

## CurePSP focuses on three prime of life neurodegenerative diseases:

### Progressive supranuclear palsy (PSP)

Affects roughly 17,500 people in the United States; only 25% are accurately diagnosed. Symptoms include loss of balance, changes in personality, weakened downward eye movements, slurred speech, difficulty swallowing.

### Corticobasal degeneration (CBD)

Affects 2,000-3,000 people in the United States; only 25% are accurately diagnosed. Symptoms include difficulty with balance and speech, stiffness or clumsiness in upper or lower extremities, dementia.

### Multiple system atrophy (MSA)

Affects roughly 13,000 people in the United States; only 25% are accurately diagnosed. Symptoms include excessive changes in blood pressure when altering position (sitting, standing, lying down), impaired speech and difficulty swallowing, breathing and eating.

*All diseases lead to progressive decline, and, although symptomatic treatment exists, there is no known cause or cure.*

- For all three diseases, it is very rare for two cases to occur in the same family. However, subtle genetic influences are present for all three, and researchers are using these genetic “risk factors” to help discover the other factors in the causes of these diseases.
- Another important point that applies to all three diseases is that, while there is still no cure, many of the symptoms can respond to prescription or over-the-counter medications and to nonmedication treatment. In this way, patients with PSP, CBD and MSA can delay disability and improve the quality of their lives.

**CurePSP** is the leading nonprofit organization working to improve awareness, education, care and cure for devastating prime of life neurodegenerative diseases. These include progressive supranuclear palsy (PSP), corticobasal degeneration (CBD), multiple system atrophy (MSA) and others. They often strike when a person has a career, family responsibilities and an active life. Their symptoms are incapacitating and there are no known causes, treatments or cures.

Research has shown that there are important links between prime of life diseases and more common neurodegenerative conditions, such as Alzheimer’s disease and Parkinson’s disease. Your support will help advance this research, provide resources for families and caregivers of patients and better educate the healthcare community. Together we are unlocking the secrets of brain disease.

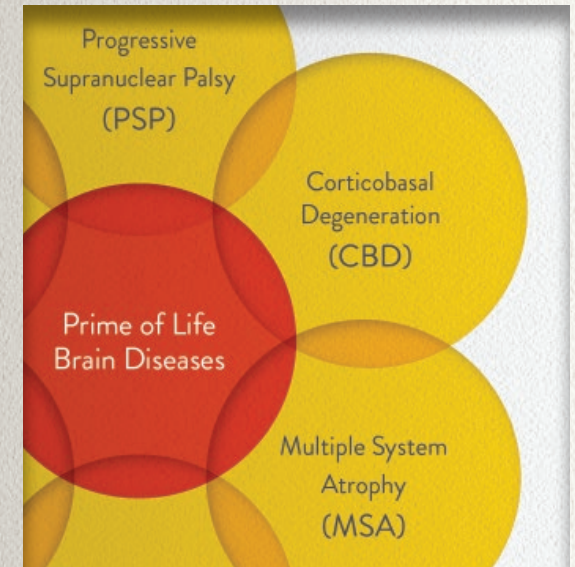
**CurePSP** is a not-for-profit 501(c)(3) organization. Gifts and pledges of support are encouraged and donations are tax deductible to the extent allowed by law.



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## Brief Descriptions for PSP, CBD and MSA

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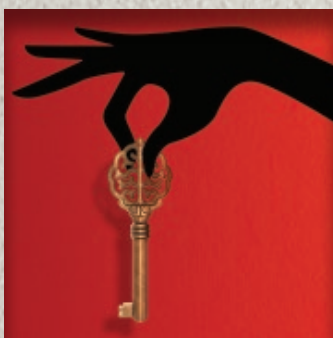


# PSP

**PROGRESSIVE SUPRANUCLEAR PALSY** is a brain disease in the category of “neurodegenerative” diseases along with Alzheimer’s, Parkinson’s and Lou Gehrig’s diseases. In PSP, cells in some areas of the brain accumulate clumps of a protein called “tau” and gradually die off. Those cells control walking, balance, mobility, vision, speech, swallowing, sleep and behavior.

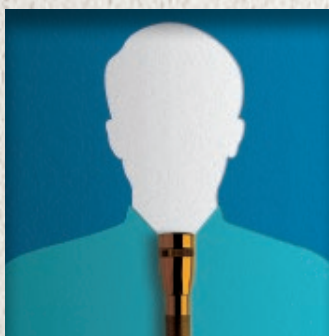
In the U.S., around 17,500 people have been diagnosed with PSP, a number similar to that of better-known Lou Gehrig’s disease (ALS). PSP’s average age of onset is 63, but rare cases have started in the early 40s. It is slightly more common in men than women, but PSP has no known geographical, occupational or racial preference. PSP is often misdiagnosed as Parkinson’s disease because of the general slowing of movement.

It can also be mistaken for dementia or Alzheimer’s disease because of changes in mood, intellect, memory and personality. Survival after the initial symptoms averages 7.4 years, with the milder “PSP-parkinsonism” variety progressing more slowly than the more severe “Richardson’s syndrome” variety. Currently there is no treatment or cure for PSP although research is very active.



# CBD

**CORTICOBASAL DEGENERATION** is also a neurodegenerative brain disease. Almost the same set of symptoms occurs in CBD as in PSP, but the emphasis is on limb movement rather than on gait and balance, and in CBD the symptoms are highly asymmetric (worse on one side than the other). Only about 2,000 – 3,000 people in the United States have CBD, of whom only 500-750 are correctly diagnosed. The average age of onset is similar to that of PSP. Initial symptoms are often stiffness, shakiness, jerkiness, slowness and clumsiness in one upper or lower extremity. Eventually the symptoms will affect the entire body. Other initial symptoms may include difficulty with speech generation, articulation, controlling the muscles of the face and mouth and walking and balance difficulties. A person with CBD will usually become immobile due to rigidity within five years of symptom onset. Research continues despite the rarity of the condition, and there is currently no cure.



## OUR MISSION:

*Awareness, education, care and cure for devastating prime of life neurodegenerative diseases.*

# MSA

**MULTIPLE SYSTEM ATROPHY** is a disease of the brain and spinal cord. The protein that accumulates in the brain cells, alpha-synuclein, is the same as in Parkinson’s, rather than the tau protein that accumulates in PSP and CBD. The “MSA-parkinsonism” form can resemble Parkinson’s disease for years, but usually with more balance loss. The other form is “MSA-cerebellar,” where there is a coarse tremor and drunken-appearing gait and speech. People with MSA also have important impairment of the autonomic nervous system, which controls blood pressure, the digestive system and the bladder. The result is usually dizziness or fainting, constipation, urinary urgency or incontinence. MSA also can affect sleep in important ways, causing obstructive sleep apnea or other forms of insomnia. Like PSP and CBD, MSA is rare, affecting about 13,000 in the U.S. The average age of onset is usually the early 50s, a bit younger than PSP or CBD. Survival after onset averages about seven years. While there is no current treatment or cure, MSA research is ongoing.

