

**SOUTH DAKOTA
EARLY HEARING DETECTION AND INTERVENTION (EHDI)
TRACKING, SURVEILLANCE, AND INTEGRATION**

TABLE OF CONTENTS

I.	Background and Need	1
II.	Work Plan.....	6
III.	Collaborative Efforts	13
IV.	Program Capacity.....	14
V.	Staffing and Management Plan	15
VI.	Evaluation Plan	15
VII.	Appendices	
	A. Organizational Chart	
	B. Curriculum Vitae for Key Personnel	
	C. Job Descriptions	

I. BACKGROUND AND NEED

South Dakota is one of the nation's most rural states with 781,919 people residing within its 75,885 square miles. Nearly 60 percent of South Dakota's total population lives in small, rural communities of 5,000 or fewer people, with communities of less than 500 people making up a large portion of this population group. Over half (34) of the state's 66 counties are classified as frontier (population density of less than six persons per square mile) while 29 counties are considered rural (population density of six or more persons per square mile but no population centers of 50,000 or more). Three counties are classified as urban (have a population center of 50,000 or more). Of the states total population, 88.7 percent are White (of which 99.3 percent are White alone, not Hispanic or Latino), 9.0 percent are Native American, and the remaining 2.3 percent are classified as some other race.

The South Dakota Department of Health (DOH) was first awarded a CDC Cooperative Agreement for the Early Hearing, Detection and Intervention (EHDI) Tracking, Surveillance and Integration in 2001 to establish and implement a surveillance and data tracking system which links the data from the three components of the EHDI system – screening, audiologic diagnosis, and early intervention. The EHDI cooperative agreement supports the activities of the department's Newborn Hearing Screening Program whose

goal is to have a fully implemented, sustainable program for newborn hearing screening, audiologic diagnosis, and enrollment in early intervention.

Hearing loss is the most common birth defect with as many as 3 to 4 out of every 1,000 babies in the U.S. born with some level of hearing loss. Based on this estimate, of the 12,000 plus infants born in SD 33 to 44 babies are born with hearing loss each year. The DOH Newborn Hearing Screening Program recommends:

- 1 All babies be screened by *1 month* of age, preferably before leaving the hospital;
- 2 If after two screenings the baby does not pass, a medical evaluation and hearing evaluation be completed by *3 months*; and
- 3 Once a hearing loss is detected, services and intervention should be started by *6 months* of age.

This *1-3-6* guidelines were developed to give the baby the best possible timeframe for screening, diagnosis, and treatment/services if appropriate. The earlier a baby is determined to have a hearing loss and begins receiving services, the more likely that speech, language, and social skills will reach their full potential.

It is the standard care of practice for birthing facilities statewide to screen all newborns prior to hospital discharge. If the newborn passes this screening, there is no need for any follow-up. For those infants not passing the initial screen, the DOH asks a hearing re-screen be done within the first month of age. If the infant passes the re-screen, no further screening is necessary at this time. Infants who do not pass the re-screen are referred to their primary care provider (PCP) to determine if there is any medical reason for not passing. If a medical reason is identified, a notation is made in the infant's medical record and appropriate medical treatment is provided by the PCP. Regardless of whether a medical reason is identified, it is recommended that all infants not passing the re-screen are referred to a diagnostic audiologist. The diagnostic audiologist completes an evaluation on the infant and a referral is made to the Birth to Three Program if a confirmed hearing loss is detected.

EHDI funds have played an important part in the development and maintenance of the state's Electronic Vital Records and Screening System (EVRSS). EVRSS is a web-based system that incorporates web technology to improve the vital records system as well as newborn metabolic and hearing screening data. Statewide implementation of EVRSS began on February 11, 2003. To ensure an effective follow-up, all of the information, starting with the initial screening, to the possible re-screening, PCP evaluation and diagnostic audiologic evaluation are all entered into the EVRSS program. This allows for an effective tracking and follow-up for all the infants in the state of South Dakota. This assures that timely intervention can be initiated if a hearing loss is detected.

