

Some babies are born listeners.



Others need your help.

UNIVERSAL NEWBORN HEARING SCREENING



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FACT SHEET

Fact 1 Every day, 33 babies (or 12,000 each year) are born in the United States with permanent hearing loss. With 3 of every 1,000 newborns having a hearing loss, it is the most frequently occurring birth defect.

Fact 2 In a 1988 report to Congress and the President, the Commission on Education of the Deaf estimated that in the United States, the average age that children with congenital hearing loss were identified was 2-1/2 to 3 years of age, with many children not being identified until 5 or 6 years of age.

Fact 3 "If hearing impaired children are not identified early, it is difficult, if not impossible, for many of them to acquire the fundamental language, social, and cognitive skills that provide the foundation for later schooling and success in society."

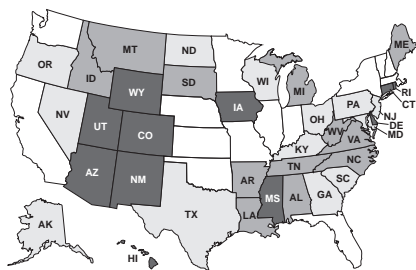
Fact 4 In 1993, a Consensus Panel convened by the National Institutes of Health concluded "that all infants should be screened for hearing impairment. . . . This will be accomplished most efficiently by screening prior to discharge. . . . Infants who fail . . . should have a comprehensive hearing evaluation no later than 6 months of age."

Fact 5 The American Academy of Pediatrics, the American Academy of Audiology, the Joint Committee on Infant Hearing, and the National Association of the Deaf have recommended that all babies be screened for hearing loss before they leave the hospital.

Fact 6 "When early identification and intervention occurs, hearing impaired children make dramatic progress, are more successful in school, and become more productive members of society."

Fact 7 The practicability and cost-efficiency of hospital-based universal newborn hearing screening is demonstrated by the fact that approximately 1,000 hospitals throughout the country are operating successful universal newborn hearing screening programs.

Fact 8 The cost for hospital-based universal newborn hearing screening is very inexpensive and continues to decrease. Using current technology, the cost ranges from \$10-\$50 per baby depending on the protocol and technology used.



STATES OPERATING SUCCESSFUL UNIVERSAL NEWBORN HEARING SCREENING PROGRAMS:

- STATEWIDE NEWBORN HEARING SCREENING PROGRAMS.
- MORE THAN HALF OF ALL BIRTHS ARE SCREENED.
- NOT YET STATEWIDE, BUT SCREENING MORE THAN 20,000 BIRTHS EACH YEAR.



Fact 9 The cost per child identified with congenital hearing loss is about 1/10th the cost per child identified with PKU, hypothyroidism, or sickle cell anemia in metabolic disorder screening programs. Such metabolic disorder screening programs are required in all 50 states.

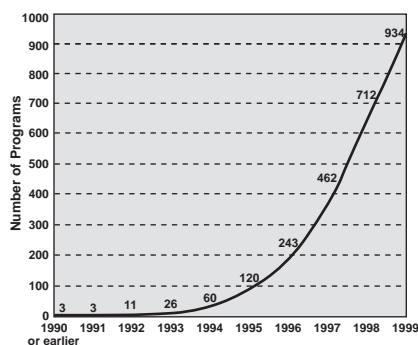
Fact 10 Research has compared children with hearing loss who receive early intervention and amplification before 6 months of age versus after 6 months of age. By the time they enter first grade, children identified earlier are 1-2 years ahead of their later-identified peers in language, cognitive, and social skills.



Fact 11 Infants with hearing loss can be fit with amplification before they are 1 month old. With appropriate family-centered intervention, normal language, cognitive, and social development for such infants is likely.

Fact 12 The evidence for the benefits, practicability, and cost-efficiency of universal newborn hearing screening is so compelling that 22 states have passed legislative mandates requiring hospitals to screen all newborns for hearing loss. Similar legislation is pending in several other states.

Fact 13 All babies should be screened for hearing loss in the birth hospital, and comprehensive, family-centered service should be available for identified children and families. Such statewide early hearing detection and intervention programs are now operational in at least 10 states, and others are rapidly approaching such statewide systems.



UNIVERSAL NEWBORN HEARING SCREENING PROGRAMS IN THE USA BY YEAR OF IMPLEMENTATION

Fact 14 The number of hospitals implementing universal newborn hearing screening has increased more than fifty-fold in the last 6 years. Nonetheless, only about 35% of the babies in this country are born in hospitals with universal newborn hearing screening programs, and 75% of birthing hospitals do not screen hearing for all babies prior to discharge.

Fact 15 If it remains undetected, even mild hearing loss or hearing loss in only one ear has substantial detrimental consequences. For example, research shows that children with hearing loss in one ear are ten times as likely to be held back at least one grade compared to a matched group of children with normal hearing.

