

Iowa EHDl News

EHDl

Iowa's Early Hearing
Detection & Intervention System



Your **Sound Source** for Early Hearing Detection & Intervention Information

Fall 2009

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Iowa EHDl News

It has been a couple of years now since we talked about the purpose of *Iowa EHDl News*. Some of you may be first time readers, while others may receive this publication quarterly. The purpose of the newsletter is to communicate with parents and professionals about newborn hearing screening and follow up in Iowa. We will share information about:

- Hearing screenings
- Early intervention, including communication opportunities
- Resources available for parents and professionals
- "Best practices" by hospitals, Area Education Agencies (AEAs), private practice audiology offices or other health and education providers working with children who are deaf or hard of hearing
- National research
- Iowa EHDl program goals
- EHDl program progress, system development, evaluation
- Family stories
- Highlights from the EHDl Advisory Committee

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Advisory Update

The next meeting of the Iowa Early Hearing Detection and Intervention Committee is:

January 7, 2010

9 a.m. - 12 p.m., ICN locations are available by calling Tammy O'Hollearn at 1-800-383-3826

January 2010						
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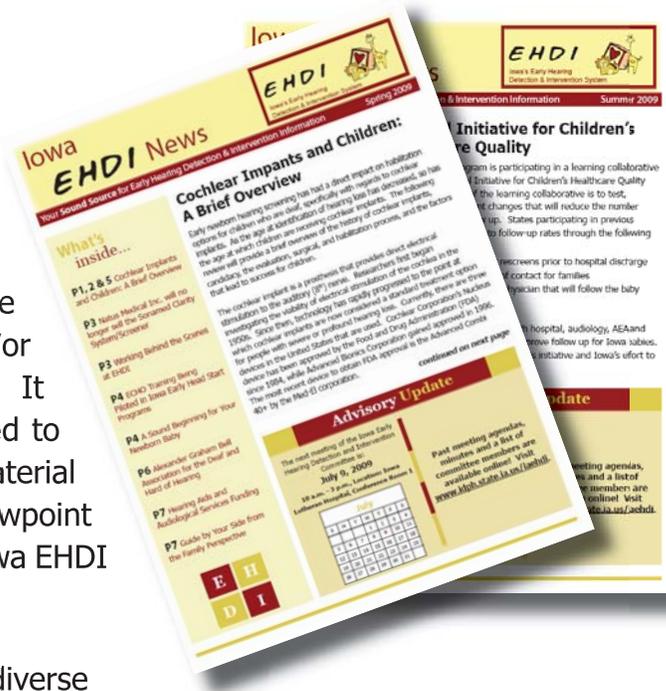
Past meeting agendas, minutes and a list of committee members are available online! Visit www.idph.state.ia.us/iaehdi.

Iowa EHDI News

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While the EHDI program works to provide unbiased information and resources in the quarterly newsletter, there will be times when an issue of the newsletter may not appear to provide balance and/or include opposing viewpoints. This is not intentional. It may be due to timing, space limitations or the need to disseminate other material. There may also be material included occasionally that does not reflect the viewpoint of the Iowa EHDI program or its members on the Iowa EHDI Advisory Committee.

However, it is important to point out that we are a diverse team of individuals working together to ensure that all newborns and toddlers with hearing loss are identified as early as possible and provided with timely and appropriate audiological, educational and medical intervention that meets the needs of the child and family. The choice a family makes are their own. We just want to serve as another resource.



Attention Hospital Personnel...

Many facilities are using the older gold Bio-logic AuDX OAE screening units in the Iowa EHDI Program. Hospital newborn hearing screening programs that utilize the OLD Bio-logic AuDX OAE gold screening units (not the blue units) need to be aware that Bio-logic will no longer repair these units, but will continue to repair and replace probes for about one more year.

It is our understanding that if your old AuDX breaks down, Bio-logic may be willing to provide a discount on a new piece of equipment.

If you need more information, please contact Karen Morris at 1-800-323-8326, ext. 239. You can also contact your assigned EHDI Audiology Technical Assistant (Emily Andrews or Nick Salmon) for further assistance.

