Office of the Governor of Guam
P.O. Box 2950 Hagåtña, Guam 96932
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Felix Perez Camacho
Governor

Kaleo Scott Moylan
Lieutenant Governor

Office of the Speaker
Vicente C. Pangelinan

DEC 31 2004
4:30
TIME
RECEIVED BY:

31 DEC 2004

The Honorable Vicente C. Pangelinan
Speaker
Mina' Bente Siete Na Liheslaturan Guåhan
155 Hessler Street
Hagåtña, Guam 96910

Dear Mr. Speaker:

Transmitted herewith is Bill No. 408 (COR), "THE UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA) FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS, CODIFIED AS CHAPTER 5 OF DIVISION 1 OF TITLE 10, GUAM CODE ANNOTATED," now designated as **Public Law 27-150**.

Sinseru yan Magåhet,

FELIX P. CAMACHO
I Maga'låhen Guåhan
Governor of Guam

Attachment: copy attached of signed bill

cc: The Honorable Tina Rose Muna-Barnes
Senator and Legislative Secretary

1115

I MINA'BENTE SIETE NA LIHESLATURAN GUÅHAN
2004 (SECOND) Regular Session

CERTIFICATION OF PASSAGE OF AN ACT TO *I MAGA'LAHEN GUÅHAN*

This is to certify that **Bill No. 408 (COR), "THE UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA) FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS, CODIFIED AS CHAPTER 5 OF DIVISION 1 OF TITLE 10, GUAM CODE ANNOTATED," was on the 20th day of December, 2004, duly and regularly passed.**

vicente (ben) c. pangelinan
Speaker

Attested:

Tina Rose Muña Barnes
Senator and Legislative Secretary

This Act was received by *I Maga'lahen Guåhan* this 20th day of December, 2004, at 5:50 o'clock P.M.

Assistant Staff Officer
Maga'lahi's Office

APPROVED:

FELIX P. CAMACHO
I Maga'lahen Guåhan

Date: **December 30, 2004**

Public Law No. **27-150**

I MINA'BENTE SIETE NA LIHESLATURAN GUÅHAN
2004 (SECOND) Regular Session

Bill No. 408 (COR)
As amended by the Sub-Committee on Health,
and further amended on the Floor.

Introduced by: L. A. Leon Guerrero
F. B. Aguon, Jr.
J. M.S. Brown
F. R. Cunliffe
Carmen Fernandez
Mark Forbes
L. F. Kasperbauer
R. Klitzkie
J. A. Lujan
T. R. Muña Barnes
v. c. pangelinan
J. M. Quinata
R. J. Respicio
Toni Sanford
Ray Tenorio

THE UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA) FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS, CODIFIED AS CHAPTER 5 OF DIVISION 1 OF TITLE 10, GUAM CODE ANNOTATED.

BE IT ENACTED BY THE PEOPLE OF GUAM:

Section 1. A new Chapter 5 is hereby *added* to Division 1 of Title 10, Guam Code Annotated, to read:

"Chapter 5

§5101. Short Title.

§5101. Short Title. This Act shall be known and may be cited as the 'Universal Newborn Hearing Screening and Intervention Act (UNHSIA) of 2004'.

§5102. Legislative Findings and Intent. *I Liheslaturan Guåhan* hereby finds that significant hearing loss is one of the most common major abnormalities present at birth and, if undetected, will impede the child's speech, language, and cognitive development. Screening by high-risk characteristics alone (e.g., family history of deafness) only identifies approximately fifty percent (50%) of newborns with significant hearing loss. Reliance solely on physician and/or parental observation fails to identify many cases of significant hearing loss in newborns and infants. There is evidence that children with hearing loss, who are identified at birth and receive intervention services shortly thereafter, have significantly better learning capacity than children who are identified with hearing loss later than six (6) months after birth.

Legislation is needed to provide for the early detection of hearing loss in newborns and infants and to prevent or mitigate the developmental delays associated with late identification of hearing loss. Through tracking and surveillance of infants with hearing impairments, the loss to follow-up services is alleviated.

It is therefore the intent of *I Liheslaturan Guåhan* to provide for the early detection and intervention of hearing loss in newborn children at the hospital or as soon after birth as possible, to enable these children and their families/caregivers to obtain needed multi-disciplinary evaluation, treatment, and intervention services at the earliest opportunity and to prevent or mitigate the developmental delays and academic failures associated with late identification of hearing loss. Furthermore, *I Liheslaturan Guåhan* intends to provide the community of Guam with the information necessary to effectively plan, establish, and evaluate a comprehensive system of appropriate services for newborns and infants who have a hearing loss or are deaf and to further provide assurance that a smooth transition from the current Federally-funded health initiative in hearing screening, detection, and intervention is made from the University of Guam, Center for Excellence in Developmental Disabilities Education, Research, and Services (UOG CEDDERS) to the Department of Public Health and Social Services (DPH&SS).

§5103. Definitions.

(a) *'Infant'* means a child who is not a newborn and has not attained the age of one (1) year.

(b) *'Newborn'* means a child up to twenty-eight (28) days old.

(c) *'Child'* means a person up to twenty-one (21) years of age.

(d) *'Parent'* means a natural parent, stepparent, adoptive parents, guardian, or custodian of a newborn or infant.

(e) *'Birth Admission'* means the time after birth that the newborn remains in the hospital nursery prior to discharge.

(f) *'ICC Subcommittee'* means the subcommittee of the Guam Interagency Coordinating Council of the Guam Early Intervention System tasked with monitoring newborn hearing screening, tracking, and intervention.

(g) *'False Positive Rate'* means the proportion of infants identified as having a significant hearing loss by the screening process who are ultimately found to not have a significant hearing loss.

(h) *'False Negative Rate'* means the proportion of infants not identified as having a significant hearing loss by the screening process who are ultimately found to have a significant hearing loss.

(i) *'Health Care Insurer'* means any entity regulated by the Commissioner of Banking and Insurance, including, *but not limited to,* health care insurers; health, hospital or medical service plan corporations; or health

maintenance organizations. Health care insurer does not include self-insured plans or groups regulated by the Employment Retirement Income Security Act of 1974 ('ERISA'), to the extent that Guam regulation of such plans is preempted by ERISA.

(j) *'Health Insurance Policy'* means any health insurance policy, contract, plan, or evidence of coverage issued by a health care insurer, which provides medical coverage on an expense incurred, service or prepaid basis.

(k) *'Hearing Screening Test'* means automated auditory brainstem response, otoacoustic emissions, or any other appropriate screening test as recommended by national professional medical and health organizations and approved by the DPH&SS.

(l) *'Health Care Facility'* means any institution, building or agency whether public or private (for-profit or non-profit) that is used or designed to provide health care services, medical treatment or preventive care to any person or persons.

(m) *'Hearing Loss'* means a hearing loss of twenty-five (25) dB HL or greater in the frequency region important for speech recognition and comprehension in one or both ears (approximately 500 through 4000 Hz).

§5104. **Newborn and Infant Hearing Screening Programs.** (a) Each health care facility shall establish a universal newborn hearing screening program which shall include, *but not be limited* to:

(1) in advance of any hearing screening testing, providing to the newborn's or infant's parent(s), information concerning the nature of the screening procedure, applicable costs of the screening procedure (including information concerning insurance coverage and co-payment obligations), the potential risk and effects of hearing loss, and the benefits of early detection and intervention;

(2) providing a hearing screening test for every newborn born in the health care facility for identification of hearing loss, regardless of whether or not the newborn has known risk factors suggesting hearing loss;

(3) developing screening protocols and select screening method(s) designed to detect newborns and infants with a significant hearing loss, as recommended by professional health and medical organizations;

(4) providing for appropriate training and monitoring of the performance of individuals responsible for performing hearing screening tests who shall be trained properly in:

i) the performance of the tests;

ii) the risks of the tests, including psychological stress for the parent(s);

iii) infection control practices; and

iv) the general care and handling of newborns and infants in hospital settings.

(5) performing the hearing testing *prior* to the newborn's discharge; *if* the newborn is expected to remain in the health care facility for a prolonged period, testing shall be performed *prior* to the date on which he or she attains the age of three (3) months;

(6) developing and implementing procedures for documenting the results of all hearing screening tests;

(7) informing the newborn's or infant's parents and primary care physician of the results of the hearing screening test, or *if* the newborn or infant was not successfully tested. Whenever possible, such notification shall occur *prior* to discharge; *if* this is not possible, notification shall occur *no later than* ten (10) days following the date of testing. Notification shall include information regarding appropriate follow-up for a screening failure or a missed screening, and referral information for confirmatory testing. *If* a hearing screening test indicates the possibility of a significant hearing loss, the health care facility shall ensure that the physician, or other persons attending the newborn or infant, is made aware of the community resources available for confirmatory testing and process of referral to early intervention services; and

(8) collecting performance data specified and recommended by the Center for Disease Control, Early Detection

and Intervention Program Guidance Manual to insure that each health care facility is in compliance with reporting:

i) the number of newborns born in the hospital;

ii) the number of newborns and infants recommended for diagnostic audiological evaluation;

iii) the number of newborns screened on birth admission;

iv) the number of newborns who passed the birth admission screening, *if* administered;

v) the number of newborns who did not pass the birth admission screening, *if* administered;

vi) the number of newborns recommended for monitoring, intervention, and follow-up care;

vii) the number of newborns and infants who return for follow-up rescreening;

viii) the number of newborns and infants who pass the follow-up rescreening; and

ix) National Testing Performance Standards as adopted by the American Academy of Pediatrics.

(b) The Department of Public Health & Social Services shall exercise oversight responsibility for health care facilities, including establishing a performance data set and reviewing performance data collected pursuant thereto by each health care facility.

§5105. **Confidentiality.** The DPH&SS and all other persons to whom data is submitted in accordance with this Act shall keep such information confidential. No publication or disclosure of information shall be made except in the form of statistical or other studies which do not identify individuals, except as specifically consented to in writing by the parent(s) of a tested child.

§5106. **Coverage and Reimbursement.** (a) Any health insurance policy which is delivered, issued for delivery, renewed, extended, or modified in Guam by any health care insurer and which provides coverage for a child shall be deemed to provide coverage for hearing screening tests of newborns and infants provided by a health care facility before discharge.

(b) A health care insurer delivering a health insurance policy regulated under this Act shall provide each insured with notice of the provisions of this Act upon the effective date of coverage and annually thereafter.

(c) The amount of reimbursement for newborn or infant hearing screening provided under such a policy shall be consistent with reimbursement of other medical expenses under the policy, including the imposition of co-payment, co-insurance, deductible, or any dollar limit or other cost-sharing provisions otherwise applicable under the policy.

§5107. **Delivery of Policy.** Any health insurance policy, whether purchased on Guam or off-island that provides coverage or benefits to a

resident of Guam shall be deemed to be delivered in Guam within the meaning of this Act.

§5108. Applicability. This Act applies to health insurance policies delivered, issued for delivery, renewed, extended or modified after September 30, 2005.

§5109. Duties and Responsibilies.

(a) UOG CEDDERS: It will be the duty and responsibility of the Director of UOG CEDDERS to work in collaboration with DPH&SS, Department of Education (DOE), ICC Subcommittee, and the health care facilities to implement universal hearing screening and intervention programs through a four (4) year Federal grant under the United States Department of Health & Human Services, Health Resources and Services Administration, Maternal Child Health Bureau (H61 MC 00094-03-00). It will also be the duty and responsibility for UOG CEDDERS to develop the tracking and surveillance database monitoring system through a 2-year Cooperative Agreement with the Center of Disease Control in Atlanta, Georgia (UR3/CCU923118-02). UOG CEDDERS shall develop a plan for the collection of data and evaluation of the program in relation to the duties and responsibilities of the departments and the health care facilities with guidelines for the screening, identification, diagnosis, and monitoring of infants hearing impairment and infants at risk for delayed onset of hearing impairment. At the conclusion of this initial development and implementation, UOG CEDDERS will transition all

information, materials, and data on infant hearing screening and intervention to the DPH&SS.

(b) DPH&SS: It is the duty and responsibility of the Director of DPH&SS to collaborate with UOG CEDDERS, DOE, ICC Subcommittee, and the health care facilities during this developmental phase to establish Guam's universal newborn hearing screening programs to ensure a smooth transition from UOG CEDDERS and the DPH&SS. Once the transition is completed, DPH&SS shall be responsible for maintaining universal newborn hearing screening programs, tracking and surveillance systems and the evaluation of an island-wide program for early identification of and intervention for infants with hearing impairments. The DPH&SS shall conduct a community outreach and awareness campaign to inform medical providers, pregnant women, and families of newborns and infants of the availability of newborn hearing screening programs and the value of early hearing testing.

(c) Health Care Facilities: It is the duty and responsibility of the Administrator, Director, or whomever is in charge of the health care facility to collaborate with UOG CEDDERS, DPH&SS, ICC Subcommittee, and DOE to insure that one hundred percent (100%) of all hearing screening of all newborns on Guam is part of the standard of care. Health care facilities shall maintain hearing screening data and shall report hearing results to the UOG CEDDERS and/or DPH&SS on an annual basis. Health care

facilities shall work in collaboration with the DPH&SS to continue training of health care providers in conducting infant hearing screening, including cutting edge techniques, updated technical advances in early hearing screening and detection, and ongoing personnel training on the importance of early identification of hearing loss.

(d) ICC Subcommittee: It is the duty and responsibility of the Chairperson of the ICC Subcommittee to collaborate with UOG CEDDERS, DPH&SS, health care facilities, and DOE to monitor service delivery of all infants with hearing loss, assuring that state of the art hearing screening and diagnostic equipment are being used by health care facilities to identify children with hearing impairments. In addition, the ICC Subcommittee shall submit annual reports of Guam's hearing screening efforts to the Guam Interagency Coordinating Council.

(e) DOE: It is the duty and responsibility of the Superintendent of the Department of Education to collaborate with UOG CEDDERS, DPH&SS, ICC Subcommittee, and the health care facilities to insure that all infants identified with hearing impairments, and those at risk, receive appropriate early intervention services, which includes transdisciplinary diagnostic assessments, development of an Individualized Family Service Plan, and follow-up with the appropriate medical home. DOE will work in collaboration with UOG CEDDERS, DPH&SS, ICC Subcommittee, and the health care facilities in planning future

data system linkages so that no infant born on Guam is lost to follow-up and intervention services.

§5110. Promulgation of Rules and Regulations. The DPH&SS shall promulgate the Rules and Regulations *no later than* sixty (60) days upon enactment of this Act.

§5111. Severability. *If* any provision of this Act or its application to any person or circumstance is found to be invalid or contrary to law, such invalidity shall *not* affect other provisions or applications of this Act which can be given effect without the invalid provisions or applications, and to this end the provisions of this Act are severable."

Mina' Bente Siete Na Liheslaturan Guahan
TWENTY-SEVENTH GUAM LEGISLATURE

Senator Lou Leon Guerrero
Chairwoman, Committee on Rules & Health
Majority Leader, Democratic Party

December 15, 2004

The Honorable Vicente C. Pangelinan
Speaker
I Mina' Bente Siete Na Liheslaturan Guahan
155 Hesler Stree
Hagåtña, GU 96910

Dear Mr. Acting Speaker:

The Sub-Committee on Health to which was referred Bill No. 408, "AN ACT TO ESTABLISH THE "UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA)" FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS has had under the same consideration, and now wishes to report back the same with the **recommendation to pass**.

The voting record is as follows:

To Pass	4
Not to Pass	0
Abstain Due to Potential Conflict	0
To Place in Inactive File	0

A copy of the Committee Report and other pertinent documents are attached for your immediate reference and information.

Senseramente,

Senator Lou Leon Guerrero
Chairwoman, Sub-Committee on Health

Attachment(s)

155 Hesler Street, Hagåtña, Guam 96910
Tel: (671) 472-3582-5 – Fax: (671) 472-3591 – Email: senlou@ite.net

Mina' Bente Siete Na Liheslaturan Guahan
TWENTY-SEVENTH GUAM LEGISLATURE
Senator Lou Leon Guerrero
Chairwoman, Committee on Rules & Health
Majority Leader, Democratic Party

VOTING SHEET ON:

Bill No. 408, AN ACT TO ESTABLISH THE "UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA)" FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS

Committee Member	Initial	To Pass		Re Out		
Lou Leon Guerrero Chairwoman	LLG.	✓				
Vicente C. Pangelinan Co-Chairman	✓	✓				
Carmen Fernandez Member	✓	✓				
Larry Kasperbauer Member						
Jesse Lujan Member						
Tina R. Muña-Barnes Member	✓	✓				
Ray Tenorio Member						

Committee Report
Sub-Committee on Health
December 13, 2004
10:30am

I. Overview

A public hearing was held on December 13, 2004 at the Guam Legislature Public Hearing Room for **Bill No. 408, "AN ACT TO ESTABLISH THE "UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA)" FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS.** Details of the proceedings are as follows:

Senators Present

Senator Lou Leon Guerrero
Senator Rory Respicio
Senator Bob Klitzkie
Senator Joann Brown

Senator Lou Leon Guerrero, Chairwoman for the Sub-Committee on Health called the public hearing to order on Bill No. 408. Senator Leon Guerrero stated that Bill No. 408 was a concerted effort of all stakeholders including parents, government agencies such as CEDDARS, GMH, DOE, Department of Public Health and Social Services which mandates that hearing tests for all infants born on Guam be included as part of the standard of care provided. Statistics show that if hearing tests are done and problems are detected early in the child's development, it is an overall benefit for the child and his/her family. It is important to mandate the health of our children. This issue is non-controversial, minimal costs for the family and the community, increased benefits and prevention will be accomplished.

II. Testimony

Those present at the public hearing providing written and oral testimony present in support of Bill No. 408 were:

Mr. Dennis Triolo, Clinical Audiologist from Audiological Associates
Dr. Velma Sablan, UOG CEDDARS
Ms. Elaine Eclavea, UOG CEDDARS representing Ms. Heidi San Nicolas, Director, Guam CEDDARS

Those present at the public hearing providing written testimony in support of Bill No. 408 were:

Mr. Joe Mendiola, Parent, Chairperson of the GEHDI Advisory Committee

Mrs. Joyce Flores, Parent

Other written testimonies submitted in support of Bill No. 408 were:

Margaret Murphy Bell, Program Coordinator IV, Office of Maternal and Child Health Services, Department of Public Health and Social Services
Peter John Camacho, MPH, Director, Department of Public Health and Social Services
Lillian Posadas, RN, Associate Administrator of Nursing Services, Guam Memorial Hospital
Gino Cayanan, Co-Chairperson, Guam Interagency Coordinating Council

No other testimonies were submitted.

