

# Normal Pressure Hydrocephalus

National Institute of Neurological Disorders and Stroke (NINDS)

## Source

*National Institute of Neurological Disorders and Stroke (NINDS). [Normal Pressure Hydrocephalus Information Page.](#)*

Normal pressure hydrocephalus (NPH) is an abnormal buildup of cerebrospinal fluid (CSF) in the brain's ventricles, or cavities. It occurs if the normal flow of CSF throughout the brain and spinal cord is blocked in some way. This causes the ventricles to enlarge, putting pressure on the brain. Normal pressure hydrocephalus can occur in people of any age, but it is most common in the elderly. It may result from a subarachnoid hemorrhage, head trauma, infection, tumor, or complications of surgery. However, many people develop NPH even when none of these factors are present. In these cases the cause of the disorder is unknown.

Symptoms of NPH include progressive mental impairment and dementia, problems with walking, and impaired bladder control. The person also may have a general slowing of movements or may complain that his or her feet feel "stuck." Because these symptoms are similar to those of other disorders such as Alzheimer's disease, Parkinson's disease, and Creutzfeldt-Jakob disease, the disorder is often misdiagnosed. Many cases go unrecognized and are never properly treated. Doctors may use a variety of tests, including brain scans (CT and/or MRI), a spinal tap or lumbar catheter, intracranial pressure monitoring, and neuropsychological tests, to help them diagnose NPH and rule out other conditions.