

Logan County Health Department Strategic Plan

2022 - 2027



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MISSION

To protect and promote health, to prevent disease and injury, and to cultivate conditions by which Logan County residents can be healthy.

VISION

Creating a County of Health

VALUES

Leadership - To provide vision and purpose in public health through knowledge, inspiration and dedication and serve as the leading authority on prevention, preparedness and health policy.

Integrity - To steadfastly fulfill our obligations, maintain public trust, and exemplify excellence and ethical conduct in our work, services, and operations.

Community - To respect the importance, diversity, and contribution of individuals and community partners.

Service - To demonstrate a commitment to public health through compassionate actions and stewardship of time, resources, and talents.

Accountability - To competently improve the public's health on the basis of sound scientific evidence and responsible research.

Introduction

The Logan County Health Department (LCHD) completed its first strategic plan on October 19, 2018. Each of the four strategic issues demonstrated improvements in health outcomes. Highlights included:

- Adult Obesity Rate decreased from 33% to 30.40%, an 8% improvement.
- Social media assets improved to include Facebook and Twitter.
- Infant Mortality Rate decreased from 7.9 per 1,000 live births to 4.8.
- Adult Smoking Rate decreased from 25.4% to 15.50%.

LCHD began a second strategic planning cycle. Staff worked with community partners to conduct a new Community Health Assessment (CHA) and develop a new Community Health Improvement Plan (CHIP). Development of LCHD's Strategic Plan was to follow. However, it was delayed by the COVID-19 pandemic. Nonetheless, LCHD modified the process to overcome pandemic obstacles and move forward with the development of its second strategic plan.

Participants in the development process included the Regional Administrator, Accreditation Coordinator, Health Educator, Supervising Nurse, Business Manager, and Clerical Staff. The process consisted of less formal conferencing methods such as targeted one-on-one and small group discussions and electronic communication. This was due to social interaction restrictions and heavier workload requirements resulting from COVID.

Data from the CHA identified 10 elements for closer review and discussion:

- Alcohol Abuse
- Cancer
- Child Abuse and Neglect
- Drug Abuse
- Heart Disease
- Mental Health Problems
- Obesity
- Poverty
- Suicide
- Tobacco Use

Other considerations included health department - specific data, availability of reliable and timely data, agency mission and scope, available resources in manpower and material, and external opportunities and barriers. In effect, in an informal way, we conducted a SWOT Analysis of our health department.

After further analysis and consultation, three strategic issues were chosen; obesity, tobacco use, and mortality. The following is justification for selecting these issues, performance objectives for improvement, and strategies for effecting change.

Public Health Strategic Issues

Issue One:

Obesity

Obesity is a complex issue resulting from a combination of contributing factors, including behavior and genetics. Behaviors include diet, physical activity, medication, and other exposures. Contributing societal factors include food and physical environment, education and skills, and food marketing and promotion. Obesity is associated with poorer mental health outcomes, reduced quality of life, and the leading causes of death in the United States including diabetes, heart disease, stroke, and some types of cancer.¹

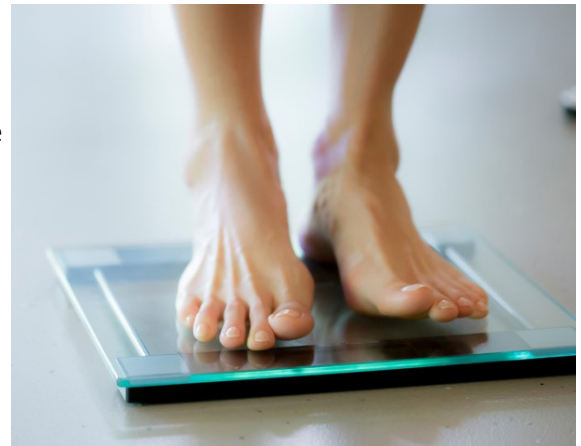
In the Community Themes and Strengths Assessment, residents identified Obesity as the 2nd most important health problem and Being Overweight as the 3rd most important risk behavior in their communities.

The State of the State's Health Report defines Adult Obesity as a Body Mass Index (BMI) greater than or equal to 30 (Overweight is 25.0 to 29.9, Normal is 18.5 to 24.9). Logan County's rate of Adult Obesity was 31.9%.² This was a notable decrease from 35.1% reported previously. In comparison, the state rate was 34.8%. (Figure 1)

Roadmaps reported Logan County's Adult Obesity rate at 33% and indicated the measure was an "Area to Explore." No significant trend was found for this measure.

Community Commons reported 33% of Logan County adults aged 20 and older self-reported a BMI greater than 30.0, compared to the state at 33.3% and the nation at 28.3%, finishing in the "green" of the report's dashboard indicator.

The Forces of Change Assessment identified Obesity as a significant factor to the community's health.



Opportunities created included: education on health and nutrition, and a chance to break the cycle of unhealthiness. Threats posed included: increases in heart disease, stroke, diabetes and cancer, and a continued cycle of unhealthiness.