III. Discussions

Senator Leon Guerrero asked what is involved in the actual procedure and the cost for a hearing test. Mr. Triolo explained that it is a very simple procedure that takes about a minute using a hand held unit (OAE) which costs about twenty dollars. Through the grant, GMH, Sagan Managu and Public Health have received equipment and training to conduct the tests. Continuity is important and Public Health has been identified as the responsible agency to oversee the program.

Senator Respicio asked whether there was any known opposition to the bill. Those testifying stated that as of this date, there has been no opposition. As the bill mandates that hearing tests be included as benefits with health insurance companies, all companies have been provided a copy of the bill and the Sub-Committee on Health has not received any comments from them. At present, 86% of babies born are being screened and the goal is reach 100%.

There was further discussion posed by Senator Klitzkie as to the enforcement of the bill in the event that providers and/or hospitals do no comply. Dr. Sablan responded that this bill will mandate that hearing tests be part of the standard of care for all infants and should a medical professional not comply, they would be violating the law and this issue could be brought to the attention of the Guam Medical Board.

For accountability, it was suggested that changes be made in Section 9 under duties and responsibilities to reflect that Administrators and Directors be responsible for their agencies.

Senator Brown asked how the current grant was being used. Dr. Sablan said that currently CEDDARS is in their third year for a four year grant to provide the service providers. The other grant which is a two year grant is to provide the training/mentoring system and to link data to all agencies to assure that babies are tested. There are two nurse facilitators under the grant which trains nursing aides at GMH to do the hearing screening. Maintenance for the equipment is also under the

grant and CEDDARS will support the continuity of the program by applying for further grants.

Passage of Bill No. 408 will strengthen the effort of further federal funding.

Public hearing ended at 11:25am

Findings and Recommendation

The Sub-Committee on Health recommends that Bill No. 408 be reported out **TO DO PASS** as amended.

To: Lisa Cipollone, Chief of Staff
Office of Senator Lou Leon Guerrero

From: Dennis Triolo M.S. Clinical Audiologist CCC-A
Audiological Associates 649-2902, Fax 649-2905, aahearing@kuentos.guam.net

Testimony on Bill 408, an act to establish the "Universal Newborn Hearing Screening and Intervention Act."

I am a licensed private practice Clinical Audiologist on Guam. I have had a private practice here since 1990. Prior to that, I was a Clinical Audiologist with the Government of Guam.

I support Bill 408. I support 408 for two primary reasons: (1) Universal Newborn hearing screening works. (2) Universal Newborn hearing screening, long- term, has the potential to save the Government of Guam money.

According to the American Speech-Language-Hearing Association in 1998 there were only 11 states with newborn hearing screening legislation or Acts. By 2003 the number increased to 38 states, plus the District of Columbia.

Why has there been such a dramatic increase? It works. Universal newborn hearing screening programs are primarily developed to identify sensorineural hearing losses. Sensorineural losses are permanent. There is no medicine, surgery or cure for a sensorineural loss.

With an infant, the auditory neurons in the brainstem, have plasticity, they are not developed until around 6 or 7 months. If you can fit hearing aids on an infant before 6 or 7 months, a normal auditory tract can be developed in the brainstem. With infant development, amazing things happen, but there are rules, and the rule is to maximize success, hearing aids must be fit before 6 or 7 months.

Another rule, speech & language is innate. The ability to learn speech & language is in our genes. At 18 to 24 months infants have less than a few hundred words, but at 36 months the child has several 1000 words. That is if the child has normal hearing.

If the child has a sensorineural loss, they can not develop speech & language naturally like other children, that is unless they are fitted with hearing aids prior to 6 or 7 months of age. For centuries the hearing impaired had to develop visual systems of communication, and were never fully mainstreamed.

The State of Colorado was one of the early states with newborn legislation. The University of Colorado, in a landmark research study, Yoshinaga-Itano (2001) documented and studied infants fit with hearing aids prior to 6 months, involved in the statewide newborn screening program. Results showed that 80% of hearing aided

infants, severity of loss was not a factor, even if infants had other disabilities, 80% had normal skills and were in normal kindergarten classes.

How does this save money? If you enter a self contained special hearing impaired classroom, you will usually have a small class, with a specially trained teacher, hearing impaired teacher are usually difficult to recruit, usually there are several teacher aids, frequently speech pathology services are provided, the classrooms have expensive FM Auditory Systems. It is much more expensive to run a hearing impaired classroom than it is to run a regular classroom.

If 80% of all hearing impaired children could be educated in regular classrooms, costs would be reduced.

This is only my opinion, but I feel that people who do not support, if they understood the details and implications, in the end Newborn Hearing Screening would be supported. Thirty-eight states have newborn hearing screening legislation and defined newborn hearing screening as basic health care, and are resolving a centuries old disability, deafness.

REFERENCES:

Newborn Hearing Intervention, The ASHA Leader Vol.8, No.10, May 27, 2003.

Yoshinaga-Itano C, and JS Gravel, "The evidence for universal newborn hearing screening" American Journal of Audiology, 10 No.2 (2001) pp62-4.

Testimony to the

Mina'bente Siete Na Liheslaturan Guahan

On

Bill No. 408

Relating to a Universal Newborn Hearing Screening and Intervention

Act for the Early Detection and Identification of

Children with Hearing Impairments

By

Velma A. Sablan, Ph.D.

Associate Professor of Educational Research &

Project Director of the

Center of Disease Control

Early Hearing Detection of Intervention Project

Guam CEDDERS, University of Guam

December 14, 2004

Honorable Senators of the Mina'bente Siete Na Liheslaturan Guahan and the People of Guam,

I am here this morning to testify in support of Bill No. 408, a bill that will make newborn hearing screening part of the standard of care for all babies born on Guam. As the first Chamorro speech and hearing therapist to be trained in this field, having graduated from Marquette University in 1973 in the field of Communicative Disorders and having observed over the last 31 years the number of children on this island who suffer from the devastating effects of communication disorders, I can not emphasize enough how important this legislation is to the prevention of this type of disability among our children.

If this bill is passed into law, it will require that every baby born on Guam is provided with a hearing test that will determine if the infant is at risk for or will suffer from hearing loss that can have a very critical impact on how that baby will learn from the world around him or her and how he or she will develop oral language and eventually learn how to communicate with the world. Imagine if you will what kind of a world it would be if you were a baby unable to hear. You would not be nurtured by the sound of your mother's voice singing a lullaby or the sound of her voice telling what a wonderful gift you are to the family. You would not hear the sound of your daddy's soothing words of comfort as he cradled you in his arms and thanked God for your presence in his life. Hearing is such a critical part of the learning process and the earlier we can detect the presence of a hearing loss, the better we professionals can provide the intervention needed to alleviate the long term effect of this problem.

We know from years of research that when we take the little time it takes to give a hearing screening test to a baby soon after birth, we can improve the baby's chances of developing oral language if we know well ahead of time that there is a need for a hearing aide or surgery for cochlear implants or for simply monitoring an infant who is at risk. We also know that these babies who are identified early can learn like any other child and can be in the regular classroom. But, we also know, that if left undetected, the critical years between birth to age 3 years when a child needs to be immersed in the rich orality of human language, can be lost and a child never fully catches up to his or her peer group and the adjustment to school becomes much more complex, not to mention the cost involved to provide the myriad of services needed due to late detection.

The provision of newborn hearing screening on Guam is long overdue when we look at the statistics that tell us that we are behind 39 States who have already passed legislation on this important procedure, with Hawaii having been one of the first to pass legislation for newborn hearing screening 14 years ago in 1990. I, and my colleagues at Guam CEDDERS, especially Mrs. Elaine Eclavea, Mrs. Victoria Ritter, and Mr. Bill Toves, who have worked hard on the draft legislation of this bill. Working with Senator Lou Leon Guerrero and her wonderful staff, we drafted this bill based on the model of the American Academy of Pediatrics, the American Speech and Hearing Association model bill, and the American Academy of Audiology. We have been in discussions with our other agencies such as the Guam Memorial Hospital Authority, the Department of Public Health and Social Services,

the Department of Education, and the Sagua Managu Birthing Center to keep this matter at the forefront. With the assistance of federal grant funds from Maternal Child and Health Bureau and the Center of Disease Control, we have been able to conduct hearing screening in our hospitals and although we are not quite at 100% screening of all babies, we have already identified a significant number of children with conductive hearing losses and 4 with the more severe senor-neural losses. Guam is well above the national average of infants born with these conditions.

I implore the members of this esteemed body, to pass Bill 408 and make it a Public Law so that every baby born on Guam will get this important test as part of standard of care. During this wonderful holiday season that celebrates the birth the One great King, what greater gift can you give to our babies born on Guam? Thank you for the opportunity to give this testimony.

Guam Center for Exc ..nce in
Developmental Disabilities Education, Research, and Service
University of Guam · *Unibetsedåt Guahan*
Office of Academic Affairs
29 Dean's Circle · UOG Station · Mangilao, Guam 96923
(671) 735-2481 (V) · (671) 734-6531 (TTY) · (671) 734-5709 (Fax)
E-mail: heidisan@uog9.uog.edu · Website: www.uog.edu/cedders

Center for Excellence in Developmental Disabilities
Education, Research, and Service

December 14, 2004

Senator Lou Leon Guerrero, RN, MPH
Chairwoman, Committee on Rules and Health
27th Guam Legistlature
155 Hesler Street
Hagatna, Guam 96910

Honorable Senator Lou Leon Guerrero,

On behalf of the University of Guam Center for Excellence in Developmental Disabilities Education, Research, and Service (CEDDERS), I submit this written testimony in complete support of Bill 408, "An act to establish the Universal Newborn Hearing Screening and Intervention Act of 2004 for early detection and intervention of children with hearing impairments".

The University Of Guam CEDDERS is the recipient of two federal grants that support newborn hearing screening. We are in a third year of a four year grant titled: "*The Guam Early Hearing Detection and Intervention Project*" funded by the U.S. Department of Health & Human Services, Maternal Child Health Bureau. The purpose of this project is to refine Guam's infant hearing screening, evaluation, and intervention process by ensuring that all newborns have access to hearing screening prior to discharge from a birthing facility and if appropriate, are referred for audiological evaluation and intervention services.

Our second federal grant is related to early hearing screening and is funded by a two-year Cooperative Agreement from the Center of Disease Control to collect data in monitoring and tracking the implementation of the newborn infant hearing screening project.

Research has shown that approximately 3 in 1000 newborns are born with permanent hearing loss, and 1 in every 1000 is born deaf. Young children identified with hearing loss, who receive intervention before six months of age, develop language (spoken or signed) that is comparable with hearing peers. As of November 2004, 4,848 newborns have been screened for hearing prior to discharge from GMHA, Sagua Managu, and U.S. Naval Hospital Guam. Of that number, 52 have been referred for audiological evaluation, and 21 have been diagnosed with conductive or sensorineural hearing loss. The long term outcomes for these children are much brighter as a result of early identification and supports.

The University of Guam CEDDERS has been engaged in a collaborative process in drafting this legislation and have received input and recommendations from the Guam Memorial Hospital Authority Pediatrics' Committee, GMH Family Practice Committee, parents of young children with hearing impairments, and the GEHDI Advisory Committee. The development of Bill 408 has been a truly collaborative process.

Hearing loss is invisible, but the effects can lead to lack of exposure to language and can cause lifelong cognitive, educational and vocational challenges. This legislation will ensure that newborn hearing screening becomes a part of the "Standard of Care" for every infant born on Guam. It is through legislation like Bill 408 that WE as a COMMUNITY have enhanced the quality of life and created opportunities for positive learning outcomes and our futures for, "OUR YOUNG CHILDREN WITH HEARING IMPAIRMENTS and their FAMILIES."

Sincerely,

Heidi E. San Nicolas

Heidi E. San Nicolas, Ph.D.
Director, Guam CEDDERS

Guam Early Hearing Detection & Intervention (GEHDI)
University of Guam
Center for Excellence in Developmental Disabilities Education,
Research, & Service (Guam CEDDERS)
(671) 735-2466/2465 (Phone)
(671) 734-5709 (Fax)
(671) 734-6531 (TTY)

June 25, 2004

The Honorable Senator Lou Leon Guerrero
Majority Leader, 27th Guam Legislature
155 Hesler Street
Hagatna, Guam 96910

Dear Senator Leon Guerrero,

As a parent of a 3 year old daughter who has significant hearing loss, I am always looking for ways to improve the quality of life for my child. I am submitting this letter with great enthusiasm and anticipation in support of legislation to mandate newborn infant screening on Guam.

With the many challenges my family faces, the importance of having access to intervention services as early as possible cannot be stressed enough. We are particularly in support since it focuses on hearing, which ultimately will affect the speech, language, and cognitive development of my child. My family and I were informed when our daughter was a toddler that she has significant hearing loss. This discovery has shown us the importance of detecting the need for special services as early as possible and how early identification and intervention has a direct impact on the development of the child. Having access to these services and information will also serve as a way for families to become more aware of the needs of their children.

As a parent advocate as well as the Chairperson for the Guam Early Hearing Detection and Intervention (GEHDI) Advisory Committee, I look forward to the support of legislation to mandate newborn infant screening of Guam. It is also necessary that every family have a medical home where they receive coordinated follow-up services in addition to services provided to families through the Guam Early Intervention System.

Sincerely,

Joseph Mendiola

Joseph Mendiola
Parent & Chairperson of the GEHDI Advisory Committee

July 12, 2004

Honorable Lou Leon Guerrero
155 Hesler Place
Hagatna, Guam 96910

Hafa Adai Senator Leon Guerrero,

We are Richard and Joyce Flores, the parents of Joseph E. H. Flores, who is three years old. Our son was born prematurely at Guam Memorial Hospital on June 26, 2001. At four months old, Joseph was diagnosed with a moderate to severe sensorineural hearing loss. As a parent, this was very difficult to accept. We were not informed at the hospital or through his pediatrician that there were support and intervention services available for Joseph and our family. A family friend told us about Guam Early Intervention System (GEIS). It was GEIS that provided services for our family and Joseph.

Through our efforts to find help for our son, Joseph is now enrolled in the Guam Early Intervention System (GEIS), which provides services and supports for young children with special needs. As a result of his hearing loss, Joseph was in need of hearing aids to assist him in developing his speech and language skills. GEIS provided funding for these necessary bilateral hearing aids.

If Joseph was given a hearing screening at birth, we may have been able to detect the hearing loss earlier, and therefore intervention services could have been provided to our family earlier also, reducing the chances of any developmental delays Joseph may have later on when he enters school.

The Guam Early Hearing Detection and Intervention (GEHDI) Project under the University of Guam's Center for Excellence and Developmental Disabilities Education, Research, & Service (Guam CEDDERS) is striving to ensure that ALL children born on Guam will have a hearing screening, and if a hearing loss is detected, intervention services are provided before the child reaches 6 months of age. GEHDI implemented hearing screening in November 2002 at GMH, Sagua Managu, Guam's Birthing Center and at the U.S. Naval Hospital Guam.

GEHDI has an Advisory Committee that meets on a quarterly basis. This committee's purpose is to set up policies and procedures for newborn hearing screening and intervention. We have been active members of this committee since its inception and are deeply committed to working towards improving the services and supports to families of children with hearing impairments, and further all families of children with special

needs. We want to ensure that every infant born on Guam gets their hearing screening done before they leave the hospital or birthing center.

GEHDI has also facilitated a "Parent to Parent Support Group" for families of children with hearing impairments. Since March 2004, Joyce accepted the role of Chairperson for this group.

As Chairperson and an active member of the "Parent to Parent Support Group" we seek the support of our Legislature and lawmakers in mandating "Newborn Hearing Screening on Guam." It is only through the power of legislation that will ensure all children born on Guam will have a hearing screening. Furthermore, as a result of mandated hearing screening, early identification of any degree of hearing loss can be detected and earlier intervention services will be provided, reducing the chance of children with hearing impairments from having to rely on government financial support through their lifetime.

Your support and commitment to this endeavor will greatly impact the quality of life for children with special needs, especially those children with hearing impairments. Our children's future depends on your actions. As a community we need to come together to ensure the best quality of life for ALL our children!

Sincerely,

Richard and Joyce Flores

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES

OFFICE OF MATERNAL AND CHILD HEALTH SERVICES

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Senator Lou Leon Guerrero	Maggie M. Bell
COMPANY:	DATE:
Subcommittee on Health	12/14/2004
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
472-3597	8
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
472-3582	
RE:	YOUR REFERENCE NUMBER:
Testimony on Bill 408	

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Hafa Adai! Please find attached testimony on behalf of Bill No. 408.

Should you have any questions or concerns, please feel free to telephone me at 735-7306 or email mags@kuentos.guam.net.

Maggie Murphy Bell

Testimony presented to the Committee on Rules and Health

Bill No. 408 (COR) An Act to Establish the "Universal Newborn Hearing Screening and Intervention Act of 2004 (UNHSIA)" For the Early Detection and Identification of Children with Hearing Impairments

Submitted by
Margaret Murphy Bell
Program Coordinator IV, Office of Maternal and Child Health Services
Department of Public Health and Social Services

Honorable Chairperson and members of the Committee, I thank you for the opportunity to participate in this hearing on Bill No. 408 An Act to Establish the "Universal Newborn Hearing Screening and Intervention Act of 2004 (UNHSIA)" For the Early Detection and Identification of Children with Hearing Impairments.

Hearing loss is one of the most common developmental abnormalities present at birth. Approximately, one in three infants per thousand are born with significant hearing loss. If this condition goes undetected, it will impede speech, language, and cognitive development, thus resulting in significant health costs. All children can be evaluated for hearing loss, even children who are only minutes old, using a safe and painless test.

Unfortunately, parents are usually unaware of their infant's hearing condition. Ironically, these same infants are screened at birth for Phenylketonuria (PKU), a disorder 20 times less likely to occur in newborns than hearing loss.

