

# Universal Newborn Hearing Screening

SAMPLE POLICY AND PROCEDURE FOR THE NEWBORN NURSERY

[FACILITY'S NAME]

## Purpose

To meet Minnesota state requirements related to mandatory newborn hearing screening of all newborns before discharge, documenting the results in the medical record, reporting the results of the screening to the primary care physician, the parent(s)/guardian(s), and exporting results through the secure electronic MNScreen platform to the Minnesota Department of Health (MDH).

## Policy

Individuals who are trained to do hearing screenings will screen all newborns before hospital discharge. Exceptions include a) newborns who are transferred out to tertiary facilities and b) newborns whose parent(s)/guardian(s) refuse the procedure.

## Version

August 2019

## Procedure

### A. Preparations for Hearing Screening

- 1) Give parent(s)/guardian(s) informational brochure or fact sheet about newborn hearing screening. Minnesota Department of Health recommends use of the Newborn Hearing Screening Fact Sheet, which can be ordered free of charge.
- 2) Parental options:
  - a) MN state law allows parent(s)/guardian(s) to choose to have their child's hearing screened, but to request that the MDH's record of the hearing test be destroyed.
    - i) Have parent complete & sign the Directive to Destroy Newborn Blood Samples and Newborn Screening Test Results form:
    - ii) Place original document in infant's electronic medical record.
    - iii) Provide copies to the parent(s)/guardian(s), newborn's primary care physician, and the MDH Newborn Screening Program (see instructions on the form).

- b) MN state law allows parent(s)/guardian(s) to choose not to have their child's hearing screened. Because this decision is a serious one, parent(s)/guardian(s) need to review the benefits of hearing screening with their provider.
  - i) Have parent complete & sign the Parental Refusal of Newborn Screening Form.
  - ii) Place original document in infant's electronic medical record.
  - iii) Provide copies to the parent(s)/guardian(s), newborn's primary care physician, and the MDH Newborn Screening Program (see instructions on the form).
- 3) Choose appropriate infant to screen.
  - a) Infant needs screening.
  - b) Infant is ideally at least 12 hours post-partum for well-baby nursery.
  - c) NICU infant meets minimum age for hearing screening device (if applicable and specified per each device), and is medically stable.
  - d) Infant is in a "quiet" state.
- 4) Follow hospital infection control procedure.
- 5) Prepare infant for screening by following step-by-step instructions located with the screening equipment.
- 6) Choose a quiet location for completing testing (either nursery exam room, or mother's room if a quiet environment can be ensured).
- 7) Screen both ears.
  - a) Note: it is important not to repeatedly rescreen as this may result in a false PASS. Some babies will need more specialized testing.

## B. Results

- 1) If infant **passes**:
  - a) Both ears must pass a single screening to be considered an overall passing result.
  - b) **If NICU infant's health status changes and includes new risk factors for hearing loss after passing an initial screening, another screening prior to discharge is warranted.**
  - c) Document results in infant's medical record and any other location required by hospital policy.
  - d) Inform parent(s)/guardian(s) of PASS result and give them appropriate written information. The MDH PASS Result: Hearing Screen Result Notification form (<https://www.health.state.mn.us/people/newbornscreening/materials/hearingpass.pdf>) is orderable in multiple languages on the MDH Newborn Screening Education materials webpage (<https://www.health.state.mn.us/people/newbornscreening/materials/education.html>)
    - i) PASS: Indicates the infant passed the hearing screening in both ears. Encourage the parent(s)/guardian(s) to express any future concerns about their child's hearing to their primary care physician.
  - e) Notify infant's primary care physician of PASS result.
  - f) Ensure routine export of screening results to MDH using the MNScreen electronic platform. This should occur daily for most hospitals, and a minimum of 3 times weekly for birth facilities with <500 births annually.
- 2) If infant **refers/fails/does not pass/has incomplete screen or technical fail**:

- a) Document results in infant's medical record and any other location required by hospital policy.
- b) Inform parent(s)/guardian(s) of REFER result and that a rescreen prior to discharge will be completed.
- c) Ensure routine export of screening results to MDH using the MNScreen electronic platform. This should occur daily for most hospitals, and a minimum of 3 times weekly for birth facilities with <500 births annually.
- d) Rescreen **both ears** at a later time, at least 4-6 hours later and prior to hospital discharge.

