



**OKLAHOMA**

# **Alzheimer's Disease & Related Dementias State Plan**

**2023-2027**

Oklahoma State Department of Health  
Chronic Disease Prevention Service

# Helpful Terms for the Plan

**ADRD**

Alzheimer's Disease and Related Dementias are conditions that cause impaired memory, functioning and thought processes, primarily among older adults.

**BRFSS**

Behavioral Risk Factor Surveillance System

**Care Partners**

Informal, unpaid caregivers, usually friends and family members who assist a person living with ADRD to provide support, resources and care.

**CHR**

Community Health Representative; frontline workers of change within tribal communities. They help those in the community improve and maintain their health.

**CHW**

Community Health Worker; frontline workers of change within a community. They help to reduce health disparities within underserved communities.<sup>1</sup>

**Mild Cognitive Impairment (MCI)**

Decline in cognitive function that can include memory, language or critical thinking.

**PLWD**

Person Living with the Disease

**Subjective Cognitive Decline**

Self-reported memory problems that have been getting worse over the past years.

# Contents

---



Executive Summary	1
<hr/>	
Impact of Alzheimer's	3
<hr/>	
National Impact	3
Oklahoma Impact	4
Workforce	5
Risk Factors	6
Goals & Objectives	9
Policy Development	11
<hr/>	
Public Education	12
<hr/>	
Data & Surveillance	13
<hr/>	
Workforce Development	14
<hr/>	
General	14
<hr/>	
Members/Partners	16
<hr/>	
References	17
<hr/>	



# OKLAHOMA

## Alzheimer's Statistics

### PREVALENCE

Number of people aged 65 and older with Alzheimer's

Year	TOTAL
2020	67,000
2025	76,000

**13.4%**

Estimated increase

### WORKFORCE

**26**

Number of geriatricians

**557.7%**

Increase needed to meet the demand in 2050

**22,820**

Number of home health and personal care aides

**33.3%**

Increase needed to meet the demand in 2028

### CAREGIVING (2021)

**129,000**

Number of caregivers

**\$3,811,000,000**

Total value of unpaid care

**244,000,000**

Total hours of unpaid care

**27.5%**

Caregivers with depression

**53.5%**

Caregivers with chronic health conditions

**4th**

Highest average number of hours per caregiver

### HEALTH CARE

**Hospice (2017)**

**4,102**

Number of people in hospice with a primary diagnosis of dementia

**Hospitals (2018)**

**1,692**

Number of emergency room visits per 1,000 people with dementia

**Medicaid**

**\$516M**

Medicaid costs of caring for people with Alzheimer's (2020)

**18%**

In hospice with a primary diagnosis of dementia

**21.6%**

Dementia patient hospital readmission rate

**18.3%**

Projected change in costs from 2020 to 2025

**Medicare**

**\$28,273**

Per capita Medicare spending on people with dementia (in 2021 dollars)

### MORTALITY

**1,775**

Number of deaths from Alzheimer's disease (2019)

**178.2%**

Increase in Alzheimer's deaths since 2000

# Executive Summary

Alzheimer's disease and related dementias (ADRD) are brain diseases that are currently without a cure or treatment that steal the memories, and ultimately the lives, of those diagnosed. Research to identify potential cures and treatments as well as better understanding the contributing factors to ADRD is ongoing. While Alzheimer's disease and related dementias are not a regular part of the aging process, the likelihood someone will experience mild or subjective cognitive decline, Alzheimer's disease, or related dementia increases with age.

