

Recognizing Vision and Hearing Loss

By Ann Milanese, MD Developmental Pediatrician, Connecticut Children's Medical Center Medical Advisor, CT Birth to Three System

This article is translated into Spanish on page 2. Ver la versión española de este artículo en la página 2.

Produced by the State Department of Education and the Connecticut Birth to Three System in Collaboration with the



COOPERATIVE EXTENSION SYSTEM College of Agriculture and Natural Resources ision and hearing are important tools that children use to form relationships, connect socially, communicate and to take in information

about the world

around them. Problems with vision and hearing often exist as part of a cluster of developmental disabilities. They may be related to a condition itself or may occur as a

consequence of necessary interventions such as neonatal intensive care. For some children with other developmental disabilities, there might be fewer expectations for attention and communication and, therefore, a delay in recognizing the sensory loss. Since many vision and hearing problems can be either corrected or improved, it is essential to be aware of the risk and to evaluate vision and hearing status as part of routine check ups. Young children seldom complain that they cannot see or hear! Children with one sensory impairment might compensate by relying on another sense, so early signs of dysfunction can be very subtle.

Visual development is a

neurological process that is highly dependent on clear and well-coordinated images being transmitted to the brain. Normal visual development requires the brain to receive equally clear, focused images from both eyes simultaneously for visual pathways to develop properly. If the eyes transmit unequal images or if the muscles of the eyes do not work together, the brain will automatically ignore one of the images, resulting in a loss of vision in one eye. Because the coordination of the eye muscles is often affected by neurological damage, it has been estimated that as many as 75% of children with developmental disabilities have visual disorders, including refractive errors that limit their ability to focus and significant eye muscle imbalances.

Certain warning signs of visual prob-

lems can be observed by parents and teachers, even in children who cannot complain or fully cooperate with an exam. These include:

- Squinting
- Frequent blinking or rubbing of eyes
- Covering or closing one eye
- Eyes pointing in different directions
- Twisting or tilting the head to favor one eye

The American Academy of Pediatrics recommends that children's eyes should be examined at all well child visits, beginning at the earliest age that is practical. Conditions that interfere with vision are of extreme importance, due to the dependence on visual stimuli for development of normal vision.

> The American Optometric Association recommends paying attention to the following for early detection of visual problems:

> > • By the age of three to four months an infant's

eyes should focus on small objects. The eyes should appear straight or parallel.

• At six months the infant should be able to focus on both distant and near objects.

In children functioning at a two- to five-year-old level, the doctor can use a picture-based eye chart to measure visual acuity. A comprehensive eye examination includes tests for near and distance vision, focusing ability and eye coordination, perception of depth, color and peripheral vision, refraction, muscle based alignment and amblyopia (lazy eye).

If a child is to benefit from glasses, the frames should include the following features:

- Padded or rubber bridges where the glasses rest on the nose
- Deep-grooved eyewires to keep the lenses in place
- Headband attachments to keep glasses on the face
- Shapes that allow a wider field of vision

Hearing is necessary for the development of spoken language. The mechanism for hearing is complex and depends on both the hearing organs and the brain's ability to interpret the signals in order to hear correctly. Hearing loss can affect the development of both receptive and expressive language, particularly if it occurs before two years of age, a time of rapid language growth.

Unfortunately, there is often a delay in identifying children with hearing loss. Deaf infants are often exquisitely sensitive to their visual environments and tune in to gestures, expression and touch to enhance their contact with caregivers. This can mask outward signs of hearing loss. Universal newborn hearing screening is a step in the right direction but hearing loss can begin gradually during the first several months of life. Parents need to be attuned to continued signs of good hearing ability even after their baby passes the newborn hearing test.

Between birth and four months of age a child who hears will awaken from sleep if startled by loud talking. A child with a hearing loss may or may not be similarly startled. Early language behavior might yield a clue. Between four and six months of age most children babble. Deaf children become quieter by around nine months and then stop babbling. Typical five to seven month olds turn to the sound of a familiar voice, often beginning to imitate sounds. Children with hearing loss do not show this pre-language behavior.

