

Arkansas Infant Hearing Program (IHP) Annual Report

2015

Submitted by: Arkansas Infant Hearing Program

EHDI

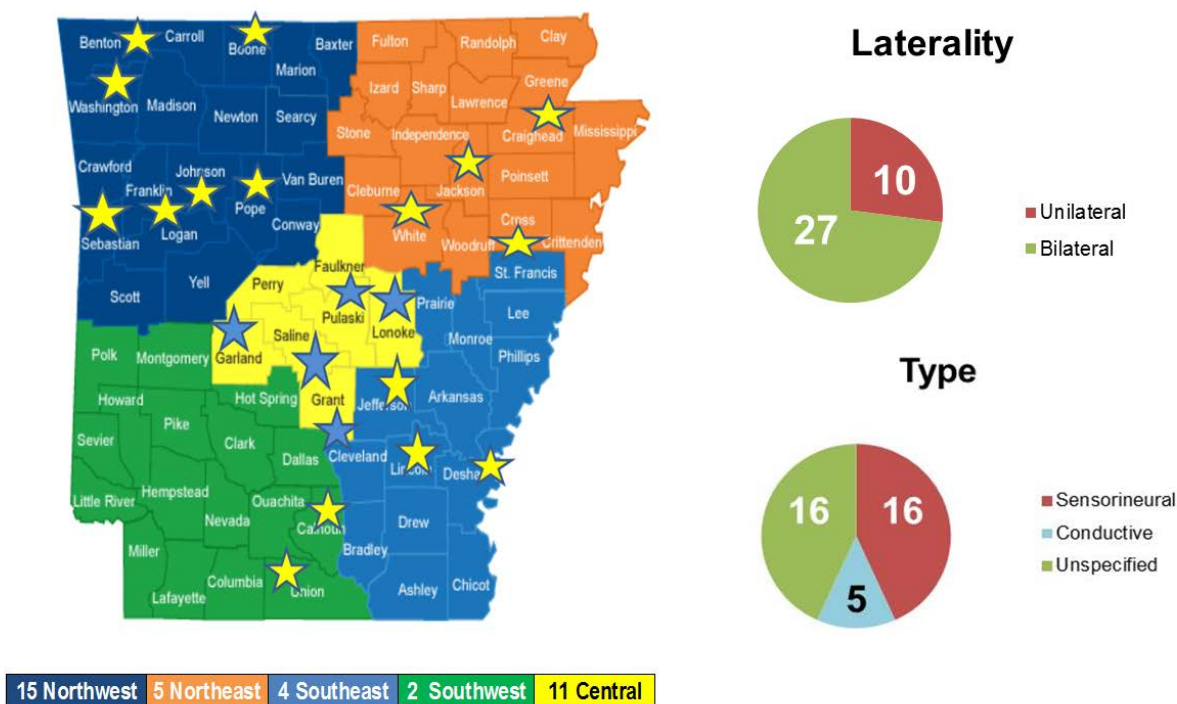


Arkansas Department of Health

Mission Statement

The goal of early hearing detection and intervention is to identify hearing loss and provide intervention services as early as possible in an effort to prevent speech, language, and other delays so newborns, infants and children reach their maximum potential.

Confirmed Hearing Loss by County



37 Confirmed hearing loss cases in 2015.

Arkansas IHP Overview

The Arkansas Infant Hearing Program (IHP), located within the Arkansas Department of Health (ADH), serves as the state Early Hearing Detection and Intervention (EHDI) team overseeing the state mandate.

Program funding is provided through three sources: 1) Health Resources and Services Administration (HRSA) Universal Newborn Hearing Screening Grant, 2) Centers for Disease Control and Prevention (CDC) Early Hearing Detection and Intervention (EHDI) Cooperative Agreement, and 3) the HRSA Title V Maternal and Child Health Block Grant. The IHP works to ensure all infants with hearing loss are identified early, provided with timely and appropriate audiology, medical and educational intervention.

Program Purpose

The focus of the Arkansas EHDI program is to ensure quality developmental outcomes for infants identified with hearing loss. The program collaborates with hospitals, early intervention programs, parents, and stakeholders to assure hearing screenings are provided to newborns and services are provided for those identified with hearing loss.

State Law

Arkansas Act 1559 of 1999 mandates hearing screening for infants born at birthing hospitals. The Arkansas EHDI Program, located in the ADH's Center for Health Advancement, oversees the regulatory component of the mandate.

