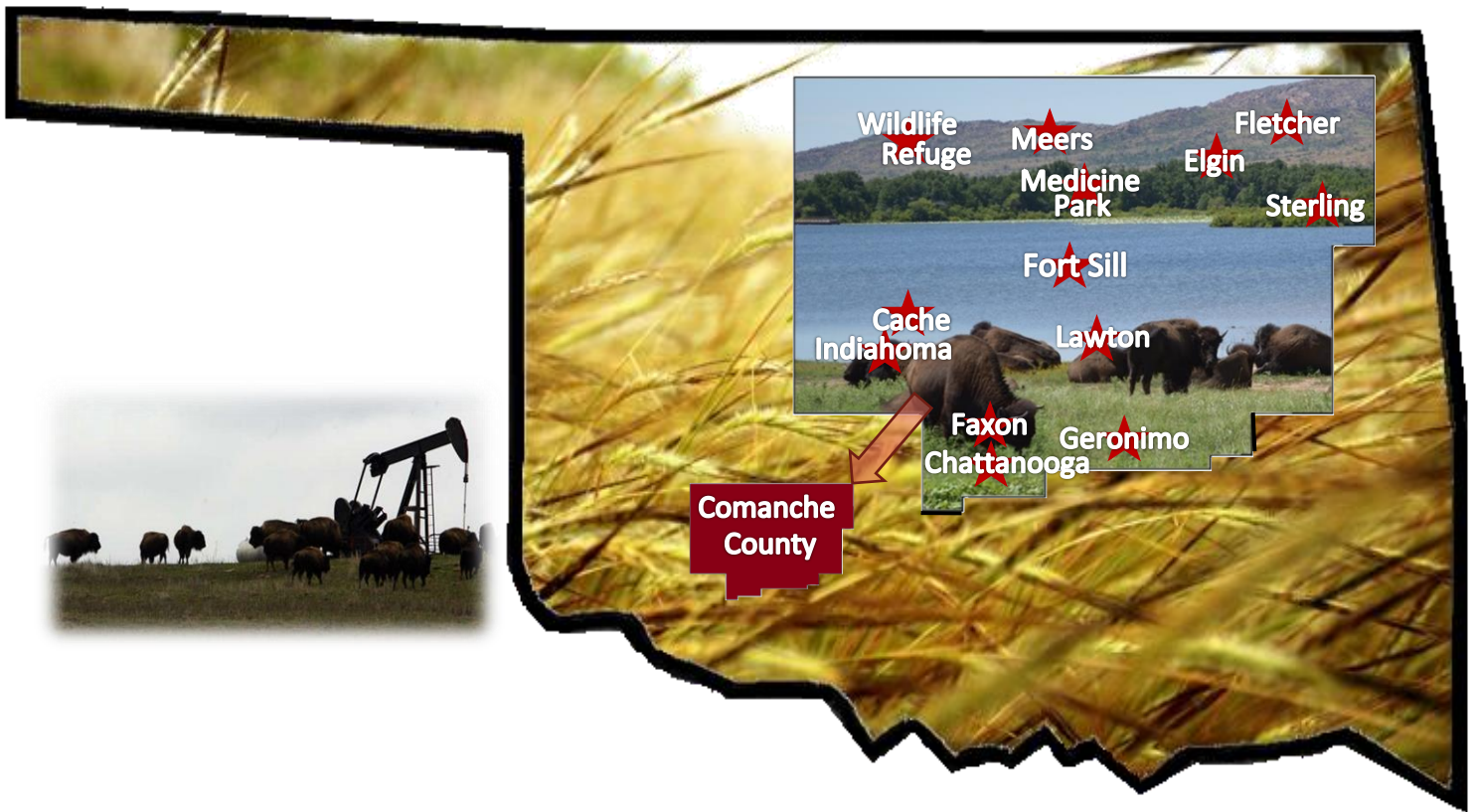


# COMANCHE COUNTY

*Oklahoma*



# COMMUNITY HEALTH ASSESSMENT

**Initial Release December 2016**

**Revised March 2021**



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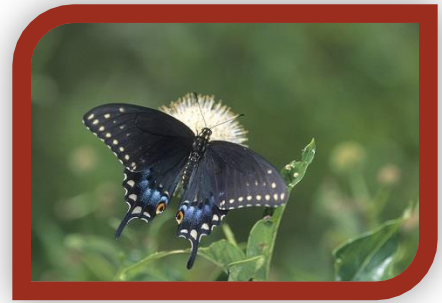
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## Community Contributors

A special thank you to all the Community Contributors who volunteer their time and energy. We are fortunate to have partners who are committed to the task of creating a state of good health in Comanche County.



Alpha Kappa Alpha Sorority  
Cache High School  
Cameron University  
City of Lawton  
Comanche County Health Department  
Comanche County Juvenile Bureau  
Comanche County Memorial Foundation  
Comanche County Memorial Hospital  
Comanche County OSU Cooperative  
Family Promise  
Farmers Market  
Fit Kids of Southwest Oklahoma  
Fletcher City Council  
Food Services, Lawton Public Schools  
Fort Sill Oklahoma Military Installation  
Great Plains Technology Center  
Indian Health Service  
Jim Taliaferro Community Mental Health Center  
Lawton City Council  
Lawton Community Health Center  
Lawton Family YMCA  
Lawton Fire Department

Lawton Fort Sill Chamber of Commerce  
Lawton Police Department  
Lawton Public Library  
Lawton Public Schools  
Lawton-Fort Sill Community Coalition  
Magic 95 (Fitness Revolution)  
Marie Detty Youth and Family Center  
MIGHT Community Development Resource Center  
Oklahoma State University  
Office of Partnership Engagement  
Partnerships and Possibilities  
Patterson Center  
Platt College  
Regional AIDS Intercommunity Network  
Salvation Army  
Southwestern Medical Center  
Specialized Alternatives for Families and Youth  
Tobacco Settlement Endowment Trust (TSET)  
United Way of Lawton-Fort Sill  
Wichita Mountains Prevention Network  
Wichita Mountains Wildlife Refuge

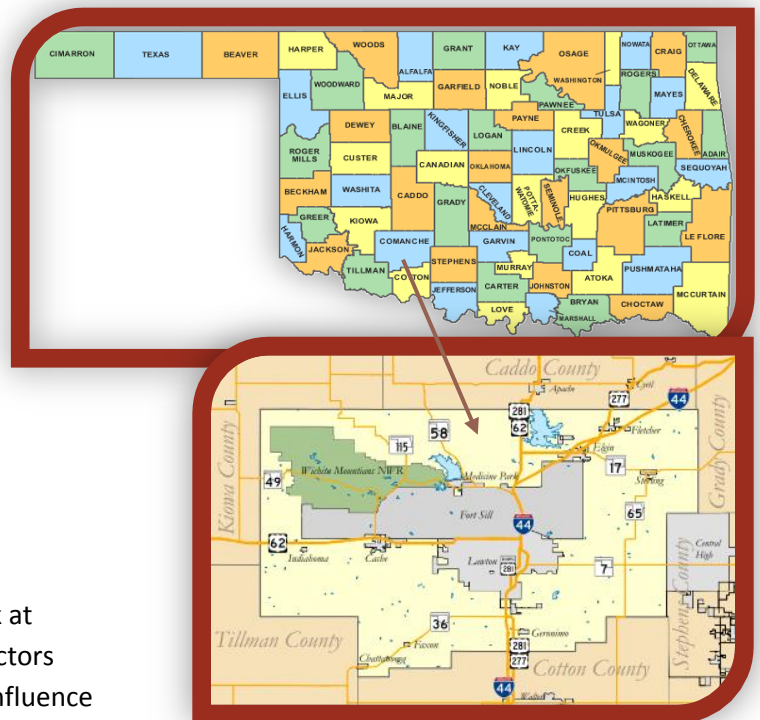


## Introduction Comanche County

In 2015 as part of an ongoing process, Comanche County once again engaged community partner’s to assess the health of the county using the Mobilizing for Action through Planning and Partnerships (MAPP) model. Organizations collected information using the following four assessments:

- Community Health Status
- Community Themes and Strengths
- Local Public Health System
- Forces of Change

The assessments provided a comprehensive look at Comanche County’s current health outcomes, the factors affecting those outcomes, real or perceived, which influence the health of the community. The community health assessment is a systematic examination of the health status indicators for Comanche County. The ultimate goal of a community health assessment is to develop strategies to address the community's health needs and identified issues. Although there are many health related issues needing attention, after review of the data in the fall of 2015, the following areas were identified by stakeholders as the leading nine areas for improvement:



- Mental Health
- Obesity
- Poverty
- Sexual Health
- Substance Abuse (Tobacco, Alcohol, Drugs)
- Infant Mortality
- Violence and Crime
- Dental Health
- Injury Related Mortality

Following a detailed review and further discussion of these nine elements, stakeholders voted to focus on the following five priorities:

- Mental Health
- Obesity
- Substance Abuse (Tobacco, Alcohol, Drugs)
- Violence and Crime
- Poverty

This document will briefly discuss these priorities while demonstrating how and why they were chosen for health improvement in Comanche County.

## Mobilizing for Action through Planning and Partnerships (MAPP)

MAPP is a community-wide strategic planning framework for improving public health.<sup>1</sup> MAPP helps communities prioritize their public health issues, identify resources for addressing them, and implement strategies relevant to their unique community contexts.

MAPP will help communities use broad-based partnerships, performance improvement, and strategic planning in public health practice. This approach leads to the following:

- measurable improvements in the community’s health and quality of life;
- increased visibility of public health within the community;
- community advocates for public health and the local public health system;
- ability to anticipate and manage change effectively; and
- stronger public health infrastructure, partnerships, and leadership.

The MAPP model and illustrated community roadmap: both depict the process Comanche County undertook. To initiate the MAPP process, lead organizations in the community begin by organizing themselves and recruiting participants. A shared vision and common values provide a framework for pursuing long-range community goals as shown in the following illustration:

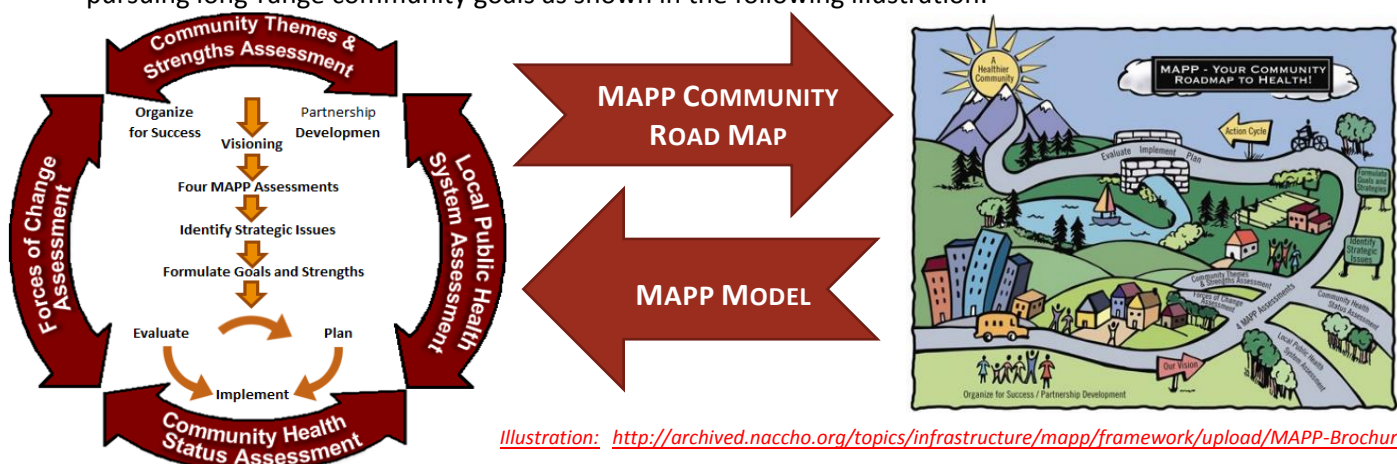


Illustration: <http://archived.naccho.org/topics/infrastructure/mapp/framework/upload/MAPP-Brochure->

The four MAPP Assessments provide critical insights into challenges and opportunities throughout the community.<sup>1</sup>

**Community Themes and Strengths Assessment** identifies issues that interest the community, perceptions about quality of life and community assets.

**Local Public Health System Assessment** measures the capacity and performance of the local public health system including all organizations and entities that contribute to the public’s health.

**Community Health Status Assessment** assesses data about health status; quality of life, and risk factors in the community.

**Forces of Change Assessment** identifies forces that are or will be affecting the community or the local public health system.

Using the results of the assessments, participants identify strategic issues and then formulate goals and strategies for addressing five priority areas. Conducting MAPP should create a sustained community initiative that ultimately leads to community health improvement.

## Description and Community Demographics

Comanche County is a mixed urban and rural setting located in southwest Oklahoma. Comanche County is isolated from other more populous Oklahoma counties, and as such is a central hub of activity and resources for the Southwest region of the state. The majority of the population resides in Lawton-Fort Sill (pop. 96, 655) with the remainder spread out among the rural areas of the county. The county boasts ten cities and communities as well as the Fort Sill military installation and Wichita Mountains Wildlife Refuge. Also located in Comanche County is Cameron University, the largest four year university in southwest Oklahoma.

With 1,069 square miles of land, the landscape of the county is typical of the Great Plains with flat topography and gently rolling hills, while the northwest part of the county is marked by the Wichita Mountains. Interstate 44 and three major US Highways serve the county by ground, while the Lawton-Fort Sill Regional Airport serves the county by air.

In terms of healthcare facilities, Comanche County has a county health department, four hospitals; the largest being county owned, followed by a privately owned hospital, an Army hospital and an Indian Health Service hospital. Other healthcare providers include a federally qualified health center, two residency programs (MD and DO), limited mental health providers, and several medical and dental clinics. See Appendix A for the following demographics:

### County Population<sup>3</sup>: 124,648

- Cache
- Chattanooga
- Elgin
- Faxon
- Fletcher
- Geronimo
- Indiahoma
- Lawton-Fort Sill
- Medicine Park
- Sterling



### Populations by Races<sup>3</sup>:

White:	66%
Hispanic or Latino	13% (ethnicity not race)
Black or African American:	18%
American Indian & Alaska Native:	6.3%
Asian:	2.7%
Two or more races:	6.3%

**Average Household Income<sup>3</sup>: \$46,302**

**Persons in Poverty<sup>3</sup>: 18.6% (state: 16.6%)**

**Children Living in Poverty (under age 18)<sup>6</sup>: 24% (state: 22.4%)**

**Persons without Health Insurance under age 65<sup>6</sup>: 19% (state 21%)**

**High School Graduate or Higher<sup>3</sup>: 89.3% (state 86.7%)**

## Mortality and Leading Causes of Death

According to the 2014 Oklahoma State of the County Report , Appendix B, Comanche County's leading causes of death reported to be **heart disease, cancer and chronic lower respiratory disease**. **Infant mortality** remains a concern as the rate of infant deaths worsened by 26% from the previous year; 7.8 (per 1,000 births) to 9.8 compared to the state rate of 7.6.<sup>7</sup> Reported in 2018, the infant mortality rate has now increased to 10 with concerns regarding the African American population reports an alarming rate of 12 while the white population reports a rate of 9.<sup>6</sup> The percentage of **motor vehicle crash deaths with alcohol involvement** in Comanche County in 2014 was 43% with a state rate of 33%. In 2015, the percentage rose to 46% with a state rate declining to 31%.<sup>6</sup>

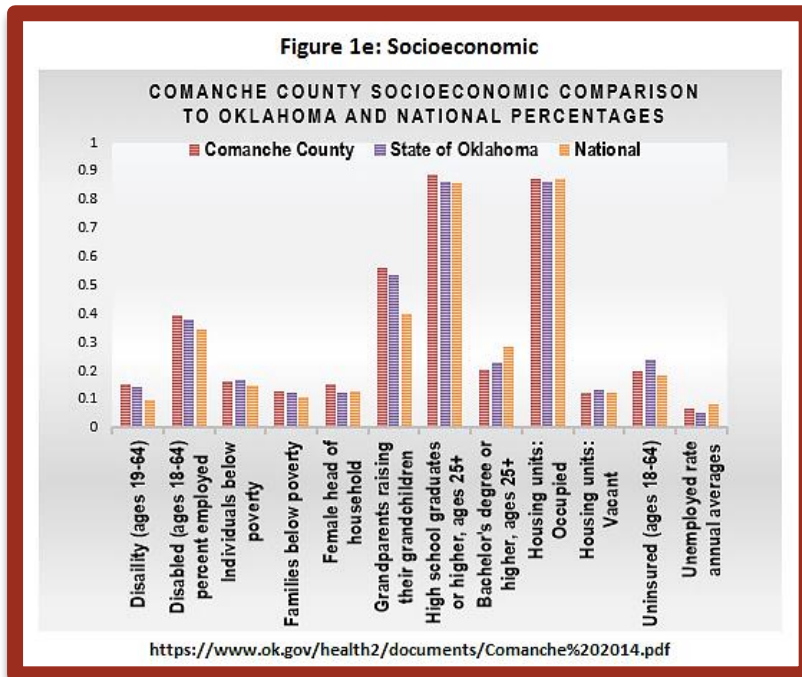
## SOCIAL DETERMINANTS OF HEALTH

Health starts in our homes, schools, workplaces, neighborhoods, and communities. We know taking care of ourselves by eating well and staying active, not smoking, getting the recommended immunizations, screening tests, and seeing a doctor when we are sick all influence our health. Our health is also determined in part by access to social and economic opportunities; the resources and support available in our homes, neighborhoods, and communities; the quality of our schools; the safety of our workplaces; the cleanliness of our water, food, air, the nature of our social interactions and relationships. Figure 1f shows some possible community consequences of not addressing social determinants.

Figure 1f: Social Determinates				
Why do I care? How could this affect my life?				
Possible Effects	Quik Facts from US Census Bureau	Comanche County	United States	Possible Effects
More People to support	Population Increased-April 1, 2010-July 1, 2014	↓ 0.08%	↑ 3.30%	More competition for jobs
More elderly needing care	Increase of person 65 and over April 1, 2010 to July 1, 2014	↓ 0.80%	↑ 1.50%	More fixed incomes
Less employment opportunities	Receive a bachelor degree or higher	↓ 20.40%	↑ 29.30%	Fewer higher paying jobs
More emergency room visits	Persons without health insurance under age 65	↑ 18.50%	↓ 12.00%	Persons less likely to seek medical attention
Less workers may stagnate the economy	Civilian labor force employed from 2010 to 2014	↓ 55.10%	↑ 63.50%	Difficult for employers to fill positions
Lower sales will deter new Business openings	Total retail seller per capita from 2007	↓ \$10,539	↑ \$53,482	Retailors closing
Persons without adequate access to food, shelter and medical care	Persons in poverty	↑ 18.60%	↓ 14.80%	Buying less healthy food due to cost
Population growing but not the workforce	Employment percentage change from 2012-2013	↓ -1.70%	↑ 2.00%	More unemployment

<http://www.countyhealthrankings.org/app/#!/oklahoma/2015/rankings/comanche/county/outcomes/overall/snapshot>





Healthy People 2020 emphasizes the importance of addressing the social determinants of health by including “Create social and physical environments that promote good health for all” as one of the four overarching goals for this decade.

Figure 1e depicts social determinants affecting Comanche County residents as compared to the state and nation.

### Education

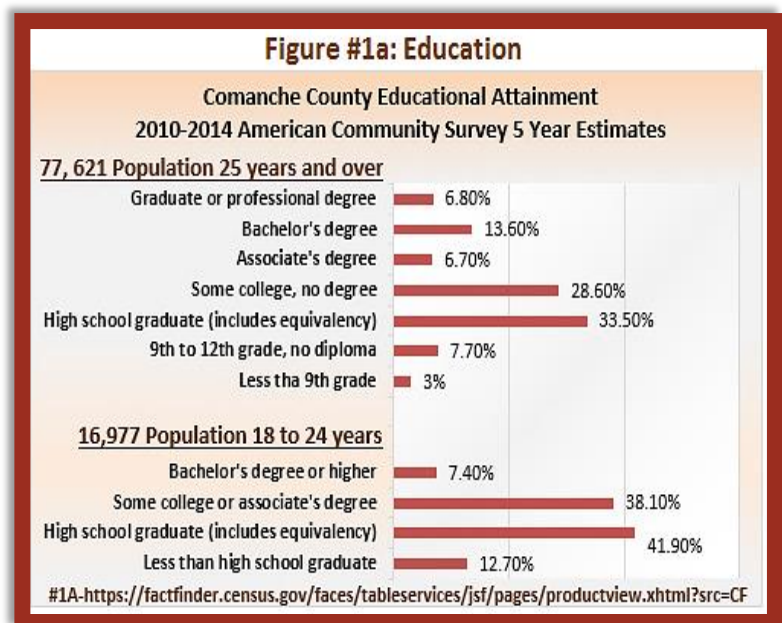
Education is becoming more and more recognized as an important social determinant of health, more specifically, educational attainment. Educational attainment being the years or overall

schooling a person has, rather than actual instruction on a particular health topic. According to a Robert Wood Johnson Foundation Issue Brief, “Exploring the Social Determinants of Health”, adults’ educational attainment is linked with their children’s health, beginning early in life. Additionally, higher educational attainment significantly influences employment opportunities as well as increases ability to make more informed decisions about one’s health. In Comanche County, according to Census data, 89.3% of persons over the age of 25 years are high school graduates or higher with 20.4% of that same age group with a bachelor’s degree or higher. For additional information related to educational attainment, refer to Figure 1a.<sup>9</sup>

### Income

The relationship and impact between income, wealth and health goes beyond the ability to afford health insurance and medical care although this is an important consideration. The connection between income, wealth and health essentially determines what home we live in and whether we can afford to buy in a safe neighborhood. Economic resources dictate if healthier foods are purchased and available leisure time for physical activity or time with children. As mentioned previously, approximately **nineteen percent of Comanche County’s population lives in poverty with twenty four percent of children living in poverty.**<sup>3,6</sup>

The percentage of the population under age 65 without health insurance in Comanche County is 19% compared to the state at 21%.<sup>6</sup> According to CDC data reports, 16.1% of Comanche County adults reported they did not see a doctor due to cost.<sup>5</sup> Comanche County has an unemployment rate of 4.8%, which is higher than the state at 4.5%.<sup>6</sup>





## MAPP Assessments: COMMUNITY HEALTH STATUS ASSESSMENT

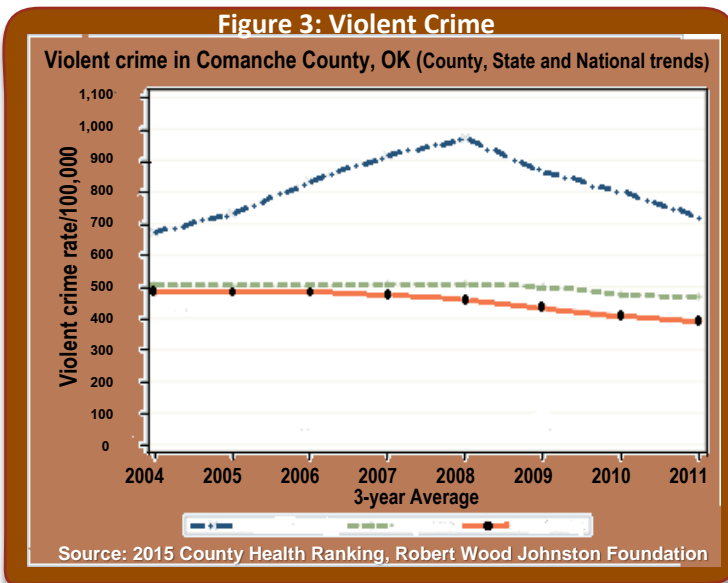
The Community Health Status Assessment (CHSA) answers the questions, “How healthy are our residents?” and “What does the health status of our community look like?” During the community health assessment process, community partners and local public health leaders reviewed health and quality of life data to identify the health conditions, strengths, resources and health care needs of the county. The result of this phase is a strong understanding of the community’s health status, as portrayed through data from many sources.



### General Health Status in Comanche County

The 2014 Health Report Card ranked Comanche County 30<sup>th</sup> in the state for total mortality with a rate that is 19% higher than the nation. According to this report, Comanche County’s overall cancer rate improved yet the percentage of uninsured adults worsened. Comanche County received a grade of “F” on key health outcomes such as diabetes, childhood vaccinations, women receiving first trimester prenatal care, teen pregnancy and the minimum amount of fruits and vegetables being consumed by adults. Comanche County received only high marks in influenza and pneumonia vaccinations for senior adults.<sup>4</sup> Reference Appendix C. The CDC reports the Hypertension Death Rate per 100,000, 35 and over at 479.4. The following is a breakdown of those populations at the highest risk: American Indian and Alaska Native 553.6, Black 583.9,

White 466.1, Hispanic 417.9, Asian and Pacific Islander 358.8.<sup>32</sup> Health Reports such as the County Health Rankings and Roadmaps ranked Comanche County 43<sup>rd</sup> out of 77 counties in overall Quality of Life which included measures such as low birthweight, adults reporting poor or fair health, average number of mentally unhealthy days and physically unhealthy days. Comanche County was ranked as 24<sup>th</sup> in overall Health Outcomes and 66<sup>th</sup> in Health Behaviors such as adult smoking, adult obesity, alcohol impaired driving deaths, excessive drinking and more. Comanche County fared well when ranked 7<sup>th</sup> in the state on Clinical Care measures (number of primary care providers, preventable hospital stays, mammography, etc.).<sup>6</sup> Reference Appendix D.



Comanche County had 722 violent crimes in 2011, which is significantly higher than the state at 468 and national at 59. See figure 3 for trends.<sup>6</sup> According to the Oklahoma Prevention Needs Assessment, in 2014 approximately 7% of students grades 6<sup>th</sup> – 12<sup>th</sup> in Comanche County reported carrying a handgun in the last 12 months.<sup>14</sup> Rates of Arrest of Juveniles for Violent Crimes measure the portion of youth arrested for violent offenses, and are displayed as an annual average number of arrests during a given year calculated for every 100,000 youth ages 10 through 17. Violent offenses include homicide, forcible rape, robbery and aggravated assault. In 2012 Comanche County had a rate of 80.1 arrests of juveniles for violent crimes which increased to a rate of 223.5 for 2014.<sup>15</sup>

## MAPP Assessment: COMMUNITY THEMES AND STRENGTHS ASSESSMENT



The Community Themes and Strengths Assessment answers the questions: "What is important to our community?" "How is quality of life perceived in our community?" and "What assets do we have that can be used to improve community health?" This assessment results in a strong understanding of community issues and concerns, perceptions about quality of life, and a map of community assets. See Appendix I map of community assets.

### Stakeholders Discussion

A stakeholder community meeting was held in 2015. A great amount of data concerning community health was presented and shared. After brainstorming individually (Figure 4), stakeholders evaluated the data and selected the nine health

priorities they felt were most significant as listed previously on page 2.

The survey was updated based on stakeholder feedback and distributed county wide through a variety of formats and venues.

- Online through Survey Monkey
- Stakeholder's email list serve
- Hard copies made available at key locations to reach the underrepresented population such as waiting rooms and public libraries
- Websites and Social Media.
- Promoted through local newspapers and news stations

The survey was distributed throughout the month of May. The committee received 1,495 responses resulting in a valid sample size for the population with a confidence interval of 95%. This assessment was based on the 2015 Comanche County Community Health Survey (CTSA).

### Respondent Demographics

The demographics of the largest respondent age groups were 18-20 years of age followed by 50-59 years of age with 73.7% of all respondents being female. The top four ethnic group respondents were American Indian/Alaskan Native, Hispanic/Latino, African American/Black and White/Caucasian.

Figures 6 and Table 7 information reported using the 2015 CTSA. For full report see Appendix F.

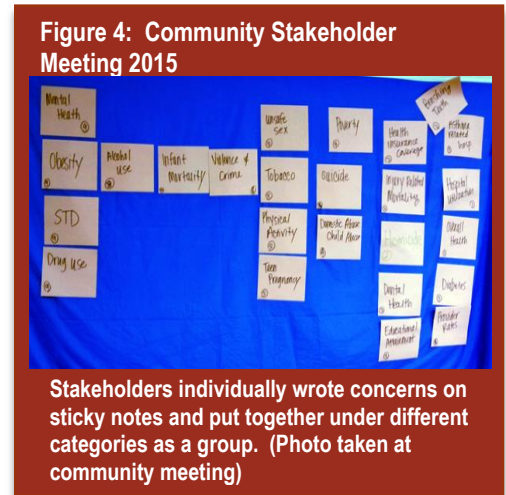


Figure 4: Community Stakeholder Meeting 2015

Stakeholders individually wrote concerns on sticky notes and put together under different categories as a group. (Photo taken at community meeting)



Top Health Concerns		Top Risky Behaviors	
Poverty	49.7%	Drug abuse	59.1%
Sexually transmitted disease	23.5%	Alcohol abuse	46.6%
Child abuse/neglect	22.4%	Being overweight	43.0%
Teenage pregnancy	21.4%	Unsafe sex	34.1%
Mental health problems	20.9%	Poor eating habits	24.4%
Housing that is adequate, safe and affordable	20.4%	No annual doctor visits (dentist, eye, etc.)	12.6%
Diabetes	19.3%	Dropping out of school	18.3%
Homicide	19.0%	Lack of exercise	22.7%
Domestic violence	18.0%	Tobacco use	21.2%

2015 Survey: Community Themes and Strengths

## Mapp Assessment: FORCES OF CHANGE ASSESSMENT

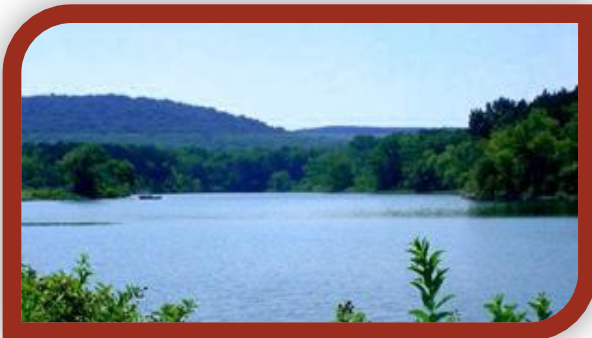
Forces of change are a broad all-encompassing category affecting the local public health system or the community that includes trends, events, and factors:

- Trends are patterns over time, such as migration in and out of a community or a growing disillusionment with government.
- Factors are discrete elements, such as a community's large ethnic population, an urban setting, or a jurisdiction's proximity to a major waterway.
- Events are one-time occurrences, such as a hospital closure, a natural disaster, or the passage of new legislation.



The Forces of Change Assessment focuses on identifying forces such as legislation, technology, and other impending changes that affect the context in which the community and its public health system operate. After asking these questions to community stakeholders, the following is a sampling of the responses that were provided:

1. Advancing technology for medical billing and electronic medical records is a challenge for all health care organizations. The transition will impact all people, processes, and finances in nearly every healthcare organization. Though the technology transition will be challenging, it will afford the opportunity to improve clinical documentation, quality management, reimbursement, fraud detection, HIPPA compliance and overall quality of care.
2. Vaccinations and Flu Shots not being up to date can pose a significant risk to the community. This risk provides health organizations and schools an opportunity to educate about the importance of vaccinations as well as open discussions about access to vaccinations for children and adults
3. Extreme weather or environmental catastrophic occurrences are always an impending possibility; however, it provides the community an opportunity to be proactive by keeping an up to date emergency disaster plan that is tested and reviewed on a regular basis.
4. National and state elections can potentially affect the community particularly regarding federal dollars for funding such as accountable healthcare. Currently each state has the option of Medicaid which is directly affected by legislation. It is important to speak up as a community by voting and contacting elected officials to influence their decisions and make sure our voice is heard.
5. Threats to health and safety can come in many forms for example: second hand smoke. It provides a proactive way for the community to anticipate and have policies and procedures in place to address various types of issues such as certified healthy organizations where smoking is not allowed on the property.





6. Job loss, layoffs and business closings can have a devastating effect on a community which is why it is so important to address issues to build a better community to maintain a healthy economy and a favorable option to attract new businesses.

7. Childhood and adult obesity can put individuals at higher risk for high blood pressure, heart disease, diabetes, breathing and joint issues. Education on evidence based practices are available to the community and legislation for modifications or additions for city parks, sidewalks, etc.

8. Layoffs or relocation of community leaders is a great loss of experience; however, new leadership can also mean new ideas and perspectives.
9. Lack of support for education and teachers can affect the quality of education provided and the ability to maintain high quality staff. It would be beneficial for more local organizations and residents to partner with public schools to support education efforts.
10. Lack of funds can create a shortage of services, organizations and staff to provide services. It is important to speak with legislators about the importance of funding to provide access to health care and services which will ultimately save revenue used for prevention of disease.
11. The one size fits all approach leaves out the most vulnerable persons while taking a multilevel approach will encompass a larger majority.
12. Base Realignment and Closure (BRAC) would impact the socioeconomic structure of the community by eliminating jobs on Fort Sill greatly impacting area sales, income, employment and population. The community should consistently try to improve to be able to stand alone if Fort Sill were greatly reduced or closed.
13. Tobacco tax increase. History has shown it increases the quit smoking rate among current smokers and discourages youth from starting to smoke.
14. Having the time and a safe area to be physically active is limited in the community. Regular physical activity is one of the most important things you can do to control weight, heart disease, diabetes, strengthen bones, improve mental health and the ability to do daily activities for older adults.
15. Electronic cigarettes remain unregulated at the federal level. Many individuals believe it is healthier than smoking; however, the long term benefits and risks associated with e-cigarettes use are not currently known.
16. Poverty creates conditions that reduce household savings, lower learning ability, less physical and emotional wellbeing which endangers people's health. The community and nation recognize this is an issue and are working towards strategies to alleviate or improve poverty conditions.



The Forces of Change assessment revealed that several factors are or could affect the health of our community. Each presenting opportunity to improve the community's health or address possible future threats. For the full survey see Appendix G.



### MAPP Assessment: LOCAL PUBLIC HEALTH SYSTEM ASSESSMENT (LPHSA)

The concepts of health prevention, protection and promotion require the participation of multiple partners working as a system as illustrated in figure 8.

The National Public Health Performance Standards Program (NPHPSP) is a partnership designed to improve the practice of public health and the performance of public health systems.

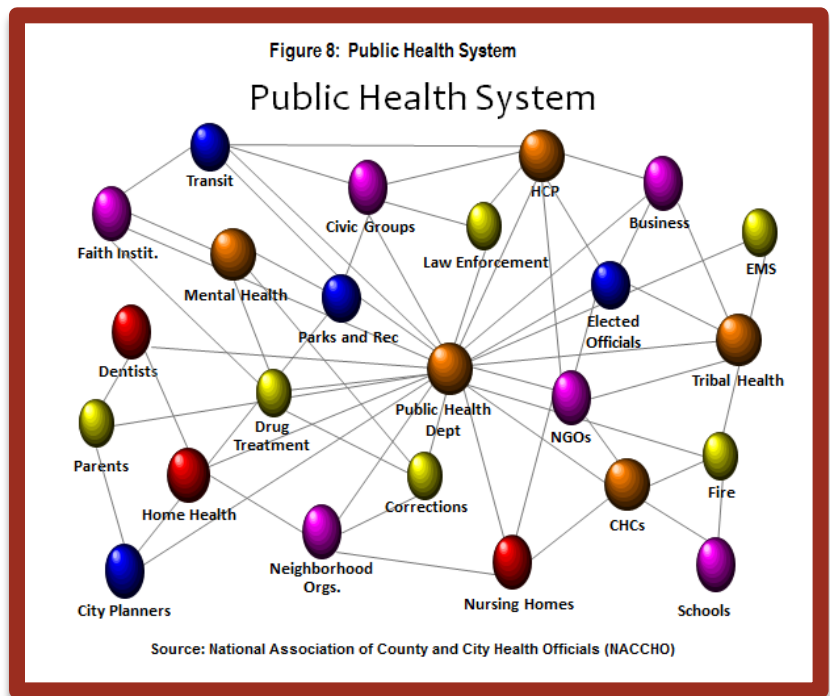
Assessments were divided into four parts and distributed electronically to public health partners. The assessments are based on the framework of the ten Essential Public Health Services (EPHS) which represent the spectrum of activities that should be provided in any jurisdiction to create better outcomes regarding the health of residents.<sup>27</sup>

The purpose for undertaking a performance assessment is to strengthen and improve the public health system. The LPHSA performance scoring scale is displayed in Table 10.

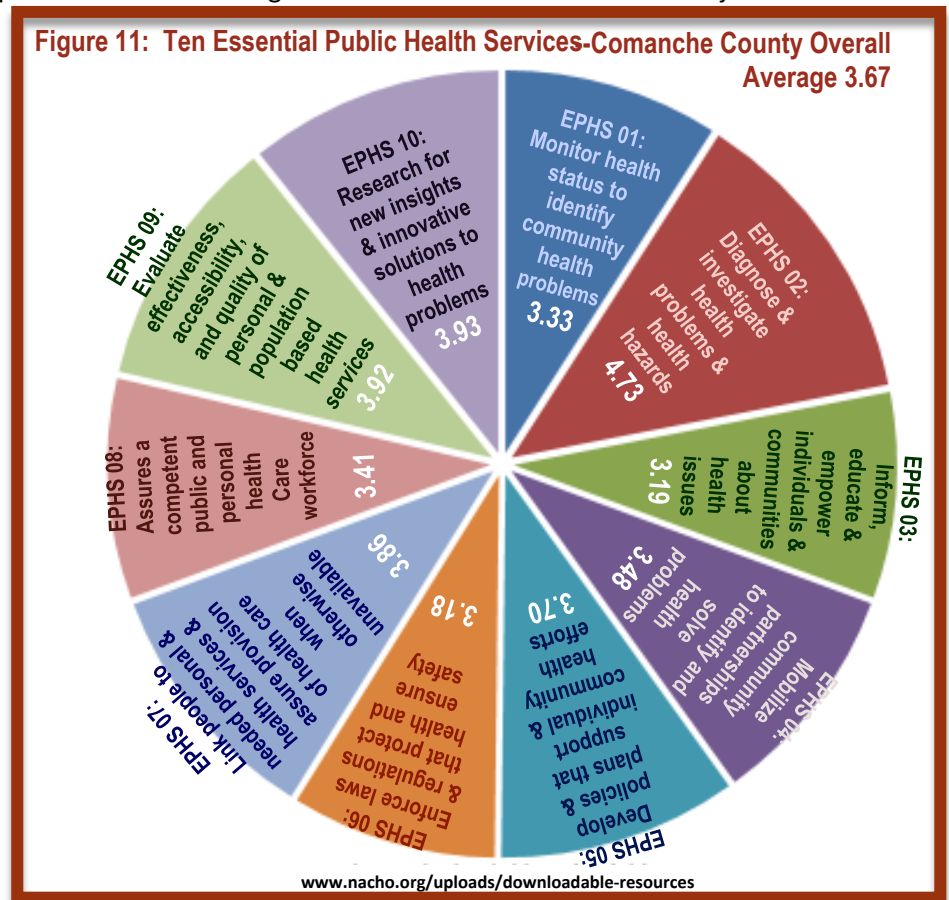
Rating System	Percentage Scores	Scale
No Activity	0%	1
Minimal Activity	Between 0% and 25%	2
Moderate Activity	Between 26% and 50%	3
Significant Activity	Between 51% and 75%	4
Optimal Activity	Between 76% and 100%	5

Source: National Association of County and City Health Officials (NACCHO)

The overall rank for Comanche County was 3.67 which is moderate activity. This shows Comanche County has a well-rounded network of services that is committed to supporting the 10 Essential Public Health Services. For full survey questions and rankings see Appendix H.



For each action, an average score was calculated based on the ratings provided by the group of stakeholders. Figure 11 is a summary identifying the composite scores and ratings for Comanche Counties 10 EPHS objectives.





## FIVE PRIORITY ELEMENTS

### Mental Health

People’s beliefs and attitudes toward mental illness set the stage for how they interact with, provide opportunities for, and help support a person with mental illness. Attitudes and beliefs about mental illness are shaped by personal knowledge, knowing and interacting with someone living with mental illness, cultural stereotypes, and other factors.

Stigma has been described as "a cluster of negative attitudes and beliefs that motivate the general public to fear, reject, avoid, and discriminate against people with mental illness."<sup>24</sup> In Comanche County 19,293 adults have mental



**19,293**  
 In Comanche County an estimated 19,293 adults have mental illness with an estimated 4,691 adults having a Serious Mental Illness.<sup>28</sup>

illness with an estimated 4,691 adults having a Serious Mental Illness.<sup>19</sup>

When stigma leads to social exclusion or discrimination, whether from mental illness or some other condition, it results in unequal access to resources that all

people need to function well and adversely affecting quality of life.<sup>24</sup>

### Early Intervention Reduces Impact

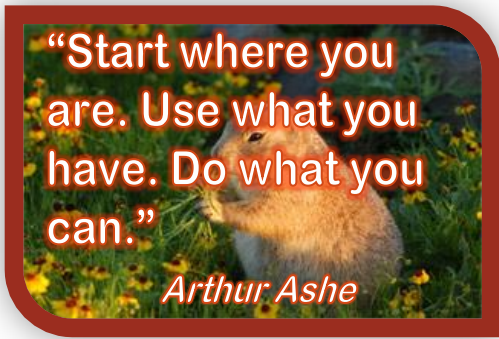
- Half of all lifetime cases of mental illness begin by age 14; three fourths by age 24
- Treatment and support are needed earlier
- Screening
- Brief interventions
- Coordinated referrals<sup>25</sup>

When residents were asked “**What do you think are the 3 biggest health problems in Comanche County?**”, 20.9% responded mental health. Comanche County reported 24.1% had poor mental health days.<sup>4</sup> Between the years of 2006-2012, Comanche County residents averaged 4.3 mentally unhealthy days per month among adults 18 years and over. This is higher than the state rate of 4.1.<sup>6</sup> In Oklahoma, about 111,000 adults aged 18 or older (3.9% of all adults) per year in 2013-2014 had serious thoughts of suicide within the year prior to being surveyed. The percentage did not change significantly from 2010-2011 to 2013-2014.<sup>16</sup>

**6,147**  
 In Comanche County an estimated 6,147 youth have mental illness with an estimated 3,995 youth having a Serious Mental Illness.<sup>28</sup>

### Comanche County Community Assets

Several organizations are available for counseling and treatment. There is a Mental Health community workgroup comprised of several organizations that are committed to identifying gaps in services, improving access to services and better outcomes. Jim Taliaferro Community Mental Health Center and Lawton Community Health Center are valuable resources to the county and region as they provide counseling and mental health services to clients with or without insurance. See appendix I for map of assets.



## POVERTY

Poverty is one of the main causes of hunger in the United States. Many individuals and families have to make a trade-off between buying food and paying for other expenses such as health insurance, utility bills, medical expenses and others. Poverty affects access to nutritious meals and restricts resources to seeking healthcare; preventative, behavioral, medical, dental, etc.

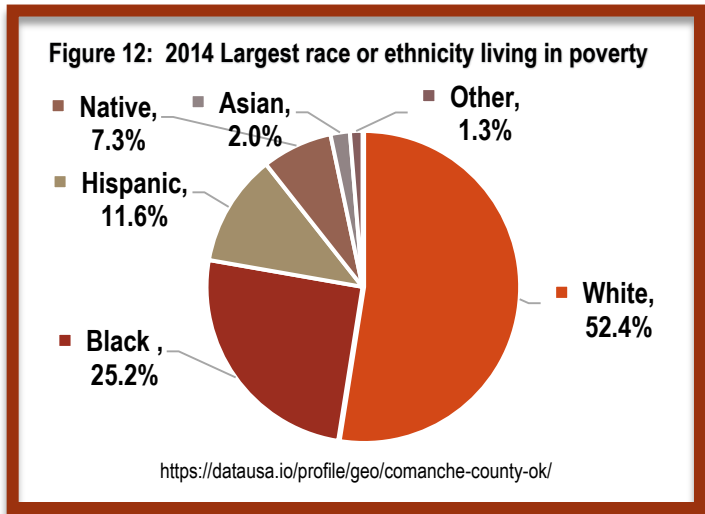
### Living in Poverty

Increased mortality and poor health is associated with area-level poverty even after the data are adjusted for individual risk factors. Research shows an increase in heart disease among residents in disadvantaged neighborhoods. Neighborhoods with low socioeconomic status are less likely to have access to parks and recreation facilities or to have an environment that supports active transportation (eg, walking or biking to work), less likely to be close to commercial areas, schools, and work, and less likely to have safe walkable routes to any place.<sup>20</sup>

In 2014 the most common race or ethnicity living below the poverty line in Comanche County is White, followed by Black or African American and Hispanic or Latino.<sup>11</sup> See figure 12. The Median household income for Comanche County is \$46,302 versus \$46,235 for the state.<sup>3</sup> Data reported in 2018 reports The Median household income at \$48,500 with African American at \$38,900, Hispanic at \$55,200 and White at \$49,600.<sup>6</sup> The number of individuals being supported plays a large role in poverty. In 2012, Hispanics are more than a quarter of the nation’s youngest residents, according to the new population estimates, accounting for 26.3% of the population younger than age 1. Among other major non-Hispanic groups, the share for whites is 49.6%;

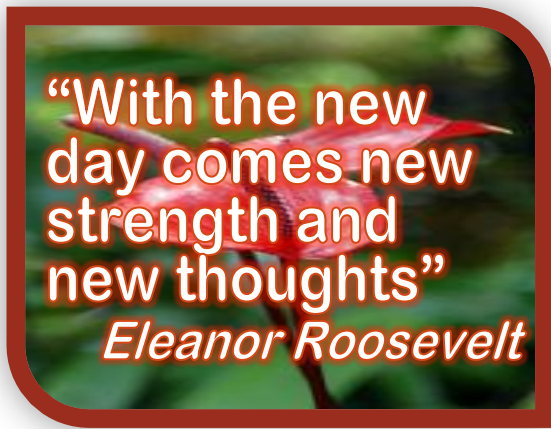
**19%** Comanche County had a no insurance coverage rate of 19%<sup>6</sup>

for blacks, 13.7%; and for Asians 4.4%.<sup>31</sup> Unemployment is 4.8% versus 4.5% in the state.<sup>6</sup> Children living in poverty is 24% under the age of 18 while the state is 22%.<sup>6</sup> The community has a population of 23,683 uninsured for persons under the age of 65.<sup>6</sup> Children that are living in single-parent households in the community are 42% versus 34% for the state.<sup>6</sup> There are 6465 households with at least 1 of 4 severe housing problems: overcrowding, high housing costs, lack of kitchen or plumbing.<sup>6</sup> When residents were asked if jobs in the community pay enough to live on, 44% disagree. When asked one of the three biggest health problems considered by residents, 49.7% responded poverty. See Appendix F.



## Comanche County Community Assets

County Activities include: LATS public transit is piloting a 60-day route to the Lawton Food Bank to increase access to the facility for those in need, community and urban gardens at area schools, congregations, and local higher education organizations. The local Salvation Army and other community partners have implemented the Bridges Out of Poverty offering workshops for those interested in breaking the poverty cycle. A Poverty Workgroup formed as a result of the Community Health Assessment and meets on a monthly basis to develop strategies to address poverty in Comanche County. See appendix I for map of additional assets.



## OBESITY

Obesity has important consequences on our nation's health and economy. It is linked to a number of chronic diseases, including coronary heart disease, stroke, diabetes, and some cancers. It is evident obesity has a major impact in Comanche County, considering the number one leading cause of death in the county is heart disease, which is compounded by a poor diet, physical inactivity, and tobacco use. According to Comanche County's Health Report (County Profile) released in 2014, the rate of adult obesity was 31.4%, only 15.6% of adults consumed the daily recommended servings of fruits and vegetables, and only 31.4% achieved the recommended amount of physical activity. In addition to this, the prevalence of diabetes has risen in Comanche County to 9.3% with the

state rate being 10.1%. In 2010, heart disease accounted for \$51.7 million in healthcare costs alone with an additional \$5 million in hospital discharges related to diabetes. Medical costs for obese individuals were estimated to be \$2,741 higher than per capita spending for normal weight individuals in 2005. This economic burden can be expected to increase as the cost of health care increases. <sup>7</sup>

### Prevalence of Childhood Obesity

Childhood obesity has been called "one of the most serious public health challenges of the 21<sup>st</sup> century" <sup>21</sup> and with good reason. It is the greatest health threat facing our children as it can harm nearly every system in a child's body – heart and lungs, muscles and bones, kidneys and digestive tract, as well as the hormones that control blood sugar and puberty. <sup>22</sup> Over the past three decades, childhood obesity rates have tripled in the U.S., and today, the country has some of the highest obesity rates in the world. One out of six children are obese, and one out of three children is overweight. County specific childhood obesity rates are hard to gather however, according to the 2015 Youth Risk Behavior Survey, 15.3% Oklahoma adolescents were overweight with 17.3% being obese. The percentage of students who were physically active for a total of at least 60 minutes per day on all seven of the seven days before the survey was 32.2% which was down from the 2013 percentages of 38.5. Of Oklahoma students, 45.6% reported they played video or computer games or used a computer for something that was not school work three or more hours per day on an average school day. <sup>28</sup>

### Comanche County Community Assets

Fit Kids of Southwest Oklahoma was developed in 2006 to serve as a coordinating organization in an effort to create a more active and healthy community for children. The fact that the CDC and other leading health experts predict that this generation of children will be the first that will not have the same life expectancy as their parents due to the health implications of obesity is deplorable. This profound statement is the driving force behind the Fit Kids of Southwest Oklahoma Coalition. Fit Kids is comprised of many, key partners throughout the county to include: local organizations, community groups and private citizens, as well as health professionals, schools, local, county and state governmental agencies.

Comanche County has numerous resources available and actively involved in addressing obesity. To name a few:

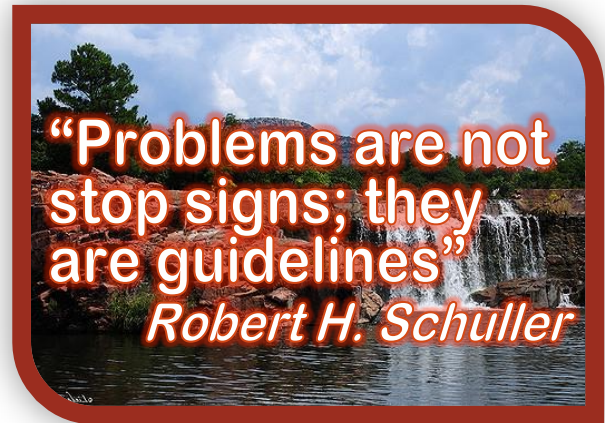
- Two Tobacco Settlement Endowment Trust (TSET) Healthy Living grants - designed to prevent cancer and cardiovascular disease by preventing and reducing tobacco use and obesity at the community level.
- Certified Healthy Oklahoma Program
- Fitness in Action Series - community wide resource for running, walking, biking
- Farmers Market
- Fort Sill Healthy Base Initiative
- City of Lawton actively addressing walkability and bikeability through development of comprehensive plans.
- Duty Rowe Fit Kids Fitness Trailway through the Wildlife Refuge (over \$12 million dollar project)
- See appendix I for map of assets.

In Comanche County 31.4% adults measures Obese. <sup>7</sup>

31.4%

## VIOLENCE

Do healthy communities make a safe community or does a safe community create a healthy community? A 1979 Surgeon General's report made one of the first explicit links between public health and law enforcement: It identified violent behavior as a significant risk to health. Four years later, the Centers for Disease Control and Prevention (CDC) established the Violence Epidemiology Branch, which later became the Division of Violence Prevention.<sup>23</sup> Since then, law enforcement and public health agencies have increasingly recognized a shared interest in poverty, violence and other societal problems. Both fields respond to existing problems while also taking a preventive approach, stopping problems before they start.



### Violence in Comanche County

Between 1998 and 2013 Comanche County had 27 intimate partner homicide victims.<sup>17</sup> The 2015 Comanche County arrests for juveniles was 210 and 880 for adults. Of those arrests, drug related for juveniles numbered 22 while adult numbered 426; alcohol related included 4 juveniles with adults numbering 516. Violent crime in 2015 was 722 per 100,000 versus 468 in the state. The number of violent crimes in the community was 905. In 2016, homicide deaths per 100,000 people was 9.6 and motor vehicle crash deaths per 100,000 was 14.9.<sup>11</sup>

In 2014 the following students in Comanche County reported:

Family conflict by grade:

6<sup>th</sup>: 49.8%      8<sup>th</sup>: 46.7%      12<sup>th</sup>: 44.8%

Perceived availability of handguns by grade:

6<sup>th</sup>: 26.1%      8<sup>th</sup>: 35.9%      10<sup>th</sup>: 26.7%      12<sup>th</sup>: 32.3%

Reported feeling safe at school by grade:

6<sup>th</sup>: 73.8%      8<sup>th</sup>: 66.4%      10<sup>th</sup>: 61.5%      12<sup>th</sup>: 69.1%.<sup>14</sup>

**Total 2015 arrests in Comanche County: 3,706 adults and 807 juveniles for a total of 4,513 arrests.**<sup>18</sup>

**4,513**

In 2014 Comanche County had 1,148 child abuse and neglect referrals accepted for investigation.<sup>27</sup>

### Comanche County Community Assets

Assets in the community include engaged Police Departments, City and Volunteer Fire Departments, Emergency Services along with other local, state and federal organizations fighting community crime and violence. There is also a workgroup made up of several organizations dedicated to examining the root causes of community violence and crime. This will enable the group to collectively deploy strategies to eliminate violence and crime from Comanche County creating a safe environment for residents.

See appendix I for asset map.





## SUBSTANCE ABUSE (TOBACCO, ALCOHOL & PRESCRIPTION DRUGS)

**Tobacco:** Tobacco continues to be the leading preventable cause of death in Oklahoma, causing about 6,000 deaths in our state per year. Smoking kills more Oklahomans than alcohol, auto accidents, AIDS, suicides, murders and illegal drugs combined.<sup>29</sup> Throughout 2005-2010 31% of Comanche County adults were smokers. This is 5% less than the percentage of adult smokers reported in the 2010 County Health Report however, it is 24% more than the state rate of 25.0% across the same time period. Health care costs associated with smoking were approximately \$480.4 million in Comanche County.<sup>30</sup> Of concern are other types of tobacco use, such as

smokeless tobacco and now e-cigarettes. According to the 2015 YRBS (youth Risk Behavior Survey), 31% of high school students attending public schools in Oklahoma report using some form of tobacco (cigarette, cigar, smokeless, or electronic vapor product) within 30 days of the survey. 46% have used an electronic vapor product with 24% being within 30 days of the survey.<sup>12</sup>

**Alcohol:** 46% of driving deaths in Comanche County had alcohol involvement compared to 31% for the state.<sup>6</sup> According to the 2015 YRBS, 15% of Oklahoma public high school students reported they drank alcohol for the first time before 13 years of age with 64% reporting they have drunk alcohol. Additionally Comanche County (24.2) has a higher percentage of youth riding with a drinking driver than the State of Oklahoma (23.9).<sup>14</sup> In 2015 Comanche County had an excessive drinking rate of 18%, which is higher than both the state 13% and national 10%.<sup>14</sup> Binge drinking is defined as 5 or more drinks in a row. In 2014 students reported binge drinking by the following grades<sup>15</sup>:

6 <sup>th</sup>	4.5%	10 <sup>th</sup>	17.2%
8 <sup>th</sup>	9.3%	12 <sup>th</sup>	24.9%

**Prescription Drug Abuse:** According to 2010 OPNA data, Comanche County has higher percentages in every grade for non-medical use of prescription drugs compared to the State of Oklahoma<sup>14</sup>. According to the Oklahoma Bureau of Narcotics data on non-fatal overdoses, Comanche had higher rates than the state per 1,000 people, 1.24 compared to .61. Drug poisoning deaths in 2015 in Comanche County per 100,000 population was 86.17.<sup>6</sup>

Comanche County drug poisoning mortality estimated age adjusted range has risen from 8.1-10 in 2009 to 12.1-14 in 2014 affecting up to 17,505 residents.<sup>10</sup>

17,505

### Why Ending Addiction Changes Everything:

Addiction is a complex disease, often chronic in nature, which affects the functioning of the brain and body. It also causes serious damage to families, relationships, schools, workplaces and neighborhoods. The most common symptoms of addiction are severe loss of control, continued use despite serious consequences, preoccupation with using, failed attempts to quit, tolerance and withdrawal. Addiction can be effectively prevented, treated and managed by healthcare professionals in combination with family or peer support.<sup>2</sup>

### Comanche County Community Assets

Comanche County currently holds a TSET Healthy Living grant with a focus on reducing tobacco use throughout the county. Additionally, Comanche County boasts of a long time community coalition, Lawton-Fort Sill Community Coalition, that engages citizens and leaders to implement reduction strategies while bolster protective factors for the most at risk populations. Specific actions to address these priority areas include: 24/7 tobacco free policy in every school system, reduction in youth smoking rates over 5 years, reduction in adult prevalence rates over 5 years, tobacco free policy on all city owned property, tobacco free city wide ordinance including e-cigs and vapor products, large businesses in Comanche County have adopted tobacco free policies. Community Advocates for Sober Teens and Able Commission partnered to provide training for LPD cadets on laws pertaining to alcohol, party dispersal, and social host. See appendix I for asset map.



# CORONAVIRUS (COVID 19)



Coronaviruses began in 1965. First found in human embryonic tracheal organ cultures obtained from the respiratory tract of an adult with a common cold named B814.

In the same timeframe, Almeida and Tyrrell performed electron microscopy on fluids from organ cultures infected with B814 and found particles that resembled the infectious bronchitis virus of chickens.

In the late 1960s, Tyrrell lead a group of virologists working with human strains and a number of animal viruses. This new group of viruses was named coronavirus (corona denoting the crown-like appearance of the surface projections) and was later officially accepted as a new genus of viruses.

Ongoing research has resulted in a considerable amount of information regarding the epidemiology of the human respiratory coronaviruses. It was found that in temperate climates, respiratory coronavirus infections occur more often in the winter and spring than in the summer and fall.

While research was proceeding to explore the pathogenicity and epidemiology of the human coronaviruses, the number and importance of animal coronaviruses were growing rapidly. With the enormous variety of animal coronaviruses, the cause of a new severe acute respiratory syndromes, called SARS, emerged in 2002-2003 as a coronavirus from southern China and spread throughout the world with quantifiable speed<sup>1</sup>.

Seven coronaviruses can infect humans.

Coronaviruses are a big family of different viruses. Here's what we know about the virus that was first detected in Wuhan, China, in late 2019 and has set off a global pandemic. Experts say SARS-CoV-2 (COVID 19) originated in bats. SARS-CoV-2 made the jump to humans at one of Wuhan's open-air "wet markets."

As SARS-CoV-2 spread both inside and outside China, it infected people who have had no direct contact with animals meaning it is transmitted from one human to another. The growing worldwide transmission is now a pandemic<sup>2</sup>.

1 ([https://journals.lww.com/pidj/fulltext/2005/11001/history\\_and\\_recent\\_advances\\_in\\_coronavirus.12.aspx](https://journals.lww.com/pidj/fulltext/2005/11001/history_and_recent_advances_in_coronavirus.12.aspx))

2 <https://www.webmd.com/lung/coronavirus-history>

# How has Comanche County Confronted Coronavirus?



Comanche met coronavirus head on. We provide testing through Points of Distribution (POD), onsite for some partnerships and businesses, and daily at the Comanche County

Health Department. It was realized early that it would only be through strong partnerships and coordination of efforts this virus could be managed. Several partnerships offered to help at the PODs while others donated space. The Comanche County Health Department (CCHD) was diligent to make tests available to all who desired testing. The health department has been fortunate to have staff and National Guard administer tests. CCHD also supplies tests to some businesses that provide testing for staff or residents.

