

INTRODUCTION

Parkinson's disease is a long-term degenerative brain disorder characterized by a progressive decline of motor and other physical functions. A common sign is a muscular tremor when at rest, frequently affecting fingers, thumbs, hands or chin.¹ The majority of those affected with Parkinson's disease will develop additional health problems including cognitive changes, depression, loss of smell, constipation and sleep disorders. These symptoms sometimes occur years before the disease is diagnosed.²

In 2017, approximately 90,000 commercially insured adults between the ages of 30 and 64 were diagnosed with Parkinson's disease. While that number is relatively small, our research shows that the prevalence rate has grown more than 50% in the span of five years.

This report examines this troubling trend, including who is being diagnosed with Parkinson's disease, the impact it has on their health and how they're treating it. With the majority of Parkinson's patients being cared for by family members, it is important to understand the impact of this disease and its rise in younger Americans on both those afflicted and their caregivers.

KEY FINDINGS

- The prevalance rate of Parkinson's disease has grown more than 50% in the span of five years.
- The average age of a Parkinson's diagnosis in the commercially insured population (30-64) is 57 years old with those diagnosed under the age of 50 classified as early-onset.³
- Blue Cross Blue Shield (BCBS) research shows that approximately 14% of Parkinson's cases in the commercially insured population occur in adults younger than 50.
- More than 82% of Parkinson's patients use a symptom relieving drug to treat the disease.

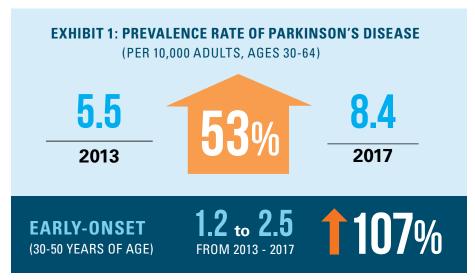
^{1.} https://www.parkinson.org/understanding-parkinsons/10-early-warning-signs

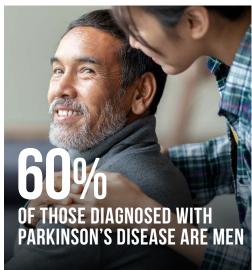
^{2.} https://www.parkinson.org/Understanding-Parkinsons/Non-Movement-Symptoms

^{3.} https://www.apdaparkinson.org/what-is-parkinsons/early-onset-parkinsons-disease

PARKINSON'S DIAGNOSES ARE ON THE RISE

In 2017, approximately 90,000 of commercially insured adults between the ages of 30 and 64 were diagnosed with Parkinson's disease. While the total number of people affected is relatively small, the prevalence of the condition has grown 53% over the past 5 years, from 5.5 per 10,000 commercially insured members in 2013 to 8.4 per 10,000 commercially insured members in 2017 (see Exhibit 1). The likelihood of Parkinson's increases with age. While rare, growth of early-onset Parkinson's (diagnosed before age 50) has increased from 1.2 to 2.5 Americans per 10,000.

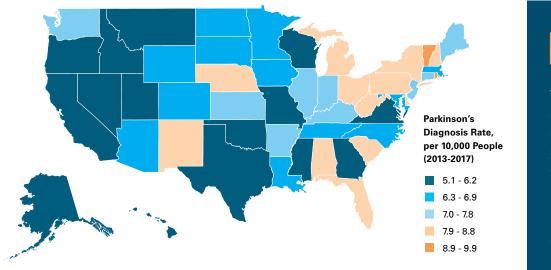




PREVALENCE OF PARKINSON'S STATE-BY-STATE

Western and Southern states appear to have lower rates of Parkinson's disease, while Northeastern and many Midwestern states have higher rates (see Exhibit 2). Mississippi and Montana have the lowest rates of Parkinson's, at 5.1 per 10,000. Vermont has the highest rate of Parkinson's at 9.9 per 10,000.

