



State of Alaska

Title V Maternal and Child Health Block Grant

FY 2010 Needs Assessment

Alaska Department of Health and Social Services
Division of Public Health
Section of Women's Children's and Family Health

September 15, 2010



This page blank

Contents

Glossary & Acronyms	5
1. Process for Conducting Needs Assessment	1
Goals and Vision	1
Leadership	2
Methodology	2
Methods for Assessing MCH Populations	4
Methods for Assessing State Capacity	4
Description of Data Sources	5
Linkages Between Assessment, Capacity, and Priorities	6
Dissemination	6
Strengths and Weaknesses of the Process	6
2. Partnership Building and Collaboration Efforts	7
Efforts with Local MCH Programs	8
Efforts with Other State Agencies	9
Efforts with Public and Private Organizations	11
3. Strengths and Needs of the Maternal and Child Health Population Groups and Desired Outcomes	12
Resources on the Web	12
Health Status of Women Across the Lifespan, Including Pregnant Women and Mothers	14
Health Status of Infants	21
Health Status of Children	26
Health Status of Children and Youth with Special Health Care Needs With Developmental Delays	33
Disparities	40
4. MCH Program Capacity by Pyramid Levels	41
Direct Health Care Services	42
Enabling Services	43
Population-Based Services	44
Infrastructure-Building Services	46
5. Selection of State Priority Needs	48
List of Potential Priorities	48
Methodologies for Ranking/Selecting Priorities	50
Priorities Compared with Prior Needs Assessment	51
For the discussion of why priorities were added, changed or replace, see the next section where these comments were incorporated.	53
State Priority Needs/Capacity, MCH Groups & State Performance Measures	53
MCH Population Groups	62
6. Outcome Measures - Federal and State	62
C. Needs Assessment Summary	62

Glossary & Acronyms

Abbreviation	Description
ABDR	Alaska Birth Defects Registry
AFVPP	Alaska Family Violence Prevention Project
AK	Alaska
AMCHP	Association of Maternal and Child Health Programs
ANTHC	Alaska Native Tribal Health Consortium
BRFS	Behavioral Risk Factor Survey
CDR	Child Death Review
CL/P	cleft lip and palate
CPT1	Carnitine palmitoyltransferase 1. A metabolic disorder, included in the newborn metabolic screening program.
CUBS	Childhood Understanding Behaviors Survey
CYSHCN	Children and Youth with Special Health Care Needs
DELTA	Domestic Violence Prevention Enhancement and Leadership Through Alliances
DHSS	Alaska Department of Health and Social Services
DPA	Division of Public Assistance
ECCS	Early Childhood Comprehensive Systems
EHDI	Early Hearing & Detection Intervention Program
EI/ILP	Early Intervention/Infant Learning Program
FASD	fetal alcohol syndrome disorders
FERPA	Family Educational Rights and Privacy Act. A federal law protecting privacy of student education records.
GCDSE	Governor's Council on Disabilities and Special Education
GPRA	Government Performance Results Act. This federal legislation mandated federal agencies to have measurable performance goals.
HIPAA	Health Insurance Portability and Accountability Act. This federal legislation includes privacy clauses.
IDEA	Individuals with Disabilities Act
MCH	maternal and child health
ME	Medical Examiner
MIMR	Maternal Infant Mortality Review
MPH	Master's of Public Health
NTD	neural tube defect. A birth defect reportable to the AK Birth Defect Registry.
OT	occupational therapy
PHC	public health center
PRAMS	Pregnancy Risk Assessment Monitoring System
PT	physical therapy
RHP	Reproductive Health Partnership

SCAN	Surveillance of Child Abuse and Neglect
SCHIP	State Children's Health Insurance Program
SEED	System for Early Education and Development. University of Alaska, Southeast
SF	Strengthening Families
SIDS	sudden infant death syndrome
SSDI	Social Security Disability Insurance
SWOT	strengths, weaknesses, opportunities and threats. An analysis tool used to assess needs and capacity.
UAA	University of Alaska Anchorage
UAP	University Affiliated Programs. Authorized by Federal legislation to help states and local communities respond to the needs of people with developmental disabilities and their families, UAPs serve as a liaison between the academic world and the developmental disabilities service delivery system.
WCFH	Section of Women's Children's and Family Health
WIC	Women, Infants and Children, Special Supplemental Program
YAHA	Youth Alliance for a Healthier Alaska
YRBSS	Youth Risk Behavior Surveillance System

1. Process for Conducting Needs Assessment

Goals and Vision

The Title V Maternal and Child Health Block Grant under the Social Security Act of 1935 is a Federal-State partnership program to improve the health of mothers and children, including children and youth with special health care needs. In Alaska, the Title V program is managed by the Department of Health and Social Services (DHSS), Division of Public Health (DPH), Section of Women's Children's and Family Health (WCFH). Allocation of Title V funds are based on the state's maternal and child health priorities. These priorities were developed in the 2005 Needs Assessment.

Every five years each state must conduct a new assessment of maternal and child health need to reconfirm or realign its priorities for the next five years. The mission of WCFH is a reflection of the overall intent of the Title V program:

To promote optimum health outcomes for all Alaskan women, children, teens and their families:

- Through leadership;
- Coordination with the primary and public entities within the health care system to improve access to and organization of services in support of families;
- Deliver preventive, rehabilitative and educational services that are family-centered and culturally appropriate targeting women, all children and teens, and their families.
- Through the provision of reliable data on maternal and child health issues for use in planning and evaluating programs, preventing poor health outcomes, and guiding public health policy.

The programs in WCFH stress improving health status, assuring health service access, and eliminating health disparities in present and future generations of Alaskan women of all ages and their families. Our target populations include pregnant women and their infants, children and adolescents, children and youth with special health conditions, those with low income status and those with limited access to health services.

One of WCFH's goals is to work with other health care and community support services to assure they are able to address the changing and varied needs of families in their natural care-giving roles.

The priorities established in the 2005 Needs Assessment were used in several ways. Programs relevant to the stated priorities and within the scope of the Title V program were funded. For example, Title V provided financial support of a post partum depression support program and a mood disorder navigator at the Children's Hospital at Providence Hospital to support the

priority of increasing awareness around mental health issues in the MCH population. Four new programs were created within WCFH and these will be described in a later section. Another state priority was to reduce the rate of child abuse and neglect. In response, WCFH established a surveillance system of child abuse and neglect. Partnerships and collaborations to support priority issues that reside in other state agencies were pursued. To support the priority of reducing the rate of unplanned and unintended pregnancies, WCFH collaborated with the Division of Public Assistance to provide reproductive health services in regions with the highest rates of non-marital or teen births as well as established an adolescent health program focused on engaging teens as peer mentors

Leadership

The Needs Assessment Leadership committee consisted of 10 WCFH program managers and the WCFH Section Chief, as follows:

- Title V Director & WCFH Section Chief
- Maternal and Child Health Indicators Program Manager (Needs Assessment Coordinator)
- Adolescent Health Program Manager
- Childhood Understanding Behaviors Program Manager
- Pregnancy Risk Assessment Monitoring System Program Manager
- Autism and Parent Services Program Manager
- Breast and Cervical Cancer Check Program Manager
- Perinatal Nurse Consultant
- Title X Family Planning Program Manager
- School Health Nurse Consultant
- Child Health Unit Manager (oversees newborn metabolic and hearing programs, and pediatric specialty clinics)

Each committee member was responsible for acting as a liaison with their respective program advisory committees, gathering input from their program stakeholders, assisting with developing the methodology for conducting the needs assessment, and summarizing results of the stakeholder meeting.

Methodology

In Alaska, assessing MCH needs is an on-going, continuous process. We believe this strategy is more flexible, efficient and responsive than one singular effort every five years. Our activities revolve around four functions: meeting with WCFH-established advisory committees; participating as a member in other organizations' committees; partnering with other agencies on program implementation; and research.

WCFH works with and sponsors numerous advisory committees. Membership of the committees are generally composed of health care providers, parents, coalition members, and

staff from across Alaska. They meet on a regular basis, usually once per quarter, to provide input on programs needs, assess quality, and provide ideas for future directions.

Communication with stakeholders is also accomplished through WCFH participation in committees, coalitions and task forces sponsored by other organizations. For example, the Adolescent Health Program works closely with the Alaska Network on Domestic Violence and Sexual Assault to address the link between dating violence and teen sexual risk behavior in areas of the state that have high rates of both violence and teen births, in the hopes of decreasing the disparities between rural and urban census areas. For the last three years, the Title V MCH/CSHCN Director has been an active representative for the Division of Public Health on the Department of Health & Social Services Commissioner's State Child Policy Team. This team includes division directors and leadership staff from juvenile justice, behavioral health, public assistance, child protection, and the commissioner's office.

WCFH partners with other agencies to identify needs of the MCH population. For example, WCFH and our long term partners at the Section of Public Health Nursing identified the need for family planning services, especially outside of Anchorage. These services are offered at Public Health Centers staffed by public health nurse practitioners as well as private nurse practitioners contracted using Title V block grant funding. Contraceptive supplies are purchased with Title V block grant funds. The public health nurses are also critical in referring children identified in well child clinics to genetics, metabolic, neurodevelopmental and autism screening clinics, funded by Title V, and held in the regional hubs in 10 Alaskan communities.

The MCH-Epidemiology Unit is key to supporting the MCH block grant reporting requirements and the initiatives of WCFH. The Unit manages six surveillance programs: Alaska PRAMS, the Childhood Understanding Behaviors Survey (CUBS), MCH Indicators, Surveillance of Child Abuse and Neglect (SCAN), the Birth Defects Registry (ABDR), and the Maternal-Infant Mortality Review-Child Death Review (MIMR/CDR). Their data collection, analysis and research activities provide the basis of accountability required by our grants, as well as reliable data for program evaluation, needs assessments and policy/decision making. The MCH-Epidemiology Unit won the 2009 National MCH Epidemiology Award in Effective Practice - Improving Public Health Practice through Effective Use of Data, Epidemiology and Applied Research.

Each year during the block grant application process WCFH requests Title V partners to report on activities supporting the MCH priorities and to report on progress made towards the state and national performance measures. The narratives and data provide qualitative and quantitative documentation of how activities support MCH priorities. Much of the information regarding the capacity of the state's health care system to meet MCH needs come from the regular interactions with our stakeholders, particularly the family advisory committees and the many program advisory committees.

Targets for the national performance measures are set using Healthy Alaskan or Healthy People 2010 goals, where applicable. But in some cases, such as the rate of suicide deaths among youths aged 15-19, what goal could possibly be acceptable other than 0? An acceptable goal could be "a decreasing trend". In instances such as these we do not have a standard methodology for goal setting.

As mentioned before, stakeholder involvement occurs on an on-going basis. To specifically address prioritization of needs across all issues, WCFH holds a stakeholder meeting each spring. For the 2010 Needs Assessment, we held a workshop on February 19th. Stakeholder input was obtained by using a collaborative thinking strategy. This technique, called a World Café conversation, was used previously at DHHS in the development of the Early Childhood Comprehensive Systems Program and in WCFH's Safe Infant Sleep Initiative. Three powerful questions were designed to elicit collaborative thinking and deep conversations among very small (3-4) groups of people of different backgrounds and who share a common interest in maternal and child health. The 2010 Needs Assessment Stakeholder meeting is discussed more thoroughly under "Selection of State Priority Needs".

Methods for Assessing MCH Populations

The State Systems Development Initiative (SSDI) grant funds a medical epidemiologist who acts as the technical director of the MCH-Epidemiology Unit within WCFH. Over the last five years the Unit has made excellent progress in data linkages that support research and surveillance activities. New activities since 2005 include:

- linking death certificates and Medicaid data for infant, child and maternal death reviews
- linking PRAMS and CUBS (a survey of PRAMS mothers about their toddlers) data to obtain longitudinal data on women
- linking metabolic screening data to Medicaid data
- linking OCS, Medicaid, and law enforcement data for the SCAN surveillance project

Assessing the strengths and needs of MCH populations occurs in several ways. The MCH-Epidemiology Unit analyzes data from its six surveillance programs as well as WIC and Medicaid data. Research findings from these sources are disseminated through peer-reviewed publications, pediatric Grand Rounds, presentations, Epidemiology Bulletin publications, and data books.

Advisory committees organized by WCFH meet regularly to discuss data outcomes and provide input to program designs and interventions. In addition, feedback is solicited from physicians at the annual presentations at the Anchorage and Fairbanks Pediatric/Perinatal Grand Rounds, All Alaska Pediatric Partnership committee meetings, and specific community visits. All of these activities contribute to the ongoing work of updating our needs assessment and performance priorities.

Methods for Assessing State Capacity

For this needs analysis process, SWOT (Strengths, Weaknesses, Opportunities and Threats) analyses were conducted with advisory committees. We found the SWOT analysis to be an excellent tool for obtaining qualitative data.

For the FY 2010 Block Grant reporting process, MCH program managers within DHHS were asked to assess agency capacity and program strengths and weaknesses in each of the four tiers of Title V services, for each state and national measure. This information was used in the 2010 Needs Assessment.

As mentioned above, WCFH sponsors a meeting of Title V MCH Block Grant stakeholders each Spring. The purpose of the meetings are threefold: to report on the state's progress towards national and state performance measures; to reconfirm or suggest different state priorities from those developed during the 2005 Needs Assessment; and to develop ideas for new activities and partnerships for the upcoming years. Invited stakeholders represent public and private health care institutions that serve MCH populations.

Description of Data Sources

Data sources for measureable objectives included:

- Vital Statistics
- Medicaid
- 6 surveillance programs managed by MCH-Epidemiology Unit
- Trauma Registry
- Youth Risk Behavioral School Survey
- WIC
- Alaska Oral Health Survey
- American Community Survey
- Alaska Department of Labor
- Alaska DHSS, Division of Juvenile Justice
- Alaska Department of Education and Early Development
- National Survey of Children's Health
- Kaiser Family Foundation

Data sources for qualitative data included:

- program managers from the following DHSS agencies: Office of Children's Services, WCFH, Division of Public Assistance, Division of Behavioral Health, Section of Chronic Disease and Prevention
- WCFH Advisory Committees:
 - Perinatal Advisory Committee
 - Preconception & Interconception Advisory Committee
 - Newborn Metabolic Screening Advisory Committee
 - Maternal and Infant Mortality/Child Death (MIMR/CDR) Review Committee
 - Family to Family Advisory Group (parent navigation services)
 - School Nursing and Health Advisory Committee
 - Youth Alliance for a Healthier Alaska
 - Alaska Dental Action Coalition
 - Autism Advisory Committees
- Early Hearing Detection and Intervention Program (EHDI)

Linkages Between Assessment, Capacity, and Priorities

The Needs Assessment Leadership Committee, composed of 10 WCFH program managers and the WCFH Section Chief, met during the two months after the February 19th café conversation workshop to develop priorities. The themes from the café conversation were primarily process oriented as opposed to program oriented. The Committee decided to use 2005 priorities as a starting point. The following criteria were used to develop new priorities or reconfirm current priorities:

1. Clinical Severity - mortality, years of potential life lost, long term effects, etc.
2. Urgency - comparison to U.S. baseline, and trends
3. Disparities
4. Economic loss
5. Intervention Effectiveness
6. Capacity - within scope of WCFH; community acceptability; legality; availability of state resources
7. Encompasses the life course
8. Known to be protective
9. Identified as a risk factor in Alaska studies

For the priorities, the Committee developed a list of more than 70 potential performance indicators. Ten were selected.

Dissemination

The WCFH website (<http://www.hss.state.ak.us/dph/wcfh/titleV/>) was the primary means for disseminating information about the Needs Assessment planning process and documents. There was no funding available for producing and distributing hard copy publications. A report documenting the results of the Needs Assessment stakeholder's meeting and draft state priorities was emailed to over 150 stakeholders.

Strengths and Weaknesses of the Process

We believed that conducting on-going needs assessment activities through regular meetings with stakeholders, maintaining surveillance programs, conducting applied research, and publishing data and research findings was the best method for developing the five-year comprehensive needs assessment document. By actively engaging stakeholders on a regular basis, the scope of work required for the 2010 Needs Assessment was considerably reduced. Regular communication with stakeholders fostered close working relationships, better understanding of changes, and better response to changing conditions.

One weakness of the Needs Assessment is that stakeholders from rural areas are persistently underrepresented. Limited funding for travel and busy schedules is a severe limitation for all programs. This year, bad weather cancelled the flight from Juneau and those participants were unable to attend the February 19th meeting.

A strength of this needs assessment process was the use of collaborative thinking techniques in the needs assessment stakeholder meeting, based on the World Café model. We used this model to foster cross pollination of ideas, to consider outcomes affected by a life course perspective, and to focus on health rather than health care. This process allowed for all attendees to participate fully in the discussion and have time in smaller groups to express their thoughts and ideas. Parents of children with special health care needs were well represented and their feedback was very well stated and represented.

2. Partnership Building and Collaboration Efforts

Alaska's health care system differs from most other states in that there are virtually no local health departments that function under the umbrella agency of the state health department. Two communities have locally organized health departments -- the Municipality of Anchorage and the North Slope Borough. The Municipality of Anchorage has greatly decreased its services over the last several years and has chosen to interpret their health powers more narrowly. There are two health delivery systems for the non-military population- a tribal health consortium serves the Alaska Native population exclusively and the traditional private sector system serves both the Native and non-Native population. The military health system serves a significant military population in Alaska, however, its ability to deliver services to military dependents is limited and variable depending on deployments and other base activities.

Conversations with stakeholders during advisory committee meetings, coalition meetings, and during formal Title V stakeholder meetings inform WCFH of issues and concerns throughout the year. Stakeholders' roles as representatives of their agencies, as health care providers, as grantees, as families, and as advocates are the ideal persons to synthesize critique and evaluate MCH issues. The three SWOT analyses with the Perinatal Advisory Committee, the EHDI Committee and the NBMS Committee all included a common theme that collaboration among all the different stakeholders is very good and is a primary reason for success of MCH efforts. Ongoing assessment of the needs of communities is inherent in the work done by programs.

Family members and consumers are included as active members in all the advisory councils sponsored by the Title V/CSHCN program. These include EHDI, NBMS, Adolescent Health, Perinatal Health, Oral Health, Breast and Cervical Health Check, Autism/Neurodevelopmental Outreach, Early Childhood Comprehensive Systems (ECCS), Adolescent Health (teens), School Nursing and Health and many other ad hoc groups. Title V staff participate in committees that include parents such as the Governor's Council for Disabilities and Special Education. Efforts to include families from outside of Anchorage is made by providing travel expenses and, on occasion, child care expenses. However, assistance is limited due to the significant cost of air travel.

To enhance the family perspective, WCFH added a staff position to represent Parent Services. This staff person attends many of the planning committees for programs such as ECCS, Strengthening Families (child abuse prevention effort), early child hood mental health, and other community agency meetings to assure that the voice of parents is considered.