A mandated benefit for newborn hearing screening is necessary for the health and well-being of the children of Guam. Undetected hearing loss present from an early age significantly impairs speech, language, cognitive, and social-emotional

development. Studies have conclusively shown the importance of screening early in a child' life, the efficacy of the newborn hearing screening test themselves, and the cost effectiveness of performing hearing screening on newborns.

Currently, children are usually identified with a hearing loss between the ages of 12 and 25 months. When hearing loss is detected this late in a child's development, speech and language development is delayed, which can affect social and emotional growth as well as academic development. Children are more likely to perform below their grade level, and are more likely to be held back, drop out of school, and fail to earn a high school diploma.

Since early detection is the key to effective treatment, it is vital that newborns are screened before they leave the hospital. The cost of late identification is not only in real health care and public education dollars, but also in the frustration borne by parents and children who lack appropriate language skills to compete academically and in today's job market.

The newborn hearing screening issue has gained national support, with the passage of the Newborn Hearing Screening and Intervention Act (the "Walsh Bill") in 2000. This law was supported by more than 20 national audiological, medical, and consumer organizations. It provides up to three years of federal funding for state grants to develop infant hearing screening and intervention programs. This act allocated funding for states to develop and expand statewide newborn hearing screening programs. In FY 2000, Congress allocated $7 million for the grants program. As of June 2000, 22 states has received $3 million in grant monies from the Health Resources and Services Administration (HRSA), with additional grants awarded from the Centers for Disease Control and Prevention (CDC).

Screening newborns for hearing loss is extremely cost-effective. The costs of these tests range from $25 to $40. The long-term savings, however, far outweigh the initial expense. Studies have shown that detection of hearing loss during infancy, followed by appropriate intervention, minimized the need for rehabilitation during the school years. This includes savings in special education funding and social services funding. This rehabilitation later in life will cost far more than the initial $25 spent on the newborn hearing screening.

Studies overwhelmingly show that newborns whose deafness is detected early can learn to communicate far better than those whose hearing impairment is found later in life. Early experiences of auditory stimulation are critical to speech and language development. In fact, the most important period for language and speech development is generally regarded as the first three years of life. If hearing loss is detected early, a child can be fitted with a hearing aid and can receive this necessary auditory stimulation. Children whose hearing loss is detected later in life lose the critical window of opportunity for auditory stimulation and their speech and language skills suffer accordingly. These children will depend on more expensive speech therapy interventions as a result of later hearing loss identification.

Not only will speech therapy service costs be less for children screened early for hearing loss, the cost of special education services will also be less for these children. Children with early hearing loss detection function as well as children without a hearing loss. They are able to learn side-by-side with other students. There is less of a need for special education because their language skill development was not delayed. Children who are screened early will develop their cognitive skills, which, in turn, will help their academic skill development. This will result in academic success and ultimately in improved lifetime earnings.

The ability to hear is paramount to how children learn. Studies show that as much as 90% of what young children learn is attributable to the reception of incidental conversations around them (Flexer, 1993). Any degree of hearing loss can be educationally handicapping for children. Even children with mild to moderate hearing losses can miss up to 50% of classroom discussions. Studies have also shown that 37% of children with only minimal hearing loss fail at least one grade (Bess, 1998). If hearing loss is detected early in life, speech, and hearing professionals can work with the child to minimize the chances of academic failure.

Experts across the nation all recommend newborn hearing screening. In 1993, the National Institutes of Health Consensus Development Conference on Early Identification for Hearing Impairment was convened to address newborn hearing screening. This panel concluded that all infants admitted to the neonatal intensive care unit be screened for hearing loss prior to discharge; universal screening be implemented for all infants with the first three months of life; and education of primary caregivers and primary health care providers on early signs of hearing impairment is essential.

The U.S. Public Health Service's Healthy People 2000 Initiative and 2010 health objectives for the nation recommend screening infants for hearing loss by one month of age.

The 2000 position statement of the Joint Committee on Infant Hearing (JCIH), which represents national professional and consumer groups concerned with hearing loss (including the Directors of Speech and Hearing Programs in State Health and Welfare Agencies; the American Academy of Audiology; the American Academy of Pediatrics; the American Speech-Language-Hearing Association; and the Council on Education of the Deaf), recommends that all

newborns be screened for hearing loss. They also recommend that all infants with hearing loss be identified before three months of age.

The US Centers for Disease Control and Prevention (CDC) recommends "all infants be screened for hearing loss by one month of age, preferably before they are discharged from the birth hospital."

A study conducted at the University of Colorado by Dr. Christine Yoshinaga-Itano documents the efficacy of newborn hearing screening. Her study found the "inevitable conclusion that identification of hearing loss by six months of age...is the most effective strategy for the normal development of language in infants and toddlers with hearing loss...Identification of hearing loss by six months can only be accomplished through universal newborn hearing screening." This study further found that 90% of children with hearing loss who were identified early in life develop vocabulary that is in the normal range in the first three years of life. This compares to only one-quarter of children identified later in life developing vocabulary within the normal range. (Downs, M. & Yoshinaga-Itano, C. (1999). The efficacy of early identification and intervention for children with hearing impairment. *Pediatric Clinics of North America*, 46 (1), 79-87).

Another study, also conducted by Dr. Christine Yoshinaga-Itano, found that infants whose hearing loss was identified before age six months scored significantly higher than those whose hearing loss was identified after age 18 months in the expressive language and comprehension-conceptual subtests. (Apuzzo, M. & Yoshinaga-Itano, C. (1998). Identification of hearing loss after age 18 months is not early enough. *American Annals of the Deaf*, 143(5), 380-7).

The following studies further document the validity, reliability, and effectiveness of newborn hearing screening:

- Finitzo, T., Albright, K., & O'Neal, J. (1998). The newborn with hearing loss: Detection in the nursery. *Pediatrics, 102*, 1452-1460.

- Prieve, B., & Stevens, F. (2000). The New York State university newborn hearing screening demonstration project: Introduction and overview. *Ear and Hearing, 21*, 85-91.

- Spivak, L. (1998). *Universal newborn hearing screening.* New York: Thieme.

- Spivak, L., Dalzell, L., Berg, A., Bradley, M., Cacace, A., Campbell, D., Decrisofaro, J., Gravel, J., Greenberg, E., Gross, S., Orlando, M., Pinheiro, J., Regan, J., Stevens, F., & Prieve, B., (2000). The New York State universal newborn hearing screening demonstration project: Inpatient outcome measures. *Ear and Hearing, 21*, 92-103.

- Vohr, B.R., Carty, L., Moore, P., Letourneau, K. (1998). The Rhode Island Hearing Assessment Program: Experience with statewide hearing screening (1993-1996). *Journal of Pediatrics, 133*, 353-357.

- Vohr, B.R., & Maxon, A. (1996). Screening infants for hearing impairment. *Journal of Pediatrics, 128*, 710-714.

In conclusion, the National Institutes of Health have stated, "Among the five senses, people depend on...hearing to provide the primary cues for conducting the basic activities of daily life. At the most basic level...hearing permit(s) people

to navigate and to stay oriented within their environment...Hearing is a defining element of the quality of life."

GOVERNMENT OF GUAM

DEPARTMENT OF PUBLIC HEALTH & SOCIAL SERVICES
(DIPATTAMENTON SALUT PUPBLEKO YAN SETBISION SUSIAT)
Post Office Box 2816, Hagatña, Guam 96932
123 Chalan Kareta, Route 10
Mangilao, Guam 96923

Felix P. Camacho
GOVERNOR

Kaleo S. Moylan
LIEUTENANT GOVERNOR

PeterJohn D. Camacho, MPH
DIRECTOR

AUG 04 2004

Honorable Lou Leon Guerrero
Chairwoman, Committee on Rules and Health
27th Guam Legislature
155 Hesler Place
Hagatna, Guam 96910

Dear Senator Leon Guerrero:

On behalf of the Department of Public Health and Social Services (DPHSS), I am writing this letter in full support of legislation, for the implementation of universal newborn hearing screening as a standard care for the island of Guam.

Hearing loss is one of the most common birth defects affecting newborns. If hearing loss is left undetected, it will impede speech, language, and cognitive and social development. Although not life threatening, the effects of late identified hearing impairment can be irreparable and costly. Studies show that if hearing loss is identified and intervention services are administered prior to six months of age, children who are deaf or hard of hearing have the potential to develop communication and cognitive skills similar to their hearing peers.

The mission of the Maternal and Child Health (MCH) Program is to provide and promote coordinated health care and related support services to infants and children, including children with special health care needs, of our island. The implementation of Universal Newborn Hearing Screening as a standard of care for the island of Guam will assure that our mission is met.

Thank you for taking the lead with this much-needed legislation. We at the DPHSS are fully committed to the implementation and facilitation of this important piece of legislation.

Sincerely,

PeterJohn D. Camacho, MPH

PETERJOHN D. CAMACHO, M.P.H.
Director, DPHSS

Tel. No.: (671) 735-7399 • 735-7102
Fax: (671) 734-5910

Guam Memorial Hospital Authority
Aturidåt Espetåt Mimuriåt Guåhan

850 GOV. CARLOS CAMACHO ROAD
OKA, TAMUNING, GUAM 96911
TEL: 647-2444 or 647-2330
FAX: (671) 649-0145

July 14, 2004

Honorable Senator Lou Leon Guerrero
Chairwoman, Committee on Rules and Health
27th Guam Legislature
155 Hesler Place
Hagatna, GU 96910

Hafa Adai Senator Leon Guerrero,

On behalf of the Guam Memorial Hospital Authority (GMHA) Nursing Services Administration, we are in full support of legislation that would ensure ALL newborns are provided hearing screening as part of the standard of care provided to all infants born on Guam. Since November 2002 through June 2004, there were 4,083 births at GMHA with approximately 3,213 newborns having access to hearing screening prior to discharge. Our goal is to screen ALL newborns prior to discharge from the hospital.

The mission of GMHA is to provide quality health care to our patients, and we continually strive to screen and identify newborns with possible hearing aberrations. The American Academy of Pediatrics has fully endorsed and supports the Universal Newborn Hearing Screening. Early detection of hearing loss in a child and early intervention and treatment has been demonstrated to be highly effective to facilitating a child's healthy development in a manner consistent with the child's age and cognitive ability. Further research indicates that children who are identified with hearing loss and receive intervention before six months of age, develop language (spoken or sign) comparable to their hearing peers.

We are confident and committed to this cause, and through the implementation of this legislation that would mandate hearing screening as a part of the Standard of Care on Guam, we will be able to identify newborns with potential hearing impairment/loss.

Respectfully,

Lillian Posadas, RN

Lillian Posadas
Associate Administrator of Nursing Services, GMHA

Guam Interagency Coord ing Council
Department of Education, Division of Special Education
Guam Early Intervention System
PO Box DE
Hagatna, Guam 96932
e-mail: geis@ite.net

of Services and Supports for Infants and Toddlers with Special Needs and their Families

Administrator:	(671) 735-2414	Fax: 735-2439
Diagnostic Unit:	(671) 735-2455/6	Fax: 734-7820
Intervention Unit:	(671) 735-2417	Fax: 734-2439

July 14, 2004

Honorable Senator Lou Leon Guerrero
Chairwoman, Committee on Rules and Health
27th Guam Legislature
155 Hesler Place
Hagatna, GU 96910

Dear Senator Leon Guerrero,

On behalf of the *Guam Interagency Coordinating Council* (GICC), I am submitting this letter with the full support of its members for legislation that ensures that ALL newborns are provided hearing screening as part of the standard of care provided to all infants born on Guam. The Newborn Hearing Screening program's goal is to provide a hearing screening to all infants prior to discharge from the hospitals or birthing center.

The role of the GICC is to support policy that ensures all infants and toddlers with or at risk for disabilities are located, identified, and provided early intervention services as soon as possible. With the implementation of the Guam Early Hearing Detection and Intervention (GEHDI) Project beginning November 2002, over 4,000 newborns have been screened at the Guam Memorial Hospital for possible hearing loss. Legislation that mandates universal hearing screening for all newborns will assist in the identification of infants with possible hearing loss and provide the supports needed for infant and their family.

Your full support in mandating universal newborn hearing screening will provide a mechanism for early detection and ensure that intervention services are provided to our young children with hearing impairments and their families!

Sincerely,

Gino Cayanan
Co-Chairperson

I MINA' BENTE SIETE NA LIHESLATURAN GUAHAN

Subcommittee on Health
Public Hearing
Bill No. 408

December 14, 2004

AGENDA

Hearing on Bill No. 408-AN ACT TO ESTABLISH THE "UNIVERSAL HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA)" FOR THE EARLY DETECTION AND INDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS.

Mina' Bente Siete Na Liheslaturan Guahan
TWENTY-SEVENTH GUAM LEGISLATURE

Senator Lou Leon Guerrero
Chairwoman, Committee on Rules & Health
Majority Leader, Democratic Party

December 15, 2004

The Honorable Vicente C. Pangelinan
Speaker
I Mina' Bente Siete Na Liheslaturan Guahan
155 Hesler Stree
Hagåtña, GU 96910

Dear Mr. Acting Speaker:

The Sub-Committee on Health to which was referred Bill No. 408, "AN ACT TO ESTABLISH THE "UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA)" FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS has had under the same consideration, and now wishes to report back the same with the **recommendation to pass**.

The voting record is as follows:

To Pass	4
Not to Pass	0
Abstain Due to Potential Conflict	0
To Place in Inactive File	0

A copy of the Committee Report and other pertinent documents are attached for your immediate reference and information.

Senseramente,

Senator Lou Leon Guerrero
Chairwoman, Sub-Committee on Health

Attachment(s)

155 Hesler Street, Hagåtña, Guam 96910
Tel: (671) 472-3582-5 - Fax: (671) 472-3591 - Email: senlou@ite.net

Mina' Bente Siete Na Liheslaturan Guahan
TWENTY-SEVENTH GUAM LEGISLATURE
Senator Lou Leon Guerrero
Chairwoman, Committee on Rules & Health
Majority Leader, Democratic Party

COMMITTEE ON RULES

VOTING SHEET ON:

Bill No. 408, AN ACT TO ESTABLISH THE "UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA)" FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS

Committee Member	Initial	To Pass	Not to Pass	To Report Out	Abstain	Inactive File
Lou Leon Guerrero Chairwoman		✓				
Vicente C. Pangelinan Co-Chairman		✓				
Carmen Fernandez Member		✓				
Larry Kasperbauer Member						
Jesse Lujan Member						
Tina R. Muña-Barnes Member		✓				
Ray Tenorio Member						

Committee Report
Sub-Committee on Health
December 13, 2004
10:30am

I. Overview

A public hearing was held on December 13, 2004 at the Guam Legislature Public Hearing Room for **Bill No. 408, "AN ACT TO ESTABLISH THE "UNIVERSAL NEWBORN HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA)" FOR THE EARLY DETECTION AND IDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS.** Details of the proceedings are as follows:

Senators Present

Senator Lou Leon Guerrero
Senator Rory Respicio
Senator Bob Klitzkie
Senator Joann Brown

Senator Lou Leon Guerrero, Chairwoman for the Sub-Committee on Health called the public hearing to order on Bill No. 408. Senator Leon Guerrero stated that Bill No. 408 was a concerted effort of all stakeholders including parents, government agencies such as CEDDARS, GMH, DOE, Department of Public Health and Social Services which mandates that hearing tests for all infants born on Guam be included as part of the standard of care provided. Statistics show that if hearing tests are done and problems are detected early in the child's development, it is an overall benefit for the child and his/her family. It is important to mandate the health of our children. This issue is non-controversial, minimal costs for the family and the community, increased benefits and prevention will be accomplished.

II. Testimony

Those present at the public hearing providing written and oral testimony present in support of Bill No. 408 were:

Mr. Dennis Triolo, Clinical Audiologist from Audiological Associates
Dr. Velma Sablan, UOG CEDDARS
Ms. Elaine Eclavea, UOG CEDDARS representing Ms. Heidi San Nicolas, Director, Guam CEDDARS

Those present at the public hearing providing written testimony in support of Bill No. 408 were:

Mr. Joe Mendiola, Parent, Chairperson of the GEHDI Advisory Committee

Mrs. Joyce Flores, Parent

Other written testimonies submitted in support of Bill No. 408 were:

Margaret Murphy Bell, Program Coordinator IV, Office of Maternal and Child Health Services, Department of Public Health and Social Services
Peter John Camacho, MPH, Director, Department of Public Health and Social Services
Lillian Posadas, RN, Associate Administrator of Nursing Services, Guam Memorial Hospital
Gino Cayanan, Co-Chairperson, Guam Interagency Coordinating Council

No other testimonies were submitted.

III. Discussions

Senator Leon Guerrero asked what is involved in the actual procedure and the cost for a hearing test. Mr. Triolo explained that it is a very simple procedure that takes about a minute using a hand held unit (OAE) which costs about twenty dollars. Through the grant, GMH, Sagan Managu and Public Health have received equipment and training to conduct the tests. Continuity is important and Public Health has been identified as the responsible agency to oversee the program.

Senator Respicio asked whether there was any known opposition to the bill. Those testifying stated that as of this date, there has been no opposition. As the bill mandates that hearing tests be included as benefits with health insurance companies, all companies have been provided a copy of the bill and the Sub-Committee on Health has not received any comments from them. At present, 86% of babies born are being screened and the goal is reach 100%.

There was further discussion posed by Senator Klitzkie as to the enforcement of the bill in the event that providers and/or hospitals do no comply. Dr. Sablan responded that this bill will mandate that hearing tests be part of the standard of care for all infants and should a medical professional not comply, they would be violating the law and this issue could be brought to the attention of the Guam Medical Board.

For accountability, it was suggested that changes be made in Section 9 under duties and responsibilities to reflect that Administrators and Directors be responsible for their agencies.

Senator Brown asked how the current grant was being used. Dr. Sablan said that currently CEDDARS is in their third year for a four year grant to provide the service providers. The other grant which is a two year grant is to provide the training/mentoring system and to link data to all agencies to assure that babies are tested. There are two nurse facilitators under the grant which trains nursing aides at GMH to do the hearing screening. Maintenance for the equipment is also under the

grant and CEDDARS will support the continuity of the program by applying for further grants.

Passage of Bill No. 408 will strengthen the effort of further federal funding.

