

State of Maine



MATERNAL AND CHILD HEALTH SERVICES
TITLE V BLOCK GRANT PROGRAM
COMPREHENSIVE STRENGTHS AND NEEDS ASSESSMENT
JULY 15, 2005

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1. PROCESS FOR CONDUCTING NEEDS ASSESSMENT	4
A. Overall Needs Assessment Methodology	4
a) Cultural and Linguistic Competence:.....	7
b) Evaluation and Planning Cycle	8
c) Public Input	13
d) Quantitative Methods Description	13
e) Qualitative Methods Description	27
B. Methodology for Assessing MCH Program Capacity	30
a) Strengths.....	30
i. Maine’s Public-Private Partnerships.....	30
ii. Timing.....	30
iii. Collaboration.....	31
iv. Epidemiology Capacity.....	31
v. New Department and Department Leadership.....	32
b) Weaknesses	33
i. Multiple Demands, Time Limits and Competing Priorities.....	33
ii. Staffing Limits	33
iii. Technology	34
2. NEEDS ASSESSMENT PARTNERSHIP BUILDING AND COLLABORATION	36
3. ASSESSMENT OF NEEDS OF THE MCH POPULATION GROUPS	43
A. Maternal and Child Health Populations in Maine.....	43
B. Racial and Cultural Diversity.....	44
C. Pregnancies and Births.....	46
D. Mortality	49
E. Morbidity: Medical Conditions, Mental Health Conditions, Oral Health Conditions, and Children with Special Health Needs.....	56
F. Health Behaviors.....	66
G. Qualitative Strengths and Needs Results	74
4. MCH PROGRAM CAPACITY BY PYRAMID LEVELS.....	81
A. Direct Health Care Services.....	81
B. Enabling Services.....	81
a) Welfare Reform.....	88
b) The Pursuit for Cultural and Linguistic Competence.....	92
c) Access to Care / Health Capacity.....	93
i. Availability of Services.....	93
ii. Specialty Services	100
iii. Impact of emerging issues on ability to provide direct and enabling services ...	106

C. Population-Based Services.....	109
a) Status of select population-based services	124
b) Other State Population-Based Services.....	128
D. Infrastructure Building Services	131
5. SELECTION OF STATE PRIORITY NEEDS	142
6. NEEDS ASSESSMENT SUMMARY	147
7. HEALTH STATUS INDICATORS	149
8. OUTCOME MEASURES	150
9. REFERENCES	151

II. NEEDS ASSESSMENT

1. PROCESS FOR CONDUCTING NEEDS ASSESSMENT

A. Overall Needs Assessment Methodology

The powerful idea that government has a moral and legal responsibility to promote the health and well being of the nation's children and families became a reality with the enactment of Title V of the Social Security Act in 1935. Seventy years later, we continue to draw inspiration, direction, and resources from the visionary leadership that led to the original Title V legislation.

The U.S. Congress amended Title V in 1981 and in 1989. These amendments clarified and expanded the leadership role of State Government in carrying out the Title V mission. These amendments were instrumental in giving State Title V Agencies the fiscal authority and programmatic responsibility to focus its resources on developing family-centered and culturally competent systems of care for all children and families.

In Maine, the State Title V Agency is housed in the Division of Family Health of the Bureau of Health, Department of Health and Human Services. We embarked upon the five-year Needs Assessment for 2005-2010 in the spring of 2004. At that time, we decided that the Assessment represents a unique opportunity to plant creative and fertile seeds for MCH leadership in Maine. As the Title V Agency for Maine, we articulated a vision for the assessment.

We agreed on the concept that this would be a Comprehensive Strengths and Needs Assessment (CSNA), not just a needs assessment: Underlying this is our belief that our leadership work to improve the health of the state's children and families should be rooted in tapping into strengths as well as in meeting needs. We believe that children, families, communities, and systems are more likely to change for the better when the context for such actions includes their strengths, assets, resources, protective factors, and resiliency. It is also important to know the strengths of the MCH system so those elements key to achieving and maintaining positive outcomes are not dismantled by the state when faced with necessary changes in allocation of resources to address emerging issues. To create such a context, we decided to frame our Assessment by keeping in mind a series of new questions that we didn't pose in our 2000 Assessment. Why do some families do better than others in the face of similar circumstances and adversity? Why does Maine do well in certain MCH indicators such as infant mortality and teen fertility? What are the aspects and qualities of certain MCH programs, such as WIC and home visitation, that make a positive impact on the MCH population? How can we collect information over the next five years so that we will be able to track the answers to these and other such questions? Thus, we decided to conduct a Comprehensive Strengths and Needs Assessment that seeks, from start to finish, to begin a five year process that will enable us to identify and measure positive factors, so that we have a balance in our systems and programs between risk reduction and strength enhancement.

We have found tremendous value in the Institute of Medicine's 1988 definition of public health. This definition is rooted in the idea that public health refers to a process of fostering conditions that will enable the whole population – all people - to achieve optimal health. For us in Title V,

each element of that definition – process, fostering, conditions, whole, and optimal – evokes the central notion of MCH as **M**aking **C**ommunity **H**appen. It’s a definition rooted in humanitarian and humane values that affirm the interconnectedness of all people. When children thrive; when they grow up with a sense of dignity, curiosity, and hope; when they experience enduring unconditional love from at least one adult; and when they feel a collective spirit of respect from the community and society as a whole, we all benefit – every one of us.

On the other hand, when children experience the trauma of abuse and neglect; when their health is impaired due to systemic gaps and a lack of synergy and collaboration across sectors; when they grow depressed in adolescence, only to come up against a culture of stigma about mental illness; when their oral health is such that it not only causes a series of medical complications but also an enduring low self-esteem; when those with special health needs remain in segregated settings, we all lose out – every one of us.

Indeed, as President Theodore Roosevelt said a century ago, every child represents a potential addition to the productive and humane capacity or a potential addition to the destructive forces of a community. We as a society have a strongly vested interest in seeing that children do well in all aspects of life, and our challenge as MCH leaders is to foster the conditions that will help them do well. Such is the mission of Title V.

So in the spirit of the values that lie at the heart of public health, we decided early on in planning for the Assessment to measure the health of the MCH population not only quantitatively but also in ways that illuminate the quality of their lives and of the policies and systems that affect them. The quantitative measures with which we are most familiar and comfortable – such as infant mortality, low birth weight, and youth suicide rates – continue to be important and essential to our leadership. However, we decided that our Comprehensive Strengths and Needs Assessment should also focus on qualitative indicators at all levels. The questions that form the foundation for our assessment should stretch and flow well beyond the boundaries of numbers. To what extent are Maine’s children “thriving”? To what extent are our MCH services, organizations, and systems culturally and linguistically competent? To what extent are they family-centered? The MCH Dialogues that took place throughout the state in the fall and winter of 2004-2005 grew out of our desire to feature quality as well as quantity in our Assessment.

Drawing on the success of our CSHN Program, we aimed to include a wide array of stakeholders in such dialogues, especially those most directly affected by MCH policies and systems. One reason that Title V is such a precious resource is that it requires us to not only assure reasonable services for the whole MCH population but also to establish the foundation needed to sustain such services from one generation to the next. The MCH Comprehensive Strengths and Needs Assessment is a central component of this foundation for our leadership, and its value as a powerful planning tool over the next five years will rest, in large part, on our capacity to get buy-in and involvement from all stakeholders. Thus, family and community involvement from start to finish is central to every last detail of the Assessment and the priorities that emerged from it. Our initial task as MCH leaders should always be to ask again and again: Who should be at the table? Whom have we forgotten? And how do we ensure that everyone feels welcomed and that his or her voice matters in this process?

As Maine prepared for and planned the 2005 CSNA process we initiated discussions with several of the Region I states regarding the processes they used, as well as, how they incorporated strengths in their assessment. This led Region I to discuss the importance of evaluating strengths and exploring the literature for existing measures of strength. The discussion included both the measurement of strengths of the MCH population and of the system of care that serves this population. It was less challenging to gather data around the assessment of strengths of populations than around systems.

At the technical assistance workshop on needs assessment offered by the Maternal and Child Health Bureau (MCHB) in Rockville in January 2004, the Region I Title V and CSHN Directors agreed to explore opportunities regarding the inclusion of strengths in the comprehensive 5 year assessment, as well as, the possibility of developing a performance measure that could be used by all states in the region and most likely one that would measure a strength. We achieved progress on this primarily through our monthly regional conference calls, led by Maine Title V Director and AMCHP Board Member Valerie Ricker. In addition, as our work progressed, Vermont and Maine submitted an abstract for a session at the AMCHP in February 2005 regarding the process used and the experience gained through the process. AMCHP accepted the abstract and Valerie Ricker along with Vermont's MCH Planner Sally Kerschner conducted a 90-minute workshop on February 21, 2005. Another opportunity to achieve the goal of a regional performance measure emerged through a learning collaborative with the University of California at Los Angeles (UCLA) National Center for Infant and Early Childhood Health Policy. The center is working with MCHB on the Early Childhood Comprehensive Systems (ECCS) grant, so the work of the collaborative focused on the early childhood population. It was also an opportunity to bring together work related to the Maternal and Child Health Block Grant (MCHBG), ECCS and the School Readiness Indicator Project in which all 6 New England states participated. UCLA has guided Region I in developing a performance measure for early childhood.

Developing a regional strength-based performance measure has progressed slowly. Review of the public health and other health related literature revealed little in relation to strength-based performance measures or assessment of strengths within systems. The literature discusses individual assets of specific populations such as adolescents or school aged children, but is limited in assessing the strength components of MCH systems. However, strong interest in a shared performance measure continues and has solidified around two areas, early childhood and adolescence. The ECCS grantees and the Region I Learning Collaborative with UCLA National Center for Infant and Early Childhood Health Policy reached agreement to develop a performance measure related to child care health consultation. Final wording of the measure is expected by 2006. Interest remains strong for a strength based measure related to adolescence. Vermont and Maine proposed an asset measure from the YRBS. At this time, not all Region I states conduct the YRBS and in some states, the MCH Program is unable to influence the questions used on the survey. Vermont and Maine have agreed to use a similar YRBS question as a state performance measure starting with the FY06 measures. The remaining states agreed to work on including the question in their YRBS or State Youth Survey. The YRBS question that the two states will use is "Do you feel that in your community you feel like you matter to people?" It has its roots in the Search Institutes 40 Assets For Youth.

a) Cultural and Linguistic Competence:

Healthy People 2010 has established a Year 2010 public health objective of 100 % access to health care and zero disparities in health status for all citizens. The attainment of such an ambitious and significant public health objective depends on the capacity of all of our health and human systems, including education and childcare and mental health, to deliver culturally and linguistically competent care. The recognition that cultural and linguistic issues affect all aspects of public health practice heighten the importance of striving to incorporate cultural competence into our MCH Comprehensive Strengths and Needs Assessment.

MCH leaders and practitioners are well poised to play a central leadership role in this effort. First, we can educate ourselves about this issue. Second, we can advocate within our own organizations, starting with the State Title V Agency itself, for policy changes that place a value on diversity, implement frequent cultural self-assessment, are conscious of the dynamics inherent when cultures and languages interact, develop institutionalized cultural and linguistic knowledge, and put into practice adaptations to systems and services that reflect an understanding and honoring of cultural and language diversity. Finally, we can collaborate with diverse partners to ensure that our communities in Maine recognize cultural competence as a high priority and foundation for healthy and safe children and families.

We use the 1989 monograph, *Toward a Culturally Competent System of Care*, for our starting point definition of cultural competence. According to this definition, cultural competence is a set of behaviors, attitudes, and policies that enable a system, organization, or health care practice to work effectively in cross-cultural and cross-language situations. The difference between cultural sensitivity and competence is important to acknowledge. Culturally sensitive provision of care involves the individual provider's awareness of and respect for the beliefs of people of diverse backgrounds. Cultural competence, on the other hand, encompasses such awareness and respect at the institutional, organizational, and systems and policy level.

How can we conduct the Comprehensive Strengths and Needs Assessment so that it moves us forward in statewide leadership for cultural and linguistic competence? Specifically, how can we integrate our knowledge of cultural competence into an honest organizational self-assessment and into an awareness of the impact of an organization's culture on services and systems to strengthen families in Maine? Such a self-assessment is central to getting started in the practice of cultural competence. In fact, the process of self-assessment itself is just as important as what it may in fact demonstrate, in terms of organizational strengths and needs. The path to culturally competent practices follows a long continuum from cultural destructiveness to cultural proficiency, and we recognize that agencies are currently at multiple stages in this process.

b) Evaluation and Planning Cycle

Maine Title V links its cycle for MCH program planning and evaluation with the State required performance based contracting, implemented in 1997, as well as the five (5) year assessment and planning cycle for the MCHBG. An additional element since the 2000 MCH Needs Assessment is the development of individual logic models for most of the MCH related programs. During the current 5-year assessment, we developed a logic model for the Title V Program in Maine. (Figure 1)

The Maine Maternal and Child Health Logic Model is a tool for communicating the long-term outcomes that we will focus on achieving, as well as the strategies and methods to achieve these outcomes. The logic model is particularly critical at this time of reorganization within the Department as we work with new partners to improve the health of all children and families in Maine.

To develop the logic model, the DFH contracted with the Maine Center for Public Health (MCPH) for Consultation Evaluation Specialist, Brenda Joly, PhD. A planning meeting with Dr. Joly and the MCH Medical and Title V Directors took place in the summer of 2004 to identify the group process for developing the model, the number of sessions, and identify workgroup participants. Approximately a dozen people from key partnerships internal and external to government were invited to three facilitated sessions between November 2004 and January 2005.

The logic model served as a useful touch point as the Title V Program reviewed data from the comprehensive assessment, and identified the 10 priorities for the upcoming 5-year period.

Dick Aronson, our MCH Medical Director, has articulated assumptions that are at the heart of our public health work with the MCH population. They are such a core component of our practice that we tend to neglect articulating them to those with whom we work. As you read through the CSNA and annual report and plan, please keep these assumptions in mind.

1. Honor and respect the dignity of all people involved, and of their cultures.
2. Consider that everyone is an "expert" and honor all voices, especially those who have historically not been included in the design of the policies that affect them.
3. Involve families and communities from start to finish.
4. Use simple and clear, non-jargon, non-bureaucratic, non-violent language and communication. This means not using acronyms unless we are willing to explain what the letters mean, and not using terms such as "targeted" and "surveillance" unless we define them first.
5. Draw on the strengths, resiliency, and resources of all people involved, including the families and communities that we serve.
6. Collect, track, analyze, and use data in an honest, clear, and accurate way that is true to the basic principles of public health and that serves as the foundation for action.

