COGNITIVE IMPAIRMENT:

The Impact on Health in California

Although cognitive impairment is not an inevitable sign of aging, age is the greatest risk factor. As a steady increase of baby boomers turn 65, the number of people with cognitive impairment in California has the potential to double in just 20 years. For Latinos and Asian Americans, the numbers will triple.

With the rapidly increasing number of older Americans, cognitive impairment is a growing public health concern in California and other states. Cognitive impairment will place unprecedented demands on our existing health system and, if we are not prepared, has the potential to present a tremendous economic burden.

Estimates vary, but, nationally, experts suggest that 5.1 million Americans aged 65 years or older may have Alzheimer's disease, the most well-known form of cognitive impairment. These numbers are predicted to increase to 13.2 million by 2050.

Every state must begin now to address this important public health challenge, and state public health professionals need to join in the cause. Like every other public health issue, states can conduct surveillance which will help determine the best strategies, programs, and policies to, address the needs of community-dwelling individuals with cognitive impairment and to improve the health and well-being of people impacted by it. Public health efforts are critical to promote healthy behavior and extend independent life in the community.



What Is Cognitive Impairment?

Cognitive impairment is when a person has trouble remembering, learning new things, concentrating, or making decisions that affect their everyday life. Cognitive impairment ranges from mild to severe. With mild impairment, people may begin to notice changes in cognitive function, but still be able to do their everyday activities. Severe levels of impairment can lead to losing the ability to understand the meaning or importance of something and the ability to talk or write, resulting in the inability to live independently.

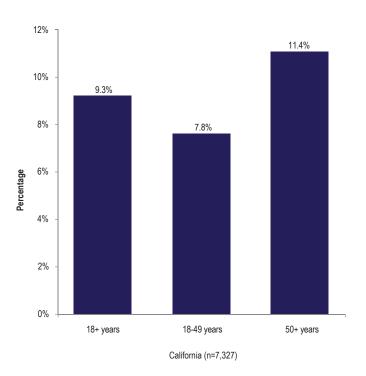


The data that follow are taken from the Centers for Disease Control and Prevention's (CDC) 2009 Behavioral Risk Factor Surveillance System (BRFSS) Impact of Cognitive Impairment Optional Module for California. The BRFSS (www.cdc.gov/brfss) is a continuous data collection tool for states to gather data on health issues to use in setting priorities. As a result of the data collected from this module, California will be in a better position to highlight opportunities to address the needs and improve the health of adults in California affected by cognitive impairment. Public health professionals, aging service providers, the Department of Veterans Affairs, and other partners will have state-level data to reference in developing programs and policies to address the needs of adults living with cognitive impairment in communities across the state.

Data refer to the respondent's perception of cognitive impairment and not any specific diagnosis. Cognitive impairment (CI) is defined as "confusion or memory loss that is happening more often or is getting worse during the past 12 months." These data are weighted and refer to the civilian, noninstitutionalized population. Source: CDC, BRFSS, 2009

Perceived burden of cognitive impairment, by age

Percentage of individuals aged 18 or older who perceive themselves to be cognitively impaired (CI), *California*, 2009



Approximately 9% of adults aged 18 or older in California perceive themselves as being cognitively impaired (CI). Approximately 11% of adults aged 50+ in California perceive themselves as being cognitively impaired.

Why This Matters: State health agencies can ensure that strategic planning (e.g., for emergency preparedness), surveillance, and programmatic efforts carried out in collaboration with key partners include elements that support the health and wellbeing of this vulnerable population. For example, chronic disease self-management programs should take into account the needs and abilities of people living with CI.

Older adults are the population most at risk for CI. The dramatic aging of the U.S. population will result in substantially increased numbers of individuals with CI in states.

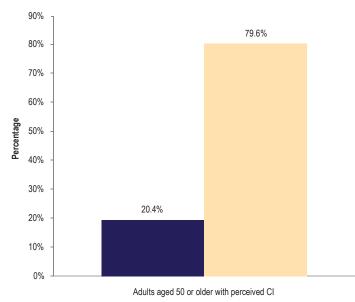
State health departments play a critical role in providing information about the impact of cognitive impairment on individuals, communities and states. This report provides a snapshot of current needs and provides the means to track trends that can assist policy and program development to address the needs of this vulnerable population.⁷⁷

—Wayne Giles, M.D. Director, Division of Adult and Community Health Centers for Disease Control and Prevention



Care provided due to cognitive impairment, Adults 50+

Percentage of adults aged 50 or older with perceived cognitive impairment (CI) that reported having care provided to them because of CI, *California*, 2009



■ Care always, usually, or sometimes provided ■ Care rarely or never provided

Approximately 20% of California adults aged 50 or older with perceived cognitive impairment (CI) reported having care provided to them by a family member or friend because of their CI.

