HEALTH FOR A LIFETIME







With a 4.6% increase in obesity from 34.8% to 36.4% in the past two years, Oklahoma remains one of the most obese states in America. In 2020, Oklahoma had the 9th highest obesity prevalence in the nation and is among the top-ten most obese states according to America's Health Rankings⁽¹⁾. Across the nation, 31.9% of the adult population are considered obese compared to 36.4% of adults in Oklahoma. Overall, Oklahoma has approximately 1 million adults that are obese. Additionally, 32.3% of Oklahoma's children ages 10-17 are overweight or obese compared to the national average of 32.1%. Recently, there has been improvement in the low income 2-to-5 year old population, but as a state more needs to be done.



Behaviors such as consumption of calorie-rich foods, diets high in fat, physical inactivity, and excessive alcohol consumption in addition to genetics, stress, and poor emotional health contribute to a person's risk for obesity. Furthermore, obesity increases a person's risk of serious health conditions including hypertension, type 2 diabetes, heart disease, stroke, sleep apnea and breathing problems, some cancers, and mental illness such as depression and anxiety. As a result, obesity and related conditions have contributed to medical expenditures exceeding \$1 billion a year in Oklahoma⁽²⁾.

To address the high prevalence of obesity among the Oklahoma population, The Oklahoma State Department of Health (OSDH) along with more than 200 partners from a variety of agencies worked together to create a state plan of action to address obesity in Oklahoma. The plan is organized by lifespan, ranging from the prenatal period to older adults, focusing on a comprehensive approach to obesity prevention and treatment during each lifespan category. This plan will be used to guide partnership work moving forward, but can also be used by professionals or individuals across the state to align programs and policies with the larger movement to create a more effective synergy of efforts.



COMMUNITY INVOLVEMENT

Community members and local stakeholders from across the state worked together to identify barriers to health, as well as opportunities for improvement in health services and the environmental factors promoting health. Electronic surveys, community listening sessions, and comment cards were used to identify findings and areas of improvement. In addition, sub-committees were developed to organize the plan by lifespan, ranging from birth to older adults. A stakeholder analysis was conducted and over 200 stakeholders were convened to develop the goals and objectives within this plan.

FINDINGS / AREAS OF IMPROVEMENT

Built	Envi	ronn	nent.

Lack of Resources

Social Influences

Health and Safety Concerns

SUBCOMMITEES

Early Childhood (0-5)

School Age (5-18)

Adults (18-64)

Older Adults (55+)

All Ages

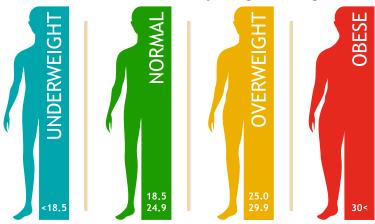




OVERVIEWDETERMINING OBESITY

Body Mass Index

The measurement of overweight and obesity most commonly used is **Body Mass Index (BMI)**. BMI measures the weight to height ratio of both adults and children but does not measure body fat directly. Having a high BMI can indicate high body fat that may lead to health problems. A person is considered to be overweight or obese if their weight is higher than what is considered to be a healthy weight for a given height.



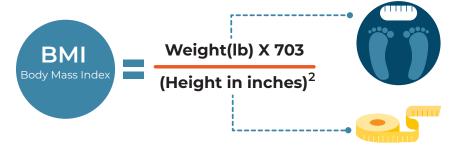
BMI Limitations

While BMI is easy to use and can provide some indication of a person's weight status, it is inherently limited. For example, it is possible for a very lean and muscular individual with little body fat to weigh more than others of the same height due to the weight of increased muscle. As a result, some individuals who have a healthy amount of fat tissue would be inaccurately categorized as overweight or obese using BMI measurements. Body composition instruments such as skin calipers to measure skinfold thickness, bod pods, and DEXA machines are more precise at measuring the ratio of fat versus lean tissue, but are more costly, not widely available, and require training to use.

Adult BMI

In adults, a BMI of 25 to 29.9 is considered to be overweight and a BMI of 30 or greater is considered to be obese. In contrast, below 18.5 is considered to be underweight and 18.5 to 24.9 is normal.

ВМІ	Weight Status
Below 18.5	Underweight
18.5 - 24.9	Normal/Healthy Weight
24.0 - 29.9	Overweight
30.0 & Above	Obese



Adults may calculate BMI using a table such as the one below. To calculate BMI, find the appropriate height in the left-hand column labeled "Height". Move across to the right until you find the appropriate weight. The number at the top of the column is the BMI at that height and weight.

For example, a person who is 64 inches tall and weighs 128 pounds has a BMI of 22. This person is considered to be of normal weight. In contrast, a person who is 64 inches tall and weighs 151 pounds has a BMI of 26 and is considered to be overweight.

BODY MASS INDEX TABLE

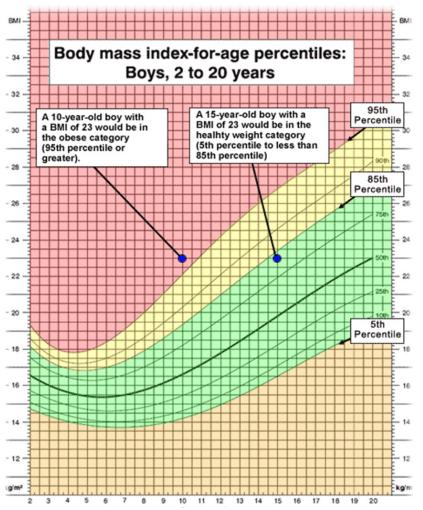
			No	rmal				Ov	erwe	ight		Obese							Extreme Obesity																	
ВМІ	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54
Height (inches)													E	Body	Weig	ht (p	ound	s)																	
58	91	96	100	105	110	115	119	124	129	134	138	143	148	153	158	162	167	172	177	181	186	191	196	201	205	210	215	220	224	229	234	239	244	248	253	258
59	94	99	104	109	114	119	124	128	133	138	143	148	153	158	163	168	173	178	183	188	193	198	203	208	212	217	222	227	232	237	242	247	252	257	262	267
60	97	102	107	112	118	123	128	133	138	143	148	153	158	163	168	174	179	184	189	194	199	204	209	215	220	225	230	235	240	245	250	255	261	266	271	276
61	100	106	111	116	122	127	132	137	143	148	153	158	164	169	174	180	185	190	195	201	206	211	217	222	227	232	238	243	248	254	259	264	269	275	280	285
62	104	109	115	120	126	131	136	142	147	153	158	164	169	175	180	186	191	196	202	207	213	218	224	229	235	240	246	251	256	262	267	273	278	284	289	295
63	107	113	118	124	130	135	141	146	152	158	163	169	175	180	186	191	197	203	208	214	220	225	231	237	242	248	254	259	265	270	278	282	287	293	299	304
64	110	116	122	128	134	140	145	151	157	163	169	174	180	186	192	197	204	209	215	221	227	232	238	244	250	256	262	267	273	279	285	291	296	302	308	314
65	114	120	126	132	138	144	150	156	162	168	174	180	186	192	198	204	210	216	222	228	234	240	246	252	258	264	270	276	282	288	294	300	306	312	318	324
66	118	124	130	136	142	148	155	161	167	173	179	186	192	198	204	210	216	223	229	235	241	247	253	260	266	272	278	284	291	297	303	309	315	322	328	334
67	121	127	134	140	146	153	159	166	172	178	185	191	198	204	211	217	223	230	236	242	249	255	261	268	274	280	287	293	299	306	312	319	325	331	338	344
68	125	131	138	144	151	158	164	171	177	184	190	197	203	210	216	223	230	236	243	249	256	262	269	276	282	289	295	302	308	315	322	328	335	341	348	354
69	128	135	142	149	155	162	169	176	182	189	196	203	209	216	223	230	236	243	250	257	263	270	277	284	291	297	304	311	318	324	331	338	345	351	358	365
70	132	139	146	153	160	167	174	181	188	195	202	209	216	222	229	236	243	250	257	264	271	278	285	292	299	306	313	320	327	334	341	348	355	362	369	376
71	136	143	150	157	165	172	179	186	193	200	208	215	222	229	236	243	250	257	265	272	279	286	293	301	308	315	322	329	338	343	351	358	365	372	379	386
72	140	147	154	162	169	177	184	191	199	206	213	221	228	235	242	250	258	265	272	279	287	294	302	309	316	324	331	338	346	353	361	368	375	383	390	397
73	144	151	159	166	174	182	189	197	204	212	219	227	235	242	250	257	265	272	280	288	295	302	310	318	325	333	340	348	355	363	371	378	386	393	401	408
74	148	155	163	171	179	186	194	202	210	218	225	233	241	249	256	264	272	280	287	295	303	311	319	326	334	342	350	358	365	373	381	389	396	404	412	420
75	152	160	168	176	184	192	200	208	216	224	232	240	248	256	264	272	279	287	295	303	311	319	327	335	343	351	359	367	375	383	391	399	407	415	423	431
76	156	164	172	180	189	197	205	213	221	230	238	246	254	263	271	279	287	295	304	312	320	328	336	344	353	361	369	377	385	394	402	410	418	426	435	443

