

# Dementia

## Idaho Resident Mortality 2014

### Dementia

Dementia or 'Neurocognitive Disorder' is not a specific disease. Instead, dementia is a name for a group of symptoms caused by damage to nerve cells in the brain<sup>1</sup>. Symptoms associated with dementia include decline in memory or thinking skills, personality changes and the inability to perform everyday activities.

### In 6 out of 10 dementia deaths, the type of dementia could not be specified.

Age-adjusted death rate per 100,000 population by type of dementia, Idaho residents, 2014



2014

#### Dementia (Total)

Number of deaths: 1,152

Age-adjusted death rate: 67.9

#### Alzheimer's disease

Number of deaths: 376

#### Unspecified dementia

Number of deaths: 709

#### Vascular dementia

Number of deaths: 67

**Alzheimer's disease** is a specific type of dementia diagnosed and was ranked 7<sup>th</sup> in Idaho as the underlying cause of death. Alzheimer's disease can only be confirmed after death, by linking clinical measures with an examination of brain tissue in an autopsy. However, in many deaths where Alzheimer's was the underlying cause of death, the physician did not perform an autopsy, and the diagnoses of Alzheimer's disease was based on standard medical tests, brain scans and skill tests. Dementia, including Alzheimer's disease, has been known to be underreported on death certificates<sup>4</sup>. **Vascular dementia**, often coexists with other types of dementia, including Alzheimer's disease and is the second most diagnosed form of dementia. In 2014, the physician could not determine a specific type of dementia for 61.5 percent of dementia deaths, and diagnosed "**Unspecified Dementia**".

Deaths from dementia include underlying causes of death coded F01 (vascular dementia), F03 (unspecified dementia) or G30 (Alzheimer's disease)<sup>2</sup>. There is no one test to determine if someone has dementia. Doctors diagnose Alzheimer's and other types of dementia based on medical history, a physical examination, laboratory tests, and the characteristic changes in thinking, day-to-day function and behavior associated with each type. Doctors can determine that a person has dementia with a high level of certainty. But it's harder to determine the exact type of dementia because the symptoms and brain changes of different dementias can overlap<sup>3</sup>.

### If dementia would be ranked as a group, it would be the third leading cause of death.

Leading Seven Causes of Death, Ranking 1-7, Idaho Residents, 2014

1.	Malignant neoplasms	Deaths: 2,790
2.	Diseases of heart	Deaths: 2,684
	<b>Dementia</b> (not ranked as a group)*	Deaths: 1,152
3.	Chronic lower respiratory diseases	Deaths: 830
4.	Accidents	Deaths: 748
5.	Cerebrovascular diseases	Deaths: 638
6.	Diabetes Mellitus	Deaths: 408
7.	<b>Alzheimer's disease</b>	Deaths: 376

\*CDC does not rank/list mental and behavioral deaths (ICD-10: F00-F99) in US mortality tables.

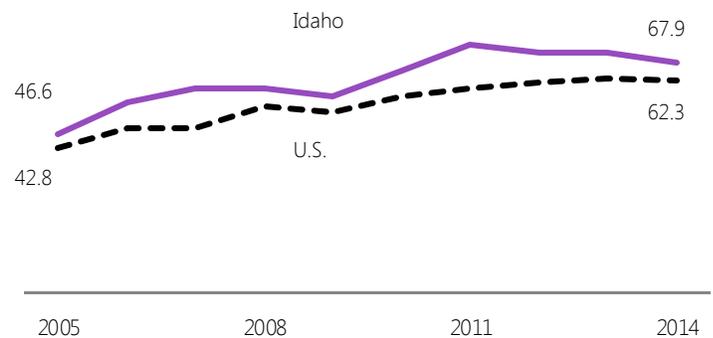
# Dementia - Idaho Resident Mortality 2014