Fact 16 Research shows that by the time a child with hearing loss graduates from high school, more than \$400,000 per child can be saved in special education costs if the child is identified early and given appropriate educational, medical, and audiological services. These savings in special education costs will pay for universal newborn hearing screening many times over.

Fact Sheet References

- Fact 1: White, K. R. (October, 1997). The scientific basis for newborn hearing screening: Issues and evidence. Invited keynote address to the Early Hearing Detection and Intervention (EHDI) Workshop sponsored by the Centers for Disease Control and Prevention, Atlanta, Georgia.
- Fact 2: Commission on Education of the Deaf. (1988). Toward equality: Education of the deaf. Washington, DC: Author.
- Fact 3: U.S. Department of Health and Human Services (HHS). (1990). Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, DC: Public Health Service.
- Fact 4: National Institutes of Health (NIH). (1993). NIH Consensus Statement. Early identification of hearing impairment in infants and young children, 11(1), 1-24.
- Fact 5.: U.S. Department of Health and Human Services (HHS). (1990). Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, DC: Public Health Service.
National Institutes of Health (NIH). (1993). NIH Consensus Statement. Early identification of hearing impairment in infants and young children, 11(1), 1-24.
American Academy of Pediatrics Task Force on Newborn and Infant Hearing. (1999). Newborn and Infant Hearing Loss: Detection and intervention. Pediatrics, 103(2), 527-530.
- Fact 6: U.S. Department of Health and Human Services (HHS). (1990). Healthy People 2000: National Health Promotion and Disease Prevention Objectives. Washington, DC: Public Health Service.
- Fact 7: White, K. R. (1997). Survey of UNHS programs. NCHAM World Wide Web site (www.usu.edu/~ncham/survey.html).
- Fact 8: Maxon, A. B., White, K. R., Behrens, T. R., & Vohr, B. R. (1995) Referral rates and cost efficiency in a universal newborn hearing screening program using transient evoked otoacoustic emissions (TEOAE), Journal of the American Academy of Audiology, 6, 271-277.
White, K. R., Mauk, G. W., Culpepper, N. B., & Weirather, Y. (1998). Newborn hearing screening in the United States: Is it becoming the standard of care? In L. Spivak (Ed.), Universal newborn hearing screening (pp. 225-255). New York: Thieme.
Grosse, S. (September, 1997). The costs and benefits of universal newborn hearing screening. Paper presented to the Joint Committee on Infant Hearing, Alexandria, VA.
Mehl, A. L., & Thomson, V. (1998). Newborn hearing screening: The great omission. Pediatrics, 101(1), 1-6 (<http://www.pediatrics.org/cgi/content/full/101/1/e4>).
- Fact 9: Johnson, M. J., Maxon, A. B., White, K. R., & Vohr, B. R. (1993). Operating a hospital-based universal newborn hearing screening program using transient evoked otoacoustic emissions. Seminars in Hearing, 14(1), 46-56.
- Fact 10: Yoshinaga-Itano, C., Sedey, A., Apuzzo, M., Carey, A., Day, D., & Coulter, D. (July 1996). The effect of early identification on the development of deaf and hard-of-hearing infants and toddlers. Paper presented at the Joint Committee on Infant Hearing Meeting, Austin, TX.
Moeller, M. P. (October 1996). Early intervention of hearing loss in children. Paper presented at Fourth International Symposium on Childhood Deafness, Kiawah Island, South Carolina.
- Fact 11: Harrison, M., & Roush, J. (1996). Age of suspicion, identification, and intervention for infants and young children with hearing loss: A national study. Ear and Hearing, 17, 55-62.
Strong, C. J., Clark, T. C., & Walden, B. E. (1994). The relationship of hearing-loss severity to demographic, age, treatment, and intervention-effectiveness variables. Ear and Hearing, 15, 126-137.
- Fact 12: White, K. R. (1997). Legislative activities. NCHAM World Wide Web site (www.usu.edu/~ncham/legislative.html).
- Fact 13: White, K. R. (1997). Survey of UNHS programs. NCHAM World Wide Web site (www.usu.edu/~ncham/survey.html).
- Fact 14: White, K. R. (1997). Survey of UNHS programs. NCHAM World Wide Web site (www.usu.edu/~ncham/survey.html).
- Fact 15: Bess, F. H., & Tharpe, A. M. (1986). Case history data on unilaterally hearing-impaired children. Ear and Hearing, 7(1), 14-19.
- Fact 16: White, K. R., & Maxon, A. B. (1995). Universal screening for infant hearing impairment: Simple, beneficial, and presently justified. International Journal of Pediatric Otorhinolaryngology, 32, 201-211.