Children with mental retardation, whose hearing is fine, might also exhibit delays in early language milestones. However, for them the delays exist as part of a cluster of other delays rather than in isolation.

Some children experience intermittent or "on and off" hearing loss related to ear infections and middle ear fluid accumulation. These children might present a more puzzling picture of inconsistent listening and speaking.

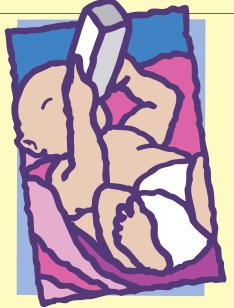
A hearing test can help sort out such a confusing developmental pattern by telling if a hearing loss exists, the severity of a loss, and the type of hearing loss. Several types of hearing tests are available: some require less or more cooperation by the child. In addition to the hearing test a tympanogram should be done to check middle ear function.

Children with developmental disabilities face many challenges, but vision or hearing impairment does not need to go uncorrected. It is everyone's job to regularly monitor every child's vision and hearing in order to detect difficulties as early as possible and to offer maximum support and skilled intervention.

Identificación de deficiencia de la vista y el oído

Por Ann Milanese, DM pediatra especialista en desarrollo infantil, Connecticut Children's Medical Center; asesora médica, Sistema para Infantes a Tres Años de CT.

a vista y el oído son instrumentos importantes en los niños para formar relaciones, conectarse socialmente, comunicarse y absorber información del mundo que les rodea. Los problemas de la vista y el oído son con frecuencia parte de un conjunto de deficiencias del desarrollo infantil.



Pueden estar relacionados con determinado cuadro clínico o ser consecuencia de intervenciones necesarias tales como el cuidado intensivo neonatal. En los niños con otras incapacidades del desarrollo que reclaman atención podría resultar insuficiente la que se dedica a estos problemas, y por lo tanto demorarse el reconocimiento de la deficiencia del sentido. Dado que muchos problemas de la vista y el oído pueden corregirse o mejorarse, es esencial estar consciente del riesgo y evaluar la visión y la audición como parte de los reconocimientos rutinarios. ¡Los niños tiernos rara vez se quejan de no poder ver u oír! Como los niños con deficiencia en un sentido podrían compensarla apoyándose en otro sentido, los primeros indicios de disfunción pueden ser muy sutiles.

El desarrollo del sentido de la vista es un proceso neurológico que depende

en alto grado de que puedan transmitirse al cerebro imágenes claras y bien coordinadas. El desarrollo visual normal necesita que el cerebro reciba simultáneamente de ambos ojos imágenes igualmente claras y en foco para que las sendas visuales se desarrollen propiamente. Si los ojos transmiten imágenes desiguales o si sus músculos motores no trabajan al unísono, el cerebro automáticamente desecha una de las imágenes y se pierde la visión de un ojo. Como la coordinación de los músculos de los ojos a menudo se afecta por daños neurológicos, se ha estimado que tanto como el 75% de los niños con incapacidad de desarrollo tienen desórdenes visuales, incluyendo errores de refracción que les limitan la capacidad de enfocar, y falta de coordinación en los músculos de los ojos.

Hay señales indicativas de problemas

de la vista que los padres y los maestros pueden observar aun en niños que no pueden quejarse o cooperar adecuadamente en un reconocimiento. Estos signos incluyen:

- Bizquear o entrecerrar un ojo
- Pestañar y frotarse los ojos con excesiva frecuencia
- Taparse o cerrar un ojo
- Enfocar los ojos en direcciones diferentes
- Mover la cabeza para favorecer un ojo

La Academia Norteamericana de Pediatría recomienda que se examinen los ojos en todas las visitas de los niños, comenzando tan temprano como sea práctico. Los cuadros clínicos que interfieren con la visión son de extrema importancia porque el desarrollo de la visión normal es altamente dependiente de los estímulos visuales.

La Asociación Norteamericana de Optometría recomienda prestar atención a lo siguiente para la detección de problemas visuales:

- A los tres o cuatro meses de edad los ojos del infante deben poder enfocar objetos pequeños. Los ojos deben aparecer derechos o paralelos.
- A los seis meses de edad el infante debe poder enfocar tanto los objetos cercanos como los distantes.