In Oklahoma, 16.2% of the state's population is 65 or older and 67,000 Oklahomans are living with Alzheimer's disease. This number is expected to climb as the population ages, with an anticipated increase to 76,000 people by 2025 - an estimated percentage change of 13.4%.<sup>2</sup>

To address the current and increasing needs of Oklahomans living with ADRD and their care partners, health care providers, and communities, the Oklahoma State Health Department, in partnership with a coalition of stakeholders called the Oklahoma Healthy Brain Initiative, developed this Alzheimer's Disease and Related Dementias 2023-2027 State Plan (Plan). The Plan's writing was in part made possible by CDC BOLD – Building

our largest dementia infrastructure – funding and aligns with select key actions contained in The Healthy Brain Initiative (HBI): The Public Health Road Map for State and National Partnerships, 2013-2018. Over the next five years stakeholders, which includes governmental agencies, academic institutions, health care entities, nonprofits, and other community organizations, will work to advance brain health in Oklahoma by meeting goals and actions in four areas:

**Policy Development • Public Education • Data and Surveillance • Workforce Development**

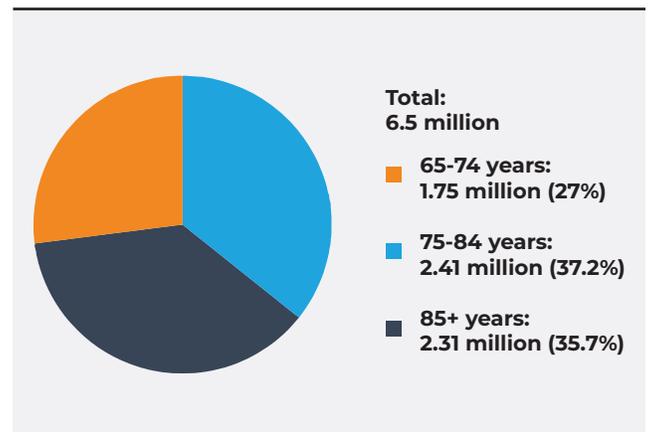
Through this Plan and the efforts of the Oklahoma Healthy Brain Initiative Coalition members and their partners, Oklahomans will gain awareness and a better understanding of brain health, how to care for those with ADRD, and develop a sustainable system to address the needs of those with ADRD and their care partners.

**Dementia** is the general term for a group of symptoms that can include difficulty remembering, thinking or making decisions. It is not a normal part of aging.<sup>4</sup>

**Alzheimer's disease** is a progressive brain disease and is the most common type of dementia. As the disease progresses the symptoms become severe enough to interfere with activities of daily living.<sup>4</sup>

This ADRD State Plan sets the overarching direction for the next five years and outlines actions to advance the risk reduction and early diagnosis and improve outcomes for those persons living with the disease and their care partners who live, work and play in Oklahoma.

**Number and Ages of People 65 or Older with Alzheimer's Dementia, 2022**

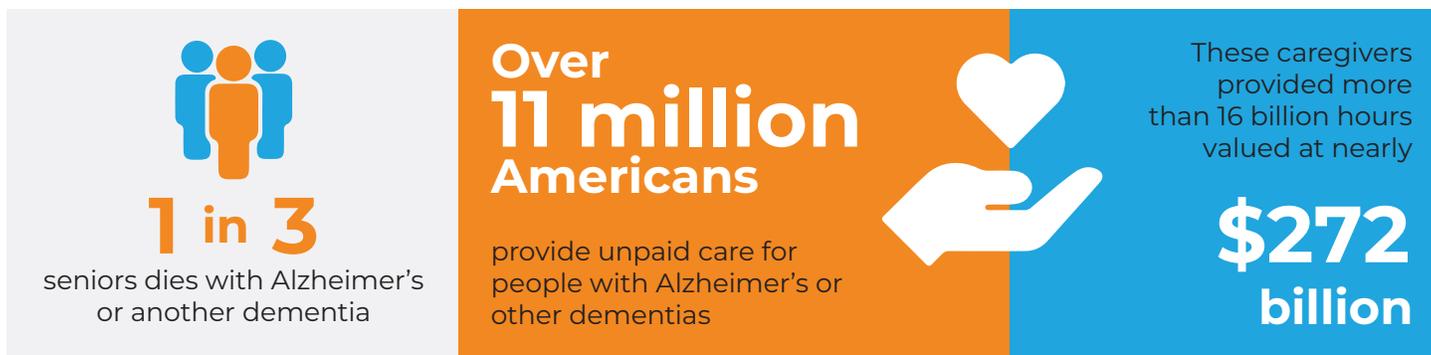




# Impact of Alzheimer's

## National Impact

Alzheimer's disease is the sixth leading cause of death in the United States and for those ages 65 and older is the fifth leading cause of death.<sup>6</sup> More than six million Americans are living with Alzheimer's. In 2022, Alzheimer's and other dementias cost the nation \$321 billion. These costs are estimated to rise to nearly \$1 trillion by 2050.<sup>2</sup>



