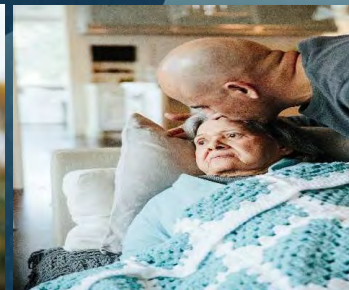


# Aging and Health: CDC's Healthy Brain Initiative

Brain Health Forum  
April 26, 2022

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Centers for Disease Control and Prevention



Centers for Disease Control and Prevention

National Center for Chronic Disease Prevention and Health Promotion



# AGING AND HEALTH

- Aging well depends on your:
  - Genes
  - Environment
  - Lifestyle
  
- Healthy lifestyle choices may help you maintain a healthy body and brain.



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# YOUR BODY AND BRAIN CAN CHANGE WITH AGE

The aging process is normal:

- Your brain's physical structure and abilities change.
- Your circulatory and digestive systems, kidneys, and liver slow down.
- Your body's ability to break down and use medicine changes.



**All of this means your reactions to medicines change, too.**



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**Cognition** is the ability to:

**THINK**

**REASON**

**REMEMBER**



# Healthy Cognitive Functioning

- Language
- Thought
- Memory
- Executive function  
(the ability to plan and carry out tasks)
- Judgment
- Attention
- Perception
- Remembered skills  
(such as driving)
- Ability to live a purposeful life



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# AGE-RELATED CHANGES IN MEMORY AND LEARNING

## You may find:

- Increased difficulty finding words
- More problems in multi-tasking
- Mild decreases in ability to pay attention

## You can still:

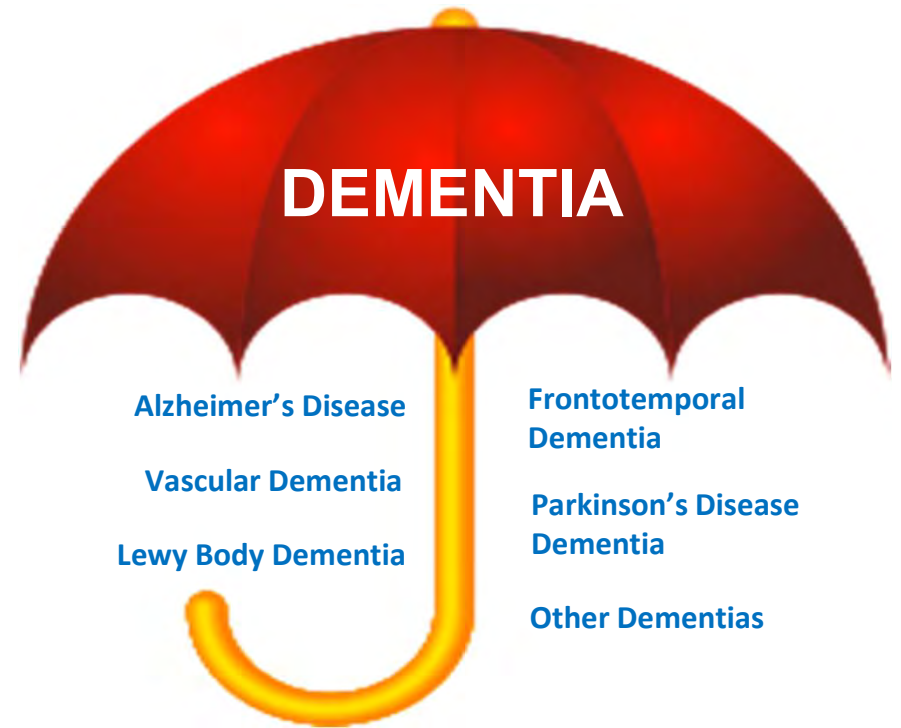


- Learn new things
- Create new memories
- Improve vocabulary and language skills



# WHAT IS DEMENTIA?

- Dementia is changes in the brain resulting in loss of cognitive function that interferes with daily life
- Alzheimer's is the most common cause of dementia
- Many (maybe majority) of cases have multiple causes
- Will refer to collection of diseases as **Alzheimer's disease and related dementias (ADRD)**



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“Alzheimer’s is the most under-recognized  
threat to public health in the 21st century.”

