



# Amyotrophic Lateral Sclerosis (ALS)

## What is ALS?

- ALS is a term to describe a group of progressive neuromuscular diseases that destroy motor neurons (nerve cells responsible for movement).
- ALS is also known as Lou Gehrig's disease (after the baseball player who was diagnosed with it) and Charcot's disease (which is more common in France).
- Often begins with muscle twitching and weakness in a limb, or slurred speech.
- Affects approximately 2/100,000 people
- No cure exists, and eventually is fatal.

## Symptoms of ALS

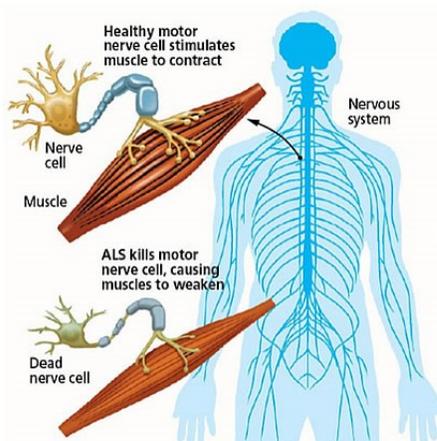
- Tripping and falling
- Hand weakness / dropping things
- Difficulty walking
- Difficulty performing daily activities
- Slurred speech
- Trouble swallowing
- Abnormal fatigue
- Emotional lability
- Progressive spastic paraparesis

## Complications

- Breathing problems
- Speaking problems
- Eating problems
- Dementia

## Causes

- 5—10% of cases are inherited
- 90—95% unknown cause
- Current research & theories
  - Gene Mutation
  - Chemical imbalance
  - Inappropriate immune response
  - Protein mishandling



## Risk Factors

Heredity, Age, Sex, and Genetics  
Environmental triggers

- Smoking
- Environmental toxin exposure
- Military Service

## Diagnosis

Potential tests to rule out other conditions

- Electromyogram (EMG)
- Nerve conduction velocity study
- Muscle biopsy
- Blood and urine tests
- Spinal tap
- Magnetic resonance imaging (MRI)
- X-rays
- Hormone Levels

## Treatment

Medications

- Riluzole
- Edaravone

Therapy (Physical, Occupational, and Speech)

- Providing adaptive equipment
- Breathing care
- Helps prolong cardiovascular fitness, muscle strength, and range of motion for as long as possible
- Helps you remain as independent as possible despite hand and arm weakness
- Home / lifestyle modifications to allow accessibility and promote well-being
- Learn strategies to maintain communication as long as possible and help you explore alternative methods of communication when necessary
- Nutritional support
- Psychological and social support