Public hearing ended at 11:25am

Findings and Recommendation

The Sub-Committee on Health recommends that Bill No. 408 be reported out **TO DO PASS** as amended.

To: Lisa Cipollone, Chief of Staff
Office of Senator Lou Leon Guerrero

From: Dennis Triolo M.S. Clinical Audiologist CCC-A
Audiological Associates 649-2902, Fax 649-2905, aahearing@kuentos.guam.net

Testimony on Bill 408, an act to establish the "Universal Newborn Hearing Screening and Intervention Act."

I am a licensed private practice Clinical Audiologist on Guam. I have had a private practice here since 1990. Prior to that, I was a Clinical Audiologist with the Government of Guam.

I support Bill 408. I support 408 for two primary reasons: (1) Universal Newborn hearing screening works. (2) Universal Newborn hearing screening, long- term, has the potential to save the Government of Guam money.

According to the American Speech-Language-Hearing Association in 1998 there were only 11 states with newborn hearing screening legislation or Acts. By 2003 the number increased to 38 states, plus the District of Columbia.

Why has there been such a dramatic increase? It works. Universal newborn hearing screening programs are primarily developed to identify sensorineural hearing losses. Sensorineural losses are permanent. There is no medicine, surgery or cure for a sensorineural loss.

With an infant, the auditory neurons in the brainstem, have plasticity, they are not developed until around 6 or 7 months. If you can fit hearing aids on an infant before 6 or 7 months, a normal auditory tract can be developed in the brainstem. With infant development, amazing things happen, but there are rules, and the rule is to maximize success, hearing aids must be fit before 6 or 7 months.

Another rule, speech & language is innate. The ability to learn speech & language is in our genes. At 18 to 24 months infants have less than a few hundred words, but at 36 months the child has several 1000 words. That is if the child has normal hearing.

If the child has a sensorineural loss, they can not develop speech & language naturally like other children, that is unless they are fitted with hearing aids prior to 6 or 7 months of age. For centuries the hearing impaired had to develop visual systems of communication, and were never fully mainstreamed.

The State of Colorado was one of the early states with newborn legislation. The University of Colorado, in a landmark research study, Yoshinaga-Itano (2001) documented and studied infants fit with hearing aids prior to 6 months, involved in the statewide newborn screening program. Results showed that 80% of hearing aided

infants, severity of loss was not a factor, even if infants had other disabilities, 80% had normal skills and were in normal kindergarten classes.

How does this save money? If you enter a self contained special hearing impaired classroom, you will usually have a small class, with a specially trained teacher, hearing impaired teacher are usually difficult to recruit, usually there are several teacher aids, frequently speech pathology services are provided, the classrooms have expensive FM Auditory Systems. It is much more expensive to run a hearing impaired classroom than it is to run a regular classroom.

If 80% of all hearing impaired children could be educated in regular classrooms, costs would be reduced.

This is only my opinion, but I feel that people who do not support, if they understood the details and implications, in the end Newborn Hearing Screening would be supported. Thirty-eight states have newborn hearing screening legislation and defined newborn hearing screening as basic health care, and are resolving a centuries old disability, deafness.

REFERENCES:

Newborn Hearing Intervention, The ASHA Leader Vol.8, No.10, May 27, 2003.

Yoshinaga-Itano C, and JS Gravel, "The evidence for universal newborn hearing screening" American Journal of Audiology, 10 No.2 (2001) pp62-4.

Testimony to the

Mina'bente Siete Na Liheslaturan Guahan

On

Bill No. 408

Relating to a Universal Newborn Hearing Screening and Intervention

Act for the Early Detection and Identification of

Children with Hearing Impairments

By

Velma A. Sablan, Ph.D.

Associate Professor of Educational Research &

Project Director of the

Center of Disease Control

Early Hearing Detection of Intervention Project

Guam CEDDERS, University of Guam

December 14, 2004

Honorable Senators of the Mina'bente Siete Na Liheslaturan Guahan and the People of Guam,

I am here this morning to testify in support of Bill No. 408, a bill that will make newborn hearing screening part of the standard of care for all babies born on Guam. As the first Chamorro speech and hearing therapist to be trained in this field, having graduated from Marquette University in 1973 in the field of Communicative Disorders and having observed over the last 31 years the number of children on this island who suffer from the devastating effects of communication disorders, I can not emphasize enough how important this legislation is to the prevention of this type of disability among our children.

If this bill is passed into law, it will require that every baby born on Guam is provided with a hearing test that will determine if the infant is at risk for or will suffer from hearing loss that can have a very critical impact on how that baby will learn from the world around him or her and how he or she will develop oral language and eventually learn how to communicate with the world. Imagine if you will what kind of a world it would be if you were a baby unable to hear. You would not be nurtured by the sound of your mother's voice singing a lullaby or the sound of her voice telling what a wonderful gift you are to the family. You would not hear the sound of your daddy's soothing words of comfort as he cradled you in his arms and thanked God for your presence in his life. Hearing is such a critical part of the learning process and the earlier we can detect the presence of a hearing loss, the better we professionals can provide the intervention needed to alleviate the long term effect of this problem.

We know from years of research that when we take the little time it takes to give a hearing screening test to a baby soon after birth, we can improve the baby's chances of developing oral language if we know well ahead of time that there is a need for a hearing aide or surgery for cochlear implants or for simply monitoring an infant who is at risk. We also know that these babies who are identified early can learn like any other child and can be in the regular classroom. But, we also know, that if left undetected, the critical years between birth to age 3 years when a child needs to be immersed in the rich orality of human language, can be lost and a child never fully catches up to his or her peer group and the adjustment to school becomes much more complex, not to mention the cost involved to provide the myriad of services needed due to late detection.

The provision of newborn hearing screening on Guam is long overdue when we look at the statistics that tell us that we are behind 39 States who have already passed legislation on this important procedure, with Hawaii having been one of the first to pass legislation for newborn hearing screening 14 years ago in 1990. I, and my colleagues at Guam CEDDERS, especially Mrs. Elaine Eclavea, Mrs. Victoria Ritter, and Mr. Bill Toves, who have worked hard on the draft legislation of this bill. Working with Senator Lou Leon Guerrero and her wonderful staff, we drafted this bill based on the model of the American Academy of Pediatrics, the American Speech and Hearing Association model bill, and the American Academy of Audiology. We have been in discussions with our other agencies such as the Guam Memorial Hospital Authority, the Department of Public Health and Social Services,

the Department of Education, and the Sagua Managu Birthing Center to keep this matter at the forefront. With the assistance of federal grant funds from Maternal Child and Health Bureau and the Center of Disease Control, we have been able to conduct hearing screening in our hospitals and although we are not quite at 100% screening of all babies, we have already identified a significant number of children with conductive hearing losses and 4 with the more severe senor-neural losses. Guam is well above the national average of infants born with these conditions.

I implore the members of this esteemed body, to pass Bill 408 and make it a Public Law so that every baby born on Guam will get this important test as part of standard of care. During this wonderful holiday season that celebrates the birth the One great King, what greater gift can you give to our babies born on Guam? Thank you for the opportunity to give this testimony.

Guam Center for Excellence in
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Center for Excellence in Developmental Disabilities Education, Research, and Service

December 14, 2004

Senator Lou Leon Guerrero, RN, MPH
Chairwoman, Committee on Rules and Health
27th Guam Legistlature
155 Hesler Street
Hagatna, Guam 96910

Honorable Senator Lou Leon Guerrero,

On behalf of the University of Guam Center for Excellence in Developmental Disabilities Education, Research, and Service (CEDDERS), I submit this written testimony in complete support of Bill 408, "An act to establish the Universal Newborn Hearing Screening and Intervention Act of 2004 for early detection and intervention of children with hearing impairments".

The University Of Guam CEDDERS is the recipient of two federal grants that support newborn hearing screening. We are in a third year of a four year grant titled: "*The Guam Early Hearing Detection and Intervention Project*" funded by the U.S. Department of Health & Human Services, Maternal Child Health Bureau. The purpose of this project is to refine Guam's infant hearing screening, evaluation, and intervention process by ensuring that all newborns have access to hearing screening prior to discharge from a birthing facility and if appropriate, are referred for audiological evaluation and intervention services.

Our second federal grant is related to early hearing screening and is funded by a two-year Cooperative Agreement from the Center of Disease Control to collect data in monitoring and tracking the implementation of the newborn infant hearing screening project.

Research has shown that approximately 3 in 1000 newborns are born with permanent hearing loss, and 1 in every 1000 is born deaf. Young children identified with hearing loss, who receive intervention before six months of age, develop language (spoken or signed) that is comparable with hearing peers. As of November 2004, 4,848 newborns have been screened for hearing prior to discharge from GMHA, Sagua Managu, and U.S. Naval Hospital Guam. Of that number, 52 have been referred for audiological evaluation, and 21 have been diagnosed with conductive or sensorineural hearing loss. The long term outcomes for these children are much brighter as a result of early identification and supports.

The University of Guam CEDDERS has been engaged in a collaborative process in drafting this legislation and have received input and recommendations from the Guam Memorial Hospital Authority Pediatrics' Committee, GMH Family Practice Committee, parents of young children with hearing impairments, and the GEHDI Advisory Committee. The development of Bill 408 has been a truly collaborative process.

Hearing loss is invisible, but the effects can lead to lack of exposure to language and can cause lifelong cognitive, educational and vocational challenges. This legislation will ensure that newborn hearing screening becomes a part of the "Standard of Care" for every infant born on Guam. It is through legislation like Bill 408 that WE as a COMMUNITY have enhanced the quality of life and created opportunities for positive learning outcomes and our futures for, "OUR YOUNG CHILDREN WITH HEARING IMPAIRMENTS and their FAMILIES."

Sincerely,

Heidi E. San Nicolas

Heidi E. San Nicolas, Ph.D.
Director, Guam CEDDERS

Guam Early Hearing Detection & Intervention (GEHDI)
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Center for Excellence in Developmental Disabilities Education,
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June 25, 2004

The Honorable Senator Lou Leon Guerrero
Majority Leader, 27th Guam Legislature
155 Hesler Street
Hagatna, Guam 96910

Dear Senator Leon Guerrero,

As a parent of a 3 year old daughter who has significant hearing loss, I am always looking for ways to improve the quality of life for my child. I am submitting this letter with great enthusiasm and anticipation in support of legislation to mandate newborn infant screening on Guam.

With the many challenges my family faces, the importance of having access to intervention services as early as possible cannot be stressed enough. We are particularly in support since it focuses on hearing, which ultimately will affect the speech, language, and cognitive development of my child. My family and I were informed when our daughter was a toddler that she has significant hearing loss. This discovery has shown us the importance of detecting the need for special services as early as possible and how early identification and intervention has a direct impact on the development of the child. Having access to these services and information will also serve as a way for families to become more aware of the needs of their children.

As a parent advocate as well as the Chairperson for the Guam Early Hearing Detection and Intervention (GEHDI) Advisory Committee, I look forward to the support of legislation to mandate newborn infant screening of Guam. It is also necessary that every family have a medical home where they receive coordinated follow-up services in addition to services provided to families through the Guam Early Intervention System.

Sincerely,

Joseph Mendiola

Joseph Mendiola
Parent & Chairperson of the GEHDI Advisory Committee

July 12, 2004

Honorable Lou Leon Guerrero
155 Hesler Place
Hagatna, Guam 96910

Hafa Adai Senator Leon Guerrero,

We are Richard and Joyce Flores, the parents of Joseph E. H. Flores, who is three years old. Our son was born prematurely at Guam Memorial Hospital on June 26, 2001. At four months old, Joseph was diagnosed with a moderate to severe sensorineural hearing loss. As a parent, this was very difficult to accept. We were not informed at the hospital or through his pediatrician that there were support and intervention services available for Joseph and our family. A family friend told us about Guam Early Intervention System (GEIS). It was GEIS that provided services for our family and Joseph.

Through our efforts to find help for our son, Joseph is now enrolled in the Guam Early Intervention System (GEIS), which provides services and supports for young children with special needs. As a result of his hearing loss, Joseph was in need of hearing aids to assist him in developing his speech and language skills. GEIS provided funding for these necessary bilateral hearing aids.

If Joseph was given a hearing screening at birth, we may have been able to detect the hearing loss earlier, and therefore intervention services could have been provided to our family earlier also, reducing the chances of any developmental delays Joseph may have later on when he enters school.

The Guam Early Hearing Detection and Intervention (GEHDI) Project under the University of Guam's Center for Excellence and Developmental Disabilities Education, Research, & Service (Guam CEDDERS) is striving to ensure that ALL children born on Guam will have a hearing screening, and if a hearing loss is detected, intervention services are provided before the child reaches 6 months of age. GEHDI implemented hearing screening in November 2002 at GMH, Sagua Managu, Guam's Birthing Center and at the U.S. Naval Hospital Guam.

GEHDI has an Advisory Committee that meets on a quarterly basis. This committee's purpose is to set up policies and procedures for newborn hearing screening and intervention. We have been active members of this committee since its inception and are deeply committed to working towards improving the services and supports to families of children with hearing impairments, and further all families of children with special

needs. We want to ensure that every infant born on Guam gets their hearing screening done before they leave the hospital or birthing center.

GEHDI has also facilitated a "Parent to Parent Support Group" for families of children with hearing impairments. Since March 2004, Joyce accepted the role of Chairperson for this group.

As Chairperson and an active member of the "Parent to Parent Support Group" we seek the support of our Legislature and lawmakers in mandating "Newborn Hearing Screening on Guam." It is only through the power of legislation that will ensure all children born on Guam will have a hearing screening. Furthermore, as a result of mandated hearing screening, early identification of any degree of hearing loss can be detected and earlier intervention services will be provided, reducing the chance of children with hearing impairments from having to rely on government financial support through their lifetime.

Your support and commitment to this endeavor will greatly impact the quality of life for children with special needs, especially those children with hearing impairments. Our children's future depends on your actions. As a community we need to come together to ensure the best quality of life for ALL our children!

Sincerely,

Richard and Joyce Flores

DEPARTMENT OF PUBLIC HEALTH AND SOCIAL SERVICES

OFFICE OF MATERNAL AND CHILD HEALTH SERVICES

FACSIMILE TRANSMITTAL SHEET

TO:	FROM:
Senator Lou Leon Guerrero	Maggie M. Bell
COMPANY:	DATE:
Subcommittee on Health	12/14/2004
FAX NUMBER:	TOTAL NO. OF PAGES INCLUDING COVER:
472-3591	8
PHONE NUMBER:	SENDER'S REFERENCE NUMBER:
472-3582	
RE:	YOUR REFERENCE NUMBER:
Testimony on Bill 408	

☐ URGENT ☐ FOR REVIEW ☐ PLEASE COMMENT ☐ PLEASE REPLY ☐ PLEASE RECYCLE

NOTES/COMMENTS:

Hafa Adai! Please find attached testimony on behalf of Bill No. 408.

Should you have any questions or concerns, please feel free to telephone me at 735-7306 or email mags@kuentos.guam.net.

Maggie Murphy Bell

Testimony presented to the Committee on Rules and Health

Bill No. 408 (COR) An Act to Establish the "Universal Newborn Hearing Screening and Intervention Act of 2004 (UNHSIA)" For the Early Detection and Identification of Children with Hearing Impairments

Submitted by
Margaret Murphy Bell
Program Coordinator IV, Office of Maternal and Child Health Services
Department of Public Health and Social Services

Honorable Chairperson and members of the Committee, I thank you for the opportunity to participate in this hearing on Bill No. 408 An Act to Establish the "Universal Newborn Hearing Screening and Intervention Act of 2004 (UNHSIA)" For the Early Detection and Identification of Children with Hearing Impairments.

Hearing loss is one of the most common developmental abnormalities present at birth. Approximately, one in three infants per thousand are born with significant hearing loss. If this condition goes undetected, it will impede speech, language, and cognitive development, thus resulting in significant health costs. All children can be evaluated for hearing loss, even children who are only minutes old, using a safe and painless test.

Unfortunately, parents are usually unaware of their infant's hearing condition. Ironically, these same infants are screened at birth for Phenylketonuria (PKU), a disorder 20 times less likely to occur in newborns than hearing loss.

A mandated benefit for newborn hearing screening is necessary for the health and well-being of the children of Guam. Undetected hearing loss present from an early age significantly impairs speech, language, cognitive, and social-emotional

development. Studies have conclusively shown the importance of screening early in a child' life, the efficacy of the newborn hearing screening test themselves, and the cost effectiveness of performing hearing screening on newborns.

Currently, children are usually identified with a hearing loss between the ages of 12 and 25 months. When hearing loss is detected this late in a child's development, speech and language development is delayed, which can affect social and emotional growth as well as academic development. Children are more likely to perform below their grade level, and are more likely to be held back, drop out of school, and fail to earn a high school diploma.

Since early detection is the key to effective treatment, it is vital that newborns are screened before they leave the hospital. The cost of late identification is not only in real health care and public education dollars, but also in the frustration borne by parents and children who lack appropriate language skills to compete academically and in today's job market.

The newborn hearing screening issue has gained national support, with the passage of the Newborn Hearing Screening and Intervention Act (the "Walsh Bill") in 2000. This law was supported by more than 20 national audiological, medical, and consumer organizations. It provides up to three years of federal funding for state grants to develop infant hearing screening and intervention programs. This act allocated funding for states to develop and expand statewide newborn hearing screening programs. In FY 2000, Congress allocated $7 million for the grants program. As of June 2000, 22 states has received $3 million in grant monies from the Health Resources and Services Administration (HRSA), with additional grants awarded from the Centers for Disease Control and Prevention (CDC).

Screening newborns for hearing loss is extremely cost-effective. The costs of these tests range from $25 to $40. The long-term savings, however, far outweigh the initial expense. Studies have shown that detection of hearing loss during infancy, followed by appropriate intervention, minimized the need for rehabilitation during the school years. This includes savings in special education funding and social services funding. This rehabilitation later in life will cost far more than the initial $25 spent on the newborn hearing screening.

Studies overwhelmingly show that newborns whose deafness is detected early can learn to communicate far better than those whose hearing impairment is found later in life. Early experiences of auditory stimulation are critical to speech and language development. In fact, the most important period for language and speech development is generally regarded as the first three years of life. If hearing loss is detected early, a child can be fitted with a hearing aid and can receive this necessary auditory stimulation. Children whose hearing loss is detected later in life lose the critical window of opportunity for auditory stimulation and their speech and language skills suffer accordingly. These children will depend on more expensive speech therapy interventions as a result of later hearing loss identification.