*--Dr. David Satcher  
Former Director, CDC  
Former U.S. Surgeon General*

Satcher, The Hill (Nov. 14, 2014).

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# WHAT MAKES ALZHEIMER'S A PUBLIC HEALTH CONCERN?



The burden is  
**LARGE**

The impact is  
**MAJOR**



There are ways to  
**INTERVENE**

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# SCOPE OF THE ALZHEIMER'S EPIDEMIC (U.S.)

6.2 million  
U.S. adults

- ↑ to 14 million  
by 2060

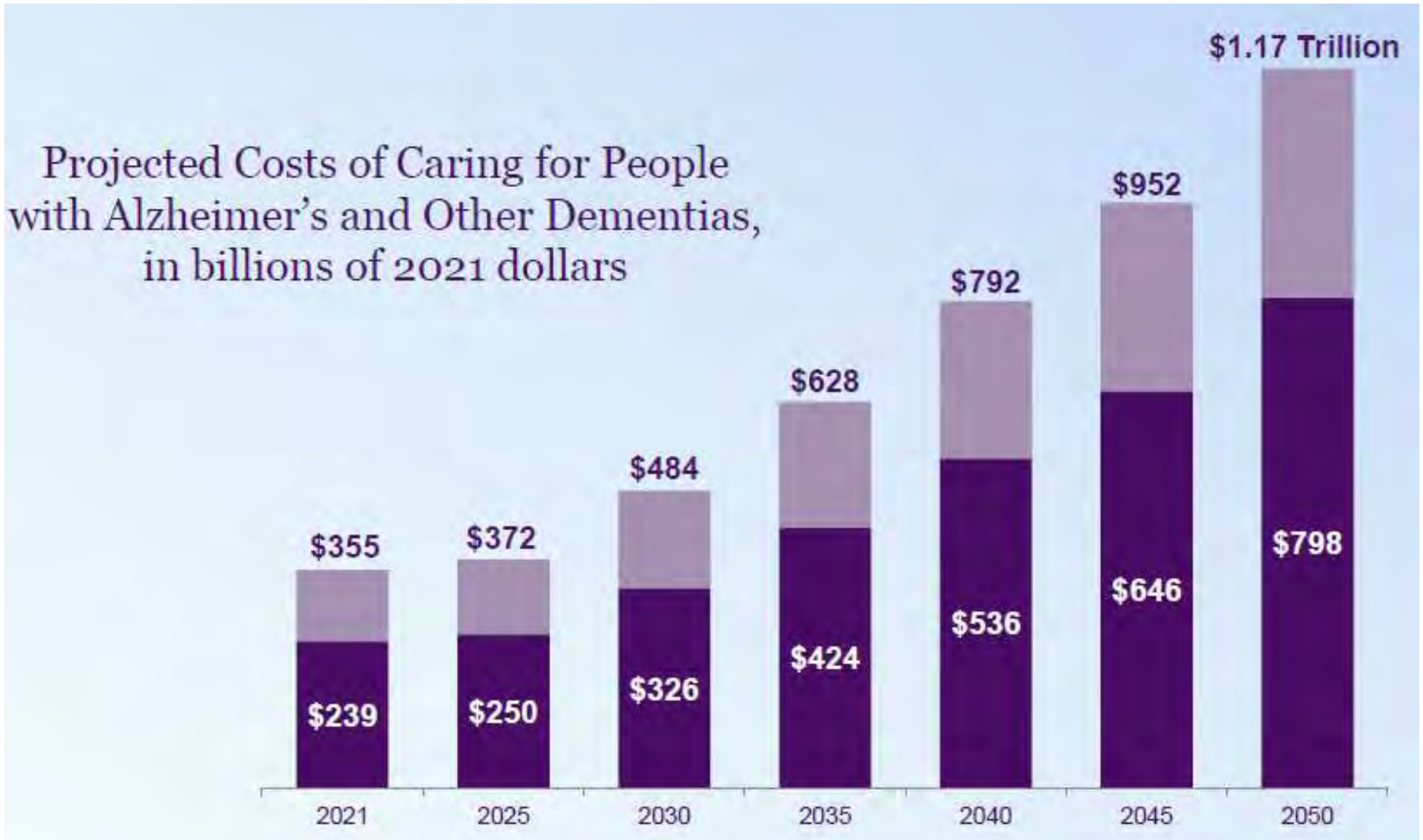
1 in 9 adults  
age  $\geq 65$

1 in 3 adults  
age  $\geq 85$

2/3 are  
women



# COSTS OF DEMENTIA



*Econometric model developed by The Lewin Group for the Alzheimer's Association.*

