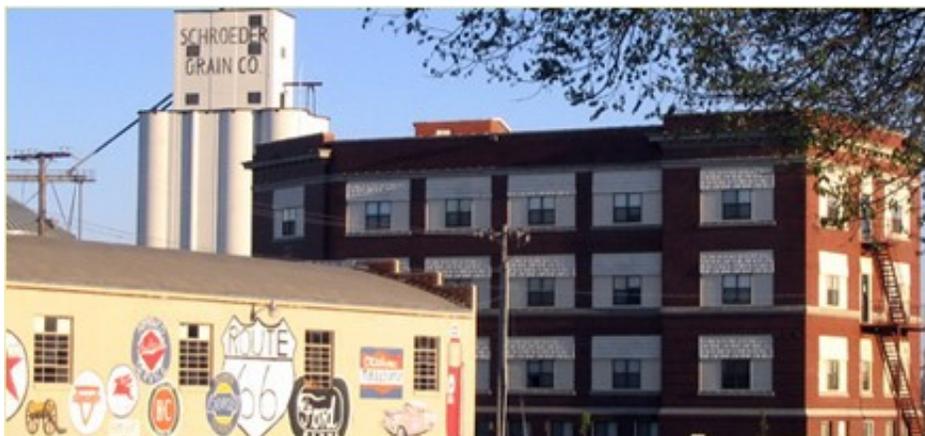


Community Health Improvement Plan Canadian County



March 10, 2015

Completed March 10, 2020

Community Contributors

Canadian County Board of Health
Canadian County District Attorney's Office
Central Communities Health Access Network
Canadian County Health Department
Canadian County Juvenile Bureau
Canadian County Systems of Care (Red Rock)
Cheyenne and Arapaho Tribes
City of Piedmont
City of Yukon
Children's Justice Center
Darlington Public School
El Reno Chamber of Commerce
El Reno Carnegie Library
El Reno Public Schools
El Reno Tribune
EquiBalance
Evolution Foundation
Girl Scouts of Western Oklahoma
Indian Health Services
Integris Canadian Valley Hospital
Mercy Hospital El Reno
Mustang Public Schools
Northwest Area Health Education Center Rural Health Projects
Oklahoma City - County Health Department
Fetal and Infant Mortality Review
Oklahoma Commission on Children and Youth
Oklahoma Department of Human Services
Oklahoma Department of Mental Health and Substance Abuse Services Systems of Care
Oklahoma Department of Rehabilitation Services
Oklahoma Family Counseling Services
Oklahoma Family Network
OG&E Energy Corporation
Oklahoma LEND
Oklahoma Health Care Authority
Opportunities Mental Health Services
OU National Center for Disability Education and Training
Red Rock Regional Prevention Coordinator
Redlands Community College
Safe Kids Oklahoma
Smart Start Canadian County
Sooner Success
The Child Abuse Response Team House
Tobacco Settlement Endowment Trust
Communities of Excellence - Tobacco Control
Turning Point
Varangon Academy
Youth and Family Services of Oklahoma
Yukon Public Schools

Table of Contents

Canadian County Coalition for Children & Families	4
Executive Summary	5
Demographics	6
The Framework: MAPP	7
Canadian County	9
Public Health Priority Issues	
Issue One: Child Health	10
Issue Two: Heart Disease Prevention	13
Issue Three: Mental Health	16
Issue Four: Obesity Prevention	19
Issue Five: Prevention of Alcohol, Tobacco and Dangerous Drugs	22
Summary	25
Priority Issues Workgroup Member Organizations	26
Appendix A - Version History	27
Appendix B - Annual Reports	28
First Annual Report	29
Second Annual Report	35
Third Annual Report	42
Fourth Annual Report	48
Fifth Annual Report	55
Final Five-Year Report	62
References	73



The Canadian County Coalition for Children & Families was organized in September 1996 when the District Child Abuse Prevention Task Force, the Oklahoma Commission on Children and Youth, and the El Reno Early Childhood Task Force combined into one group.

The Coalition currently serves as the “umbrella organization” for a number of programs, including the Task Force on Child Abuse Prevention; OCCY Community Partnership Board; Canadian County Caring for Kids (Systems of Care); Sooner SUC-CESS; Smart Start; TSET Tobacco Prevention Grants; and the Red Rock Regional Prevention Coordinator. The coalition provides a forum for networking, sharing of information, professional training and public awareness on issues relating to children.

One of the biggest areas of concern for the Coalition has been seeking access to healthcare. The process began in 2006 after Coalition members attended a retreat to discuss the issues facing Canadian County residents. From that retreat, an Access to Healthcare Committee was developed with the mission to improve healthcare access for Canadian County residents. From that task force, a next step was to partner with the El Reno Community Clinic since they were already established as a 501c3 non-profit organization with similar goals. In 2008, the Access to Healthcare Committee morphed into what is now called the Partnership for Healthy Central Communities (PHCC). The Oklahoma Health Care Authority funded the Health Access Network, now titled the Central Communities Health Access Network (or CC-HAN), in 2011. Since then a fulltime project/care manager has been joined by two part-time RN care managers; two other independent contractors provide IT support services. The CC-HAN has grown to include 22 Providers from six different medical home practices and has a roster of over 3,500 members who are enrolled in the state’s SoonerCare Choice (Medicaid) program. Services provided by the CC-HAN include care management for members with complex health needs, support to the contracted Providers, and various strategies to increase access to care, to improve quality of care, and to address cost reductions.

In 2011 the Coalition held its first Annual Community Baby Shower Fun Day where participants could gather resources to improve the health of their children. This included information for Tobacco Prevention, SIDS (Sudden Infant Death Syndrome) information, Car Seat Safety, Safe Sleep methods, and breastfeeding support resources. It also included free toys, car seats, and baby items such as swings, highchairs and diapers. The event helped provide resources to around 50 participants to increase the health of Canadian County children.

Canadian County was awarded the Strategic Prevention Framework State Incentive Grant (SPF-SIG), funded through the Oklahoma Department of Mental Health and Substance Abuse Services. Based on data throughout the region, Canadian County was chosen as the county of focus to combat non-medical use of prescription drugs. The goal is to reduce opiate overdose deaths by promoting the prescription monitoring program to reduce “doctor shopping”, promoting prescription drop boxes, and providing media advocacy to increase knowledge of the dangers of prescription sharing. Currently there are three drop boxes in Canadian County.

The coalition has agreed to use the Mobilizing for Action through Planning and Partnerships (MAPP) framework as a tool to assess the community’s health and to strategically plan activities, initiatives and objectives to pursue in order to help create a healthier Canadian County.

Executive Summary

In the fall of 2012, the Canadian County Coalition for Children & Families began engaging the community to assess the health status of county residents. Organizers used the MAPP process. This involved the following six phases:

1. Partnership Development / Organizing for Success
2. Visioning
3. Community Health Assessment consisting of four community-based assessments:
 - Community Themes and Strengths
 - Local Public Health System
 - Forces of Change
 - Community Health Status
4. Identify Strategic Issues
5. Develop Performance Objectives and Strategies
6. Action Cycle - Plan, Do, Check, Act

In November 2013, a sub-committee of the Coalition began meeting to identify strategic issues and fulfill Phase 4. The data was reviewed and ten elements were identified as having particular importance in Canadian County:

- Child health
- Diabetes
- Heart disease
- Infant mortality
- Mental health / Substance abuse
- Obesity
- Stroke
- Suicide
- Tobacco
- Unintentional injury

After further review and discussion of the ten elements, five priority issues were identified:

- Child Health
- Heart Disease Prevention
- Mental Health
- Obesity Prevention
- Prevention of Alcohol, Tobacco and Other Drugs

Next, to fulfill Phase 5, the sub-committee began developing performance objectives for each priority issue and strategies for achieving these objectives. These were taken to the Coalition for review, modification, and final approval. The plan that follows is the result of this entire process and provides the platform for moving forward to Phase 6, “Action Cycle.”

While this Community Health Improvement Plan (CHIP) provides specific focus for five priority issues, the Coalition will not limit its activities to these issues alone. These issues were selected because the Coalition believes positive change in these areas will have the most significant impact on the health of the community. However, the Coalition recognizes that there are many other important factors that contribute to public health and will not fail to engage them when opportunity permits.

Demographics

2010 Demographics	Oklahoma	%	Canadian County	%
Total Population	3,751,351		115,541	
Age				
19 years and under	1,041,610	27.8	33,824	29.3
20 - 64 years	2,203,027	58.8	69,141	59.8
65+ years	506,714	13.4	12,576	10.9
Gender				
Male	1,856,977	49.5	57,334	49.6
Female	1,894,374	50.5	58,207	50.4
Race/Ethnicity				
White	2,706,845	72	96,058	83.1
Hispanic or Latino	332,007	9	7,794	6.7
African American	277,644	7	2,933	2.5
Asian	65,076	2	3,483	3.0
American Indian & Alaska Native	321,687	9	5,549	4.8
Native Hawaiian & Pacific Islander	4,369	<1	70	<1
Other	154,409	4	2,696	2.3
Identified by two or more	221,321	6	4,752	4.1
Selected Economic Characteristics				
Mean household income (dollars)	65,977	X	72,154	X
Median household income (dollars)	49,937	X	61,404	X
Mean travel time to work (minutes)	27.0	X	23.0	X
Percent unemployed	6.6	X	6.1	X

2010 Census Bureau Report

The Framework: MAPP

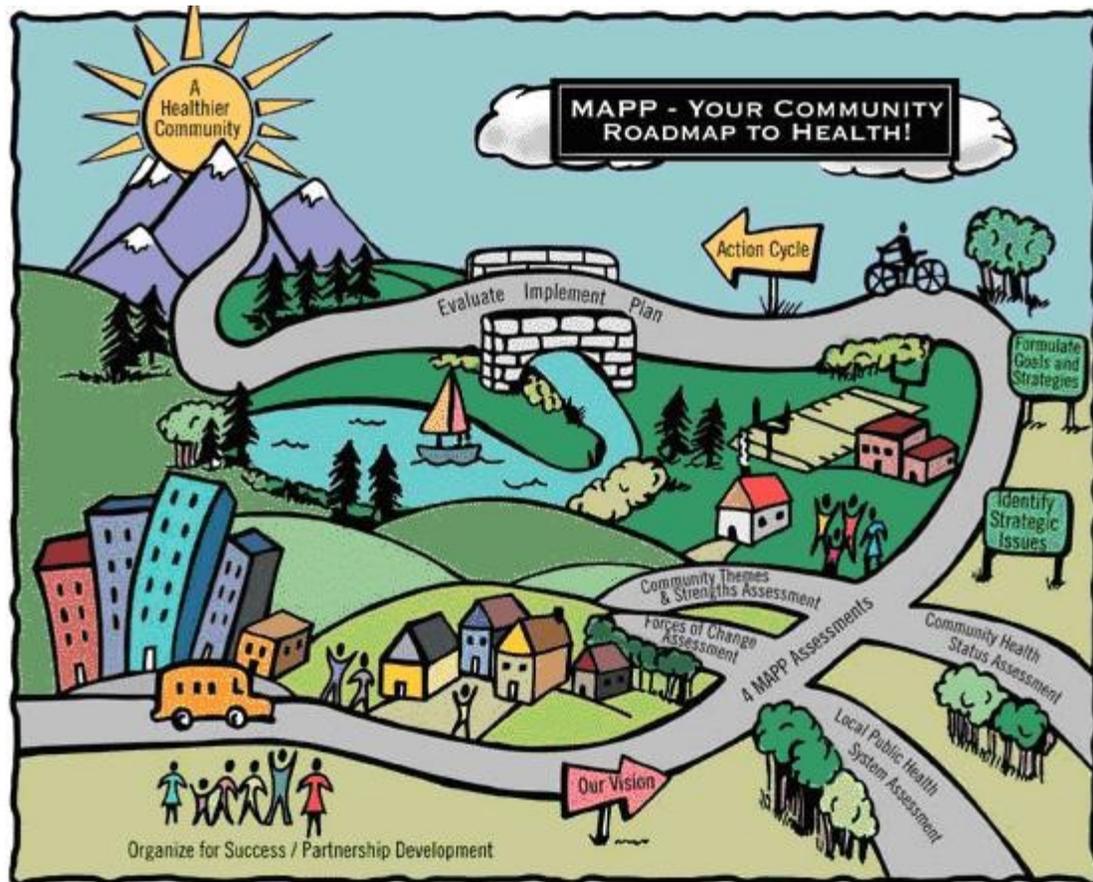
Mobilizing for Action through Planning & Partnerships



The Coalition used the MAPP process as a guide to conduct community-based health assessments from a variety of sources.

- **Partnership Development** - The Canadian County Coalition for Children & Families was organized in September 1996 when the District Child Abuse Prevention Task Force, the Oklahoma Commission on Children and Youth, and the El Reno Childhood Task Force combined into one group. Its mission is to improve the quality of life for children, youth, and families through coordination of community services with a focus on child abuse prevention and community health.
- **Four MAPP Assessments** - Starting in the fall of 2012, the Coalition conducted the four MAPP assessments: Community Health Status Assessment, Community Themes and Strengths Assessment, Forces of Change Assessment, and Local Public Health System Assessment. The assessments were completed over a period of one year.
- **Identifying Strategic Issues** - After reviewing the assessment data, ten elements were identified for closer review and discussion. The ten elements were: child health, diabetes, heart disease, infant mortality, mental health / substance abuse, obesity, stroke, suicide, tobacco, and unintentional injury.
- **Visioning** - This was completed in the CHIP planning meetings. Using various vision statements from participating community partners, the group discussed what a healthy Canadian County would look like. The discussion led to a consensus on a single vision statement for the CHIP development workgroups.

- **Identify Strategic Issues** - From the ten elements, the group selected five top priorities to include in the CHIP. They were: Prevention of Alcohol, Tobacco and Other Drugs; Obesity Prevention; Access to Mental Health; Heart Disease Prevention; and Child Health.
- **Develop Performance Objectives and Strategies** - Once the priorities were identified, the sub-committee developed performance objectives and brainstormed strategies for addressing the five priority issues. They were taken to the Coalition for review, modification and final approval.
- **Action Cycle** - With completion of the initial CHIP, the Action Cycle began. Workgroups met as necessary to continue planning, implementing, and evaluating. The Coalition worked to ensure that organizations, agencies, coalitions, and volunteer groups throughout the county were invited to join the ongoing efforts of improving the community's health.



Note: The MAPP tool was developed by NACCHO in cooperation with the Public Health Practice Program Office, Center for Disease Control and Prevention (CDC). A work group composed of local health officials, CDC representatives, community representatives, and academicians developed MAPP between 1997 and 2000.

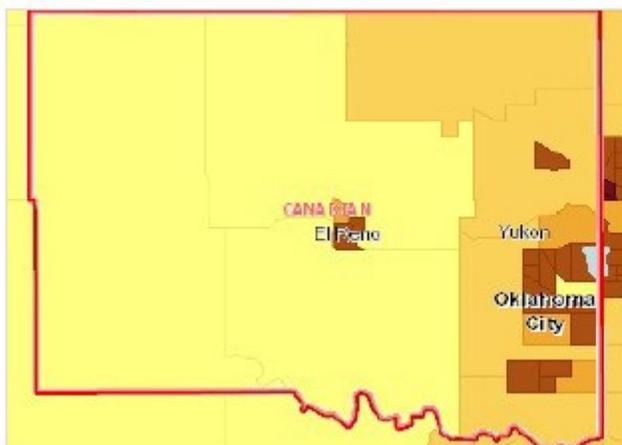
Canadian County



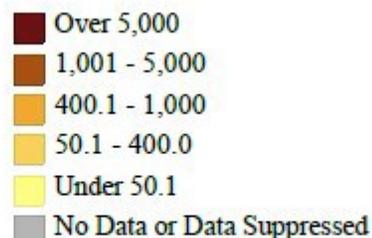
Situated in west-central Oklahoma, Canadian County lies mostly within the Red Bed Plains, a sub-region of the Osage Plains physiographic region. The county's northwestern corner is situated in the Gypsum Hills. Drained by the North Canadian and the Canadian rivers, which cross the county from northwest to southeast, the county consists of 905.17 square miles of land and water. At the turn of the 21st century, incorporated towns included Calumet, Mustang, Okarche, Piedmont, Union City, Yukon, and the county seat of El Reno.

