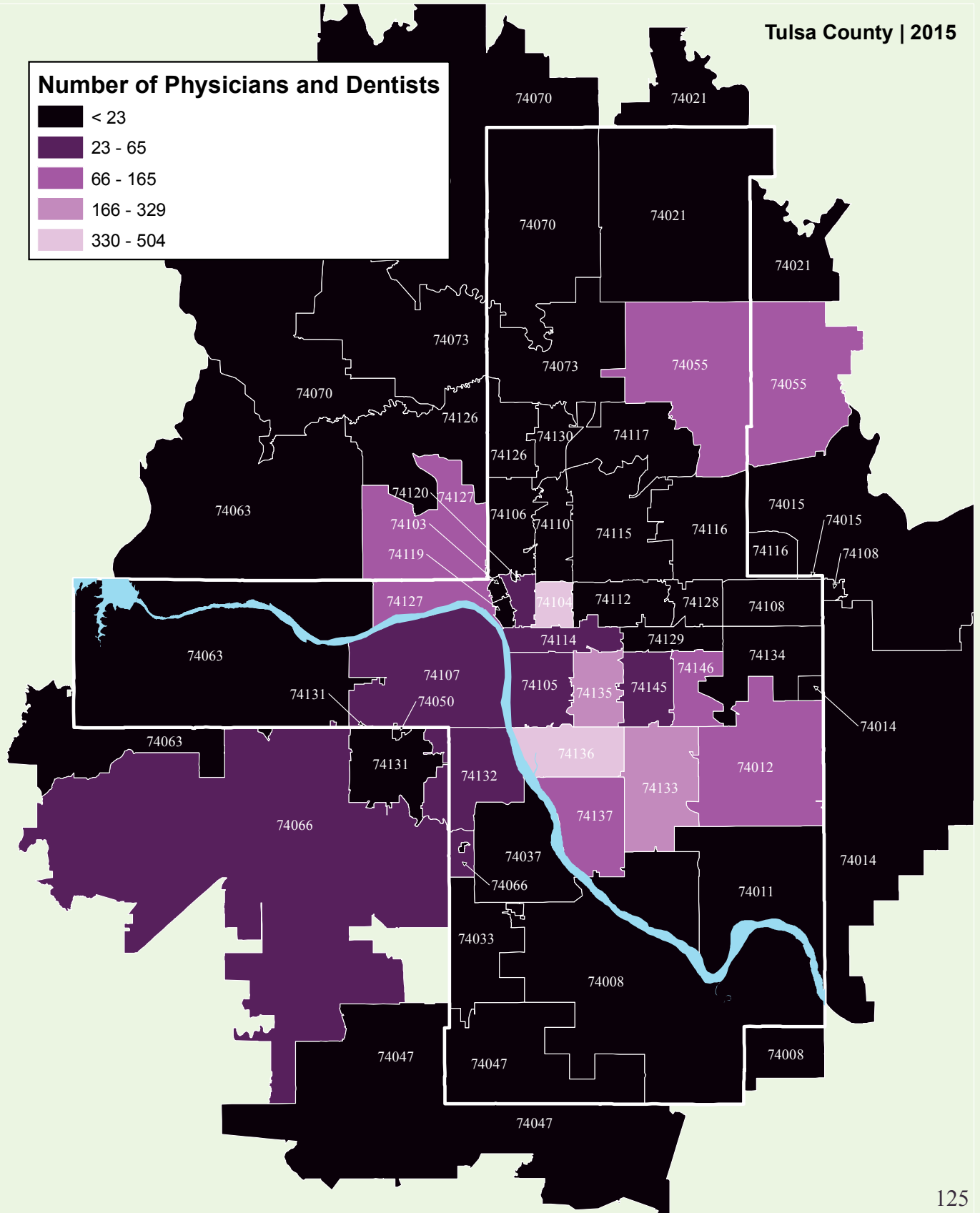
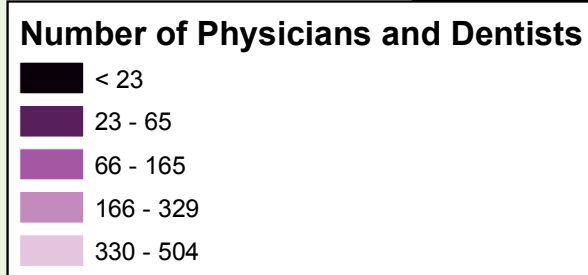
Reference USA. *Physicians in Tulsa County*. May 2015.

Top Ten Provider Specialities  
Tulsa County | 2015



# Physicians & Dentists

Tulsa County | 2015







**Behavioral  
Risk Factors &  
Quality of Life**

# Overweight & Obese

This indicator is the percentage of Tulsa County residents who were overweight or obese (total overweight) in 2013. Overweight is defined by the World Health Organization as individuals who have a body mass index (BMI) greater than or equal to 25. Obese refers to individuals who have a BMI greater than or equal to 30. BMI is calculated by taking the person's weight in kilograms divided by the square of his height in meters (kg/m<sup>2</sup>).

## Why Is This Indicator Important?

A variety of factors, including behavioral, environmental, and genetic factors can all play a role in being overweight/obese. Individuals who are overweight or obese have an increased risk of many health conditions: heart disease, type 2 diabetes, certain cancers, hypertension, and stroke, as well as other conditions. Overweight and obese BMI (and associated health problems) have a significant economic impact on the health system through direct medical costs, lost productivity in the general workforce, and early death.

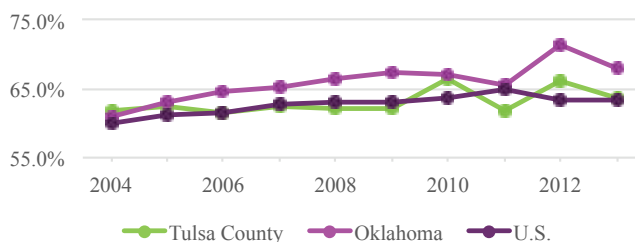
## How Are We Doing?

In 2010, 63.7 percent of Tulsa County residents were overweight or obese (35.2 percent overweight; 28.5 percent obese), compared to 67.9 percent of Oklahomans and 63.5 percent of residents of the United States.