An Incident Command System was fashioned and all positions were filled primarily by CCHD staff. Testing is currently ongoing.

Although there is not a state mask mandate, Lawton, the largest city in Comanche County, is wearing masks through a city ordinance. There is a great deal of controversy regarding the ordinance. Unfortunately, the internet and political environment has fueled indifference and a great deal of negativity towards social distancing and wearing masks. Although the spread of positive tests continues, a few individuals continue to resist the mask requirement.

Local business has been affected by shutdowns, take out only and layoffs. It has been very difficult particularly on restaurants. In the beginning it was mandated that restaurants adhere to take out only. This was especially difficult for those that are primarily dining room service. The restriction has been removed as long as tables are six feet apart for social distancing. With escalated unemployment benefit payments, it has been difficult for some businesses to hire staff since unemployment equates to higher than their wages for many minimum wage workers.

Schools were totally shut down in the beginning but now offer classroom and virtual learning. The health department is responsible for contact tracing individuals with positive results. When the testing was greatest, there was a great deal of contact tracing required.

There are currently two vaccines being administered by pandemic providers. Pfizer and Moderna which both require two vaccinations. Johnson and Johnson recently started distributing a vaccine that only requires one vaccination. The local health department administers vaccinations and works with pandemic providers to help supply their needs. PODs are held for vaccinations just as they were for testing. Testing and vaccinations are happening concurrently. Scheduling for the PODs is through an online application developed by the Oklahoma State Department of Health. PODs are held a minimum of three days per week in Comanche County.

Although there will certainly be changes and improvements, Comanche County is meeting the needs of the county head on and hands on.

## Next Steps

Continuing the MAPP process, the information contained in this document will be distributed to the Community Stakeholders. With the five areas of improvement identified, work groups will be formed around each priority area and charged with the development of goals, objectives and strategies. These efforts will be used to develop, initiate and implement a community health improvement plan.



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


CLEAR


TABLE


**Table**

<b>ALL TOPICS</b>	Browse more datasets	<b>COMANCHE COUNTY, OKLAHOMA</b>
<b>PEOPLE</b>		
<i>Population</i>		
Population estimates, July 1, 2015, (V2015)		124,648
Population estimates base, April 1, 2010, (V2015)		124,098
Population, percent change - April 1, 2010 (estimates base) to July 1, 2015, (V2015)		0.4%
Population, Census, April 1, 2010		124,098
<i>Age and Sex</i>		
Persons under 5 years, percent, July 1, 2015, (V2015)		7.5%
Persons under 5 years, percent, April 1, 2010		7.6%
Persons under 18 years, percent, July 1, 2015, (V2015)		24.2%
Persons under 18 years, percent, April 1, 2010		25.1%
Persons 65 years and over, percent, July 1, 2015, (V2015)		11.4%
Persons 65 years and over, percent, April 1, 2010		10.2%
Female persons, percent, July 1, 2015, (V2015)		48.1%
Female persons, percent, April 1, 2010		48.5%
<i>Race and Hispanic Origin</i>		
White alone, percent, July 1, 2015, (V2015) (a)		66.0%
White alone, percent, April 1, 2010 (a)		64.5%
Black or African American alone, percent, July 1, 2015, (V2015) (a)		17.9%
Black or African American alone, percent, April 1, 2010 (a)		17.5%
American Indian and Alaska Native alone, percent, July 1, 2015, (V2015) (a)		6.3%
American Indian and Alaska Native alone, percent, April 1, 2010 (a)		5.9%

① Asian alone, percent, July 1, 2015, (V2015) (a)	2.7%
① Asian alone, percent, April 1, 2010 (a)	2.2%
① Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2015, (V2015) (a)	0.7%
① Native Hawaiian and Other Pacific Islander alone, percent, April 1, 2010 (a)	0.6%
① Two or More Races, percent, July 1, 2015, (V2015)	6.3%
① Two or More Races, percent, April 1, 2010	6.5%
① Hispanic or Latino, percent, July 1, 2015, (V2015) (b)	12.9%
① Hispanic or Latino, percent, April 1, 2010 (b)	11.2%
① White alone, not Hispanic or Latino, percent, July 1, 2015, (V2015)	56.6%
① White alone, not Hispanic or Latino, percent, April 1, 2010	58.9%
<b>Population Characteristics</b>	
① Veterans, 2010-2014	16,345
① Foreign born persons, percent, 2010-2014	5.7%
<b>Housing</b>	
① Housing units, July 1, 2015, (V2015)	51,696
① Housing units, April 1, 2010	50,739
① Owner-occupied housing unit rate, 2010-2014	56.1%
① Median value of owner-occupied housing units, 2010-2014	\$114,400
① Median selected monthly owner costs -with a mortgage, 2010-2014	\$1,110
① Median selected monthly owner costs -without a mortgage, 2010-2014	\$383
① Median gross rent, 2010-2014	\$770
① Building permits, 2015	100
<b>Families and Living Arrangements</b>	
① Households, 2010-2014	44,104
① Persons per household, 2010-2014	2.63
① Living in same house 1 year ago, percent of persons age 1 year+, 2010-2014	71.3%
① Language other than English spoken at home, percent of persons age 5 years+, 2010-2014	11.0%
<b>Education</b>	
① High school graduate or higher, percent of persons age 25 years+, 2010-2014	89.3%
① Bachelor's degree or higher, percent of persons age 25 years+, 2010-2014	20.4%
<b>Health</b>	
① With a disability, under age 65 years, percent, 2010-2014	13.8%
① Persons without health insurance, under age 65 years, percent	▲ 16.0%

<b>Economy</b>	
 In civilian labor force, total, percent of population age 16 years+, 2010-2014	55.1%
 In civilian labor force, female, percent of population age 16 years+, 2010-2014	55.3%
 Total accommodation and food services sales, 2012 (\$1,000) (c)	220,487
 Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)	704,609
 Total manufacturers shipments, 2012 (\$1,000) (c)	D
 Total merchant wholesaler sales, 2012 (\$1,000) (c)	D
 Total retail sales, 2012 (\$1,000) (c)	1,407,794
 Total retail sales per capita, 2012 (c)	\$11,138
<b>Transportation</b>	
 Mean travel time to work (minutes), workers age 16 years+, 2010-2014	17.1
<b>Income and Poverty</b>	
 Median household income (in 2014 dollars), 2010-2014	\$46,302
 Per capita income in past 12 months (in 2014 dollars), 2010-2014	\$23,035
 Persons in poverty, percent	 18.6%
<b>BUSINESSES</b>	
 Total employer establishments, 2014	2,162
 Total employment, 2014	31,938
 Total annual payroll, 2014	1,066,155
 Total employment, percent change, 2013-2014	1.1%
 Total nonemployer establishments, 2014	4,796
 All firms, 2012	6,293
 Men-owned firms, 2012	3,164
 Women-owned firms, 2012	2,044
 Minority-owned firms, 2012	1,418
 Nonminority-owned firms, 2012	4,487
 Veteran-owned firms, 2012	947
 Nonveteran-owned firms, 2012	4,798
<b>GEOGRAPHY</b>	
 Population per square mile, 2010	116.1
 Land area in square miles, 2010	1,069.29
 FIPS Code	40031

 This geographic level of poverty and health estimates are not comparable to other geographic levels of these estimates

Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographies statistically indistinguishable. Click the Quick Info  icon to the left of each row in TABLE view to learn about sampling error.

The vintage year (e.g., V2015) refers to the final year of the series (2010 thru 2015).  
Different vintage years of estimates are not comparable.

(a) Includes persons reporting only one race

(b) Hispanics may be of any race, so also are included in applicable race categories

(c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

D Suppressed to avoid disclosure of confidential information

F Fewer than 25 firms

FN Footnote on this item in place of data

NA Not available

S Suppressed; does not meet publication standards

X Not applicable

Z Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

<http://www.census.gov/quickfacts/table/PST045215/40031>





OKLAHOMA STATE DEPARTMENT OF HEALTH

# State of the County's Health Report

## Health on the Horizon

### Comanche County

Health is not simply the absence of disease. Health is comprised of our physical, mental, and social well-being,<sup>1</sup> and is influenced by a variety of factors called 'determinants of health'.<sup>2</sup> These determinants include a range of personal, social, economic, and environmental factors, such as our genetics, behaviors, and access to health care. The determinants of health are inter-related; change in one area results in changes in other areas. As such, interventions and policies that target more than one determinant will have greater impact on our health.<sup>2</sup>

Oklahoma has historically ranked poorly in many key health indicators. Most of these indicators relate to conditions that Oklahomans live with every day, such as poverty and limited access to primary care. Such conditions, along with risky health behaviors like smoking and physical inactivity, contribute to the poor health status of Oklahomans.

Recently, Oklahoma has experienced improvement in some key areas, such as infant health (lower rates of pre-term births and infant deaths) and smoking (lower prevalence of adult smokers). The Oklahoma Health Improvement Plan (OHIP) encourages Oklahomans to work together across multiple health care systems to strengthen resources and infrastructure, enabling sustainable improvements in health status.<sup>3</sup> Health is on the horizon, and together we will Create a State of Health.

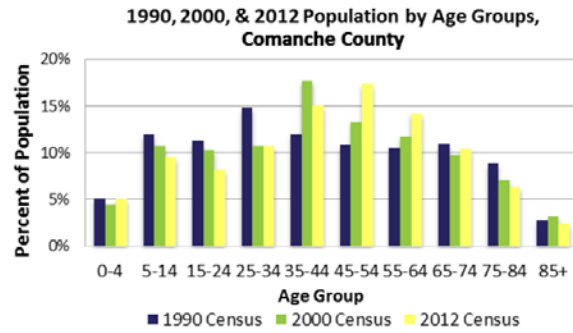


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## County Demographics and Socioeconomic Profile

Demographics	County
Population, 2012 estimate <sup>4</sup>	126,390
Population, percent change, 2000 to 2012	10.2% increase
Rank for growth in State	16th
<u>Race and Ethnicity, 2008-2012<sup>5</sup></u>	
Whites alone	65.1%
Blacks alone	16.9%
Native Americans alone	5.3%
Hispanic or Latino	11.3%
<u>Age, 2008-2012<sup>5</sup></u>	
Less than 5	7.5%
65 and Over	10.3%
Median age	31.5 years



Socioeconomic Profile	County	State	National
Disability (ages 18 to 64), 2008-2012 <sup>5</sup>	15.3%	14.3%	10.0%
of disabled (ages 18 to 64) percent employed, 2008-2012 <sup>5</sup>	39.7%	38.0%	34.7%
Individuals below poverty, 2008-2012 <sup>5</sup>	16.5%	16.6%	14.9%
Families below poverty, 2008-2012 <sup>5</sup>	13.0%	12.3%	10.9%
Median household income, 2008-2012 <sup>5</sup>	\$46,320	\$44,891	\$53,046
Female head of household, 2008-2012 <sup>5</sup>	15.4%	12.2%	12.9%
Grandparents raising their grandchildren, 2008-2012 <sup>5</sup>	56.0%	53.4%	39.8%
High school graduates or higher, ages 25+, 2008-2012 <sup>5</sup>	88.9%	86.2%	85.7%
Bachelor's degree or higher, ages 25+, 2008-2012 <sup>5</sup>	20.3%	23.2%	28.5%
<u>Housing units, 2008-2012<sup>5</sup></u>			
Occupied	87.5%	86.5%	87.5%
Vacant	12.5%	13.5%	12.5%
Uninsured (ages 18-64), 2005-2010 <sup>6</sup>	19.7%	23.9%	18.2%
Unemployment rate, 2012 annual averages <sup>7</sup>	6.6%	5.2%	8.1%

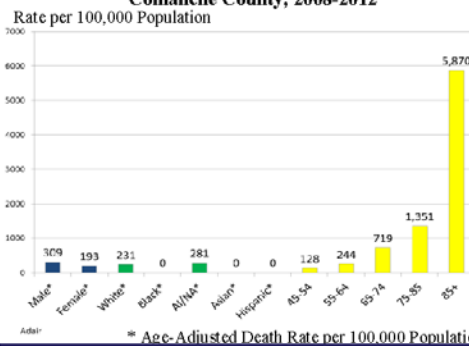
## Top 10 Leading Causes of Death

The top 10 leading causes of death table on the next page displays a broad picture of the causes of death in Comanche County.<sup>8</sup> Since many health-related issues are unique to specific ages, this table provides causes of death by age group at a glance. The causes of death that are present across almost every age group have been highlighted.

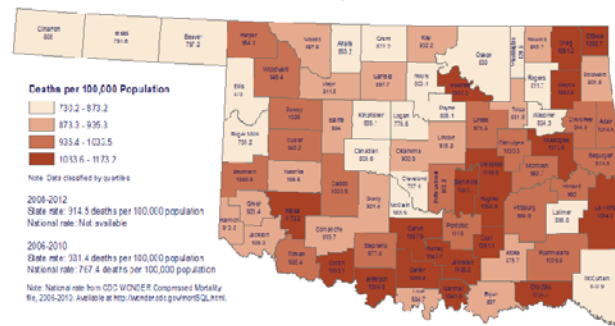
In Comanche County, heart disease is still the leading cause of

death for all ages combined. The rate declined 13.5% since the previous 5-year period, from 274.7 deaths per 100,000 population (2003-2007)<sup>9</sup> to 237.7 deaths per 100,000 population (2008-2012).<sup>8</sup> In 2010, the most recent year for which hospital discharge data are publicly available, the total charges attributable to heart disease in Comanche County were \$51.73 million, or \$43,108.83 per discharge.<sup>10</sup>

**Heart Disease Death Rates by Demographic Groups, Comanche County, 2008-2012**



**Age-Adjusted Death Rates by County, OSDH Vital Statistics, 2008-2012<sup>8</sup>**



Top 10 Causes of Death by Age Group Comanche County 2008-2012									
RANK	0-4	05-14	15-24	25-34	35-44	45-54	55-64	65+	ALL AGES
1	PERINATAL PERIOD 46	UNINTENT. INJURY 7	UNINTENT. INJURY 24	UNINTENT. INJURY 25	UNINTENT. INJURY 28	CANCER 100	CANCER 208	HEART DISEASE 891	HEART DISEASE 1202
2	CONGENITAL ANOMALIES 16	OTHER CAUSES* 13	SUICIDE 11	SUICIDE 19	HEART DISEASE 25	HEART DISEASE 94	HEART DISEASE 176	CANCER 677	CANCER 1016
3	OTHER CAUSES* 52		HOMICIDE 8	HOMICIDE 15	CANCER 20	UNINTENT. INJURY 39	BRONCHITIS/ EMPHYSEMA/ ASTHMA 48	BRONCHITIS/ EMPHYSEMA/ ASTHMA 276	BRONCHITIS/ EMPHYSEMA/ ASTHMA 341
4			OTHER CAUSES* 23	HEART DISEASE 10	SUICIDE 17	LIVER DISEASE 31	DIABETES MELLITUS 28	STROKE 214	STROKE 259
5				CANCER 7	LIVER DISEASE 13	DIABETES MELLITUS 20	UNINTENT. INJURY 27	ALZHEIMER'S DISEASE 117	UNINTENT. INJURY 235
6				OTHER CAUSES* 24	HOMICIDE 8	STROKE 15	STROKE 24	DIABETES MELLITUS 108	DIABETES MELLITUS 159
7					OTHER CAUSES* 42	BRONCHITIS/ EMPHYSEMA/ ASTHMA 14	LIVER DISEASE 24	INFLUENZA/ PNEUMONIA 88	INFLUENZA/ PNEUMONIA 119
8						SUICIDE 11	INFLUENZA/ PNEUMONIA 15	UNINTENT. INJURY 82	ALZHEIMER'S DISEASE 118
9						INFLUENZA/ PNEUMONIA 9	SUICIDE 12	NEPHRITIS 59	LIVER DISEASE 91
10						HOMICIDE 9	SEPTICEMIA 11	SEPTICEMIA 58	SUICIDE 85

\*Total deaths per age group were determined; cause of death was ordered (by frequency) when 5 or more deaths occurred for a specific cause; and the number of deaths that occurred in frequencies fewer than 5 per cause were groups together as "OTHER CAUSES." Specific causes could not be determined for those deaths in "OTHER CAUSES" because the data are suppressed on OK2SHARE (the source of this data) when there are fewer than 5 deaths per search category.

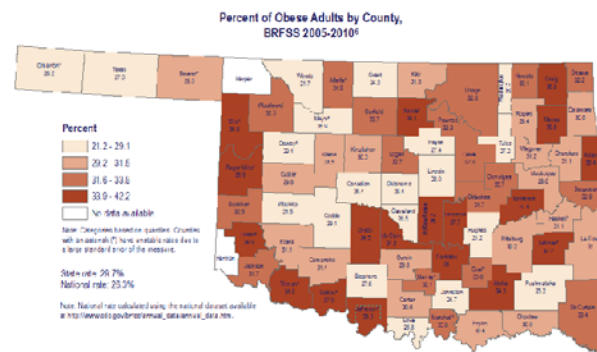
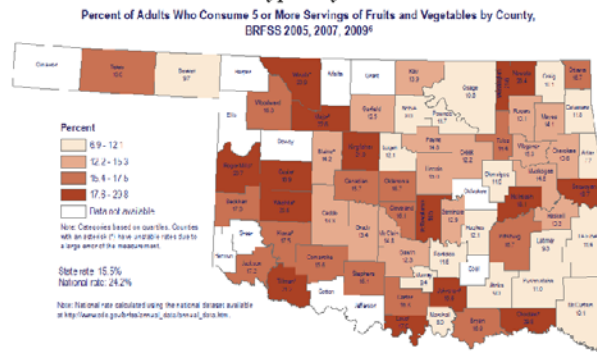
Data source: Vital Statistics, Health Care Information Division, Oklahoma State Department of Health  
 Produced by: Community Epidemiology and Evaluation, Oklahoma State Department of Health

## Nutrition and Obesity

Poor diet is a primary cause of adult deaths in the U.S.<sup>11</sup> Poor diet can be characterized in many different ways, but a common proxy measure of poor diet is assessing fruit and vegetable consumption. A recent study determined that fruit and vegetable consumption is associated with reduced risk of death.<sup>12</sup> Oklahoma has typically ranked as one of the worst states for fruit and vegetable consumption among adults.

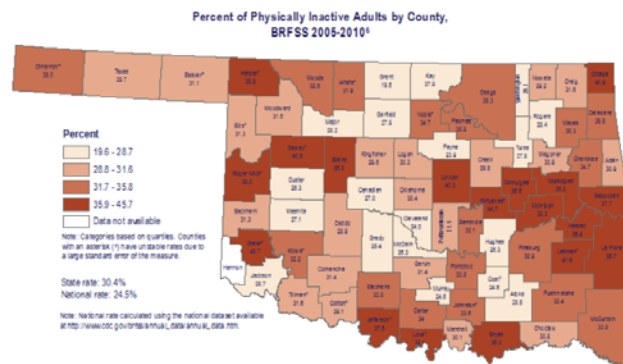
In 2009, the last year data were available for every state, Oklahoma ranked last in consuming 5 or more daily servings of fruits and vegetables.<sup>13</sup> In Comanche County, 15.6% of adults consumed the recommended servings of fruits and vegetables daily.<sup>6</sup>

Obesity is also a primary cause of adult deaths.<sup>11</sup> Obesity is defined as having a BMI greater than 30.0 kg/m<sup>2</sup> (BMI = weight in kg/square of height in m). In addition to its association with mortality, obesity increases our risk of several chronic diseases such as heart disease and type 2 diabetes.<sup>14</sup> Obesity rates have skyrocketed in Oklahoma, with self-reported adult obesity prevalence at 32.2% in 2012<sup>6</sup> and self-reported obesity prevalence at 11.8% among high school students in 2013.<sup>15</sup> Data from 2005-2010 estimate the rate of adult obesity to be 31.4% in Comanche County (11.4% higher than the rate reported in the previous County Health Report<sup>9</sup>). Medical costs for obese individuals were estimated to be \$2741 higher than per capita spending for normal weight individuals in 2005, and this economic burden can be expected to increase as the cost of health care increases.<sup>16</sup>



## Physical Activity and Fitness

Physical inactivity was reported to be a leading contributor to almost 1 in 10 adult deaths in the U.S.<sup>14</sup> Close to 23 % of U.S. adults do not engage in any physical activity.<sup>13</sup> Adults who engage each week in 150 minutes of moderate to vigorous intensity aerobic activity in bouts of at least 10 minutes experience improved health and fitness and reduced risk of several chronic diseases.<sup>17</sup> While 30.4% of all Oklahoma adults from 2005-2010 were not engaging in any physical activity, the rate was slightly higher in Comanche County, at 31.4%.<sup>6</sup> This rate is 5.7% higher than the county rate reported in the previous County Health Report.<sup>9</sup>



Youth who are regularly active have a better chance of having a healthy adulthood. Children and adolescents should get at least 60 minutes of moderate intensity physical activity most days of the week, preferably every day, and three of those days should include vigorous intensity aerobic activity.<sup>18</sup> Statewide, 56.6% of high school students were physically active most days of the week in 2013.<sup>15</sup>

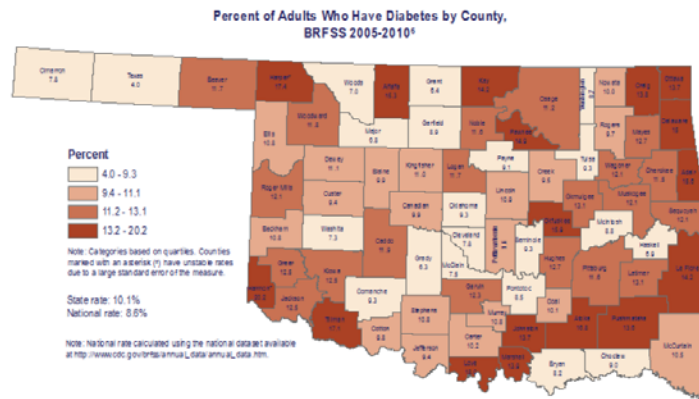


## Diabetes

Type II Diabetes Mellitus is a chronic disease characterized by high levels of sugar (i.e., glucose) in the bloodstream due to the body's resistance to insulin. If left untreated, serious complications can arise, including heart disease, renal failure, retinopathy, and neuropathies. Several risk factors may increase the likelihood of developing diabetes. Some of these risk factors cannot be changed (eg., aged 45 years and older, family history). Other risk factors relate to our behaviors, such as prediabetes, overweight/obesity, being physically inactive, and having high blood pressure.<sup>19</sup>

The prevalence of diabetes has been on the rise in Oklahoma. Slightly more than 10% of Oklahoma adults from 2005-2010 had been told by a health professional that they had diabetes.<sup>6</sup> During this same time frame in Comanche County, 9.3% of adults had diabetes,<sup>6</sup> which is more than the 8.8% of adults cited in the previous County Health Report.<sup>9</sup>

The American Diabetes Association released a report estimating the total cost of diagnosed diabetes to be \$245 billion in the U.S. in 2012.<sup>20</sup> This amount includes both direct medical costs and reduced productivity. They estimated the largest component of direct medical costs to be hospital inpatient care. In Comanche County, there were 195 hospital discharges attributable to diabetes in 2010, the most recent year that hospital data is available.<sup>10</sup> This amounted to \$4,929,992.00 in total charges in 2010 alone, or 1.3% of total hospitalization charges in the county.<sup>10</sup>

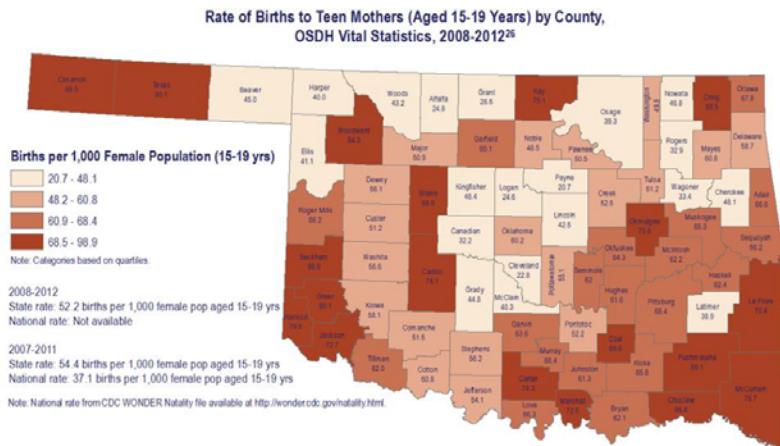


## Teen Births

Although births to teen mothers have been declining in recent years,<sup>21</sup> Oklahoma still has one of the highest teen birth rates in the country,<sup>22</sup> including a high rate of repeat births.<sup>23</sup> Pregnant teens are more likely than older pregnant females to experience medical complications, have low educational attainment, and engage in unhealthy behaviors that put their unborn child at risk.<sup>24</sup> Children of teen mothers are more likely than children of older mothers to display poor health and social outcomes, such as premature birth, low birth weight, behavioral problems, and abuse and neglect.<sup>22</sup> Additionally, infant mortality rates are highest for babies of teen mothers.<sup>25</sup>

From 2008-2012, Comanche County had a teen birth rate of 51.5 births per 1,000 female population aged 15-19 years, which is similar to the state rate of 52.2 births per 1,000 female population aged 15-19 years.<sup>26</sup> The county rate is 19.3% lower than the rate reported in the previous County Health Report.<sup>9</sup>

Recent estimates place the cost of teen childbearing in Oklahoma at \$190 million in 2008, and this includes only health care and other costs associated with the children, not the mothers.<sup>27</sup>

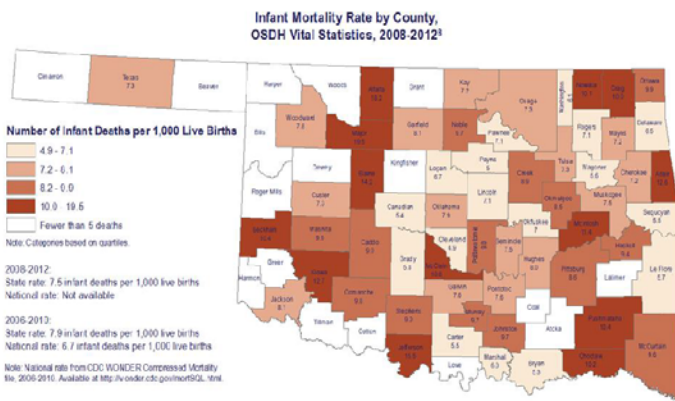


## Infant Mortality

The infant mortality rate (IMR) is an important indicator of the health of a nation, and is also a reflection of maternal health, accessibility and quality of primary health care, and the availability of supportive services in the community.<sup>28</sup> The leading causes of infant death include congenital malformations (i.e., medical conditions present at birth), disorders related to short gestation (fewer than 37 weeks of pregnancy completed) and low birth weight (less than 5 lbs., 8 oz.), and Sudden Infant Death Syndrome (SIDS).<sup>25</sup> Oklahoma’s IMR has declined 12.8% from its recent high of 8.6 deaths per 1,000 live births in 2006 to 7.5 deaths per 1,000 live births in 2012.<sup>8</sup> However, the rate is still significantly higher than the national (preliminary) rate of 6.05 infant deaths per 1,000 live births in 2011.<sup>29</sup> While organizations across Oklahoma have been working together to reduce infant mortality as part of the Preparing for a Lifetime, It’s Everyone’s Responsibility initiative,<sup>30</sup> there is still much work to do.

Racial disparities exist in IMR, with rates among Oklahoma’s Black/African American infants being more than double the rates of White and Asian/Pacific Island infants. The IMR for Black/African American infants declined between 2003-2007 and 2008-2012 (16.4 to 14.6, respectively),<sup>8</sup> but is still extremely high.

From 2008-2012, the overall IMR for Comanche County was 9.8 deaths per 1,000 live births.<sup>8</sup> This rate is 31% higher than the state rate of 7.5 deaths per 1,000 live births<sup>8</sup> and 29% higher than the county rate from 2002-2006.<sup>9</sup> The IMR in Comanche County accounted for 7,425 years of potential life lost based on an average age of death in Oklahoma of 75 years.<sup>8</sup>



Receiving timely prenatal care is believed to reduce the risk of maternal and infant sickness and death as well as preterm delivery and low birth weight. From 2008-2012, 70.9% of women who had a live birth in Comanche County accessed prenatal care during the first trimester of their pregnancy.<sup>26</sup>

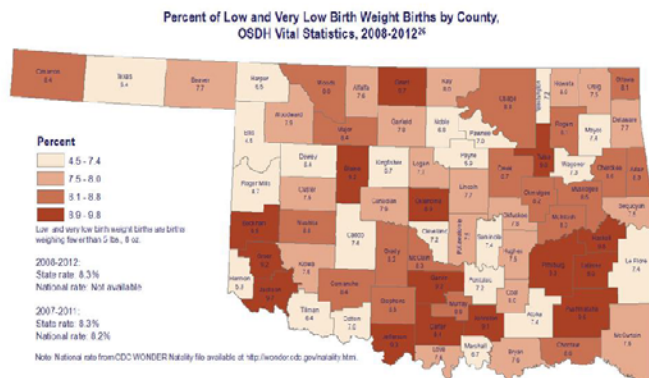
## Low Birth Weight

Low birth weight and preterm births together are the second leading cause of death among children less than 1 year of age.<sup>25</sup> Low birth weight infants are more at risk of health problems compared to infants born of normal weight, including infection, gastrointestinal problems, delayed motor and social development, and learning disabilities. Low birth weight infants may also be at higher risk of high blood pressure, diabetes, and heart disease later in life.<sup>31</sup>

The percentage of Oklahoma babies born at low birth weight (i.e., weighing fewer than 5 pounds and 8 ounces, or 2500 grams) was 8.3% across 2008-2012.<sup>26</sup> This rate is similar to the latest national data (8.2% from 2007-2011).<sup>32</sup>

In Comanche County, the rate of low birth weight births was 8.4% from 2008-2012,<sup>26</sup> which is 5% lower than the rate from 2003-2007.<sup>26</sup>

As is seen with infant mortality, the percentage of low birth weight births is higher for Black/African American babies (14.1%) than babies of other races (White: 7.8%; American Indian: 7.3%; Asian/Pacific Island: 7.4%).<sup>26</sup>



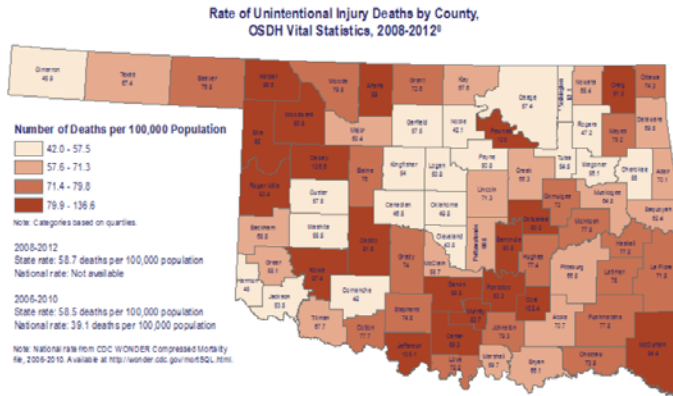
## Injury and Violence

Unintentional injury is the 4th leading cause of death in Oklahoma, and the leading cause of death among individuals aged 5-44 years.<sup>8</sup> In 2010, the most recent year that data are publicly available, injuries accounted for almost \$1.4 billion of Oklahoma’s hospital inpatient charges, or almost \$34,000 per discharge.<sup>10</sup> This equates to more than 10% of total inpatient charges in 2010,<sup>10</sup> and does not consider other related medical expenses or lost productivity.

In Comanche County, unintentional injury is the 5th leading cause of death at 42.0 deaths per 100,000 population.<sup>8</sup> The county rate is higher than the rate of 35.0 which was reported in the previous County Health Report.<sup>9</sup> The current rate is lower than the state rate of 58.7 deaths per 100,000 population.<sup>8</sup>

Motor-vehicle accidents account for 33% of Comanche County’s unintentional injury deaths per 100,000 population, resulting in an estimated cost of \$110.8 million in 2011. This cost includes wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage, and employers’ uninsured costs (\$1.42 million per death).<sup>33</sup>

Violence-related deaths (suicide and homicide) are also leading causes of death in Oklahoma.<sup>8</sup> Comanche County’s homicide rate of 8.6 deaths per 100,000 population is 30% higher than the state rate of 6.6 deaths per 100,000 population, and the suicide rate of 14.3 deaths per 100,000 population is 14% lower than the state rate of 16.6 deaths per 100,000 population.<sup>8</sup>

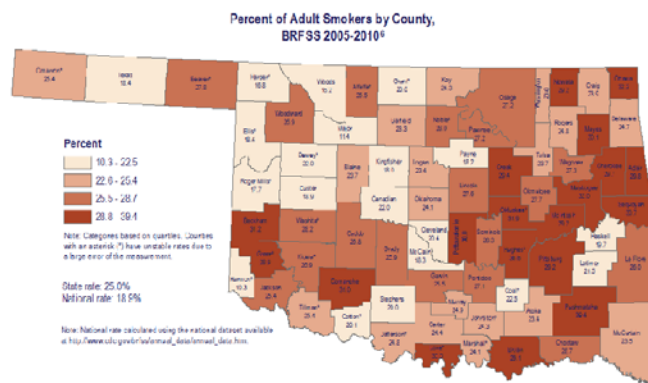


## Tobacco Use Prevention

While smoking rates continue to decline in the United States, tobacco is still the leading contributor of preventable deaths in the United States, resulting in 80-90% of lung cancer deaths, 90% of deaths from chronic lower respiratory disease, and increasing risk of coronary heart disease and stroke deaths.<sup>34</sup> Oklahoma has consistently had one of the highest rates of adult smoking in the country, with an estimated 23.3% of Oklahoma adults being smokers in 2012.<sup>6</sup> While this rate is higher than the national rate of 19.6%,<sup>13</sup> it represents a significant decline from Oklahoma’s 2011 rate of 26.1%.<sup>6</sup> Total cigarette sales have remained stable the last three years (at about 71 packs per capita, each year from 2010 through 2012),<sup>35</sup> but have declined from 86.7 packs per capita in 2008 that was reported in the previous County Health Report.<sup>9</sup>

Across 2005-2010 in Comanche County, 31.0% of adults were smokers.<sup>6</sup> This is 5% less than the percentage of adult smokers reported in the previous County Health Report<sup>9</sup> but is 24% more than the state rate of 25.0% across the same time period. Health care costs associated with smoking were approximately \$480.4 million in Comanche County.<sup>36</sup>

Of concern are other types of tobacco use, such as smokeless tobacco and now e-cigarettes. Almost 7% of Oklahoma adults use smokeless tobacco products (6.9% in 2011 and 6.7% in 2012), with almost 70% of smokeless tobacco users also being smokers. Data are still being gathered about e-cigarettes, but their usage has increased among adults as well as middle and high school students nationally.<sup>37,38</sup>





## Healthy People 2020 Table

Healthy People 2020 Indicators <sup>1</sup>	Comparison Data: Year(s)					2020 target <sup>1</sup>	
	Comanche County <sup>2</sup>		Oklahoma <sup>2</sup>		United States <sup>1</sup>		
Prevalence of obesity (Aged 20+)	N/A†		N/A†		2009-2010	35.7%	30.5%
No leisure-time physical activity (Aged 18+ )	N/A†		N/A†		2011	31.6%	32.6%
Prevalence of smoking (Aged 18+)	N/A†		N/A†		2011	19.0%	12.0%
Infant mortality (Per 1,000 of births)	2008-2012	9.8	2009	7.9	2009	6.4	6.0
Low birth weight infants (Percent of live births)	2008-2012	8.4%	2010	8.4%	2010	8.1%	7.8%
Very low birth weight infants (Percent of live births)	2008-2012	1.5%	2010	1.4%	2010	1.4%	1.4%
First trimester prenatal care (Percent of births)	2008-2012	70.9%	2007	76.3%	2007§	70.8%	77.9%
Prevalence of diabetes (Aged 18–84 years)	N/A†		N/A†		2009-2011	8.1%	7.2%
Lack of health insurance (Aged <65 years)	N/A†		N/A†		2011	17.0%	0%
Prevalence of binge drinking (Aged 18+)	N/A†		N/A†		2011	26.7%	24.4%
Coronary heart disease deaths (per 100,000 population)*	2008-2012	237.7	2010	234.1	2010	113.6	100.8
Cancer deaths (per 100,000 population)*	2008-2012	191.9	2010	190.4	2010	172.8	160.6
Unintentional injury deaths (per 100,000 population)*	2008-2012	42.0	2010	58.8	2010	38.0	36.0
Transportation-related deaths (per 100,000 population)*	2008-2012	13.1	2010	19.8	2010	10.7	12.4

### Notes:

\*Death rate is age-adjusted to the 2000 U.S. standard population;

†Data are not available in the state or county because data are collected using a different methodology and thus are not comparable to the national rates and targets established by Healthy People 2020.

§The most recent data available from CDC WONDER Natality Data shows that 73.7%<sup>3</sup> of women having live births in 2011 received prenatal care within the first three months of pregnancy. Not all states collect prenatal care information on the birth certificate.

### References:

- [1] U.S. Department of Health and Human Services. Healthy people 2020 – Topics and Objectives. Washington, DC. Available at <http://www.healthypeople.gov/2020/topicsobjectives2020/default.aspx>. Data for United States and 2020 Target
- [2] OSDH, OK2SHARE, Vital Statistics: Data for Oklahoma and Oklahoma Counties.
- [3] 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 2007-2011, on CDC WONDER Online Database, November 2013. Accessed at <http://wonder.cdc.gov/natality-current.html>



## Health Care Cost Summary

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### Cardiovascular Disease (Heart Disease)

- Average hospital discharges in 2010 = 1200
- Average charges = \$43,108.83 per discharge
- Total—\$51,730,600 in 2010

### Obesity

- 31.4% of adult population (29,016) from 2005-2010
- \$2,741.00 in additional medical costs per person aged 18 and over
- Total—\$108,970,796 in 2010

### Diabetes

- Average hospital discharges in 2010 = 195
- Average charges = \$25,282.01 per discharge
- Total—\$4,929,992 in 2010

### Teen Pregnancy

- 1098 births to females aged 15-19 from 2008-2012
- \$3,807 in costs per year
- Total—\$4,180,086 in 2010

### Motor Vehicle-Related Injury Death

- 78 deaths from 2008-2012
- \$1,420,000.00 in economic costs per death
- Total—\$22,152,000 in 2010

### Tobacco Use

- 31.0% of adult population (145,588) from 2005-2010
- \$3,300 in health care costs per person
- Total—\$129,523,053 in 2010

## Total Annual Cost\* for Comanche County:

# \$321,486,527

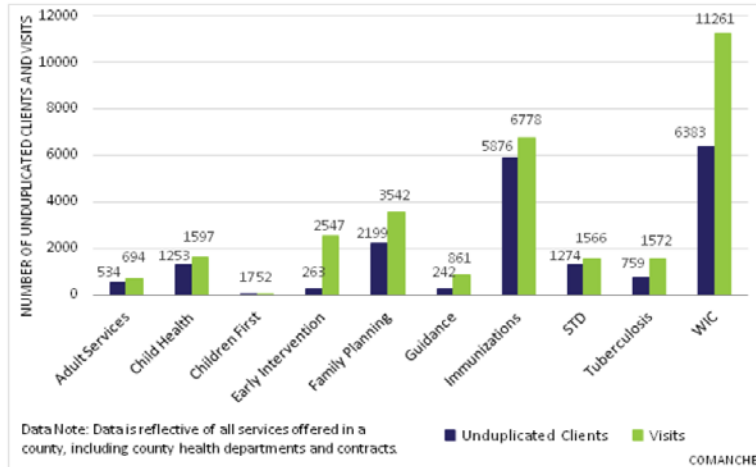


\*Total cost is the minimum cost to the county for health care related spending for the causes listed above in 2010. Other health maladies, and costs unaccounted for in this report may increase the total annual cost per county.

## County Health Department Usage

Oklahoma currently has 68 county health departments and two independent city-county health departments serving 77 counties. Each department offers a variety of services, such as immunizations, family planning, maternity education, well-baby clinics, adolescent health clinics, hearing & speech services, child developmental services, environmental health, and the SoonerStart program. Additionally, many county health departments participate in health education and community development services throughout their county. All county health departments in Oklahoma utilize the Public Health Oklahoma Client Information System (PHOCIS) to track an overview of the services provided to each citizen. In addition, PHOCIS contains a population-based module (POPS) that houses information about community-based events in which health department employees are involved. The information on this page is an accounting of services provided within the county health department and throughout the county.

**County Health Department Unduplicated Clients, and Visits by Program, Comanche County, State Fiscal Year 2013**



**Population-Based Services by Event Type, Comanche County, SFY13**

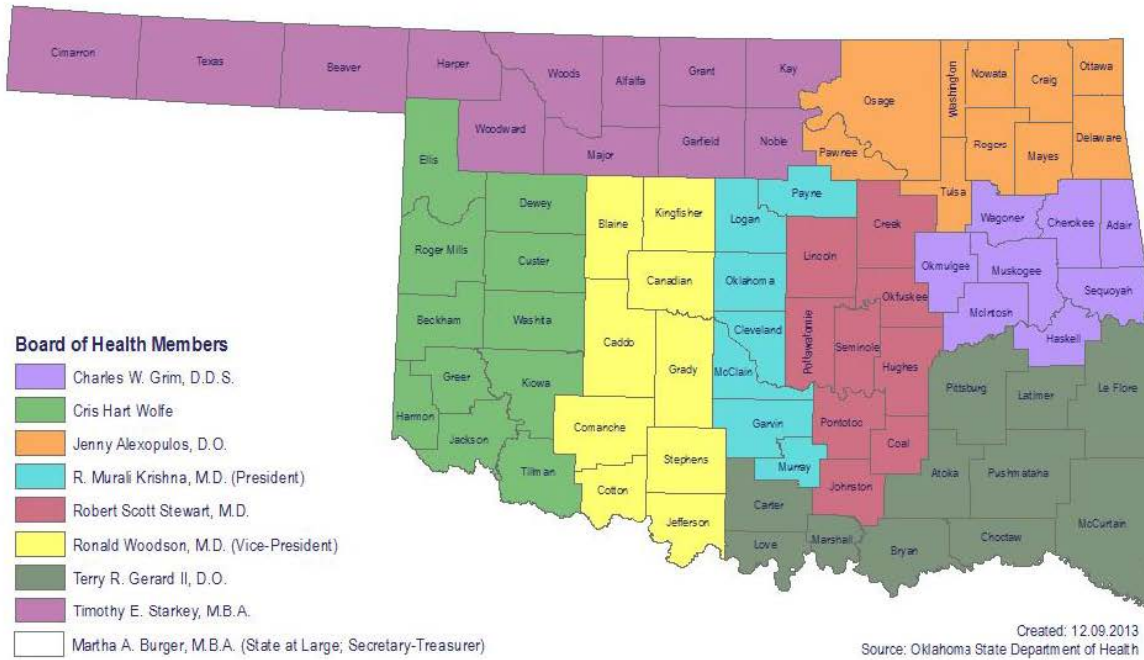
Event Type	Number of Events	Total Attendees
Conference/Display	4	290
Consultation	3	217
Health Fair	1	200
Media Event/Newsletter	1	3
Meeting/Taskforce/Coalition	57	839
Outreach	39	3268
Presentation/Class	75	3380
Record Review	1	35
Surveys/Assessment	3	223
<b>Grand Total</b>	<b>184</b>	<b>8455</b>

**Population-Based Services by Main Topic, Comanche County, SFY13**

Topic	Number of Events	Total Attendees
Arthritis	1	15
Certified Healthy Oklahoma	2	12
General Health Department Services	62	1450
Health Education	4	58
Immunizations	1	35
Infant & Early Childhood Consultation	1	10
Infectious Disease	61	2810
Injury Prevention	18	224
MCH and Related Topics	13	202
Oral Health	1	44
Physical Activity/Nutrition	38	3001
STD/HIV/AIDS	54	4144
Terrorism/Emergency Preparedness	2	41
<b>Grand Total</b>	<b>258</b>	<b>12046</b>



## OSDH Board of Health Map



## Oklahoma Health Improvement Plan



For the complete OHIP, including a full list of partners, visit [www.ok.gov/health](http://www.ok.gov/health) and click the "Oklahoma Health Improvement Plan" link.



**[STRATEGIC PLANNING]**

**FLAGSHIP GOALS**

- Tobacco Use Prevention
- Obesity Reduction
- Children's Health

**INFRASTRUCTURE GOALS**

- Public Health Finance
- Workforce Development
- Access to Care
- Health Systems Effectiveness

**SOCIETAL & POLICY INTEGRATION**

- Policies and Legislation
- Social Determinants of Health & Health Equity

OKLAHOMA HEALTH IMPROVEMENT PLAN



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**OKLAHOMA STATE  
DEPARTMENT OF HEALTH**

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**Health on the Horizon**

**Comanche County Health  
Department**  
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Lawton, OK 73501  
580-248-5890

The Oklahoma Turning Point Initiative is public health improvement in action. The success of the Turning Point process involves a partnership between the state and county departments of health, local communities, and policy-makers. The Oklahoma Turning Point engine is fueled by a community-based decision making process whereby local communities tap into the capacities, strengths, and vision of their citizens to create and promote positive, sustainable changes in the public health system, and the public's health.

We are at a cross roads in our state and in Comanche County. Please come and be part of the solutions that will lead Oklahoma and Comanche County to becoming a healthy place to live, work and learn.

If you are interested in learning more about Turning Point or becoming involved in local activities, please contact:

Shaina Cherilus  
Comanche County  
(580) 353-9170  
Email: [ShainaC@health.ok.gov](mailto:ShainaC@health.ok.gov)  
Website: [www.okturningpoint.org](http://www.okturningpoint.org)

## Comanche County Community Partnerships

### Fit Kids of Southwest Oklahoma

**Priority Areas:**

1. Obesity Prevention
2. Children's Health
3. Physical Activity Promotion
4. Policy Development
5. Environmental Health
6. Promotion of Good Nutrition

### Lawton Fort Sill Community Coalition

**Priority Areas:**

1. Substance Abuse Prevention
2. Children's Health
3. Homelessness Reduction
4. Violence Reduction
5. Underage Drinking Prevention
6. Mental Health

Supplement Table 1: Total Mortality Rate and Adult Prevalence of Sufficient Fruit and Vegetable Consumption (5 or More Daily Servings), Obesity, Physical Inactivity, and Diabetes by County.

County	Total Mortality <sup>1</sup> (deaths/100,000)	Fruit & Vegetable Consumption <sup>2</sup> (percent)	Obesity <sup>3</sup> (percent)	Physical Inactivity <sup>3</sup> (percent)	Diabetes <sup>3</sup> (percent)
Adair	1,014.6	7.2	35.4	30.9	15.6
Alfalfa	863.2	-	31.9*	31.9*	15.3
Atoka	875.7	9.0	34.5	28.5	16.8
Beaver	797.2	9.7	29.5*	31.1*	11.7
Beckham	1,030.3	17.0	32.5	31.3	10.8
Blaine	934.0	14.2*	31.5	36.3	9.9
Bryan	897.0	16.0	30.4	36.2	8.2
Caddo	1,033.5	13.3	29.1	28.9	11.9
Canadian	805.6	15.7	26.4	27.0	9.9
Carter	1,096.9	16.8	30.6	34.0	10.2
Cherokee	944.5	13.6	31.1	34.7	11.5
Choctaw	1,104.7	29.8*	30.0	30.8	9.0
Cimarron	805.0	-	26.2*	35.0*	7.8
Cleveland	787.6	16.1	26.5	24.0	7.8
Coal	1,091.1	-	33.6*	24.6*	10.1
Comanche	915.7	15.6	31.4	31.4	9.3
Cotton	1,035.1	-	37.9*	29.1*	9.8
Craig	1,061.2	10.1	36.8	31.6	13.8
Creek	979.5	12.2	32.3	29.8	9.5
Custer	940.2	18.9	29.8	26.3	9.4
Delaware	900.6	11.8	30.6	35.5	15.0
Dewey	1,026.0	-	29.1*	40.6*	11.1
Ellis	873.0	-	36.8*	31.3*	10.8
Garfield	897.7	12.5	33.7	27.9	8.9
Garvin	1,097.9	12.3	29.8	31.4	12.3
Grady	921.4	13.4	34.5	25.4	6.3
Grant	873.2	-	24.2	19.6	6.4
Greer	923.4	-	34.9*	45.7*	12.5

Supplement Table 1 continued: Total Mortality Rate and Adult Prevalence of Sufficient Fruit and Vegetable Consumption (5 or More Daily Servings), Obesity, Physical Inactivity, and Diabetes by County.

County	Total Mortality <sup>1</sup> (deaths/100,000)	Fruit & Vegetable Consumption <sup>2</sup> (percent)	Obesity <sup>3</sup> (percent)	Physical Inactivity <sup>3</sup> (percent)	Diabetes <sup>3</sup> (percent)
Harmon	913.8	-	-	-	20.2*
Harper	954.3	-	-	38.9*	17.4*
Haskell	960.0	15.3	31.1*	36.4	6.9
Hughes	1,066.9	12.1	21.2	26.3	12.7
Jackson	935.3	17.2	31.7	28.7	12.5
Jefferson	1,084.8	-	39.3*	37.6*	9.4
Johnston	1,105.3	19.6*	24.7	33.6*	13.7
Kay	932.2	13.9	31.3	27.9	14.2
Kingfisher	835.1	21.0	30.5	29.6	11.0
Kiowa	1,173.2	17.5*	31.1	32.2*	12.5
Latimer	856.8	9.3	42.2*	41.6*	13.1
Le Flore	1,054.9	11.4	31.0	36.7	14.2
Lincoln	915.3	15.0	28.0	40.3	10.9
Logan	776.5	12.1	32.7	30.3	11.7
Love	934.7	17.9*	25.6	39.1*	18.0
Major	911.8	14.8	26.9*	28.2	6.8
Marshall	1,041.8	10.1	33.8*	30.1	13.9
Mayes	1,033.6	18.1	36.9	35.3	12.7
McClain	863.9	22.6*	34.8	26.3	7.5
McCurtain	870.9	6.9	33.4	33.8	10.5
McIntosh	992.7	14.1	37.4	38.3	8.8
Murray	1,042.2	9.4	32.1*	24.6	10.8
Muskogee	1,072.6	14.5	29.6	36.2	12.1
Noble	853.1	8.0	39.1*	34.7*	11.6
Nowata	910.7	20.4	33.1	29.2	10.0
Okfuskee	1,109.8	-	31.7	44.7*	15.9
Oklahoma	900.5	16.7	28.4	30.4	9.3
Okmulgee	1,030.3	11.9	33.7	36.6	13.1



Supplement Table 1 continued: Total Mortality Rate and Adult Prevalence of Sufficient Fruit and Vegetable Consumption (5 or More Daily Servings), Obesity, Physical Inactivity, and Diabetes by County.

County	Total Mortality <sup>1</sup> (deaths/100,000)	Fruit & Vegetable Consumption <sup>2</sup> (percent)	Obesity <sup>3</sup> (percent)	Physical Inactivity <sup>3</sup> (percent)	Diabetes <sup>3</sup> (percent)
Osage	830.0	10.6	32.8	35.3	11.2
Ottawa	1,082.7	16.7	32.2	40.9	13.7
Pawnee	1,058.3	11.7	32.3	35.8	14.9
Payne	808.1	14.8	27.4	23.9	9.1
Pittsburg	988.6	16.7	30.2	32.9	11.6
Pontotoc	1,018.0	11.6	35.0	33.5	8.5
Pottawatomie	988.8	18.5	34.2	31.1	9.6
Pushmataha	1,009.9	11.0	25.2	32.4	13.6
Roger Mills	730.2	20.7*	35.5*	39.2*	12.1
Rogers	811.7	15.1	29.4	28.4	9.7
Seminole	1,061.7	12.9	37.7	32.1	9.3
Sequoyah	1,010.3	18.7	32.9	37.7	12.1
Stephens	977.4	16.1	27.6	32.8	10.8
Texas	791.6	16.6	27.5	29.7	4.0
Tillman	935.4	21.2*	34.5*	31.6*	17.1
Tulsa	881.8	16.4	27.2	27.8	9.3
Wagoner	824.3	15.3	31.2	30.9	12.1
Washington	826.5	21.6	26.7	28.1	8.7
Washita	905.5	23.6*	24.5	27.1	7.3
Woods	897.6	20.9*	21.7	32.6	7.0
Woodward	946.4	16.8	32.5	31.6	11.8
Oklahoma State	914.5	15.5	29.7	30.4	10.1

\*Rate is unstable due to the large measurement error associated with the estimate.

Data Sources:

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2. Oklahoma State Department of Health, Health Care Information, Behavioral Risk Factor Surveillance System (BRFSS): 2005, 2007, 2009.
3. Oklahoma State Department of Health, Health Care Information, Behavioral Risk Factor Surveillance System (BRFSS): 2005-2010.

Supplement Table 2: Teen Birth Rate, Infant Mortality Rate, Prevalence of Low Birth Weight (Births Weighing &lt; 5 lb., 8 oz.), Unintentional Injury Mortality, and Prevalence of Adult Smokers by County.

County	Teen Births <sup>1</sup> (births/1,000 females 15-19 yrs)	Infant Mortality <sup>2</sup> (deaths/1,000 live births)	Low Birth Weight <sup>1</sup> (percent)	Unintentional Injury Mortality <sup>2</sup> (deaths/100,000)	Adult Smokers <sup>3</sup> (percent)
Adair	66.6	12.6	8.3	70.1	29.8
Alfalfa	24.8	18.2	7.6	89.0	25.5*
Atoka	65.8	-	7.4	70.7	23.4
Beaver	45.0	-	7.7	76.8	27.8*
Beckham	98.9	10.4	9.8	68.8	31.2
Blaine	68.5	14.2	9.2	76.0	23.7
Bryan	62.1	5.3	7.6	66.1	29.1
Caddo	74.1	9.0	7.4	91.5	26.8
Canadian	32.2	5.4	7.9	46.5	22.0
Carter	74.3	5.5	9.4	89.3	24.4
Cherokee	48.1	7.2	8.6	56.0	29.7
Choctaw	96.8	10.2	8.6	73.9	28.7
Cimarron	68.5	-	8.4	45.9	25.4*
Cleveland	22.8	4.9	7.2	43.8	20.4
Coal	69.8	-	8.0	102.4	22.5*
Comanche	51.5	9.8	8.4	42.0	31.0
Cotton	60.8	-	7.0	77.7	20.1*
Craig	68.5	10.0	7.5	81.3	23.9
Creek	52.5	8.9	8.7	66.3	29.4
Custer	51.2	7.3	7.5	57.5	18.9
Delaware	58.7	6.5	7.7	69.5	24.7
Dewey	56.1	-	6.4	136.6	22.0*
Ellis	41.1	-	4.5	92.0	18.4*
Garfield	65.1	8.1	7.8	57.5	23.3
Garvin	63.6	7.6	9.2	98.8	25.5
Grady	44.8	5.8	8.2	74.0	25.9
Grant	28.5	-	9.7	72.6	20.0*
Greer	80.1	-	9.2	58.1	28.9*

Supplement Table 2 continued: Teen Birth Rate, Infant Mortality Rate, Prevalence of Low Birth Weight (Births Weighing &lt; 5 lb., 8 oz.), Unintentional Injury Mortality, and Prevalence of Adult Smokers by County.

County	Teen Births <sup>1</sup> (births/1,000 females 15-19 yrs)	Infant Mortality <sup>2</sup> (deaths/1,000 live births)	Low Birth Weight <sup>1</sup> (percent)	Unintentional Injury Mortality <sup>2</sup> (deaths/100,000)	Adult Smokers <sup>3</sup> (percent)
Harmon	79.6	-	5.3	48.0	10.3*
Harper	40.0	-	6.5	96.6	16.8*
Haskell	62.4	9.4	9.8	77.2	19.7
Hughes	61.6	8.0	7.5	77.4	36.6*
Jackson	72.7	8.1	9.7	53.8	25.4
Jefferson	54.1	15.5	9.3	105.1	24.8*
Johnston	61.3	9.7	9.1	79.3	24.3*
Kay	75.1	7.2	8.0	67.6	24.3
Kingfisher	46.4	-	5.7	54.0	18.0
Kiowa	58.1	12.7	7.5	97.4	26.9*
Latimer	38.9	-	9.0	75.0	21.5
Le Flore	70.4	5.7	7.4	71.8	26.0
Lincoln	42.5	7.1	7.7	71.3	27.6
Logan	24.6	6.7	7.7	50.8	23.4
Love	66.3	-	7.6	72.2	35.5*
Major	50.9	19.5	8.4	60.4	11.4
Marshall	72.5	6.0	6.7	59.7	24.1*
Mayes	60.8	7.2	7.4	75.2	30.1
McClain	40.3	10.8	8.3	58.7	18.3
McCurtain	78.7	9.6	7.6	84.4	23.5
McIntosh	62.2	11.4	8.3	77.8	29.2
Murray	66.4	9.7	8.8	83.7	24.9
Muskogee	65.3	7.5	8.5	64.8	32.0
Noble	48.5	9.7	6.8	42.1	28.0*
Nowata	46.8	10.1	8.0	65.4	29.2
Okfuskee	64.3	7.0	7.8	80.2	31.9*
Oklahoma	60.2	7.9	8.9	49.8	24.1
Okmulgee	70.8	8.5	8.2	72.0	27.7

Supplement Table 2 continued: Teen Birth Rate, Infant Mortality Rate, Prevalence of Low Birth Weight (Births Weighing &lt; 5 lb., 8 oz.), Unintentional Injury Mortality, and Prevalence of Adult Smokers by County.