# ***LEADING CAUSES OF DEATH, US ADULTS 65+ YEARS, 2020***

<b>Rank</b>	<b>Cause of Death</b>
1	Heart Disease
2	Cancer
3	COVID-19
4	Unintentional Injuries
5	Stroke
6	Chronic lower respiratory diseases
7	Alzheimer's disease
8	Diabetes
9	Influenza and pneumonia
10	Kidney disease

SOURCE: National Center for Health Statistics. Underlying Cause of Death 2020- CDC WONDER Online Database (2020)

# New Estimates of Americans with Alzheimer's Disease and Related Dementias Show Racial and Ethnic Disparities

Number of Americans with Alzheimer's Disease Expected to Increase

Percentage of Adults Aged 65 and Older with Alzheimer's Disease by Race and Ethnicity



Alzheimer's Disease Projected to Nearly Triple by 2060



296249A



[www.cdc.gov/aging](http://www.cdc.gov/aging)

Centers for Medicare and Medicaid Services, 2014

Census Population Projections Program, 2014 to 2060

SOURCE: Matthews, K. A., Xu, W., Gaglioti, A. H., Holt, J. B., Croft, J. B., Mack, D., & McGuire, L. C. (2018). Racial and ethnic estimates of Alzheimer's disease and related dementias in the United States (2015–2060) in adults aged  $\geq 65$  years. *Alzheimer's & Dementia*.