The Act also established a Universal Newborn/infant Hearing Screening, Tracking and Intervention Program and Advisory Board which is appointed by the Governor. The board consists of one audiologist, one audiologist from the Department of Health, one audiologist from Arkansas Children's Hospital, one speech-language pathologists, one pediatrician/neonatologist or ENT physician, one adult who is deaf or hard of hearing to represent consumer organizations for deaf and hard of hearing persons and one consumer of services who is a parent of a child or children with hearing loss.

Program Goals: **1-3-6**

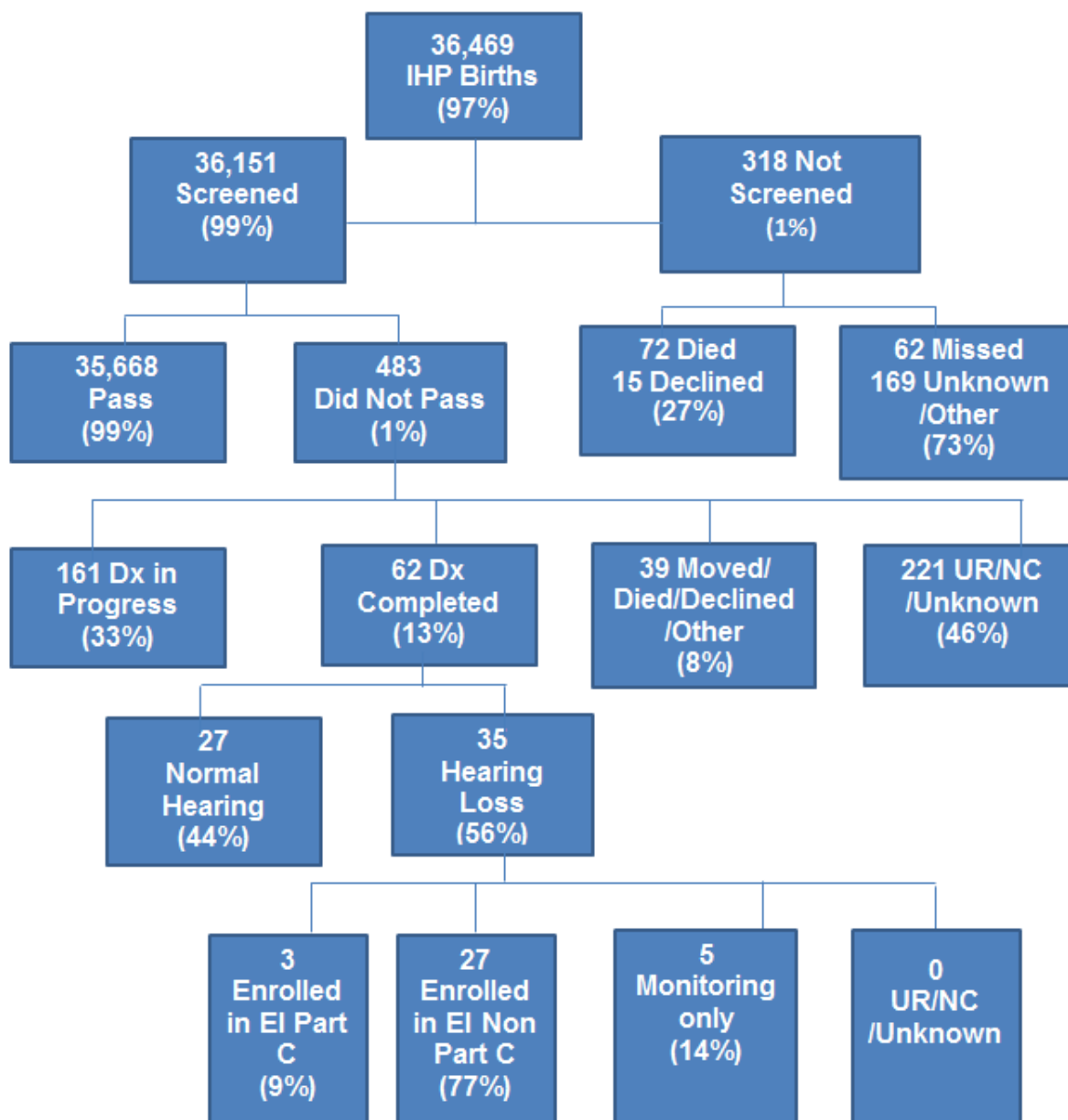
- 👂 All newborns will be screened for hearing loss before 1 month of age, preferably before hospital discharge.
- 👂 All infants who screen positive will have a diagnostic audiology evaluation before 3 months of age.
- 👂 All infants identified with hearing loss will receive appropriate early intervention services before 6 months of age (medical, audiology, and early intervention).
- 👂 All infants and children with late onset, progressive or acquired hearing loss will have diagnosis at the earliest possible time.