With an aging population and people living longer, the prevalence of Alzheimer's will only increase, and the need for appropriate diagnosis and care could easily overwhelm available resources in the next decade. This is complicated by the chronic under-diagnosis of Alzheimer's and other dementias in the primary care setting. Outside of research settings, a substantial portion of those who would meet the diagnostic criteria for Alzheimer's and other dementias are not diagnosed with dementia by a physician, and fewer than half of Medicare beneficiaries who have a diagnosis of Alzheimer's or another dementia in their Medicare billing records (or their caregiver, if the beneficiary's cognitive impairment prevented him or her from responding) report being told of the diagnosis.<sup>4</sup> According to the 2022 Alzheimer's Associations Facts and Figures Special Report more than 80% of Americans know little or are not familiar with mild cognitive impairment (MCI), which can be an early stage of Alzheimer's.<sup>2</sup> A March 2020 survey of primary care providers conducted by the Alzheimer's Association revealed that less than half had pursued training in dementia care.



90% of physicians say it's important to diagnose MCI due to Alzheimer's, but **over half** say they are not fully comfortable diagnosing it.



About one-third of people with MCI due to Alzheimer's disease develop dementia **within 5 years** of diagnosis.

## Oklahoma Impact

In 2022, 129,000 Oklahoma family caregivers bore the burden of Alzheimer's disease by spending 244 million hours of unpaid care; equivalent to \$3.8 billion. The cost of the disease to Oklahoma's Medicaid system was \$516 million. Medicare spent \$28,273 per capita on Oklahomans with dementia in 2021.<sup>2</sup>

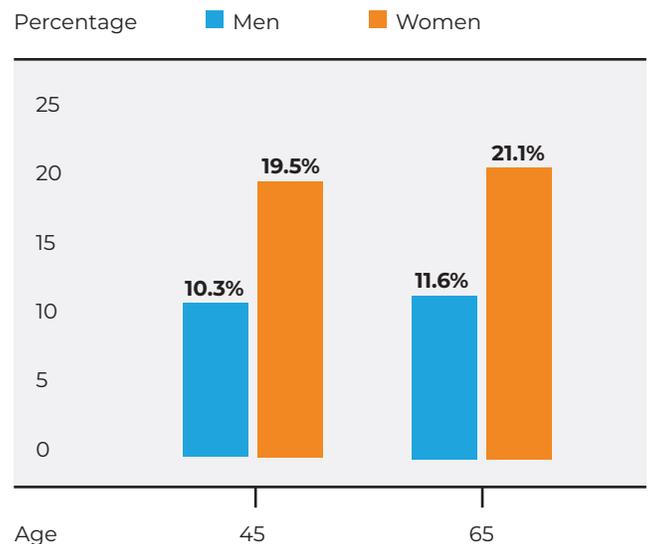


Alzheimer's cost Oklahoma  
**\$516 MILLION**  
in Medicaid costs of caring for PLWD

Alzheimer's is a disease that progresses slowly and takes a huge toll on the quality of life not only of the person living with the disease (PLWD), but their families as well. Alzheimer's disease disproportionately impacts women, African Americans and Hispanic populations. Women are two-thirds more likely than men to live with Alzheimer's disease. While women live longer than men — and this can be a contributing factor to a higher number of cases in women — it is not the only reason, and research is ongoing. African Americans are two times more likely than Caucasians to have Alzheimer's, while Latinos are 1.5 times more likely than Caucasians to have the disease. The reasons for disparity are not entirely known at this time, but some research has suggested that the higher rates of cardiovascular disease within these populations put them at a greater risk for Alzheimer's.