## Age-Adjusted Death Rate per 100,000

### Idaho Residents, 2005-2014

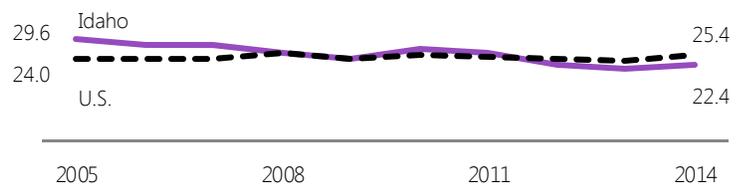
#### Dementia Trend

From 2005 to 2014, Idaho's age-adjusted rate for dementia increased significantly (45.7%). The age-adjusted rate peaked in 2011 (73.1 deaths per 100,000 population) and has decreased to 67.9 in 2014. Idaho's age-adjusted rate has been consistently higher than the national rate<sup>5</sup>. In 2014, Idaho's age-adjusted rate was 9.0 percent higher than the national average rate.



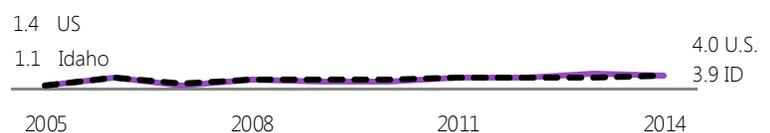
#### Alzheimer's Disease Trend

From 2005 to 2014, the age-adjusted death rate for Alzheimer's disease declined by 24.3 percent. Since 2011, Idaho's age-adjusted rate has been lower than the national rate.



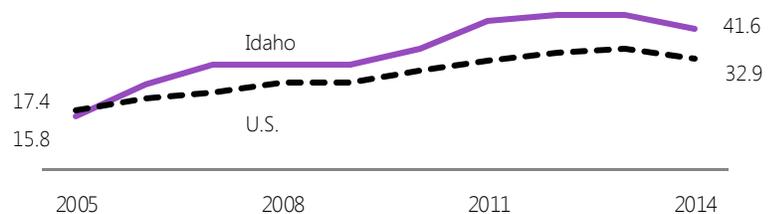
#### Vascular Dementia Trend

The age-adjusted death rate for vascular dementia increased 254.6 percent, from 2005 (1.1) to 2014 (3.9). Since 2005, the age-adjusted rate for Idaho has been similar to the national rate.



#### Unspecified Dementia Trend

The unspecified dementia age-adjusted death rate increased 163.3 percent, from 2005 (15.8) to 2014 (41.6). From 2006 to 2014, Idaho's age-adjusted death rate for unspecified dementia was consistently higher than the national rate. In 2014, Idaho's rate for unspecified dementia (41.6) was significantly higher (26.4%) than the national rate (32.9).



#### Number of deaths from dementia are projected to rise.

Baby boomers (people born between 1946 and 1964) started to turn 65 in 2011, and the Idaho resident age-group of 75 and older is estimated to increase by 82.4 percent, from 2014 to 2030<sup>6</sup>. Longer life expectancies and aging baby boomers are projected to impact the number of deaths from dementia significantly over the next decades.



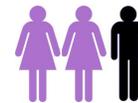
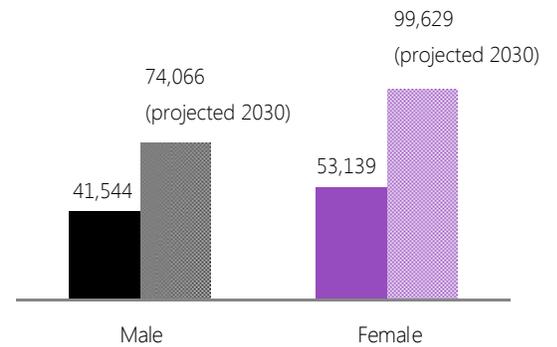
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## Demographics

The majority of Idaho residents dying from all dementia were aged 75 and older (93.4%), and female (69.3%). Percentages for Idaho residents that died from Alzheimer's disease were similar; aged 75 and older (92.3%) and female (70.2%). The average age at death for males was 84.6, and 87.1 for females, which is above the Idaho resident life expectancy at birth (males: 78.0 years, females 81.8 years). The larger number of females dying from dementia can be explained in part that females live longer. In 2014, there were 11,595 more Idaho resident females than males, aged 75 and older.