In 2009, the WCFH Parent Services program staff and the Family Voices Chair participated in the Alaska Title V MCH Block grant review and the Region X technical assistance and Title V/CYSHCN leadership meeting held in Seattle. They actively participate in planning and educational activities with other state family representatives from Oregon and Washington. Also in 2009, a newly formed parent advisory committee provided feedback on the Title V block grant performance measures regarding CYSHCN. A rich discussion ensued with excellent ideas proposed to change systems statewide in support of improving the experience for families.

Efforts with Local MCH Programs

Health care for the non-military population in Alaska consists of two delivery systems. A consortium of Alaska Native tribal organizations (the Alaska Native Tribal Health Consortium, or ANTHC) operates a three-tier system of hospitals, regional health centers and village clinics, with funding from the Indian Health Service Medicaid dollars (both federal and state), for members of those tribal organizations. Non-native Alaskans utilize the private health care system or federally qualified/community health centers. Public health clinics, operated by the Division of Public Health, offer limited well child, sexually transmitted disease and reproductive health services and disease outbreak investigation in hub communities and serve as a safety net for high risk populations. Native Alaska residents may choose to utilize non-tribal facilities as well. There are only two local governmental agencies with health planning powers in Alaska - the North Slope Borough and the Municipality of Anchorage. Both have chosen to interpret their health powers very narrowly.

WCFH collaborates with local tribal health agencies on grant applications. For example, WCFH, the Section of Public Health Nursing and the Southcentral Foundation (tribal health organization for the Anchorage region) are collaborating on a grant application for a home visitation program. Title V funds are braided with TANF funds to purchase contraceptives for village clinics, through the Reproductive Health Partnership, in areas of the state with high rates of teen and out of wedlock pregnancy.

Using Title V block grant monies, WCFH collaborates with the Borough of Juneau to fund nurse practitioners to offer reproductive health and well child visits in the two local high schools in Juneau. WCFH staff is also working with the Anchorage School District to start a school health center in one of the junior high schools located in one of the poorer parts of Anchorage.

WCFH collaborates with the Alaska Native Tribal Health Consortium (ANTHC) in numerous venues:

- WCFH is co-sponsoring the Alaska Maternal Child Health and Immunization Conference with ANTHC EpiCenter, to be held in September 2010.
- WCFH is collaborating with the ANTHC EpiCenter to publish a data book focused on Alaska Native maternal and child populations.
- WCFH participates in quarterly meetings with the EpiCenter staff to share research efforts and activities.
- ANTHC providers participate on WCFH technical advisory committees such as the NMBS committee, the Perinatal Advisory Committee, and the EHDI Advisory Committee.

WCFH actively participates and is a leader in the All Alaska Pediatric Partnership (AAPP). The AAPP is composed of representatives of the largest hospitals from across the state who care for children as well as the Division of Public Health-WCFH and the Division of Health Care Services. AAPP's mission is to bring together institutional perspectives to exchange ideas and develop collaborative approaches to enhance Alaska's pediatric resources. (website: <http://a2p2.com/index.php>)

The majority of population-based MCH programs are managed and implemented by the State of Alaska. Collaborations between WCFH, the Title V agency, and other state agencies with MCH program responsibility is described under "Efforts With Other State Agencies".

Efforts with Other State Agencies

We believe that our close cooperation in data sharing and program development with other sections and divisions within the Department is a particular strength that contributes to the success of our combined MCH programs. Listed below are the more visible examples of collaborations with other sections or divisions within the state:

- WCFH has a data sharing agreement with the Bureau of Vital Statistics. As a result, WCFH can link birth certificate data to PRAMS, CUBS, ABDR and SCAN surveillance data, as well as to Medicaid data for special research projects
- WCFH provides CUBS surveillance data to the Section of Chronic Disease Prevention and Health Promotion for the Obesity Prevention Program.
- WCFH collaborates with Division of Public Assistance on many projects:
 - Receives WIC data to analyze anemia and iron deficiency in Alaska Native children and mothers.
 - Uses TANF funds to provide long acting reversible contraceptives in western Alaska, the region with the highest rate of teen births and non-marital births. These monies have also supported Title V staff in providing education, training and supplies to rural providers on insertion of long acting reversible contraceptives, education on other methods and approaches to family planning education especially for the rural tribal health aides. In addition, TANF funds have supported collaborative efforts in developing peer education models of education and leadership for teens in developing healthy relationships. Funds are also used to fund media and training focused on Healthy Relationships curriculum such as the *4th R curriculum*
- WCFH collaborates with the Division of Juvenile Justice, the Children's Justice Task Force and other agencies to develop the SCAN surveillance system. This is a difficult task of overcoming privacy, legal and administrative concerns among the different agencies.
- The Division of Public Health and the Office of Children's Services has a data sharing agreement to link the EHDI program with the Early Intervention/Infant Learning (EI/ILP) Program. As a result, children identified as needing services through the EHDI program

can be tracked for receiving appropriate services from EI/ILP. FERPA concerns limit data sharing.

- WCFH participates on the steering committee of the Early Childhood Comprehensive System (ECCS) program managed by the Office of Children's Services
- WCFH provided staff to the Division of Homeland Security and Emergency Management for the H1N1 immunization program as part of the Emergency Disaster Plan. WCFH has a designated staff member focused on working with Division Disaster management staff to assure special populations such as children and pregnant and parenting moms are considered in disaster planning.
- WCFH partners with the Section of Public Health Nursing to identify and provide needed services to MCH populations. Contraceptives and nurse practitioner contracts are funded with MCH block grant funds to support reproductive health services provided by Section of Public Health Nursing at the Public Health Centers and other private providers Public Health Nursing is frequently contacted when following up with abnormal screens for children identified through the EHDI or NBMS programs. Some public health centers act as case coordinators for families when children in their communities are diagnosed with neurodevelopmental, autism genetics or metabolic conditions.
- The WCFH Adolescent Health Manager is an active participant in the CDC's DELTA project, a program targeting intimate partner and domestic violence. The AHPM is serving as an active member of a domestic violence and sexual assault prevention steering committee. TANF funding has been blended with DELTA funding to sponsor this year's intimate partner violence media campaign.
- WCFH collaborates with the Division of Health Care Services on the Medicaid Program. WCFH provides health information to Medicaid/Denali KidCare recipients about well-child exams, health and safety and who to contact for access to medical care through Medicaid enrolled providers. This activity requires partnerships between the various state agencies administering the programs, local providers and local program administrators. WCFH also provides data to the Medicaid program to support their operations. The WCFH Section Chief (Title V/CSHCN Director) is working with Division and tribal staff on improving outreach for EPSDT exams and services.
- The School Nurse consultant partnered with the YRBS program in the Section of Chronic Disease Prevention and Health Promotion and the Department of Education and Early Development to develop the social development school health module. She also participates as a key member on the steering committee charged with developing the school health track for the Department of Education and Early Development's statewide education plan as well as an active member of the Children's Obesity Task force.
- The School Nurse Consultant was a key member in the H1N1 immunization distribution planning committee during FY2010 and continues to be an active member of the disaster preparation team.
- The Perinatal Nurse Consultant co-leads an interdepartmental and community wide advisory committee on Infant Safe Sleep with her colleagues from the MCH Epidemiology Unit.
- WCFH staff led the implementation of statewide clinics for autism/neurodevelopmental early identification, training and expansion by collaborating with the early intervention program, the Governor's Council on Developmental Disabilities and Special Education,

tribal health, public health nursing, University of Alaska Center for Human Development program, families, and other private agencies.

- Important collaborations occur at the section director's level:
 - The Title V Director serves on the Strengthening Families (SF) Leadership Team. The team continues to work towards embedding this framework in state policies and systems. The SF program is managed by the Office of Children's Services.
 - The Title V Director serves on the DHSS Commissioner's Child Policy Team which is focused on improving in-state access and infrastructure of behavioral health services.
 - The Title V Director serves on the steering committee for the ECCS program managed by the Office of Children's Services.
 - The Title V Director serves on the UAA committee working on the development of a doctorate of nursing practice program as well as the ongoing development of the masters in public health program

Efforts with Public and Private Organizations

- WCFH staff works with providers from Seattle Children's Hospital and Medical Center and Oregon Health Sciences University, funded by MCH Title V grants, to hold genetics and metabolic specialty clinics around the state.
- WCFH invites coalitions and non-profit agencies to participate in advisory committees and stakeholder meetings such as the March of Dimes, Planned Parenthood, the Association of Women's Health, Obstetric and Neonatal Nursing, American Academy of Pediatrics-Alaska chapter, Stone Soup Group, Broken Sparrow, YWCA, and families who participate in Title V programs.
- WCFH has a strong relationship with the University of Alaska-Anchorage (UAA) and the University of Alaska-Fairbanks. WCFH staff are frequent lecturers in the dental hygiene, human services, nursing, child development, laboratory science and MPH programs. The Title V Section Chief serves on the advisory program for the UAA's MPH program. The University Affiliated Program, Center for Human Development at UAA, is a close collaborator in developing programs for CSHCN, especially in the area of transition from adolescents to adulthood.
- The Title V/CSHCN Director and the Children's Health Unit Manager are active participants in the All Alaska Pediatric Partnership, a community coalition of hospitals and medical providers serving the pediatric population of the state.
- The Title V/CSHCN Director was active in Project Access, a program available in Anchorage for individuals who are underinsured or have no insurance.
- Title V providing funding assistance for post partum depression screening at the Children's Hospital at Providence Hospital.
- WCFH collaborates with Primary Care Associates, a private group of providers, to promote medical homes and reproductive health initiatives

3. Strengths and Needs of the Maternal and Child Health Population Groups and Desired Outcomes

Resources on the Web

Highlights of the health status of the three primary MCH populations is described in this section. Listed below are existing publications posted on the WCFH website that contain far more data than what can presented in this document.

Alaska MCH Data Books are published annually by the MCH Epidemiology Unit. Beginning in 2003, and published every third year thereafter, the Data Book features a comprehensive look at maternal and child health indicators for Alaska. In interim years, Data Books present findings of the public health surveillance programs managed by the MCH Epidemiology Unit.

- Health Status Edition, 2008. <http://www.epi.alaska.gov/mchepi/mchdatobook/2008.htm>
- Birth Defects Edition, 2005. <http://www.epi.alaska.gov/mchepi/mchdatobook/2005.htm>
- PRAMS Edition, 2004. <http://www.epi.alaska.gov/mchepi/mchdatobook/2004.htm>
- Health Status Edition, 2003. <http://www.epi.alaska.gov/mchepi/mchdatobook/2003.htm>

Fact Sheets on MCH and CYSHCN health outcomes give information on the urgency, severity, disparities, interventions and recommendations, and capacity. They are available at <http://www.epi.alaska.gov/mchepi/MCHFacts/na.htm>. Topics covered are:

Women, Infants and Mothers

- Birth Defects among Infants and Children in Alaska
- Breastfeeding in Alaska
- Fetal Alcohol Syndrome & Other Effects of Prenatal Alcohol Exposure in Alaska
- Infant and Fetal Mortality in Alaska
- Infant Sleep Position and Co-Sleeping in Alaska
- Low Birth weight and Preterm Births in Alaska
- Maternal Illness and Complications During Pregnancy in Alaska
- Maternal Mental Health in Alaska
- Newborn Hearing Screening in Alaska
- Newborn Metabolic Screening in Alaska
- Oral Health Care among Pregnant Women and Women in Alaska
- Perinatal HIV Infection in Alaska
- Pregnancy-Associated and Pregnancy-Related Mortality in Alaska
- Prenatal Alcohol Use in Alaska
- Prenatal Care in Alaska
- Prenatal Marijuana and Cocaine Use in Alaska
- Prenatal Tobacco Use in Alaska
- Unintentional Infant Injury in Alaska

Women

- Breast and Cervical Cancer Screening in Alaska

- Contraception: Access and Use in Alaska
- Maternal Mental Health in Alaska
- Oral Health Care among Pregnant Women and Women in Alaska
- Sexually Transmitted Diseases and HIV among Women in Alaska
- Unintended Pregnancy in Alaska

Children and Adolescents

- Child and Adolescent Access to Health Care in Alaska
- Child and Adolescent Asthma in Alaska
- Child and Adolescent Cancer in Alaska
- Child and Adolescent Diabetes in Alaska
- Child and Adolescent Mental Health in Alaska
- Child and Adolescent Mortality and Injury in Alaska
- Child and Adolescent Nutrition in Alaska
- Child and Adolescent Oral Health in Alaska
- Child and Adolescent Overweight and Obesity in Alaska
- Child and Adolescent Physical Activity
- Child Maltreatment in Alaska
- Early Identification and Intervention among Children in Alaska
- Sexually Transmitted Diseases and HIV among Teenagers in Alaska
- Teen Pregnancy and Sexual Behavior in Alaska
- Youth Risk Behaviors in Alaska: Tobacco Use, Alcohol Use, Drug Use
- Youth Violence in Alaska

Children with Special Health Care Needs

- Characteristics and Issues of Children with Special Health Care Needs in Alaska
- Oral Health among Children with Special Health Care Needs

Journal articles and Epi Bulletins disseminate research findings of the MCH Epidemiology Unit or give updates on programs. Our publications are posted at the following website:
<http://www.epi.alaska.gov/mche/pi/pubs/indexcategory.jsp>.

The following section presents highlights of the health status of MCH populations. They were presented as five handouts at the Needs Assessment stakeholder meeting in February 2010. The narratives are available on the WCFH Title V webpage (<http://www.hss.state.ak.us/dph/wcfh/titleV/>).



Health Status of Women Across the Lifespan, Including Pregnant Women and Mothers

How Do Social Networks and Economic Status Affect Health?

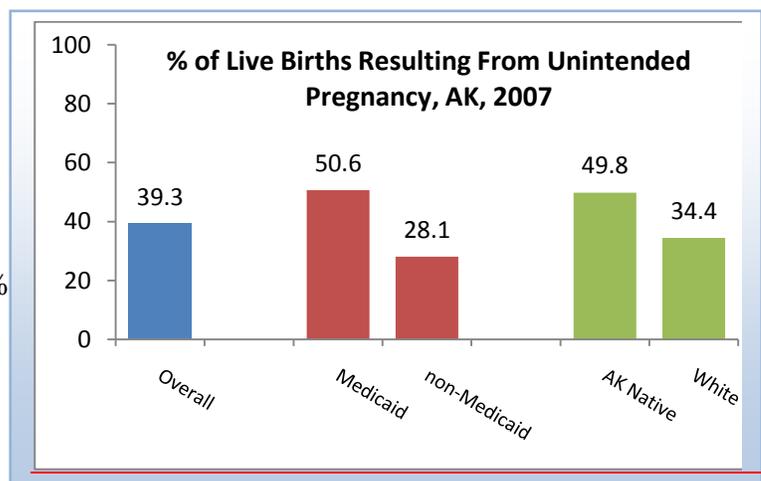
Disparities in health status has long been observed to be associated with income, education, social class, and working and living conditions. There is now a growing body of work that explains the pathways by which these social, economic and environmental factors at the population level translate to biological processes affecting the human body and the individual's health. In the social factors listed below, Alaska rates are similar to the U.S. average.¹

	Alaska	U.S.
Living in poverty	15.7%	16.4%
all minority women	23.7%	25.8%
Median HH income	\$ 54,431	\$ 45,000
all minority women	\$ 39,029	\$ 30,000
Gender wage gap	69.4%	69.2%
all minority women	56.0%	60.8%
No high school diploma	7.5%	12.4%
all minority women	14.9%	22.8%
Living in Female-headed households w/children	20.0%	22.1%
all minority women	28.2%	29.6%

Importance of Reproductive Health during the Child Bearing Years

Most women spend half their lives trying not to become pregnant. In 2007, 39% of Alaska women who delivered a live birth indicated their pregnancy was unintended.⁷ At the same time, an estimated 12% of women (based on U.S. data)² have an impaired ability to have children. Therefore, **preconception and interconception care** is important to all women regardless of pregnancy intention. This includes helping women detect, treat or modify behaviors and health conditions to minimize poor outcomes such as pregnancy loss, low birth weight, premature birth, infant mortality and birth defects. Recent research has shown that poor birth outcomes can be detrimental to the lifelong health of the offspring. In 2008, there were 140,026 women of childbearing age (15-44 years) in Alaska. More than half (56%) reside in the Anchorage/Mat-Su Region, and 16% live in the Interior Region.

Women with **unintended pregnancies** are more likely to find out that they are pregnant later than women with intentional pregnancies - making intendedness a factor in the newborns' birth outcomes. Of the women who indicated they had an unintended pregnancy, over half - 54% in 2007 - were using a contraceptive.



National studies indicate that incorrect or inconsistent use is the primary reason for unintended pregnancy despite use of contraception.³ In the postpartum period (3 months after birth, on average), 84% of women surveyed were doing something to keep from getting pregnant.

- WCFH provides information to health care professionals on contraception and the importance of having a planned pregnancy. Nurse practitioner contracts for family planning services are funded where access to such services is minimal. Title X family planning funds are used at one of the Public Health Nursing's clinic located in a part of the state where the rates for teen pregnancy are some of the highest. Title X funding is also granted to a private non-profit reproductive health clinic in Homer. Funds are used to pay for a nurse practitioner time, for technical assistance and contraceptive supplies.
- Access to long-acting reversible contraceptives and training providers in reproductive health is limited in rural areas of the state.
- Medicaid only covers contraceptive services up to 30 days postpartum.

"Prenatal care is one of the most widely used preventive health care services in the U.S."⁴ It was originally conceived to reduce maternal morbidity and mortality, prevent fetal abnormalities, and reduce risk of low birth weight and preterm births. However,

"Despite the widespread use of prenatal care, the evidence for its effectiveness remains equivocal and its primary purpose and effects continue to be a subject of debate".⁴

--- GR Alexander and M Kotelchuk

In Alaska, the proportion of singleton low birth weight births has not decreased in the last thirty years, although infant mortality rates have dramatically improved mostly through reduction of infectious disease. The proportion of women receiving prenatal care in the first trimester has remained at about 80% over the last decade. This indicator, however, does not measure quality of care.