Source: Adapted from Clinical Guidelines on the Identification, Evaluation, and Treatment of Overweight and Obesity in Adults: The Evidence Report.

BMI Children and Adolescents

For children and adolescents, BMI is calculated differently than with adults. Age and sex growth charts are used to determine BMI. This is due to the body fat changes with age and the sex-specific body fat differences in boys and girls.

In the example below, a 10-year-old boy and a 15-year-old boy both have a BMI-for-age of 23. One of the children is considered to be obese, while the other is not. The 10-year-old boy would be in the obese category (95th percentile or greater). The 15-year-old boy would be in the healthy weight category (5th percentile to less than 95th percentile).



OBESE CHILDREN ARE MORE LIKELY TO BE OBESE ADULTS.

SOURCE: CENTERS FOR DISEASE CONTROL AND PREVENTION

CHILDREN'S HEALTH DATA

OBESITY & OVERWEIGHT	OK	STATUS	U
AGES 2-4 OBESITY PREVALENCE ⁽³⁾	13.8%		14.4
AGES 10-17 OBESITY PREVALENCE ⁽⁴⁾	18.7%	7	16.2
AGES 10-17 OVERWEIGHT PREVALENCE ⁽⁴⁾	13.6%		15.9
HIGH SCHOOL OBESITY PREVALENCE ⁽⁵⁾	17.6%	1	17.
HIGH SCHOOL OVERWEIGHT PREVALENCE(5)	18.1%	Q	16.
PHYSICAL ACTIVITY	OK	STATUS	U
AGES 6-17 PARTICIPATE IN PHYSICAL ACTIVITY FOR AT LEAST 60 MINUTES EVERY DAY ⁽⁴⁾	23.0%	<u></u>	20.0
HIGH SCHOOL AGE PHYSICALLY ACTIVE AT LEAST 60 MINUTES EVERY DAY ⁽⁵⁾	29.2%		23.
NUTRITION	OK	STATUS	U
HIGH SCHOOL AGE ATE FRUIT OR DRANK 100% FRUIT JUICES TWO OR MORE TIMES PER DAY ⁽⁵⁾	20.3%	Q	28.
HIGH SCHOOL AGE ATE VEGETABLES THREE OR MORE TIMES PER DAY ⁽⁵⁾	9.4%	7	14.0
BUILT ENVIRONMENTS	OK	STATUS	U
CHILDREN LIVE IN NEIGHBORHOODS WITH SIDEWALKS OR WALKING PATHS ⁽⁴⁾	55.6%	O	75.
CHILDREN LIVE IN NEIGHBORHOODS WITH A PARK OR PLAYGROUND ⁽⁴⁾	62.8%	7	74.
CHILDREN LIVE IN NEIGHBORHOODS WITH RECREATION CENTER, COMMUNITY CENTER ⁽⁴⁾	25.3%	7	48.
CHILDREN LIVE IN NEIGHBORHOODS WITH A LIBRARY(4)	44.3%	$oldsymbol{Q}$	66.
OKLAHOMA NEIGHBORHOODS WITH SIDEWALK (6)	48.6%		N
OKLAHOMA NEIGHBORHOODS WITH SIDEWALK THAT ARE VERY WELL MAINTAINED ⁽⁶⁾	51.1%		N
Access to Healthy Foods / Healthcare	ОК	STATUS	U
CHILDREN IN HOUSEHOLDS THAT COULD ALWAYS AFFORD TO EAT GOOD NUTRITIOUS MEALS ⁽⁴⁾	61.2%	7	69.
PERCENTAGE OF FOOD INSECURE CHILDREN ⁽⁷⁾	20.5%	7	14.
OLUMBIA DE LA CONTROLLA DE LA	29.6%		N
OKLAHOMANS WHO STRONGLY AGREE THAT EASY TO PURCHASE HEALTHY FOODS IN NEIGHBORHOOD ⁽⁶⁾	20.070		
PURCHASE HEALTHY FOODS IN NEIGHBORHOOD ⁽⁶⁾ OKLAHOMANS WHO STRONGLY AGREE THERE IS LARGE SELECTION OF HIGH QUALITY FRESH FRUITS AND VEGETABLES IN NEIGHBORHOOD ⁽⁶⁾	23.0%		N
PURCHASE HEALTHY FOODS IN NEIGHBORHOOD ⁽⁶⁾ OKLAHOMANS WHO STRONGLY AGREE THERE IS LARGE SELECTION OF HIGH QUALITY FRESH FRUITS AND		•	93