Canadian County's demographics and its rapid change play a major role in determining what resources and services are needed in order to create a healthier community.

Canadian County has approximately 115,541 residents. This represents a 31.7% increase in total population since 2000. This increase in population, over time, could potentially impact healthcare providers and community resources. The population density per square mile is 126.23. Total population by gender is 49.5% male and 50.5% female. The population density graphic below is taken from the Community Health Needs Assessment Report by the Institute for People, Place and Possibility.



Population, Density (Persons per Sq Mile) by Tract, 2007-11



Public Health Priority Issues

Issue One

Child Health

According to U.S. Census data, 29.3% of the population of Canadian County is at or under the age of 19. The 2013 Integris Canadian Valley Hospital Survey indicated that of respondents:

- 74.7% reported obesity in children
- 60.3% reported tobacco use among children
- 64.9% reported underage drinking
- 60.4% reported bullying among youth
- Drug use among youth was identified as the fourth most important health risk in the community

The 2011 State of the State's Health Report indicated infant mortality in Canadian County was 8.2 per 100,000 live births compared to the state at 8.6 and the nation at 6.8, earning a grade of "D." However, the recent release of the 2014 State of the State's Health Report indicated a rate of 5.4 (a 34% improvement), compared to the state at 7.6 and the nation at 6.1, earning an improved grade of "B." The 2014 Report also indicated 7.6% of babies were born with low birth weight, compared to the state at 8.4% and



the nation at 8.1%, earning a grade of "C."

The Community Health Needs Assessment Report by the Institute for People, Place and Possibility indicated Canadian County's infant mortality rate was 6.65 per 100,000 live births, compared to the state at 7.92 and the nation at 6.71, putting Canadian County in the "red" of this report's dashboard indicator.

According to the Kids Count Data Center:

- child and teen death rates for ages 15-19 increased 23.4%
- high school dropout rate increased 10.1%
- confirmed child abuse and neglect cases were 321, a rate of 9.9 per 1,000

The Forces of Change Focus Group

identified various tobacco issues and their possible impact on children. Specifically, there were concerns that the state law restrictions on tobacco control could contribute to the increased use of e-cigarettes within the smoking population, particularly children. Threats to addressing this issue included: inability to pass preemption legislation at the state level, preventing stricter regulations against use of tobacco and e-cigarettes; and the "appeal" of the e-cigarette to youth as another electronic device that is "cool to use." Opportunities created by this issue included: passing of preemption could lead to stricter regulation that could keep e-cigarettes out of the hands of youth.

Child Health

Objectives:

- By 2020, decrease the number of confirmed child abuse and neglect cases from 321 to 225.
- By 2020, decrease infant mortality rate from 5.4 per 100,000 to 5.0 per 100,000.

Strategy 1: Provide and Offer Training

- Increase the number of parenting classes offered in Canadian County
- Provide two trainings to child care workers and daycare center / home staff
- Provide the Risk Watch curriculum to the school systems for staff and students
- Provide county wide training on importance and impact of child mental health

Strategy 2: Education

- Increase the education and awareness of child mental health, child abuse prevention, and stress management
- Support and / or host child abuse prevention efforts / projects in the month of April
- Educate parents and providers on importance of well child checks and scheduled immunizations
- Educate community on Preparing for a Lifetime Campaign - before, during and after pregnancy through trainings and / or projects
- Collaborate with community partners to provide a car seat safety event to educate on importance of child safety

Strategy 3: Increase County Wide Communication, Media and Participation

- Increase the number of community members focused on child health to be members of the Coalition / Infant Mental Health Sub-Committee
- Connect and collaborate with providers through newsletters, emails, media and presentations on the child health activities in Canadian County
- Use social media to educate parents on importance of child health and the activities to stay involved in or participate in

Lead Organizations:

Sooner SUCCESS
Central Communities Health Access Network
Canadian County Health Department
Youth and Family Services - Smart Start
Oklahoma Department of Human Services
Oklahoma City-County Health Department, Fetal and Infant Mortality Review (FIMR)

Policy Changes Needed:	None
Resources:	Agencies that serve children Community centers Library Media / flyers Hospitals
Barriers:	Resources Lack of local specialists Child psychiatry (lack of) Poverty Teen pregnancy Parenting issues Domestic violence Parents and substance abuse Mental health issues Language barriers Lack of interest from parents Infant mortality - awareness of screening services and what results mean

Heart Disease Prevention



According to the 2014 State of the State's Health Report, heart disease was the leading cause of death in Canadian County with a rate of 190.1 per 100,000 population, compared to the state at 235.2 and the nation at 179.1, earning a grade of "C."

The 2014 State of the County's Health Report showed heart disease as the third leading cause of death for ages 35-44; the second leading cause of death for ages 45-54 and 55-64; and the leading cause of death for ages 65+ and for all ages combined.

The Community Health Needs Assessment Report by the Institute for People, Place and Possibility indicated a heart disease mortality rate of 141.18 per 100,000 population, compared to the state at 176.87 and the nation at 134.65. The Healthy People 2020 target is 100.80. Canadian County was in the "red" on this report's dashboard indicator. However, this same report indicated a heart disease prevalence rate of 3.38% compared to the state at 5.36% and the nation at 4.33%, putting the county in the "green" for this indicator. Lower heart disease prevalence combined with higher heart disease mortality may indicate issues with access to care. This report indicated a rate of 44.14 primary care physicians per 100,000 population, compared to the state at 69.90 and the nation at 84.70, putting

the county in the "red" for this indicator.

Nearly two-thirds of Oklahomans are classified as obese or overweight. The state consistently ranks low for fruit and vegetable consumption and physical activity. Both of these factors contribute to heart disease. The 2014 State of the State's Health Report demonstrates the following for Canadian County:

- obesity rate of 31.7% (grade of "D")
- minimal fruit consumption is 50.3% (grade of "F")
- minimal vegetable consumption is 24.9% (grade of "D")

Regular physical activity decreases the risk of heart disease as well as cancer, obesity, arthritis, type 2 diabetes, osteoporosis, and improves quality of life and mental health. In the 2014 State of the State's Health Report, 26.9% of residents reported no physical activity, compared to the state at 28.3% and the nation at 22.9%, earning a grade of "D." The 2014 State of the County's Health Report indicated that 27.0% of adult residents reported not engaging in physical activity. The 2014 County Health Rankings & Roadmaps reported a rate of physical inactivity of 31%.

Tobacco use is also a significant

contributor to heart disease. The 2014 State of the State's Health Report indicated a rate of adult smoking prevalence of 21.1%, compared to the state at 23.3% and the nation at 19.6%, earning a grade of "C." The 2014 State of the County's Health Report indicated that 22.0% of adult residents were smokers. This report also commented on the limitations of this statistic due to lack of reliable data concerning the use of smokeless tobacco and e-cigarettes. The 2014 County Health Rankings & Roadmaps reported an adult smoking rate of 21% and identified the indicator as an "area to explore."

Another possible contributing factor may be residents' high blood pressure management. The Community Health Needs Assessment Report by the Institute for People, Place and Possibility indicated that 20.98% of adults with high blood pressure did not take their medication as prescribed, putting the county in the "red" for this indicator.

Heart Disease Prevention

Objectives:

- By 2020, decrease the rate of heart disease mortality from 190.1 per 100,000 to 179 per 100,000.

ACCOMPLISHED

- By 2020, decrease the rate of cerebrovascular disease (stroke) mortality from 42.9 per 100,000 to 39 per 100,000. **ACCOMPLISHED**

Strategy 1: Promotion and Education

- Support and promote participation in free screenings (blood pressure, blood sugar, and cholesterol checks)
- Promote the “Know Your Numbers Campaign” by giving out wallet cards for participants
- Promote and support activities that support physical activity and nutrition as well as tobacco cessation (ex., Walk This Way, Walktober, 1-800-QuitNow)
- Encourage and engage the community by providing evidence-based programs on heart disease, tobacco cessation, physical activity, and nutrition
- Promote the A.C.T. Fast stroke campaign in the communities

Strategy 2: Communications

- Utilize media to promote and educate on heart disease and stroke prevention
- Tie tobacco, physical activity and nutrition activities to heart disease prevention media
- Collaborate with health care providers to encourage clients to participate in chronic disease self-management programs (ex., Living Longer Living Stronger, Tools for Health Living, etc.)

Lead Organizations:

Canadian County Health Department
Integris Canadian Valley Regional Hospital
Mercy Hospital El Reno
Central Communities Health Access Network
City of Piedmont
City of Yukon

Policy Changes Needed:

Pass Clean Indoor Air Ordinance in municipalities throughout the county
Pass Tobacco Free 24/7 policies in all public and private schools and campuses
Restore Local Control through the Oklahoma Legislature

Resources:

Integrus Hospital Yukon
Mercy Hospital El Reno
Canadian County Health Department
Physical activity / event programs
Changing Your Weighs
Girls on the Run program
Walking trails
Parks
School sports
Weight Watchers
Diabetes education

Barriers:

Lack of knowledge / experience with heart disease prevention
Aging population
Tobacco use
Substance use
Decreased physical activity levels
Increased obesity rates
Low rates of routine wellness check ups
Increased diabetes rates
Heredity
Too many fast food restaurants
Large restaurant portions with high calorie and fat content
Cattle producing state - high level of meat consumption
Lack of sidewalks

Mental Health

In the 2013 Integris Canadian Valley Hospital Survey, 36.1% reported stress / depression as a health problem in their household (second to high blood pressure). Depression was identified as the most important behavioral health concern in the community.

According to the 2014 State of the State's Health Report, suicide was among the leading causes of death with a rate of 17.3 per 100,000 population, compared to the state at 16.5 and the nation at 12.1, earning a grade of "D."

The 2014 State of the County's Health Report indicated that suicide was the second leading cause of death for ages 15-24 and 25-34, fourth for ages 35-44, fifth for ages 45-54, eighth for ages 55-64, and eighth for all ages combined.

The Community Health Needs Assessment Report by the Institute

for People, Place and Possibility indicated a suicide rate of 14.05 per 100,000 population, compared to the state at 15.44 and the nation at 11.57, putting the county in the "red" of this report's dashboard indicator.

The 2014 State of the State's Health Report indicated that approximately one out of four (23.7%) adults in Canadian County reported 4+ days of poor mental health in the past month, earning a grade of "C." The 2014 County Health Rankings & Roadmaps indicated residents reported an average of 3.8 poor mental health days, compared to the state at 4.2. The report further indicated a ratio of population to mental health providers of 802:1, compared to the state at 438:1.

In contrast, the Community Health Needs Assessment Report by the

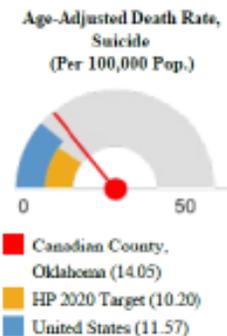


Institute for People, Place and Possibility indicated that 19.30% of the adult population reported they receive insufficient social and emotional support all or most of the time, compared to the state at 20.30% and the nation at 20.93%, putting the county in the "green" for this indicator. This is relevant because social and emotional support is critical for good mental health.

Suicide

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

Report Area	Total Population	Average Annual Deaths, 2006-2010	Crude Death Rate (Per 100,000 Pop.)	Age-Adjusted Death Rate, Suicide (Per 100,000 Pop.)
Canadian County, Oklahoma	109,675	15	13.31	14.05
Oklahoma	3,673,268	566	15.40	15.44
United States	303,844,430	35,841	11.80	11.57
HP 2020 Target				<= 10.2



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

Data Source: Centers for Disease Control and Prevention, National Center for Health Statistics, Underlying Cause of Death, 2006-2010. Accessed through CDC

WONDER. Source geography: County.

Mental Health

Objectives:

- By 2020, decrease the suicide rate from 17.3 per 100,000 to 12.1 per 100,000.
- By 2020, decrease the percentage of reported poor mental health days (4+ days in the past month) from 23.7% to 15%. **METRIC NO LONGER AVAILABLE, REPLACED BY THE FOLLOWING:**
- By 2020, decrease percentage of reported Frequent Poor Mental Health Days (≥ 14 days in the past 30 days) from 11.2% to 9%.

Strategy 1: Awareness

- Provide presentations, newspaper articles, and/or events to promote forms of stress reduction and self-esteem
- Promote use of 2-1-1 services

Strategy 2: Education

- Promote QPR (Question, Persuade, Refer) Suicide prevention training offered by Integris Canadian Valley Hospital and encourage school staff, church staff, physicians, and parents to participate
- Collaborate with Infant Mental Health coalition to provide trainings on infant mental health to child care providers and professionals
- Promote mental health support groups to the community (ex., NAMI, Parent groups, etc.)

Strategy 3: Networking

- Network with health care providers and the Health Access Network to implement depression screening tool for all regular routine health care visits
- Link community to mental health services through media outlets
- Promote utilization of Integris TeleHealth Network to connect with specialty physicians and clinical professionals
- Collaborate with Red Rock's Trauma Care Committee to provide trauma therapy
- Partner with non-traditional partners, churches, to be the possible first link in the community to facilitate mental health prevention

Lead Organizations:	<p>Red Rock BHS</p> <p>Youth and Family Services - Smart Start</p> <p>Central Communities Health Access Network</p> <p>Oklahoma Department of Mental Health and Substance Abuse</p> <p>Integrus Health System</p> <p>Mustang Public Schools</p> <p>Yukon Public Schools</p>
Policy Changes Needed:	None
Resources:	<p>Existing Providers</p> <p>Counseling agencies</p> <p>School counseling and school programs on bullying and self esteem</p>
Barriers:	<p>Lack of providers</p> <p>Lack of money</p> <p>Lack of time</p> <p>Lack of funding and barriers to access funding</p> <p>Lack of transportation</p> <p>Lack of knowledge of available resources</p> <p>Heredity</p> <p>Parenting</p> <p>Domestic violence</p> <p>Substance abuse</p> <p>Stigma</p> <p>No inpatient treatment facility for mental health or substance abuse issues</p> <p>Divorce rate</p> <p>Poverty</p> <p>Noncompliance with medications</p> <p>Cost of medications</p> <p>Bullying</p>

Obesity Prevention



Obesity prevention is a key component to help increase the quality of life for adults and raise healthy children in the future.

Obesity is defined as having a Body Mass Index (BMI) greater than 30.0 kg/m² (BMI = weight in kilograms divided by the square of height in meters). In addition to its association with mortality, obesity increases our risk of several chronic diseases such as heart disease and type 2 diabetes.

According to the State of the County's Health Report, data from 2005-2010 estimate the rate of adult obesity to be 26.4% , 9.7% higher than the rate reported in the previous County Health Report.

Excess weight may indicate an unhealthy lifestyle and puts individuals at risk for further health issues. In today's society, adults and youth find themselves often rushing from one place to the next, from one task to the next, and looking for the most convenient thing they can get their hands on to eat. These unhealthy lifestyles and choices are decreasing the quality of life for adults and children.

Poor diet and lack of physical activity are two main causes of increased obesity rates. There are other contributing factors such as:

- Television and media
- Marketing of unhealthy foods

- Limited access to healthy, affordable foods
- Limited access to parks and sidewalks
- Increased portion sizes
- Higher consumption of sugary beverages

The 2013 Integris Canadian Valley Hospital Survey indicated 32.1% of participants reported obesity as a health problem in their household.

When asked to identify what they thought were the five most important health risks in the community, 61.4% chose being overweight (ranked first), 48.1% chose poor eating habits (ranked second), and 45.2% chose lack of exercise (ranked third); all of these are contributing factors to obesity.

When asked if adult obesity was a problem in Canadian County, 81.4% responded "yes." When asked if obesity in children was a problem in Canadian County, 74.7% responded "yes."

The 2014 State of the State's Health Report indicated an obesity rate of 31.7%, compared to the state at 32.2% and the nation at 27.6%, earning a grade of "D."

The Community Health Needs Assessment Report by the Institute for People, Place and Possibility identified issues that contributed to a higher obesity rate:

- 12.98 grocery stores per 100,000 population, compared to the state at 16.61 and the nation at 20.85
- 20.92 WIC-authorized food stores per 100,000 population, compared to the state at 22.20 and the nation at 15.60
- 28% of the population is within 1/2 mile of a park, compared to the state at 33% and the nation at 39%

These issues provide measures of healthy food access, food security, and environmental influences on dietary and healthy behaviors. Canadian County was in the "red" on this report's dashboard indicator for all of these issues.

