

MONTANA's CDC-EHDI PROJECT 2008 – 2011 **REVISED**

Background and need – The national “1-3-6” standard is the guiding principle of Montana’s statewide program – newborn hearing screening completed by one month of age, needed audiological assessment completed by three months of age, and early intervention services provided by no later than six months of age. Montana’s initial legislation to implement voluntary newborn hearing screening by the hospitals that provided obstetric services was enacted in 2001 and implemented through the Montana Department of Public Health and Human Services (hereinafter “the department”) in 2002 when the first three-year HRSA universal newborn hearing screening and intervention (UNHSI) hearing grant was received to fund implementation. In 2007, the legislature amended the original enabling legislation (and directed the department to promulgate administrative rules) to mandate and implement: (1) universal newborn hearing screening by all hospitals providing obstetric services before discharge or by one month of age; (2) recording and submission of newborn hearing screening results in state-approved tracking software; (3) recording and submission in state-approved tracking software of all audiological assessment results on babies referred to audiologists for assessment after receiving “Refer” results at completion of newborn hearing screening; and (4) electronic referral of all babies assessed as deaf or hard of hearing (D/HH) to the Montana School for the Deaf and Blind (MSDB), which is statutorily required to track all deaf and blind children from point of assessment through education or intervention. (See Appendix G for copies of the current legislation and administrative rules).

Because the program has only recently changed from five years of voluntary status to mandatory status, the “**maturity**” of the program has substantially changed. Although state program encouragement and tracking support of local hospitals during the five years the statewide

program was voluntary resulted in all hospitals participating in screening and reporting to the state (with varying degrees of completeness), the administrative rules promulgated to detail the implementation of the statewide screening effort have added a level of complexity that was not previously expected. Further, audiologists are now required to report their assessment results to the state surveillance program, which was not a requirement under the voluntary program. The first year of mandatory newborn hearing screening by birthing facilities actually began in February of calendar year 2008. Electronic referral from the screening/assessment monitoring program to the MSDB of children assessed as deaf or hard of hearing has been implemented for the last six months.

Lost To Follow Up (LTFU) The latest complete year of Montana’s screening, assessment and intervention data is calendar 2006 when the screening program was still voluntary and reporting of audiological assessments was not yet required. Identification of babies receiving Early Intervention services provided through Part C of IDEA was not provided, nor was electronic linking of intervention services tracked by the Montana School for the Deaf and Blind in place.

Table 1 shows the LTFU rate for screening, audiologic assessment, and intervention.

Table 1. LTFU Rates for Montana’s EHDI Program, Calendar Year 2006

Screening	TOTAL	PERCENT
Occurrent Births	12,488	100%
Deaths and parent refusal of screening	86	<1%
Babies available to screen	12,402	(100%)
Screened	11,615	94%
Screened by 1 month of age	11,238	91%
Not screened – missed or unknown - LTFU	787	6%
Audiological Assessment		
Babies with Refer result at end of NBHS	75	100%
Babies with audiological assessment in software	18	24%
Babies assessed by 3 months of age	5	7%
Babies assessed between 3 and six months of age	5	7%
Babies assessed after 6 months of age	7	9%

No information about assessment - LTFU	57	76%
Early Intervention		
Babies receiving services by six months of age	Unknown	Unknown

Montana’s statewide program needs to reduce LTFU rates for newborn hearing screening and for audiologic assessments. The surveillance program needs to secure and use expanded early intervention data to more accurately assess and address the barriers to achieving appropriate early intervention by six months of age or sooner. This can be achieved by working collaboratively with the department’s Part C program to obtain more detailed information about date of referral and date of enrollment and to match their service rolls with birth certificate and screening data. The program needs to make newborn hearing screening and assessment data more accessible to local service providers and to facilitate entry of early intervention service data into the tracking software by regional early intervention service providers. The program needs to establish statewide quality assurance protocols and on-site chart review to ensure that the data reported are accurate and correct. The program needs to develop reporting protocols and collaborative partnerships to gather late onset and progressive hearing loss cases into the surveillance system.