ADRD are not the only brain health concerns experienced by adults in Oklahoma. An additional 1 in 7 (13.6%) Oklahoma adults ages 45 years and older reported experiencing cognitive decline in 2019. Over 85% of adults who reported experiencing cognitive decline also reported having at least one chronic health condition.<sup>3</sup>

**Estimated Lifetime Risk for Alzheimer's Dementia, by Sex, at Ages 45 and 65**





## Workforce

The primary care workforce in Oklahoma is currently not prepared to meet the needs of people with dementia. The 2022 Alzheimer's Association Facts and Figures reported that Oklahoma has only 26 geriatricians statewide and 22, 820 home health and personal care aides. The geriatric care workforce in Oklahoma will need to increase by 557% by 2050 to meet the demand and by 33% for home health and personal care aides.<sup>2</sup>

Reducing the burden of chronic diseases and improving the health of Oklahomans — older adults in particular — requires eliminating disparities and addressing social determinants of health. Cognitive health is no exception. Disparities in socioeconomic status and/or access to health care can influence Alzheimer's disease and other dementias, as they could contribute to missed or delayed diagnosis. In Oklahoma, among adults ages 45 years and older who reported experiencing cognitive decline in 2021 (last available data from BRFSS Subjective Decline optional module), approximately 1 in 2 (47.5%) adults reported an annual household income of under \$25,000 and 37.1% reported high school or less than high school education.<sup>5</sup> When it comes to the poverty and uninsured rate, Oklahoma has been falling behind the United States average in recent years.<sup>8</sup> According to the Behavioral Risk Factor Surveillance System, 88% of people in Oklahoma that reported Subjective Cognitive Decline (SCD) have at least one chronic condition.<sup>3</sup>

## Risk Factors

Researchers believe the cause for Alzheimer's disease isn't one single thing, but rather developed from multiple factors such as genetics, lifestyle and environment. While not all risk factors can be changed (age, family, genetics), evidence suggests some risk factors are modifiable.



### AGE

The majority of people who develop Alzheimer's are 65 years or older. Age is the greatest risk factor. As people get older the percentage of those with Alzheimer's dementia increases: 5% ages 65-74, 13% ages 75-84 and 33.2% ages 85 or older. The baby-boomer generation coming into the ages of 65 years and older will greatly increase the reported Alzheimer's cases in the United States.<sup>2</sup>



### GENETICS

There are several genes that researchers have found that increase the risk of Alzheimer's. There are two categories of genes that can influence development of the disease: risk genes and deterministic genes. Risk genes increase one's chance of developing the disease, while deterministic genes directly cause the disease and guarantees that if the gene is inherited one will develop the disease. Deterministic genes are found to be rare and only account for an estimated 1% or less of Alzheimer's cases.<sup>2</sup>



### FAMILY HISTORY

Having a family history of Alzheimer's is not necessary for someone to develop the disease; however, those that have a first-degree relative (parent or sibling) with Alzheimer's are more likely to develop the disease than those without a parent or sibling with the disease.<sup>2</sup> When the disease runs within a family, genetics, environmental factors or both could play a role.



### MODIFIABLE RISK FACTORS

The Centers for Disease Control and Prevention (CDC) found in a recent study that if someone has one or more chronic conditions, they are more likely to report having subjective cognitive decline (SCD). The chronic conditions reported were diabetes, heart disease, arthritis, stroke, chronic obstructive pulmonary disease (COPD), asthma and kidney disease.<sup>8</sup> Having worsening or frequent issues with memory loss or confusion in addition to chronic conditions can make activities of daily living more difficult. SCD can put someone at greater risk for Alzheimer's disease. According to the 2019 BRFSS in Oklahoma, 1 in 7 people ages 45 years and older said they were experiencing SCD. Over 80% of those who said they have SCD also said they have at least one chronic condition.<sup>3</sup> Hearing loss is also a modifiable risk factor; according to a 2022 study published in JAMA Neurology, using hearing aids or cochlear implants can help improve cognitive decline, as well.<sup>6</sup>

**Four unhealthy behaviors** (poor diet, tobacco use, excessive alcohol use, sedentary lifestyle) influence **five chronic diseases** (cardiovascular disease, cancer, diabetes, Alzheimer's disease, lung disease) that account for about **61% of all deaths in Oklahoma**. In 2020, approximately 3 in 5 Oklahomans died from a 4-5-61 chronic disease, or approximately 48,000 annually.