Para examinar niños de dos a cinco años el médico puede utilizar figuras o dibujos en lugar de letras en el cartel del óptico. Un examen ocular comprensivo incluye pruebas de la visión cercana y de la lejana, de la facultad de enfocar y de la coordinación ocular, percepción de profundidad, color y visión periférica, refracción, alineamiento basado en los músculos y ambliopía.

Para que a un niño le sea beneficioso usar gafas, la armadura debe satisfacer las siguientes condiciones:

- Puentes acolchados o de goma donde los espejuelos descansan en la nariz
- Aros con ranura profunda para que los lentes no se salgan
- Bandas de cabeza que ayuden a mantener los espejuelos en la cara
- Forma que permita un campo de visión más amplio

Es necesario poder oír para que se desarrolle la facultad de hablar. El mecanismo de la audición es complejo y para funcionar correctamente depende tanto de los órganos de la audición como de la capacidad del celebro para interpretar las señales que recibe. La pérdida de la audición puede afectar el desarrollo del lenguaje tanto receptivo como expresivo, particularmente si ocurre antes de los dos años de edad, etapa de rápida expansión del lenguaje.

Desafortunadamente es frecuente la tardanza en la determinación de deficiencias auditivas en los niños. Los niños con sordera suelen ser exquisitamente sensibles a su entorno visual y se concentran en gestos, expresiones y tacto para intensificar su comunicación con quienes los cuidan, lo que puede opacar las señales de deficiencia. El reconocimiento auditivo universal de los recién nacidos es una buena medida pero la pérdida del oído puede comenzar gradualmente en los subsiguientes primeros meses de vida. Los padres deben seguir comprobando las manifestaciones de la capacidad de oír de sus hijos aunque éstos hayan pasado satisfactoriamente la prueba

del recién nacido.

Entre el nacimiento y los cuatro meses de edad el niño dormido que oye bien se despierta sobresaltado si súbitamente se habla en voz alta a su alrededor. Un niño con pérdida del oído puede o no sobresaltarse. Sus primeras manifestaciones lingüísticas pueden

indicar si oye bien. Entre los cuatro y los seis meses de edad la mayoría de los niños balbucean. Los niños con sordera se tornan más silenciosos hacia los nueve meses en que dejan de bal-

bucear. El niño típico de cinco a siete meses se vuelve hacia el sonido de la voz familiar, y con frecuencia comienza a imitar sonidos. Los niños con pérdida de la facultad de oír no presentan este comportamiento prelingüístico.

Los niños con retraso mental que oyen bien podrían también mostrar retraso en marcar los primeros hitos lingüísticos. Sin embargo, para ellos las demoras existen como parte de un grupo de otras demoras más bien que aisladas.

Algunos niños experiencia intermitentemente pérdidas auditivas debido a infecciones del oído y acumulación de líquido en el oído medio. Estos niños podrían presentar un cuadro más desconcertante de inconsistencia en escuchar y hablar.

Una prueba de audición puede ayudar a aclarar una pauta de desarrollo confuso y determinar si existe pérdida del oído, su severidad y su tipo. Hay varios tipos de prueba de audición, que pueden precisar menos o más cooperación del niño. Además de la prueba de audición debe hacerse un timpanograma para examinar la función del oído medio.

Los niños con incapacidad de desarrollo confrontan muchos retos, pero el deterioro de la vista o el oído no tiene que quedar sin corregir. Es obligación de todos vigilar regularmente la visión y la audición de cada niño para detectar problemas tan temprano como sea posible y ofrecer apoyo máximo e intervención especializada.

BIRTH TO THREE SYSTEM

By Linda Goodman

T's been another challenging fiscal year in Birth to Three. Once again the state continues to be very generous in its financial support for our everexpanding services. We're hoping that the amount budgeted for this coming year (beginning July 1, 2002) will be just enough and that we won't, for the first time in three years, be projecting a shortfall. The federal government has also been generous, increasing its financial contribution to Connecticut by 12%, which means an additional \$500,000 for next year.