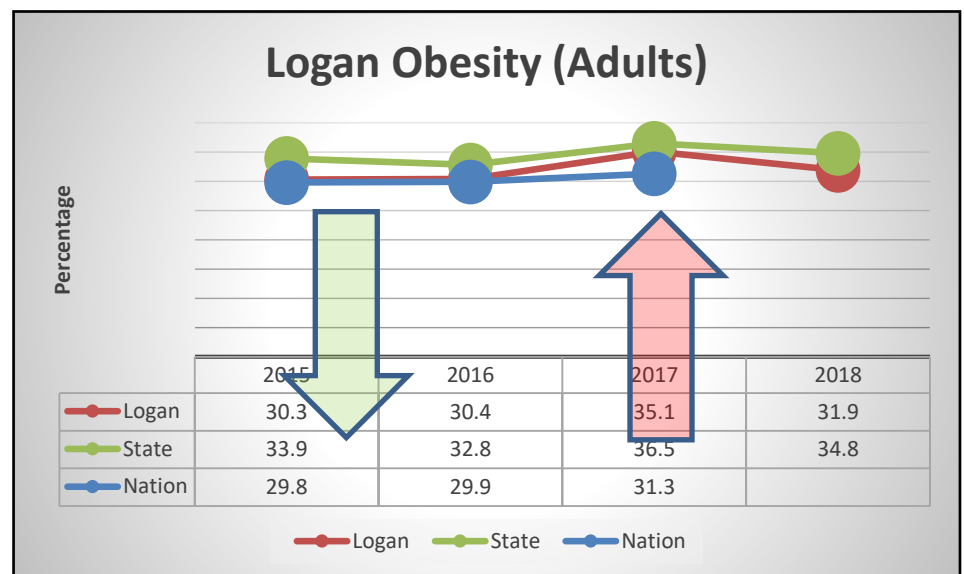


Figure 1. Logan Obesity (Adults). Data from Oklahoma State Department of Health.

The County Health Rankings &

- Oklahoma State of the State's Health Report. (Feb 26, 2019). Data - Health Indicators - Obesity (Adults) - Learn More.
- Oklahoma State Department of Health, Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System (BRFSS), 2013-2018.

Obesity

Objectives:

- By 2027, decrease rate of adult obesity from 31.9% to 28.0%. (Rate reported with 2014 data; a 12% improvement; as reported by Oklahoma State Department of Health BRFSS data) *(Logan CHIP Issue Two: Obesity)*
- By 2027, increase physical activity prevalence from 77.8% to 80.5%. (Best national rate reported in State of the State's Health Report [2/26/2019] - Colorado; a 3% improvement; as reported by Oklahoma State Department of Health BRFSS data)
- By 2027, decrease rate of major cardiovascular diseases from 226 per 100,000 population to 204. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Tobacco Use and Mortality)
- By 2027, decrease age-adjusted death rate of malignant neoplasms (cancers) from 150.9 per 100,000 population to 136. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Tobacco Use and Mortality)

Strategy 1: Facilitate

Provide technical assistance to community partners to help pass policy and shape environments to promote healthy eating and physical activity. *(Healthy People 2030 Nutrition and Healthy Eating Objectives - Workplace; Healthy People 2030 Physical Activity Objectives - Workplace)*

Strategy 2: Educate

Identify evidence-based programs and best practices for obesity reduction to implement for specific target populations. *(Healthy People 2030 Health Communication Objectives - General)*

Strategy 3: Advocate

Promote Certified Healthy Oklahoma program to provide guidance and recognition to organizations working to promote healthy environments. *(Healthy People 2030 Workforce Objectives - Workplace)*

Key support functions required

Information Management:	LCHD requires timely data from the OSDH Center for Health Statistics.
Communication and Branding:	LCHD requires identification and implementation of evidence-based resources for specific target populations.
Workforce Development:	LCHD must maintain adequate health educator and community engagement staffing to deliver effective messaging to target populations.
Financial Stability:	LCHD requires adequate budget provided by local/state funding sources.

Changing or emerging trends

COVID concerns effect every aspect of health department operations. At any given time, depending on current circumstances, community engagement efforts may be interrupted to provide assistance for various clinical efforts.

Issue Two:

Tobacco Use

Tobacco use is still the leading preventable cause of disease and death. Smoking kills more Oklahomans than alcohol, auto accidents, AIDS, suicides, murders and illegal drugs combined.³ Thousands more die from other tobacco-related causes. Smoking causes cancer, heart disease, stroke, lung diseases, diabetes, and chronic obstructive pulmonary disease (COPD), which includes emphysema and chronic bronchitis. Smoking increases risk of tuberculosis, certain eye diseases, and problems of the immune system, including rheumatoid arthritis.⁴ Smokers put others at risk; secondhand smoke is responsible for the death of over 50,000 nonsmokers every year.⁵ It is yet to be seen what the effects of e-cigarette use and legalized “smokable” forms of cannabis will have on adult smoking rates.

Logan County’s Smoking Prevalence rate was 14.8%, compared to the state at 19.7%.⁶ Logan County has improved on this measure for a number of years as demonstrated by Figure 1. However, the current rate still represents approximately one out of every six adults.

The County Health Rankings & Roadmaps reported an Adult Smoking Rate of 16%. This fell just short of the Top U.S. Performers (90th percentile), but was still identified as an “area to explore.”

In the Community Themes and Strengths Assessment, residents ranked Tobacco use as the 6th most important health problem in their communities. This was in the middle of the list and well below the behaviors identified as most important, indicating that residents



did not perceive tobacco as an important risk behavior.