Obesity Prevention

Objectives:

- By 2020, decrease adult obesity rate from 31.7% to 28%. BMI<=30.
- By 2020, increase percentage of adults reporting leisure activity from 73.1% to 78%.
- By 2020, increase community's access to healthy foods.
- By 2020, decrease adult overweight rate from 39.19% to 35%. **METRIC DISCONTINUED**

Strategy 1: Community Education

- Increase nutrition education by providing cooking classes, lessons, or demonstrations in the public or school setting. Partner with OSU Extension, grocery stores and other community partners to provide these classes.
- Host community/county wide physical activity challenges in order to increase knowledge and overall physical activity.
- Promote evidence-based and practice-based health education curriculum in schools and child care centers.
- Increase the number of after-school programs that implement Coordinated Approach to Child Health (CATCH).
- Encourage participation in Certified Healthy Businesses Oklahoma Programs.
- Educate adults and youth through media and presentation on the importance of eating healthy and physical activity.

Strategy 2: Access to Healthy Foods

- Support and promote farmers' markets in the communities.
- Utilize media outlets to showcase healthy local restaurants and healthy meals.
- Work with local farmers' markets to accept SNAP and WIC.

Strategy 3: School Health Policies

- Increase the number of schools and school districts that provide healthy options at lunch, snacks, parties, vending machines, fundraisers, etc.
- Increase and promote the shared use of school facilities.
- Increase the number of Walking School Buses

Strategy 4: Place Making

- Encourage and support each community to provide access for healthy living through better infrastructure such as sidewalks, trails, etc.
- Encourage and support each community to provide more affordable/free events and activities to get families focused on increasing physical activity.

Lead Organizations: Canadian County Health Department
Integris Canadian Valley Regional Hospital
Mercy Hospital El Reno
Central Communities Health Access Network
City of Piedmont
City of Yukon

Policy Changes Needed: None

Resources: Kiwanis
Farmers markets
Food banks
Community gardens
Dieticians
Community centers / pools
Skate parks

Barriers: Transportation
Culture
Low fruit and vegetable consumption
High costs for fresh produce
High fast food density
Lack of time for parents
Lack of after school activities / sports
Not knowing how to cook healthy
Lack of funding for classes and activities

Prevention of Alcohol, Tobacco, and Other Drugs

Tobacco use affects every system in the body and causes physical and mental dependence, illness, and disease. About one third of Americans will die prematurely due to tobacco dependence.

According to the CDC, 6,200 Oklahomans die from smoking-related illness each year. Smoking kills more people than alcohol, AIDS, car crashes, illegal drugs, murders and suicides combined.

Oklahoma ranked 39th nationally for adult smoking; an improvement from 47th. Oklahoma's adult smoking rate dropped from 26.1% in 2011 to 23.3% in 2012; a historic low for the state. Canadian County's adult smoking rate was 22%; lower than the state rate but higher than the nation at 13%.

The 2010 Oklahoma Prevention Needs Assessment published by the Oklahoma Department of Mental Health and Substance Abuse Services reported that 25.7% of Canadian County 8th graders, and 36.6% of 10th graders, have used tobacco products. The Community Themes and Strengths Assessment and the Forces of Change

Assessment both identified reducing tobacco use among adults and youth as one of the most important public health issues in the community.

An asset for the community is the Canadian County Against Tobacco Coalition. This coalition is actively engaged in the schools and communities and strives to make a difference on tobacco related issues.

Though the county's adult smoking rate is lower than the state's, tobacco prevention and cessation remain a top priority. With the appropriate resources and motivated individuals, the Coalition hopes to see success in other areas of tobacco prevention such as increased education, reductions in smoking rates for

specific populations, reductions in the use of smokeless tobacco, and reductions in youth tobacco rates.

According to the National Center for Health Statistics, poisoning is the leading cause of injury death in the United States. Pharmaceutical and illicit drugs cause the vast majority of these deaths. More overdose deaths involve prescription painkillers than alcohol and illicit drugs combined. Of the approximately 700 unintentional poisoning deaths in Oklahoma each year, nearly 70% involve at least one prescription drug. Opioids are involved in more than 80% of prescription drug-related deaths.



Canadian County SWAT youth speaking to State Legislators about Tobacco Preemption

Community Strengths:

- Communities of Excellence in Tobacco Control Grant
- Canadian County Against Tobacco Coalition
- 24-7 Tobacco Free Schools
- Strong Support from Educational Organizations and businesses
- Active coalitions focusing on ATOD prevention

Prevention of Alcohol, Tobacco, and Other Drugs

Objectives:

- By 2020, reduce adult smoking rate from 23.3% to 18%. **ACCOMPLISHED**
- By 2020, reduce unintentional poisoning death rate from 9.8 per 100,000 to 7 per 100,000.
- By 2020, increase the use of prescription drug drop boxes by 5%.

Strategy 1: Prevent Youth Initiation

- Increase number of schools that have and enforce a written 24/7 No Tobacco Use School Policy, including e-cigarettes
- Continue to educate youth about harmful effects of alcohol, tobacco, and other drug use
- Increase number of Responsible Beverage Service and Sales trainings and policies
- Continue regular Alcohol Compliance Checks and Reward Reminder Tobacco Checks

Strategy 2: Promote Tobacco Cessation Services

- Promote Helpline to the specific populations (i.e., Hispanics, Native Americans, underserved, low socio-economic, and pregnant women)
- Collaborate with health care providers and public health department to provide tobacco cessation, 5As, and use fax referral system to the OK Tobacco Helpline
- Partner with local businesses to promote the Helpline and offer rewards/recognition for employees that quit or reduce intake/amount of tobacco

Strategy 3: Prevention of Prescription Drug Abuse/Misuse

- Promote and increase the use of the prescription drug drop sites
- Collaborate with community partners to educate on proper disposal of prescription drugs
- Collaborate with community partners to host prescription drug take-back days

Strategy 4: Pass Policies

- Encourage more businesses to implement tobacco-free policies
- Encourage municipalities to pass and/or strengthen rules/regulations/ordinances regarding alcohol and tobacco use
- Support and enforce alcohol and tobacco rules/regulations/ordinances
- Promote and educate on the Social Host Law to adults, youth and law enforcement

Strategy 5: Increase Prevention Media

- Increase number of media outlets that publish earned media that educate on dangers of alcohol, tobacco and other drugs

Strategy 6: Enhance Coalition and Skills

- Increase representation to the coalition that includes the rural communities
- Develop non-traditional partnerships to increase the outcome of the populations reached

Lead Organizations: Canadian County Health Department
Red Rock BHS Prevention Programs
Central Communities Health Access Network
Mustang and Yukon Public Schools

Policy Changes Needed: Pass Clean Indoor Air Ordinances in county municipalities
Pass Tobacco Free 24/7 policies in all schools and campuses
Restore Local Control through the Oklahoma Legislature

Resources: Fort Reno rehab center
Tobacco Quitline
RPC
CCAT
Canadian County Health Department
Hospitals
Central Communities Health Access Network
Law enforcement agencies
Strong school coalitions - MPACT / YUCAN
Churches
Juvenile Justice Center
Youth and Family Services
Center for Positive Change
OK Family Counseling
Oklahoma City-County Health Department, Fetal and Infant Mortality Review

Barriers: Lack of knowledge and resources
Culture
Money
Stigma
Youth cessation/treatment

Summary

As the Canadian County Coalition for Children & Families moves into the implementation of this Community Health Improvement Plan, it is important we remember that this is a fluid and dynamic process. All phases of the MAPP process may need to be revisited at any time due to unforeseen circumstances and developments. This is to be expected. Try as we have to strive to be deliberative in the strategic planning process, no doubt there will be obstacles and opportunities waiting for us that we have yet to encounter. The committees and teams created to attend to each of the five priority issues will be in constant evaluation mode as they work to implement strategies.

The Coalition originated with the combining of three task forces and has been a cornerstone of community collaboration since the first meeting in 1996. It provides a forum for networking, sharing of information, professional training, and public awareness on issues relating to children, families and public health. The mission of this Coalition is to improve the quality of life for children, youth, and families through coordination of community services with a focus on child abuse prevention and community health. This Community Health Improvement Plan is the next significant step in that continued journey.

The Coalition has learned over the years that improving health outcomes takes a lot of time and effort. However, it has also seen that improved health outcomes do eventually come. This is demonstrated by such things as:

- Ranked 2nd best in the state for deaths due to influenza/pneumonia and 4th best for infant mortality
- Lowest rate in the state of residents living in poverty
- Consistently ranked in the top ten for various indicators including teen fertility, adult obesity prevalence, physically inactive adults, self-health rating, usual source of healthcare, vegetable consumption, adult dental visits, and seniors influenza/pneumonia vaccination
- 2014 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation ranked Canadian County as 5th in the state in health outcomes, 2nd in length of life, 4th in health factors, and 4th in clinical care

With the experience and knowledge of these successes, the Canadian County Coalition for Children & Families will continue to apply itself to improving the health of its citizens. It understands that this is a battle that never ends, that there will always be room for improvement no matter how much ground we gain, and that the “public health” battle is one worth fighting on behalf of all our communities and residents.

Priority Issues Workgroup

Member Organizations

Child Health

- Canadian County Health Department
- Integris Canadian Valley Hospital
- Mercy Hospital El Reno
- Safe Kids Oklahoma
- Smart Start Canadian County
- Sooner SUCCESS
- Oklahoma City-County Health Department - FIMR

Heart Disease Prevention

- Central Communities Health Access Network
- Integris Canadian Valley Hospital
- Mercy Hospital El Reno
- Canadian County Health Department
- Tobacco Settlement Endowment Trust

Mental Health

- Canadian County Systems of Care
- Integris Canadian Valley Hospital
- Mercy Hospital El Reno
- Sooner SUCCESS
- Systems of Care

Obesity Prevention

- Canadian County Health Department
- Central Communities Health Access Network
- Integris Canadian Valley Hospital
- Mercy Hospital El Reno
- Tobacco Settlement Endowment Trust

Prevention of Alcohol, Tobacco and Other Drugs

- Canadian County District Attorney's Office
- Canadian County Juvenile Bureau
- Canadian County Health Department
- Integris Canadian Valley Hospital
- Tobacco Settlement Endowment Trust

Appendix A - Version History

Version numbering is as follows:

- Initial version is 1.0
- Subsequent minor changes will increase the version number by 0.1
- Subsequent major changes will increase the version number by 1.0

Version Number	Change Request Number (if applicable)	Accepted Date	Author	Summary of Change
1.0		1/12/2015	Mikeal Murray	Release of initial document
2.0		1/13/2016	Mikeal Murray	Addition of First Annual Report
3.0		1/9/2017	Mikeal Murray	Addition of Second Annual Report
4.0		1/12/2018	Mikeal Murray	Addition of Third Annual Report
5.0		1/8/2019	Mikeal Murray	Addition of Fourth Annual Report
6.0		6/15/2020	Mikeal Murray	Added Fifth Annual Report, Final Five-Year Report, References, and fixed format issues

Appendix B - Annual Reports

First Annual Report	29
Second Annual Report	35
Third Annual Report	42
Fourth Annual Report	48
Fifth Annual Report	55
Final Five-Year Report	62

First Annual Report

Issue One

Child Health

Objectives:

- **By 2020, decrease number of confirmed child abuse and neglect cases from 321 to 225.**

According to the Kids Count Data Center published by the Annie E. Casey Foundation (Dec 22, 2015), child abuse and neglect confirmations rose from 321 in 2013 (9.9 per 1,000) to 412 in 2014 (12.3 per 1,000)¹, representing a 28% increase. However, the report stipulates the following:

“Major revision in investigation, service provision and enforcement have occurred since the initial base period, requiring data collection to begin anew. This data should not be compared to historic child abuse & neglect indicators.”

Current Child Abuse & Neglect Confirmations

Year(s): 5 selected | Data Type: All

Data Provided by: Oklahoma Institute for Child Advocacy

Location	Data Type	2010	2011	2012	2013	2014
Canadian County	Number	226	237	395	321	412
	Rate per 1000	8.0	7.6	12.4	9.9	12.3

LAST UPDATED OR EDITED: December 22, 2015

- **By 2020, decrease infant mortality rate from 5.4 per 1,000 to 5.0 per 1,000.**

According to source from OK2SHARE, Canadian County’s infant mortality rate was 6.1 per 1,000².

1. Kids Count Data Center. The Annie E. Casey Foundation, 2016. Available at <http://datacenter.kidscount.org/data/tables/5514-current-child-abuse-neglect-confirmations?loc=38&loct=5#detailed/5/5274/false/869,36,868,867,133/any/12090,12091>.

2. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2010 to 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 03MAR2016:15:25:29.

Heart Disease Prevention

Objectives:

- **By 2020, decrease the rate of heart disease mortality from 190.1 per 100,000 to 179 per 100,000.**

According to source data from OK2SHARE, Canadian County's heart disease mortality rate was 167.6 per 100,000³. This exceeds the established objective and provides opportunity to establish a new one.

- **By 2020, decrease the rate of cerebrovascular disease (stroke) mortality from 42.9 per 100,000 to 39 per 100,000.**

According to source data from OK2SHARE, the rate of stroke mortality was 33.0 per 100,000⁴. This exceeds the established objective and provides opportunity to establish a new one.

Detailed Mortality Statistics

Characteristics Selected for Records Search

Search Characteristic	Values Selected
Counties	Canadian
Years	2012 to 2014
Cause of Death	Diseases of heart

634 records matched the search criteria.

Detailed Mortality Statistics

Characteristics Selected for Records Search

Search Characteristic	Values Selected
Counties	Canadian
Years	2012 to 2014
Cause of Death	Cerebrovascular diseases

125 records matched the search criteria.

Death Record Search Based on Query

All rates are deaths per 100,000 population.

Deaths	Population	Death Rate
634	378,265	167.6

Death Record Search Based on Query

All rates are deaths per 100,000 population.

Deaths	Population	Death Rate
125	378,265	33.0

3. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 03MAR2016:16:45:02.

4. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 03MAR2016:16:51:54.

Mental Health

Objectives:

- **By 2020, decrease the suicide rate from 17.3 per 100,000 to 12.1 per 100,000.**

According to source data from OK2SHARE, the suicide rate was 15.1 per 100,000⁵. This was an improvement and demonstrates progress towards the established objective.

Detailed Mortality Statistics	
Characteristics Selected for Records Search	
Search Characteristic	Values Selected
Counties	Canadian
Years	2012 to 2014
Cause of Death	Intentional self-harm (suicide)

57 records matched the search criteria.

Death Record Search Based on Query		
All rates are deaths per 100,000 population.		
Deaths	Population	Death Rate
57	378,265	15.1

- **By 2020, decrease the percentage of reported poor mental health days (4+ days in the past month) from 23.7% to 15%.**

Source data from the Oklahoma State Department of Health was not available at the time of this report.

The 2016 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation⁶ reported a rate of poor mental health days as 3.8. This represented the average number of mentally unhealthy days reported in the past 30 days (age-adjusted). The report also indicated Oklahoma’s rate was 4.1 and the nation’s 90th percentile rate was 2.8.

Quality of Life		6		
Poor or fair health**	15%	14-15%	12%	20%
Poor physical health days**	3.7	3.6-3.9	2.9	4.4
Poor mental health days**	3.8	3.7-3.9	2.8	4.1
Low birthweight	8%	7-8%	6%	8%

5. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 04MAR2016:15:17:28.

6. A Robert Wood Johnson Foundation program, 2016 County Health Rankings & Roadmaps. Accessed at <http://www.countyhealthrankings.org/app/oklahoma/2016/rankings/canadian/county/outcomes/overall/snapshot> on 07APR2016.

Obesity Prevention

Objectives:

- **By 2020, decrease adult obesity rate from 31.7% to 28%. BMI < 30.**

Source data from the Oklahoma State Department of Health was not available at the time of this report.

The 2016 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation⁷ reported an adult obesity rate of 34%. This represented the percentage of adults who reported a Body Mass Index (BMI) of 30 or more. This was a slight increase from the 33% reported in 2015. In addition, the adult obesity rate for the state was 32% and the 90th percentile of the nation was 25%.