7. Advocate for ways to humanize and dignify systems, policies, programs, and services in the long term.

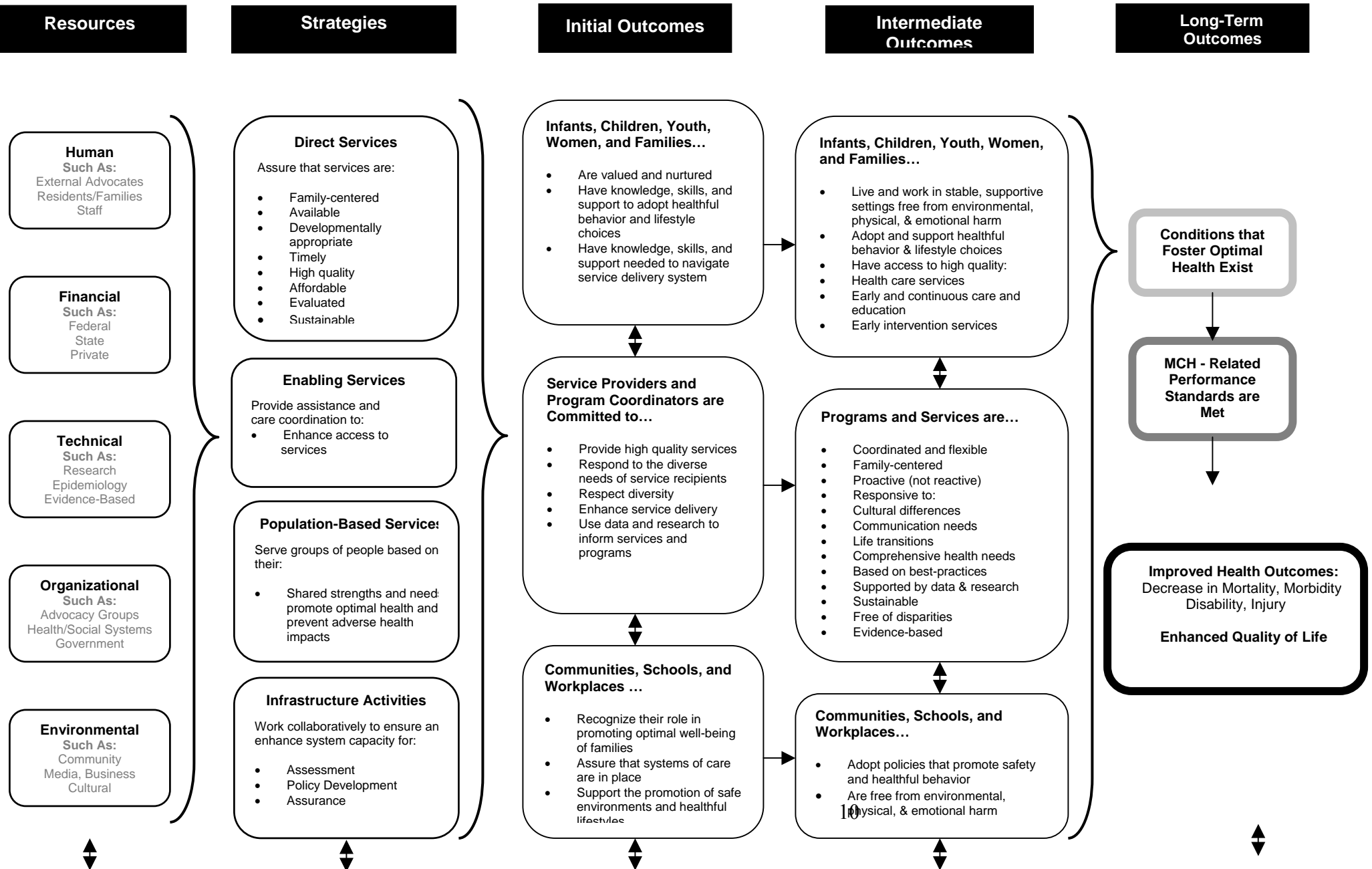
8. Be faithful to the purpose of public health, which is to foster the conditions that will enable the whole population to achieve optimal health. To serve the health of the public, we have to take care of our own health first.

9. Be non-judgmental, and realize that behind every statistic, every risk factor, every death is a real human being, with all the complexity, magnificence, and potential for good that is in each of us.

10. Be relationship-centered...i.e. carry out the work of public health within a context that appreciates the vital role of loving and thoughtful human relationships in promoting health, safety, and justice.

Figure 1.

Maine Maternal and Child Health Logic Model

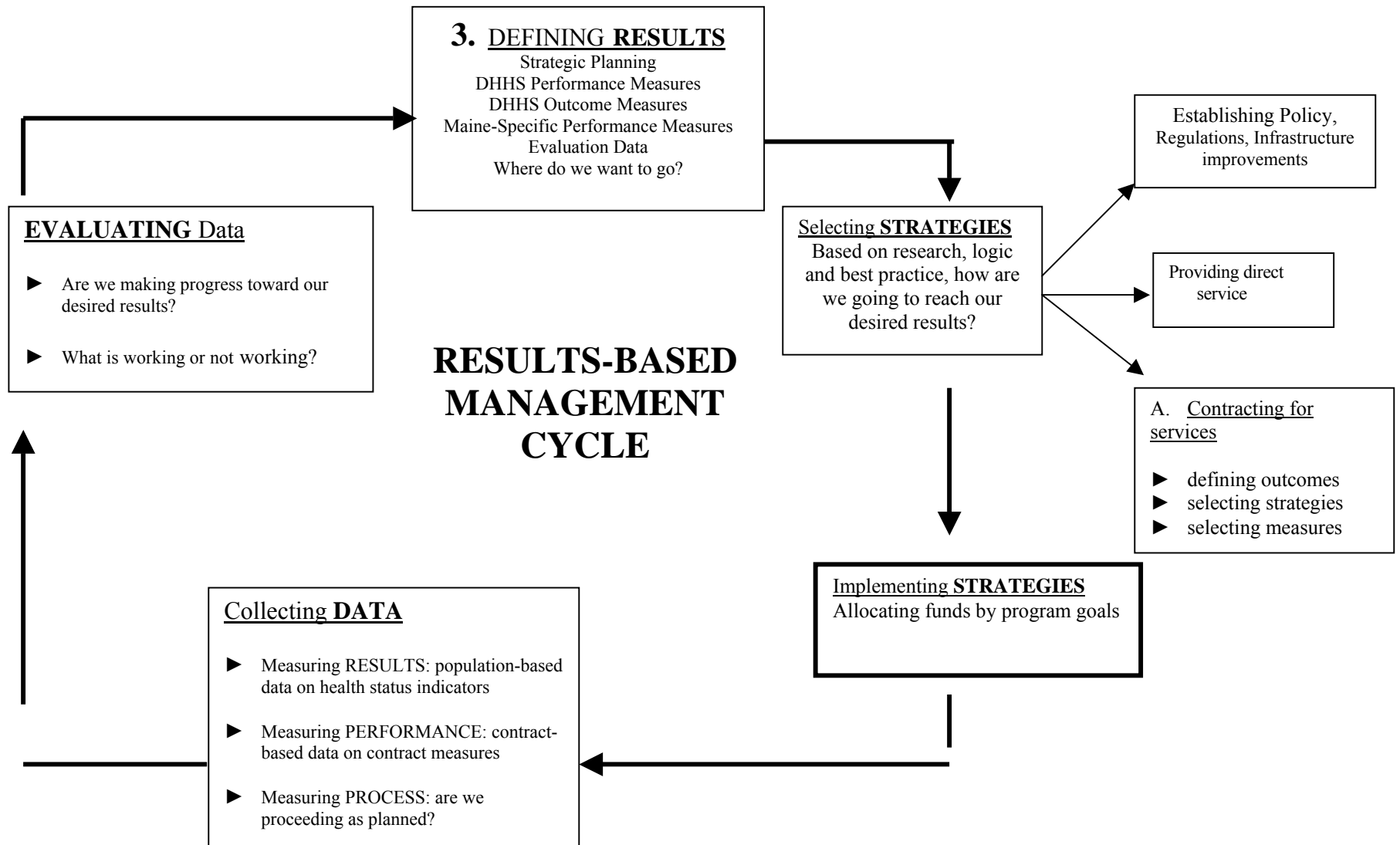


Another change since the 2000 Assessment is the development of an Epidemiology Team (Epi Team) within the Divisions of Community and Family Health. What developed into the Epi team began with the hiring of a PhD Epidemiologist for chronic disease, Dr. Nancy Sonnenfeld. The initial capacity assessment conducted by Dr. Sonnenfeld in 1998 revealed a significant lack of and need for epidemiology support for the MCH related programs. Over the ensuing 7 years, the epidemiology capacity for MCH and chronic disease grew to a staff of 4, plus a Masters prepared MCH Epidemiology Fellow. Starting in the fall of 2002, the epidemiology capacity of MCH programs was reassessed to measure the change in capacity from the 1998 Assessment. It revealed that while epidemiology resources were minimal there had been some increase in within MCH related programs.

Reading the 2005 MCHBG Annual Report and CSNA, one sees the positive influence of the Epi Team on data collection and analysis. An epidemiologist is assigned as a liaison to each program within MCH and chronic disease. This permits the epidemiologists to develop specific knowledge and expertise about the program and its relevant data sources. The long-term goal is the development of program specific surveillance plans as well as development of sufficient knowledge of basic epidemiology within programs. This will allow programs to manage their basic surveillance system and generate basic reports allowing the Epi Team to be utilized for more complex data analyses. Programs are beginning to include their epidemiologist in the process of developing program specific performance measures in relation to the State's performance based contracting, which allows for a linking of the State's performance based contracting and the Title V state and national performance and outcome measures. This, along with the development of a program specific surveillance plan, supports a continuous planning and evaluation cycle. (Figure 2)

As the Title V Program's understanding and experience with performance measures has grown along with epidemiology capacity, the state performance measures have matured. The development and analysis of state negotiated performance measures as well as the setting of longer term goals and annual objectives involves the program manager and relevant staff, the Epi Team liaison assigned to the program, the Title V Director and the MCH Medical Director.

Figure 2. Planning and Evaluation Cycle



c) Public Input

The CSNA derived public input from many sources. These included the various committees and collaborative projects of our MCH related programs such as the Task Force on Early Childhood, CSHN Family Advisory Committee, CSHN Youth Advisory Committee (YEA ME), Joint Advisory Committee for CSHN and Genetics Program, Maine Chapter of AAP, Home Visiting Coalition, Home Visiting Programs, and meetings of the Bureau of Health leadership team. In addition, the Title V Program contracted with the University of Southern Maine, Edmund S. Muskie School of Public Service, Institute for Public Sector Innovation to conduct a series of dialogues with a diverse range of constituents, (including young adults with special health care needs and families) advocates and partners in public health specific to the strengths and weaknesses of Maine's Title V Program. The dialogues began in the fall of 2004 and were completed by early winter 2005. They form the qualitative component of the CSNA. (See Qualitative Methods Description Section Page 21)

Data from those dialogues is evident in the assessment that follows. The group responsible for completing the CSNA included the Title V Director, MCH Medical Director, CSHN Director, a member of the Epi Team, and the leader of the dialogue sessions who is also the lead writer for the CSNA. Based on the qualitative and quantitative data, this group developed a list of 10 priorities. They then presented the priorities to Title V Program Managers, and to the public and key stakeholders for their review and response. From the responses, the group finalized the priority list to form the foundation for the 5-year Title V Plan.

d) Quantitative Methods Description

We used quantitative data on births, mortality, morbidity, health behaviors, population-based services, enabling services, and access to care to assess the needs and strengths of the MCH population in Maine. For births, we looked at pregnancies, live births, low birthweight, prematurity, prenatal care, and related topics. For mortality, we presented age-specific mortality rates and leading causes of death, including a detailed examination of the two leading causes. For morbidity, we looked at common causes of hospitalization, selected measures from each of the Healthy People 2010 leading health indicator categories (i.e., physical activity, overweight and obesity, tobacco use, substance abuse, responsible sexual behavior, mental health, injury and violence, environmental quality, immunization and access to health care), and other conditions of interest in Maine (e.g., oral health). We also selected health behaviors from the leading health indicator categories. We looked at population-based services such as newborn hearing screening and newborn bloodspot screening. For enabling services we looked at topics such as health insurance, childcare, and WIC. For access to care, we examined capacity, use, and barriers to care.

We obtained data from multiple sources, including vital statistics files, hospital discharge data sets studies, surveys conducted solely in Maine, and national surveys from which state-level estimates were obtained. We conducted our own analyses for some measures; for others, we used findings published by other groups or available via Web-based query sites.

Data are presented as numbers, proportions, and/or rates, as appropriate for a given measure. When small numbers were an issue, we reported data for multi-year intervals, including using 5-year moving averages to look at trends for certain measures.

We presented subgroup analyses for selected measures in order to identify possible disparities. For example, many of the birth-related measures are presented by maternal age and many of the access to care issues are examined by health insurance status. The discussion on enabling services and access to care included information specific to individuals with special needs. Due to small numbers (even combining across years), we were not able to present race/ethnicity-specific results.

For many measures, we compared Maine rates with the US white or non-Hispanic white rates. We chose to use these comparison groups because 96.9% of the Maine population is white and only 1% is Hispanic. We also compared Maine's status on various measures with Healthy Maine 2010 and/or Healthy People 2010 goals.

Quantitative data analysis began prior to the start of the dialogue groups and continued while the groups were being held. Once the draft of the dialogue group findings was completed, we identified themes (e.g., housing) from the group discussions that were not yet represented in the quantitative sections of the assessment. We then gathered additional quantitative data to complement the qualitative data obtained from the dialogue groups on these topics.

Strengths and Weaknesses of Quantitative Methods

The quantitative assessment has many strengths including:

- Inclusion of a comprehensive set of measures that addressed births, mortality, morbidity, health behaviors, population-based services, enabling services, and access to care for all MCH populations;
- Inclusion of selected measures from each of the Healthy People 2010 leading health indicator categories;
- Use of multiple data sources;
- Inclusion of subgroup analyses to identify possible disparities on select measures;
- Comparison of current status to Healthy Maine 2010 and/or Healthy People 2010 goals.

While we pride ourselves on the strengths of our quantitative assessment we also recognize its limitations. They include:

- Limited epidemiology resources available for the assessment and lack of physical access to many datasets led to the use of some pre-existing analyses and reports that did not include the precise age groups, years, or variables that we would have preferred to use. One major impact of this was that we could not use a consistent set of age groupings (e.g., 5-year intervals) for all findings, which made it difficult to get a broad view of possible disparities between age groups or to recognize different needs at different developmental stages;
- Some data (e.g., 2000 Census) are now several years old and might not accurately reflect current status. However, it is unlikely that large changes have taken place since these were collected to change the overall picture presented in this assessment;

- Small numbers necessitated the use of 5-year moving averages for some measures, which could mask very recent changes; lack of statistical precision due to small numbers also means that apparent trends might not be statistically significant;
- Comparison data sources for the United States did not always use the same case definition (e.g., different definitions of “very premature”) and were not always available for the same years as Maine data.

Following is a comprehensive listing of data sources that includes limitations of data that are not commonly understood from the literature.