Emily Andrews - (319) 384-6894 or emily-andrews@uiowa.edu

Nick Salmon - (515) 576-5312 or nsalmon@frontiernet.net

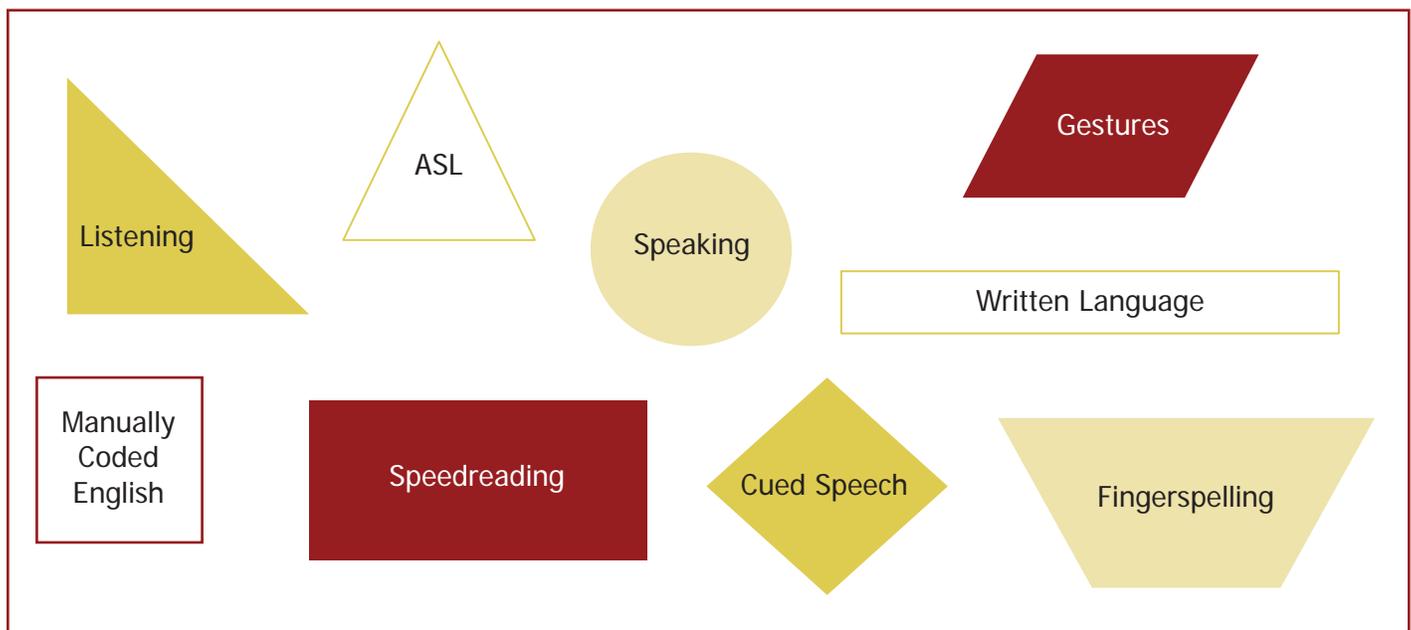
Communication Opportunities

By Marsha Gunderson, Statewide Consultant, Iowa Department of Education

Once your child has been diagnosed either deaf or hard of hearing, your first thoughts may be “Now how do I communicate with my child?” Let your child guide you. Let your goal be to have an effective and efficient means of communication with your child.

Children who are deaf or hard of hearing learn language like hearing children although some adaptations may be needed, more repetition may be required and the input may be different. Let's look at communication opportunities with building blocks. Building blocks come in all different shapes and sizes. Blocks serve different purposes at different times. We can combine blocks to form a beautiful structure – that is our communication system.

Let's look at some of the blocks we can use:



Babies begin communicating with crying, gestures and eye contact. They learn cause and effect – I cry; Mom feeds me. I see Dad; he makes funny faces back at me. Reinforcing this notion of ‘you do something; I respond’ is the foundation for communication development. Many families use a combination of the blocks above and watch how their child responds. Recently, there has been an increase of families with hearing babies using sign language. Usually when the hearing baby starts to talk more, the baby's use of sign language decrease. This may also happen if you use sign language with your hard of hearing child. However, if your child is not using speech consistently, continue signing to communicate with your child. Paying attention to how your child observes and interacts with his/her environment and other people will show you what works for your child.