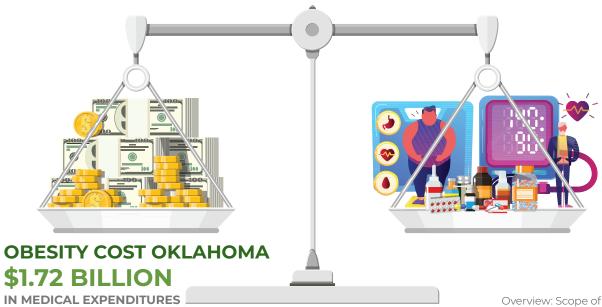


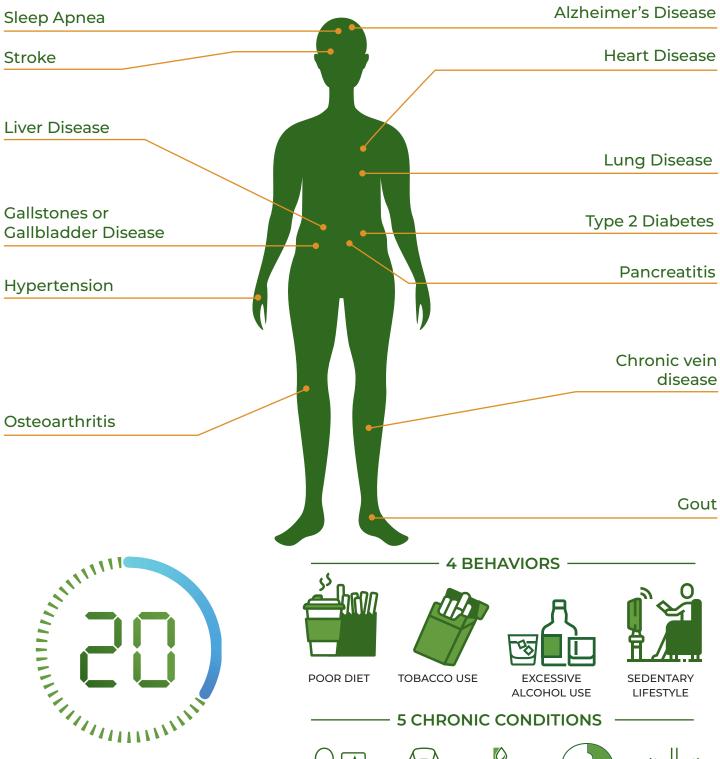
Across the nation obesity is one of the leading causes of preventable lifeyears lost among adult Americans⁽⁸⁾. However, obesity impacts humans all across the lifecycle. Oklahoma, as well as many states across the nation, has seen a steady increase in rates of obesity over the past two decades. At times, Oklahoma has seen its rate of increase surpass many other states, consistently leaving Oklahoma as one of the most obese states in the country. Future projections place Oklahoma on the path to becoming the most obese state in the United States by 2030 if the course is not altered through obesity prevention and reduction strategies⁽⁹⁾.



Impacts

The impacts of obesity are serious and costly. According to the CDC, obesity is associated with poor mental health outcomes, reduced quality of life and an increased risk for developing chronic conditions such as hypertension, type 2 diabetes, heart disease, stroke, sleep apnea and breathing problems, some cancers, and mental illnesses such as depression and anxiety(10). Additionally, the impact of obesity reaches beyond an individual, extending also to statewide health care costs, business productivity, and the nation's defense readiness(11).





Oklahomans died each day in 2019 from a 4-5-61 chronic disease or about one Oklahoman every 20 minutes.



CARDIOVASCULAR DISEASE



CANCER



DIABETES



ALZHEIMER'S DISEASE

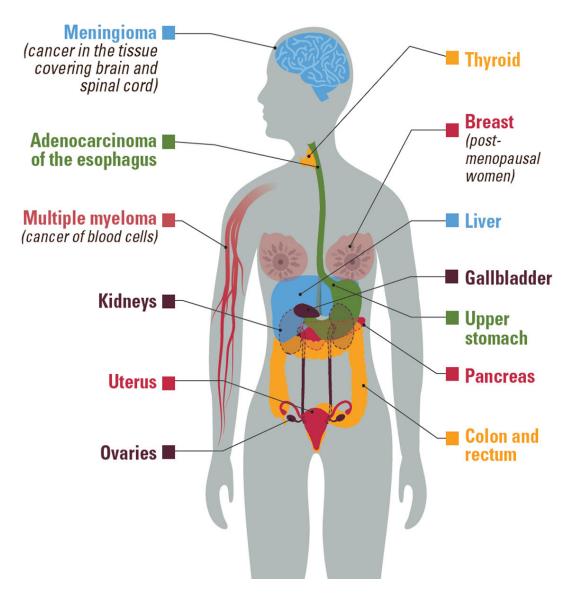


LUNG DISEASE

Four unhealthy behaviors influence five chronic diseases that account for about 61% of all deaths in Oklahoma.

13 Cancers Associated with Overweight & Obesity

13 cancers are associated with overweight and obesity



Being overweight or obese increases the risk for developing certain types of cancer due to excess body fat and the impact it has on:

- ▶ Immune system function and inflammation
- ► Levels of certain hormones (insulin and estrogen)
- ► Regulation of cell growth
- Proteins that influence how the body uses hormones

Many Oklahomans experience very poor health outcomes. Our state ranks 49th in the nation for deaths due to cardiovascular disease, 48th in deaths due to cancer, and 42nd for premature death⁽¹²⁾. When looking specifically at deaths due to heart disease and stroke, Oklahoma exceeds the national average.

HEALTH OUTCOMES - OKLAHOMA(6)(13)	OKLAHOMA	STATUS	USA
LIFE EXPECTANCY			
MALE LIFE EXPECTANCY	73.2	7	76.3
FEMALE LIFE EXPECTANCY	78.3	Q	81.4
OVERALL LIFE EXPECTANCY	75.7	?	78.8
ADULT OBESITY PREVALENCE	36.4%	7	31.9%
CHILDHOOD OBESITY PREVALENCE (WIC 2-4 YEARS)	13.8%	0	14%
PHYSICAL ACTIVITY (PA) PREVALENCE (ANY/LAST 30 DAYS)	71.4%	7	77.6 %
AEROBIC PA (150 MINS/WEEK)	37.3%	7	50.1%
MINIMAL VEGETABLE CONSUMPTION PREVALENCE*	21.5%	(3)	21.2%
MINIMAL FRUIT CONSUMPTION PREVALENCE*	48.4%	7	39.3%
DIABETES PREVALENCE	13.0%	7	10.6%
HYPERTENSION PREVALENCE	37.8%	7	32.3%
CARDIOVASCULAR DISEASE (AGE-ADJUSTED DEATH RATE)	300.3	•	224.4
CANCER (AGE-ADJUSTED DEATH RATE)	171.1	7	144.1

LEGEND

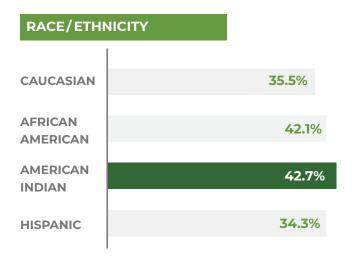


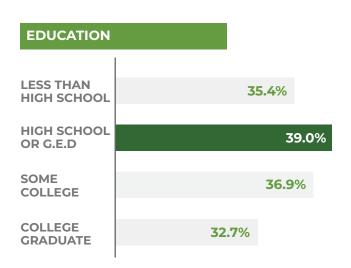


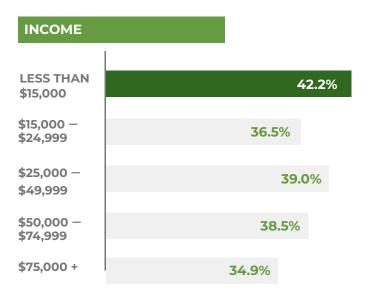
WORSE THAN NATIONAL OUTCOME

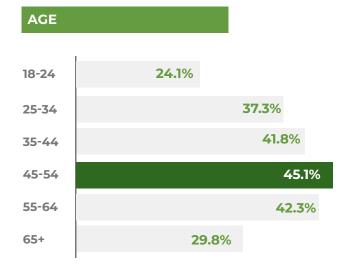
*Consumed <1 serving of vegetable/fruit per day Age-adjusted rate based on 2000 US population standard. All rates are deaths per 100,000 population.

Obesity rates are generally higher for certain population groups than others. African-Americans and American Indians tend to have higher rates of obesity than Caucasians and other races, and several health conditions and chronic diseases reflect similar ethnic differences. The most consistent upstream social determinant of obesity is socio-economic status. In 2020, the highest prevalence of obesity was 42.2% among those with a household income less than \$15,000 while college graduates continue to have the lower prevalence of obesity (32.7%) compared to other educational levels. Additionally, adults 45-54 years of age have the highest prevalence of obesity.