Figure 3. SOURCES USED

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
American Academy of Pediatrics	<ul style="list-style-type: none"> • Children living in linguistically isolated households • Health insurance status • Children per clinically active pediatrician • Clinically active pediatricians per primary care service area • Patient caseload capacity • Medicaid participation • SCHIP participation • Barriers to Medicaid participation 	
Behavioral Risk Factor Surveillance System (BRFSS)	<ul style="list-style-type: none"> • French-American ethnicity • Overall health status • Asthma • Weight status • High cholesterol • Diabetes • High blood pressure • Physical activity • Fruits/vegetables consumption • Alcohol use • Smoking • Seat belt use • Cholesterol screening • Clinical breast exams • Mammograms • Pap tests • Influenza vaccine • Pneumococcal vaccine 	

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
	<ul style="list-style-type: none"> • Health insurance status • Dental visits • Teeth cleaned 	
Brain Injury Association of Maine (traumatic brain injury resource and needs assessment)	<ul style="list-style-type: none"> • Obstacles to service utilization • Service needs 	<ul style="list-style-type: none"> • Not limited to MCH population • Included only people already receiving at least some services¹²⁵
Centers for Disease Control and Prevention: National Center for Health Statistics	<ul style="list-style-type: none"> • Live births • Prenatal care • Prematurity • Low birthweight, very low birthweight • Perinatal mortality • Neonatal mortality • Postneonatal mortality • Infant mortality • Child mortality • Sudden infant death syndrome 	
Centers for Disease Control and Prevention: Other centers	<ul style="list-style-type: none"> • Smoking during pregnancy • Vaccination coverage 	
Child Care and Children with Special Needs: Challenges for Low Income Families (study conducted by the Muskie School of Public Service, University of Southern Maine)	<ul style="list-style-type: none"> • Parents' views of access to child care for children with special needs 	<ul style="list-style-type: none"> • Findings might not be generalizable to all low-income families in Maine that have children with special needs because: (a) only 39 families were involved in the focus groups;⁹⁰ (b) families were not randomly selected,⁹⁰ and (c) families were from Maine or Connecticut and no state-specific results are not reported
Childhood Lead Poisoning Prevention Program, Maine Bureau of Health	<ul style="list-style-type: none"> • Lead screening (children screened, elevated levels) 	
Eastern Maine Rural Child Mental Health Epidemiology Study	<ul style="list-style-type: none"> • Psychiatric symptoms • DSM-IV disorders • Parental preferences re preferred provider • Parental preferences re preferred service setting • Children receiving mental health 	<ul style="list-style-type: none"> • Study was conducted in four rural counties in eastern Maine; results might not be generalizable to the entire state • Prevalence estimates are

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
	services (proportion, provider, setting) <ul style="list-style-type: none"> • Service needs • Barriers to accessing services 	based on parental reports of symptoms; no clinical exams were conducted
Genetics Program, Maine Bureau of Health	<ul style="list-style-type: none"> • Newborn bloodspot screening (babies screened, conditions detected, specimen standards) 	
HIV/STD Program, Maine Bureau of Health	<ul style="list-style-type: none"> • Chlamydia • Gonorrhea • Syphilis • Chronic hepatitis C • AIDS • HIV 	
Health Insurance Coverage Among Maine Residents: The Results of a Household Survey 2002 (report by the University of Southern Maine)	<ul style="list-style-type: none"> • Risk factors for being uninsured • Health insurance premium costs • Eligibility for health insurance among the uninsured • Comprehensiveness of health insurance coverage • Access to medical care 	
Immunization Program, Maine Bureau of Health	<ul style="list-style-type: none"> • Pertussis • Varicella 	
Kaiser Family Foundation	<ul style="list-style-type: none"> • Health insurance status 	
Maine Cancer Registry, Maine Bureau of Health	<ul style="list-style-type: none"> • Cancer incidence • Breast cancer • Colorectal cancer • Lung cancer 	
Maine Center for Economic Policy	<ul style="list-style-type: none"> • Required annual income to meet basic needs budget 	
Maine Child Care Advisory Council	<ul style="list-style-type: none"> • Head Start enrollment 	
Maine Child Health Survey	<ul style="list-style-type: none"> • Overall health status • Asthma • Weight status • Tooth decay / dental caries experience • Untreated tooth decay • Second-hand smoke • Exposure to pre-1950 housing • Elevated blood lead level testing • Health insurance status 	<ul style="list-style-type: none"> • Overall response rate for the 2002 survey was 40.0%, so results might not be generalizable to all kindergartners in Maine. Factors suggesting that the results are representative of the state include: (a) the demographic

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
		<p>characteristics of survey respondents were similar to those of the state and (b) several findings were consistent with other sources of data³⁵</p> <ul style="list-style-type: none"> • Included only kindergartners in public schools; might not be generalizable to private school students
Maine Department of Education	<ul style="list-style-type: none"> • Race • High school completion • High school dropout rate • Intent to enroll in postsecondary programs • Eligibility for free or reduced school lunch 	
Maine Department of Public Safety	<ul style="list-style-type: none"> • Domestic violence 	
Maine Development Foundation	<ul style="list-style-type: none"> • Jobs that pay a livable wage 	
Maine Hospital Discharge Dataset (obtained from the Maine Health Data Organization)	<ul style="list-style-type: none"> • Asthma hospitalizations • Injury hospitalizations • Mental disorder hospitalizations 	<ul style="list-style-type: none"> • Information on cause of injury hospitalizations may be incomplete since not all injuries were E-coded; in 2002, 86% of hospital discharge records that had an injury principal diagnosis had external cause codes • (Note: This percentage was calculated using CDC guidelines)
Maine Office of Child Care and Head Start	<ul style="list-style-type: none"> • Children with diagnosed special needs enrolled in Head Start 	
Maine Office of Substance Abuse	<ul style="list-style-type: none"> • Leading substance abuse problems • Parental opinion on likelihood their own child was drinking 	
Maine State Housing Authority	<ul style="list-style-type: none"> • Number of homeless individuals 	

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
	<ul style="list-style-type: none"> • Use of homeless shelters • Factors contributing to homelessness • Substance abuse and mental illness among people using homeless shelters • Current and additional needed housing resources for people who are homeless 	
Maine State Planning Office population projections	<ul style="list-style-type: none"> • 2015 population projections for <18 year olds and 65+ year olds 	
Maine Youth Drug and Alcohol Use Survey (MYDAUS)	<ul style="list-style-type: none"> • Language used most often at home • Alcohol • Marijuana • Cigarettes • Prescription drugs not prescribed for you • Smokeless tobacco • Cocaine • Hallucinogens • Stimulants • Inhalants • Ecstasy • Heroin • Other illegal drugs 	<ul style="list-style-type: none"> • Public schools and private, non-sectarian schools with 60% or more publicly funded students and any of grades 6 through 12 were eligible to participate in 2004¹⁴⁰ • Survey focuses on youth in schools and does not include youth who are have dropped out of school or are absent from school for other reasons¹⁴⁰ • Findings are based on self-reported behaviors; students might not accurately remember certain information (e.g., age at first use) and might underreport undesirable behaviors; 4% of respondents did not meet the criteria established for the honesty profile filter in 2004¹⁴⁰ • Survey used a mixed sampling strategy in 2004, with some schools required to participate, some schools randomly selected for participation, and other

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
		<p>schools volunteering to participate. Participating schools were asked to include their entire school population; some schools used a random sample of students instead. Statewide, approximately 63% of all eligible students participated in the 2004 survey.¹⁴⁰</p>
MaineCare	<ul style="list-style-type: none"> • Participants (Medicaid and SCHIP) • Coverage among poor and low-income residents 	
National Cancer Institute	<ul style="list-style-type: none"> • Cancer mortality • Leading cause of cancer deaths 	
National Children with Special Health Care Needs Survey	<ul style="list-style-type: none"> • Prevalence of children (birth to 17 years) with special health care needs • Type of special health care needs • Severity of special health care needs / impact on daily activities • Health insurance status • Adequacy of health insurance coverage • Financial problems due to child's health needs • Parent/guardian cut back on work hours or stopped working due to child's health needs • Poverty level • Usual source of health care • Family-centered care • Receipt of needed information re health problems • Service needs and proportion of children who did not get all the care they needed (14 specific medical, dental, and other services) 	

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
	<ul style="list-style-type: none"> • Time families spend on providing/coordinating care 	
National Clearinghouse for English Language Acquisition & Language Instruction Education Programs	<ul style="list-style-type: none"> • Students who are “Limited English Proficient” 	
National Highway Traffic Safety Administration	<ul style="list-style-type: none"> • Motor vehicle fatalities 	
National Immunization Survey	<ul style="list-style-type: none"> • Breastfeeding • Vaccination coverage 	
Newborn Hearing Program, Maine Bureau of Health	<ul style="list-style-type: none"> • Newborn hearing screening 	<ul style="list-style-type: none"> • Information provided is estimates for 2004 because data entry is not yet complete
Office of Data, Research and Vital Statistics, Maine Bureau Of Health: vital statistics datasets	<ul style="list-style-type: none"> • Pregnancies • Live births • Abortions • Live births • Prenatal care • Prematurity • Low birthweight, very low birthweight • Perinatal mortality • Neonatal mortality • Postneonatal mortality • Infant mortality • Child mortality • Mortality among 20-44 year old women • Leading causes of death • Sudden infant death syndrome 	
Office of Data, Research and Vital Statistics, Maine Bureau Of Health: Maine Cooperative Health Manpower Resource System	<ul style="list-style-type: none"> • Population per active primary care physician • Primary specialty of physicians • Population per active dentist • Specialist dentists who treat children • Active general practice dentists who treat Medicaid patients • Active general practice dentists who accept new Medicaid 	<ul style="list-style-type: none"> • Survey information is collected on a voluntary basis; no validation is done of self-reported information¹¹⁹

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
	patients <ul style="list-style-type: none"> • Population per practicing registered dental hygienist 	
Office of Data, Research and Vital Statistics, Maine Bureau Of Health: population file	<ul style="list-style-type: none"> • Proportion of population that is children <18 years of age or women of childbearing age (15-44) • Population distribution across counties 	
Office of Rural Health and Primary Care, Maine Bureau of Health	<ul style="list-style-type: none"> • Federally designated medically underserved areas and populations • Federally designated primary care health professional shortage areas • Federally designated dental health professional shortage areas • Federally designated mental health professional shortage areas 	
Oral Health of Washington County Preschool Children	<ul style="list-style-type: none"> • Early childhood caries • Tooth decay / dental caries experience • Untreated tooth decay • Dental visits 	<ul style="list-style-type: none"> • Study findings might not be generalizable to the entire state because: (a) study was conducted in a single county; (b) study used a convenience sample; approximately 39% of 1-4 year old children in the county participated in the study, and (c) results for 12-35 month olds were based on a small number of children¹²⁴ • Conducted in 1998-1999; results might not reflect 2005 status
Oral Health Program, Maine Bureau of Health	<ul style="list-style-type: none"> • Population on public water systems receiving fluoridated water • Population receiving fluoridated 	

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
	water <ul style="list-style-type: none"> • Community, municipal, and non-profit dental service sites 	
Pediatric Nutrition Surveillance System	<ul style="list-style-type: none"> • Weight status • Breastfeeding • Child enrollment in WIC 	<ul style="list-style-type: none"> • Limited to children enrolled in WIC; results might not be generalizable to all children in the state
Portland Public Schools Office of Multilingual and Multicultural Programs	<ul style="list-style-type: none"> • Languages spoken by school children • Languages spoken by students who are “Limited English Proficient” • Students who are “culturally and linguistically diverse” 	
Pregnancy Risk Assessment Monitoring System (PRAMS)	<ul style="list-style-type: none"> • Pregnancy intention • Baby sleep position • Co-sleeping • Physical abuse during pregnancy • Postpartum depression • Breastfeeding • Alcohol use • Smoking • Second-hand smoke • Car seats • Seat belt use • Smoke alarms • Loaded firearms in home • New mothers who were enrolled in MaineCare just before or during pregnancy or at time of delivery • New mothers who were enrolled in WIC during pregnancy • Teeth cleaned 	
Report: The Economic Impact of the Child Care Industry in Maine.	<ul style="list-style-type: none"> • Children with working parents • Licensed child care enrollment • Unlicensed child care providers • Child care costs • Child care financial assistance 	
Satisfaction with Children’s Health Care: Families’ Evaluation of Medicaid and the State Children’s Health Insurance Program (SCHIP), FY	<ul style="list-style-type: none"> • Prevalence of special needs 	

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
2003 (report by the University of Southern Maine)		
Smile Survey	<ul style="list-style-type: none"> • Tooth decay / dental caries experience • Untreated tooth decay • Sealants • Barriers to dental care 	<ul style="list-style-type: none"> • Conducted in 1998-1999; results might not hold true for 2005 • Study results might not be generalizable to the entire state because (a) the overall 3rd grade response rate was only 51%, and (b) 15% of the 3rd graders who returned questionnaires were not screened¹³²
Survey Findings: Children with Special Health Care Needs and MaineCare Benefits (report by the University of Southern Maine)	<ul style="list-style-type: none"> • Overall health status • Type of special health care need • Need for accessible environments • Private health insurance • Out-of-pocket expenses • Assessment of care from primary care provider • Services received • Written health care plan / care coordination / case management 	
US Administration for Children and Families	<ul style="list-style-type: none"> • Child maltreatment 	
US Census 1990	<ul style="list-style-type: none"> • Race • Individuals below poverty level 	
US Census 2000	<ul style="list-style-type: none"> • Proportion of population that is children <18 years of age or women of childbearing age (15-44) (United States) • Households that include children under 18 years • Households that consist of female householder with her own children under 18 years of age and no husband present • Grandparents as primary caregivers • Race • Hispanic ethnicity • Foreign-born • Language other than English 	

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
	<p>spoken at home sometimes or always</p> <ul style="list-style-type: none"> • Speak English less than very well • Disability • High school graduates • Bachelor's degree or above • Labor force • Unemployment • Children with all parents in family in labor force • Individuals below poverty level • Households with children below poverty level • Median household income • Housing units • Housing costs • Area (land + water) • Population density • Population living in urban vs. rural areas • Vehicles kept at home and available for household use • Public transportation 	
US Office of Special Education Programs	<ul style="list-style-type: none"> • Early intervention • Special education • Disabilities 	
WISQARS, Centers for Disease Control and Prevention	<ul style="list-style-type: none"> • Leading causes of unintentional injury death • Suicide method • Homicide method • Leading causes of death (United States) 	
Youth Risk Behavior Survey (YRBS)	<ul style="list-style-type: none"> • Weight status • HIV/AIDS education • Sadness/hopelessness • Suicidal ideation and behavior • Physical activity • Physical education class • Sports team • TV watching • Computer games 	

Source	Data Items Used For	Limitations Not Commonly Understood From the Literature
	<ul style="list-style-type: none"> • Fruits/vegetables consumption • Seat belt use • Helmet use • Driving under the influence • Weapons • Intercourse • Talking with parents/guardians about sex • Condom use • Usual place for health care • Dental visits 	

Note: The data sources listed above are the primary source from which data used in this assessment were obtained. Maine Bureau of Health staff or contractors conducted some of the analyses; other results were extracted from reports published by outside groups. The “Assessment of Needs of the Maternal and Child Health Population” and “MCH Program Capacity by Pyramid Levels” sections include complete reference citations for all reported data.

e) Qualitative Methods Description

Qualitative data were also collected and analyzed. The data were collected through dialogues (informal conversations, *Stories From the Field*, to elicit stakeholder ideas and opinions on MCH issues) with various stakeholders hosted by the University of Southern Maine's (USM) Edmund S. Muskie School of Public Service. USM, Muskie School staff met with the Bureau of Health, Division of Family Health Director, and MCH Medical Director to design the data collection process. Based on these discussions, we sought to engage children, youth, and families from all sectors of MCH in the dialogues. One goal of the dialogues was to reach out to a variety of non-traditional stakeholders based on the vital importance of getting input from the whole system. As a result, the dialogues included groups such as youth with special needs, parents of children with special needs, kinship care grandparents and guardians, parents of children in early childhood care and representatives of young incarcerated women. The Muskie staff developed questions for the dialogues based on Future Search, an interactive planning process that emphasizes the expertise of all stakeholders and honors all voices, especially those of historically excluded groups. Key principles of Future Search, which the Muskie staff used in conducting the dialogues, are to: 1) Get the *whole system* in the room; and 2) Explore all issues affecting the MCH population within a global as well as local context. In designing the methodology for the dialogues, Muskie staff concluded that such an approach would provide qualitative data that would enable the Title V Program to better understand the perspectives of those affected by its work. In addition to the Bureau of Health, the Muskie staff consulted with the National Center for Cultural Competence at Georgetown University to ensure that the dialogues would honor and respect the cultures of all people involved in the dialogues.