Reporting protocols – Reporting requirements for licensed birthing facilities that provide obstetric services are established by law and rule (Appendix G for the law and Administrative Rules). The screening and rescreening results for all the babies born in the hospital in a month, and for those transferred into the hospital prior to newborn hearing screening by the birth facility, must be reported to the state via a download of the state-approved tracking software to the state UNHSI program by no later than the 15th of the next month. The hospitals also must report previous birth months in which babies’ screening were completed beyond the birth month in

order to update the central tracking software maintained by the department program. If a baby's newborn hearing screening is completed with "Refer" rather than "Pass" results, the baby's tracking record must contain a note stating the identity of the baby's primary care provider and the date that professional and the parents were: (1) formally notified of the final newborn hearing screening results and (2) given the hospital's recommendation that an audiological assessment to be performed prior to the baby's third month of life. If a parent refuses the newborn hearing screening, the birthing facilities must fax a completed and signed copy of the program-approved refusal form to the state UNHSI program. The audiologists must use the state-approved software to record their assessment results and submit those records at least monthly to the state program. The HI*TRACK© reporting software will provide the reporting format for both the birthing hospitals and the audiologists to meet their reporting requirements.

Under the existing UNHSI program, parent education protocols have already been established and distributed to local hospitals and midwives attending births. Forms to be completed and signed to document receipt of education about the importance of newborn hearing screening and a form to document refusal of screening after the education has been provided by the hospital or birth attendant also have been distributed to local hospitals and midwives attending births. The MT CDC EHDI Project will dovetail with the existing UNHSI program to develop protocols for: (1) quality assurance reviews of screening and assessment records maintained by our local partners; and (2) diagnostic and intervention service reporting by local professionals involved in diagnosing and providing intervention services to deaf and hard of hearing children, whether identified through newborn screening or discovered to have late onset or progressive deafness in varying degrees.

Data systems -- The hearing screening and audiological assessment tracking software is provided by the department to the birthing hospitals, one birthing center, and to audiologists providing pediatric assessments. The existing UNHSI program pays the annual license fees for the HI*TRACK© software owned by the National Center for Hearing Administration and Management (NCHAM) of the University of Utah. The license fee includes access to a Help Desk for the use of the software. The department shares its Children's Health Referral and Information System (CHRIS) software with the Board of Public Education's Montana School for the Deaf and Blind (MSDB) to collaborate in early identification and tracking of intervention of children with special health care needs in Montana. (See Appendix A for the Memorandum of Understanding between the Department and MSDB)

Because of the relatively low number of births attended by licensed health care providers (HCP) outside of birthing hospitals, these HCP's are not required to perform hearing screening, but must provide parental education about the critical importance of newborn hearing screening and provide information about where such screenings may be obtained. The state UNHSI program provides brochures and referral information to the HCP's and hospitals through HRSA grant program funds.

The current configuration of the tracking systems in use are:

- HI*TRACK© version 3.5 is in distributed application used by the 32 local hospitals who still provide obstetric services and the state UNHSI program to track newborn hearing screening, and by pediatric audiologists to record repeat screenings and/or audiological assessments. Hospitals download their current screening data to the state program office on a monthly basis. Audiologists send the data at least monthly.

- CHRIS is an Oracle-based system. The users receive role-dependent secure access to client records based on specific view, update and delete rights. CHRIS includes an electronic import module that allows any data file that meets the formatting requirements to be easily imported into temporary tables in the database. Client records that are imported into the CHRIS system from various sources undergo an electronic match process that has a 90% rate of automated matching. In addition, the system provides a de-duplication feature in the event that records are not properly matched or are manually added to the system more than once. CHRIS currently provides an export of data from the Master Newborn table which stores information about both newborn hearing and newborn metabolic screening. The CHRIS system interfaces with multiple state data sources, facilitating the coordination of care among government agencies that track information on similar client populations. The interfaces to the CHRIS systems are the Montana Department of Public Health and Human Services fiscal system (AWACS), the Harvest™ laboratory system, HI*TRACK© hearing screening software, Vital Records and Statistics electronic birth registry (VSIMS), the web-enabled Case Ascertainment Tool, and SSI beneficiaries. These interfaces assist in coordinating the programs and capitalizing on the use of the same database. (See Appendix E for a data flowchart.)

