



Michigan Early Hearing Detection
and Intervention Program

Michigan Early Hearing Detection and Intervention (EHDI) Program Loss to Follow Up: Missed Opportunities to Identify Infants Who are Deaf and Hard of Hearing

Each year in Michigan, there are approximately 105,000 infants who pass an initial hearing screen and 5,000 that do not. The Michigan Department of Health and Human Services (MDHHS), Early Hearing Detection and Intervention (EHDI) Program works diligently to ensure that babies receive additional needed testing, however, each year more than 40% of infants who fail their final hearing screen do not receive this additional testing. These infants are categorized as “lost to follow up.” This summary report provides a brief overview of the MDHHS EHDI Program’s data with regards to characteristics associated with increased odds of being lost to follow up. Since hearing loss is invisible, follow-up testing is very important. If a baby has a hearing loss, it is best to know early so that intervention can begin as early as possible. Not knowing that a baby has hearing loss can have a long-lasting impact on language and learning, and is considered to be a developmental emergency.

About The Study

- **Study Population:** Infants who failed a final hearing screen between January 1, 2010 and December 31, 2015.
 - 1,784 (44.2%) infants who failed a hearing screen and did not receive follow up with additional testing.
 - 2,256 (55.8%) infants who failed a hearing screen and received adequate follow up additional testing.
- **Data Source:** MDHHS Newborn Screening and Birth Certificate Data

Methods

- EHDI follow up data was obtained from the Michigan Newborn Screening (NBS) database.
- Birth records were obtained from the MDHHS Division of Vital Records and Health Statistics.
- NBS records were linked with the EHDI data.
- Individuals were separated into groups based on hearing screen follow up status.
- Crude analyses were conducted for individual demographic and perinatal characteristics.
- Analyses that controlled for potential confounding factors were also conducted.



Results

EHDI compared the babies that went back for follow up versus the infants that did not return for testing. Listed below are characteristics associated with not returning for testing:

- Having a younger mother.
- Infant race of Non-Hispanic Black.
- Using WIC.
- Using Medicaid.
- Failing an initial hearing screen.
- Lower maternal education.
- Mother that smoked during pregnancy.
- Later prenatal care.
- Not receiving prenatal care.
- Being tested by OAE (Otoacoustic Emission).
- Only one ear failed the hearing screen.



Implications



These findings may:

- Help to increase awareness of which infants are at a higher risk of being lost to follow up in regards to hearing screening.
- Allow for interventions to be created that target these at-risk groups.
- Help to promote changes that would allow for more children to receive adequate follow up care.

Action Steps

- Contact the MDHHS EHDI Program to get involved in improving the early hearing screening process.
- Parents receive conflicting messages about the importance of repeat testing. Please ensure a clear message is given to parents. Do NOT say “there is probably nothing wrong” and/or “it’s probably just fluid.”
- To ensure appropriate testing, send babies to an EHDI Best Practice Facility, http://www.michigan.gov/documents/mdch/PedAudFeb2008_223684_7.pdf or call 517-335-8955 to find a site near you.

Michigan EHDI Program

Division of Maternal and Infant Health

Michigan Department of Health and Human Services
109 E. Michigan Avenue, P.O. Box 30195
Lansing, Michigan 48933

Phone: (517) 335-8955

Fax: (517) 335-8036

**For more information, please visit our
website at: www.michigan.gov/ehdi**



MDHHS

Michigan Department of
Health & Human Services

RICK SNYDER, GOVERNOR
NICK LYON, DIRECTOR