EXHIBIT 2: PREVALENCE OF PARKINSON'S DISEASE, BY GEOGRAPHY



THE IMPACT OF PARKINSON'S DISEASE ON OVERALL HEALTH

Based on the Blue Cross Blue Shield (BCBS) Health Index, the overall health of those affected by Parkinson's is significantly lower than the general population. In 2017, the average BCBS Health Index for someone aged 30-64 with Parkinson's was 57, compared to 88 for the entire commercially insured population in this age range. This translates to an average of 10.7 years of healthy life lost for those with the condition compared to 3.4 years for the 30-64 population as a whole.4

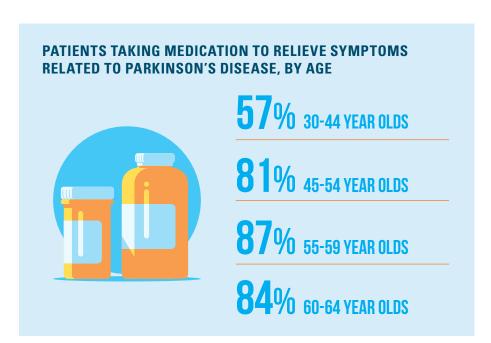
PATIENTS WITH PARKINSON'S DISEASE ARE LESS HEALTHY

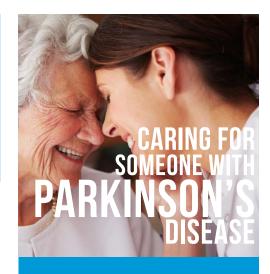
AVERAGE YEARS OF HEALTHY LIFE LOST

compared to overall population in the same age range (30-64)

MOST PARKINSON'S PATIENTS USE MEDICATION TO MANAGE THEIR DISEASE

While there is no known cure for Parkinson's disease, 82% of patients receive a symptom-relieving drug. Because the symptoms of Parkinson's get worse with age, only 57% of younger patients take these medications, likely because the drug side-effects are worse than the symptoms.





The majority of Parkinson's patients are cared for by informal caregivers, such as a family member. The physical, mental and emotional work this requires can be significant. The Impact of Caregiving on Mental and Physical Health found that caregivers have 26% poorer health compared to a benchmark population, as measured by the BCBS Health Index. In addition, a national survey conducted by the Blue **Cross Blue Shield Association** found that 1 in 4 unpaid caregivers are feeling more stress trying to balance work and family due to COVID-19.5

^{4.} Data sourced from Blue Cross Blue Shield Health Index, for more information, see: https://www.bcbs.com/the-health-of-america/health-index/national-health-index 5. BCBSA COVID-19 National Pulse Survey, May 2020.



While still extremely rare, the growth in Parkinson's disease is rising amongst members ages 30-64, and rapidly in adults under the age of 50. These people living with Parkinson's will likely need caregiving support for an extensive period of time as they grow older. With no known cure and limited treatment options, this condition will adversely impact a growing number of Americans, either as patients or as caregivers, well into the future.

METHODOLOGY

This is the 35th study of the Blue Cross Blue Shield, The Health of America Report® series, a collaboration between the Blue Cross Blue Shield Association (BCBSA) and Blue Health Intelligence® (BHI), which uses a market-leading claims database to uncover key trends and insights in healthcare affordability and access to care. Additional analysis was performed by and also includes data from The National Opinion Research Center (NORC) at the University of Chicago.

This report focuses on the diagnosis of Parkinson's disease among commercially insured Americans 30 to 64 years of age from 2013 to 2017. Anyone who is diagnosed with Parkinson's under the age of 50 is defined as having "young" or "earlyonset" Parkinson's. The study population was identified by utilizing diagnosis codes in BCBS medical claims of more than 48 million BCBS commercially insured members from 2013 to 2017. Prevalence rates were calculated by taking all member months of an individual post the month of diagnosis of Parkinson's and dividing the months by the total member months in the data for each year through 2017. The derived rate of these conditions was then used to extrapolate to the entire commercially insured population between the ages of 30 and 64, based on government estimates.

The numbers in this report represent a point-in-time measurement of the prevalence of Parkinson's disease among commercially insured American adults 30 to 64 years of age. Therefore, a portion of the growth in the prevalence of these conditions over time can be attributed to the accumulation of people who are diagnosed with the condition and remain within the commercially insured population during the study period, rather than to an increase in the rate of diagnosis year over year.



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