Early this spring, we issued a request for proposals for two new or expanded Birth to Three programs in the Southwest and North Central regions of the state. We have consistently had an issue this year with families having to wait up to 30 days after calling Infoline just to be referred to a Birth to Three program for an eligibility evaluation. Long delays are not acceptable because every day that a family has to wait for that evaluation can be agony. Our goal is no more than a 48-hour wait for any family.

In another effort to make our system operate more efficiently, we've hired a consultant, Shafer and Associates from Coraopolis, Pennsylvania, to study and make recommendations about reducing the time that interventionists spend traveling between home visits. This is always an interesting balance between offering families some flexibility of scheduling and not having to drive 50 miles on two different days during the week to visit two families who live in the same neighborhood. A summary of that report will be available this summer and will be posted on the website.

UNIVERSAL NEWBORN HEARING SCREENING PROGRAM

By Donna C. Maselli, RN, BS, Nurse Consultant, Connecticut Department of Public Health

On July 1, 2000 the Department of Public Health (DPH) implemented

We're pleased with our Parent Leadership initiative so far. This past year, training sessions were held in four of the five regions and there are currently regional parent coordinators in four of the five regions. Two of the coordinators, Carmina Cirioli and Zoe Tasker, have been appointed to the State Interagency Coordinating Council. Several parents who attended the initial training session are being

further trained to assist in parent interviews when we review the quality of programs, and several parents participated in reviewing the recent proposals for additional programs in the Southwest and North Central regions. We're off to a good start.

PRESCHOOL SPECIAL EDUCATION By Maria Synodi

The warm weather has arrived, the flowers are blooming and parents and professionals are discussing summer and the opportunities that may be available to young children with disabilities. A frequently asked question at the State Department of Education at this time of year involves extended school year services (ESY). Here's the scoop on ESY:

A school district's Individualized Education Program (IEP) team, usually at a child's annual review, discusses and determines whether or not an individual child will be eligible for an extended school year program. The school district is obligated to provide ESY when such services are necessary to permit a child with an IEP to receive a benefit from his/her educational program dur-

a statewide Universal Newborn Hearing Screening Program. Through this program all infants are screened for hearing loss at birth, prior to leaving the hospital. The hearing screening is quick and painless and identifies infants in need of further audiological testing.

Prior to universal newborn hearing



ing the school year. There are a number of factors that must be considered in the IEP decision-making process including:

- The nature or severity of the child's disability;
- The child's progress in the areas of learning crucial to attaining self-sufficiency;
- Whether the child will likely lose critical skills or fail to recover skills within a reasonable period of time as compared to typically

developing children;

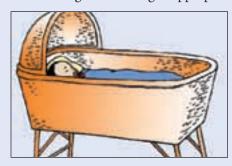
- Whether stereotypic, ritualistic, aggressive or self-injurious behavior prevents a child from benefiting from his/her IEP during the school year;
- Other special circumstances identified by the child's IEP team such as ability and opportunities for the child to interact with non-disabled peers and areas of curriculum that need continued attention.

The provision of ESY is the exception and not the rule for children receiving special education and related services. The determination should be made each year for individual students who may be eligible to receive ESY.

Resources for parents include the Summer Directory of Camps and Programs for Exceptional Children in Connecticut (2002). This document is available through the Special Education Resource Center's (SERC) web site at www.serc.rh.edu. The National Center for Children and Youth with Disabilities (NICHCY) also offers resource and directory information on summer camps for children with disabilities. NICHCY information can be obtained through their web site at www.nichcy.org.

screening, the average age at which hearing loss was discovered in infants was 22 months. Many of these children required special education services because of their speech delays. The earlier a child with hearing loss is identified and interventions are put in place, the less impact the hearing loss will have on the child's speech and language development. Hearing aides can be placed on infants as young as four weeks of age.

The goal of the Department of Public Health is to screen all infants at birth, conduct diagnostic testing as appropri-



ate by two months of age, and enroll the child in Birth to Three for early intervention services by four months of age. The DPH staff track infants from the initial screening through intervention.

Since the Universal Newborn Hearing Screening Program began in Connecticut over 50,000 infants have been screened at birth for hearing loss. Fifty-three infants have been diagnosed with hearing loss ranging from mild unilateral to profound bilateral. Over half of the children identified would not have been discovered at such an early age had the Universal Newborn Hearing Screening Program not been in place.