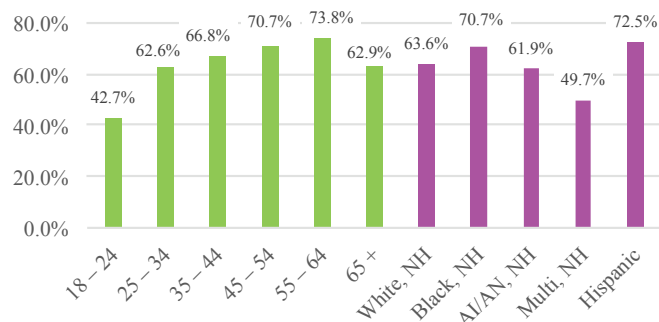
Men were more likely to be overweight/obese than women (70.1 percent compared to 57.3 percent). The prevalence of total overweight was also highest among middle-age individuals (35 – 64). Additionally, total overweight was most prevalent among black, non-Hispanic (NH) and Hispanic individuals.

With regard to socioeconomic factors, total overweight was relatively stable across income groups, although it was slightly lower among adults who had an income of greater than \$75,000. It was also slightly lower among adults who had less than a high school education.

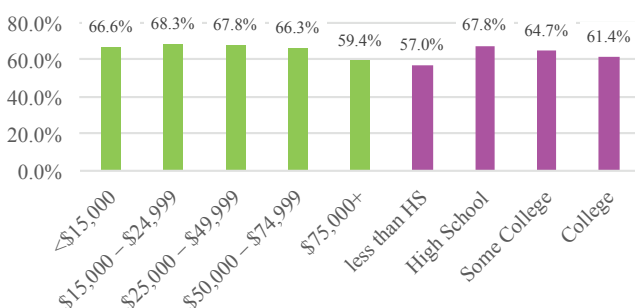
Overweight and Obese by Locality | 2004 – 2013



Overweight and Obese by Age and Race/Ethnicity  
Tulsa County | 2013



Overweight and Obese by Income and Education  
Tulsa County | 2013



### Data Source:

Overweight and Obesity: Causes and Consequences. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>

Behavioral Risk Factor Surveillance System. Centers for Disease Control and Prevention.



# Physical Activity

This indicator is presented as the percentage of adults in 2013 who reported no leisure time physical activity in the past month, other than their regular job.

## Why Is This Indicator Important?

Regular physical activity can improve the health and quality of life of people of all ages, regardless of the presence of a chronic disease or disability. Among adults, physical activity can lower the risk of early death, coronary heart disease, stroke, high blood pressure, type 2 diabetes, breast and colon cancer, falls, and depression. Among children and adolescents, physical activity can improve bone health, improve cardiorespiratory and muscular fitness, decrease levels of body fat, and reduce symptoms of depression. For people who are inactive, even small increases in physical activity are associated with health benefits.

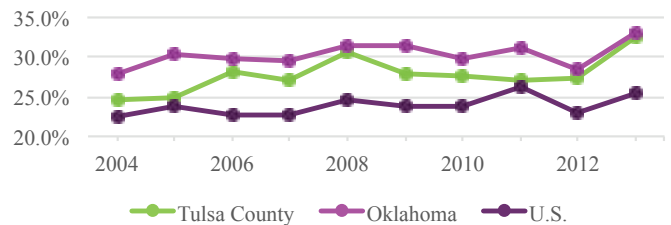
## How Are We Doing?

Overall, 32.4 percent of Tulsa County adults reported no leisure time physical activity in the previous month in 2013. This was lower than in Oklahoma (33.0 percent), but higher than the United States (25.3 percent). Tulsa County and the U.S. met the Healthy People 2020 national target of 32.6 percent of adults reporting no leisure time physical activity. The prevalence of 'no physical activity' increased in Tulsa County from 2010 – 2013.

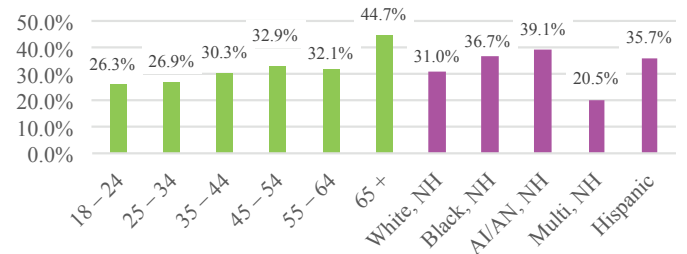
Females were more likely than males to have no leisure time physical activity (34.5 percent compared to 30.1 percent). Additionally, adults age 65+ had higher rates of no leisure time physical activity. With regard to race and ethnicity, multiracial, non-Hispanic individuals had the lowest rate of no leisure time physical activity.

Adults who had an income of less than \$50,000 were almost twice as likely to have no physical activity, other than their regular job, in the past month compared to adults who made more than \$50,000. Adults who had a high school education or less were also almost twice as likely to have no physical activity, other than their regular job, in the past month compared to adults who had a college education.

No Leisure Time Physical Activity in the Past Month by Locality | 2004 – 2013



No Leisure Time Physical Activity in the Past Month by Age and Race/Ethnicity Tulsa County | 2013



No Leisure Time Physical Activity in the Past Month by Income and Education Tulsa County | 2013



### Data Source:

Physical Activity: Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Behavioral Risk Factor Surveillance System. Centers for Disease Control and Prevention.

# Fruits

This indicator is the percentage of Tulsa County residents who reported that they consumed less than one serving of fruit daily in 2013.

## Why Is This Indicator Important?

Fruits and vegetables are part of a well-balanced and healthy diet. Eating more fruits and vegetables along with whole grains and lean meats, nuts, and beans is a way to lose weight or maintain a healthy weight. Along with helping to control weight, diets rich in fruits and vegetables may reduce the risk of some types of cancer and other chronic diseases. Fruits and vegetables also provide essential vitamins and minerals, fiber, and other substances that are important for good health.

## How Are We Doing?

In 2013, 50.3 percent of Tulsa County residents reported that they consumed less than one serving of fruit daily. This was similar to Oklahoma (50.7 percent) but higher than the United States (39.2 percent).

Men were more likely to report low fruit consumption than women (56.1 percent compared to 44.7 percent). Adults ages 25 – 34 were most likely to report that they consumed less than one serving of fruit daily. Additionally, this was more likely to be reported among black, non-Hispanics and American Indian/Alaskan Native, non-Hispanics.

With regard to socioeconomic factors, low fruit consumption was highest among adults who had an income of less than \$15,000. Low fruit consumption decreased as education levels increased.