- **By 2020, increase percentage of adults reporting leisure activity from 73.1% to 78%.**

Source data from the Oklahoma State Department of Health was not available at the time of this report.

The 2016 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation⁷ reported a physical inactivity rate of 29%. This represented the percentage of adults aged 20 and over who reported participating in no leisure-time physical activity. This is a slight improvement from the 30% reported in 2015. In addition, the rate for the state was 31% and the 90th percentile for the nation was 20%.

- **By 2020, increase community's access to healthy foods.**

Source data from the Oklahoma State Department of Health was not available at the time of this report.

The 2016 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation⁷ reported a food environment index indicator. This number represented an index of factors that contribute to a healthy food environment, 0 being worst and 10 being best. Canadian County's food environment index was 7.7, a decrease from the 7.9 reported in 2015. The index for the state was 6.6 and the 90th percentile for the nation was 8.3; both of these numbers had decreased as well.

- **By 2020, decrease adult overweight rate from 39.19% to 35%.**

Source data from the Oklahoma State Department of Health was not available at the time of this report.

7. A Robert Wood Johnson Foundation program, 2016 County Health Rankings & Roadmaps. Accessed at <http://www.countyhealthrankings.org/app/oklahoma/2016/rankings/canadian/county/outcomes/overall/snapshot> on 07APR2016.

Prevention of Alcohol, Tobacco and Other Drugs

Objectives:

- **By 2020, reduce adult smoking rate from 23.3% to 18%.**

Source data from the Oklahoma State Department of Health was not available at the time of this report.

The 2016 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation reported an adult smoking rate of 18%. This represented the percentage of adults who were current smokers. The report indicated this data should not be compared with prior years due to changes in definition/methods. The state rate was 21% and the 90th percentile of the nation was 18%.

- **By 2020, reduce the rate of unintentional poisoning deaths from 9.8 per 100,000 to 7.0 per 100,000.**

Source data from the Oklahoma State Department of Health was not available at the time of this report.

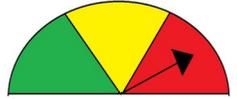
The 2016 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation reported a drug overdose mortality rate of 14 per 100,000. This was an increase from the rate of 11 per 100,000 reported in 2015. The state rate was 20 and the 90th percentile for the nation was 8.

- **By 2020, increase the use of prescription drug drop boxes by 5%.**

Source data from the Oklahoma Bureau of Narcotics and Dangerous Drugs was not obtained at the time of this report.

Summary

Child Health



The number of confirmed child abuse and neglect cases rose dramatically. However, this may be due in part to major revisions in investigations, service provision and enforcement activity.

The infant mortality rate increased.

Heart Disease Prevention



Both performance objectives for heart disease and stroke mortality were met.

Mental health



The suicide rate improved. Secondary data indicated that the rate of poor mental health days compared favorably to the state rate.

Obesity Prevention



Source data was not available for any of the performance measures. However, secondary data indicated trending in the wrong direction. There was no data available for the rate of overweight.

Prevention of Alcohol, Tobacco and Other Drugs



Source data was not available for any of the performance measures. However, secondary data indicated no significant change. There was no county data available for the use of prescription drug drop boxes.

Second Annual Report

Issue One

Child Health

Objectives:

- **By 2020, decrease number of confirmed child abuse and neglect cases from 321 to 225.**

According to the Kids Count Data Center published by the Annie E. Casey Foundation (May 6, 2017), child abuse and neglect confirmations decreased from 412 in 2014 (12.3 per 1,000) to 372 in 2015 (10.8 per 1,000), but increased again to 408 in 2016 (11.5 per 1,000)⁸. This represents only a 1% improvement since major revisions required new baseline data collection in 2015.

Location	Data Type	2012	2013	2014	2015	2016
Canadian County	Number	395	321	412	372	408
	Rate per 1000	12.4	9.9	12.3	10.8	11.5

- **By 2020, decrease infant mortality rate from 5.4 per 1,000 to 5.0 per 1,000.**

According to source data from OSDH, the infant mortality rate was 6.2 per 1,000⁹. This was essentially the same as last year's rate. It was 16.2% lower than the state rate of 7.4, but higher than the 5.4 reported in the 2014 State of State's Health Report.

8. Kids Count Data Center. The Annie E. Casey Foundation, 2017. Available at <http://datacenter.kidscount.org/data/tables/5514-current-child-abuse-neglect-confirmations?loc=38&doct=5#detailed/5/5274/false/870,573,869,36,868/any/12090,12091>.

9. State of the County's Health Report - Canadian County, Summer 2017. Oklahoma State Department of Health (OSDH), Community and Family Health Services, Community Epidemiology & Evaluation. Accessed at <https://www.ok.gov/health2/documents/Canadian%202017.pdf>.

Heart Disease Prevention

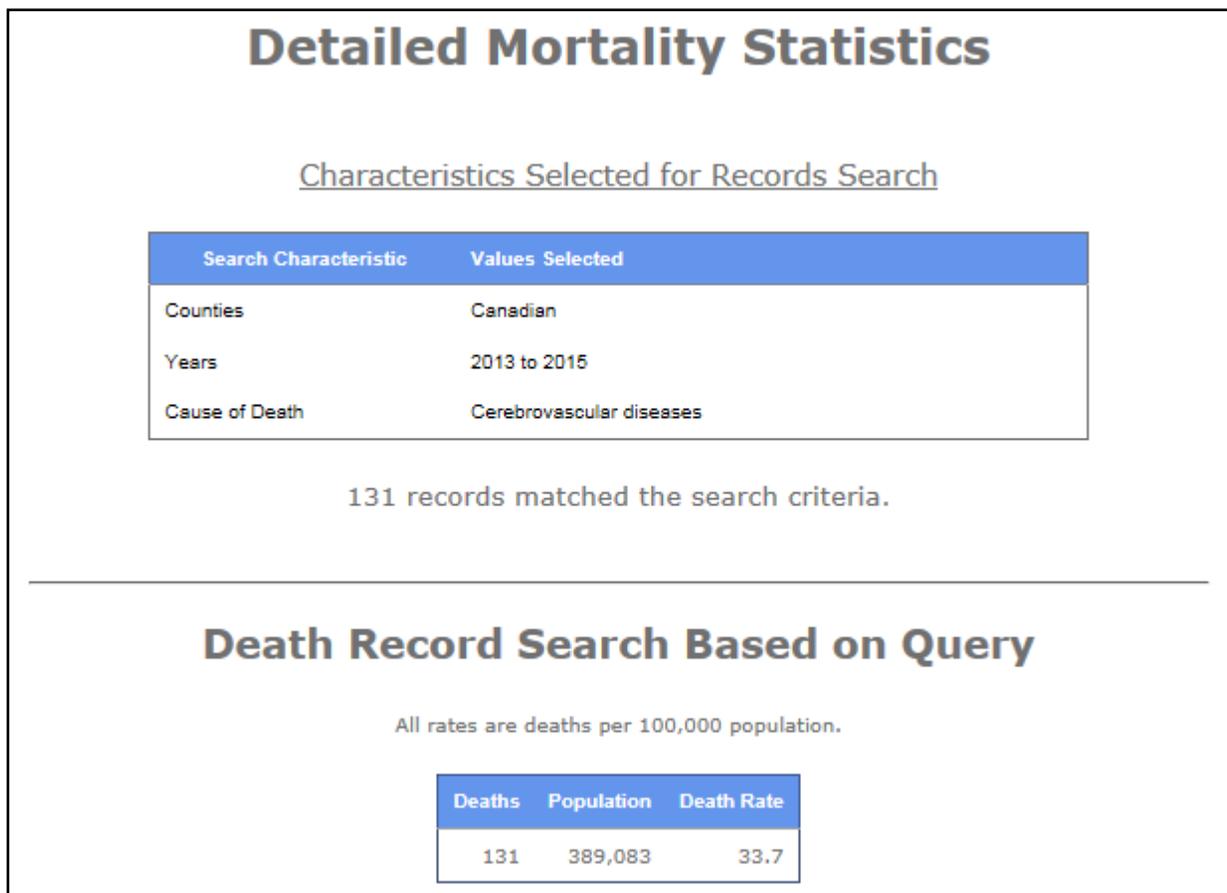
Objectives:

- **By 2020, decrease the rate of heart disease mortality from 190.1 per 100,000 to 179 per 100,000.**

According to source data from OSDH, the rate of heart disease mortality was 187.4 per 100,000¹⁰. This was almost a total reversal of the progress reported last year.

- **By 2020, decrease the rate of cerebrovascular disease (stroke) mortality from 42.9 per 100,000 to 39 per 100,000.**

According to source data from OK2SHARE, the rate of stroke mortality was 33.7 per 100,000¹¹. This was a slight increase from last year but still exceeded the established performance objective.



10. Oklahoma State Department of Health. (n.d.). *Detailed Mortality Statistics*. Vital Statistics on OK2SHARE.

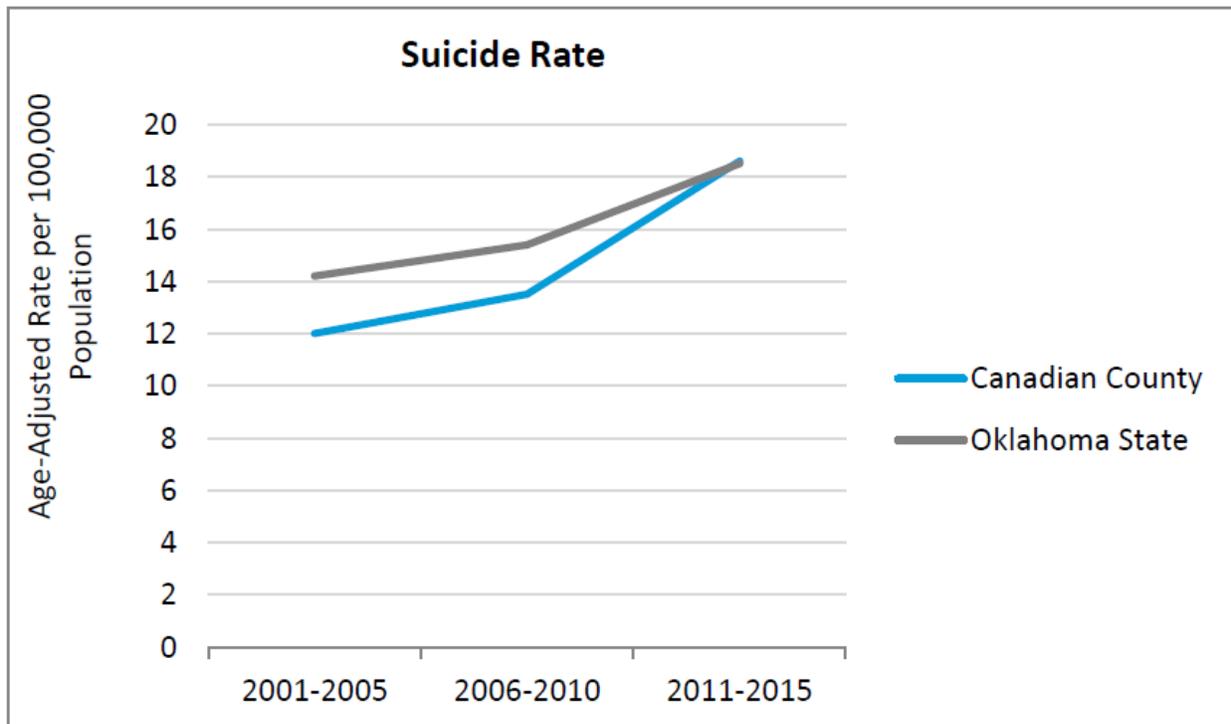
11. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2013 to 2015, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 10/JAN2018:15:33:31.

Mental Health

Objectives:

- By 2020, decrease the suicide rate from 17.3 per 100,000 to 12.1 per 100,000.

According to source data from OK2SHARE, the suicide rate was 18.6 per 100,000. This was a 23% increase from the rate reported last year.



- By 2020, decrease the percentage of reported poor mental health days (4+ days in the past month) from 23.7% to 15%.

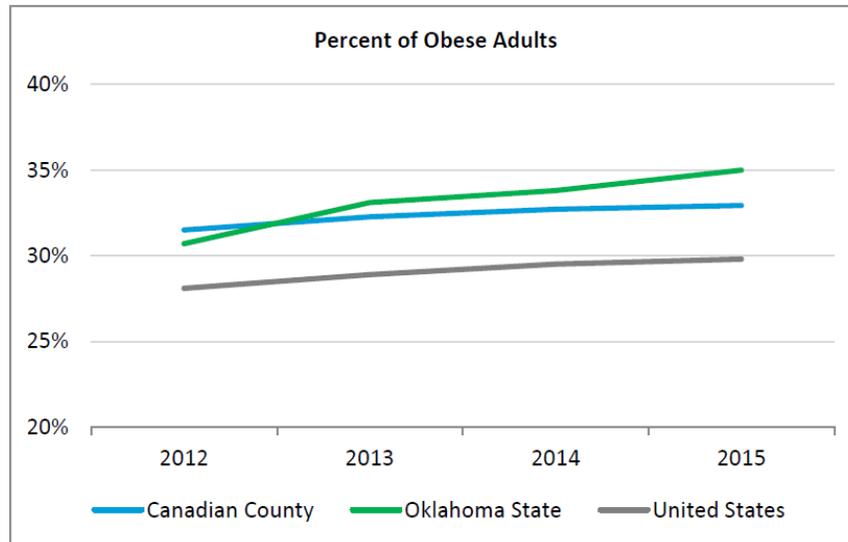
Source data from the Oklahoma State Department of Health was not available at the time of this report.

Obesity Prevention

Objectives:

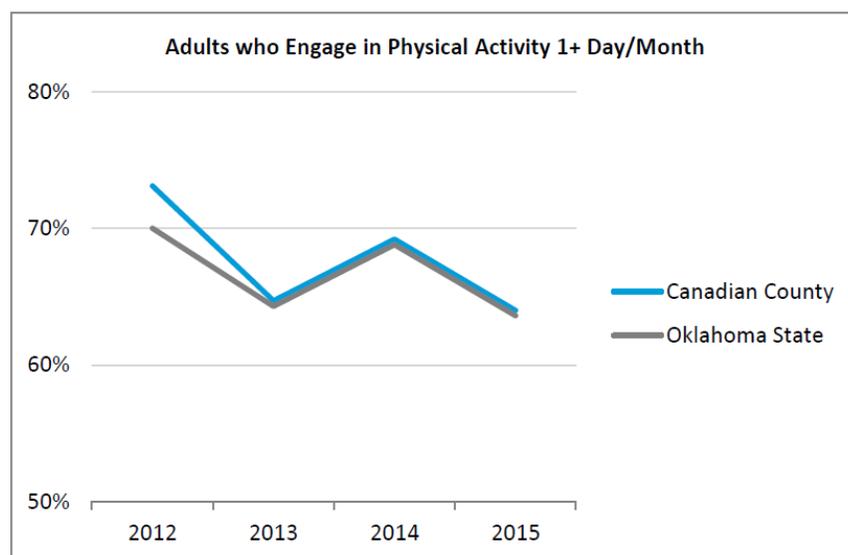
- **By 2020, decrease adult obesity rate from 31.7% to 28%. BMI < 30.**

According to source data from OSDH, the rate of adult obesity was 32.9%. This may indicate a levelling off of the obesity rate, but is still trending in the wrong direction.



- **By 2020, increase percentage of adults reporting leisure activity from 73.1% to 78%.**

Source data from OSDH indicated 36.0% of residents reported not engaging in physical activity. Therefore, 64% did engage in physical activity.



- **By 2020, increase community's access to healthy foods.**

Source data from OSDH indicated 49.7% of residents consumed two or more daily servings of fruits; 24.7% consumed three daily servings of vegetables. State rates were 51.7% for fruits and 25.8% for vegetables. In addition, the state rates ranked nationally 49th and 48th respectfully.

The 2017 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation reported a food environment index of 7.8. This was a slight increase from last year's 7.7. The food environment index is comprised of factors that contribute to a healthy food environment, 0 being worst and 10 being best. The index remained at 6.6 for the state. The 90th percentile for the nation improved to 8.4.