For more information on the Newborn Hearing Screening Program call the State Department of Public Health at (860) 509-8081, or visit our web site at *www.state.ct.us/dph.*

LEARNING OPPORTUNITY

Orientation to the Connecticut Birth to Three System

Mondays, July 15 or August 19, 8:45 AM – 12 noon or Tuesday, September 10, 8:45 AM – 12 noon

For more info or to register, contact Kathy Granata at (860) 418-6146 or *kathy.granata@po.state.ct.us*

Local Interagency Councils Reach Out to Health Care Providers

By Eileen McMurrer Birth to Three System Coordinator

hen a medical provider diagnoses a vision or hearing impairment, they talk with the parent about the medical issues involved. But what about other issues? What can the parent do next? Health care providers can go

beyond the basic medical issues by discussing the supports and services available from the Connecticut Birth to Three System and the local public schools, and making a referral with the family. Connecticut's Local Interagency Coordinating Councils (LICCs) are helping to educate medical providers about their role in taking this next step to support families.

LICCs are independent partnerships of parents, providers, school staff, childcare providers and others who are dedicated to increasing the effectiveness of services for young children birth through age five. Many LICCs include medical providers as active members and most have reached out to their local medical community. Office visits by LICC members to explain what Birth to Three offers and how

Bridgeport		New Haven	
Elizabeth MacKenzie	(203) 365-8835	Mary Humphrey	(203) 294-5085
Greater Hartford		Jaime Uribe	(203) 318-3692
Elaine Cannon	(860) 695-5193	Northeast	
Brenda Sullivan	(860) 657-4361	Zoe Tasker	(860) 228-3181
Lower Fairfield		Julie Rowe	(203) 318-3692
Lolli Ross	(203) 629-1880	Suffield/Enfield	
	x 132	Karen Boscarino	(860) 668-2982
Meriden		Southeast	
Patricia Sullivan	(203) 630-4245	Jesse Sargent	(860) 447-2931
Middlesex County		Amy Anderson	(860) 447-2931
Lisa Wiernasz	(860) 344-6717	Mary Littel	(860) 859-5528
Cindy Cohen	(860) 344-8014	Torrington	
,	(000) 511 0011	Pat Wescott	(203) 806-8753
Naugatuck Valley		Carole McGuire	(860) 824-5639
Dianne Guillett	(203) 924-9548		(
Ellen Steinbrick	(203) 881-0129	Waterbury	
		Joy Liebeskind	(203) 272-9058
		Tom Melesky	(203) 575-0707

to make a referral have been an effective way to inform doctors and their staff. LICCs have donated children's books to the office waiting room to make "down time" into fun and learning time. Each book bears a sticker with the Birth to Three System referral number on it. Brochures and posters that explain when and how to contact Birth to Three have been delivered by LICCs to hospitals and offices. Some LICCs have even made presentations in hospitals at staff meetings and Grand Rounds which doctors are required to attend for their continuing education. LICCs continue to search for ways to deliver the message that early intervention works and referral at the earliest opportunity is most helpful to the family and child.

LICCs need your ideas and energy. Join them for a meeting, or call these contact people to learn more!

"SNIPPETS" The Provider Perspective

HEARING LOSS IN YOUNG CHILDREN By Robert Benoit, MA CCC-A

Now that Connecticut mandates new-born hearing screening, infants born with hearing impairment are being identified early. These infants are benefiting from early intervention including hearing aid fitting or cochlear implants. Connecticut also mandates hearing screening when a child enters the school system, usually at age five. But what happens between the newborn period and five years of age? Some children may develop a hearing problem during those first five years, a critical time for speech and language development. Parents and professionals need to be alert to risk factors for hearing loss and signs that a child may be having hearing difficulty.