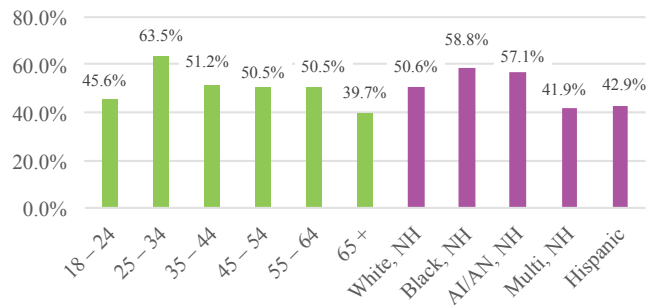
### Data Source:

Fruits and Vegetables. Centers for Disease Control and Prevention. Retrieved from: <http://www.cdc.gov/>

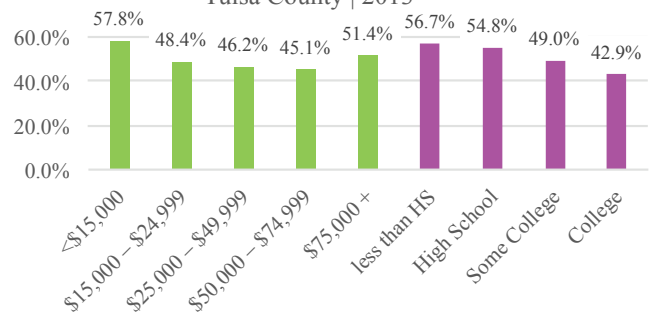
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Behavioral Risk Factor Surveillance System. Centers for Disease Control and Prevention.

Consume <1 Serving of Fruit Daily  
by Age and Race/Ethnicity  
Tulsa County | 2013



Consume <1 Serving of Fruit Daily  
by Income and Education  
Tulsa County | 2013



# Vegetables

This indicator is the percentage of Tulsa County residents who reported that they consumed less than one serving of vegetables daily in 2013.

## *Why Is This Indicator Important?*

Most fruits and vegetables are naturally low in fat, sodium, and calories. None have cholesterol. Nutrients that are obtained from fruits and vegetables include potassium, dietary fiber, folate (folic acid), vitamin A, and vitamin C. These nutrients can help lower cholesterol and blood pressure, as well as keep the body healthy overall. Consumption of folate (folic acid) is especially important for women of childbearing age who may become pregnant. Folic acid lowers the risk of birth defects during fetal development.

## *How Are We Doing?*

In 2013, 24.6 percent of Tulsa County residents reported that they consumed less than one serving of vegetables daily. This was lower than Oklahoma (26.3 percent) but higher than the United States (22.9 percent).

Men were more likely to report low vegetable consumption than women (27.3 percent compared to 22.1 percent). Adults ages 18 – 24 were most likely to report that they consumed less than one serving of vegetables daily. Additionally, this was more likely to be reported among black, non-Hispanics.

With regard to socioeconomic factors, low vegetable consumption was highest among adults who had an income of less than \$15,000. Low vegetable consumption decreased as education levels increased.

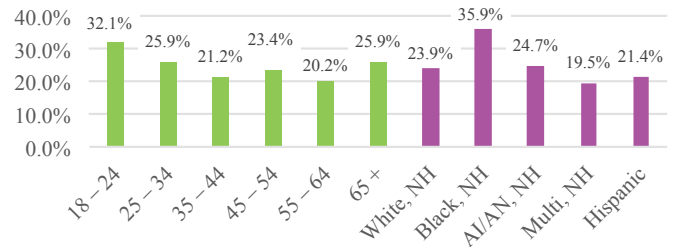
### *Data Source:*

Food Groups. Choose My Plate. United States Department of Agriculture. Retrieved from <http://www.choosemyplate.gov/>

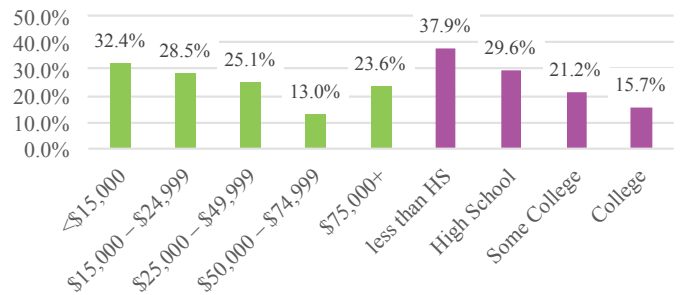
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Behavioral Risk Factor Surveillance System. Centers for Disease Control and Prevention.

Consume <1 Serving of Vegetables Daily  
by Age and Race/Ethnicity  
Tulsa County | 2013



Consume <1 Serving of Vegetables Daily  
by Income and Education  
Tulsa County | 2013



# Diabetes

This indicator is presented as the percentage of Tulsa County residents who had ever been diagnosed with diabetes in 2013. It is important to note that this includes both type 1 and type 2 diabetes.

## Why Is This Indicator Important?

Diabetes mellitus (DM) occurs when the body cannot produce or respond appropriately to insulin. Insulin is a hormone that the body needs to absorb and use glucose (sugar) as fuel for the body's cells. Without a properly functioning insulin signaling system, blood glucose levels become elevated and other metabolic abnormalities occur, leading to the development of serious, disabling complications. Effective therapy can prevent or delay diabetic complications. However, almost 25 percent of Americans with DM are undiagnosed, and another 57 million Americans have blood glucose levels that greatly increase their risk of developing DM in the next several years. Few people receive effective preventative care, which makes DM an immense and complex public health challenge.

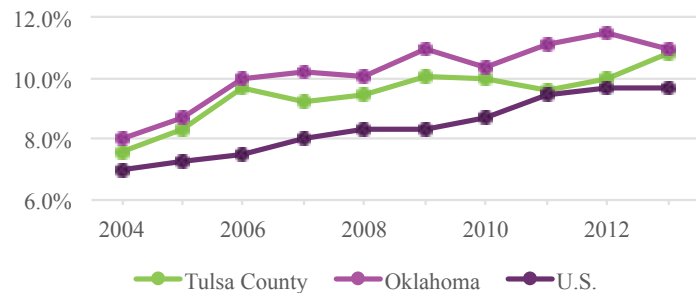
## How Are We Doing?

In 2013, 10.8 percent of Tulsa County residents reported that they had been diagnosed with diabetes. This was similar to the rate in Oklahoma (11.0 percent) and was slightly higher than the rate in the U.S. (9.7 percent). The rate of diabetes in Tulsa County increased from 2011 – 2013.