It should be further noted that this data does not include smokeless tobacco. Smokeless tobacco is highly addictive, containing up to four times more nicotine than cigarettes.

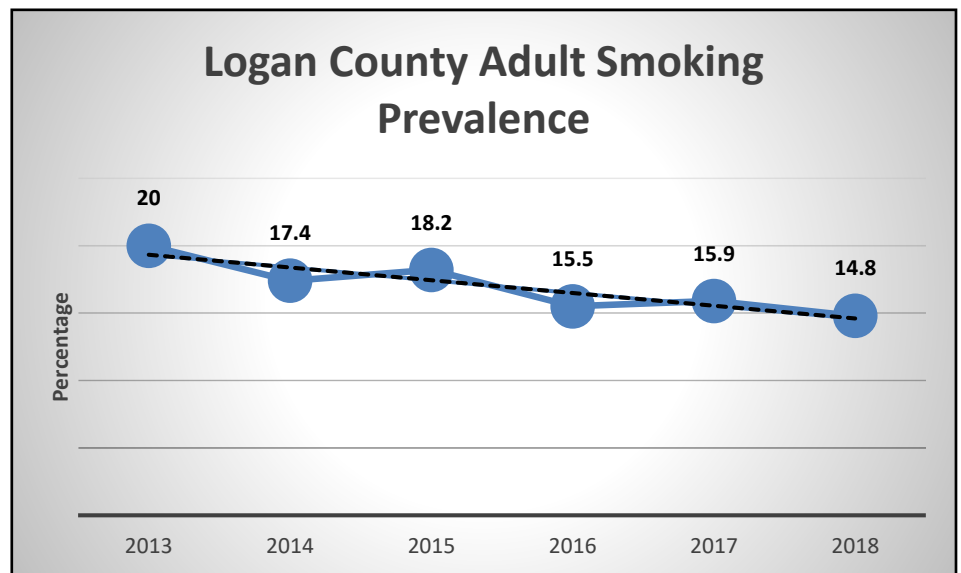


Figure 2. Logan County Adult Smoking Prevalence. Data from Oklahoma State Department of Health.

3. Campaign for Tobacco Free Kids. The Toll of Tobacco in Oklahoma. Retrieved from <https://www.tobacofreekids.org/problem/toll-us/oklahoma> on May 18, 2018.
4. Centers for Disease Control and Prevention. Health Effects. Retrieved from https://www.cdc.gov/tobacco/basic_information/health_effects/index.htm on May 18, 2018.
5. Campaign for Tobacco Free Kids. Smoke-Free Laws. Retrieved from <https://www.tobacofreekids.org/what-we-do/us/smoke-free-laws> on May 18, 2018.
6. Oklahoma State Department of Health, Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System (BRFSS), 2013-2018.

Tobacco Use

Objectives:

- By 2027, decrease rate of adult smoking prevalence from 14.8% to 12.6%. (continuation of trend rate established by data as reported by the Oklahoma State Department of Health, 2014-2018; 15% improvement) (*Logan CHIP Issue Three: Substance Use Disorder - Performance Objective*)
- By 2027, decrease rate of major cardiovascular diseases from 226 per 100,000 population to 204. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Obesity and Mortality)
- By 2027, decrease age-adjusted death rate of malignant neoplasms (cancers) from 150.9 per 100,000 population to 136. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Obesity and Mortality)

Strategy 1: Facilitate

- Referrals to Oklahoma Tobacco Helpline. (The "5 As") (*Healthy People 2030 Tobacco Use Objectives - Health Care*)

Strategy 2: Educate

- Promote and support smoking cessation events (ex., Great American Smoke Out, World No Tobacco Day, Kick Butts Day, etc.) (*Healthy People 2030 Tobacco Use Objectives - Health Care*)

Strategy 3: Advocate

- Promote certification at the level of Excellence through Certified Healthy Oklahoma. Excellence requires the institution to have a tobacco free policy. (*Healthy People 2030 Community Objectives - General*)

Key support functions required

Information Management: LCHD requires timely data from the OSDH Center for Health Statistics.

Communication and Branding: LCHD requires identification and implementation of evidence-based resources for specific target populations.

Workforce Development: LCHD must maintain adequate health educator and community engagement staffing to deliver effective messaging to target populations.

Financial Stability: LCHD requires adequate budget provided by local/state funding sources.

Changing or emerging trends

COVID concerns effect every aspect of health department operations. At any given time, depending on current circumstances, community engagement efforts may be interrupted to provide assistance for various clinical efforts.

Mortality

Life expectancy for the U.S. population in 2020 was 77.0 years, a decrease of 1.8 years from 2019. The age-adjusted death rate increased by 16.8% from 715.2 deaths per 100,000 standard population in 2019 to 835.4 in 2020. Age-specific death rates increased for each age group 15 years and over. Nine of the 10 leading causes of death remained the same; heart disease and cancer remained the top two. Infant mortality decreased 2.9% to a record low of 541.9 deaths per 100,000 live births.⁷ Oklahoma's 2020 age-adjusted death rate was 1,010.0 per 100,000 standard population. This was an almost 15% increase (worsening) from 2019's rate of 880.4. Logan County's age-adjusted death rate was 721.8, a 2% increase from 2019's rate of 707.0.⁸