Risk factors for developing permanent hearing impairment at any age include:

- Bacterial meningitis
- Severe head trauma/skull fracture
- Family history of progressive hearing loss starting in childhood
- Severe noise trauma, e.g. firecracker explosion near the ear
- Certain chemotherapies that treat childhood cancers and certain antibiotics that treat severe infections
- Genetic syndromes that may be associated with progressive hearing loss

More commonly, many infants and young children develop temporary or fluctuating hearing impairment due to middle ear infection and/or build-up of fluid in the middle ear. If this type of hearing loss lasts for several months, speech and language development can be hindered. Occasionally some permanent hearing loss may also result if scarring and adhesions form on the eardrum and middle ear bones or if a cyst forms in the middle ear. Some children are at greater risk for developing chronic middle ear problems and associated hearing loss. These include:

- Children born with cleft lip and/or palate
- Children with Down syndrome
- Infants who were intubated due to premature birth or other medical complications during infancy

Additionally, placement in daycare and preschool settings may increase risk of middle ear infection and associated hearing loss. (Note that children do not "catch" ear infections from other children. They, however, may catch upper respiratory infections that then lead to ear infection.) Research also shows that some ethnic/racial groups are at higher risk for ear infections. Children of Hispanic background and Native Americans are at higher risk compared to the general population.

The following advice is for parents to lessen the chance of their children developing ear infections and related hearing loss:

• Strongly consider breastfeeding your infant. Babies who are breastfed tend to have fewer colds and ear infections.

• Avoid exposing your child to second hand smoke. If you smoke do so away from children.

> • When bottle-feeding your child keep his/her head up. Do not let your child drink from a bottle while laying flat.

> > • If an antibiotic is prescribed for an ear infection, give the medication for as long as recommended. If you stop the medication too early, the ear infection may not clear.

Using a variety of special procedures, audiologists can test the hearing of children of any age. A hearing test should be considered whenever a child's hearing ability is questioned or when speech and language development is delayed.

A HEARING CHECKLIST BY AGE

- **6 Months:** Does the infant turn toward sounds?
- **12 Months:** Does the child understand simple commands and questions like "Wave bye-bye" and "Where is Mommy?"
- **18 Months:** Does the child say about six words?
- **24 Months:** Does the child occasionally speak in two-word phases?
- **36 Months and Older:** Does the child ask for frequent repetition or often ask "What?" Does the child want the TV volume turned up high? Does the child complain of not hearing well on the telephone?

VISION AND CHILDHOOD DEVELOPMENT

By Jannie Shapiro, M.Ed; L.O., Optician, Eye Center Optical and Low Vision Instructor, Middlesex Community College

Of all the senses of the body, vision is the most important in terms of the development and learning of a young infant and child. It has been proven time and again that when vision is impaired or restricted developmental delays will occur that affect the child's ability to learn and perform well in school. Since 75 to 90% of all classroom learning occurs through vision, it is important that parents and professionals understand the stages of vision development, warning signs to look for and the necessity for regular vision screenings and eye exams.

First of all, a distinction must be made between sight and vision. Sight is a static measurement that is determined when a patient reads the letters on a visual acuity chart. It is a measurement of how clearly we see and is only one aspect of vision. Vision is a dynamic, learned process that is directly tied into movement. Vision allows us to look at an object, recognize it and judge where it is, how big it is, and how far away it is from us. When a child crawls across a room to reach a toy that he sees, he is using his vision to

judge the space and determine how far to move and reach for the toy. If he has reached a certain developmental level that has allowed him to coordinate vision and motor, he will successfully reach his goal.

In the first six weeks of life an infant will stare at his environment and will fleetingly gaze at bright objects and lights. The infant will not be able to focus in on details or objects brought in front of his face. From 8 weeks to 24 weeks, the infant begins to gain more control over eye movements. He begins to look at his parent's face, starts to look at his own hands and by 20 weeks is paying more attention to distant objects. He is more visually alert and is developing an attention span. From 30 to 48 weeks, the child looks at objects for longer



TECHNOLOGY AND THERAPY

By Susan Cotton

Then the audiologist said, "Your daughter will need hearing aids for the rest of her life," it was like a sword had been plunged into our hearts. Our worst suspicions were confirmed, and we were devastated to learn our twoand-a-half-year-old's fate. Then postpartum depression sunk in almost nine months after our newborn son's initial, but inconclusive, screening. Follow-up testing at six months confirmed his hearing impairment. A CAT scan revealed the same two congenital inner ear defects as our daughter; both conditions related to progressive loss. Lightning had struck twice.