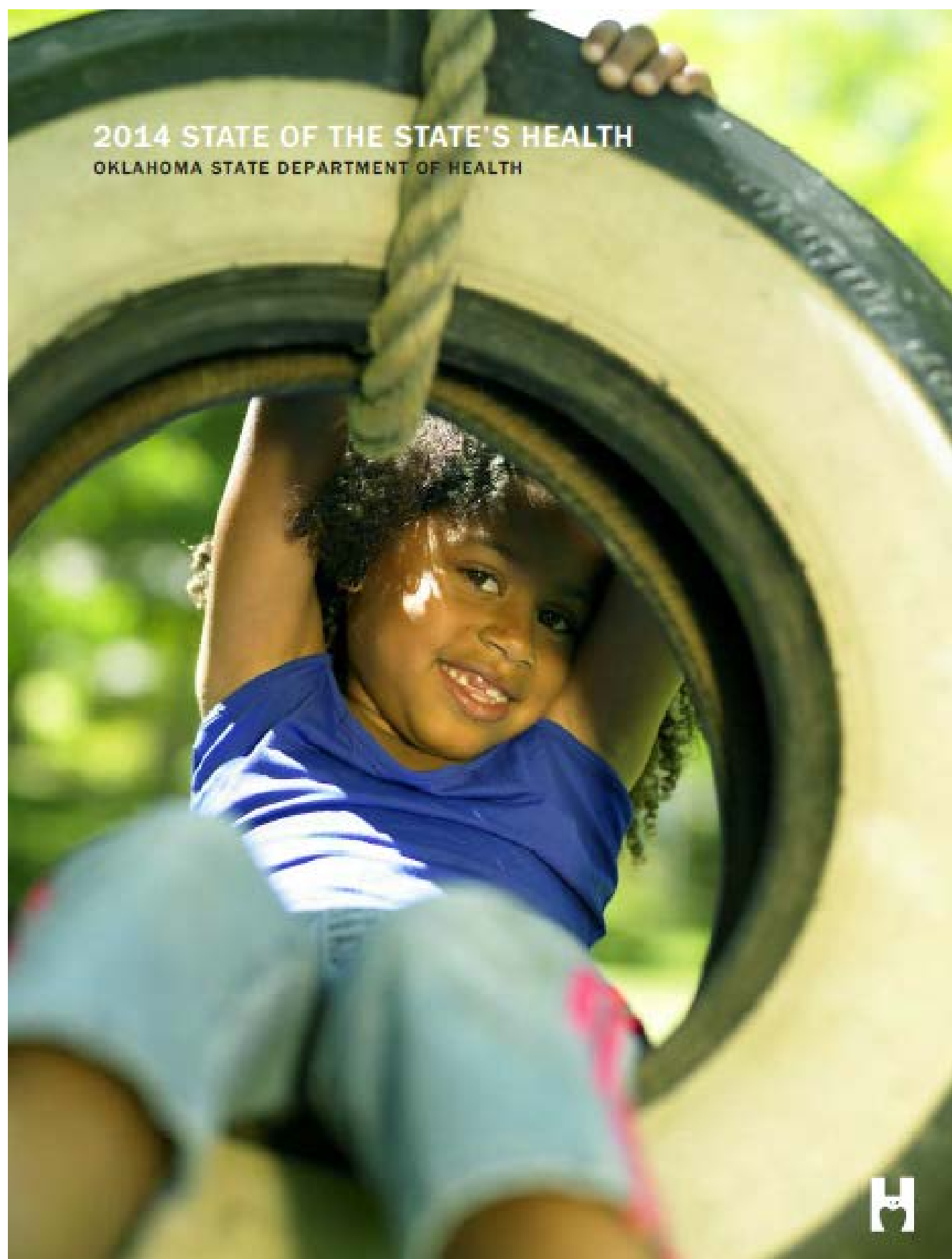
County	Teen Births <sup>1</sup> (births/1,000 females 15-19 yrs)	Infant Mortality <sup>2</sup> (deaths/1,000 live births)	Low Birth Weight <sup>1</sup> (percent)	Unintentional Injury Mortality <sup>2</sup> (deaths/100,000)	Adult Smokers <sup>3</sup> (percent)
Osage	39.3	7.3	8.8	57.4	27.2
Ottawa	67.8	9.9	8.1	74.3	32.2
Pawnee	50.5	7.1	7.0	128.0	27.2
Payne	20.7	5.0	5.9	50.8	18.2
Pittsburg	68.4	8.6	9.3	66.5	29.2
Pontotoc	52.2	7.6	7.2	82.3	27.1
Pottawatomie	55.1	9.0	7.5	66.6	30.0
Pushmataha	69.1	10.4	9.6	77.8	39.4
Roger Mills	66.2	-	4.7	93.4	17.7*
Rogers	32.9	7.1	8.1	47.2	24.8
Seminole	62.0	7.5	7.4	80.8	28.3
Sequoyah	66.2	5.5	7.5	62.4	30.7
Stephens	56.2	9.0	8.5	74.5	20.0
Texas	80.1	7.3	6.4	67.4	18.4
Tillman	62.0	-	6.4	67.7	25.4*
Tulsa	51.2	7.3	9.0	54.5	23.7
Wagoner	33.4	5.6	7.3	56.1	27.3
Washington	49.8	6.1	7.2	52.1	23.0
Washita	56.6	9.9	8.8	55.5	28.2*
Woods	43.2	-	8.8	79.8	16.2
Woodward	84.3	7.8	7.9	80.8	26.9
Oklahoma State	52.2	7.5	8.3	58.7	25.0

\*Rate is unstable due to the large measurement error associated with the estimate.

Data Sources:

1. Oklahoma State Department of Health, Health Care Information, OK2SHARE, Birth Statistics,—Final: 2008-2012. [www.health.ok.gov/ok2share](http://www.health.ok.gov/ok2share).
2. Oklahoma State Department of Health, Health Care Information, OK2SHARE, Death Statistics – Final: 2008-2012. [www.health.ok.gov/ok2share](http://www.health.ok.gov/ok2share).
3. Oklahoma State Department of Health, Health Care Information, Behavioral Risk Factor Surveillance System (BRFSS): 2005-2010.





**2014 STATE OF THE STATE'S HEALTH**  
OKLAHOMA STATE DEPARTMENT OF HEALTH



## COMANCHE COUNTY

	PREVIOUS	CURRENT	GRADE
<b>MORTALITY</b>			
INFANT (RATE PER 1,000)	7.8	9.8	F
TOTAL (RATE PER 100,000)	946.2	889.8	F
<b>LEADING CAUSES OF DEATH</b> (RATE PER 100,000)			
HEART DISEASE	251.6	234.7	F
MALIGNANT NEOPLASM (CANCER)	208.4	183.6	D
CEREBROVASCULAR DISEASE (STROKE)	59.3	46.1	D
CHRONIC LOWER RESPIRATORY DISEASE	72.9	63.9	F
UNINTENTIONAL INJURY	52.7	42.8	C
DIABETES	33.6	29.6	F
INFLUENZA/PNEUMONIA	31.3	20.4	F
ALZHEIMER'S DISEASE	20.7	24.3	C
NEPHRITIS (KIDNEY DISEASE)	15.1	14.4	C
SUICIDES	14.0	16.7	D
<b>DISEASE RATES</b>			
DIABETES PREVALENCE	9.6%	9.9%	C
CURRENT ASTHMA PREVALENCE	9.8%	10.3%	D
CANCER INCIDENCE (RATE PER 100,000)	474.7	429.3	B
<b>RISK FACTORS &amp; BEHAVIORS</b>			
MINIMAL FRUIT CONSUMPTION	NA	50.5%	F
MINIMAL VEGETABLE CONSUMPTION	NA	28.1%	F
NO PHYSICAL ACTIVITY	29.0%	26.1%	D
CURRENT SMOKING PREVALENCE	27.1%	24.2%	D
OBESITY	30.7%	31.8%	D
IMMUNIZATIONS < 3 YEARS	66.8%	62.3%	F
SENIORS INFLUENZA VACCINATION	62.1%	67.5%	B
SENIORS PNEUMONIA VACCINATION	73.2%	75.5%	A
LIMITED ACTIVITY DAYS	16.7%	18.1%	D
POOR MENTAL HEALTH DAYS	25.8%	24.1%	C
POOR PHYSICAL HEALTH DAYS	23.2%	23.7%	D
GOOD OR BETTER HEALTH RATING	81.4%	82.6%	C
TEEN FERTILITY (RATE PER 1,000)	27.0	24.9	F
FIRST TRIMESTER PRENATAL CARE	64.9%	70.1%	D
LOW BIRTH WEIGHT	8.5%	8.0%	C
ADULT DENTAL VISITS	61.5%	63.2%	D
USUAL SOURCE OF CARE	76.2%	76.1%	C
OCCUPATIONAL FATALITIES (RATE PER 100,000 WORKERS)	4.7	4.2	C
PREVENTABLE HOSPITALIZATIONS (RATE PER 100,000)	1729.2	1525.6	C
<b>SOCIOECONOMIC FACTORS</b>			
NO INSURANCE COVERAGE	19.7%	16.0%	C
POVERTY	18.3%	17.6%	F

### Mortality and Leading Causes of Death

- Comanche County ranked 30<sup>th</sup> in the state for total mortality (age-adjusted) with a rate that is 19% higher than the nation.
- Comanche County's leading causes of death were heart disease, cancer, and chronic lower respiratory disease.
- Comanche County had the 2<sup>nd</sup> lowest rate of deaths due to unintentional injury with a rate that is 23% lower than the rest of the state, but still 9% higher than the national rate.

### Disease Rates

- 1 in 10 Comanche County adults (10%) reported having asthma, which was the highest rate in the state.
- Comanche County had a lower diabetes disease prevalence rate than most other counties in the state.

### Risk Factors, Behaviors and Socioeconomic Factors

- Comanche County had the 3<sup>rd</sup> worst percentage of children under 3 years of age that had completed their primary immunization series.
- Comanche County ranked in the top ten best for adult dental visits.
- Approximately 1 in 6 people in Comanche County lived in poverty (18%).
- Approximately 1 in 6 adults reported 3+ days with limited activity in the past month (18%).
- Nearly 1 in 4 adults reported 4+ days of poor physical health (24%) and nearly 1 in 4 reported 4+ days of poor mental health (24%) in the previous month.

### Changes from Previous Year

- The rate of infant deaths worsened by 26% from the previous year.
- The prevalence of asthma improved by 5%.
- The rate of cancer incidence improved by 10%.
- The percentage of uninsured adults worsened by 19%.

**County Health Rankings & Roadmaps**  
Building a Culture of Health, County by County
A Robert Wood Johnson Foundation program

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## OKLAHOMA 2016

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Select a Ranking:

HEALTH OUTCOMES  
OVERALL RANK

### Comanche (CM)

Show areas to explore 
  Show areas of strength

#### County Demographics +

	Comanche County	Trend <span style="font-size: x-small;">i</span>	Error Margin	Top U.S. Performers <span style="font-size: x-small;">i</span>	Oklahoma	Rank (of 77)
<b>Health Outcomes</b>						<b>24</b>
<b>Length of Life</b>						<b>17</b>

Premature death	8,500		8,000-9,100	5,200	9,200
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### Quality of Life **43**

Poor or fair health	<span style="font-size: x-small;">i</span> 21%	21-21%	12%	20%
Poor physical health days	<span style="font-size: x-small;">i</span> 4.6	4.5-4.8	2.9	4.4
Poor mental health days	<span style="font-size: x-small;">i</span> 4.3	4.1-4.4	2.8	4.1
Low birthweight	8%	8-9%	6%	8%





#### Additional Health Outcomes (not included in overall ranking) +

<b>Health Factors</b>					<b>39</b>
Food environment index	5.4			8.3	6.6
Physical inactivity	30%		27-34%	20%	31%
Access to exercise opportunities	65%			91%	69%
Excessive drinking	<span style="font-size: x-small;">i</span> 13%		13-14%	12%	14%
Alcohol-impaired driving deaths	46%		40-51%	14%	31%
Sexually transmitted infections	814.1			134.1	479.1
Teen births	54		51-56	19	52

Food insecurity	19%		11%	17%
Limited access to healthy foods	15%		2%	9%
Drug overdose deaths	15	11-19	8	20
Drug overdose deaths - modeled	12.0-14.0		6.1-8.0	20.3
Motor vehicle crash deaths	15	12-18	9	19
Insufficient sleep	38%	37-39%	28%	35%




**Clinical Care**

7

Uninsured	19%		17-20%	11%	21%
Primary care physicians	1,290:1			1,040:1	1,560:1
Dentists	1,050:1			1,340:1	1,760:1
Mental health providers	340:1			370:1	270:1
Preventable hospital stays	46		42-50	38	63
Diabetic monitoring	74%		70-78%	90%	78%
Mammography screening	54%		49-58%	71%	55%

**Social & Economic Factors**

42

High school graduation	88%			93%	85%
Some college	58%		56-61%	72%	59%
Unemployment	4.8%			3.5%	4.5%
Children in poverty	24%		19-29%	13%	22%
Income inequality	4.4		4.1-4.8	3.7	4.6
Children in single-parent households	42%		38-46%	21%	34%
Social associations	9.3			22.1	11.7
Violent crime	722			59	468
Injury deaths	71		64-77	51	88
Median household income	\$46,100		\$42,300-49,800	\$61,700	\$47,500
Children eligible for free lunch	48%			25%	51%
Residential segregation - black/white	32			23	57



## SELECTED KIDS COUNT INDICATORS FOR COMANCHE COUNTY, OKLAHOMA

 Compare to Oklahoma

 Jump to Specific Indicator: Child Population -- Decade Count
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### Child Population -- Decade Count (Number & Percent)

Location	Data Type	1980	1990	2000	2010
Comanche County	Number	34,206	31,515	31,937	31,134
	Percent	30.4%	28.3%	27.8%	25.1%

### Child Population -- Annual Estimates (Number & Percent)

Location	Age group	Data Type	2009	2010	2011	2012	2015
Comanche County	All Ages	Number	113,228	124,098	125,753	126,390	124,648
		Percent	100.0%	100.0%	100.0%	100.0%	100.0%
	Ages 0-2	Number	5,864	5,846	5,856	5,788	5,605
		Percent	5.2%	4.7%	4.7%	4.6%	4.5%
	Ages 3-5	Number	5,157	5,426	5,522	5,609	5,441
		Percent	4.6%	4.4%	4.4%	4.4%	4.4%
	Ages 6-9	Number	6,442	6,805	7,028	7,038	6,560
		Percent	5.7%	5.5%	5.6%	5.6%	5.3%
	Ages 10-14	Number	7,557	8,094	8,163	8,089	7,842
		Percent	6.7%	6.5%	6.5%	6.4%	6.3%
	Ages 15-17	Number	4,950	4,963	4,885	4,688	4,681
		Percent	4.4%	4.0%	3.9%	3.7%	3.8%
	Ages 18-19	Number	4,533	4,700	4,746	4,638	4,314
		Percent	4.0%	3.8%	3.8%	3.7%	3.5%
	Ages 0-17	Number	29,970	31,134	31,454	31,212	30,129
		Percent	26.5%	25.1%	25.0%	24.7%	24.2%
	Ages 0-20	Number	34,503	38,368	38,810	38,581	36,794
		Percent	30.5%	30.9%	30.9%	30.5%	29.5%
	Ages 18 & Over	Number	83,258	92,964	94,299	95,178	94,519
		Percent	73.5%	74.9%	75.0%	75.3%	75.8%

## Child, Youth &amp; Adult Population With Child &amp; Youth Age Groups (Number &amp; Percent)

Location	Age group	Data Type	2010	2011	2012	2013	2014
Comanche County	All Ages	Number	124,098	125,753	126,390	125,035	125,033
		Percent	100.0%	100.0%	100.0%	100.0%	100.0%
	Ages 0-2	Number	5,846	5,856	5,788	5,703	5,508
		Percent	4.7%	4.7%	4.6%	4.6%	4.4%
	Ages 3-5	Number	5,426	5,522	5,609	5,543	5,521
		Percent	4.4%	4.4%	4.4%	4.4%	4.4%
	Ages 6-9	Number	6,805	7,028	7,038	6,823	6,759
		Percent	5.5%	5.6%	5.6%	5.5%	5.4%
	Ages 10-14	Number	8,094	8,163	8,089	7,933	7,887
		Percent	6.5%	6.5%	6.4%	6.3%	6.3%
	Ages 15-17	Number	4,963	4,885	4,688	4,692	4,643
		Percent	4.0%	3.9%	3.7%	3.8%	3.7%
	Ages 18-19	Number	4,700	4,746	4,638	4,338	4,295
		Percent	3.8%	3.8%	3.7%	3.5%	3.4%
	Ages 0-17	Number	31,134	31,454	31,212	30,694	30,318
		Percent	25.1%	25.0%	24.7%	24.5%	24.3%
	Ages 0-20	Number	38,368	38,810	38,581	37,506	37,015
		Percent	30.9%	30.9%	30.5%	30.0%	29.6%
	Ages 18 & Over	Number	92,964	94,299	95,178	94,341	94,715
		Percent	74.9%	75.0%	75.3%	75.5%	75.8%

## Child Population By Race Under Age 5 (Number &amp; Percent)

Location	Race	Data Type	2011	2012	2013	2014	2015
Comanche County	American Indian	Number	740	716	830	804	824
		Percent	7.7%	7.5%	8.8%	8.7%	8.9%
	Asian	Number	303	339	328	349	345
		Percent	3.1%	3.5%	3.5%	3.8%	3.7%
	Black	Number	2,314	2,303	2,179	2,217	2,214
		Percent	24.0%	24.0%	23.2%	23.9%	23.8%
	Hispanic	Number	1,775	1,777	1,800	1,708	1,791
		Percent	18.4%	18.5%	19.1%	18.4%	19.2%
	White	Number	6,287	6,243	6,067	5,902	5,921
		Percent	65.2%	65.0%	64.5%	63.7%	63.6%

## Child Population By Race Under Age 18 (Number &amp; Percent)

Location	Race	Data Type	2011	2012	2013	2014	2015
Comanche County	American Indian	Number	2,565	2,567	2,656	2,628	2,643
		Percent	8.2%	8.2%	8.7%	8.7%	8.8%
	Asian	Number	970	1,023	1,018	1,047	1,061
		Percent	3.1%	3.3%	3.3%	3.5%	3.5%
	Black	Number	7,959	7,726	7,422	7,389	7,311
		Percent	25.3%	24.8%	24.2%	24.4%	24.3%
	Hispanic	Number	5,377	5,438	5,581	5,490	5,613
		Percent	17.1%	17.4%	18.2%	18.1%	18.6%
White	Number	19,960	19,896	19,598	19,254	19,114	
	Percent	63.5%	63.7%	63.9%	63.5%	63.4%	

## Per Capita Income (Currency)

Location	Data Type	2002 - 2004	2003 - 2005	2004 - 2006	2006 - 2008	2008 - 2010
Comanche County	Currency	\$25,236	\$26,751	\$28,519	\$33,209	\$35,311

## Unemployment (Rate)

Location	Data Type	2005 - 2007	2007 - 2009	2008 - 2010	2009 - 2011	2012 - 2014
Comanche County	Rate	4.4	4.6	5.3	6.1	5.5

## Temporary Assistance For Needy Families (TANF) (Number &amp; Percent)

Location	Data Type	SFY2008 - SFY2010	SFY2009 - SFY2011	SFY2010 - SFY2012	SFY2011 - SFY2013	SFY2012 - SFY2014
Comanche County	Number	510	514	511	514	476
	Percent	1.7%	1.7%	1.6%	1.7%	1.6%

## Women, Infants, And Children (WIC) (Number)

Location	Data Type	2011	2012	2013	2014
Comanche County	Number	51,573	48,970	46,073	45,613

## Child Poverty -- Decade Count (Number &amp; Percent)

Location	Data Type	1980	1990	2000
Comanche County	Number	6,271	6,733	6,372
	Percent	19.3%	21.8%	20.9%

## Child Poverty -- Annual Estimates (Number &amp; Percent)

Location	Data Type	2010	2011	2012	2013	2014
Comanche County	Number	7,977	7,381	7,201	8,522	7,075
	Percent	25.9%	23.9%	23.6%	28.5%	24.0%

## Child Food Insecurity (Number &amp; Percent)

Location	Data Type	2012	2013
Comanche County	Number	7,590	7,950
	Percent	24.7%	25.6%

## Pre-K Enrollment (Number)

Location	Age	Data Type	2010 - 2011	2011 - 2012	2012	2012 - 2013	2013 - 2014
Comanche County	3 year olds	Number	69	58	56	24	46
	4 year olds	Number	1,344	1,394	1,363	1,405	1,382

## High School Dropouts (Percent)

Location	Data Type	Class of 2011	Class of 2012	Class of 2013	Class of 2014	Class of 2015
Comanche County	Percent	10.7%	12.2%	9.1%	6.1%	6.6%

## Third Grade Reading Proficiency (Percent)

Location	Data Type	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014	2014 - 2015
Comanche County	Percent	75.0%	82.0%	82.0%	84.0%	85.0%

## Eighth Grade Math Proficiency (Percent)

Location	Data Type	2009 - 2010	2010 - 2011	2011 - 2012	2012 - 2013	2013 - 2014
Comanche County	Percent	79.0%	80.0%	77.0%	78.0%	72.0%

## Preschool Enrollment By Race (Number)

Location	Age	Race	Data Type	2013
Comanche County	3 year olds	White	Number	27.0
	3 year olds	Black	Number	7.0
	3 year olds	American Indian	Number	2.0
	3 year olds	Asian	Number	1.0
	3 year olds	Two or more	Number	2.0
	3 year olds	Hispanic	Number	7.0
	4 year olds	White	Number	612.0
	4 year olds	Black	Number	228.0
	4 year olds	American Indian	Number	71.0
	4 year olds	Asian	Number	22.0
	4 year olds	Two or more	Number	170.0
	4 year olds	Hispanic	Number	279.0



## Low Birthweight (Number &amp; Percent)

Location	Birthweight	Data Type	2010	2011	2012	2013	2014
Comanche County	Under 3 lbs. 5 oz.	Number	30	23	32	33	34
		Percent	1.4%	1.1%	1.6%	1.7%	NA
	Under 5 1/2 lbs.	Number	137	143	127	115	NA
		Percent	6.4%	7.1%	6.4%	5.9%	1.8%

## Teen Births (Number &amp; Rate)

Location	Age group	Data Type	2010	2011	2012	2013	2014
Comanche County	Ages 15-19	Number	214	198	194	193	168
		Rate	49.3	46.5	46.9	48.0	42.1
	Ages 15-17	Number	61	41	53	54	33
		Rate	25.5	17.1	22.9	23.2	14.4
	Ages 18-19	Number	153	157	141	139	135
		Rate	78.7	84.8	77.4	81.8	79.6
	Total Births Ages 10-19	Number	218	201	196	195	168
		Rate	NA	NA	NA	NA	NA

## Preterm Births (Number &amp; Percent)

Location	Category	Data Type	2009	2010	2011	2012	2013
Comanche County	<32 weeks	Number	42.0	31.0	34.0	39.0	34.0
		Percent	19.0%	15.0%	16.7%	19.8%	19.9%
	32-36 weeks	Number	179.0	175.0	170.0	158.0	137.0
		Percent	81.0%	85.0%	83.3%	80.2%	80.1%

## Uninsured (Number &amp; Percent)

Location	Age group	Data Type	2010	2011	2012	2013	2014
Comanche County	Under 19	Number	3,211	2,979	3,056	2,846	2,636
		Percent	NA	9.2%	9.5%	9.0%	850.0%
	Under 65	Number	NA	NA	20,453	18,851	2,636
		Percent	NA	NA	19.8%	18.5%	850.0%
		Number	NA	NA	NA	NA	NA
		Percent	NA	NA	NA	NA	NA

## Infant Mortality (Rate &amp; Number)

Location	Data Type	2010	2011	2012	2013	2014
Comanche County	Number	28	18	13	19	15
	Rate	13.1	8.9	6.6	9.7	7.9

## Child &amp; Teen Death (Number &amp; Rate Per 100,000)

Location	Age group	Data Type	2004 - 2006	2006 - 2008	2007 - 2009	2008 - 2010	2009 - 2011
Comanche County	Ages 1-14	Rate per 100,000	32.6	41.4	40.4	32.7	29.1
		Number	8	10	28	23	21
	Ages 15-19	Rate per 100,000	35.8	71.5	75.8	44.7	44.8
		Number	3	7	22	13	13
	All (ages 1-19)	Rate per 100,000	33.4	49.9	50.8	36.2	33.6
		Number	11	17	50	36	34

## Current Child Abuse &amp; Neglect Confirmations (Number &amp; Rate Per 1000)

Location	Data Type	2010	2011	2012	2013	2014
Comanche County	Number	163	280	301	391	438
	Rate per 1000	5.4	9.0	9.5	12.5	14.3

## Historic Child Abuse &amp; Neglect Confirmations (Number &amp; Rate Per 1000)

Location	Data Type	SFY2002 - SFY2004	SFY2003 - SFY2005	SFY2004 - SFY2006	SFY2005 - SFY2007	SFY2006 - SFY2008
Comanche County	Number	382.0	377.0	344.0	304.0	291.0
	Rate per 1000	12.2	12.0	11.0	9.8	9.0

## Historic Change Over Time In Child Abuse &amp; Neglect Confirmation Rate (Percent)

Location	Data Type	SFY2006 - SFY2008
Comanche County	Percent	4.6%

## Child Abuse &amp; Neglect Referrals Accepted For Investigation (Number)

Location	Data Type	2011	2012	2013	2014
Comanche County	Number	447	793	1,008	1,057

## Child Abuse &amp; Neglect By Type (Number)

Location	Category	Data Type	SFY 2011	SFY 2012	SFY 2013	SFY 2014
Comanche County	Abuse	Number	36	94	91	74
	Neglect	Number	221	165	250	327
	Both abuse and neglect	Number	23	42	50	37

## Arrests Of Juveniles For Violent Crimes (Number &amp; Rate)

Location	Data Type	2010	2011	2012	2013	2014
Comanche County	Number	32	13	25	15	28
	Rate	82.1	37.7	80.1	118.8	223.5

## Children 0 To 17 In Foster Care (Number &amp; Rate)

Location	Data Type	2011	2012	2013	2014
Comanche County	Rate	9.4	11.4	12.8	13.7
	Number	296	360	399	415

## Children Aged Out/Emancipated From Foster Care (Number &amp; Rate)

Location	Data Type	2011	2012	2013	2014
Comanche County	Number	17	13	6	14
	Rate	0.5	0.4	0.2	0.5

SIGN UP FOR THE KIDS COUNT MAILING LIST



STAY CONNECTED

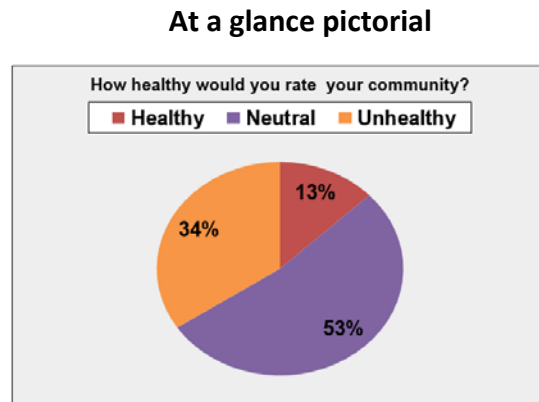


### Comanche County Themes & Strengths Survey Results

#### Questions, Response Percentage, Count, Agree, Disagree and Neutral

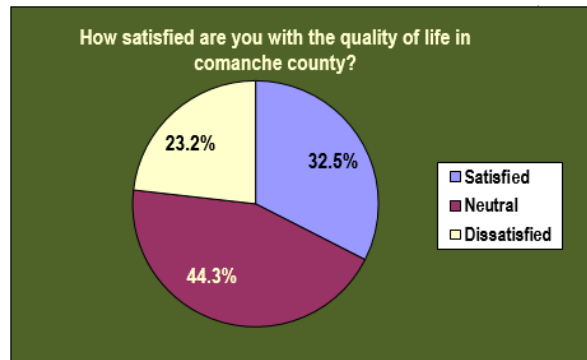
##### How healthy would you rate your community?

Answer Options	Response %	Response #
Healthy	12.9%	192
Neutral	52.8%	784
Unhealthy	34.3%	510



##### How satisfied are you with the quality of life in Comanche County?

Answer Options	Response %	Response #
Satisfied	32.5%	482
Neutral	44.3%	658
Dissatisfied	23.2%	345



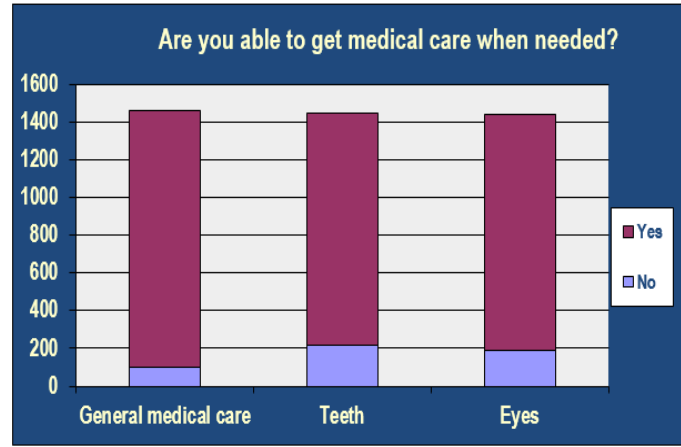
##### Where do you currently get your local news and community information?

Answer Options	Response %	Response #
Television	82.2%	1220
Radio	38.7%	575
Newspaper-hard copy	42.3%	628
Newspaper-online	16.6%	247
Magazines-hard copy	5.1%	76
Magazines-online	2.8%	41
Social Media-Facebook, Twitter, etc.	57.4%	852
Internet blog	4.3%	64
Internet news site	33.9%	503
Other	4.1%	61



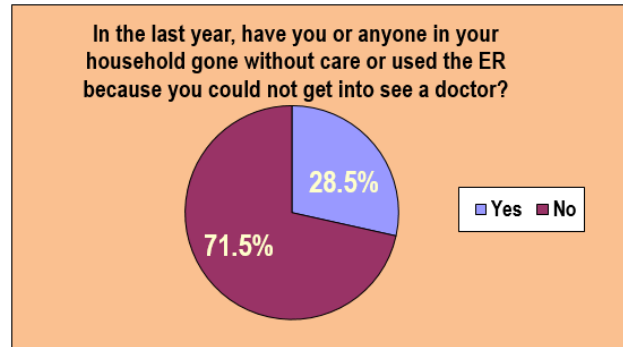
**Are you able to get medical care when needed?**

Answer Options	Yes	No	Response #
General medical care	1362	100	1462
Teeth	1231	215	1446
Eyes	1251	188	1439



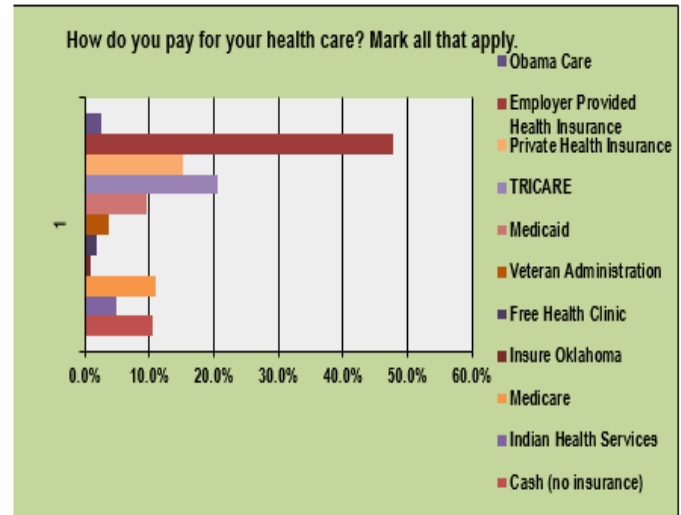
**In the last year, have you or anyone in your household gone without care or used the ER because you could not get into see a doctor?**

Answer Options	Response %	Response #
Yes	28.5%	419
No	71.5%	1051



**How do you pay for health care?**

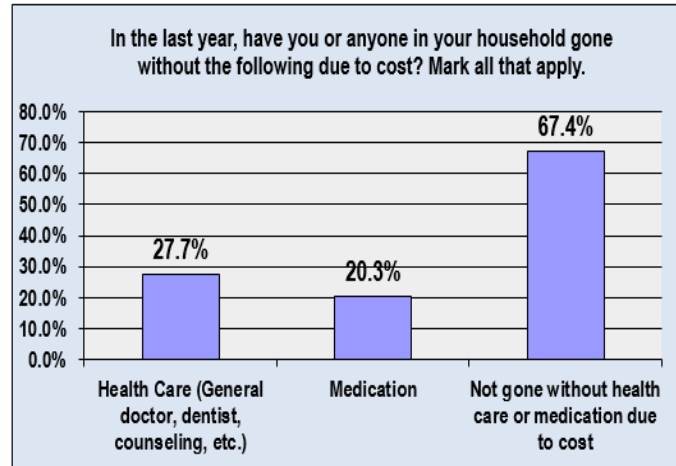
Answer Options	Response %	Response #
Cash (no insurance)	10.6%	153
Indian Health Services	5.0%	72
Medicare	11.0%	158
Insure Oklahoma	1.0%	15
Free Health Clinic	1.9%	27
Veteran Administration	3.7%	53
Medicaid	9.5%	137
TRICARE	20.5%	295
Private Health Insurance	15.2%	219
Employer Provided Insurance	47.7%	687
Obama Care	2.5%	36





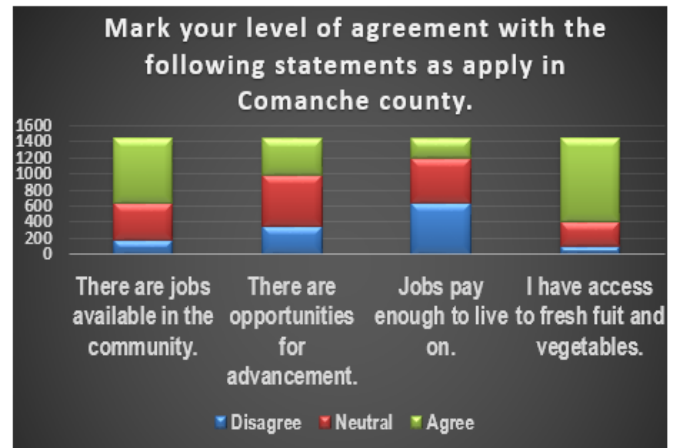
**In the last year, have you or anyone in your household gone without the following due to cost?**

Answer Options	Response %	Response #
Health Care (General doctor, dentist, counseling, etc.)	27.7%	379
Medication	20.3%	278
Not gone without health care or medication due to cost	67.4%	922



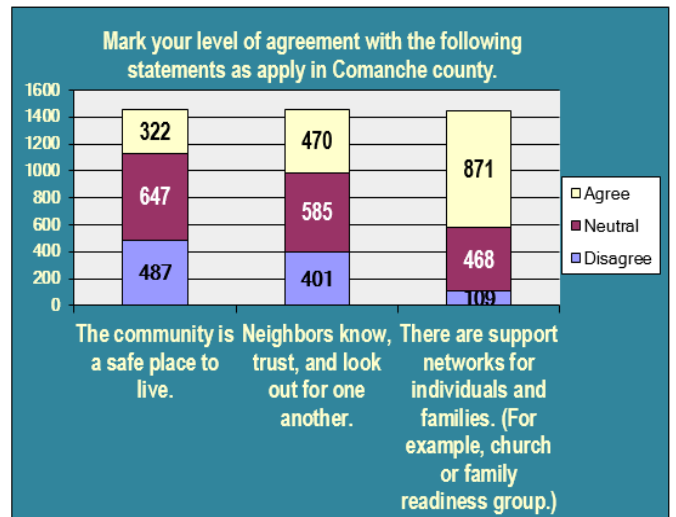
**Mark your level of agreement with the following statements as apply in Comanche County.**

Answer Options	Agree	Neutral	Disagree
There are jobs available in the community.	806	460	183
There are opportunities for advancement.	453	640	349
Jobs pay enough to live on.	244	557	641
I have access to fresh fruit and vegetables.	1045	298	101



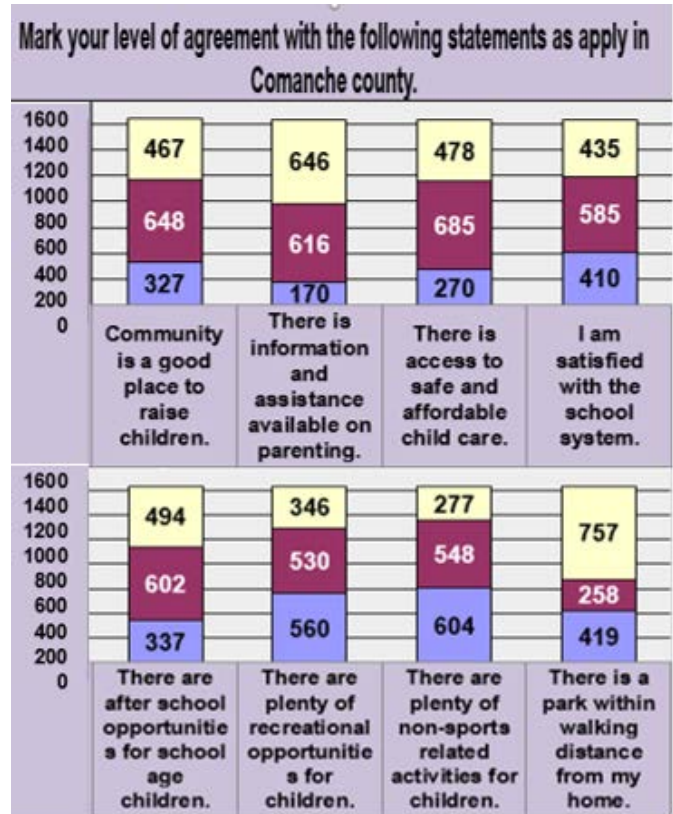
**Mark your level of agreement with the following statements as apply in Comanche County.**

Answer Options	Agree	Neutral	Disagree
The community is a safe place to live.	322	470	871
Neighbors know trust, & look out for one another.	647	585	468
There are support networks for individuals and families. (For ex. Church, family, readiness group.)	487	104	109



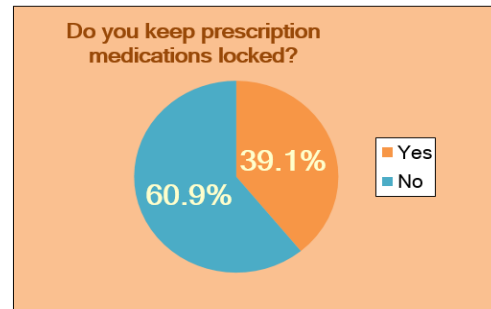
**Mark your level of agreement with the following statements as apply in Comanche County.**

Answer Options	Agree	Neutral	Disagree
Community is a good place to raise children.	467	648	327
There is information and assistance available on parenting.	646	616	170
There is access to safe and affordable child care.	478	685	270
I am satisfied with the school system.	435	585	410
There after school opportunities for school age children	494	60	337
There are plenty of recreational opportunities for children.	346	530	560
There are plenty of non-sports related activities for children.	277	548	604
There is a park within walking distance from my home.	757	258	419



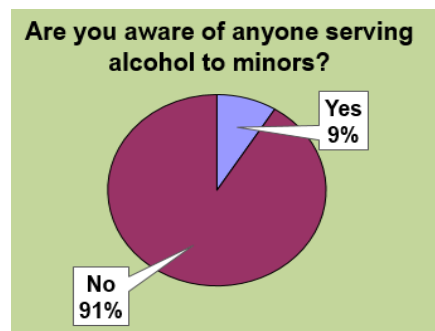
**Do you keep prescriptions medications locked?**

Answer Options	Response %	Response #
Yes	39.1%	500
No	60.9%	780



**Are you aware of anyone serving alcohol to minors?**

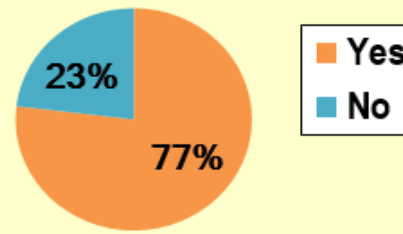
Answer Options	Response %	Response #
Yes	9.0%	130
No	91.1%	1325



**Oklahoma’s Social Host law puts a shared responsibility for underage drinking on the person providing the location for the gathering. Adults or minors can be cited and fined under the Social Host law. Were you aware of this law?**

Answer Options	Response %	Response #
Yes	76.9%	100
No	23.1%	30

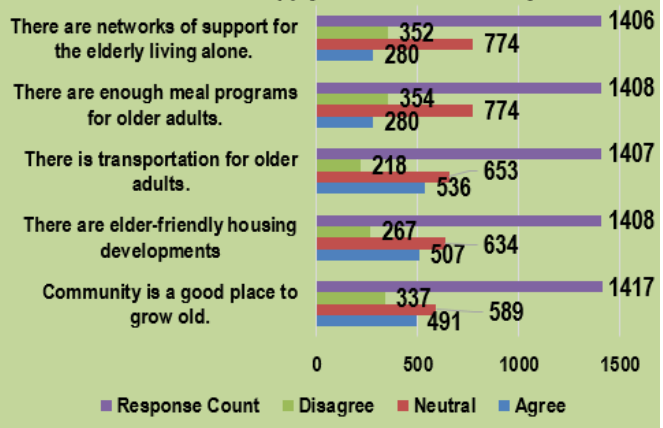
**Oklahoma’s Social Host law puts a shared responsibility for underage drinking on the person providing the location for the gathering. Adults or minors can be cited and fined under the Social Host law. Were you aware of this law?**



**Mark your level of agreement with the following statements as apply in Comanche County.**

Answer Options	Agree	Neut ral	Disag ree
There are networks for support for the elderly living alone.	280	774	352
There are enough meal programs for older adults.	280	774	354
There is transportation for older adults.	536	653	218
There are elder-friendly housing developments.	507	634	267
Community is a ood place to grow old.	491	589	337

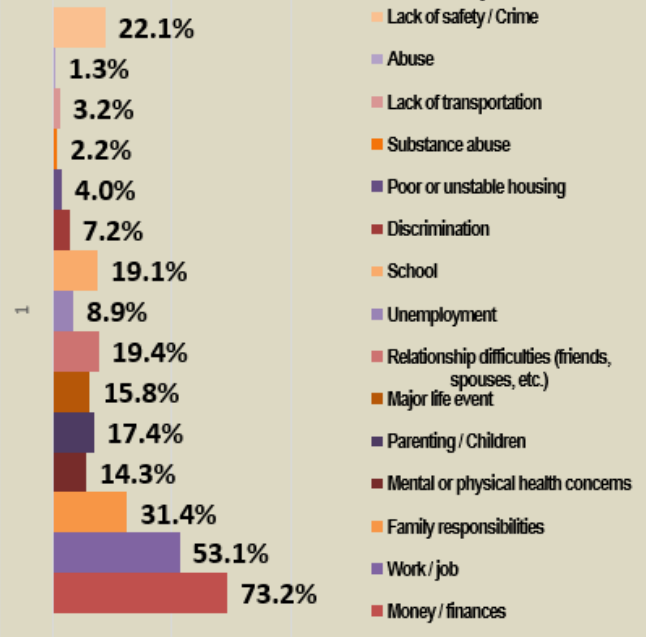
**Mark your level of agreement with the following statements as apply in Comanche county.**



**What are the 3 things that cause you the most stress?**

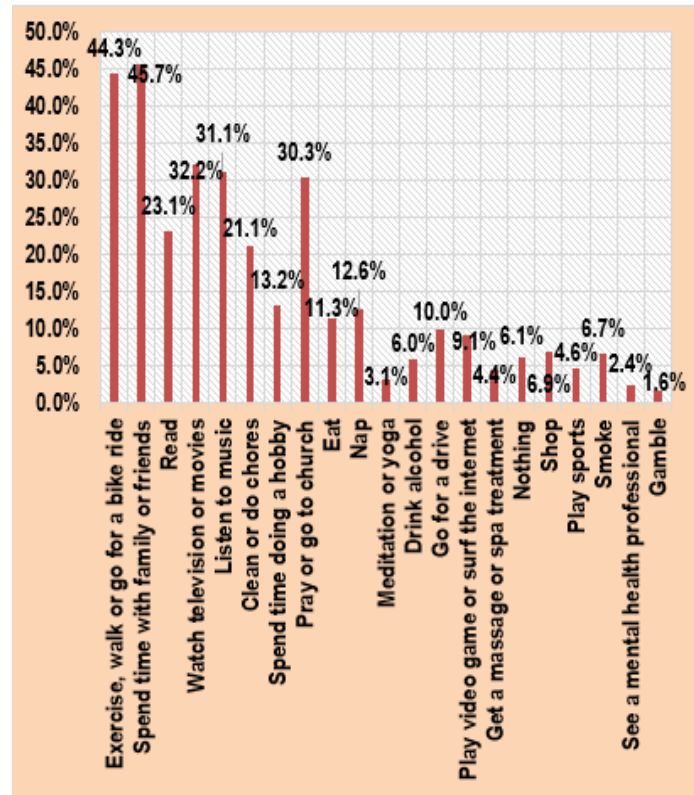
Answer Options	Response %	Response #
Money/finances	73.2%	1032
Work/job	53.1%	749
Family responsibilities	31.4%	443
Mental or physical health concerns	14.3%	201
Parenting/Children	17.4%	245
Major life event	15.8%	223
Relationship difficulties (friends, spouses, etc.)	19.4%	273
Unemployment	8.9%	126
School	19.1%	270
Discrimination	7.2%	102
Poor or unstable housing	4.0%	56
Sustance abuse	2.2%	31
Lack of transportation	3.2%	45
Abuse	1.3%	18
Lack of safety/Crime	22.1%	312

**What are the 3 things that cause you the most stress? Please mark only 3.**



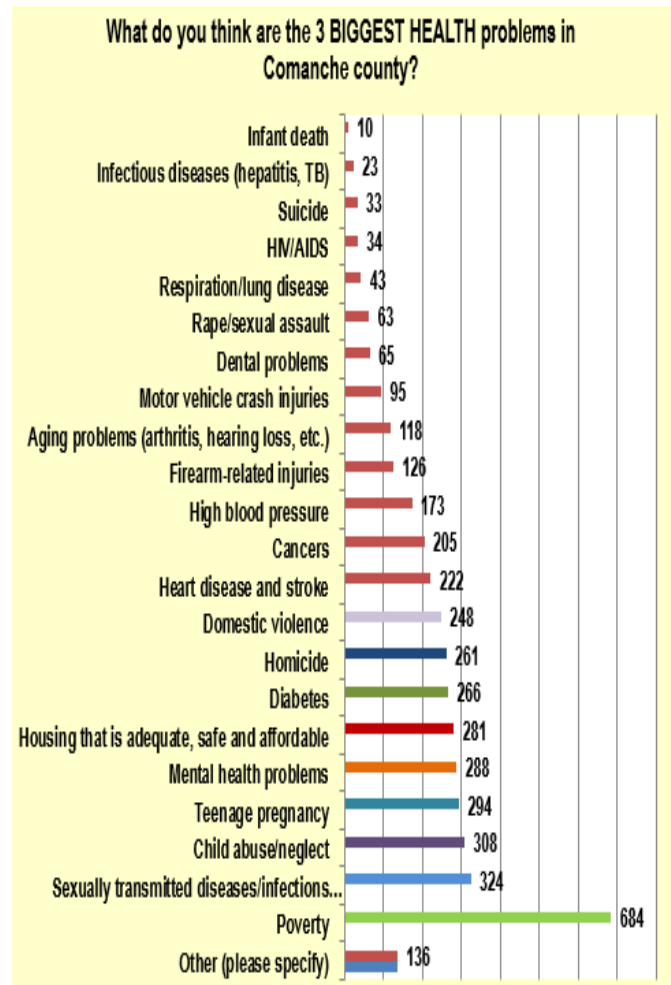
**What are the 3 most common ways you manage your stress?**

Answer Options	Response %	Response #
Exercise, walk or go for a bike ride	44.3%	629
Spend time with family or friends	45.7%	649
Read	23.1%	328
Watch television or movies	32.2%	457
Listen to music	31.1%	442
Clean or do chores	21.1%	300
Spend time doing a hobby	13.2%	188
Pray or go to church	30.3%	430
Eat	11.3%	160
Nap	12.6%	179
Meditation or yoga	3.1%	44
Drink alcohol	6.0%	85
Go for a drive	10.0%	142
Play video game or surf the internet	9.1%	129
Get a massage or spa treatment	4.4%	63
Nothing	6.1%	86
Shop	6.9%	98
Play sports	4.6%	65
Smoke	6.7%	95
See a mental health professional	2.4%	34
Gamble	1.6%	23



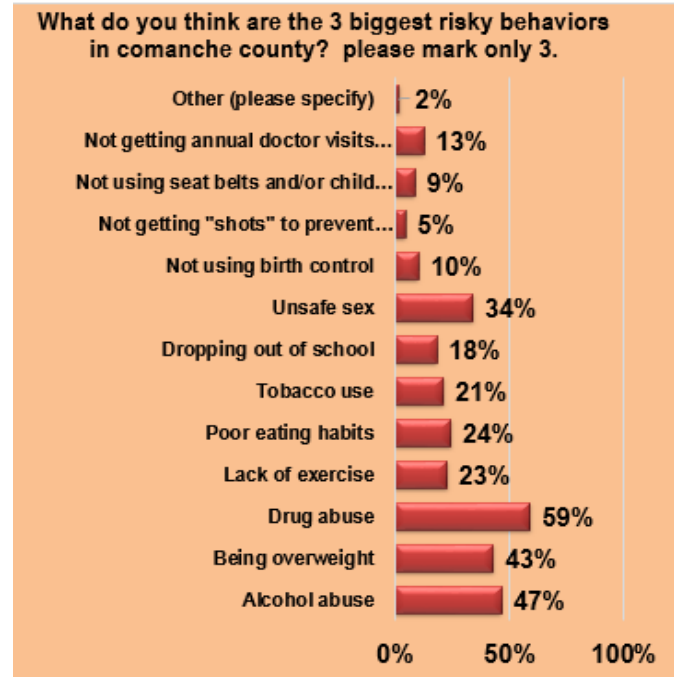
**What do you think are the 3 biggest health problems in Comanche County?**

Answer Options	Response %	Response #
Poverty	49.7%	684
Sexually transmitted disease/infection	23.5%	324
Child abuse/neglect	22.4%	308
Teenage pregnancy	21.4%	294
Mental health problems	20.9%	288
Housing that is adequate, safe and affordable	20.4%	281
Diabetes	19.3%	266
Homicide	19.0%	261
Domestic violence	18.0%	248
Heart disease and stroke	16.1%	222
Cancers	14.9%	205
High blood pressure	12.6%	173
Firearm-related injuries	9.2%	126
Again problems (arthritis, hearing loss, etc.)	8.6%	118
Motor vehicle crash injuries	6.9%	95
Dental problems	4.7%	65
Rape/sexual assault	4.6%	63
Respiration/lung disease	3.1%	43
HIV/AIDS	2.5%	34
Suicide	2.4%	33
Infectious diseases (hepatitis, TB)	1.7%	23
Infant death	0.7%	10



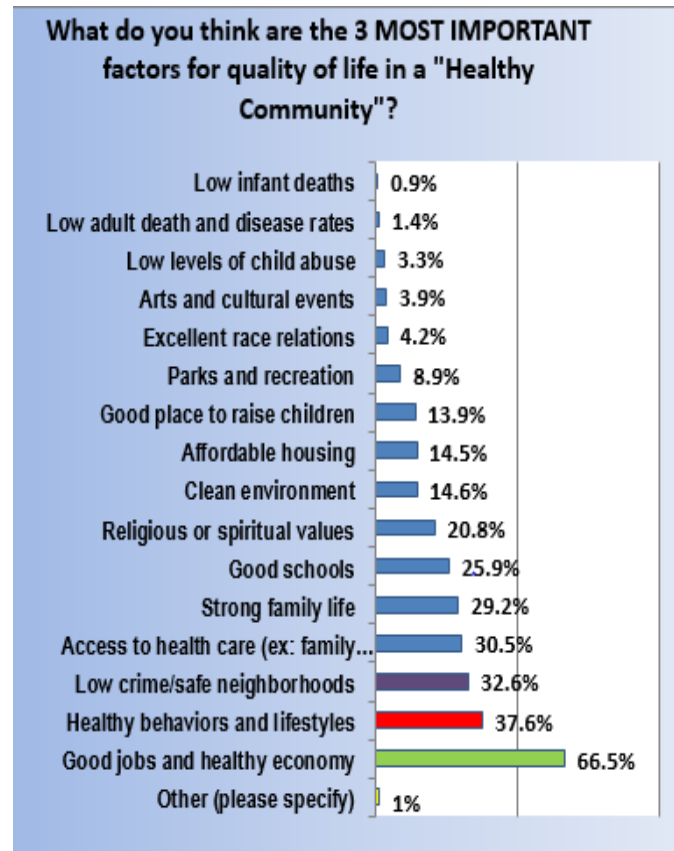
**What do you think are the 3 biggest risky behaviors in Comanche County?**

Answer Options	Response %	Response #
Alcohol abuse	47%	644
Being overweight	43%	594
Drug abuse	59%	817
Lack of exercise	23%	314
Poor eating habits	24%	338
Tobacco use	21%	293
Dropping out of school	18%	253
Unsafe sex	34%	471
Not using birth control	10%	144
Not getting shots to prevent disease	5%	63
Not using seat belts and/or child safety seats	9%	122
Not getting annual doctor visits (dentist, eye doctor, obgyn, etc.)	13%	174



**What do you think are the 3 most important factors for quality of life in a "Healthy Community"?**

Answer Options	Response %	Response #
Good jobs and healthy	66.5%	929
Healthy behaviors and lifestyles	37.6%	525
Low crime/safe neighborhoods	32.6%	455
Access to health care (ex: family doctor)	30.5%	426
Strong family life	29.2%	407
Good schools	25.9%	361
Religious or spiritual values	20.8%	291
Clean environment	14.6%	204
Affordable housing	14.5%	203
Good place to raise children	13.9%	194
Parks and recreation	8.9%	124
Excellent race relations	4.2%	59
Arts and cultural events	3.9%	55
Low levels of child abuse	3.3%	46
Low adult death and disease rates	1.4%	19
Low infant deaths	0.9%	12

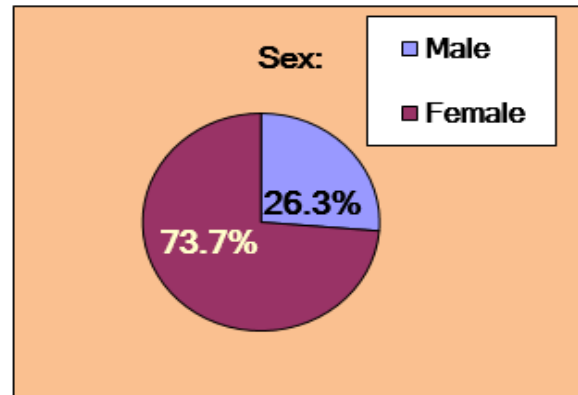




Whats your ZIP Code?				Whats your ZIP Code?			
Answer Options		Response Percent	Response Count	Answer Options		Response Percent	Response Count
ZIP:		100.0%	1374	ZIP:		100.0%	1374
Number	Zip Code	City	Count	Number	Zip Code	City	Count
126	73005	Anadarko	4	557	73528	Chattanooga	5
208	73006	Apache	3	1351	73533	Duncan	3
540	73042	Gracemont	1	1358	73538	Elgin	38
894	73055	Marlow	8	558	73540	Faxon	8
14	73069	Norman	1	81	73541	Fletcher	13
31	73082	Rush Springs	1	524	73543	Geronimo	16
61	73099	Yukon	1	951	73552	Indiahoma	12
1078	73207	Coyle	1	1301	73554	Mangum	1
956	73501	Lawton	216	2	73557	Medicine Park	4
1027	73502	Lawton	9	44	73566	Snyder	2
238	73503	Fort Sill	40	47	73567	Sterling	6
1199	73505	Lawton	608	55	73568	Temple	1
805	73506	Lawton	1	56	73572	Walters	4
627	73507	Lawton	267	30	74447	Okmulgee	1
1086	73521	Altus	3			answered question	1374
302	73527	Cache	85			skipped question	121

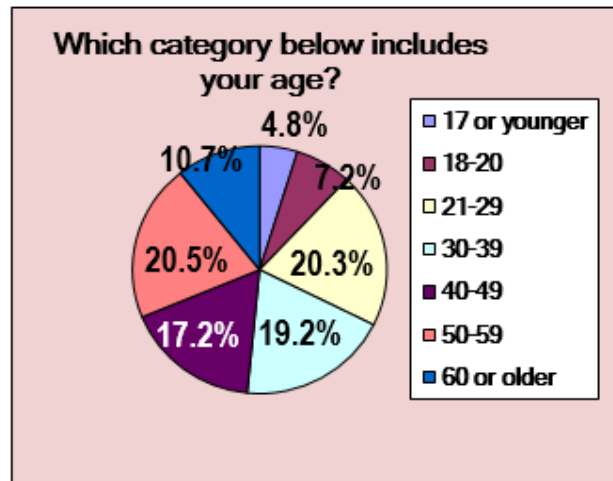
Sex:

Answer Options	Response %	Response #
Male	26.3%	366
Female	73.7%	1026



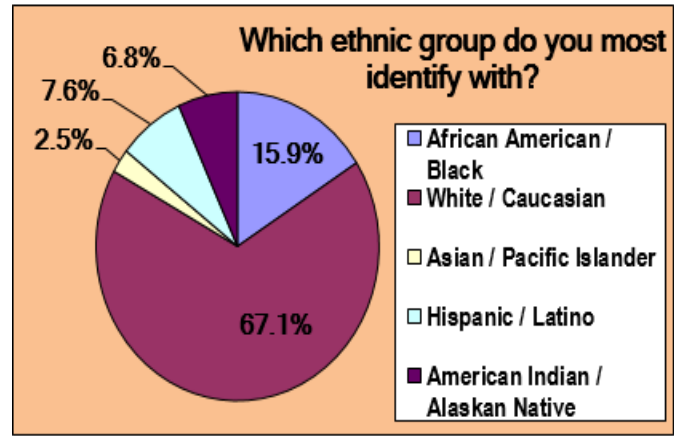
Which category below includes your age?

Answer Options	Response %	Response #
17 or younger	4.8%	67
18-20	7.2%	101
21-29	20.3%	284
30-39	19.2%	269
40-49	17.2%	241
50-59	20.5%	286
60 or older	10.7%	150



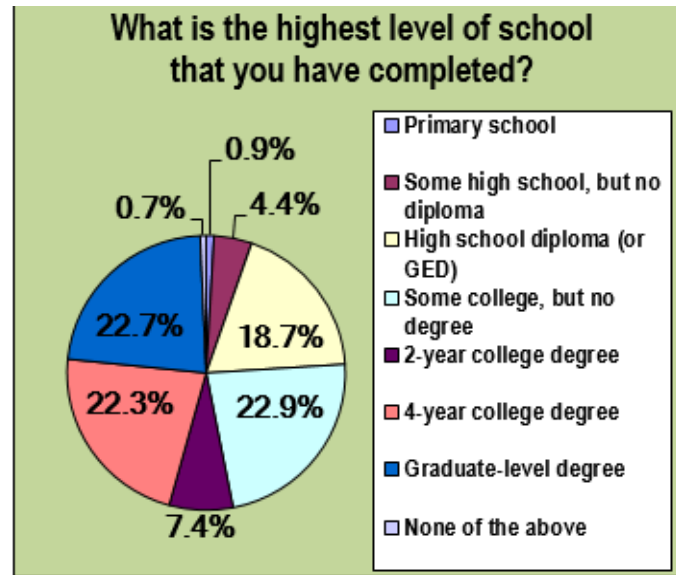
**Which ethnic group do you most identify with?**

Answer Options	Response %	Response #
African American/Black	15.9%	215
White/Caucasian	67.1%	905
Asian/Pacific Islander	2.5%	34
Hispanic/Lation	7.6%	102
American Indian/Alaskan	6.8%	92



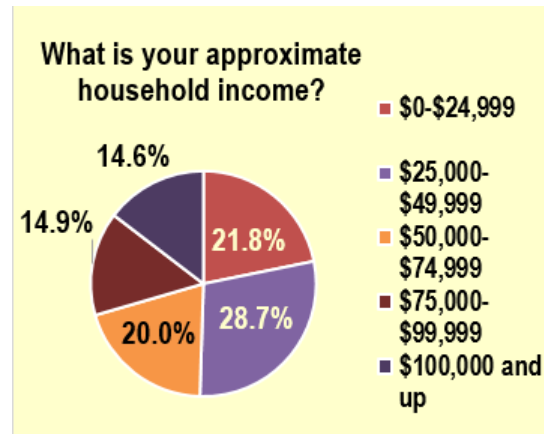
**What is the highest level of school that you have completed?**

Answer Options	Response %	Response #
Primary school	0.9%	12
Some high school, but no diploma	4.4%	61
High school diploma (or GED)	18.7%	257
Some college, but no degree	22.9%	314
2-year college degree	7.4%	101
4-year college degree	22.3%	307
Graduate-level degree	22.7%	312
None of the above	0.7%	10



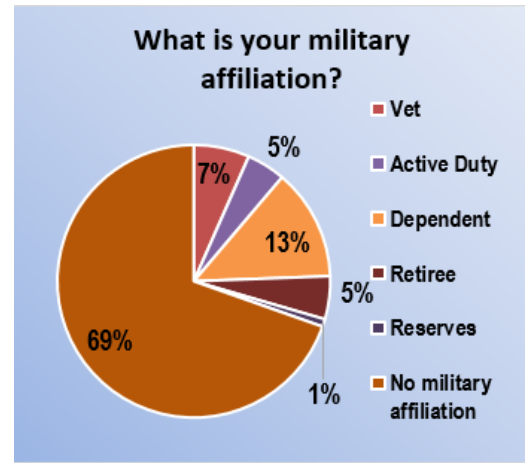
**What is your approximate household income?**

Answer Options	Response %	Response #
\$0-\$24,999	21.8%	290
\$25,000-\$49,999	28.7%	382
\$50,000-\$74,999	20.0%	266
\$75,000-\$99,999	14.9%	198
\$100,000 and up	14.6%	194



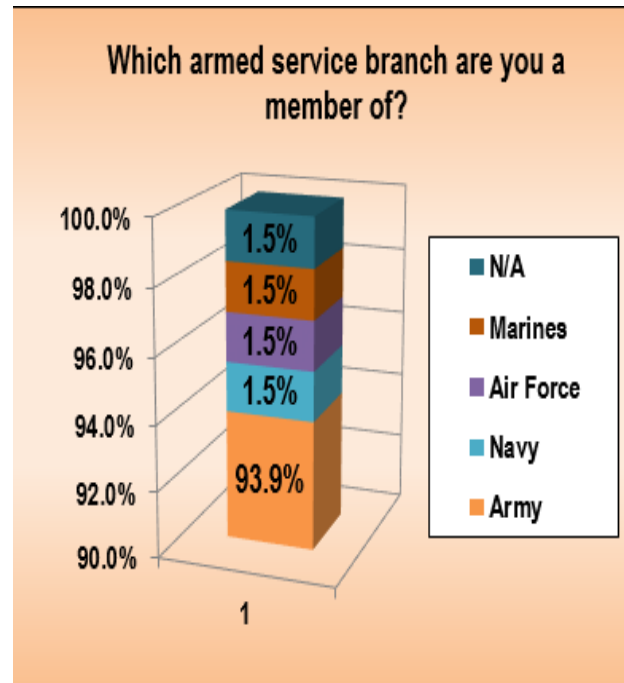
**What is your military affiliation?**

Answer Options	Response %	Response #
Vet	6.6%	93
Active Duty	4.6%	65
Dependent	13.2%	187
Retiree	5.1%	72
Reserves	0.9%	13
No military	69.6%	985



**Which armed service branch are you a member of?**

Answer Options	Response %	Response #
Army	93.9%	62
Navy	1.5%	1
Air Force	1.5%	1
Marines	1.5%	1
N/A	1.5%	1



## 2015 Forces of Change Survey Responses

List of brainstormed forces, including factors, events, and trends that impact Comanche County.