This cooperative agreement will allow the existing statewide system to convert to a web-based application. This conversion has the advantage of efficiently and reliably reaching remote users, since the application will be accessible from any computer with an internet connection. It is not dependant on software being installed on the local computers. It also provides secure “view only” access to members of the community with appropriate system rights who may wish to

download reports and view other records online. This expands the ability to coordinate the care and services to the target population.

In addition, we are motivated to use this opportunity to springboard the technical upgrade of the current CHRIS client/server application. The client/server technology used in the original development of the CHRIS application is an aging technology. Not only is it becoming difficult to find developers knowledgeable of and willing to work on this type of application, Oracle no longer supports the older version of Oracle forms used in this application. Development and support for web-based applications are readily available. In addition, the existing database is still viable and supported by Oracle, as are the reports built using Oracle's Report Developer. With the web-enabled system, the reports will be accessed via a web interface.

Work Plan – The program goals, objectives, and activities to improve our current capacity to identify, match, collect and report standardized unduplicated individual identifiable hearing data are presented in Appendix F. This appendix also includes a Gantt chart to provide more details of the work plan and the Evaluation Plan for Project activities. The following table provides a listing of the 14 activities that the CDC EHDI Awardee must address and the current and planned status of the MT CDC EHDI program in relation to each of the 14 activities.

Table 2. Status of MT CDC EHDI Project Required “Awardee Activities”

CDC EHDI Awardee Required Activities	Status in MT CDC EHDI Project
<p>1. Enhance the tracking and surveillance system to improve methods to accurately identify, match, and collect unduplicated individual identifiable data. Secure authenticated role-based web reporting is encouraged. (CDC EHDI cooperative agreement Year One Objective 2, and Appendix H.)</p>	<p>1. Hearing screening and assessment tracking is currently monitored through use of the HI*TRACK© software in a distributed application to all local birthing hospitals and one birthing center.</p> <p>Intervention services are currently tracked through the use of the department’s CHRIS software which is used by the Children’s Special Health Services section of the department to track specialty clinic services to children with special health care needs as well as by The Board of Public Education’s Montana School for the Deaf and Blind to track intervention services for deaf and blind children. Project activities will include expanding the software’s existing capability for remote data entry to include entry of service data by Outreach service staff employed by the MSDB to provide early intervention services to deaf and hard of hearing children and their families. Project activities will also include phasing in authenticated role-based web access to the CHRIS software by service providers. (See Appendix I for details about the web development.)</p>
<p>2. Conduct all tracking and surveillance</p>	<p>2. This application includes a Work Plan with Goals, Objectives and Activities, a</p>

<p>activities as described in the detailed work plan that outlines overall program goals, SMART objectives, and activities for each objective, timeline, responsible staff, and measures of effectiveness. (Year One CDC EHDI cooperative Agreement, Appendix F)</p>	<p>Gantt chart, and Evaluation Plan to measure effectiveness. See Appendix F.</p>
<p>3. Collaborate with potential reporting sources such as birthing facilities, diagnostic centers, audiologist and otolaryngology services, physicians and Part C and other early intervention services to develop an EHDI reporting protocol. (Year One CDC EHDI cooperative agreement Objective 3)</p>	<p>3. The MT CDC EHDI Project will collaborate with Montana’s hospitals, birthing centers, pediatric audiologists, otolaryngologists and physicians participating in regional specialty clinics, and with MSDB and the Part C early intervention providers to develop a mutually understood EHDI reporting protocol in the first year of the project.</p>
<p>4. Collaborate with multiple sources including vital records, birth defects registries, immunization registries, bloodspot programs,</p>	<p>4. The existing MT UNHSI program already collaborates with the department’s Office of Vital Statistics and bloodspot program in the matching of Birth Certificates and newborn screening data. The department’s Part C program already shares basic</p>

