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Amyotrophic Lateral Sclerosis (ALS)

National Institute of Neurological Disorders and Stroke (NINDS)

Source

National Institute of Neurological Disorders and Stroke (NINDS). [Amyotrophic Lateral Sclerosis \(ALS\) Information Page.](#)

Amyotrophic lateral sclerosis (ALS) is a rapidly progressive, fatal disease that affects the nerve cells (neurons) in that brain and spinal cord that control voluntary muscle movement. Our voluntary muscles produce movements like walking, breathing, chewing, and talking. Nerve cells called motor neurons--that connect from the brain and spinal cord to the rest of the body--begin to degenerate and die, and stop sending messages to muscles. The muscles gradually weaken, waste away, and twitch, and the brain can't start and control voluntary movement. Symptoms are usually first noticed in the arms and hands, legs, or swallowing muscles. People with ALS lose their strength and become unable to move their arms and legs, and to hold the body upright. Some individuals eventually can't breathe on their own. Although ALS doesn't usually impair a person's mind or personality, several recent studies suggest that some people with ALS may develop cognitive problems involving word fluency, decision-making, and memory. Most cases of ALS happen with no known cause, while a small percentage of cases are inherited.