- **By 2020, decrease adult overweight rate from 39.19% to 35%.**

Source data from the Oklahoma State Department of Health was not available at the time of this report.

Prevention of Alcohol, Tobacco and Other Drugs

Objectives:

- **By 2020, reduce adult smoking rate from 23.3% to 18%.**

Source data from OSDH indicated an adult smoking rate of 18.3%. This was close to achieving the performance objective for this measure.

The 2017 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation reported an adult smoking rate of 15%. This was within the margin of error to equal the Top U.S. Performers at the 90th percentile. It was also an improvement from last year's rate of 18%.

- **By 2020, reduce the rate of unintentional poisoning deaths from 9.8 per 100,000 to 7.0 per 100,000.**

Source data from OSDH indicated a rate of unintentional poisoning deaths of 11.2 per 100,000. This was higher than our initial rate of 9.8, but lower than the state rate of 17.8 and the national rate of 14.80.

- **By 2020, increase the use of prescription drug drop boxes by 5%.**

Source data from the Oklahoma Bureau of Narcotics and Dangerous Drugs was not obtained at the time of this report.

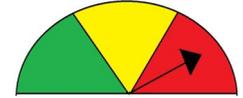
Summary

Child Health



The latest data indicated a temporary improvement in the number of confirmed child abuse and neglect cases that lasted one year. The infant mortality rate remained steady, still better than the state rate.

Heart Disease Prevention



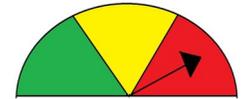
Heart disease mortality almost returned to the original rate, erasing last year's reported progress. Stroke mortality increased slightly but remained as an achieved performance objective.

Mental health



The suicide rate increased by almost a quarter.

Obesity Prevention



Source data indicated that obesity rates were trending up, physical activity was trending down, consumption of fruits and vegetables was remaining steady and below the state and national rates, and there was no data available for the rate of overweight.

Prevention of Alcohol, Tobacco and Other Drugs



The adult smoking rate was just short of the performance objective. Unintentional poisoning deaths appeared to have steadied.

Third Annual Report

Issue One

Child Health

Objectives:

- By 2020, decrease number of confirmed child abuse and neglect cases from 321 to 225.

There was no new source data available.

- By 2020, decrease infant mortality rate from 5.4 per 1,000 to 5.0 per 1,000.

According to source data from OSDH, the infant mortality rate was 5.7 per 1,000. This was an approximate 8% improvement from last year's rate and essentially returns Canadian County to the where it began this strategic plan cycle.

Detailed Mortality Statistics

Characteristics Selected for Records Search

Search Characteristic	Values Selected
Counties	Canadian
Years	2012 to 2016
Age	Under 1 year

49 records matched the search criteria.

Death Record Search Based on Query

All Infant Mortality Rates are deaths per 1,000 births.

Deaths	Population	Death Rate
49	8,579	5.7

Calculations may have been suppressed due to small cell size (less than 5 deaths/populations less than 20)

Suggested Citation:

Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2016, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 07MAR2018:13:45:08.

Heart Disease Prevention

Objectives:

- By 2020, decrease the rate of heart disease mortality from 190.1 per 100,000 to 179 per 100,000.

According to source data from OSDH, the rate of heart disease mortality was 166.6 per 100,000. This was an approximate 11% improvement from last year’s rate and exceeds the performance objective for this measure.

Detailed Mortality Statistics

Characteristics Selected for Records Search

Search Characteristic	Values Selected
Counties	Canadian
Years	2012 to 2016
Cause of Death	Diseases of heart

1,080 records matched the search criteria.

Death Record Search Based on Query

All rates are deaths per 100,000 population.

Deaths	Population	Death Rate
1,080	648,175	166.6

Calculations may have been suppressed due to small cell size (less than 5 deaths/populations less than 20)

Suggested Citation:
 Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2016, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 07MAR2018:14:13:15.

- By 2020, decrease the rate of cerebrovascular disease (stroke) mortality from 42.9 per 100,000 to 39 per 100,000.

According to source data from OK2SHARE, the rate of stroke mortality was 35.9 per 100,000¹². This was a slight increase from last year but still exceeded the established performance objective.

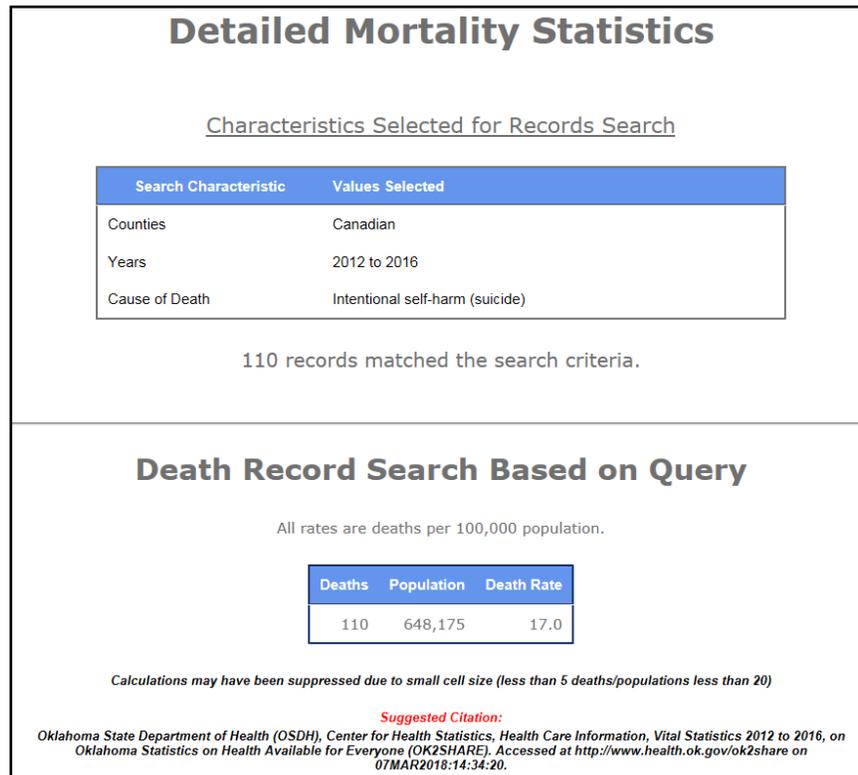
12. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2016, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 07MAR2018:14:21:32.

Mental Health

Objectives:

- By 2020, decrease the suicide rate from 17.3 per 100,000 to 12.1 per 100,000.

According to source data from OK2SHARE, the suicide rate was 17.0 per 100,000. This was an approximate 9% improvement from last year's rate and returns Canadian County to where it began this strategic planning cycle.



- By 2020, decrease the percentage of reported poor mental health days (4+ days in the past month) from 23.7% to 15%.

Source data from the Oklahoma State Department of Health was not available at the time of this report.

Obesity Prevention

Objectives:

- **By 2020, decrease adult obesity rate from 31.7% to 28%. BMI < 30.**

According to source data from OSDH, the rate of adult obesity was 32.6%. This was essentially the same as last year's rate of 32.9%.

- **By 2020, increase percentage of adults reporting leisure activity from 73.1% to 78%.**

Source data from OSDH indicated 29.9% of residents reported not engaging in physical activity. Therefore, 70.1% did engage in physical activity. This was an approximate 9% improvement from last year.

- **By 2020, increase community's access to healthy foods.**

New source data from OSDH was unavailable at the time of this report.

- **By 2020, decrease adult overweight rate from 39.19% to 35%.**

New source data from OSDH was unavailable at the time of this report.

Prevention of Alcohol, Tobacco and Other Drugs

Objectives:

- **By 2020, reduce adult smoking rate from 23.3% to 18%.**

Source data from OSDH indicated an adult smoking rate of 14.9%. This was a 19% improvement and meets the performance objective for this measure.

The 2018 County Health Rankings & Roadmaps by the Robert Wood Johnson Foundation reported an adult smoking rate of 14%. This was an improvement from last year's rate of 15% and was equal to the Top U.S. Performers at the 90th percentile. However, the measure is still identified as an "area to explore."

- **By 2020, reduce the rate of unintentional poisoning deaths from 9.8 per 100,000 to 7.0 per 100,000.**

Source data from OSDH indicated a rate of unintentional poisoning deaths of 12.2 per 100,000. This compares favorably to the state rate of 20.6 and the national rate of 18.20. However, the trend still continues to increase.

- **By 2020, increase the use of prescription drug drop boxes by 5%.**

Source data from the Oklahoma Bureau of Narcotics and Dangerous Drugs was not obtained at the time of this report.

Summary

Child Health



There was no new source data for confirmed child abuse and neglect cases. However, the infant mortality rate continued to improve and returned to the level we started with.

Heart Disease Prevention



The heart disease mortality rate again achieved the performance objective. Stroke mortality increased slightly for a second straight year but still remained as an achieved performance objective.

Mental health



The suicide rate improved to where it began in the strategic cycle.

Obesity Prevention



The obesity rate remained steady and the physical activity rate improved. It appears that a rate for overweight is no longer available.

Prevention of Alcohol, Tobacco and Other Drugs



The adult smoking rate has achieved the performance objective for this measure. There is reason to be optimistic about the rate of unintentional poisoning deaths.

Fourth Annual Report

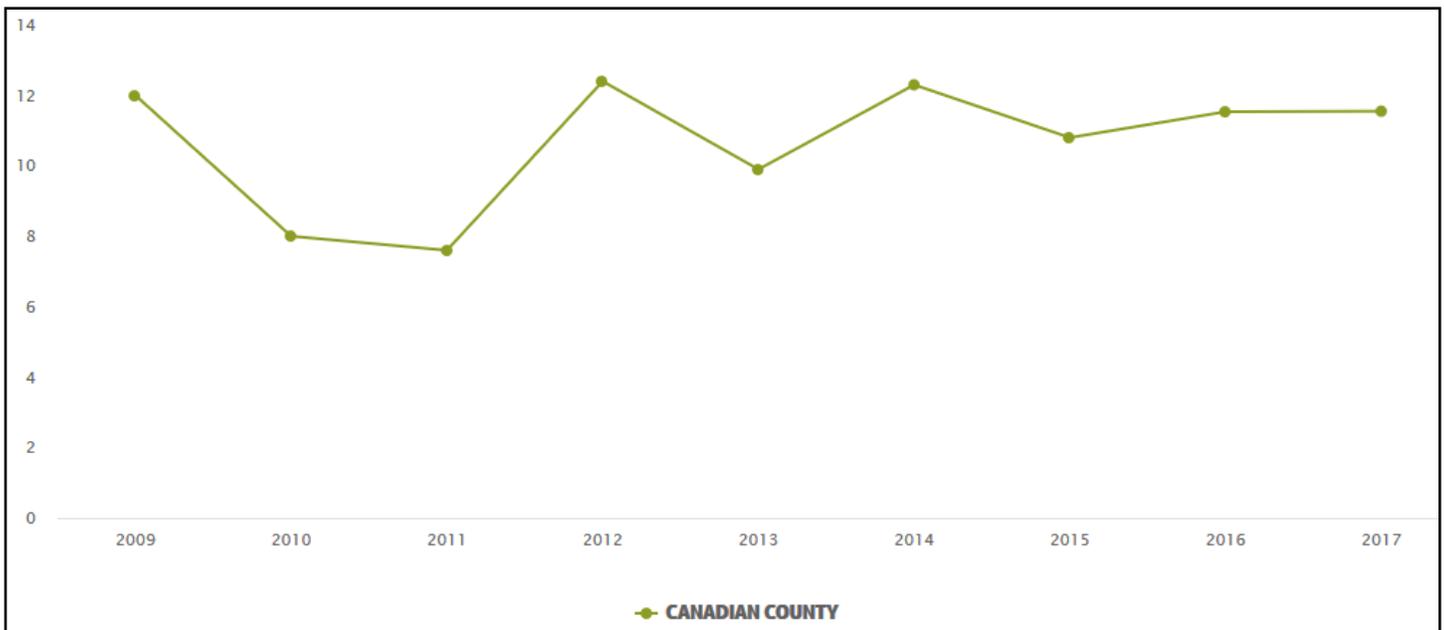
Issue One

Child Health

Objectives:

- By 2020, decrease number of confirmed child abuse and neglect cases from 321 to 225.

According to the latest data from Kids Count Data Center published by the Annie E. Casey Foundation (May 13, 2018), child abuse and neglect confirmations increased from 408 in 2016 (11.5 per 1,000) to 415 in 2017 (11.6 per 1,000). This represented an approximate 2% increase in confirmations.



- By 2020, decrease infant mortality rate from 5.4 per 1,000 to 5.0 per 1,000.

According to source data from OSDH, the infant mortality rate was 5.3 per 1,000. This was an approximate 7% improvement from last year's rate.

Detailed Mortality Statistics

Characteristics Selected for Records Search

Search Characteristic	Values Selected
Counties	Canadian
Years	2013 to 2017
Age	Under 1 year

46 records matched the search criteria.

Characteristics Selected for Records Search

Deaths	Population	Death Rate
46	8,699	5.3

Calculations may have been suppressed due to small cell size (less than 5 deaths/populations less than 20)

Suggested Citation:

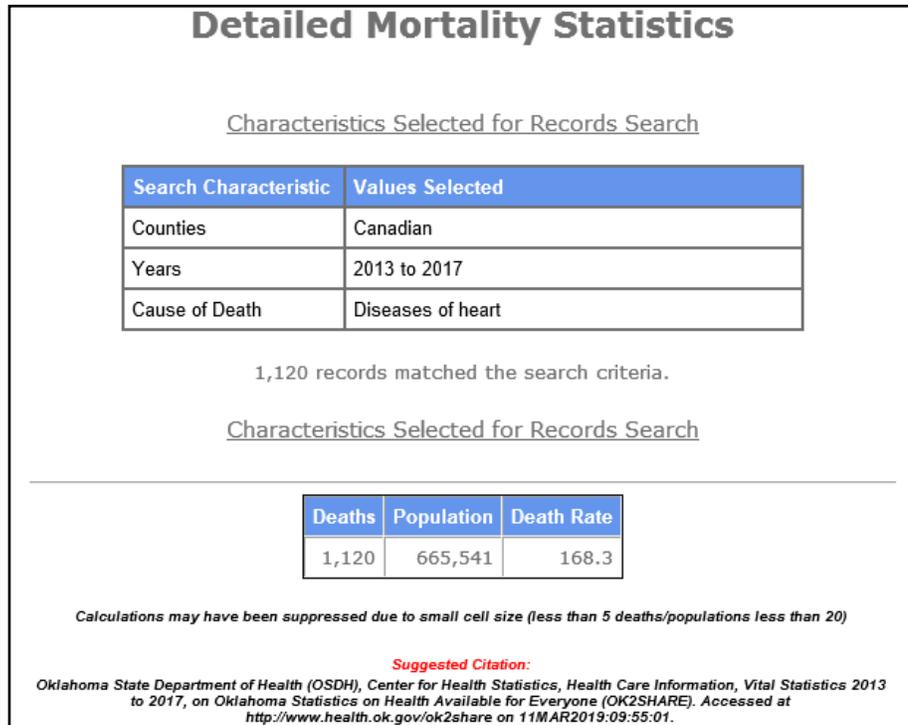
Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2013 to 2017, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 11MAR2019:09:18:22.

Heart Disease Prevention

Objectives:

- By 2020, decrease the rate of heart disease mortality from 190.1 per 100,000 to 179 per 100,000.

According to source data from OSDH, the rate of heart disease mortality was 168.3 per 100,000. This was an approximate 1% increase from last year’s rate and but still exceeds the performance objective for this measure.



- By 2020, decrease the rate of cerebrovascular disease (stroke) mortality from 42.9 per 100,000 to 39 per 100,000.

According to source data from OK2SHARE, the rate of stroke mortality was 36.2 per 100,000¹³. This was a slight increase from last year but still exceeded the established performance objective.