<p>and other early intervention services to increase data sharing, integration and linkage. (Year One CDC EHDI cooperative agreement Objective 1.2)</p>	<p>unduplicated individual identifiable service data with the UNHSI program, although not yet the referral and enrollment dates for those babies served. The department’s immunization program already provides web access to immunization records for 80% of the physicians who immunize children in MT and has the capacity to populate public health department immunization registries with birth certificate data. The UNHSI program already has electronic referral through the CHRIS system to MSDB to track intervention services to deaf or hard of hearing children. What is still needed, and what will be the focus of the MT CDC EHDI Project’s collaborative efforts with Part C in the first year of the Project, will be obtaining Part C referral dates and dates of enrollment into Part C services.</p>
<p>5. Collaborate with other state and territorial EHDI, CDC and other federal and national agencies on effective mechanisms for obtaining screening data across EHDI programs. (No specific objective, but statement of cooperation with national</p>	<p>5. The MT CDC EHDI Project will cooperate with collaborative efforts to appropriately share screening data across EHDI programs to reduce LTFU for babies who move between states and to ensure provision of standardized national data.</p>

<p>efforts.)</p>	
<p>6. Monitor the status and progress of every occurrent birth statewide through the three components of the EHDI process (screening and rescreening, audiologic and medical evaluation, and early intervention services). (Existing state program already does this. See Appendix H for details.)</p>	<p>6. Montana’s current program: matches every Montana birth certificate with both bloodspot and newborn hearing screening; tracks both hearing screening and audiologic assessment for all occurrent births, enters medical evaluations in CHRIS when available, makes electronic referrals to MSDB for that agency’s mandated tracking of intervention services through the shared use of the CHRIS software, and obtains some Part C early intervention service information for annual CDC EHDI reporting.</p>
<p>7. Report standardized aggregated information extracted from unduplicated individual identifiable screening results data including DOB, gender, maternal demographics, date of screen(s) and screening results. (Year One CDC EHDI cooperative agreement Objective 1.)</p>	<p>7. The MT CDC EHDI Project includes activities to further develop automatic generation of the CDC EHDI HSFS report on screening, diagnostic and intervention services.</p>

<p>8. Report standardized aggregated information extracted from unduplicated individual identifiable data on diagnostic results including type and severity of hearing loss, maternal demographics, and date of diagnosis (excluding temporary hearing loss due to otitis media). (See response to #7)</p>	<p>8. See response to number 7. In addition, the UNHSI program manager will review all audiologic diagnostic data in HI*TRACK© to ensure that temporary deafness due to otitis media is not included in the CDC EHDI HSFS reporting.</p>
<p>9. Report standardized aggregated information extracted from unduplicated individual identifiable on intervention service data including maternal demographics, date of referral to Part C or MSDB early intervention services, and date of enrollment in services. (See response to #7)</p>	<p>9. See response to number 7. In addition, collaborative efforts will be undertaken with Part C to obtain date of referral and date of enrollment in Part C services. These data on early intervention services provided by MSDB are already available for late 2007 and in calendar year 2008.</p>
<p>10. Develop or improve mechanisms to identify and collect standardized data on</p>	<p>10. The MT CDC EHDI Project will work collaboratively with the Office of Public Instruction to develop a parent authorization form that will meet both HIPAA and</p>

<p>unduplicated individual infants and children with late onset or progressive hearing loss.</p> <p>(Year One CDC EHDI cooperative agreement Objective 3)</p>	<p>FERPA privacy standards and will allow reporting of late onset hearing loss detected by school audiologists to the hearing screening and assessment portion of the program and to MSDB for tracking of intervention services. Further, the existing UNHSI program will work collaboratively with the pediatric audiologists in the state who are not employed by the school system to establish reporting of late onset and progressive hearing loss to the UNHSI program via the HI*TRACK© software already used by those audiologists. The children identified as deaf or hard of hearing by the regional specialty clinics will be entered into the CHRIS software.</p>
<p>11. Develop an analytic plan to address LTFU rates including: differences between key variables such as birthing facility, false positive rates, demographic differences (racial subpopulations, gender, maternal age and education) and seasonal variations or other timing differences or geographic locations (urban versus rural) (Year One CDC EHDI</p>	<p>11. In conjunction with the existing UNHSI program and with stakeholder input that will already be obtained in the UNHSI program, the MT CDC EHDI Project will develop and implement an analytical plan to address LTFU variations including false positive rates, birth facility, population density, race/ethnicity, maternal age and education, and seasonal variations.</p>