Planning for the dialogues led to the identification of 26 groups for the sessions. From these, we were able to successfully conduct 17 dialogues between September 2004 and February 2005. One group was not able to participate in a dialogue, but asked if it could contribute a written response. A Muskie representative met with the group to provide background on the project and shared questions being asked of other participants. This group did not provide answers to individual questions and chose to focus their aggregate response on the issue of access. The Muskie School was not able to hold dialogues with 9 groups primarily due to scheduling conflicts of invited participants. Where possible the Muskie School extended invitations to attend other scheduled dialogues in an effort to include all voices.

Of the 260 individuals invited, 170 participated in the dialogues. Stakeholder groups are listed in Figure 3. With permission of the participants, all dialogues were audio recorded and transcribed verbatim. Those groups/individuals agreeing to participate in a dialogue were asked to share the trends and influences affecting a particular issue or population through a mind map activity, modeled after a component of Future Search. Once completed, they then identified those trends/issues most pressing to them. Muskie staff then asked the group to answer the following questions keeping in mind the trends and issues they had identified.

1. Which trends/issues are we doing well here in Maine?
2. Which trends/issues are we not doing well here in Maine?
3. In regards to the trends/issues identified, what is not taking place now that you would like to see or be changed?

4. We are interested in learning about your experience with the MCH Program. Is there anything you would like to tell us about your experience?

Upon completion of the dialogues, the transcripts were read and themes identified. These data were then presented to the Epidemiologist to identify potential additional topics for the quantitative portion of the strengths and needs assessment to complement the findings from the dialogues.

Limitations

While the dialogues provided some very rich and informative data, the open-ended nature of participant responses made interpretation, analysis, and summarization of the results difficult. Participant responses were not strictly independent in that they often flowed from or represented a reaction to the statements of others in the room. In addition, there was limited ability to generalize findings to the larger population, as we were unable, in some cases, to include a statewide representative sample of MCH population groups in the dialogues.

Figure 4. Dialogue Schedule

Group/Organization	Dialogue Date	Location
Perinatal Nurse Managers of Maine	9.10.04	Bangor
CSHN Family Advisory Council and YEAME	9.18.04	Augusta
SBHC Directors	9.24.04	Augusta
Coastal Healthy Communities Coalition	10.06.04	Saco
Bucksport Early Childhood Committee	10.12.04	Bucksport
Refugee and Immigrant	10.20.04	Portland
Knox County Coalition Against Tobacco (Parents and Providers)	10.26.04	Camden
Incarcerated Women's Network of Maine (I WIN ME)	11.04.04	Augusta
MYAN	11.05.04	Bar Harbor
Joint Advisory Committee of Newborn Screening & CSHN	11.17.04	Augusta
Healthy Moms/Healthy Babies	11.17.04	Gardiner
Child Abuse & Neglect Councils	11.18.04	Waterville
Child Death Review Panel	12.03.04	Augusta
Maine Dental Association Exec. Board	12.03.04	Manchester
Kinship Care (Grandparents/Guardians)	12.10.04	Westbrook
MCH Program Managers	12.16.04	Augusta
MIPP Stakeholders	1.24.05	Augusta
Balancing Social w/Emotional & Cognitive Development Workgroup	2.7.05	Augusta

B. Methodology for Assessing MCH Program Capacity

The methodology used for assessing the capacity for MCH services involved a review of key factors influencing the availability and utilization of services. This included a review of existing payment mechanisms (public and private insurance), availability of specialty care, the practice of cultural and linguistic competence, and the impact of other policy issues, such as welfare reform, on the MCH population. Quantitative information was obtained from a variety of sources as listed in the Quantitative Methods Section (Pages 11-20) of the Assessment. Additional information was obtained by reviewing national and state policies for the last few years.

Strengths and Weaknesses of Current Methods

a) Strengths

i. Maine's Public-Private Partnerships

Maine's total population of only 1.3 million residents, many of whom descend from families who have resided here for generations, creates a statewide small town climate where everyone knows almost everyone else. As a result, there is a long-standing history of direct, albeit often informal, relationships between state agencies, legislators, and a populace not afraid to speak their minds. This creates an environment of continuous informal feedback that truly helps us keep our "finger on the pulse" of our communities.

Title V purchases many direct services from vendors in the communities, which helps us keep abreast of community strengths, needs, and concerns. A formal strengths and needs assessment is of great importance, but our on-going relationships and ease of communication are also highly valued sources of information.

Our legislators are not career politicians, and Maine does not have a complex political infrastructure. This makes access to leaders and legislators relatively simple and easily accomplished. The advent of the Internet and email has also significantly increased access to key leadership within government and the Legislature. In addition, our legislative sessions are scheduled to alternate one long year with one short year. Therefore, while there are great demands on staff to quickly respond to legislators' requests during the legislative session, once the Legislature adjourns our staff are able to turn their undivided attention to the business of the Division and Bureau. Our legislators are also willing to partner with agencies. For example, two legislators are serving on the Task Force on Early Childhood of the Governor's Children's Cabinet, Maine's vehicle for the work of *Humane Systems for Early Childhood*, which is our State Early Childhood Comprehensive Systems grant (ECCS). Our First Lady chairs this Task Force.

ii. Timing

It was fortuitous for Title V to be conducting the 5-year CSNA at this time, as the Department in which Title V is organized is in the midst of a significant reorganization, giving thoughtful

attention to the location of activities and the ability to maximize collaboration, services and outcomes. This process has required Title V staff to educate leaders of diverse backgrounds, professional disciplines and interests about the programs within Title V as well as about Title V as a whole. Information compiled for the CSNA as well as information describing Title V for the dialogues, included in a video made specifically for the dialogues, were also useful in educating decision makers about Title V; its role in systems development, focus populations, how it measures outcomes, and its critical foundation in health. The reorganization process has brought attention to the Title V Program and its leaders (CSHN, Title V, and MCH Medical Director) and a new recognition of their knowledge and expertise.

iii. Collaboration

The collaboration among state agencies, private organizations, and the University system is a great strength of this process. Of particular political importance is the participation of the Governor's Children's Cabinet. The Children's Cabinet (CC) was established in 1995 by former Governor Angus King and has been expanded and strengthened by the current Governor, John E. Baldacci. It is composed of those state departments directly related to children and families: Health and Human Services, Education, Public Safety, Labor, and Corrections. The CC meets monthly and includes the Commissioners from these Departments. It has a sub-committee of senior staff from the CC Departments, which meet weekly to address the issues (both positive and negative) that arise in the CC meetings. The CC is chaired by First Lady, Karen Baldacci, a Registered Dietician and Kindergarten teacher. She also chairs the Task Force on Early Childhood (the working body for Maine's SECCS grant). The MCH Medical Director represents the Bureau of Health and MCH on the Senior Staff Committee and also attends the CC meetings. Involvement in the CC and Senior Staff Committee provides us with contacts, grants, data resources in other departments, new opportunities for collaboration, and other initiatives pertinent to the MCH population.

In addition to the CC, the Bureau of Health (BOH), through the Title V Program, has developed an Interdepartmental Women's Health Committee (IWHC). It was initially formed through a MCHB grant for Integrated Comprehensive Women's Health. The grant allowed the BOH to formalize and expand the work it had been developing related to women's health. The IWHC was established in November 2002 at the end of former Governor King's term. It is composed of senior staff from departments across the Executive Branch. The Departments most active in the IWHC are Health and Human Services (DHHS), Education (DOE), and Corrections (DOC). The DHHS is the largest department in the Executive Branch with approximately 4,000 employees.

iv. Epidemiology Capacity

The State Systems Development Initiative (SSDI) grant was restructured during fiscal year 2000 to provide partial support for the salary of a Masters prepared Epidemiologist specific to MCH. The SSDI funds were pooled with funds from the Childhood Lead Poisoning Prevention and Asthma Programs to hire a full-time Masters prepared Epidemiologist (Kathy Tippy, MPH), who began in December 2000. During the summer of 2000, the Title V Director worked with Dr. Sonnenfeld, Chronic Disease Epidemiologist at that time, in developing an application for a grant from the Council of State and Territorial Epidemiologists (CSTE) to support the hiring of a

PhD prepared Epidemiologist for MCH. The application was approved and in the spring of 2002 Dr. David Ehrenkrantz, PhD in Public Health Administration, was hired as the MCH Epidemiologist. In December 2002 Katie Meyer, PhD, was hired as the Chronic Disease Epidemiologist. Dr. Ehrenkrantz resigned the position in April of 2004. In July 2004 a second Masters prepared epidemiologist was hired (Cindy Mervis, MPH), bringing the Epi Team to a total of 3 staff. A year long search resulted in the hire of Dr. Erika Lichter as the new PhD prepared MCH Epidemiologist, bringing the Epi Team to a total of 4 Epidemiologists as of June 2005. Also in 2004, the Title V Program was successful in obtaining an MCH Epidemiology Fellow, Meredith Anderson, MPH, for a two-year fellowship through the CDC and CSTE.

v. New Department and Department Leadership

Prior to July 2004, the Bureau of Health was organized in the Department of Human Services. During the 2002 Gubernatorial campaign, John E. Baldacci pledged, if elected, he would merge the Department of Human Services with the Department of Behavioral and Developmental Services (former mental health and substance abuse prevention agency) in order to improve the delivery of services to Maine residents. Governor Baldacci submitted legislation at the beginning of the 2004 session of the Legislature for the reorganization of the two departments into a new Department of Health and Human Services. The legislation passed with a requirement that the new Commissioner (John Nicholas) develop a more detailed plan of the functional organization of the new Department and that he share it with the Joint Committee on Health and Human Services by January 31, 2005. The Committee reviewed the plan, and the Legislature approved it in June 2005. Starting in July 2005, the Commissioner will designate work groups to finalize operational details and the timeline for implementation of the plan. The DHHS is statutorily mandated through 2004 merger legislation to improve services, increase efficiencies, and improve relations with community organizations particularly in relation to child welfare and mental health services. Commissioner Nicholas has stated that the creation of the new Department will result in an organization that is adaptive, flexible, nimble, learning, responsive, productive, and a good partner.

The creation of the new Department provides a window of opportunity for some reorganization within the Bureau of Health. The Bureau name is being changed to the Maine Center for Disease Control and Prevention and will continue to include a Division specific to family health. The Bureau leadership is in the process of determining what changes are needed in its structure to support the mission and vision of the new DHHS. At this time we know that the home visiting program (Healthy Families), which includes Parents As Teachers, and Parents Are Teachers Too Programs, and the State Early Childhood Systems Program (SECCS) will move to the Office of Child and Family Services in a new Division of Early Childhood. This provides a significant opportunity to increase and enrich the coordination and collaboration between Title V and child welfare and mental health.

b) Weaknesses

i. Multiple Demands, Time Limits and Competing Priorities

The delicate art of balancing the demands of planning and conducting the CSNA, providing information for and participating in workgroups focused upon the reorganization of the Department, and responding to legislation related requests, all at the same time, has burdened an already over extended and understaffed Title V Program. This resulted in delays to elements of the CSNA and obtaining public input on the priorities and performance measures. For example, we had to delay the creation of a broad based MCH Advisory Committee until 2006. Obtaining data from other sections within the DHHS as well as other Departments continues to be challenging as a) they are trying to meet data deadlines for their state and federal funders, and b) federal government requires various State agencies to track data for an indicator in slightly different ways. For example, the current guidance from MCHB states that the numerator for calculating perinatal-mortality is the number of fetal deaths > 28 weeks gestation plus deaths occurring under 7 days, while the National Center for Health Statistics, in *Health, United States, 2004*, uses the number of fetal deaths of 28 weeks or more gestation plus infant deaths within 7 days of birth.

ii. Staffing Limits

The Bureau of Health has experienced a decrease of staff in MCH and chronic disease prevention programs without a decrease in the number or type of programs focused on these populations. Those eliminated positions have been reassigned to Emergency Preparedness and Environmental Health, the areas with new federal funding and no staff. Consistently over the last 10 years, regardless of which political party is leading the Administration, the Executive Branch leadership has been resistant to creating new positions within State government. New work must either be absorbed by existing positions or outsourced. There are functions within both Emergency Preparedness and Environmental Health that are inappropriate to contract to other organizations, and BOH leadership must make difficult choices. Lack of adequate staff has resulted in the Bureau not applying for grants that would benefit the State and assist in achieving Bureau and State priorities. Many public health staff are approaching eligibility for retirement and are choosing to leave state government because they don't see improvement in the staffing and have little energy left to assume additional responsibilities. In addition to the number of staff eligible for retirement, Maine government salary scale has not maintained pace with the private sector. This is beginning to present a significant challenge for recruiting and hiring experienced and qualified staff to fill vacancies. One example is the difficulty hiring into vacant Public Health Nursing (PHN) positions. Nurses interested in PHN interviewed and offered positions decline when learning the salary. Many realize they have greater earning potential working three or four days a week doing comparable work for a Home Health Agency.

iii. Technology

Over the past five years, Title V has continued to increase its information technology capacity through the purchase of hardware and software upgrades. Governor Baldacci's Administration has unified all department information technology (IT) sections under one Bureau of Information Services (BIS) within the Department of Administrative and Financial Services. While the technology sections remain physically located within the individual departments, all staff report to BIS. The adjustment in reporting is proving useful in attaining uniformity in information systems across state government. This structure also allows improved purchasing power and a uniform plan for equipment purchases on a 3-year cycle. Moving to a centralized IT structure has presented some challenges in obtaining specific equipment desired by staff. Standard computer monitor size (15") is cumbersome for staff. The administration set a priority of enhancing information infrastructure across the state and worked with industry for the installation of T-1 lines (dedicated telephone and internet connection lines) in the more northern areas of the state. During the past year the Bureau of Health purchased a license for "Survey Monkey". This is proving to be a useful tool in collecting information on various initiatives. The CSHN Program, in collaboration with the Maine Chapter of the American Academy of Pediatrics and the Maine Support Network, is currently using Survey Monkey. Through this online survey Chapter members are being asked to complete a self-assessment for "Medical Home-ness."

While the capacity for information technology at the local and state level has improved since the 2000 needs assessment, it is an area of continued struggle for the programs within Title V. Since 2000, most programs have moved from paper data files to Access data bases for general program level data which makes program specific reports easier to develop. However, the Title V Program continues to struggle attaining a reliable unduplicated count of services provided. Through Emergency Preparedness and Infectious Disease Control, the BOH is building the foundation of an integrated public health information system (IPHIS) which will enhance the capacity for data collection and integration. WIC and Newborn Screening are likely to be among the first Title V related programs to address integrating with the IPHIS. Phase I of the IPHIS project is the development of a National Electronic Disease Surveillance System (NEDSS) and platform that has basic coordination and integration of data. It will end when there is full integration of the NEDSS system (which includes Health Alert Network, HAN). The projected completion date is January of 2006. Phase II of the project involves assessment of legacy (existing information systems such as WIC, Immunization Registry, Electronic Birth Certificate, and Death Certificate) information systems and will be driven by the assessments and the decision of which systems to bring in beyond NEDSS and HAN, the foundation framework. The birth certificate, death certificate and environmental health data systems will be among the first legacy systems to be assessed.