Why This Matters: Family caregivers, who provide most of the care for people with CI, have been shown to have increased levels of depression and anxiety, poorer self-reported physical health, and increased mortality. ¹⁻² Individuals with severe CI generate high costs for Medicaid and other state programs, and these costs will increase as the population ages. ³

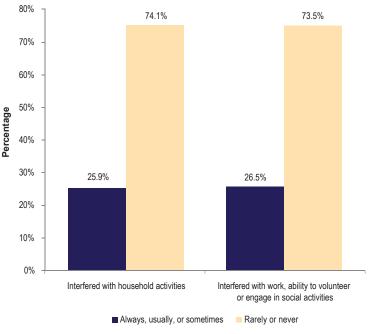
¹ Schulz, R. & Beach, S.R. (1999). Caregiving as a risk factor for mortality: The Caregiver Health Effects Study. *Journal of American Medical Association*, 282, 2215-2219.

² Schulz, R., O'Brien, A. T., Bookwala, J., & Fleissner, K. (1995). Psychiatric and physical morbidity effects of dementia caregiving: prevalence, correlates, and causes. *The Gerontologist*, 35, 771-791.

³ National Alliance for Caregiving & AARP (2004). *Caregiving in the U.S.* Available: http://www.caregiving.org/data/04finalreport.pdf

Perceived impact on activities, Adults 50+

Percentage of adults aged 50 or older with perceived cognitive impairment (CI) who reported their CI interfered with activities, by activity type, *California*, 2009



Discussed with health care professional, Adults 50+

Approximately 23% of California adults aged 50 or older with perceived cognitive impairment (CI) reported discussing increases in CI with a health care professional.

Of those who reported discussing perceived increases in CI with a health care professional, 44% reported receiving treatment including therapy and medication representing 9.3% of all adults with CI age 50+.

Why This Matters: Discussing changes in, or concerns about, cognition with a health care professional is important. Recognizing signs of cognitive impairment is critical to initiating effective treatment and care as well as to distinguish dementia, such as Alzheimer's disease, from other temporary and reversible conditions that may cause loss of cognitive functioning. Most Americans with Alzheimer's disease and other dementias have not been diagnosed.

Approximately 26% of California adults aged 50 or older with perceived cognitive impairment (CI) reported having to give up household activities because of CI. Approximately 27% of California adults aged 50 or older with perceived CI reported that it interfered in their ability to work, volunteer or engage in social activities.

Why This Matters: By preserving function, we can help older adults remain independent for as long as possible, which can improve their quality of life and delay the need for costly long-term care, such as home and community-based services or nursing home placement. State health departments can link those with CI and their family caregivers to easily accessible services, activities, and information (e.g., caregiver support programs and social services).



Lack of diagnosis may create serious safety issues for the person, the family, and others. Alzheimer's and other dementias limit a person's ability to understand and comply with prescribed treatments, including medications, and follow emergency preparedness procedures. People with Alzheimer's disease and other dementias are also at risk for fall-related injuries. In addition, both they and their family members are at risk when guns are in the home, and if people with dementia continue to drive when they are no longer capable of doing so safely.

Important Facts About Cognitive Impairment

- Cognitive impairment is not caused by any one disease or condition, nor is it limited to a specific age group.
- Alzheimer's disease and other dementias, and conditions such as stroke, traumatic brain injury, and developmental disabilities, can cause cognitive impairment. There are also some causes of cognitive impairment that may be treatable. Treatable conditions that may mimic cognitive impairment include depression, drug interaction, excess alcohol use, symptoms associated with certain vitamins, and dehydration.
- While age is the primary risk factor, other risks include family history, education level, head injury, exposure to pesticides or toxins, physical inactivity, and chronic conditions such as heart disease and stroke, diabetes, and high blood pressure.
- Some common signs of cognitive impairment include memory loss, frequently asking the same question or repeating the same story over and over, difficulty performing familiar tasks, trouble coming up with the right words to name objects, frequently forgetting events and appointments, not recognizing familiar people and places, having trouble exercising judgment (e.g., knowing what to do in an emergency), changes in mood or behavior, vision problems, and difficulty planning and carrying out tasks (e.g., following a recipe, writing a letter, or keeping track of monthly bills).
- Ways to reduce the risk of cognitive impairment include being physically active, eating a healthy diet, keeping your mind active, maintaining healthy blood sugar levels, maintaining good heart health (e.g., quit smoking, decrease cholesterol levels, reduce sodium [salt] intake, and decrease alcohol consumption), and protecting your head from injuries (e.g., wear a helmet when riding your bike, buckle your seat belt, and remove objects that could lead to a fall in your home).
- People with cognitive impairment are disproportionately affected by other chronic conditions (e.g., diabetes and heart disease).
 It is important for public health to incorporate strategies to assist individuals with cognitive impairment and their caregivers to effectively manage multiple conditions and their cognitive