<https://doi.org/10.1016/j.jalz.2018.06.3063>

# RISK REDUCTION FOR DEMENTIA

## Risk Factors

Depression

Diabetes

Hearing Loss

Mid-life Hypertension

Physical Inactivity

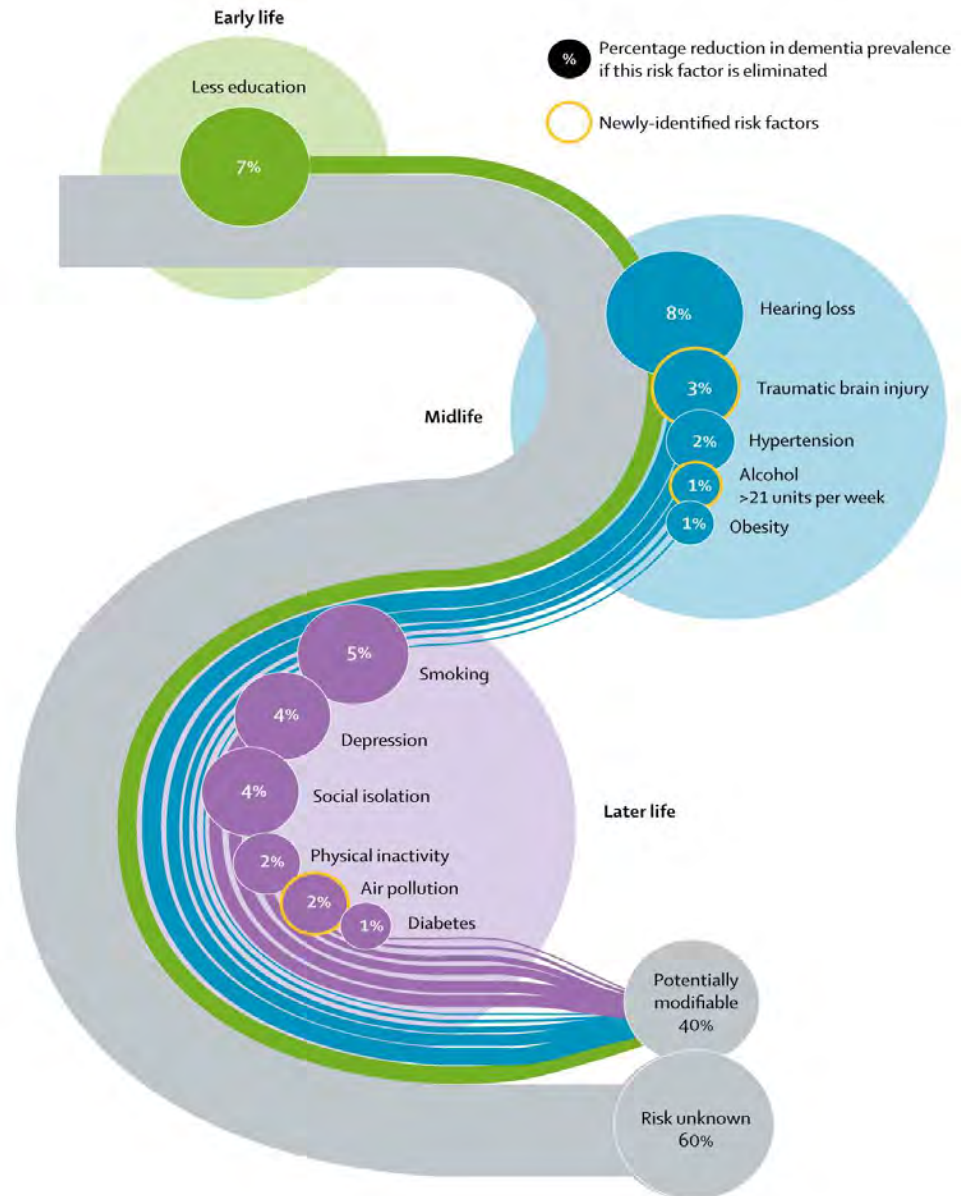
Poor Diet Quality and Obesity

Poor Sleep Quality and Sleep Disorders

Tobacco Use

Traumatic Brain Injury

Unhealthy Alcohol Use

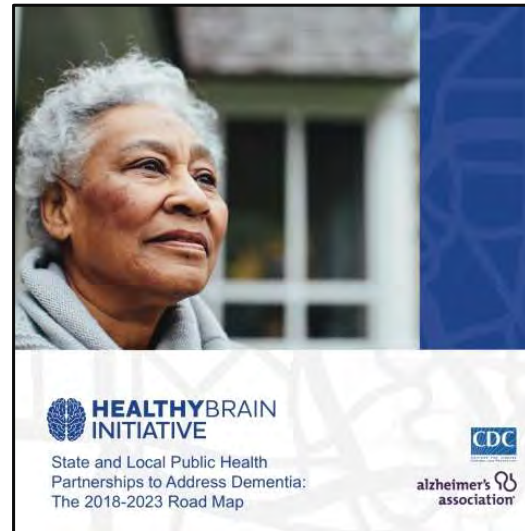
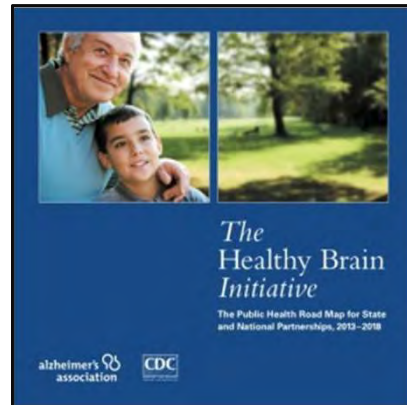
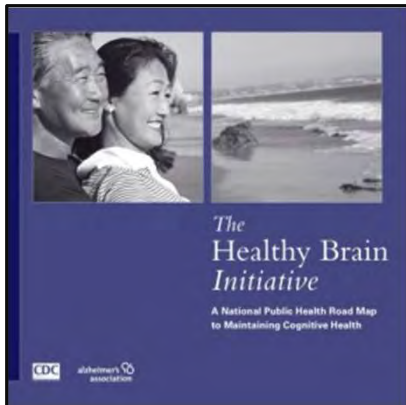
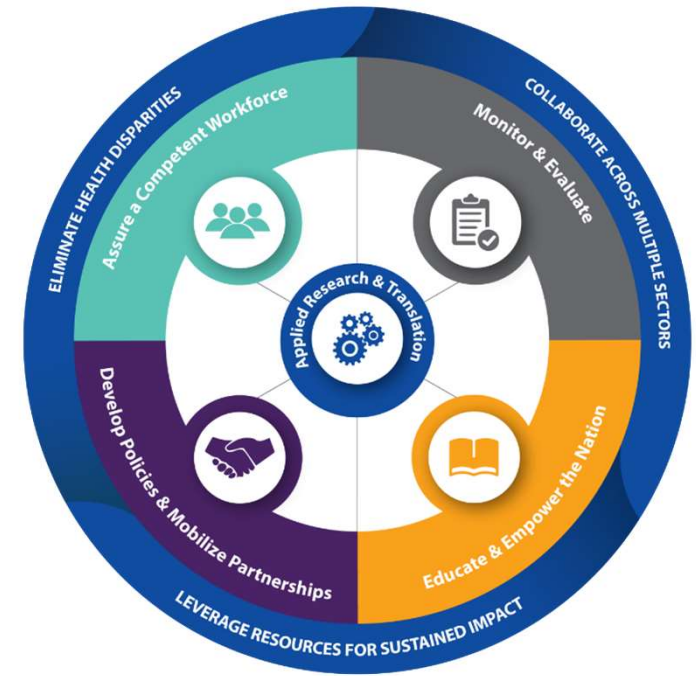