Oklahoma's 2020 age-adjusted death rate for major cardiovascular diseases was 298.5 per 100,000 standard population. This was a 5% increase from 2019's rate of 284.4. Logan County's age-adjusted death rate for major cardiovascular diseases was 226.0, a 1% decrease (improvement) from 2019's rate of 229.0.⁸

Oklahoma's 2020 age-adjusted death rate for malignant neoplasms (cancers) was 170.7 per 100,000 standard population. This was a 1%



decrease (improvement) from 2019's rate of 173.1. Logan County's age-adjusted death rate was 162.0, practically the same as 2019's rate of 162.3.⁸

Oklahoma's 2020 infant mortality rate was 6.0 per 1,000 live births. This was a 14% decrease (improvement) from 2019's rate of 7.0. Logan County's

infant mortality rate was 2.8, an almost 10% decrease from 2019's rate of 3.1.⁸

Oklahoma's 2020 suicide rate was 21.8 per 100,000 standard population. This was a 6% increase from 2019's rate of 20.6. Logan County's suicide rate was 17.0, a 17% improvement from 2019's rate of 20.5.⁸

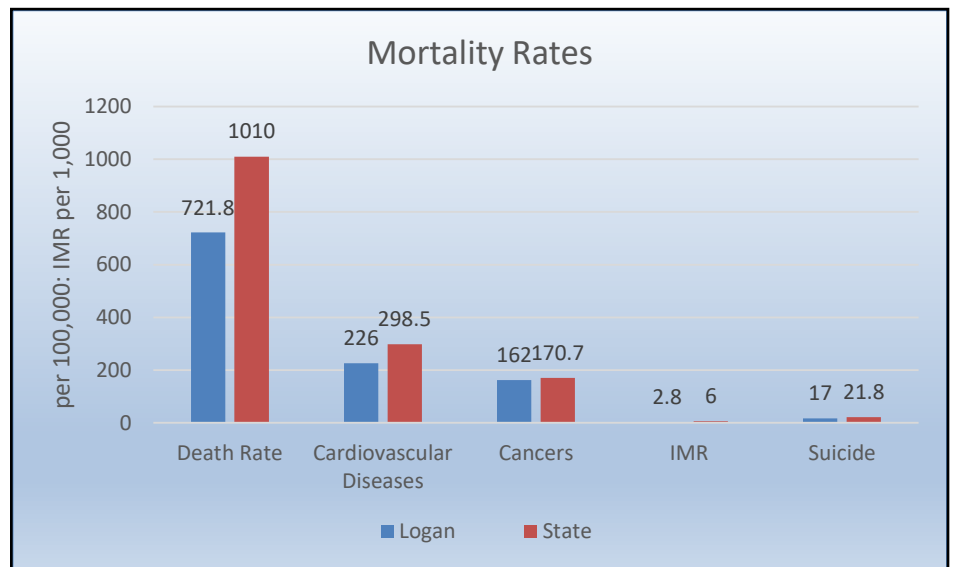


Figure 3. Logan County Mortality Rates. Data from Oklahoma State Department of Health.

7. Murphy SL, Kochanek KD, Xu JQ, Arias E. Mortality in the United States, 2020. NCHS Data Brief, no 427. Hyattsville, MD: National Center for Health Statistics. 2021.

8. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019 and 2020 (state rates), 2017 to 2019 and 2018 to 2020 (county rates). On Oklahoma Statistics on Health Available for Everyone (OK2SHARE).

Mortality

Objectives:

- By 2027, decrease age-adjusted death rate from 721.8 per 100,000 standard population to 649.62. (a 10% improvement; as reported by the Oklahoma State Department of Health Vital Records Mortality Data)
- By 2027, decrease age-adjusted death rate of major cardiovascular diseases from 226 per 100,000 population to 204. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Obesity and Tobacco Use)
- By 2027, decrease age-adjusted death rate of malignant neoplasms (cancers) from 150.9 per 100,000 population to 136. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Obesity and Tobacco Use)
- By 2027, decrease infant mortality rate from 2.8 per 1,000 live births to 2.5. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data) **Accomplished 6/8/2023**
- By 2027, decrease suicide rate from 17.0 per 100,000 standard population to 15.3. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data) *(Logan CHIP Issue One: Mental Health)*

Strategy 1: Promote strategies to help people quit smoking, eat healthy, and get more physical activity to help reduce deaths from cardiovascular disease. *(Crosscutting strategies with Obesity and Tobacco Use; Healthy People 2030 Heart Disease and Stroke Objectives - General)*

Strategy 2: Promote strategies to help people quit smoking, eat healthy, and get more physical activity to help reduce deaths from different types of cancer. *(Crosscutting strategies with Obesity and Tobacco Use; Healthy People 2030 Cancer Objectives - General)*

Strategy 3: Support breastfeeding as the recommended way to feed most babies. Breastfeeding helps babies get the best start in life. It helps children reach their full potential for health and growth. *(Healthy People 2030 Infant Objectives - Child and Adolescent Development; Healthy People 2030 Infant Objectives - General)*

Strategy 4: Through our Children First efforts, empower new families to care for themselves and their babies by providing information and education; assessing health, safety and development; and providing linkages to community resources. Promote the well-being of families through public health nurse home visitation. *(Healthy People 2030 Infant Objectives - General; Logan CHIP Issue Four: Poverty - Strategy 1)*

