

## 2017-J5106

Senate Resolution No. 5106

BY: Senator FLANAGAN

MEMORIALIZING Governor Andrew M. Cuomo to proclaim September 2018, as Hydrocephalus Awareness Month in the State of New York

WHEREAS, Derived from the Greek words "hydro" meaning water and "cephalus" meaning head, hydrocephalus is a condition that has no cure and in which the primary characteristic is excessive accumulation of fluid in the brain; and

WHEREAS, Hydrocephalus was once known as "water on the brain," however the "water" is actually cerebrospinal fluid, a clear fluid that surrounds the brain and spinal cord; excessive accumulation results in an abnormal widening of spaces in the brain called ventricles, which creates potentially harmful pressure on the tissues of the brain; and

WHEREAS, Cerebrospinal fluid has three important life-sustaining functions: to keep the brain tissue buoyant, acting as a cushion or "shock absorber"; to act as the vehicle for delivering nutrients to the brain and removing waste; and to flow between the cranium and spine and compensate for changes in intracranial blood volume; and

WHEREAS, The balance between production and absorption of cerebrospinal fluid is critically important; because it is made continuously, medical conditions that block its normal flow or

absorption will result in an over-accumulation of cerebrospinal fluid and the resulting pressure of the fluid against brain tissue is what causes hydrocephalus; and

WHEREAS, There are two primary types of hydrocephalus, including congenital hydrocephalus, which is present at birth and may be caused by either events or influences that occur during fetal development, or genetic abnormalities; acquired hydrocephalus, which develops at the time of birth or at some point afterward and affects individuals of all ages and may be caused by injury or disease; and

WHEREAS, There are two classifications of hydrocephalus, including communicating hydrocephalus, which occurs when the flow of cerebrospinal fluid is blocked, not allowing it to exit the ventricles; and non-communicating hydrocephalus, which is also called obstructive hydrocephalus and occurs when the flow of cerebrospinal fluid is blocked along one or more of the narrow passages connecting the ventricles; and

WHEREAS, Two other forms of hydrocephalus which primarily affect adults are: hydrocephalus ex-vacuo, which occurs when stroke or traumatic injury cause damage to the brain; and normal pressure hydrocephalus, which can happen to people at any age, but it is most common among the elderly and may result from a subarachnoid hemorrhage, head trauma, infection, tumor, or complications of surgery but often whose cause is unknown, referred to as idiopathic normal pressure hydrocephalus (iNPH); and

WHEREAS, The number of people who develop hydrocephalus or who are currently living with it is difficult to establish since there is no

national registry or database of people with the condition; nevertheless, experts estimate that it affects approximately 1.5 in

every 1,000 live births; and

WHEREAS, The causes of hydrocephalus are still not well understood; it may result from inherited genetic abnormalities, developmental disorders, complications of premature birth such as intraventricular hemorrhage, diseases such as meningitis, tumors, traumatic head injury, or subarachnoid hemorrhage; and

WHEREAS, The symptoms of hydrocephalus vary with age, disease progression, and individual differences in tolerance to the condition; for example, an infant's ability to compensate for increased cerebrospinal fluid pressure and enlargement of the ventricles differs from an adults; and

WHEREAS, In infancy, the most obvious indication of hydrocephalus is often a rapid increase in head circumference or an unusually large head size; other symptoms may include vomiting, sleepiness, irritability, downward deviation of the eyes and seizures; and

WHEREAS, Older children and adults may experience headache followed by vomiting, nausea, papilledema, blurred or double vision, sunseting of the eyes, problems with balance, poor coordination, gait disturbance, urinary incontinence, slowing or loss of developmental progress, lethargy, drowsiness, irritability, or other changes in personality or cognition including memory loss; and

WHEREAS, Symptoms of normal pressure hydrocephalus include, problems with walking, impaired bladder control leading to urinary frequency and/or incontinence, and progressive mental impairment and dementia; and

WHEREAS, Hydrocephalus is diagnosed through clinical neurological evaluation and by using cranial imaging techniques such as

ultrasonography, computed tomography, magnetic resonance imaging or pressure-monitoring techniques; and

WHEREAS, The only treatment for hydrocephalus requires brain surgery; most often, hydrocephalus is treated by surgically inserting a shunt system which diverts the flow of cerebrospinal fluid to another area of the body where it can be absorbed as part of the normal circulatory process; and

WHEREAS, The prognosis for individuals diagnosed with hydrocephalus is difficult to predict, although there is some correlation between the specific cause of the hydrocephalus and the outcome; and

WHEREAS, Affected individuals and their families should be aware that hydrocephalus poses risks to both cognitive and physical development; however, children diagnosed with the disorder benefit from early intervention programs, rehabilitation therapies, and educational interventions and many go on to lead lives with few limitations; and

WHEREAS, The symptoms of normal pressure hydrocephalus usually get worse over time if the condition is not treated, and can ultimately result in death; while the success of treatment with shunts varies from person to person, some people recover almost completely after treatment and have a good quality of life; early diagnosis and treatment improve

the chance of a good recovery and minimize the risk of long term damage to the brain; and

WHEREAS, Raising awareness about hydrocephalus will play a key role in prevention, treatment, and educating others and will result in better health for all individuals in the State of New York and throughout the nation; now, therefore, be it

RESOLVED, That this Legislative Body pause in its deliberations to memorialize Governor Andrew M. Cuomo to proclaim September 2018, as Hydrocephalus Awareness Month in the State of New York; and be it further

RESOLVED, That a copy of this Resolution, suitably engrossed, be transmitted to The Honorable Andrew M. Cuomo, Governor of the State of New York.