## 10 Ways to Love Your Brain

There is growing research showing that healthy behaviors are shown to prevent cancer, diabetes and heart disease. These behaviors may also reduce the risk for SCD.<sup>8</sup> Strong evidence shows that what is good for the heart is good for the brain. People may reduce their risk of cognitive decline by adopting key lifestyle habits. When possible, combine these 10 habits to achieve maximum benefit for the brain and body. It's never too late to incorporate healthy habits.



### BREAK A SWEAT

Engage in regular cardiovascular exercise that elevates heart rate and increases blood flow. Studies have found that physical activity reduces risk of cognitive decline.



### FUEL UP RIGHT

Eat a balanced diet that is higher in vegetables and fruit to help reduce the risk of cognitive decline.

### BUDDY UP

Staying socially engaged may support brain health. Find ways to be part of your local community or share activities with friends and family.



### FOLLOW YOUR HEART

Risk factors for cardiovascular disease and stroke — obesity, high blood pressure and diabetes — negatively impact your cognitive health.

### HEADS UP!

Brain injury can raise risk of cognitive decline and dementia. Wear a seat belt and use a helmet when playing contact sports or riding a bike.



### BUTT OUT

Smoking increases risk of cognitive decline. Quitting smoking can reduce risk to levels comparable to those who have not smoked.

### STUMP YOURSELF

Challenge your mind. Build a piece of furniture. Play games of strategy, like bridge.



### HIT THE BOOKS

Formal education will help reduce risk of cognitive decline and dementia. Take a class at a local college, community center or online.

### TAKE CARE OF YOUR MENTAL HEALTH

Some studies link depression with cognitive decline, so seek treatment if you have depression, anxiety or stress.



### CATCH SOME ZZZs

Not getting enough sleep may result in problems with memory and thinking.

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. When looking specifically at deaths due to heart disease and stroke, Oklahoma exceeds the national average. As previously mentioned, some recent research has shown a likely link between chronic diseases and MCI. For Oklahomans, it is important to recognize the link between brain health and physical health: What is good for the body and heart is good for the brain.

Health Outcomes: Oklahoma	Oklahoma	Status	USA
MALE LIFE EXPECTANCY	73.2		76.3
FEMALE LIFE EXPECTANCY	78.3		81.4
OVERALL LIFE EXPECTANCY	75.7		78.8
ADULT OBESITY PREVALENCE	36.4%		31.9%
CHILDHOOD OBESITY PREVALENCE (WIC 2-4 YEARS)	13.8%		14%
PHYSICAL ACTIVITY PREVALENCE (ANY/LAST 30 DAYS)	71.4%		77.6%
AEROBIC PHYSICAL ACTIVITY (150 MINS/WEEK)	37.3%		50.1%
MINIMAL VEGETABLE CONSUMPTION PREVALENCE*	21.5%		21.2%
MINIMAL FRUIT CONSUMPTION PREVALENCE*	48.4%		39.3%
DIABETES PREVALENCE	13.0%		10.6%
HYPERTENSION PREVALENCE	37.8%		32.3%
CARDIOVASCULAR DISEASE (AGE-ADJUSTED DEATH RATE)†	300.3		224.4
CANCER (AGE-ADJUSTED DEATH RATE)†	171.1		144.1

### Legend

-  Better than national outcome
-  ± 0.5 from national outcome
-  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.