Strategy 5: Provide suicide prevention services, such as Talk Saves Lives by the American Foundation for Suicide Prevention. *(Healthy People 2030 Mental Health and Mental Disorders Objectives - Injury Prevention; Logan CHIP Issue One: Mental Health - Strategy 3)*

Strategy 6: Promote mobile delivery of public health services to populations experiencing barriers to access to care. Public health services, such as immunizations, health screenings, and health education can improve levels of health and well being and inform residents of the best choices to improve and maintain their health. *(Healthy People 2030 Access to Health Services - 08)*

Key support functions required

- Information Management: LCHD requires timely data from the OSDH Center for Health Statistics through the data portal OK2SHARE.
- Communication and Branding: LCHD requires identification and implementation of evidence-based resources for specific target populations.
- Workforce Development: LCHD must maintain adequate health educator and community engagement staffing to deliver effective messaging to target populations.
LCHD must establish and maintain adequate clinical and operational staffing to deploy and maintain mobile units to the community.
- Financial Stability: LCHD requires adequate budget provided by local/state funding sources.

Changing or emerging trends

COVID concerns effect every aspect of health department operations. At any given time, depending on current circumstances, community engagement efforts may be interrupted to provide assistance for various clinical efforts.

The Strategic Plan and the Community Health Improvement Plan

This Strategic Plan is specific to LCHD. The Community Health Improvement Plan (CHIP) is the “strategic plan” for Logan County public health partners.

The Logan County Partnership (LCP) is a coalition of public health partners with jurisdiction in Logan County. LCHD is an active member of LCP and provides technical assistance in the strategic planning process that results in community health assessments and community strategic plans. With LCHD facilitation, LCP developed its first five-year CHIP. This CHIP was completed on October 4, 2018. The process demonstrated the value of community strategic planning. LCP committed to a second round of strategic planning with LCHD again providing technical assistance and facilitation. LCP’s second CHIP was implemented on February 27, 2020. LCP’s new CHIP included four strategic issues: Mental Health, Obesity, Poverty, and Substance Use Disorder.

Because of the broader range of resources present within LCP’s partnerships, there are public health issues that LCP can address that LCHD cannot. For example, the CHIP’s strategic issue of Poverty is one that LCHD has little opportunity to address directly. Nonetheless, many elements of LCHD’s Strategic Plan and LCP’s CHIP are similar and complimentary. Examples of this include:

CHIP Issue One: Mental Health includes a performance objective to decrease the suicide rate and includes strategies for success. Strategic Plan Issue Three: Mortality also includes a performance objective to decrease suicide rate and includes a strategy for success.

CHIP Issue Two: Obesity and Strategic Plan Issue One: Obesity have many similarities and share the primary objective of decreasing adult obesity.

CHIP Issue Three: Substance Use Disorder includes a performance objective to decrease the rate of adult smoking prevalence. Strategic Plan Issue Two: Tobacco Use focuses primarily on decreasing adult smoking prevalence.

CHIP Issue Four: Poverty includes a strategy for promoting the Children First Program provided by LCHD. One outcome of this program is to help improve families’ economic self-sufficiency. Strategic Plan Issue Three: Mortality includes a strategy to promote the Children First Program for another programmatic outcome; to decrease infant mortality.

Past experience has demonstrated that the CHIP and Strategic Plan are never the same, yet always similar. What differences there are stem from organizational missions and resources available to carry them out. Public health is greater than just the local health department and hospital. Yet, the overall goal is the same; to improve public health outcomes in Logan County. With all of our community partners working towards the same end, it makes sense that community strategic plans and health department strategic plans would be very similar.

Monitoring

Further additions will be added to this strategic plan as they become available. Activity will be added that documents efforts to implement strategies for positive change. Updates will be added to document new data. Attachments may be added to document miscellaneous developments that are believed to have an impact on the strategic plan. Annual Reports will be added to formally document the latest data and progress towards meeting performance objectives.

In addition, strategic plan objectives will be tracked with other performance management objectives with a spreadsheet located on LCHD's SharePoint page.

Conclusion

LCHD has experienced the benefits of a formal strategic planning process. During its last Strategic Plan, improvement in the rates of adult obesity and adult smoking prevalence were accompanied by rate improvements in diabetes mortality, stroke mortality, heart disease mortality, cancer mortality, and asthma prevalence. In other words, two strategic issue improvements likely contributed to five additional health outcome improvements. That's the benefit of strategic planning!

There are many other public health issues not reflected in this Strategic Plan. That does not mean that they are not important, nor does it mean LCHD will not strive to address any and all public health issues when it has the means and opportunity to do so. LCHD is not "limited" by its Strategic Plan. It will always seek to improve the health status of Logan County citizens in every way it can.

As LCHD implements its new Strategic Plan, it is important to remember that this is a dynamic and fluid process. Things change quickly as COVID has so effectively demonstrated. There will be unforeseen obstacles and opportunities. LCHD will review its Strategic Plan often to assess its relevance and make necessary changes.

Improving public health outcomes is hard. It takes a lot of time and effort. However, with patience and persistence, improvements do come. And even during difficult circumstances, such as a pandemic, progress can be made. As pointed out above, Logan County has improved in some very important health indicators. LCHD is committed to continuing these trends and expanding on them.