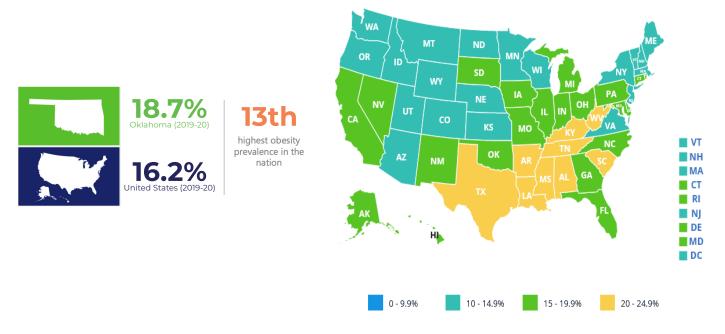




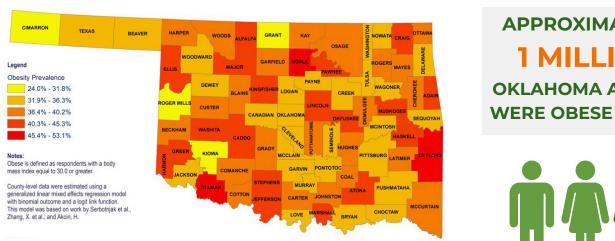


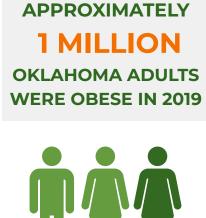


FROM EARLY CHILDHOOD TO ADULTHOOD, OBESITY IS A PROBLEM ACROSS THE HUMAN LIFESPAN.



In 2019-20, seventy-eight thousand or 1 out of 5 of Oklahoma's children ages 10-17 were obese⁽⁴⁾. This is concerning because children with obesity are more likely to have obesity as adults and further increase the severity of adult obesity in Oklahoma. Oklahoma has seen a decrease in WIC participants ages 2-5 years who are obese.





That's about 1 out of every 3 adults.

Contributing Factors

The complexity of obesity, with its many contributing factors, makes finding solutions more challenging than just telling people to "eat less and move more". Obesity is a complex issue with many contributing factors. In general, obesity occurs when caloric intake exceeds caloric expenditures resulting in the body storing the excess calories as fat. While genetics may contribute to an increased risk of weight gain, most contributing factors (e.g., poor diet, sedentary lifestyle, excessive alcohol use) are within an individual's control.

OKLAHOMA ADULTS

21.5%

Consumed vegetables less than one time per day

OKLAHOMA YOUTH

9.4%

Consumed vegetables 3+ times/day past 7 days

OKLAHOMA ADULTS

48.4% Consumed fruit less than one time per day

OKLAHOMA YOUTH

20.3%

Consumed fruit 2+ times/day past 7 days

Poor Diet

The 2020–2025 Dietary Guidelines for Americans advise incorporating more fruits and vegetables into U.S. residents' diets as part of healthy dietary patterns. Adults should consume 1.5–2 cup-equivalents of fruits and 2–3 cup-equivalents of vegetables daily. A healthy diet supports healthy immune function and helps to prevent obesity, type 2 diabetes, cardiovascular diseases, and some cancers; having some of these conditions can predispose persons to more severe illness and death from COVID-19⁽¹⁴⁾.

FRUIT AND VEGETABLE RECOMMENDATIONS





	AGES	DAILY AMOUNT	DAILY AMOUNT
CIIII DDEN	2-3	1 CUP	1 сир
CHILDREN	4-8	1 - 1 ^{1/2} CUPS	1 ^{1/2} CUPS
GIRLS	9-13	1 1/2 CUPS	2 CUPS
UIKLS	14-18	1 1/2 CUPS	2 1/2 CUPS
BOYS	9-13	1 ^{1/2} CUPS	2 1/2 CUPS
ВОТЗ	14-18	2 cups	3 CUPS
WOMEN	19-30	2 CUPS	2 1/2 CUPS
	31-50	1 1/2 CUPS	2 1/2 CUPS
	51+	1 1/2 CUPS	2 CUPS
	19-30	2 CUPS	3 CUPS
MEN	31-50	2 cups	3 CUPS
	51+	2 cups	2 1/2 CUPS

Sedentary Lifestyle

Additionally, only 37.3% of Oklahoma adults and 29.2% of children participate in adequate amounts of physical activity⁽¹³⁾. Lack of physical activity and an overall sedentary lifestyle are also contributing factors to obesity. Physical inactivity increases the risk of heart disease, diabetes, stroke, high blood pressure, osteoporosis, certain cancers, as well as contributes to stress.

OKLAHOMA ADULTS

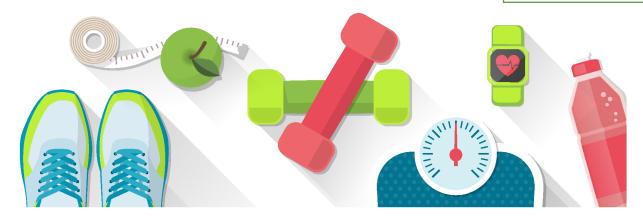
37.3%

Participated in 150 mins or more of aerobic PA per week.

OKLAHOMA YOUTH

29.2%

Active 60min everyday during the past 7 days.



Physical activity is bodily movement caused by your muscles. It's intentionally done and increases the number of calories you burn. When balanced with the recommended daily caloric intake, engaging in physical activity will help people maintain a healthy body weight. Physical activity decreases fat around the waist and total body fat, slowing the development of abdominal obesity. Weight lifting, push-ups, and other muscle-strengthening activities build muscle mass, increasing the energy that the body burns throughout the day-even when it's at rest-and making it easier to control weight. Weight bearing exercises build bone mass and reduce the risk for osteoarthritis. Physical activity reduces depression and anxiety, and this mood boost may motivate people to stick with their exercise regimens over time.

Physical Activity Recommendations(15)

PRESCHOOL (3-5 YEARS)

PA everyday throughout the day

ADULT (18-64 YEARS)

At least 150 minutes each week of moderate intensity activity and 2 days a week activities to strengthen muscles.



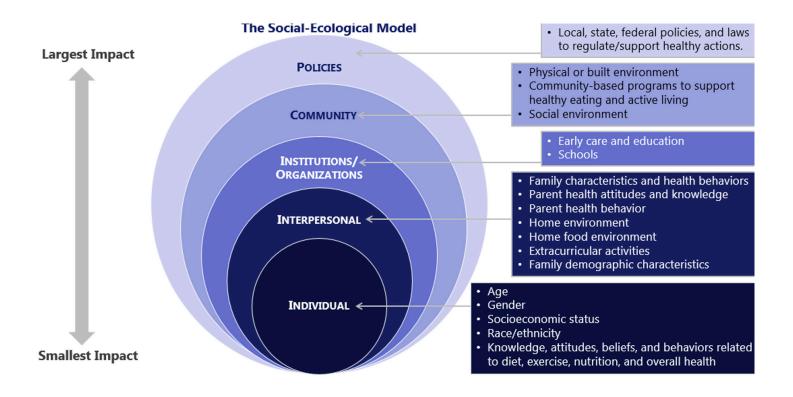
CHILDREN AND TEENS (6-17 YEARS)

60 minutes or more moderate to vigorous intensity PA each day.

OLDER ADULT (65+ YEARS)

At least 150 minutes each week of moderate intensity activity and 2 days a week activities to strengthen muscles.