Not only will speech therapy service costs be less for children screened early for hearing loss, the cost of special education services will also be less for these children. Children with early hearing loss detection function as well as children without a hearing loss. They are able to learn side-by-side with other students. There is less of a need for special education because their language skill development was not delayed. Children who are screened early will develop their cognitive skills, which, in turn, will help their academic skill development. This will result in academic success and ultimately in improved lifetime earnings.

The ability to hear is paramount to how children learn. Studies show that as much as 90% of what young children learn is attributable to the reception of incidental conversations around them (Flexer, 1993). Any degree of hearing loss can be educationally handicapping for children. Even children with mild to moderate hearing losses can miss up to 50% of classroom discussions. Studies have also shown that 37% of children with only minimal hearing loss fail at least one grade (Bess, 1998). If hearing loss is detected early in life, speech, and hearing professionals can work with the child to minimize the chances of academic failure.

Experts across the nation all recommend newborn hearing screening. In 1993, the National Institutes of Health Consensus Development Conference on Early Identification for Hearing Impairment was convened to address newborn hearing screening. This panel concluded that all infants admitted to the neonatal intensive care unit be screened for hearing loss prior to discharge; universal screening be implemented for all infants with the first three months of life; and education of primary caregivers and primary health care providers on early signs of hearing impairment is essential.

The U.S. Public Health Service's Healthy People 2000 Initiative and 2010 health objectives for the nation recommend screening infants for hearing loss by one month of age.

The 2000 position statement of the Joint Committee on Infant Hearing (JCIH), which represents national professional and consumer groups concerned with hearing loss (including the Directors of Speech and Hearing Programs in State Health and Welfare Agencies; the American Academy of Audiology; the American Academy of Pediatrics; the American Speech-Language-Hearing Association; and the Council on Education of the Deaf), recommends that all

newborns be screened for hearing loss. They also recommend that all infants with hearing loss be identified before three months of age.

The US Centers for Disease Control and Prevention (CDC) recommends "all infants be screened for hearing loss by one month of age, preferably before they are discharged from the birth hospital."

A study conducted at the University of Colorado by Dr. Christine Yoshinaga-Itano documents the efficacy of newborn hearing screening. Her study found the "inevitable conclusion that identification of hearing loss by six months of age...is the most effective strategy for the normal development of language in infants and toddlers with hearing loss...Identification of hearing loss by six months can only be accomplished through universal newborn hearing screening." This study further found that 90% of children with hearing loss who were identified early in life develop vocabulary that is in the normal range in the first three years of life. This compares to only one-quarter of children identified later in life developing vocabulary within the normal range. (Downs, M. & Yoshinaga-Itano, C. (1999). The efficacy of early identification and intervention for children with hearing impairment. *Pediatric Clinics of North America*, 46 (1), 79-87).

Another study, also conducted by Dr. Christine Yoshinaga-Itano, found that infants whose hearing loss was identified before age six months scored significantly higher than those whose hearing loss was identified after age 18 months in the expressive language and comprehension-conceptual subtests. (Apuzzo, M. & Yoshinaga-Itano, C. (1998). Identification of hearing loss after age 18 months is not early enough. *American Annals of the Deaf*, 143(5), 380-7).

The following studies further document the validity, reliability, and effectiveness of newborn hearing screening:

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- Vohr, B.R., Carty, L., Moore, P., Letourneau, K. (1998). The Rhode Island Hearing Assessment Program: Experience with statewide hearing screening (1993-1996). *Journal of Pediatrics, 133*, 353-357.

- Vohr, B.R., & Maxon, A. (1996). Screening infants for hearing impairment. *Journal of Pediatrics, 128*, 710-714.

In conclusion, the National Institutes of Health have stated, "Among the five senses, people depend on...hearing to provide the primary cues for conducting the basic activities of daily life. At the most basic level...hearing permit(s) people

to navigate and to stay oriented within their environment...Hearing is a defining element of the quality of life."

GOVERNMENT OF GUAM

DEPARTMENT OF PUBLIC HEALTH & SOCIAL SERVICES
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PeterJohn D. Camacho, MPH
DIRECTOR

AUG 04 2004

Honorable Lou Leon Guerrero
Chairwoman, Committee on Rules and Health
27th Guam Legislature
155 Hesler Place
Hagatna, Guam 96910

Dear Senator Leon Guerrero:

On behalf of the Department of Public Health and Social Services (DPHSS), I am writing this letter in full support of legislation, for the implementation of universal newborn hearing screening as a standard care for the island of Guam.

Hearing loss is one of the most common birth defects affecting newborns. If hearing loss is left undetected, it will impede speech, language, and cognitive and social development. Although not life threatening, the effects of late identified hearing impairment can be irreparable and costly. Studies show that if hearing loss is identified and intervention services are administered prior to six months of age, children who are deaf or hard of hearing have the potential to develop communication and cognitive skills similar to their hearing peers.

The mission of the Maternal and Child Health (MCH) Program is to provide and promote coordinated health care and related support services to infants and children, including children with special health care needs, of our island. The implementation of Universal Newborn Hearing Screening as a standard of care for the island of Guam will assure that our mission is met.

Thank you for taking the lead with this much-needed legislation. We at the DPHSS are fully committed to the implementation and facilitation of this important piece of legislation.

Sincerely,

PeterJohn D. Camacho, MPH

PETERJOHN D. CAMACHO, M.P.H.
Director, DPHSS

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Guam Memorial Hospital Authority
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July 14, 2004

Honorable Senator Lou Leon Guerrero
Chairwoman, Committee on Rules and Health
27th Guam Legislature
155 Hesler Place
Hagatna, GU 96910

Hafa Adai Senator Leon Guerrero,

On behalf of the Guam Memorial Hospital Authority (GMHA) Nursing Services Administration, we are in full support of legislation that would ensure ALL newborns are provided hearing screening as part of the standard of care provided to all infants born on Guam. Since November 2002 through June 2004, there were 4,083 births at GMHA with approximately 3,213 newborns having access to hearing screening prior to discharge. Our goal is to screen ALL newborns prior to discharge from the hospital.

The mission of GMHA is to provide quality health care to our patients, and we continually strive to screen and identify newborns with possible hearing aberrations. The American Academy of Pediatrics has fully endorsed and supports the Universal Newborn Hearing Screening. Early detection of hearing loss in a child and early intervention and treatment has been demonstrated to be highly effective to facilitating a child's healthy development in a manner consistent with the child's age and cognitive ability. Further research indicates that children who are identified with hearing loss and receive intervention before six months of age, develop language (spoken or sign) comparable to their hearing peers.

We are confident and committed to this cause, and through the implementation of this legislation that would mandate hearing screening as a part of the Standard of Care on Guam, we will be able to identify newborns with potential hearing impairment/loss.

Respectfully,

Lillian Posadas, RN

Lillian Posadas
Associate Administrator of Nursing Services, GMHA

Guam Interagency Coord ing Council
Department of Education, Division of Special Education
Guam Early Intervention System
PO Box DE
Hagatna, Guam 96932
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of Services and Supports for Infants and Toddlers with Special Needs and their Families

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July 14, 2004

Honorable Senator Lou Leon Guerrero
Chairwoman, Committee on Rules and Health
27th Guam Legislature
155 Hesler Place
Hagatna, GU 96910

Dear Senator Leon Guerrero,

On behalf of the *Guam Interagency Coordinating Council* (GICC), I am submitting this letter with the full support of its members for legislation that ensures that ALL newborns are provided hearing screening as part of the standard of care provided to all infants born on Guam. The Newborn Hearing Screening program's goal is to provide a hearing screening to all infants prior to discharge from the hospitals or birthing center.

The role of the GICC is to support policy that ensures all infants and toddlers with or at risk for disabilities are located, identified, and provided early intervention services as soon as possible. With the implementation of the Guam Early Hearing Detection and Intervention (GEHDI) Project beginning November 2002, over 4,000 newborns have been screened at the Guam Memorial Hospital for possible hearing loss. Legislation that mandates universal hearing screening for all newborns will assist in the identification of infants with possible hearing loss and provide the supports needed for infant and their family.

Your full support in mandating universal newborn hearing screening will provide a mechanism for early detection and ensure that intervention services are provided to our young children with hearing impairments and their families!

Sincerely,

Gino Cayanan
Co-Chairperson

I MINA' BENTE SIETE NA LIHESLATURAN GUAHAN

Subcommittee on Health
Public Hearing
Bill No. 408

December 14, 2004

AGENDA

Hearing on Bill No. 408-AN ACT TO ESTABLISH THE "UNIVERSAL HEARING SCREENING AND INTERVENTION ACT OF 2004 (UNHSIA)" FOR THE EARLY DETECTION AND INDENTIFICATION OF CHILDREN WITH HEARING IMPAIRMENTS.

Gov't losing millions in poker license fees

By Haidee V. Eugenio
Variety News Staff

SAIPAN — Illegal transfers of poker machines from one place to another and the current fee payment system are taking a toll on various programs of the government, which should have been collecting at least $12 to $14 million from annual poker license fees on Saipan alone.

Instead, the government collects only about $7 million from poker license fees annually, Variety learned.

As a result, government programs that rely on poker license fee appropriations like scholarships and some payment for overtime work are receiving less funding or none at all.

Finance secretary Fermin Atalig, in an interview on Friday, said at least two poker machine operators on Saipan have been confirmed to be moving machines around illegally to avoid taxation.

Atalig said the current system which allows operators to pay their annual poker license fees in four separate quarters makes it easier for some businesses to move their machines around almost every quarter, tries to avoid paying taxes.

"It's harder to monitor who is paying taxes because the payment is divided into four payments...Owners play with us; they move around machines illegally, and we have been finding out-of-place machines," he said.

He said Finance wants to revert to the old payment system, where operators pay their annual poker license fee on a lump sum basis.

"The original law on lump sum payment of fees was amended because we raised the Saipan poker license fee to $12,000 (from only $8,000 in early 2002)," he said.

A bill seeking to revert to the lump sum payment of poker license fee has long been pending at the Senate.

"There are so many appropriations from poker license fees but we have few collections. (The Department of) Finance is left with the unenviable job of prioritizing which appropriations should come first like scholarships," Atalig added.

There are over 1,200 registered poker machines on Saipan.

With an annual fee of $12,000, the government should have been collecting $14 million.

"We collected only about $7 million in fiscal year 2004, when we should have collected at least $12 million," said Atalig.

The problem of lost revenues is compounded by the fact that Finance only has two to three personnel who actually monitor and inspect poker establishments, to ensure that they are complying with laws and regulations.

"First, we need to hire people to monitor these (poker machine operations). But we still have to find money to hire new people," said Atalig.

Among the new requirements that need to be monitored is to have a security guard for every 24-hour poker operation.

Finance also earlier noted that while the number of registered poker machines has been increasing, collections derived from license fees, jackpot gaming taxes, business taxes and excise taxes paid by the industry have been dropping.

For example, Finance reported a 15 percent drop in gaming jackpot tax collections for the first seven months of fiscal year 2004, or from $2.332 million to only $1.989 million.

However, the number of authorized poker machines on Saipan alone went up by 40 percent.

Rota DCCA closed, employees displaced

By Ulysses Torres Sabuco
Variety News Staff

SAIPAN — For failure to pay an estimated $16,000 in rent, the Rota Department of Community and Cultural Affairs Rota was padlocked, affecting more than a dozen government employees, Representative Crispin M. Ogo confirmed on Friday.

Ogo, however, said he is now spearheading efforts to find money to pay the vendor, whom he identified as the Tamara and Seven Brother Co.

"There are displaced government employees. The office has not paid (its) rent. It is a very crucial department," said Ogo (Covenant-Rota). "I am working on it now, looking for funds..."

DCCA Secretary Juan L. Babauta could not be reached for comment, while Rota Mayor Benjamin T. Manglona was unavailable yesterday.

But Senate Floor Leader Paul A. Manglona (R-Rota), and a member of the Rota Legislative Delegation, said he is "unaware" of the situation.

"That should not be a problem because we budget office rentals for all offices," Manglona told Variety yesterday.

But Manglona admitted that the situation is unavoidable. "I understand that some of these office rentals are being reprogrammed. That is why the delegation agreed to put in the (fiscal year 2005) budget that office rentals should not be reprogrammed," Manglona added.

He lamented, however, that "a lot of times" appropriations for office rentals "are reprogrammed" causing such situations.

The Senate, Manglona added, has put "restrictions" in the FY 2005 budget, particularly in the reprogramming language under the administrative provision of the proposed new spending plan.

'Padlocked'

Ogo, meanwhile, said he was told that the Rota DCCA office was padlocked and its employees have no choice but to stay "outside."

"Probably more than a dozen employees are displaced. I guess they are outside, they cannot enter because of that reason," Ogo said. "They are renting it from Tamara and Seven Brothers Company and they failed to pay."

The DCCA is an umbrella department of the Divisions of Youth Services, Arts Council, Language Commission and Sports and Recreation. The different divisions employ between two to three employees.

Military exercises at FDM

By Haidee V. Eugenio
Variety News Staff

SAIPAN — The U.S. military has scheduled live fire training and aerial survey exercises on the island of Farallon de Medenilla starting this Friday.

According to the Emergency Management Office, the live fire exercises will be held from Dec. 10 to 14, starting at 8 a.m. and ending at 11 p.m.

The aerial survey, meanwhile, is set for Dec. 16, from 8 a.m. to 12 p.m.

"Due to the danger imposed by this activity, the general public, especially fishermen, tour operators and commercial pilots, are advised to stay away from this location during the time and date indicated," said EMO in an advisory.

The general location of the activity is on FDM training area R7201, from surface to 15,000 feet mean sea level on a 10-nautical mile radius on all quadrants.

"The cooperation and understanding of the general public is highly appreciated," EMO added.

The CNMI plays a key role in U.S. military training and exercises. FDM in the CNMI, for example, has been the U.S. military's training target for bombs, missiles and naval gunfire for more than 30 years now.

In other news, the high surf and small craft advisories hoisted over the CNMI remain in effect.

The EMO yesterday said that the strong trade winds and rough seas will gradually subside in the next couple of days as high pressure weakens north of the region.

Mina' Bente Siete Na Liheslaturan Guahan
TWENTY-SEVENTH GUAM LEGISLATURE

Senator Lou Leon Guerrero
Chairwoman, Committee on Rules & Health
Majority Leader, Democratic Party

Public Hearing
Bill No. 408
December 14, 2004, 10:30A.M.

Sign-In Sheet

Name	written testimony	oral testimony	Company/Agency	Contact no.
Dennis Tajalo	yes	yes	Audiological Associates Clinical Audiologist	649-2902
DR. VELMA SABLAN	Yes	Yes	UOG-CEDDERS	735-2398
Elaine Eclavea	Yes		UOG CEDDERS	735 2466
Joe Manibusan	Yes		Parent	477-8280
Joyce Flores	YES		Parent	789-2009

Guam Early Hearing Detection & Intervention (GEHDI)

RESOURCE MANUAL

(UPDATED JULY 13, 2004)

TABLE OF CONTENTS

This activity is funded under Grant No. CFDA 93.231, FY2002 Universal Newborn Hearing Screening and Intervention and facilitated by the University of Guam Center for Excellence in Developmental Disabilities Education, Research, and Service (Guam CEDDERS) Guam Early Hearing Detection and Intervention (GEHDI) Project

A National Priority

Significant hearing loss is the most common birth defect in the United States today. The American Academy of Pediatrics reports that significant bilateral hearing loss is present in approximately 1 to 3 per 1000 newborn infants in the well-baby nursery population, and in approximately 2 to 4 per 100 infants in the intensive care unit population. Current research shows that if hearing impairment is not detected and children do not receive appropriate interventions, their speech, language, cognitive, and social development can be compromised. If children with diagnosed hearing loss can begin rehabilitation by 6 months of age, the child will have language development close to that of a hearing infant, assuming that cognitive development is normal. This is true whether the child has a mild, moderate, or severe sensorineural hearing loss. Language skills in children whose loss is identified after 6 months of age rarely equal those of hearing children, even with extensive rehabilitation. (Shuman, Contemporary Pediatrics, July 1998)

The standard protocol to identify hearing impairments in infants has been to screen only those infants with identified risks (i.e. family history of deafness or prenatal exposure to certain risk factors; see the complete list of risk factors in this manual). However, screening by high-risk registry alone can only identify approximately fifty percent of newborns with significant congenital hearing loss; and unfortunately, the average age of identification of hearing impairment in the general newborn population has been 2 to 3 years of age – well past the optimum age for beginning needed interventions.

In 1990, a national goal of identifying all children with a significant hearing loss by 12 months of age was incorporated into Healthy People 2000 as part of the national effort to improve the health of United States citizens by the year 2000. Since that time, techniques and procedures to identify hearing loss in infants have improved dramatically and research has shown that the optimum time to identify hearing loss is at birth with needed interventions no later than 6 months of age. In 1993, the National Institute of Health issued a consensus statement recommending programs be put in place to screen all newborns for hearing impairments. In 1994, the Joint Committee on Infant Hearing, composed of representatives from the American Academy of Pediatrics, American Speech-Language-Hearing Association, and American Academy of Otolaryngology – Head and Neck Surgery, endorsed Universal Newborn Hearing Screening. The goal of Universal Hearing Screening is detection of hearing loss in infants before 3 months of age, with appropriate intervention no later than 6 months of age. Universal detection of infant hearing loss requires universal screening of all infants. As a result of major state and national efforts over the last decade, 37 states have enacted legislation requiring hospitals to implement newborn hearing screening programs and other states are supporting implementation of newborn hearing screening programs.

Guam's Priority

To ensure that all children born in Guam have access to newborn hearing screening prior to hospital discharge, the Guam Early Hearing Detection and Intervention Project (GEHDI) was established in 2002. Currently, approximately ninety-two percent of Guam's newborns are screened in 2 hospitals and 1 birthing center. Key project goals of the GEHDI include the following:

- Establish an advisory committee to assist in program development and implementation. Stakeholders include parents and persons who experience hearing loss, and professionals who work with persons with hearing loss.
- Ensure that babies born on Guam have newborn hearing screening prior to hospital discharge.
- Ensure that all newborns who are referred for further hearing screening receive an audiological evaluation by 3 months of age.
- Ensure that infants diagnosed with hearing loss are referred to, and enrolled in, appropriate early intervention and other needed services by 6 months of age.