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Communication Opportunities

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Strategies to use with your child:

- Adaptations: Make sure the hearing aids or cochlear implants are working. Position yourself within the eyesight of your child before you start to talk.
- Repetition: Repeating phrases, songs, and nursery rhymes builds expectation and a sense of routine for your child. Repetition builds the foundation for language development.
- Input: Communication input can vary as much as the building blocks above. Use them all and let your child show you what works to make communication effective and efficient!

For more detailed resources on communication opportunities or considerations, please visit the Iowa Hands and Voices Web site section entitled, Communication Considerations A-Z™, www.handsandvoices.org/comcon/index.html.

Iowa EHDI Program Participating in Collaborative to Reduce LTF Rates

The Iowa EHDI program is participating in a Learning Collaborative sponsored by the National Initiative for Children's Healthcare Quality (NICHQ). Several state EHDI programs are participating in this effort to decrease loss to follow-up (LTF) rates, improve communication among health care providers, and improve state systems of care for children who are deaf/hard of hearing.

The Iowa team is currently working on small tests of change focused on decreasing LTF rates between the initial birth screening and the outpatient screening. Diana Hanson, audiologist at Iowa Health - Des Moines and Iowa NICHQ team member, and her staff have been testing the accuracy of primary care provider (PCP) listed in babies' medical records. In June, the PCP was verified with parents for 64 infants and 59 had the correct PCP listed in their records. The next step in this test will be to focus on infants that miss or do not pass the hospital screening.

The screening staff will call the PCP office for these infants to verify that they will be seeing the infant and to discuss the need for a rescreen.

Iowa Health - Des Moines is also looking at the length of time between hospital discharge and the outpatient rescreen. These data are not yet available. Other planned tests of change include:

- Developing hearing healthcare maps for families and PCPs
- Developing a script for hospital staff members to use when discussing screening results with families
- Giving families information about family support and community resources at the time of diagnosis
- Providing more comprehensive follow-up processes

Hearing Aid & Audiological Services Funding Summary 2008-09

As many of our readers of this newsletter know, Iowa has a law which requires universal newborn hearing screening. The goal of the universal hearing screening of all newborns and infants in Iowa is early detection of hearing loss to allow children and their families the opportunity to obtain early intervention services. That being said, children are being identified at a young age, they have medical insurance, but their plan does not cover the cost of hearing aids.

Research consistently shows that the most important factor in determining receptive and expressive language developmental levels for children who are deaf or hard of hearing is the age at which early intervention begins (Yoshinaga-Itano et al., 1998; Moeller, 2000). For children who can use their residual hearing as the primary sensory modality for communication, the first step in that early intervention is hearing aid fitting which ensures that conversational speech is audible. For some families having to purchase hearing aids is a financial hardship and families are left faced with tough decisions.

A number of states have moved forward with legislation in the last several years to require insurance companies to cover the costs of hearing aids for children. Other states are looking into the possibility of enacting similar legislation in their state. Representative Janet Petersen introduced a bill in Iowa the last couple of years, but the bill did not move forward. In response to policy recommendations to require insurance companies to pay for hearing aids and audiological services, the legislature appropriated a small amount of funding to the Iowa Department of Public Health to pay for these services.

During the fiscal year ending June 2009, Iowa taxpayers spent \$255,018 to provide hearing aids and accessories and audiological services (e.g. diagnostic testing) to 199 Iowa children. The following tables provide averages for the 2009 claim payments, the ages of children served and the insurance status of those children served.

Averages derived from the 2009 claim payments	
Number of children enrolled into the program = 231	Average number of claims per child = 1.61
Number of children with one paid claim = 199**	Gross average paid per child = \$1,284.89
Number of claims processed = 320	Gross average paid per claim = \$799.04
Gross dollars paid = \$255,692.52	Children with at least one claim with another insurance = 9
Net dollars paid = \$255,018.36*	

*This total does not include the fee paid to Provider Claim Systems for processing and paying claims. ** Out of the children served above, nine children had services before 7/1/09 for a total of \$10,347.3. Because the providers did not get the claims turned in until after the state fiscal year deadline, claims had to be paid out of the following year.

