



Basic Information About
**PARKINSON'S
DISEASE**

**American Parkinson
Disease Association**

ABOUT PARKINSON'S DISEASE

Parkinson's disease (PD) is a progressive neurological condition that affects more than one million people in the United States. Approximately 60,000 people are newly diagnosed each year. Onset commonly occurs after age 60; however, up to 10% of individuals with PD will receive an earlier diagnosis and are considered "young onset."

People with PD experience movement (motor) problems including slowness, rigidity, and tremor. Balance and gait problems may occur as the disease progresses. Some people may also experience decreased facial expression, low voice volume, small handwriting, and difficulty with fine motor movements. A number of non-motor symptoms are associated with PD, including depression and other emotional changes; difficulty in swallowing, chewing, and speaking; urinary problems or constipation; skin problems; and sleep disruptions. It is important to understand that symptoms vary from person to person. The American Parkinson Disease Association (APDA) PD Handbook provides an expanded description of signs and symptoms.

Dr. James Parkinson, an English physician, first described the disease as "shaking palsy" in 1817. It was not until the 1960s, however, that research revealed that in PD there is a reduction of a brain chemical (neurotransmitter) called dopamine. Motor symptoms of PD result from the loss of the pigmented dopamine neurons (brain cells) in the *substantia nigra* region of the brain. Dopamine is responsible for smooth, purposeful movement. Despite advances in research, the exact cause of dopamine neuron loss is still unknown. Decreases in dopamine, however, do not account for all symptoms experienced in PD. Research is ongoing to better understand more about the biology of Parkinson's and all of the changes that occur in the brain due to the disease.

APDA SERVICES

Health and Wellness

Support groups are a wonderful way to receive practical information and education about living with PD. Support groups, exercise, stress, and nutrition programs are offered.

Education

Up to date educational programs and information are provided through our website, a quarterly e-newsletter, a series of free publications and supplements, and regional programs.

Nationwide Network of Chapters

APDA's nationwide network of Chapters provides information and referral, education and support programs, health and wellness activities, and events to facilitate a better quality of life for the Parkinson's community. It is this grassroots structure that distinguishes APDA from other organizations serving people with Parkinson's disease.

Information & Referral (I&R) Centers

I&R Centers, are staffed by a medical director and coordinator. They offer physician and services referrals, establish and maintain support groups, and offer free support and education.

RESEARCH

Since its beginnings, APDA has supported innovative research and passionate, dedicated scientists, with the ultimate goal of *Finding a Cure* for Parkinson's disease. Cutting-edge research continues to make a substantial impact in the areas of genetics, drug discovery, animal models, and new therapies.

APDA has funded most of the important Parkinson discoveries in the past 50 years, including the work of Dr. George Cotzias, who established the effectiveness of high oral doses of the medication levodopa in treating this debilitating disorder.

This therapy remains the gold standard of Parkinson's treatment today. APDA supported the work of renowned scientist Dr. Roger Duvoisin and his team that led to identifying the role of heredity and environment in PD; and the work of Dr. Lawrence Golbe, whose team located the first causative mutation for Parkinson's disease: PARK1 in the alpha-synuclein gene. This work changed the direction of research by identifying an entirely new protein whose manufacture, function or breakdown could be the key to the disease.

An important objective for APDA is providing funding for young investigators pursuing promising research initiatives with the potential to change lives. We support scientists like Dr. Talene Yacoubian, who studies the pathophysiology of Parkinson's disease to develop innovative new therapies, and Dr. Clemens Scherzer, who uses the latest genomic approaches to diagnose and treat Parkinson's disease.

Specialized Centers

Recognizing that the challenges of PD are different according to age and occupation, APDA has created national centers dedicated to varying needs:

National Young Onset Center – Addresses the unique challenges to younger people with PD and their families. Visit www.apdaparkinson.org, or contact (800) 223-2732 or email young@apdaparkinson.org.

National Resource Center for Rehabilitation at Boston University – Provides phone access to a licensed physical therapist who can answer questions about exercise, educational materials, and available resources. Contact (888) 606-1688 or email rehab@bu.edu.

National Veteran's Center – A centralized resource dedicated to supporting and improving the lives of Veterans with Parkinson's Disease. Call (888) 838-6256, Ext. 1715 or email susan.gulas@va.gov for members of the U.S. armed forces and their families.

DID YOU KNOW?

In the United States, every nine minutes someone is told they have Parkinson's disease.

APDA'S GRASSROOTS REACH

We're in cities, towns, and communities across the United States. It's what makes APDA unique.

APDA is the country's largest grassroots organization serving those touched by Parkinson's disease. Through our wide network of chapters, Information and Referral (I&R) Centers, Centers for Advanced Research, Specialized Centers (National Young Onset Center, National Resource Center for Rehabilitation at Boston University and National Veteran's Center) and countless support groups, we quickly reach people and connect them to resources that will provide the best outcomes as they navigate Parkinson's disease.

APDA is in communities across the United States, supporting people with Parkinson's disease from the day of diagnosis throughout the Parkinson journey.

APDA has been a funding partner in most major Parkinson's disease discoveries. We will continue to fund research initiatives that enable people with Parkinson's disease to lead lives that are as active as possible.

Generous support for this brochure was provided by

Medtronic
Further, Together

ITEMS AVAILABLE FOR REQUEST

- _____ Parkinson's Disease Handbook
- _____ Be Active: An Exercise Program for People with Parkinson's Disease
- _____ Living Well With Parkinson's Disease – 10 Things You Can Do Now
- _____ Living Well With Parkinson's Disease – 10 Things You Can Do Now – *Spanish*
- _____ Fatigue in Parkinson's Disease
- _____ Constipation & Parkinson's Disease
- _____ Depression & Parkinson's Disease
- _____ Incontinence & Parkinson's Disease
- _____ Cognitive Changes in Parkinson's Disease

For a complete listing of educational materials and patient support resources, please visit www.apdaparkinson.org/resources-support/download-publications.

Your contribution supports:

- Health and wellness initiatives that deliver programs to help people maintain independence and optimism
- Education, communication, and support programs that share care and treatment options and connect people with Parkinson's disease to one another
- Expedited and innovative research to develop promising clinical approaches and better outcomes
- Funding of the next generation of scientists dedicated to finding new treatments and a cure

Here are just a few ways to donate today:

- Become a monthly supporter, and your recurring gift ensures stable funding throughout the year.
- Double your gift through a corporate matching gift program. Ask your company's human resources office to find out if your company has one.
- Give a donation as a memorial or tribute to honor a loved one or dear friend while at the same time giving hope and optimism to others.
- Leave your legacy by naming APDA in your will – planned giving is one of the simplest and most effective ways to make a difference.

To make your donation now, visit the APDA website at **www.apdaparkinson.org** or call **(800) 223-2732**.

American Parkinson Disease Association is exempt from federal income taxes under Section 501(c) (3) of the Internal Revenue Code.