Activities to improve balance



The Social-Ecological Model

Many factors influence our health from our social ties to where we live to our access to healthy food. All these factors, and many more, are interrelated and combine to create our individual lived experiences. They are also influenced by social norms; the environment in which we live, work, learn, and play; and public policies. The social-ecological model is one framework for understanding the multifaceted and interactive effects of the personal and environmental factors that determine behaviors and ultimately health outcomes. The model shows how various factors influence our diets, physical activity patterns, tobacco use, and ultimately health outcomes.



OPPORTUNITIES FOR OKLAHOMA TO THRIVE

It can be discouraging that Oklahoma is on the path to becoming the most obese state in the United States by 2030⁽⁹⁾. This projection will not come to fruition if evidence-based, cross-sectoral approaches are taken. The state obesity plan was carefully developed to incorporate interventions that can address the conditions in the places where people live, learn, work, play, and pray. These conditions are referred to as the Social Determinants of Health (SDoH). Healthy People 2030 organizes the SDoH into 5 domains⁽¹⁶⁾:

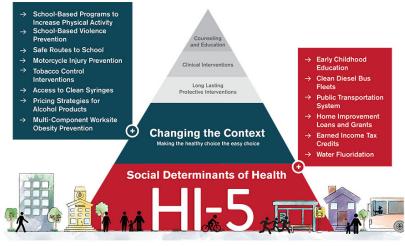
- **ECONOMIC STABILITY**
- **▶** EDUCATION ACCESS and QUALITY
- ▶ HEALTH CARE ACCESS and QUALITY
- ▶ NEIGHBORHOOD and BUILT ENVIRONMENT
- SOCIAL and COMMUNITY CONTEXT

Addressing the SDoH requires that public health organizations work across sectors to improve health. Public-private partnerships are key in achieving some of the overarching goals of Healthy People 2030 including creating social, physical, and economic environments that promote attaining the full potential for health and well-being for all⁽¹⁷⁾. The National Center for Chronic Disease Prevention and Health Promotion establishes that health departments are uniquely positioned to drive progress by addressing the following determinants; built environment, community-clinical linkages, food and nutrition security, social connectedness, and tobacco-free policy⁽¹⁸⁾.

A key issue in the economic stability domain is addressing food insecurity. Oklahoma has some of the worst food insecurity rates in the nation⁽¹⁹⁾. Reducing food insecurity and increasing healthy food consumption is incorporated across this plan. Reducing food deserts in high priority areas, increasing food insecurity screenings and connection to resources, increasing access to summer meals, and increasing healthy donations from corporations to charitable programs are just some of the objectives within this plan that seek to offer sustainable solutions to address hunger and reach those who are most vulnerable.

The state obesity plan is a 5-year plan to prevent and reduce obesity in Oklahoma.

Stakeholders took careful considerations to craft objectives which could have the highest impact. The CDC HI-5 initiative highlights non-clinical, community-wide approaches that have evidence reporting positive health impacts, results within five years, and cost effectiveness and/or cost savings over the lifetime of the population or earlier⁽²⁰⁾. The CDC HI-5 interventions can prevent or reduce several health conditions at once. Oklahoma's state obesity plan incorporates school-based programs to increase physical activity, safe routes to schools, multi-component worksite obesity prevention, and early childhood education. These specific strategies are proven to have the biggest impact on health over the next 5 years.



HEALTH IMPACT IN 5 YEARS



The objectives outlined in the plan aim to take a comprehensive approach to combating obesity. There is a call for coordination with healthcare systems to increase resources and education for providers in an effort to more effectively work with patients on managing weight status. The plan focuses on providing adequate access to all Oklahomans across the state and also highlights improvements to the environments in which most Oklahomans spend most of their time. This includes early care and education locations, schools, worksites, and the communities in which people live, work, and play.

While personal responsibility will always be a component of weight management, the plan aims to identify environmental changes which will make it easier for all Oklahomans to choose to be healthier, and to encourage healthy habits and behaviors. This plan also aims to put resources and education in the hands of Oklahomans so the decisions they make can be well informed, but also supported by the environment in which they live with the ultimate goal of creating a state of health!

Individuals representing over 70 agencies came together to develop a vision and mission, as well as specific goals and objectives to be undertaken by partners across the state. Each objective was identified as an area of need, and a Coordinating Agency was designated to ensure the objective was actionable, and coordinate group effort to work toward completion of the objective. In addition, there were proposed agencies that would be a good fit to be Partners in Implementation, due to their area of work and expertise, and those agencies would be invited to work towards the objective if they were not already present in the planning process. These objectives were then pared down into a priority plan comprised of high readiness or high impact strategies, which would be the focus of work, while contributing to the larger plans set forth. This plan will be used to guide partnership work moving forward, but can also be used by professionals or individuals across the state to align programs and policies with the larger movement to create a more effective synergy of efforts.

VISION

Enhance the well-being of all Oklahomans.

MISSION

Improve sustainable access to a healthy environment by empowering statewide collaboration through evidence-based practices and innovation.

HIGH LEVEL GOALS

- Decrease childhood obesity rates by 3% by 2026
- Decrease adult obesity rates by 1% by 2026

ALL AGES

INCREASE ACCESS TO CARE FOR ALL OKLAHOMANS

By 2025, increase by 3 the number of fully recognized organizations certified in the National Diabetes Lifestyle Change Program.

By 2026, increase by 10% the number of participants in a fully recognized National Diabetes Lifestyle Change Program in Oklahoma.

By 2026, decrease the uninsured percent in Oklahoma from 14.3% (2019) to below 10%.

By 2026, increase reimbursement for obesity treatment options within Medicaid.

By 2026, increase reimbursement for obesity treatment options within Healthchoice.

By 2026, establish 20 telehealth pods with Rural Digital Navigators in public libraries located in rural areas.

INCREASE THE UTILIZATION OF AVAILABLE DATA

By 2024, create a statewide physical activity, nutrition, and obesity treatment programmatic registry.

By 2024, create a statewide BMI data registry.

INCREASE BUILT ENVIRONMENT INFRASTRUCTURE WHICH PROMOTES SAFE BIKING AND WALKING

By 2024, adopt 1 state-level Complete Streets Policy.

By 2025, have a dedicated amount of state funding appropriated for active transportation infrastructure.

By 2024, have I adopted planning and/or design guidance document adopted by a statewide planning organization or Oklahoma Municipal League or Oklahoma Chapter of the American Planning Association.

By 2025, initiate and begin implementation for 8 or more complete streets plans in a community that did not have a plan prior to Jan 1, 2022.

By 2025, enhance 14 existing parks per year with new environmental structures to promote physical activity (e.g. shade structures, walking trails, multi-use courts, etc.).

IMPROVE THE NUTRITION ENVIRONMENT IN COMMUNITIES ACROSS OKLAHOMA

By 2024, work collaboratively at the food bank level on incorporating Healthy Eating Research nutrition guidelines and cultural preferences among both of Oklahoma's food banks.

By 2024, work at the state and local level to support changes through policy and practice to build community support, increase access, create culturally supportive environments, and build demand for Healthy Eating Research nutrition guidelines and Supporting Wellness at Pantries (SWAP) stoplight system at Oklahoma food banks and within their partner programs.

By 2024, pass 1 state level policy to incentivize affordable healthy food options.

By 2026, reduce by 2 the number of food desert tracts in Oklahoma.

By 2026, increase by 12 the number of retail stores applying for the Healthy Food Financing Program.

By 2025, increase the number of healthy concession stands in public areas such as community recreational centers.

By 2022, increase by 5% the number of people utilizing clinic food incentive referral programs to farmers markets.

INCREASE THE LIKELIHOOD THAT PERSONS LIVING IN LOW-INCOME HOUSEHOLDS (AT OR BELOW 185% OF THE FEDERAL POVERTY LEVEL) WILL MAKE HEALTHY FOOD AND PHYSICAL ACTIVITY CHOICES.