Prenatal care visits are used as an opportunity to educate women about preventable exposures to risk factors. In 2006, of mothers who delivered a live birth, 77% reported being talked to about how drinking alcohol during pregnancy could affect the baby, 73% about smoking during pregnancy, and 83% about what to do if labor starts early. Sixty-four percent said they were talked to about physical abuse by their partners, an increase from just 47% in 2000.⁷ From 1999- 2007 approximately 25% of women who delivered a live baby said they took a daily multi-vitamin during the month before pregnancy.⁷

Prenatal Health Messages - In 2006, how many Alaskan mothers of newborns were talked to about:⁴

Breastfeeding	87%
Screening for birth defects	86%
Early labor	83%
Drinking alcohol	77%
Smoking	73%
Physical abuse by husband or partner	64%
Seat belt use	52%

Risky Behaviors Have Consequences

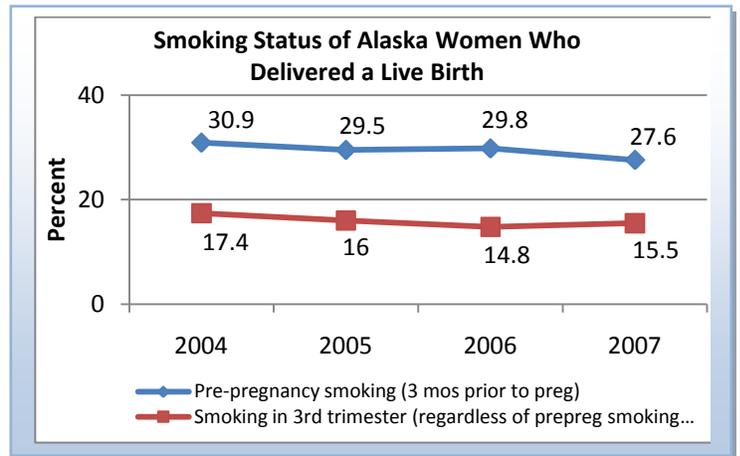
Alaska has had the first or second highest **chlamydia** infection rate in the U.S. each year since 2000. In 2008, 3,252, or 67% of all cases, occurred in females.² The highest documented infection rates were among females 15-19 and 20-24 years.² Up to 40% of females with

untreated Chlamydia infections develop pelvic inflammatory disease, which can lead to infertility, pelvic abscess and chronic pelvic pain.⁵

- The state’s STD Program consists of case surveillance, consultation on laboratory and medical aspects of diagnosis and treatment; direct assistance to providers in outbreak situations; assistance to affected individuals and their sexual partners, as well as to their health care providers, with partner notification and access to STD treatment; training for health care providers in partner interviewing, follow up, notification, and referral techniques; and provision of information, technical assistance, and other capacity building services to medical and other health service providers, as well as educators and members of the public.
- The Title V program actively participates in the Infertility Prevention Project as a part of Title X Family Planning to promote prevention of sexually transmitted infections, testing both clients and partner contacts, and timely treatment.

High risk behaviors contribute to adverse pregnancy outcomes. Prenatal **cigarette smoking** is the strongest known risk factor for low birth weight births, accounting for 20 - 30% of all low birth weight births in the U.S.⁶ In 2008 14.2% of adult Alaskan women reported smoking everyday and an additional 5% reported smoking some days.¹⁰ Both these indicators are slightly higher than the national median but reflect a reduction from 1996.¹⁰

For the women who gave birth, the percentage who smoked during the three months before getting pregnant has not changed much from 2002 - 2006, remaining steady at about 30% - 32%.⁸ The percent of those who smoked during the last 3 months of pregnancy ranged from 15% - 18%.⁸



There remains further opportunities to target smoking cessation intervention. Of the women who smoked prior to pregnancy, 45% of those who were talked to by a health care provider about smoking impacts said they quit, and 60% of those who weren't talked to quit as well. But 55% of smokers who were talked to continued to smoke in the third trimester.⁷

During 2004–2005, 4.1% of all Alaskan women surveyed reported prenatal iq'mik and 2.7% reported spit tobacco use.⁸ Compared to women from other regions, women from Southwest Alaska reported prenatal use of iq'mik or spit tobacco over seven times more frequently than the region with the next highest reported use. Although chew tobacco may contribute to nicotine addiction and adverse effects on the fetus, Alaska Native women report few perceived health effects.⁸

Intervention Opportunity - 55% of pre-pregnancy smokers who were talked to in 2006 continued to smoke in the third trimester.

Frequently tobacco cessation efforts are not targeted to pregnant women. There is little support offered during pregnancy nor assistance with starting or maintaining cessation after pregnancy.

- Legislation around tobacco sales to youth, advertising, taxes, and smoking in public places has been effective. Other successful intervention efforts include a free quit line service, free patches to those who sign up with the Quit Line, health messaging to the community and schools, and surveillance.
- The Alaska Tobacco Control Program⁹ is funded through tobacco taxes and follows CDC recommended Best Practices. In 2008, nine health center grantees received funding for tobacco use cessation program.

What Chronic Conditions Do Alaska Women Face?

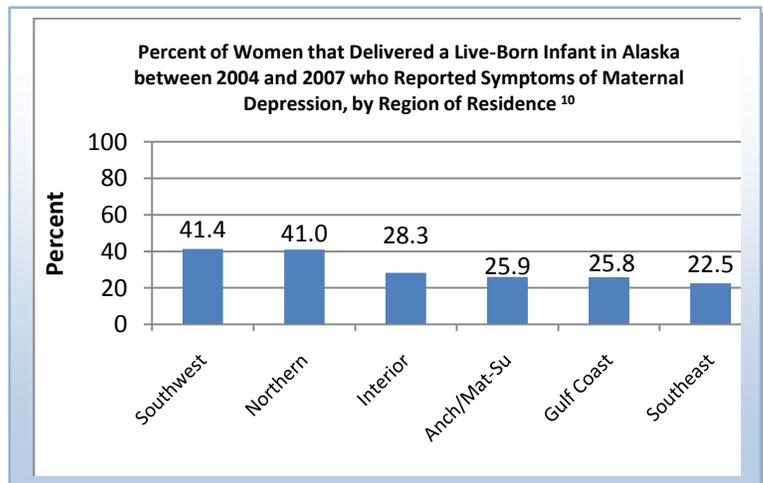
In 2008, 30% of all Alaskan women over 18 years old reported themselves as being **obese**.¹⁰ Seven percent of women reported being told they had **diabetes**.¹⁰ Twenty-two percent of adult women have ever been told they had high blood pressure¹, and of those who had their cholesterol checked, 36% were told it was too high¹⁰.

- At this time, obesity prevention and promotion of physical activity interventions primarily revolve around surveillance of related behaviors in adolescent and adult populations, creating partner coalitions to work on policy issues, and providing nutrition and physical activity training to childcare providers.
- Better surveillance of obesity rates and risk factors is needed in the child population, and increased research could help refine policy initiatives. The state is limited to advocacy efforts through providing expertise on policy topics. Providing physical activity opportunities is within the scope of local government and school districts.
- The Institute of Medicine recently published new guidelines for total and rate of **weight gain** during pregnancy, based on observational data which show women who gained within the guidelines experienced better outcomes of pregnancy than those who did not.¹¹ The next phase of the PRAMS survey will include questions on pregnancy weight gain.

Chronic conditions of new mothers :
 hypertension - 1.4% (BVS, 2008)
 diabetes - 0.5% (BVS, 2008)
 obesity - 23% (PRAMS, 2006)

Life Stressors

Poor **maternal mental health** adversely affects families, children and infants. Recent research has shown that children whose mothers had a chronic and activity-limiting mental health condition had a fourfold increased association of ADHD.¹² During 2004-2007, 9% of postpartum women reported always or often having a depressed mood since their baby was born.¹³ Ten percent of new mothers who were surveyed in 2004

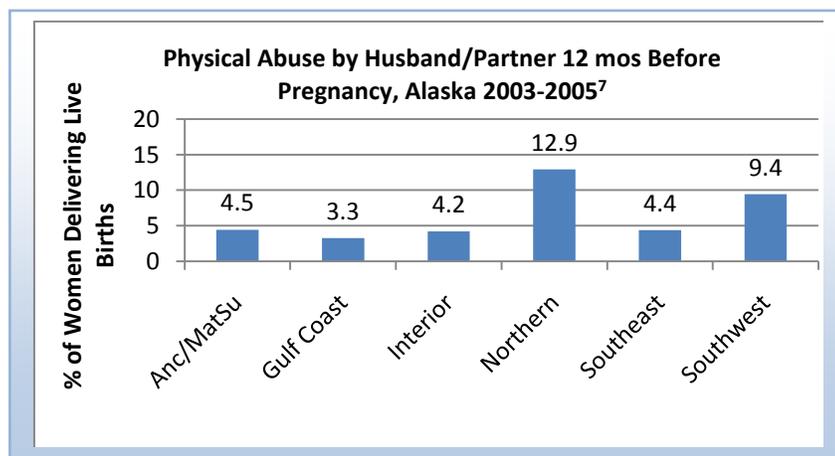


and again 2 years later reported being depressed at both times.¹³

- The Children's Hospital at Providence (Anchorage) has a perinatal mood disorder program manager who advocated for and provided training (to a wide array of providers) on screening all mothers for depression. This program may be ending due to funding issues..
- In 2008, Title V monies funded printing and distribution of postpartum depression packets for health care providers and the public. WCFH continues to distribute educational materials that include information on postpartum depression.

Violence against women is gradually receiving more attention, but significant gaps in knowledge and data exist. According to a national survey¹⁴ conducted in 1995 by the National Institute of Justice and the Centers for Disease Control and Prevention, 52% of surveyed women said they were physically assaulted as a child or as an adult. Eighteen percent of the women surveyed said they had been the victim of a completed or attempted rape at some time in their life. Of those, more than half were younger than 18 years at the time of the attempted or completed rape. Violence against women is predominantly intimate partner violence. National studies indicate that Native American and Alaska Native women are more than 2.5 times more likely to be raped or sexually assaulted than women in other women in the U.S.¹⁵

In Alaska, women who are physically abused prior to pregnancy are more at risk for physical abuse during pregnancy than those that never experienced abuse.¹⁶ Although both Alaska Native women and non-Native women independently reported a 50% decline in the prevalence of pre-pregnancy physical abuse by their husbands or partners during 2000-2005, Alaska Native women were 3.2 times more likely to report abuse than non-Native women at the end of that time frame (8% compared with 2.5%, respectively).¹⁶



- State level data on different aspects of violence against women are available through the Pregnancy Risk Assessment Monitoring System, the Behavioral Risk Factor Surveillance System, the Youth Risk Behavior Surveillance System, and research from the University of Alaska Anchorage Justice Center.
- Crisis services statewide are inadequate.

Disabilities and Illnesses

Disabilities are physical or mental limitations that make it harder to perform normal daily activities. A disability can range from mild to severe. It is estimated that during 1997 - 2008, 2.3% of U.S. women over 18 years of age needed help with activities of daily living (any personal care needs).¹⁷

Related Title V State Priorities, 2005 - 2010

- Reduce the rate of unplanned and unwanted pregnancies including teen pregnancies.
- Reduce the rate of domestic violence.
- Increase awareness around mental health issues in the MCH population.

Related State Performance Measures, 2005 - 2010

#1. Percentage of mothers of newborns who say their physician or health plan would not start prenatal care as early as they wanted or they could not get an appointment as early as they wanted.

2004 - 14.8% 2005 - 12.5% 2006 - 16.5% 2007 - 14.8%

#2. Percent of women who smoked during the last 3 months of pregnancy among women who smoked 3 months prior to pregnancy and were talked to about the effects of smoking by a prenatal health care provider.

2004 - 58.5% 2005 - 53.9% 2006 - 51.5% 2007 - 60.1%

#5. Percentage of women who recently had a live-born infant who reported their prenatal health care provider advised them not to drink alcohol during their pregnancy.

2004 - 80.3% 2005 - 79.5% 2006 - 82.6% 2007 - 80.0%

#6. Prevalence of unintended pregnancies that resulted in a live birth among women who reported having a controlling partner during the 12 months prior to getting pregnant.

2004 - 51.9% 2005 - 51.3% 2006 - 69.6% 2007 - 50.%

#7. Percentage of women who recently had a live-born infant who reported that they always or often felt down, depressed, or hopeless since their new baby was born.

2004 - 10.8% 2005 - 9.3% 2006 - 8.5% 2007 - 8.3%

Endnotes for Women's Health Status:

¹ The Kaiser Family Foundation, *statehealthfacts.org*. Data Source: CPS, 2004–2006, accessed Dec. 14, 2009.

² Fertility, Family Planning, and Reproductive Health of U.S. Women: Data from the 2002 National Survey of Family Growth, tables 67, 69, 97. <http://www.cdc.gov/nchs/FASTATS/fertile.htm>. Retrieved Dec. 14, 2009.

³ The Alan Guttmacher Institute. *Contraceptive Use*. New York, NY: The Institute. 2004.

⁴ Alexander GR, Kotelchuck M. Assessing the Role and Effectiveness of Prenatal Care: History, Challenges, and Directions for Future Research. *Public Health Reports* 2001; 116:306-316.

⁵ AK Dept of Health & Social Services, Div of Public Health. *Epi Bulletin No. 13. Chlamydia trachomatis Infection - Alaska, 2008*. April 3, 2009.

-
- ⁶ U.S. Dept. of Health and Human Services. The Health consequences of Smoking: A Report of the Surgeon General. Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health promotion, Office on Smoking and Health. 2004
- ⁷ Alaska Pregnancy Risk Assessment Monitoring System.
- ⁸ AK Dept of Health & Social Services, Div of Public Health. Epi Bulletin No. 28. Prenatal Smokeless Tobacco and Iq'mik Use in Alaska. October 10, 2007
- ⁹ AK Dept of Health and Social Services, Division of Public Health. Tobacco Prevention and Control in Alaska, FY 2008.
- ¹⁰ Centers for Disease Control and Prevention (CDC). *Behavioral Risk Factor Surveillance System Survey Data*. Atlanta, Georgia: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, 2007, 2008.
- ¹¹ Institute of Medicine. Weight Gain During Pregnancy: Reexamining the Guidelines. Resource sheet, May 2009.
- ¹² Lesesne CA, Visser SN, and White CP. Attention-Deficit Hyperactivity Disorder in School-aged Children: Association with Maternal Mental Health and Use of Health Care Resources. *pediatrics*. 111(5 part 2):1232-7. May 2003.
- ¹³ AK Dept of Health & Social Services, Division of Public Health. Maternal Mental Health in Alaska. Epi Bulletin No. 16. July, 2009.
- ¹⁴ Tjaden P, Thoennes N. Full Report of the Prevalence, Incidence and Consequences of Violence Against Women. U.S. Dept. of Justice, Office of Justice Programs. November 2000. Available at <http://www.ncjrs.gov/pdffiles1/nij/183781.pdf>.
- ¹⁵ Amnesty International. Maze of Injustice - The failure to protect Indigenous women from sexual violence in the USA. 2007. Available at <http://www.amnestyusa.org/women/maze/report.pdf>.
- ¹⁶ Schoellhorn KJ, Perham-Hester KA, Goldsmith YW. AK Maternal and Child Health Data Book 2008: Health Status Edition. Anchorage, AK. Maternal and Child Health Epidemiology Unit, Section of Women's Children's and Family Health, Division of Public Health, AK Dept of Health & Social Services. December 2008.
- ¹⁷ Centers for Disease Control and Prevention. National Center for Health Statistics. Health Data Interactive. [Health and functional status]. www.cdc.gov/nchs/hdi.htm. Retrieved Dec. 14, 2009.



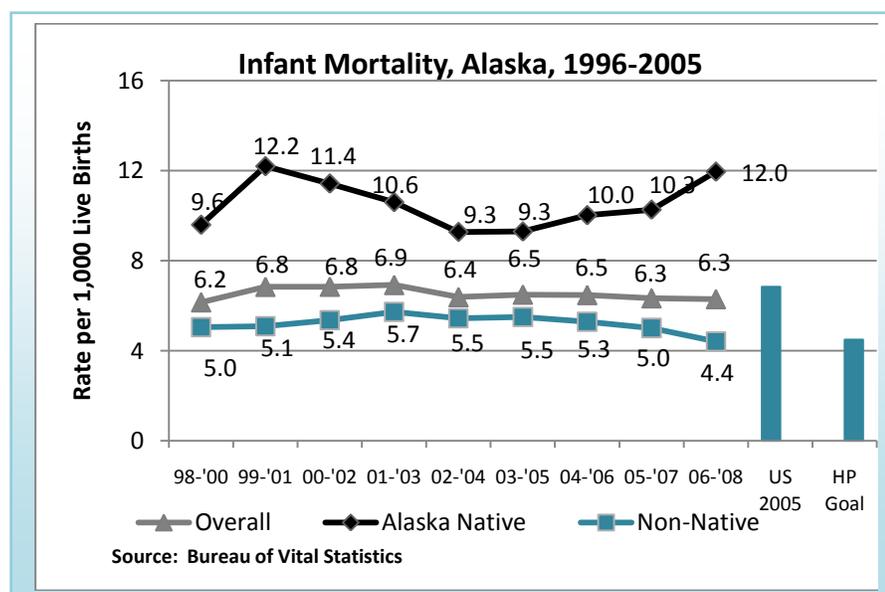
Health Status of Infants

"The early years of a child's life are crucial for cognitive, social and emotional development. Children who grow up in environments where their developmental needs are not met are at an increased risk for compromised health and safety, and learning and developmental delays ... with long term effects on the foster care, health care, and education systems."¹⁸

--- Centers for Disease Control and Prevention

Infant mortality (IMR) is the leading world-wide indicator of maternal and infant health status. It is also valuable in assessing the quality and accessibility of primary health care available to pregnant women and infants, and the impact of poor socio-economic conditions on maternal and infant health. Alaska's IMR ranked 20th in the Nation during 2004. The disparity between Alaska Natives and non-Natives has improved since the early 1990s but still persists. For the 2003-2005 period the Alaska Native rate is nearly twice that of non-Natives.¹⁹ Factors associated with infant deaths vary according to the age of the infant. Infant deaths that occur in the neonatal period (birth to 28 days) are usually associated with pregnancy and delivery issues.

The Alaska Maternal-Infant Mortality Review (MIMR) was established in 1992 to evaluate preventable causes for the state's high IMR. The committee has reviewed over 99% of all known infant deaths during 1992-2002, allowing for multiple causes. During this review period, preterm birth (less than 37 weeks gestation) contributed to almost half (48%) of all neonatal deaths in Alaska. Other primary causes of neonatal death included congenital anomalies (33%), perinatal events (19%), and infections (12%). Infections associated with neonatal deaths included Group B Streptococcal sepsis and pneumonia, Gram negative sepsis and candida sepsis.²⁰ Medical advances, the introduction of neonatal intensive care units, perinatal regionalization, and improved access to prenatal care have contributed to declines in neonatal mortality, particularly in low birth weight and preterm infants.²¹

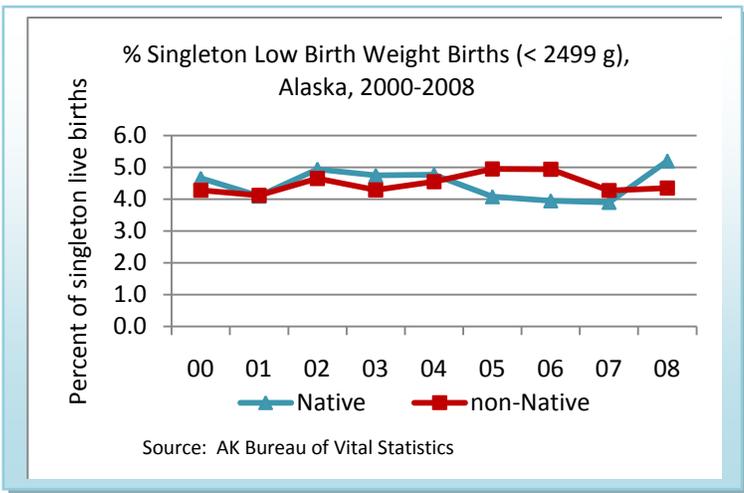


Medically indicated **preterm births** are defined as preterm birth following labor induction or Cesarean section without premature rupture of membranes (PROM). Medically indicated preterm births are increasing nationally as well as in Alaska and are a major contributor to increasing proportions of preterm births.²⁰ This increase coincides with a decrease in the cause specific infant mortality rate for preterm births and may indicate better monitoring of the mother and fetus. Recent studies have shown that only some interventions for preterm birth may be beneficial.¹⁹

Trends in Three Categories of Preterm Birth, Alaska, 1996 - 2005:

- Premature Rupture of Membranes (PROM): increased by 17.9% - 18.7% among non-Native births, and 12.3% among Alaska Native births
- Medically Indicated: increased by 16.3% among non-Natives births, and declined by 16.5% among Alaska Native births
- Spontaneous (including all vaginal deliveries not induced and without PROM): stable at less than 1% of live births for both Alaska Native and non-Native mothers.