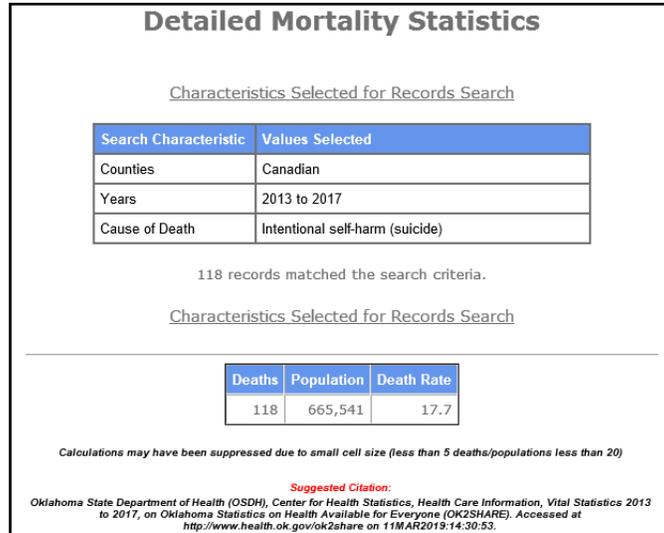
13. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2016, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 11MAR2019:14:21:55.

Mental Health

Objectives:

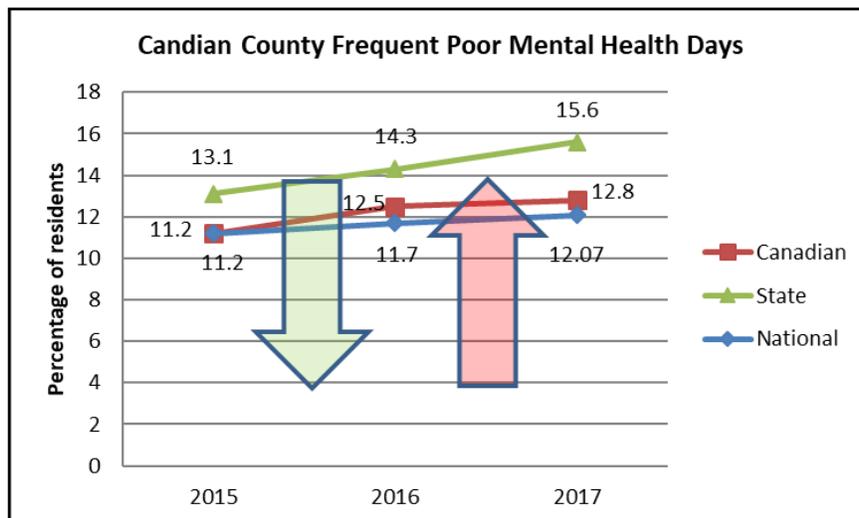
- By 2020, decrease the suicide rate from 17.3 per 100,000 to 12.1 per 100,000.

According to source data from OK2SHARE, the suicide rate was 17.7 per 100,000. This was an approximate 4% improvement from last year's rate.



- By 2020, decrease the percentage of reported poor mental health days (4+ days in the past month) from 23.7% to 15%.

OSDH no longer calculates this indicator. It has been replaced with “Frequent Poor Mental Health Days (>=14 days in the past 30 days)”. This is the percentage of residents reporting at least 14 days of poor mental health in the past 30 days. Available data from the State of the State’s Health Report are presented in the graph below.

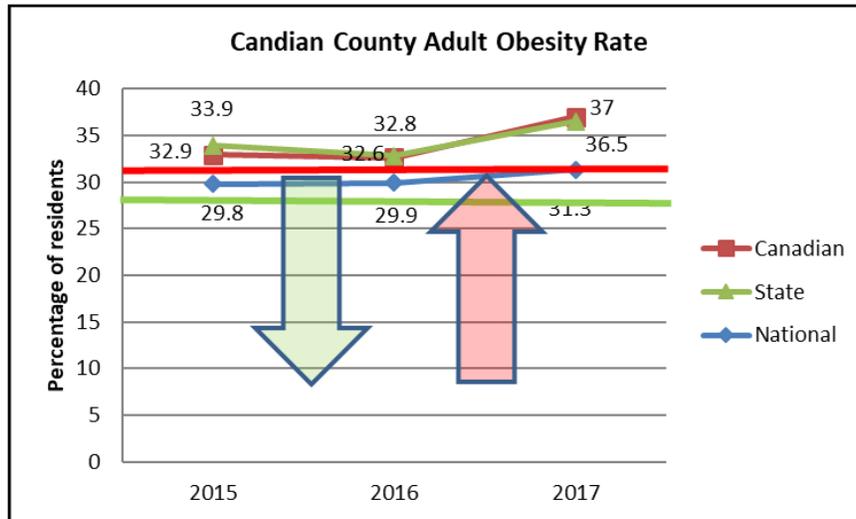


Obesity Prevention

Objectives:

- **By 2020, decrease adult obesity rate from 31.7% to 28%. BMI < 30.**

Source data from the State of the State’s Health Report demonstrate trends for adult obesity in the graph below. The current adult obesity rate is 37.0% which is an approximate 13% increase.



- **By 2020, increase percentage of adults reporting leisure activity from 73.1% to 78%.**

Source data from OSDH indicated 31.9% of residents reported not engaging in physical activity. Therefore, 68.1% did engage in physical activity. This was an approximate 7% increase in residents reporting no physical activity.

- **By 2020, increase community’s access to healthy foods.**

Source data from OSDH indicated 41.9% of residents consumed less than one serving of fruit per day; 16.3% consumed less than one serving of vegetables per day (lower is better). By comparison, statewide rates were 45.8% for fruit and 17.1% for vegetables; national rates were 36.1% for fruit and 18.05% for vegetables.

- **By 2020, decrease adult overweight rate from 39.19% to 35%.**

New source data from OSDH was unavailable at the time of this report.

Prevention of Alcohol, Tobacco and Other Drugs

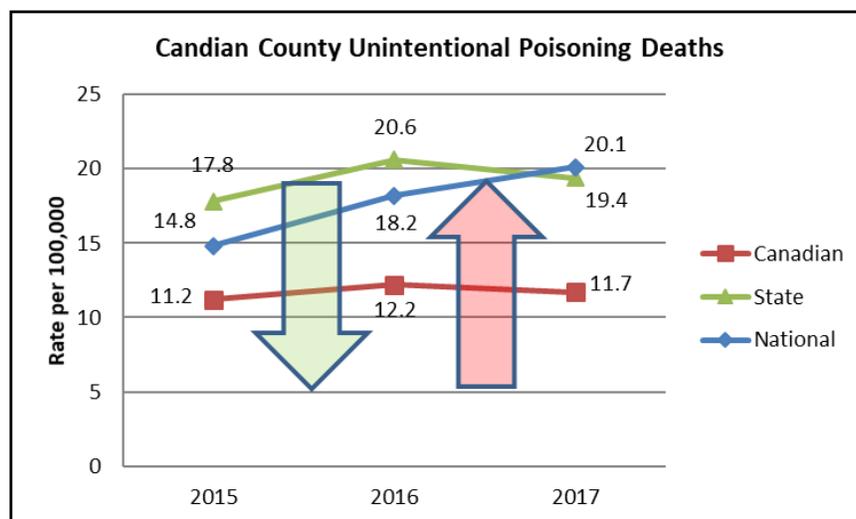
Objectives:

- By 2020, reduce adult smoking rate from 23.3% to 18%.

Source data from OSDH indicated an adult smoking rate of 13.5%. This was a 9% improvement and continues to exceed the performance objective for this measure.

- By 2020, reduce the rate of unintentional poisoning deaths from 9.8 per 100,000 to 7.0 per 100,000.

Source data from the State of the State’s Health Report indicated a trend as reported in the graph below. The current rate of unintentional poisoning deaths is 11.7 per 100,000.



- By 2020, increase the use of prescription drug drop boxes by 5%.

Source data from the Oklahoma Bureau of Narcotics and Dangerous Drugs was not obtained at the time of this report.

Summary

Child Health



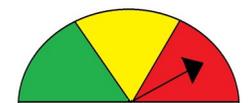
Confirmed child abuse and neglect cases appear to have leveled off. Infant mortality rate continues to improve and is approaching the performance objective for this measure.

Heart Disease Prevention



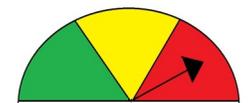
The rates of heart disease mortality and stroke mortality continue to meet the performance objectives for these measures.

Mental health



Rates of suicide and poor mental health days increased.

Obesity Prevention



The obesity rate increased while the rate of physical activity decreased.

Prevention of Alcohol, Tobacco and Other Drugs



The adult smoking rate continues to improve, further achieving the performance objective for this measure. Graphic representation of unintentional poisoning deaths demonstrate the positive nature of this measure.

Fifth Annual Report

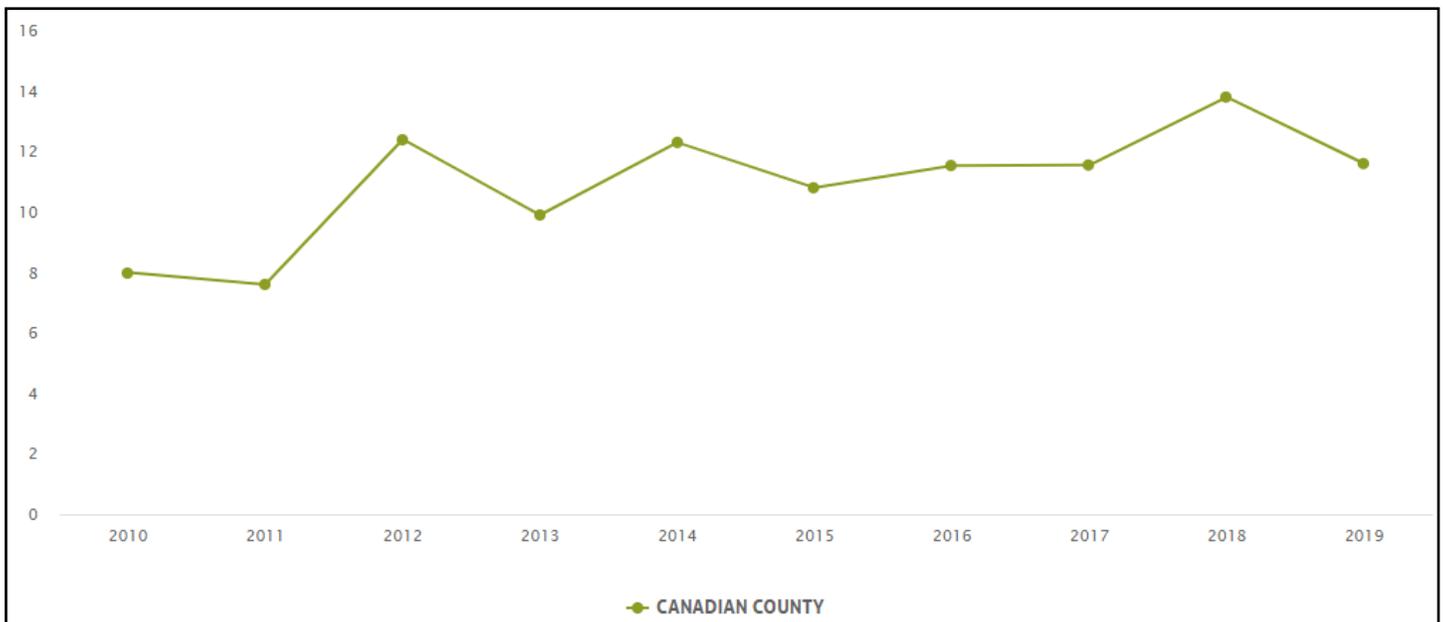
Issue One

Child Health

Objectives:

- By 2020, decrease number of confirmed child abuse and neglect cases from 321 to 225.

According to the latest data from Kids Count Data Center published by the Annie E. Casey Foundation (May 6, 2020), child abuse and neglect confirmations increased from 415 in 2017 (11.6 per 1,000) to 503 in 2018 (13.8 per 1,000), a 19% rate increase. Then the number of confirmations decreased to 438 in 2019 (11.6 per 1,000), a 16% rate improvement. There was no change of rate between data reported in the Fourth Annual Report and the most recent data. The graph below demonstrates the overall upward trend over the past nine years.



- By 2020, decrease infant mortality rate from 5.4 per 1,000 to 5.0 per 1,000.

The infant mortality rate was 5.4 per 1,000. This was essentially the same as last year's rate of 5.3.

Detailed Mortality Statistics

Characteristics Selected for Records Search

Search Characteristic	Values Selected
Counties	Canadian
Years	2014 to 2018
Age	Under 1 year

48 records matched the search criteria.

Characteristics Selected for Records Search

Deaths	Population	Death Rate
48	8,871	5.4

Calculations may have been suppressed due to small cell size (less than 5 deaths/populations less than 20)

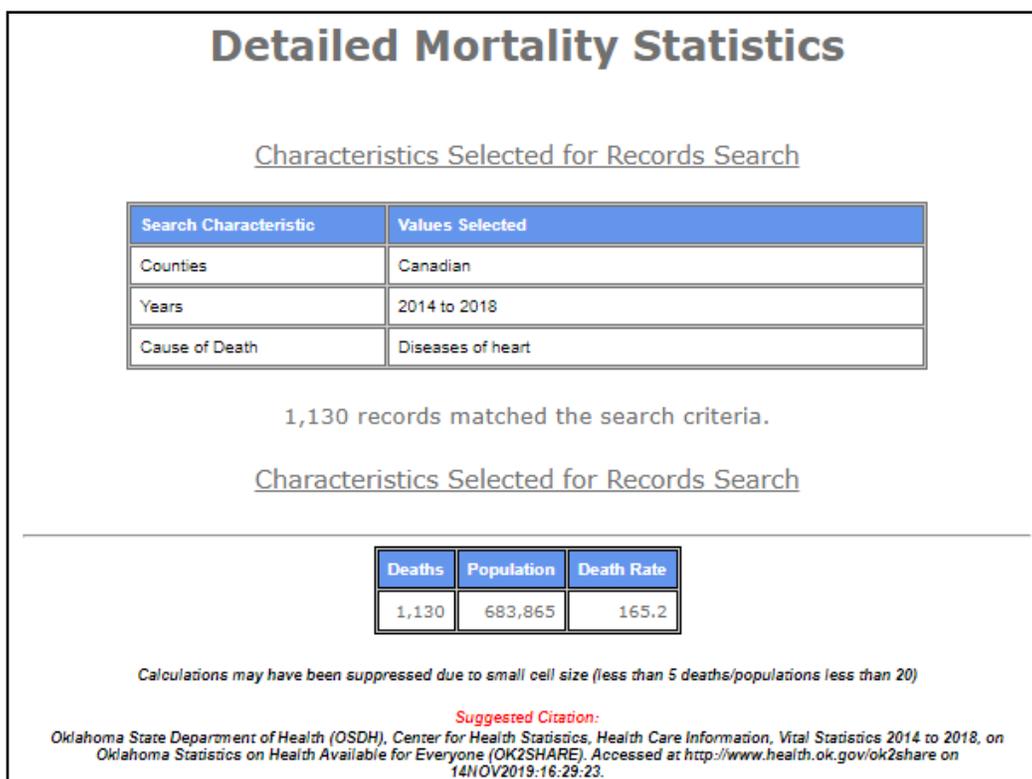
Suggested Citation:
 Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2014 to 2018, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 14NOV2019:16:24:25.

Heart Disease Prevention

Objectives:

- **By 2020, decrease the rate of heart disease mortality from 190.1 per 100,000 to 179 per 100,000.**

The rate of heart disease mortality was 165.2 per 100,000. This was an approximate 2% improvement and still exceeds the performance objective for this measure.



- **By 2020, decrease the rate of cerebrovascular disease (stroke) mortality from 42.9 per 100,000 to 39 per 100,000.**

The rate of stroke mortality was 37.4 per 100,000¹⁴. This was another slight increase but still exceeded the performance objective.