Activity

Logan County Health Department personnel provide Homebound Services to those in the community who are unable to leave their home due to their condition. Logan County Homebound missions have occurred on the following dates:

2022

March 3rd

April 13th

June 13th

July 20th

August 5th

October 6th

October 14th

2023

April 17th

Services provided included 57 vaccines, eight blood pressure checks, and 37 STI screenings.

Updates

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First Annual Report

Issue One: Obesity

Objectives:

- By 2027, decrease rate of adult obesity from 31.9% to 28.0%. (Rate reported with 2014 data; a 12% improvement; as reported by Oklahoma State Department of Health BRFSS data) (*Logan CHIP Issue Two: Obesity*)

The 2022 Wellness County Profile provided by the OSDH Office of Community Analysis & Linkages reported two new data points: 2019 - 34.8% and 2020 - 33.8%. Overall, the county's obesity rate has increased (worsened) by 6%.

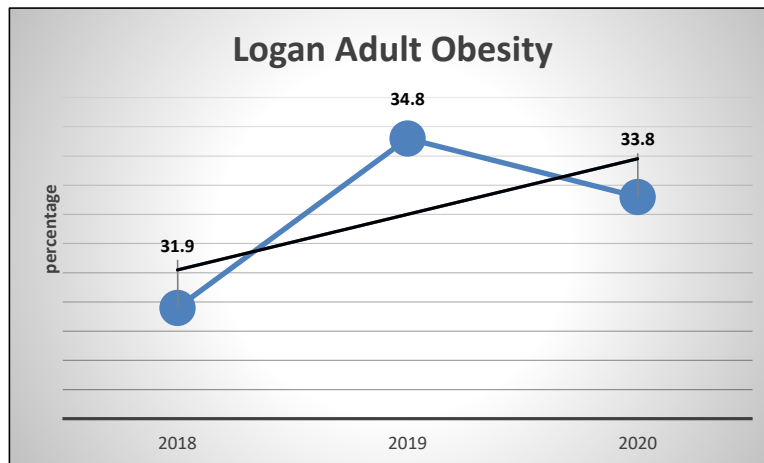


Figure 4. Logan County Adult Obesity. Data from Oklahoma State Department of Health.

- By 2027, increase physical activity prevalence from 77.8% to 80.5%. (Best national rate reported in State of the State's Health Report [2/26/2019] - Colorado; a 3% improvement; as reported by Oklahoma State Department of Health BRFSS data)

The 2022 Wellness County Profile reported two new data points: 2019 - 71.2% and 2020 - 76.2%. Overall, the county's physical activity prevalence has decreased (worsened) by 2%.

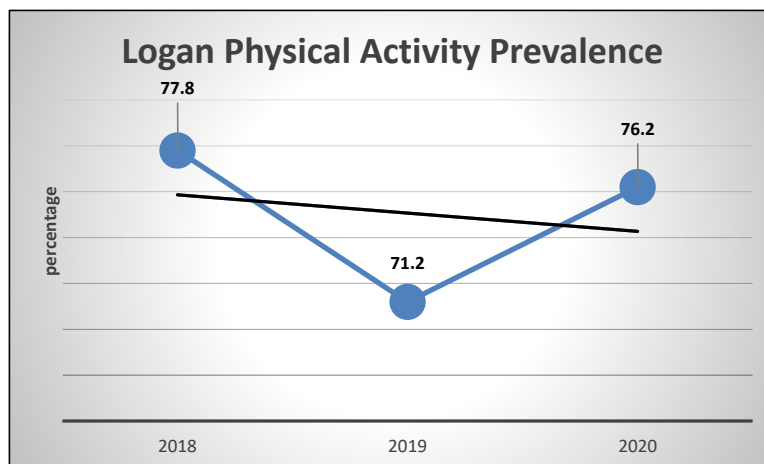


Figure 5. Logan Physical Activity Prevalence. Data from Oklahoma State Department of Health.

- By 2027, decrease rate of major cardiovascular diseases from 226 per 100,000 population to 204. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Tobacco Use and Mortality)

There was no new data at the time of this report. However, there was Preliminary data available that is discussed in “Issue Three: Mortality” on page 21.

UPDATE 6/8/2023: New data was made available. The age-adjusted death rate of major cardiovascular diseases for Logan County was 225.4 per 100,000 standard population⁹. This indicated no practical change.

- By 2027, decrease age-adjusted death rate of malignant neoplasms (cancers) from 150.9 per 100,000 population to 136. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Tobacco Use and Mortality)

There was no new data at the time of this report. However, there was Preliminary data available that is discussed in “Issue Three: Mortality” on page 21.

UPDATE 6/8/2023: New data was made available. The age-adjusted death rate of malignant neoplasms for Logan County was 147.5 per 100,000 standard population¹⁰. This was a 2% decrease (improvement).

9. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019 to 2021, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 08JUN2023:14:11:35.

10. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019 to 2021, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 08JUN2023:14:16:37.

Issue Two: Tobacco Use

Objectives:

- By 2027, decrease rate of adult smoking prevalence from 14.8% to 12.6%. (continuation of trend rate established by data as reported by the Oklahoma State Department of Health, 2014-2018; 15% improvement) (*Logan CHIP Issue Three: Substance Use Disorder - Performance Objective*)

The 2022 Wellness County Profile provided by the OSDH Office of Community Analysis & Linkages reported two new data points: 2019 - 13.8% and 2020 - 14.8%. Overall, the county's smoking prevalence is where it started.