EVRSS enables the Newborn Hearing Screening Program to track individual infants as well as collect and analyze quantitative data. Information on infants screened and results of the screens is provided by the 25 birthing facilities, 3 of which have a Neonatal

Intensive Care Unit (NICU). There are additional hospitals not considered birthing facilities who have screeners as they may have occasional deliveries. The Newborn Hearing Screening Program utilizes EVRSS to determine the percent of infants screened/not screened by facility, the number of infants referred for further testing and evaluation, and the number of infants referred to early intervention programs. All information is available by facility and is provided back to the facility on a periodic basis. EVRSS also allows the Newborn Hearing Screening Program to track infants from the time of the initial hearing screening all the way to the early intervention process when needed. Infants who do not pass their first two screenings are referred to a physician for a medical evaluation as well as a diagnostic audiologist for an auditory evaluation. All of the results from these evaluations are entered into EVRSS which helps ensure infants receive proper and appropriate intervention in a timely manner.

EVRSS includes information on the date and results of the initial screening, re-screening, PCP evaluation, and diagnostic audiologic evaluation. This allows for effective tracking and follow-up for all the infants in South Dakota and assure timely intervention can be initiated if a hearing loss is detected.

EVRSS has the ability to identify the residence of those infants born in South Dakota. Using this information, the Newborn Hearing Screening Program sends a reminder letter to those families whose infant is in need of an initial or re-screening. This letter also provides contact information on finding the location nearest them for a screening to be done. To make screenings more readily accessible for all infants, six hearing screeners were purchased by the Newborn Hearing Screening Program and distributed to medical providers located in identified residential areas of infants who are in need of either an initial or re-screening. The Newborn Hearing Screening Program also provided education, training and technical assistance on the use of the hearing screeners.

EVRSS also allows the Newborn Hearing Screening Program to provide reports on "border babies". Information on hearing screening results, medical and audiological evaluations, and referred services is provided to other state newborn hearing screening programs when the infant is born in South Dakota but is a resident of another state. This helps ensure fewer infants are lost to follow-up and appropriate care will occur when needed. The Newborn Hearing Screening Program has identified a similar system should be developed for gathering newborn hearing screening results for infants born in another state but who are residents of South Dakota. Since these infants don't have an electronic birth certificate, they are not included in EVRSS and follow-up and tracking can sometimes be delayed.

EVRSS has multiple resources within its electronic birth certificate (EBC). The EBC collects:

- 1 Mother's and father's (if available) demographic information (i.e., ethnicity, race, education, and income);
- 2 Mother participation in WIC, prenatal visits, medical history during the pregnancy, which includes a family history of hearing loss, and the onset and

- characteristics of the labor and delivery;
- 3 Newborn's demographics, abnormal conditions, congenital anomalies upon delivery, administration of initial Hepatitis B, metabolic screening results and follow-up, and hearing screening results.

The hearing screening results also include the medical and audiological evaluation information and the intervention referrals that were made. When a hearing loss is diagnosed, the dated documentation entered into the EVRSS program identifies ear, specific results, type and severity of the hearing loss (i.e., minimal and unilateral).

The DOH has established a voluntary referral system with hospital and the Birth to Three Connection Program for infants referred for further evaluation and services. Birth to Three provides link to referral resources and potential funding sources for families of infants with potential hearing loss. To strengthen efforts to identify children with late and progressive onset hearing loss in a timely manner, the Newborn Hearing Screening Program purchased 12 handheld hearing screeners for the Birth to Three Program. Birth to Three staff have been trained and educated by the Newborn Hearing Screening Program's audiological consultant on the use and care of the equipment and the importance of screening children of this age group on a yearly basis. It was also explained the children they serve are part of the at risk group for developing any degree of hearing loss which will compromise their speech and learning ability. Hearing screening results from Birth to Three screenings are sent to the Newborn Hearing Screening Program so monitoring and follow-up can be done regarding late onset or progressive hearing loss and the date intervention and services were initiated.

The Newborn Hearing Screening Coordinator conducts periodic site visits to re-enforce training on how to conduct screenings as well as entering results into EVRSS. The site visits provide an opportunity to strengthen the working relationship between providers and the Newborn Hearing Screening Program.

