

# Division of Newborn Screening and Genetics (DNSG) Hearing Screening Instructions for Submitters (Hospitals, Birthing Centers and Midwives)

#### Introduction

Since 2009, the Infant Hearing Education, Assessment, Reporting and Referral (IHEARR) Act requires all newborns to be screened for hearing loss, unless the parent refuses. The DNSG seeks to ensure newborns are screened for hearing loss within one month of age, are diagnosed within three months of age, and receive prescribed treatment or intervention services within six months of age, as recommended by the Joint Committee on Infant Hearing. If a newborn's hearing loss is not found and treated, the child may:

- Be slow in learning to speak or use sign language;
- Have problems learning at school; and
- Suffer from social and emotional problems.

#### Timing of inpatient hearing screening

- Inpatient hearing screening should be conducted between 24-48 hours after birth for all well newborns unless the parent refuses.
- If the newborn is discharged between 12-24 hours after birth, the inpatient hearing screening should be done immediately prior to discharge.
- If the newborn is discharged before 12 hours after birth or is born at home, the submitter should have a protocol in place to screen the newborn between 24-48 hours after birth.
- If the newborn is in the NICU, the newborn should be screened prior to discharge. Perform the hearing screening when the newborn is medically stable.
- Midwives without hearing screening equipment should refer the family to another midwife or screening provider to have the screening completed between 24-48 hours after birth, or no later than one month of age.

#### **Screening protocol**

- There are two ways to complete a hearing screening. The first is an Otoacoustic Emissions (OAE) test, which measures an inner ear response to determine if the newborn is hearing properly.
   The second is an Auditory Brainstem Response (ABR), which measures the newborn's inner ear and nerve response to sound.
- An inpatient screen should be limited to two hearing screening sessions, using the same technology, separated by several hours.
- A hearing screening session should be limited to two screening attempts.
- The newborn should always receive a bilateral screen, regardless of previous screening results.
- If the final result after the two hearing screening sessions is a refer, or a not passed screening
  result, provide the parents with an appointment to return for an outpatient hearing screening
  within one month of age. If the submitter does not have the ability to provide the outpatient
  screen, the submitter should have a protocol in place to ensure the newborn receives an
  outpatient hearing screening within one month of age.



- If the final result of the outpatient screening is a refer, provide the parents with an appointment for a diagnostic evaluation within three months of age. If the submitter does not have the ability to provide the diagnostic evaluation, the submitter should have a protocol in place to ensure the newborn receives a diagnostic evaluation within three months of age.
- Diagnosis of hearing loss should lead to appropriate referrals to Early Intervention, family support, and other valuable services, making timely screenings and referrals critical to early development in deaf/hard of hearing newborns.

## **Screening tips**

- Perform the hearing screening when the newborn is quiet or sleeping, optimally one hour after feeding. To help calm a restless newborn, swaddle the newborn and dim the lights.
- Perform the hearing screening in a quiet environment, away from any background noise.
- Perform the hearing screening when the newborn is not being seen by other health care professionals.

# **Reporting requirements**

- All inpatient and outpatient hearing screening results, including information on non-screened newborns (parent refusals, missed screens, newborns that were transferred to another hospital, no-shows, and expired newborns) must be reported to the DNSG via the iCMS system.
- Midwives without internet access must notify the DNSG, in writing, to receive an exemption from iCMS reporting and permission to report all results via paper form.
- If the parent refuses screening, the submitter should have a process for reporting the parent refusal in the medical record and should report the refusal in iCMS or on the paper form if you have an exception to iCMS reporting.
- If a newborn is transferred to another hospital before the hearing screening can take place, the
  transferring hospital should enter the transfer in iCMS and notify the receiving hospital that a
  hearing screening was not performed. The receiving hospital should complete the hearing
  screening.
- All results must be submitted within seven days of screening; however, it is recommended that facilities update/report every day, or as often as staffing allows.
- Risk factors for hearing loss should be identified and reported into iCMS for all newborns regardless of the hearing screening result.
- Parents should be notified of the result of the hearing screening. Below are links to scripts that can be used for parent notification.
  - Script for parents of newborn who passed the hearing screening: <a href="http://www.infanthearing.org/infant\_screening\_course/page964.html">http://www.infanthearing.org/infant\_screening\_course/page964.html</a>
  - Script for parents of newborn who did not pass the hearing screening: <a href="http://www.infanthearing.org/infant">http://www.infanthearing.org/infant</a> screening course/page976.html
- The newborn's primary care physician (PCP) should be reported in the iCMS system and notified of the hearing screening result.



# Hearing screening coordinator responsibilities

- Identify a Hearing Screening Coordinator and provide the DNSG with the name, phone number, and email address of the hearing screening coordinator. Information can be provided to the DNSG via phone (717-783-8143) or email (nbhs@pa.gov).
- Ensure that hearing screenings are performed according to the protocol in this document.
- Confirm that the submitter has a protocol in place for ensuring newborns with a refer result
  receive an outpatient hearing screening within one month of age and when indicated, a
  diagnostic evaluation within three months of age.
- Ensure individual level screening data is entered into iCMS within seven days of the screen.
- Train multiple staff personnel on the reporting process; at a minimum, there should be two trained persons at every facility. Ideally, there will be a staff person who knows how to report hearing screenings at your facility every day of the week. If staffing prohibits training more than two reporters, at least make sure a single backup is identified and trained in the event the primary reporter has an extended absence. The backup(s) should report data at least once a month to keep the process fresh in their minds.
- Check the iCMS birth log and birth summary reports a few times a week to ensure the reports reconcile. Consider a monthly reconciliation against internal hospital records as a means of ensuring every screening has been reported.
- Ensure calibration, maintenance and updating of hearing screening equipment.
- Ensure staff who perform screenings and enter data into iCMS are properly trained.
- Ensure staff provide clear, consistent, supportive and easy to understand information to parents regarding the hearing screen.

### More information

The PA Early Hearing Detection and Intervention Program website <a href="www.paearlyhearing.org">www.paearlyhearing.org</a> has information for families, physicians, audiologists, and birth facilities about hearing screening, detection, and intervention.