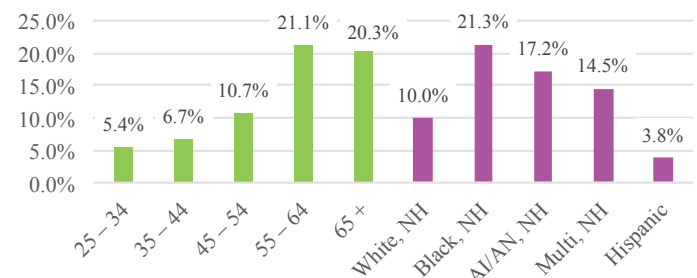
Males had a higher prevalence of diabetes than females (13.2 percent compared to 8.7 percent). Also, adults age 55+ had higher rates of diabetes. The prevalence of diabetes doubled from ages 45 – 54 to 55 – 64. With regard to race and ethnicity, black, non-Hispanics had a higher prevalence than other races/ethnicities.

The prevalence of diabetes was variable among income levels, although it was lowest in those individuals who had an income of \$75,000 or greater. Additionally, the prevalence of diabetes was highest in individuals who had less than a high school education.

Diabetes by Locality | 2004 – 2013



Diabetes by Age and Race/Ethnicity  
Tulsa County | 2013



Diabetes by Income and Education  
Tulsa County | 2013



### Data Source:

Diabetes. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Behavioral Risk Factor Surveillance System. Centers for Disease Control and Prevention.

# High Blood Pressure

This indicator is presented as the percentage of Tulsa County residents who had ever been diagnosed with high blood pressure in 2013.

## Why Is This Indicator Important?

Uncontrolled high blood pressure can lead to serious health consequences if untreated. It is sometimes called ‘the silent killer,’ because it has no symptoms, so individuals may not be aware that it is damaging their arteries, heart, and other organs. Possible health consequences include heart disease, stroke, and kidney damage, as well as other complications. Risk factors for high blood pressure include family history, age, low physical activity, poor diet, overweight/obese BMI, and high alcohol consumption.

## How Are We Doing?

In 2013, 34.8 percent of Tulsa County residents reported having high blood pressure. This was lower than in Oklahoma (37.5 percent) but higher than the United States (31.4 percent). These regions did not meet the Healthy People 2020 national goal of reducing the proportion of individuals with high blood pressure to 26.9 percent.

Men in Tulsa County had a slightly higher prevalence of high blood pressure compared to women (35.4 percent compared to 34.3 percent). Also, high blood pressure prevalence increased with age. Multiracial, non-Hispanic individuals had a higher prevalence of high blood pressure than other race/ethnic groups.

With regard to income, individuals who had an income of less than \$25,000 had a higher prevalence of high blood pressure. Additionally, the prevalence was higher in individuals who had less than a high school education.

### Data Source:

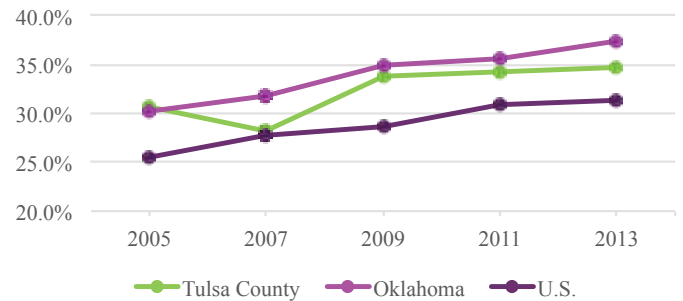
High Blood Pressure. American Heart Association. Retrieved from: <http://www.heart.org>

Heart Disease and Stroke. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

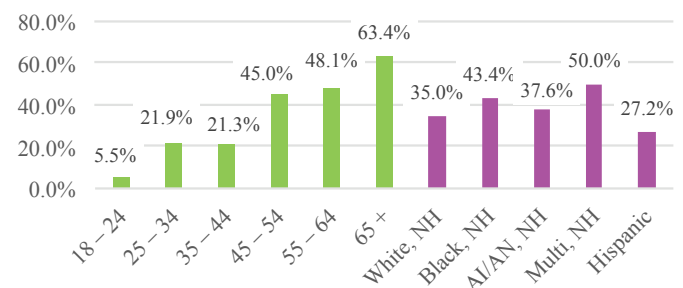
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Behavioral Risk Factor Surveillance System. Centers for Disease Control and Prevention.

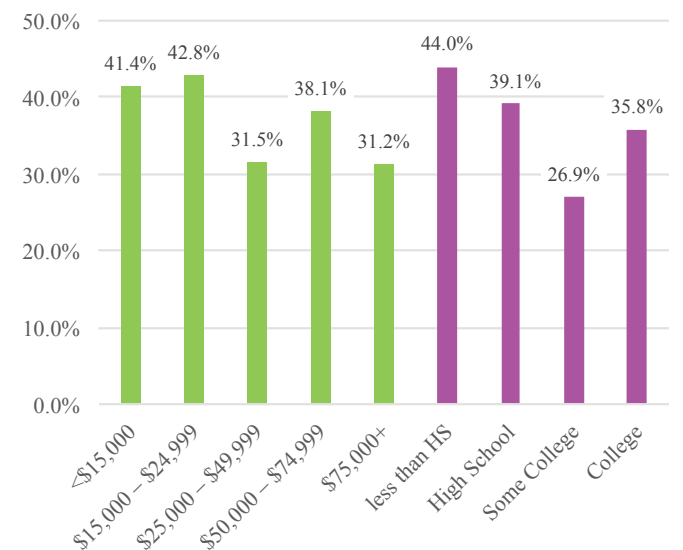
High Blood Pressure by Locality | 2005 – 2013



High Blood Pressure by Age and Race/Ethnicity  
Tulsa County | 2013



High Blood Pressure by Income and Education  
Tulsa County | 2013



# Tobacco Use

This indicator is the percentage of Tulsa County residents who smoked cigarettes in 2013.

## Why Is This Indicator Important?

Tobacco use is the single most preventable cause of death and disease in the United States. Tobacco use causes cancer, heart disease, lung diseases (including emphysema, bronchitis, and chronic airway obstruction), premature birth, low birth weight, stillbirth, and infant death. Secondhand smoke causes heart disease and lung cancer in adults and a number of health problems in infants and children, including severe asthma attacks, respiratory infections, ear infections, and is associated with Sudden Infant Death Syndrome (SIDS). There is no risk-free level of exposure to secondhand smoke.