impairment. This would improve their quality of life, help reduce health care costs, and reduce the burden on family caregivers.

- Although there is no cure for some causes of cognitive impairment (e.g., Alzheimer's disease), early identification of people who may be showing signs of cognitive impairment is important. They should be evaluated by a health care professional to ensure appropriate care and treatment. For Alzheimer's disease in particular, early-stage detection may slow progression of the disease if prescribed medication is started early in the disease process; this approach is associated with lower costs.
- More research is underway to determine how to maintain cognitive health and prevent cognitive impairment.

Cognitive Impairment Leads to a Substantial Individual, Family, and Societal Burden

People have expressed fear and concern about losing cognitive function. According to a ResearchAmerica survey, respondents were twice as fearful about losing their mental capacity as having diminished physical ability. Another survey reported about 60% of adults were very or somewhat worried about memory loss.

Cognitive impairment exacts a tremendous emotional, physical, and financial toll on family caregivers. Seven out of 10 people with Alzheimer's disease live at home. Family caregivers often report a decline in their own health as they try to balance the demands of caregiving for a loved one with their own work responsibilities.

Taking care of people with cognitive impairment will save California money and decrease the burden on society in the long term. For example, studies show that costs for persons with Alzheimer's disease are higher than for patients without Alzheimer's disease and substantially higher for patients with Alzheimer's disease and a co-occurring chronic condition. Better treatment and care management of those with cognitive impairment, such as Alzheimer's disease, will reduce the costs for multiple conditions commonly suffered by these patients.

How Public Health Professionals Can Take Action

With the growing number of persons affected by cognitive impairment, it is more important than ever to implement an effective public health solution to avert a potential crisis. Public health leaders and their networks must address the needs of community-dwelling persons with cognitive impairment—a vulnerable population—with a comprehensive and coordinated public health approach. Taking steps to address the challenges of cognitive impairment today will ultimately have a positive impact on individuals and communities across the great state of California tomorrow.

Here are some things public health professionals might consider when developing public health strategies, programs, and policies:

- Continue to assess and monitor the impact of cognitive impairment in your state by supporting the Impact of Cognitive Impairment Module on California's BRFSS survey.
- Develop collaborative work groups to address cognitive impairment. For example, several states have developed Alzheimer's state action plans.
- Convene collaborative work groups to address the needs of community-dwelling individuals with cognitive impairment and their families.
- Create and disseminate educational resources for the individuals newly diagnosed with cognitive impairment, the families affected by cognitive impairment, and the champions who can educate others in the community about the importance of maintaining cognitive health.
- Partner with other state offices (e.g., aging and mental health) and entities such as the Department of Veterans Affairs to share ideas, integrate programs, and coordinate strategies to support optimal physical and mental health and quality of life among persons with cognitive impairment.

- Work with other state agencies and share resources and opportunities to educate people about the cooccurrence of cognitive impairment and chronic conditions, such as diabetes and heart disease.
- Support training needed for health care providers and improved standards of care for those with cognitive impairment.
- Develop new or adapt existing public health programs, policies, and strategies to address the needs of community-dwelling individuals with cognitive impairment.
- Learn about the signs and symptoms of cognitive impairment that might impact self-care or selfmanagement of a chronic disease, impact safety, or make an individual more vulnerable in an emergency.
- Help educate health care providers about supportive services for individuals with cognitive impairment and their families.
- Partner with other organizations to develop comprehensive systems of support for persons with cognitive impairment, their families, and caregivers.
- Provide educational resources on how to reduce risk for cognitive impairment tailored to diverse racial and cultural groups.



LINKS TO RESOURCES

Administration on Aging: www.aoa.gov Alzheimer's Association: www.alz.org

Centers for Disease Control and Prevention: www.cdc.gov/aging National Association of Area Agencies on Aging: www.n4a.org

National Institute on Aging: www.nia.nih.gov

This report is available at www.cdc.gov/aging/healthybrain/index.htm