By 2023, increase by 5% the number of schools that participate in an interactive education program to promote healthy eating with a parental in-direct education component such as (Body Adventures, Eagle Adventure, Farm to You, and etc.).

By 2023, increase by 2% the number of SNAP or FDPIR recipients/eligibles participating in SNAP-Ed direct education.

By 2023, increase by 5% the provided food resource management strategies in classes offered to individual/families living in low-income households.

By 2023, increase by 5% the number of EBT accepting farmers markets, food hubs, and farm stands.

By 2023, increase by 5% the number of community initiatives focusing on policy, system or environment changes to improve access to healthy food for individuals/families living in low-income households.

INCREASE SCREENINGS AND REFERRALS FOR ALL AGES

By 2026, ensure that at least one SNAP Application Assistance Partner and/or site is serving each county in Oklahoma.

By 2024, increase the number of organizations/sites that screen for food insecurity and initiate closed-loop referrals to the SNAP Application Assistance Hotline.

By 2026, increase utilization of the Oklahoma SNAP Application Assistance Hotline for Grocery Assistance referrals across all counties by 20% to reduce food insecurity and related health outcomes.

By 2026, 200 healthcare delivery sites will screen for food insecurity and/or Social Determinants of Health needs annually at a minimum based on presentation for care.

By 2026, 80% of all patients with reported food insecurity or SDoH needs will be provided referrals to food resources including SNAP and food pantries.

INCREASE FREE SOCIAL SUPPORT PROGRAMMING TO IMPROVE NUTRITION AND INCREASE PHYSICAL ACTIVITY

By 2026, develop 1 health communication plan or central hub which educates the public on free social support programming available across the state.

By 2026, increase free social support programming which is inclusive of nutrition and/or physical activity.

By 2023, expand Let's Get Moving programming to one additional community.

By 2026, 70 public libraries will have ongoing health literacy programs and projects which are inclusive of nutrition education and/or physical activity components.

EARLY CHILDHOOD

IMPROVE THE QUALITY OF CARE TO PREVENT AND/OR TREAT OBESITY IN CLINICS CARING FOR CHILDREN

By 2022, identify a minimum of 2 partners with expertise in pediatric obesity to provide training in pediatric obesity assessment and management to pediatric primary care clinicians and dietitians.

By 2025, offer 20 trainings in pediatric weight management to pediatric primary care practices.

By 2024, increase the number of counties with pediatric clinicians and dietitians participating in tele-education on pediatric weight management.

By 2024, establish two full time, multidisciplinary child and adolescent obesity treatment programs that provide the full scope of obesity treatment services as recommended in current professional guidelines.

By 2024, increase by 10% the number of pediatric primary care practices joining the Healthy Steps network.

IMPROVE THE EARLY CARE ENVIRONMENT SUPPORTS FOR APPROPRIATE PHYSICAL ACTIVITY & NUTRITION

By 2022, increase to 700 the number of Certified Healthy Excellent ECE centers and homes.

By 2024, incorporate Certified Healthy ECE into QRIS criteria.

By 2024, all licensed child care programs that participate in the Reaching for the Stars program will adopt at least one new practice to promote healthy weight.

By 2026, 40 licensed child care and education programs in high risk areas will have participated in the GoNAPSACC program.

INCREASE BREASTFEEDING RATES

By 2025, increase by 3 the number of birthing hospitals with International Board Certified Lactation Consultants (IBCLCs).

By 2025, increase by 10 the number of IBCLC's.

By 2025, increase by 5 the number of IBCLCs representing minorities/BIPOCs.

By 2025, contacts with the breastfeeding hotline will represent 80% of Oklahoma birthing hospitals.

By 2025, increase by 15% contacts to the breastfeeding hotline.

By 2025, Increase by 5 the number of Baby Friendly Hospitals with a particular focus on rural and tribal hospitals.

By 2025, increase by 10% the number of Breastfeeding Friendly Businesses with a particular focus on rural and tribal communities.

INCREASE NUTRITION EDUCATION PROVIDED TO WOMEN OF CHILDBEARING AGE, DURING THE PRENATAL PERIOD, AND TO THE PARENTS OF CHILDREN AGED 0-5

By 2025, increase by 50% the number of OB/GYN and Family Practice Physicians that receive ongoing education regarding the correlation between prenatal nutrition and childhood obesity.

By 2025, increase by 50% the number of providers seeing patients during the prenatal period and those providers seeing patients during childbearing years and providing education to patients regarding the impact of prenatal nutrition on the developing fetus as related to the development of childhood obesity.

By 2026, lower childhood obesity rates in children 2-5 years of age enrolled in the WIC program by offering nutritious food options, nutrition education, and nutrition counseling opportunities to WIC participants beginning during the prenatal period and extending through 5 years of age.

By 2024, home visitation programs will increase by 10% the number of nutrition service referrals and initiation of services.

INCREASE MESSAGING TAILORED TO CAREGIVERS OF PRE-SCHOOL AGE CHILDREN PROMOTING A HEALTHY WEIGHT AND HEALTH PROMOTING BEHAVIORS

By 2024, develop I health communication plan specifically tailored towards caregivers of pre-school age children and nutrition and physical activity health behaviors.

By 2024, home visitation programs will increase by 10% the number of families setting physical activity goals.

SCHOOL AGE

IMPROVE THE QUALITY OF CARE TO PREVENT AND/OR TREAT OBESITY IN CLINICS CARING FOR CHILDREN

By 2025, increase by 22 the number of counties with health care providers served by innovative educational programming in the management of overweight and obesity in children and adolescents.

By 2025, treatment of obesity in adolescents and children will be incorporated into the Continuing Medical Education of pediatricians and related providers in Oklahoma.

By 2024, establish two full time, multidisciplinary child and adolescent obesity treatment programs that provide the full scope of obesity treatment services as recommended in current professional guidelines.

By 2025, offer 20 trainings in pediatric weight management to pediatric primary care practices.

INCREASE THE UTILIZATION OF AVAILABLE DATA

By 2024, create a statewide physical activity, nutrition, and obesity treatment programmatic registry.

By 2024, create a statewide BMI data registry.

By 2024, have a dedicated amount of funding appropriated for 1 confidential and sensitive nutrition and physical activity assessment training for schools.

IMPROVE THE NUTRITIONAL ENVIRONMENT IN OKLAHOMA SCHOOLS

By 2024, increase by 10% the number of public school districts utilizing the Smarter Lunch Room Checklist.

By 2024, all students are offered at least 20 minutes from the time they are seated to consume their lunch and at least 10 minutes for breakfast.

INCREASE THE PERCENT OF CHILDREN IN AREAS WITH 50% OR GREATER FREE AND REDUCED-PRICE MEAL ELIGIBILITY (HIGH-NEED AREAS) WITH ACCESS TO NUTRITION PROGRAMS YEAR-ROUND

By 2026, increase the percentage of youth accessing summer food through either Seamless Summer, Summer Food Service Program, and/or Tribal Summer EBT.

By 2024, have 100% of counties with an implemented summer feeding program.

By 2026, increase afterschool meals and/or the number of organizations offering afterschool meals in high-need areas.

By 2026, each high-need county has at least one open meal site each month of the year.

INCREASE THE AMOUNT OF MODERATE TO VIGOROUS PHYSICAL ACTIVITY TIME IN OKLAHOMA SCHOOLS

By 2024, pass 1 state level policy requiring recess be provided prior to the school lunch period.