cooperative agreement Objective 5)	
<p>12. Develop a quality assurance and improvement plan to monitor the accuracy and quality of data reported to the EHDI program through independent chart reviews at hospitals, private providers, birthing facilities and diagnostic centers. (Year One CDC EHDI Cooperative agreement Objective 4)</p>	<p>12. In the first year of the cooperative agreement, the MT CDC EHDI Project will develop a standardized, on-site chart review protocol to be used for quality assurance of the accuracy and completeness of the documentation of all birthing hospitals and center, midwives attending births, and audiologists who perform pediatric assessments over the three years of the cooperative agreement. The protocol will be developed in collaboration with the hospitals, midwives and audiologists.</p>
<p>13. Develop an evaluation plan to monitor progress toward meeting program goals and objectives and to assess the timeliness, completeness, and success of the Project. (Year One CDC EHDI Cooperative agreement APPENDIX J)</p>	<p>13. The preliminary MT CDC EHDI Project evaluation plan is included in this application. It will be modified as needed based on the results assessed during each year of the Project.</p>
<p>14. Attend the annual national EHDI conference to share latest information and to</p>	<p>14. The manager of the state’s existing HRSA-funded UNHSI program will attend the EHDI conference using HRSA funds. The CDC EHDI Project includes sending</p>

<p>collaborate with other experts on best practices in early hearing detection and surveillance.</p> <p>(Year One CDC EHDI Cooperative Agreement Objective 6)</p>	<p>an additional staff member to this conference.</p>
--	---

Collaborative efforts – When newborn hearing screening was an optional activity in birthing hospitals (2002 through 2007), the program’s main local collaborative effort was with hospitals providing obstetric services and with one pediatric audiologist who shared assessment data with the program. The major stakeholder advisory group was the Task Force established in the enabling legislation to advise the department on the reporting requirements for the UNHS program. This group was comprised of a deaf adult, a parent of a deaf child, a neonatologist, a physician representative from the Montana chapter of the American Academy of Pediatrics, a representative of a birthing hospital, two audiologists (one from the I.H.S.), a representative of the Montana Office of Public Instruction, the Coordinator of Part C of IDEA, a representative of the Montana School for the Deaf and Blind, and a representative of the state’s parent-to-parent support group. Consultation was provided to this group by the Montana Hospital Association, a speech and language pathologist, a developmental psychologist, and state program staff. This advisory group provided invaluable guidance to the department not only about suggested reporting requirements, but also about standards for screening, assessment and intervention. The Task Force completed its legislative task to advise the department on the development of appropriate protocols and reporting requirements and was eliminated from the amended legislation as part of an administration-wide process of reducing the number of advisory groups and consolidating the approval of advisory groups in the Governor’s office. The UNHSI program has recently invited the Montana Deaf Association to act as a source of consumer perspective on the program’s activities, particularly on the statewide advertizing campaign being developed to publicize the 1-3-6 service standard to the public and to health care professionals. No commitment has yet been received from that consumer group.

In 2002, Montana Telephone Assistance Program (MTAP) one-time fund balances were used to purchase screening equipment for all participating hospitals that did not already have such equipment. Over the period of the first three years, the hospitals were provided with technical assistance in the use of the HI*TRACK software through the NCHAM Help Desk paid for by HRSA funds for the software licenses used by the hospitals and program encouragement to screen and report in a timely manner (the original state law required that they report quarterly to the state IF they screened). The importance of the 1-3-6 standard, with particular emphasis on completing screening by no later than one month of age was stressed. As early as 2004, the program began collaboration with the department's Office of Vital Statistics to start the electronic matching of birth certificates with newborn hearing screening data (metabolic screening matching was begun in 2002). In 2005, after consultation with the Montana Hospital Association, the program manager started providing feedback to the hospital screening and reporting staff, as well as the CEO's, on the "status" of the hospitals in comparison to their peers. Hospitals were divided into five groups in terms of the sizes of their birth cohorts and ranked in their groups by the completeness of their screening data – matching to birth certificates and completion of newborn screening. Only two of the four audiologists who could perform pediatric audiologic assessments at that time were reporting their results to the state program. The Montana State Plan for use of Part C of IDEA funds contained (and still contains) one of the most restrictive sets of criteria for eligibility for receipt of Part C services in the nation. Only children with a diagnosed condition representing at least 50% impairment, not children at risk, could be served. Therefore, assistance from Part C for follow-up in communities for babies whose screening was not completed prior to discharge from the birthing hospital could not be

arranged. Part C does provide services to children who have been officially identified as deaf or hard of hearing.