Purpose

To screen every newborn at GMHA for possible hearing loss.

Policy

GMHA mandates as part of the standard of care guidelines, hearing screening for all newborns.

General Comments

1. Hearing is essential for the development of normal speech and language as well as psychological well-being.
2. Risk factors for hearing loss in newborns include:
    a. Family history of hereditary childhood sensorineural hearing loss.
    b. In utero infections:
        Cytomegalovirus (CMV)
            CMV may or may not be diagnosed at birth. The type of degree of impairment the child has at birth may vary. Hearing loss in children with CMV may not be present at birth, and the age of onset has no set pattern; it may begin at any age. It is usually one of the parents or caregivers who first notices that the child is not paying attention in the same way.
        Maternal Rubella
        Herpes
        Toxoplasmosis
        Syphilis
    c. Craniofacial anomalies (anomalies of the head and neck including the pinna, ear canal, eustachian tube and cleft lip or palate)
    d. Birth weight less than 1500 grams
    e. Bacterial Meningitis
    f. Hyperbilirubinemia with phototherapy
    g. Ototoxic medication administration $\geq$ 5 days
    h. Anoxia at birth; Apgar score of 0 to 4 at one minute, or 0 to 6 at five minutes
    i. Mechanical ventilation $\geq$ 5 days
    j. Stigmata or other findings of syndromes related to sensorineural and/or conductive hearing loss
    k. Neurodegenerative disorders

Procedures

1. Give parents the newborn screening information booklet.
2. The newborn must be 12 hours old to perform screening, or is within two hours of being discharged from the hospital.
3. Have staff gather medical and family history information, then perform screening in both ears of the newborn. Results are documented on the Assessment System: GMHA Hearing Screen Form. Place results in the newborn's medical record, and provide a copy to the Guam Early Hearing Detection and Intervention (GEHDI) Project.

4. If a newborn fails the hearing screening or is at risk for potential delayed-onset hearing loss, a letter shall be provided to parents/guardians, and the newborn is referred to the Guam Early Intervention System (GEIS) and to GEHDI.
5. Inform parents/guardians of results, and have them sign an acknowledgement of the results.

Resources

1. Informational brochures
2. Universal Newborn Hearing Screening Booklet by the American Academy of Pediatrics
3. GEHDI Procedural Handbook

Policy

All newborns will be screened for possible hearing impairment. Studies have shown that screening infants, identified as high-risk, reflect about half of all babies born with permanent hearing loss. In order to identify the other 50%, universal newborn hearing screening has been developed in an effort to screen all newborns. Early diagnosis of hearing impairment leads to early intervention and will lead to a better prognosis for the infant.

Reference:

1. GSI-70 Automated OAE Screener Quick Reference Guide
2. Judith Marlow (2003). AWHONN Newborn Hearing Screening: Testing, Follow-up and Communication with Families

Policy:

1. Identify steps in the conduction of screening process, designate the person responsible for notifying parents of results, and designate how notification is documented and communicated to health care providers.

Goal:

1. To identify newborns at high risk for developing impaired speech and language abilities, during their hospital stay.

Preparation:

1. Mother-Baby Unit Staff will be educated about the proper procedure and parent education will be provided.
2. Consents must be obtained from parents or legal guardian.
3. Mother-Baby Unit will be the site of testing; obtain a quiet room, exam room, or empty nursery.
4. All testing will be documented in MBU Newborn Hearing Screen Log.

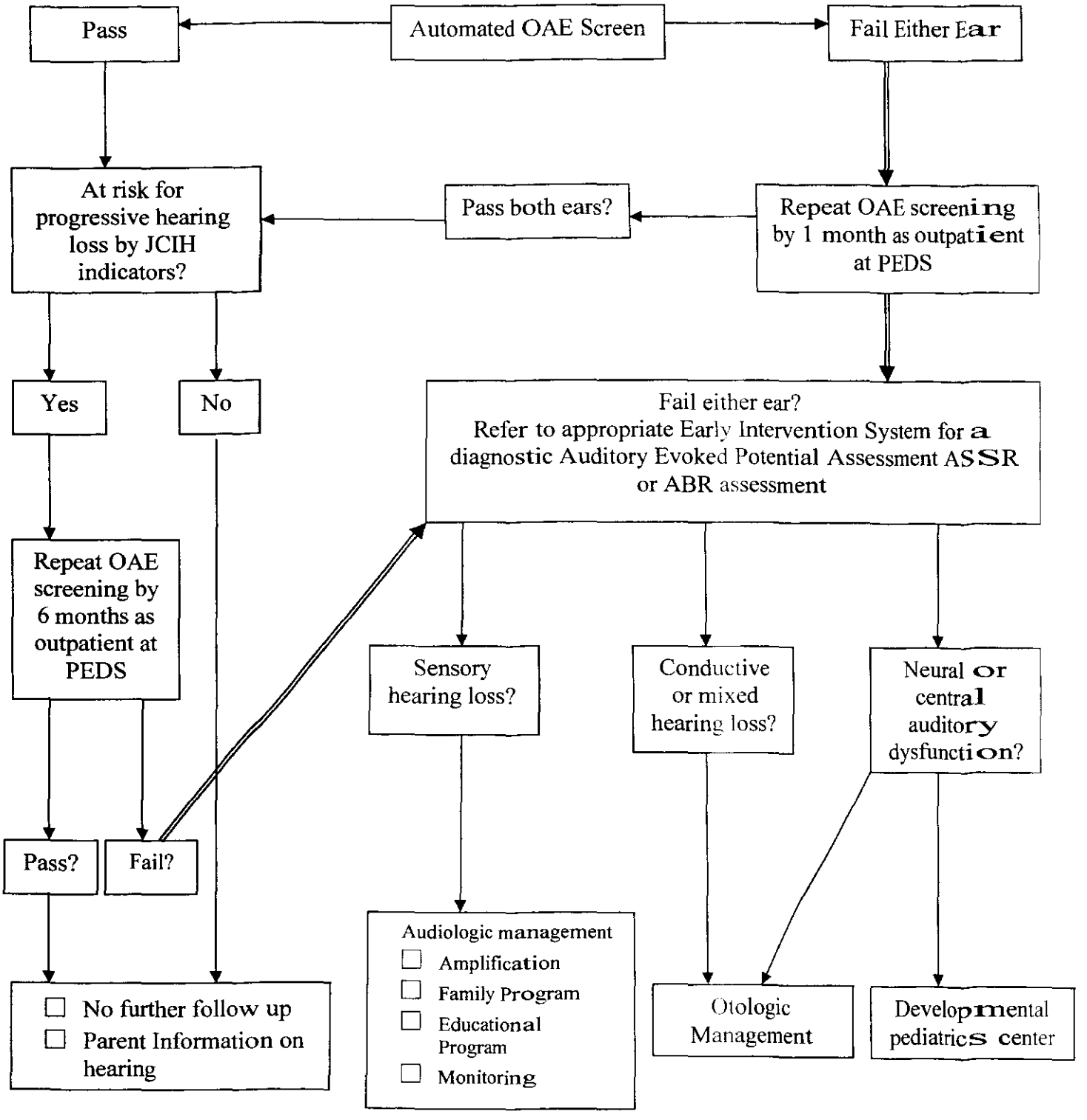
Equipment:

GSI-70 Automated OAE Screener

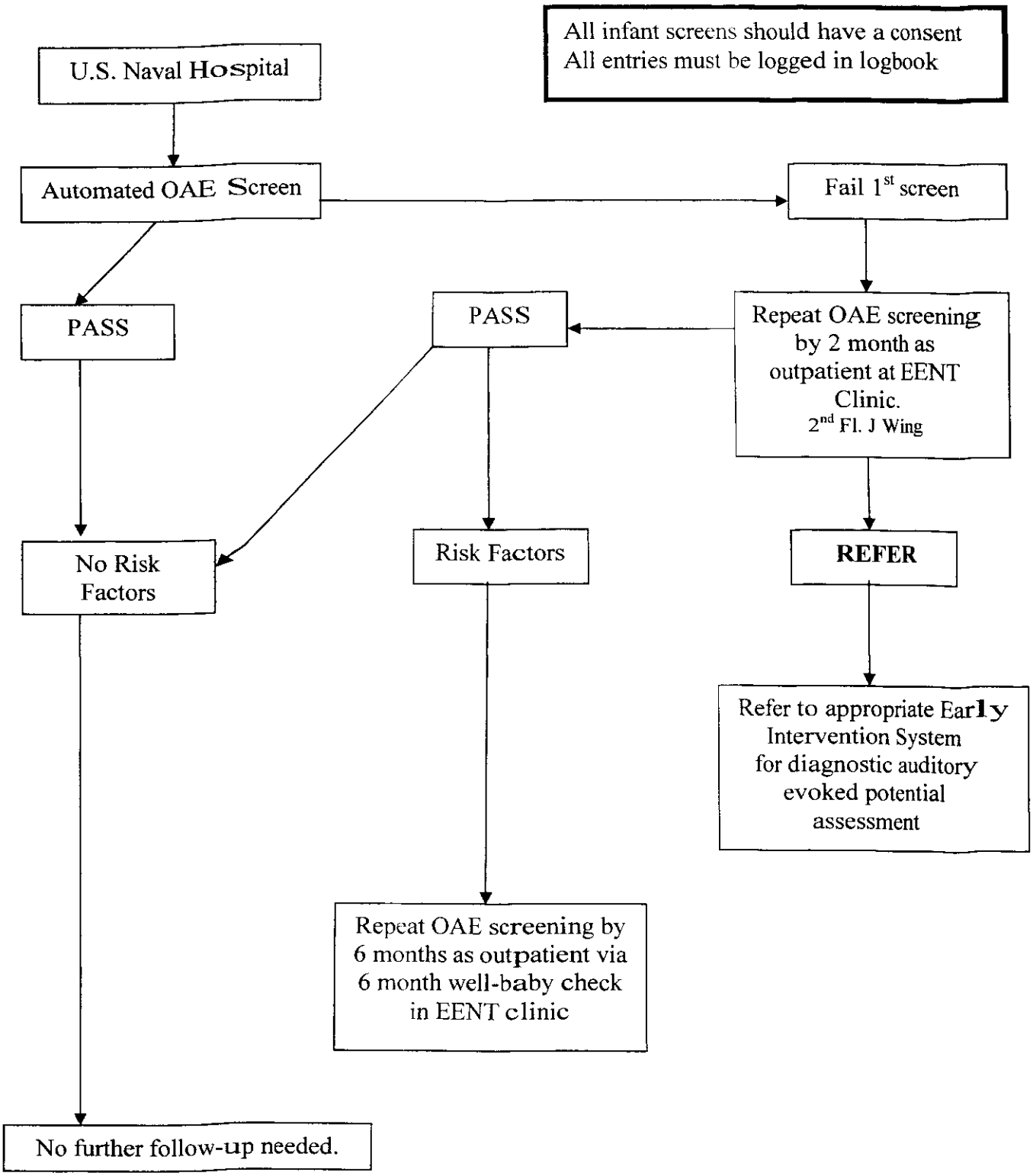
UNIVERSAL NEWBORN SCREENING PROTOCOL

(GUAM MEMORIAL HOSPITAL AUTHORITY & SAGUA MAÑAGU BIRTHING CENTER)

☐ Intensive Care Nursery ☐ Regular Nursery
☐ Intermediate Nursery ☐ Rooming In



U.S. NAVAL HOSPITAL INFANT SCREENING PROTOCOL
MOTHER BABY UNIT



A. Procedures

GOAL I: To screen every newborn for possible hearing loss.

1. Nursing staff must perform a "Daily Calibration-Quick Check." If the GSI-70 passes, you may begin testing. If the GSI 70 fails the quick check, you must clean the probe tip and repeat the quick check. If the GSI-70 fails the quick check again, consult your unit supervisor. The unit supervisor will call the GSI-70 Representative. {See attached checklist for instructions on how to conduct a "Quick Check" on the GSI-70}

2. For hearing screening, a consent for testing will be given to parents by the nursing staff at Labor and Delivery.

3. Nursing staff will perform an Otoacoustic Emission (OAE) screening on all infants as close to discharge as possible, or a minimum of 12 hours after birth.

4. For all Rooming-In mothers, a hearing screening will be done by OB ward staff. Infants that are in the Intermediate or NICU nursery will have their hearing screening done by the nursery staff.

5. Nursing staff will complete the Consent for Screening form. GEHDI will pick up the completed hearing screening forms from the Nursery and the OB ward on a bi-weekly basis.

B. Procedures for Re-Screen

GOAL II: Infants failing the initial OAE screen will receive an outpatient re-screen at the Pediatric Evaluation and Developmental Services (PEDS) Center prior to one month of age.

1. The GEHDI Data clerk will input all the information provided in the "Consent for Screening" form and forward a "Re-screen" form" to PEDS for scheduling of appointments.

2. The PEDS or GEHDI staff will conduct a re-screen prior to 1-month of age. Prior to the re-screening, parents are requested to sign a "Release of Information" form for the GEHDI Project. This form and the results will be forward to the GEHDI office.

3. For infants that pass the re-screen, the results will be forwarded to the GEHDI office. However, if the infant is "high risk", parents will be asked to fill out a "post card" to remind them to bring the infant back at 6 months of age for another screening.

4. For infants that fail the re-screen, a referral is made to GEIS. In addition, further diagnostic evaluation will be performed by an audiologist, using electro physiologic procedures prior to 3 months of age.

C. Procedures for a Full Audiological Evaluation

GOAL III. To ensure that all infants referred to the appropriate Early Intervention Program receive a full audiological evaluation before 3 months of age.

1. The Audiologist/staff will:
   a. Refer the child and family to the appropriate Early Intervention System for electro physiologic assessments.
   b. Inform the families about the Guam Hearing Detection and Intervention (GEHDI) Project and request for "Consent for Release of Information" for the GEHDI Project to support the monitoring and tracking of their child throughout the project or until Fall, 2006.

2. Infants that are referred to the "Early Intervention System" will be:
   a. Assigned a Service Coordinator that will schedule a full audiological evaluation within 2 weeks and evaluation before 3 months of age.

D. Procedures for Intervention Services

GOAL IV. All infants identified with a hearing impairment receive early intervention services prior to 6 months of age.

1. Upon completion of the evaluation, a meeting is scheduled to determine if the child is eligible for the Early Intervention System. If eligible, an Individualized Family Service Plan will be developed to meet the needs of the child and family.
   a. Information on the parent-to-parent support group will be shared with the families.
   b. The IFSP may include intervention services, such as audiological management strategies, amplification (hearing aid), recommend educational and family programs, and monitoring.

2. Upon consent of the parents, the Service Coordinator will provide a copy of the child's IFSP to the child's family physician/ medical home.

E. Procedures for Late-Onset Hearing Loss

GOAL IV. Infants with high risk factors will have another hearing screening done by 6 months of age.

1. The appropriate Early Intervention System will contact families of infants with high risk factors to schedule a follow-up hearing screening, on or before 6 months of age, at PEDS.

2. GEHDI staff will mail out a reminder post card for parents to call to schedule a hearing screening.

3. For infants that are not receiving early intervention services, and fail the 6 months re-screen, a referral will be made to the appropriate Early Intervention System and parents are requested to sign the GEHDI "Release of Information" form. A full audiological evaluation is scheduled.

4. PEDS will forward the "Re-screen Form" with results to the GEHDI office to be inputted into the data tracking system.

Procedures

1. Obtain informed consent from parents on admission of labor patient. Assess family for hearing loss of blood relatives of newborn. Note any hearing loss that started at birth or required any special schooling or training, on hearing screening form. A brochure will be provided for parents to read and discuss. Benefits of hearing screening will be communicated to parents.
2. Distortion Product Otoacoustic Emission is the physiological process that will be utilized for hearing screening. Otoacoustic emissions are affected by both sensory dysfunction and conductive (middle ear) disorders, and are an ideal first-level screen for detection of hearing loss. Screening will be done after 12 hours of birth to allow for amniotic fluid to clear from ear canals.
3. Room noise will be minimized as much as possible for hearing screening. The infant should be bathed, fed, and sleepy to ensure an accurate test result.
4. Performing the hearing screening:
    a. Inspect the screening probe for debris such as cerumen or vernix. Clean the probe as needed following the GSI 70 Automated Screening Quick Reference Guide.
    b. Attach the ear probe tip to the probe using a clockwise rotating motion. The three metal tubes should be clearly visible.
    c. Insert ear tip firmly into patient's ear.
    d. Press the green button on the screener.
    e. When the test is complete, press RIGHT (pink) or LEFT (blue) button to store the result.
    f. Repeat the process on other ear.
    g. Record screening results on the DPOAE hearing screening results, or to be kept in the patient's chart.

5. Reviewing a Test
   Press RIGHT (pink) or LEFT (blue) button to recall and review a stored test.

6. Printing a Test
    a. Place the screener in the powered Printer/Charger Module (PCM).
    b. Press PRINT on the PCM.

7. Deleting a Test
   Hold down RIGHT (pink) or LEFT (blue) button for four seconds to delete the stored test for that ear.

8. The GSI 70 will be calibrated daily:
    a. Simultaneously press the LEFT and RIGHT (blue and pink) buttons.
    b. Press RUN (green) button.
    c. Insert a probe with 4 mm ear tip into the probe tip.
    d. Insert the probe into the quick check cavity.
    e. Press NEXT (green) button.
    f. If the quick check is successful, press NEXT (green) button. Scroll down to EXIT and press RUN (green button to return to DPGram screen. If quick check is unsuccessful, clean probe tip and repeat above steps. If problem persists, replace probe.
    g. Log in results of calibration on the Quick-Check Daily Log.

9. Notification of Results
    a. Please refer to the GSI 70 Automated OAE Pass/Refer Criteria to obtain specifics for test results.
    b. Parents will receive a copy of the newborn's hearing screening results and possible referral letters. A re-screen notification letter will be provided to the parents in the event the newborn has a refer on either ear or if there is a family history placing the infant at high risk for hearing loss.

