HOSPITAL HEARING SCREENING

All hospitals that deliver babies are equipped with newborn hearing screening equipment. Screening equipment utilized by the hospitals is easy to use, requires minimum test time and elicits objective results (requires no response from the baby). Most hospitals use the Natus Automated Auditory Brainstem Response (AABR) unit. Training of hospital staff is conducted periodically in order to ensure that the hospital is comfortable with the screening equipment, procedures and paperwork. Ongoing efforts are made to ensure that hospitals are making indicated referrals to the program.

A. Three Step Screening Procedure:

- 1. First screen is completed shortly after birth when the baby is quiet.
- 2. Second screen is completed prior to discharge if the baby refers in either ear on the first screen. <u>Both ears are to be re-screened.</u>
- **3.** Third screen: If the baby refers in either ear during the 1st & 2nd screens, an appointment is made at birthing hospital for an outpatient screen. This screen should be conducted within 2 days after hospital discharge and before 1 month after birth.

B. Procedures for a "pass":

The results are discussed with the parents. Parents are informed that their child passed the hospital hearing screening. Pamphlets with information on normal auditory and speech/language development are provided and the parents are encouraged to contact their primary care provider (PCP) if concerns arise.

C. Procedures for infants who "refer":

- 1. Results of the screening (3rd outpatient) are discussed with the parents. Parents are informed regarding the need to confirm the screening results with a diagnostic evaluation.
- 2. Within a month, an appointment is scheduled by the hospital with a local diagnostic center and parents are provided with the date and time of the appointment. The Joint Commission on Infant Hearing (JCIH) recommends that the diagnostic audiological evaluation be completed by 3 months of age.
- **3.** Mississippi State Department of Health (MSDH) Form # 288 (Exhibit 1) is completed and faxed or mailed within 2 business days to the EHDI-M program, the child's PCP, and the scheduled local diagnostic center that has the equipment and expertise to diagnose hearing loss in infants.

D. Procedures for infants who are "high risk" for developing hearing loss:

- 1. JCIH names the following risk indicators for progressive hearing loss: Findings associated with a syndrome known to include a sensorineural and/ or conductive hearing loss, family history of permanent childhood sensorineural hearing loss, craniofacial anomalies, including those with morphological abnormalities of the pinna and ear canal, and in-utero infection such as (CMV, herpes, toxoplasmosis, and rubella).
- 2. Results of the screening are discussed with the parents or guardian. Parents are

informed that their child is "at risk" for developing hearing loss as a late onset even though their child may have passed the hearing screen. They are provided with information regarding normal auditory and speech/language development. It is important that these children are in a system of care for periodic monitoring of hearing status and assessment of communication development. (JCIH recommends that these children have their hearing evaluated at least by 24 to 30 months of age.)

3. The Screening Coordinator (at hospital) completes and faxes or mails MSDH Form #288 to the EHDI-M office and to the child's PCP.

E. Procedures for "No Shows" for the outpatient screen:

- 1. If the child fails to return for the 3rd (outpatient) screening, the hospital staff reschedules the appointment.
- **2.** If the child fails to show for the rescheduled appointment, the hospital completes the Form # 288 and faxes or mails it to the EHDI-M Hearing Screening Coordinator.

HEARING SCREENING COORDINATOR MONITORING & TRACKING PROCEDURES

A. Procedures for referrals (Form #288) received from hospital:

- 1. The EHDI-M office receives Form#288 on a child and it is routed to the **Hearing Screening Coordinator** to ensure an appointment has been made for a diagnostic evaluation.
- 2. The Hearing Screening Coordinator enters data from Form # 288 into the data system. The Form # 288 is routed (within 2 days) to the Diagnostic/Intervention Coordinator with a checklist (Exhibit 2) to contact family to confirm scheduled appointment.

B. Procedures for Processing Form # 291 and Floppy Disk:

- 1. The Infant Hearing Screening Log (Form #291) (Exhibit 8) and a disk are received from each screening by the fifth of each month. The hospital downloads screening results from the Natus Screener onto a disk and sends the disk to the MSDH-EHDI-M Program.
- 2. The Hearing Screening Coordinator downloads the disk in an excel program, saves it in a folder on a shared hard drive, prints the logs, and attaches the log to Form #291. The information on this form includes: baby's name, date of birth, screening results, high risk indicators, attending physician, hospital screening staff, and hospital medical record number.
- **3**. The hospital completes the Infant Hearing Screening Log Form #291 (once a month) recording the following information:
 - **a.** Total number of live births for the hospital during a month.
 - **b**. Total number of babies screened prior to discharge.
 - **c**. Total number of babies screened prior to 1 month of age or > 1 month of age.
 - **d**. Total number and names of babies referred for diagnostic evaluation.