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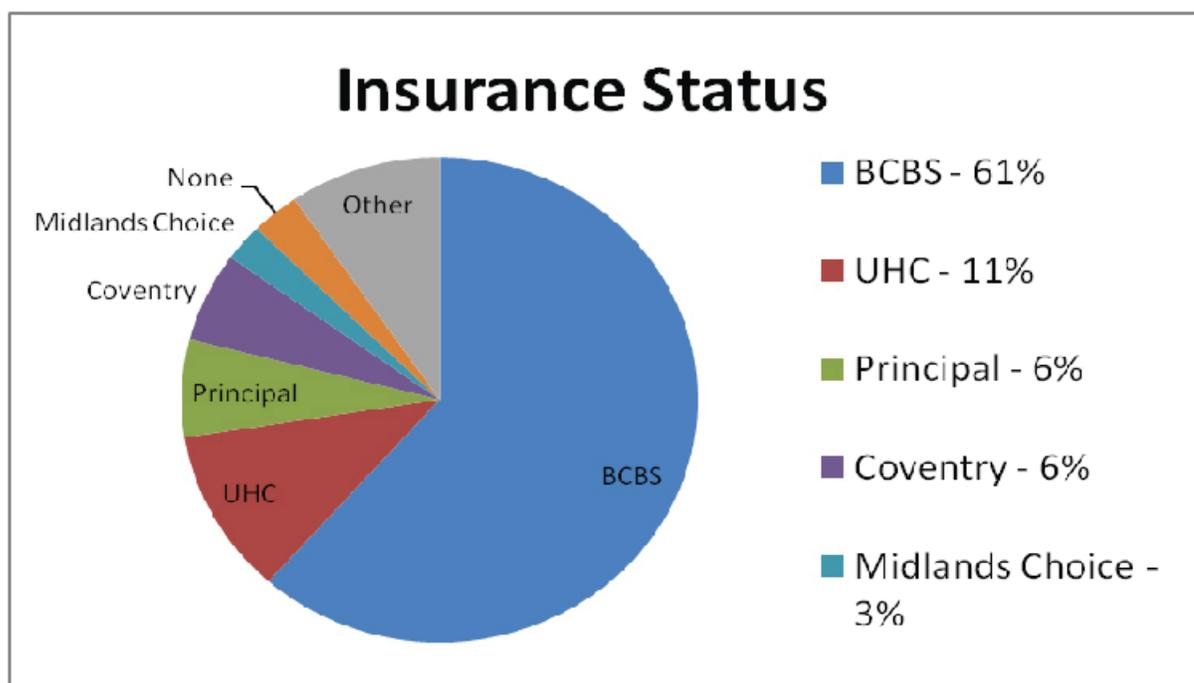
Hearing Aid & Audiological Services Funding Summary 2008-09

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The following is a table that includes the ages of children served. It is important to point out that 63% of the children served by this program were under the age of 10 when language development is so important.

AGE	CHILDREN SERVED	PERCENT	NET DOLLARS PAID
0-3	29	15%	38,597.17
4-10	95	48%	114,655.84
11-15	47	23%	60,680.19
16-20	28	14%	41,085.16

The following chart illustrates the insurance status of children served under the Hearing Aids and Audiological Services program. Only five percent of those children served with this funding were children who did not have private medical insurance or qualify for public health insurance. That means that ninety-five percent of the children served had medical coverage whose plan did not cover hearing aids at all or only a small fraction of the costs.



Hearing Aid & Audiological Services Funding Summary 2008-09

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Research shows that by the time a child with hearing loss graduates from high school, more than \$400,000 per child can be saved in special education costs if the child is identified early and given appropriate educational, medical and audiological services (White, K. R., & Maxon, A. B. (1995). Universal screening for infant hearing impairment: Simple, beneficial, and presently justified. International Journal of Pediatric Otorhinolaryngology, 32, 201-21).

We would like to thank all of the audiologists and hearing aid dispensers who work tirelessly with families to help them access funding (this funding, as well as other funding) to obtain hearing aids and accessories for the children they serve. There are only a small number of providers in the state who will not accept this funding because reimbursement is based on Medicaid rates. We would also like to thank the EHDI Advisory Committee Members and the organizations they represent for their assistance and guidance in setting up this program. Finally, thank you to the legislators, our Governor,

and advocates who worked very hard to assist families in getting hearing aids for children diagnosed with hearing loss. You are making a difference. Just ask any of the parents whose children have benefited from this funding. Better yet, I will leave you with one of the messages received from a parent, "Emma's life is different and we would like to thank you from the bottom of our heart!!"