### C. Rescreen before Discharge Procedure (for infants not passing initial screening)

- 1) Follow Preparation for Hearing Screening section (A, 3-7) above.
- 2) Rescreen **both ears** prior to discharge (ideally at least 4-6 hours later), even if one ear passed a previous screen. **Both ears must pass in a single screening for an overall passing result. Combining passing results in opposite ears on successive screens does not equal a passing result.**
- 3) **If NICU infant's health status changes and includes new risk factors for hearing loss after passing an initial screening, another screening prior to discharge is warranted.**
- 4) If infant passes, see instructions B1 above.
- 5) If infant **refers/fails/does not pass/ has incomplete screen or technical fail** for the second screen:
  - a) Document results in infant's medical record and any other location required by hospital policy.
  - b) Schedule hearing follow-up appointment within two (2) weeks of discharge.
    - i) Appropriate locations for the FIRST outpatient rescreen could include hospital nursery screening staff, primary care (if they have appropriate screening device for infants), audiology clinic, or other provider with appropriate screening device and training for newborn hearing screening.
    - ii) Visit could be scheduled the same day as a well-baby visit for family convenience.
  - c) NICU infants should ideally receive diagnostic audiology consult for full assessment prior to discharge. If this is not possible, schedule a diagnostic audiology appointment as an outpatient within 2 weeks after discharge. **Additional outpatient rescreening for NICU infants is not recommended.**
  - d) Inform parent(s)/guardian(s) of REFER/DID NOT PASS result, follow-up information, and appointment dates.
  - e) Provide parent(s)/guardian(s) with REFER Result: Hearing Screen Result Notification form, which documents results and explains follow-up plan.
    - i) REFER: Indicates the infant did not pass the hearing screening in one or both ears. Help parent(s)/guardian(s) understand that a REFER result does not mean their child has a hearing loss but that they need additional testing to know more about hearing levels. Emphasize the importance of follow-up appointments for early hearing loss identification.

- f) Notify primary care physician of **FINAL inpatient refer** test results and date/location of scheduled hearing follow-up appointment.
- g) Report/document outpatient follow-up appointment date to MDH.
  - i) MNScreen data manager/Super User will log into MNScreen and enter appointment information (location, date, time) as Hearing Note.
- h) Ensure routine export of screening results to MDH using the MNScreen electronic platform. This should occur daily for most hospitals, and a minimum of 3 times weekly for birth facilities with <500 births annually.

## D. Missed Infant Hearing Screen

- 1) Discharge summary should clearly indicate that hearing screening was not completed prior to discharge.
- 2) Schedule hearing screen at hospital nursery (or alternate site as planned) as soon as possible after discharge.
- 3) Instruct parent(s)/guardian(s) on follow-up information and appointment date.
- 4) Report/document outpatient hearing screen appointment date to MDH.
  - a) MNScreen data manager/Super User will log into MNScreen and enter appointment information (location, date, time) as Hearing Note.
- 5) Notify primary care physician of missed status, and hearing screening appointment date.
- 6) If infant/family does not show for hearing screen appointment:
  - a) Call family to reschedule hearing screen. Hearing screen should be completed before one (1) month of age.
  - b) If infant is older than one (1) month of age, schedule with audiology for follow-up.
  - c) When infant does return for screen, follow Outpatient Rescreen By Hospital Nursery section (H) below.

## E. Transferred Out Infants

- 1) Discharge summary should clearly indicate that hearing screening was not completed prior to transfer.
- 2) Document name of receiving hospital in the MDH MNScreen electronic platform.
  - a) MNScreen data manager/Super User will log into MNScreen and enter name of Transfer Hospital and transfer date as Hearing Note.
- 3) The hospital that discharges infant to home is responsible for completing hearing screening.

## F. Transferred In Infants

- 1) The hospital that discharges to home is responsible for completing newborn hearing screening and for exporting those results to MDH using the secure MNScreen electronic platform.
- 2) If transfer documents do not provide ear specific hearing screening results and date of screen then follow procedure sections in A-D above.

## G. Result Reporting/Documentation

- 1) Report results of newborn hearing screening to:
  - a) The parent(s)/guardian(s) should receive results verbally and in writing.
  - b) The primary care physician should receive the FINAL inpatient results, and any outpatient results completed by hospital birth center staff.
  - c) The Minnesota Department of Health (see section I below for details).
- 2) Document results of the newborn hearing screening:
  - a) In the infant's electronic medical record.
  - b) In the Discharge Summary:
    - i) Include the hearing screening date, results, and any scheduled follow-up visits for hearing evaluation.
  - c) Internal charting and discharge summary MUST match final hearing screening result in the actual hearing screening device, and what is electronically submitted to MNScreen.
  - d) All hearing screen results in the device must be routinely exported to MDH using the MNScreen electronic platform. This should occur daily for most hospitals, and a minimum of 3 times weekly for birth facilities with <500 births annually.

## H. Outpatient Rescreen (if completed by Hospital Nursery Staff)

\*If outpatient rescreen is completed by primary care or an audiologist, that provider is responsible for following the steps below and for reporting the result to MDH.

