

Understanding Dementia: A Focus on Alzheimer's Disease

Think of "dementia" as a category, much like "heart disease" or "cancer." Within that category, there are many specific conditions that can lead to the symptoms of dementia.

Approximately **425,400 Australians** are living with dementia in 2026.



Dementia: An overarching syndrome characterized by a decline in mental ability that interferes with daily life. It affects memory, thinking, orientation, comprehension, calculation, learning capacity, language, and judgment.

Multiple underlying causes can lead to dementia.

Alzheimer's Disease: The Most Common Cause

Alzheimer's disease is the **most common form of dementia**, accounting for up to 70% of dementia cases.

It is characterized by the accumulation of beta-amyloid peptide and intracellular tau protein, leading to the destruction of neurons. This results in a fall in acetylcholine concentration, impacting cognitive function.

Other types of dementia exist, including vascular dementia (often caused by strokes), Lewy body dementia, and frontotemporal dementia, each with its own underlying cause and set of symptoms.

Did you know? More than 1 million Australians are caring for someone with dementia.

In the early stages, a person may remain independent and need very little care. However, as the disease progresses, care needs will intensify, eventually leading to a need for 24-hour assistance.

Dementia is the no. 1 cause of disability in Australians aged 65 years or older.

Resource - The Dementia Australia Library

Australia's free dementia public library and is the largest publicly accessible dementia library in the world.

[Click here to join](#)

Resource - BrainTrack

A free *Dementia Australia* mobile app that helps people monitor changes in cognition over time through engaging, travel-themed brain games, while supporting conversations with healthcare providers about cognitive health.

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Current pharmacological therapies focus on managing symptoms and delaying decline; however, they don't prevent or cure dementia. **Two classes of medications are used:**

Acetylcholinesterase Inhibitors (AChEIs)

- **Mechanism of action:** Decreases the breakdown of acetylcholine, a neurotransmitter crucial for memory and cognition.
- **Indication:** Primarily for mild-to-moderate Alzheimer's disease.
- **Examples:** Donepezil, Galantamine, Rivastigmine.
- **Efficacy:** Meta-analyses suggest similar efficacy and safety across these agents. Choice is often based on ease of use, tolerability, and cost.

Memantine (an N-methyl-D-aspartate (NMDA) receptor antagonist)

- **Mechanism of action:** Regulates glutamate activity, another neurotransmitter involved in learning and memory. Can be used alone or in combination with AChEIs
- **Indication:** Typically used for moderate-to-severe Alzheimer's disease.
- **Examples:** Ebixa, Memanxa
- **Efficacy:** Benefits can be short-lived (approximately 12-months)