Research shows that by the time a child with hearing loss graduates from high school, more than \$400,000 per child can be saved in special education costs if the child is identified early and given appropriate educational, medical and audiological services.



A Sound Beginning for Your Newborn Baby

To order additional hearing screening brochures in English or Spanish, please call the Healthy Families Line at 1-800-369-2229. Ask for publication IDPH 131 (English) or IDPH 131(S) (Spanish). The brochure is available free of charge!

Healthy Families Line: 1-800-369-2229

Phones are answered 24 hours a day, seven days a week

Hearing Aid Use in Very Young Children

Consistent hearing aid usage is essential if individuals with hearing loss are going to maximize the use of their hearing to interact with their environment. According to a survey of over 2700 adult hearing aid users, up to 16% of those who have hearing aids do not wear them (Kochkin, 2000).

Much less is known about hearing aid use in children. The establishment of early hearing detection and intervention programs has resulted in children receiving appropriate amplification at very young ages. Consistent hearing aid use is necessary if children are going to maximize their auditory development and be able to use audition to develop speech and language skills. While it is known that early identification and intervention of hearing loss improves outcomes for young children, little is known about how they adapt to hearing aid use.

An article that was recently published in the *American Journal of Audiology* described hearing aid use in children ages 9 to 28.5 months of age (Moeller, Hoover, Peterson, Stelmachowicz, 2009). The authors interviewed the mothers of seven children with mild to moderately severe hearing loss at 4 to 6 month intervals in order to determine if developmental stages and behaviors as well as various daily situations influenced hearing aid use. The study showed that hearing aid use improves as children age; however not every child reached optimal hearing aid use by 28.5 months of age. Hearing aid usage ebbed and flowed and was dependent on developmental and environmental situations. As children developed, improved motor skills allowed them to remove their own hearing aids. They also realized that removing them resulted in a

lot of parental attention. If children were ill or fussy, they were less likely to consistently wear their hearing aids. Parents reported that some environmental situations were more difficult than others. Riding in a car seat proved to be problematic for parents; children were able to remove their hearing aids and put them in their mouth or throw them, or children experienced feedback due to the car seat head rests.

The authors suggest that increased use of FM systems may help in some situations such as riding in a car seat. They also suggest that audiologists help families find possible solutions to difficult listening situations. Possible solutions include the use of hearing aid retention devices such as Critter Clips, toupee tape or bonnets. Families should also be encouraged to have appropriate insurance coverage for their child's hearing aids. Families and their service providers need to be aware of developmental stages, health conditions such as illness, or environmental conditions such as riding in a car seat that influence hearing aid use. Parents involved in the study reported that perseverance is important. Families need continued support to help their children grow into optimal hearing aid use.

If you would like to listen to or read the interview between Mary Pat Moeller and a parent discuss why consistency of hearing aid use is so important, go to www.asha.org/podcast and click on *Infants and Hearing Aids* or *Read the transcript*.

References:

- Kochkin, S. (2000). MarkeTrack V: "Why my hearing aids are in the drawer": The consumers perspective. *Hearing Journal*, 53, 34-41.
- Moeller, M., Hoover, B., Peterson, B., Stelmachowicz, P. (2009). Consistency of hearing aid use in infants with early-identified hearing loss. *American Journal of Audiology*, 18, 14-23.

What to Expect Following Diagnosis of Hearing Loss

Readers of this newsletter are well aware that research clearly shows that early identification of childhood hearing loss and timely early intervention can make all the difference in a child's language abilities. Around the time of diagnosis, however, families are faced with a large amount of new information, learning a whole new vocabulary and meeting lots of new people. The knowledge that timely decisions need to be made can add to their burden. Here we present a brief outline of what can be expected around the time that a child is identified as being deaf or hard of hearing.



In infants and toddlers, a definitive diagnosis of hearing loss is made with an auditory brainstem response (ABR) test performed by an audiologist. At the appointment the audiologist will explain test results and try to give parents a brief introduction to what appointments might be expected and what decisions will need to be made. Optimally, parents will be provided with the Iowa EHDI Family Resource Guide and contact information for the Iowa Guide by Your Side support program. Also at this appointment, the subject of hearing aids may be introduced and earmold impressions may be made for one very practical reason: It is easier to make earmold impressions on a sleeping baby than on one that is active and awake. No matter what decisions a family makes about communication options, early amplification can facilitate language development for children who can benefit from hearing aids and we often don't know if a child will benefit from amplification unless a trial period is initiated.