Compared to infants of normal weight, **low birth weight** (LBW; less than 2,500 grams or 5.5 lbs.) and very low birthweight (VLBW; less than 1,500 grams or 3.3 lbs.) infants are at increased risk of death and delayed motor and social development. The majority of LBW and VLBW infants are born preterm. Studies suggest that smoking in the third trimester is particularly detrimental to fetal growth.¹⁹ The occurrence of LBW could be reduced by an estimated 20% if all pregnant women were non-smokers.¹⁹ Women are more likely to stop smoking during pregnancy, both spontaneously and with assistance, than at other times in their lives. Since women are highly motivated to stop smoking during pregnancy, programs that encourage women to stop smoking before, during and after pregnancy deserve high priority.



- In 2007, 77% of very low birthweight infants were delivered at facilities for high risk deliveries and neonates.²²

Post-neonatal mortality is more often caused by environmental conditions than problems with pregnancy and childbirth. According to MIMR-CDR consensus decisions, **Sudden Infant Death Syndrome** (asphyxia of unknown etiology) and **unintentional suffocation** contributed to half of all post-neonatal deaths in Alaska during 1992-2002. Other primary causes of post-neonatal death included congenital anomalies (20%), infection (16%), and physical trauma (11%). Infections associated with post-neonatal deaths included pneumonia and bronchiolitis due to a variety of viral and bacterial causes and bacterial meningitis. Of 47 post-neonatal deaths due to physical trauma, the committee determined that at least 26 were possible or probable victims of neglect or abuse. Unintentional injuries included motor vehicle accidents, house fires, carbon monoxide poisoning, and drowning.²⁰

What Risk Factors Are Associated With Infant Mortality?

Maternal education is one of the strongest predictors of infant mortality worldwide, including in Alaska, even when controlling for maternal age. Lack of maternal education may be reflected in lack of understanding of how to care for an infant, how to implement prevention measures, and how to recognize early signs of serious illness.¹⁹

Infants born to women who smoke prenatally have increased risk of mortality from most causes, especially SIDS, preterm delivery, and low birth weight. A recent evaluation found that lack of information for the father on the birth certificate is strongly associated with post-neonatal death.¹⁹

What Does Science Tell Us About Early Childhood Development?²³

"The period between birth and three years is a time of rapid linguistic, social, emotional, and motor development. Language rich, nurturing, and responsive care giving fosters healthy development in this period. When inadequate stimulation is provided or barriers to opportunities for productive learning exist, these can lead to early disparities in capability that generally persist in the absence of effective intervention".²²

Early infancy is the time when parent-child bonding occurs and emerging attachments by the baby are built. **Excessive stress** in infants is associated with effects on the nervous and hormone systems that can damage the developing brain architecture and lead to lifelong problems in learning, behavior, physical health and mental health.²⁴ Families at lower socio-economic levels face significantly more barriers to providing an optimal environment for infants than families at the higher socio-economic level.

Health Related Socio-Economic Factors

% non-marital births	38% (2008) ^a
% births covered by Medicaid	50% (2007) ^a
% new moms with annual income < \$10,000	16% (2007) ^c
% children < 5 living in poverty	14% (2008) ^b
% children < 6 in low-income working families	17% (2007) ^b
% births to mothers with < 12 years education	14% (2008) ^a
% mothers still breastfeeding 8 wks after delivery	71% (2007) ^c
% new moms with postpartum depression symptoms	14% (2007) ^c

Data sources:

^a Alaska Bureau of Vital Statistics

^b Kids Count Program

^c Alaska PRAMS

Early Interventions

Newborn screening programs can detect certain harmful or potentially fatal disorders that aren't apparent at birth. Early intervention and treatment could avoid or mitigate lifelong impairment. The Early Hearing Detection and Intervention (EHDI) program has achieved nearly 100% screening of in-hospital births and has significantly improved the rate of out-of-hospital birth screening.²⁵ The Newborn Metabolic Screening Program (NBMS) has achieved a 100% screening rate in 2008 and a 100% rate of screen positive newborns who receive timely follow-up.²⁵

Related Title V State Priorities, 2005-2010²⁵

- Reduce the rate of child abuse and neglect.
- Reduce the rate of post-neonatal mortality.

Related Title V State Performance Measures, 2005-2010²⁵

#4. Rate of substantiated reports of harm to children per one thousand children age 0 to 18.
FFY 2007 - 15 per 1,000 FFY 2008 - 18 per 1,000

#8. Prevalence at birth of Fetal Alcohol Spectrum Disorders (FASD), per 1,000 live births.*

Reporting Year	Birth Years	Rate	Number
2006	1997-1999	20.9	623
2007	1998-2000	21.9	654
2008	1999-2001	19.2	574
2009	2000 - 2002	16.9	505

* average age of diagnosis for FAS is 5-6 years.

Related Title V National Performance Measures, 2005-2010²⁵

#1. The % of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their State-sponsored newborn screening programs.

Year	Percent	Number
2005	92.6	25
2006	100.0	36
2007	100.0	44
2008	100.0	195

#11. The % of mothers who breastfed their infants at 6 months of age.

Child's Birth Year	Percent	Error*
2000	40.9	± 13.8
2001	53.2	± 7.5
2002	49.4	± 6.2
2003	43.8	± 6.2

2004	59	± 6.1
2005	53	± 8.2

* Survey results subject to a margin of error.

#12. % of newborns who have been screened for hearing before hospital discharge.

Year	Percent	Number
2002	65.4	6430
2003	80.8	8081
2004	87.3	8968
2005	90.5	9351
2006	90.4	9837
2007	95.3	9899
2008	97.7	10426

#13. % of children without health insurance.

2005 - 9.2% 2006 - 9.4% 2007 - 11.2%

#17. Percent of very low birth weight infants delivered at facilities for high-risk deliveries.

Year	Rate	Number
2003	75.3	67
2004	74.8	89
2005	76.8	73
2006	78.1	96
2007	76.8	76

References for Health Status of Infants

¹⁸ Centers for Disease Control and Prevention. [website] Child Development and Public Health. Accessed 9/28/09 from <http://www.cdc.gov/ncbddd/child/development.htm>.

¹⁹ AK Dept of Health & Social Services, Division of Public Health, Section of Women's Children's and Family Health. Infant & Fetal Mortality in Alaska. Title V Fact Sheet: Needs Assessment Update. Vol. 2 No 3, June 2007.

²⁰ Schoellhorn KJ, Perham-Hester KA, Goldsmith YW. AK Maternal and child Health Data Book 2008: Health Status Edition. Anchorage, AK. Maternal and Child Health Epidemiology Unit, Section of Women's, Children's and Family Health, Div of Public Health, AK Dept of Health & Social Services. December 2008.

²¹ Rowley DL, Iyasu S, MacDorman M, Atrash HK. Neonatal and Post-Neonatal Mortality in From Data to Action. U.S. Dept of Health and Human Services. 1995.

²² AK Bureau of Vital Statistics.

²³ Center on the Developing Child at Harvard University (2007). A Science-Based Framework for Early Childhood Policy: Using Evidence to Improve Outcomes in Learning, Behavior, and Health for Vulnerable Children. <http://www.developingchild.harvard.edu>.

²⁴ The Science of Early Childhood Development. (2007). National Scientific Council on the Developing Child. <http://www.developingchild.net>

²⁵ State of Alaska, section of Women's Children's and Family Health. FY 2010 Title V Block Grant application.



Health Status of Children

Some of the major issues around preschool children include age appropriate physical growth, cognitive and social-emotional development, and school readiness. The effects of poor health in childhood can last until adulthood. In 2007, 90% of Alaskan parents reported that their child's health status was good or excellent.²⁶

What Health Challenges Do Young Children Face?

Alaska Native children have some of the highest lower respiratory tract **infection** (LRI) rates ever reported.²⁷ Individual-level risk factors associated with LRI include poverty and low maternal education, and increased use of tobacco. Environmental risk factors include living in crowded conditions and poor indoor air quality from wood stove use. A recent study of Alaskan communities showed a possible influence of community education levels on risk of LRI in children. The proportion of poorly educated adults in the community was more predictive of inpatient and outpatient LRI risk than household crowding, income levels, or proximity to physician services. The protective factor associated with birth to a well-educated mother was substantially reduced if the community educational status was low.²⁷ Lack of piped water and sewage services in rural Alaskan communities is also a potential environmental factor associated with LRI.²⁸

Excess weight has become nearly an epidemic in the U.S., and is a major contributor to problems such as high blood pressure, high cholesterol, orthopedic disorders, and type 2 diabetes.²⁹ For every 10 students of normal weight in the Anchorage School District in 1998-1999, 2 had become overweight or obese 10 years later. For every 10 students in that same cohort who were overweight or obese, 10 years later only 2 were normal weight and 8 remained obese.²⁹ Diabetes is one of the most expensive chronic medical conditions. While the prevalence of diabetes in young children is very low, life-long habits in nutrition and physical activity set the stage for the level of risk in adolescents, teens and adults. Proper nutrition and physical activity are major factors affecting weight. There is strong evidence that regular physical activity helps reduce body fat and that sedentary lifestyles are associated with higher BMI.³⁰ There is evidence that breastfeeding offers some protection against overweight in the child.

Anchorage School District
K & 1st Grade Students, 2007-08:

- 15% Overweight
- 18% Obese

- School districts have implemented significant policy and environmental modifications such as banning soda and junk food, increasing health instruction including nutrition education, and increasing mandatory physical education.
- Over half of Alaskan adults (55%) support more nutrition

Where Can Risk Factors Be Modified Among 3-Year Olds?⁴ In 2008, the day before their mom was interviewed:

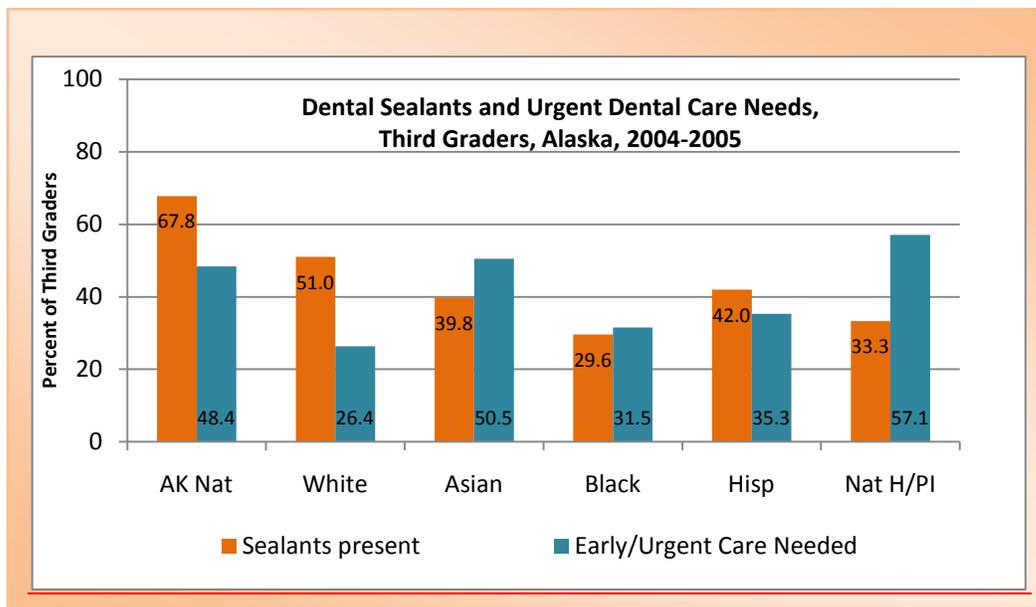
- 26% drank 1 c or more of sweetened beverage
- 11% drank 1 c or more of soda
- 35% drank whole milk, 36% drank reduced fat milk; and 13% drank low fat or fat free milk
- 42% ate french fries, tator tots or potato chips at least once
- 75% ate candy, cookies or other sweets at least once
- 59.4% were enrolled in WIC
- 45% spent 2+ hours watching TV, videos or DVDs

information in restaurants and over three-quarters (79%) support a government-funded media campaign.³⁰

- 59% of 3-year olds surveyed by CUBS received services from WIC at some point since birth.³²

Chronic Conditions

Dental caries, or tooth decay, is the most prevalent chronic disease of childhood. Among children, oral disease and oral pain have been associated with speech problems, difficulty eating, sleep problems, poor school performance and reduced self esteem. 13% of mothers of 3-year olds say they've been told their child had tooth decay or cavities.³² The current recommendation for the first dental visit is at eruption of the first tooth or no later than age 1. Five percent of mothers surveyed in CUBS followed this recommendation. Fifty-five percent of the surveyed moms report their child had not yet been seen by a dentist.



- Some large communities do not support water fluoridation
- Medicaid covers oral health preventive services, including dental sealants, for children 0 - 21. Access to dental sealants is available through The AK Native Tribal Health Consortium, federally funded Community Health Centers, dental clinics or itinerant providers, and private dental offices. However, Denali KidCare/Medicaid enrolled children have serious difficulties accessing dental services due to shrinking dental workforce, high no show rates, low reimbursement rates and administrative requirements.³¹ The AK DHSS has developed a strategy plan that addresses some of these issues.
- Additional resources are needed for regular surveillance, program evaluation, and outreach to high risk populations.
- Services could be improved with: case management in Medicaid program; training for non-dental EPSDT providers to do fluoride varnish, dental screening, triage and referrals; understanding of Medicaid/DKC transportation issues; raise awareness of oral health as a major health issue

Asthma is a major cause of childhood disability and a major cause of missed school days. In 2008 16% of mothers surveyed by CUBS were told that their 3-year old had asthma or wheezing treated with inhalers, puffers or nebulizers³² and in 2004, 8% of adults in Alaska reported they had a child who ever had asthma. That's about 11,000 children < 18 years of age who have experienced asthma.³³

- The Alaska Asthma Coalition prepared an Alaska Asthma Plan: A Strategic Plan for Addressing Asthma in Alaska which presents strategies for reducing asthma mortality and morbidity, controlling the cost of care, and improving the quality of life for people with asthma. There is a significant parent and family role in helping to educate, coach, and monitor the asthmatic on the importance of good control as a lifelong skill.
- Alaska does not have funding for an asthma control program.

Issues in School-based Care

Many rural schools do not have school nurses or other certified individuals who are licensed to oversee health care of children who need services during the school day, for example, children who need to take regularly-scheduled medications for chronic conditions such as asthma. Of the 54 school districts in the state, only 15 districts hire school nurses. The other districts rely on resources such as public health itinerant nurses who have limited time and resources, community health aides, contract tribal nurses, and lay people with limited medical/nursing knowledge and expertise. Children with special health care needs may receive limited or no planning/coordination of their care in districts without school nurses.

- This is a significant and highly concerning status due to the high number of children with special needs, both disabilities and as chronic health conditions.
- A school-based health care model is being piloted at Clark Middle School in Anchorage. There is also a teen health center at Thunder Mountain High School, Juneau .

Neglect and Abuse Is a Particular Threat to All Children

The Alaska Surveillance of Child Abuse and Neglect (SCAN) was established in 2008. The purpose of this program is to provide reliable data of **child maltreatment** through an integrated and centralized data depository. Preliminary analysis of 2000 - 2006 data show that:

- The majority (69%) of child maltreatment-related fatalities occur in children less than 1 year old.
- Annually the average number of child maltreatment-related fatalities among infants is 10.
- Alaska Native children ages 0 – 9 have nearly 4 times the risk of maltreatment fatality compared with non-Native children.
- The majority (92%) of fatal maltreatment cases occurring in children 4 years old through 9 years old are neglect related.
- The majority (87%) of fatal abusive head trauma/Shaken Baby Syndrome fatalities occurred among non-Native children.

A more thorough and descriptive picture of neglect and abuse will be available as more data is collected. This will be helpful for implementing effective intervention programs.

- Strengthening Families program is a nationally recognized parenting and family strengthening program for high-risk families aimed at reducing problem behaviors,

delinquency, and alcohol and drug abuse in children, and improving social competencies and school performance. This framework has been adopted by Alaska for prevention of child abuse and neglect and decreasing the drop-out rate. The number of early care and learning programs implementing the Strengthening Families approach is expanding but additional funding for program expansion and technical assistance is needed.³⁴

Unintentional Injury Mortality

Alaska's child mortality rate among children is higher than the U.S. rate. The leading cause of death is **unintentional injury**, primarily motor vehicle crashes, then drowning and other accidents. Alaskans participate in activities that could put children at risk for injury. In 2008, 24% of 3-year olds rode on an ATV or snow machine in the week before their mother was surveyed.³²

- Injury prevention programs are implemented by the Division of Public Health, Section of Chronic Disease and Injury Prevention. Two examples are the Kids Don't Float and the ATV-Snow machine helmet safety programs. Partners include Safe Kids Alaska, Safe Routes to School, and Safety Bear.
- The Child Death Review program was created in 2005 within the Section of Women's, Children's, and Family Health based on the infant mortality review process.
- A new medical examiner was hired in June 2009 and two assistant ME positions were recently filled. More capacity skilled death scene investigation is needed in locations outside of Anchorage.
- Legislation passed in 2009 that improved requirements for child passenger restraints but no corresponding legislation exists for alternate motorized vehicle such as ATVs and snow machines.

Immunizations

In 2007, 78.6% of children 19 to 35 months received a full schedule of age appropriate **immunizations**.³⁵ 74% of mothers surveyed by CUBS believe it is important for their child to get all shots according to schedule, and another 21% believe some shots are important but delaying or refusing others is ok. 4.5% believe their child should never get shots, and 1% believes it is ok to wait until the child goes to school to get shots.³² Between 20 - 29% had received advice not to get childhood shots, from either friends or family, the media, or the internet. Planning for H1N1 response is primarily through the disaster planning process.

- The School Nurse Consultant is working with the Division of Public Health's statewide disaster planning team to develop vaccination procedures for schools across the state.