Currently, the program collaborates with: all 32 birthing hospitals in consultation with the Montana Hospital Association; one birthing center with its own screening equipment (purchased with support from HRSA program funds); the midwives licensed through the State of Montana and attending births; the Office of Public Instruction's Hearing Conservation Program audiologists (who can provide state-funded screening services for repeat screening of babies who did not complete their screening before hospital discharge); the Part C office which is housed in the Department and can share names of babies served with the EHDI program under HIPAA provisions for state public health surveillance; the Office of Vital Statistics, which is also housed in the Department and works closely with the newborn hearing screening program. HRSA funds are currently being used to create a custom view into the birth certificate database for the two staff members who need to immediately match existing or filed birth certificates with either metabolic or hearing screening records to ensure that population-based screening is accomplished. Collaboration with the Montana School for the Deaf and Blind (MSDB) has been strengthened over the past three years by maintaining the stakeholder relationship in the statewide intervention program through frequent mutual consultation and by use some of the program's HRSA funding to expand the early intervention Outreach staff to provide more outreach in the eastern, more rural part of Montana for two years while MSDB sought (and obtained) approval for expanded FTE and funding from the Montana State Legislature.

The UNHSI program is located in the Children's Special Health Services (CSHS) section of the Family and Community Health Bureau, which is the designated Title V agency in Montana. The CSHS section sponsors regional metabolic and cleft specialty clinics on a regional basis. Care at

the Regional Pediatric Specialty Clinic sites is provided by in-state specialists and contracted pediatric specialists from neighboring states. The clinics are staffed by nurses and staff knowledgeable and experienced in the care and coordination of care for CYSCHN. The Montana Cleft/craniofacial team provides clinics at the Regional Pediatric Specialty Clinic sites as well as five outreach sites. The teams provide multidisciplinary care including evaluation, recommendations, and monitoring for children with clefts and other craniofacial conditions, including congenital anomalies such as atresia and conductive hearing loss in children with cleft palate. All children attending clinic receive ongoing hearing evaluation, as well as otolaryngology exams. Refer to Appendix A for letters of support and the MOU with MSDB.

Program capacity – To date, Montana’s statewide UNHSI program has been solely funded by HRSA grants for universal newborn hearing screening and intervention (UNHSI) projects. These funds were received in three-year installments beginning in 2002, were continued in 2005, and continued again for April 1, 2008 through March 31, 2011. This requested cooperative agreement funding for the CDC EHDI project will enhance the existing integrated data systems established to accomplish the UNHSI goals, objectives and activities (refer to Appendix H for the HRSA grant funded goals, objectives and activities for 2008 through 2011) and **will not supplant** funding for those approved activities. Because of the expanded Quality Assurance activities included in this cooperative agreement application, HRSA travel activities for the UNHSI manager will be expanded by CDC EHDI Project funded activities for QA on-site evaluations of screening and assessment data of all birthing facilities and non-hospital birthing professionals, and of pediatric audiologists. The UNHSI Manager will already be attending the EHDI Conference via the HRSA UNHSI grant funds.

The current UNHSI program is located in the Children’s Special Health Services section of the Family and Community Health Bureau in the department. (See Organizational Chart in Appendix B) This section includes the population-based surveillance programs for both newborn bloodspot and hearing screening programs. Matching of birth certificate data from the department’s Office of Vital Statistics with both kinds of newborn screening is in place. This section also uses Title V Maternal and Child Health Block Grant (MCHBG) funds to support regional specialty clinics for children with special health care needs. The section’s software that records those services (and includes the Birth Defects Registry component which has been suspended since 2006 due to lack of funding) is the Children’s Health Referral and Information System (CHRIS). This software is also used by the Montana Board of Public Education’s Montana School for the Deaf and Blind (MDDDB) to meet its statutory responsibility to track intervention services for all deaf and blind children in Montana. The HI*TRACK© software is used by all birthing hospitals, one birthing center and the state’s current six pediatric audiologists to meet their statutory newborn hearing and audiological assessment reporting requirements to the program. The UNHSI program manager has provided surveillance data to local hospital partners to reinforce their newborn hearing screening efforts. The manager has provided EHDI survey data for national reporting of Montana’s surveillance results, and prior to the suspension of the Birth Defects Registry, provided annual data to the National Birth Defects Prevention Network according to the CDC standards for reporting those surveillance data.