Program Services:

The IHP maintains a comprehensive tracking database system, Electronic Record of Arkansas Vital Events (ERAVE) to assure all newborns are screened for hearing loss before hospital discharge; infants are tracked for timely follow-up evaluations; those identified with hearing loss are enrolled in Early Intervention (EI) Services; families have access to family-to-family support; and children with confirmed hearing loss are linked to a medical home.



2015 Screening Diagnostic and Intervention Data



Source: EHDI Hearing Screening and Follow-up Survey Report produced in ERAVE for babies born in calendar year 2015. UR=Family Unresponsive, NC =Not able to contact family, UNK = Unknown. There were 2 babies with confirmed diagnosis not included above because they passed initial hearing screening and were diagnosed later. There were 37,600 births reported by ADH Vital Records.

Stakeholder Education

Outcome Assessment: The Effect of Training Nurses Regarding Proper Infant Hearing Screening Methods on Referral Rate Outcomes.

Hypothesis

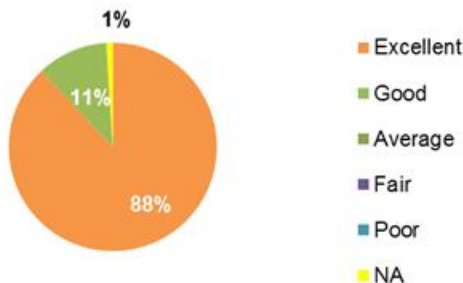
The vast majority of birthing hospitals conduct repeated newborn hearing screenings until the newborn has a pass/pass. This over-screening practice will decrease after receiving training on hearing screening methodologies.

Pre Assessment

- 🔗 Nurses were not comfortable relaying results to family members.
- 🔗 Nurses did not feel proficient administering AABR hearing screenings.
- 🔗 Hospital staff stated they would “screen until the newborn passed” and did not follow the Joint Commission on Infant Hearing (JCIH) best practice guide.

Post Assessment

Percent of Nurses Reporting Feeling Comfortable Communicating Results to Parents



Workshop Training Follow-Up Results

- ✓ 65% of attending hospital staff report feeling comfortable stopping hearing screens after two screening attempts.
- ✓ 52% of attending hospital staff verified rescreening procedures included rescreening both ears, even if only one ear failed the first screening attempt.
- ✓ 61% of the 31 attending hospitals' refer rates increased.
- ✓ 39% of the 31 attending hospitals' refer rates decreased.

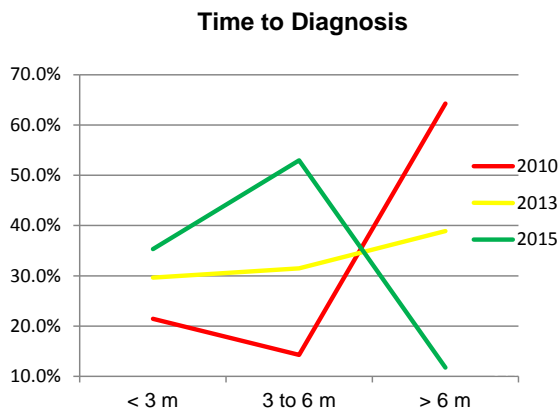
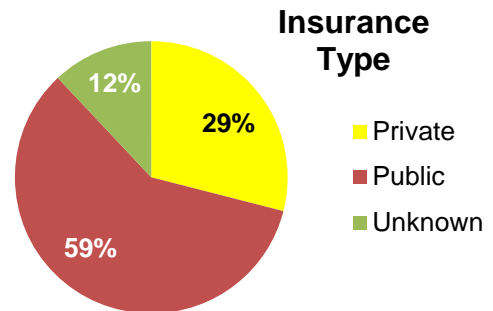
Future Plans

Continue to educate nursery staff on when to screen, how often to screen, and how to perform an AABR hearing screen according to JCIH guidelines.

Utilize ERAVE to print screening results form for parents while also using the information on the form as talking points to educate the family on the results prior to discharge.