## Goals & Objectives

The goals and objectives outlined in the plan aim to take a comprehensive approach to building better infrastructure in Oklahoma for care partners and those living with Alzheimer's and other dementias. There is a call for coordination within the workforce, public policy and public awareness. The plan focuses on providing all Oklahomans adequate access to resources, and also highlights improvements to the workforce, awareness and education. This includes certification and education locations, schools, worksites and the communities in which people live, work and play.

This plan aims to put resources and educations in the hands of Oklahomans so they can better handle the disease and make informed decisions while also feeling supported by the environment in which they live, with the ultimate goal of creating a dementia-friendly state.

Individuals representing over 50 agencies came together to develop goals and objectives to be addressed by partners across the state. Each goal aligns with at least one action item from the Healthy Brain Initiative Road Map and was identified as an area of need; a Coordinating Agency was designated to ensure the goal was actionable, as well as to coordinate a group effort to work toward completion of the goal. 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

To advance brain health in Oklahoma.



### MISSION

To promote a system of collaboration among Oklahoma Healthy Brain Initiative stakeholders.



### CORE VALUES

- Increase public awareness of Alzheimer's and dementia.
- Provide an accessible location for resources regarding Alzheimer's and dementia.
- Identify opportunities for provider collaboration.
- Inform providers about proper, early and accurate diagnosis.
- Address need for education among policymakers.



# Policy Development

**By the end of 2024, expand nurse training to include career laddering and micro-credentialing opportunities.**

**Organizations responsible:** Oklahoma Healthy Brain Initiative - Workforce Development Workgroup, Oklahoma Assisted Living Association, Oklahoma State Department of Health

- Identify current training programs and curriculum.
- Develop an effective, transparent training tracking system for CNAs and CMAs.

**By 2026, identify strategic locations and develop Dementia Coordinator positions across the state.**

**Organizations responsible:** Oklahoma State Department of Health, Alzheimer's Association

- By 2024, establish a permanent dementia coordinator position within the Oklahoma State Department of Health.
- By 2025, establish streams of funding and locations for additional dementia coordinators to allow for comprehensive service provision and planning to be carried out across the state.

**By the end of Legislative Session 2023, enact a Bipartisan, Bicameral Dementia (or Brain Health) Legislative Champions program that works with various existing caucuses.**

**Organizations responsible:** Alzheimer's Association, Oklahoma Healthy Brain Initiative - Policy Development Workgroup

- Identify legislative members with care/concern for brain health.
- Provide regular education on brain health issues.

**By 2026, establish Dementia Specific Respite funding.**

**Organizations responsible:** Alzheimer's Association, Oklahoma Department of Human Services - Community Living, Aging and Protective Services

- Identify funding stream (and all necessary structures).

**By 2027, evaluate the feasibility of expanding Adult Day Services.**

**Organizations responsible:** Alzheimer's Association, Oklahoma Healthy Brain Initiative - Policy Development Workgroup

- Request and complete an interim study by 2025.

# Public Education

**By 2025, create a comprehensive education resource which focuses on brain health and cognitive aging, changes to discuss with providers, questions to ask providers, benefits of early detection and healthy lifestyle choices to disseminate to the public (i.e., school age children, adults, older adults, providers and organizations).**

**Organizations responsible:** Oklahoma Healthy Brain Initiative - Public Education Workgroup

- By 2024, sign up to offer Dementia Dialogues statewide from the Office for the Study of Aging at the University of South Carolina.
- By 2024, increase the utilization of Be a Neighbor by 5% and increase by 5% yearly after.

**By 2024, formalize partnerships with Office of Minority Health staff throughout Oklahoma to disseminate information and resources around brain health and cognitive aging.**

**Organizations responsible:** Oklahoma State Department of Health - Central and County Health Departments

- Schedule and hold two Community Education trainings per year through the Alzheimer's Association.

**By summer 2024, certify two new cities in Oklahoma as Dementia Friendly.**

**Organizations responsible:** Oklahoma State Department of Health, Oklahoma Healthy Brain Initiative Coalition - Members & Partners

- Apply for Oklahoma to be a statewide effort with Dementia Friendly America.
- Create Dementia Friendly Oklahoma criteria and applications.