There are several challenges to maintaining and enhancing the newborn hearing screening in South Dakota. South Dakota does not mandate newborn hearing screening so participation by hospitals and healthcare providers in any screening and intervention activities undertaken by the state is voluntary. However, by working with birthing hospitals in the state, the Newborn Hearing Screening Program has been able to achieve a 96% rate of infants born in the state who have been screened prior to hospital discharge.

Access to diagnostic audiologists is limited in the state with only seven diagnostic audiologists in the state – one in Rapid City (far western South Dakota), two in Sioux Falls (extreme eastern South Dakota, one in Vermillion (extreme southeastern South Dakota), two in Aberdeen (northeast South Dakota), and one in Pierre (central South Dakota). This results in many instances where families frequently have to drive over 200 miles for diagnostic evaluations.

Aberdeen Area Indian Health Services (IHS) provides services to the Native American population on the state's nine reservations. The Native American population is a very

transient population and getting follow-up services can be problematic. Poverty levels for counties on Indian reservations are also significantly higher than other areas of the state which can provide a barrier to accessing services. The Newborn Hearing Screening Program continues to work closely with IHS to ensure infants receiving care in their facilities receive appropriate hearing screening and follow-up.

In 2006, the Newborn Hearing Screening Program has replaced 21 audiometers located in the Department of Health, Community Health Services office around the state. These audiometers are used by community health nurses to conduct hearing screening for school-aged children, from 5-18 years of age. A training CD was produced on the proper use of the audiometer and documentation on the audiogram card. The CD recommends a child should be screened three times during their years in school. If the child does not pass a screening and subsequent re-screening, the child should be referred to a diagnostic audiologist. There was also information provided explaining the risk factor leading up to delayed onset and progressive hearing loss. The CD was distributed statewide to school nurses and community health nurses to ensure children are screened periodically from the ages 5-18 years of age and intervention can begin promptly once a hearing loss is diagnosed.

One of the main areas of focus for the Newborn Hearing Screening Program during the project period will be on those children who are at high risk or have late onset of hearing loss. Because there are a growing number of infants requiring care in neonatal intensive care units there are an increasing number of high risk and late onset children. The Newborn Hearing Screening Program will enhance EVRSS to identify, screen, and refer for appropriate follow-up those high risk and late onset children. The Newborn Hearing Screening Program has worked closely with the Office of Data, Statistics, and Vital Records (DSVR) to enhance the birth certificate worksheet that is completed as part of the EBC in EVRSS to capture the risk factors at the time of birth for high risk and late onset hearing loss for all infants born in South Dakota. This information will help assist in the identification of those infants who will need regular hearing screening follow-up. The diagnostic audiologists will enter the evaluation data results of those children they have seen. For those infant who are in the NICU, screening will be done and documented into the EVRSS prior to leaving the unit.

EHDI funding will be used to continue to provide training and support to birth facilities, clinics, physicians, audiologists, diagnostic audiologists, and Birth to Three staff. Education will focus on the importance of newborn hearing, at what age a child needs to be screened, and the signs and factors that are present for a current, late onset or progressive hearing loss, as well as training for new personnel doing screening and data entry. The Newborn Hearing Screening Program will work with Dr. Julia Jones who serves as the diagnostic audiological consultant to the program to evaluate if there are areas in the state or communities that need additional education. The Newborn Hearing Screening Program will also continue efforts to improve the reports provided to hearing screening facilities, diagnostic audiologist, and/or physicians of those infants needing further follow-up to determine if there is a need for another screening or if those infants who were diagnosed with a hearing loss were referred to any type of intervention.

The South Dakota Newborn Hearing Screening Program will continue to monitor, train, and educate the Birth to Three Program on the importance in screening children of this age group on a yearly basis because the children they serve are part of the at risk group for developing any degree of hearing loss which will compromise their speech and learning ability. Training will also be provided as needed on the use and care of screening equipment.

The Newborn Hearing Screening Program continually monitors newborn hearing screening data entered into EVRSS to check for data entry errors. By using the reports available in the EVRSS Program and working with other agencies, questionable trends can be investigated, addressed, and data corrected. For instance, looking at newborn hearing screening results, the Newborn Hearing Screening Program identified numerous cases of Rubella. Working with DOH Office of Disease Prevention it was determined that there were no active cases of Rubella among those infants identified but instead there were data entry errors on the EBC. Working with DSVR, the Newborn Hearing Screening Coordinator provided education on proper data entry to correct the problem.

