Michigan Early Hearing Detection and Intervention (EHDI) Program 2004-2008

Michigan Early Hearing Detection and Intervention Program

Hearing loss in infants is one of the most common birth defects. In Michigan, the prevalence of hearing loss in 2008 was about 1.3 infants per 1,000 live births. Nationally, the prevalence of hearing loss is about one to three infants per 1,000 live births. The Early Hearing Detection and Intervention (EHDI) Program, at the Michigan Department of Community Health (MDCH), helps identify infants with hearing loss and follows these infants to enrollment of early intervention services, striving toward achievement of the national EHDI goals, as described in this report. The Michigan EHDI Program continues to be supported by state funding and grants awarded by the Centers for Disease Control and Prevention (CDC) and the Maternal and Child Health Bureau (MCHB). Other funding for EHDI comes from Michigan Newborn Screening Card fees to support efforts in newborn hearing screening, quality assurance, and reducing loss to follow-up rates.

Goal 1: All newborns will be screened for hearing loss no later than 1 month of age, preferably before hospital discharge.

There were a total of 631,168 resident births in Michigan from 2004 to 2008, of which 95.3% (n=601,194) had a complete initial screen (Figure 1). The percent of infants with a complete hearing screen increased from 92% in 2004 and has remained at about 96% from 2006 through 2008. This is primarily due to universal newborn hearing screening becoming a standard of care in 100% of hospitals since 2003. Of infants born from 2004 to 2008 with a complete hearing screen, 97.7% were screened by one month of age (Figure 1). This reflects an increase in the screening of infants by one month of age from 96.3% in 2004 to 98.3% in 2008.

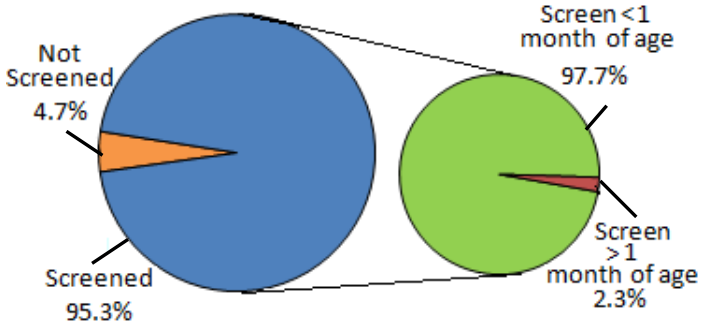

Figure 1: Percent of complete hospital hearing screens and screens by one month of age: MI EHDI Data, 2004-2008.

Goal 2: All infants who screen positive for hearing loss will have a diagnostic audiologic evaluation no later than 3 months of age.

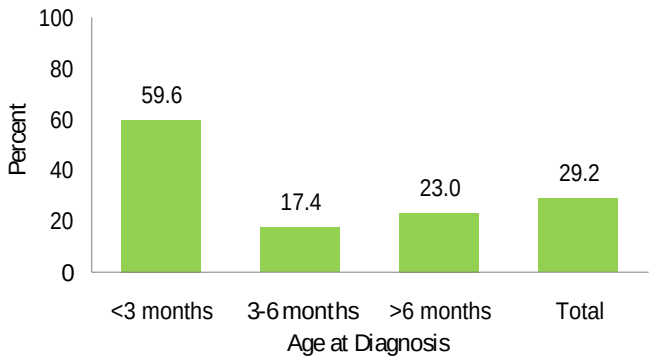

Figure 2: Age at diagnostic evaluation in those referring from the final hearing screen: MI EHDI Data, 2004-2008.

From 2004 to 2008, a total of 29.2% (n=2778) of infants who referred from the final screen had a diagnostic audiologic evaluation (Figure 2). The EHDI program has been working to improve this goal, and the percentage of infants with an evaluation increased from 15.4% in 2004 to 40.6% in 2008. Of those with an evaluation, 59.6% (n=1657) had an evaluation by three months of age, 17.4% (n=482) by three to six months of age, and 23.0% (n=639) after six months of age (Figure 2). The Michigan EHDI program is not yet meeting the national EHDI goal and much effort is being put into reducing loss to follow-up in this area.

Goal 3. All infants identified with hearing loss will receive appropriate early intervention services no later than 6 months of age.