Insurance Coverage

About 87% of children are covered by some kind of health care plan and about 18 - 19% are either **uninsured** or had periods of no coverage.^{26,32}

- In FFY 2008, the Denali KidCare eligibility level was 175% of federal poverty level (\$4,000/mo for a family of 4 with no other coverage)³⁶. Legislation is pending in the 2010 legislative session for the FPL to be increased to 200%.
- Several agencies are working together to develop effective standards and to tie documented EPSDT visits to Medicaid reimbursements.
- Administrative organization of the Medicaid program creates barriers to be fully effective in needs assessment, enrollment, initiatives, quality assurance, coordination with other programs, and outreach.

Child Care

Of the mothers surveyed for CUBS, 31% used childcare for 10 or more hours a week on a regular basis.³² Of those using **child care**, 37% used a child care center or preschool and 36% used care in a caregiver's home. 37% said their provider was not licensed.

- 7% of parents who used daycare said they could not find childcare for a week or longer in the month before being surveyed. Reasons included: couldn't find the quality desired (41%); couldn't afford any care (33%); scheduling conflicts (28%); location conflicts (23%); and could find care that could meet the child's special needs (including behavioral concerns - 8%).³²

Challenging Experiences Affect Health through Adulthood

There is a growing body of research that links **adverse childhood experiences** to higher risk of a wide variety of health problems including alcoholism, depression, illicit drug use, ischemic heart disease, STD's, smoking, and suicide attempts.³⁷ Child poverty has consequences lasting throughout life. Children under 5 years of age in Alaska and nationwide are those most likely to be poor. It is estimated that in 2007, 14% of Alaska children up to 18 years of age (27,620) lived in poverty.³⁸ In 2008, 5.2% of children 0-19 years of age (11,154) were enrolled in TANF and 22% (45,888) were enrolled in the food stamp program.³⁹

The Adverse Childhood Experiences Study found that as the amount of stress a person experienced in childhood increased, the risk for health problems increased in a strong and graded fashion.³⁶

- Declines in Denali KidCare enrollment were seen at the end of FFY 2008, despite addition of staff to the Denali KidCare Eligibility Office. Staff turnover, citizenship documentation requirements, expiration of an outreach grant, and lengthy application processing times were identified as challenges.
- A WCFH School Nurse Consultant will assist in education and outreach for the EPSDT Program (well child checkups).
- Alaska has adopted the Strengthening Families model to build protective factors around children. More resources are needed to expand and evaluate the program. Almost 1/3 of children under 6 years are engaged in SF programs.⁴⁰

What Stressors Affected Moms of Alaska Toddlers?³²

- had bills they couldn't pay - 30%;
- self lost a job - 7%;
- partner lost a job - 14%;
- changed marital status - 10%;
- partner or self went to jail - 9%;
- mom diagnosed with depression - 8%;
- was homeless - 3%;
- experienced physical abuse or a threatening partner - 5%.

The Early Childhood Comprehensive Systems (ECCS) is a comprehensive systems approach for delivering services to families with young children. The systems approach may integrate elements composed of:

- physical health and medical care
- mental health
- social services
- education
- public safety
- family involvement
- substance abuse
- violence prevention
- job training and skills development.

What does a systems approach mean?

- **Create partnerships** among federal, state and community service providers to leverage resources and improve coordination and effectiveness
- Develop cross service systems - **break down silo effects**, promote integration and multifaceted approaches
- Establish links within the lifespan health model so that the early childhood stage is viewed as part of a **lifespan continuum** rather than a separate point in time

The Dept of Health & Social Services, Office of Children's Services developed an ECCS Plan that focuses on four areas: medical homes; social, emotional and mental health; early care and learning; and family support.⁴¹

Related Title V State Priorities, 2005-2010⁴²

- Reduce the rate of child abuse and neglect.
- Increase public awareness and access to health care services for children and CSHCN.
- Increase access to dental health services for children.
- Reduce the prevalence of childhood obesity and overweight.
- Increase awareness around mental health issues in the MCH population.

Related Title V State Performance Measures, 2005-2010⁴²

#3. Percentage of children ages 10-13 who are at-risk for being overweight.
2008 - 40.1% 2009 - 39.7%

#4. Rate of substantiated reports of harm to children per one thousand children age 0 to 18.
FFY 2007 - 15 per 1,000 FFY 2008 - 18 per 1,000

Related Title V National Performance Measures, 2005-2010⁴²

#9. % of third grade children who have received protective sealants on at least one permanent molar tooth.
FY 2005 - 52.4% FY 2008 - 55.3%

10. Rate of deaths to children aged 14 years and younger caused by motor vehicle crashes per 100,000 children.

Year	Rate	Number
2003-2005	6.5	31
2004-2006	5.0	24
2005-2007	4.1	20

#13. % of children (0-18 years) without health insurance.
2005 - 9.2% 2006 - 9.4% 2007 - 11.2%

#14. %-age of children, ages 2 to 5 years, receiving WIC services with a BMI at or above the 95th percentile.

2005 - 22.1% 2006 - 21.7% 2007 - 21.6% 2008 - 21.5%

References for Status of Child Health:

²⁶ Child and Adolescent Health Measurement Initiative. *2007 National Survey of Children's Health, Data Resource Center for Child and Adolescent Health website*. Retrieved 9/09/09 from www.nschdata.org

²⁷ Gessner BD, Chimonas MR, Grady SC. It takes a village: community education predicts pediatric lower respiratory infection risk better than maternal education. *J Epidemiol Community Health* doi:10.1136/jech.2009.087981

²⁸ Gessner BD. Lack of Piped Water and Sewage Services is Associated with Pediatric Lower Respiratory Tract Infection in Alaska. *Journal of Pediatrics*, May 2008.

²⁹ AK Dept of Health & Social Services, Section of Chronic Disease Prevention and Health Promotion. Prevalence of Overweight and Obesity among Anchorage School District Students, 1998 - 2008. *CHPHP Chronicles*, Vol. 2 Iss. 1.

<http://www.hss.state.ak.us/dph/chronic/pubs/assets/ChroniclesV2-1.pdf>

³⁰ AK Dept of Health % Social Services. Childhood Obesity in Alaska. March, 2009.

http://www.hss.state.ak.us/DPH/chronic/obesity/pubs/Childhood_Obesity.pdf

³¹ AK Medicaid Dental Action Plan accessed 9/10/2009. Available at

<http://www.hss.state.ak.us/dph/wcfh/oralhealth/docs/dental-dma-actionplan.pdf>

³² Alaska CUBS, 2008

³³ Gessner B, Utermohle C. Asthma In Alaska, 2006 Report. AK Dept of Health & Social Services, MCH-Epidemiology Unit.

³⁴ correspondence, S. Pittz. April 2009.

³⁵ CDC National Immunization Program, Immunization Coverage in the US, Immunization Survey, NIS Data: Tables, Articles & Figures. (See the 4:3:1:3:3 series).

³⁶ AK DHSS, Health Care Services. Website: Denali KidCare, Income Guidelines. Accessed Sep 10, 1009 at http://www.hss.state.ak.us/dhcs/DenaliKidCare/income_guide_dkc.htm

³⁷ Centers for Disease Control and Prevention. Adverse Childhood Experiences Study. [website].

<http://www.cdc.gov/NCCDPHP/ACE/findings.htm>

³⁸ Kaiser Family Foundation. website: statehealthfacts.org, Alaska: Poverty Rate by Age. Accessed 9/11/2009 from <http://www.statehealthfacts.org/profileind.jsp?ind=10&cat=1&rgn=3>.

³⁹ AK DHSS, Division of Public Assistance.

⁴⁰ correspondence, S Pittz, March 2009.

⁴¹ Office of Children's Services. [website] Early Childhood Comprehensive Systems.

<http://hss.state.ak.us/ocs/ECCS/default.htm>

⁴² State of Alaska, Section of Women's Children's and Family Health. FY 2010 Title V Block Grant application.



Health Status of Children and Youth with Special Health Care Needs With Developmental Delays

"The early years of a child's life are crucial for cognitive, social and emotional development. Children who grow up in environments where their developmental needs are not met are at an increased risk for compromised health and safety, and learning and developmental delays ... with long term effects on the foster care, health care, and education systems."⁴³
 --- Centers for Disease Control and Prevention

Social and emotional, cognitive and language developmental milestones for children 3 months to 5 years of age have been developed to track the progress of children's growth. The 2007 National Survey of Children's Health has several questions relating to child development.⁴⁴

National Survey of Children's Health (2007): Alaska's Profile

Indicator	%	Est. #
• Children age 4 mos to 5 yrs whose parents have 1 or more concerns about child's development	39.3%	23,172
• Children age 4 mos to 5 yrs who are at high risk for developmental, behavioral or social delay	10.1	5,936
• Children age 6-17 who consistently exhibit problematic social behaviors	7.0	8,429
• Children age 2-17 who currently take medication because of difficulties with emotions, concentration or behavior	5.0	7,969
• Children age 10 mos to 5 yrs who had a health care visit during the previous 12 mos that included developmental screening	20.7	10,172
• Children age 6-17 who have ever repeated a grade in school	6.7	8,020

The Individuals with Disabilities Education Act (IDEA) governs how states and public agencies provide early intervention, special education and related services to eligible infants, toddlers, children and youth with disabilities. Infants and toddlers with disabilities from birth - 3 years receive early intervention services under IDEA Part C while children and youth ages 3-21 receive special education under IDEA Part B. In Alaska, the Early Intervention/Infant Learning Program partners with grantees throughout the state to provide services for families of children age birth to 3 with special needs within the family's home area by using direct service staff in the community or itinerant staff from hub services. Among mothers who were surveyed by CUBS, 10.3% reported their 3-year old receiving Early Intervention or Infant Learning Program (ILP) services.⁴⁵ In 2008, ILP served 3,097 children.⁴⁶

What Types of Services Are Used by Alaska Families for their 3-year Olds?⁴⁵

Hearing Specialist	12.1%
Speech or Language Therapist.....	7.2%
Eye Specialist.....	6.9%
Physical Therapist.....	4.5%
Behavioral or Mental Health Specialist.....	1.1%

- In 2000, the percentage of children receiving at least one initial or periodic **well-child screening** was 82% for infants; 48% for children 1-5 years; and 18% for children 6-9 years. There are no indicators regarding type and depth of developmental screening.⁴⁷
- The **Early Childhood Comprehensive Systems (ECCS)** is a framework for delivering services to families with young children ages birth through 8. The Dept of Health & Social

Services, Office of Children's Services, developed an ECCS Plan that focuses on four areas: medical homes; social, emotional and mental health; early care and learning; and family support. The plan contains many process objectives to promote comprehensiveness and integration of programs that are delivered by many different organizations and funded by many different sources.⁴⁸

- **Bright Futures** is a national initiative launched by the US Health Resources and Services Administration to promote and improve the health and well-being of infants, children and adolescents. Its centerpiece is guidelines that provide child health promotion information and guidance to health professionals.⁴⁹ Bright Futures information is offered through the Alaska WIC Office.

The federal Maternal and Child Health Bureau defines children and youth with special health care needs (CYSHCN) as

*“those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally”.*⁵⁰

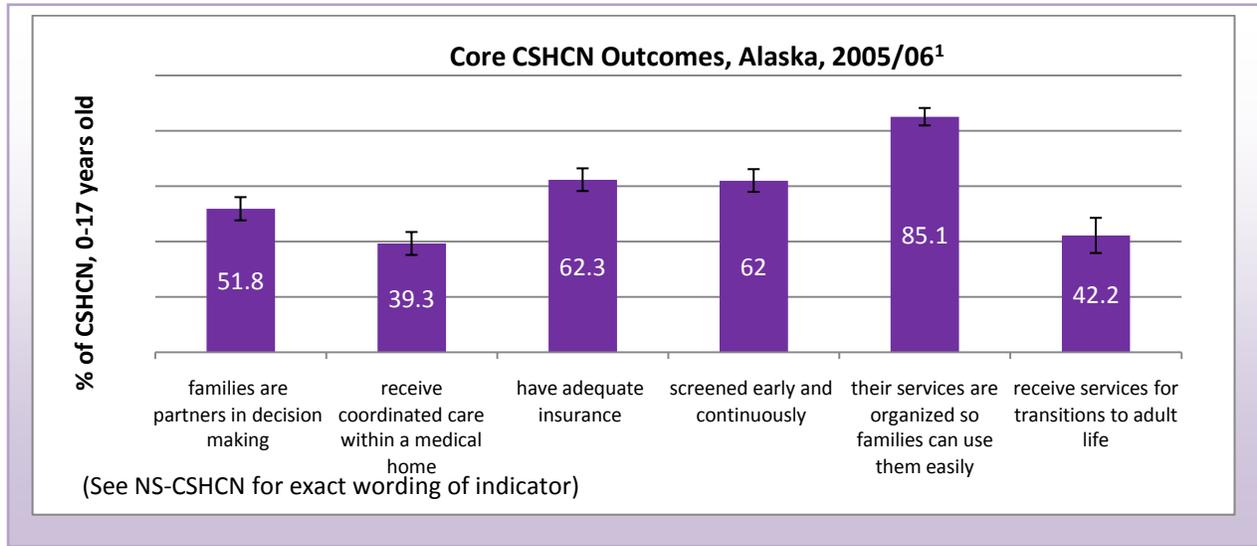
The National Survey of CSHCN estimates that CYSHCN are about 14% of the child population, CYSHCN account for 40% or more of medical expenditures for children overall.⁵⁰ In Alaska, approximately 12% of children 0-17 years are estimated to have special health care needs. The highest prevalence is among the 12 - 17 age group (14.6%).⁵⁰

The health of the families of CYSHCN are significantly challenged with the near overwhelming daily time demands of children with these chronic conditions, accessing therapies and interventions for care, the large expense, and emotional toll that affects the quality of family life.

- The State of Alaska includes parents of children with chronic conditions such as asthma, cancers, cystic fibrosis, epilepsy, allergies, and diabetes in all planning and discussion of infrastructure development. Managing and supervising the care of chronic conditions in school children represents a significant work load for school nurses, where one is available.

How does Alaska compare to the US on core outcomes?

According to the 2005/06 National Survey of CSHCN (NS-CSHCN), Alaska is lower than the national average on two of the six core CSHCN outcomes - CSHCN whose families are partners in decision-making at all levels and who are satisfied with the services received, and CSHCN who receive coordinated care within a medical home.



How Does Alaska Track and Serve CYSHCNs ?

A mix of legislation, improved technology and federal and state funding enables several state agencies track and serve children with special health care needs with screening and surveillance programs.

The **pediatric neurodevelopmental/autism screening clinics** are currently held in Fairbanks, Juneau, Barrow, Nome, Kotzebue, Bethel, Dillingham, Kodiak, Soldotna/Homer, and Ketchikan. An additional site in Valdez will be added in FY 2011. The trainings and information sharing during site visits have greatly expanded autism outreach efforts. Some families, especially those from Southeast Alaska, prefer to go to Seattle Children's Hospital for screenings and diagnosis. Most families prefer to stay in their home community for intervention and therapeutic services. The clinic is focused on autism and screening for all pediatric neurodevelopment needs including those with associated behavioral issues. Providers recommend treatments, interventions, or additional testing.

The **autism and parent services program** is considering an improved tracking system for autism spectrum diagnosis in Alaska. The state has contracting with the University of Alaska, Anchorage, Center for Human Development, to conduct workforce development for service delivery to CYSHCN. The Section of Women's Children's and Family Health is evaluating ways to study the epidemiological issues around autism spectrum disorder in the state.

The **cleft lip and palate clinic** is held several times a year. During the clinic, a multi-disciplinary team conducts the child examination and family consultation at a central location. The team approach results in better coordination among the providers and less confusion for the family to following up on treatment recommendations.

The **metabolic and genetic clinics** are held throughout the state. Children receive medical and genetic evaluations for diagnosis and on-going treatment recommendations. A genetic counselor works with all families to help them understand long-term outcomes and potential for similar outcomes in other children and located support groups and resources that may be helpful. The children are referred back to their medical home for ongoing care

The **Early Hearing Detection and Intervention** (EHDI) program has achieved nearly 100% screening of in-hospital births and significantly improved the rate of out-of-hospital birth screening. Faithful and accurate use of the electronic tracking system by providers and program staff is key to achieving a smooth tracking, follow-up and referral process. The **Newborn Metabolic Screening Program** (NBMS) achieved a 100% screening rate in 2008 and a 100% rate of screen positive newborns who receive timely follow-up.⁵¹ The prevalence of CPT-1 metabolic disorder is high among the Alaska Native population. Although the outcomes are serious, the condition responds very well to treatment, so early detection and parent education is essential.

What We Achieved With Data Integration:

- Improves follow-up rate
- Allows multiple providers access to the same comprehensive set of information on the baby
- Creates a foundation for a medical home
- Helps in coordinating follow-up and care

- The EHDI and NBMS programs have an integrated electronic database to improve coordination of services.
- The state sponsors Cleft Lip and Palate , Metabolic, Genetic and Neurodevelopment/Autism screening clinics to make up for the lack of private sector services. These clinics are held in the larger communities around the state. Some families prefer to go Outside for services.
- The majority of recently confirmed cases of CPT-1 are found in the Alaska Native population. The MCH-Epidemiology Unit has applied for a grant to collaborate with metabolic geneticists at Oregon Health Sciences University, Alaska physicians and the Alaska Native Tribal Health Consortium to determine the significance of these findings.
- Special challenges in delivering services reflect the geographic nature and the diversity of the population of the state.
- Strengths common to the EHDI and NBMS programs are the excellent collaboration/communication among professionals, and the assistance of parent navigators through the Stone Soup Group. The pediatric neurodevelopmental clinic is following the model of EHDI and NBMS by building a reputation of collaboration and communications among agencies in order to decrease the silo effect and make service delivery more transparent for the families.
- Continuing education to providers, staff and parents is always needed.
- A new state demonstration grant is focusing on earlier identification and diagnosis of autism and other neurodevelopmental needs. Earlier intervention by the skilled EI/ILP, PHN, private therapies, and school-based Part B services is making a significant impact on the long-term outcome of CYSHCN. Earlier diagnosis is increasing referrals to the Infant Learning Program which was successful in acquiring additional resources for training, education, and direct service delivery.

Challenges in delivering services:

- lack of pediatric specialists in the state
- difficulty in serving rural families with direct care and medical supplies
- difficulty in follow-up with sub-populations who do not support or want services
- ability to address issues beyond the immediate medical need, such as long term education, financial and legal issues

- A major concern is transition of CYSHCN between service providers (Part B and C) into adolescents where services are limited and into the workforce.

Most birth defects are not preventable, but early diagnosis and treatment can be successful. **Fetal alcohol spectrum disorders** (FASD) are the second most common type of birth defect reported to the Alaska Birth Defects Registry.⁵² As of April 2009, the prevalence of FASD for the 2000 - 2002 birth cohort was 16.9 per 1,000 live births, affecting 505 children. In 2007, 80% of women who recently had a live birth reported having been advised to avoid alcohol by their health care provider.⁵³ This rate has remained steady since 2004. Recent preliminary analysis of birth defects surveillance data indicate an increase in **neural tube defects** two years in a row, after many years of decline.⁵⁴

- A comprehensive analysis of Alaska's birth defects surveillance data was published in 2006.
- Education on birth defects, including FASD prevention, occurs through the newsletter Alaska Birth Defects Monitor published by the MCH-Epidemiology Unit.
- The Arctic Fetal Alcohol Spectrum Disorders Regional Training Center is located at the University of AK-Anchorage campus and there are diagnostic teams in 13 communities. A diagnosis of FASD does not automatically qualify an individual for intervention services.
- The WCFH Perinatal Nurse Consultant includes these topics in her education messages to public and private health care providers and administrators, as well as to the Perinatal Advisory Committee.
- An affordable and effective home visitation program continues to be of interest.