With the expansion of its Epidemiology capacity, the Title V programs are benefiting from stronger partnerships with other data resources. Partnership agencies include a) The Maine Health Data Organization, which houses hospital discharge and outpatient data; and b) Maine Health Information Center (MHIC), which obtains data from the Maine Health Data

Organization (MHDO) and private insurers for large employers. MHIC also analyzes Medicaid data and can offer some information on utilization and claims.

2. NEEDS ASSESSMENT PARTNERSHIP BUILDING AND COLLABORATION

The MCH Dialogues in the fall and winter of 2004-2005 confirmed what we had hypothesized going into the Assessment: That we have made great strides in partnership building and collaboration during the past five years. Some examples of this include:

- Enhanced partnership between the Title V Agency and the Maine Chapter of the American Academy of Pediatrics, as reflected in the AAP's start-up this year of a Maine web site that became possible through a Medical Home Champions Grant to our CSHN Program.
- Increased involvement of Title V in the Maine Children's Cabinet through the MCH Medical Director's appointment as a DHHS representative to the Senior Staff of the Cabinet.
- A Governor's Proclamation on youth suicide in Maine that highlighted the state's commitment to preventing this second-leading cause of death among 15-24 year olds in the state, and how a public health approach to it is so essential. This Proclamation grew out of the outstanding work of the Maine Youth Suicide Prevention Program, housed in the Division of Community Health and strongly linked to TitleV. The Program engaged the involvement of a wide array of partners, including dynamic community-rooted organizations, family survivors, schools, the mental health system, and the CDC, which helped the mid-coast region in addressing what appears to be a cluster of suicides there.
- A project that involves Title V, the CDC-funded Coordinating School Health Program, the Department of Education, the AAP, Academy of Family Physicians, and schools in strengthening and enhancing collaboration between physicians and schools.
- The start-up of a statewide Maternal and Infant Mortality and Resiliency Review Program, through a newly funded March of Dimes Grant, that has already brought together 50 organizations and people from the health care, substance abuse, hospital, community advocacy, educational, insurance, families, and other sectors.
- The success of the Early Childhood Comprehensive Systems Grant, detailed elsewhere in our application, in uniting people from the public and private sectors and from the state and local level in planning to humanize and dignify systems, policies, and services for young children and their families.
- Framing child abuse prevention as a public health issue, and working much more closely with the Maine Children's Trust in support of our universal home visitation program (*Healthy Families*).
- Improved collaboration between the CSHN Program and the Bureau of Medical Services, specifically with the sharing of data from Medicaid on the costs associated with specific diagnoses for children with special health needs. Providing this kind of information to primary care practices enhances their capacity, as the medical home, to carry out care coordination.

While celebrating our successes, we have become increasingly aware of the need to move beyond collaboration and partnerships to a higher level of working together. This involves

achieving the trust and commitment among and within all stakeholders that open the doors to previously unimaginable and unlikely actions necessary to further promote the health of the MCH population.

This awareness started to come together during the work we did with the Maine Center for Public Health in the fall, winter, and spring of 2004-2005 to develop a concise, one-page MCH Logic Model for our state. In the course of this effort, the concept and role of synergy emerged as a key component for building and sustaining partnerships.

As the conversation unfolded, we became aware that the concept of synergy in our MCH leadership is real, but at the same time an intangible attribute and difficult to articulate and measure. Synergy inspires a new realm of discovering what is possible when people and organizations are in an organic state. This organic state creates openness for learning and allows extraordinary action to flow in multiple directions, transcending traditional and conventional boundaries. We have started to visualize what synergy looks like and how it feels when it happens, but describing it to others and framing it within the MCH Pyramid, for example, are real challenges. Although the current literature on organizational development and theory refers to these concepts, they have yet to be well integrated into the context of public health and MCH.

Achieving this synergy and a synchronistic approach to serving the MCH population, we have discerned, is really not just about cooperating, coordinating, collaborating, or working collectively in any conventional way. In fact, a close look at this language of partnership and collaboration reveals how highly linear and limited it is. Although the terminology sounds good and promotes MCH as a leader in fostering teamwork and collaborative systems, it is, in a sense, superficial. A substantive body of research and practice points to the recognition that effectively and humanely serving the MCH population requires much more than *feel good* or *do good* labels to describe our efforts or the design of our approach.

Creating enlightened systems of change in MCH requires that all involved get a bit uncomfortable at times and dive feet first into unfamiliar waters. We must move in a direction in which, as MCH leaders, we invite and embrace a certain amount of tension and risk in our work. The improved systems will probably look chaotic, and sparks of energy will fly all over the place while interfacing continuously. While we have been caught in the illusion that we can manage and control these systems, by contrast, in the context of organic and fluid reality of synergistic change, we have to learn to forget much of what we know about management and control, and start anew with serving the MCH population as the core focus of everything that we do.

So, how exactly do we fulfill our role, going back to the Institute of Medicine's definition of the purpose of public health, which is to foster the conditions to enable the whole MCH population to achieve optimal health and safety? How do we foster conditions so that our systems, policies, and programs are humane, effective, serve our customers well, and are replicable and sustainable?

During the next five years, we shall strive to frame the response to such questions within the framework of synergy and synchronicity. We use the term *synergy* because in part it gets at what we're trying to do in lifting partnership and collaboration to a higher and deeper level. For

synergy describes the working together of two or more activities, people, or organizations, especially when the result is greater than the sum of their individual effects or capabilities. And synchronicity describes the simultaneous occurrence of two or more actions. Both of these concepts must be alive and thriving if MCH programs can work towards improving the outcomes for the children and families we serve.

Such a level of working together represents an ideal fulfillment of Title V: the coming together of all MCH related programs, efforts, and initiatives and other direct and indirect service systems around the needs and strengths of children, families, and communities. We hypothesize that such a coming together will produce better outcomes and results than if each of them operates by independently providing their individual piece or, at best, their resources and capacity for sharing with others.

We believe that this synergistic approach is organic and natural, but it does challenge us to unlearn entrenched behaviors of interaction and hierarchy. Ultimately, however, it represents the only way that we are going to provide a humane environment in which the MCH population can achieve optimal health and well being. Getting to this place and designing system changes that support this approach are the real challenges of the Strengths and Needs Assessment. Knowing what's needed is easy. Knowing what works well is harder, if only because it represents a largely uncharted path. But acting in synergistic and synchronistic ways is the hardest of all because doing it takes passionate commitment, extraordinary flexibility, courage to tackle the social and environmental forces that give rise to health inequality, and a bit of boundless wizardry.

An essential first step for system change is to give all people with whom we interact the permission and support to step out of familiar roles; to recognize all people as "experts" and honor their voices; and to replace fear, the most overarching and limiting force in all of us, with hope. This permission has to come from our Title V leadership so that people, organizations, and communities throughout the state know that we not only encourage but also want them to think and behave in a healthier way.

To begin to get to this ideal, we first looked at the way in which our systems are historically designed, structured, and supported. Socially, this harkens back to the original New England settlers and how they staked land claims, erected fences and built stone walls, placed a strong value on independence instead of interdependence, and held firm to a fear of the unknown, external elements, or anyone that appeared different. It is impossible to deny that the individualistic can-do philosophy that dominates our cultural landscape has served us well, but it has done so by blocking out the reality that we are all interconnected and interdependent. The way of doing business rooted in individualism and self-sufficiency keeps us safe but excludes others from the dialogue and the action. Our current government systems of categorical funding and organizational hierarchy promote this view.

By reflecting on our history, we are better able to realize our vision for deeper partnerships. Here are a few examples of how this is starting to take shape for MCH in Maine:

1. State-Local Partnership for **MCH** as **Making Change Happen**: Systems change can be an arduous, lengthy process without the intangible and organic connections among stakeholders that informally address or precede filling service gaps. In Maine, our Early Childhood Systems Coordinator functions to facilitate change both with calculated and steady steps toward policy and culture shifts, and equally importantly, through the informal relationships among groups that transcend any one area of expertise or concern. Simply put, with an awareness of the power of these possibilities, Maine is nurturing opportunities for more effective and humane change. When we capitalize on synchronicity and bring together people who would not traditionally consider their discrete fields as congruent, our efforts for systems change are propelled exponentially.

Here's what happened in this example: A "casual" phone call to the Early Childhood Systems Coordinator for some assistance generated some incredibly visionary and entirely feasible ideas for community based resource hubs, which represent a major recommendation emerging from our Early Childhood Systems Grant.

A small coastal Maine community (Bucksport) spent a number of years assessing its resources and the health outcomes of its people. It realized that its children and families faced service system gaps that affected their health and development. Lacking effective infrastructure, these gaps further drained limited resources. Community partners collaborated to create the Bucksport Bay Area Early Childhood Network primarily by using its existing assets. The Bay Area Early Childhood Network would become the platform from which to coordinate access, communication, and service delivery among agencies and community families. Network partners had already volunteered their social capital and needed only minimal funding to pilot their concept and show the far-reaching benefits to their community.

The initial dialogue between the Early Childhood Systems Coordinator and the Network Director yielded tremendous synergy. Drawing upon her own experience and connections, the Early Childhood Systems Coordinator realized the pilot could use the School Readiness Indicators Project as a tool to measure health outcomes and to document the coalition building successes with ongoing process evaluation. She brought the emergent idea to the School Readiness Indicators Liaison at the Department of Education. With assurances that the pilot's intent was to develop a replicable and measurable network initiative, monies from the School Readiness Project and the Early Childhood Initiative were secured. The network was energized and sprang into action.

The public rollout of the network "Totline" as the access point for Bay Area families was an overwhelming success. Families from diverse cultures, structures, education and incomes are engaging in what they see as a partnership with the community network agencies. Optimism is infusing the project, and the value of its potential is now truly blossoming.

To begin, Maine can capitalize on its rich systems of coalitions that have the capacity and capability to initiate early childhood networks. We can use the existing Healthy Maine Partnerships supported by the Bureau of Health. The Early Childhood Initiative could function as the early childhood technical advisors for the Healthy Maine Partnerships and develop a template

strengths and needs assessment to create a benchmark from which communities could individualize their network structures.

With a system in place to collect comparable local early childhood assessments statewide, the Early Childhood Initiative could share its data to support broader systemic change and validate a broader public health study. For instance, a partner of the Early Childhood Initiative, the State Planning Office, is hoping to incorporate local early childhood data as a standard element into each municipal planning packet. Communities could review this data and implement the promising practices of the Healthy Maine Partnerships into their own, early childhood networks.

From informal partner conversations to actions requiring only nominal formality, we could see local networks burgeoning in a climate that embraces early childhood as vital to the economic health and development of our state.

2. Children's Cabinet and Assets Initiative: In the summer of 2004, the DHHS Commissioner appointed Dr. Aronson, MCH Medical Director, to serve on the Senior Staff of the Maine Children's Cabinet. The Children's Cabinet, chaired by First Lady Karen Baldacci, includes the Commissioners of all the departments in state government that serve children and families. The Senior Staff, appointed by the Commissioners, meet weekly to probe into policy and systems issues that require strong partnerships within and between these departments. Recommendations to the Children's Cabinet emerge from these weekly dialogues, and after careful consideration by the Commissioners, may get translated into policy decisions.

At the time that Dr. Aronson joined Senior Staff, efforts were underway in the MCH Title V Program and the Department of Education to place a new policy and systems emphasis on the assets and resiliency of children, youth, families, and their communities. Both agencies, from their own perspective, were asking remarkably similar questions. For MCH, the question centered on how we can move from a historical public health model rooted in risk, morbidity, and mortality to one that also includes the strengths and resiliency of the MCH population. Our inquiry emerged and was played out as we designed our MCH Needs Assessment in the spring and summer of 2004 and as we heightened our efforts to integrate cultural and linguistic proficiency into our MCH work. For the Department of Education, the question centered on how we can develop a system for Maine in which every school creates an environment that honors, respects, and knows every student. The Department of Education question also materialized during the same seasons of 2004 as Susan Savell, Director of Communities for Children and Youth, engaged the Department of Education in a dialogue with the Search Institute in Minneapolis, which led to a commitment by the Education Commissioner and Maine Superintendents to explore the integration of the assets approach into schools.

As a result of this synchronicity, a half day meeting of the Children's Cabinet took place in the early fall of 2004, at which the commissioners gave a broad based but strong directive to all of their departments to work together in ways that will yield systematic changes that place a sustained focus on assets and resiliency. These efforts began shortly thereafter in October 2004.

3. Federal Funding: Historically in MCH, we tend to find and secure our niche and keep everyone and everything else out. This prevailing concept continues to affect, or more accurately

infect and debilitate the systems, culture, and environment in which MCH efforts must strive for improvement and success.

An innovative example of federal MCHB efforts to overcome this challenge can be seen in Maine's Integrated Comprehensive Women's Health project. From 2001-2004, this funding enabled Maine's MCH program and public health office to traverse programmatic areas within MCH and Bureau of Health Programs as well as create new and strengthen existing relationships across state government and with community partners. This project is located both physically and organizationally within the Division of Family Health, which is home to the State Title V Office, and most of the MCH related programs. The State Title V Director, the MCH Medical Director, the MCH Epidemiologists, and MCH funded Program Directors, Managers and Staff all support and participate in this effort in a variety of ways.

Co-location of the MCHB funded women's health initiative has supported collaboration with the MCH related programs, integration of women's health services across programs, and the exchange of information and resources. In part, as a result of this project, MCH programs are strengthening cross-program collaborations within the Bureau as well as across the new Department of Health and Human Services and other departments and agencies of Maine State Government. Moreover, as a result of this initiative and these valuable relationships, MCH programs have expanded their view and definition of focus populations of MCH and have developed an increased understanding of the broader issue of women's health across the lifespan.

4. State Action in Response to Creative Federal Funding: The Women's Health Initiative brought to light the issues faced by women beyond reproductive age and an acknowledgment that these women who are not within the 15-44 age group should be considered focus populations for MCH programs, specifically women who are relative parents (aunts, uncles, cousins, siblings) raising children and grandparents who are primary caregivers for their grandchildren. This effort included a special initiative and partnership between Maine MCH and other state agencies in co-sponsoring a Public Forum on March 26, 2004: *Relatives as Parents: When the Grandchildren Come to Stay: How Maine Supports Families*, held at the University of Maine Augusta. The partnering agencies included the University of Maine at Orono School of Social Work and its *Relatives as Parents Program*, and the Maine DHHS Bureaus of Child and Family Services (BCFS) and Elder and Adults Services (BEAS).

5. State-Local Partnership: The Early Childhood Initiative and the Women's Health Initiative joined together in the summer of 2004 to assist the University of Maine Orono's Relatives as Parents Program to develop a successful grant application that will assist relative parents and the children they are caring for who are either living with or have parents that are HIV infected.

6. Strengthened MCH partnership with the Maine Department of Corrections and community agencies: The Women's Health Coordinator was a founding member and represents MCH on a statewide networking group focusing on incarcerated and formerly incarcerated Maine women. This networking initiative emerged at the Region 1 Office of Women's Health, U.S. Department of Health and Human Services meeting in September 2003 that brought together representatives from public health and corrections in New England states to discuss incarcerated women and HIV. Attendees expressed interest and energy around developing a networking collaborative for

the comprehensive health issues of incarcerated women as well as transitional services as these formerly incarcerated women reenter the community.

The Women's Health Coordinator linked the conveners of this network with the Region 1 Women's Health Coordinator from the Office of Women's Health, and as a result of this linkage, the network received a competitive purchase request from OWH to create a health section in the library at the women's prison with culturally and linguistically appropriate health publications as well as develop a guide or resource booklet for women leaving county jails and prisons and transitioning back into the community. The Women's Health Coordinator is working with the group and MCH programs to ensure the inclusion of statewide MCH services and resources in the library section as well as in the guide or resource booklet.