**By 2026, offer virtual dementia training statewide.**

**Organizations responsible:** Oklahoma Healthy Brain Initiative Coalition - Members & Partners, Oklahoma State Department of Health

- By summer 2023, establish funding source for training and curriculum materials.
- By 2024, select individual(s) to attend Second Wind Dreams Virtual Dementia Training.
- By 2025, complete one train-the-trainer training each quarter.

**Annually increase public awareness of Alzheimer's disease and dementia through social media and other outlets.**

**Organizations responsible:** Oklahoma Healthy Brain Initiative Coalition - Members & Partners, Oklahoma State Department of Health

# Data & Surveillance

**Yearly, include one of the two modules to the Centers for Disease Control Oklahoma Behavioral Risk Factor Surveillance System (BRFSS) survey in order to provide the Oklahoma Healthy Brain Initiative workgroups sound data to support projects and coalition-related work.**

**Organizations responsible:** Oklahoma State Department of Health

- During odd years, include the Cognitive Decline Module.
- During even years, include the Caregiver Module.

**By 2026, utilize current data and needs assessments to collaborate with the Oklahoma Caregiver Coalition to create and implement a new caregiver survey to address the needs of caregivers in Oklahoma.**

**Organizations responsible:** Oklahoma Caregiver Coalition, Oklahoma Healthy Brain Initiative Coalition, Oklahoma State Department of Health, Oklahoma Department of Human Services - Community Living, Aging and Protective Services

- By summer 2025, develop community needs assessment for specific diverse communities.

**By 2025, utilize multiple data sources to create and distribute infographics regarding older adults and Alzheimer's disease and related dementias.**

**Organizations responsible:** Oklahoma Healthy Brain Initiative Coalition - Data & Surveillance Workgroup, Oklahoma State Department of Health, Alzheimer's Association, Hospital Association, Primary Care Association

- By 2024, vet and compile data sources for the creation of yearly infographics.
- Annually distribute infographics to Oklahoma caregivers, providers and the general public in order to educate and inform about current trends in Oklahoma.

**By fall 2025, establish an inter-agency data sharing agreement for Alzheimer's Disease and Related Dementias data.**

**Organizations responsible:** Oklahoma State Department of Health, Oklahoma Department of Human Services - Community Living, Aging and Protective Services, Area Agencies on Aging

- By 2024, develop coordinated, collaborative partnerships between state agencies and relevant associations.
- By 2025, identify and develop coordinated funding sources to ensure sustainable and continued growth and maintenance of data sharing, collection and report generation.

# Workforce Development

**By 2025, increase healthcare workers in-service opportunities throughout the state by 10%, with a 5% increase each year after.**

**Organizations responsible:** Oklahoma Dementia Care Network, Oklahoma State Department of Health

- Utilize the curriculum and trainings created by the Oklahoma Dementia Care Network and Project Echo for CNAs and CMAs across the state.
- Establish/maintain 5% of newly graduating CNAs with dementia certification over the next five years.
- Increase the number of current CNAs and CMAs with dementia certification by 5% over the next five years.

**By January 2024, provide Alzheimer's Disease and Related Dementias specific certification for Community Health Workers (CHWs) and Community Health Representatives (CHRs).**

**Organizations responsible:** OUHSC Hudson College of Public Health, Oklahoma Dementia Care Network

- Promote and utilize Dr. Reinschmidt's ADRD-specific training for CHWs and CHRs.

**By 2025, increase first responders Alzheimer's Disease and Related Dementias training opportunities throughout the state by 5%.**

**Organizations responsible:** Oklahoma Dementia Care Network, OU College of Medicine

- Utilize the curriculum and trainings created by the Oklahoma Dementia Care Network and OU College of Medicine.

## General

**Inclusion of Dementia in State Health Improvement Plans.**

**Organizations responsible:** Oklahoma State Department of Health



# Members/Partners



If you are interested in joining the State Plan Implementation efforts please contact [center@health.ok.gov](mailto:center@health.ok.gov).