Procedure:

1. Explain procedure to parents/guardian and obtain consent.
2. Double wrap infant and transport to testing location, ideally post feeding or while infant is sleeping.
3. Conduct a Calibration-Quick Check- takes about 10 seconds
   A. Simultaneously press the left and right (blue & pink) buttons.
   B. Press RUN (green) button.
   C. Insert probe with 4 mm ear tip into the probe tip.
   D. Insert probe into quick check cavity.
   E. Press NEXT (green) button.

   Note: Of Quick Check is successful, press NEXT (green) button and scroll down to EXIT and press RUN (green) button to return to the DPGram Screen. If Quick Check is unsuccessful, clean probe tip (see attachment) and repeat above steps. If problem persists, replace probe.
4. Running a Test
   A. Select the correct size ear tip for the patient being tested and attach it to the probe tip with a clockwise rotating motion. The three metal tubes should be clearly visible.
   B. Insert the ear tip firmly into the patient's ear. You will know you have a good seal when the green blinking light stops blinking.
   C. Press the Green button on either the Pod or the Screener.
   D. When the test is complete, press Right (pink) or Left (blue) button to store results, for the ear that was just tested.
   E. Remove ear tip from just tested ear and insert into untested ear, again note good seal when flashing green lights are now solid.
   F. Press the green button and press Left or Right button to record your results.
5. Record all testing results into MBU Newborn Hearing Log along with infant Name, Date, Time of Birth, Date and Time of Screen, and Test results for each ear.
6. Results from testing will indicate:
   PASS: No retesting while inpatient required
   REFER: Will have to re-test post discharge
   ABORT: Test was not able to conduct, will have to re-test prior to discharge, do not document, document re-try if valid.
   NOISE: Test was unable to conduct due to too much noise in environment, must retest prior to discharge. Do not document, document re-try if valid.
7. Return newborn to parent/guardians.

Documentation:

1. Document findings into MBU Newborn Hearing Log.
2. Document findings and potential risk factors on Newborn Hearing Screening Consent Form (see attached).
3. If re-screen is needed, document Re-screen Notification handout for parental use (see attached).

Procedures

1. Upon failure on a re-screen, the SCREENER will make a referral to Audiological Associates (AA) for a full audiological evaluation and to the Guam Early Intervention System (GEIS).
2. Upon receipt of the referral, the GEIS Service Coordinator will contact parents to schedule the evaluation. GEIS Service Coordinator will inform parents of the purpose of the evaluation, instructions for a successful ABR procedure, and will stress to the parents the need to have the infant really tired before coming in for the assessment (e.g. don't give the baby the bottle until they get to the AA office) so that the baby will sleep soundly through the testing.
3. Upon completion of the audiological evaluation, a copy of the report will be forwarded to GEHDI and GEIS. The report includes the following sections:
    a. Child's Medical History
    b. Test Results: 1) Middle ear assessment of the left and right ear, to say normal or abnormal
       2) OAE
    c. ABR Results
    d. Impressions
    e. Recommendations and follow-up
4. An invoice will be forwarded to GEHDI for all initial evaluations. Other evaluations will be invoiced to GEIS.

Purpose

To empower parents of children with hearing impairments by providing support, awareness and education.

General Comments

1. Parent to Parent meetings are held every other month for two hours.
2. Members include parents of children with hearing impairments and the GEHDI Facilitator.
3. Meetings are lead by a Parent Facilitator.
4. Child care and stipends are provided for parents.
5. During the meetings, guest speakers may be present to discuss various related topics, network with parents, or provide insight regarding hearing loss.

Guam Early Hearing Detection & Intervention
(GEHDI)

APPENDIX A
FORMS

NEWBORN HEARING SCREENING
OPERATOR COMPETENCY CHECKLIST
FOR
GSI 70 AUTOMATED OAE SCREENER

EMPLOYEE NAME: _____ **DATE:** _____

TEST PROCEDURE: **Reviewer's Initial**

1. Conduct a Calibration – Quick Check prior to performing the test. _____
   a. Simultaneously press the blue and pink buttons on the GSI 70. _____
   b. Press Run (green) button. _____
   c. Insert probe with a 4mm ear tip into the probe tip. _____
   d. Insert probe into the quick check cavity. _____
   e. Press Next (green) button. _____
   f. If quick check is successful, proceeds to main DPGram screen. _____

2. If Quick Check is unsuccessful, clean probe tip and repeat the Quick Check. _____
   a. After successful Quick Check, proceed to testing. _____

3. Wash hands before handling infants. _____
4. Explain procedure to parent/guardian, obtain consent, and investigate for risk factors. _____
5. Select correct size ear-tip for the patient being tested, and correctly attach tip to the probe. _____
6. Insert the ear tip firmly into the patient's ear. _____
7. Correctly position infant and the wire properly. _____
8. Press the green button on either the pod or screener. _____
9. When the testing is complete, correctly save the data. _____
10. Repeat the testing on the other ear. _____
11. Correctly document results in the Newborn Hearing Screening Log and on the Newborn Hearing Screen Consent Form. _____

TEST RESULTS:

1. Understand how to recover from "Abort" and "Noise" results. _____
2. Explain meaning of the results "Pass" and "Refer." _____
3. Correctly explain results and follow-up in 2-4 weeks, and which infants require follow-up at 6 months of age. _____

Having completed the above checklist, I feel fully competent to perform Newborn Hearing Screening using the GSI 70 Automated OAE.

_____ _____

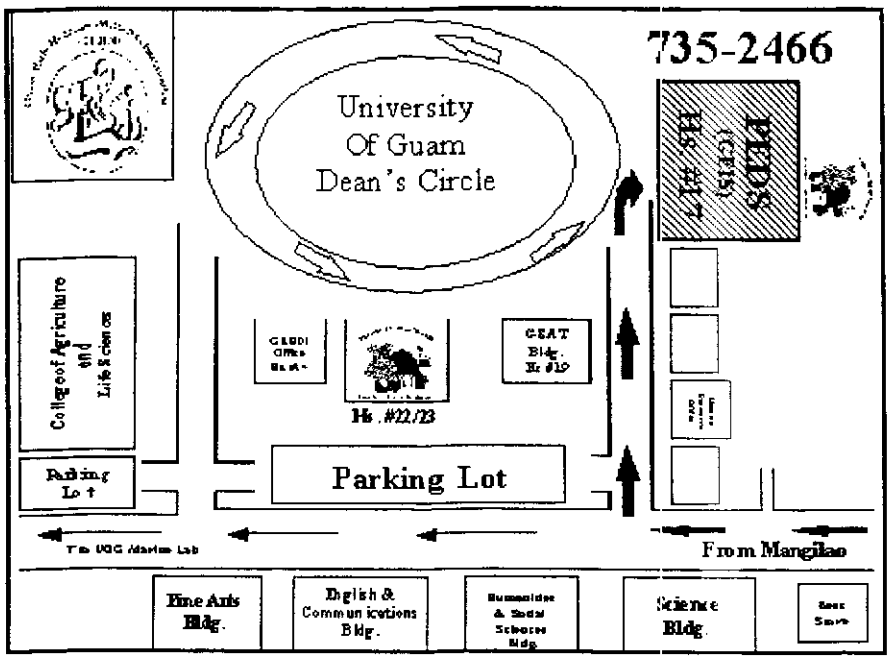
Student's Signature Date

_____ _____

Trainer's Signature Date

MAP TO THE PEDIATRIC EVALUATION & DEVELOPMENTAL SERVICES (PEDS) CENTER

The following map to the Pediatric Evaluation & Developmental Services (PEDS) Center, Dean's Circle House #17, UOG Campus should be disseminated to families of infants who have failed, or did not complete the first screening. A re-screen or initial screening will be conducted at the PEDS Center.



Guam Memorial Hospital Authority
NEWBORN HEARING SCREENING

CONSENT:

I understand that Guam Memorial Hospital Authority (GMHA) has initiated a Newborn Hearing Screening program in collaboration with Guam Early Hearing Detection & Intervention (GEHDI). This program is intended to ensure that all infants and their families have access to early hearing screening, evaluation and intervention services.

I have been informed that my newborn may be referred for further testing if so indicated by the initial screening results and/or if there are other factors that may potentially put my baby at risk for hearing loss.

I have fully read and understood the hearing screening information given to me.

I hereby give my full consent to GMHA to perform a hearing screening through an *Otoacoustic Emission* test on my newborn's ears.

Name of Newborn _____ Name of Parent/Guardian _____

Medical Number: _____ Sex: _____ Phone: _____

Date of Birth: _____ Ethnicity: _____

Date of Screening: _____ Signature of Parent/Guardian _____

POTENTIAL RISK FACTORS:

- ☐ Family history of hearing loss
- ☐ Congenital perinatal infection
- ☐ Birth weight <1 500 grams
- ☐ Ototoxic Medication ≥ 5 days
- ☐ Hyperbilirubinemia with phototherapy
- ☐ Bacterial Meningitis
- ☐ Mechanical Ventilation
- ☐ Head/neck deformity
- ☐ Asphyxia
- ☐ Syndrome
- ☐ No Risk Factor

RESULTS:

☐ PASS: Peripheral hearing sensitivity is within or near normal limits bilaterally in the 2000 to 4000 Hz

☐ REFER: ☐ Right ear ☐ Left ear

☐ INCOMPLETE ☐ Right ear ☐ Left ear

Test Site: _____ PEDS _____ NICU _____ Normal Nursery
_____ Intermediate Nursery _____ OB Ward _____ Other(specify)

RECOMMENDATIONS and/or REFERRAL:

☐ No further testing required at this time. Re-test only if a change in hearing is suspected.

☐ Due to initial screening results, follow up audiologic testing by 1 month..

☐ Because of potential risk factors identified above, follow up hearing screening by 6 month of age.

For Follow Up Testing, contact the Pediatric Evaluation & Development Services (PEDS) Center at 735-2455.

Signature of Staff _____ Date _____ Signature of Parent/Guardian _____ Date _____

SAGUA MAÑAGU

Guam's First Birthing Center

Pelisa Place, 472 Chalan San Antonio, Tamuning, GU 96911

NEWBORN HEARING SCREENING

CONSENT:

I understand that Sagua Mañagu has initiated a Newborn Hearing Screening program in collaboration with Guam Early Hearing Detection & Intervention (GEHDI). This program is intended to ensure that all infants and their families have access to early hearing screening, evaluation and intervention services.

I have been informed that my newborn may be referred for further testing if so indicated by the initial screening results and/or if there are other factors that may potentially put my baby at risk for hearing loss.

I have fully read and understood the hearing screening information given to me.

I hereby give my full consent to Sagua Mañagu to perform a hearing screening through an *Otoacoustic Emission* test on my newborn's ears.

Name of Newborn

Medical Number: _____

Date of Birth: _____

Date of Screening: _____

Name of Parent/Guardian

Sex: _____ Phone: _____

Signature of Parent/Guardian

POTENTIAL RISK FACTORS:

- ❒ Family history of hearing loss
- ❒ Congenital perinatal infection
- ❒ Head/neck deformity
- ❒ Birthweight <1500 grams
- ❒ Hyperbillrubinemia
- ❒ Bacterial Meningitis
- ❒ Asphyxia
- ❒ Mechanical Ventilation
- ❒ Ototoxic Medication
- ❒ Syndrome
- ❒ No Risk Factor

RESULTS:

- ❒ PASS: peripheral hearing sensitivity is within or near normal limits bilaterally in the 2000 to 4000 Hz
- ❒ REFER: ❒ Right ear ❒ Left ear
- ❒ INCOMPLETE ❒ Right ear ❒ Left ear

RECOMMENDATIONS and/or REFERRAL:

- ❒ No further testing required at this time. Re-test only if a change in hearing is suspected.
- ❒ Due to initial screening results, follow up audiologic testing by 1 month..
- ❒ Because of potential risk factors identified above, follow up hearing screening by 6 month of age.

For Follow Up Testing, contact the Pediatric Evaluation & Development Services (PEDS) Center at 735-2455.

Signature of Staff _____ Date _____

Signature of Parent/Guardian _____ Date _____

NEWBORN HEARING SCREEN
USNH GUAM

CONSENT:

I understand that USNH Guam has initiated a Newborn Hearing Screening program in collaboration with Guam Early Hearing Detection and Intervention. This program is intended to ensure that all infants and their families have access to early hearing and screening, evaluation and intervention services.

I have been informed that my newborn my be referred for further testing if so indicated by the initial screening results and or if there are other factors that may potentially put my baby at risk for hearing loss.
I have fully read and understand the hearing screen information given to me.
I hereby give my full consent to USNH Guam to perform a hearing screening through an otoacoustic emission test on my newborn's ears.

_____ _____

Name of Newborn Name of Parent / Guardian

Medical Number: _____ Sex: _____ Phone: _____

Date of Birth: _____

Date of Screening: _____ _____

Signature of Parent/ Guardian

Potential Risk Factors:

__ Family History of hearing loss
__ Congenital perinatal infection
__ Mechanical Ventilation
__ Bacterial meningitis
__ Hyperbillirubinemia
__ Head/neck deformity
__ Birth Wt. <1500 gms
__ Ototoxic Medication
__Syndrome
__Asphyxia
__ NO Risk factor

Results

__ Pass: Peripheral hearing sensitivity is within or near normal limits bilaterally in the 2000 to 4000 Hz

__ Refer: __ Right Ear __ Left Ear

__ Incomplete __ Right Ear __ Left Ear

Recommendations

__ No further testing required at this time, retest only if suspect hearing change
__ Due to initial screening results, repeat screen by 1 month of age. Telephone the ENT clinic at 344-9271 to schedule your baby's follow-up appointment.
__ Because of potential risk factors identified above, follow up hearing screen by 6 months of age. Follow-up with your child's health care provider at the six month well-baby appointment.

_____ _____ _____ _____

Signature of Staff Date Signature of Parent/Guardian Date

NH GUAM 6200/8

Guam Early Hearing Detection and Intervention

Re-Screen Form

Ethnicity _____

Name of Newborn: _____ Date of Re-Screening: _____

Name of Parent/Guardian: _____ GEHDI Number: _____

Date of Birth: _____ Sex: _____ Phone: _____

This child has been referred to PEDS based on screening results from the Newborn Hearing Screening performed at the birthing facility.

Results of Initial Screening: Right: Left: Risk Factors:
Referral:

Results of PEDS Screening

___ Pass - Peripheral hearing sensitivity is bilaterlally within or near the 2000 to 4000 Hz range.

___ Refer: ___ Right Ear ___ Left Ear

___ Incomplete ___ Right Ear ___ Left Ear

Potential Risk Factors

___ 00 No Risk Factor
___ 01 Family History of Hring Loss
___ 02 Congenital Perinatal Infection
___ 03 Head/Neck Deformity
___ 04 Birth Wt. Less than 1500
___ 05 Hyperbillrubinemia
___ 06 Bacterial Meningitis
___ 07 Asphyxia
___ 08 Mechanical Ventilation
___ 09 Ototoxic Medication
___ 10 Syndrome
___ Other_____

Recommendations and/or Referral

___ No further testing required at this time. Re-test only if a change in hearing is suspected.
___ Referral to GEIS. Retesting before 3 months of age.
___ Because of potential risk factors identifed, follow up hearing screening by 6 months of age.

CONSENT TO RELEASE INFORMATION TO GEHDI

The GEHDI Project is required to track data and submit reports of children's hearing screening, evaluations and intervention services provided. We would like your permission to obtain this information from the Department of Education, Division of Specil Education -- Guam Early Intervention System (GEIS) for the duration of the GEHDI Project through Fall 2006.

Documents to be shared with GEHDI include: Any DOE hearing screening reports, PEDS Hearing Evaluation Reports, and the related services indicated on IFSPs through Fall 2006.

I understand my child's information will be used solely for reporting purposes and I give my permission for the release of this information to GEHDI. I also understand that I may revoke this authorization at any time.

_____ _____
Signature of Authorized PARENT or GUARDIAN **Date**

_____
Print Name Above

_____ _____
Signature of Agency Representative Releasing Information **Date**

☐ I **DO NOT** give consent for the Department of Education, Division of Special Education to release information regarding my child's hearing evaluation or his/her IFSP to the GEHDI Project for the purpose of tracking data.

_____ _____
Signature of Authorized PARENT or GUARDIAN. **Date**

Copy for parents.

Original in GEHDI File

Form Updated: June 13, 2003

RESCREEN NOTIFICATION

Date:

RE:

Date of Birth:

Prior to discharge from USNH Guam, a newborn hearing screen test was performed on your infant using evoked otoacoustic emission. This test is performed on all babies to identify those who may later have difficulties developing speech and language. Your child will need a re-evaluation to be performed to obtain further information about your child's hearing status.

Please call USNH Guam ENT, at (671) 344.927 to schedule this important appointment. It is advised during the day of the appointment to please bring a pacifier or bottle to keep your infant quiet, ideal times for re-test are during infant sleep times. The re-screen will be conducted on Tuesdays. Please make sure to tell them if this is your infant's one month or six month follow up appointment. The ENT clinic is located at USNH 2nd floor J wing (across from Dental).

Sincerely,

USNH Guam Staff

Guam Early Hearing Detection & Intervention
Hearing Screening Results

Date: _____

Child's Name: _____ **Date of Birth:** _____

Guam Department of Education
Division of Special Education
Guam Early Intervention System

EARLY INTERVENTION INTAKE FORM

Name: _____ (Last) _____ (First) _____ (Middle) DOB: _____

Sex: _____ Citizenship: _____ ID#: _____

Primary Language: _____ Ethnic Identity: _____

Health Insurance: _____ Primary Physician: _____

Home Address: _____ Village: _____

Mailing Address: _____ Village: _____

Home Phone: _____ Zip Code: _____

Mother's Name: _____ (Last) _____ (First) _____ (Middle)

Work Site: _____ Work Phone: _____

Father's Name: _____ (Last) _____ (First) _____ (Middle)

Work Site: _____ Work Phone: _____

Hospital Recommendations: _____

Major concern at this time: _____

What is your child able to do now? _____

If medical:

Any current history of medications, treatments or hospitalizations? _____

Any medical diagnosis? _____

If speech:

Any history of ear infections? How many?_____ Frequency?_____

Is your child babbling? How many words does he/she say? _____

How does he/she communicate with you? (pointing, gesturing, pulling your hand) _____

If gross/fine motor:

Is your child sitting, crawling, cruising along furniture or walking? _____

Is your child reaching, grasping and holding onto objects and/or pointing? _____

Does your child seem too stiff or too weak? _____

Any unusual movements? _____

Any other concerns? _____

Was the child born ◯ Full Term ◯ Premature ◯ No Info How many weeks premature? _____

Referred by: _____ Phone No.: _____

Referring agency or relationship to child: _____

Intake conducted by: _____ Intake Date: _____

Is this child currently receiving Early Intervention Services? ◯ Yes ◯ No

Case Assigned To: _____ Date Assigned: _____

Please return to GEIS Data System clerk upon completion.