periods of time and looks for toys he drops. He may also start to creep after toys that he wants. From 12 months to 18 months, the child starts to have an interest in looking at pictures in books, visually focuses on an object that he wants to grasp, and is driven by movement. From 24 to 36 months,

the child visually inspects without needing to touch. He watches his hand as he scribbles, imitates the activities of other children and is able to color. From three to four years of age, the child's eye-hand coordination is greatly improving, as he is able to draw rather than just scribble. From four to five years of age, the child can use eyes and hands well together, drawing names and pictures, and coloring within the lines.

Although all children develop at a different pace, they should all reach these levels of development. If delays are noted, referrals should be made to the appropriate clinician. Parents should pay attention to the appearance of their child's eyes and should report any redness, styes or excessive tearing. It should also be noted if the child rubs

We have seen progression in their hearing loss. Each time feels like that first day. It is important to mourn the loss and hurt that exists knowing that you can't make the deafness go away. You must get beyond the feeling of being overwhelmed and embrace your method of communication with 100% commitment. Only when you are able to accept the diagnosis and channel your energy positively will your child's progress shine through like the first ray of sunlight after a blizzard.

With today's technology and therapy children who do not have natural access to speech sounds can learn to listen and speak with incredible voice quality. This is the road we have chosen and we intend to learn some American Sign Language (ASL) to enhance our communication when needed. There are tremendous resources available professionally and through support networks like the Alexander Graham Bell Association to his eyes excessively, avoids bright light or keeps his eyes closed too much. A visual examination should be provided by a doctor who will evaluate vision development and performance as well as the health of the child's eyes. The information and assistance from these exams will ensure that your child has the best start in life and will prepare him for the school years ahead.



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NATHAN By Kristina and Edwin Gonzalez

"It's a boy!" the doctor yelled out on April 24th, 2000. As my husband and I looked at our son for the very first time, tears of joy and excitement rushed

through our bodies. "He is perfect!" my husband said as he kissed him on his forehead. Hours later, as family and friends were "oohing" over our little boy, the hospital nurse came in and sat on my bed. She proceeded to tell us our son did not pass the newborn hearing screening. "What? I didn't even know there was a hearing test," I managed to say between tears of shock. The nurse told us not to worry - they would repeat the test. Four hours later they did just that, and again, Nathan did not pass. The nurse told us again not to worry and an appointment was set up for two weeks later to repeat the test. The two weeks went by very slowly, and everyone kept telling us not to worry. When Nathan was tested at two weeks of age, the result was the same and we scheduled diagnostic testing at CT Children's Medical Center (CCMC).

UNIVERSITY OF CONNECTICUT COOPERATIVE EXTENSION SYSTEM 1376 Storrs Road, Unit 4036 Storrs, CT 06269-4036

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The day before our appointment my mom had contacted Birth to Three and was given information about the services available in Connecticut. I received a call that very evening from the director of one of the early intervention programs to discuss Nathan. She had asked me if I wanted to speak with parents of other children

with parents of other children with hearing loss. My husband and I were so excited that a parent would call at 9:00 p.m. on a Sunday night to talk with us! By the end of our conversation, I felt better about hearing loss and knew that no matter what the test would reveal the next day, my husband and I could handle it. The next day at CCMC we were told that Nathan had a moderate-severe loss in one ear and a severe loss in the other ear. Two days later we went to **CREC** Soundbridge and Nathan was fitted with his first pair of ear molds. My husband and I kept them to show Nathan when he is older. At four weeks old, a Birth to Three audiologist put hearing aids on

Nathan for the very first time. We went home with a bag filled with hearing aid accessories and a ton of information to read and learn.

> I often think of how we could possibly thank everyone who has helped Nathan and us, including the audiologist and therapist, the woman answering the phone, and especially all the parents we've met.

The best advice we ever received was to give our son unconditional love and enjoy every minute of every day together. Now that Nathan is two, my husband and I reflect on the day he was born, look at our son, and kiss him on the forehead thinking of just how "perfect" he really is.

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