II. WORK PLAN

GOAL: By June 1, 2011, the South Dakota Department of Health will maintain and enhance a fully implemented, sustainable program for newborn hearing screening, audiologic diagnosis, and enrollment in early intervention in South Dakota.

Measures of Success: 98% of infants born in South Dakota are screened before one month of age; 72% of infants identified as needing follow-up receive further medical and hearing evaluation before 3 months of age; 78% of infants identified with a hearing loss receive services/interventions before 6 months of age.

Objectives/Activities	Data/Evaluation	Timeframe for Assessing Progress
<p><i>Objective 1.</i> By July 1, 2009 and ongoing, assure 98% of infants born in South Dakota are screened for hearing loss before one month of age, 72% receive needed follow-up screening before three months of age, and 78% receive services/interventions before six months of age.</p> <ul style="list-style-type: none"> •1 Maintain/enhance EVRSS for newborn hearing screening. •2 Meet regularly with DSVR to discuss improvements in EVRSS to ensure collection of needed hearing data. •3 Work with DSVR to resolve issues/problems with EVRSS which impact the newborn 	<ul style="list-style-type: none"> •7 For each facility and statewide, monitor the total births, hearing screening and re-screening results, and referrals from reports available in EVRSS. 	<ul style="list-style-type: none"> •1 Monthly

<p>hearing screening portion of EVRSS.</p> <ul style="list-style-type: none">•4 Develop a system for receiving timely reports of newborn hearing screening results for South Dakota resident infants born out-of-state.•5 Provide timely reports of newborn hearing screening results to other state hearing screening programs for infants born in South Dakota but who are residents of others states.•6 Develop a system for receiving timely newborn hearing screening results from the Birth to Three Program as they are done.		
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--	--

Objectives/Activities	Data/Evaluation	Timeframe for Assessing Progress
<p><i>Objective 2.</i> By July 1, 2009 and ongoing, 100% of birthing hospitals and diagnostic audiologists will have access to EVRSS and will be able to enter the initial newborn hearing screening and/or re-screening results.</p> <ul style="list-style-type: none"> •1 Provide EVRSS access to all birthing hospitals and diagnostic audiologists, to allow them to enter hearing screenings, follow-up and possible intervention data. •2 Utilize EVRSS to collect standardized EHDI data from all birthing hospitals and diagnostic audiologists, to allow them to track all infants in need of follow-up screening. •3 Provide training, education, and technical support to screening personnel on importance of screening and proper screening techniques. •4 Provide training, education, and technical support to data entry personnel to ensure complete and accurate reporting. •5 Monitor EHDI data in EVRSS to check for data entry errors and provide education and technical assistance to correct identified problems. •6 Provide individualized periodic and year-end reports to birthing hospitals, audiologists, clinics, and provide technical assistance to address identified issues. 	<ul style="list-style-type: none"> •7 Continue to evaluate who has the potential as a birthing or audiological diagnostic facility to ensure they have access capabilities to do data entry for follow-up. 	<p>Monthly</p>

Objectives/Activities	Data/Evaluation	Timeframe for Assessing Progress
<p><u>Objective 3.</u> By July 1, 2009 and ongoing, 97% of clinics with 5 or more physicians and diagnostic audiologists will have access to EVRSS and will be able to enter the medical and audiological evaluations for those infants having follow-up and intervention actions.</p> <ul style="list-style-type: none"> •8 Provide EVRSS access to designated clinics and diagnostic audiologists, to allow them to enter hearing screenings, follow-up and intervention/services data. •9 Utilize EVRSS to collect standardized EHDI data from designated clinics and diagnostic audiologists, to allow them to track all infants in need of follow-up screening and/or medical and audiological follow-up, evaluations and intervention/services data. •10 Provide training, education, and technical support to screening personnel on importance of screening and proper screening techniques. •11 Provide training, education, and technical support to data entry personnel to ensure complete and accurate reporting. •12 Monitor EHDI data in EVRSS to check for data entry errors/provide education/technical assistance to correct identified problems. •1 Provide individualized periodic and year-end reports to designated clinics, and diagnostic audiologists, and provide technical assistance to address identified issues. 	<ul style="list-style-type: none"> •2 Continue to evaluate who has the potential for providing medical and audiological evaluations and ensure they have access capabilities to do data entry for follow-up. 	<p>Monthly</p>