By 2024, develop, promote, and conduct web-based and/or in-person professional development trainings around implementing recess before lunch.

By 2024, increase PE compliance by 15%, without increasing class size.

By 2024, have mandated and funded PE, or equivalent, requirement of 1 semester per year in secondary schools.

By 2026, increase by 4% the number of schools implementing a joint use policy.

By 2025, increase the number of communities with safe routes to school policies and/or implementation of safe routes to school.

INCREASE THE NUMBER OF SCHOOLS IMPLEMENTING SOCIAL EMOTIONAL LEARNING STRATEGIES

By 2025, 65% of school districts in Oklahoma will demonstrate knowledge of the importance of systemic SEL implementation.

By 2025, 40% of school districts in Oklahoma will demonstrate dedication to SEL by implementing the OSDE SEL competencies.

INCREASE THE NUMBER OF SCHOOLS IMPLEMENTING THE WHOLE SCHOOL, WHOLE COMMUNITY, WHOLE CHILD MODEL

By 2026, increase the number of school administrators and other school personnel obtaining the WSCC micro-credential to 200.

By 2025, increase by 5%, the number of Certified Healthy Excellent schools.

INCREASE HEALTH EDUCATION IN SCHOOLS

By 2021, enact 1 state level policy to ensure age-appropriate health education is taught in all Oklahoma schools.

By 2023, funding for the development of an open access Skills Based Health Education curriculum for all grade bands will be identified.

By 2023, funding for school based health staff to receive Professional Development for Skills Based Health Education will be identified.

INCREASE MESSAGING TAILORED TO ADOLESCENTS PROMOTING A HEALTHY WEIGHT AND HEALTH PROMOTING BEHAVIORS

By 2022, develop 1 health communication plan specifically tailored toward adolescents and nutrition and physical activity health behaviors. (ensuring at risk and state care children are involved in the process).

INCREASE HEALTH PROMOTION EFFORTS AMONG VULNERABLE ADOLESCENT POPULATIONS

By 2025, direct service state agencies are actively enrolling eligible transitioning youth in SNAP, Soonercare, and Community Nutrition Education Program within 6 months of their transition.

By 2024 develop a means of tracking and verifying transitioning youth enrollment in nutrition and nutrition education programming.

By 2026, credential at least 1,000 wellness coaches to help promote a culture of wellness and provide wellness services to children and families in the behavioral health system.

ADULTS

INCREASE THE HEALTH PROMOTING ENVIRONMENT OF EMPLOYERS ACROSS OKLAHOMA

By 2022, increase by 20% the number of Certified Healthy Excellent Businesses with a particular focus on disparate populations.

By 2024, pass 1 state level policy that incentivizes employers to adopt and implement comprehensive workplace wellness policies.

By 2026, 100 businesses will be trained in the CDC's Work@Health program.

INCREASE HEALTH PROMOTING PARTNERSHIPS AND COMPONENTS WITHIN THE FOOD SYSTEM

By 2026, expand Double up Oklahoma to 18 additional communities (100% increase) designated as high need and/or Low Income Low Access.

By 2026, have a dedicated amount of in-state, recurring funding for Double Up Oklahoma to increase access to fresh produce for SNAP participants.

By 2025, one innovative private/public partnership increasing access to healthy foods in areas of low-income and low-access will be identified.

By 2026, increase healthy donations from corporate partners to food assistance programs.

INCREASE CAPACITY WITHIN THE HEALTH CARE SYSTEM TO PREVENT AND TREAT OBESITY

By 2023, healthcare partners will conduct a total of 4 nutrition education classes for healthcare providers to increase capacity to engage Oklahomans in obesity prevention and treatment.

By 2023, all counties have at least one designated "obesity medicine clinic" to provide a dedicated assessment of obesity.

By 2025, increase to three the number of professional medical education schools offering comprehensive, multidisciplinary curricula in obesity medicine.

By 2026, increase by 18 the number of health care providers with the American Board of Obesity Medicine's Obesity Medicine Certification.

By 2026, provide at least 50 community organizations, health practitioners, schools, and health agencies training related to the impact of food and nutrition security on obesity and the strategies, tools, and resources available to protect/improve food security in their communities.

REDUCE WEIGHT STIGMA AND DISCRIMINATION

By 2025, reduce the stigma around weight through Continuing Education Credits (CECs) for current providers around addressing stigma.

By 2023, incorporate weight stigma and associated mental health needs into the Community Health Worker training curriculum.

By 2026, increase targeted, unbiased interventions to individuals with obesity and their families by providing diabetes education, resources, and technical assistance to Certified Community Behavioral Health Centers, Counseling and Mental Health Centers, and Comprehensive Community Addiction Recovery Centers.

By 2026, ensure that the prevention of weight based victimization, weight bias, and weight stigma is included in the action planning across educational related objectives within the state obesity plan.

OLDER ADULTS

IMPROVE THE QUALITY AND AVAILABILITY OF HEALTH CARE FOR OLDER ADULTS

By 2026, increase Medicaid enrollment among adults aged 55-64.

By 2023, an educational session on "medical (pharmacotherapy) and surgical (bariatric surgery) treatments of obesity in older adults" will be implemented in CME courses of primary care providers (PCP), and be presented to at least 50% of PCPs every year.

INCREASE SCREENINGS AND REFERRALS FOR OLDER ADULTS

By 2023, increase by at least 2 the number of health care clinics utilizing a food insecurity screening in the intake/EHR process and providing additional resources for those who screen as food insecure.

By 2026, increase the number of health care providers utilizing a physical activity screening in the intake/EHR process and providing information on how to get more physically active.

IMPROVE THE NUTRITION ENVIRONMENT IN COMMUNITIES ACROSS OKLAHOMA

By 2025, increase by 3 the number of senior targeted Community Nutrition Education Program class providers in Oklahoma.

By 2025, conduct an analysis on senior nutrition sites in Oklahoma to identify opportunities to increase nutrition education within meal sites.

By 2026, implement 2 new community gardens in high need areas.

By 2026, increase access to and utilization of Older American Act programming.

INCREASE PHYSICAL ACTIVITY OPPORTUNITIES FOR OLDER ADULTS

By 2026, Increase by 2 the number of "Age Friendly Communities".

By 2024, Increase by 8 the number of organizations that offer evidence based physical activity programs designed for seniors.

By 2024, increase to 60 the number of public libraries hosting older adult focused (tai chi, SAIL) physical activity events at least once per week.

By 2024, Increase by 25% the number of OHAI trained exercise leaders.