- By 2027, decrease rate of major cardiovascular diseases from 226 per 100,000 population to 204. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Obesity and Mortality)

There was no new data at the time of this report. However, there was Preliminary data available that is discussed in "Issue Three: Mortality" on page 21.

UPDATE 6/8/2023: New data was made available. The age-adjusted death rate of major cardiovascular diseases for Logan County was 225.4 per 100,000 standard population⁹. This indicated no practical change.

- By 2027, decrease age-adjusted death rate of malignant neoplasms (cancers) from 150.9 per 100,000 population to 136. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Obesity and Mortality)

There was no new data at the time of this report. However, there was Preliminary data available that is discussed in "Issue Three: Mortality" on page 21.

UPDATE 6/8/2023: New data was made available. The age-adjusted death rate of malignant neoplasms for Logan County was 147.5 per 100,000 standard population¹⁰. This was a 2% decrease (improvement).

Issue Three: Mortality

Objectives:

- By 2027, decrease age-adjusted death rate from 721.8 per 100,000 standard population to 649.62. (a 10% improvement; as reported by the Oklahoma State Department of Health Vital Records Mortality Data)

There was no new data at the time of this report. However, there was preliminary data for years 2021 and 2022. Given that preliminary data is subject to change, and that mortality rates at the county level are calculated using three-year ranges, the best we can present is a “snap-shot” that should not be compared to past data.

Using finalized data from 2019-2020, the age-adjusted death rate was 724.0 per 100,000 standard population. Using preliminary data from 2021-2022, the rate was 848.7. We hope that the trend inferred by these numbers does not turn out to be true (worsening). However, this may reflect the outcomes of the COVID Pandemic.

UPDATE 6/8/2023: New data was made available. The age-adjusted death rate for Logan County was 763.4 per 100,000 standard population¹¹. This was a 6% increase (worsening).

- By 2027, decrease age-adjusted death rate of major cardiovascular diseases from 226 per 100,000 standard population to 204. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Obesity and Tobacco Use)

There was no new data at the time of this report. However, as indicated above, there was preliminary data available. Understanding what is discussed above, we offer the following “snap-shot.”

Using finalized data from 2019-2020, the age-adjusted death rate for major cardiovascular diseases was 223.6 per 100,000 standard population. Preliminary data from 2021-2022 indicated a rate of 234.4. This would infer a slight increase (worsening).

UPDATE 6/8/2023: New data was made available. The age-adjusted death rate of major cardiovascular diseases for Logan County was 225.4 per 100,000 standard population⁹. This indicated no practical change.

- By 2027, decrease age-adjusted death rate of malignant neoplasms (cancers) from 150.9 per 100,000 population to 136. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data; undercutting performance objective with Obesity and Tobacco Use)

There was no new data at the time of this report. However, as indicated above, there was preliminary data available. Understanding what is discussed above, we offer the following “snap-shot.”

Using finalized data from 2019-2020, the age-adjusted death rate for malignant neoplasms was 148.2 per 100,000 standard population. Preliminary data from 2021-2022 indicated a rate of 144.5. This would infer a slight decrease (improvement).

UPDATE 6/8/2023: New data was made available. The age-adjusted death rate of malignant neoplasms for Logan County was 147.5 per 100,000 standard population¹⁰. This was a 2% decrease (improvement).

11. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019 to 2021, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 08JUN2023:14:23:11.

- By 2027, decrease infant mortality rate from 2.8 per 1,000 live births to 2.5. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data)

There was no new data at the time of this report. As indicated above, there was preliminary data available. However, using two-year ranges for both preliminary and finalized data produced a suppressed result for each (less than five events). The relative infrequency of these events is one reason why county infant mortality rates use five-year ranges and are expressed per 1,000 live births.

UPDATE 6/8/2023: New data was made available. The infant mortality rate for Logan County was 2.4 per 1,000 live births¹². This was a 14% decrease (improvement) and **achieved the performance objective for this measure.**

- By 2027, decrease suicide rate from 17.0 per 100,000 standard population to 15.3. (a 10% improvement; as reported by Oklahoma State Department of Health Vital Records Mortality Data) (*Logan CHIP Issue One: Mental Health*)

There was no new data at the time of this report. However, as indicated above, there was preliminary data available. Understanding what is discussed above, we offer the following “snap-shot.”

Using finalized data from 2019-2020, the age-adjusted death rate for suicide was 19.3 per 100,000 standard population. Preliminary data from 2021-2022 indicated a rate of 15.4. The range between these two outcomes covers the spectrum from “worse” to almost meeting the performance objective.

UPDATE 6/8/2023: New data was made available. The suicide rate for Logan County was 17.9 per 100,000 standard population¹³. This was a 5% increase (worsening).

OK2SHARE, the Oklahoma State Department of Health web-based query system, is the source for all of these mortality data. According to its home page, the 2020 data set (the most recent available) was updated for Cancer in February 2023. Overall “Deaths” was updated in October 2021. It is reasonable to hope that overall mortality data, or “Deaths,” may be updated to the 2021 data set later this year.

UPDATE 6/8/2023: Overall mortality data was updated and made available from OK2SHARE.

12. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2017 to 2021, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 08JUN2023:14:27:41.

13. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019 to 2021, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 08JUN2023:14:29:22.