A visit to a pediatric otolaryngologist (ear, nose and throat specialist) is the next best step. This physician may refer the family on to a variety of specialists, depending on results of a history and physical exam. Some of these referrals may surprise and concern parents, but are medically necessary. Some appointments will be made to help parents understand the cause of the hearing loss. Other appointments may be necessary to determine

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What to Expect Following Diagnosis of Hearing Loss

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whether accompanying, medically treatable conditions can be detected. Referrals may be made to the following specialists:

- 1** An ophthalmologist (eye specialist) may be made because many conditions that affect hearing can also affect vision.
- 2** Consultation from a cardiologist (heart specialist) may be requested because some conditions responsible for childhood hearing loss also cause heart difficulties. One syndrome even puts a child at risk for sudden death, which is preventable if identified and treated early.
- 3** Nephrology (kidney specialty) may be consulted because kidney disorders and hearing disorders are often associated.
- 4** An MRI or other imaging of the head may be ordered to determine whether there are any abnormalities in the structure of the ear.
- 5** Neurology may also be consulted.
- 6** A child may also get an appointment with a genetic specialist because researchers are becoming increasingly aware that much of childhood hearing loss is genetic, even when there is no obvious family history of childhood hearing loss.
- 7** Of course, the child's primary care provider will continue to manage routine healthcare and monitor developmental milestones.
- 8** The child will also have continued hearing aid consultations with the audiologist. Several appointments may be necessary to ensure that earmolds fit well and that the hearing aids are adjusted for the best fitting. At some point a family along with their support team may determine that a child is not accruing benefit from amplification. In that case, it may be suggested that the family consult with a cochlear implant team. Of course, as is the case with all referrals, this consultation would be the family's choice. Cochlear implants are just one of many communication opportunities for a child.



Simultaneously, the family will be making steps toward optimizing communication and enrolling the baby in services with Iowa Early ACCESS, Iowa's coordinating agency for early intervention. An

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What to Expect Following Diagnosis of Hearing Loss

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Individualized Family Service Plan (IFSP) will be written to ensure that the intervention plan meets the needs of the child and family for the best possible outcomes. Parents may choose to join a family group, such as Iowa Hands and Voices, Strength in Numbers or AG Bell, and to take advantage of the support provided by the Guide by Your Side program.

To learn more about your journey toward understanding your child's hearing loss and the resources available for your child and your family, visit the Iowa Early Hearing Detection and Intervention Web site at www.idph.state.ia.us/iaehdi/default.asp. There you will find a copy of a Family Resource Guide developed by parents and professionals. Your understanding of your child's hearing loss, and of the services available to both of you, will play an essential role in helping your child achieve the best possible outcomes.

EHDI Loaner Equipment Change

The contact for the EHDI loaner equipment program has changed from Marilyn Dolezal to Alitta Boechler. Alitta is training to be an audiologist and she can be reached at (319) 356-1345 OR (800) 272-7713.

Infant Hearing Screening Equipment Loaner Program

Are you having problems with your hearing screening equipment? The Iowa EHDI program has a limited number of loaner screening OAE units available for hospitals to use while their screening equipment is being repaired.

There is no charge for borrowing the equipment.

For information about loaner units, please contact:

Alitta Boechler - (800) 272-7713

Lenore Holte - (319) 356-1168

Emily Andrews - (319) 384-6894

Nick Salmon - (515) 576-5312

Your single point of contact to assist families in connecting with Early ACCESS and community-based services that address specialized child and family needs

1-888-IAKIDS1 or
1-888-425-4371

www.EarlyACCESSIowa.org

Contact Information

State EHDI Coordinator

Tammy O'Hollearn
Iowa Department of Public Health
(515) 242-5639
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**Requests?
Feedback?
Comments?
Suggestions?**

We welcome your questions, comments and suggestions about this newsletter. Please forward any feedback about Iowa EHDI News to:

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Additional copies of Iowa EHDI News are available by contacting Tammy O'Hollearn.