Normal pressure hydrocephalus (NPH) is the buildup of too much cerebrospinal fluid (CSF) in the brain. CSF is a clear liquid that flows through spaces in the brain called ventricles. Normally, this fluid cushions the brain. If the normal flow of CSF gets blocked for some reason, the ventricles become larger, which puts harmful pressure on the brain.

In most people, NPH occurs with no known cause, but it can result from a bleed or injury to the brain, infection, tumor or complications of surgery.

NPH can occur in people at any age, but it is most common in people in their 60's and 70's. The parts of the brain that control the legs, bladder and thinking skills are most affected by NPH.

Early Signs of NPH include:
- Weakness and unsteadiness
- Problems walking
- Sudden falls

As NPH worsens, signs include:
- Needing to urinate often or urgently
- Lack of bladder or bowel control

Symptoms of dementia
- Problems with memory
- Difficulty with speech
- A lack of interest in daily life
- Changes in behavior or mood
- Difficulties in paying attention, reasoning or judgment

If your doctor suspects NPH, these tests may be ordered:
- Lumbar puncture (spinal tap)
- Head CT scan
- MRI scan of the head
- Spinal cord or CSF flow scan

Treatment
The goal of treatment is to improve symptoms. The most common treatment is surgery. A thin tube called a shunt is placed to remove the extra spinal fluid from the areas in the brain called fluid cavities. The shunt drains the spinal fluid to another part of the body where it can be absorbed.

A shunt remains in place permanently. It is not a cure, but it can help relieve the symptoms of NPH. The earlier that NPH is found, the better the chance that surgery will help.
Resources
Coping with the symptoms of NPH can be difficult. Support groups for people living with NPH and their loved ones can be helpful. To learn more about NPH or to find a support group:

- Hydrocephalus Association
  www.hydroassoc.org
  888-598-3789

- National Hydrocephalus Foundation
  http://nhonline.org
  888-857-3434

Talk with your doctor about any questions or concerns you may have.