



# First Sound

## South Carolina's Early Hearing Detection and Intervention (EHDI) Program

### 2024 LEGISLATIVE UPDATE

The **First Sound program**, established by state law in 2001, conducts surveillance for the statewide mandate that all infants are screened for hearing loss at birth and, if applicable, receive diagnostic and intervention services. South Carolina is one of 48 states in the U.S. to have legislation requiring the creation of an Early Hearing Detection and Intervention (EHDI) program.

Approximately 3 out of every 1,000 children born in the United States have some degree of hearing loss. More than 90% of deaf children are born to hearing parents. Without early identification, parents would be unaware of the child's hearing loss until the child started showing signs of developmental delays for speech and language. Signs typically occur around 2 years of age, after a considerable amount of the critical window (birth-3 years of age) for language development has passed.

### Program Highlights

- Identified **2,094 infants** as Deaf or Hard of Hearing (DHH) at birth since the start of the program in 2001
- Provided ongoing trainings to hospitals, audiologists, and internal stakeholders
- Partnered with Beginnings SC and SC Hands & Voices (DHH family support organizations) to host the 8th Annual Back to School Bash for DHH Students
- Partnered with Beginnings SC to conduct hearing screening trainings to early childhood centers across the state
- Co-presented *Exploring Birth Defects Surveillance Programs and Title V Partnerships* for the Association of Maternal & Child Health Programs Technical Assistance Virtual Roundtable Series highlighting successful partnerships
- Co-hosted the first statewide *"Deaf and Hard of Hearing (DHH)/Deaf Blind (DB)/Deaf+ (DP) Building Bridges Family Conference"*
  - Keynote Speaker: Amie Fornah Sankoh – first deaf black woman in US to earn PhD in STEM
  - Partners included: SC Hands & Voices, Beginnings SC, SC Association of the Deaf, SC Registry of Interpreters for the Deaf, MUSC Audiology, SC School for the Deaf and Blind SC DHH Education Partnership, SC Dept of Education, and Carter Hears
- First Sound Program Manager was elected to serve on the Board of Directors of Speech and Hearing Programs in State Health and Welfare Agencies (DSHPSHWA)
- Co-recipient of the National Birth Defects Prevention and Education Award by the National Birth Defects Prevention Network with the SC Birth Defects Program

### Program Benchmarks

Since 2001, First Sound has diligently worked to meet the national goals and objectives for EHDI programs, including the **"1-3-6 Plan"**:

- 1** All infants should have access to hearing screening no later than **1 month** of age.
- 3** All infants who do not pass the hearing screening/rescreening should have diagnostic audiologic evaluation confirming hearing status by **3 months** of age.
- 6** All infants with a confirmed hearing loss should receive early intervention services as soon as possible following diagnosis but no later than **6 months** of age.

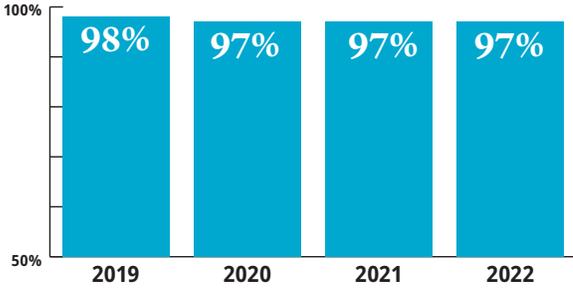
### Future Goals

- Strengthen the ability of the First Sound program to make direct referrals to early intervention and family support organizations to increase the number of infants 1) identified with hearing loss by 3 months of age and 2) enrolled in early intervention services by 6 months of age
- Reduce the number of infants who are lost to follow up through intra-agency partnerships with Women, Infants and Children (WIC), Birth Defects, and Children and Youth with Special Health Care Needs
- Expand diversity of family engagement in the EHDI systems through collaborative partnerships with DHH family support organizations
- Partner with stakeholders in planning and hosting the 2nd annual statewide DHH conference for families and students
- Continue partnership with Beginnings SC to conduct hearing screening training in additional early childhood centers across the state

# South Carolina By The Numbers

## South Carolina Newborn Hearing Screening Rate

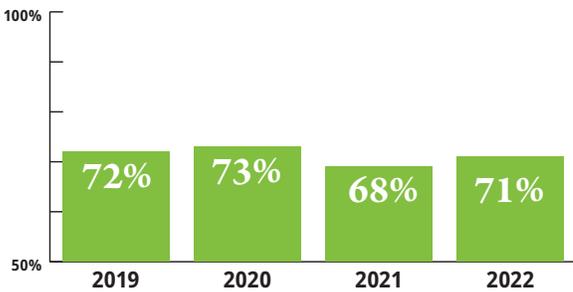
AAP Benchmark: 95% | 2021 National Average: 97.4%



The South Carolina newborn hearing screening rate remains stable and above the American Academy of Pediatrics benchmark value of 95%.