Response Text as entered:

- ICD 10/ Coding System (y3)
- When children don't get required vaccinations and encounter an avoidable disease and spread to the population.
- Everyone should get the Flu vaccination to keep the public healthy and if people contract a spreadable disease then stay away from others to keep these contagious diseases under control.
- Extreme weather conditions or catastrophic occurrences.
- Outcome of the National elections and attitude of State Government toward acceptance of Federal dollars for funding of Accountable Healthcare to what has been labeled Obama Care.
- Same as mentioned above with local, state and national government. County government still works with the people. Globally we need to all be concerned about pollution and the changes that are occurring from contaminating the environment.
- We must look for opportunities to improve and diminish the threats to our health and safety.
- Our nation is polarized. We must learn to listen and compromise to regain control for the betterment of our nation.
- Halliburton job layoff in Duncan
- Tobacco/ Childhood Obesity problem in our county
- Attempt to redirect Tobacco Settlement Funds away from Healthcare
- Anticipated \$1 Billion shortfall in state revenue for next fiscal year
- Layoffs
- Relocation of possible community leaders
- The drought has an effect on our local community.
- Violent crime, lack of support for education/teachers
- Lack of funds to deliver needed services
- Tendency to offer a "one-size-fits-all" approach
- BRAC (Base Realignment and Closure)
- OK Tobacco Settlement Endowment Trust being raided
- Increase in the Tobacco Tax
- E-Cigarettes
- Dedicated group of community members working hard to impact, in a positive way, the health of Comanche County

- Drought
- Obesity
- Physical Activity
- Comanche County has a large military base on Fort Sill. Currently there is a trend to downsize the military across the country. The next 2016 election could affect that change for better or worse.
- High poverty rate in Comanche County



### Comanche Local Public Health System Assessment--Fall 2015

#### 1. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
1.1.1 Conduct regular CHAs?	0	0	2	4	1	7	0	0	6	16	5	3.86
1.1.2 Update the CHA with current information continuously?	0	0	3	3	1	7	0	0	9	12	5	3.71
1.1.3 Promote the use of the CHA among community members and partners?	0	0	1	6	0	7	0	0	3	24	0	3.86

#### 3. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
1.2.1 Use the best available technology and methods to display data on the public's health?	0	0	3	4	0	7	0	0	9	16	0	3.57
1.2.2 Analyze health data, including geographic information, to see where health problems exist?	0	0	0	7	0	7	0	0	0	28	0	4.00
1.2.3 Use computer software to create charts, graphs, and maps to display complex public health data (trends over time, sub-population analyses, etc.)?	0	0	2	5	0	7	0	0	6	20	0	3.71

#### 3. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
1.3.1 Collect timely data consistent with current standards on specific health concerns in order to provide the data to population health registries?	0	0	2	5	0	7	0	0	6	20	0	3.71
1.3.2 Use information from population health registries in CHAs or other analyses?	0	0	3	4	0	7	0	0	9	16	0	3.57

Section 1 Average

3.33

**8. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
2.1.1 Participate in a comprehensive surveillance system with national, state, and local partners to identify, monitor, and share information and understand emerging health problems and threats?	1	0	1	2	3	7	1	0	3	8	15	3.86
2.1.2 Provide and collect timely and complete information on reportable diseases and potential disasters, emergencies, and emerging threats (natural and manmade)?	0	0	0	3	4	7	0	0	0	12	20	4.57
2.1.3 Ensure that the best available resources are used to support surveillance systems and activities, including information technology, communication systems, and professional expertise?	0	0	2	3	2	7	0	0	6	12	10	4.00

**10. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
2.2.1 Maintain written instructions on how to handle communicable disease outbreaks and toxic exposure incidents, including details about case finding, contact tracing, and source identification and containment?	0	0	2	2	3	7	0	0	6	8	15	4.14
2.2.2 Develop written rules to follow in the immediate investigation of public health threats and emergencies, including natural and intentional disasters?	0	0	1	2	4	7	0	0	3	8	20	4.43
2.2.3 Designate a jurisdictional Emergency Response Coordinator?	0	0	1	3	3	7	0	0	3	12	15	4.29

2.2.4 Prepare to rapidly respond to public health emergencies according to emergency operations coordination guidelines?	0	0	0	4	3	7	0	0	0	16	15	4.43
2.2.5 Identify personnel with the technical expertise to rapidly respond to possible biological, chemical, or and nuclear public health emergencies?	1	0	1	1	4	7	1	0	3	4	20	4.00
2.2.6 Evaluate incidents for effectiveness and opportunities for improvement (such as After Action Reports, Improvement Plans, etc.)?	1	0	1	1	4	7	1	0	3	4	20	4.00

12. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
2.3.1 Have ready access to laboratories that can meet routine public health needs for finding out what health problems are occurring?	0	0	2	2	3	7	0	0	6	8	15	4.14
2.3.2 Maintain constant (24/7) access to laboratories that can meet public health needs during emergencies, threats, and other hazards?	0	0	3	0	4	7	0	0	9	0	20	4.14
2.3.3 Use only licensed or credentialed laboratories?	0	0	0	2	5	7	0	0	0	8	25	4.71
2.3.4 Maintain a written list of rules related to laboratories, for handling samples (including collecting, labeling, storing, transporting, and delivering), determining who is in charge of the samples at what point, and reporting the results?	0	0	2	1	4	7	0	0	6	4	20	4.29
<b>Section 2 Average</b>										<b>4.73</b>		

**1. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
3.1.1 Provide policymakers, stakeholders, and the public with ongoing analyses of community health status and related recommendations for health promotion policies?	0	5	6	7	2	20	0	10	18	28	10	3.30
3.1.2 Coordinate health promotion and health education activities at the individual, interpersonal, community, and societal levels?	0	3	4	11	2	20	0	6	12	44	10	3.60
3.1.3 Engage the community throughout the process of setting priorities, developing plans, and implementing health education and health promotion activities?	0	5	7	6	2	20	0	10	21	24	10	3.25

**3. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
3.2.1 Develop health communication plans for media and public relations and for sharing information among LPHS organizations?	0	5	9	4	1	19	0	10	27	16	5	3.05
3.2.2 Use relationships with different media providers (e.g., print, radio, television, the Internet) to share health information, matching the message with the target audience?	0	6	6	6	1	19	0	12	18	24	5	3.11
3.2.3 Identify and train spokespersons on public health issues?	1	6	10	1	1	19	1	12	30	4	5	2.74

5. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
3.3.1 Develop an emergency communications plan for each stage of an emergency to allow for the effective dissemination of information?	0	3	8	6	2	19	0	6	24	24	10	3.37
3.3.2 Make sure resources are available for a rapid emergency communication response?	0	4	7	6	2	19	0	8	21	24	10	3.32
3.3.3 Provide risk communication training for employees and volunteers?	0	5	10	3	1	19	0	10	30	12	5	3.00
<b>Section 3 Average</b>										<b>3.19</b>		

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
4.1.1 Maintain a complete and current directory of community organizations?	0	6	5	7	1	19	0	12	15	28	5	3.16
4.1.2 Follow an established process for identifying key constituents related to overall public health interests and particular health concerns?	0	3	8	6	2	19	0	6	24	24	10	3.37
4.1.3 Encourage constituents to participate in activities to improve community health?	0	4	3	10	2	19	0	8	9	40	10	3.53
4.1.4 Create forums for communication of public health issues?	1	3	8	4	3	19	1	6	24	16	15	3.26

10. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
4.2.1 Establish community partnerships and strategic alliances to provide a comprehensive approach to improving health in the community?	0	3	3	9	4	19	0	6	9	36	20	3.74



4.2.2 Establish a broad-based community health improvement committee?	0	3	4	8	4	19	0	6	12	32	20	3.68
4.2.3 Assess how well community partnerships and strategic alliances are working to improve community health?	0	2	6	8	3	19	0	4	18	32	15	3.63
<b>Section 4 Average</b>										<b>3.48</b>		

**1. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
5.1.1 Support the work of the local health department (or other governmental local public health entity) to make sure the 10 Essential Public Health Services are provided?	1	0	1	6	2	10	1	0	3	24	10	3.80
5.1.2 See that the local health department is accredited through the PHAB's voluntary, national public health department accreditation program?	1	0	1	3	5	10	1	0	3	12	25	4.10
5.1.3 Ensure that the local health department has enough resources to do its part in providing essential public health services?	1	0	2	4	3	10	1	0	6	16	15	3.80

**3. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
5.2.1 Contribute to public health policies by engaging in activities that inform the policy development process?	1	0	3	4	1	9	1	0	9	16	5	3.44
5.2.2 Alert policymakers and the community of the possible public health effects (both intended and unintended) from current and/or proposed policies?	1	0	2	6	0	9	1	0	6	24	0	3.44

5.2.3 Review existing policies at least every three to five years?	1	0	2	6	0	9	1	0	6	24	0	3.44
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**5. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
5.3.1 Establish a CHIP, with broad-based diverse participation, that uses information from the CHA, including the perceptions of community members?	1	0	1	4	3	9	1	0	3	16	15	3.89
5.3.2 Develop strategies to achieve community health improvement objectives, including a description of organizations accountable for specific steps?	1	0	1	5	2	9	1	0	3	20	10	3.78
5.3.3 Connect organizational strategic plans with the CHIP?	1	0	2	5	1	9	1	0	6	20	5	3.56

**Section 5 Average** **3.70**

**7. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
5.4.1 Support a workgroup to develop and maintain emergency preparedness and response plans?	0	0	0	7	1	8	0	0	0	28	5	4.13

5.4.2 Develop an emergency preparedness and response plan that defines when it would be used, who would do what tasks, what standard operating procedures would be put in place, and what alert and evacuation protocols would be followed?	0	0	0	6	2	8	0	0	0	24	10	4.25
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5.4.3 Test the plan through regular drills and revise the plan as needed, at least every two years?	0	1	0	6	1	8	0	2	0	24	5	3.88
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**10. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
6.1.1 Identify public health issues that can be addressed through laws, regulations, or ordinances?	0	0	3	3	2	8	0	0	9	12	10	3.88
6.1.2 Stay up-to-date with current laws, regulations, and ordinances that prevent health problems or that promote or protect public health on the federal, state, and local levels?	0	0	1	4	3	8	0	0	3	16	15	4.25
6.1.3 Review existing public health laws, regulations, and ordinances at least once every three to five years?	0	0	2	5	1	8	0	0	6	20	5	3.88
6.1.4 Have access to legal counsel for technical assistance when reviewing laws, regulations, or ordinances?	0	1	2	3	2	8	0	2	6	12	10	3.75

**12. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
6.2.1 Identify local public health issues that are inadequately addressed in existing laws, regulations, and ordinances?	0	0	2	5	1	8	0	0	6	20	5	3.88

6.2.2 Participate in changing existing laws, regulations, and ordinances, and/or creating new laws, regulations, and ordinances to protect and promote public health?	0	0	2	5	1	8	0	0	6	20	5	3.88
6.2.3 Provide technical assistance in drafting the language for proposed changes or new laws, regulations, and ordinances?	0	1	2	4	1	8	0	2	6	16	5	3.63

14. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
6.3.1 Identify organizations that have the authority to enforce public health laws, regulations, and ordinances?	0	0	1	4	3	8	0	0	3	16	15	4.25
6.3.2 Ensure that a local health department (or other governmental public health entity) has the authority to act in public health emergencies?	0	0	0	5	3	8	0	0	0	20	15	4.38
6.3.3 Ensure that all enforcement activities related to public health codes are done within the law?	0	0	2	4	2	8	0	0	6	16	10	4.00
6.3.4 Educate individuals and organizations about relevant laws, regulations, and ordinances?	0	0	2	4	2	8	0	0	6	16	10	4.00
6.3.5 Evaluate how well local organizations comply with public health laws?	0	1	1	4	2	8	0	2	3	16	10	3.88
<b>Section 6 Average</b>											<b>3.18</b>	

13. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
7.1.1 Identify groups of people in the community who have trouble accessing or connecting to personal health services?	0	3	8	7	1	19	0	6	24	28	5	3.32

7.1.2 Identify all personal health service needs and unmet needs throughout the community?	0	3	10	5	1	19	0	6	30	20	5	3.21
7.1.3 Defines partner roles and responsibilities to respond to the unmet needs of the community?	0	4	11	2	2	19	0	8	33	8	10	3.11
7.1.4 Understand the reasons that people do not get the care they need?	0	2	10	3	4	19	0	4	30	12	20	3.47

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15. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
7.2.1 Connect or link people to organizations that can provide the personal health services they may need?	0	3	5	7	4	19	0	6	15	28	20	3.63
7.2.2 Help people access personal health services in a way that takes into account the unique needs of different populations?	0	3	7	7	2	19	0	6	21	28	10	3.42
7.2.3 Help people sign up for public benefits that are available to them (e.g., Medicaid or medical and prescription assistance programs)?	0	2	7	8	2	19	0	4	21	32	10	3.53
7.2.4 Coordinate the delivery of personal health and social services so that everyone in the community has access to the care they need?	0	4	7	6	2	19	0	8	21	24	10	3.32

<b>Section 7 Average</b>										<b>3.86</b>		
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**1. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
8.1.1 Complete a workforce assessment, a process to track the numbers and types of LPHS jobs—both public and private sector—and the associated knowledge, skills, and abilities required of the jobs?	1	2	1	0	2	6	1	4	3	0	10	3.00
8.1.2 Review the information from the workforce assessment and use it to identify and address gaps in the LPHS workforce?	1	2	1	0	2	6	1	4	3	0	10	3.00
8.1.3 Provide information from the workforce assessment to other community organizations and groups, including governing bodies and public and private agencies, for use in their organizational planning?	1	2	1	0	2	6	1	4	3	0	10	3.00

**3. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
8.2.1 Ensure that all members of the local public health workforce have the required certificates, licenses, and education needed to fulfill their job duties and comply with legal requirements?	0	1	2	2	1	6	0	2	6	8	5	3.50
8.2.2 Develop and maintain job standards and position descriptions based in the core knowledge, skills, and abilities needed to provide the 10 Essential Public Health Services?	0	2	2	1	1	6	0	4	6	4	5	3.17
8.2.3 Base the hiring and performance review of members of the public health workforce in public health competencies?	0	2	1	2	1	6	0	4	3	8	5	3.33

5. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
8.3.1 Identify education and training needs and encourage the public health workforce to participate in available education and training?	0	2	2	0	2	6	0	4	6	0	10	3.33
8.3.2 Provide ways for public health workers to develop core skills related to the 10 Essential Public Health Services?	0	3	1	1	1	6	0	6	3	4	5	3.00
8.3.3 Develop incentives for workforce training, such as tuition reimbursement, time off for attending class, and pay increases?	0	2	2	1	1	6	0	4	6	4	5	3.17
8.3.4 Create and support collaborations between organizations within the LPHS for training and education?	0	1	1	2	2	6	0	2	3	8	10	3.83
8.3.5 Continually train the public health workforce to deliver services in a culturally competent manner and understand the social determinants of health?	0	1	1	3	1	6	0	2	3	12	5	3.67

7. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
8.4.1 Provide access to formal and informal leadership development opportunities for employees at all organizational levels?	0	2	1	0	2	5	0	4	3	0	10	3.40
8.4.2 Create a shared vision of community health and the LPHS, welcoming all leaders and community members to work together?	0	1	0	1	3	5	0	2	0	4	15	4.20
8.4.3 Ensure that organizations and individuals have opportunities to provide leadership in areas where they have knowledge, skills, or access to resources?	0	1	1	1	2	5	0	2	3	4	10	3.80

8.4.4 Provide opportunities for the development of leaders who represent the diversity of the community?	0	1	1	1	2	5	0	2	3	4	10	3.80
<b>Section 8 Average:</b>											<b>3.41</b>	

**10. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
9.1.1 Evaluate how well population-based health services are working, including whether the goals that were set for programs and services were achieved?	0	1	2	1	1	5	0	2	6	4	5	3.40
9.1.2 Assess whether community members, including vulnerable populations, are satisfied with the approaches taken toward promoting health and preventing disease, illness, and injury?	0	2	1	0	2	5	0	4	3	0	10	3.40
9.1.3 Identify gaps in the provision of population-based health services?	0	2	0	1	2	5	0	4	0	4	10	3.60
9.1.4 Use evaluation findings to improve plans, processes, and services?	0	2	0	2	1	5	0	4	0	8	5	3.40

**12. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
9.2.1 Evaluate the accessibility, quality, and effectiveness of personal health services?	0	1	1	1	2	5	0	2	3	4	10	3.80
9.2.2 Compare the quality of personal health services to established guidelines?	0	1	1	2	1	5	0	2	3	8	5	3.60

9.2.3 Measure user satisfaction with personal health services?	0	2	1	0	2	5	0	4	3	0	10	3.40
9.2.4 Use technology, like the Internet or electronic health records, to improve quality of care?	0	2	1	0	2	5	0	4	3	0	10	3.40
9.2.5 Use evaluation findings to improve services and program delivery?	0	1	1	1	2	5	0	2	3	4	10	3.80

**14. At what level does the LPHS...**

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
9.3.1 Identify all public, private, and voluntary organizations that contribute to the delivery of the 10 Essential Public Health Services?	0	1	1	0	3	5	0	2	3	0	15	4.00
9.3.2 Evaluate how well LPHS activities meet the needs of the community at least every five years, using guidelines that describe a model LPHS and involving all entities contributing to the delivery of the 10 Essential Public Health Services?	0	1	0	1	3	5	0	2	0	4	15	4.20
9.3.3 Assess how well the organizations in the LPHS are communicating, connecting, and coordinating services?	0	1	1	1	2	5	0	2	3	4	10	3.80
9.3.4 Use results from the evaluation process to improve the LPHS?	0	1	1	0	3	5	0	2	3	0	15	4.00
<b>Section 9 Average:</b>											<b>3.92</b>	

17. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
10.1.1 Provide staff with the time and resources to pilot test or conduct studies to test new solutions to public health problems and see how well they actually work?	0	1	0	2	2	5	0	2	0	8	10	4.00
10.1.2 Suggest ideas about what currently needs to be studied in public health to organizations that conduct research?	1	2	0	1	1	5	1	4	0	4	5	2.80
10.1.3 Keep up with information from other agencies and organizations at the local, state, and national levels about current best practices in public health?	0	1	0	3	1	5	0	2	0	12	5	3.80
10.1.4 Encourage community participation in research, including deciding what will be studied, conducting research, and sharing results?	0	1	1	1	2	5	0	2	3	4	10	3.80

19. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
10.2.1 Develop relationships with colleges, universities, or other research organizations, with a free flow of information, to create formal and informal arrangements to work together?	0	2	1	0	2	5	0	4	3	0	10	3.40
10.2.2 Partner with colleges, universities, or other research organizations to conduct public health research, including community-based participatory research?	0	3	0	0	2	5	0	6	0	0	10	3.20
10.2.3 Encourage colleges, universities, and other research organizations to work together with LPHS organizations to develop projects, including field training and continuing education?	0	1	1	1	2	5	0	2	3	4	10	3.80



21. At what level does the LPHS...

Answer Options	No Activity	Minimal	Moderate	Significant	Optimal	Response Count	No activity=1pt	Minimal =2pt	Moderate =3pt	Significant =4pt	Optimal =5pt	Average
10.3.1 Collaborate with researchers who offer the knowledge and skills to design and conduct health-related studies?	0	1	2	0	2	5	0	2	6	0	10	3.60
10.3.2 Support research with the necessary infrastructure and resources, including facilities, equipment, databases, information technology, funding, and other resources?	0	2	1	1	1	5	0	4	3	4	5	3.20
10.3.3 Share findings with public health colleagues and the community broadly, through journals, Web sites, community meetings, etc.?	0	1	0	1	3	5	0	2	0	4	15	4.20
10.3.4 Evaluate public health systems research efforts throughout all stages of work from planning to effect on local public health practice?	0	3	0	0	2	5	0	6	0	0	10	3.20
<b>Section 10 Average:</b>												<b>3.93</b>
<b>Composite Average:</b>												<b>3.67</b>

The following question was asked after each section of questions: What are our community’s strengths, weaknesses, or improvement opportunities in the following areas?

Question Numbers	Strength, Weakness, and Opportunities listed by respondents of LPHSA Survey.
1.1.1-1.1.3	Health Depart very active and supports healthy life styles
	Update the CHA with current information continuously
	Public Health Investigation and Disease Detection of Oklahoma (PHIDDO) System
	Community Health Assessment has many diverse organizations involved
1.2.1-1.2.2	Open lines of Communication
	Health Department website is easy to use with access to pertinent data
	Health Department uses all modes of communication available

	Education and exposure on a more regular basis
	More education to create community awareness on areas that have lower scores
<b>1.3.1-1.3.2</b>	Data needs to be published more up to date
<b>2.1.1-2.1.3</b>	Automated system for sharing information
	Opportunity to exercise and process was employed with Ebola awareness and education in the community
	Great community partners that share information
<b>2.2.1-2.2.6</b>	Policies and procedures that have been demonstrated during events affecting the community
	Staff have trained hard
	More staff development
<b>3.1.1-3.1.3</b>	Asking questions to access needs
	Addressing key initiatives through organizing and implementing workgroups to collaborate
	Community cares about health of both adults and minors
	Leaders are committed to improvement of Community well being
	Community is interested in better health practices
	Education new partners and residents
	Small core of active participants with limited successful completion
	Educate small communities on programs and services
	Educate new community residents on programs and services
	More engagement in planning with workgroups
<b>3.2.1-3.2.3</b>	A definite positive for kids
	Numerous communication outlets in this area
	Key interests are involved
	Knowledge and participation of smaller groups is weak
<b>3.3.1-3.3.3</b>	Infectious disease response, planning, training and dissemination of information during the Ebola virus disease preparedness
	Communication when power is off

	Education new arrivals
	LPHS in Comanche County does a great job of trying to reach out to our community and establish programs to help people live healthy
	Need regular meetings to communicate new information and information to new comers
	We seem to need increased communication about various programs available. There has been a significant increase recently, but I think we could probably do better
	For the population that we serve I find that the service continually provides Essential Services and support to meet needs.
	I believe they do a good job of creating programs and services, but still need to work on getting the message out to more than the critical stakeholders. Broader-range.
	If you are mobile or have access you can handle things, but for those elderly in rural settings it is very challenging.
<b>4.1.1-4.1.4</b>	Collaboration of stakeholders to address public health issues
	Do a good job of finding champions
	Community wants a healthy, safe environment and are willing to work to that end
	Share the Community Organization’s directory with the community
	Update the Community Organization’s directory
<b>4.2.1-4.2.3</b>	Having a program like this has made significant strides in improving the overall opportunities to improve healthy lifestyles in the community.
	LPHS works to the highest level to accomplish this standard
	Strong Community Health Improvement Organization that is working systematically to attack issues that are significant.
	Bus service outside the city limits. Resources for the aging population that are more easily accessible.
<b>5.1.1-5.1.3</b>	Community is the 3 <sup>rd</sup> largest city in the state
	Handling training and major events with limited resources
	Numerous coalitions are hard to keep track of who and what resources they can provide
	Plan, train and coordinate prior to a major issue happening.
	Health department gains support for its programs and activities from a wide variety of partner agencies
	Health department has active participation in their stakeholder’s meetings, and represent the community’s needs
	LPHS strives to keep local community organizations informed and involved in up to date training to be prepared for major events.

<b>5.3.1-5.3.3</b>	CHIP is current and represents the strategies needed to improve overall health of the community
	Community Health Center monitors and oversees in order to see that the CHIP is on track and maintained.
	By keeping CHIP up to date, local organizations maintain their portion and are better able to keep on track.
	Need to sustain established working groups in identified areas that need improvement.
<b>5.4.1-5.4.3</b>	A plan that has been tested
	Annex H's and Local Emergency Response Coordinator do an excellent job of monitoring and responding.
	Time and money inhibit the community's ability to exercise and test plans
<b>6.3.1-6.3.5</b>	The LPHS takes a proactive approach to guide and mentor the community on health related legalities, for instance; during the Ebola concerns, the health department brought Law Enforcement Emergency Management and other first response agencies in and provided guidance and direction relevant to policies and legal limitations
<b>7.1.1-7.1.4</b>	We do have several organizations that try to target groups in need. I think we could probably work together a little more to identify them.
	Strength-federally qualified health center
	improvement opportunities-better definition of the roles and responsibilities for partners
	Strength-we have a wonderful free clinic
<b>7.2.1-7.2.4</b>	Weakness: many need health care and for one reason or another do not obtain, presenting in most cases a degree of public health threat.
	Great job in our community
<b>8.1.1-8.1.3</b>	We have started making the public more aware of healthy activities going in the community. Bike path and parks are more available. Still opportunities' for promoting positive things going on and focusing less on the negative.
	Collaborative assessments and programs
	Pay seems to be lower here than in other cities in the state. In an attempt to attract the best qualified health care providers, that might prove to be a deterrent.
<b>8.2.1-8.2.3</b>	Do people know what the 10 essential Public Health Services are?
<b>8.4.1-8.4.4</b>	The Health Department does a good job of bringing people from a variety of local businesses to get a balanced outlook of the community needs.

<b>9.3.1-9.3.4</b>	We have regular community meetings to keep everyone abreast of efforts being made in the community.
<b>10.3.1-10.3.4</b>	I am fortunate enough to have the educational background and resources to seek out answers I need, but I fear that the regular public may now be receiving the information needed. In terms of entities working collaboratively, I do not think we do that effectively. Educational institutions in the area should know more about what is happening. I work at an educational institution. My administration may know more about what is happening, but educators in the departments do not. I would think we should be able to find ways to communicate better in order to promote the development of more educational tools.
	The Health Department does a great job of communication with the community needs, the efforts and the plans of action to make healthcare better for our community.

## Comanche County Asset Mapping

### Purpose

Asset mapping provides information about the strengths and resources of a community and can help uncover solutions. Once community strengths and resources are inventoried and depicted in a map, you can more easily think about how to build on these assets to address community needs and improve health. Finally, asset mapping promotes community involvement, ownership, and empowerment.

### What is a community asset?

A community asset or resource is anything that **improves the quality of community life**.

Assets include:

- The capacities and abilities of community members.
- A physical structure or place. For example, a school, hospital, or church. Maybe a library, recreation center, or social club.
- A business that provides jobs and supports the local economy.
- Associations of citizens. For example, a Neighborhood Watch or a Parent Teacher Association.
- Local private, public, and nonprofit institutions or organizations.

### What are our plans for using these assets?

When we get to the step of action planning and choosing strategies, it will be essential that we can build from and connect assets in our communities. Without a collective knowledge of what's out there, what's being done, and where it is, we will risk duplication or missing important opportunities.





<b>Asset Inventory</b>	
<b>Individual Assets</b>	
<b>Citizen Assets</b>	
	Tobacco Sensation Endowment Fund Neighborhood Associations Cultural Organizations Faith-based Organizations
<b>Institutional Assets</b>	
Health Care Services	Hospitals Urgent Care Centers Private Physicians Community Health Centers & Free Clinics Public Health Departments Community Mental Health and Mental Health Providers Substance Abuse Treatment and Recovery Providers Nursing Homes, Rehabilitation, Home Health & Hospice
Cultural Assets	Museums Performing Arts Organizations Historical Organizations Public Spaces Community Events and Festivals Media Organizations
Recreational Assets	School-based athletics and Community Ed. Programs Community Centers Parks and Public Recreation Programs Walking/biking trails & Sidewalks YMCA & Non-profit Recreation and Fitness Orgs Private Membership Fitness Clubs
Food System Assets	Full-service Grocery Stores Community Gardens Farmer's Markets Restaurants with healthy food choices Food-Related Organizations
Public Safety Assets	Police and fire departments Environmental Protection Organizations
Employment Assets	Major Employers Small Employers Self-Employed & Startups Unemployment and Job-placement Services Chambers of Commerce and Business Associations
Transportation Assets	Public Transportation Providers Health Visit Transportation Providers Regional Transportation and Land Use Planning
Housing Assets	Homeless Prevention and Housing Organizations Weatherization, Home Improvement, and Home Safety Programs Rental Housing Landlords and Developments
Educational Assets	Childcare and Preschool Providers (0-5) K-12 School Districts Colleges and Universities Public Libraries
Organizational Assets	Informal groups and meetings Multi-sector Coalitions (i.e. Substance Abuse Prevention, Great Start, etc) Human Services Collaboratives Local Charities, Grant-makers, Foundations

## GROUP #1

**HEALTH CARE SERVICES**

---

Hospitals  
Urgent Care Centers  
Private Physicians  
Community Health Centers & Free Clinics  
Public Health Departments  
Community Mental Health and Mental Health Providers  
Substance Abuse Treatment and Recovery Providers  
Nursing Homes, Rehabilitation, Home Health & Hospice

---

**CULTURAL ASSETS**

---

Museums  
Performing Arts Organizations  
Historical Organizations  
Public Spaces  
Community Events and Festivals  
Media Organizations

---

## GROUP #2

**RECREATIONAL ASSETS**

---

School-based athletics and Community Ed. Programs  
Community Centers  
Parks and Public Recreation Programs  
Walking/biking trails & Sidewalks  
YMCA & Non-profit Recreation and Fitness Orgs  
Private Membership Fitness Clubs

---

**FOOD SYSTEM ASSETS**

---

Full-service Grocery Stores  
Community Gardens  
Farmer's Markets  
Restaurants with healthy food choices  
Food-Related Organizations

---

## GROUP #3

**PUBLIC SAFETY ASSETS**

---

Police and fire departments  
911 Emergency Services  
Animal Control  
Environmental Protection Organizations

---

**EMPLOYMENT ASSETS**

---

Major Employers  
Small Employers  
Self-Employed & Startups  
Unemployment and Job-placement Services  
Chambers of Commerce and Business Associations

---

**GROUP #4**

**TRANSPORTATION ASSETS**

---

Public Transportation Providers  
Health Visit Transportation Providers  
Regional Transportation and Land Use Planning

---

**HOUSING ASSETS**

---

Homeless Prevention and Housing Organizations  
Weatherization, Home Improvement, and Home Safety Programs  
Rental Housing Landlords and Developments

---

**GROUP #5**

**EDUCATIONAL ASSETS**

---

Childcare and Preschool Providers (0-5)  
K-12 School Districts  
Colleges and Universities  
Public Libraries

---

**ORGANIZATIONAL ASSETS**

---

Informal groups and meetings  
Multi-sector Coalitions (i.e. Substance Abuse Prevention, Great Start, etc)  
Human Services Collaboratives  
Local Charities, Grant-makers, Foundations

---

## 500 Cities: Local Data for Better Health

500 Cities Project allows for local targeting of interventions to areas where they are most needed for maximum public health impact. Everyone has a loved one, friend, or neighbor who has a chronic condition such as heart disease or cancer. Until now, local level data to understand and address these health challenges have been limited. This type of health data is now available through the 500 Cities Project, a new, interactive website that allows users to view and explore local data for America’s 500 largest cities.

### What is 500 Cities?

The 500 Cities Project is a partnership with the Centers for Disease Control and Prevention (CDC), the CDC Foundation, and the Robert Wood Johnson Foundation. The Project identifies, analyzes and reports on 27 chronic disease measures focusing on conditions, behaviors, and risk factors that affect the public’s health. While data have been available at the state, county, and some city levels, this project is a first of its kind release of data on a large scale for cities and neighborhoods within cities.

### Why is the 500 Cities Project an important resource?

The 500 Cities Project delivers local data to public health professionals, city officials, policy makers, and researchers. It helps them use the data to develop and implement effective and targeted public health prevention strategies and interventions, identify critical and emerging health problems, and establish health objectives. This project provides the data estimates necessary for local partners to focus efforts in areas where they are most needed. For example, health department officials can use the website to find communities that have a high estimated burden of heart disease and stroke and then plan blood pressure and cholesterol screenings in those areas. Through the 500 Cities Project, users can zoom in to their neighborhood and explore local data in the larger context of their city. See website link below.

<https://www.cdc.gov/features/500-cities-project/index.html>

The screenshot shows the CDC website interface. At the top left is the CDC logo with the text 'Centers for Disease Control and Prevention' and the tagline 'CDC 24/7: Saving Lives, Protecting People™'. To the right is a search bar with the word 'SEARCH' and a magnifying glass icon. Below the search bar is a dropdown menu labeled 'CDC A-Z INDEX'. The main content area has a dark blue header 'CDC Features'. On the left is a sidebar menu with categories like 'Data & Statistics', '500 Cities: Local Data for Better Health', 'Diseases & Conditions', etc. The main content area displays the title '500 Cities: Local Data for Better Health' with social media icons for Facebook, Twitter, and a plus sign. Below the title is a paragraph: '500 Cities Project allows for local targeting of interventions to areas where they are most needed for maximum public health impact. Everyone has a loved one, friend, or neighbor who has a chronic condition such as heart disease or cancer. Until now, local level data to understand and address these health challenges have been limited. This type of health data is now available through the 500 Cities Project, a new, interactive website that allows users to view and explore local data for America's 500 largest cities.' Below this is a sub-section 'What is 500 Cities?' with a paragraph: 'The 500 Cities Project is a partnership with the Centers for Disease Control and Prevention (CDC), the CDC Foundation, and the Robert Wood Johnson Foundation. The Project identifies, analyzes and reports on 27 chronic disease measures focusing on conditions, behaviors, and risk factors that affect the public's health. While data have been available at the state, county, and some city levels, this project is a first-of-its-kind release of data on a large scale for cities and neighborhoods within cities.' To the right of the text is a graphic with a colorful city skyline and the text '500 Cities: Local data for better health'.



# Oklahoma State Department of Health

## State of the County's Health Report

### #HealthierOK

Comanche County  
Spring 2017

Being healthy means optimizing all aspects of well-being, including physical, mental, and social well-being.<sup>1</sup> Health is influenced by a variety of personal, social, economic, and environmental factors called 'determinants of health',<sup>2</sup> such as our genetics, behaviors, where we live, and accessibility to health care. The determinants of health are inter-related, whereby changes in one determinant impact other determinants. As such, interventions and policies that target more than one determinant will have greater impact on our health.<sup>2</sup>

Oklahoma has historically ranked poorly in many key health indicators. The United Health Foundation ranked Oklahoma's overall health in 2016 as 45<sup>th</sup> in the United States in their annual *America's Health Rankings* report.<sup>3</sup> Most of the indicators in the report relate to conditions that Oklahomans live with every day, such as poverty and limited access to primary care. The report cited Oklahoma's high prevalence of smoking, uninsured, and premature death rate as some of the state's biggest challenges. Such conditions, along with risky health behaviors like smoking and physical inactivity, contribute to the poor health status of Oklahomans.

Recently, Oklahoma has experienced improvement in some key areas. Despite still having high prevalence of smoking, the rates have declined significantly over the past few years.<sup>4</sup> The rate of teen births has declined 39% in 6 years,<sup>5</sup> and the rate of infant deaths remains lower than it was in 2000.<sup>6</sup> The Oklahoma Health Improvement Plan (OHIP) encourages Oklahomans to work together across multiple health care systems to strengthen resources and infrastructure, enabling sustainable improvements in health status.<sup>7</sup> Every small step forward is progress leading to a #HealthierOK!

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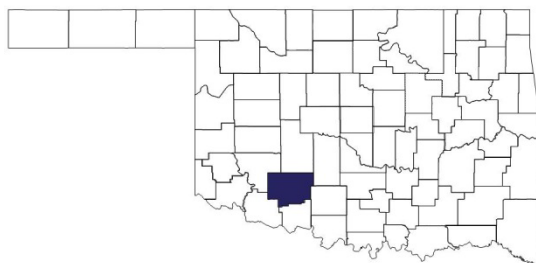
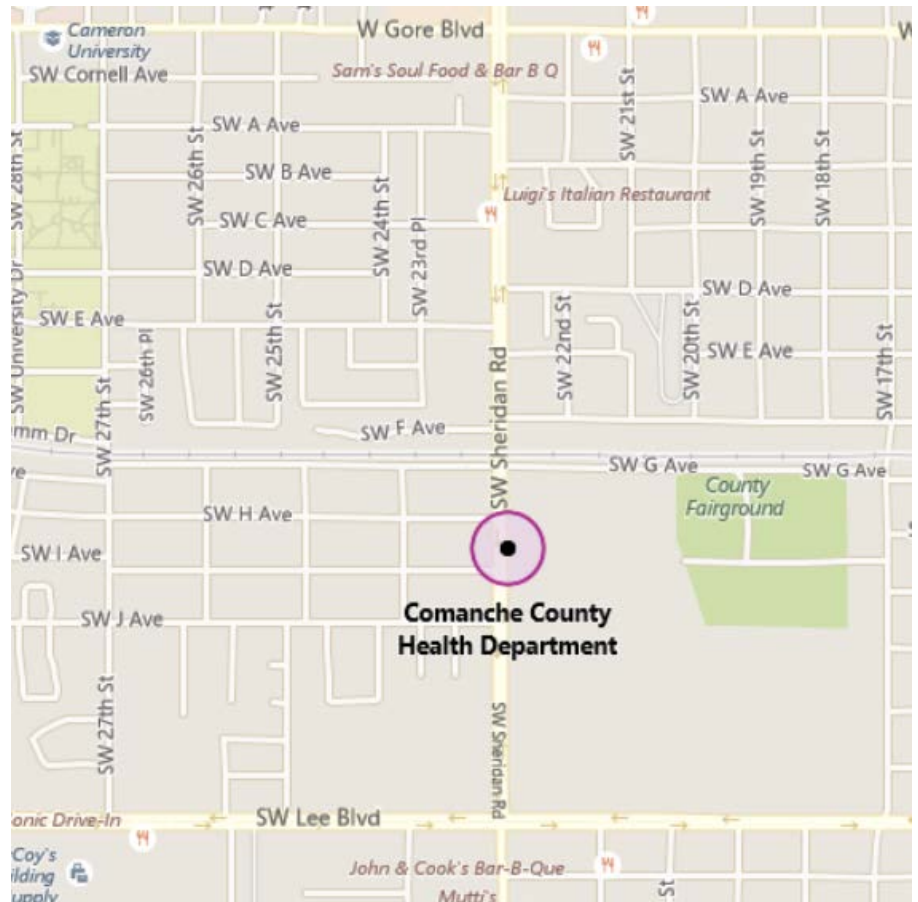
Oklahoma State Department of Health (OSDH)	Shape your Future Oklahoma	Comanche County Health Department
Facebook.com/Oklahoma-State-Department-of-Health	Facebook.com/shapefutureok	Facebook.com/ComancheCountyHealthDepartment
@HealthyOklahoma	@shapefutureok	N/A
Youtube.com/user/HealthyOklahoma	Youtube.com/user/ShapeFutureOK	N/A

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## County Spotlight

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*Scale: 1 (best) - 77 (worst)*

Compared to all other Oklahoma counties, Comanche County ranks:

- **2<sup>nd</sup>** for percent of mothers receiving prenatal care in the 1<sup>st</sup> trimester (2011-2015)
- **4<sup>th</sup>** for unintentional injury mortality rate (2011-2015)
- **5<sup>th</sup>** for motor vehicle mortality rate (2011-2015)
- **9<sup>th</sup>** for percent of physically inactive population (2015)
- **16<sup>th</sup>** for suicide mortality rate (2011-2015)



### *About Comanche County<sup>8</sup>:*

The county was named after the Comanche tribe. It was originally part of the Kiowa-Comanche-Apache Reservation, but was selected by lottery to open to non-Indian citizens on August 6, 1901. Over the next few decades, much of the land was taken to create parts of Tillman, Grady, Jefferson, Stephens, Kiowa, and Cotton counties. The economy has largely existed through agriculture, Fort Sill military, raising livestock, mineral resources, and oil and gas wells.<sup>9</sup>

### **Fun Facts:**

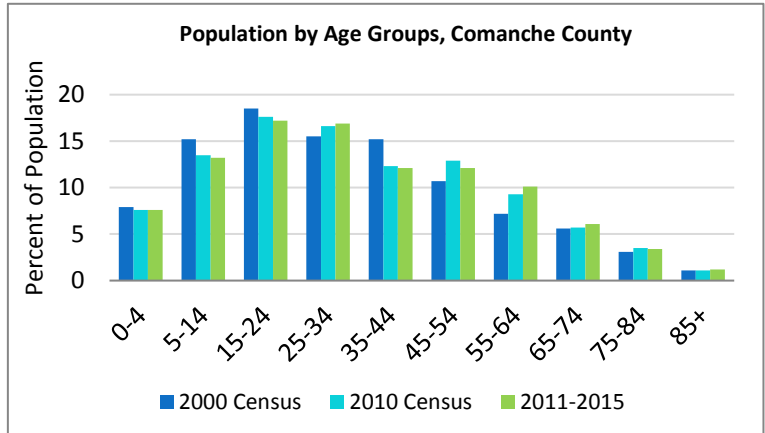
- U.S. Senators Thomas P. Gore and John William Elmer Thomas have resided in Comanche County.
- Fort Sill became a national historic landmark on December 19, 1960.
- The county is home to the Wichita Mountains National Wildlife Refuge and the Museum of the Great Plains.
- The first Western movie ever made, “The Bank Robbery”, was filmed in Cache around 1907.
- The 1949 movie “The Prince of Peace” was also known as “The Lawton Story” because it was filmed in Lawton; the actors’ Oklahoman accents were so strong that the film had to be dubbed “from English to English.”
- There are 31 locations in the county on the National Register of Historic Places.

### **DATA NOTE:**

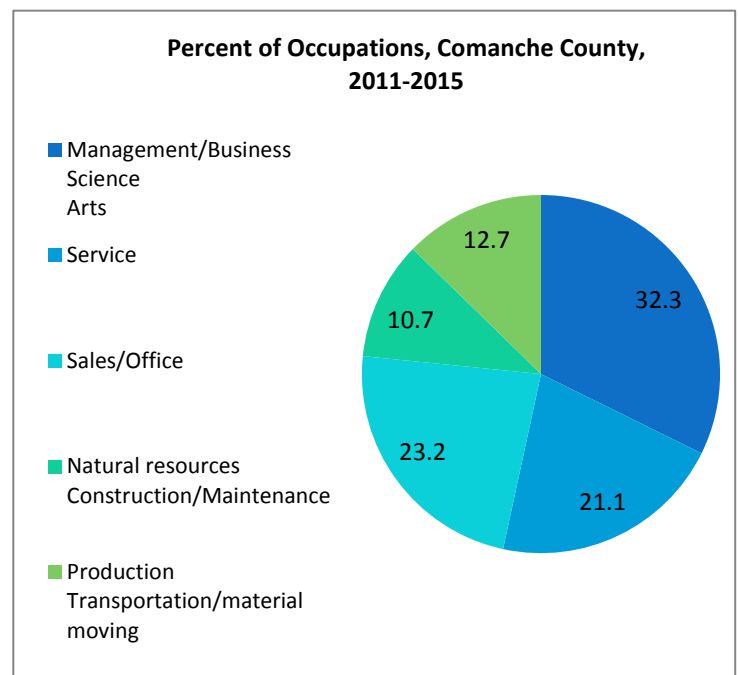
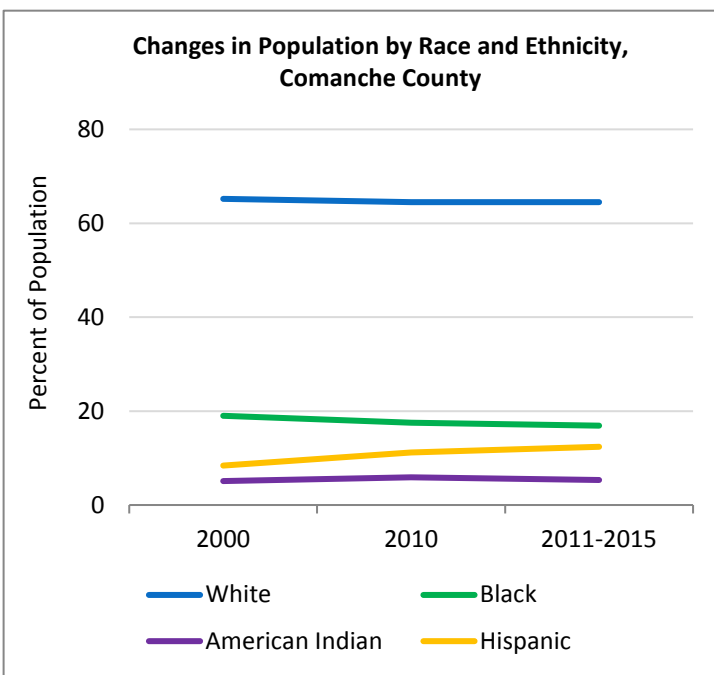
Multiple years of data are utilized in this report to create more stable estimates of health indicators for Oklahoma’s small populations. Trends and comparisons across groups are made when possible. Because the Behavior Risk Factor Surveillance System (BRFSS) data are not sampled at the county level, Health Care Information at the Oklahoma State Department of Health has created small area estimates through statistical modelling to enable discussion of county-level data. However, these small area estimates are not comparable to state and national data that are derived via the CDC’s standard weighting process. In addition, the CDC instituted new data weighting methodology for BRFSS data, rendering data prior to 2011 incomparable to data for 2011 and later. Also note that some data are not available for every year.

## County Demographics and Socioeconomic Profile

Demographics	County
Population, 2011-2015 estimate <sup>9</sup>	125,531
Population, percent change, 2000 to 2015	9.2% increase
Rank for growth in state (out of 77)	21 <sup>st</sup>
<b>Race and Ethnicity, 2011-2015<sup>10</sup></b>	
Whites alone	64.5%
Blacks alone	16.9%
Native Americans alone	5.3%
Hispanic or Latino	12.4%
<b>Age, 2011-2015<sup>10</sup></b>	
Less than 5	7.6%
65 and Over	10.7%
Median age	31.8 years

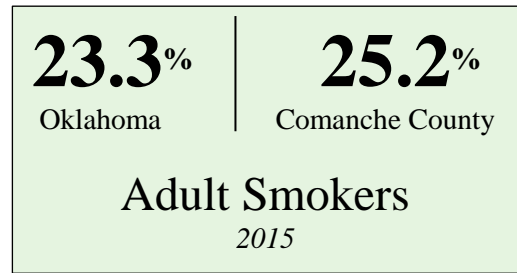


Socioeconomic Profile (2011-2015 estimates <sup>10</sup> )	County	State	National
Disability (ages 18-64)	16.8%	13.9%	10.3%
Of employed, percent disabled	9.1%	7.1%	4.9%
Individuals below poverty	17.6%	16.7%	15.5%
Families below poverty	13.9%	12.4%	11.3%
With children under 18 years	20.7%	19.7%	18.0%
With children under 5 years only	22.2%	22.2%	18.0%
Median household income	\$57,040	\$46,879	\$53,889
Female head of household	14.7%	12.4%	13.0%
Grandparents raising their grandchildren	51.3%	51.8%	37.3%
High school graduates or higher	89.3%	86.9%	86.7%
Bachelor's degree or higher	20.8%	24.1%	29.8%
Occupied housing units	84.0%	86.1%	87.7%
Uninsured (ages 18-64)	15.3%	16.7%	18.1%
Unemployment rate, civilian labor force	8.6%	6.3%	8.3%

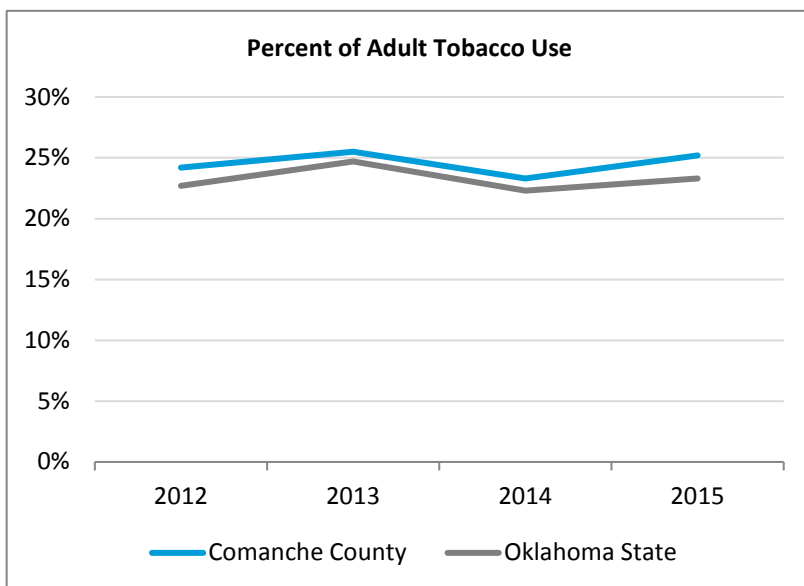
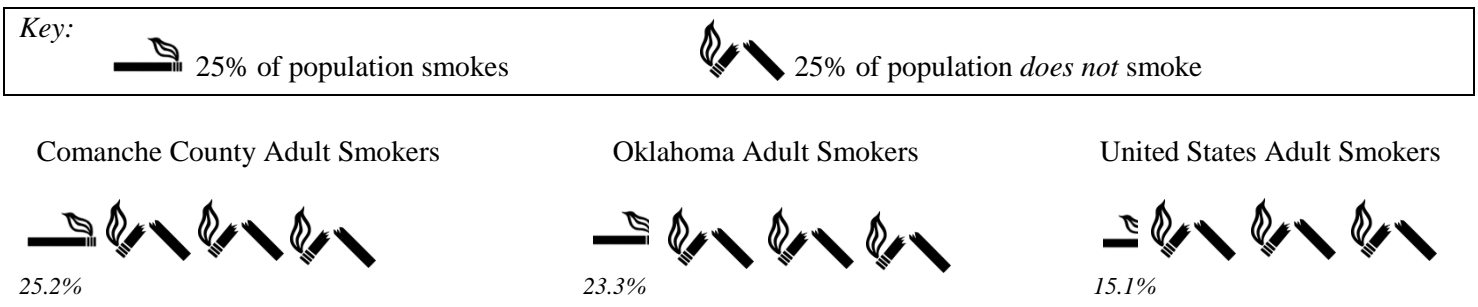


## OHIP Flagship Issue #1: Tobacco Use Prevention

While smoking rates continue to decline in the United States, tobacco is still the leading contributor of preventable deaths in the United States; a quarter of coronary heart disease deaths, 82% of lung cancer deaths, and 61% of pulmonary diseases are attributed to tobacco use.<sup>11</sup> Oklahoma consistently has one of the highest rates of adult smokers in the country. The 2015 Oklahoma rate is higher than the 2015 national rate (15.1%), as well as the previous 2014 rate (22.3%).<sup>12,13,14</sup> Fortunately, 52.7% of previous Oklahoma smokers have quit, which is similar to the national average of 58.8%.<sup>13</sup>



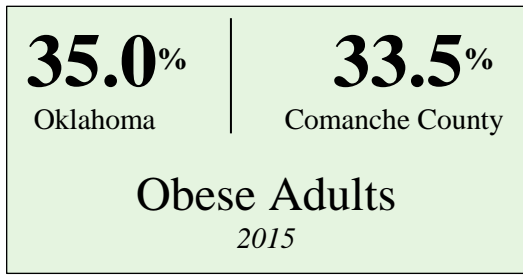
Data from 2015 show that racial disparities do exist in tobacco use, with a higher percentage of Oklahoma American Indian adults smoking (32.5%) compared to Black (25.0%), White (21.4%), and Hispanic (17.1%) adults.<sup>14</sup> Additionally, young adults (aged 25-34 years, 27.6%) comprised the highest percentage of smokers in the Oklahoma population, as well as males (24.0%) compared to females (20.4%).<sup>14</sup>



Attributable expenses for smoking in for the state in 2009, the most recent year for data, was \$1.62 billion, including ambulatory, hospital, prescription drug, and nursing home expenses, but excluding dental expenditures.<sup>15</sup> From 2005-2009, 7,490 deaths were attributable to smoking in Oklahoma.