- **e**. Names of babies that are transferred to another hospital, missed screening, and with high risk indicators for hearing loss.
- 4. The Hearing Screening Coordinator critiques the printed log from the disk to:
 - **a**. Verify that all babies have been counted once; reconciles duplicates.
 - **b.** Verify that babies have been counted in the month that they were screened.
 - **c.** Verify the babies that passed the hearing screening.
 - **d**. Verify that all babies that failed the hearing screening ("refer") have a completed Hearing Screening Form #288.
 - **e**. Verify that all babies that are transferred to another hospital are screened have a hearing screening recorded.

C. Procedures for a "pass" (documentation at EHDI-M office):

Hearing Screening Coordinator receives information on a floppy disk of all babies that pass the hospital screening. The disk is downloaded in an excel program and saved to a hard drive. A copy is printed and attached to the Infant Hearing Screening Log, filed by hospital name and the month of the screenings. The information includes: the infant's medical number, first and last name, gender, date of birth, birth location, date and time of screen, screening method, application, results and duration, and high risk indicators.

D. Procedures for infants who are "No Show" for outpatient (3rd) screening:

- 1. The Hearing Screening Coordinator attempts to contact the family by telephone to reschedule the appointment and attempts to solve any barriers the parents may have in rescheduling the appointment.
- 2. If the family cannot be contacted by phone, the Hearing Screening Coordinator will mail a certified letter (Exhibit 3) to the parent/caregiver stating the importance of completing the hearing screening. All MSDH data resources (Genetics, local health department, etc.) will be checked to verify contact information.
- **3**. The listed PCP is sent a Fax back form (Exhibit 4) to verify that the child is an established patient and to request assistance with follow-up.
- **4.** If no response from the family is received after these attempts, the child is considered "lost to follow up". The child's file is kept in the EHDI-M office with documentation that attempts have been made to contact the family by phone and/or by letter on at least three different occasions and that the child's listed PCP has been notified.

E. Procedures for <u>out-of-hospital births:</u>

- 1. The Hearing Screening Coordinator receives a list of "out-of-hospital" births from Vital Records at periodic intervals.
- **2.** The Hearing Screening Coordinator checks hospital logs to see if the babies have been screened at a hospital in their area of residence.
- **3.** If a baby is not found on a hospital log, the parent is called to ask if a screening has been completed and, if so, the location of the screening. If the baby has been screened, the results will be located. If the baby has not been screened, the

Hearing Screening Coordinator assists the family in scheduling a screening at a hospital or diagnostic center in their area of residence.

4. If the parent cannot be reached by phone, a letter with information regarding the nearest screening hospital is sent along with educational materials discussing the importance of early identification of hearing loss. Information to contact the Hearing Screening Coordinator is also included.

F. Procedures for infant <u>transferred to another hospital</u>:

- 1. The Hearing Screening Coordinator receives Form #288 from the birth hospital on babies who are transferred to another hospital.
- 2. The Hearing Screening Coordinator checks the hospital logs where the babies are transferred to see if the babies have been screened.
- **3.** If a baby is not found on the hospital log, an appointment will be scheduled by the Hearing Screening Coordinator and the parents are notified by phone or mail of the scheduled appointment and its importance.

G. Procedures for "SICK" infants:

- **1.** The Hearing Screening Coordinator receives Form #288 from the birth hospital for babies who are "sick" and unable to be screened.
- 2. The Hearing Screening Coordinator enters the data from the Form #288 into the data system.
- **3.** The Form #288 is routed to the Diagnostic/Intervention (**within 2 days**) to file in notebook and monitored periodically to track if/when the diagnostic assessment is done, the results of the assessment, and indicated follow-up.

H. Property Transfer/Location Change Form:

- **1.** There are four Natus Portable Screeners that are kept in the EHDI-M office to use as loaners to the hospitals.
- **2.** The Hearing Screening Coordinator transfers the screening equipment to the hospitals.
- **3.** The property transfer/location change form is completed with the necessary authorized signatures.
- **4.** This form is updated once a year. Documentation of completed forms are stored in a notebook in the EHDI-M office.