Staffing and Management Plan – The following Family and Community Health Bureau staff will implement the activities of the MT CDC EHDI Project:

- The Project Director of the MT CDC EHDI Project will be Jo Ann Walsh Dotson, RN, MSN Chief of the Family and Community Health Bureau. Ms. Dotson is the Title V

Director for Montana. Her contribution to the administration of the Project is paid by the Maternal and Child Health Block Grant and by indirect cost recovery and will amount to 36 hours per year to direct the project and monitor progress and required reporting.

- The .25 FTE Project Manager is Sib Clack, MA, UNHSI Manager, for whom the HRSA UNHSI grant pays .75 FTE of her compensation -- the remaining .25 FTE will be supported by the MT CDC EHDI Project. Ms Clack will be the primary contact for all collaborative efforts with local and state agency partners, will perform on-site QA reviews with the Quality Improvement Specialist, and will provide all required Project reports
- MaryLynn Donnelly, RN, will be the IT contract liaison and System Administrator for the CHRIS software modifications for the MT CDC EHDI Project at .20 FTE per year.
- Michele O'Donnell, Quality Improvement Specialist I, will participate in the on-site quality assurance reviews with the Project Manager for .23 FTE per year on the CDC EHDI Project.
- Dianna Frick, MPH, Epidemiologist, will provide consultation to the Project Manager on assessing the surveillance data. Her consultation is supported by MCHBG funds.

Job descriptions of these positions are found in Appendix C; resumes are found in Appendix D.

Evaluation Plan -- The specific components of the Quality Assurance (QA) Protocol to be used during the project will be developed during the first year of the program in consultation with the hospitals, birthing centers, midwives and audiologists. Quality assurance areas are expected to include: completeness of screening and assessment services offered; timeliness and appropriateness of follow-up and adherence to follow-up protocol; timeliness and accuracy of

data entry. The on-site reviews will be conducted by the Project Manager and Quality Improvement Specialist.

The CDC EHDI Project will then provide quality assurance (QA) through on-site: chart review of all the birthing hospitals and birthing centers providing newborn hearing screening; and, review of the audiological assessment records of the pediatric audiologists who assess babies who received “Refer” results at the completion of their newborn hearing screening. A sample of records will be selected randomly from each site to be included in chart reviews. The sample size will depend on the size of the clinic and its client load. These records will be compared to the result/assessments reported in the state’s approved software supplied to these local partners. The QA process will also include verifying the documentation by all midwives attending births in Montana that substantiates the provision of (1) the parent educational protocol about the importance of newborn hearing screening and (2) the brochure with information about where newborn hearing screening can be obtained. A standard form to be signed by the parent has been provided to these local partners to document the provision of those materials.

The QA Plan found in Appendix J schedules the on-site reviews that will accomplish coverage of all facilities and professionals within the three-year period of the cooperative agreement.

The stakeholders involved in the EHDI program will also be involved in refining and finalizing the CDC EHDI Evaluation Plan. A proposed evaluation plan will be developed in the first year of the cooperative agreement, but additional input from hospitals, birthing centers, midwives and audiologists will ensure that the programs and the resulting data are appropriate and useful to all stakeholders involved and that the evaluation is in-line with the activities of the EHDI Improvement Program as it progresses. State-level staff members from several areas will also be

involved in the evaluation, including representatives from the Office of Vital Statistics, Children's Special Health Services and Maternal and Child Health Epidemiology.

Data used in the evaluation will be collected from a variety of sources and will include both process and output measures.

Appendix F contains the Work Plan for each of the three years of the cooperative agreement including: Goals, Objectives and Activities; the Evaluation Plan with performance indicators for each Objective and Activity; and a staff time/activities timeline table.