Objectives/Activities	Data/Evaluation	Timeframe for Assessing Progress
<p><i>Objective 4.</i> By July 1, 2009 and ongoing, 100% of the Birth to 3 offices and diagnostic audiologists will be able to provide screenings and/or audiological results for those children they are providing services to.</p> <ul style="list-style-type: none"> •3 Collect, monitor, and analyze EVRSS data to identify infants at high risk for delayed onset or progressive hearing loss for future follow-up and/or intervention. •4 Explore options for contacting parents of infants who have been identified through EVRSS as being at risk for delayed or progressive onset hearing loss. •5 Provide education to the medical community about the importance of hearing screening and delayed/progressive onset hearing loss. •6 Monitor and provide technical assistance to community health nurses on the importance of yearly hearing screening, use and maintenance of audiometers used to conduct hearing screenings for school-aged children, and submission of results to the Newborn Hearing Screening Program •7 Monitor and provide technical assistance to Birth to 3 staff on the importance of yearly hearing screening, use and maintenance of hearing screeners, and submission of results to the Newborn Hearing Screening Program 	<ul style="list-style-type: none"> •8 Continue to evaluate needs, provide education and services to assist with ensuring screenings are being done and results are available to the Newborn Hearing Screening Program for data entry and follow-up. 	<p>Monthly</p>

Objectives/Activities	Data/Evaluation	Timeframe for Assessing Progress
<p><u>Objective 5.</u> By July 1, 2009 and ongoing, the Newborn Metabolic Screening Program will provide parent education in three formats.</p> <ul style="list-style-type: none"> •1 Send letters to parents of infants who have been identified as needing initial or follow-up hearing screening and educate them on the importance of screenings/evaluations, risks of delayed onset hearing loss, and information on where screening/follow-up services can be done. •2 Document concerns from parents regarding EHDI process and develop plan for addressing concerns. •3 Maintain and update Newborn Hearing Screening Program website to include resource links to available services, newborn hearing information, and contact information for the Newborn Hearing Screening Program. •4 Provide newborn hearing educational materials in the <i>Bright Start Welcome Box</i> which is sent to all new parents of infants born in South Dakota. 	<ul style="list-style-type: none"> •5 To have available educational materials and provide notification to identified families of infants needing screenings, having the risk for delayed onset and current information regarding hearing loss in infants and children. 	<p>Monthly</p>

Objectives/Activities	Data/Evaluation	Timeframe for Assessing Progress
<p><i>Objective 6.</i> By July 1, 2009 and ongoing, the Newborn Hearing Screening Program will monitor five data elements to identify trends and progress to achieving objectives.</p> <ul style="list-style-type: none"> •1 Utilize EVRSS to determine percent of infants screened/not screened by facility, number referred for further testing/evaluation, and the number enrolled in early intervention. •2 Identify unexpected clusters of infants with hearing loss as well as unexpected differences in EHDI screening performance between key variables such as participating birth hospitals, racial/ethnic sub-populations, gender, geographic location, false positive rates, and loss to follow-up. 	<ul style="list-style-type: none"> •3 Monitor and analyze information of those identified needs to assess any trends which may need addressing and reported to specific agencies if a correction should be done. 	<p>Monthly</p>

III. COLLABORATIVE EFFORTS

South Dakota's public health system includes the DOH. Other state agencies, community health center, IHS, tribal health representatives and other public/private organizations. Through its work on maternal and child health issues and the Newborn Hearing Screening program, the DOH has developed numerous collaborative relationships with these entities in an effort to meet the health care needs of South Dakotans.