An update to the 2017 Lancet Commission on Dementia prevention, intervention, and care expands the life-course model showing the potentially modifiable risk factors that contribute to dementia. [Read the full Commission.](#)



# HEALTHYBRAIN INITIATIVE

Public health strategies to promote brain health, address dementia, and help support caregivers



[www.cdc.gov/aging](http://www.cdc.gov/aging)



**Advance brain health** as a central part of public health practice (nationally)

BOLD is designed to **create a strong public health infrastructure** for dementia and dementia caregiving

<https://www.cdc.gov/aging/funding/hbi/index.html>

<https://www.cdc.gov/aging/funding/php/index.html>

<https://www.cdc.gov/aging/funding/phc/index.html>



# NEW: CHRONIC DISEASE MESSAGES



**HEALTHY BLOOD PRESSURE.**

## HEALTHY BRAIN.

It is normal for your brain to change as you get older. Having healthy blood pressure can lower your risk for memory loss and confusion. Follow your healthcare provider's guidance to manage your blood pressure.



**HEALTHY BLOOD SUGAR.**

## HEALTHY BRAIN.

Having diabetes can put your brain health at risk. Diabetes can damage blood vessels, which results in reduced or blocked blood flow to the brain. This can double your risks for Alzheimer's disease, memory loss, and confusion.

It is important to keep your blood sugar levels under control to stay healthy. Visit your doctor regularly to help manage your diabetes. Here are some other ways to help you manage your blood sugar and protect your brain health:



**HEALTHY DIET.**

## HEALTHY BRAIN.

It is normal for your brain to change as you get older. A healthy diet may reduce your risk for memory loss and confusion. A healthy diet can help to improve your overall health, including brain health. A healthy diet:

- Emphasizes fruits, vegetables, whole grains and fat-free or low-fat milk and milk products
- Includes lean meats, poultry, fish, beans, eggs and nuts
- Is low in saturated fats, trans fats, cholesterol, salt (sodium) and added sugars
- Stays within your daily calorie needs

Please talk to your healthcare provider about how you can have a healthy diet.



**HEALTHY BODY.**

## HEALTHY BRAIN.

It is normal for your brain to change as you get older. Regular physical activity can have many benefits for health, including lowering your risk for memory loss and confusion. It can:

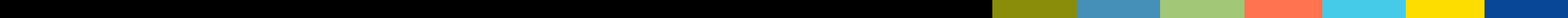
- Help you think better
- Improve your sleep quality and help you to fall asleep faster
- Improve your feelings of well-being
- Reduce symptoms of anxiety and depression
- Lower your risk of Alzheimer's Disease and related dementias

All forms and amounts of physical activity are helpful for the health of older adults. For maximum health benefits, older adults should do all 3 of these activities:





# Impact of the Pandemic on Older Adults

- Nearly 75% of all US COVID-19 related deaths in the US have occurred in people 65 and older.
  - In US and elsewhere, older adults were a priority population for COVID-19 vaccination.
    - Nearly a third of people 65 and older who are eligible for a booster have not yet had one
  - Mortality rates were higher in places (e.g., Hong Kong) where this population was not prioritized for vaccination.
  - During the COVID-19 pandemic, many chronic conditions (such as heart conditions, cancer, chronic lung diseases, dementias and others) were associated with increased COVID-19-related morbidity and mortality
  - Multiple chronic conditions were associated with even poorer health outcomes
- 

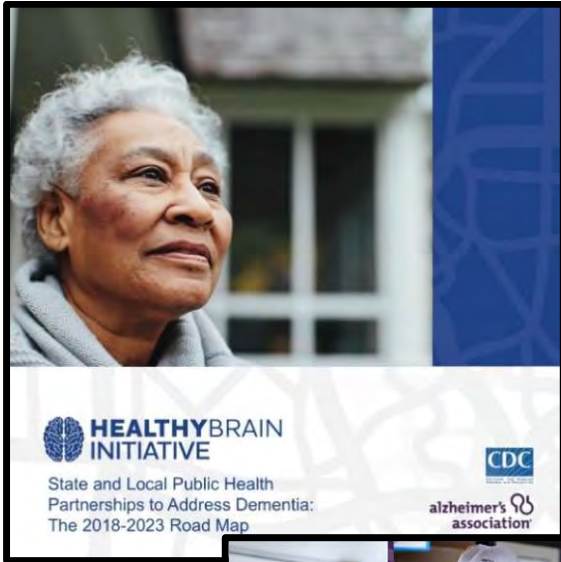


# Impact of the Pandemic on Chronic Disease

- Effects of the pandemic on people with chronic conditions were not limited to direct effects of COVID-19.
- During the pandemic, use of health care services declined for preventive, routine and even emergency care.
- Excess mortality has been observed related to COVID-19, but also related to cardiovascular conditions, diabetes, and dementia among others.



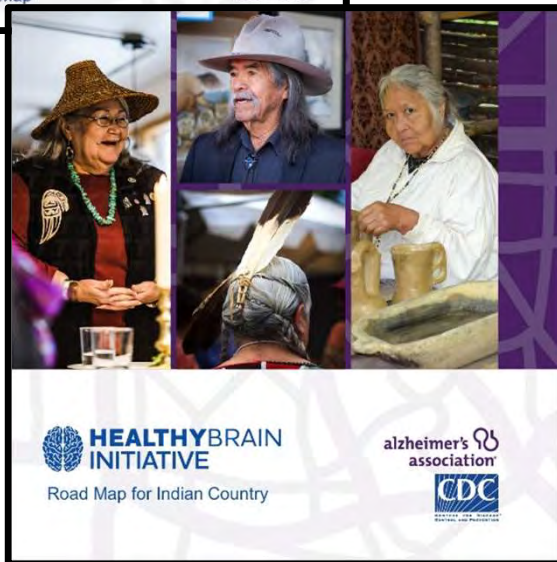
# SUMMARY



- Alzheimer's and other dementias affect millions of people, are costly, and are growing

- Public Health has a role and can impact Alzheimer's and other dementias

- Healthy Brain Initiative, through its Road Map Series and BOLD, is helping public health and its partners chart a course for a dementia-prepared future



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## Alzheimer's Disease and Healthy Aging

COVID-19: Guidance for Older Adults



Healthy Brain Initiative Road Map for Indian Country

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- [Healthy Body, Healthier Brain](#)
- [Loneliness and Poor Health \(Español\)](#)
- [Help for Caregivers \(Español\)](#)
- [The Truth About Aging and Dementia \(Español\)](#)

What is Alzheimer's disease?



Caregiving



Healthy Brain Road Maps



Healthy Brain Initiative



Data and Statistics



Communications Center



Alzheimer's Disease and Healthy Aging Data Portal



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# THANK YOU



[www.cdc.gov/aging](http://www.cdc.gov/aging)



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Division of Population Health

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.