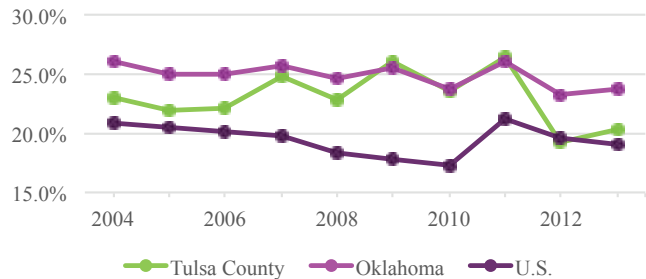
## How Are We Doing?

In 2013, 20.4 percent of Tulsa County residents reported smoking cigarettes on some days or every day (current smokers). This was lower than Oklahoma (23.7 percent) but higher than the United States (19.0 percent). None of these regions met the Healthy People 2020 national goal of reducing smoking prevalence to 12.0 percent. The prevalence of cigarette smoking has fluctuated over time, but overall, there was an 11.6 percent decrease in the prevalence in Tulsa County from 2004 – 2013.

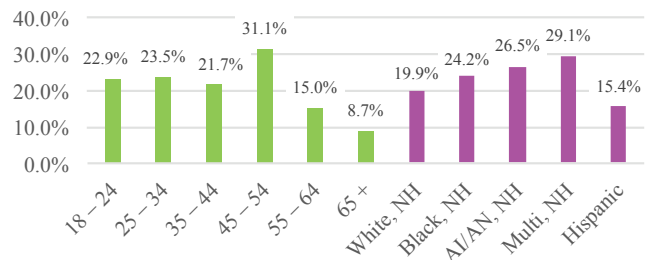
Males in Tulsa County were more likely to smoke cigarettes than females (22.6 percent compared to 18.4 percent). Also, adults ages 45 – 54 had a higher prevalence of cigarette smoking. With regard to race and ethnicity, Hispanics had a lower prevalence of cigarette smoking compared to other race/ethnic groups.

Although the price of cigarettes has continuously increased over time, adults who had an income of less than \$15,000 were about twice as likely to be current smokers compared to other income levels. This was even higher when compared to individuals who had an income of greater than \$50,000. The prevalence of current smokers among individuals with a college education was about three times lower than individuals with other education levels.

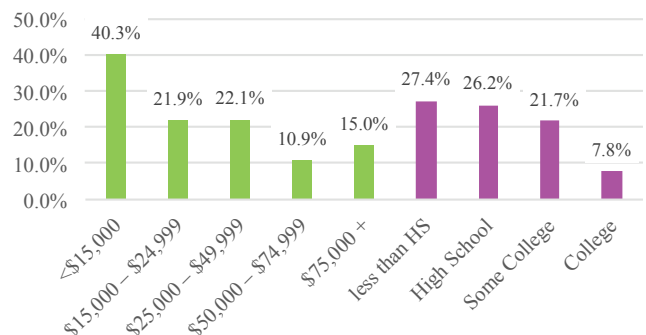
Current Smokers by Locality | 2004 – 2013



Current Smokers by Age and Race/Ethnicity  
Tulsa County | 2013



Current Smokers by Income and Education  
Tulsa County | 2013



### Data Source:

Tobacco Use. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Behavioral Risk Factor Surveillance System. Centers for Disease Control and Prevention.

# No Health Care Coverage

This indicator is the percentage of Tulsa County residents ages 18 – 64 who did not have any type of health care coverage in 2013.

## Why Is This Indicator Important?

Access to comprehensive, quality health care services is important for the achievement of health equity and for increasing the quality of a healthy life for everyone. Barriers to services include lack of availability, high cost, and lack of insurance coverage. Uninsured people are less likely to receive medical care, more likely to die early, and more likely to have poor health status. Current policy efforts focus on the provision of insurance coverage as the principal means of ensuring access to health care among the general population.

## How Are We Doing?

In 2013, 22.5 percent of Tulsa County residents ages 18 – 64 did not have any type of health care coverage. This was very similar to Oklahoma (22.6 percent) and higher than the United States (20.0 percent). The Healthy People 2020 goal is 100 percent coverage (0 percent uninsured).

The uninsured rate was slightly higher among males than females (23.0 percent compared to 21.9 percent). Adults ages 25 – 34 had the highest rate of no insurance. As age increased from this point, the percentage of adults with no health care coverage decreased. Adults age 65+ were not included in these demographics, thus excluding the Medicare population. With regard to race/ethnicity, Hispanics had an uninsured rate that was about four times that of white, non-Hispanics.

Adults who had an income of less than \$25,000 had uninsured rates that were about three times as high as individuals at higher income levels. Additionally, the uninsured rate decreased as education increased. Adults with less than a high school education had an uninsured rate that was more than five times higher than those individuals with a college education.

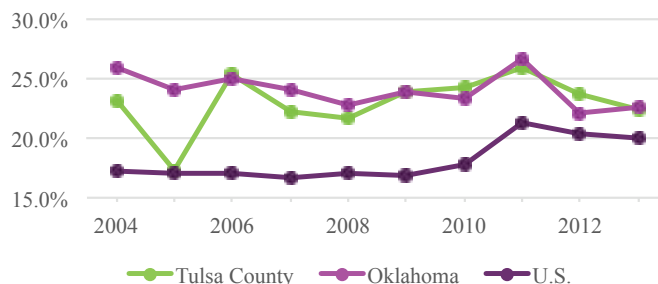
### Data Source:

Access to Health Services. Healthy People 2020. U.S. Department of Health and Human Services. Retrieved from: <http://www.healthypeople.gov/>

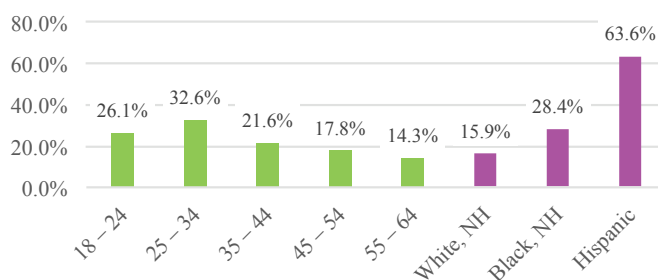
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Retrieved from: <http://www.health.ok.gov/ok2share>.

Behavioral Risk Factor Surveillance System. Centers for Disease Control and Prevention.