Measure of Progress

Background: The IHP continues to see reductions in the time it takes for children with hearing loss to receive diagnoses. Of the infants diagnosed in 2015, 35% were diagnosed within 3 months of birth in comparison to only 21% in 2010. In 2010, 64% of the children diagnosed received their diagnosis after 6 months as compared to 12% in 2015.



Findings:

- 👂 During follow-up with parents, staff members receive feedback about reasons for delays to diagnosis. Reasons included lack of insurance and transportation.
- 👂 The IHP is monitoring the influence outside factors have on the time it takes to get a diagnosis such as insurance.

- 👂 The insurance types for babies with confirmed hearing loss were reported as 29% private, 59% public and 12% unknown for 2015.
- 👂 Further investigation revealed 21% of babies with confirmed hearing loss had a NICU stay greater than 5 days. Of those babies, 4 were reported to have risk factors for ototoxic drugs and 4 were reported to have risk factors of defects to the head and neck.

Summary of Activities

Evaluation Plan: The purpose of the evaluation plan is used to improve internal processes, practices, cost or productivity for issues related to the submission and quality of hearing screening data reported to the IHP staff. The Centers for Disease Control recommends the IHP evaluation of key attributes including; timeliness, effectiveness, acceptability, data quality, and representativeness. For 2015 IHP can report the following:

- 🔗 Timeliness – During 2015 time to submission of results continued to average 48 hours.
- 🔗 Data Quality- Monitoring of 2015 EI documentation revealed 100% accuracy when reviewing in ERAVE.
- 🔗 Effectiveness –The number of open records in ERAVE continue to decrease due to changes in IHP protocol. These changes include follow-up with two sets of phone calls to parents, second contacts and clinics. At least two letters are sent to the parents address indicating the need for further testing. Protocols also address communication between IHP liaisons and hospitals.
- 🔗 Communication – An IHP liaison has been assigned to each facility to provide additional resources to assist with submission of complete and accurate information which includes the use of quality assurance reports.
- 🔗 Provider Acceptability – For 2015, 94% of IHP records have been submitted by providers other than IHP staff.
- 🔗 Representativeness -100% of the 40 birthing hospitals are using ERAVE. Additional users represent birthing facilities, PCP, hearing screening clinics and midwives.

Continued Projects:

- 🔗 Continue working with Part C and Non Part C Providers, Arkansas School for the Deaf and Arkansas Children's Hospital to increase EI enrollment documentation.
- 🔗 Increase data sharing between EI programs and the IHP.
- 🔗 Implementation of stakeholder subcommittees to improve services of EI providers.
- 🔗 Continue working with the Arkansas chapter of Hands and Voices offering family support programs.
- 🔗 Continue to provide loaner screening equipment. In 2015, equipment was provided for a total of 1,214 loaner days. The loaner program reduces the number of babies that are discharged without screening.

Achievements:

- 👂 Completed (ERAVE) training for otolaryngology clinics and primary care clinics providing access to patient hearing screening information and the ability to submit additional clinical data.
- 👂 Submitted a poster at the National EHDI Annual Meeting on “The Effect of Training Nurses Regarding Proper Infant Hearing Screening Methods on Referral Rate Outcomes”, winning an Outstanding Poster Ribbon.
- 👂 Increased attendance at the annual Infant Hearing Program Conference by 70%. Educated Arkansas EHDI Stakeholders in the use of ERAVE and best practices for hearing screening and documentation.
- 👂 Offered two days of the CARE Project training and counseling for stakeholders. This training included the filming of parent interviews detailing their personal journey with receiving a hearing loss diagnosis for their child.
- 👂 Hosted a National Center for Hearing Assessment and Management (NCHAM) Quality Improvement Training for stakeholders. During a two day training session with NCHAM QI Advisors; Arkansas data, grant goals and development of Plan Do Study Act (PDSA) cycles were discussed. These activities improve IHP program success.

What the future holds for IHP:

- 👂 Implementing the Guide by Your Side program for parents of children who are diagnosed with hearing loss. This program will provide parent to parent support.
- 👂 Provide continuing education, training workshops, and email blasts to providers addressing best practices.
- 👂 Improve the communication with birthing facilities by providing consistent messages for the delivery of written and verbal test results at the time of testing.
- 👂 Improve data sharing with stakeholders by creating a list of EI services, identifying EI providers with professional qualifications, and creating educational material given to parents at time of diagnosis as identified by the IHP stakeholder subcommittees.