- AARP
- ABLE Technology
- Alzheimer's Association
- Around the Clock Home Care
- Care Providers of Oklahoma
- Caregivers - Past and Present
- Cherokee Elder Care Pace
- Compassus Hospice
- Daily Living Center
- Dementia Friendly Tulsa
- Denis Rischard Elder Law Attorney
- Department of Human Services - Ombudsmen
- Dr. Sarah Coats, neuropsychologist
- Dr. Germaine Odenheimer, neurologist and geriatrician
- Edward Jones
- EODD Area Agency on Aging
- Indian Health Services
- Leading Age Oklahoma
- Life Senior Services
- Oklahoma Assisted Living Association
- Oklahoma City Veterans Affairs
- Oklahoma Dementia Care Network
- Oklahoma Family Health
- Oklahoma Healthy Aging Initiative
- Oklahoma Health Care Authority

- Oklahoma Hospital Authority
- Oklahoma Medical Research Foundation
- Oklahoma Primary Care Association
- Oklahoma Public Health Association
- OSDH - Chronic Disease Prevention Services
- OSDH - Community Analysis and Linkages
- OSDH - Community Health Departments
- OSDH - Injury Prevention Services
- OSDH - Tribal Liaison
- OSDH - Office of Primary Care
- OU Health
- OUHSC - Department of Medicine
- OUHSC - Hudson College of Public Health
- Persons Living with the Disease
- RSVP of Central Oklahoma
- RSVP of Kay County
- SODA Area Agency on Aging
- Synergy Home Care
- Telligen
- Tulsa Community College
- Tulsa Technology
- Well Preserved Advisors

# References

---

- 1) U.S. Department of Health and Human Services. (2014). *Role of Community Health Workers*. National Heart Lung and Blood Institute. Retrieved August 4, 2022, from <https://www.nhlbi.nih.gov/health/educational/healthdisp/role-of-community-health-workers.htm>
- 2) 2022 Alzheimer's disease facts and figures. Alzheimer's Association. (2022). Retrieved August 4, 2022, from <https://www.alz.org/media/Documents/alzheimers-facts-and-figures.pdf>
- 3) Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System, 2019. Available at <https://www.cdc.gov/brfss/brfssprevalence/index.html>
- 4) Centers for Disease Control and Prevention. (2019, April 5). What is dementia? Centers for Disease Control and Prevention. Retrieved August 4, 2022, from <https://www.cdc.gov/aging/dementia/index.html>
- 5) Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System, 2021. Available at <https://www.cdc.gov/brfss/brfssprevalence/index.html>
- 6) Yeo BSY, Song HJJMD, Toh EMS, et al. Association of Hearing Aids and Cochlear Implants With Cognitive Decline and Dementia: A Systematic Review and Meta-analysis. *JAMA Neurol.* 2023;80(2):134-141. doi:10.1001/jamaneurol.2022.4427
- 7) Centers for Disease Control and Prevention. (2021, September 10). Road map for State and local public health. Centers for Disease Control and Prevention. Retrieved August 4, 2022, from <https://www.cdc.gov/aging/healthybrain/roadmap.htm>
- 8) Alzheimer's Association and Center for Disease Control and Prevention. *Healthy Brain Initiative, State and Local Public Health Partnerships to Address Dementia: The 2018-2023 Road Map*. Chicago, IL: Alzheimer's Association; 2018.
- 9) *Is Alzheimer's genetic?* Alzheimer's Disease and Dementia. (n.d.). Retrieved August 19, 2022, from <https://www.alz.org/alzheimers-dementia/what-is-alzheimers/causes-and-risk-factors/genetics>
- 10) Centers for Disease Control and Prevention. (2020, May 29). *Healthy Body, healthier brain*. Centers for Disease Control and Prevention. Retrieved August 19, 2022, from <https://www.cdc.gov/aging/publications/features/healthy-body-brain.html>



**OKLAHOMA**  
State Department of Health

[Oklahoma.gov/Health](http://Oklahoma.gov/Health)