

# SMA STATE FACT SHEET

## North Carolina

Est. individuals living with SMA: 371  
Est. babies born with SMA annually: 11  
Est. number of SMA carriers: 208,788



Estimates for incidence, prevalence, and carriers are based on 2020 birth and population data for the state of North Carolina.

### TYPES OF SMA

There are four primary types of SMA that are based on the age of onset and highest physical milestone achieved. Type 1 is the most severe and most common, accounting for 60 percent of those with SMA, and is typically diagnosed during an infant's first 6 months of life.



#### Type 1 SMA

Onset: Before 6 months  
Milestones: No sitting



#### Type 2 SMA

Onset: 6 - 18 months  
Milestones: Sitting, not walking



#### Type 3 SMA

Onset: Childhood after 12 months  
Milestones: Walking



#### Type 4 SMA

Onset: After 30 years old  
Milestones: Normal

### ABOUT SMA AND CURE SMA

Spinal muscular atrophy (SMA)—the number one genetic cause of death for infants—robs people of physical strength by affecting the motor nerve cells in the spinal cord, taking away the ability to walk, eat, or breathe. SMA is caused by deletion or mutation of the survival motor neuron gene 1 (SMN1). In a healthy person, this gene produces a protein that is critical to the function of the nerves that control our muscles. Without it, those nerve cells cannot properly function and eventually die, leading to debilitating and often fatal weakness of muscles used for breathing, crawling, walking, head and neck control, and swallowing.

Cure SMA is the largest network of individuals, families, clinicians, and research scientists working together to advance SMA research, support individuals with SMA and their families, and educate public and professional communities about SMA.

### NORTH CAROLINA CHAPTER INFORMATION

Cure SMA has 36 volunteer-led chapters across the U.S.  
To find and contact the North Carolina chapter, visit [www.curesma.org/chapters](http://www.curesma.org/chapters).

### CURE SMA CARE CENTER NETWORK

The Cure SMA Care Center Network is the centerpiece of our efforts to address the changing landscape of SMA. The goal of the Network is to develop an evidence-based standard of care that will improve the lives of all those with SMA.

### Find an SMA Treatment Center

Cure SMA created an online resource where you can find a comprehensive list of Cure SMA Care Centers, SMA treatment centers, and newborn screening referral centers. Check it out at [www.curesma.org/find-a-location/](http://www.curesma.org/find-a-location/).

### NEW HOPE FOR TREATING SMA

Thanks to the dedication of our community and the ingenuity of our researchers, we now have treatments that target the underlying genetics of SMA. Currently, there are multiple treatments for SMA approved by the U.S. Food and Drug Administration (FDA)—Evrysdi, Spinraza, and Zolgensma. All are SMN-enhancing treatments.

But our work is not done. We know what needs to be done to develop and deliver effective therapies that target other systems, pathways, and processes impacted by SMA. Our goal is a combination of therapeutic approaches that can be tailored to each individual's age, stage, and type of SMA. These breakthroughs will continue to change the course of SMA for everyone—from infants to adults to families.

# NEWBORN SCREENINGS FOR SMA IN NORTH CAROLINA CAN SAVE AND IMPROVE LIVES



Early diagnosis and treatment for spinal muscular atrophy (SMA) can lead to improved, long-lasting developmental outcomes for individuals with SMA. In addition, clinical data shows that SMA treatments and care are more effective when delivered early, even before symptoms appear. Newborn screening is the most effective and efficient way for babies with SMA to access timely treatments and available support.

## SMA INCLUDED ON NATIONAL RECOMMENDED NEWBORN SCREENING PRIORITY LIST

In July 2018, the U.S. Secretary of Health and Human Services added SMA to the national recommended list for newborn screening—known as the Recommended Uniform Screening Panel or RUSP.

Each state determines what conditions to include in its screening panel, and how to add conditions to this panel. The RUSP is an important guideline for the states in this process, and after being included, several states have taken action to adopt and implement newborn screenings for SMA.

## CURE SMA'S GOAL: UNIVERSAL SCREENING FOR SMA



Cure SMA has made implementation of universal screening for SMA—as recommended by the federal government—a top priority. Thanks to the advocacy of individuals with SMA and their families and the leadership of state officials, **more than three-quarters of all states have implemented newborn screening for SMA, representing close to 9 in every 10 babies born in this country.**

Despite the progress in screening newborns for SMA, the U.S. remains well short of the goal of 100 percent universal newborn screening for SMA. Several states are still not screening babies born in their state for the leading genetic cause of death among infants.

## THANK YOU, NORTH CAROLINA!



All babies born in North Carolina are screened for SMA! Cure SMA applauds North Carolina for its adoption of newborn screening for SMA in all babies. The state started screening all newborns for SMA in 2021. North Carolina parents of newborns with SMA now have the information they need to make timely decisions about care and treatment for their child.



For more information, contact the Cure SMA Advocacy Team at [advocacy@curesma.org](mailto:advocacy@curesma.org)

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