The CSHS director services on the State Interagency Coordinating Council for Birth to 3 Connections, South Dakota's early intervention program. The purpose of the council is to ensure collaboration in the maintain and implementation of a statewide, comprehensive, coordinated, multi-disciplinary, and interagency service delivery system for children eligible under Part C of the Individuals with Disabilities Education Act (IDEA). The system is designed to ensure the availability and accessibility of early intervention services for all eligible infants and toddlers and their families. The DOH participates in an interagency agreement with the Department of Education, Human Services and Social Services required and provides guidance for their implementation. Under this agreement, the DOH provides the following services:

- 1 Child health conferences (i.e., nursing physical assessments, developmental screening, age-appropriate vision/hearing screening and patient education);
- 2 Care coordination for children with special health care needs (CSHCN)
- 3 Age-appropriate immunizations;

- 4 Newborn assessment (i.e., nursing physical assessment, parent education)
- 5 School health services as designated in contractual agreements with individual schools;
- 6 Medical evaluations, diagnosis and treatment by pediatric specialty physicians for CSHCN;
- 7 Nutrition education and counseling for CSHCN; and
- 8 Supplemental food program for women, infants and children (WIC)

The DOH also collaborates informally and through a formal contract with the South Dakota Parent Connection. Parent Connections serves as the Parent Training and Information Center for the state and as such provides parent workshops and trainings throughout the state as well as training for CSHS staff.

The DOH has a long-standing collaborative relationship with the South Dakota University Affiliated Program (UAP). As a Leadership Education in Neurodevelopment and Related Disorder (LEND) grantee, the UAP is serving a vital role as the only training program in the state that provides specialty education opportunities to graduate students in the fields of medicine, nursing, social work, nutrition, speech pathology, audiology, pediatric dentistry, psychology, occupational therapy, physical therapy, and health administration. LEND graduates are specially trained to meet the unique needs of residents of South Dakota. The Associate Director of the UAP has a history with Newborn Hearing Advisory committee and both the Title V MCH director and CSHS director serve on the LEND Advisory committee. In addition to LEND, MCH, and UAP coordinate on a number of other training and interagency projects.

The DOH has worked closely with DSVR, Birth to Three, IHS, Parent Connection, UAP, hospital, physicians and audiologist in the state to implement the Newborn Hearing Screening Program. Interaction with all of these groups is necessary has been essential in order to utilize their expertise in the development of training activities, protocols/policy guidelines, referral system, reporting, and education materials.

IV. PROGRAM CAPACITY

The DOH is an executive-level department with the Secretary of Health appointed by, and reporting to, the Governor. The mission of the DOH is to prevent disease and promote health, ensure access to necessary, high quality care at a reasonable cost, and efficiently manage public health resources. The DOH is organized into three divisions – Health and Medical Services, Administration, and Health Systems Development and Regulation.

The Division of Health and Medical Services (HMS) is the health care delivery arm of DOH and consists of four offices – Health Promotion, Family Health, Community Health Services/Public Health Alliance, and Disease Prevention.

- 1 Office of Health Promotion (OHP) – OHP coordinates a variety of programs designed to promote health and prevent disease. The mission is to improve quality of life, health and well being through effective leadership, surveillance, education, advocacy,

and partnership development. Program areas within this office include tobacco control, coordinated school health, diabetes, nutrition, physical activity, breast and cervical cancer, cancer registry, oral health, and chronic disease epidemiology.

- 2 *Office of Family Health (OFH)* – OFH provides leadership and technical assistance to assure systems that promote the health and well-being of women of reproductive age, infants, children, and adolescents, including those with special health care needs and their families. The Newborn Hearing Screening Program is located within this office. Other program areas include Children's Special Health Services (CSHS), perinatal health, newborn metabolic screening, newborn hearing screening, Women, Infants, and Children (WIC), family planning, and child/adolescent health. OFH administers the Maternal and Child Health (MCH) block grant for the state.
- 3 *Office of Community Health Services and Public Health Alliance (OCHS)* – OCHS provides professional nursing and nutrition services and coordinates health-related services to individuals, families, and communities across the state. Services include education and referral; immunizations; developmental screenings; management of pregnant women; WIC; family planning; nutrition counseling and education; general health screenings. In most counties, these services are delivered at state DOH offices. In 11 Public Health Alliance sites, OCHS coordinates the delivery of services through contracts with local county governments and private health care providers.
- 4 *Office of Disease Prevention (ODP)* – ODP coordinates infectious disease prevention and control programs including immunizations and investigation, treatment, and control of communicable disease.