- 1) Follow procedure steps A 4-7 above:
  - a) Note: **Both ears must be rescreened** even if one ear had passed previously.
  - b) **Both ears must pass in a single screening for an overall passing result. Combining passing results in opposite ears on successive screens does not equal a passing result.**
  - c) Note: it is important not to repeatedly rescreen as this may result in a false pass. Some babies will need more specialized testing from an audiologist.
- 2) If infant **passes**:
  - a) Both ears must pass a single screening to be considered as an overall passing result.
  - b) Document results in infant's medical record and any other location required by hospital policy.
  - c) Inform parent/guardian of PASS screening results and provide written documentation. The MDH PASS Result: Hearing Screen Result Notification form is orderable in multiple languages.
  - d) Notify infant's primary care provider of PASS outpatient rescreening result.
  - e) Ensure routine export of screening results to MDH using the MNScreen electronic platform. This should occur daily for most hospitals, and a minimum of 3 times weekly for birth facilities with <500 births annually.
- 3) If infant **refers/fails/does not pass/ has incomplete screen or technical fail**:
  - a) Document results in infant's electronic medical record.
  - b) Inform parent/guardian of REFER screening results and provide written documentation. The MDH REFER Result: Hearing Screen Result Notification form is orderable in multiple languages.

- c) Notify infant's primary care provider of REFER outpatient rescreening result.
  - d) Schedule appointment for Diagnostic audiology evaluation as soon as possible, ideally between 4-6 weeks after hospital discharge. Make sure that a physician order for this is in place.
  - e) Report/document diagnostic audiology appointment date to MDH.
    - i) MNScreen data manager/Super User will log into MNScreen and enter appointment information (location, date, time) as Hearing Note.
  - f) Report/document diagnostic audiology appointment date to primary care provider.
  - g) Ensure routine export of screening results to MDH using the MNScreen electronic platform. This should occur daily for most hospitals and a minimum of 3 times weekly for birth facilities with <500 births annually.
- 4) If infant/family does not show for rescreen appointment.
    - a) Call family to reschedule outpatient hearing rescreen before 1 month of age.
    - b) If infant is older than 1 month refer & schedule with audiology site for follow-up.
    - c) Communicate new appointment information to primary care provider and MDH.

## I. Reporting Results to the Minnesota Department of Health – critical staff function

- 1) Ensure routine export of screening results to MDH using the MNScreen electronic platform. Hearing screen results should be exported to MDH daily for most hospitals, and a minimum of 3 times weekly for birth facilities with < 500 births annually.
- 2) Plan for back-up staff to carry out this function in the event of illness, vacation, or staff vacancy.
- 3) Confirm that export was completely successful.
- 4) Incomplete transfers of data or other technical issues should immediately be resolved by contacting the OZ Systems Help Desk at 888-727-3366 ext. 3, or ozhhelp@oz-systems.com

## J. Contingency Plan for Equipment Failure

- 1) Contact BioMed per hospital policy to evaluate equipment failure.
- 2) Contact Equipment Manufacturer Technical Support (may be facilitated by BioMed) to arrange for loaner equipment, if needed.
- 3) Babies who miss screening due to equipment malfunction must be brought back for screening when the equipment is repaired, or they should be scheduled by the hospital for screening elsewhere. All screening should be completed before one (1) month of age.
- 4) Discharge summary should clearly indicated baby was not screened prior to discharge (if screening could not be completed).

## K. Staff Training

- 1) All staff providing hearing screening will receive orientation and education on the Newborn Hearing Screening Program during their orientation to the birthing unit and as needed. This will be documented on the orientation checklist.

- 2) Staff providing hearing screening will each have initial and annual refresher training to assure qualified competent hearing screeners.
- 3) MDH audiologists can be available to provide onsite training, or a national online curriculum (<http://www.infanthearing.org/nhstc/index.html>) can be used.

## L. References

- 1) Minnesota Department of Health. (2019). Teach Back. Retrieved from <http://improvehdi.org/MN/library/files/Teach Back for QI EHDI.final.pdf>.
- 2) Minnesota Department of Health. (2019). Screening AABR Tips. Retrieved from <http://www.improvehdi.org/mn/library/files/abrtips.pdf>.
- 3) Minnesota Department of Health. (2015, February). Guidelines for the Organization and Administration of Universal Newborn Hearing Screening Programs in the Special Care Nursery and Neonatal Intensive Care Unit (NICU). Retrieved from <http://www.improvehdi.org/mn/library/files/nicuguidelines.pdf>.
- 4) Minnesota Department of Health. (2013, November). Guidelines for the Organization and Administration of Universal Newborn Hearing Screening Programs in the Well-Baby Nursery. Retrieved from <http://www.improvehdi.org/mn/library/files/wbnguidelines.pdf>.
- 5) Minnesota Department of Health. (2019). Newborn Hearing Screening Communicating “REFER” and “DID NOT PASS” Results to Families. Retrieved from <http://www.improvehdi.org/mn/library/files/communicationtips.pdf>.
- 6) Minnesota Statute 144.966 Early Hearing Detection and Intervention Program. (2018). Retrieved from <https://www.revisor.mn.gov/statutes/cite/144.966>.
- 7) Joint Commission on Infant Hearing Position Statement (2007), Year 2007 position statement: Principles and guidelines for early hearing detection and intervention. Pediatrics, 120, 898-921.

For more information or assistance, contact:

**Minnesota Newborn Screening program**

<https://www.health.state.mn.us/newbornscreening/>

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