III. HOSPITAL SCREENING STANDARDS

A. Population

Public Act 91-0067, the Hearing Screening for Newborns Act, Section 5 requires all hospitals performing deliveries to conduct hearing screening of all newborn infants prior to discharge. While this act does not require the screening of infants born outside the hospital, the UNHS Standards Committee recommends that all birthing hospitals provide screening for those infants at the request of the parents or by the child's physician.

1. Beginning December 31, 2002, all hospitals performing deliveries will provide bilateral hearing screening to every newborn born in their institution. This hearing screening shall be provided prior to discharge.

2. Beginning December 31, 2002, if a newborn is transferred without written documentation of a completed hearing screening, such hearing screening will be completed by the receiving hospital prior to discharge.

3. Beginning December 31, 2002, all hospitals performing deliveries will make provisions to screen infants born in the home or other location outside the hospital when requested by the parents or by the child's physician.

B. Parental Information/Consent

The Hearing Screening for Newborns Act, Section 25 allows the parent or guardian to refuse testing on the grounds that the screening conflicts with his or her religious beliefs and practices. The Act requires that this refusal be made in writing. The Act implies that screening may not be refused by the parents for any other reason.

1. All hospitals shall provide information to the parents about newborn hearing screening that shall include: the purposes and benefits of newborn hearing screening; indications of hearing loss; what to do if the parent suspects a hearing loss; and procedures used for hearing screening.

2. Parents must provide written denial for hearing screening on the grounds that such test conflicts with their religious tenets and practices.

C. Documentation

1. The hospital shall provide written information to the parents and to the infant's primary care provider that includes procedures used for hearing screening, limitations of screening procedures, results of the hearing screening, recommendations for further diagnostic testing, where those diagnostic tests may be available, and resources available for these diagnostic tests.

2. The hospital shall maintain written documentation in the infant's clinical record. Such documentation shall include: procedures used for hearing screening, time and location for the screening, individual administering the screening test, screening results per ear for each and every screening or screening attempt and recommendations for further testing.

D. Personnel

1. Newborn hearing screening shall be performed by an individual who is appropriately trained and supervised. (This recommendation is not discipline-specific because the key to quality screening is appropriate training and supervision. It was felt that volunteers could be used

as long as each one is appropriately trained and supervised. The experiences of other states support this recommendation).

2. Each hospital shall identify a liaison to the Universal Newborn Hearing Screening Program at the Department of Human Services and at the Department of Public Health.

E. Equipment

3. Technology utilized must:

    a. Measure a physiologic response;

    b. Be implemented with objective response criteria;

    c. Measure the status of the peripheral or peripheral and central auditory system that is highly correlated with hearing status.

4. Acceptable methodologies for physiologic screening include evoked otoacoustic emissions (EOAE), either transient or distortion product, and auditory brainstem response (ABR), either automated or non-automated. These techniques can be performed either alone or in combination. Both are noninvasive, quick, and easy to perform, although each assesses hearing differently. The following are guidelines:

    a. The methodology used should detect, at a minimum, all infants with unilateral or bilateral hearing loss greater than or equal to 35 dB HL.

    b. The methodology used should have a false-positive rate (the proportion of infants without hearing loss who are identified incorrectly by the screening process as having significant hearing loss) of 3% or less.

    c. The methodology used ideally should have a false-negative rate (the proportion of infants with significant hearing loss missed by the screening program) of zero.

F. Pass/Refer Criteria

Type of Test	Stimulus	Pass Criteria
Transient Evoked Otoacoustic Emission (TEOAE)	air conduction click	Testing in the 1500 through 3000 Hz range with replicability in the 70% or greater across that frequency range
Distortion Product	pure tone complex	F2=1000,2000,3000 & 4000 Hz 3 of 4
Otoacoustic	Intensity = maximum	frequencies exceeding the noise floor
Emission(DPOAE)	levels < 65 dBSPL	
Automated Auditory	air conduction click	ABR response @ 35 dBnHL for both the right
Brainstem Response		and left ears
AABR		
Auditory Brainstem	air conduction click	Replicable wave V thresholds for each ear less
Response ABR		than or equal to 35 dBnHL

IV. REPORTING AND TRACKING STANDARDS

The Hearing Screening for Newborns Act, Section 10, requires hospitals to report information about each child with a positive hearing screening result to the Illinois Department of Public Health (IDPH). Section 15 requires the development of a registry of children with positive hearing screening results. Section 20(b) requires the development of a tracking and follow-up program for diagnostic hearing testing for those infants failing hospital-based screening.