Of concern are other types of tobacco use, such as smokeless tobacco and now e-cigarettes. Almost 7% of Oklahoma adults use smokeless tobacco products, with almost 70% of smokeless tobacco users also being smokers. E-cigarettes usage has also increased among tobacco users of all ages, both nationally and at the state-level.<sup>16,17</sup> For example, 19% of Oklahoma high school students used e-cigarettes in 2015, dramatically increased from 6.3% in 2013.<sup>18</sup>

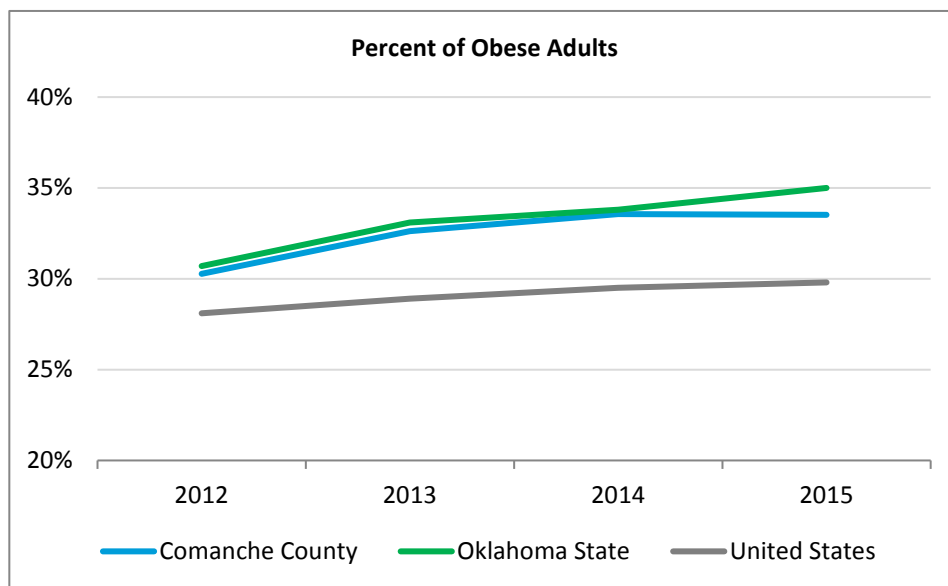
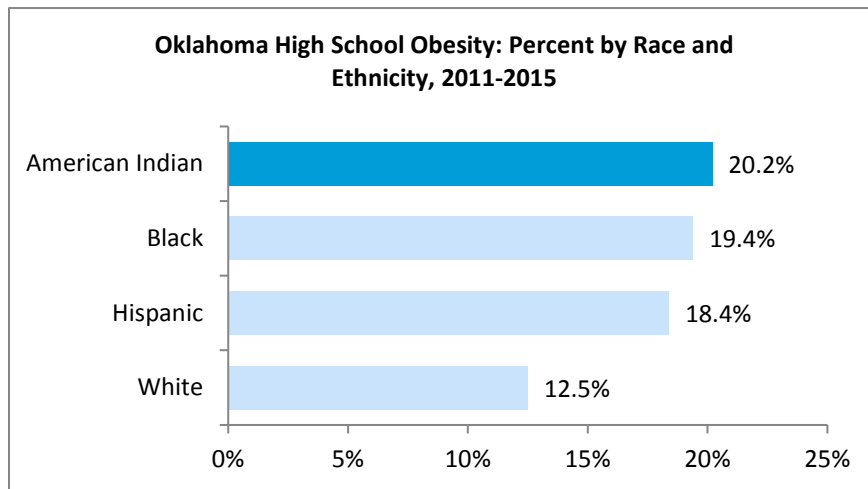
## OHIP Flagship Issue #2: Obesity



Obesity is a primary cause of adult deaths and is defined as having a BMI greater than 30.0 kg/m<sup>2</sup> (BMI = weight in kg/square of height in m).<sup>19</sup> In addition to its association with mortality, obesity increases risk for several chronic diseases such as heart disease and type 2 diabetes.<sup>20</sup> Unfortunately, obesity rates have continued to rise in Oklahoma. Thirty-four percent of adult females and 33.7% of adult males in Oklahoma were obese in 2015, and nearly half of American Indian adults were obese, followed by Black (36.9%), White (32.9%), and Hispanic (32.0%) adults.<sup>14</sup>

Additionally, obesity continues to be a problem for youth in Oklahoma. Nearly 14% of 2- to 4-year-old WIC participants were obese from 2000–2014, as well as 17.4% of 10- to 17-year-olds in 2011.<sup>21, 22</sup> Data from the Youth Risk Behavior Surveillance System (YRBSS) show that 15.4% of high school students self-reported obesity from 2011-2015. More male (18.1%) than female (12.8%) students were obese.<sup>23</sup>

Medical costs for obese individuals were estimated to be \$2,741 higher than per capita spending for normal weight individuals in 2005, and this economic burden can be expected to increase as the cost of health care increases.<sup>24</sup>

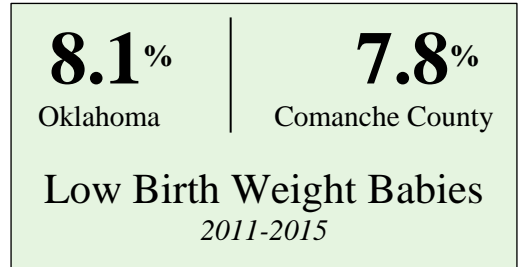


## OHIP Flagship Issue #3: Children's Health

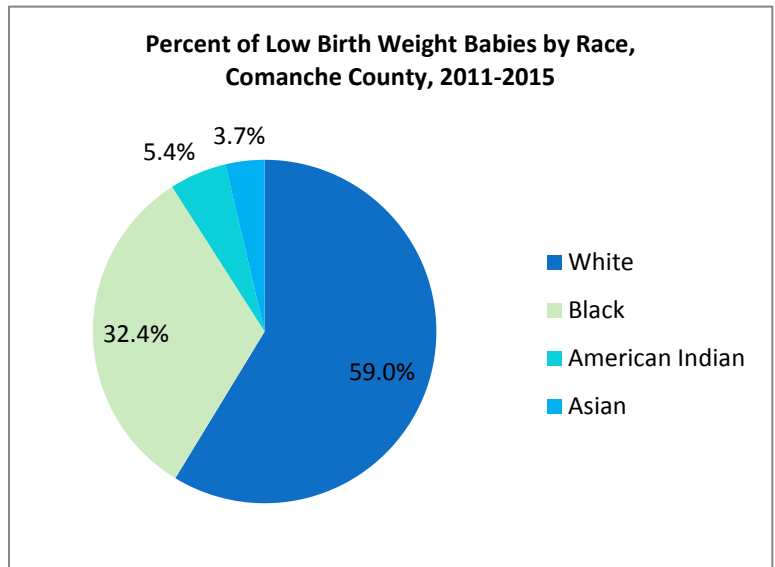
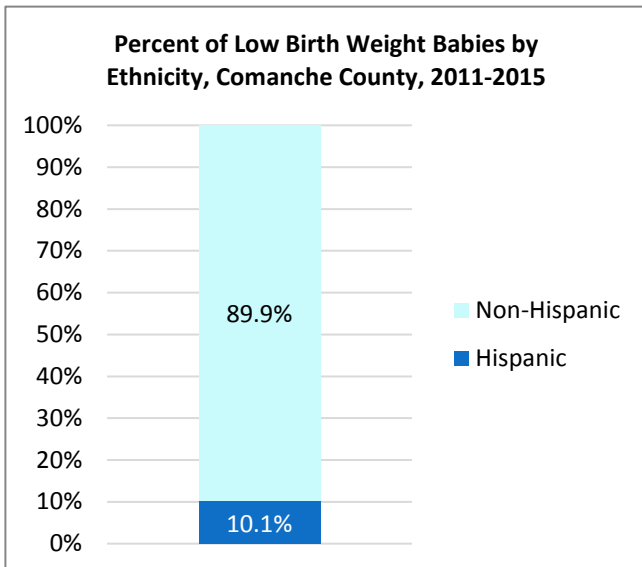
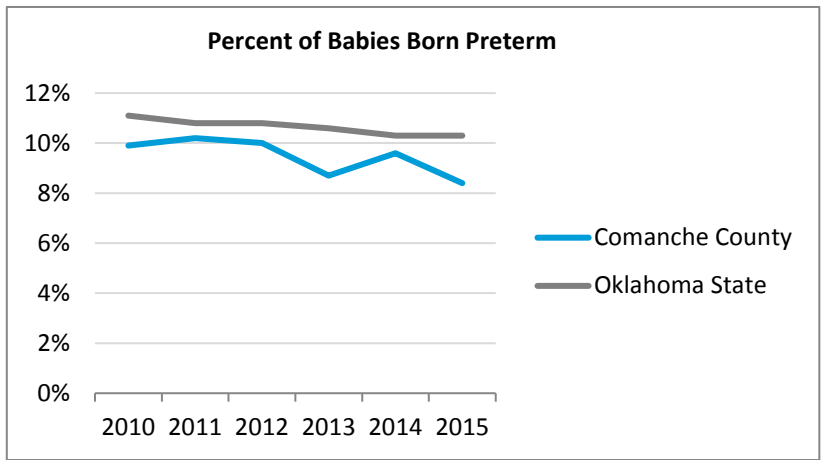
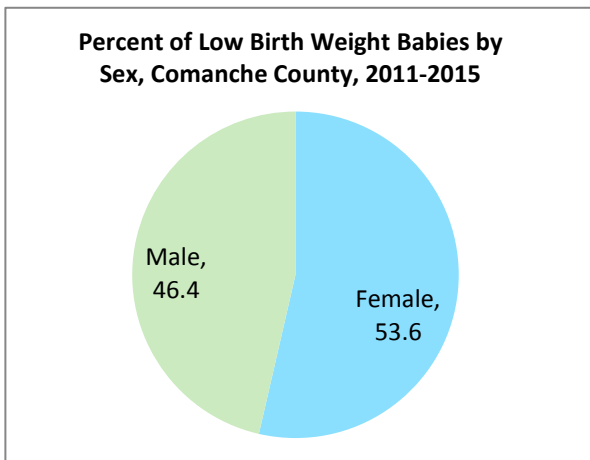
Of Oklahoma mothers giving birth from 2011-2015, 58% were married; in Comanche County, 60.6% were married. Three percent of mothers giving birth in the county had gestational diabetes, which is lower than the state average of 4.1%. Additionally, 11.4% of live births in the county were to mothers who smoked during pregnancy, which is lower than the state's average of 13.5%.<sup>25</sup>

### Low Birth Weight

Low birth weight (i.e., weighing fewer than 5 pounds and 8 ounces, or 2500 grams) and preterm births (i.e., 37 weeks of gestation or less) together are the second leading cause of death among children less than 1 year of age.<sup>26</sup> Low birth weight infants are more at risk of health problems compared to infants born of normal weight, including infection, gastrointestinal problems, delayed motor and social development, and learning disabilities. Low birth weight infants may also be at higher risk of high blood pressure, diabetes, and heart disease later in life.<sup>27</sup>

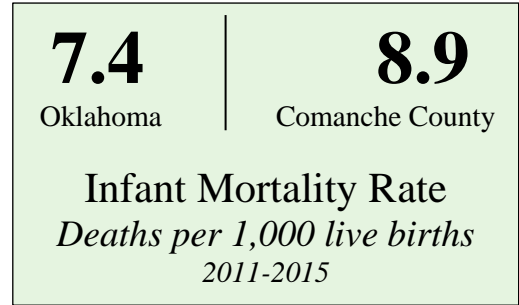


The state rate is the same as the latest national data (8.1% in 2015).<sup>27</sup> When considering race from 2011-2015, Oklahoma Black babies were more likely to be of low birth weight (13.4%) compared to White (7.5%), American Indian (7.0%), and Asian (7.8%) babies.<sup>25</sup>



### Infant Mortality Rate

The infant mortality rate (IMR) is an important indicator of the health of a nation and is also a reflection of maternal health, accessibility and quality of primary health care, and the availability of supportive services in the community.<sup>28</sup> The leading causes of infant death include congenital malformations (i.e., medical conditions present at birth), disorders related to short gestation (fewer than 37 weeks of pregnancy completed) and low birth weight (less than 5 lbs., 8 oz.), and Sudden Infant Death Syndrome (SIDS).<sup>26</sup>



Oklahoma’s 2011-2015 IMR, although slightly lower than its previous 2006-2010 rate of 7.6 deaths per 1,000 live births, has resulted in 147,075 years of potential life lost from 2011-2015, based on an average age of death in Oklahoma of 75 years.<sup>29</sup> The rate is also still significantly higher than the national rate of 6.0 infant deaths per 1,000 live births in 2013.<sup>30</sup> Further, racial disparities exist in IMR, with Oklahoma’s Black infant rate being more than double the rates of White and Asian infants. The IMR for Black infants declined between 2006-2010 estimates and 2011-2015 estimates (15.6 to 14.5, respectively),<sup>29</sup> but is still extremely high.

**6,450**

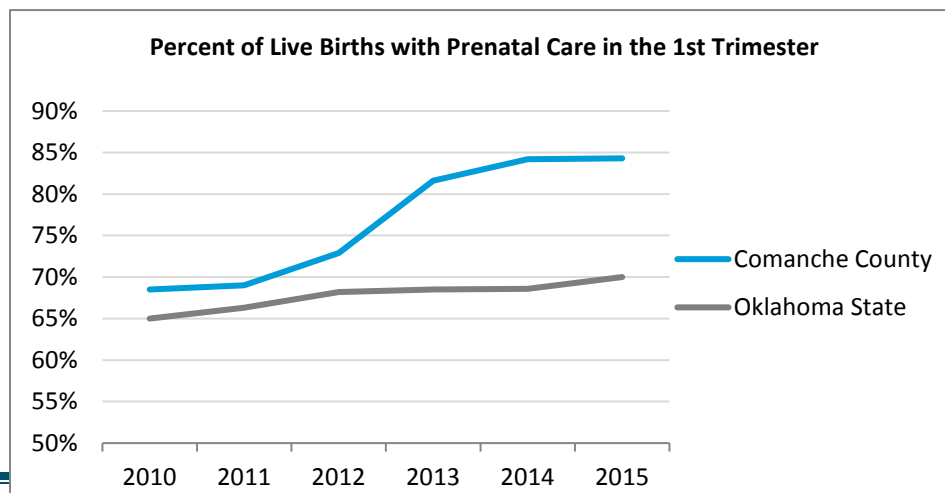
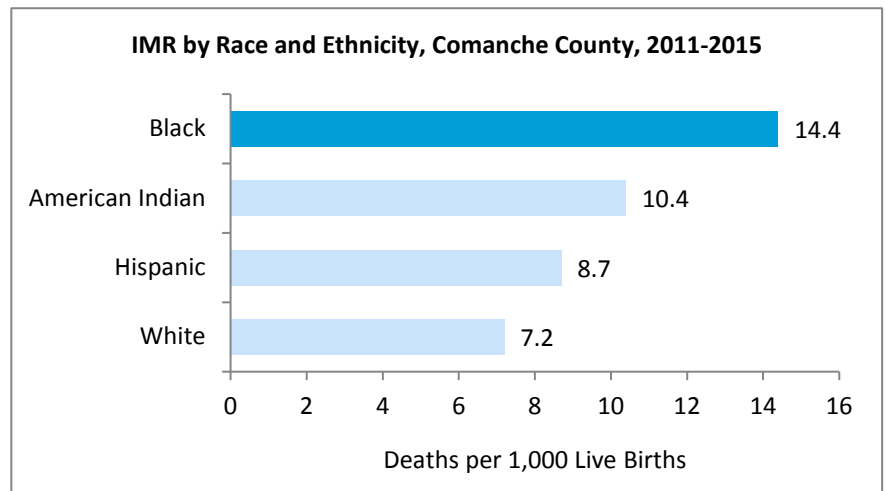
### Years of Potential Life Lost

Comanche County, 2011-2015

Based on an average death in Oklahoma of 75 years

Comanche County’s IMR is 20.3% higher than the state rate and 18.4% lower than the county rate from 2006-2010 (10.9 deaths per 1,000 live births). Additionally, since 2006-2010 data, all race rates have decreased, but Hispanic infant mortality rates have increased.<sup>29</sup>

While organizations across Oklahoma have been working together to reduce infant mortality as part of the Preparing for a Lifetime, It’s Everyone’s Responsibility initiative,<sup>31</sup> there is still much work to do. One way to reduce infant mortality is through receiving prenatal care in the first trimester, which is believed to reduce the risk of maternal and infant sickness and death as well as preterm delivery and low birth weight. From 2011-2015, 78.3% of women who had a live birth in Comanche County accessed prenatal care during the first trimester of their pregnancy.<sup>25</sup>





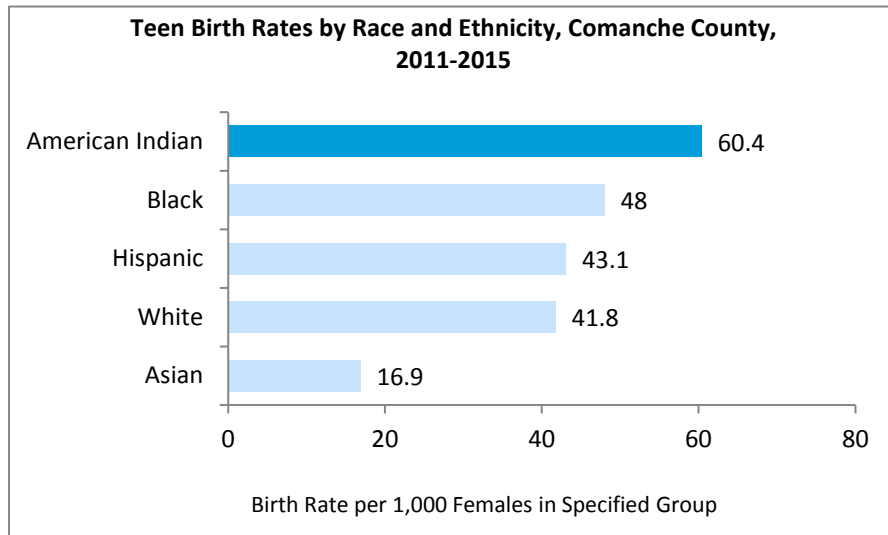
*Teenage Pregnancy*

<p><b>42.2</b> Oklahoma</p>	<p><b>44.1</b> Comanche County</p>
<p><b>Teen Birth Rate</b> <i>Births per 1,000 female population aged 15-19 years 2011-2015</i></p>	

Although births to teen mothers have been declining in recent years,<sup>32</sup> Oklahoma still has one of the highest teen birth rates in the country (ranked at 48<sup>th</sup> in the nation),<sup>33</sup> including a high rate of repeat births.<sup>34</sup> Pregnant teens are more likely than older pregnant females to experience medical complications, have low educational attainment, and engage in unhealthy behaviors that put their unborn child at risk.<sup>35</sup> Children of teen mothers are more likely than children of older mothers to display poor health and social outcomes, such as premature birth, low birth weight, behavioral problems, and abuse and neglect.<sup>36</sup> Additionally, infant mortality rates are highest for babies of teen mothers.<sup>26</sup>

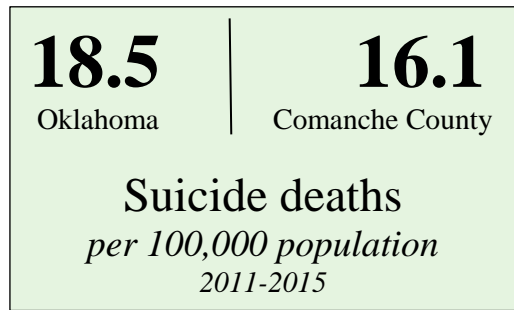
Comanche County’s teen birth rate is slightly higher than the state rate and nearly double the 2015 national rate of 22.3.<sup>25,37</sup> The current county rate is 25.1% lower than the 2005-2009 rate. The majority of births in Comanche County to teen mothers are first births (79.5%), while 16.5% are second births, and 4% are the third or more births.<sup>25</sup>

Recent estimates place the cost of teen childbearing in Oklahoma at \$169 million in 2010, and this includes only health care and other costs associated with the children, not the mothers.<sup>38</sup>



## OHIP Flagship Issue #4: Behavioral Health

From 2013-2014, nearly 20% of adult Oklahomans had a mental illness and 4.4% had a serious mental illness. This is similar to the national rates for the same time period of 18% and 4.2%, respectively. Further, it is estimated that 3.9% of Oklahoman adults had thoughts of suicide from 2013-2014; this rate is the same as the national rate. What is even more troubling is that only 42% of Oklahoman adults with a mental illness had received treatment or counseling from 2010-2014.<sup>39</sup>



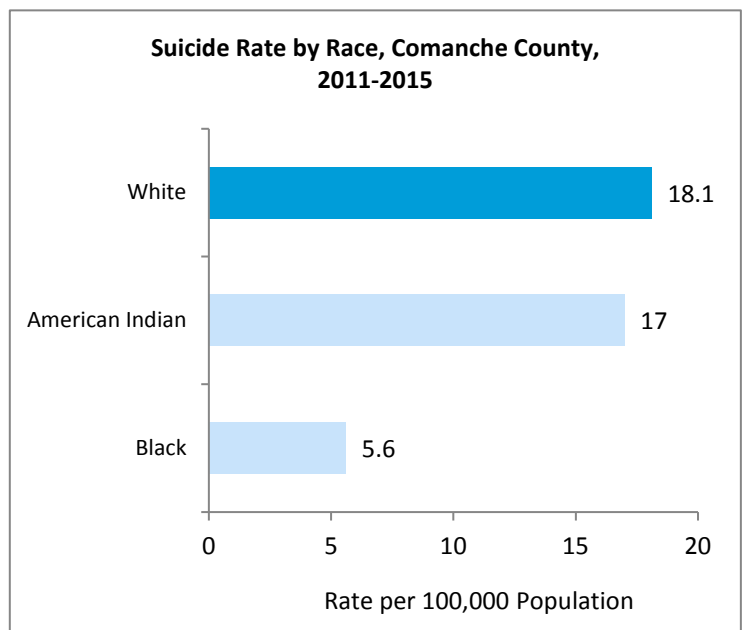
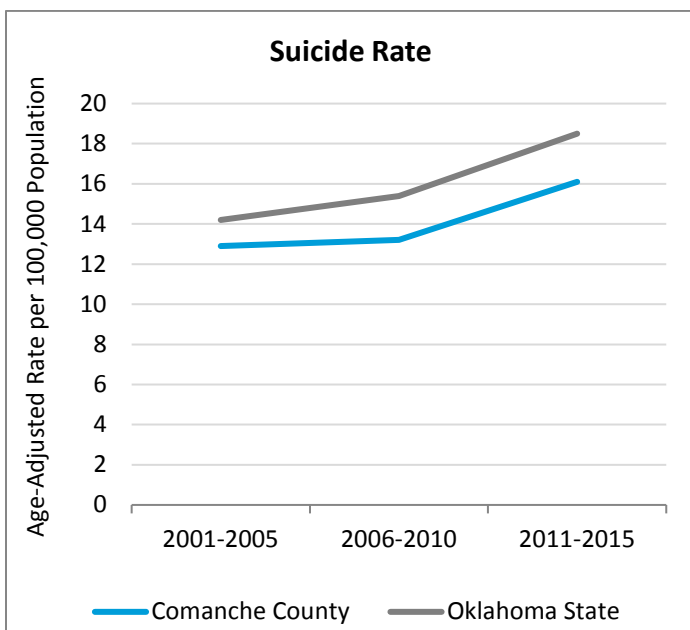
Adolescents are not spared from mental illness either. From 2013-2014, one in ten Oklahoman adolescents (compared to the 11% national average) experienced a major depressive episode and of those, over half did not receive any treatment for depression.<sup>39</sup> Unfortunately, 2015 data show that 15.1% of high school youth seriously considered attempting suicide and 7.4% attempted one or more times.<sup>23</sup>

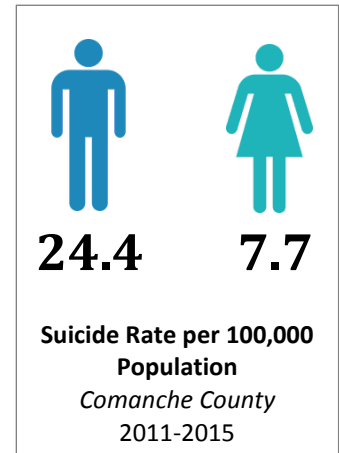
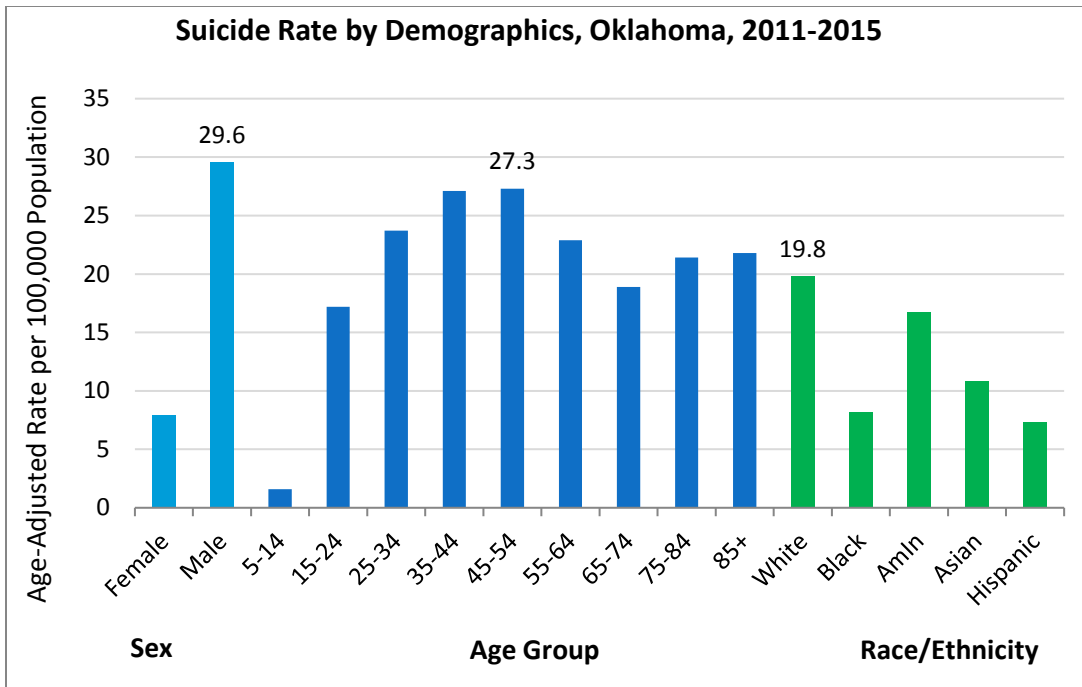
Substance use and abuse is also a problem among both adolescents and adults. From 2013-2014, 8.1% of adolescents in Oklahoma had used illicit substances in the past 30 days (national average: 9.1%), and 5.3% of Oklahoman adolescents used pain relievers for nonmedical use (national average: 4.7%). Two percent of Oklahomans 12 years and older were dependent on or abused illicit drugs (national average: 2.6%), and of those with a dependence/abuse problem, 85% did not get any addiction treatment (2010-2014). Further, from 2013-2014, 6.4% of Oklahomans over 12 years of age had alcohol dependence or abuse (national average: 6.5%). Of those, 92.8% did not receive treatment (2010-2014).<sup>39</sup>

**\$382,485,734**  
*Mental illness*  
*hospital inpatient cost*  
*Oklahoma, 2014*

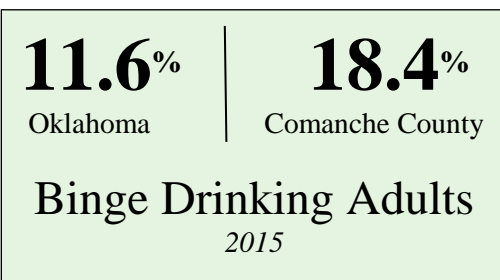
Oklahoma hospital inpatient discharge data for 2014 show 19,352 discharges related to mental illness with an average stay of 10.8 days. In Comanche County, 721 discharges were for mental illness, costing \$23,602,168 total. The average length of stay was 16.7 days. Both sexes had similar discharge rates, but males stayed double the length of females (22 days and 11.6 days, respectively).<sup>40</sup>

The Oklahoma suicide rates are highest for men, 45-54 year-olds, and White individuals. The highest rates for Comanche County were for males, 75-84 year-olds (41.2 deaths per 100,000 population), and White individuals. Additionally, ages 45-54 (28.9) and 35-44 (25) had high rates.<sup>29</sup>



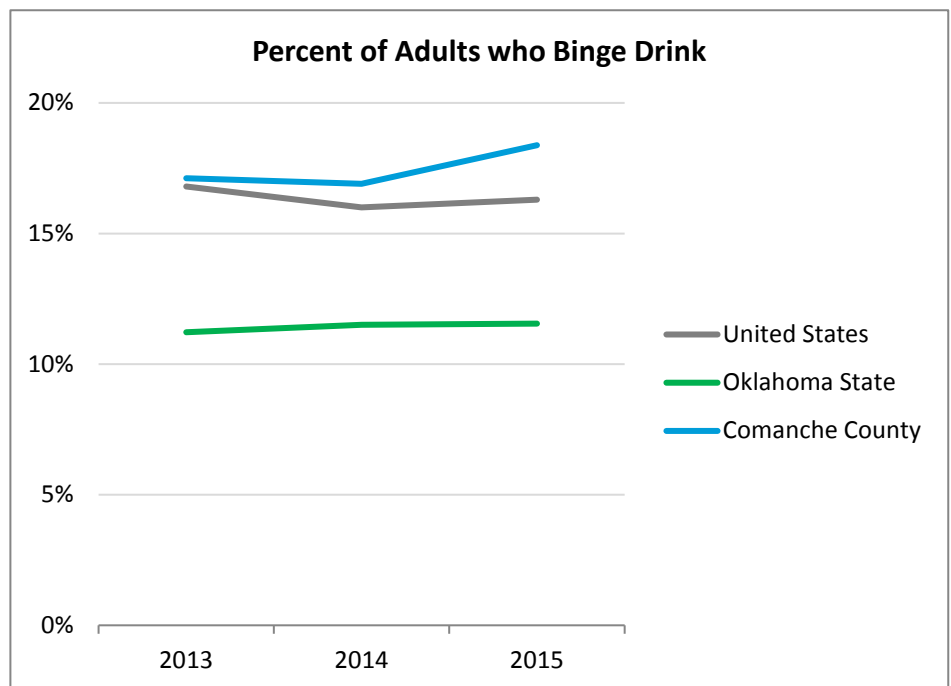


### Binge Drinking



In 2015, 41.9% of Oklahoman adults had at least one drink of alcohol in the past month, lower than the national average of 53.6%. This percentage has slowly decreased since 2011, both at the state and national level. Binge drinking (five or more alcoholic beverages on one occasion for men, four or more for women), however, continues to be an occurrence for many adult Oklahomans. Unlike the decreases in monthly use of alcohol, engagement in binge drinking has increased slightly since 2013 at the county level, while remaining steady at the state and national levels.<sup>14</sup>

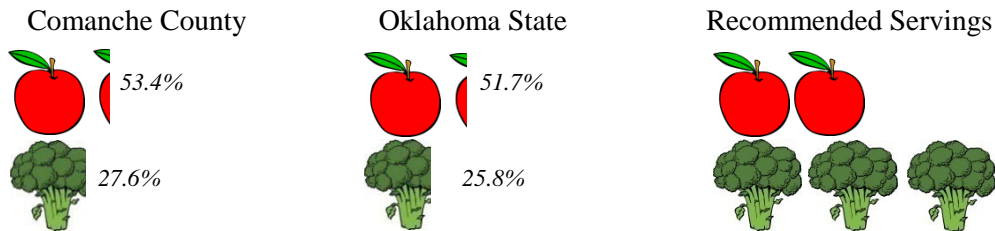
Oklahoma high school youth also admit to alcohol use. Fifteen percent drank alcohol before the age of 13 (highest for American Indian and Hispanic males), 27.3% consumed one or more drinks in the past month (highest for Hispanic and White males), and 5.8% had 10 or more alcoholic drinks in a row (highest for males). Further, nearly half had alcohol given to them (highest for White and Hispanic females).<sup>23</sup>



## Nutrition and Physical Activity

Poor diet is a primary cause of adult deaths in the U.S.<sup>41,19</sup> While poor diet can be characterized in many different ways, a common proxy measure is assessing fruit and vegetable consumption. A recent study determined that fruit and vegetable consumption is associated with reduced risk of death.<sup>42</sup> Oklahoma has typically ranked as one of the worst states for fruit and vegetable consumption among adults. In 2013, the last year data were available for every state, Oklahoma ranked second to last in consuming three daily servings of vegetables and third to last in consuming two or more daily servings of fruits.<sup>43</sup>

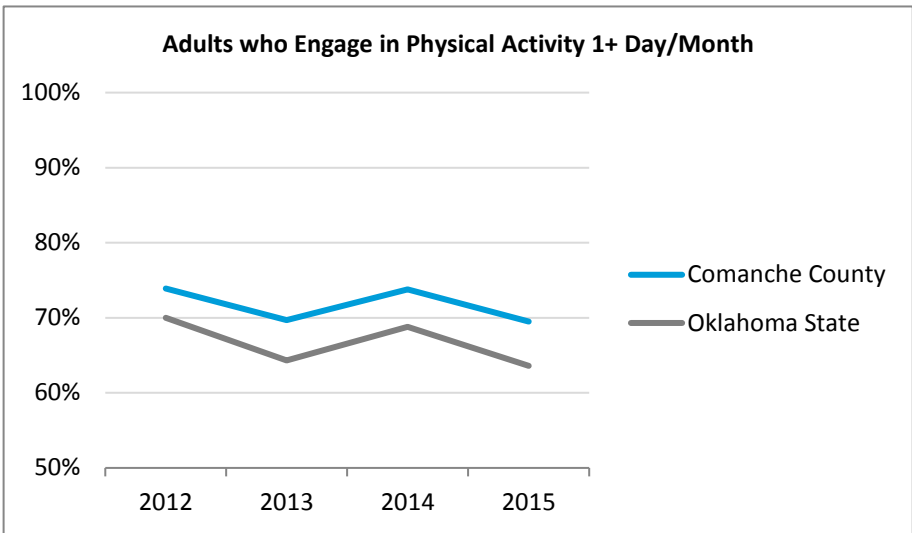
**Key:**

### Physical Activity

Physical inactivity was reported to be a leading contributor to almost 1 in 10 adult deaths in the U.S.<sup>20</sup> In 2014, close to 24% of U.S. adults did not engage in any physical activity.<sup>44</sup> Adults who engage each week in 150 minutes of moderate to vigorous intensity aerobic activity in bouts of at least 10 minutes experience improved health and fitness and reduced risk of several chronic diseases.<sup>45</sup>

<b>36.4%</b> Oklahoma	<b>30.5%</b> Comanche County
<b>Adults who Do Not Engage in Physical Activity</b> 2015	



Youth who are regularly active have a better chance of having a healthy adulthood. Children and adolescents should get at least 60 minutes of moderate intensity physical activity most days of the week, preferably every day, and three of those days should include vigorous intensity aerobic activity.<sup>46</sup> Statewide from 2013-2015, 53.8% of high school students were physically active for one hour at least five days of the week.<sup>23</sup>

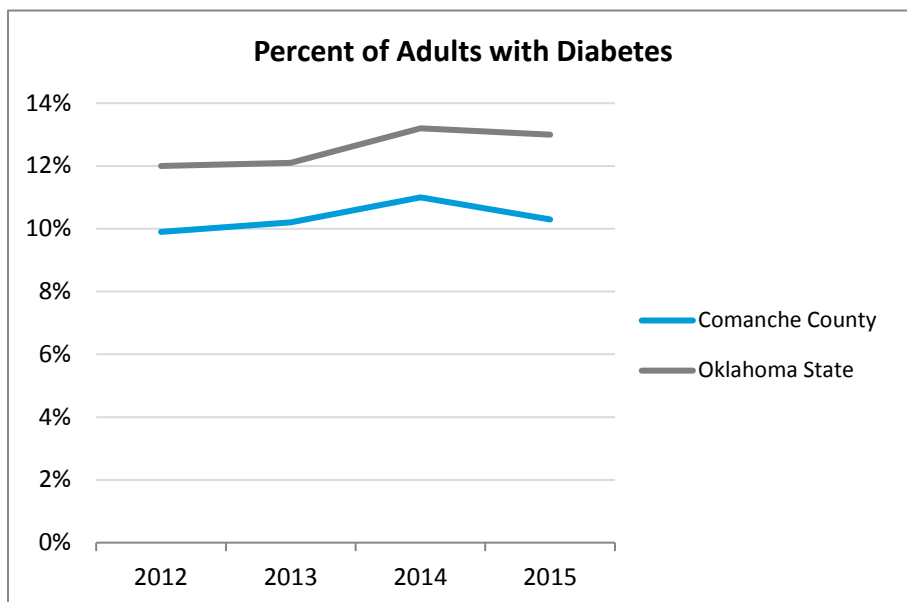
## Diabetes

<b>13.0%</b> Oklahoma	<b>10.3%</b> Comanche County
<b>Adults Diagnosed with Diabetes</b> 2015	

Type II Diabetes Mellitus is a chronic disease characterized by high levels of sugar (i.e., glucose) in the bloodstream due to the body’s resistance to insulin. If left untreated, serious complications can arise, including heart disease, renal failure, retinopathy, and neuropathies. Several risk factors may increase the likelihood of developing diabetes. Some of these risk factors cannot be changed (eg., aged 45 years and older, family history). Other risk factors relate to behaviors, such as prediabetes, overweight/obesity, being physically inactive, and having high blood pressure.<sup>47</sup>

The American Diabetes Association released a report estimating the total cost of diagnosed diabetes to be \$245 billion in the U.S. in 2012.<sup>48</sup> This amount includes both direct medical costs and reduced productivity. They estimated the largest component of direct medical costs to be hospital inpatient care.

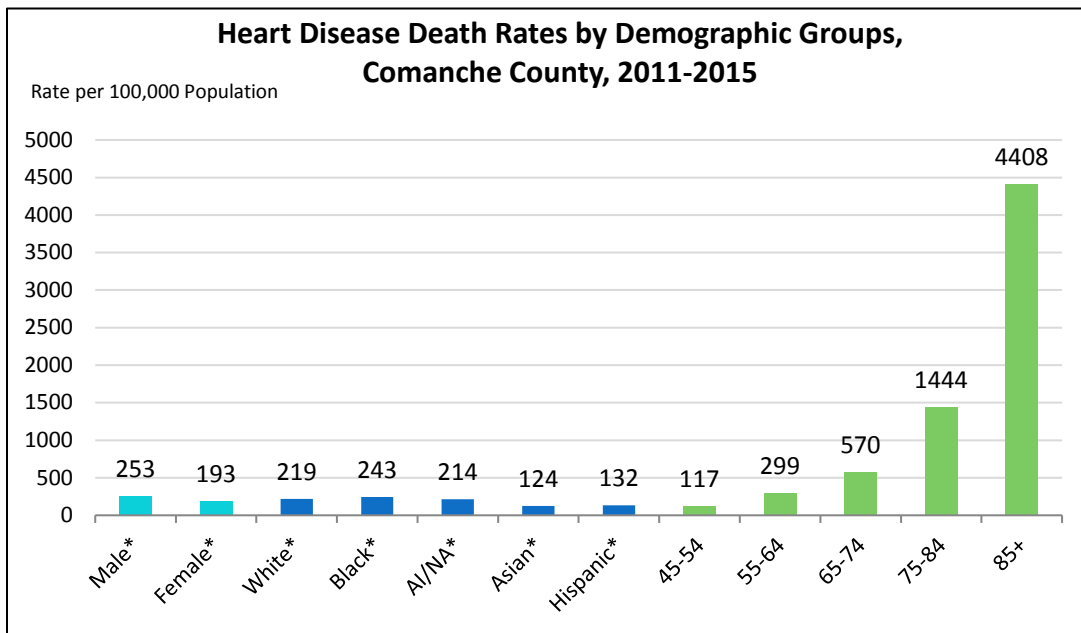
Comanche Diabetes Inpatient Data (2014)			
<b>218</b>	<b>\$6,811,956</b>	<b>4.3 days</b>	<b>\$31,247.5</b>
<i>Hospital Discharges</i>	<i>Total Charges</i>	<i>Average Hospital Stay</i>	<i>Average Charges per Stay</i>



## Death, Injury, and Violence

### Leading Cause of Death

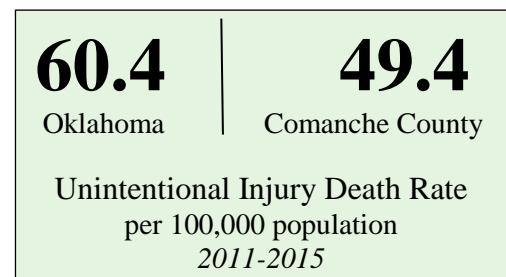
In Comanche County, heart disease is still the leading cause of death for all ages combined at 221.2 deaths per 100,000 population (2011-2015).<sup>29</sup> The rate decreased 10.6% from the previous 2008-2012 data (247.5 deaths per 100,000 population).<sup>29</sup> In 2014, the most recent year for which hospital discharge data are publicly available, the total charges attributable to heart disease in Comanche County were \$37,535,531, or \$47,274 per discharge.<sup>40</sup>



\*Age-Adjusted Death Rate per 100,000 Population

### Injury and Violence

Unintentional injury is the 5<sup>th</sup> leading cause of death in Oklahoma, and the leading cause of death among individuals aged 5-44 years.<sup>29</sup> In 2014, the most recent year that data are publicly available, injuries and poisoning accounted for 36,984 total discharges, costing \$2.1 billion of Oklahoma’s hospital inpatient charges, or \$58,543 per discharge.<sup>40</sup> This equates to 12.7% of total inpatient charges in 2010,<sup>40</sup> and does not consider other related medical expenses or lost productivity.



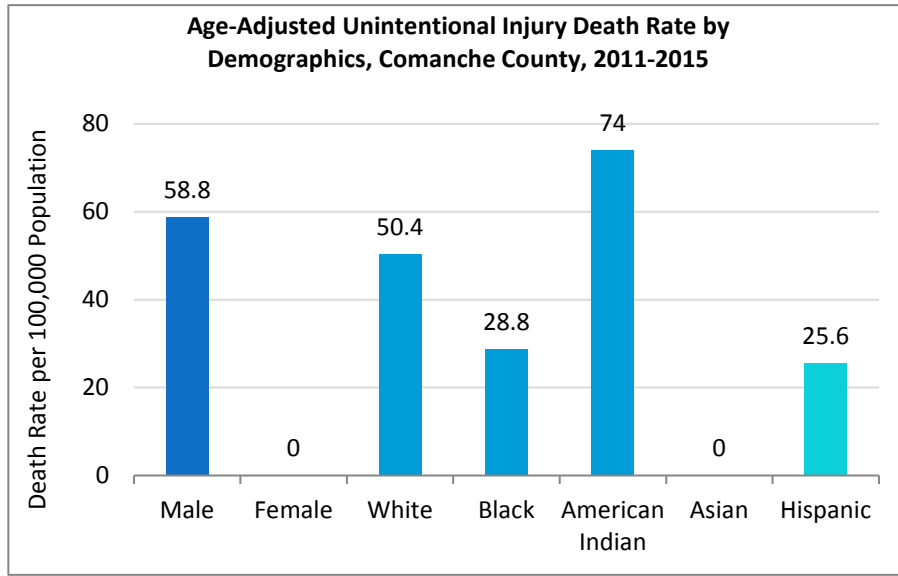
From 2011-2015, unintentional injury was the 4<sup>th</sup> leading cause of death for Comanche County and is similar to the 2006-2010 rate (50.1).<sup>29</sup>

**14.8**

Motor-vehicle Death Rate per 100,000 population Comanche County, 2011-2015

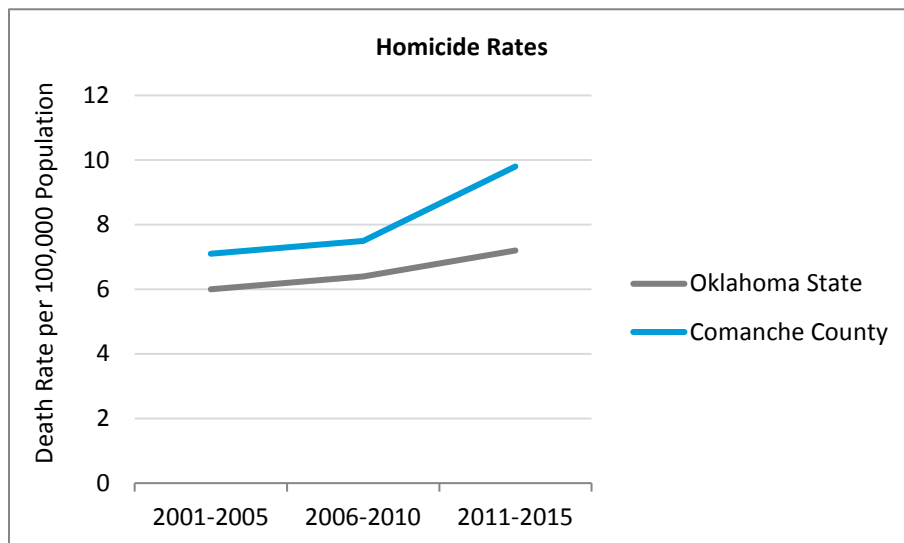
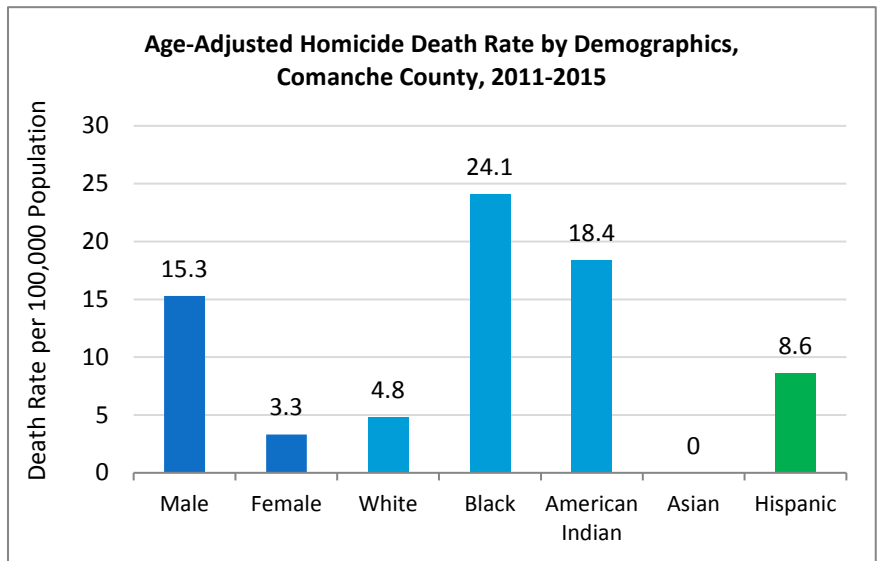
Motor-vehicle accidents account for 31.8% of Comanche County’s total unintentional injury deaths.<sup>29</sup> In 2013, motor vehicle crashes cost Oklahoma an estimated \$8 million in medical costs and \$894 million in work loss costs, resulting in a total cost of \$902 million.<sup>49</sup> This cost includes wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage, and employers’ uninsured costs.





Violence-related deaths, like suicide and homicide, are also leading causes of death in Oklahoma.<sup>29</sup> Comanche County’s homicide rate is 36.1% higher than the state rate.

<b>7.2</b> Oklahoma	<b>9.8</b> Comanche County
Homicide Rate per 100,000 population 2011-2015	



The top 10 leading causes of death table displays a broad picture of the causes of death in Comanche County.<sup>29</sup> Since many health-related issues are unique to specific ages, this table provides causes of death by age group at a glance. The causes of death that are present across almost every age group have been highlighted. This table shows the actual number of deaths by cause.

Top 10 Causes of Death by Age Group  
Comanche County 2011-2015

RANK	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65+	ALL AGES
1	PERINATAL PERIOD 35		UNINTENT. INJURY 23	UNINTENT. INJURY 33	HEART DISEASE 32	CANCER 91	CANCER 209	HEART DISEASE 867	HEART DISEASE 1192
2	CONGENITAL MALFORMATIONS 14		HOMICIDE 14	SUICIDE 22	UNINTENT. INJURY 31	HEART DISEASE 89	HEART DISEASE 191	CANCER 675	CANCER 1016
3			SUICIDE 9	HOMICIDE 18	CANCER 20	UNINTENT. INJURY 44	UNINTENT. INJURY 50	BRONCHITIS/ EMPHYSEMA/ ASTHMA 298	BRONCHITIS/ EMPHYSEMA/ ASTHMA 363
4			CANCER 5	CANCER 11	SUICIDE 19	LIVER DISEASE 27	BRONCHITIS/ EMPHYSEMA/ ASTHMA 47	STROKE 201	UNINTENT. INJURY 289
5				HEART DISEASE 7	HOMICIDE 13	DIABETES 25	DIABETES 44	DIABETES 138	STROKE 253
6					LIVER DISEASE 7	SUICIDE 22	STROKE 27	ALZHEIMER'S DISEASE 122	DIABETES 215
7					DIABETES 5	STROKE 17	LIVER DISEASE 27	UNINTENT. INJURY 99	ALZHEIMER'S DISEASE 123
8						HOMICIDE 11	SEPTICEMIA 16	INFLUENZA/ PNEUMONIA 67	LIVER DISEASE 96
9						BRONCHITIS/ EMPHYSEMA/ ASHTMA 11	INFLUENZA/ PNEUMONIA 13	NEPHRITIS 56	SUICIDE 96
10						HOMICIDE 11	HYPER-TENSION 11	HYPER-TENSION 49	INFLUENZA/ PNEUMONIA 89

\*Total deaths per age group were determined and cause of death was ordered (by frequency) when 5 or more deaths occurred for a specific cause; the number of deaths that occurred in frequencies fewer than 5 per cause were not included because the data are suppressed on OK2SHARE (the source of this data) when there are fewer than 5 deaths per search category.

Data source: Vital Statistics, Health Care Information Division, Oklahoma State Department of Health  
Produced by: Community Epidemiology and Evaluation, Oklahoma State Department of Health

## Healthy People 2020 Table

Healthy People 2020 Indicators <sup>50</sup>	Comparison Data: Year(s)						2020 target <sup>50</sup>
	Comanche County <sup>51</sup>		Oklahoma <sup>51</sup>		United States <sup>50</sup>		
Infant mortality (per 1,000 births)	2011-2015	8.9	2011-2015	7.4	2013	6.0	6.0
Low birth weight infants (% of live births)	2011-2015	7.8%	2011-2015	8.1%	2014	8.0%	7.8%
Very low birth weight infants (% of live births)	2011-2015	1.5%	2011-2015	1.4%	2014	1.4%	1.4%
First trimester prenatal care (% of live births)	2011-2015	78.3%	2011-2015	62.0%	2007 <sup>§</sup>	70.8%	77.9%
Coronary heart disease deaths (per 100,000 population)*	2011-2015	221.2	2011-2015	227.9	2014	98.8	103.4
Cancer deaths (per 100,000 population)*	2011-2015	181.4	2011-2015	185.8	2014	161.2	161.4
Unintentional injury deaths (per 100,000 population)*	2011-2015	49.4	2011-2015	60.4	2014	40.5	36.4
Transportation-related deaths (per 100,000 population)*	2011-2015	14.8	2011-2015	19.5	2014	10.3	12.4

Notes:

Red = Have not yet met 2020 Target      Green = Exceeded 2020 Target      Black = Same as 2020 Target

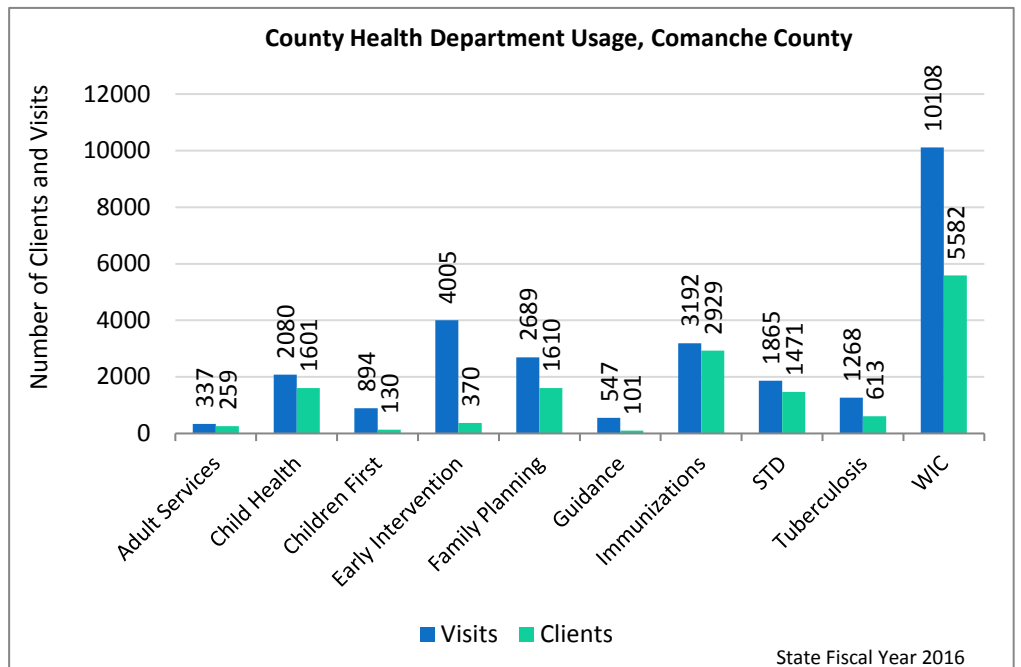
\*Death rate is age-adjusted to the 2000 U.S. standard population;

§The most recent data available from CDC WONDER Natality Data shows that 65.4%<sup>3</sup> of women having live births in from 2011-2015 received prenatal care within the first three months of pregnancy. Not all states collect prenatal care information on the birth certificate.

## County Health Department Usage

Oklahoma currently has 82 county health departments and two independent city-county health departments serving 77 counties. Each department offers a variety of services, such as immunizations, family planning, maternity education, well-baby clinics, adolescent health clinics, hearing & speech services, child developmental services, environmental health, and the SoonerStart program. Additionally, many county health departments participate in health education and community development services throughout their county. All county health departments in Oklahoma utilize the Public Health

Oklahoma Client Information System (PHOCIS) to track an overview of the services provided to each citizen. In addition, PHOCIS contains a population-based module (POPS) that houses information about community-based events in which health department employees are involved. The information on this page is an accounting of services provided within the county health department and throughout the county.



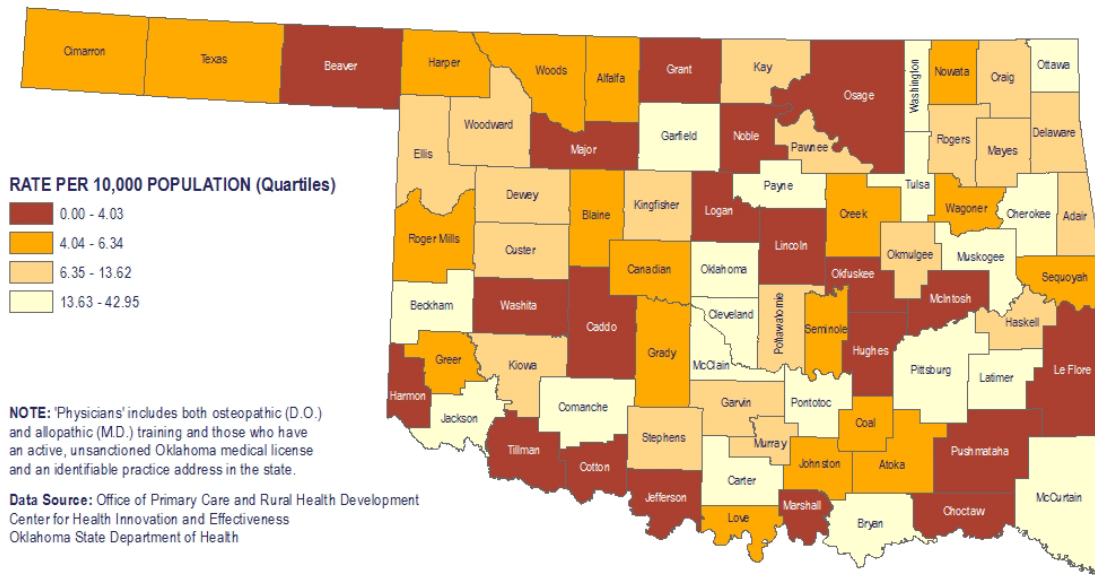
**TOTAL VISITS: 26,985**

**TOTAL CLIENTS: 11,435**

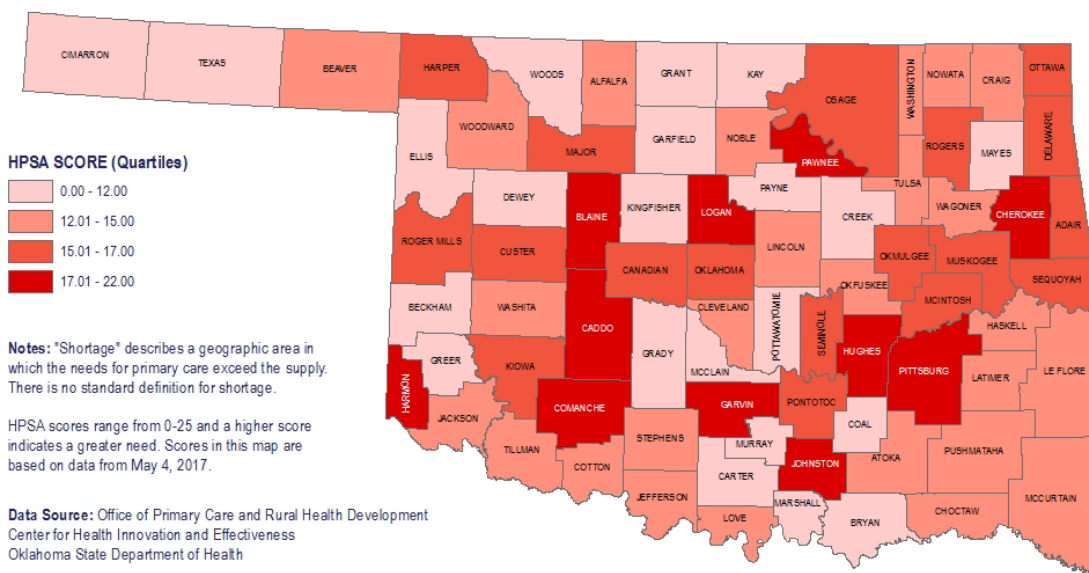
## Access to Care

In 2014, Oklahoma ranked 48<sup>th</sup> in the nation for the number of primary care physicians per 100,000 population (84.8) and nearly 25% of Oklahoma adults do not have a personal doctor or health care provider.<sup>7,14</sup> Further, 70 out of the 77 counties are considered to be medically underserved areas (MUA).<sup>53</sup> Although 86.4% of adults over 18 had health care coverage in 2015, 15.2% reported that within the past year, they could not visit a doctor due to cost.

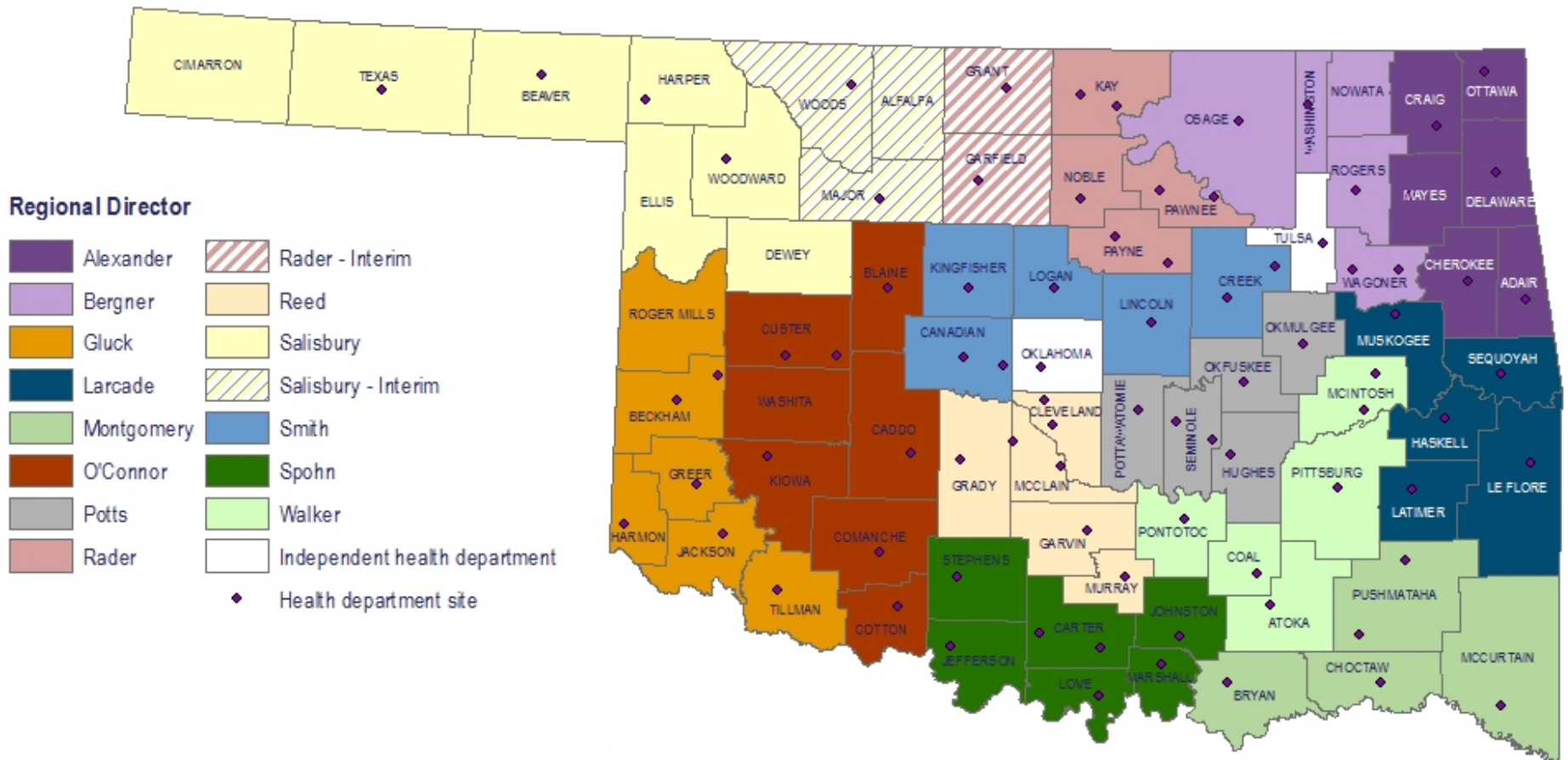
### Number of Actively Licensed Physicians by County July - Dec 2016



### Health Professional Shortage Area (HPSA) Scores for Primary Care, by County



## Regional Directors and County Health Department Locations



Data Source: Community and Family Health Services, Oklahoma State Department of Health

Effective: 07.31.2017



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<p>Oklahoma State Department of Health Community and Family Health Services Community Epidemiology &amp; Evaluation 1000 NE 10<sup>th</sup> St. Room 508</p> <p>Phone: (405) 271-5279 Fax: (405) 271-1225</p>	<p>Report compiled by:</p> <p style="text-align: center;">Alora Korb, M.A. <i>Program Assessment &amp; Evaluation Specialist</i></p> <p style="text-align: center;">Jennifer Han, Ph.D., CHES <i>Director of Community Epidemiology &amp; Evaluation</i></p>
<div style="display: flex; justify-content: space-between; align-items: center;">  <div style="font-size: 0.8em;"> <p>The Oklahoma State Department of Health (OSDH) is an equal opportunity employer and provider. This publication, issued by the OSDH, was authorized by Terry L. Cline, PhD, Commissioner of Health, Secretary of Health and Human Services. A digital file has been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries. Copies have not been printed but are available for download at <a href="http://www.health.ok.gov">www.health.ok.gov</a>. May 2017</p> </div>  </div>	



## Executive Summary

### ES-05 Executive Summary - 24 CFR 91.200(c), 91.220(b)

#### 1. Introduction

This Consolidated Plan (Con Plan) implements the U.S. Department of Housing and Urban Development's (HUD) consolidated planning process under the purview of 24 CFR Part 91, et al., Consolidated Submission for Community Planning and Development Programs; Final Rule dated January 5, 1995 (updated through February 6, 2006). The Con Plan integrates into a single plan two of HUD's Community Planning and Development (CPD) formula programs: Community Development Block Grants (CDBG), HOME Investment Partnerships (HOME).

The Con Plan serves as Lawton's application for federal funds under HUD's formula grant programs and a strategy for implementing the HUD programs and an action plan that is the basis for assessing the program's performance.