From 2004 to 2008, a total of 845 infants were diagnosed with **permanent** hearing loss. This is a rate of 1.3 infants per 1,000 live births. Of note, an additional 577 infants (0.9 infants per 1,000 live births) were diagnosed with **non-permanent** hearing loss. Of infants with permanent hearing loss, 37.4% (n=316) were enrolled in early intervention (EI) services (Figure 3). Of those enrolled in services, 41.1% (n=130) were enrolled by six months of age, 20.9% (n=66) were enrolled by six to twelve months of age, 14.6% (n=46) were enrolled after twelve months of age, and 23.4% (n=74) were enrolled at an unknown age (Figure 3). Michigan is currently not meeting the national goal, but data is limited due to the Health Insurance Portability and Accountability Act (HIPAA) and the Family Educational Rights and Privacy Act (FERPA) which regulate the sharing of confidential health information.

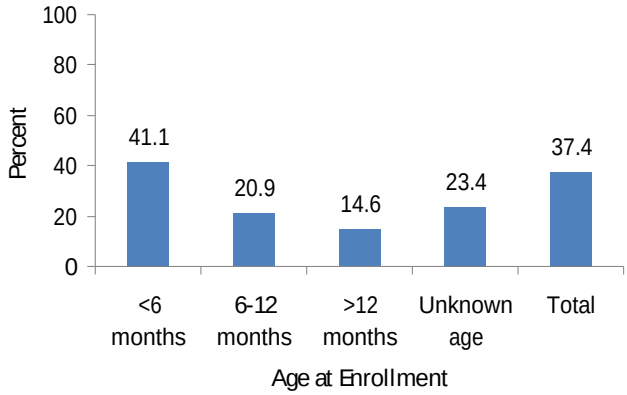

Figure 3: Age at enrollment in EI services for infants with permanent hearing loss: MI EHDI Data, 2004-2008.

Loss to follow-up

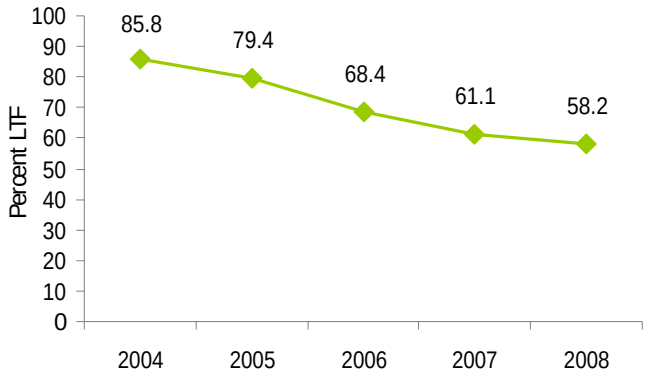

Figure 4: Loss to follow-up rates: MI EHDI Data, 2004-2008.

An infant is considered lost to follow-up (LTF) when he or she does not receive or does not have documentation of appropriate services after referring from the final hearing screen. The Michigan EHDI program has been reducing the LTF rate over the years—from 85.8% in 2004, to 58.2% in 2008 (Figure 4). LTF continues to be a problem for Michigan and most EHDI programs in the US. EHDI is involved in many projects to help reduce the LTF rate including increased contact with parents and providers and surveying families about issues in accessing services.

Support Programs and Additional Resources— The EHDI program provides resources to guide families through the process of making decisions for their baby diagnosed with hearing loss.

- **Hands & Voices (H&V)** is a non-profit parent and professional organization, offering non-biased support to families of children with hearing loss. For more information, visit the website at **www.mihandsandvoices.org**.

- **Guide By Your Side (GBYS)** is a Hands & Voices program that provides an opportunity for families of children recently diagnosed with hearing loss to meet with a parent of a deaf or hard of hearing child. For more information, visit the EHDI website at **www.michigan.gov/ehdi**.

Michigan EHDI Program
Division of Family and Community Health
Michigan Department of Community Health
109 E. Michigan Avenue, P.O. Box 30195
Lansing, Michigan 48909

Phone: (517) 335-8955
Fax: (517) 335-8036

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

Michigan Department of Community Health
MDCH
Rick Snyder, Governor
Olga Dazzo, Director