Memory Loss, Dementia and Alzheimer's Disease: The Basics
What is age-related memory loss?
Typical age-related changes involve:

- Making a bad decision once in a while
- Missing an occasional monthly payment
- Forgetting which day it is and remembering later
- Sometimes forgetting which word to use
- Losing things from time to time
Problematic changes

Changes indicating the need for a doctor’s visit:

- Consistent poor judgment and decision making
- Loss of an ability to manage money
- Inability to keep track of the date or the season
- Difficulty having a conversation
- Misplacing things and loss of the ability to retrace steps to find them
- Trouble with visual and spatial relationships
- Challenges in planning or solving problems
Early detection

Early diagnosis allows for:
- maximum benefit from available treatments
- time to consider and plan for the future
What is dementia?
Understanding dementia

Dementia

- Reversible dementias
- Frontotemporal dementia
- Vascular dementia
- Lewy body disease
- Alzheimer's disease
What is dementia?

- Loss of cognitive functioning serious enough to interfere with daily functioning

- Causes changes in:
  - memory
  - language
  - thought
  - navigation
  - behavior
  - personality / mood
### Reversible causes of dementia

- Depression, delirium
- Emotional disorders
- Metabolic disorders (e.g., hypothyroidism)
- Eye and ear impairments
- Nutritional (e.g., B12 deficiency)
- Tumors
- Infections
- Alcohol, drugs, medication interactions
Irreversible types of dementia

- Alzheimer’s disease: the most common type
- Over 70% of people with dementia have Alzheimer’s disease

Causes of Dementia in People Aged 71+, ADAMS:

- 70% Alzheimer’s
- 17% Vascular Dementia
- 13% Other Dementia

Created from data from Plassman et al.
Mild cognitive impairment

- Not severe enough to show up on tests
- Increases risk of developing Alzheimer’s disease
Vascular dementia

- Second most common form of dementia
- Caused by damage as result of reduced blood flow from one or more strokes
Mixed dementia

- Alzheimer’s disease and another type of dementia can exist at the same time.
- This may account for nearly half of the cases where Alzheimer’s is present.
Dementia with Lewy bodies

- Wide variations in attention and alertness
- May include:
  - Hallucinations
  - Tremors
  - Rigidity
Frontotemporal dementia

- Sometimes called “Pick’s disease”
- Begins earlier and progresses more quickly than Alzheimer’s disease
- First symptoms are usually personality changes and disorientation
More rare types of dementia

Other more rare dementias include:

- Creutzfeldt-Jakob disease
- Parkinson’s disease
- Huntington’s disease
- Normal pressure hydrocephalus
- Wernicke-Korsakoff syndrome
Alzheimer's disease
Alzheimer’s disease:

- is a brain disorder
- is a progressive disease
- is the most common form of dementia
- has no cure
- is eventually fatal
How the brain works

- There are 100 billion nerve cells, or neurons, creating a branching network.

- Signals traveling through the neuron forest form memories, thoughts and feelings.

- Alzheimer’s destroys neurons.
Neurons affected by Alzheimer's disease
dead cells full of tangles
Sparse, damaged cells
amyloid plaques
withered branches
Which functions are affected?

- Language
- Sense of temperature, touch, pain
- Vision
- Judgment, reasoning
- Memory, language, hearing
- Movement, balance
- Basic functions, including breathing
Healthy vs. Alzheimer brain

- **Healthy Brain**
- **Severe AD**

- Ventricles enlarge
- Cortex shrivels, especially near hippocampus
Who is at risk?
Major risk factors

- The primary risk factor is age
- The incidence is higher in women due to women living longer
- Down syndrome is correlated with AD
- Family history can increase risk
- There are two categories of genes

Estimated Percentage of Americans Aged 71+ with Dementia by Gender, ADAM

Created from data from Plassman et al.²
FAQs: Causes and other risks

◆ If I have had a head injury, am I at greater risk for Alzheimer’s disease?

◆ Does my diabetes and my high blood pressure put me at higher risk for developing Alzheimer’s?

◆ Can doing crossword puzzles reduce my risk of developing Alzheimer’s?

◆ Could broccoli or other foods be prevention tools?

◆ Will memory screening tools help me avoid a visit to the doctor?
Research

- Promising new strides for treatment, prevention and diagnosis
- Participants receive a high standard of care
Getting a thorough diagnosis
Selecting a doctor

Doctors can diagnose Alzheimer’s disease with accuracy

Choose from:

- Regular primary care physician
- Geriatrician
- Neurologist
- Psychiatrist
- Neuropsychologist
Preparing for the doctor’s visit

◆ Keep a log
  ◦ Write a list of symptoms, be specific
  ◦ Include when, how often and where
  ◦ Develop the list with input from other family members

◆ List current and previous health problems

◆ Bring all medication (prescription, vitamins, herbal supplements and over the counter medication)
The doctor’s visit

- Medical and family history
- Physical and neurological exam
- Lab tests
- Mental status exam
- May include brain imaging (MRI, CT scan)
- May include neuropsych tests
When the diagnosis is Alzheimer’s disease...
Emotions run high

shock
fear
confusion
guilt
worry
anger
acceptance
relief
grief
denial
Stages of Alzheimer's disease

- Early Stage
- Middle Stage
- Late Stage
Plan early

- Be an active partner in the long-term care plan
- Develop a relationship with your healthcare team
- Get legal and financial issues in order
- Grow a support system
- Educate yourself about the disease
Medications to treat symptoms

- Cholinesterase inhibitors for mild to moderate symptoms
  - Donepezil (Aricept®)
  - Rivastigmine (Exelon®)
  - Galantamine (Razadyne®)
Medications to treat symptoms

- Glutamate regulator for moderate to severe symptoms
  - Memantine (Namenda®)
Clinical studies

- Promising new strides for treatment, prevention and diagnosis
- Participants receive a high standard of care
Alzheimer's Association

Resources to help
Programs and services

- Educational programs for families and professionals
- 24-hour Helpline
- Information and referrals
- Care consultation
- Support groups
- Online community
- Safety services
Make a difference!

WALK TO END ALZHEIMER'S

alzheimer's association®
Alzheimer advocacy

- Generate action
- Stay on top of policy and legislative issues
- Help elevate Alzheimer's from a disease to a cause
To learn more...
Contact us!

When Alzheimer’s disease touches your life, turn to us.

**Nationwide 24-hour Helpline** Whether you need information, or just want someone to talk to, call us at 800.272.3900.

**www.alz.org** Our award-winning Web site is a rich resource of evidence-based content.

Contact us at 800.272.3900 or www.alz.org
Thank you.