No Health Care Coverage by Locality | 2004 – 2013



No Health Care Coverage by Age and Race/Ethnicity Tulsa County | 2013



No Health Care Coverage by Income and Education Tulsa County | 2013



# ZIP Code Analysis

Indicator	Socioeconomic						Maternal and Child Health									Social and Mental Health	
	ZIP Code	Average rating	Median Household Income	Population below Poverty	Female Householders	Educational Attainment	Unemployment Rate	Teen Birth Rate Ages 15 - 17	Teen Birth Rate Ages 15 - 19	Late or No Prenatal Care	Tobacco Use during Pregnancy	Premature Births	Low Birth Weight	Maternal Education	Births to Unmarried Women	Infant Mortality Rate	Deaths from Suicide
74133	1.55	2	1	3	1	2	1	1	3	1	2	3	1	2	1	2	**
74114	1.61	1	1	1	1	1	**	1	1	1	3	2	1	1	**	4	**
74137	1.65	1	2	2	1	2	1	1	2	1	2	3	1	1	4	2	**
74008	1.67	1	1	2	2	2	1	1	2	1	1	1	1	1	**	1	**
74011	1.74	1	2	2	1	2	2	2	2	2	2	3	1	1	2	2	**
74012	1.81	2	1	2	2	2	2	2	3	2	2	2	1	1	1	2	**
74021	1.83	1	1	2	2	2	2	3	1	3	3	3	1	1	**	2	**
74014	1.85	1	1	2	2	2	2	2	2	2	2	2	1	1	4	1	1
74117	1.86	1	2	1	5	1	**	**	**	**	**	**	**	**	**	**	**
74037	1.93	1	1	2	1	1	1	1	1	1	2	2	1	1	**	2	**
74055	1.97	1	1	2	2	2	2	2	1	2	2	2	1	1	2	2	1
74131	2.29	2	2	1	4	4	**	5	2	4	2	2	2	3	**	**	**
74073	2.29	2	1	1	2	2	**	1	2	4	2	1	1	3	**	**	**
74063	2.41	2	2	3	3	2	2	3	2	4	3	3	2	2	2	3	**
74132	2.46	2	1	3	2	2	**	1	3	2	2	2	1	2	**	4	**
74033	2.48	2	2	3	2	3	3	2	3	2	2	1	1	2	3	2	**
74105	2.48	3	3	3	1	2	2	3	2	3	3	3	2	3	**	2	2
74070	2.50	2	3	3	3	2	1	2	1	4	3	3	1	2	**	3	**
74135	2.64	3	3	4	2	2	2	2	2	3	4	4	2	3	5	3	**
74145	2.64	3	3	4	2	2	3	3	4	2	1	3	3	3	2	5	**
74136	2.71	4	4	4	2	3	2	2	4	3	3	4	3	3	4	1	2
74015	2.79	2	2	2	3	2	3	4	3	5	4	3	3	3	**	**	**
74104	2.81	4	4	4	3	2	4	2	2	3	4	4	2	2	**	**	2
74047	2.92	3	2	2	3	2	3	4	4	4	1	1	2	3	**	4	**
74129	2.97	4	4	4	4	3	4	5	4	2	4	4	4	4	1	2	2
74134	3.00	3	4	4	3	2	3	4	3	2	3	3	3	2	3	4	**
74112	3.06	4	3	4	4	3	2	2	3	4	3	4	3	3	2	3	**
74066	3.07	3	3	3	3	3	2	3	3	4	3	4	2	2	3	3	1
74119	3.08	4	3	2	2	2	**	4	2	3	3	4	2	3	**	**	**
74120	3.28	4	4	3	3	3	3	2	4	4	5	4	3	3	**	5	**
74128	3.30	3	3	3	4	3	5	5	4	3	2	3	5	4	**	2	4
74107	3.41	4	4	4	3	3	3	4	4	5	4	4	3	4	4	3	3
74108	3.67	3	3	3	4	3	2	3	4	5	4	4	3	4	5	**	**
74116	3.70	4	5	4	5	4	5	5	4	4	3	3	5	4	**	5	**
74130	3.77	4	4	3	3	5	**	1	3	5	1	4	4	4	**	**	**
74127	3.79	4	4	4	4	4	3	4	3	5	4	4	3	4	5	4	4
74146	3.84	4	4	4	4	3	5	5	4	2	3	3	5	4	3	3	**
74115	3.97	4	4	4	5	4	4	5	4	5	4	4	5	4	2	4	4
74050	4.20	5	5	3	5	5	**	**	3	5	**	**	4	4	**	**	**
74103	4.25	3	5	1	5	5	**	**	5	**	**	**	**	3	**	**	**
74110	4.32	5	5	4	5	4	5	5	3	4	4	4	5	4	3	4	5
74106	4.36	5	5	5	4	5	4	5	5	5	5	5	4	5	4	1	5
74126	4.62	5	5	5	4	5	4	4	5	5	5	5	4	5	**	**	5



# ZIP Code Analysis

Infectious Disease					Mortality											Health Care Access	
Chlamydia	Gonorrhea	Syphilis	HIV/AIDS	Foodborne Illness	Deaths from All Causes	Deaths from Heart Disease	Deaths from Cancer	Deaths from Chronic Lower Respiratory Disease	Deaths from All Accidents	Deaths from Stroke	Deaths from Alzheimer's Disease	Deaths from Diabetes	Deaths from Influenza and Pneumonia	Deaths from Chronic Liver Disease and Cirrhosis	Life Expectancy	Emergency Room Visits	Population on Medicaid
2	1	1	2	2	1	1	1	1	1	2	1	2	2	1	1	1	2
1	1	3	4	1	1	2	1	2	3	2	3	1	2	1	1	1	1
1	1	**	1	2	1	1	1	2	1	3	3	1	4	**	1	1	1
1	1	**	**	3	2	2	2	2	2	2	2	3	3	3	2	1	1
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# Glossary

## **Accidents (Unintentional Injuries)**

ICD-10 codes V01-X59, Y85-Y86

## **Age-adjusted mortality**

A summary of age-specific death rates standardized to one age distribution (such as the 2000 standard population). Since the summary method has the effect of removing the influence of age from the overall mortality picture, it allows more meaningful comparisons to be made between populations with different age distributions.

## **AI/AN**

American Indian/Alaskan Native

## **Alzheimer's disease**

ICD-10 code G30

## **American Community Survey (ACS)**

ACS is an ongoing nationwide survey that provides population, housing, and economic data each year.

## **Assault**

ICD-10 codes X85-Y09, Y87.1

## **Birth defects**

ICD-10 codes Q00-Q99

## **Behavioral Risk Factor Surveillance System (BRFSS)**

BRFSS, which is supported by the CDC, is the world's largest, on-going telephone health survey system. It tracks health conditions and behaviors in adults (18+ years of age) in all 50 states as well as many local areas. Information is gathered on issues such as health care access, alcohol use, cholesterol awareness, nutrition, and obesity.