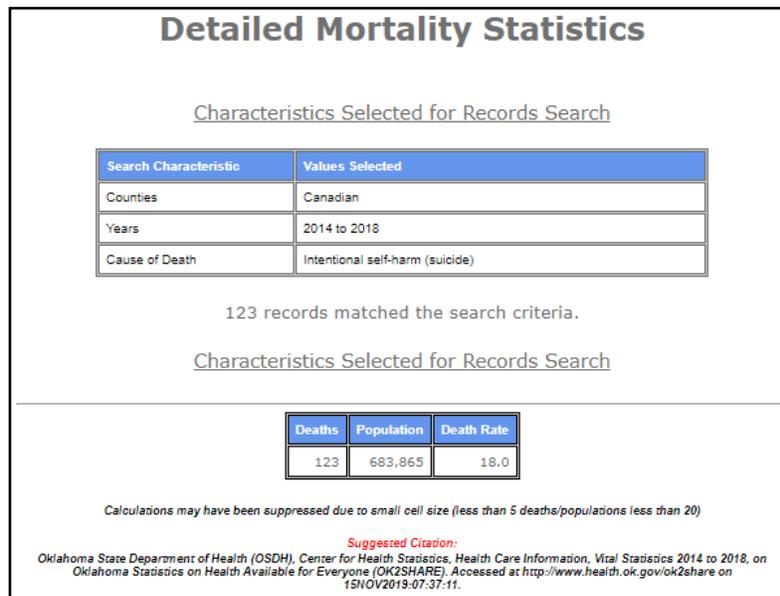
14. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2016, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 14NOV2019:16:33:39.

Mental Health

Objectives:

- By 2020, decrease the suicide rate from 17.3 per 100,000 to 12.1 per 100,000.

The suicide rate was 18.0 per 100,000. This was an approximate 2% increase from last year's rate.



- By 2020, decrease percentage of reported Frequent Poor Mental Health Days (≥ 14 days in the past 30 days) from 11.2% to 9%.

At the time of this report, there was no current data available.

Obesity Prevention

Objectives:

- **By 2020, decrease adult obesity rate from 31.7% to 28%. BMI < 30.**

At the time of this report, no new data was available.

- **By 2020, increase percentage of adults reporting leisure activity from 73.1% to 78%.**

At the time of this report, no new data was available.

- **By 2020, increase community's access to healthy foods.**

At the time of this report, no new data was available.

- **By 2020, decrease adult overweight rate from 39.19% to 35%.**

OSDH no longer calculates this metric.

Prevention of Alcohol, Tobacco and Other Drugs

Objectives:

- **By 2020, reduce adult smoking rate from 23.3% to 18%.**

At the time of this report, no new data was available.

- **By 2020, reduce the rate of unintentional poisoning deaths from 9.8 per 100,000 to 7.0 per 100,000.**

At the time of this report, no new data was available.

- **By 2020, increase the use of prescription drug drop boxes by 5%.**

Oklahoma Bureau of Narcotics and Dangerous Drugs does not calculate this metric.

Summary

Child Health

Confirmed child abuse and neglect cases still appear to have leveled off. Infant mortality rate remained essentially unchanged.



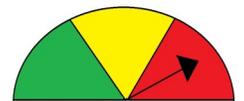
Heart Disease Prevention

The rates of heart disease mortality and stroke mortality continue to meet the performance objectives for these measures.



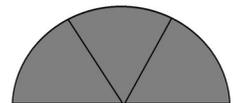
Mental health

The suicide rate increased again.



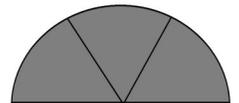
Obesity Prevention

There was no new data available for this strategic issue.



Prevention of Alcohol, Tobacco and Other Drugs

There was no new data available for this strategic issue.



Final Five-Year Report

Issue One

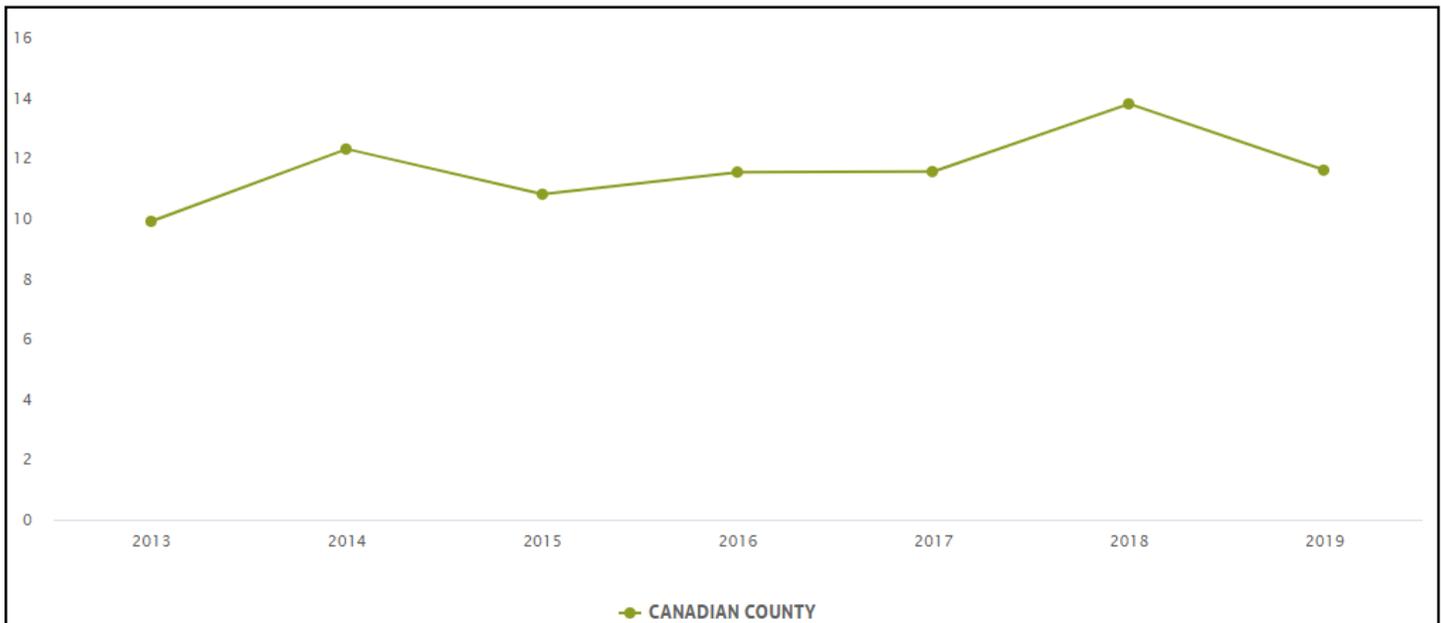
Child Health

Objectives:

- By 2020, decrease number of confirmed child abuse and neglect cases from 321 to 225.

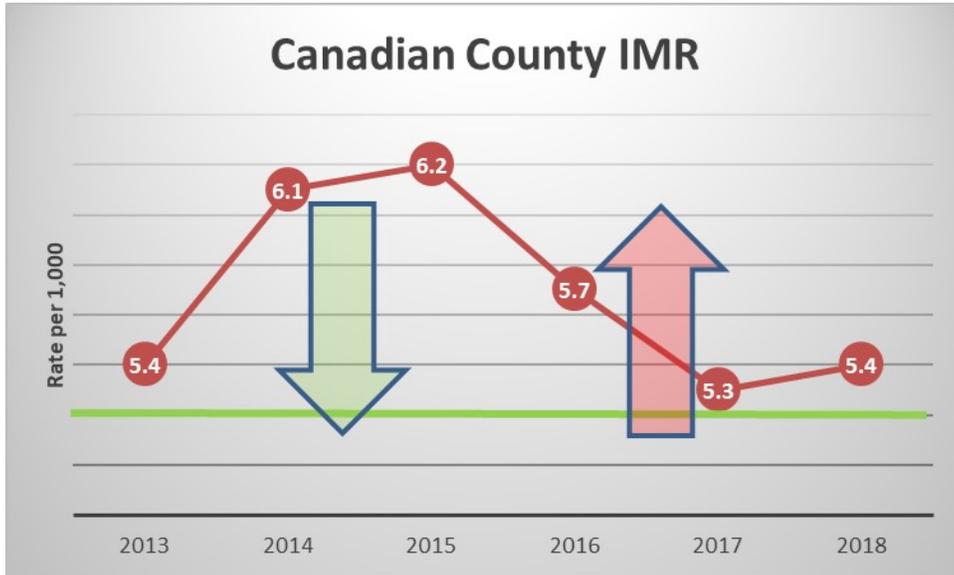
Our performance objective was written for the number of cases. The Kids Count Data Center also provided rates per 1,000. Both are depicted in the table and graph below (taken from the Annie E. Casey Foundation, KIDS COUNT Data Center, datacenter.kidscount.org, updated May 6, 2020). It is clear from these results that Canadian County did not improve. At best it may be said that Canadian County maintained in terms of rate per 1,000, though the total number of cases increased.

Location	Data Type	2013	2014	2015	2016	2017	2018	2019
Canadian County	Number	321	412	372	408	415	503	438
	Rate per 1000	9.9	12.3	10.8	11.5	11.6	13.8	11.6



- By 2020, decrease infant mortality rate from 5.4 per 1,000 to 5.0 per 1,000.

At the beginning of this five-year cycle, Canadian County was among the top five counties for low infant mortality rate. However, since infant mortality is considered a broad indicator of overall health status, it was chosen as an important measure to indicate further improvement in the county. As the graph below shows, the rate actually increased early in the cycle before returning to the starting point. At the end of the cycle, Canadian County maintained its infant mortality rate but did not improve.

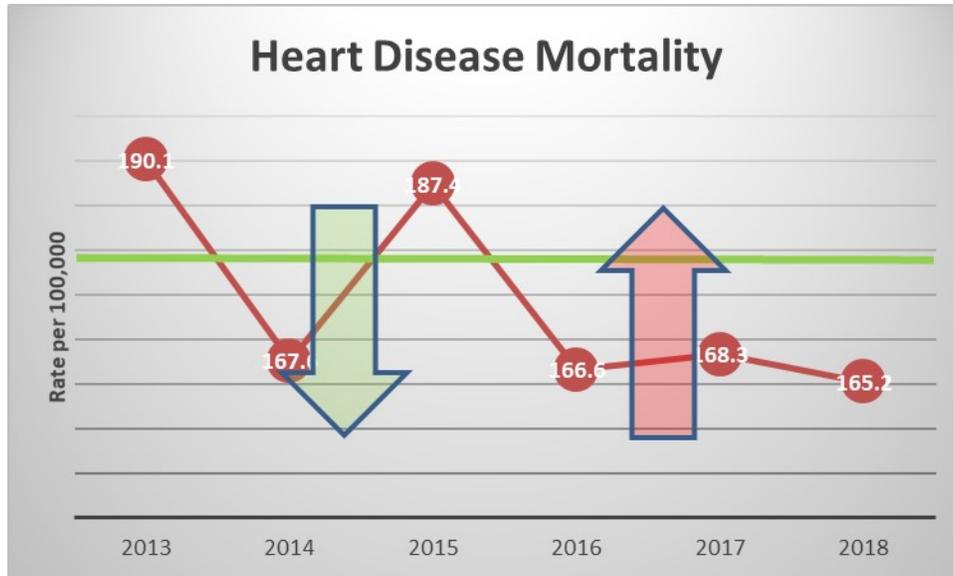


Heart Disease Prevention

Objectives:

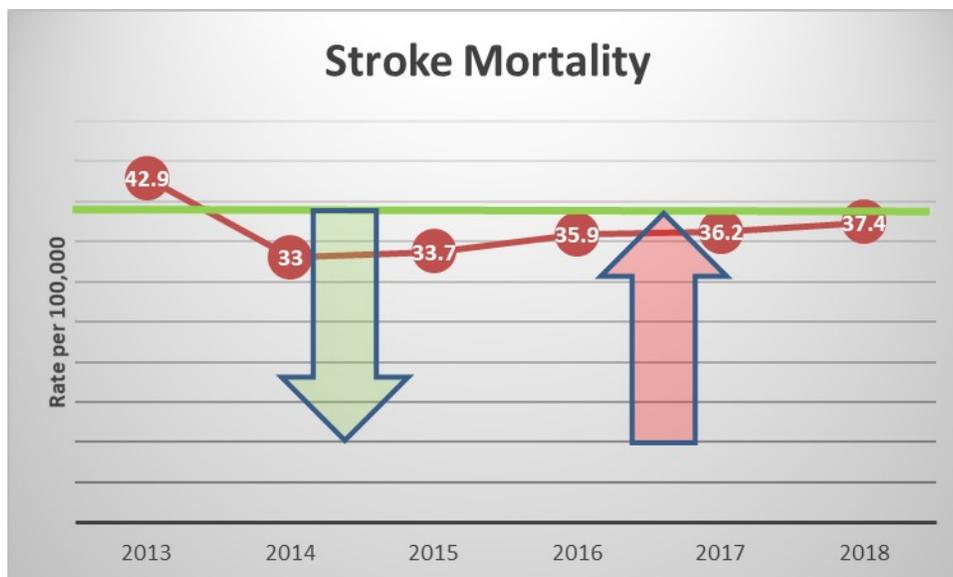
- By 2020, decrease the rate of heart disease mortality from 190.1 per 100,000 to 179 per 100,000.

Heart rate mortality improved 13% over the five-year cycle and acceded the performance objective for this measure.



- By 2020, decrease the rate of cerebrovascular disease (stroke) mortality from 42.9 per 100,000 to 39 per 100,000.

The rate of stroke mortality improved almost 13% over the five-year cycle and acceded the performance objective for this measure. It should be noted that the rate has gradually increased over the past four years.

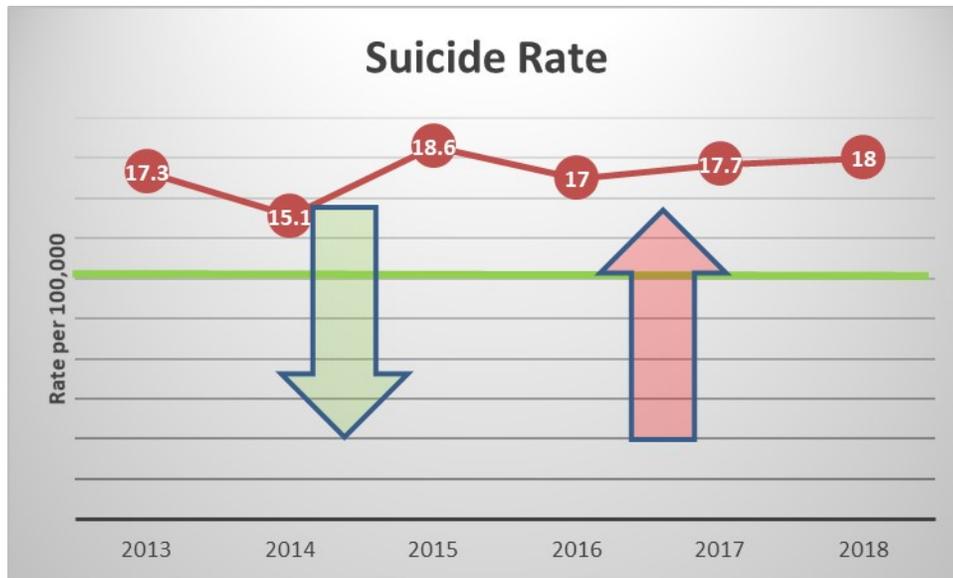


Mental Health

Objectives:

- By 2020, decrease the suicide rate from 17.3 per 100,000 to 12.1 per 100,000.

The suicide rate was 4% higher at the end of the five-year cycle. At best, it may be said that the rate remained steady. However, the trend appears to be in the wrong direction.



- By 2020, decrease percentage of reported Frequent Poor Mental Health Days (≥ 14 days in the past 30 days) from 11.2% to 9%.