In October 2009 new national prevalence estimates of autism spectrum disorders (ASD) were published. It is estimated that ASD occurs in 1 in 90 U.S. children ages 3 - 17 were given an ASD diagnosis in 2007⁵⁵ - that's about 1,814 Alaskan children.

- The Section of WCFH received a federal Combating Autism grant and hired an Autism Manager and MCH Title V Block grant funding in part supports the Children with Special Health Care Needs/Parent Support Services Manager. The funds will be used to collaborate with partners to determine workforce development needs for early screening and training for intervention services, and raise awareness.

It is estimated that during 2002 - 2005, the prevalence of **attention deficit hyperactivity disorder** (ADHD) among Medicaid enrolled children 4 through 19 years old ranged from 3.5% to 4.1%, slightly lower than the 2003 national average.⁵⁶ Rural Alaska Native children and to a lesser extent rural children in general had a low ADHD prevalence. Other chronic conditions in children are not being tracked on a regular basis at this time.

Related Title V State Priorities, 2005 - 2010⁵⁷

Increase public awareness and access to health care services for children and CSHCN.

Related Title V State Performance Measures, 2005-2010⁵⁷

#8. Prevalence at birth of Fetal Alcohol Spectrum Disorders (FASD), per 1,000 live births.*

Reporting Year	Birth Years	Rate	Number
----------------	-------------	------	--------

2006	1997-1999	20.9	623
2007	1998-2000	21.9	654
2008	1999-2001	19.2	574
2009	2000 - 2002	16.9	505

* average age of diagnosis for FAS is 5-6 years.

Related Title V National Performance Measures, 2005-2010⁵⁷

#1. The % of screen positive newborns who received timely follow up to definitive diagnosis and clinical management for condition(s) mandated by their State-sponsored newborn screening programs.

Year	Percent	Number
2005	92.6	25
2006	100.0	36
2007	100.0	44
2008	100.0	195

#12. % of newborns who have been screened for hearing before hospital discharge.

Year	Percent	Number
2002	65.4	6430
2003	80.8	8081
2004	87.3	8968
2005	90.5	9351
2006	90.4	9837
2007	95.3	9899
2008	97.7	10426

#17. Percent of very low birth weight infants delivered at facilities for high-risk deliveries.

Year	Rate	Number
2003	75.3	67
2004	74.8	89
2005	76.8	73
2006	78.1	96
2007	76.8	76

References for Health Status of CYSHCN and Children & Youth with Developmental Delays:

⁴³ Centers for Disease Control and Prevention. [website] Child Development and Public Health. Accessed 9/28/09 from <http://www.cdc.gov/ncbddd/child/development.htm>.

⁴⁴ Child and Adolescent Health Measurement Initiative. National Survey of Children's Health, 2007. Data Resource Center on Child and Adolescent Health website. Retrieved 9/28/2009 from <http://www.nschdata.org/>.

⁴⁵ 2008 AK Childhood Understanding Behaviors Survey (CUBS)

⁴⁶ AK FY 2010 Title V Block Grant.

⁴⁷ Alaska Dept of Health & Social Services. Early Childhood Comprehensive Systems Plan.

⁴⁸ Office of Children's Services. [website] Early Childhood Comprehensive Systems. <http://hss.state.ak.us/ocs/ECCS/default.htm>

-
- ⁴⁹ Bright Futures. [website] <http://brightfutures.aap.org/index.html>
- ⁵⁰ Child and Adolescent Health Measurement Initiative. National Survey of Children with Special Health Care Needs, 2005-2006. Data Resource Center for Child and Adolescent Health website. Retrieved 9/23/2009 from www.nschdata.org.
- ⁵¹ AK Newborn Metabolic Screening Program.
- ⁵² Schoellhorn KJ, Beery AL. AK MCH Data Book 2005: Birth Defects Surveillance Edition. MCH-Epi Unit, Division of Public Health, AK Dept of Health & Social Services, May 2006.
- ⁵³ AK Pregnancy Risk Assessment Monitoring System.
- ⁵⁴ personal correspondence, Janine Schoellhorn.
- ⁵⁵ National Institute of Mental Health. e-article: NIMH's Response to New Autism Prevalence Estimate. NIMH Update. Retrieved Dec.31, 2009 at <http://www.nimh.nih.gov/about/updates/2009/nimhs-response-to-new-autism-prevalence-estimate.shtml>.
- ⁵⁶ Alaska Dept. of Health & Social Services, Division of Public Health. Prevalence of Attention Deficit Hyperactivity Disorder Among Medicaid Recipients Less than 20 Years of Age. Epi Bulletin No. 33, November 5, 2007.
- ⁵⁷ State of Alaska, section of Women's Children's and Family Health. FY 2010 Title V Block Grant application.

Disparities

In Alaska, MCH population experience significant disparities. Health indicators in MCH Data Books are presented by race category (Alaska Native, non-Native and overall) and by 5 geographic regions that could also be considered proxies for rural residence and for race status. Small numbers prevent analysis by specific communities (except Anchorage) or by most census areas. Small numbers also make it difficult to analyze some health outcomes by more than one characteristic.

A defining characteristic of Alaska is the large land mass, the concentration of half the state's population in the Anchorage/Matanuska-Susitna area (Southcentral region), and the location of much of the rural population in much smaller villages and regional hubs that are not on the road system. The isolation of rural communities imposes a major limitation on delivery of health care services.

Alaska's health care system is a mix of state, tribal, and local health care agencies, and private practice health care providers. There are no county health departments. The state operates local public health centers in 23 communities and offers itinerant public health nursing services for those communities not served by public health centers. The Municipality of Anchorage and the North Slope Borough are the only communities that have locally organized health departments. Alaska Native residents are entitled to free health care services through regional, tribal non-profit health corporations and the Alaska Native Tribal Health Consortium Medical facility (a hospital in Anchorage). The tribal entities are funded by the Indian Health Service. There is also a military health delivery system.

Many disparities are associated with a few common and overlapping risk factors: rural residency, low maternal education, and Alaska Native race status. Some examples of disparities in outcomes are listed below.

- In 2005 the Alaska Native teen birth rate among 15-19 year olds was 2.4 times higher than for non-Native teens.
- During 2001-2005, the highest average annual infant mortality rate (Northern region) was more than twice that of the lowest infant mortality rate (Southeast region).
- During 2001 - 2005, major birth defects were 2.2 times more prevalent in Alaska Native infants than in non-native infants.
- There is a very prevalence of carnitine palmitoyl transferease-1 (CPT1a) deficiency, a metabolic disorder, among Alaska Native infants, specifically Yupik and Inuit populations. There are similar findings in Canada.
- Iron deficiency anemia is highly prevalent among Native children.
- During 2003 - 2005 the mortality rate of Alaska Native children 1-4 years old was nearly four and a half times that of non-Native children. Among children 5-9 years old, the Alaska Native child mortality rate was more than two and a half times the rate of non-Native children.

- During the 2004-2005 school year, the proportion of third grade children with untreated dental caries was highest among Native Hawaiian/Pacific Islander children, almost 3 times that of white children.
- During 1996 - 2002 the average prevalence of fetal alcohol spectrum disorders among Alaska Native children was almost 15 times that of non-Native children.
- During 1996 - 2005 the teen suicide rate among Alaska Native teens (110.8 per 100,000) was more than 8 times higher than for non-Native teens (13.1 per 100,000).
- The mortality rate of women 15-44 years (107.8 per 100,000 in 2003-2005) has consistently been three times higher among Alaska Native women compared to non-Native women over the last 15 years.
- During 2003-2005, the prevalence of having a controlling partner among women delivering a live birth was 3 times higher in the Northern region than in the Gulf Coast region.

4. MCH Program Capacity by Pyramid Levels

Title V programs can be envisioned as a pyramid of four levels of services. In this section we describe and assess the state's capacity to meet the needs of the state's MCH population, by each level of service.

Capacity refers to the strength of the human and material resources necessary to meet public health obligations. Types of resources include:

- Structural resources - financial, human and material resources; policies and protocols.
- Data/Information Systems - information management and data analysis.
- Organizational Relationships - partnerships, communication channels with public and private entities.
- Competencies/Skills - knowledge and abilities of internal and external staff accessible to the Title V program.

Capacity building begins with recognizing two critical issues Alaska faces in providing comprehensive care: geographic isolation and low population density outside of Anchorage. There is a lack of professional staff and facilities in areas outside of Anchorage, particularly in the northern, western and interior regions of the state, and in communities off the road system. Some residents may travel a distance equivalent to Washington, D.C. to New Orleans for even routine medical care. Moreover, severe weather can render travel impossible, creating especially critical situations in medical emergencies. Many communities have no facilities equipped for childbirth so pregnant women must leave their homes one month before their due date. Well-child check-ups, prenatal exams and regular dental exams may require airplane rides to the regional hub.

Over time, DHSS has developed significant capacity to serve women and children from prenatal care and birth through adolescence and adulthood, including health care services for CSHCN. As mentioned earlier, Alaska's health care system differs from most other states in that there are only two locally organized health departments that function under the umbrella agency of the state health department. Collaborations and partnerships operate between state agencies as well as

between the state and the private sector, the non-profit sector, local communities, the tribal health system, other public agencies, and families.

Direct Health Care Services

Direct care services are provided directly to individuals by state or local agency staff, by grantees, or by contractors. WCFH contracts with private and non-profit agencies to provide genetic, metabolic and neurodevelopmental/autism-outreach specialty services not otherwise available. Medical professional staffing for specialty clinics is currently provided by Seattle Children's Hospital and Oregon Health Sciences University. WCFH receives clinical assistance from the Section of Nursing and the facility where the clinics are held.

WCFH collaborates with the Alaska Dental Action Coalition, who identified several capacity issues with respect to oral health:

- Rural areas are underserved. Much of rural and remote Alaska have received designation for dental-health professional shortage areas.
- Few dentists actively participate in Medicaid. Issues raised by private dentists include reimbursement levels, paperwork, missed appointments and liability. Tribal programs in Alaska have developed the Dental Health Aide Program to increase preventive services, education, and assistance with some of the restorative treatment needs of the population.

SWOT analyses for the 2010 Needs Assessment identified inadequate capacity in the following areas:

- Specialty services, especially in perinatal specialists, and medical geneticists
- Specialty services outside of Anchorage/Mat-Su region
- FASD treatment
- Crisis services

For many health care services, all geographic regions in Alaska outside the Anchorage/MatSu urban area is underserved. In 2009 the All Alaska Pediatric Partnership, in collaboration with the Alaska State Hospital and Nursing Home Association (ASHNHA) and the Alaska Mental Health Trust Authority (AMHTA), initiated the development of a pediatric subspecialty distribution plan for Alaska. The purpose of this plan was to identify and adopt a distribution strategy that provides the optimal balance of access to care for Alaska's children with an environment that is attractive to new providers, identifies the best use of outside specialists and primary care providers, and ensures volumes necessary to maintain skill sets and provide high-quality, safe care. The Title V Director was a member of the steering committee and the executive committee which had oversight and approval responsibilities. Findings related to service delivery were:

1. There is a growing and diversifying pediatric population and a need for a full range of subspecialty services, but volumes are insufficient to support.
2. Large and difficult geography limits access to subspecialty care, therefore, a reliance on air transport will continue. There are opportunities for telemedicine.
3. While existing resources are better than expected, gaps exist. The gaps can be fill with a coordinated approach of combining in-state and out-of-state resources.

4. No one delivery system can support a full range of subspecialists so collaboration among delivery systems is important.
5. Physician sustainability remains a challenge.

The full report, "Alaska Pediatric Subspecialty Plan" is included as an attachment in Chapter III E.

Enabling Services

These services help families access and use health services and are usually targeted to families that have special needs or face specific barriers.

Alaska is uniquely challenged with having adequate providers to meet the traditional definition for a medical home, especially for CYSHCN. To address these challenges, a coalition of state and private agencies developed a broader definition of a medical home for Alaska CYSHCN:

"The medical home is where a child with special health care needs and his or her family can count on having medical care coordinated by a health care professional they trust. It is not a building, house or hospital, but rather an approach to providing quality and coordinated services".

Children and youth with SHCN receive coordinated and comprehensive medical home care through a combination of pediatricians and family practice physicians, advanced nurse practitioners (ANPs), physician assistant (PAs), public health nurses (PHNs), and community health aides/practitioners (CHA/Ps) in rural and urban areas.

In frontier areas, medical services are limited to a small clinic staffed by a Community Health Aide with basic training in primary, preventive and emergency medical care. Itinerant public health nurses visit most of Alaska's rural communities providing the "medical home" for many of Alaska's children and families. An R.N., Nurse Practitioner, Community Health Aide or Physician's Assistant provides primary and preventive care in many cases. Due to chronic staff shortages, unpredictable weather, and high cost of travel, villages and communities may receive a visit from an itinerant Public Health Nurse as frequently as monthly or as infrequently as biannually.

Communication with public and private entities are fostered in several ways. Program managers participate in many interagency committees such as the Autism Alliance, the Comprehensive Plan for School Health and Safety, the Rural Ad Hoc Committee, Comprehensive Mental Health plan, First Families, and the Governor's Council on Disabilities and Special Education. Advisory committees for each of the programs managed by WCFH are structured to include a mix of stakeholders including providers, parents, funding agencies (Medicaid) and staff to facilitate communication among those with differing perspectives. "Excellent collaboration", "good leadership", and "good communication" were strengths listed in the SWOT analyses.

The Division of Health Care Services and the Division of Public Health work closely on many capacity-expanding projects involving the Medicaid program. These include:

- covering transportation to medical appointments for children, especially attendance in a specialty clinic. This is a major expense in Alaska's Medicaid budget due to lack of access in many rural villages. Children frequently are flown by small bush planes to regional hubs for basic health services.
- reducing barriers to Medicaid by allowing 12 months continuous enrollment and raising the eligibility requirement to 175% of FPL.
- covering nutritional supplements for children with inborn metabolic disorders and improving durable medical equipment used for children
- expanding coverage for OT, PT, Speech-Language and Audiology services to schools that enrolled as providers of Medicaid. Nearly 50% of the children in Alaska are enrolled in the Medicaid program and many have special needs.

Other ideas under consideration include express lane eligibility (utilizing eligibility information collected by other programs), electronic application, outreach, and raising eligibility to 200% of FPL. A pilot is being considered with Medicaid services to offer parent navigation for families who have children with chronic health conditions such as diabetes, cancer and asthma in coordination with nursing case management.

Parent navigation services, offered at the specialty clinics to assist families with children newly diagnosed with hearing loss, cleft lip and palate, neurodevelopmental/autism spectrum disorder, genetic and metabolic conditions as well as other special health care needs, are funded by Title V block grant and other federal grants. These services are provided by a private agency, Stone Soup Group. The EHDI program's SWOT analysis indicated that "parent navigators are very involved in the program and are an excellent resource". Stone Soup Group offers a variety of programs to assist families of children and youth with special needs including autism and FASD family support, positive behavioral support, epilepsy awareness and parent training. Their website is <http://www.stonesoupgroup.org/PBS.html#>.

An emerging issue is recruitment and training of more foster families who are willing to care for medically fragile infants and children.

Population-Based Services

These services are largely primary prevention programs, universally reaching everyone that might be affected or in need.

WCFH manages several population based services:

- The Newborn Metabolic Screening program and the Early Hearing and Detection Intervention program screen both have close to 100% screening rates. Both programs track referrals to appropriate services of infants identified as follow-up. Data linkages to the Office of Children's Services' EI/ILP program is work in progress.
- The Reproductive Health Partnership (RHP) is a collaboration between WCFH and the Division of Public Assistance. Title V funds are used to purchase contraceptives such as Mirena and ParaGard IUD, NuvaRings and emergency contraception for areas of the state where the proportion of non-marital and teen births is high and availability of long

acting reversible contraceptives is minimal. Supplies are also provided to the Section of Public Health Nursing centers where reproductive health services are delivered.

- Cervical cancer screening services are funded by Title V and are available to women seeking family planning services at state PHCs and the Juneau school clinic. Women with abnormal screening results are referred to the Alaska Breast and Cervical Health Check program for diagnostics and/or treatment as needed.
- WCFH manages the Title X Family Planning program.
- The Oral Health Program provides leadership in oral health in five focus areas: the oral health surveillance system, the oral health coalition, the community water fluoridation program, the state oral health plan, and the dental sealant program.
- School Nursing consultation program offers technical assistance on best practices in school health nursing
- Infant Safe Sleep program

Other population based services are offered through collaborations with partners. These efforts are centered around distributing educational materials, and developing and implementing interventions. Example of shared activities are:

- March of Dimes - developed smoking cessation classes with hospitals and local agencies as part of the preterm delivery campaign
- Alaska Native Tribal Health Consortium - assisted in distributing information and conduct training developed by the Healthy Native Babies Project (a National Institute of Health project addressing SIDS)
- All Alaska Pediatric Partnership - identified pediatric sub-specialty needs, and assisted with recruitment. In addition, WCFH leads a implementation group on improving pediatric disaster planning efforts for hospitals and communities across the state
- Division of Public Assistance - developed healthy relationship and youth development programs to reduce teen births in rural areas.
- DPH, Section of Epidemiology - provided assistance to the Alaska Immunization Program, especially with the H1N1 vaccination effort.
- Section of Chronic Disease and Prevention - Title V funds 2 positions for the Alaska Family Violence Prevention Project (AFVPP). WCFH staff also work actively on an unfunded collaborative school health program and on prevention of obesity in children effort
- Alaska Native Tribal Health Consortium, Epi Center - helped organize the 2010 Alaska MCH and Immunization Conference.
- DELTA (Domestic Violence Prevention Enhancement and Leadership Through Alliances) - WCFH staff is on the steering committee for this federally-funded primary prevention initiative for intimate partner violence in Alaska.
- Alaska Mental Health Authority - the Authority provided funding to expand the autism diagnostic clinic, and to provide training on intensive intervention services to care providers of children diagnosed with autism.

WCFH has expanded its staffing levels significantly in the last five years. Programs added since 2005 include: Perinatal Health, Preconception and Interconception Health, Adolescent Health, School Nursing and Health, expansion of Neurodevelopment Screening/Autism Outreach clinics

that included the addition of an Autism early identification program, and Parent Services for CYSHCN. These were added to implement priorities identified in the 2005 Needs Assessment.

Infrastructure-Building Services

These services include most of the 10 essential public health services and encompass the functions that indirectly benefit families by laying the foundations for the policies and programs that can improve their health and well-being.