A Con Plan approved by HUD is a prerequisite for eligibility to receiving funding for the following formula grant programs (Update the programs UP Sec. 91.2):

1. The CDBG Program (24 CFR Part 570);
2. The HOME Program (24 CFR Part 92);

Applicants for the HUD programs outlined above must obtain a Certification of Consistency with the Con Plan from the City of Lawton. An application will be considered consistent if the activities outlined in the proposal are identified priorities in this Con Plan and/or the annual Consolidated One-Year Action Plan and the targeted location is consistent with the geographic areas identified in the Con Plan.

## **2. Summary of the objectives and outcomes identified in the Plan Needs Assessment Overview**

The overall goals of the community planning and development programs covered by the Plan are to develop and sustain in Lawton a viable community by providing decent housing and a suitable living environment and by expanding economic opportunities for all citizens but principally for low- and moderate-income persons. The Plan seeks to accomplish these goals by extending and strengthening partnerships within the community among all levels of government and the private sector, including profit and non-profit organizations, in community and economic development and the development of affordable housing throughout the community.

The overall objective of the Consolidated Plan is to integrate economic, physical, environmental, community, and human development in a comprehensive, coordinated fashion to meet the needs of the community.

## **3. Evaluation of past performance**



H.C. King Community Center                      1705 NW 20th Street

Patterson Community Center                      4 NE Arlington Street

Citizens have thirty (30) days to review and provide comments. Comments should be submitted in writing to the Assistant Director, Housing and Community Development, 1405 SW 11th Street, Lawton, OK 73501. A public hearing to discuss the Consolidated Plan and One-Year Action Plan was held at the Lawton City Council at 6:00 p.m. on April 26, 2016 at the City Hall located at 212 SW 9th Street, Lawton, OK 73501. The City of Lawton will take reasonable measures to provide copies of the reports in formats accessible to persons with disabilities upon request.

## **5. Summary of public comments**

The public participation process for the completion of the 2016-2020 Consolidated Plan began in March 2016 with the publication of a Notice of Public Meetings for four (3) community input sessions held in various areas of the City on March 24, 2016 ; April 14, 2016 and April 26, 2016. Meetings were held in public facilities, with one meeting held during the afternoon to accommodate persons working evening hours. A total of thirty-five (35) citizens and representatives of local organizations and service providers attended these meetings

## **6. Summary of comments or views not accepted and the reasons for not accepting them**

All public feedback was given due consideration, although not every requested activity could be funded. The need for greater community investment is apparent; however, resources (both monetarily and administratively) are insufficient to enlarge the targeted neighborhood boundaries at the present time. In order to have a consolidated strategy and plan which is the result of effective citizen participation process, the City of Lawton has adopted its Citizen Participation Plan for Housing and Community Development in accordance with 24 CFR Part 92.

## **7. Summary**

All public feedback was given due consideration, although not every requested activity could be funded. The need for greater community investment is apparent; however, resources (both monetarily and administratively) are insufficient to enlarge the targeted neighborhood boundaries at the present time. In order to have a consolidated strategy and plan which is the result of effective citizen participation process, the City of Lawton has adopted its Citizen Participation Plan for Housing and Community Development in accordance with 24 CFR Part 92.





## The Process

### PR-05 Lead & Responsible Agencies 24 CFR 91.200(b)

**1. Describe agency/entity responsible for preparing the Consolidated Plan and those responsible for administration of each grant program and funding source**

The following are the agencies/entities responsible for preparing the Consolidated Plan and those responsible for administration of each grant program and funding source.

Agency Role	Name	Department/Agency
CDBG Administrator	LAWTON	HOUSING AND COMMUNITY DEVELOPMENT
HOME Administrator	LAWTON	HOUSING AND COMMUNITY DEVELOPMENT

**Table 1 – Responsible Agencies**

#### Narrative

Housing and Community Development (HCD), a division of the Administrative Services Department, is the lead agency for coordination and development of the Consolidated Plan. For that purpose, HCD is responsible to provide community leadership, to plan and coordinate the consolidated planning process, and to develop the Consolidated Plan for submission to HUD. Points of contact for the consolidated planning process are the Assistant Director, HCD and the Federal Grants and Housing Programs Coordinator located at:

City of Lawton

Housing and Community Development (HCD)

1405 SW 11th Street

Lawton, Oklahoma 73501

Telephone (580) 581-3347

#### Consolidated Plan Public Contact Information

Anthony F. GRIFFITH

Assistant Director, Housing & Community Development Division

City Of lawton

E:mail [agriffith@cityof.lawton.ok.us](mailto:agriffith@cityof.lawton.ok.us)

Phone: 580-581-3350

## **PR-10 Consultation - 91.100, 91.200(b), 91.215(I)**

### **1. Introduction**

Development of the Consolidated Plan resulted from consultation and coordination with appropriate public and private agencies throughout the development stages of the consolidated planning process and included issues concerning non-housing community development needs. The process included close consultation with appropriate agencies of the State of Oklahoma and Comanche County, as necessary, to address and coordinate efforts in areas and on issues of common interest or concern. Coordination between appropriate Lawton agencies and departments was emphasized.

### **Provide a concise summary of the jurisdiction's activities to enhance coordination between public and assisted housing providers and private and governmental health, mental health and service agencies (91.215(I)).**

The City routinely communicates with the Lawton Housing Authority (LHA) to understand their programs and needs. The City continues to provide them with funding each year to rehabilitate some of their public housing units as indicated within our Action Plan. The LHA has housing units City wide, and we have discussed with them the potential for exterior improvements to help the neighborhood. Early discussions have been held with LHA to consider the possibility of making joint application for a future Choice Neighborhood Grant.

The City interacts routinely with the Lawton Housing Authority (LHA) as we direct clients to Section 8 programs, coordinate data sharing, and process Resolutions of Local Support for Low Income Housing Tax Credit (LIHTC) applicants proposing to build affordable housing in the City limits. In the past the City has provided some additional funding in support of selected LIHTC projects.

The City actively interacts on an on-going basis with our Continuum of Care (CoC) lead agency Lawton Support Services and subrecipients, including a number of mental and private service agencies that provide various types of assisted housing. Several homeless service providers within the CoC specialize in assisting individuals with mental health concerns.

### **Describe coordination with the Continuum of Care and efforts to address the needs of homeless persons (particularly chronically homeless individuals and families, families with children, veterans, and unaccompanied youth) and persons at risk of homelessness**

Lawton Housing Authority (LHA) is the lead agency for the City of Lawton Continuum of Care. The City has placed an emphasis on housing the chronically homeless using a housing first come approach. Housing homeless veterans has also been an emphasis of this program and the CoC coordinates with the Veteran's Administration for VASH vouchers and case management. Additionally,

the City will be collaborating increasingly with LHA to provide services to veteran's families as Goodwill is the local provider of the Supportive Services for Veteran's Families grantee.

Planning for the homeless strategies and outcomes starts with the City of Lawton Coalition to End Poverty. This is a broad based group of service/housing providers, faith based organizations; volunteer advocates and service recipients. This group provides insight and feedback on the Plan objectives to meet the needs of people who are homeless and have special needs. The Coalition updates the City's 10-Year Plan to End Homelessness and works to provide awareness to elected officials, interested parties and the public about homelessness and people who have special needs.

**Describe consultation with the Continuum(s) of Care that serves the jurisdiction's area in determining how to allocate ESG funds, develop performance standards and evaluate outcomes, and develop funding, policies and procedures for the administration of HMIS**

The Continuum of Care Committee oversees and evaluates the housing and service programs funded through the CoC, and City Social Services. The CoC Committee reviews proposals and makes funding recommendations to the City's Housing and Community Development Division, which in turn makes recommendations to the City Council.

Homeless Management Information System (HMIS) policies and procedures are developed through the Data Committee of the Coalition to End Poverty. Policies and procedures are developed to comply with HUD data requirements as well as other federal and local requirements and to meet the data needs of the CoC.

**2. Describe Agencies, groups, organizations and others who participated in the process and describe the jurisdictions consultations with housing, social service agencies and other entities**

**Table 2 – Agencies, groups, organizations who participated**

1	<b>Agency/Group/Organization</b>	Lawton Support Services, Inc.
	<b>Agency/Group/Organization Type</b>	Housing PHA Services - Housing Services-Elderly Persons Services-Persons with Disabilities Services-homeless Service-Fair Housing
	<b>What section of the Plan was addressed by Consultation?</b>	Housing Need Assessment Public Housing Needs Homelessness Strategy Homeless Needs - Chronically homeless Homelessness Needs - Veterans
	<b>How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?</b>	The Lawton Housing Authority (LHA) was consulted directly by City Staff to gauge current needs for public housing and Section 8 tenants. Information was provided by LHA about current inventories, waiting lists, capital needs, veterans' benefits, anticipated funding over the next five (5) years, and anticipated gaps in resources. The City of Lawton continues to provide CDBG funding to support the rehabilitation of public housing units annually to enhance the quality of public housing.
2	<b>Agency/Group/Organization</b>	LAWTON
	<b>Agency/Group/Organization Type</b>	Housing PHA Services - Housing Service-Fair Housing Other government - Local Grantee Department

	<p><b>What section of the Plan was addressed by Consultation?</b></p>	<p>Housing Need Assessment                  Lead-based Paint Strategy                  Public Housing Needs                  Homelessness Strategy                  Homeless Needs - Chronically homeless                  Homeless Needs - Families with children                  Homelessness Needs - Veterans                  Homelessness Needs - Unaccompanied youth                  Non-Homeless Special Needs                  Economic Development                  Anti-poverty Strategy</p>
	<p><b>How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?</b></p>	<p>The City Housing and Community Development Division (HAD) was consulted directly by City Staff to gauge current needs for public housing and Section 8 tenants. Information was provided by LHA about current inventories, waiting lists, capital needs, veterans' benefits, anticipated funding over the next five (5) years, and anticipated gaps in resources. The City of Lawton continues to provide CDBG funding to support the rehabilitation of public housing units annually to enhance the quality of public housing.</p>
<p>3</p>	<p><b>Agency/Group/Organization</b></p>	<p>Family Promise of Lawton</p>
	<p><b>Agency/Group/Organization Type</b></p>	<p>Services-Children                  Services-Persons with HIV/AIDS                  Services-Victims of Domestic Violence                  Services-homeless                  Services-Health                  Services - Victims                  Child Welfare Agency                  Regional organization                  Neighborhood Organization</p>
	<p><b>What section of the Plan was addressed by Consultation?</b></p>	<p>Homeless Needs - Families with children                  Non-Homeless Special Needs                  Anti-poverty Strategy</p>



	<b>How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?</b>	The overall goal of local homeless programs is to assist homeless families and individuals to progress from homelessness to self-sufficiency. Implementation of the strategy relies on a system of public and private homeless providers who, through their collaborative efforts, pursue a continuum of care approach to address the economic, human, and social needs of homeless families and households.
4	<b>Agency/Group/Organization</b>	Christian Family Counseling Center
	<b>Agency/Group/Organization Type</b>	Services-Children Services-Victims of Domestic Violence Services-homeless Services-Health Service-Fair Housing Services - Victims Health Agency Regional organization
	<b>What section of the Plan was addressed by Consultation?</b>	Non-Homeless Special Needs
	<b>How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?</b>	Christian Family Counseling provides professional outpatient counseling to individuals and families on marriage and group therapy to adults, adolescents and children. They provided information on the need for such services
5	<b>Agency/Group/Organization</b>	GPIF C. CARTER CRANE HOMELESS SHELTER
	<b>Agency/Group/Organization Type</b>	Services - Housing Services-Children Services-Elderly Persons Services-Persons with Disabilities Services-Victims of Domestic Violence Services-homeless Neighborhood Organization
	<b>What section of the Plan was addressed by Consultation?</b>	Homeless Needs - Chronically homeless Homeless Needs - Families with children Homelessness Needs - Veterans

	<b>How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?</b>	Great Plains Improvement Foundation, Inc., through the C. Carter Crane Shelter, provides temporary shelter to the homeless. The shelter provided shelter to approximately 330 homeless persons during 2008 and anticipates providing shelter for over 400 homeless in 2009. They provided valuable input on the need for the emergency shelter.
6	<b>Agency/Group/Organization</b>	MARIE DETTY COUNSELING SERVICES, INC.
	<b>Agency/Group/Organization Type</b>	Services - Housing Services-Children Services-Health Services-Education Services-Employment Services - Victims
	<b>What section of the Plan was addressed by Consultation?</b>	Housing Need Assessment Homeless Needs - Families with children Non-Homeless Special Needs
	<b>How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?</b>	Marie Detty Counseling Service provides professional counseling/ temp housing to children and group therapy to adults, adolescents and children. They provided information on the need for such services
7	<b>Agency/Group/Organization</b>	NEW DIRECTIONS - BATTERED WOMEN'S SHELTER
	<b>Agency/Group/Organization Type</b>	Services - Housing Services-Children Services-Victims of Domestic Violence Services-homeless Service-Fair Housing Services - Victims
	<b>What section of the Plan was addressed by Consultation?</b>	Homelessness Strategy Homeless Needs - Families with children Non-Homeless Special Needs
	<b>How was the Agency/Group/Organization consulted and what are the anticipated outcomes of the consultation or areas for improved coordination?</b>	new Directions - battered Women Shelter provides professional counseling/ temp housing to women and children who are victims of domestic violence. They provided information on the need for such services

**Identify any Agency Types not consulted and provide rationale for not consulting**

None

**Other local/regional/state/federal planning efforts considered when preparing the Plan**

Name of Plan	Lead Organization	How do the goals of your Strategic Plan overlap with the goals of each plan?
Continuum of Care	Lawton Support Services	

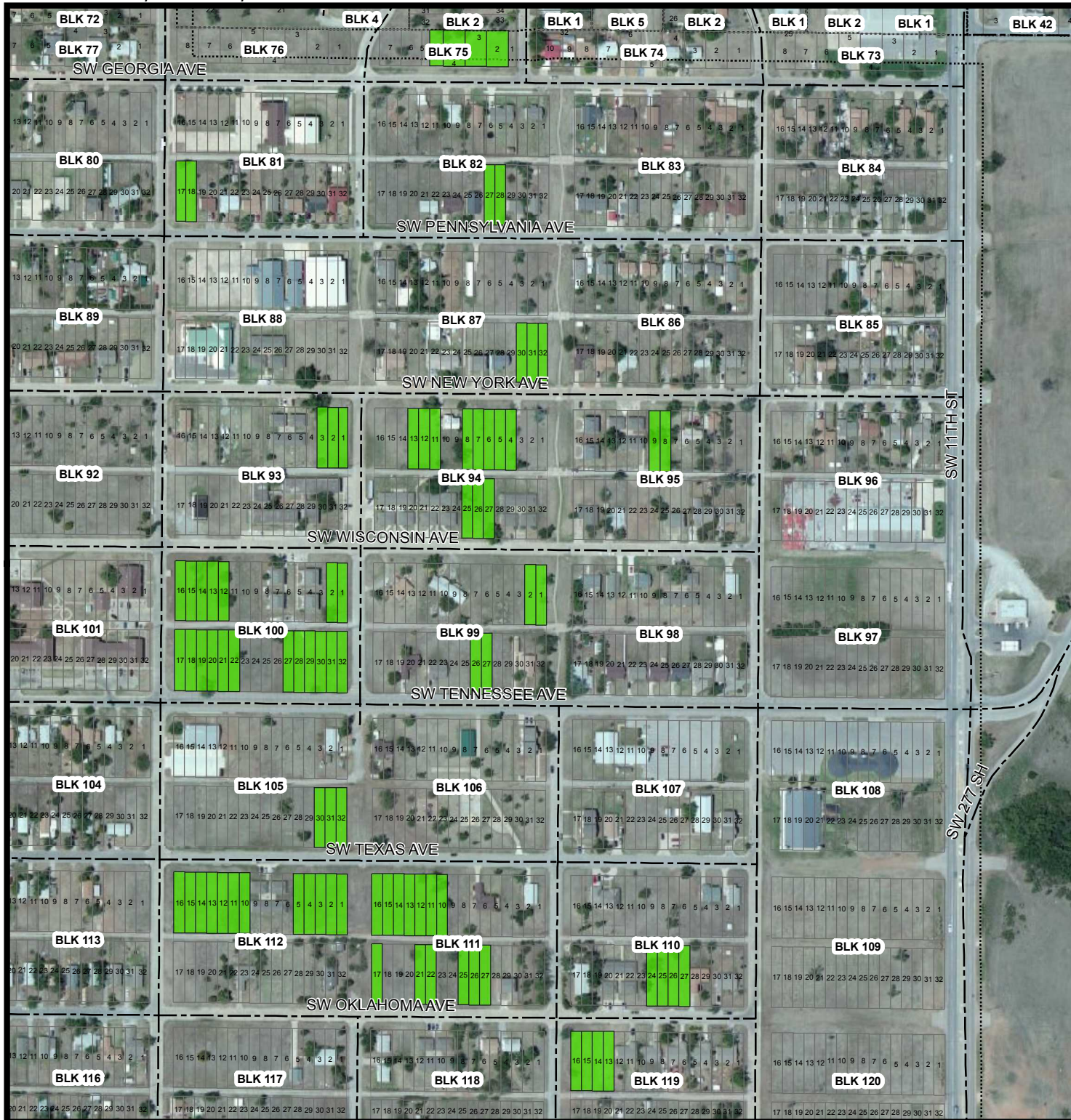
**Table 3 – Other local / regional / federal planning efforts**

**Describe cooperation and coordination with other public entities, including the State and any adjacent units of general local government, in the implementation of the Consolidated Plan (91.215(l))**

The City of Lawton has worked closely with both private and public sectors, to included the State andf Federal Government in developing the Consolidated Planm

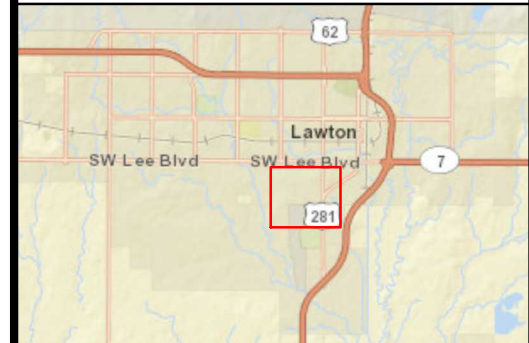
**Narrative (optional):**

**This is the first portion of the report. The full report is available upon request.**



- Street Centerline
- Available Lot
- Lot
- ⋯ Subdivision
- Block

**LURA Owned Land  
Lawton View  
Available Property**



Not To Scale



# Welcome to the State of the State's Health Report

The first State of the State’s Health Report was issued by the Oklahoma State Board of Health in 1997. That report served to provide an assessment of the general health status of Oklahomans and to fulfill the assessment function of public health for the state based upon the 1988 Institute of Medicine Report supporting such a role. A little over 20 years later we are moving to a new platform providing data on more than 50 indicators related to health through an interactive website. With this new site we hope to better explain how various health outcomes and behaviors affect the overall health status of Oklahoma residents in a user friendly format. The information (grades and data) provided are to help identify patterns that occur across the state, over time, and within particular groups.

The Oklahoma State of the State’s Health website was launched in 2018 for an interactive experience with data specific to Health Indicators, Counties, and Demographics Groups. The website address is as follows:

<https://stateofstateshealth.ok.gov/>





# Oklahoma State Department of Health

## State of the County's Health Report

### #HealthierOK

Comanche County

Summer 2017

Being healthy means optimizing all aspects of well-being, including physical, mental, and social well-being.<sup>1</sup> Health is influenced by a variety of personal, social, economic, and environmental factors called 'determinants of health',<sup>2</sup> such as our genetics, behaviors, where we live, and accessibility to health care. The determinants of health are inter-related, whereby changes in one determinant impact other determinants. As such, interventions and policies that target more than one determinant will have greater impact on our health.<sup>2</sup>

Oklahoma has historically ranked poorly in many key health indicators. The United Health Foundation ranked Oklahoma's overall health in 2016 as 45<sup>th</sup> in the United States in their annual *America's Health Rankings* report.<sup>3</sup> Most of the indicators in the report relate to conditions that Oklahomans live with every day, such as poverty and limited access to primary care. The report cited Oklahoma's high prevalence of smoking, uninsured, and premature death rate as some of the state's biggest challenges. Such conditions, along with risky health behaviors like smoking and physical inactivity, contribute to the poor health status of Oklahomans.




Recently, Oklahoma has experienced improvement in some key areas. Despite still having high prevalence of smoking, the rates have declined significantly over the past few years.<sup>4</sup> The rate of teen births has declined 39% in 6 years,<sup>5</sup> and the rate of infant deaths remains lower than it was in 2000.<sup>6</sup> The Oklahoma Health Improvement Plan (OHIP) encourages Oklahomans to work together across multiple health care systems to strengthen resources and infrastructure, enabling sustainable improvements in health status.<sup>7</sup> Every small step forward is progress leading to a #HealthierOK!

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**Follow us on social media!**

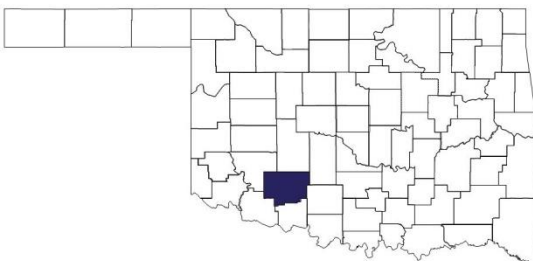
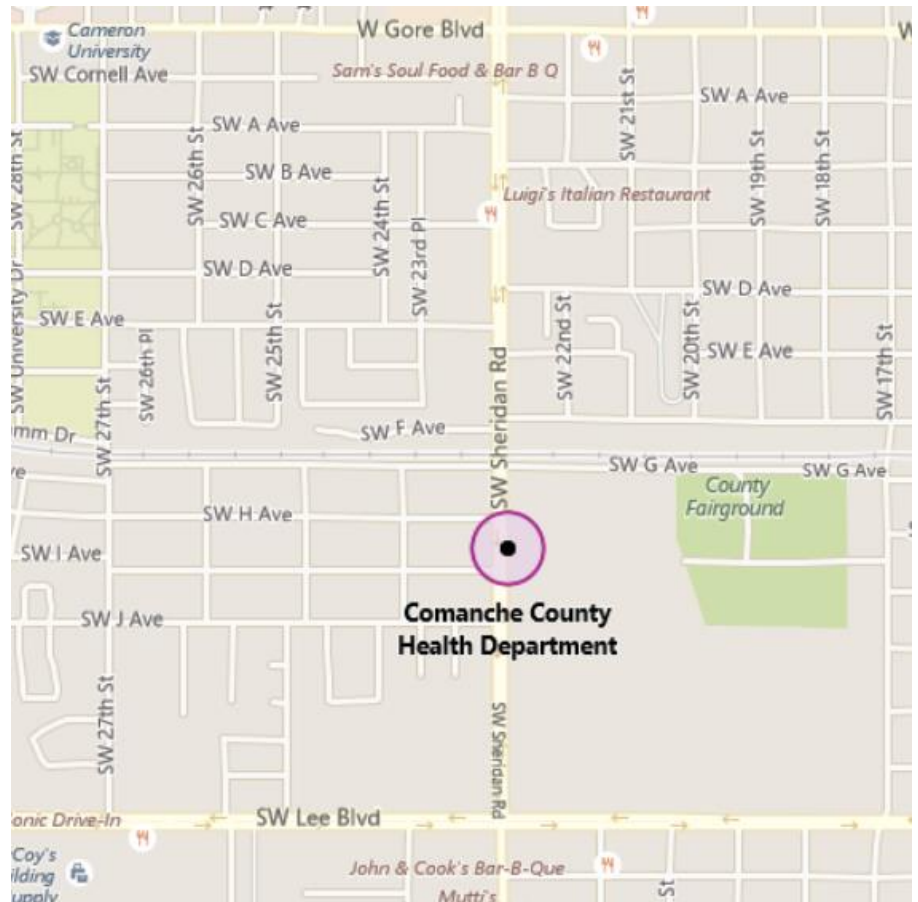
Oklahoma State Department of Health (OSDH)	Shape your Future Oklahoma	Comanche County Health Department
 Facebook.com/Oklahoma-State-Department-of-Health	Facebook.com/shapefutureok	Facebook.com/ComancheCountyHealthDepartment
 @HealthyOklahoma	@shapefutureok	N/A
 Youtube.com/user/HealthyOklahoma	Youtube.com/user/ShapeFutureOK	N/A

**Contact Information**

Brandie O'Connor  
Regional Director

Comanche County Health Department  
1010 South Sheridan Road  
P.O. Box 87  
Lawton, OK 73501

(580) 248-5890  
www.ok.gov/health





## County Spotlight

*Scale: 1 (best) - 77 (worst)*

Compared to all other Oklahoma counties, Comanche County ranks:

- **2<sup>nd</sup>** for percent of mothers receiving prenatal care in the 1<sup>st</sup> trimester (2011-2015)
- **4<sup>th</sup>** for unintentional injury mortality rate (2011-2015)
- **5<sup>th</sup>** for motor vehicle mortality rate (2011-2015)
- **9<sup>th</sup>** for percent of physically inactive population (2015)
- **16<sup>th</sup>** for suicide mortality rate (2011-2015)



### *About Comanche County<sup>8</sup>:*

The county was named after the Comanche tribe. It was originally part of the Kiowa-Comanche-Apache Reservation, but was selected by lottery to open to non-Indian citizens on August 6, 1901. Over the next few decades, much of the land was taken to create parts of Tillman, Grady, Jefferson, Stephens, Kiowa, and Cotton counties. The economy has largely existed through agriculture, Fort Sill military, raising livestock, mineral resources, and oil and gas wells.<sup>9</sup>

### **Fun Facts:**

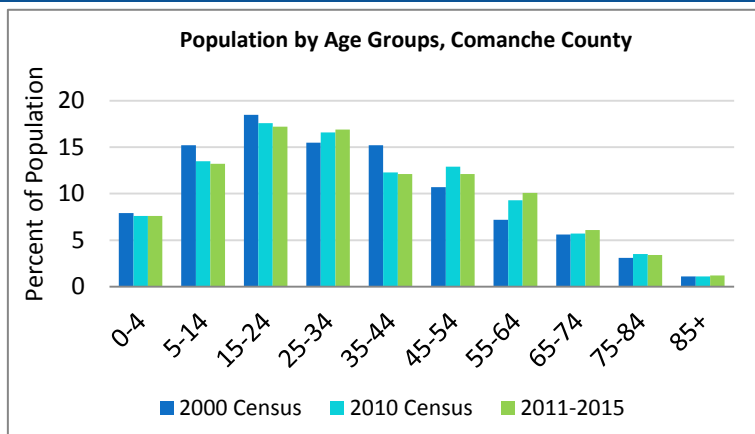
- U.S. Senators Thomas P. Gore and John William Elmer Thomas have resided in Comanche County.
- Fort Sill became a national historic landmark on December 19, 1960.
- The county is home to the Wichita Mountains National Wildlife Refuge and the Museum of the Great Plains.
- The first Western movie ever made, “The Bank Robbery”, was filmed in Cache around 1907.
- The 1949 movie “The Prince of Peace” was also known as “The Lawton Story” because it was filmed in Lawton; the actors’ Oklahoman accents were so strong that the film had to be dubbed “from English to English.”
- There are 31 locations in the county on the National Register of Historic Places.

### **DATA NOTE:**

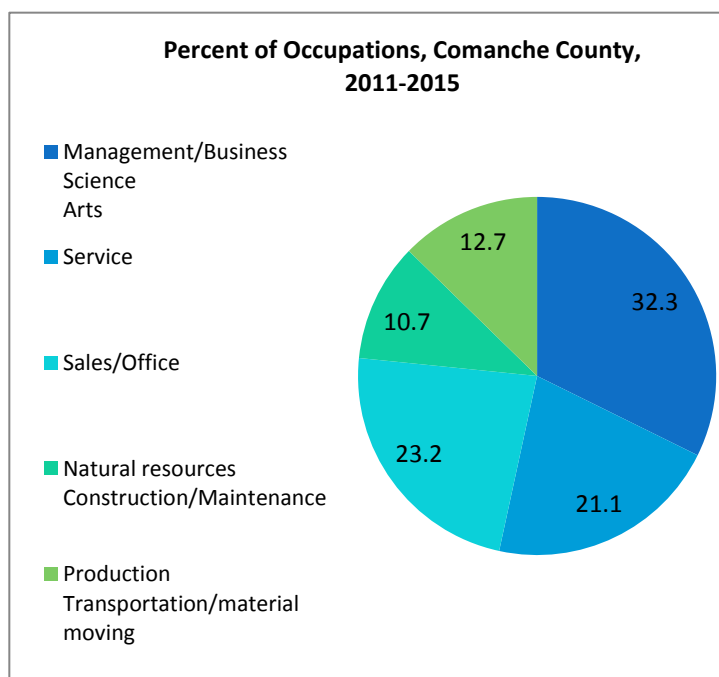
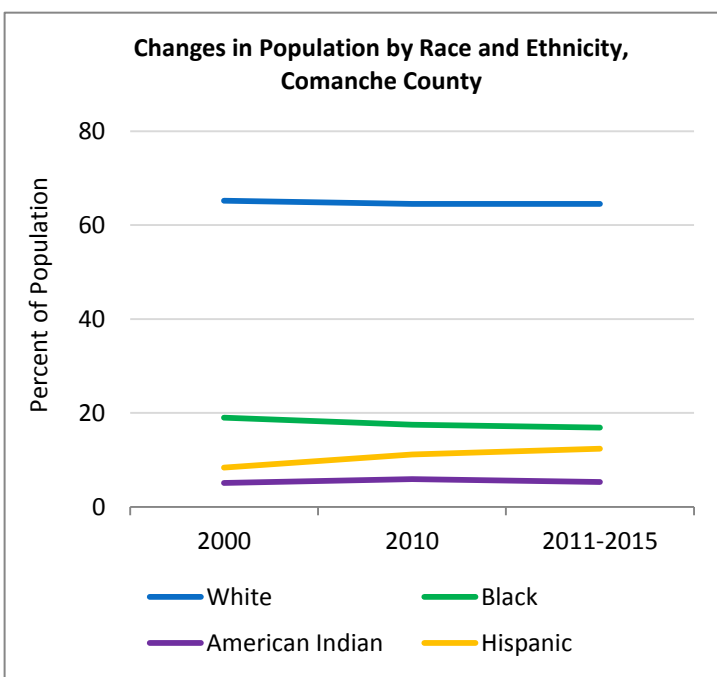
Multiple years of data are utilized in this report to create more stable estimates of health indicators for Oklahoma’s small populations. Trends and comparisons across groups are made when possible. Because the Behavior Risk Factor Surveillance System (BRFSS) data are not sampled at the county level, Health Care Information at the Oklahoma State Department of Health has created small area estimates through statistical modelling to enable discussion of county-level data. However, these small area estimates are not comparable to state and national data that are derived via the CDC’s standard weighting process. In addition, the CDC instituted new data weighting methodology for BRFSS data, rendering data prior to 2011 incomparable to data for 2011 and later. Also note that some data are not available for every year.

## County Demographics and Socioeconomic Profile

Demographics	County
Population, 2011-2015 estimate <sup>9</sup>	125,531
Population, percent change, 2000 to 2015	9.2% increase
Rank for growth in state (out of 77)	21 <sup>st</sup>
<b>Race and Ethnicity, 2011-2015<sup>10</sup></b>	
Whites alone	64.5%
Blacks alone	16.9%
Native Americans alone	5.3%
Hispanic or Latino	12.4%
<b>Age, 2011-2015<sup>10</sup></b>	
Less than 5	7.6%
65 and Over	10.7%
Median age	31.8 years

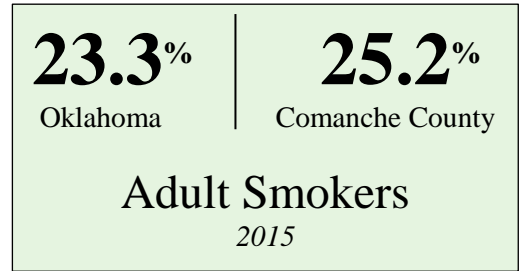


Socioeconomic Profile (2011-2015 estimates <sup>10</sup> )	County	State	National
Disability (ages 18-64)	16.8%	13.9%	10.3%
Of employed, percent disabled	9.1%	7.1%	4.9%
Individuals below poverty	17.6%	16.7%	15.5%
Families below poverty	13.9%	12.4%	11.3%
With children under 18 years	20.7%	19.7%	18.0%
With children under 5 years only	22.2%	22.2%	18.0%
Median household income	\$57,040	\$46,879	\$53,889
Female head of household	14.7%	12.4%	13.0%
Grandparents raising their grandchildren	51.3%	51.8%	37.3%
High school graduates or higher	89.3%	86.9%	86.7%
Bachelor's degree or higher	20.8%	24.1%	29.8%
Occupied housing units	84.0%	86.1%	87.7%
Uninsured (ages 18-64)	15.3%	16.7%	18.1%
Unemployment rate, civilian labor force	8.6%	6.3%	8.3%

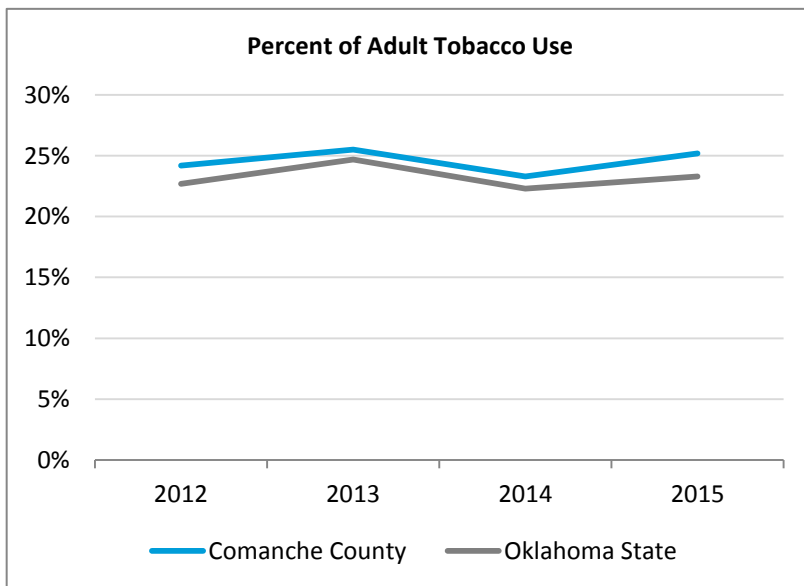
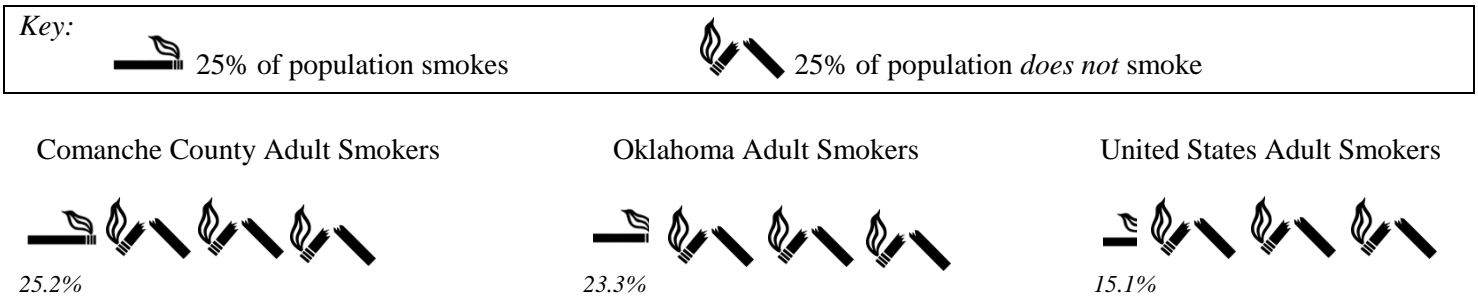


# OHIP Flagship Issue #1: Tobacco Use Prevention

While smoking rates continue to decline in the United States, tobacco is still the leading contributor of preventable deaths in the United States; a quarter of coronary heart disease deaths, 82% of lung cancer deaths, and 61% of pulmonary diseases are attributed to tobacco use.<sup>11</sup> Oklahoma consistently has one of the highest rates of adult smokers in the country. The 2015 Oklahoma rate is higher than the 2015 national rate (15.1%), as well as the previous 2014 rate (22.3%).<sup>12,13,14</sup> Fortunately, 52.7% of previous Oklahoma smokers have quit, which is similar to the national average of 58.8%.<sup>13</sup>



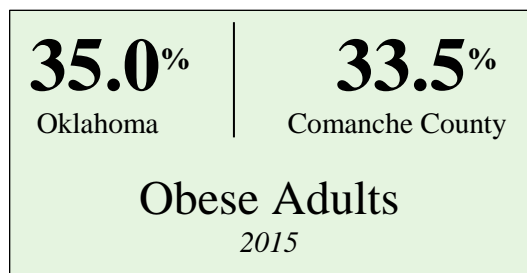
Data from 2015 show that racial disparities do exist in tobacco use, with a higher percentage of Oklahoma American Indian adults smoking (32.5%) compared to Black (25.0%), White (21.4%), and Hispanic (17.1%) adults.<sup>14</sup> Additionally, young adults (aged 25-34 years, 27.6%) comprised the highest percentage of smokers in the Oklahoma population, as well as males (24.0%) compared to females (20.4%).<sup>14</sup>



Attributable expenses for smoking in for the state in 2009, the most recent year for data, was \$1.62 billion, including ambulatory, hospital, prescription drug, and nursing home expenses, but excluding dental expenditures.<sup>15</sup> From 2005-2009, 7,490 deaths were attributable to smoking in Oklahoma.

Of concern are other types of tobacco use, such as smokeless tobacco and now e-cigarettes. Almost 7% of Oklahoma adults use smokeless tobacco products, with almost 70% of smokeless tobacco users also being smokers. E-cigarettes usage has also increased among tobacco users of all ages, both nationally and at the state-level.<sup>16,17</sup> For example, 19% of Oklahoma high school students used e-cigarettes in 2015, dramatically increased from 6.3% in 2013.<sup>18</sup>

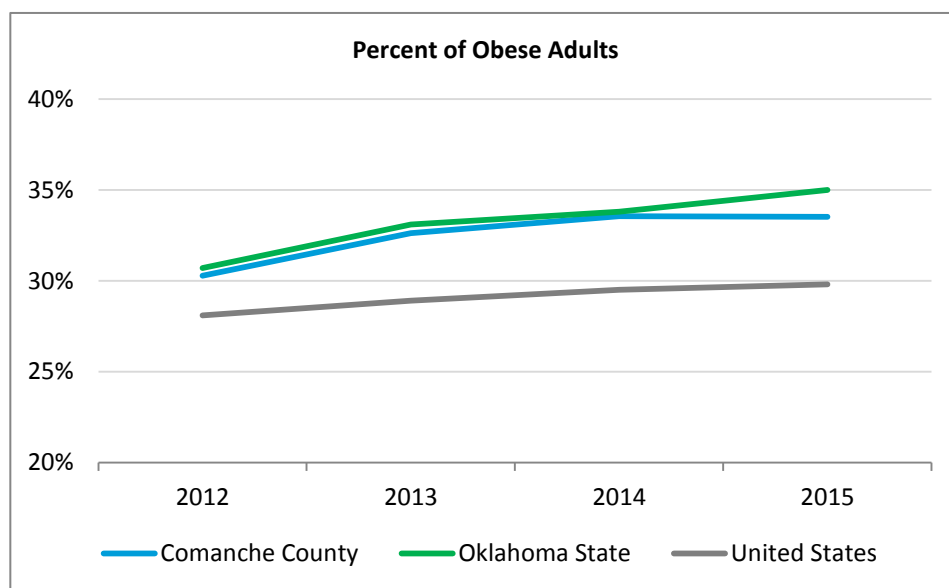
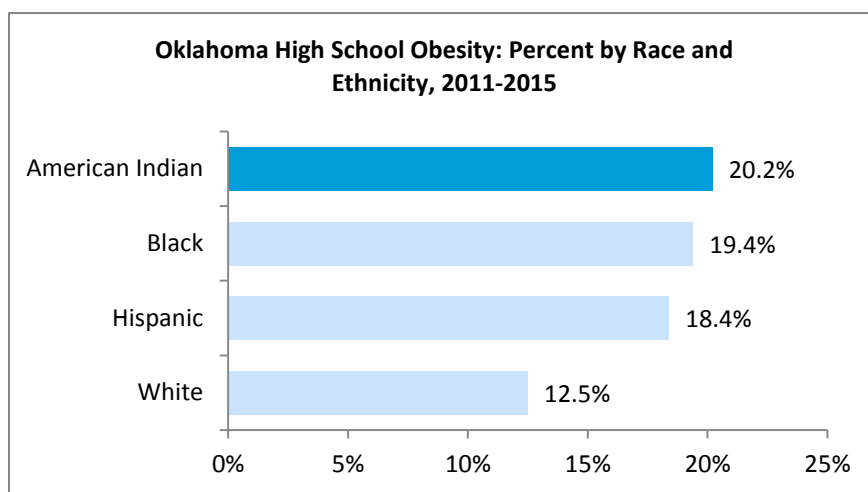
## OHIP Flagship Issue #2: Obesity



Obesity is a primary cause of adult deaths and is defined as having a BMI greater than 30.0 kg/m<sup>2</sup> (BMI = weight in kg/square of height in m).<sup>19</sup> In addition to its association with mortality, obesity increases risk for several chronic diseases such as heart disease and type 2 diabetes.<sup>20</sup> Unfortunately, obesity rates have continued to rise in Oklahoma. Thirty-four percent of adult females and 33.7% of adult males in Oklahoma were obese in 2015, and nearly half of American Indian adults were obese, followed by Black (36.9%), White (32.9%), and Hispanic (32.0%) adults.<sup>14</sup>

Additionally, obesity continues to be a problem for youth in Oklahoma. Nearly 14% of 2- to 4-year-old WIC participants were obese from 2000–2014, as well as 17.4% of 10- to 17-year-olds in 2011.<sup>21, 22</sup> Data from the Youth Risk Behavior Surveillance System (YRBSS) show that 15.4% of high school students self-reported obesity from 2011-2015. More male (18.1%) than female (12.8%) students were obese.<sup>23</sup>

Medical costs for obese individuals were estimated to be \$2,741 higher than per capita spending for normal weight individuals in 2005, and this economic burden can be expected to increase as the cost of health care increases.<sup>24</sup>

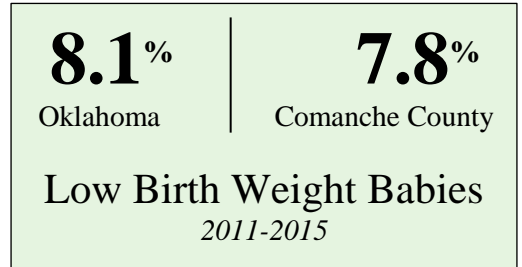


## OHIP Flagship Issue #3: Children's Health

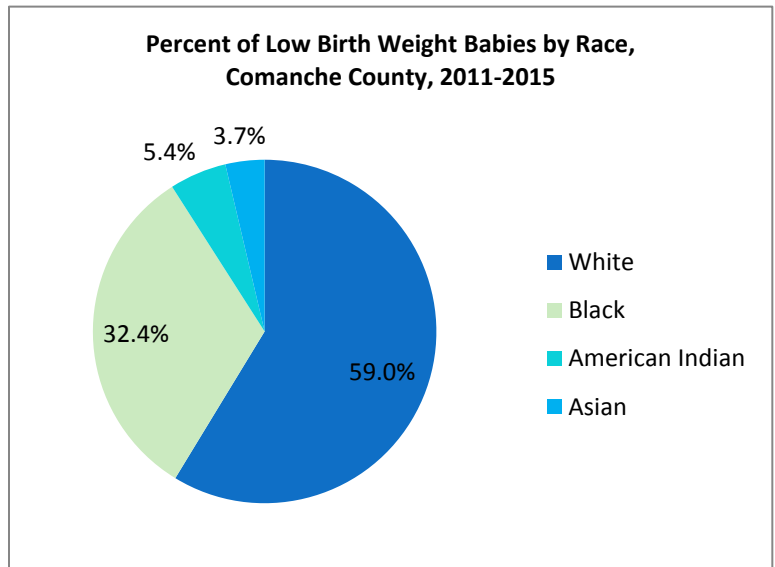
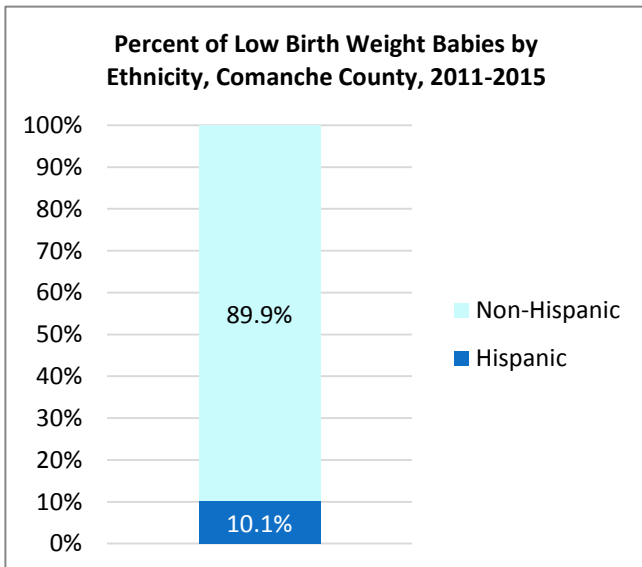
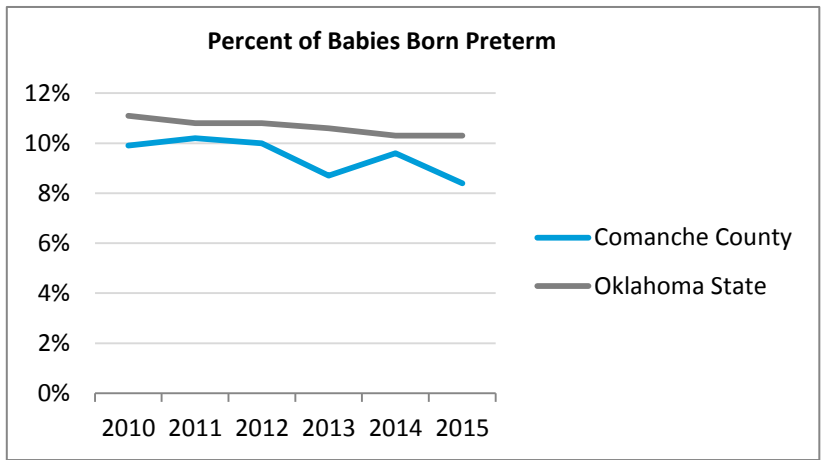
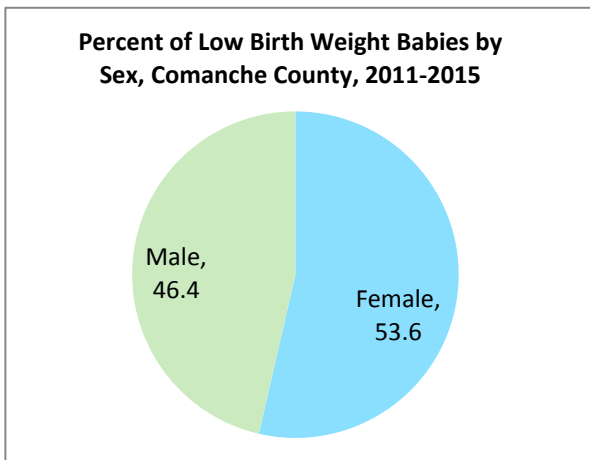
Of Oklahoma mothers giving birth from 2011-2015, 58% were married; in Comanche County, 60.6% were married. Three percent of mothers giving birth in the county had gestational diabetes, which is lower than the state average of 4.1%. Additionally, 11.4% of live births in the county were to mothers who smoked during pregnancy, which is lower than the state's average of 13.5%.<sup>25</sup>

### Low Birth Weight

Low birth weight (i.e., weighing fewer than 5 pounds and 8 ounces, or 2500 grams) and preterm births (i.e., 37 weeks of gestation or less) together are the second leading cause of death among children less than 1 year of age.<sup>26</sup> Low birth weight infants are more at risk of health problems compared to infants born of normal weight, including infection, gastrointestinal problems, delayed motor and social development, and learning disabilities. Low birth weight infants may also be at higher risk of high blood pressure, diabetes, and heart disease later in life.<sup>27</sup>

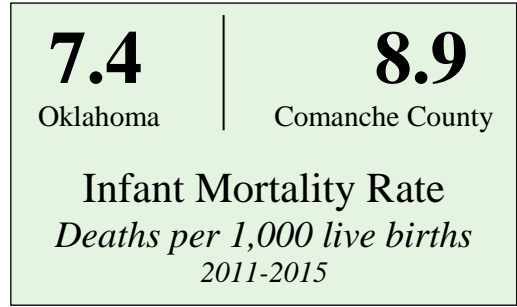


The state rate is the same as the latest national data (8.1% in 2015).<sup>27</sup> When considering race from 2011-2015, Oklahoma Black babies were more likely to be of low birth weight (13.4%) compared to White (7.5%), American Indian (7.0%), and Asian (7.8%) babies.<sup>25</sup>



*Infant Mortality Rate*

The infant mortality rate (IMR) is an important indicator of the health of a nation and is also a reflection of maternal health, accessibility and quality of primary health care, and the availability of supportive services in the community.<sup>28</sup> The leading causes of infant death include congenital malformations (i.e., medical conditions present at birth), disorders related to short gestation (fewer than 37 weeks of pregnancy completed) and low birth weight (less than 5 lbs., 8 oz.), and Sudden Infant Death Syndrome (SIDS).<sup>26</sup>



Oklahoma’s 2011-2015 IMR, although slightly lower than its previous 2006-2010 rate of 7.6 deaths per 1,000 live births, has resulted in 147,075 years of potential life lost from 2011-2015, based on an average age of death in Oklahoma of 75 years.<sup>29</sup> The rate is also still significantly higher than the national rate of 6.0 infant deaths per 1,000 live births in 2013.<sup>30</sup> Further, racial disparities exist in IMR, with Oklahoma’s Black infant rate being more than double the rates of White and Asian infants. The IMR for Black infants declined between 2006-2010 estimates and 2011-2015 estimates (15.6 to 14.5, respectively),<sup>29</sup> but is still extremely high.

**6,450**

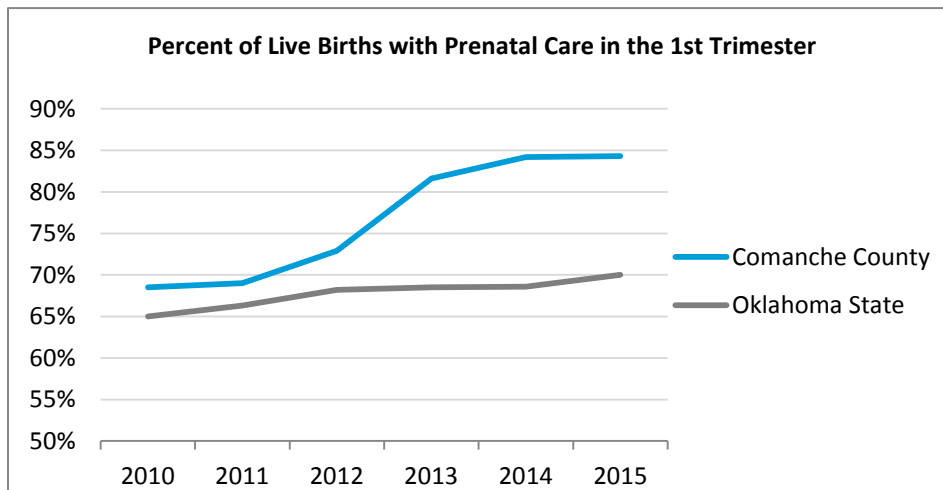
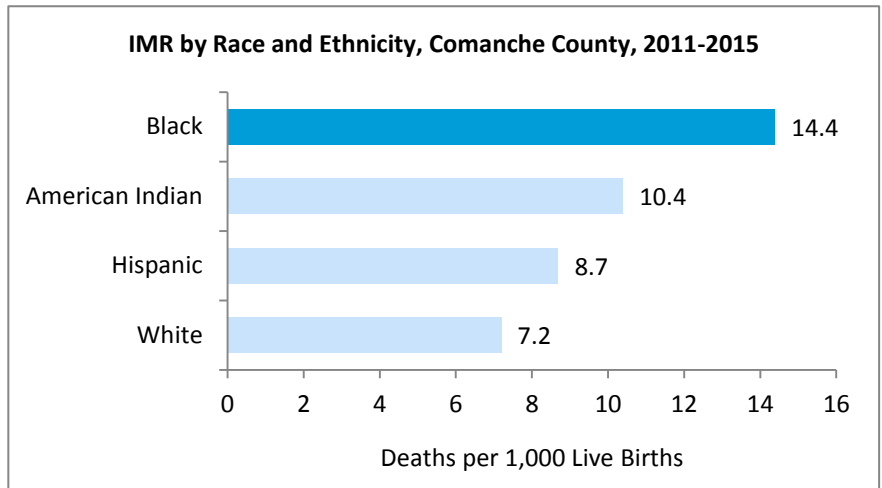
**Years of Potential Life Lost**

Comanche County, 2011-2015

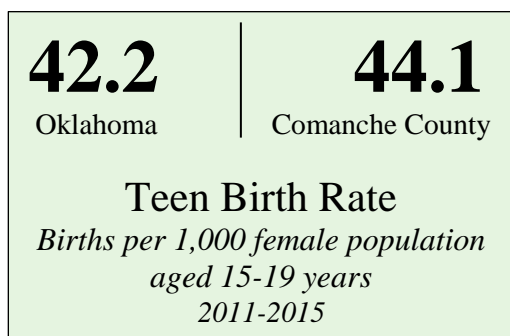
Based on an average death in Oklahoma of 75 years

Comanche County’s IMR is 20.3% higher than the state rate and 18.4% lower than the county rate from 2006-2010 (10.9 deaths per 1,000 live births). Additionally, since 2006-2010 data, all race rates have decreased, but Hispanic infant mortality rates have increased.<sup>29</sup>

While organizations across Oklahoma have been working together to reduce infant mortality as part of the Preparing for a Lifetime, It’s Everyone’s Responsibility initiative,<sup>31</sup> there is still much work to do. One way to reduce infant mortality is through receiving prenatal care in the first trimester, which is believed to reduce the risk of maternal and infant sickness and death as well as preterm delivery and low birth weight. From 2011-2015, 78.3% of women who had a live birth in Comanche County accessed prenatal care during the first trimester of their pregnancy.<sup>25</sup>



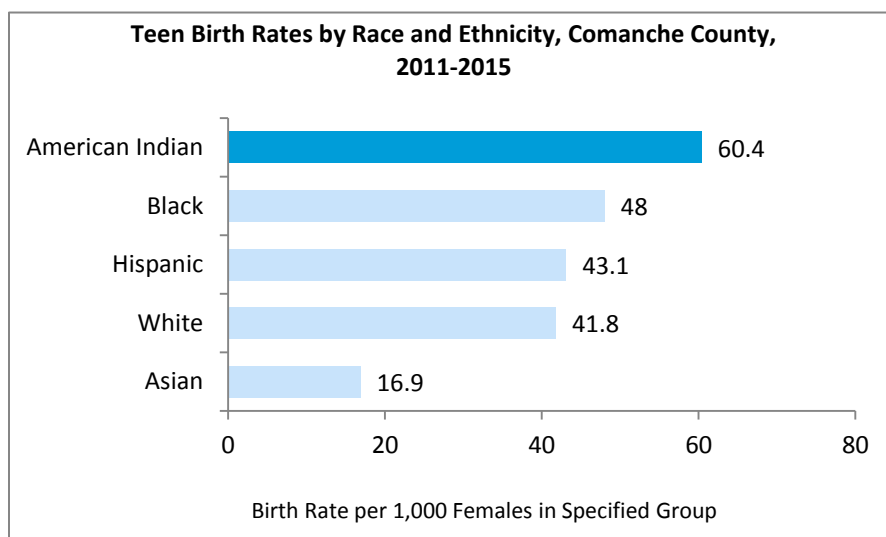


*Teenage Pregnancy*

Although births to teen mothers have been declining in recent years,<sup>32</sup> Oklahoma still has one of the highest teen birth rates in the country (ranked at 48<sup>th</sup> in the nation),<sup>33</sup> including a high rate of repeat births.<sup>34</sup> Pregnant teens are more likely than older pregnant females to experience medical complications, have low educational attainment, and engage in unhealthy behaviors that put their unborn child at risk.<sup>35</sup> Children of teen mothers are more likely than children of older mothers to display poor health and social outcomes, such as premature birth, low birth weight, behavioral problems, and abuse and neglect.<sup>36</sup> Additionally, infant mortality rates are highest for babies of teen mothers.<sup>26</sup>

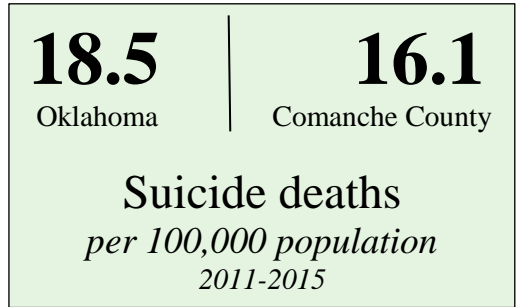
Comanche County's teen birth rate is slightly higher than the state rate and nearly double the 2015 national rate of 22.3.<sup>25,37</sup> The current county rate is 25.1% lower than the 2005-2009 rate. The majority of births in Comanche County to teen mothers are first births (79.5%), while 16.5% are second births, and 4% are the third or more births.<sup>25</sup>

Recent estimates place the cost of teen childbearing in Oklahoma at \$169 million in 2010, and this includes only health care and other costs associated with the children, not the mothers.<sup>38</sup>



## OHIP Flagship Issue #4: Behavioral Health

From 2013-2014, nearly 20% of adult Oklahomans had a mental illness and 4.4% had a serious mental illness. This is similar to the national rates for the same time period of 18% and 4.2%, respectively. Further, it is estimated that 3.9% of Oklahoman adults had thoughts of suicide from 2013-2014; this rate is the same as the national rate. What is even more troubling is that only 42% of Oklahoman adults with a mental illness had received treatment or counseling from 2010-2014.<sup>39</sup>



Adolescents are not spared from mental illness either. From 2013-2014, one in ten Oklahoman adolescents (compared to the 11% national average) experienced a major depressive episode and of those, over half did not receive any treatment for depression.<sup>39</sup> Unfortunately, 2015 data show that 15.1% of high school youth seriously considered attempting suicide and 7.4% attempted one or more times.<sup>23</sup>

