



hydro

(water)

+



kephale

(head)

# = HYDROCEPHALUS

The buildup in the brain of excess cerebrospinal fluid (CSF)

**1 IN 500** INFANTS is born with this condition.

**Another 6,000 CHILDREN** annually develop hydrocephalus during the first 2 years of life.

There are two types: **Communicating (or non-obstructive)** and **Non-Communicating (or obstructive)**.

Both types can be present in either **Congenital Hydrocephalus** (present at birth) or **Acquired Hydrocephalus** (occurs after birth and at any age).

SOURCES  
www.hydroassoc.org/about-us/newsroom/facts-and-stats-2/  
nhfonline.org/facts-about-hydrocephalus.htm  
www.medtronic.com/us-en/patients/conditions/hydrocephalus.html



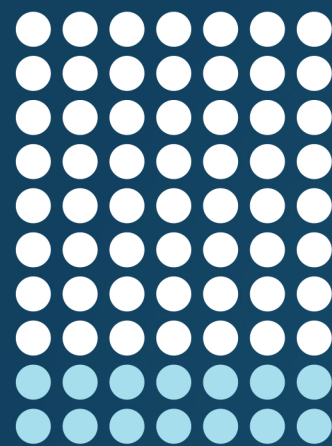
70%

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90%

of children born with spina bifida also develop hydrocephalus.

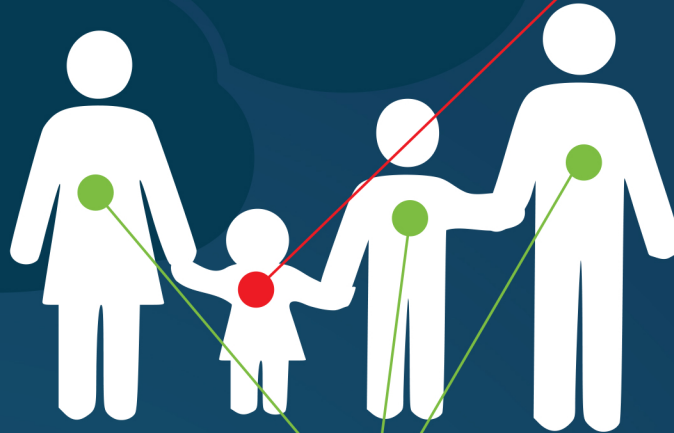


It is estimated that more than **700,000 AMERICANS** have NPH, but **LESS THAN 20%**

receive an appropriate diagnosis.

## SYMPTOMS

may include but are not limited to:



### PEDIATRIC

- Vomiting
- Poor feeding
- Listlessness
- Irritability
- Constant downward gaze of the eyes
- Occasional seizures

### OLDER CHILDREN AND ADULTS

- Headache
- Nausea
- Vomiting
- Visual disturbances
- Poor coordination
- Personality changes
- Lack of concentration
- Lethargy

## TREATMENT

**THE ONLY EFFECTIVE TREATMENT FOR HYDROCEPHALUS IS SURGERY.**

*Hydrocephalus is the leading cause of brain surgery for children in the United States.*

THERE ARE **OVER 180**



**POSSIBLE CAUSES OF HYDROCEPHALUS,** according to the National Institutes of Health (NIH).



There are over **40,000**

hydrocephalus operations performed annually (one every 15 minutes).



APPROXIMATELY **\$100 MILLION** IN HEALTH CARE **SPENDING**

in the US alone goes for CSF shunting procedures to treat hydrocephalus.



**ADULTS 50 AND OVER**

are the **FASTEST GROWING** segment of the population to be **DIAGNOSED WITH NORMAL PRESSURE HYDROCEPHALUS (NPH)**. NPH is often misdiagnosed as Alzheimer's disease or Parkinson's disease.

**IN THE PAST 25+ YEARS, DEATH RATES ASSOCIATED WITH HYDROCEPHALUS HAVE DECREASED FROM 54% TO 5%,**

*and the occurrence of intellectual disability has decreased from 62% to 30%.*