## **Cancer (Malignant neoplasms)**

ICD-10 codes C00-C97

## **CDC**

Centers for Disease Control and Prevention

## **Chronic liver disease and cirrhosis**

ICD-10 codes K70, K73-K74

## **Chronic Lower Respiratory Disease (CLRD)**

ICD-10 codes J40-J47

## **Crude mortality rate**

The total number of deaths per unit of population reported during a given time interval, often expressed as the number of deaths per 100,000 persons.

## **Diabetes mellitus**

ICD-10 codes E10-E14

## **Ethnicity**

A social group characterized by a distinctive social and cultural tradition, maintained within the group from generation to generation. For reporting purposes, it is a separate category from race. The U.S. Census currently tracks Hispanic/non-Hispanic.

## **Frequency**

The number of times an event occurs within a stated period of time.

## **Healthy People 2020**

Healthy People provides science-based, 10-year national objectives for improving the health of all Americans. For 3 decades, Healthy People has established benchmarks and monitored progress over time in order to encourage collaborations across communities and sectors, empower individuals toward making informed health decisions, and measure the impact of prevention activities. Where applicable, these objectives are used as indicators of areas for improvement.

## **Heart disease**

ICD-10 codes I00-I09, I11, I13, I20-I51

## **Hispanic Origin**

Based on self-identification by respondents. People of Hispanic origin are those who indicated that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Hispanic origin. People of Hispanic origin may be of any race.

**ICD codes**

The International Classification of Diseases and Related Health Problems (ICD) was designed to promote international comparability in the collection, processing, classification, and presentation of disease and death statistics. It is a collaborative effort of the World Health Organization and ten international centers. ICD codes translate verbal descriptions of diseases and procedures into numbers. There have been 10 versions of ICD, with the tenth version currently used to track death statistics (e.g., it is used to code cause of death on death certificates).

**Incidence rate**

A measure of the number of new cases of disease occurring in a specific population over a specific period of time, usually one year.

**Indicator**

A measure of health status of a health outcome.

**Infectious disease**

Any disease caused by the entrance, growth, and multiplication of microorganisms or other agents, such as bacteria, fungi, or viruses, in the body.

**Influenza/pneumonia**

ICD-10 codes J10-J18

**Kidney disease**

ICD-10 codes N00-N07, N17-N19, N25-N27

**Life expectancy**

An expected number of years of life based on statistical probability.

**Mean**

A measure of central location commonly called the average. It is calculated by taking the sum of all values divided by the number of values recorded.

**Median**

A measure of central location which divides a set of data into two equal parts. Half of the values lie below the median, half above the median.

**Mortality**

The event or rate of death.

**National Notifiable Diseases****Surveillance System**

The Centers for Disease Control and Prevention (CDC)'s National Notifiable Diseases Surveillance System (NNDSS) is a multifaceted public health disease surveillance system that allows public health officials to monitor the occurrence and spread of diseases. State, local, territorial, and tribal health departments notify CDC of cases of specific diseases and conditions that they identify in their jurisdictions. Every year, the nation's epidemiologists determine which of these diseases and conditions should be notifiable and how to define a case.

**National Vital Statistics System**

The National Vital Statistics System is the oldest and most successful example of inter-governmental data sharing in Public Health and the shared relationships, standards, and procedures form the mechanism by which National Center for Health Statistics (NCHS) collects and disseminates the Nation's official vital statistics. These data are provided through contracts between NCHS and vital registration systems operated in the various jurisdictions legally responsible for the registration of vital events – births, deaths, marriages, divorces, and fetal deaths.

**NH/PI**

Native Hawaiian/Pacific Islander

**Non-Hispanic Origin**

All individuals who did not self-identify that their origin was Mexican, Puerto Rican, Cuban, Central or South American, or some other Hispanic origin. People of non-Hispanic origin may be of any race.

# Glossary

## **ODMHSAS**

Oklahoma Department of Mental Health and Substance Abuse Services

## **Oklahoma Statistics on Health Available for Everyone (OK2SHARE)**

OK2SHARE is a web-based data query system containing data that supports the information needs of the Oklahoma State Department of Health and other data users. OK2SHARE contains data from Vital Statistics, Hospitals and ASCs, Health Surveys, and Health Registries as well as links to external data sources.

## **OSDH**

Oklahoma State Department of Health

## **Race**

Based on self-identification by respondents. Current U.S. Census categories include African American, Asian and Pacific Islander, Native American and Native Alaskan, Hawaiian, White, and Other. It is reported separately from ethnicity.

## **Rate**

An expression of the frequency with which an event occurs in a defined population for a specified amount of time, often one year. Rates are generally calculated per 1,000 or 100,000 population.

## **Stroke**

ICD-10 codes I60-I69

## **Suicide**

ICD-10 codes X60-X84, Y87.0

## **Tulsa Area Syndromic Surveillance System (TASSS)**

TASSS is THD's emergency room surveillance system. Chief complaint data is transmitted electronically to THD where it is analyzed daily to identify clusters of syndromes (such as fever, vomit and diarrhea). The purpose is to monitor population-level data in order to identify patterns of illness and detect early signs of impending disease so that physicians can be alerted in regards to potential outbreaks and bioterrorism events before a large number of patients become sick.

## **THD**

Tulsa Health Department

## **U.S. Census**

The U.S. Census is a decennial survey that is used to collect population data. It is used to determine the number of seats each state has in the U.S. House of Representatives and is also used to distribute billions in federal funds to local communities.