For Idaho residents aged 75 years and older, Alzheimer's disease was the fifth leading cause of death (347 deaths).

Population aged 75 and older by gender, Idaho residents, 2014, & 2030 (projected)<sup>6</sup>.

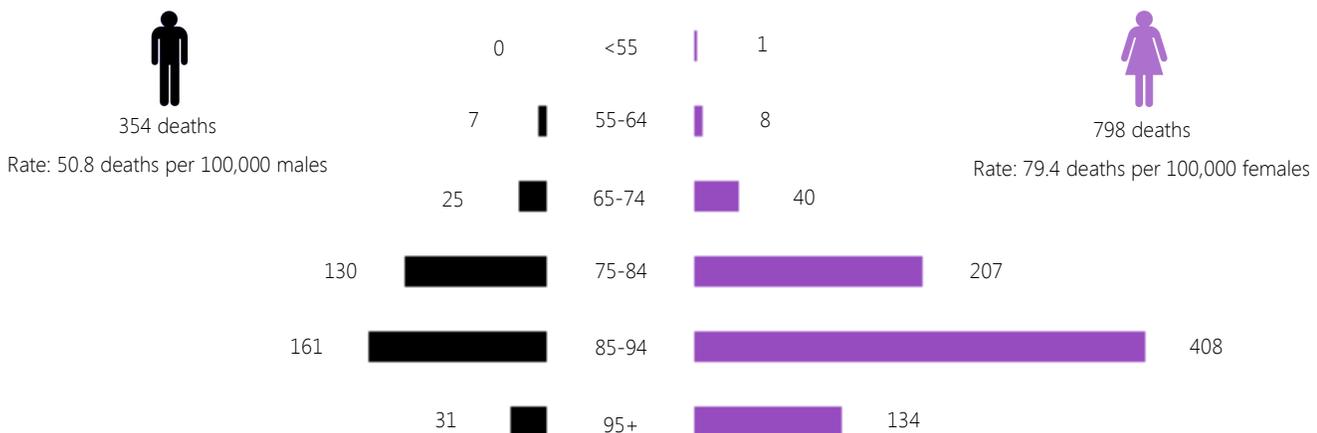


**2 out of 3** dementia deaths were female



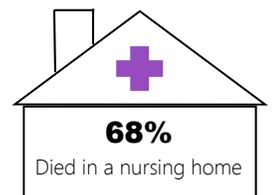
The average age at death from dementia was **86**

