

Spina Bifida in North Carolina

Spina Bifida, the most common, permanently disabling birth defect that is also compatible with life in the United States, affects approximately 1,500 births each year. Spina Bifida is a serious and life-long condition which occurs when the spinal cord fails to close properly during the early stages of pregnancy. Approximately 10% of babies born with Spina Bifida do not live into adulthood.

- In North Carolina, 4.21 babies are born with Spina Bifida per 10,000 births (data collection period: 2010).
- Recent research has estimated that the number of Americans living with all forms of Spina Bifida may be as high as 166,000. Based on this national estimate and the birth rate of Spina Bifida, approximately 3,883 people with Spina Bifida live in North Carolina.
- In North Carolina, there are an estimated 2.9 million women of childbearing age. All are at-risk of a Spina Bifida pregnancy. If women of childbearing age were to consume 400 micrograms (mcg) of the B-vitamin folic acid every day *before pregnancy*, the risk of Spina Bifida and other serious birth defects could be reduced by up to 70%.
- Approximately 3,106 of individuals with THE most serious form of Spina Bifida, myelomeningocele (MMC), suffer from hydrocephalus, a dangerous fluid build-up around the brain, which necessitates surgery to implant a shunt in the brain. Unfortunately, shunts require frequent revisions, and 2,485 of these devices will fail within 10 years.
- 1,941 of the people living with Spina Bifida are adults, and 1,553 of them have MMC. Very little is known about aging with Spina Bifida. Very few physicians are willing to treat people with Spina Bifida or have the knowledge of treatments and interventions associated with its management.

Cost Related to the Care of People with Spina Bifida in North Carolina

- The estimated cost of lifetime care related to Spina Bifida for the 1,145 people living with Spina Bifida in North Carolina ranges between \$3,202,260,000 and \$3,883,000,000. Among adults with MMC, only half live independently as adults, accruing substantial costs for the lifetime care.
- Out-of-pocket costs for direct medical care for children born with MMC are 13 times more than children born without MMC. These additional costs continue into adulthood, when individuals with MMC pay 7 times more in medical cost than those without MMC.
- Family caregivers for Spina Bifida patients are 25% less likely to be employed and, when they are employed, work 25% fewer hours compared to those not providing Spina Bifida-related care.

Clinics:

Levine Children's Specialty Center (0 – transition) 1628 E Morehead St. Charlotte, NC 28207 (704) 381-8840 https://atriumhealth.org/medical-services/childrens-services

UNC Department of Physical Medicine and Rehabilitation (0 – transition, 0 - 21) 1807 Fordham Boulevard Chapel Hill, NC 27514 984-974-9747 https://www.uncmedicalcenter.org/uncmc/care-treatment/rehabilitation-therapies/

Lenox Baker Children's Hospital (0 – adults) 3000 Erwin Rd, Durham NC 27705 919-681-5456 https://www.dukehealth.org/locations/lenox-baker-childrens-hospital