We make every effort to involve family representatives of MCH services within our programs. By placing a high value on a diverse workforce and a culturally competent work environment, the life experiences and voice of MCH consumers are influencing and contributing to MCH programs in a multitude of ways. It is not uncommon at an MCH team meeting to hear a program director talk about the challenges of being a single parent of more than one child under five years old, to hear another talk with the group about raising her granddaughter as a single parent and the challenges for the family and health concerns caused by her adult daughter's many years of drug use. MCH leadership values the life experience of our staff and community members. We support and encourage consumers to share their knowledge in an environment that appreciates and values their resilience instead of stereotyping or judging them for the difficulties they have endured.

3. ASSESSMENT OF NEEDS OF THE MCH POPULATION GROUPS

A. Maternal and Child Health Populations in Maine

MCH populations (i.e., infants, children, including those with special health needs, and women of reproductive age) represent a significant proportion of Maine’s population. In 2002, children under 18 years made up 21.4% of the state’s 1.3 million people, with a range from 19.7% to 22.9% across the state’s 16 counties (Table 1).¹ Children represented a smaller proportion of the population in Maine than they did in the United States as a whole, where 25.7% of the population was under 18 years of age.²

In 2000, 32.4% of Maine households included one or more children under 18 years, as compared with 36.0% of US households. The range across Maine counties was 30.1% to 35.3% (data not shown).³ 6.2% of Maine households consisted of a female householder with her own children under 18 years of age and no husband present; the range across counties was 5.0% to 7.5%.³ The comparable figure for the United States was 7.2%.¹⁴²

The 2001 National Children with Special Health Care Needs Survey found that 15.5% of Maine children aged birth to 17 years had special health care needs,⁵ defined broadly 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.”⁶ The corresponding proportion for the United States was 12.8%, which is significantly lower than that found in Maine.⁵ The proportion of children with special health care needs in Maine increased with age, from 8.8% of 0-5 year olds to 16.2% of 6-11 year olds to 20.1% of 12-17 year olds. The US percentages for these age groups were 7.8%, 14.6%, and 15.8%, respectively. 23.5% of Maine households had one or more children under 18 years of age who had special health care needs, as compared with 20.0% of households in the United States.⁶

Table 1. Select Population Groups, Maine and United States, 2002.¹

	% of population represented by MCH groups	% of population that are children less than 18 years old	% of population that are women of childbearing age (15-44 years)
United States	---	25.7 ⁵⁵	21.7 ⁵⁵
State of Maine	40.5	21.4	21.0
Androscoggin	41.7	21.9	21.7
Aroostook	37.7	20.2	19.5
Cumberland	41.9	21.8	21.9
Franklin	40.9	20.8	22.1
Hancock	37.4	19.7	19.7
Kennebec	40.5	21.2	21.2
Knox	36.8	20.0	18.8
Lincoln	36.0	19.7	18.4
Oxford	38.8	21.0	19.9
Penobscot	41.0	20.4	22.4
Piscataquis	37.0	20.5	18.7
Sagadahoc	42.0	22.9	21.0
Somerset	40.5	21.9	20.7
Waldo	40.1	21.9	20.2
Washington	38.8	21.2	19.7
York	41.6	22.5	21.0

Women of childbearing age, defined as 15-44 years, represented 21.0% of the Maine population in 2002, which was similar to the US figure of 21.7% (Table 1). The range across Maine counties was 18.4% to 22.4%.^{1,2}

Children under 18 years plus women of childbearing age together represented 40.5% of the Maine population in 2002, with a county range of 36.0% to 42.0% (Table 1).¹

Grandparents are the primary caregivers for a small proportion of children in Maine. The 2000 Census found that 1.7% of Maine adults aged 30 and over lived with grandchildren under 18 years of age. Similarly, 1.7% of Maine households included grandparents living with grandchildren. More than a third (38.9%) of the grandparents who lived with grandchildren were “grandparent caregivers,” defined as having primary responsibility for coresident grandchildren younger than 18. A third (28.1%) of grandparent caregivers were aged 60 and over. In half of the cases of grandparent caregivers, the child’s parents were not in the household. One third (34.5%) of grandparent caregivers had been responsible for their grandchildren for 5 or more years.⁴

Maine’s population is aging. The State Planning Office projects that in 2015, 18.1% of the state population will be under 18 years and there will be more people 65 years and older in the state than children under 18.⁷

B. Racial and Cultural Diversity

The 2000 Census provided a snapshot of the racial and cultural diversity of Maine’s population (Table 2). (Note: The Census data presented here are for the entire state population, not just the MCH population.) In 2000, Maine was 96.9% white, with little variation across counties. Statewide, 0.7% of Mainers were Asian, 0.6% were American Indian or Alaska Native, 0.5% were black or African-American, 1.0% were two or more races and 0.2% described themselves as being some other race. Less than 1% of the entire population was Hispanic,³ 1.2% of children under age 18 were Hispanic.⁸ A much larger proportion of the entire population is French-American; on the 2003 Behavior Risk Factor Surveillance System (BRFSS) survey, 19% of Maine adults ages 18 and over reported that they were French-American or Franco-American.⁹

Table 2. Racial and cultural diversity, Maine and United States, 2000.³

	% white	% Hispanic	% foreign born	% language other than English spoken at home sometimes or always ^a	% speak English less than "very well" ^{na}
United States	75.1	12.5	11.1	17.9	8.1
State of Maine	96.9	0.7	2.9	7.8	2.0
Androscoggin	97.0	1.0	2.6	16.4	4.1
Aroostook	96.8	0.6	5.8	24.1	6.3
Cumberland	95.7	1.0	3.8	5.9	1.7
Franklin	98.0	0.5	1.6	4.9	1.0
Hancock	97.6	0.6	2.3	3.6	0.9
Kennebec	97.5	0.7	2.2	7.8	2.1
Knox	98.3	0.6	2.1	3.4	0.6
Lincoln	98.5	0.5	2.0	2.8	0.6
Oxford	98.3	0.5	1.8	4.5	1.1
Penobscot	96.6	0.6	2.5	4.6	1.2
Piscataquis	97.8	0.5	1.9	3.4	0.7
Sagadahoc	96.5	1.1	2.4	4.4	1.1
Somerset	98.0	0.5	1.7	4.3	1.0
Waldo	97.9	0.6	1.7	3.3	0.7
Washington	93.5	0.8	4.1	5.4	1.1
York	97.6	0.7	2.8	9.4	2.4

^a People 5 years of age and older.

While Maine's population is predominantly white, the state is very gradually becoming more racially diverse. The proportion of the population that is white decreased from 98.4% on the 1990 Census to 96.9% on the 2000 Census.^{3,10} Similarly, the proportion of Maine students in public and approved private schools who are white decreased from 97.5% in the 1993-1994 school year to 95.8% in the 2002-2003 school year.¹¹

The Census found that almost 3% of Mainers were foreign-born. Nearly 8% spoke a language other than English at home at least some of the time; the range across counties was 2.8% to 24.1%. Most of these people did also speak English. Two percent of people in the state reported speaking English less than very well.³

The 2002 Maine Youth Drug and Alcohol Use Survey (MYDAUS) asked 6th-12th graders what language they used most often at home. 96.8% said English, 0.8% said Spanish, and 2.4% said "another language".¹²

In the 2002-2003 school year, 77 languages other than English were spoken by school children in Maine. The nine most common languages spoken by Maine's "Limited English Proficient" (LEP) students in 2002 were French (spoken by 16.8% of LEP students), Spanish (12.9%), Passamaquoddy (10.7%), Somali (9.2%), Khmer (8.9%), Vietnamese (4.5%), Cantonese (4.0%), Russian (3.7%), American Sign Language (3.4%), and Serbo-Croatian (2.8%).¹³ (Note: The National Clearinghouse for English Language Acquisition & Language Instruction Educational Programs' Web site glossary states that LEP refers to "students who have insufficient English to succeed in English-only classrooms.")¹⁴

LEP students make up a small, but growing, proportion of Maine's school children. During the 2003-2004 school year, 1.6% of Maine students were LEP. This represented a 68.6% growth in LEP enrollment since the 1993-1994 school year; during this same time period, the total school enrollment in the state decreased by 10.9%.¹⁵

"Culturally and linguistically diverse" (CLD) is another term used to describe diversity. The National Clearinghouse for English Language Acquisition and Language Instruction Educational Programs' Web site glossary states that the phrase refers to "individuals from homes and communities where English is not the primary language of communication, although the individual may be bilingual or a monolingual English speaker."¹⁴ While statewide statistics are not available, in October 2003, 25.4% of Portland's public school students were CLD; the school-specific proportions ranged from 0.0% to 62.3%.¹³

Statewide in 2000, 0.5% of Maine children 5-17 years old lived in linguistically isolated households, defined as households in which all members aged 14 years and older speak a non-English language and also speak English less than very well. The highest concentration (6.7%) of children in linguistically isolated households was found in the Madawaska primary care service area in Aroostook County.⁸

C. Pregnancies and Births

Pregnancies. There were 16,261 known pregnancies among Maine residents in 2003. Three-quarters of the pregnancies occurred among women who were 20-34 years old (Table 3).

Overall, 84.9% of the pregnancies ended in live births and 14.6% ended in induced abortions. Fetal deaths were rare.

Pregnancy outcome varied by maternal age. The percentage of pregnancies ending in live births was lowest among the youngest women, rose to 91.6% among 30-34 year old women, and then fell slightly among older women.

Induced abortions were most common among younger women, decreasing to 8.0% of pregnancies among 30-34 year olds and then increasing slightly among older women. Information for 10-14 and 45-54 year old women should be interpreted with caution throughout this Pregnancies and Births section; due to small numbers, percentages and rates could vary widely from year to year.¹⁶

Pregnancy intention. Pregnancy Risk Assessment Monitoring System (PRAMS) survey data from 2002 found that 56.9% of Maine women were trying to get pregnant at the time their baby was conceived. Groups of women who were least likely to have been trying to conceive included <20 year olds (22.9% reported that they were trying to conceive at the time they became pregnant); 20-24 year olds (35.5%); less than high school education (25.2%); not married (22.8%); household income less than \$16,000 (26.9%); enrolled in WIC (33.3%), and enrolled in MaineCare (31.6%).¹⁷ Maine has not yet met the Healthy Maine 2010 goal to increase the proportion of pregnancies that are intended to 80.0%.¹⁸

Table 3. Pregnancies and pregnancy outcome, by maternal age, Maine, 2003.¹⁶

Maternal age (years)	# of pregnancies	Pregnancy outcome		
		Live births	Fetal deaths	Induced abortions
10-14	17	52.9%	0.0%	47.1%
15-19	1,579	71.7%	0.4%	27.9%
20-24	4,251	79.7%	0.1%	20.1%
25-29	4,347	88.3%	0.3%	11.4%
30-34	3,851	91.6%	0.3%	8.0%
35-39	1,773	89.7%	0.4%	10.0%
40-44	394	86.0%	0.8%	13.2%
45-54	24	83.3%	4.2%	12.5%
Total ^a	16,261	84.9%	0.3%	14.6%

^a Includes 25 pregnancies with unknown maternal age.

Table 4. Live birth rate (per 1000 women), by maternal age, Maine¹⁶ and United States²³, 2003.

Maternal age (years)	Maine 2003	US 2003	Maine		
			1989-1993	1994-1998	1999-2003
10-14	0.2	0.2	0.4	0.3	0.2
15-19	24.9	27.5	39.8	31.9	27.2
20-24	83.1	83.5	111.1	92.1	89.9
25-29	115.3	110.9	110.6	101.9	110.8
30-34	86.7	97.7	65.0	67.8	78.1
35-39	32.4	43.2	23.3	26.0	29.8
40-44	6.0	8.1	3.6	4.6	5.6
45-54	0.4	0.5	0.2	0.3	0.3
Total	52.0	58.5	58.2	50.8	51.1

^a US rates are for non-Hispanic white women.

^b Numerator is total number of births across all ages; denominator is 15-44 year olds.

Live births. There were 13,846 live births to Maine residents in 2003. Nearly all (99.8%) of the 2003 live births were to 15-44 year old women; the live birth rate in this group was 52.0 per

1000 women. The live birth rate varied by maternal age, ranging from 115.3 among 25-29 year olds to less than 1 per 1000 among 10-14 and 45-54 year old women (Table 4).¹⁶ Four in 10 live births (43.9%) were to first-time mothers (i.e., women who had had no prior live births).¹⁹ Maine's 2003 live birth rates were lower than or equal to the preliminary 2003 rates for non-Hispanic white women in the United States for all age groups except 25-29 year olds.²⁰ (Note: The US white population or non-Hispanic white population is used as the comparison group whenever possible throughout this strengths and needs assessment since 96.9% of the Maine population is white and only 1% is Hispanic.)

Over the most recent 15-year period, the number of live births decreased from 17,464 in 1989 to 13,875 in 1995 and has remained stable since then (fluctuating between 13,549 and 13,846 per year). Changes in live birth rates varied by maternal age (Table 4). Birth rates decreased among women less than 25 years of age and remained the same or increased among women in age groups older than 25.¹⁶

Prenatal care. Prenatal care was initiated in the first trimester for 87.9% of live births to Maine residents during 1999-2003 (Table 5). Early initiation of prenatal care occurred least often among women under 20 years of age and most often among women 25-39 years old. For 3.1% of Maine live births, prenatal care was not initiated until the third trimester or there was no prenatal care. Late or no care was most common among 10-14 year old women and least common among 25-39 year olds.¹⁶ The pattern of prenatal care initiation by maternal age in Maine is similar to that seen in the United States, though the absolute percentages differ slightly.²¹

Table 5. Trimester prenatal care initiated for live births, by maternal age, Maine (1999-2003)¹⁶ and United States (2002).²¹

Maternal age (yrs)	Trimester			
	1 st		3 rd or none	
	Maine	US ^a	Maine	US ^a
10-14	48.7%	56.1%	12.8%	12.4%
15-19	77.7%	75.8%	3.6%	4.6%
20-24	84.1%	83.2%	2.3%	3.2%
25-29	90.0%	90.6%	1.4%	1.8%
30-34	92.1%	93.1%	1.0%	1.4%
35-39	90.3%	92.3%	1.6%	1.6%
40-44	86.9%	89.5% ^c	2.4%	2.3%
45-54	83.5%	---	3.3%	---
Total ^b	87.9%	88.6%	1.8%	2.2%

Maine is close to meeting the Healthy Maine 2010¹⁸ and Healthy People 2010²² goals of early prenatal care for 90% of live births; Maine women ages 25-39 have met this goal.

^a U.S. percentages are for non-Hispanic white women.
^b Maine total includes 14 live births with unknown maternal age.
^c U.S. rate is for 40+ year old women.

