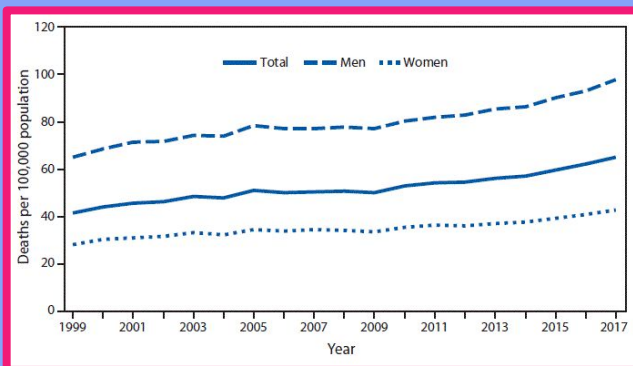


BACKGROUND INFORMATION

- Brain disorder
- Unintended or uncontrollable movements: shaking, stiffness, and difficulty with balance and coordination
- Anyone can develop the disease
 - May affect more men than women
 - Age can play a role (most develop it after 60)
- An estimated 1 million people live with the disease in the United States
- Cost of treating PD in U.S. is roughly \$14 billion annually



(United States Statistics from CDC)

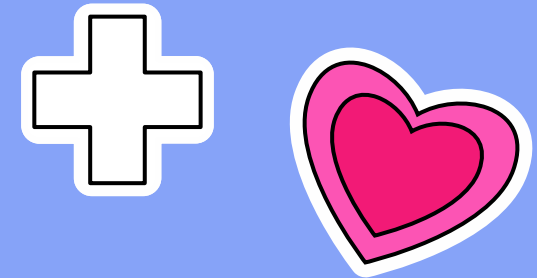


DO YOU HAVE QUESTIONS?

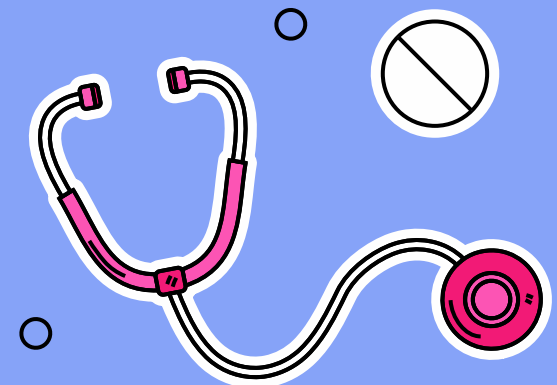
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For More Info Visit Our Sources:

- [Parkinson's Disease: Causes, Symptoms, and Treatments](#)
- [Mayo Clinic](#)
- [NIH: History of Parkinson's Disease](#)
- [Parkinson's Foundation](#)



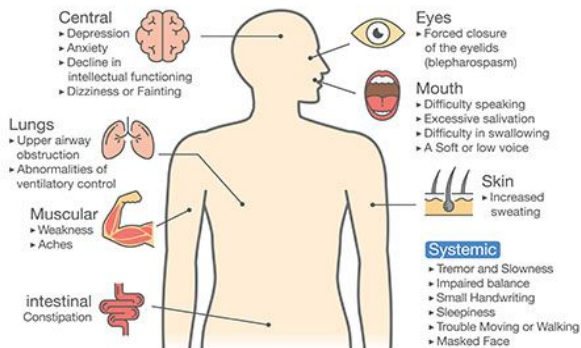
PARKINSON'S DISEASE



SYMPTOMS

- Tremor
 - Rhythmic shaking that can start in the hand and move to the whole limb
- Bradykinesia
 - Slow movement (like taking shorter steps)
- Rigidity
 - Stiff muscles; difficulty moving
- Difficulty thinking, understanding, and speaking
- Anxiety
- Distorted sense or loss of smell

Symptoms of Parkinson's Disease



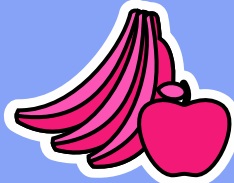
PREVENTION

Physical Activity



Helps treat patients as well as prevent or delay the onset of Parkinson's Disease.

Diet



Aim for a balanced diet of whole foods, like vegetables and fruits, lean protein, beans and legumes, and whole grains

Theories



None of these methods have been proven, but this is what researchers suggest.

Causes

- Nerve cells in basal ganglia become impaired or die
 - Less dopamine
- Loss of nerve endings that produce norepinephrine
- Brain cells contain Lewy bodies (clumps of alpha-synuclein)
- Hereditary → specific gene variants
- Environmental factors
 - Exposure to toxins

Treatment Options

- Levodopa: nerve cells use it to make dopamine
 - Taken with carbidopa: prevents side effects
- Other: dopamine agonists, enzyme inhibitors, amantadine, anticholinergic drugs, healthy diet, exercise, physical therapy, etc.