Summary

Obesity



The adult obesity rate increased while the physical activity prevalence decreased. The COVID pandemic may account for some of these outcomes. If so, it is likely that new data to come will show a greater increase in these rates.

UPDATE 6/8/2023: New data indicated that cancer mortality improved while cardiovascular mortality stayed the same. In the final analysis, three out of the four indicators got worse.

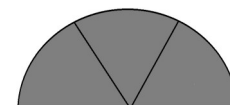
Tobacco Use



Smoking prevalence showed improvement for a year but bounced back to its original rate. Again, the COVID pandemic may account for some of this result due to increases in life stresses.

UPDATE 6/8/2023: New data indicated that cancer mortality improved while cardiovascular mortality stayed the same.

Mortality



Mortality data has not yet been updated. The glimpses made possible by preliminary data are not definitive. However, what appears to be the most telling of these glimpses would be the overall age-adjusted death rate. The modified data processing approach produced a rate over one hundred points higher than the beginning rate for the performance objective. If this trend were to verify, it would likely be a significant increase in the county's mortality rate.



UPDATE 6/8/2023: New mortality data became available. Of the five indicators, three got worse while two improved. One of the improvements, infant mortality, achieved its performance objective.

Technical Notes

Prevalence data for adult obesity, physical activity, and adult tobacco use come from the Oklahoma Behavioral Risk Factor Surveillance System (BRFSS). OK2SHARE, the OSDH public health data portal, provides BRFSS data within its Health Surveys products. However, it is provided by entire state or by region (Northwest, Northeast, Tulsa, Central, Southwest, Southeast). It is not provided by county. Therefore, we rely on OSDH Center for Health Statistics to provide county BRFSS data. Adult obesity prevalence and adult tobacco prevalence are published more frequently by county within various OSDH reports.

Mortality data for state and county estimates were acquired from OK2SHARE. State data represent deaths for calendar year, while county-level data reflect a three-year period. County-level infant mortality rates reflect a five-year period. Age-adjusted rates used the 2000 US Standard Population method. Infant mortality rate was not age adjusted.

Indicator Details

Adult Obesity	Percent of adults residing in Oklahoma and Logan County that have a Body Mass Index (BMI) greater than or equal to 30. Source: BRFSS
Physical Activity	Percent of adults residing in Oklahoma and Logan County that reported leisure time physical activity. Source: BRFSS
Major Cardiovascular Diseases	Deaths due to major cardiovascular diseases in Oklahoma and Logan County (Age Adjusted Mortality Rate per 100,000 population). Source: OK2SHARE, Vital Statistics, Death.
Adult Smoking	Percent of adults residing in Oklahoma and Logan County that reported currently smoking. Source: BRFSS.
Total Mortality	Rate of death per 100,000 population in Oklahoma and Logan County (Age Adjusted). Source: OK2SHARE, Vital Statistics, Death.
Malignant Neoplasm Deaths	Deaths due to malignant neoplasm (cancer) in Oklahoma and Logan County (Age Adjusted Mortality Rate per 100,000 population). Source: OK2SHARE, Vital Statistics, Death
Infant Mortality	Infant deaths in Oklahoma and Logan County (less than one year of age). Source: OK2SHARE, Vital Statistics, Death
Suicide	Suicide deaths in Oklahoma and Logan County (Age Adjusted Mortality Rate per 100,000 population). Source: OK2SHARE, Vital Statistics, Death

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1. Oklahoma State of the State's Health Report. (Feb 26, 2019). Data - Health Indicators - Obesity (Adults) - Learn More.
2. Oklahoma State Department of Health, Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System (BRFSS), 2013-2018.
3. Campaign for Tobacco Free Kids. The Toll of Tobacco in Oklahoma. Retrieved from <https://www.tobacofreekids.org/problem/toll-us/oklahoma> on May 18, 2018.
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5. Campaign for Tobacco Free Kids. Smoke-Free Laws. Retrieved from <https://www.tobacofreekids.org/what-we-do/us/smoke-free-laws> on May 18, 2018.
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9. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019 to 2021, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 08JUN2023:14:11:35.
10. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019 to 2021, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 08JUN2023:14:16:37.
11. Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Vital Statistics 2019 to 2021, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at <http://www.health.ok.gov/ok2share> on 08JUN2023:14:23:11.
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Figure 1. Logan Obesity (Adults). Data from Oklahoma State Department of Health.

Figure 2. Logan County Adult Smoking Prevalence. Data from Oklahoma State Department of Health.

Figure 3. Logan County Mortality Rates. Data from Oklahoma State Department of Health.

Figure 4. Logan Obesity. Data from Oklahoma State Department of Health.

Figure 5. Logan Physical Activity Prevalence. Data from Oklahoma State Department of Health.

Version History

The version numbering is as follows:

- The initial version is 1.0
- After the baseline (v 1.0), all subsequent minor changes should increase the version number by 0.1
- After the baseline (v 1.0), all subsequent major changes should increase the version number by 1.0

Version Number	Change Request Number (if applicable)	Accepted Date	Author	Summary of Change
1.0		02/15/2022	Mikeal Murray	Release of initial document
2.0		4/18/2023	Mikeal Murray	First Annual Report first draft.
2.1		6/8/2023	Mikeal Murray	Updated First Annual Report.

Notes:

Logan County Health Department Strategic Plan

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