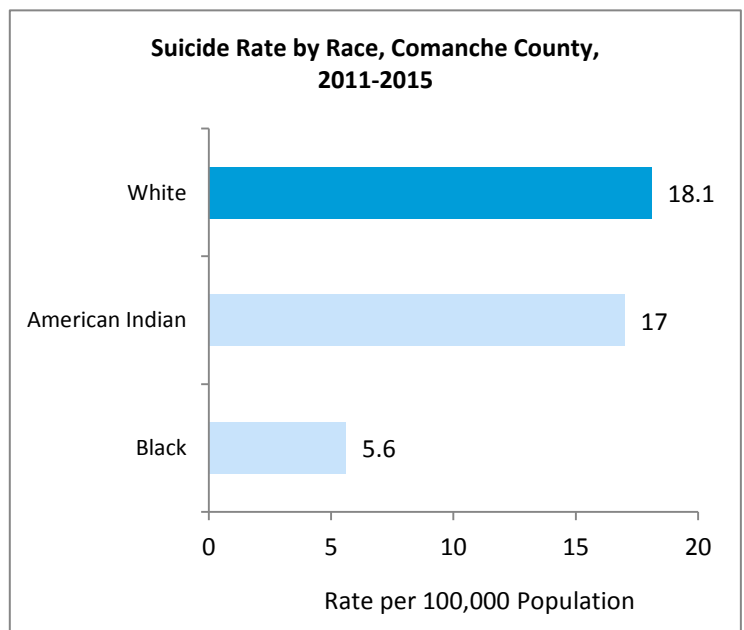
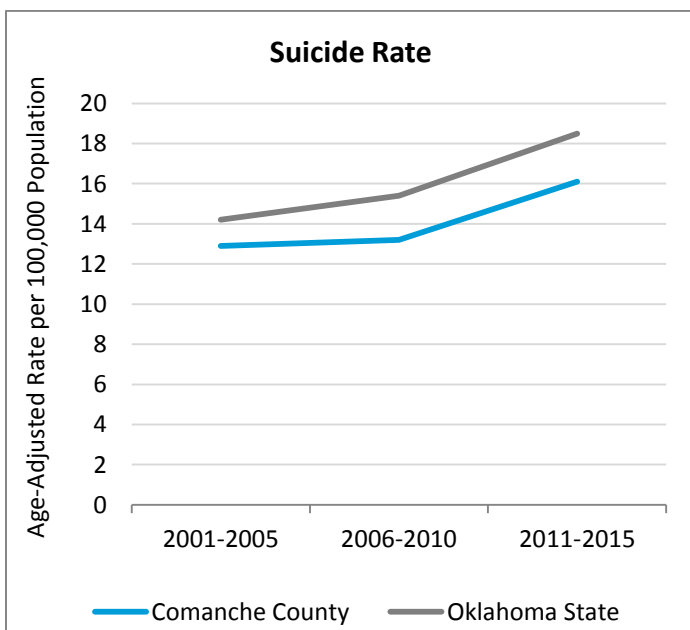
Substance use and abuse is also a problem among both adolescents and adults. From 2013-2014, 8.1% of adolescents in Oklahoma had used illicit substances in the past 30 days (national average: 9.1%), and 5.3% of Oklahoman adolescents used pain relievers for nonmedical use (national average: 4.7%). Two percent of Oklahomans 12 years and older were dependent on or abused illicit drugs (national average: 2.6%), and of those with a dependence/abuse problem, 85% did not get any addiction treatment (2010-2014). Further, from 2013-2014, 6.4% of Oklahomans over 12 years of age had alcohol dependence or abuse (national average: 6.5%). Of those, 92.8% did not receive treatment (2010-2014).<sup>39</sup>

**\$382,485,734**

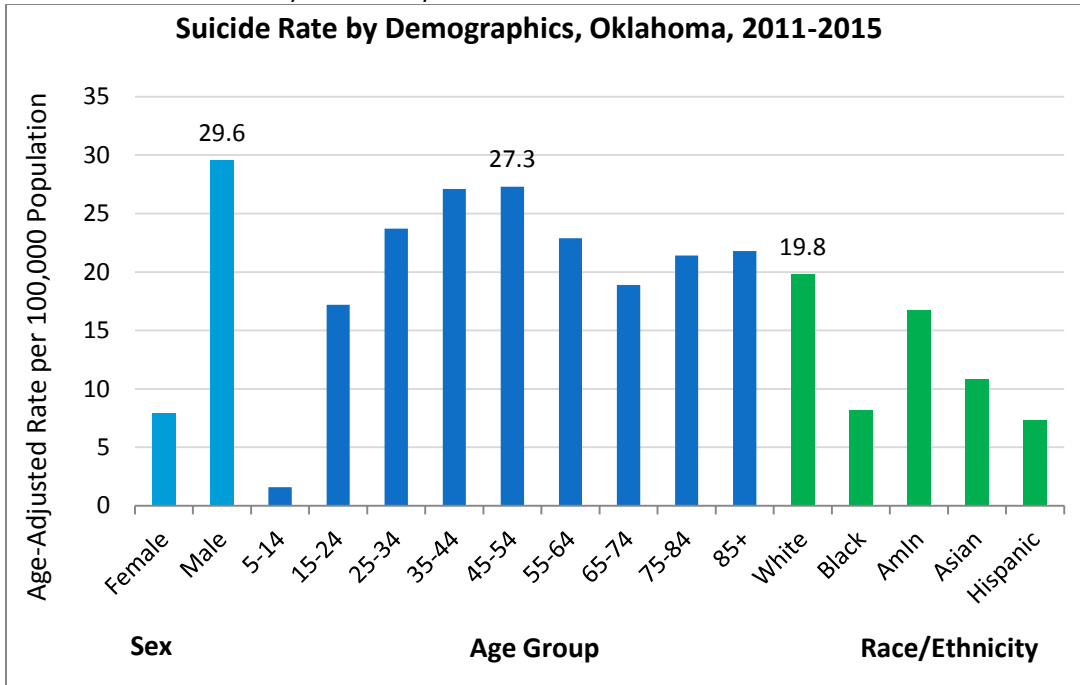
*Mental illness  
hospital inpatient cost  
Oklahoma, 2014*

Oklahoma hospital inpatient discharge data for 2014 show 19,352 discharges related to mental illness with an average stay of 10.8 days. In Comanche County, 721 discharges were for mental illness, costing \$23,602,168 total. The average length of stay was 16.7 days. Both sexes had similar discharge rates, but males stayed double the length of females (22 days and 11.6 days, respectively).<sup>40</sup>

The Oklahoma suicide rates are highest for men, 45-54 year-olds, and White individuals. The highest rates for Comanche County were for males, 75-84 year-olds (41.2 deaths per 100,000 population), and White individuals. Additionally, ages 45-54 (28.9) and 35-44 (25) had high rates.<sup>29</sup>



Comanche County Community Health Assessment



24.4
7.7

Suicide Rate per 100,000 Population

Comanche County  
2011-2015

### Binge Drinking

## 11.6%

Oklahoma

## 18.4%

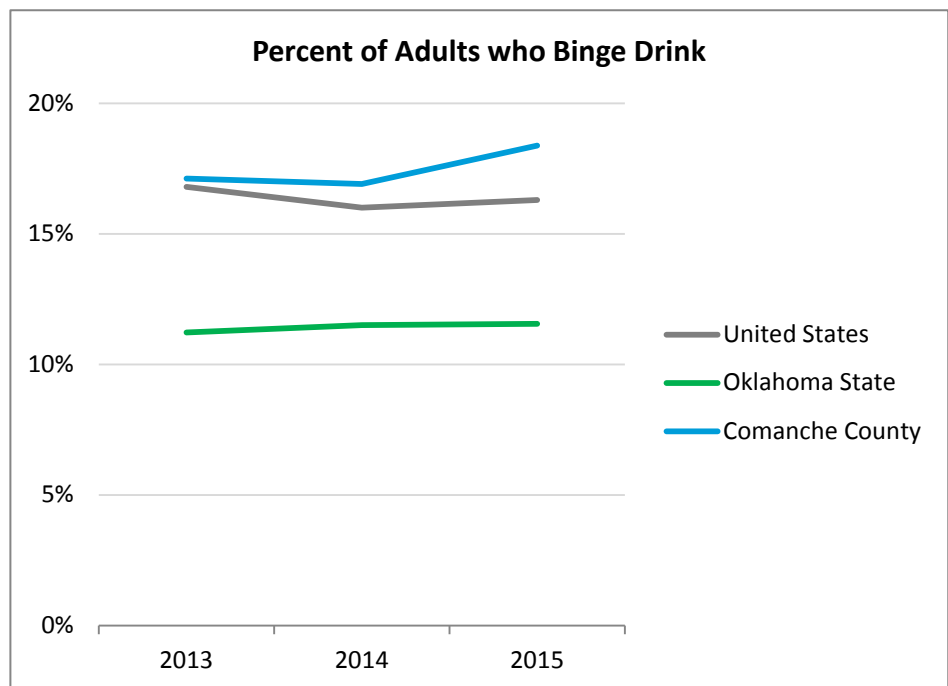
Comanche County

Binge Drinking Adults

2015

In 2015, 41.9% of Oklahoman adults had at least one drink of alcohol in the past month, lower than the national average of 53.6%. This percentage has slowly decreased since 2011, both at the state and national level. Binge drinking (five or more alcoholic beverages on one occasion for men, four or more for women), however, continues to be an occurrence for many adult Oklahomans. Unlike the decreases in monthly use of alcohol, engagement in binge drinking has increased slightly since 2013 at the county level, while remaining steady at the state and national levels.<sup>14</sup>


Oklahoma high school youth also admit to alcohol use. Fifteen percent drank alcohol before the age of 13 (highest for American Indian and Hispanic males), 27.3% consumed one or more drinks in the past month (highest for Hispanic and White males), and 5.8% had 10 or more alcoholic drinks in a row (highest for males). Further, nearly half had alcohol given to them (highest for White and Hispanic females).<sup>23</sup>



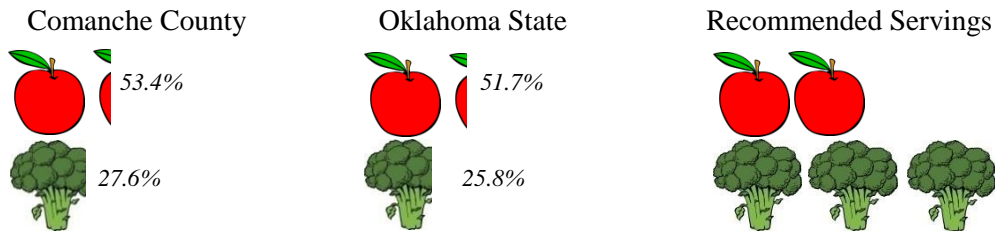
## Nutrition and Physical Activity

Poor diet is a primary cause of adult deaths in the U.S.<sup>41,19</sup> While poor diet can be characterized in many different ways, a common proxy measure is assessing fruit and vegetable consumption. A recent study determined that fruit and vegetable consumption is associated with reduced risk of death.<sup>42</sup> Oklahoma has typically ranked as one of the worst states for fruit and vegetable consumption among adults. In 2013, the last year data were available for every state, Oklahoma ranked second to last in consuming three daily servings of vegetables and third to last in consuming two or more daily servings of fruits.<sup>43</sup>

**Key:**



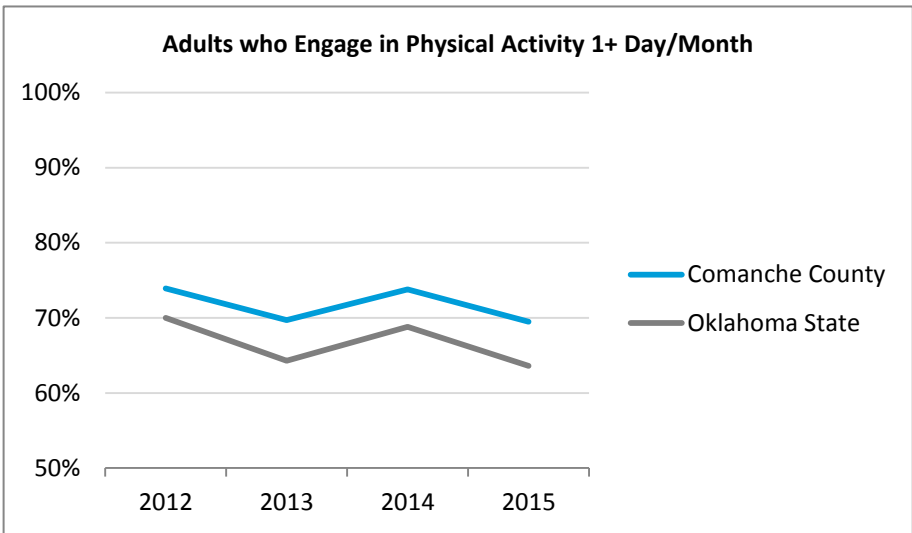
50% recommended serving      33% recommended serving



### Physical Activity

Physical inactivity was reported to be a leading contributor to almost 1 in 10 adult deaths in the U.S.<sup>20</sup> In 2014, close to 24% of U.S. adults did not engage in any physical activity.<sup>44</sup> Adults who engage each week in 150 minutes of moderate to vigorous intensity aerobic activity in bouts of at least 10 minutes experience improved health and fitness and reduced risk of several chronic diseases.<sup>45</sup>

<b>36.4%</b> Oklahoma	<b>30.5%</b> Comanche County
<b>Adults who Do Not Engage in Physical Activity</b> 2015	



Youth who are regularly active have a better chance of having a healthy adulthood. Children and adolescents should get at least 60 minutes of moderate intensity physical activity most days of the week, preferably every day, and three of those days should include vigorous intensity aerobic activity.<sup>46</sup> Statewide from 2013-2015, 53.8% of high school students were physically active for one hour at least five days of the week.<sup>23</sup>

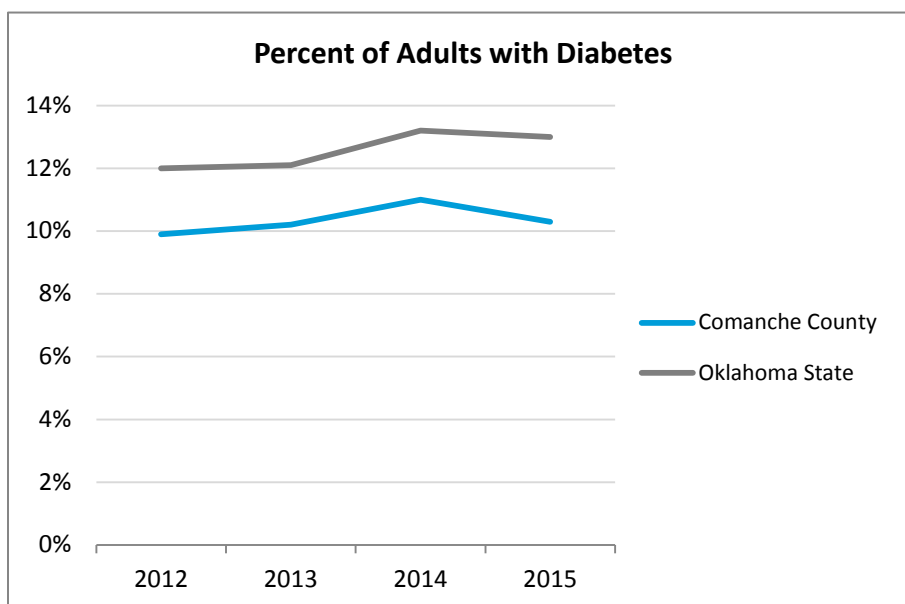
## Diabetes

<b>13.0%</b> Oklahoma	<b>10.3%</b> Comanche County
<b>Adults Diagnosed with Diabetes</b> 2015	

Type II Diabetes Mellitus is a chronic disease characterized by high levels of sugar (i.e., glucose) in the bloodstream due to the body’s resistance to insulin. If left untreated, serious complications can arise, including heart disease, renal failure, retinopathy, and neuropathies. Several risk factors may increase the likelihood of developing diabetes. Some of these risk factors cannot be changed (eg., aged 45 years and older, family history). Other risk factors relate to behaviors, such as prediabetes, overweight/obesity, being physically inactive, and having high blood pressure.<sup>47</sup>

The American Diabetes Association released a report estimating the total cost of diagnosed diabetes to be \$245 billion in the U.S. in 2012.<sup>48</sup> This amount includes both direct medical costs and reduced productivity. They estimated the largest component of direct medical costs to be hospital inpatient care.

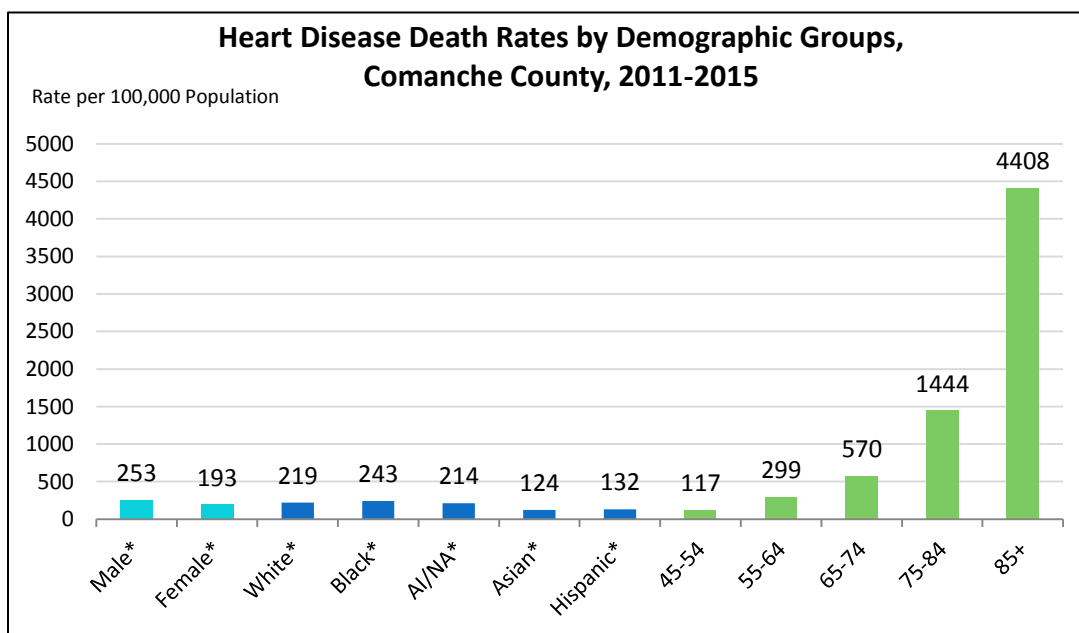
Comanche Diabetes Inpatient Data (2014)			
<b>218</b>	<b>\$6,811,956</b>	<b>4.3 days</b>	<b>\$31,247.5</b>
<i>Hospital Discharges</i>	<i>Total Charges</i>	<i>Average Hospital Stay</i>	<i>Average Charges per Stay</i>



## Death, Injury, and Violence

### Leading Cause of Death

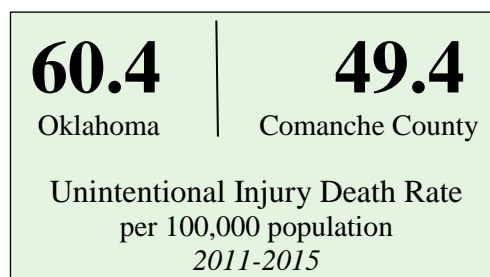
In Comanche County, heart disease is still the leading cause of death for all ages combined at 221.2 deaths per 100,000 population (2011-2015).<sup>29</sup> The rate decreased 10.6% from the previous 2008-2012 data (247.5 deaths per 100,000 population).<sup>29</sup> In 2014, the most recent year for which hospital discharge data are publicly available, the total charges attributable to heart disease in Comanche County were \$37,535,531, or \$47,274 per discharge.<sup>40</sup>



\*Age-Adjusted Death Rate per 100,000 Population

### Injury and Violence

Unintentional injury is the 5<sup>th</sup> leading cause of death in Oklahoma, and the leading cause of death among individuals aged 5-44 years.<sup>29</sup> In 2014, the most recent year that data are publicly available, injuries and poisoning accounted for 36,984 total discharges, costing \$2.1 billion of Oklahoma’s hospital inpatient charges, or \$58,543 per discharge.<sup>40</sup> This equates to 12.7% of total inpatient charges in 2010,<sup>40</sup> and does not consider other related medical expenses or lost productivity.



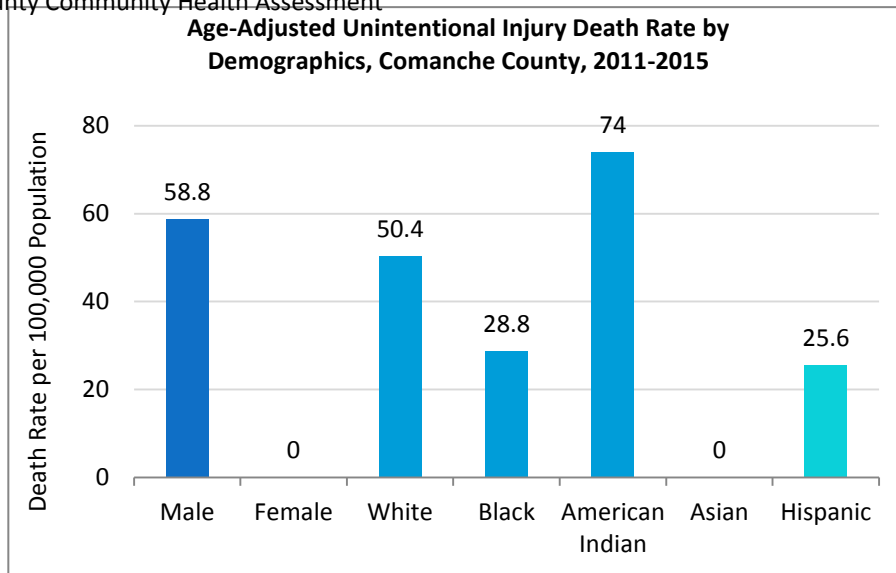
From 2011-2015, unintentional injury was the 4<sup>th</sup> leading cause of death for Comanche County and is similar to the 2006-2010 rate (50.1).<sup>29</sup>

**14.8**

Motor-vehicle Death Rate per 100,000 population  
Comanche County, 2011-2015

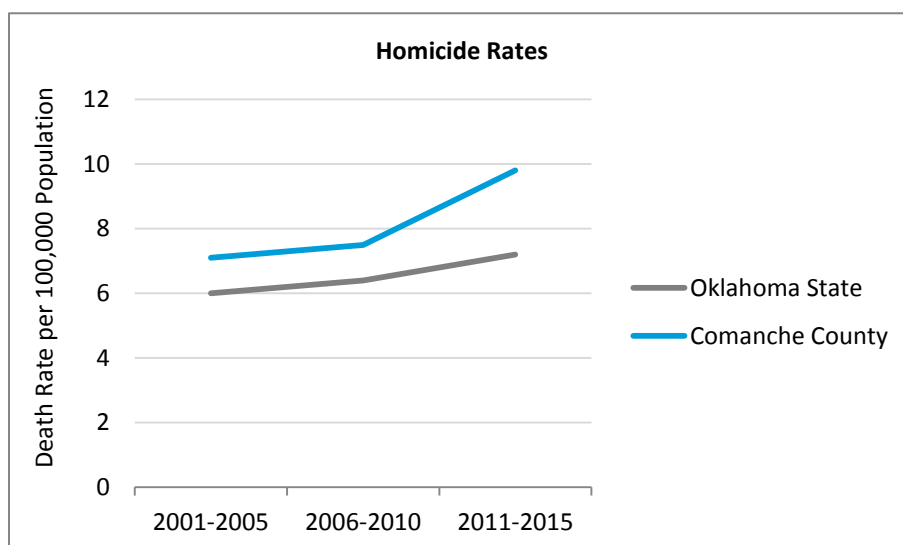
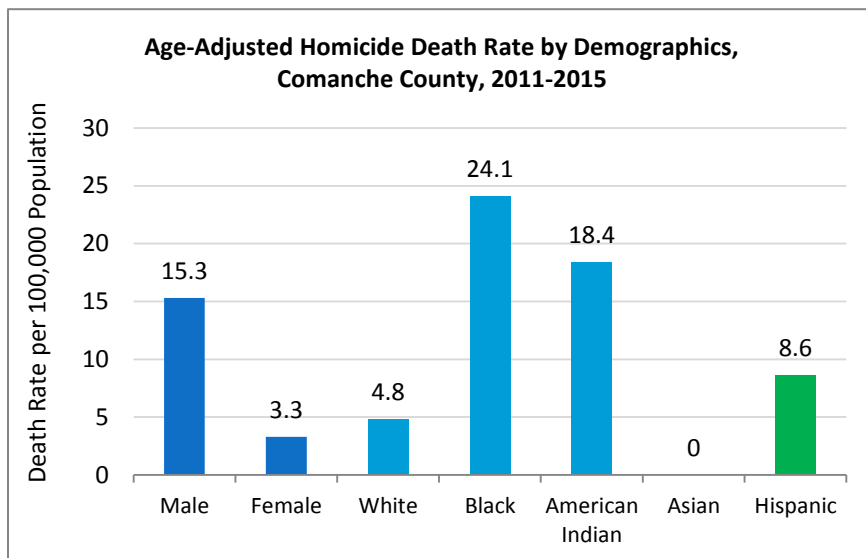
Motor-vehicle accidents account for 31.8% of Comanche County’s total unintentional injury deaths.<sup>29</sup> In 2013, motor vehicle crashes cost Oklahoma an estimated \$8 million in medical costs and \$894 million in work loss costs, resulting in a total cost of \$902 million.<sup>49</sup> This cost includes wage and productivity losses, medical expenses, administrative expenses, motor vehicle damage, and employers’ uninsured costs.





Violence-related deaths, like suicide and homicide, are also leading causes of death in Oklahoma.<sup>29</sup> Comanche County's homicide rate is 36.1% higher than the state rate.

7.2	9.8
Oklahoma	Comanche County
Homicide Rate per 100,000 population 2011-2015	



## Comanche County Community Health Assessment

The top 10 leading causes of death table displays a broad picture of the causes of death in Comanche County.<sup>29</sup> Since many health-related issues are unique to specific ages, this table provides causes of death by age group at a glance. The causes of death that are present across almost every age group have been highlighted. This table shows the actual number of deaths by cause.

Top 10 Causes of Death by Age Group  
Comanche County 2011-2015

RANK	0-4	5-14	15-24	25-34	35-44	45-54	55-64	65+	ALL AGES
1	PERINATAL PERIOD 35		UNINTENT. INJURY 23	UNINTENT. INJURY 33	HEART DISEASE 32	CANCER 91	CANCER 209	HEART DISEASE 867	HEART DISEASE 1192
2	CONGENITAL MALFORMATIONS 14		HOMICIDE 14	SUICIDE 22	UNINTENT. INJURY 31	HEART DISEASE 89	HEART DISEASE 191	CANCER 675	CANCER 1016
3			SUICIDE 9	HOMICIDE 18	CANCER 20	UNINTENT. INJURY 44	UNINTENT. INJURY 50	BRONCHITIS/ EMPHYSEMA/ ASTHMA 298	BRONCHITIS/ EMPHYSEMA/ ASTHMA 363
4			CANCER 5	CANCER 11	SUICIDE 19	LIVER DISEASE 27	BRONCHITIS/ EMPHYSEMA/ ASTHMA 47	STROKE 201	UNINTENT. INJURY 289
5				HEART DISEASE 7	HOMICIDE 13	DIABETES 25	DIABETES 44	DIABETES 138	STROKE 253
6					LIVER DISEASE 7	SUICIDE 22	STROKE 27	ALZHEIMER'S DISEASE 122	DIABETES 215
7					DIABETES 5	STROKE 17	LIVER DISEASE 27	UNINTENT. INJURY 99	ALZHEIMER'S DISEASE 123
8						HOMICIDE 11	SEPTICEMIA 16	INFLUENZA/ PNEUMONIA 67	LIVER DISEASE 96
9						BRONCHITIS/ EMPHYSEMA/ ASHTMA 11	INFLUENZA/ PNEUMONIA 13	NEPHRITIS 56	SUICIDE 96
10						HOMICIDE 11	HYPER-TENSION 11	HYPER-TENSION 49	INFLUENZA/ PNEUMONIA 89

\*Total deaths per age group were determined and cause of death was ordered (by frequency) when 5 or more deaths occurred for a specific cause; the number of deaths that occurred in frequencies fewer than 5 per cause were not included because the data are suppressed on OK2SHARE (the source of this data) when there are fewer than 5 deaths per search category.

Data source: Vital Statistics, Health Care Information Division, Oklahoma State Department of Health  
Produced by: Community Epidemiology and Evaluation, Oklahoma State Department of Health

## Healthy People 2020 Table

Healthy People 2020 Indicators <sup>50</sup>	Comparison Data: Year(s)						2020 target <sup>50</sup>
	Comanche County <sup>51</sup>		Oklahoma <sup>51</sup>		United States <sup>50</sup>		
Infant mortality (per 1,000 births)	2011-2015	8.9	2011-2015	7.4	2013	6.0	6.0
Low birth weight infants (% of live births)	2011-2015	7.8%	2011-2015	8.1%	2014	8.0%	7.8%
Very low birth weight infants (% of live births)	2011-2015	1.5%	2011-2015	1.4%	2014	1.4%	1.4%
First trimester prenatal care (% of live births)	2011-2015	78.3%	2011-2015	62.0%	2007 <sup>§</sup>	70.8%	77.9%
Coronary heart disease deaths (per 100,000 population)*	2011-2015	221.2	2011-2015	227.9	2014	98.8	103.4
Cancer deaths (per 100,000 population)*	2011-2015	181.4	2011-2015	185.8	2014	161.2	161.4
Unintentional injury deaths (per 100,000 population)*	2011-2015	49.4	2011-2015	60.4	2014	40.5	36.4
Transportation-related deaths (per 100,000 population)*	2011-2015	14.8	2011-2015	19.5	2014	10.3	12.4

Notes:

Red = Have not yet met 2020 Target      Green = Exceeded 2020 Target      Black = Same as 2020 Target

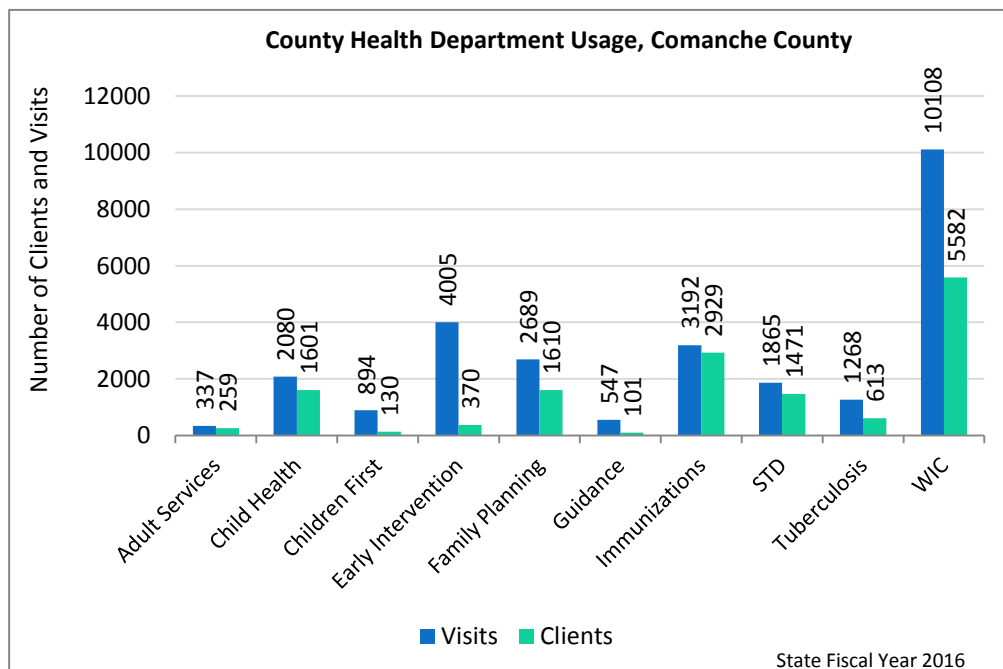
\*Death rate is age-adjusted to the 2000 U.S. standard population;

§The most recent data available from CDC WONDER Natality Data shows that 65.4%<sup>3</sup> of women having live births in from 2011-2015 received prenatal care within the first three months of pregnancy. Not all states collect prenatal care information on the birth certificate.

## County Health Department Usage

There are 82 county health department sites in 68 counties across Oklahoma which are part of the state system, and 2 independent health departments (Oklahoma City-County and Tulsa City-County Health Departments). In the 7 counties without a physical site, staff from neighboring counties provides specific services to those regions, and residents can visit health departments in neighboring counties for additional services. Each department offers a variety of services, such as immunizations, family planning, maternity education, well-baby clinics, adolescent health clinics, hearing and speech services, child developmental services, environmental health, health education, community development programs, and the SoonerStart program. Not every service is available in all counties.

The data on this page is an accounting of services provided in the county health department. Many other activities are implemented across the county and in the community to promote the public's health.



**TOTAL VISITS: 26,985**

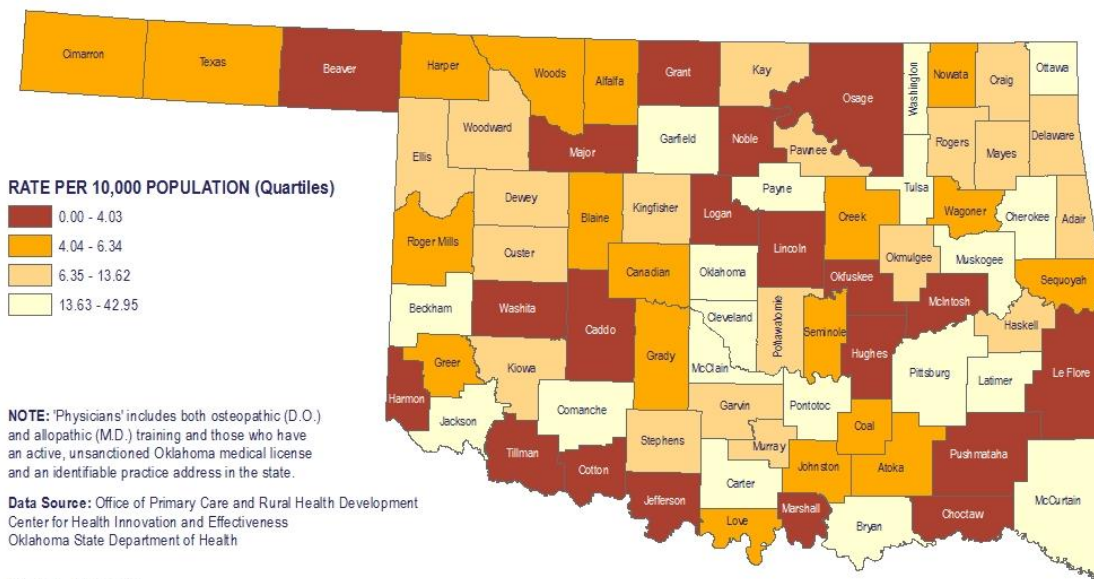
**TOTAL CLIENTS: 11,435**

State Fiscal Year 2016

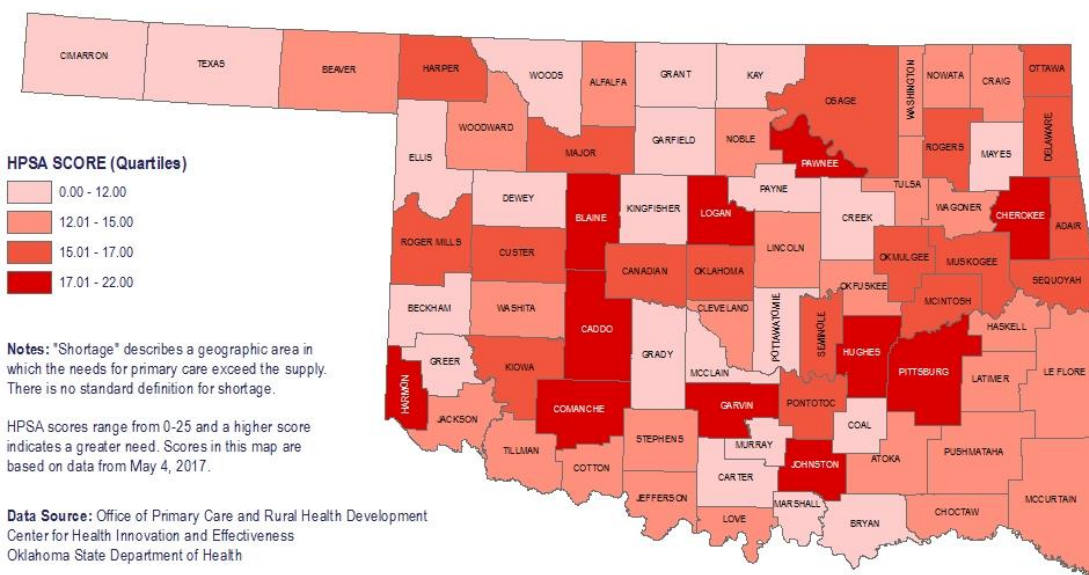
## Access to Care

In 2014, Oklahoma ranked 48<sup>th</sup> in the nation for the number of primary care physicians per 100,000 population (84.8) and nearly 25% of Oklahoma adults do not have a personal doctor or health care provider.<sup>7,14</sup> Further, 70 out of the 77 counties are considered to be medically underserved areas (MUA).<sup>53</sup> Although 86.4% of adults over 18 had health care coverage in 2015, 15.2% reported that within the past year, they could not visit a doctor due to cost.

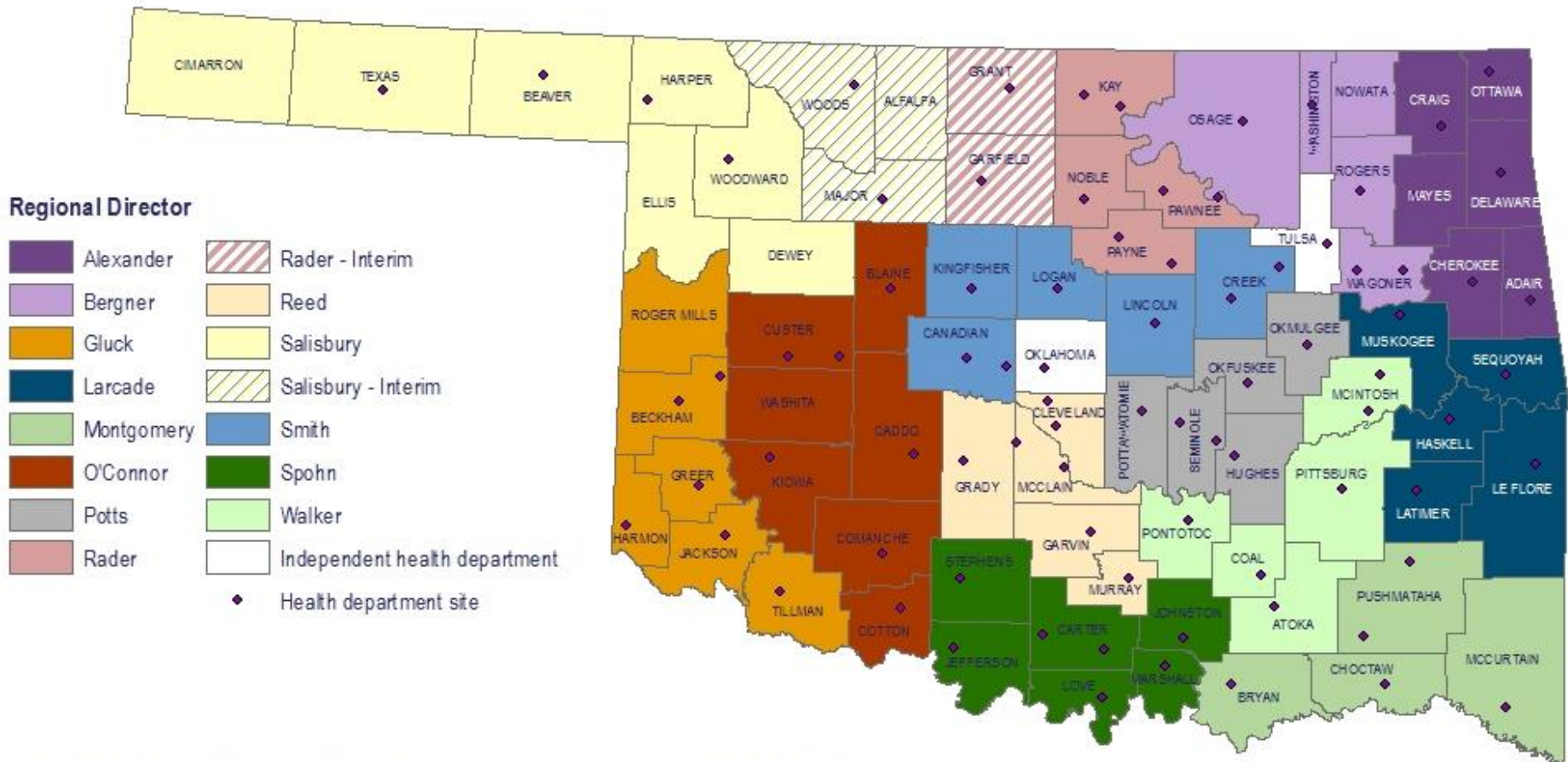
### Number of Actively Licensed Physicians by County July - Dec 2016



### Health Professional Shortage Area (HPSA) Scores for Primary Care, by County



## Regional Directors and County Health Department Locations



Data Source: Community and Family Health Services, Oklahoma State Department of Health

Effective: 07.31.2017





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<p>Oklahoma State Department of Health Community and Family Health Services Community Epidemiology &amp; Evaluation 1000 NE 10<sup>th</sup> St. Room 508</p> <p>Phone: (405) 271-5279 Fax: (405) 271-1225</p>	<p>Report compiled by:</p> <p style="text-align: center;">Alora Korb, M.A. <i>Program Assessment &amp; Evaluation Specialist</i></p> <p style="text-align: center;">Jennifer Han, Ph.D., CHES <i>Director of Community Epidemiology &amp; Evaluation</i></p>
<div style="display: flex; justify-content: space-between; align-items: center;">  <div style="font-size: 0.8em;"> <p>The Oklahoma State Department of Health (OSDH) is an equal opportunity employer and provider. This publication, issued by the OSDH, was authorized by Terry L. Cline, PhD, Commissioner of Health, Secretary of Health and Human Services. A digital file has been deposited with the Publications Clearinghouse of the Oklahoma Department of Libraries. Copies have not been printed but are available for download at <a href="http://www.health.ok.gov">www.health.ok.gov</a>. May 2017</p> </div>  </div>	

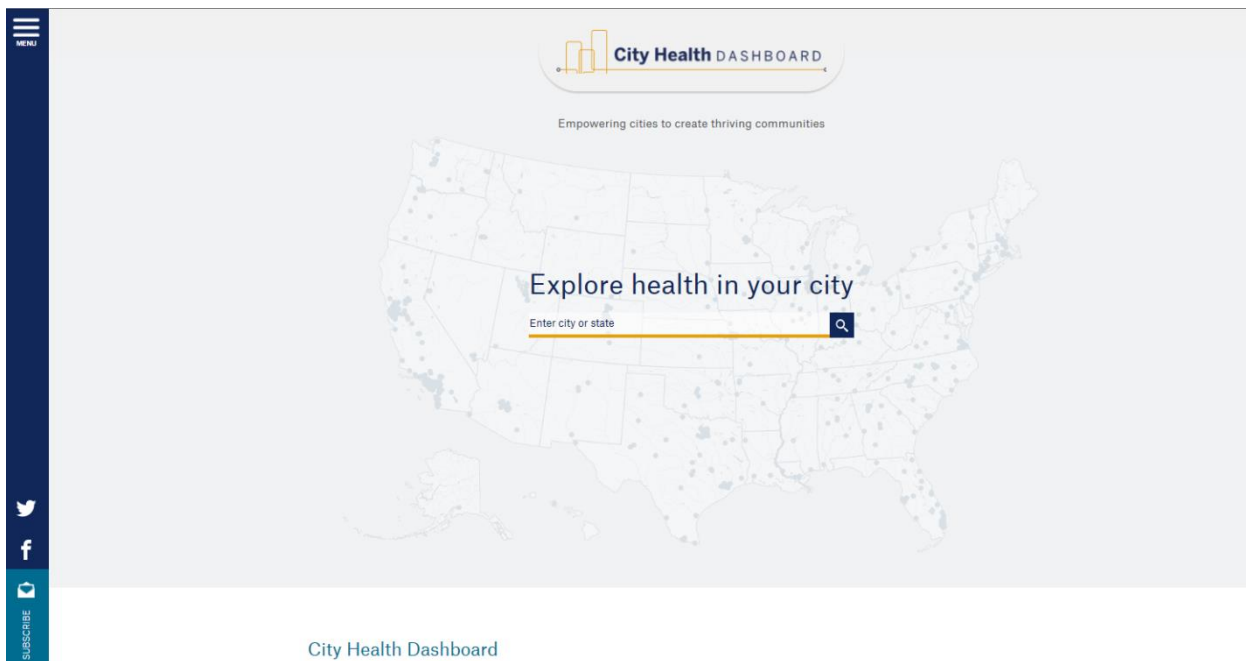


## Why City Health Dashboard?

More than 80 percent of U.S. residents live in urban areas. But until recently, few measures have been available for cities to assess health, the factors that shape it, and the drivers of health equity. That's where the City Health Dashboard comes in. Our goal is to provide city leaders with an array of regularly refreshed data to support health-related decision-making.

The City Health Dashboard launched in early 2017 with 26 measures for four pilot cities: Flint, Michigan, Kansas City, Kansas, Providence, Rhode Island, and Waco, Texas. With support from the Robert Wood Johnson Foundation, the City Health Dashboard has expanded to offer data on 36 measures for the 500 largest U.S. cities - those with populations of about 66,000 or more – representing approximately one-third of the U.S. population. Equipped with these data, local leaders have a clearer picture of the challenges facing their communities and how to address them. See our project one-pager, FAQ, or Technical Document.

The City Health Dashboard website was launched in 2018 for an interactive experience with data specific to larger cities. The website address is as follows: <https://www.cityhealthdashboard.com/>



## Comanche County at a Glance

The community has many community partners working together with the intent to create better health outcomes. Here are a few statistics reported in 2018 to compare to the 2015 reported data (reporting year is not the actual year data was originally collected).



Statistic	Reporting year 2015	Reporting year 2018	Source
County Population	124,648	121,526	CDC Quickfacts
Populations by Races:			CDC Quickfacts
White	66%	65%	
Hispanic or Latino	13%	13%	
Black or African American	18%	18%	
American Indian & Alaska Native	6.3%	6.6%	
Asian	2.7%	2.7%	
Two or more races	6.3%	6.7%	
Median Household Income	\$46,302	\$48,500	County Health Ranking
Black	\$38,900		
Hispanic	\$55,100		
White	\$49,600		
Persons in Poverty	18.6%	23%	CDC Quickfacts
Children Living in Poverty (under 18)	24%	23%	County Health Ranking
Black	36%		
Hispanic	24%		
White	18%		
Without Health Insurance (under age 65)	19%	14%	County Health Ranking
High School Graduate or Higher	89.3%	89.6%	
Infant Mortality per 100,000 births	9.8	10	County Health Ranking
Infant Mortality Rate (Black)	12		
Infant Mortality Rate (White)	9		
Number of motor vehicle crash deaths with alcohol involvement	46%	37%	
Education 25 years and over			Census factfinder
Graduate or Professional Degree	6.8%	7.3%	
Bachelor's degree	13.06%	13.4%	
Associate's degree	6.7%	7%	

## Comanche County at a Glance Cont.

Statistic	Reporting year 2015	Reporting year 2018	Source
Some college, no degree	28.6%	28.3%	
High school graduate/equivalency	33.5%	33.6%	
9 <sup>th</sup> to 12 <sup>th</sup> grade, no diploma	7.7%	7.6%	
Less than 9 <sup>th</sup> grade	3%	2.7%	
Education 18 to 24 years of age			Census factfinder
Bachelor's degree or higher	7.4%	8.1%	
Some college or associate's degree	38.1%	37.7%	
High school graduate/equivalency	41.9%	44%	
Less than high school graduate	12.7%	10.2%	
Unemployment rate	4.8%	4.7%	County Health Ranking
Violent Crimes	722	747	County Health Ranking
Carried a handgun (Self-reported)	Year 2012	Year 2016	OPNA
6 <sup>th</sup> Grade	2.94%	5.03%	
8 <sup>th</sup> Grade	3.33%	8.33%	
10 <sup>th</sup> Grade	5.15%	5.82%	
12 <sup>th</sup> Grade	4.85%	8.01%	

# FOURTH GRADE WELLNESS INITIATIVE

## 4TH GRADE BMI REPORT

Comanche County Health Department

March 2019



Comanche County  
Health Department

## Purpose

The Fourth Grade Wellness Initiative is a collaborative effort to address and improve Comanche County youth's overall health with a focus on reduction of childhood obesity. In the 2015 Comanche County Community Health Assessment, one important issue chosen to be addressed was obesity. During that same year, the school-based Youth Behavioral Risk Survey (YRBS), through the Centers for Disease Control and Prevention, was conducted across the state of Oklahoma. This survey gathers data from students about health related behaviors such as alcohol and substance use, physical activity, nutritional diet, sexual behaviors, tobacco use, obesity, and asthma. The results showed that 32.5% of Oklahoma adolescents were considered overweight or obese (YRBS 2015). This data aligned with the increasing concern of the local community on obesity. The Fourth Grade Wellness Initiative helps to further the efforts to reduce the growing threat of childhood obesity. The initiative will give us a clear, real time look at obesity rates among a targeted group in three distinct demographics in terms of resources and demographics.

## Overview

According to the World Health Organization, childhood obesity is one of the most serious public health challenges of the 21<sup>st</sup> century. In the last three decades, obesity rates have tripled in the U.S. Obesity is a serious health threat that can potentially harm numerous organ systems in a child's developing body and can negatively affect social and emotional health. The risk of chronic health conditions such as asthma, sleep apnea, bone and joint problems, type 2 diabetes, and heart disease increases in children who are obese. Additionally, obese children tend to be bullied and teased more in comparison to their healthy weight peers resulting in lower self-esteem and possible

depression. Lastly, a child with obesity is more likely to carry their weight and unhealthy eating patterns into adulthood elevating the risk for additional chronic conditions like metabolic syndrome and certain types of cancers (CDC, 2018). The cost for medical treatment of our increasingly obese society ranges from \$147 to \$210 billion per year in the US alone (Robert Wood Johnson Foundation , n.d.). Contributing factors to obesity include genetics, metabolism, community and neighborhood design and safety, sleep duration and irregularity, and eating and physical activity behaviors. It is important to understand that some of these factors, like genetics, cannot be altered but through the scope of public health practice, changes in environments and behaviors can be achieved.

Children spend a significant part of their lives in school-based settings; therefore, schools can influence dietary and physical activity behaviors through the adoption of policies and practices supporting healthy behaviors. School based Body Mass Index, or BMI, data collection is a popular surveying tool based on the simplicity and cost effectiveness of gathering the required information (Nihiser, et al., 2007). Because little research is available on this practice with children, the CDC does not list BMI collection as a recommended strategy to approach obesity but does provide guidelines on how to implement this emerging technique. BMI is a person's weight in kilograms divided by the square of height in meters (CDC, 2018). For children and teenagers, BMIs are calculated as a percentage from an age and sex specific graph due to weight, height, and body fat percentages changing significantly during developmental years. BMIs are interpreted relative to other children of the same age and sex. A high BMI percentile does not measure direct body fat but is an indicator of such.



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 CDC BMI-for-Age Growth Chart Percentiles
 

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<b>Weight Status Category</b>	<b>Percentile Range</b>
Underweight	Less than the 5 <sup>th</sup> percentile
Normal or healthy weight	5 <sup>th</sup> percentile to less than the 85 <sup>th</sup> percentile
Overweight	85 <sup>th</sup> to less than the 95 <sup>th</sup> percentile
Obese	Equal to or greater than the 95 <sup>th</sup> percentile

Although BMI measurements are an easy and cost effective screening tool, it is not a diagnostic tool. Assessment by a health professional is required to determine if a child or teen has excess body fat by collecting information from skin fold thickness, family history, diet evaluation, physical activity, and supplementary health screenings. Nevertheless, BMI tracking data is a useful tool when implementing and assessing evidence-based intervention programs and to identify relationships between external factors and population health.

#### Background

In Oklahoma, obesity rates among 2-4 year old WIC participants is 13.8%, 10-17 year olds' obesity rate is 18.7%, and obesity rates among Oklahoman high school students is 17.1% (Robert Wood Johnson Foundation, 2018). Currently, 60% of students are enrolled in the free or reduced School Lunch Program in Lawton Public Schools, 8.9% of residents utilize Supplemental Nutrition Assistance Program benefits, and 16.7% of women are enrolled in Women Infants and Children services. According to a statewide food desert evaluation by the Oklahoma State Department of Health (OSHD), 26.9% of Comanche County residents live in a food desert and 57.4% of its population has low access to food (LaVarnway & Craven, 2017).

The Comanche County's Community Health Improvement (CHIP) plan addresses the issue of obesity as a priority public health concern. By following the Healthy People 2020 objectives, the CHIP aims to reduce obesity in adults, adolescents, and children through various strategies. Strategy number two on the CHIP is to collect and evaluate data by determining uniform guidelines to collect BMI data and research evidence-based initiatives. The Comanche County Health Department (CCHD) in collaboration with Comanche County Memorial Hospital set forth a data collection project involving the 4<sup>th</sup> grade classes of three distinct elementary schools in Lawton, Oklahoma. Primary quantitative BMI data collection took place in three schools, Freedom Elementary, Pat Henry Elementary, and Whittier Elementary. Additionally, all children participating in the BMI project participated in qualitative data collection by answering a health behavior survey. This report focuses on the multiple factors such as school environment, home and family habits, socioeconomic status, and racial groups that could influence childhood obesity by comparing three different elementary schools' BMI and health behaviors in the City of Lawton, Oklahoma.

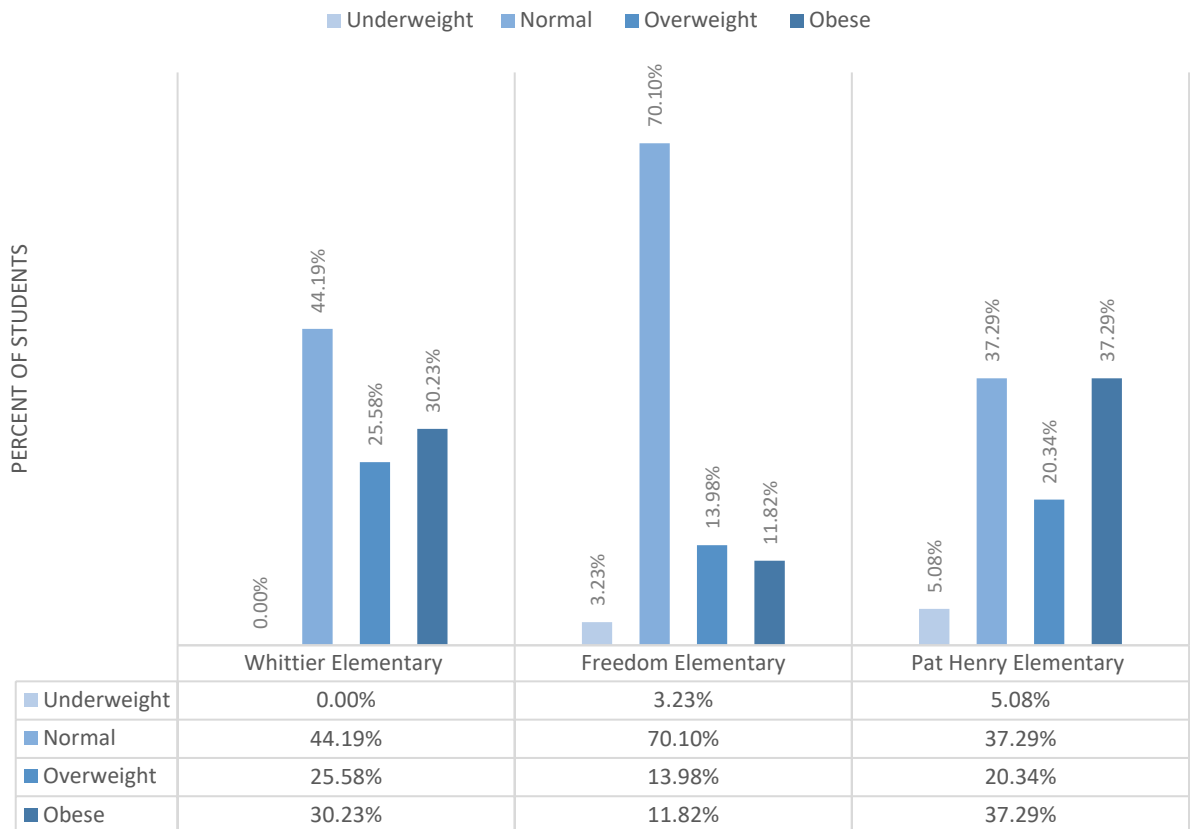
### Methods

Student BMI collection took place at each corresponding school, Freedom, Pat Henry, and Whittier Elementary using digital scales and stadiometers. The CDC's BMI Percentile Calculator for Children and Teens online tool was used to obtain growth percentiles without having to graph every data set into an individual growth chart. After BMI data collection, students individually answered a 10-question survey; response analysis was conducted through Survey Monkey. Each school provided their 4<sup>th</sup> grade class demographic information based on their student enrollment report and a low-income report gathered from Wave Student Information Systems.

## Findings

In Whittier Elementary School, 43 students participated in BMI data collection. No students were reported underweight. Nineteen students (44.19%) fell in the category for normal or healthy weight in the BMI growth chart, 11 (25.58%) screened as overweight, and 13 (30.23%) fell at or over the 95<sup>th</sup> percentile corresponding to obesity. In Freedom Elementary School, 93 students participated in BMI data collection. Three (3.23%) students screened as underweight or under the fifth percentile in the BMI growth chart, 66 (70.10%) students fell in the category for healthy or normal weight, 13 (13.98%) students screened as overweight, and 11 (11.82%) fell at or over the 95<sup>th</sup> percentile corresponding to the obese category. In Pat Henry Elementary School, 59 students participated in BMI data collection. Three (5.08%) students screened as underweight, 22 students (37.29%) fell in the category for normal or healthy weight, 12 (20.34%) students screened as overweight, and 22 (37.29%) screened as obese. Combining the total percentage of obese and overweight student population for their fourth grade students, Pat Henry Elementary has the most overweight and obese 4<sup>th</sup> grade students at 57.63%, followed by Whittier Elementary at 55.81%, lastly, Freedom Elementary has the least amount of overweight and obese student population at 25.80%.

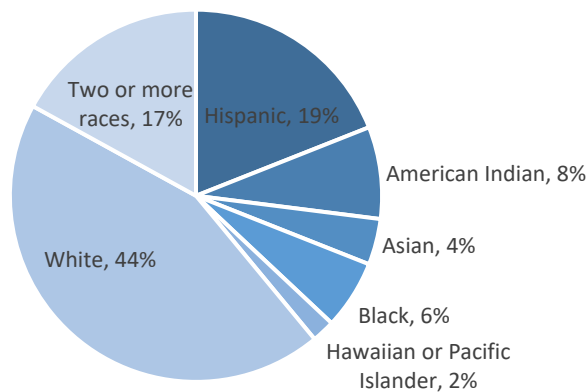
### 4TH GRADE BMI'S



A significant amount of research studies have associated lower economic status with poor diet quality like the over consumption of calorie dense foods in place of fruits and vegetables resulting in poor health outcomes like obesity and chronic disease (Pechey & Monsivais, 2016). Pat Henry Elementary 2017-2018 Low Income Report indicated 89.53% of their student population is low-income and qualifies for the free or reduced school lunch program. Whittier Elementary School’s low-income student population is 70.19% while Freedom Elementary School’s low-income population is 53.65%. Low socioeconomic status and being part of a racial minority group are some of the strongest influencing factors in childhood obesity (Lieb, Snow, & DeBoer, 2009). Based on the demographic data schools provided from Wave Student Information Systems, Pat Henry Elementary has the highest of minority populations, followed by

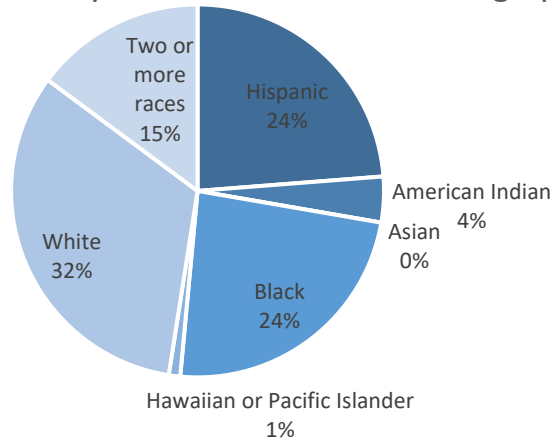
Whittier Elementary, and Freedom Elementary with the least amount. These findings support the relationship between low socioeconomic status, racial group and overweight and obesity. Pat Henry Elementary has the highest rate of overweight and obese 4<sup>th</sup> grade students at 57.63%, as well as the highest percentage of low-income students at 89.53%, and the highest minority groups in their 4<sup>th</sup> grade student population at 68%. Whittier Elementary has the second highest rate of overweight and obese 4<sup>th</sup> grade students at 55.81%, followed by the second highest percentage of low-income students at 70.19%, and the second highest minority population at 56%. Lastly, Freedom Elementary has the lowest rate of overweight and obesity at 25.80%, the lowest rate of low-income students at 53.65%, but a comparable minority population to Whittier Elementary at 55%.