## **WHO**

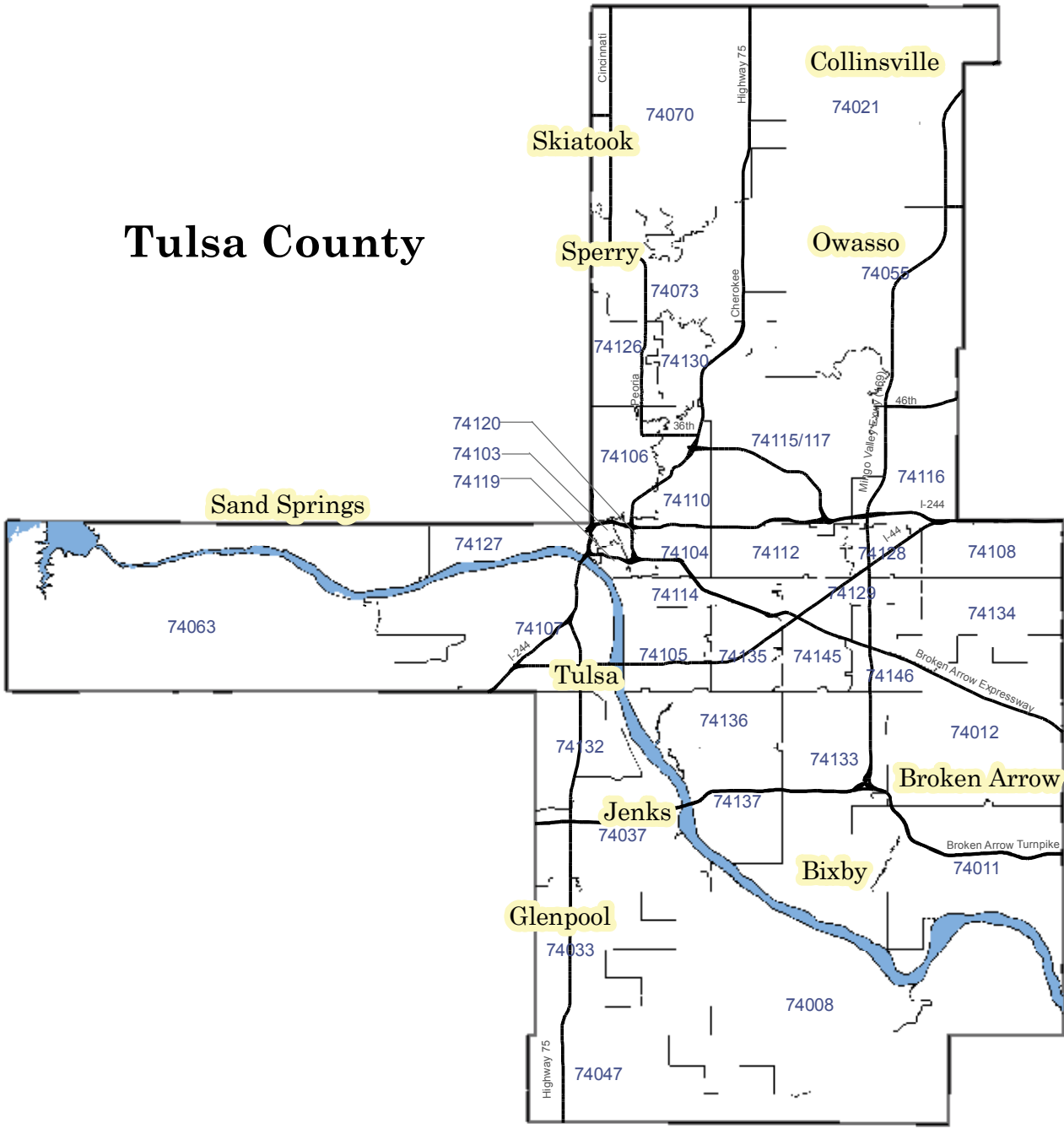
World Health Organization

## **Wide-ranging Online Data for Epidemiologic Research (WONDER)**

CDC WONDER is an easy-to-use, menu-driven system that makes the information resources of the CDC available to public health professionals and the public at large. It provides access to a wide array of public health information. CDC WONDER is valuable in public health research, decision making, priority setting, program evaluation, and resource allocation.

# County Map

## Tulsa County



# Acknowledgments

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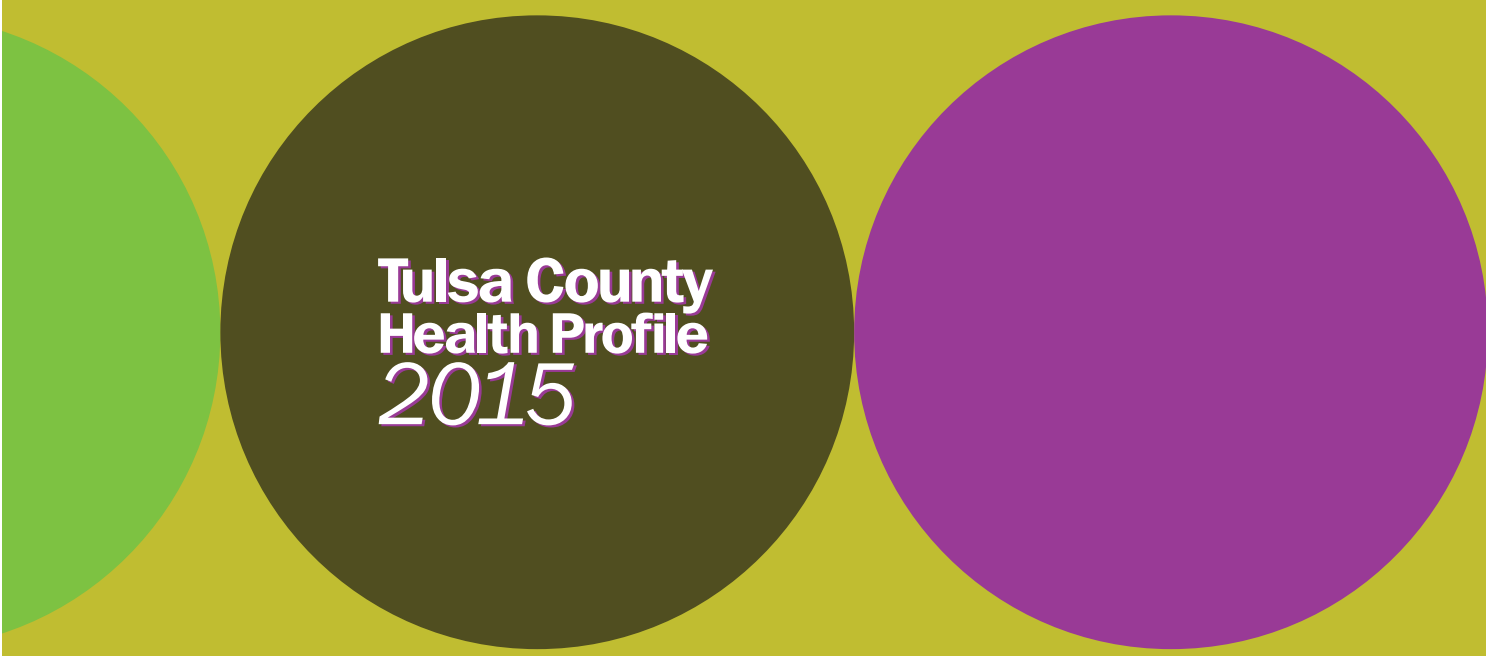
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Health Profile  
2015**