The state's MCH data/information systems are excellent. The MCH Epidemiology Unit within WCFH has been very successful with data linkages. The EHDI and NMBS programs integrated their databases in 2009. The Division of Public Health and the Office of Children's Services have a data sharing agreement to link the Early Intervention/Infant Learning Program (in OCS) with the EHDI program. However, differing interpretations of HIPAA and FERPA regulations has prevented full data sharing at this time.

The MCH Epidemiology Unit maintains six surveillance programs and publishes numerous peer-review journal articles, Epi Bulletins, data books, and fact sheets. Research findings are presented to stakeholder groups and at Grand Rounds. The Unit also actively collaborates with ANTHC's Tribal Epi Center in sharing research ideas and hosting conferences. They will be partnering on the next issue in the data book series, which will highlight Alaska Native populations. In December 2009 the Unit won the 2009 National MCH Epidemiology Award, which was presented at the annual national MCH Epidemiology Conference. In January 2010 the Unit held a day-long meeting to present its research findings. This activity was well received and will be organized on an annual basis. Several research projects have been published in national, peer- reviewed journals.

The state has very good capacity to promote coordination of comprehensive systems of care, as illustrated by the following actions taken in the last several years in both the MCH and CYSHCN program. These examples illustrate activities that provide leadership at the managerial and programmatic level for priority setting, planning and policy development.

- The Children's Policy Team led by the Deputy Commissioner of Health and Social Services convenes every two weeks to provide for the division's senior executives and their staff to report on a number of children's issues and plans for resolution. The Title V/CYSHCN-WCFH Section Chief represents the Public Health Division on this committee.
- The Office of Children's Services developed an ECCS Plan that focuses on four areas: medical homes; social, emotional and mental health; early care and learning; and family support. The ECCS working group has multi-agency representation. Several Title V/WCFH staff participate on working groups and the steering committee.
- The Early Childhood Mental Health (ECMH) cross-systems working group, of which the Title V MCH Director was a member, was formed to develop recommendations on mental health services. One of the outcomes has been the crosswalk between diagnostic codes for young children (DSM-3), billing requirements, and the use of appropriate service codes to ensure services for young children.
- WCFH Title V program staff work closely with the state's early intervention (part C) program to assure that training, screening and intervention work is well coordinated for

CSHCN. Grant funds from Title V and other sources are utilized to support special resources for children with hearing loss, metabolic and genetic conditions and those with developmental delays.

- The Alaska Strengthening Families Leadership Team includes DHSS (OCS, DPA and WCFH), the Department of Education and Early Development, Alaska Children's Trust, the Resource Center for Parents and Children, University of Alaska Southeast (SEED program), and parent representatives. The MCH Title V Director is a part of this leadership which is focused on primary prevention of child abuse and neglect. In addition the SCAN epidemiologist is a member of Children's Justice Task Force and provides data surveillance and analysis as part of his responsibilities.
- The Division of Behavioral Health proposes to create Regional Suicide Prevention Teams in FY 2010. Title V/WCFH staff also work collaboratively with this division on building infrastructure in state to prevent the need for children with severe behavioral issues to go Outside for residential treatment or come back to the state sooner with wrap around services for them in their home community.
- The Title V/WCFH staff work with the Women, Infant and Children nutrition program. They provided input and planning assistance when the new WIC food package went into effect during SFY 10 and worked together on the new State of Alaska Breastfeeding policy.
- Title V/WCFH staff work with Immunization staff in the Section of Epidemiology to promote full vaccination by age 2.
- The Governor's Council on Disabilities and Special Education partners with many agencies and organizations to expand services for youth with disabilities and foster youth. The Title V Director sits on the early intervention subcommittee of the Governor's Council. WCFH staff members also work with others on transitions issues for adolescents moving into adulthood.
- WCFH School Nurse Consultant works with the school health program in the DPH Section of Chronic Disease and the Department of Education and Early Development on policies and program supporting optimal health in school age children with the goal to improve attendance of all children, but particularly those with special health care needs.
- **Other groups that the State of Alaska Title V MCH and CYSHCN program coordinates with:**
- The Title V Director is on MPH Program Advisory Committee and the steering committee to develop a doctorate of nursing practice at the University of Alaska-Anchorage MCH Title V/WCFH staff work collaboratively with the state's one children's hospital and tertiary medical center and the major medical center for Indian health in pediatric and perinatal health program development, implementation, expansion of services and workforce development.
- MCH Title V/WCFH staff work with collaboratively with all hospitals who care for children through the All Alaska Pediatric Partnership, a coalition of institutions whose mission is to improve children's care in Alaska regardless of where care is delivered.
- MCH Title V/WCFH staff work in cooperation with members of the American Academy of Pediatrics (AAP), American Academy of Family Physicians and the American College of Obstetricians and Gynecologists (ACOG).

- MCH Title V/WCFH staff members are active in their professional associations most notably, the Association of Maternal Child Health (AMCHP) programs. Staff members participate on a variety of board and special committees. The Title V MCH/CYSHCN Director is president-elect of AMCHP and will take over presidential duties in 2011.
- WCFH Parent Services manager co-facilitates a parent advisory committee in collaboration with the state's Family Voices representative. She is responsible advancing our family centered care work and implementing changes in programs and services to better meet the 6 national performance measures and the new state performance measures developed as a result of the 5-year MCH Block grant needs assessment.

The collaboration efforts described above include monitoring of quality outcomes, especially as they relate to morbidity and mortality. For example the MCH Title V Director assisted in writing the regulations for birthing centers and utilized standards of care outlined by the AAP and ACOG as a reference. In addition she designed a reporting system for health care providers, direct entry midwives or members of the public to report untoward events that occur as a result of an out of hospital delivery. The MCH Epidemiology unit manages the maternal and infant mortality committee/child death review where standards of care are considered when looking at the manners of death for these three populations. Standards of care are used as a basis for analysis when reviewing outcome data. WCFH staff use standards of care to guide all of their work, be it direct, enabling or populations based services and programs

The MCH Title V Director has recently been asked to join the quality initiatives effort as a result of the award grant to the State of Alaska and two other states by NCIQH. This award will be evaluating the state's performance regarding several pediatric performance measures and outcomes.

5. Selection of State Priority Needs

List of Potential Priorities

To solicit potential priorities for the 2010 - 2015 Needs Assessment Plan, WCFH hosted a half day café conversation for invited MCH stakeholders on February 15. One hundred seventy invitations were issued to a wide variety of stakeholders including representatives of:

- social service organizations such as the Food Bank, Catholic Social Services, YWCA and RuralCap;
- public and private providers such as the Section of Public Health Nursing, Anchorage Neighborhood Health Clinic, and Fairbanks Memorial Hospital;
- coalitions and advocacy groups such as the March of Dimes, AK Women's Recovery Project, and Cook Inlet Housing Authority;
- youth oriented organizations such as the Youth Alliance for a Healthier Alaska, AK Department of Education and Early Development, University of Alaska;
- CYSHCN parent advisory committees

The café conversation is a technique to create a network of collaborative dialogue. This technique was used successfully elsewhere in the Department. Forty six participants considered three questions designed to elicit suggestions for MCH priorities from a life course perspective:

- Think of the women, children and families you we work with or advocate for. How might we improve their health over their entire lifespan?
- Think of maternal and child health populations in Alaska that experience health inequities. What can we do so that these populations have an equal chance at attaining good health?
- How might we work together to make the most of our resources, to promote a healthier maternal and child population in Alaska?

Three discussion rounds averaging 30 minutes in length were held. Small groups of 3-4 individuals wrote their comments on tablecloths. Participants changed groups after each round to establish new connections and encourage creative thinking. After the three rounds of discussion, all convened as a large group to harvest themes which were recorded on a large mural. The intention of the powerful questions was to elicit all ideas and not be exclusive to what the priorities of stakeholders were.

Four major themes were expressed during the café conversation.

- 1) Center the focus of wellness and health care around the family. Change the “way” and “where” we deliver health education and programs. Build programs and services aimed at the entire family, including non-traditional families. Provide these services where the families are, at the community level, and using non-traditional delivery of messages as old as storytelling and as new as social media on the internet. Ensure the families have a voice in planning. One example of a system that embodies these ideas is the Yakima Children's Village which is a one-stop regional health care facility offering services through collaborations of many agencies. Broaden definitions to include emotional health, education and cultural values.
- 2) Collaboration and coordination are very important. Reduce silos in programs and integrate planning, services, and finances. Support community-driven planning & advocacy around wellness, and change community norms. Use tools such as navigators, mentors, home visitation programs to improve families' access to health care, and think of ways to improve utilization of the family's social support systems.
- 3) Focus on wellness by changing community norms such as promoting positive sexuality and healthy relationships.
- 4) Specific topics or programs mentioned were universal screening for maternal depression, drug use, prevention of violence and abuse, ending epidemics, transition services for incarcerated women, healthy relationships, mentoring, breast feeding, Families First, Head Start as a model, Yakima Children's Village as a model.

The final exercise of the café conversation was a sticker vote. Each participant was given 10 sticker dots to place next to the themes on the mural that they felt should be a priority.

The top 15 themes receiving the most votes at the café conversation are listed in the following table.

Table. Sticker Vote - Top 15 Vote Getters

Priority	# votes
Integration: integrate planning, services and finances	17
Capacity: Follow the example of The Children's Village in Yakima to create a one-stop community based health care facility	17
Wellness: change community norms (positive sexuality, healthy relationships)	16
Capacity: integrate planning, services and finances (so no matter at what point an individual enters the health care system.....	16
Wellness: Support community-driven planning & advocacy around wellness	15
Wellness: make healthy choices the easy choice	12
Family focus: change mindsets and way of thinking of policy makers of families	12
Capacity: use non-traditional locations for services & outreach	12
Family focus: Build protective factors	11
Communication: use new & old technologies to reach audiences: storytelling, education programs & clinics in schools	11
Wellness: health education in middle & high school	10
Capacity: collaborate between service providers	10
Wellness: universal screening for maternal depression, drug use	9
Communication: between systems and services so that people know about them. Put these services in communities and understand the influence of media	9
Family focus: Recognize the social support in the person's life	8

Methodologies for Ranking/Selecting Priorities

The Needs Assessment Leadership Committee, composed of 10 WCFH program managers and the WCFH Section Chief, met over two months to develop priorities. The themes from the café conversation were primarily process oriented as opposed to program oriented. The Committee decided to use current priorities as a starting point. The following criteria were used to develop new priorities or reconfirm current priorities:

1. Clinical Severity - mortality, years of potential life lost, long term effects, etc.
2. Urgency - comparison to U.S. baseline, and trends
3. Disparities
4. Economic loss

5. Intervention Effectiveness
6. Capacity - within scope of WCFH; community acceptability; legality; availability of state resources
7. Encompasses the life course
8. Known to be protective
9. Identified as a risk factor in Alaska studies

Debate amongst the leadership committee members aligned the priorities that met the criteria and could be measured by existing data systems over time. All of the MCH surveillance systems were considered as well as those data collected as a part of the Behavioral Risk Factor Survey and the Youth Risk Behavior Survey. Priorities of the Section of WCFH and of the Division and Department were also considered in the process of selection.

Priorities Compared with Prior Needs Assessment

The following table compares the priorities selected during the FY 2010 Needs Assessment with prior needs assessment. Because this year we focused on a life course perspective, the priorities cover the three major MCH population groups: women, mothers and infants, and CYSCHN.

Table. Comparison of Prior and New State Priorities

State Priorities, 2005 - 2010	State Priorities, 2011 - 2015
Reduce the rate of drug use among families, primarily alcohol intake and cigarette use.	Reduce substance abuse among families, including alcohol, tobacco and drugs.
Reduce the rate of child abuse and neglect.	Reduce child maltreatment and bullying.
Increase public awareness and access to health care services for children and CSHCN.	Collaborate with families to work toward a system of integrated services for families with infants, children, and teens, and especially those with special health care needs..
Reduce the rate of unplanned and unwanted pregnancies including teen pregnancies.	Reduce the risks associated with unintended pregnancy and teen pregnancy.
Increase access to dental health services for children.	Reduce dental caries in children 0 - 21 years of age.
Reduce the rate of domestic violence.	Reduce intimate partner violence (IPV) including teen dating violence.
Reduce the rate of post-neonatal mortality.	Reduce preventable post-neonatal mortality due to SIDS/asphyxia.
Reduce the rate of teen suicide.	Support communities to increase family and youth resiliency.
Reduce the prevalence of childhood obesity and overweight.	Reduce the prevalence of obesity and overweight throughout the lifespan.
Increase awareness around mental health issues in the MCH population.	Increase universal screening for post partum depression in women.
	Strengthen quality school-based health care and health promotion.
	Implement standardized screening for developmental delay and behavioral health in children 0 - 21 years.
	Develop capacity to help families navigate the health care system.
	Acknowledge the importance of men in MCH programs.
	Reduce late preterm cesarean sections

For the discussion of why priorities were added, changed or replaced, see the next section where these comments were incorporated.

State Priority Needs/Capacity, MCH Groups & State Performance Measures

Over 70 potential state performance measures were selected as acceptable measures for the priorities. Measures that were based on the state's own surveillance programs, were available on an annual basis, or were linked to existing intervention programs, were the ones selected.

Priority #1. Reduce substance abuse among families, including alcohol, tobacco and drugs.

Discussion: This priority continues from 2005, slightly reworded to acknowledge other drugs. Prenatal marijuana use was higher than alcohol use in the last 3 months of pregnancy among Alaska Native women. Reports of other drug use in related data systems has been significant and thus it was felt to be more inclusive in the tracking of usage.

Prenatal cigarette smoking is the strongest known risk factor for low birthweight births, accounting for 20 - 30% of all low birthweight births in the U.S. In 2008 14.2% of adult Alaskan women reported smoking everyday and an additional 5% reported smoking some days. Smoking among youth is of particular concern due to the potential for a lifetime addiction, and can be a precursor to addictive behavior.

Infrastructure Building Services: An interdivisional preconception/interconception planning committee was initiated in 2009 to focus on improving the health status of women in the adolescent years through preconception, prenatal and postpartum time periods. Smoking cessation, alcohol and substance abuse prevention are topics of focus.

Population Based Services: WCFH staff continues to collaborate with the local March of Dimes chapter as part of the preterm delivery campaign to develop smoking cessation classes with hospitals and local agencies and to develop support systems for women who are pregnant. Programs such as reducing and preventing underage drinking; rural substance abuse prevention; and tobacco enforcement and youth education are managed by the Division of Behavioral Health. The Alaska Tobacco Control Alliance operates the free Tobacco Quit Line. The Perinatal Nurse Consultant is working with the Tobacco Prevention program to develop media messages aimed at young women and those who are pregnant to encourage them to stop smoking. YRBSS and BRFSS provide data on substance use.

State Performance Measure: Percent of women (who delivered a live birth) who had one or more alcoholic drinks in an average week during the last 3 months of pregnancy.

Data source: PRAMS, Phase VI, Q 36a

State Performance Measure: Percent of students who smoked cigarettes on 20 or more days during the 30 days before the survey

Data source: Youth Risk Behavioral Surveillance Study (YRBSS)

Prenatal smoking (smoking in the last 3 months of pregnancy) is a national performance measure.

Priority #2. Reduce child maltreatment and bullying.

Child maltreatment continues to be a major issue in Alaska, therefore this priority remains for the next five year planning period. Maltreatment includes abuse and neglect. We will use the SCAN program's definition of maltreatment. It includes situations where maltreatment may not have been the proximate cause of morbidity or fatality, but was a contributing factor or underlying cause. It is a wider, more encompassing definition and a more accurate reflection of family disruption.

Bullying was included because it is an important issue that has been more recently recognized and reported on. At this time there are no measures of bullying in the elementary school grades.

Infrastructure Building Services: We continue to expand capacity to address this priority by pursuing data sharing agreements with partner agencies to fully implement SCAN which will help identify specific risk and preventive factors in Alaska's MCH population, to better target intervention programs.

WCFH continues to collaborate with other state agencies in a number of ways: 1) expand the Strengthening Families model statewide; 2) assist in implementation and evaluation of the ECCS program; 3) pursue grant opportunities such as Project Launch and home visitation programs.

State Performance Measure: Rate of child maltreatment, ages 0 – 14.

Data source: Alaska Surveillance of Child Abuse and Neglect (SCAN)

Priority # 3. Collaborate with families to work toward a system of integrated services for families with infants, children, and teens, and especially those with special health care needs.

This is a new priority. Collaboration among agencies, integration of services, and improving services to families was a very strong theme elucidated by our stakeholders. We acknowledge there are many ways policies, regulations, guidelines and operating procedures of public agencies can help or hinder service delivery for families. We, along with our stakeholders, sincerely desire to put the families first.

Infrastructure Building Services: One example of improving collaboration is the Alaska Early Comprehensive Childhood Systems (ECCS) Plan developed by the Office of Children's Services. The goal is to deliver integrated services in the areas of medical homes; social, emotional and mental health; early care and learning; and family support. Integration means creating agency partnerships to leverage resources and improve effectiveness; breaking down silo effects to enable multifaceted approaches; and viewing the early childhood stage as part of a lifespan continuum. This model of program delivery could be extended to the adolescent health arena.

Enabling Services: There is a strong emphasis to assist families in navigating services and organizing them in ways that are helpful to them. Parent navigation services are offered through a grant with a private non-profit group, the Stone Soup Group. Parent navigators have been trained in several communities to assist families and this same agency has been awarded the Family to Family Information Center Grant from HRSA. Parents are active on the Autism Alliance Ad Hoc committee, the Epilepsy steering committee (coordinated by the Center for Human Development at the University of Alaska-Anchorage), and advisory committees for oral

health, hearing, metabolic, autism and other neurodevelopmental conditions all coordinated within WCFH.

Direct Services: WCFH continues to sponsor genetics, metabolic, cleft lip/palate, autism screening, and neurodevelopmental disorder clinics. These are clinics are sponsored using blended funding from the MCH Title V Block grant, state general funds and grant funds as they are not sustainable in the private sector. These clinics, which are held in communities throughout the state based on need and population. They serve as a specialty screening or diagnostic clinic and are linked with the child's medical home.

State Performance Measure: None.

Data source: n/a

Improving processes are best reported with qualitative data. Parent surveys are conducted after each clinic and families who participate on the various advisory committees give the Title V program input on a regular basis.

Priority # 4. Reduce the risks associated with unintended pregnancy and teen pregnancy.

In adopting the life course perspective, we extend our view of the individual by considering the health of the fetus, the woman starting with her pre-teen years and her family prior to pregnancy. Unplanned pregnancy is associated with health behaviors during pregnancy, such as smoking and drinking, that can impose adverse effects. Unplanned pregnancy is also associated with increased risk of morbidity for women. Teen pregnancy is associated with adverse outcomes to both infant and mother.