#### Whittier Elementary 4th Grade Student Demographics

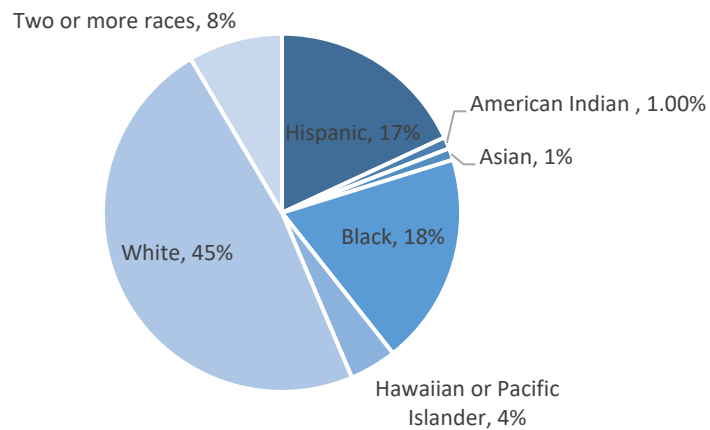


As previously mentioned, schools can influence dietary and physical activity behaviors through

Pat Henry Elementary 4th Grade Student Demographics



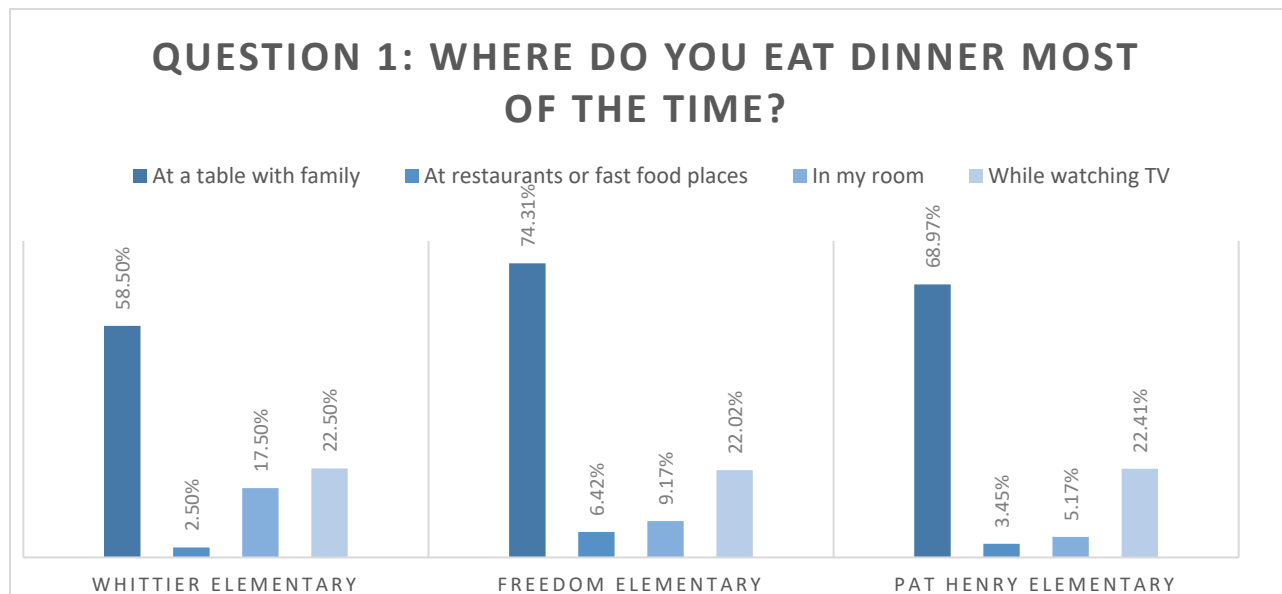
Freedom Elementary 4th Grade Student Demographics



the adoption of policies and practices supporting healthy behaviors. Whittier Elementary School is also committed to promoting a healthier lifestyle through the Safe Routes to School Walking School Bus Program but lacks model policies supporting healthy habits in school. Freedom Elementary school, located inside the U.S Army military installation of Fort Sill, has implemented Gold standard physical activity and nutrition policies through Alliance for a Healthier Generations, a national foundation that works to create healthy school environments for children to thrive. Pat Henry Elementary School has received a Bronze standard award through this same organization in their efforts to implement model policies in physical activity and nutrition. These awards are

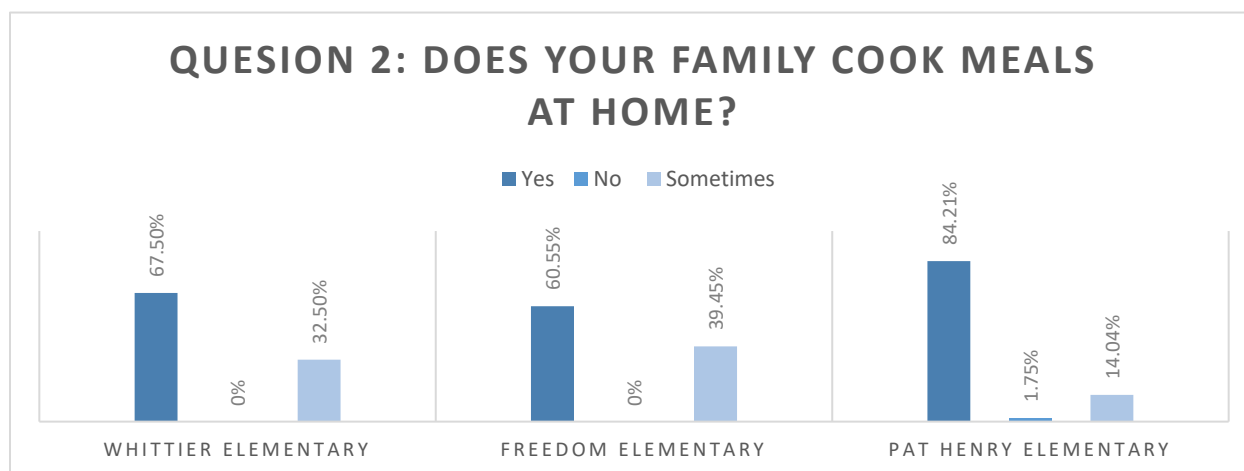
presented to schools meeting a rigorous set of criteria including serving healthier meals and snacks, increasing physical activity, offering high-quality health and physical education, and supporting staff wellness and empowering them to be healthy role models.

The health behavior survey included questions pertaining to daily health habits at home and the students own perception of personal health. Freedom Elementary students reported the highest rates of eating dinner at home with 74.31% of students, followed by Pat Henry at 68.97%, and Whittier at 58.50%. Eating meals at home as opposed to eating at sit down or fast food

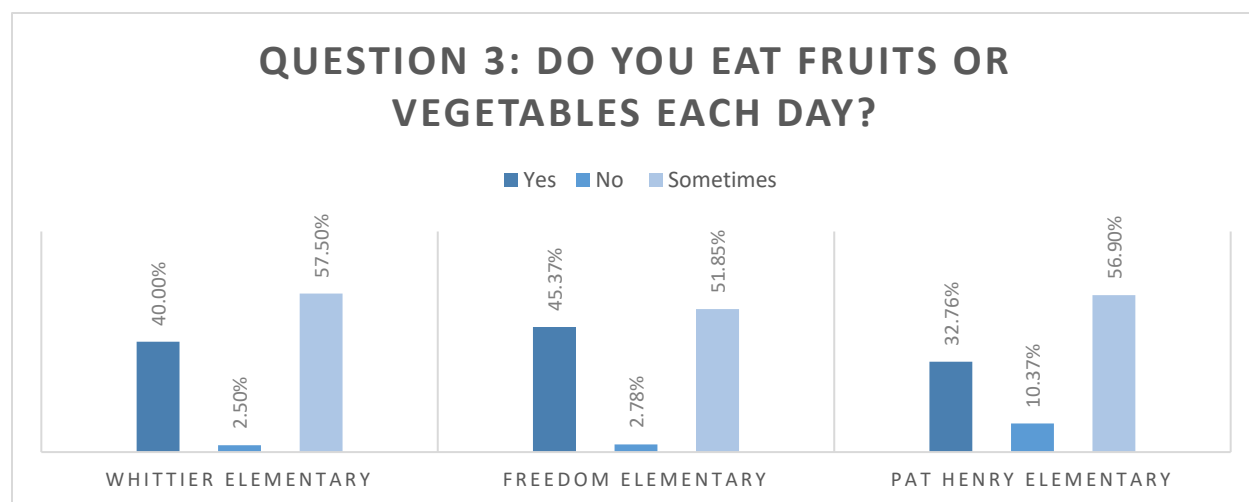


restaurants has a correlation with a lower intake of calories, fat, and added sugar (Wolfson & Bleich, 2015). About 22% of 4<sup>th</sup> grade students across all schools reported eating dinner while watching television, a habit strongly discouraged based on the correlation between distracted eating and increased intake of calories (Robinson, et al., 2013). Based on the options for answers presented to students, it is inconclusive that students eating dinner at a table with family (a positive health behavior) were not watching television, in which case, the result would have been a negative health behavior.

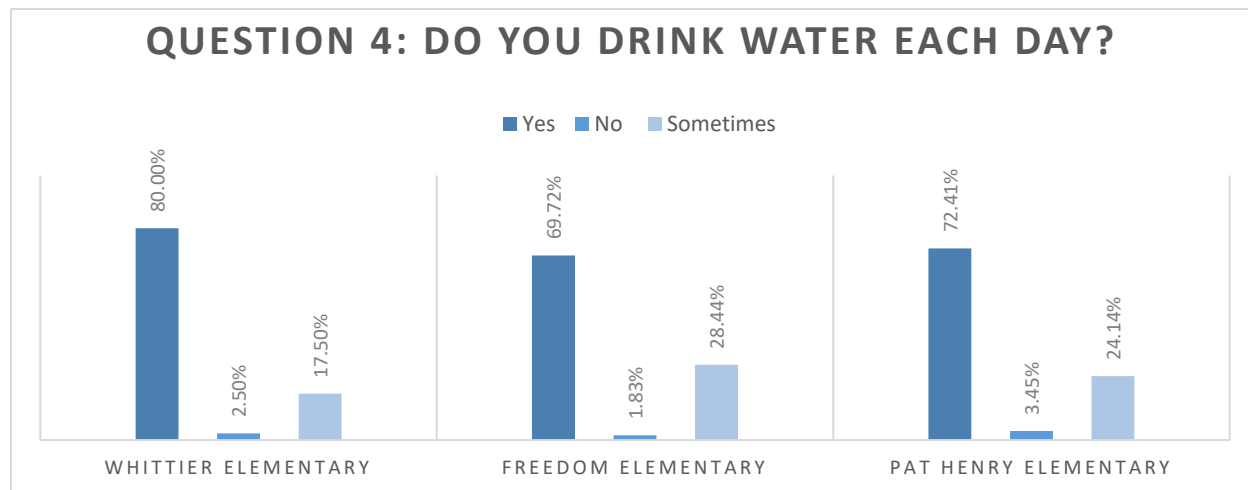




As previously stated, eating home cooked meals as opposed to fast food or restaurant meals, shows a relationship with a better balance of caloric intake and a reduction of excessive carbohydrate, fat, and added sugar intake. Pat Henry Elementary 4<sup>th</sup> grade students reported the highest number of family members cooking meals at home at 84.21%, followed by Whittier Elementary at 67.50%, and lastly, Freedom Elementary at 60.55%. Dietary recommendations for children to maintain a healthy weight for optimal development include eating at least one fruit or vegetable with each meal (Americal Heart Association, 2018). Students reporting eating fruits and vegetables every day was low, with Freedom Elementary having the highest number of students reporting eating fruits and vegetables every day at 45.37% and the lowest with Pat Henry Elementary at 32.76%.



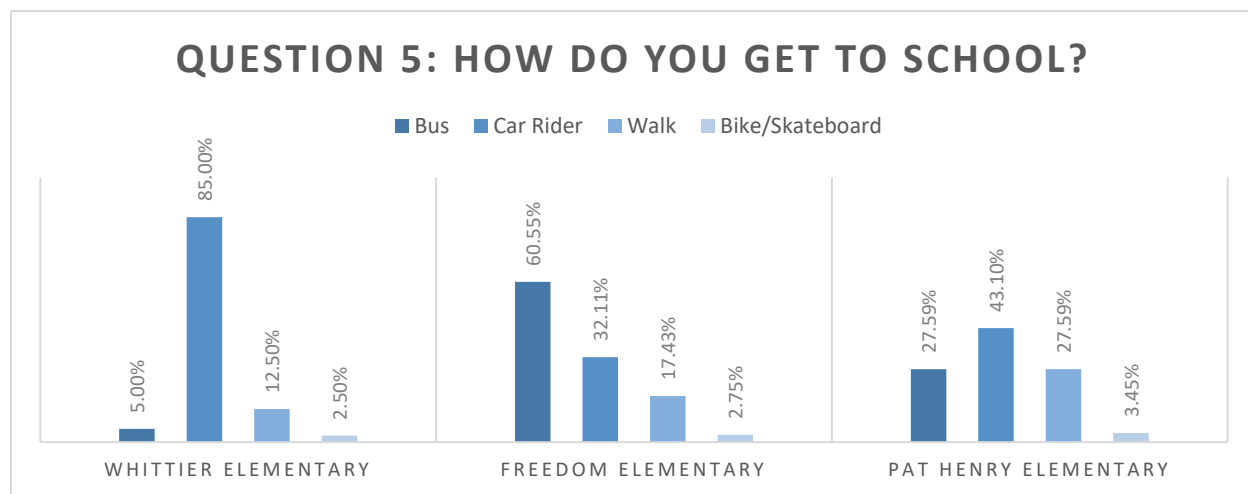
Children are particularly vulnerable to dehydration as they have higher water intake requirements than adults and children do not always know how to identify initial stages of thirst (National Hydration Council, 2019). It is recommended that children drink about 3-8 glasses of fluids each day, if a child plays sports or the weather is warm, needs will increase. Students were asked if they drank water every day,



3.45% of children in Pat Henry Elementary reported not drinking water, followed by 2.50% in Whittier Elementary, and 1.83% in Freedom Elementary. The question asks specifically about water intake, children reporting not drinking any water may be replenishing fluid needs by consuming other drinks; a practice not recommended as water is the only hydrating beverage with no calories and is harmless to teeth.

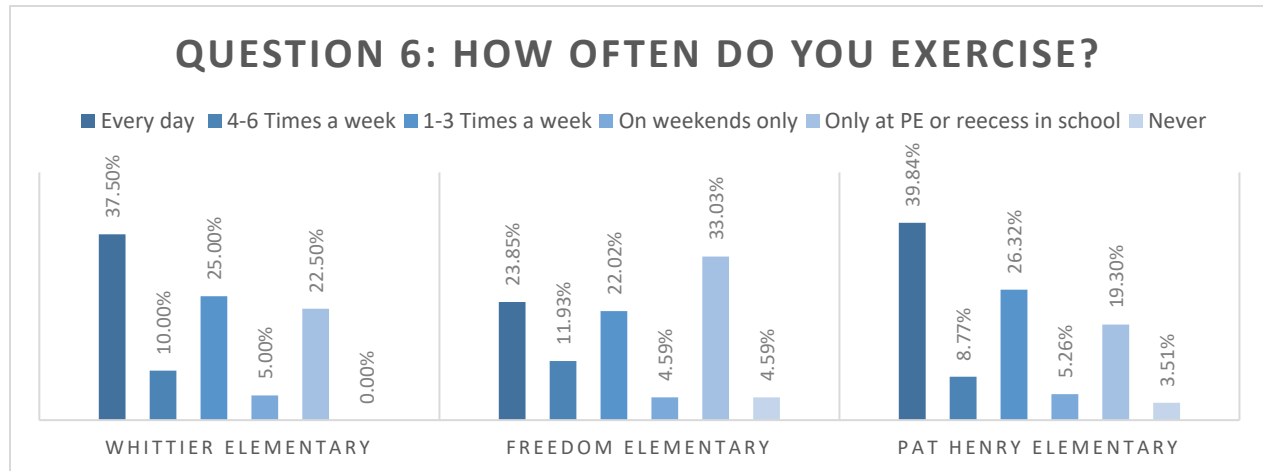
Active transportation to and from school is highly recommended for children in order to increase daily physical activity (American Academy of Pediatrics, 2018). Pat Henry Elementary had the highest number of students reporting active transportation to school with 31.04% of students waking, biking, or skateboarding to school followed by Freedom Elementary at 20.18% and Whittier Elementary with the lowest rate of children participating in active transportation at

15%. Winter weather may play a factor in active transportation reporting rates. Additionally, lack of sidewalks, sidewalk continuity, and pedestrian crosswalks in Lawton neighborhoods is a predominant problem for the safety of pedestrians and bicycle riders. Parents and guardians may prefer bus and car transportation to walking or biking for safety reasons.

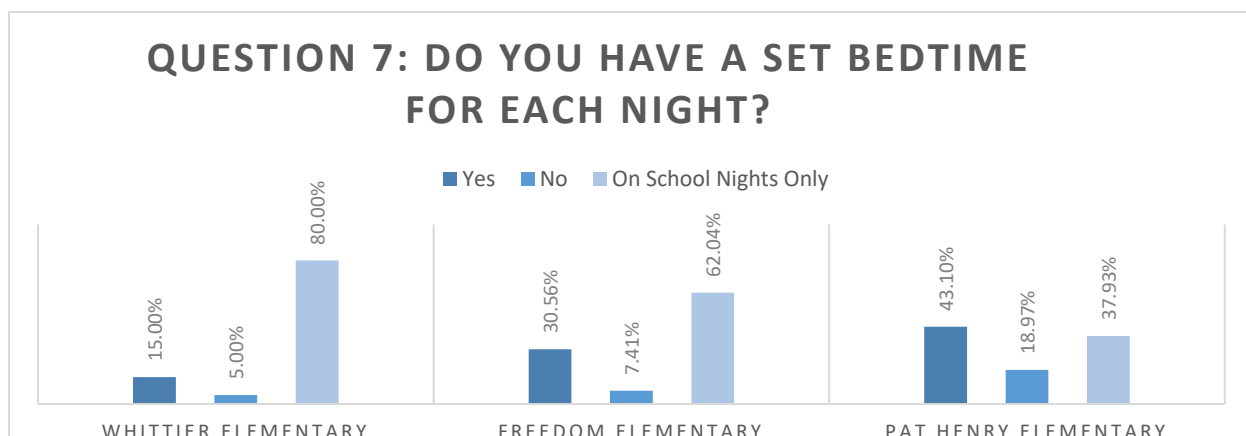


The US Department of Health and Human Services recommends children to participate in 60 minutes of physical activity each day for overall health, lower body fat and stronger muscles and bones (CDC, 2018). The student survey did not include average times of physical activity; instead, it asked students how often they exercise. More Pat Henry students reported being physically active on a daily basis at 39.84% followed by Whittier Elementary at 37.50% and 23.85% of Freedom Elementary students. Children reporting only exercising during PE or recess in school were higher in Freedom Elementary with 33.03%, followed by Whittier at 22.50%, and lastly, Pat Henry at 19.30%. Additionally, 4.9% of Freedom Elementary students and 3.51% of Pat Henry Elementary students reported participating in no physical activity during the week. The number of students participating in active transportation to and from school is relatively high in Pat Henry, which could explain high rates of self-reported physical activity. Nevertheless, Whittier

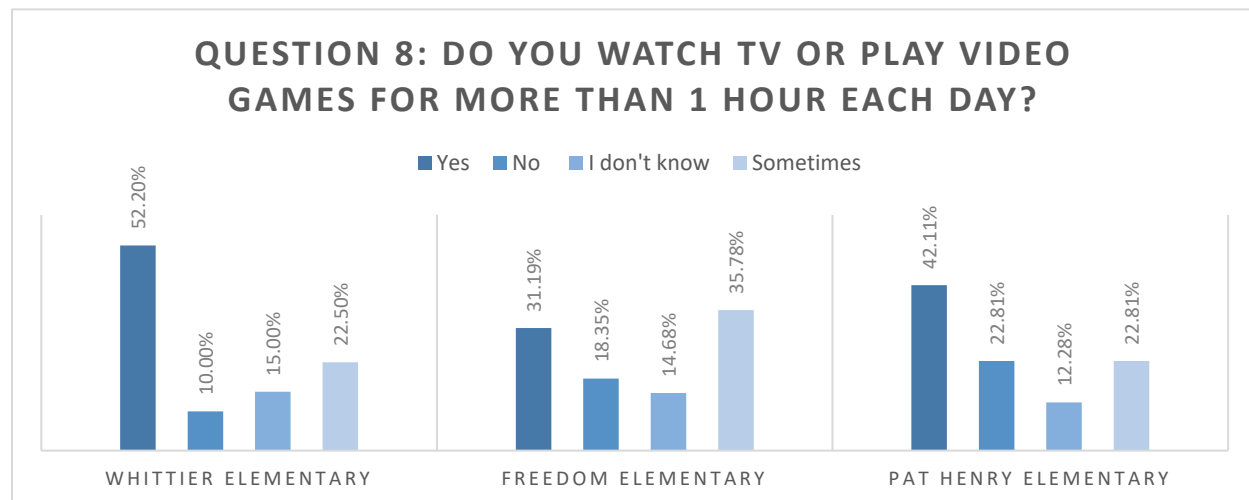
Elementary had the second highest physically active group but with significantly less students participating in active transportation.



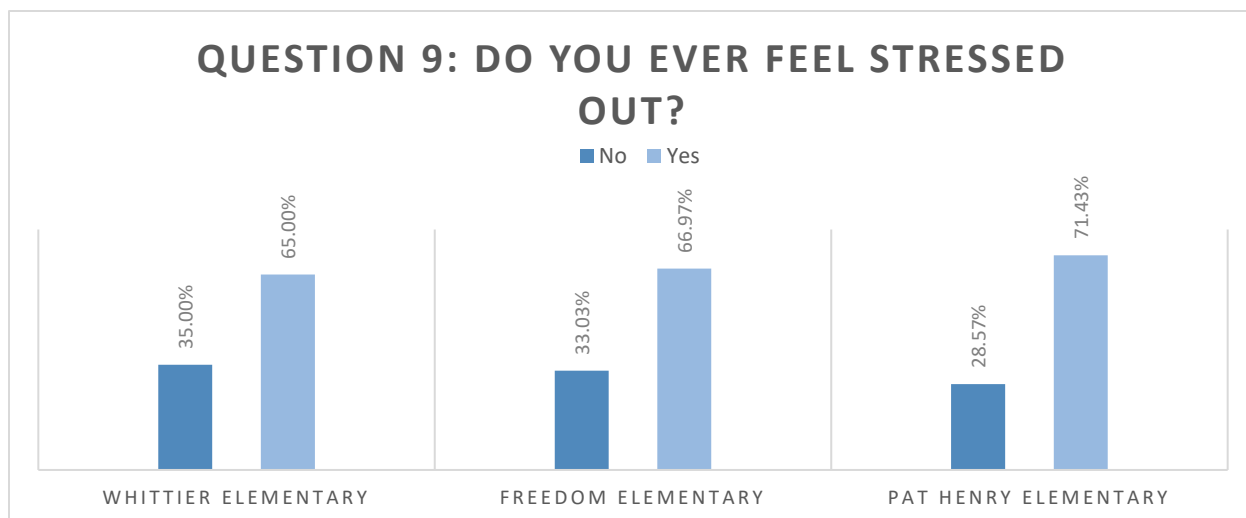
School aged children between age's six and thirteen require 9-11 hours of sleep each night. Children who do not reach adequate amounts of sleep can be subject to sleep disorders, health conditions, and cognitive conditions that can have an impact on children's learning and memory retention in school. Behavioral factors that can help decrease the risk for sleep related conditions include instilling a nightly routine or bedtime, having a dark and quiet sleep area, caffeine avoidance, and limiting screen time during sleeping hours. (National Sleep Foundation, 2019). The health behavior survey asked if the students had a set bedtime for every night, only on school nights, or not at all. For Whittier Elementary, 95% of students responded they had a bedtime on either school nights or every night. Not far behind, 92% of Freedom Elementary students reported having a set bedtime. While both Freedom and Whittier Elementary had over a 90% reporting, only 81% of Pat Henry's students responded having a bedtime.



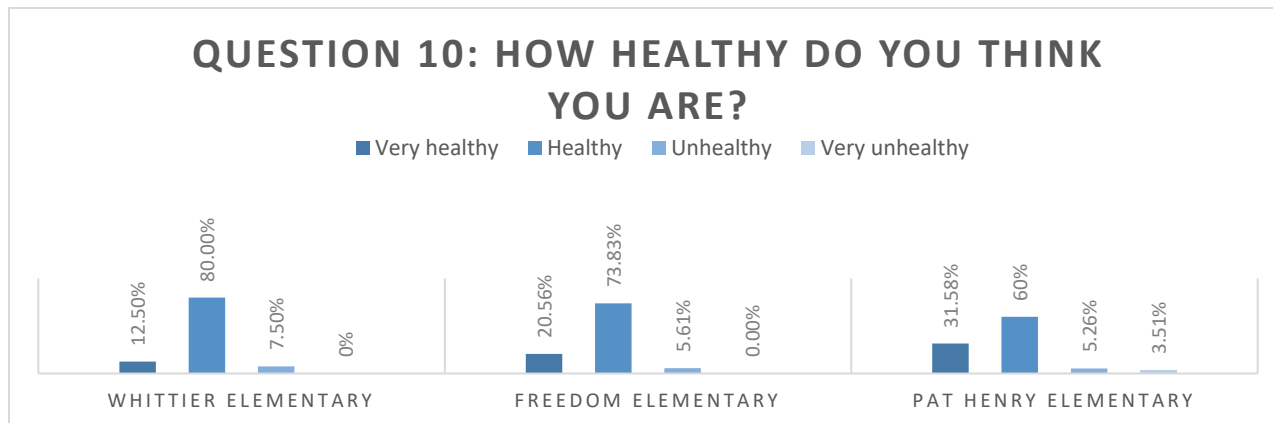
At least 60 minutes of physical activity per day and no more than 1-2 hours of screen time for children is recommended but unfortunately, the average daily screen time for children is now 7.5 hours (CDC, 2019). The time that children spend watching TV or playing video games is sedentary time in which children could exercise. Whittier students reporting “Yes” and “Sometimes” to watching or playing video games for more than one hour per day was 74.7%, followed by Freedom at 66.97%, and the lowest rate at Pat Henry Elementary with 64.92%. Pat Henry students reported the highest rates of “No” responses at 22.81%, followed by 18.35% in Freedom, and only 10% in Whittier.



Early exposure to stress has been associated with increased risk of obesity in children. Stress through factors such as adverse childhood experiences, poverty, family dynamics, and food insecurity in combination with lifestyle factors like poor sleeping patterns and poor dietary habits can contribute to increased risk of obesity and chronic disease (Miller & Welker, 2017). An overwhelming amount of students reported feeling stressed 65% in Whittier, 66.97% in Freedom, and 71.43% in Pat Henry.



The last survey question asked students about their own self-health perception. This question is highly subjective but overall student responses indicated a majority feels either “very health” or “healthy.” Over 90% of students at each elementary school reported that they consider themselves “Healthy” or “Very Healthy”.



## Discussion

Obesity is a serious public health issue affecting the health of our nation’s children but with many contributing factors, it is impossible to find a single solution to this complex and multifaceted problem. By collecting BMIs, demographics, income, and health habit data we hope

to explore and have a better understanding of the relationship these factors play in childhood overweight and obesity. Although the sample size of this project was not representative of the population, useful baseline data was gathered for future projects. As previously stated, being part of a minority group and low socioeconomic status are more precise indicators of childhood overweight and obesity than other factors. Our findings indicate a trend; Pat Henry Elementary has the highest number of overweight and obese students, the largest minority groups, and a larger low-income population followed by Whittier Elementary and lastly Freedom Elementary. The survey questions presented valuable data on student's daily health habits but given that this is the first time data of this nature is collected; it can only be used as baseline for future evaluations. Most survey responses were relatively similar per question with the exception of two questions: 2.) Does your family cook meals at home? 5.) How do you get to school? 84.21% of Pat Henry Elementary students reported their family cooking meals at home compared to Whittier at 67.50% and Freedom at 60.55%. Question 5 revealed 85% of Whittier Elementary students are taken to school by car, which is by far the school least involved in active transportation. A future analysis of pedestrian safety and walkability through the neighborhoods Whittier Elementary services may present a better understanding for the low levels of active transportation. We hope this project can be reciprocated annually to follow the Healthy People 2020 and CHIP objectives for reducing obesity in adults, adolescents, and children through the collection and evaluation of data and implementing research-based initiatives.



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## Glance at Comanche County March 2021:

*(Data shown was collected in previous years)*

	<b>Comanche</b>	<b>Oklahoma</b>
Diabetes prevalence	10%	12%
Adult obesity	32%	34%
Food Insecurity	18%	16%
Limited access to healthy foods	2%	9%
Food insecurity	18%	16%
Adult smoking	20%	20%
Crimes Reported (UCR Index Crimes)	4297	127,017
Drug Arrests	728	16,367
Alcohol Arrests	413	22,076
Total Arrests	3981	107,518
Violent crime	701 per 100k	428 per 100k
Homicides	9 per 100k	7 per 100k
Firearm fatalities	16 per 100k	18 per 100k
Drug overdose deaths	15 per 100k	20 per 100k
Poor mental health days	4.6 days	4.9 days
Frequent mental distress	14%	16%
Children in single-parent households	37%	34%
Children in poverty	24%	21%
Persons in poverty	17.6%	14.9%
Children eligible for free or reduced price lunch	61%	62%

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US Census Bureau:

<https://www.census.gov/quickfacts/fact/table/oklahomacountyoklahoma,comanchecountyoklahoma,US/SEX255219>



# YOUR ADDRESS LARGELY AFFECTS YOUR HEALTH

Comanche County Health Department

March 2021

## Overview

A variety of political, socioeconomic, and environmental factors shape the health status of cities and their residents by influencing health behaviors such as exercise, diet, sexual behavior, alcohol and substance use. The importance of “place” to health status became increasingly clear in the last decades of the twentieth century. The characteristics of place include the social and economic environments, as well as the natural environment and the built environment, which may include transportation, buildings, green spaces, roads and other infrastructure.

## Background

The basic premise is that both individual and contextual characteristics play a role in health. This concern is captured by the search for “neighborhood effects,” which generally refers to the study of how local context influences the health and well being of individuals in a way that cannot be reduced to the properties of the individuals themselves. The new multilevel research on local social context and health has garnered wide attention in social epidemiology.

One reason public health scientists have become so interested in local context is to better understand the striking and persistent racial and ethnic differences across a range of health outcomes that have eluded most efforts to explain them using data at the individual level. There are large racial/ethnic differences across many causes of morbidity and mortality. Through observation it seems that perhaps some of this health inequality is related to different types of contexts into which different racial/ethnic groups are born, and within which they grow up, live, and work. Research on residential segregation demonstrates place-based disparities are of

central importance to understanding race-based health disparities in the US. Better understanding of why place and context matter promises to yield new insights and intervention strategies for addressing racial/ethnic inequalities in health.

Residential segregation is important because it is associated with social forces that shape culture and preferences regarding healthcare use, inequities in healthcare marketplace across community, and disparities in environmental risk factors that impact health needs. African Americans and Hispanics tend to have lower rates of use of healthcare services than Whites. Race and ethnic differences in health insurance status, income, and educational attainment are factors often listed as contributors to observed disparities in healthcare use. In comparison to Whites, African Americans and Hispanics are more likely to be uninsured or covered by Medicaid, and have lower incomes and lower levels of education. Deficits in these enabling factors tend to reduce healthcare consumption even when comparing individuals with similar health needs.

Sociologists have found that residential segregation affects minority access to quality jobs, housing, education, public safety and social networks. There is evidence that segregation reduced minority access to physicians and hindered physician referrals for other medical services found that community-level characteristics accounted for some racial and ethnic differences in having a regular provider and seeing a doctor within the past year. African Americans and Whites in a low-income integrated community had similar rates of healthcare use in contrast to disparities reported nationally.

The impact of residential segregation could result in cultural preferences that discourage healthcare utilization and thus lower the demand for healthcare services in minority communities.

The gap in our knowledge regarding residential segregation is regrettable for many reasons, the most obvious of which are the longstanding education gaps between blacks and whites which lead to higher unemployment.

People living just a few blocks apart may have vastly different opportunities to live a long life in part because of their neighborhood. The life expectancy in Comanche County is 75.96 years which the National Average in the US is 78.70 years. While the percentage of individuals living in poor neighborhoods varies considerably across states, some groups are more likely to live in poor neighborhoods than others.

Unemployment is a social determinant that adversely affects minorities and where they live the greatest. In Comanche Counties largest city, Lawton, the following statistics from City Health Dashboard list unemployment as 11.2% Black, 9.9% Hispanic and 5.4% for Whites. For children living in poverty in neighborhoods, the statistics are 36.6% Black, 22% Hispanic and 17.2% White. There is obviously a correlation between unemployment and poverty overlapping and greatly affecting Blacks and Hispanics way of life. Education is also a monumental social determinant affecting minorities. In Comanche County, the average grade level performance for 3<sup>rd</sup> graders reading scores is 2.9 Black, 3.0 Hispanic and 3.3 White. The average grade level math scores for 3<sup>rd</sup> graders is 2.7 Black, 3.0 Hispanic and 3.2 White. Unemployment, poverty and education are all social determinants that overlap in the minority populations.

Racial disparities exist in the Infant mortality rate. The Infant Mortality Rate deaths per 1,000 live births in Comanche County is Black 14.4, American Indian 10.4, Hispanic 8.7 and White 7.2. The Black community is disproportionately adversely affected compared to other races. A way believed to reduce infant mortality is through receiving prenatal care in the first trimester, which is believed to reduce the risk of maternal and infant sickness and death as well



as preterm delivery and low birth weight. It is often difficult for minorities to overcome barriers such as transportation to access medical services.

Health disparities during COVID-19 reflect two important patterns of inequity. First, minority communities have a high likelihood of contracting the virus by living in urban areas and disproportionately working in higher-risk environments. Federal data reveals that African Americans and Latinos in the US have been three times more likely to contract COVID-19 than white residents and nearly twice as likely to die from it. Some counties with a majority of African American residents have almost six times the death rate compared to counties that are predominantly white. Racial minorities also experience higher rates of chronic medical conditions including obesity, diabetes, and kidney disease which are risk factors for severe illness from COVID-19. African Americans have higher rates of maternal mortality and death from cancer and heart disease than any other racial and ethnic group. Individuals from underserved communities are also more likely to have undiagnosed chronic disease. These inequities are tied to long-standing barriers to accessing essential resources such as food, transportation, and housing, as well as a long history of unequal treatment, discriminatory policies, and systemic racism. COVID-19 has resulted in stopping key social programs that are community lifelines, such as schools and senior centers. Home visitation programs that have been instrumental in reducing infant mortality and lead poisoning have been put on hold. Many who have chronic conditions face additional problems of accessing care. The acute impacts of COVID-19 worsen underlying conditions in individuals and communities.

### Discussion

The opportunities for healthy choices in homes, neighborhoods, schools, and workplaces can have decisive impacts on health. Despite improvements in medical care and in disease

prevention, health disparities persist and could be increasing for chronic conditions such as obesity, cardiovascular disease, and cancer. African Americans and other economically disadvantaged racial and ethnic minorities, and populations of all races with low socioeconomic status, experience large disparities in health. The conditions in which people live, learn, work, play and worship can affect health and produce disparities. Social determinants that negatively affect health and well-being include poverty, lack of access to high-quality education or employment, unhealthy housing, unfavorable work and neighborhood conditions and exposure to neighborhood violence. Neighborhoods are constantly changing as residents come and go, businesses open and close, and properties go up or come down. It has become apparent there is an overlapping of social disparities such as lower education attainment and transportation issues can lead to unemployment for minority groups in low income neighborhoods. In the current state of affairs, addressing social needs is key to heal from coronavirus, preventing the spread of the virus, and reducing its disproportionate burden on low-income communities and communities of color. Neighborhoods infrastructure does make a difference in health outcomes. If access to safety, food, exercise and transportation are not available, health will suffer. Segregation and racism do play a large part in the mental and physical health primarily for minorities. It will take all of us to recognize and remove the inequities that have been in place for generations to create a brighter future for all.

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Food Deserts in Comanche County

Comanche County Health Department



Comanche County  
Health Department

September 2018

## Overview

It is a known fact that personal health practices are not the sole influencing force on health (CDC, 2018). External factors such as economic stability, neighborhood, and the built environment can all influence health and wellbeing. For instance, neighborhoods with low access to food retailers supporting healthy eating patterns suffer disproportionate negative health outcomes like higher rates of obesity. Communities with low or no access to affordable and nutritious foods combined with an abundance of convenience stores offering items like candy and soft drinks are referred to as food deserts. Food deserts are commonly found in rural, minority, and low-income areas and are correlated with health inequities. According to the World Health Organization, “Health inequities are *avoidable* inequalities in health between groups of people (2008).” Time after time, evidence has shown that a person’s socioeconomic status is directly correlated to the quality of their health, access to healthcare, and opportunities to live a healthier life (WHO, 2008). Health inequities are a result of stoppable unfair policies and practices that create barriers to health. The Comanche County’s Community Health Improvement Plan (CHIP) prioritizes obesity as a public health issue based on community concerns of the health and economic consequences of an obese society. In response, the Comanche County Health Department (CCHD), in collaboration with the Tobacco Settlement Endowment Trust (TSET) Healthy Living Program, evaluated food retailers’ support for healthy eating patterns in Comanche County. The barriers to health, or health inequities, examined in this report are food deserts and their association to obesity based on a neighborhoods’ socioeconomic standing.

## Background

Comanche County is comprised of a diverse community housing three tribal entities and Ft. Sill, a major military post. The County's population consists of 55.9% Whites, 18.0% Black or African American, 13.1% Hispanic, 6.6% American Indian & Alaska Natives, 2.7% Asian, 0.6% Pacific Islander, and 6.7% two or more races with a total population of 121,526. Median household income in Comanche County is \$49,569 with 16.8% of the population living below poverty rate and a 4.95% unemployment rate (United States Census Bureau, 2017). Currently, 60% of students are enrolled in the free or reduced School Lunch Program in Lawton Public Schools, 8.9% of residents utilize Supplemental Nutrition Assistance Program benefits, and 16.7% of women are enrolled in Women Infants and Children services. According to a statewide food desert evaluation by the Oklahoma State Department of Health (OSHD), 26.9% of Comanche County residents live in a food desert and 57.4% of its population has low access to food (LaVarnway & Craven, 2017). The U.S Department of Agriculture's Food Access Research Atlas maps food access utilizing census-tract measures. Figure A. portrays zones in Comanche County (orange) with no food retailers within a 1-mile radius for an urban area and a 10-mile radius for rural areas.

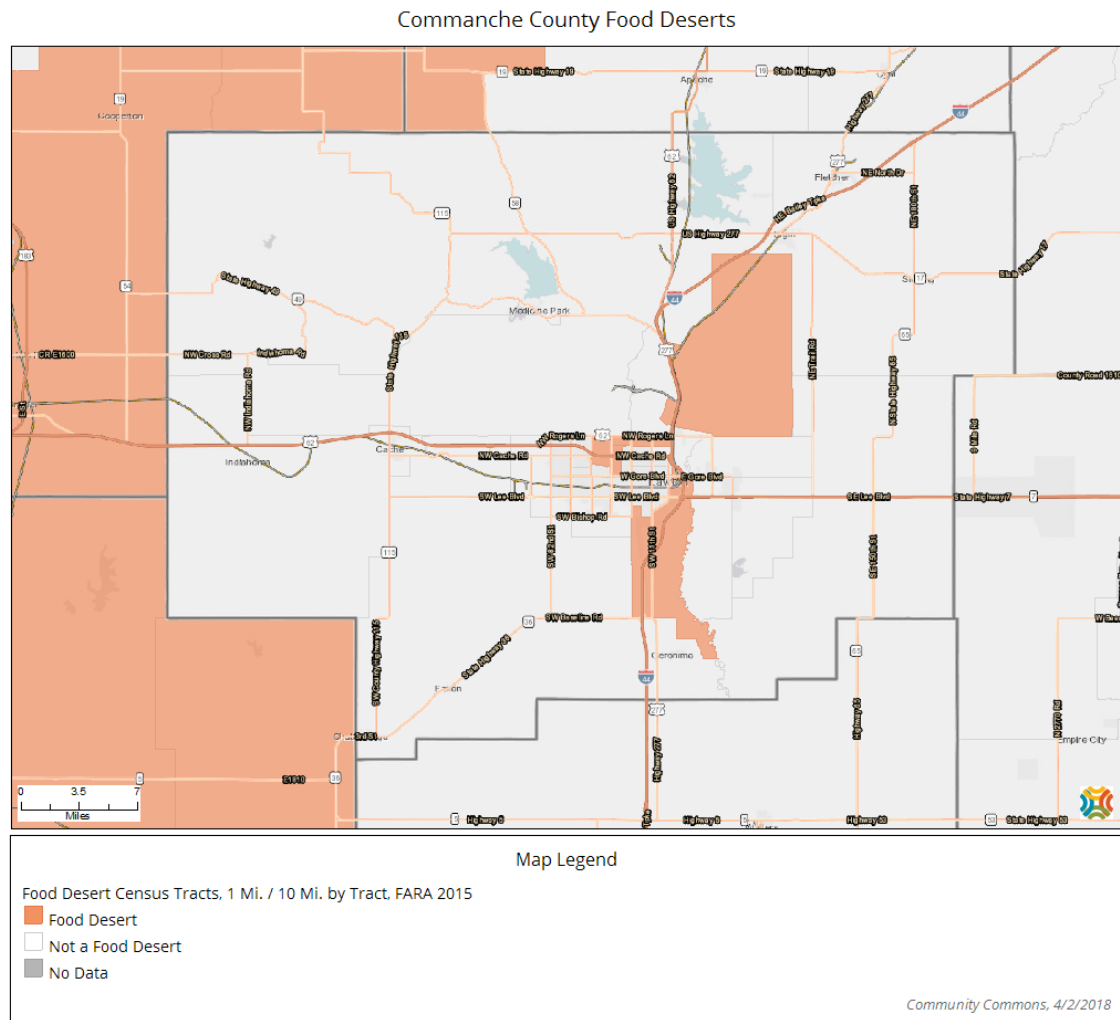


Figure A. Comanche County Food Desert Map

U.S Department of Agriculture's Food Access Research Atlas

## Methods

Evaluators conducted Food Availability and Marketing Surveys (FAMS) of two food retailers in different neighborhoods of the City of Lawton in Comanche County, Oklahoma. The FAMS survey consists of four parts: (1) products stocked, (2) marketing and promotion practices, (3) acceptance of food assistance programs, and (4) accessibility or walkability. Food retailers are given points for each category with a total possible score of 100. The lower the score



of the evaluation, the less the retailer promotes healthy eating patterns. A positive FAMS assessment would demonstrate a food retailer selling a variety of quality fruits and vegetables, will promote and advertise healthy foods instead of unhealthy ones, will accept and advertise the acceptance of food assistance programs SNAP and WIC, and will be considered safe to walk within a two block radius from the store. Secondly, prevalence of obesity rates from the CDC's 500 Cities Project was correlated to the neighborhoods of the two food retailers evaluated through FAMS in order to identify health disparities and their relationship to food accessibility and quality of food accessible. Lastly, the evaluation included the distribution of a community wide survey (Figure B.) in the City of Lawton to gather primary data on consumers' perceived barriers in accessing and purchasing healthy foods in the community. Survey distribution took place in Freedom Fitness, Cameron University Recreation Center and McMahon Central Complex, Burning Heart Ministries, Total Nutrition Lawton, and Faith Childcare Learning and Development Center in the City of Lawton with 232 participants.

## Healthy Retail Resolution

### Comanche County Community Survey

We are conducting a survey about access to healthy foods in Comanche County

1. During the past 30 days, where did you most often shop for your groceries? Include up to 2 places where you most often shop.
  - a. Name of store: \_\_\_\_\_ City/town \_\_\_\_\_.
2. During the past 30 days, where did you purchase last minute grocery items? This may or may not be one of the stores listed in Question 1. If you did not make any last minute grocery purchases, check this box
  - a. Name of store: \_\_\_\_\_ City/town \_\_\_\_\_.
3. In the 2 places where you shop, what stops you from buying more healthy foods such as fresh fruits and vegetables, lean/ non-fatty meats, whole grains, low-fat cheese? Check your top 3 choices.
 

<input type="checkbox"/> Price	<input type="checkbox"/> I don't have time to prepare them
<input type="checkbox"/> Poor quality	<input type="checkbox"/> I don't know how to prepare them
<input type="checkbox"/> Little variety	<input type="checkbox"/> Other reason: _____
<input type="checkbox"/> Store is hard to get to	<input type="checkbox"/> Nothing stops me from buying healthy foods
<input type="checkbox"/> Limited storage space at home	
4. Which of the following, if any, would help you buy more healthy foods such as fresh fruits and vegetables, lean/ non-fatty meats, whole grains, low-fat cheese? Check your top 3 Choices.
 

<input type="checkbox"/> In-store specials for healthy food (more value for your money)	<input type="checkbox"/> See in-store cooking demonstrations that use healthy foods
<input type="checkbox"/> Trying samples	<input type="checkbox"/> Nice displays
<input type="checkbox"/> Having recipes available at the store	<input type="checkbox"/> More pre-cut, pre-washed fruits and vegetables available
5. In a typical month, how much money do you spend on food and non-alcoholic beverages at food stores? It is ok to provide your best estimate. \$ \_\_\_\_\_
6. What is your age? \_\_\_\_\_
7. What is your zip code? \_\_\_\_\_

**Thank you for taking our survey!**

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Figure B: Community Survey

## Findings

The first FAMS assessment took place in Roundtree's Food Market located NW 18<sup>th</sup> St in Lawton, OK 73507. After a careful evaluation of Roundtree's produce and products stocked, marketing and promotion, food assistance acceptance, and walkability, the store received a score of 17.5 out of 100 possible points. Under the produce and products stocked category, Roundtree

offered no variety of fresh fruits and vegetables; therefore, a score of 0 out of 60 was given. In the marketing and promotion section, the store received 2.5 points out of 20. The points were awarded due to the promotion of foods in the checkout and outdoor areas. Unfortunately, the products promoted are not considered healthy foods. The food market accepts SNAP benefits but not WIC, therefore it was awarded 5 out of 10 possible points. The walkability assessment granted the store 3 points out of 10 due to lack of sidewalks, paths, shoulders, and crosswalks to access the store within a two-block radius. The neighborhood surrounding Roundtree Food Market has a population of 2,430 people with a 35.2% obesity rate (CDC, 2016). The median household income is \$31,108, unemployment rate is 6.55%, and 31.1% of families in this area live below poverty (City Data, 2016).

The second FAMS assessment took place in Country Mart located at NW Cache Rd in Lawton, OK 73505. Under the produce and products stocked category, Country Mart received 53 points out of 60. The food market offered a variety and quality of fresh fruits and vegetables but at slightly higher prices, hence the loss of 7 points. In the marketing a promotion section, Country Mart received a 7.5 out of 20 possible points. The store did not display any fruits, vegetables, or healthy options outdoors or by the cash register. Instead, the store promoted ads for unhealthful food items. Country Mart received 10 out of 10 in the food assistance category. The retailer accepts SNAP and WIC benefits with clear promotion signage. 10 out of 10 points were granted in the walkability assessment based on safe pedestrian conditions within a two-block radius of the store. The neighborhood surrounding Country Mart has a population of 4,371 people with a 26.4% obesity rate (CDC, 2016). The median household income is \$61,250, unemployment rate is 8.07%, and 6.14% of families in this area live below poverty (City Data, 2016).

The Comanche County Community Survey results concluded the majority of participants purchase their groceries at Walmart and Country Mart. Barriers keeping individuals from purchasing healthy foods such as fruits, vegetables, lean proteins, whole grains, and low-fat dairy products are shown in Figure C. Price, quality, and variety seem to be the fundamental issues for individuals when purchasing healthy food items.

**Q3: In the two places where you usually shop, what stops you from buying more healthy foods such as fresh fruits and vegetables, lean/non-fatty meats, whole grains, and low-fat cheese?**

Answer Choices	Responses	Times Response was chosen
Price	57.67%	136
Poor quality	26.61%	63
Little variety	25.11%	59
Flavor	14.89%	35
Store is hard to get to	3.40%	5
Limited storage at home	8.94%	21
I don't have time to prepare them	25.96%	61
I don't know how to prepare them	11.06%	26
I don't have recipes	11.49%	27
Nothing stops me from buying healthy foods	34.04%	80
Other reason	10.21%	24
<b>Total Respondents: 235</b>		

Figure C. Comanche County Community Survey

When questioned about motivators to purchase fruits, vegetables, lean proteins, whole grains, and low-fat dairy respondents focused on price, convenience, and taste as the areas of interest to purchase more of these items (Figure D).

## FOOD DESERTS IN COMANCHE COUNTY

**Q4: Which of the following, if any, would help you buy more healthy foods such as fresh fruits and vegetables, lean/non-fatty meats, whole grains, and low-fat cheese? Choose your top three choices.**

Answer Choice	Responses	Times Response was Chosen
In store specials for healthy for (more value for your money)	79.39%	181
Trying samples	39.47%	90
Having recipes available at the store	33.33%	76
See in store cooking demonstrations that use healthy foods	25.44%	58
Nice displays	21.05%	48
More pre-cut, pre-washed fruits and vegetables available	47.51%	109
Total Respondents: 228		

Figure D. Comanche County Community Survey

On average, respondents estimated their monthly grocery spending between \$151.00 and \$200.00. The largest age group to participate in the survey were 18-24 year olds representing 45.26% of respondents followed by 22.41% between the ages of 25 and 34, 7.33% ages 45-54, 8.19% ages 55-64, and 2.16% ages 75-84. The majority of the respondents were between the ages of 18 to 24, which can explain the low estimated monthly grocery spending.

### Discussion

Based on significant differences in scores of the two FAMS evaluations in different areas of the community, it is evident that food deserts in low-income neighborhoods are one of contributing factors to higher obesity rates. Roundtree Food Market's low scoring assessment indicated the surrounding neighborhood did not have direct access to fruits, vegetables, lean meats, wholegrains, and low-fat dairy products. Instead, residents of this neighborhood are faced with the task of purchasing their grocery items at a different location if they desire to follow a healthier diet. However, based on the relatively low median household income and the 31.1% of families living in poverty, it is not expected for all households to have reliable methods of

transportation leaving some families with no other option than to rely on the convenient foods Roundtree Food Market offers or depend on public transportation to get to other food retailers. On the other hand, Country Mart's high scoring evaluation demonstrated the retailer supports healthy eating patterns and acceptance of food assistance programs. The surrounding neighborhood had a relatively higher median household income and a drastically lower incidence of families living in poverty at 6.14%. The combination of healthy retailers, a walkable neighborhood, and economic stability seem to be positive factors on obesity rates based on the comparably lower incidence of obesity in this neighborhood at 26.4%. The first FAMS evaluation is an excellent example of how external factors such as neighborhood environment and socioeconomic status can negatively affect health outcomes and create health disparities within a single community.

The community survey revealed only 3.40% of respondents found store accessibility a barrier to purchasing healthy foods. Based on CCHD's food desert evaluation stating 26.9% of Comanche County residents live in a food desert and 57.4% of its population has low access to food, the survey results appear contradicting at first glance. A further examination of the community survey is necessary, specifically an evaluation of how distribution areas affected responses. For instance, respondents approached in locations such as Freedom Fitness gym and Total Nutrition Lawton supplement store are not expected to face the same challenges accessing affordable and nutritious foods compared to individuals frequenting The Salvation Army based on presumed income and pre-established interest in a healthy lifestyle. Nevertheless, the population surveyed did express barriers to *affordable* healthy foods and the lack of variety and poor quality as discouraging factors to purchasing these items. Additionally, a deficiency in knowledge of healthy cooking and utilizing healthy ingredients was expressed. Based on the

survey findings, a need for community wide approach to increase nutritional knowledge is vital to encourage residents to experiment with new healthy foods and ingredients.

### Conclusion

The interrelationship of negative health outcomes such as obesity, poverty, and lack of access to nutritious and affordable foods cannot be isolated from one another and must be addressed by systematic community-wide approaches. As previously mentioned, health inequities are avoidable and CCHD is committed to reach health equity for all residing in Comanche County. CCHD's vision is to be a safe place where physical, mental, spiritual health, and social well-being are true priorities where we live, work, and play; where health impact is a consideration in all policies; and where health factors and outcomes continually improve. By locating food deserts in Comanche County, CCHD and the TSET Healthy Living Program can work in collaboration with food retailers to facilitate policies that support equal opportunities for healthy lifestyles in the community regardless of socioeconomic status and geographical location.



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# IS IT SAFE TO GO BACK TO THE CLASSROOM?

Comanche County Health Department

March 2021

## Overview

Although Oklahoma opened vaccination for school staff, many staff have elected not to take the vaccine. There is a great deal of internet rumors that have influenced school staff. Many medical personnel have chosen not to be vaccinated until the long term affects are known. How will the decision not to take the vaccine affect school openings? Many schools are offering virtual learning as an option. Will the fact that the vaccine is available change the school requirements?

## Background

Controversy over whether schools should reopen arises as the Biden administration prepares to release guidelines on how schools can reopen safely. The administration isn't expected to require school staff to get vaccinated before schools reopen. The CDC released its guidelines for an operational strategy that would help make it safer for grades K-12 to reopen assuming the schools follow specific mitigation practices. The mitigation practices include many of the procedures we're already familiar with, such as mask wearing and physical distancing.

The CDC released its guidelines for reopening schools on February 12, 2021. These guidelines include five mitigation strategies for safely returning to in-person schooling:

- Universal and correct wearing of masks
- Physical distancing
- Handwashing
- Cleaning facilities and upgrading ventilation
- Contact tracing, quarantining, and isolation

What guidelines don't call for, however, is the mandatory vaccination of teachers before reopening. Instead the guidelines say "access to vaccination should not be considered a condition for reopening schools for in-person instruction."

According to the Biden administration, teacher vaccinations would be secondary to school districts adhering to the recommended mitigation practices. In the National Strategy for the COVID-19 Response and Pandemic Preparedness report, the Biden administration issued an executive order titled "Supporting the Reopening and Continuing Operation of Schools and Early Childhood Education Providers."

The executive order requires the Departments of Education and the Department of Health and Human Services to provide guidance on the safe reopening and Operating of schools, as well as developing best practices to share. With these in place, the Biden administration deems that teacher vaccination doesn't need to be mandatory in order for schools to reopen safely.

We surveyed twelve schools via telephone in Comanche County to determine the interest in school staff being vaccinated. The results are as follows:

<b>Comanche County School District Name</b>	<b>Staff who received vaccine</b>	<b>Staff who want vaccine</b>	<b>Vaccine Uptake Percentage</b>
Bishop	9	18	52.94%
Cache	15	43	15.09%
Indiahoma	No data		
Sterling	23	30	81.08%
Geronimo	2	26	60.47%

Lawton	500	1000	66.67%
Fletcher	2	10	15.87%
Elgin	0	68	34%
Chattanooga	2	20	60.61%
Flower Mound	0	18	
Lawton Christian	No data		
Trinity Christian	No data		

Studies show that elementary-aged children going for in-person learning and in-person education have been relatively safe, and that virus transmission between children or between children and adults is lower than between solely adults.

The Biden administration is looking to reopen schools during what some experts think is a precarious time, especially when considering the health and safety of teachers and school administration staff.

“There is proof of the new UK variant in more than 30 states,” said Dr. Matthew Heinz, a hospitalist based in Tucson, Arizona. This means that while it may seem like we’re in a downturn of COVID-19 cases nationwide, we may actually be in the eye of a hurricane and cases could spike again.

Oklahoma as a state has seen the need for and importance of reopening schools making school staff a priority population. Beginning in February 2021, teachers were named as a priority sending out teams and setting up special Points of Distribution (POD) specifically for school staff. This is setting the stage to bring school staff and students back to in-person

classroom learning. The Governor has been quite animate that it is his goal to get students back in the classroom.

Many school staff are eager to be inoculated; however, there is a sizable contingency of educators who refuse to take the vaccine right away. A nationally representative EdWeek Research Center survey found that 17% of educators said they were ‘very’ unlikely to take the vaccine, and 12% said they were ‘somewhat’ unlikely. (A total of 913 district leaders, principals, and teachers took the online survey on Nov, 18 and 19.) The Kaiser Family Foundation survey found that among those who are hesitant to get a vaccine, the main reasons are concerns about possible side effects, a lack of trust in the government to ensure the vaccines’ safety and effectiveness, concerns that the vaccine is too new, and concerns that the development process was politicized.

Leaders should be aware there’s a higher level of vaccine hesitancy among communities of color. A third of Black adults say they probably or definitely won’t get vaccinated, according to the Kaiser survey, and about half of that group say they don’t trust vaccines in general or they’re worried they may get COVID-19 from the vaccine. Experts say the nation’s history of racism in medical research and inequities in access to health care is a key reason why Black and Latino people are distrustful of vaccines.

Whether teachers will be required to get a coronavirus vaccine will be left up to states, and if they don’t weigh in, local school districts could make the decision.

The U.S. Equal Opportunity Commission has issued guidance saying that employers can require workers to get a COVID-19 vaccine, with exemptions for workers with certain medical conditions or religious beliefs. Since the coronavirus vaccines have so far only received emergency use authorization from the U.S. Food and Drug Administration, individuals who

receive the vaccine must have the option to accept or refuse it until the vaccines receive full FDA authorization.

### Discussion

Almost daily we are reminded about the need to have children back in the classroom. According to the CDC, mitigation efforts are the key to stopping the spread of COVID-19. Many would argue it's achieving herd immunity that will stop the spread. Both ideas have merit and scientific evidence supporting them.

Researchers continuously assure the public that the vaccines are a much safer alternative than not getting inoculated. Vaccines have been given in the US since December with little adverse reaction. The survey we provided to the schools show that the majority desire to receive the vaccine. Most states see the value in moving the school staff up to priority populations. Teachers themselves would not argue the point that in classroom is the preferred learning alternative. School staff currently have the right to choose whether or not to take the vaccine but not taking it doesn't seem like a valid excuse for staying out of the classroom if mitigation protocols are adhered to.

It is up to the government, health care and individuals to start messaging the benefits rather than the rumors appearing on the internet. It is our responsibility to make sure staff and children have the proper tools to mitigate the virus. Ultimately individuals look toward their leaders for reassurance and it is up to the Biden administration to provide proper messaging to instill confidence in the vaccine while continuing to practice all the mitigation activities recommended by the CDC.



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