Number of dementia deaths by age group and gender, Idaho residents, 2014



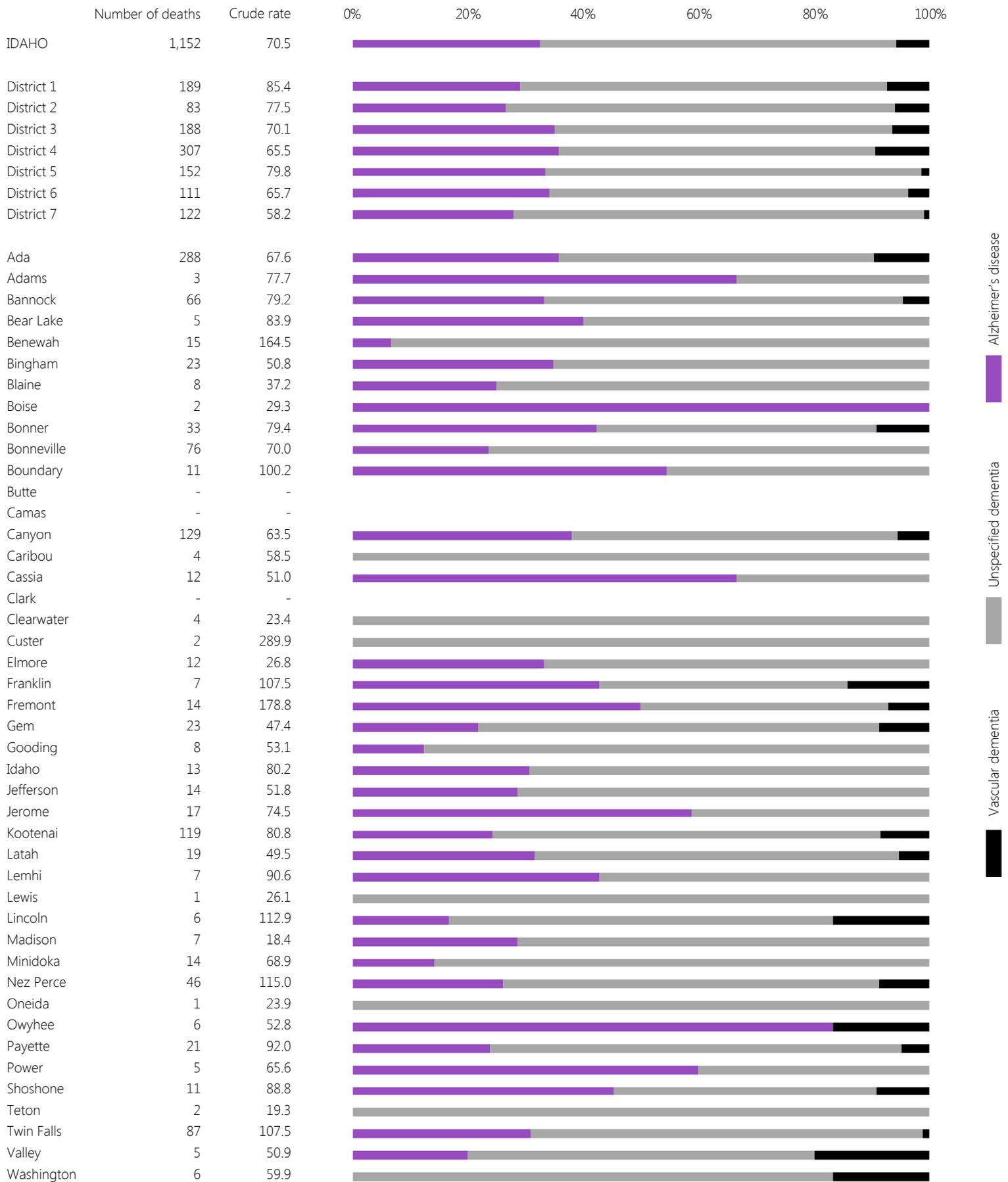
## Dementia is a leading cause of disability and dependency among the elderly<sup>7</sup>.

Most people that are in the middle and late stage of dementia are dependent on caregivers. In 2014, 20.8 percent of Idaho residents that died from dementia died at home. Sixty-eight percent died in a nursing home, 5.8 percent in the hospital, and 5.4 percent elsewhere. The growing number of Idaho residents with dementia will have an increased social and economic impact on caregivers, families, healthcare and society<sup>7</sup>.



# Dementia - Idaho Resident Mortality 2014

Number of deaths, death rate and type of dementia by County, Idaho residents, 2014



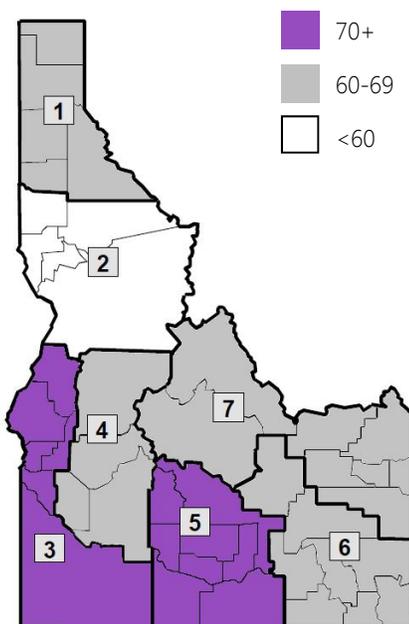
Alzheimer's disease

Unspecified dementia

Vascular dementia

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Age-adjusted death rate<sup>‡</sup> by Health District, Idaho Residents, 2014