Prematurity and low birthweight. More than 5800 (8.5%) of live births to Maine residents in 1999-2003 were born premature (i.e., <37 weeks gestation), an average of 1,165 premature births per year (Table 6). Premature births accounted for a higher proportion of live births among women at the ends of the maternal age continuum. Due to the higher birth rate among women in the middle of the age continuum, however, most of the premature babies in the state were born to 20-34 year old mothers. Roughly 1 out of every 5 premature babies in Maine was born at less than 33 weeks gestation; this translates to an average of 246 very premature babies born each year during this 5-year period.¹⁶

Of particular concern is that an increasing proportion of Maine babies are being born premature. In 1984-1988, 5.4% of live births were premature. That proportion increased to 6.3% in 1989-1993, and then to 7.8% in 1994-1998, and now to 8.5% in 1999-2003. This translates to a 57% increase in the prematurity rate in Maine from 1984-1988 to 1999-2003.¹⁶

Maine’s prematurity figures presented above are not directly comparable to the US figures produced by the National Center for Health Statistics (NCHS) because the Maine Office of Data,

Table 6. Prematurity and low birthweight, by maternal age, Maine (1999-2003)¹⁶ and United States (2002).²¹

Maternal age (yrs)	Premature ^d (<37 weeks)		Very Premature ^d (<33 weeks)		Low birthweight (<2500 g)		Very low birthweight (<1500g)	
	Maine	US ^a	Maine	US ^a	Maine	US ^a	Maine	US ^a
10-14	10.3%	n/a	2.6%	n/a	7.7%	12.6%	2.6%	3.3%
15-19	8.9%	n/a	2.0%	n/a	7.3%	8.4%	1.3%	1.6%
20-24	8.2%	n/a	1.8%	n/a	6.5%	6.9%	1.1%	1.1%
25-29	8.3%	n/a	1.7%	n/a	5.5%	6.2%	1.1%	1.0%
30-34	8.1%	n/a	1.6%	n/a	5.6%	6.5%	1.0%	1.1%
35-39	9.7%	n/a	2.2%	n/a	7.2%	7.6%	1.5%	1.3%
40-44	9.8%	n/a	2.1%	n/a	8.0%	9.4%	1.4%	1.7%
45-54	22.0%	n/a	11.0%	n/a	18.7%	20.8%	6.6%	3.4%
Total ^b	8.5%	11.0%	1.8%	1.6% ^c	6.2%	6.9%	1.2%	1.2%

n/a = Not available

^a U.S. percentages are for non-Hispanic white women.

^b Maine total includes 14 live births with unknown maternal age.

^c “Very premature” is defined as <32 weeks gestation for the US percentage.

^d Maine’s prematurity data reflect the clinical estimate of gestation; US data use gestation derived from date of last menstrual period.

Vital Statistics, and Research uses a clinical estimate of gestational age while NCHS defines gestational age based on last menstrual period. NCHS does, however, also report state level data. For 2002, NCHS reported that the preterm birth rate for Maine was 10.1% versus 11.0% for non-Hispanic whites in the United States. Both are higher than the Healthy People 2010 goal of 7.6% of live births.^{16,21-22} As in Maine, the US prematurity rate has been rising but more slowly than our state, with a 16% increase between 1990 and 2003.²³

More than 4200 (6.2%) of live births to Maine residents in 1999-2003 were low birthweight (i.e., <2500 grams), an average of 846 low birthweight babies each year during this 5-year period (Table 6). Nearly 1 in 5 low birthweight babies weighed less than 1500 grams; this translates to an average of 158 very low birthweight babies born to Maine residents each year during this 5-year period. Low birthweight babies accounted for the smallest proportion of live births among 25-34 year old women. Due to the higher birth rate in this age group, however, half of all low birthweight babies were born to 25-34 year olds. Another 25% were born to 20-24 year old mothers. Over the most recent 15-year period, the proportion of live births that were low birthweight increased from 5.2% in 1989-1993 to 5.9% in 1994-1998 to the current 6.2% in 1999-2003. This translates to a 19% increase in the low birthweight rate between 1989-1993 and

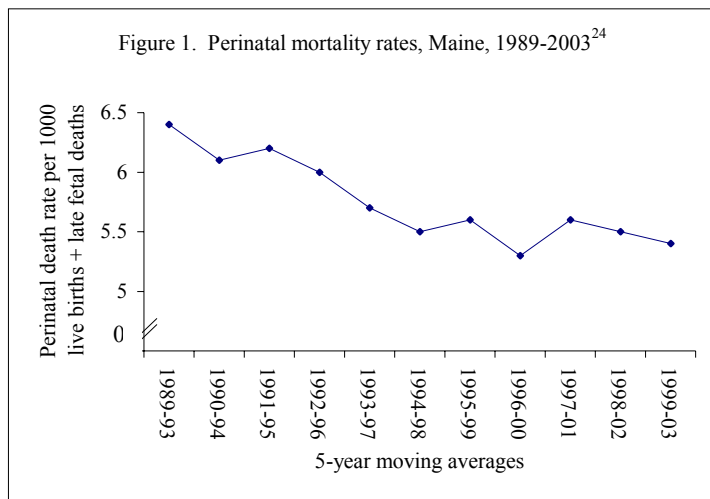
1999-2003.¹⁶ The low birthweight rate has been rising slowly in the United States as well, up 13% between 1990 and 2003.²³

Maine's 6.2% low birthweight figure for 1999-2003 is slightly less than the comparable U.S. non-Hispanic white figure of 6.9% for 2002.^{16,21} Maine has not yet met the Healthy People 2010 goals for low birthweight (5.5% of live births) or very low birthweight (0.9% of live births).²²

D. Mortality

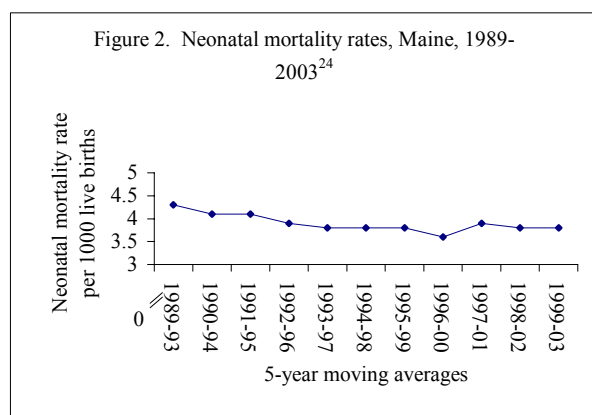
(Note: Table 7 summarizes mortality information [number of deaths, mortality rate, and leading causes of death] for the various MCH populations.)

Perinatal mortality. There were 372 perinatal deaths in Maine during 1999-2003, an average of 74 perinatal deaths per year during this 5-year period. (Note: "Perinatal" is defined in this section as 28 or more weeks gestation through 7 days of age, which is consistent with the definition used in *Health, United States, 2004*, but which differs from the MCH block grant definition.) 219 (59%) were infant deaths within 7 days of birth and 153 (41%) were fetal deaths at 28 weeks or more gestation. The average annual perinatal mortality rate for this 5-year period was 5.4 per 1000 live births plus late fetal deaths. Looking at a 15-year historical period, the perinatal death rate declined from 6.4 per 1000 in 1989-1993 to 5.5 in 1994-1998 and has remained fairly stable (5.3-5.6) since then (Figure 1).²⁴ The difference in the rate between 1989-1993 and 1999-2003, is not, however, statistically significant. Maine has not yet met the Healthy People 2010 goal for perinatal mortality of 4.5 per 1000.²²



The state rate is, however, less than the 2002 US rate for fetuses/babies of white mothers of 5.9 per 1000.²⁰

Neonatal mortality. There were 258 neonatal deaths in Maine in 1999 through 2003, an average of 52 neonatal deaths per year during this 5-year period. The average annual neonatal mortality rate was 3.8 per 1000 live births. The rate declined from 4.3 per 1000 in 1989-1993 to 3.6 in 1996-2000 and has



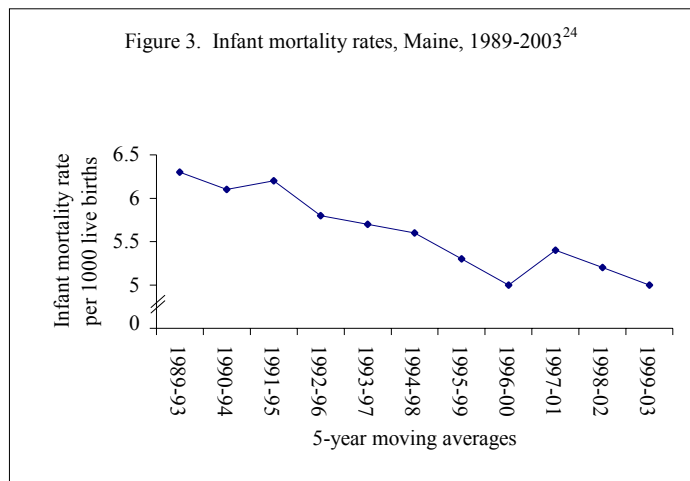
been at 3.8 or 3.9 in each of the 5-year periods since then (Figure 2).²⁴ These changes over time were not, however, statistically significant. Maine has not yet met the Healthy People 2010 goal of 2.9 neonatal deaths per 1000 live births.²²

Maine's rate is similar to the 2000-2002 US rate of 3.8 per 1000 among babies of non-Hispanic white mothers.²⁰

Postneonatal mortality. There were 82 postneonatal deaths in Maine from 1999 through 2003, an average of 16 postneonatal deaths per year during this 5-year period. The average annual postneonatal mortality rate for this period was 1.2 per 1000 live births, continuing a gradual decline from 2.8 per 1000 in 1985-1989. Maine's rate is less than the 2000-2002 US rate of 1.9 per 1000 among babies of non-Hispanic white mothers.²⁰ Maine has met the Healthy People 2010 goal of 1.2 postneonatal deaths per 1000 live births.²²

Infant mortality. 340 Maine babies died before their first birthday in 1999-2003, an average of 68 infant deaths per year during this 5-year period (Table 7). The average annual infant mortality rate was 5.0 per 1000 live births (down from 8.1 per 1000 in 1985-1989). Three quarters of infant deaths occurred during the neonatal period. Maine has not yet met the Healthy Maine 2010 goal of 4.6 infant deaths per 1000 live births or the Healthy People 2010 goal of 4.5 per 1000.²²

Maine's rate is lower than the white non-Hispanic US infant mortality rate for 2000-2002 of 5.7 per 1000.²⁰ While Maine's rate compares favorably to the US rate, there are 13 developed countries with populations of at least 2.5 million that had infant mortality rates less than 5.0 in 1999 and 2000. The higher rate in Maine might be due, at least in part, to a higher proportion of low birth weight babies in the state as compared to these countries.²⁵



Half of the infant deaths in Maine in 1999-2003 were caused by three groups of conditions: congenital anomalies, disorders related to short gestation and low birthweight, and sudden infant death syndrome (SIDS).

Five babies died from SIDS in Maine in 2003; 26 died in 1999-2003 combined. The SIDS mortality rate for 1999-2003 was 0.38 per 1000 live births. This is down from the 1994-1998 rate of 0.50 per 1000. However, even multi-year SIDS rates are based on small numbers and can vary considerably from period to period.²⁴ The Maine rate for 1999-2003 is lower than the preliminary 2002 US non-Hispanic white rate of 0.48 per 1000 live births;²⁶ however, Maine has not yet met the Healthy People 2010 goal of 0.25 SIDS deaths per 1000 live births.²²

On the 2002 PRAMS survey, 75.7% of mothers reported that they most often put their new baby down to sleep now on his or her back; another 12.2% reported that they most often put their baby to sleep on his or her side and 2.1% reported a combination of back and side. Nearly 1 in 10 mothers (9.6%), however, most often put their baby to sleep on his or her stomach and a small number of mothers (<1%) used a combination of positions that included stomach. The percentage of mothers putting their babies to sleep on their backs has increased over time as the percentage of mothers using the stomach or side position has decreased. The percentage of mothers using the stomach position has, however, remained fairly stable since 1999.²⁷ Maine has met the Healthy People 2010 goal that 70% of healthy full-term infants be put down to sleep on their backs.²²

The 2002 PRAMS also found that 7.0% of mothers reported that their new baby always slept in the same bed with them or someone else; 7.9% reported that their baby co-slept with someone almost always. Percentages for other co-sleeping frequencies were 23.2% “sometimes,” 30.4% “rarely” and 31.5% “never.”²⁷

Child mortality (1-19 years). Table 7 provides an overview of childhood mortality for 1999-2003, including number of deaths, mortality rate, and leading causes of death. Mortality rates were lowest among 5-9 year olds and highest among 15-19 year olds (14.7 and 62.3, respectively). Unintentional injury and malignant neoplasms were among the leading causes of death for all of the childhood age groups. Congenital anomalies, heart disease, and homicide were among the leading causes of death for three of the four age groups. Comparative information for the United States and Healthy People 2010 is presented below.

1-4 year olds: The 26.1 per 100,000 mortality rate is similar to the 27.3 per 100,000 preliminary 2002 rate for US non-Hispanic whites.²⁶ Maine has not yet met the Healthy People 2010 goal of 18.6 per 100,000.²² The leading causes of death in Maine in this age group all appear among the top eight leading causes of death for non-Hispanic whites in the United States in 1999-2002.²⁸

5-9 year olds: Maine’s mortality rate of 14.7 is above the Healthy People 2010 goal of 12.3 per 100,000.²² All of the leading causes of death for this age group in Maine, except nephritis, appear among the top six leading causes of death for non-Hispanic whites in the United States in 1999-2002.²⁸ The preliminary 2002 death report for the United States does not break 5-9 year olds out as a separate age category, so no comparison with the US mortality rate is possible at this time.²⁶

10-14 year olds: Maine’s mortality rate of 17.6 is slightly higher than the Healthy People 2010 goal of 16.8 per 100,000.²² The top five leading causes of death in this age group in Maine all appear among the top five causes of death for non-Hispanic whites in the United States in 1999-2002, though the rank ordering is slightly different.²⁸ The preliminary 2002 death report for the United States does not break 10-14 year olds out as a separate age category, so no comparison with the US mortality rate is possible at this time.²⁶

15-19 year olds: Maine’s mortality rate of 62.3 is well above the Healthy People 2010 goal of 39.8 per 100,000.²² The top five leading causes of death in this age group in Maine are identical to the top five causes of death for non-Hispanic whites in the United States in 1999-2002.²⁸ The

preliminary 2002 death report for the United States does not break 15-19 year olds out as a separate age category, so no comparison with the US mortality rate is possible at this time.²⁶

Table 7. Number of deaths, mortality rate, and leading causes of death for MCH populations, Maine, 1999-2003.

	< 1 year	1-4 year olds	5-9 year olds	10-14 year olds	15-19 year olds	20-44 year old women
Number of deaths ²⁴	340	73	58	80	285	925
Average annual mortality rate ²⁴	5.0 per 1000 live births	26.1 per 100,000 population	14.7 per 100,000 population	17.6 per 100,000 population	62.3 per 100,000 population	83.0 per 100,000 population
Top five causes of death (% of deaths) ²⁴ (additional causes listed in the case of ties)	<ul style="list-style-type: none"> - Congenital anomalies (25.0%) - Disorders related to short gestation and low birthweight (17.4%) - Sudden infant death syndrome (7.6%) - Maternal complications of pregnancy (5.6%) - Complications of placenta, cord, membranes (5.3%) 	<ul style="list-style-type: none"> - Unintentional injury (32.9%) - Malignant neoplasms (11.0%) - Congenital anomalies^a (11.0%) - Influenza & pneumonia (5.5%) - In situ/benign neoplasms (4.1%) - Homicide (4.1%) 	<ul style="list-style-type: none"> - Unintentional injury (43.1%) - Malignant neoplasms (20.7%) - Congenital anomalies^a (5.2%) - In situ/benign neoplasms (1.7%) - Heart disease (1.7%) - Nephritis^b (1.7%) - Homicide (1.7%) 	<ul style="list-style-type: none"> - Unintentional injury (32.5%) - Malignant neoplasms (18.8%) - Suicide (10.0%) - Heart disease (7.5%) - Congenital anomalies^a (6.3%) 	<ul style="list-style-type: none"> - Unintentional injury (60.4%) - Suicide (16.1%) - Malignant neoplasms (6.7%) - Homicide (2.8%) - Heart disease (2.5%) 	<ul style="list-style-type: none"> - Malignant neoplasms (30.4%) - Unintentional injury (22.6%) - Heart disease (8.5%) - Suicide (8.3%) - Homicide (2.9%)
% of deaths due to injury (all intents) ²⁴	2.6%	37.0%	44.8%	43.8%	79.3%	33.8%

Note: Leading causes of death were categorized using 71 cause of death groups for <1 year olds and 50 cause of death groupings for 1-44 year olds; a number of deaths fell into the “residual codes category” (age <1: 35 deaths; ages 1-4: 16 deaths; ages 5-9: 14 deaths; ages 10-14: 12 deaths; ages 15-19: 22 deaths; ages 20-44 (females): 130 deaths).