## SC Infants with Hearing Loss Where Loss is Confirmed by 3 Months

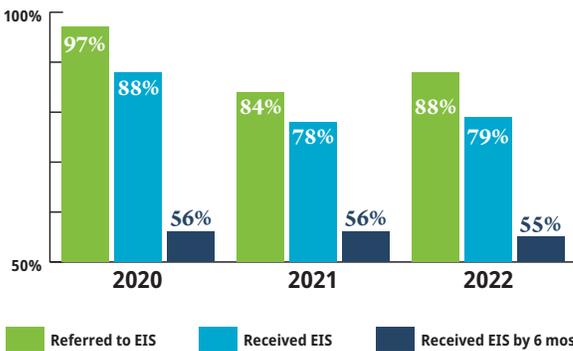
AAP Benchmark: 100% | 2021 National Average: 74%



In 2022, 71% of infants with confirmed hearing loss in South Carolina were diagnosed by 3 months. While below the American Academy of Pediatrics standard of 100%, it is increased from 2021.

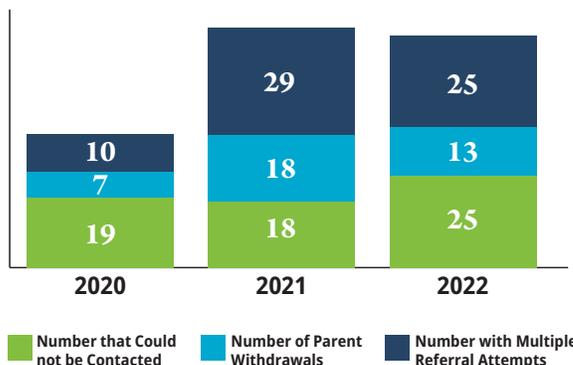
## Early Intervention for SC Infants with Permanent Hearing Loss

AAP Benchmark: 100% by 6 months old | 2021 National Average: 42.2%



All early intervention data points remained stable for 2022. South Carolina fell short of the American Academy of Pediatrics standard of 100% receiving early intervention by 6 months of age, however exceeded the 2021 national average of 42.2%

## Factors Impacting Early Intervention Services Enrollment by 6 months old



Factors contributing to delays in EI enrollment for infants with hearing loss include parent withdrawal prior to completion of enrollment process, unsuccessful attempts to make contact with the family, and multiple referral attempts being necessary prior to an infant's successful enrollment

## Affirmation

After I did not pass my hearing screening, I was directed to audiologists at MUSC where I received a cochlear implant at the age of 1 and added a second implant at the age of 5. With the hearing screening that was implemented by South Carolina and the support of my parents and audiologists, I was able to have opportunities that I otherwise wouldn't have been able to have with late identification.

In 3rd grade, I won my school Spelling Bee and went on to place 2nd at the regional Spelling Bee in Anderson, SC. In 5th grade, I was blessed to be able to represent Anderson at the 2016 Scripps National Spelling Bee in Washington, D.C. and again in 2018 as a 7th grader. Due to my accomplishments at the 2016 spelling bee, the sponsor, Amazon Kindle, gave me the opportunity to travel to Los Angeles, CA to be featured in commercials.

My spelling bee accomplishments also got me invited twice to the Alexander Graham Bell Association for the Deaf and Hard of Hearing national conference to share my story. Once to inspire younger deaf and hard of hearing children and another to help give strength to parents who were questioning their child's future after a diagnosis.

In May 2023, I graduated with honors and a ranking of 3rd in my class from Belton-Honea Path High School. I am currently a Freshman at Clemson University majoring in Chemical Engineering. I hope that my story inspires others and shows the amazing results that have occurred from the implementation of the newborn hearing screening program in South Carolina.

— Neil Maes,  
Anderson  
County

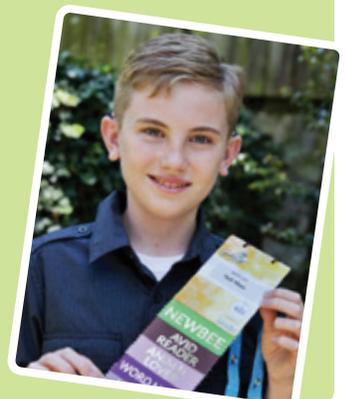


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