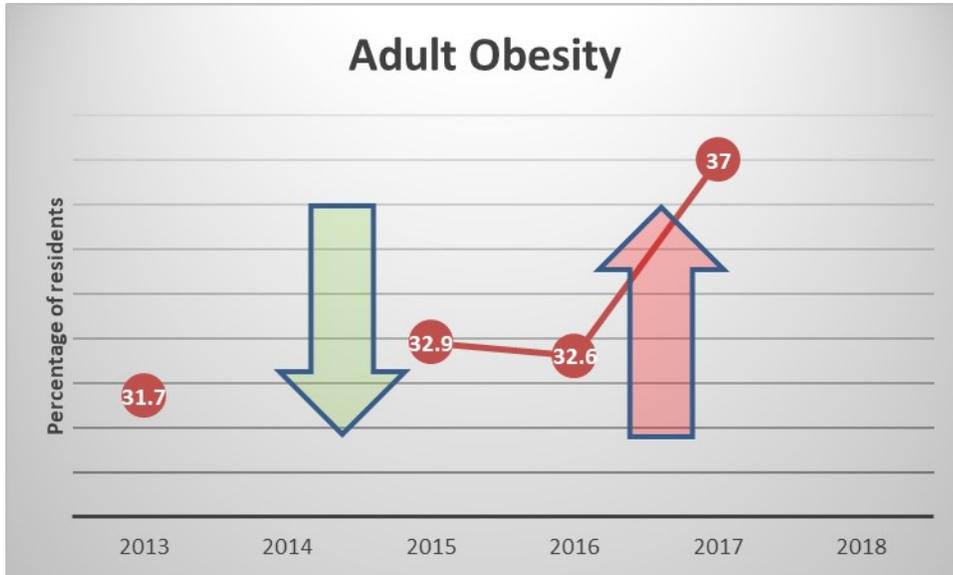
The original performance objective was to decrease the percentage of reported poor mental health days defined as four or more days reported in the past month. New data was not available through the first three annual reports. In the Fourth Annual Report we reported that the original metric had been replaced with the Frequent Poor Mental Health Days metric you see above. Data was retroactively provided for three years and can be seen in the Fourth Annual Report on page 51. Current data for the new metric was not available for the Fifth Annual Report.

Obesity Prevention

Objectives:

- By 2020, decrease adult obesity rate from 31.7% to 28%. BMI < 30.

Data for this measure was not complete for the five-year cycle. However, there is enough to demonstrate an increase in adult obesity in Canadian County.



- By 2020, increase percentage of adults reporting leisure activity from 73.1% to 78%.

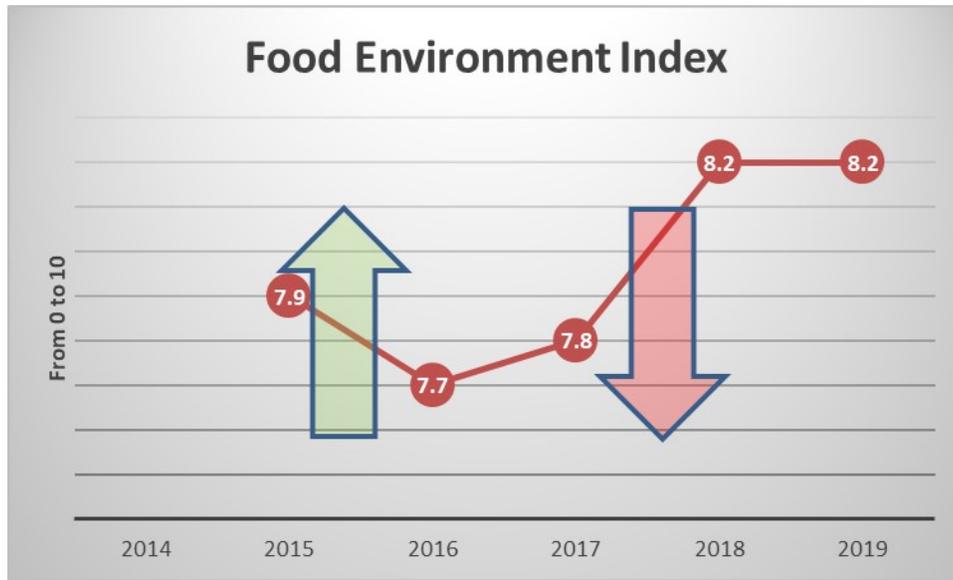
Data for this measure was also not complete. However, there is again enough to demonstrate a decrease in adult leisure activity in Canadian County.



- **By 2020, increase community’s access to healthy foods.**

This measure was expressed with rates of minimal fruit and vegetable consumption. This data was not consistently provided and cannot be used as a basis to express trends.

The County Health Rankings & Roadmaps provided a “Food environment index” that measured indexed factors contributing to a healthy environment. It is expressed on a scale from 0 (worst) to 10 (best). The graph below tracks the index through the five-year cycle. However, the report specifies that the measure “is not appropriate for tracking progress. Individual county improvement is impossible to track due to the scaled nature of the measure.”



- **By 2020, decrease adult overweight rate from 39.19% to 35%.**

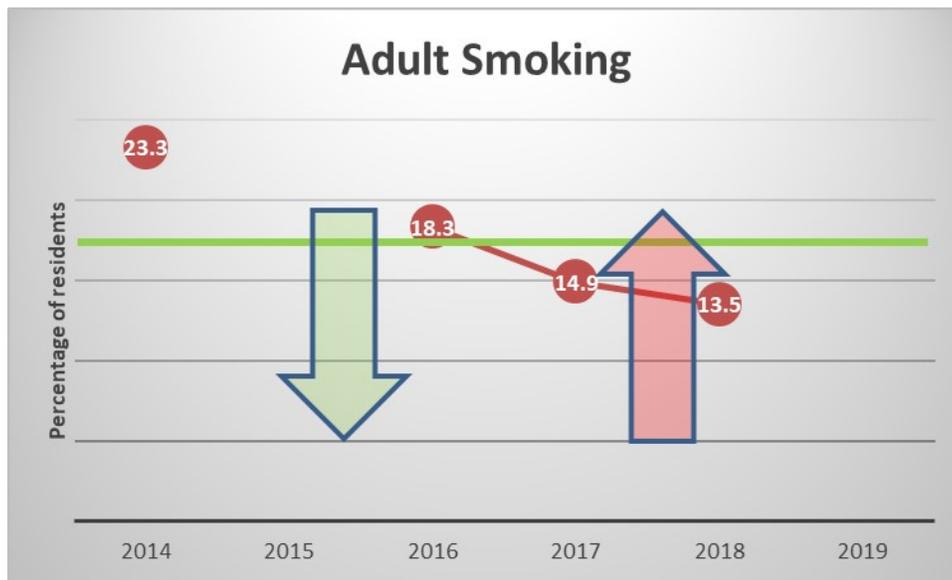
Data for this measure was not provided during the five-year cycle and there was no secondary data appropriate to replace it.

Prevention of Alcohol, Tobacco and Other Drugs

Objectives:

- By 2020, reduce adult smoking rate from 23.3% to 18%.

Data for this measure was incomplete. However, there appears to be a significant reduction in adult smoking.



- By 2020, reduce the rate of unintentional poisoning deaths from 9.8 per 100,000 to 7.0 per 100,000.

Data for this measure was also incomplete. However, it appears the trend for this measure is increasing.

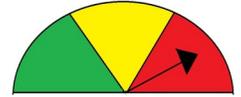


- **By 2020, increase the use of prescription drug drop boxes by 5%.**

During the development of this Community Health Improvement Plan, a metric was identified that reported the weight by county of the amount of prescription drugs retrieved from drug boxes provided by the Oklahoma Bureau of Narcotics and Dangerous Drugs Control (OBN). However, this metric could not be found again after it was included in the plan. Furthermore, upon contact with OBN, it could not be confirmed that the agency ever reported the weight of collected medication by county. Therefore, this metric must have been identified in error.

Final Summary

Child Health



The number of confirmed child abuse and neglect cases increased. Additionally, the rate of cases per 1,000 increased. Furthermore, the infant mortality rate finished where it began. This measure, particularly infant mortality rate, is generally considered as an indicator of Canadian County's health and well-being. Therefore, results may demonstrate a stagnation in certain areas of public health and access to care.

Heart Disease Prevention



At the beginning of this CHIP, heart disease was the leading cause of death in Canadian County. According to the State of the State's Health Report (last updated Feb 26, 2019), it is still the county's leading cause of death. However, the rates are much improved. Heart disease and stroke mortality each decreased by around 13% and each exceeded the performance objectives for this measure. This result may be associated with the corresponding improvements in adult smoking identified in Prevention of Alcohol, Tobacco and Other Drugs.

Mental Health

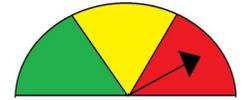


The suicide rate remained relatively steady; it did not improve. Given that research indicates 90% of suicide victims have a mental health and/or substance use disorder, this does not reflect well on the mental health status of Canadian County. This is supported by the measure of frequent poor mental health days. Though this measure was changed early in the five-year cycle and the data is incomplete, it shows a trend that is getting worse.

There is also an association between mental health outcomes and obesity. As identified in Obesity Prevention, the adult obesity rate increased over the five-year cycle.

The mental health indicators included in this CHIP either remained steady or trended worse. Overall, there was no improvement demonstrated for this strategic issue.

Obesity Prevention



The effects of obesity on health outcomes cannot be overstated. It is associated with the leading causes of death including heart disease and stroke; Issue Two of this CHIP. It is associated with poorer mental health outcomes; Issue Three of this CHIP. And it is associated with an overall reduced quality of life.

The available data showed an almost 17% increase in adult obesity and a 7% decrease in leisure activity. Measures of fruit and vegetable consumption were chosen as indicators of Canadian County's nutritional habits, which in turn could indicate levels of risk from many chronic diseases including heart disease and stroke. However, source data was not readily available during the five-year cycle.

During the development of this CHIP, there was a reported metric for Overweight. While Obesity is defined as a Body Mass Index greater than 30.0, Obesity is defined as 25.0 to 29.9. Though a lesser status than Obesity, Overweight still results in negative health outcomes including a greater risk of cardiovascular disease and diabetes. Statewide, approximately two-thirds of residents were either obese or overweight. That is why the Coalition selected Overweight in addition to Obesity for performance measurement. Unfortunately, the source stopped reporting the measure shortly after the CHIP was implemented and no other data source was found to replace it.

Prevention of Alcohol, Tobacco and Other Drugs



Likely the greatest result reported in this CHIP is the significant improvement in Canadian County's adult smoking rate; it decreased (improved) by 42%. This may have contributed to the improvements reported in Heart Disease Prevention. According to the State of the State's Health Report, Canadian County's rate was the second best in the state. In the 2020 County Health Rankings & Roadmaps report, accounting for its margin of error, Canadian County finished among the Top U.S. Performers (10th/90th percentile). It should be noted that data was not complete for the five-year cycle and was not available for the final year. Furthermore, it is of concern that the effects of vaping have not yet manifested in the data. There are still significant challenges to be faced in the fight against tobacco use.

The other indicators for this measure were not as encouraging. Unintentional poisoning deaths and prescription drug drop boxes were selected to provide an indication of the effects of alcohol and drug use. Data for unintentional poisoning deaths, provided by the State of the State's Health Report, was incomplete for the five-year cycle, but indicated an increasing (worsening) trend. Prescription drug drop boxes usage data, provided by the Oklahoma State Bureau of Narcotics and Dangerous Drugs Control, proved to be a mistaken choice of metric. The data reportedly was never published on a county basis.

Other indicators for this measure are available. The State of the State's Health Report provides data for binge drinking and heavy drinkers. OK2SHARE provides cause of death query selections that include accidental poisoning and exposure to noxious substances and alcoholic liver disease. The Oklahoma State Bureau of Narcotics and Dangerous Drugs Control provides select drug-related data by county, including overdose deaths and prescription opioid deaths. These are a few examples; there are others to choose from. Other indicators should be considered in the future to measure the effects of alcohol and drug use.

In Conclusion

The Coalition has reason to be pleased with its first CHIP. Heart disease mortality and adult smoking prevalence decreased. Concurrently, primary and secondary data sources reported improvements in rates of life expectancy, premature death, and good or better health rating. The 2020 County Health Rankings & Roadmaps ranked Canadian County as the second healthiest county in the state with the following category rankings; first for Length of Life, Health Factors, and Social & Economic Factors; third for Quality of Life; fourth for Health Behaviors and Clinical Care.

The Coalition also recognizes that there are opportunities for improvement. For example, Canadian County's infant mortality rate was the fourth best in the state, its best ranking during the five-year cycle. Furthermore, its rate of 5.3 per 1,000 live births is its best rate during the five-year cycle. However, the trend over the cycle has been stable; there has been no significant improvement. The 2020 County Health Rankings & Roadmaps reported Canadian County's infant mortality rate within the Top U.S. Performers (accounting for margin of error), but also supported that the rate had remained stable during the cycle. The Coalition does not want health outcomes to remain stable; it wants them to improve. When combined with the increase in the number and rate of child abuse and neglect cases, the Coalition is confident to identify Child Health as a remaining concern in the community. The same reasoning may be applied to Mental Health outcomes; certain measures remained steady at best and trended slightly in the wrong direction. Available data for Obesity Prevention did not require nuanced assessment; it clearly got worse.

The Coalition's first CHIP was a success. It participated in the improvement of important health outcomes that will have far reaching effects in the community. Heart disease is the leading cause of death for men, women, and people of most racial and ethnic groups in the United States.¹⁵ Smoking continues to be the leading cause of preventable death. Improvements in these two issues will have a positive ripple effect across other health issues and across all demographics. It also identified areas of further need. Obesity is associated with leading causes of death, including heart disease. Child Health establishes the foundation for what children will face when they grow to be adults. And Mental Health is associated with all other aspects of health, including all the other issues identified in this CHIP. Identifying public health issues is essential to doing something about them.

The Coalition's first CHIP was a learning experience. It learned the value of a strategic planning process for acquiring relevant data, assessing the data to make informed decisions, and developing a strategic plan to help focus attention and resources to improve health outcomes. It learned that implementing such a plan is hard. It learned that unforeseen developments can, and will, occur that may substantially impact on coalition partners and their contributions to public health. And it learned that strategic planning is worth the effort. As this strategic planning cycle was being completed, the next one had already begun. As the Coalition moves forward with its next strategic planning cycle, it can take with it the knowledge it gathered from its first effort and apply what it learned to a new set of ever changing public health challenges.

15. Heron, M. Deaths: Leading causes for 2017. National Vital Statistics Reports; 68(6). Hyattsville, MD: National Center for Health Statistics. 2019.

References

1. Kids Count Data Center. The Annie E. Casey Foundation, 2016. Available at <http://datacenter.kidscount.org/data/tables/5514-current-child-abuse-neglect-confirmations?loc=38&loct=5#detailed/5/5274/false/869,36,868,867,133/any/12090,12091>.
2. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2010 to 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 03MAR2016:15:25:29.
3. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 03MAR2016:16:45:02.
4. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 03MAR2016:16:51:54.
5. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2014, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 04MAR2016:15:17:28.
6. A Robert Wood Johnson Foundation program, 2016 County Health Rankings & Roadmaps. Accessed at <http://www.countyhealthrankings.org/app/oklahoma/2016/rankings/canadian/county/outcomes/overall/sn> aphoto on 07APR2016.
7. A Robert Wood Johnson Foundation program, 2016 County Health Rankings & Roadmaps. Accessed at <http://www.countyhealthrankings.org/app/oklahoma/2016/rankings/canadian/county/outcomes/overall/sn> aphoto on 07APR2016.
8. Kids Count Data Center. The Annie E. Casey Foundation, 2017. Available at <http://datacenter.kidscount.org/data/tables/5514-current-child-abuse-neglect-confirmations?loc=38&loct=5#detailed/5/5274/false/870,573,869,36,868/any/12090,12091>.
9. State of the County's Health Report - Canadian County, Summer 2017. Oklahoma State Department of Health (OSDH), Community and Family Health Services, Community Epidemiology & Evaluation. Accessed at <https://www.ok.gov/health2/documents/Canadian%202017.pdf>.
10. Oklahoma State Department of Health. (n.d.). *Detailed Mortality Statistics*. Vital Statistics on OK2SHARE.
11. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2013 to 2015, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 10JAN2018:15:33:31.
12. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2016, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 07MAR2018:14:21:32.

13. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2016, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 11MAR2019:14:21:55.
14. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2012 to 2016, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 14NOV2019:16:33:39.
15. Heron, M. Deaths: Leading causes for 2017. National Vital Statistics Reports; 68(6). Hyattsville, MD: National Center for Health Statistics. 2019.

Notes:

**Canadian County
Community Health
Improvement Plan
CHIP**

For more information or to get involved, contact:

Cindy Bacon, Coalition Chair

Project Manager

Central Communities Health Access Network

cbacon@cc-han.com

cc-han.com

Janet Wilson, Coalition Vice-Chair

Canadian County Coordinator

Sooner SUCCESS

janet-m-wilson@ouhsc.edu

(405) 556-1469

soonercussess.ouhsc.edu

Written for the Canadian County Coalition for Children & Families by
Mikeal Murray, Accreditation Coordinator, Canadian County Health
Department