Guam Early Hearing Detection & Intervention
(GEHDI)

APPENDIX B
RESOURCES

NEWBORN HEARING SCREENING

by Y'shua Yisrael M.S., AuD (C)-CCC-A

y identification and intervention for hearing loss has a significant and long-standing problem in the United and in other nations. The average age of detection of g loss is reported as 3 years, lesser degrees of rment may go undetected even longer. Similarly, the mportant period for speech and language development is generally regarded as 3 years. The results of reduced hearing sensitivity during infancy and early childhood interferes with the development of speech and verbal language skills, but to a lesser degree, can have harmful effects on the social, emotional, cognitive academic development, vocational and economic potential as well. Moreover, delayed identification and management of severe to profound hearing impairment may impede the child's ability to adapt to life in a hearing world or in the deaf community.

There is strong agreement that hearing impairment should be identified as early in life as possible, so that the intervention process can take full advantage of the plasticity of the developing sensory system. However, until the past two decades there has been widespread debate regarding the implementation of routine hospital hearing screening. Until the early 1990's it was discouraged, and only babies considered "AT RISK" were considered for evaluation.The criterion for identifying a newborn as "AT RISK" for hearing impairment was the presence of one or more of the following:

- History of hereditary childhood hearing impairmen
- Rubella or other non-bacterial intra-uterine fetal infections
- Head/Neck deformity
- Birth weight less than 1500 grams
- Hyperbilirubin

Recent studies however, reveal that approximately 50 percent of newborns with hearing loss do not possess any risk factors. Therefore, screening "AT RISK" infants only dentified about half of all babies born with permanent nearing loss. Failure to identify the remaining 50 percent of children with hearing loss resulted in diagnosis and ntervention at an unacceptably late age. Obviously, early dentification and intervention are important to all infants, not just those with high risk factors. Identification of the other 50 percent of infants with congenital hearing loss necessitated "Universal Hearing Screening," the hearing screening of all newborns. Simply put, Universal Newborn Hearing Screening (UNHS) is a way of finding infants born with a hearing loss soon after birth.

In order to reflect the continuum of interdisciplinary services needed to deliver a comprehensive program of infant hearing screenings, many organizations now refer to the process of hearing screening and follow up as Early Hearing Detection and Intervention (EHDI).

All infants have access to a birth admission hearing screening using a physiologic measure before hospital discharge. All infants who fail the birth admission screen and a subsequent screening at PEDS begin appropriate audiological and medical evaluation to confirm the presence of a hearing loss before three months of age. All infants with confirmed permanent hearing loss receive intervention services before six months of age. All infants who pass the newborn hearing screening but who have risk indicators for other auditory disorders receive on-going audiological and medical surveillance. Infants hearing screening and evaluation results are afforded the same protection as all other healthcare and educational information.

Otoacoustic Emission screening is the name of the hearing screening conducted on newborns. The OAE test is quick, easy, and non-invasive and requires approximately 35-45 seconds per ear. The otoacoustic emission is a low-intensity tone produced by all normal healthy ears, when hearing is impaired however, the otoacoustic emission (OAE) will be absent in the impaired ear. All babies who do not pass this simple test are seen for follow-up diagnostic testing before three months of age. Otoacoustic Emission hearing screening now performed routinely on all babies born on Guam at Sagua Mañagu Birthing Center, Guam Memorial Hospital, and the Pediatric Evaluation and Developmental Services (PEDS).

HAS YOUR BABY'S HEARING BEEN TESTED?

Y'shua Yisrael is an audiologist at the Department of Education, Division of Special Education Guam Early Intervention System, Pediatric Evaluation Developmental Services.

Summary of Universal Newborn Hearing Screening Legislation in the United States

States	Year Passed	Full Implementation by:	Requires Screening of:	Advisory Committee Established?	Covered Benefit of Health Insurance?	Report to State DOH	Provision of Educational Materials?	Informed Consent by Parents?	Liability Immunity?	Parental Objection Exclusion?
1	2	3	4	5	6	7	8	9	10	11
Arkansas	1999	July 01, 2000	Hospitals >50 births	Yes	Medicaid	Yes	Yes			Yes
California	1998	Dec. 31, 2002	Acute Care Hospitals with CCS funding		Medicaid		Yes	Yes		
Colorado	1999	July 1, 1999	85% of newborns	Yes			Yes			
Connecticut	1997	July 1, 2000	All Babies		Yes		Yes			Yes
Florida	2000	Oct. 01, 2000	All Babies		Yes		Yes			
Georgia	1999	July 1, 2001	95% of newborns	Yes			Yes			
Hawaii	1990	Not Specified	All Babies			Yes				
Illinois	1999	Dec. 31, 2002	All Babies	Yes			Yes			Yes
Indiana	1999	July 1, 2000	All Babies	Yes	Yes	Yes	Yes			
Iowa	2003									
Kansas	1999		All Babies					Yes		
Kentucky	2000		Hospitals >40 births	Yes		Yes				
Louisiana	1999	July 1, 2000†	All Babies	Yes						
Maine	1999	Nov. 01, 2001	>85%	Yes	Yes	Yes	Yes		Yes	
Maryland	1999	July 1, 2000	All Babies	Yes	Yes	Yes	Yes			
Massachusetts	1997	Not Specified	All Babies	Yes	Yes	Yes				Yes
Mississippi	1997	Jan. 1, 1998	All Babies	Yes		Yes	Yes		Yes	
Missouri	1999	Jan. 1, 2002	All Babies	Yes	Yes	Yes	Yes			Yes
Montana	2001	June 30, 2003	All Babies	Yes		Yes				
Nebraska	2000	Dec. 01, 2003	>95%		Yes	Yes	Yes			Yes
Nevada	2000	Jan. 1, 2001	Hospitals > 500			Yes	Yes			Yes

States	Year Passed	Full Implementation by:	Requires Screening of:	Advisory Committee Established?	Covered Benefit of Health Insurance?	Report to State DOH	Provision of Educational Materials?	Informed Consent by Parents?	Liability Immunity?	Parental Objection Exclusion?
New Hampshire	2000									
New Jersey	2000	Jan. 1, 2002	All Babies	Yes	Yes	Yes	Yes	Yes		Yes
New Mexico	2001		All Babies							
New York	1999	Not Specified	Hospitals >400 births			Yes				
North Carolina	1999	Not Specified	All Babies			Yes	Yes			Yes
Ohio	2002			Yes	Yes	Yes	Yes			Yes
Oklahoma	2000		All							
Oregon	1999	July 1, 2000	Hospitals >200 births	Yes		Yes	Yes			Yes
Pennsylvania	2001	July 1, 2003	85% of newborns	Yes		Yes	Yes		Yes	
Rhode Island	1992	July 1, 1993	All Babies		Yes					Yes
South Carolina	2000	June 30, 2001	Hospitals >100 births	Yes	Yes	Yes	Yes			
Texas	1999	April 1, 2001	Hospitals >100 births		Yes	Yes	Yes	Yes	Yes	
Utah	1998	July 1, 1999	All Babies	Yes		Yes	Yes			
Virginia	1998	July 1, 2000	All Babies	Yes	Yes	Yes	Yes			Yes
West Virginia	1998	July 1, 2000	All Babies	Yes	Yes	Yes				
Wisconsin	1999	July 1, 2003	88% of newborns			Yes				
Wyoming	1999	July 1, 1999	All Babies				Yes	Yes		

† Date rules are to be adopted by the state. No mention is made in the law of when full implementation must occur.

Note: This table shows only what is required by the law, which may be different from what states are doing. For example, Rhode Island has one of the best statewide tracking and reporting systems in the country, even though their law does not mention tracking and reporting.

GEHDI SUMMARY OF FINDINGS
FY 2002 - 2004

Hospital	No. of Infants Born	No. of Infants Screened	% Screened	Number of Infants Referred for Audiological Evaluation	No. of Infants found with Hearing Loss
GMHA as of Nov. 2002 to June 2004	4,083	3.213	79%	45 infants referred for full audiological evaluation of which 27 conductive hearing loss and 2 infants were diagnosed with sensori-neural	
Sagua Managu 2003 to June 2004	534	463	86%		
USNH as of Aug. 2003 to ~~June~~ April 2004	310	261	84%		
TOTAL	**4,927**	**3,937**	**79%**	***7%**	

* Of 4,927 babies screened since the initiation of newborn hearing screening prior to being Standard of Care, 7% of babies born on Guam were found to have hearing loss.

NRL
9. 1000 babies – 3 + hg
expand

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

MATERNAL AND CHILD HEALTH BUREAU

Health Resources and
Services Administration
Rockville MD 20857

APR 19 2002

Dr. Harold L. Allen
President
University of Guam
UOG Station
Mangilao, Guam 96923

154,000
4YR grant

Re: Grant # H61MC 00094-01
Universal Newborn Hearing Screening

MCH
↓
HRSA

Dear Dr. Allen:

In an effort to increase efficiency in our work process, it is necessary to establish a Single Receipt Point (SRP) at the grantee institution. Enclosed is one copy of a Notice of Grant Award (NGA) for the subject grant. It is being mailed to you because no business official was identified in the application.

The responsibility usually rests with the business official to disseminate the necessary copies of the NGA to the appropriate individuals within the grantee institution, (especially the Program Director/Principal Investigator). It is also the sole responsibility of the grantee to notify the Grants Management Branch if the SRP differs or changes from the above-referenced person.

Your cooperation and adherence with this new procedure is greatly appreciated. If you have any questions or concerns, please do not hesitate to contact Ms. Dorothy Kelley of my staff by telephone at 301-443-1440 or e-mail at dkelley1@hrsa.gov.

Sincerely,

Sandra L. Perry

Sandra L. Perry, MS
Chief, Grants Management Branch

Enclosure

cc: Irene Forsman, M.S., R.N.
Project Officer
Regional Program Consultant

1. DATE ISSUED (MO./DAY/YR.)
4/1/2002

2. CFDA NO.
93.251

3. SUPERSEDES AWARD NOTICE dated _____ except that any additions or restrictions previously imposed remain in effect unless specifically rescinded.

DEPARTMENT OF HEALTH AND HUMAN SERVICES
HEALTH RESOURCES & SERVICES ADMINISTRATION

HRSA

NOTICE OF GRANT AWARD

4. GRANT NO.
1 H61 MC 00094-01

5. FORMER GRANT NO.

6. PROJECT PERIOD — From: 3/31/2002 (Mo./Day/Yr.) — Through: 3/30/2006 (Mo./Day/Yr.)

7. BUDGET PERIOD — From: 3/31/2002 (Mo./Day/Yr.) — Through: 3/30/2003 (Mo./Day/Yr.)

	FORMULA		BLOCK		COOP AGREEMENT
	CONSTRUCTION		TRAINING		PLANNING
	RESEARCH	X	SERVICE		TECH ASSISTANCE

AUTHORIZATION (Legislation/Regulation)
PHS TITLE III, SECTION 301 42USC241

8. GRANTOR
MATERNAL AND CHILD HEALTH BUREAU

9. TITLE OF PROJECT (OR PROGRAM)
UNIVERSAL NEWBORN HEARING SCREENING

10. GRANTEE NAME AND ADDRESS
UNIVERSITY OF GUAM
OFFICE OF ACADEMIC

UOG STATION
MANGILAO, GU 96923

11. DIRECTOR OF PROGRAM (LAST NAME FIRST & ADDRESS)
NICOLAS, HEIDI SAN PHD
PROJECT DIRECTOR

UNIVERSITY OF GUAM

UOG STATION
MANGILAO, GU 96923

12. AWARD COMPUTATION FOR FINANCIAL ASSISTANCE

I PHS Grant Funds Only

II Total project costs including grant funds & all other financial participation (Select one and place NUMBER in box.) [1]

a. TOTAL APPROVED BUDGET	$ 154,115
i. Less Non-Federal Share	$ 0
ii. Federal Share	$ 154,115
(Estimated Program Income:)	
b. Unobligated Balance From the Prior Budget Periods	$ 0
(Additional Authority:)	
(Offset:)	
i. Unawarded Balance of Current Year's Funds	$
c. Less Cumulative Prior Award(s) This Budget Period	$
d. AMOUNT OF FINANCIAL ASSISTANCE THIS ACTION	$ 154,115

13. Recommended Future Support (subject to the availability of funds, satisfactory progress of the project, and the determination that continued funding is in the best interest of the Government):

YEAR	TOTAL COSTS	YEAR	TOTAL COSTS
a. 2	140,462	d.	
b. 3	147,112	e.	
c. 4	162,755	f.	

14. APPROVED DIRECT ASSISTANCE BUDGET (IN LIEU OF CASH):

a. Amount of PHS Direct Assistance	$
i. Unawarded Balance of Current Year's Funds	$ 0
b. Less Cumulative Prior Award(s) This Budget Period	$ 0
c. AMOUNT OF DIRECT ASSISTANCE THIS ACTION	$ 0

15. PROGRAM INCOME SUBJECT TO 45 CFR PART 74, SUBPART C, OR 45 CFR PART 92, SUBPART C SHALL BE USED IN ACCORD WITH ONE OF THE FOLLOWING ALTERNATIVES: [A]

A=Additional Cost, B=Deduction, C=Finance Non-Federal Share, D=Cost Sharing or Matching, E=Other

REMARKS: (Other Terms and Conditions Attached)

SEE ATTACHED CONDITIONS OF AWARD

GRANTS MANAGEMENT OFFICER: (Signature) Sandra L. Perry (Name-Type/Print) SANDRA L. PERRY (Title) GRANTS MANAGEMENT OFFICER MCHB

OBJ. CLASS	41.51	18. CRS-EIN	1970032933A1	19. FUTURE RECOM FUNDING

FY - CAN	DOCUMENT NO.	ADMINISTRATIVE CODE	AMT. ACTION FIN. ASST.	AMT. ACTION
2002 3893045	H61MC00094A0		154,115	

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Centers for Disease Control
and Prevention

JUL 0 1 2004

Velma A. Sablan, Ph.D., Project Director
University of Guam
Office of Academic and Student Affairs
UOG Station
Mangilao, Guam 96923

Reference: UR3/CCU923118-02

Dear Dr. Sablan:

Enclosed is the Notice of Award for the "Early Hearing Detection and Intervention (EHDI) Program" under Program Announcement Number 03055 in the amount of $146,355.00. Please refer to the continuation pages for specific details.

The Project Officer listed in the Notice of Award will be responsible for the review and programmatic monitoring of your assistance award. The Contract/Grants Management Specialist, Vincent J. Falzone has been assigned the business management responsibilities for your award. Any correspondence directed to this office should include the original and two copies and reference the cooperative agreement number given above. It should be addressed to Rebecca B. O'Kelley, Grants Management Officer, Attn: Vincent J. Falzone, Contract/Grants Management Specialist.

All requests which require prior approval of the Grants Management Officer (i.e. rebudgeting, contracting, etc.) must be **co-signed** by the Project Director and an official of your business office and should contain sufficient information to process such requests. **If this procedure is not followed, your request will be returned unprocessed.**

An annual Financial Status Report (FSR) must be submitted within 90 days after the end of the budget period and should include only funds authorized and expended during the budget period for which the report is being submitted. The FSRs should be completed and mailed to the appropriate Grants Management Specialist listed on the contact list. The FSR form 269A can be downloaded from the Internet address **http://grants.nih.gov/grants/forms.htm**. NOTE: Any FSR submitted on a cumulative basis will be returned. Please note page 2 of the award for the submission of progress reports.

If you have any questions concerning this cooperative agreement, please contact the appropriate individuals listed in the Notice of Award.

Sincerely,

Shirley Wynn,
Grants Management Officer
International and Territories Acquisition
and Assistance Branch

Enclosures

cc: Grantee's Business Office
Lisa T. Garbarino, NCBDDD, M/S F34

GEHDI FACT SHEET

DID YOU KNOW?.....

1. Approximately 3 in 1000 newborns with permanent hearing loss.
2. 1 in 1000 babies are born deaf.
3. 90% of babies with hearing loss are born to normal hearing parents.
4. There are varying degrees of hearing loss, ranging from mild to profound.
5. 38 states currently have laws mandating newborn hearing screening
6. Newborn hearing screening is endorsed by the American Academy of Pediatrics.
7. Over 50% of children born with hearing loss do have any risk factors for hearing loss.
8. Hearing loss is one of the most frequently occurring congenital disorders.
9. On Guam the number of newborns screened is approx: 4000 newborns since November 2002.
10. On Guam total number of infants referred to Audiologists approx: 60 infants.
11. On Guam total number of infants identified with hearing impairment is 2 infants.
12. Early detection of hearing loss in a child and early intervention and treatment has been demonstrated to be highly effective in facilitating a child's healthy development in a manner consistent with the child's age and cognitive ability.
13. Recent research indicates that children identified with hearing loss, who receive intervention before six months of age, develop language (spoken or signed) comparable with their hearing peers.
14. The incidence of congenital hearing loss is greater that the sum total of all other conditions detected by newborn metabolic blood screening tests.
15. Without universal newborn hearing screening, the average age of diagnosis is over two years of age.
16. Hearing loss is invisible, but the effects can lead to lack of exposure to language and can cause lifelong cognitive, educational and vocational challenges.
17. Technology now exists to provide safe, cost effective and reliable methods to assess hearing in newborns, Universal Newborn Hearing Screening possible and practical. Screening involves the use of non-invasive, objective physiologic measures.
18. Newborn hearing screening is not a "standard of care" for newborns on Guam.
19. There is no Legislative mandate on Guam for Universal Newborn Hearing Screening.

References Cited:

1. U.S. Center for Disease Control (CDC) www.cdc.gov/ncbddd
2. Guam Early Hearing Detection and Intervention (Guam EHDI) Data Tracking & Surveillance System