The Division of Administration provides centralized support of programs including financial management, computer systems, communications, health planning, legislative coordination, data collection, vital statistics, and the public health laboratory. The Division of Health Systems Development and Regulation (HSDR) administers regulatory programs related to healthcare facilities and health protection. The Office of Rural Health (ORH) is located within HSDR and works to improve the delivery of health services to rural/medically underserved communities with an emphasis on access including recruitment of health professionals, technical assistance to health care facilities, development, and use of telemedicine applications, and general information and referral. The State Epidemiologist reports to the Secretary of Health and integrates epidemiologic services throughout the DOH and provides support, technical assistance, and guidance to DOH programs as needed.

As is noted above, the Newborn Hearing Screening Program is located within the HMS Office of Family Health. The program is responsible for implementing a program for newborn hearing screening, audiological diagnosis, and enrollment in early intervention. Terry Disburg, RN serves as the Newborn Hearing Screening Program Coordinator. In this capacity, Terry is responsible for the daily activities of the Newborn Hearing Screening Program. She will provide direct oversight and expertise to ensure all components of the EHDI grant are implemented and report project updates as required by the grant.

The Newborn Hearing Program works closely with MCH programs on activities to

improve the health of South Dakota infants and children. The Newborn Hearing Program Coordinator is a member of the MCH team that meets regularly to discuss issues impacting women, infants, children, adolescents, and children with special health care needs. The MCH team is made up of the Administrators for the OFH, OHP, and OCHS, the State Nutritionist, and Chronic Disease Epidemiologist, as well as the oral health, tobacco control, coordinated school health, nutrition/physical activity, CSHS, perinatal health, family planning, WIC, oral health, and child/adolescent health programs.

With limited numbers of staff, it is the norm for staff to be cross-utilized by DOH programs and divisions based on expertise and department needs. HMS employees are on 100% time study which allows for specified personnel to be paid by a variety of programs. This cross-utilization provides for consistency of message, ability to use a variety of funding sources as appropriate, and lack of duplication.

A DOH organizational chart is provided in Attachment A.

V. STAFFING AND MANAGEMENT PLAN

The Newborn Hearing Screening Program is currently comprised of the program coordinator Terry Disburg (0.4 FTE), Bev Duffel (0.1 FTE). Kayla Tinker is the Administrator for the Office of Family Health and provides oversight to the Newborn Hearing Screening Program. In addition, staff from DSVR also work with the Newborn Hearing Screening Program to maintain and support EVRSS. Job descriptions and curriculum vitae for key personnel are provided in Appendix B and C.

VI. EVALUATION PLAN

The DOH Newborn Hearing Screening Program began building its newborn hearing screening surveillance system in 2001 with the development of EVRSS. As was mentioned earlier, the Newborn Hearing Screening Program utilizes EVRSS to determine the percent of infants screening/not screened in the state by facility, the number referred for further screening and evaluations, and the number referred to an early intervention program. This information is provided back to facilities on a regular basis. Reports can be produced to track infants from the time of the initial hearing screening all the way through the early intervention process, when needed. EVRSS also has the capacity to identify unexpected clusters of infants with hearing loss in particular regions at particular times, unexpected differences in EHDI screening performance between key variables such as participating birth hospitals, racial/ethnic sub-populations, gender, geographic location, false positive rates, and loss to follow-up.

EVRSS has the capability for reporting and trend setting purposes, to gather maternal demographics, educational and economic level, along with gender, racial ethnic sub populations and geographic locations (urban vs. rural). Data is used for: (1) program planning, (2) program implementation, (3) assessing program effectiveness, and (4) improving program accountability. The department's Chronic Disease Epidemiologist will provide epidemiological support for the Newborn Hearing Screening Program

throughout the grant period.

By using the EVRSS Program and all the EBC information as previously discussed, the Newborn Hearing Screening Program will be able to continue to develop an analytic plan to address loss to follow-up rate. These reports can be designed to be specific regarding birthing facilities, the not passed/referral rate for quality assurance purposes, and identifying and comparing demographic differences that may show trends statewide.

Specific data/evaluation methodology for objectives and activities is delineated in "Section B. Workplan".