Population Based Services: The newly formed Adolescent Health Program within WCFH collaborates with the Division of Public Assistance to reduce the rates of teen births in rural areas with a focus on healthy relationships, prevention of intimate partner violence, and youth development. Work is accomplished through grants to communities, train the trainer sessions, targeted media campaigns designed with the help of youth, collaborations with a large network of providers and youth, needs assessments, and d on-site technical assistance. A youth advisory committee has been established to help implement goals. The youth advisory committee held a small pregnancy prevention summit earlier in May. The information collected will assist in guiding activities in the coming state fiscal year.

Enabling Services: Enabling services include collaboration with the Division of Public Assistance on their teen and out-of-wedlock pregnancy prevention program to pay for provider training in using IUD's and Implanon, contraceptive supplies and educational materials. The focus of these efforts are in southwest and northern rural communities where rates of teen and out-of-wedlock pregnancy are highest. The Adolescent Health program uses a "train the trainer" model for educating teens on healthy relationships. Activities include public service announcements and a social marketing campaign designed by the teen advisory committee, contraception education and teen relationships training in rural communities and at the annual Community Health Aide conference. Public Health Nursing sites are provided with Title X funding and technical assistance to purchase contraceptives and supplies.

State Performance Measure: % of women who recently delivered a live birth and are not doing anything now to keep from getting pregnant.

Data source: Pregnancy Risk Assessment Monitoring System (PRAMS), Q 61

Rates of teen pregnancy, 15-17 years of age, is a national performance measure.

Priority # 5. Reduce dental caries in children 0 - 21 years of age.

This is a continuation of the 2005 priority but with a focus on the outcome of reduced dental caries as opposed to access to dental services which is difficult to measure. Dental caries, or tooth decay, is the most prevalent chronic disease of childhood. Among children, oral disease and oral pain have been associated with speech problems, difficulty eating, sleep problems, poor school performance and reduced self esteem. The current recommendation for the first dental visit is at eruption of the first tooth or no later than age 1. However, there is a severe shortage of pediatric dentists in the state. Denali KidCare/Medicaid enrolled children have serious difficulties accessing any dental services especially outside of Anchorage, Fairbanks or Juneau, the state's largest three communities.

WCFH collaborates with the Division of Health Care Services on EPSDT outreach and recruitment of dentists who will see children and accept Medicaid as a form of payment.

Performance measure: Prevalence of self-reported tooth decay in 3-year olds.

Data source: CUBS

Dental caries experience in kindergarten children is a better indicator of oral health but the availability of this measure, from the Oral Health Survey, is dependent upon funding. A related national measure is HSCI #7b (% of EPSDT eligible children ages 6-9 receiving any dental health service during the year)

Infrastructure Building Services: Infrastructure building activities by the state's Dental Officer includes working with the Alaska Dental Society on workforce development issues to expand access to dental services in rural Alaska, administering contracts with pediatric dental providers to increase access to services for children enrolled in Medicaid/SCHIP, participating in the development of the tribal Dental Health Aide Program, and developing pediatric resident itinerant rotations in Alaska.

Population-based Services: A school sealant program pilot is currently underway. In addition, the dental officer was successful lobbying Medicaid to cover fluoride varnish application by physicians, nurse practitioners and physician assistants as of this state fiscal year.

Priority #6. Reduce intimate partner violence (IPV) including teen dating violence.

This is a continuation of the 2005 priority on reducing the rate of domestic violence. It has been reworded to incorporate new terminology and to acknowledge that violence and unhealthy relationships can begin in adolescence. Teen dating violence is becoming an issue.

There are significant gaps in knowledge and data about intimate partner violence. According to a national survey conducted in 1995 by the National Institute of Justice and the Centers for Disease Control and Prevention, 52% of surveyed women said they were physically assaulted as

a child or as an adult. Eighteen percent of the women surveyed said they had been the victim of a completed or attempted rape at some time in their life. Of those, more than half were younger than 18 years at the time of the attempted or completed rape. Violence against women is predominantly intimate partner violence. National studies indicate that Native American and Alaska Native women are more than 2.5 times more likely to be raped or sexually assaulted than women in other women in the U.S.

Adverse childhood events, such as experiencing violence in the family, affect the health of the individual throughout their life and oftentimes influence initiation of sexual debut and other risk behaviors such as drugs, alcohol and cigarette smoking.

Infrastructure Building Services: PRAMS, CUBS, BRFSS and YRBS provide some data on different aspects of IPV but there is no comprehensive surveillance system to measure the burden of IPV on MCH populations.

Population Based Services: This issue is addressed primarily through the Family Violence Prevention Project located in the Section of Chronic Disease. The MCH Title V block grant funds a resource center that contains materials on education and prevention of domestic violence. The Adolescent Health Manager is actively involved in offering education around teen dating violence. A teen advisory committee will continue to collaborate with the Domestic Violence Network in rural and bush locations to decrease teen dating and intimate partner violence. The Adolescent Health program staff work collaboratively with the DELTA project focused on developing teen peer mentors and leaders who are trained for work in their villages in prevention education. WCFH has also committed resources in funding the Strengthening Families program as a primary prevention program. In 2010 the Governor declared domestic violence to be a priority and new legislation strengthened laws concerning domestic violence and sexual assault, however the appropriated funding has focused primarily at criminal justice system.

Performance measure: Percent of students who were hit, slapped, or physically hurt on purpose by their boyfriend or girlfriend during the 12 months before the survey.

Data source: YRBSS

Performance measure: Prevalence of intimate partner violence before, during or after pregnancy, among women who recently delivered a live birth.

Data source: PRAMS, Phase VI, Q 38, 39, 66, 71

Priority # 7. Reduce risk factors associated with preventable post-neonatal mortality due to SIDS/asphyxia.

This is a continuation of a 2005 priority, but with an emphasis on the top preventable cause of death category, and using MIMR data. The data showed a low percentage of agreement between the MIMR Committee's cause of death determination and that listed on the death certificate in certain categories of causes of death. Analysis of the MIMR data gave WCFH the impetus to develop a Safe Sleep Initiative in 2008. National outcome measure #4 is postneonatal mortality rate per 1,000 live births.

Infrastructure Building Services: Data from the Maternal Infant Mortality Review (MIMR) is provided to programs, health care providers and communities for program planning and education that focus on prevention related activities such as the Back to Sleep and Never Shake a Baby campaigns. A Safe Sleep coalition was formed in 2009 to work on the issues of safe sleep of all Alaska infants. Collaboration with the Indian Health Services is also occurring to tailor the message with sensitivity to the cultural traditions of co-sleeping of the Alaska Native population.

Population Based Services: The state has actively engaged all birthing facilities to participate in educational campaigns.

Performance measure: Percent of mothers who recently delivered a live birth and who reported having environmental factors in the home associated with SIDS/unexplained asphyxia. (Environmental factors include laying baby down to sleep on side or stomach; baby sleeping with pillows, plush toys, etc; smoking allowed in home; co-sleeping)

Data source: PRAMS, Phase VI, Q 73, 58, 59, 70, 72

Priority # 8. Support communities to increase family and youth resiliency.

This is a new priority. It is one model that could implement stakeholders' desire to engage the family and the community in culturally appropriate ways. The youth development approach focuses on young people's capacities, strengths and developmental needs and not solely on their problems, risks or risky behaviors. Supports, services and opportunities are offered across multiple domains including: cognitive, physical, vocational, and social/emotional development; personal resilience; environmental and personal risk factors; and civic engagement. Since youth development occurs in a family and community context, collaboration between diverse sectors (for example, school and business partnerships) is needed.

Infrastructure Building Services: An evaluation is being conducted on the Stand Up Speak Up campaign. Title V partner agencies are members of the Anchorage Youth Development Coalition (AYDC), a group of over 60 youth serving organizations and interested individuals. The AYDC works to increase protective factors and reduce substance abuse and other risk factors through the Developmental Assets framework.

Population Based Services: The Adolescent Health program manager works with junior high and high schools on using the 4th R curriculum . The curriculum is universal approach that teaches healthy relationship knowledge. The program manager is also working with the local Planned Parenthood agency to teach parents on how to talk about sexuality with their children. The session have been extremely popular. The teen advisory committee is sponsoring positive opportunities for teen involvement that are strengths based. The teen mentor program, offered in collaboration with the DELTA project, is focused on this priority.

Enabling Services: The Adolescent Health program manager is engaged in several collaborative projects that focus on youth development and resiliency. The Stand Up, Speak Up public education campaign to encourage youth to speak up against violence is being conducted with DELTA, the Alaska Council on Domestic Violence and Sexual Assault, and CDC. A youth development grant has been awarded in the Mat-Su Borough for a peer helper program. Other grants are awarded to communities for teen pregnancy prevention activities. WCFH is also co-

sponsoring the Lead On! For Peace and Equality, a program for youth and adults who are interested in positively impacting their community by promoting non-violence and equality. The program includes an annual teen summit that teaches leadership skills.

Performance measure: Percent of high school students who reported a parent talks to them about school once or twice a month or more.

Data source: YRBSS

Priority # 9. Reduce the prevalence of obesity and overweight throughout the lifespan.

This is a continuation of a 2005 priority. Although the performance measure focuses on young children, we recognize the importance of attaining appropriate weight throughout the entire life course and especially prior to pregnancy. There are many nutrition and physical activity indicators from existing state surveillance programs that give additional information. National performance measure # 14 measures the percent of children 2-4 years of age receiving WIC services with a BMI at or above the 95th percentile.

Infrastructure Building Services: State activities primarily revolve around infrastructure building services. The Section of Chronic Disease and Prevention collaborates with Anchorage School District to analyze the prevalence of overweight and obesity among school age children, and WCFH is investigating ways to incorporate weight surveillance statewide through other programs. WCFH participates in the Mayor's Task Force on Obesity in Anchorage. Nutrition education is disseminated through the WIC program.

Performance measure: Percent of mothers surveyed whose toddler was overweight

Data source: CUBS (Q 10 + 11)

Priority # 10. Increase universal screening for post partum depression in women.

This is a continuation of a 2005 priority. That priority emphasized increasing awareness of mental health issues in the MCH population while the new priority focuses on increasing screening. WCFH hopes to add an additional nurse consultant position and include postpartum depression screening as one of the job responsibilities. Other MCH populations are served by behavioral health programs managed by the Division of Behavioral Health, however these programs are focused on service delivery with a emphasis on inpatient and residential treatment for Medicaid-eligible children and adults.

Infrastructure Building Services: PRAMS and CUBS surveillance programs continue to be a source of data on mental issues for women surrounding the pregnancy period and for women with toddler-aged children. A significant increase in capacity to address this issue is needed.

Performance measure: Percent of women who delivered a live birth and had a provider talk to them about post partum depression since their new baby was born.

Data source: PRAMS, Q 74d, Phase VI

Priority # 11. Strengthen quality school-based health care and health promotion.

This is a new priority. It complements the life course perspective and the principles expressed under priority #4 - using multifaceted approaches to foster health. For several decades,

recognition of the link between health and learning has steadily increased with greater understanding that a child must be healthy to learn and learn to be healthy. There is also greater recognition that school health service programs are in a unique position to improve child health status, resilience and well-being, provide care essential to the student's school attendance, and identify and refer students with certain health risks and conditions. These activities ultimately support the student's ability to learn and contribute to both the school and the community state of health. Belief in every student's right to school health services and access to assessments by a professional school nurse is tantamount to the quality of school health care deserved by every child.

Infrastructure Building Services: The School Health/School Nursing Program is a new WCFH program so capacity building efforts are still in the very early stages. An advisory committee of school nurses has been established and plans are underway to conduct a needs assessment. These efforts will dictate future infrastructure and population-based services, as well as development of performance measures.

Performance measure: None.

Data source: n/a

Priority # 12. Implement standardized screening for developmental delay and behavioral health in children 0 - 21 years.

This is a new priority. It supports one focus area of the Early Childhood Comprehensive Systems program, Mental Health and Social Emotional Development. The priority reflects our concern for ensuring children are meeting their developmental milestones and have the skill in early childhood that prepare them for preschool and kindergarten. A significant amount of work needs to be done with our partner providers and the Medicaid agency around implementation, including standardizing screening tools and consistency in use among providers. Therefore, for the time being, a performance measure will not be included in our list of ten.

Infrastructure Building Services: A small task force is working with the Medicaid program to assess the strengths and weaknesses of the EPSDT delivery of services and the use of consistent tools for developmental assessments. Education of community health aides/practitioners is at an early stage. The task force will be approaching staff in the Medicaid program to entertain a regulation change that will require providers to use a consistent tool (Ages and Stages or the PEDDS) for EPSDT exams if they are to be paid the enhanced rate. The task force hopes to build on the lessons learned from the ABCD technical assistance.

Performance measure: Percent of children enrolled in Medicaid receiving EPSDT screening

Data source: Medicaid, CMS 416 rpt

This indicator does not measure quality or completeness of screening services. There are two related Title V block grant measures: HSCI #2 (% of Medicaid enrollees whose age is less than one year who received at least one initial or periodic screen) and HSCI #7b (% of EPSDT eligible children aged 6 through 9 receiving any dental health service during the year).

Priority # 13. Develop capacity to help families navigate the health care system.

This new priority embraces one of the themes voiced by MCH stakeholders, to improve coordinated services to families. An example receiving enthusiastic support was the Yakima Children's Village, a very successful one-stop health care facility. While Alaska is not prepared to develop such a facility at this time, one alternative is to support an active parent navigation service. Navigation assistance is particularly important to families experiencing complex health and/or development issues, including children and youth with special health care needs. Navigation services are available, especially in conjunction with the pediatric specialty clinics held around the state, and have been described under priority # 3.

Enabling Services: Parent navigation services are offered through a contract with a private non-profit group, the Stone Soup Group, and parent navigators have been trained in several communities to assist families. Parents are active on the Autism Alliance Ad Hoc committee, the Epilepsy steering committee (coordinated by the Center for Human Development at the University of Alaska-Anchorage), and the autism/ neurodevelopmental planning committee, newborn metabolic, newborn hearing, oral health and parent advisory committees all coordinated within WCFH.

Performance measure: None

Data source: n/a

Progress on this priority will be reported through qualitative data in the block grant narratives.

Priority # 14. Acknowledge the importance of men in MCH programs.

This new priority. It reaffirms the continued emphasis on centering health around the family. We will develop ideas over the upcoming five year planning period on how to incorporate this priority, and develop capacity, in MCH programs.

Performance measure: None

Data source: n/a

Priority # 15. Reduce late preterm cesarean sections

Similar to national trends, the proportion of preterm births in Alaska is increasing, primarily due to an increase in medical intervention preterm births. Among Alaska Natives and non-Natives, the proportion of medical intervention preterm births increased by 196% and 124%, respectively, during 1989-2006. Among Alaska Natives, this increase was met with a concurrent decrease in spontaneous preterm births. This may indicate that high risk Alaska Native births are being better monitored. The needs of mothers and infants for medically indicated preterm delivery must be balanced against the known risks associated with preterm birth.

Infrastructure Building Services: Infrastructure activities include monitoring trends using PRAMS and Vital Statistics data, and research regarding health outcomes of the infants.

Performance measure: Number of cesarean-section births delivered at 34 - 36 completed weeks of gestation per 100 total births.

Data source: Bureau of Vital Statistics

MCH Population Groups

All MCH population groups are covered by the priorities. Priorities that focus on capacity building and creating improved systems of care (#3, #8, #11, #12, #13) benefit all MCH populations. Other priorities such as # 2, #4, #5, #6, and #15 are focused on specific MCH subpopulation, with an emphasis on children. In addition, preventative and primary care services for pregnant women, mothers and infants are addressed in priorities #1-8, #10, #12-#15. Preventative and primary care services for children are addressed in priorities #1-3, #5, #7-15 and services for CYSHCN are addressed in priorities #1-3, #5, #7-9,#11-14.

6. Outcome Measures - Federal and State

The Healthy Alaskans 2010 - Targets and Strategies for Improved Health, enumerates desired MCH outcomes. The Healthy Alaskans 2020 Strategic Targets are under development. Existing program activities and new activities for the coming years are described in the FY 2011 Block Grant application within the narratives for the state and national performance measures and the outcome measures. New activities planned for in FFY2011 are addressed within the body of each of the performance measures. In addition, activities that support the new state performance measures are addressed in the discussion of the 15 state priorities written above.

In addition, the relationship between state MCH program activities, the national and state performance measures and their collective contributory positive impact on the outcome measures for the Title V population has already been addressed in prior sections of this 5 year needs assessment. Specifics of this relationship are addressed in the health status fact sheets included in the body of this 5-year needs assessment and used as a method to inform and educate stakeholders who participated in the needs assessment and prioritization process.

C. Needs Assessment Summary

State priorities for 2010 - 2015 are:

1. Reduce substance abuse among families, including alcohol, tobacco and drugs.
2. Reduce child maltreatment and bullying.
3. Collaborate with families to work toward a system of integrated services for families with infants, children, and teens, and especially those with special health care needs..
4. Reduce the risks associated with unintended pregnancy and teen pregnancy.
5. Reduce dental caries in children 0 - 21 years of age.
6. Reduce intimate partner violence (IPV) including teen dating violence.
7. Reduce preventable post-neonatal mortality due to SIDS/asphyxia.
8. Support communities to increase family and youth resiliency.
9. Reduce the prevalence of obesity and overweight throughout the lifespan.
10. Increase universal screening for post partum depression in women.
11. Strengthen quality school-based health care and health promotion.

12. Implement standardized screening for developmental delay and behavioral health in children 0 - 21 years.
13. Develop capacity to help families navigate the health care system.
14. Acknowledge the importance of men in MCH programs.
15. Reduce late preterm cesarean sections.

In many ways, state priorities have not changed since the 2005 Needs Assessment. Issues of mental health, education, family resiliency and delivery of health care in rural areas are reflected in the state priorities concerning outcomes in substance abuse (#1), child maltreatment (#2), teen pregnancy (#4), intimate partner violence (#6), post-neonatal mortality (#7), chronic conditions (#5, #9), and post partum depression (#10).

New priorities focus on expanding access to services by increasing system efficiency (#3), increasing navigation assistance (#13), and promoting new systems (#11, #13). The State continues to expand implementation of the Early Childhood Comprehensive Systems which supports priorities 1,2, 3, and 8. The ECCS Plan was approved and adopted by the Department of Health and Social Services Commissioner and the Children's Policy Team.

The trend of increasing late preterm cesarean sections, similar to national trends, is an emerging issue (#15). Another emerging issue is incorporating a life course perspective and making the family unit (using very broad definitions of family) to focus on risk and protective factors of the family unit (#14).

The state's MCH program continued to grow in capacity in areas identified as priority in 2005. New programs implemented were the Adolescent Health Program, School Health Program, Perinatal Health Program, and the Pediatric Neurodevelopmental Outreach & Autism Screening Clinic, and the Parent Support Services programs. The Oral Health program has gained two additional staff members in the last five years. The MCH Epidemiology Unit has developed two new surveillance programs and hired additional staff to expand data surveillance and analysis capacity. These programs support priorities 1,3,4, 7, 9 which were carried over from the prior Needs Assessment. The new programs translate to increased ability to pursue grants, expand health education, assess needs, conduct data surveillance and special analysis, conduct program evaluations, and create partnerships.