A. Hospitals will report screening results to the Illinois Department of Public Health (IDPH).

1. Until electronic reporting is available, hospitals will report all required data on IDPH forms (IDPH Neonatal Hearing Screening Referral and IDPH Neonatal Hearing Screening Monthly Numeric Report).

2. On a monthly basis, every hospital shall report aggregate data on its universal newborn hearing screening activities. Such report shall include: number of live births, number of newborns screened, number of newborns passing screening, number of newborns failing screening, and number of newborns referred for further diagnostic testing.

3. Infant specific information shall be reported within 7 calendar days of the birth of the infant only for infants who fail the hearing screening, miss the hospital screening, or miss the hospital rescreening. The infant specific information will be used by IDPH for follow-up with the infant's family and physician. Each hospital shall provide identifying information including: infant's name, mother's name and address, name and address of infant's physician, and date of referral for further diagnostic.

4. Infants who pass the screening or whose parent refuses the screening shall not be individually reported because there is no need for follow-up.

5. Outpatient screenings, rescreenings, and audiologic follow-up must be completed and reported to IDPH within 30 days of the birth of the infant.

A. Hospitals will report screening results to the Illinois Department of Public Health (IDPH)

1. All infants born at birth hospital or transferred to the facility must be reported via electronic encrypted transfer file. Infant specific information shall be reported within seven (7) calendar days after the hearing rescreening for infants who do not pass the rescreening and for those who miss the hospital screening or rescreening. The infant specific information should be provided for all children who:
   - are missed
   - are referred in one or both ears
   - are transferred
   - are not tested due to written parental refusal (on religious grounds; only)
   - expired
2. The infant specific information will be used by IDPH for matching and follow-up with the infant's family and physician of record as reported by the hospital. Each hospital shall provide identifying information including infant's last name, infant's first name (or "Baby Boy"/"Baby Girl"), gender, mother/contact name, address, and phone number, mother's language, and identify the infant's outpatient physician who will be providing ongoing medical care (the infant's medical home).

3. For those hospitals that schedule and/or perform outpatient screenings or diagnostic testing, the testing should be completed and the results must be reported to IDPH within thirty (30) days after the testing of the infant.

B. IDPH will establish a registry of all infants as a result of the newborn hearing screening program.

The registry will include all infants born in or residing in Illinois.

C. IDPH will notify the infant's physician and parents of the need for follow-up.

1. Written notification will be sent to both the infant's physician listed on the hospital record and the parents within five (5) business days of the receipt of the hospital report.

2. Written notification will be made with prescribed IDPH letters.

D. Upon notification by IDPH, the child's physician will arrange for diagnostic testing.

1. The diagnostic test shall be performed within three (3) months of the infant's date of birth.

2. Written notification of test results shall be reported by the physician to IDPH within five (5) days of diagnosis.

E. Audiologists providing diagnostic evaluation must report findings to IDPH.

1. Persons who conduct any procedure necessary to complete an infant=s hearing screening or diagnostic testing shall report this information to IDPH. Diagnostic testing results for each audiological visit shall be reported within thirty (30) days after testing.

2. Report must contain the information included on the IDPH Neonatal Hearing Screening Follow-up Services Report form.

3. Infants with confirmed hearing loss must be referred to the Early Intervention Program and to the Division of Specialized Care for Children (DSCC) within two (2) days of diagnosis.

F. When hearing loss is confirmed, IDPH will ensure that referral is made to the Early Intervention Program, to DSCC, and to the MCH Family Case Management agency.

G. IDPH will notify the local Perinatal follow-up agency, in writing, of infants with no reported diagnostic testing sixty (60) days after hospital report.

H. Local Perinatal follow-up agency will contact family.

1. Family will be provided information about the importance of early identification of hearing loss.

2. Assistance will be provided, as needed, in arranging for diagnostic testing.

3. Report will be made to IDPH of the results of the follow-up contact.

4. Infants with confirmed hearing loss will be referred to the Early Intervention Program and to DSCC within fortyeight (48) hours of receipt of the confirming report.