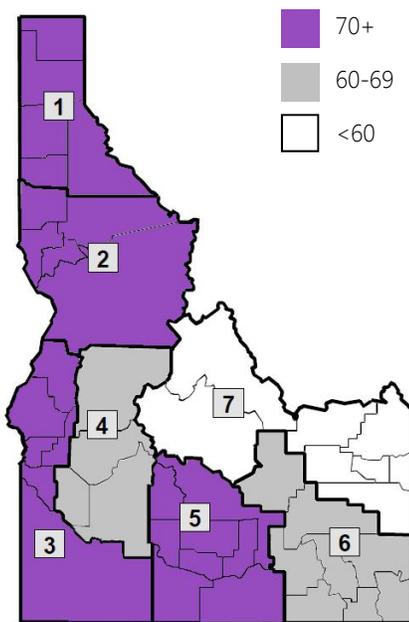
## Residence

The Southwest Health District (District 3) had the highest age-adjusted death rate for dementia (72.0) while the North Central Health District (District 2) had the lowest rate (54.8). Age-adjusted rates were used to compare death rates among health districts with different age structures. Crude death rates paint a different picture and are calculated per 100,000 population, disregarding the age structure per district. Districts 1, 2, and 5 have a larger population of people aged 75 and older. These districts recorded higher crude death rates than the rest of the state. The Panhandle Health District (District 1) had the highest crude rate (85.4), while the Southeastern Health District (District 7) had the lowest crude rate (58.2).

Ada County had the most dementia deaths (288 deaths) followed by Canyon County (129 deaths), and Kootenai County (119 deaths). Among counties with 10,000+ residents, Fremont County had the highest crude death rate (178.8) while Madison County had the lowest (18.4).

In 2014, 32.6 percent of dementia deaths to Idaho residents, had Alzheimer's disease listed as the underlying cause of death on the death certificate. The percentage of diagnosed Alzheimer's disease as the underlying cause of death was above the state average in the southern districts. District 4 had the highest percentage (35.8%), followed by District 3 (35.1%), District 6 (34.2%), and District 5 (33.6%). District 2 had the lowest percentage (26.5%), followed by District 7 (27.9%) and District 1 (29.1%). The percentage of Alzheimer's disease deaths among all dementia deaths varied by county as well. Among counties with 10 or more dementia deaths, Alzheimer's disease was the underlying cause of death for 66.7 percent of dementia deaths in Cassia County (highest) and lowest in Benewah County (6.7%).

Crude death rate\* by Health District, Idaho Residents, 2014



<sup>‡</sup> Age-adjusted rates are artificial measures developed to eliminate the bias inherent in differing age compositions, thus allowing comparisons between geographic regions. Age-adjusted rates were calculated using the 2000 U.S. population estimate as the standard population.

\* Rates are number of deaths per 100,000 population.

**Dementia is the only cause of death in the top 10 in Idaho that CANNOT BE PREVENTED, CURED or SLOWED**

<sup>1</sup> American Psychiatric Association, American Psychiatric Association. Diagnostic and statistical manual of mental disorders: DSM-5. 5th ed. Washington, D.C: American Psychiatric Association; 2013.

<sup>2</sup> Deaths are coded as F01, F03 and G30 as underlying causes of death according to the *International Classification of Diseases, 10th Revision*.

<sup>3</sup> Alzheimer's Association, 2014 Alzheimer's Disease Facts and Figures, Alzheimer's & Dementia, Volume 10, Issue 2.

<sup>4</sup> James BD, Leurgans SE, Hebert LE, et al. Contribution of Alzheimer disease to mortality in the United States. *Neurology*. 2014;82:1-6

<sup>5</sup> CDC Wonder Mortality Query System at [www.wonder.cdc.gov](http://www.wonder.cdc.gov) (2005-2013).

<sup>6</sup> CDC Wonder Population Query System at [www.wonder.cdc.gov](http://www.wonder.cdc.gov) (2004-2030).

<sup>7</sup> World Health Organization, Dementia, Fact sheet Nr 362, March 2015.