- **AARP**
- ▶ Absentee Shawnee Tribal Health System
- ▶ American Heart Association
- Ardmore Institute of Health
- Association of Central Oklahoma Governments
- **▶** Big Brothers Big Sisters of Oklahoma
- ▶ Blue Zones Project Durant
- ▶ Blue Zones Project Pottawatomie County
- ▶ Boys & Girls Clubs of Oklahoma County
- **▶** Building Healthy Military Communities
- **▶**CDC Foundation
- **▶**Chickasaw Nation
- City of Oklahoma City
- ▶ Coalition of Oklahoma Breastfeeding Advocates (COBA)
- ▶ Comanche County Memorial Hospital
- ▶ Community Food Bank of Eastern Oklahoma
- The Cooper Institute
- **▶** EODD Area Agency on Aging
- **▶** Guiding Right
- ▶ Health Alliance for the Uninsured
- **▶** HealthChoice
- ▶ Healthy Schools Oklahoma
- > Hunger Free Oklahoma
- ▶ Institute for Quality Communities
- ▶INTEGRIS Health
- ▶ Latino Community Development Agency
- Lynn Institute
- ▶ MyHealth Access Network
- ▶ Mercy Hospital
- ➤ Oklahoma Department of Mental Health and Substance Abuse Services
- ▶Office of Management and Enterprise Services
- ▶Oklahoma Foundation for Medical Quality
- **▶**OK Department of Transportation
- ➤OK Institute for Child Advocacy
- Oklahoma State Department of Agriculture
- **▶**OKC Community Foundation
- **▶**OKC-County Health Department
- ▶Oklahoma Department of Human Services (OKDHS)
- ▶Oklahoma 4-H Youth Development
- ▶Oklahoma Alliance of YMCAs
- ➤ Oklahoma Association for Health, Physical Education, Recreation, and Dance (OAHPERD)
- Oklahoma Breastfeeding Resource Center (OBRC)
- ▶Oklahoma Center for Nonprofits
- ▶ Oklahoma City Indian Clinic
- Oklahoma City Planning Department

- Oklahoma Commission on Children and Youth
- ▶ Oklahoma Department of Libraries
- ▶ Oklahoma Health Care Authority
- ▶ Oklahoma Hospital Association
- ▶ Oklahoma Institute for Child Advocacy
- ▶ Oklahoma Nutrition Information and
- **▶** Education (ONIE) Project
- ▶ Oklahoma Municipal League
- Oklahoma Lactation Consultant Association (OKLCA)
- Oklahoma Partnership for Expanded Learning
- Oklahoma Partnership for School Readiness
- ▶ Oklahoma Primary Care Association
- Oklahoma State Department of Education
- ▶ Oklahoma State Medical Association
- ▶ Oklahoma State University
- **▶** OSU Extension
- ➤ OSU Community Nutrition Education Programs (CNEP)
- Oklahoma Tribal Engagement Partners
- ➤ Oklahoma State University Family Health and Nutrition Clinic
- **▶** Education (ONIE) Project
- > Oklahoma State Department of Health
- > OU Health
- > OU Health Science Center
- ➤ University of Oklahoma
- OUHSC/Oklahoma Healthy Aging Initiative (OHAI)
- Palomar
- ▶ Potts Family Foundation
- Regional Food Bank of Oklahoma
- **▶** Smart Start
- SoonerStart
- Southwest Oklahoma Regional
- **▶** Transportation Planning Organization
- ➤ Sunbeam Family Services
- ▶ Tobacco Settlement Endowment Trust
- Tulsa Health Department
- The Indian Nations Council of Governments
- ➤ Tulsa Planning Office
- ➤ Tulsa YMCA
- ➤ University of Central Oklahoma
- > YMCA Greater OKC



- 1) United Health Foundation. (2021). America's Health Rankings analysis of America's Health Rankings composite measure. America's Health Rankings. Retrieved [April, 2022], from https://www.americashealthrankings.org/explore/annual
- 2) Wang, Y. C., Pamplin, J., Long, M. W., Ward, Z. J., Gortmaker, S. L., & Andreyeva, T. (2015). Severe obesity in adults cost state medicaid programs nearly \$8 billion in 2013. Health Affairs, 34(11), 1923-1931.
- 3) WIC Participant and Program Characteristics (WICPPC) survey. The data are gathered in April of evennumbered years, and analyzed by the CDC. Centers for Disease Control and Prevention. National Center for Chronic Disease Prevention and Health Promotion, Division of Nutrition, Physical Activity, and Obesity Data, Trend and Maps. https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html. Trend data available from 2000-2018.
- 4) 2019-2020 National Survey of Children's Health (NSCH) data query. Data Resource Center for Child and Adolescent Health supported by the U.S. Department of Health and Human Services, Health Resources and Services Administration (HRSA), Maternal and Child Health Bureau (MCHB). The data are gathered annually. Trend data available from 2016 -2020.
- 5) Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Youth Risk Behavior Survey 2019, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at https://www.health.state.ok.us/. The data are gathered in odd-numbered years. Trend data available from 2003-2019.
- 6) Oklahoma State Department of Health (OSDH), Center for Health Statistics, Health Care Information, Behavioral Risk Factor Surveillance System 2020, on Oklahoma Statistics on Health Available for Everyone (OK2SHARE). Accessed at https://www.health.state.ok.us/. The data are gathered annually. Trend data available from 2011-2020.
- 7) Map the Meal Gap 2021. Child Food Insecurity in The United States in 2019. https://map.feedingamerica.org/county/2019/child
- 8) United Health Foundation. (2020). America's Health Rankings analysis of CDC, Behavioral Risk Factor Surveillance System. America's Health Rankings. Retrieved [April, 2022], from https://www.americashealthrankings.org/explore/annual/measure/Sedentary/state/U.S.
- 9) Ward, Z. J., Bleich, S. N., Cradock, A. L., Barrett, J. L., Giles, C. M., Flax, C., & Gortmaker, S. L. (2019). Projected US state-level prevalence of adult obesity and severe obesity. New England Journal of Medicine, 381(25), 2440-2450.
- 10) Centers for Disease Control and Prevention. (2022b). Overweight and Obesity. Division of Nutrition, Physical Activity, and Obesity, National Center for Chronic Disease Prevention and Health Promotion. Retrieved [April, 2022], from https://www.cdc.gov/obesity/basics/causes.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fobesity%2Fadult%2Fcauses.html
- 11) Centers for Disease Control and Prevention. (2019). Unfit to Serve. Division of Nutrition, Physical Activity, and Obesity. Retrieved [April, 2022], from https://www.cdc.gov/physicalactivity/downloads/unfit-to-serve.pdf
- 12) Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Mortality 1999-2020 on CDC WONDER Online Database, released in 2021. Data are from the Multiple Cause of Death Files, 1999-2020, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at http://wonder.cdc.gov/ucd-icd10.html
- 13)Oklahoma State Department of Health. (2020). Health Care Information. Center for Health Statistics. Retrieved [April, 2022], from https://oklahoma.gov/health/data-and-statistics/center-for-health-statistics/health-care-information.html
- 14) Lee SH, Moore LV, Park S, Harris DM, Blanck HM. Adults Meeting Fruit and Vegetable Intake Recommendations United States, 2019. MMWR Morb Mortal Wkly Rep 2022;71:1–9. DOI: http://dx.doi.org/10.15585/mmwr.mm7101a1



- 15) United States Department of Health and Human Services. (2018). Physical Activity Guidelines for Americans 2nd edition. Retrieved [April, 2022], from https://health.gov/sites/default/files/2019-09/Physical_Activity_Guidelines_2nd_edition.pdf
- 16) U.S. Department of Health and Human Services. (n.d.) Social Determinants of Health. Healthy People 2030 https://health.gov/healthypeople/objectives-and-data/social-determinants-health
- 17) United States Department of Health and Human Services. (n.d.) Healthy People 2030 Framework. Healthy People 2030. Retrieved [April, 2022], from https://health.gov/healthypeople/about/healthy-people-2030-framework
- 18) Centers for Disease Control and Prevention. (2022). National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP). Retrieved [June, 2022], from https://www.cdc.gov/chronicdisease/programs-impact/sdoh.htm
- 19) Feeding America. (2020). Map the Meal Gap 2020. Retrieved [April, 2022], from https://www.feedingamerica.org/sites/default/files/2020-06/Map%20the%20Meal%20Gap%202020%20Combined%20Modules.pdf
- 20) Centers for Disease Control and Prevention. (2022a). Health Impact in 5 Years. Office of the Associate Director for Policy and Strategy. Retrieved [April, 2022], from https://www.cdc.gov/policy/hst/hi5/index.html