

Idiopathic Normal Pressure Hydrocephalus Epidemiology

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[Idiopathic Normal Pressure Hydrocephalus](#) appears to be extremely under-diagnosed. Properly designed and adequately powered [population based study](#) are required to accurately characterize this disease's [epidemiology](#) ¹⁾.

In a prospective, population-based study the prevalence of iNPH was 3.7% among individuals 65 years and older, and more common in the higher age group, 80 years and above. INPH should be increasingly recognized since it is a fairly common condition and an important cause of gait impairment and dementia among the elderly that can be effectively treated by shunt surgery ²⁾.

It occurs most frequently in the 70s, gait impairment and cognitive decline are the most frequent initial symptoms in men and women, respectively, and hypertension and diabetes are the most frequent comorbidities in men and women, respectively ³⁾.

Incidence

General [Incidence](#) Estimates: Population-based studies suggest that the incidence of iNPH in individuals aged 60 and above ranges between 1.1 to 5.5 per 100,000 per year. Some studies report a higher incidence of iNPH when looking at hospital admissions or specialized clinics, indicating a range of 3.2 to 20 per 100,000 per year. A large-scale study in Sweden reported an incidence rate of 1.09 per 1,000 people per year in individuals aged 65 and older, highlighting the condition's prevalence in the elderly. Factors Affecting Incidence: Age: The risk of iNPH increases significantly with age. The majority of diagnosed cases are in individuals over the age of 60. Underdiagnosis: iNPH is often underdiagnosed, as its symptoms are attributed to normal aging or other neurodegenerative diseases. This underreporting means the actual incidence may be higher than currently estimated. Incidence Compared to Other Neurodegenerative Diseases: Although iNPH is less common than Alzheimer's disease or Parkinson's disease, it is a potentially treatable cause of cognitive decline,

making accurate diagnosis crucial for improving patient outcomes.

While precise incidence rates vary, it is clear that iNPH is more common in older populations and often goes underdiagnosed. Advances in diagnostic imaging and awareness of the condition could lead to better recognition and treatment, potentially improving the quality of life for many elderly patients.

In people over 65 years old, pooled [prevalence](#) obtained from specific population studies was 1.3%, almost 50-fold higher than that inferred from door-to-door surveys of [dementia](#) or [Parkinsonism](#). [Prevalence](#) may be even higher in assisted-living and extended-care residents, with up to 11.6% of patients fulfilling the criteria for suspected iNPH and 2.0% of patients showing permanent improvement after cerebrospinal fluid (CSF) diversion. The only prospective population-based survey that reported iNPH incidence estimated 1.20 cases/1000 inhabitants/year, 15-fold higher than estimates obtained from studies based on hospital catchment areas. The incidence of shunt surgery for iNPH and SRiNPH obtained from incident cases of hospital catchment areas appears to be fewer than two cases and one case/100,000 inhabitants/year, respectively. Unfortunately, there is no population-based study reporting the real values for these two parameters.

The prevalence of iNPH, in Japan among people older than 65, the prevalence is between 0.5% and 2.9% ⁴⁾ and the syndrome is both underdiagnosed and undertreated.

1)

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