^a Congenital malformations and chromosomal abnormalities

^b Nephritis, nephrotic syndrome and nephrosis

Mortality among women ages 20-44. The mortality rate among Maine women ages 20-44 in 1999-2003 was 83.0 per 100,000. The same leading causes of death were found in this group as in 15-19 year olds, though the rank ordering differed somewhat. This was the first age group (outside of infancy) in which malignant neoplasms overtook unintentional injury as the leading cause of death (Table 7).²⁴

Leading causes of death. Injury and malignant neoplasms were the two leading causes of death among children 1-19 and women 20-44 years of age. Below, we take a closer look at these two causes

Injury. Unintentional and intentional injury combined were responsible for a third or more of the deaths in all of the Maine MCH populations except infants in 1999-2003 (Table 7). Injury had the greatest impact among 15-19 year olds, where it was responsible for nearly 80% of deaths.²⁴

In 1999-2002, the leading causes of unintentional injury deaths varied by age, with the exception of “unintentional motor vehicle traffic,” which was the number one cause in all groups (Table 8). This category captures all motor vehicle “accidents” that occurred on public highways or streets. Motor vehicle traffic injuries were responsible for 65.7% of unintentional injury deaths among 0-19 year olds and 50.0% of unintentional injury deaths among women 20-44 years of age.²⁸

Table 8. Rank ordering of top four causes of unintentional injury deaths and proportion of unintentional injury deaths for which each cause was responsible, select MCH population groups, Maine, 1999-2002.²⁸

	<1 year ^a	1-4 year olds	5-9 year olds	10-14 year olds	15-19 year olds	20-44 year old women
	Rank (%)	Rank (%)	Rank (%)	Rank (%)	Rank (%)	Rank (%)
Motor vehicle traffic	1 (42.9%)	1 (21.1%)	1 (40.0%)	1 (52.4%)	1 (77.9%)	1 (50.0%)
Other land transport			4 (10.0%)	2 (9.5%)		
Other transport				2 (9.5%)	3 (4.0%)	
Pedestrian, other		1 (21.1%)				
Fire/burn		1 (21.1%)	2 (25.0%)	2 (9.5%)		
Drowning		4 (15.8%)	3 (15.0%)			3 (3.2%)
Poisoning	3 (14.3%)				2 (6.7%)	2 (36.4%)
Suffocation	1 (42.9%)				4 (3.4%)	
Fall						4 (2.6%)

^a There were only three causes of unintentional injury deaths among children <1 year of age.

Key points about the 207 motor vehicle fatalities among people of all ages in Maine in 2003 from the National Highway Traffic Safety Administration’s “Traffic Safety Facts 2003” report include:²⁹

- 63.3% of the people killed were drivers; 20.3% were passengers; 9.7% were motorcycle riders; 6.3% were pedestrians, and 0.5% were pedalcyclists. Comparable figures for the United States were 54.5%, 23.7%, 8.6%, 11.1%, and 1.5%, respectively.

- 36.9% of occupants killed in passengers and light trucks were using restraints; 51.8% were not using restraints, and restraint use was not known for 11.3%. Comparable figures for the United States were 40.1%, 52.0%, and 7.9%, respectively.
- Maine had the 8th lowest state pedestrian fatality rate in the country (1.0 per 100,000 population); the US rate was 1.63 per 100,000.
- 36% of Maine motor vehicle deaths occurred in alcohol-related crashes; the highest blood alcohol concentration (BAC) in the crash was 0.01-0.07 in 3% of deaths and 0.08+ in 33% of deaths. In the United States, 40% of motor vehicle deaths occurred in alcohol-related crashes; the highest BAC in the crash was 0.01-0.07 for 6% of deaths and 0.08+ for 34% of deaths.
- 21% of drivers involved in fatal crashes had BACs of 0.08 or higher; another 2% had BACs of 0.01-0.07. The corresponding US percentages were 21% and 4%, respectively.
- 38.2% of motor vehicle fatalities were speeding-related; the US figure was 31.4%.
- The fatality rate per 100 million vehicle miles traveled fell from 3.14 in 1975 to 2.22 in 1985, 1.79 in 1990, 1.49 in 1995, and 1.39 in 2003; there was a 56% decrease from 1975 to 2003. The US rate also fell 56% during this time period.

After motor vehicle traffic incidents, the next most common causes of unintentional injury deaths among 0-19 year olds were fire/burn and poisoning, each of which was responsible for 5.1% of the unintentional injury deaths in this combined age group. For women ages 20-44, the second and third most common causes were poisoning and drowning (responsible for 36.4% and 3.2% of unintentional injury deaths, respectively).²⁸

Turning to intentional injury deaths, suffocation (which includes hanging) was the method used for half of the suicide deaths among 10-14 year olds; in the other half the method was firearms. Among 15-19 year olds, suffocation was the method used in 44.7% and firearms were the method used in 42.1%. In women 20-44 years of age, poisoning was the method for 40.9% of suicide deaths, firearms were the method for 30.3%, and suffocation was the method for 19.7%.²⁸

The two leading methods of homicide among 0-19 year olds were firearms and suffocation, each of which was responsible for 33.3% of homicide deaths in this age group. Among women aged 20-44 years, firearms were the method used in 73.7% of homicides and cutting/piercing instruments were the method for 21.1%.²⁸

Cancer. In 2001, Maine had the 10th highest cancer mortality rate in the nation for females under 50. Maine's rate of 25.3 per 100,000 was higher than the corresponding US rate of 21.0 per 100,000, but the difference was not statistically significant.³⁰ (Note: All rates reported in this cancer section are age-adjusted to the 2000 US Standard Population.)

The leading cause of cancer deaths among Maine females under 50 in 2001 was lung and bronchus. Maine's rate of 5.8 per 100,000 was significantly higher than the US rate of 3.0 per 100,000.³⁰

The second leading cause of cancer deaths among Maine females under 50 in 2001 was breast cancer. The Maine rate was 4.6 per 100,000, which was not significantly different from the US rate of 5.8 per 100,000.³⁰

Pediatric cancer deaths are rare in Maine. During 1997-2001, Maine had an average of 11 such deaths per year among children and youth under age 20. The average annual death rate for Maine was 3.3 per 100,000, which was similar to the US rate of 2.8 per 100,000.³¹

E. Morbidity: Medical Conditions, Mental Health Conditions, Oral Health Conditions, and Children with Special Health Needs

Overall health status. On the 2002 Maine Child Health Survey, nearly all parents/guardians of kindergartners rated their child's health as excellent (73.4%), very good (21.6%), or good (3.6%). 1.4% rated it as fair. No parents/guardians reported that their child's health was poor.³²

A 2003 survey of children with special health care needs who get MaineCare benefits without the benefit of managed care found that 20% of the parents reported that their child's health was excellent; 25% reported it was very good; 34% reported it was good, and 23% reported it was fair or poor. Parents of children with medical or developmental disabilities were more likely to rate their child's health as excellent or very good than were parents of children with mental health or emotional disabilities. Almost half (46%) of the parents reported that their physical, emotional, and/or mental health was affected by caring for their child with special health needs. Three percent of parents said that caring for their child had had a positive effect on their health and well being.³³

In 2003, 84.8% of Maine women aged 18 years and older reported that their health status was good or better than good; 15.2% reported their health as being fair or poor.³⁴

Medical conditions

(Note: The inpatient hospitalization data reported in this section for children under 1 year of age exclude hospitalizations for which the principal diagnosis was "liveborn infant" [ICD-9 code V30-V39]. The data for 10-14 year olds, 15-19 year olds and 20-44 year old women exclude hospitalizations for which the principal diagnosis was related to pregnancy or childbirth [ICD-9 code 630-677].)

Asthma. The 2002 Maine Child Health Survey found that 8.5% of Maine kindergartners had asthma (based on the Council of State and Territorial Epidemiologists case definition). Asthma was more common among males (12.0%) than among females (5.5%). Nearly 1 in 3 kindergartners (29.9%) with asthma had visited the emergency or urgent care department within the past 12 months for dry cough, wheezing, or breathing difficulties. The Expert Panel of the National Asthma Education and Prevention Program recommends that a written plan for individually managing a patient's asthma should be provided during the first clinical visit; only 36.8% of children with reported asthma had such a plan. About 1 in 5 parents (24.0%) of children with asthma had missed work due to their child's wheezing or asthma.³⁵

Asthma was the principal diagnosis for 2.9% of inpatient hospitalizations among Maine children less than a year old in 2003. The corresponding percentages for 1-4, 5-9, 10-14, and 15-19 year olds were 11.6%, 7.9%, 2.0%, and 1.2%, respectively.³⁶ (See note above at the beginning of the “Medical Conditions” for information on hospitalizations excluded from this analysis.)

There was no change in the rate of asthma hospitalizations for 0-4 year olds between 1990 and 2000. The rate for 5-14 year olds decreased an average of 4.2% annually during the same time period.³⁷

On the 2003 BRFSS, 15.5% of Maine women 18 years and older reported that they had ever been told they had asthma; 12.0% reported that they currently had asthma.³⁴ Asthma was the principal diagnosis for 1.7% of hospitalizations among Maine women ages 20-44 in 2003.³⁶ (See note above at the beginning of the “Medical Conditions” for information on hospitalizations excluded from this analysis.)

The “Asthma Status Report: Maine 2002” report included the following findings from the 1999-2000 BRFSS survey: (Note: These findings are for men and women combined.):³⁷

- MaineCare recipients were 2.4 times more likely to report current asthma than people with other health coverage. MaineCare recipients were 2.1 times more likely to report lifetime asthma.
- Adults (age 18 and above) reporting current asthma were more likely to have household incomes less than \$25,000 per year. No differences were found by level of education.
- Both current and lifetime asthma were more common among overweight and obese adults than among adults who were in the normal weight range.
- People with current or lifetime asthma were more likely to have had at least 1 day in the past month when their mental health was not good. They were also more likely to report having had at least 1 day in the past month when their physical health was not good. They were not, however, more likely to report more activity limitations than people without asthma.

Cancer. The 1999 age-adjusted cancer incidence rate among Maine females was 416.9 per 100,000. (Note: All rates in this cancer section are age-adjusted to the 2000 US standard population.) This all-sites rate is significantly lower than the SEER white rate of 438.1 per 100,000. The three most common types of cancers (of those tracked by the Maine Cancer Registry) among women were breast (126.0 per 100,000), lung (54.6 per 100,000), and colorectal (53.0 per 100,000). Maine’s breast cancer incidence rate among women is significantly lower than the SEER white rate of 144.7. Maine’s female colorectal cancer incidence rate is significantly higher than the SEER white rate of 46.8 per 100,000. Maine’s female lung cancer incidence rate is not significantly different from the SEER white rate of 53.7 per 100,000.³⁸

Overweight and obesity. Healthy People 2010 has set goals to reduce the proportion of children aged 6-19 years who are overweight or obese to 5% and to reduce the proportion of adults who are obese to 15%.³⁹ Healthy Maine 2010 has an additional goal of reducing the proportion of adults who are overweight, but not obese to 30%.¹⁸ Maine women ages 18 years and older have

met the Healthy Maine goal for overweight. Maine has not yet met the Healthy People 2010 goals.

Pediatric Nutrition Surveillance System data for 2003 found that 6.3% of Maine children under 5 years of age who were enrolled in WIC were underweight (i.e., <5th percentile for weight-for-length for children under 2 years old and BMI-for-age for 2-4 year olds); 13.6% were overweight ($\geq 95^{\text{th}}$ percentile). Looking just at 2-4 year olds enrolled in WIC, 16.0% were overweight and another 16.8% were at-risk-for-overweight (85th - <95th percentile).⁴⁰

Data from the 2002 Maine Child Health Survey (kindergartners) and the 2003 Youth Risk Behavior Surveillance System survey (YRBS; middle and high school students) were used to categorize children/youth as being underweight, normal weight, at risk for overweight (BMI between the 85th and 94th percentile for age and sex), and overweight (BMI at or above the 95th percentile for age and sex). The findings were as follows:⁴¹

- Underweight: 3% of kindergartners, 2% of middle school students, 3% of high school students.
- Normal weight: 61% of kindergartners, 67% of middle school students, 69% of high school students.
- At risk for overweight: 21% of kindergartners, 18% of middle school students, 15% of high school students.
- Overweight: 15% of kindergartners, 13% of middle school students, 13% of high school students.

The 2003 BRFSS found that 49.1% of Maine women 18 years and older were at risk for health problems related to being overweight; 30.2% of women were overweight, but not obese (BMI 25.0-29.9). Another 19.0% were obese (BMI 30.0 and above). Only 16% of Maine women had been given medical advice about their weight (i.e., lose, maintain, or gain) in the past 12 months.³⁴

Vaccine-preventable diseases. There were 91 cases of pertussis in Maine in 2003. The 5-year median number of cases for 1999-2003 was 36; the annual mean number of cases for this time period was 44. The range of case ages in 2003 was from 3 weeks to 60 years; 76% of the cases occurred in children aged 19 years or younger. Possible explanations for the reported increase in pertussis incidence in 2003 include: (1) a true increase in incidence; (2) a result of long-known cyclic increases in pertussis, and (3) better recognition and reporting by health professionals. There were no deaths from pertussis in the state in 2003.⁴²

There were 712 reported cases of varicella during the 2002-2003 school year. This was the year before the state's varicella vaccination law was implemented; all students enrolled in school must be vaccinated with the varicella vaccine by 2007. Nearly all (95.1%) of the varicella cases were from schools. 42% of the school cases occurred among kindergartners and 1st graders; another 34% occurred among 2nd and 3rd graders.⁴²

Sexually-transmitted diseases. The number of chlamydia cases in Maine increased from 965 in 1996 to 2,120 in 2004. The 2004 count represented a 4% increase over the number of cases diagnosed in 2003. Statewide, there were 166.3 cases of chlamydia per 100,000 population. A

third (33%) of the 2004 cases occurred among 15-19 year olds; 74% occurred among 15-24 year olds. Almost three-quarters (73%) of the 2004 cases occurred among females; this may be, in part, due to the fact that females are tested for chlamydia more often and may be more likely to be symptomatic.⁴³

The number of gonorrhea cases in Maine increased from 56 in 1996 to 231 in 2003, then declined slightly to 214 in 2004. There were 16.8 cases of gonorrhea per 100,000 population statewide in 2004. One in four (26%) of the 2004 cases was less than 20 years old; another 42% were 20-29 years old.⁴⁴ Males who have sex with males (MSM) represented about 40% of gonorrhea cases reported in 2003; 20% of MSM diagnosed with gonorrhea were co-infected with HIV. The Maine Division of Disease Control states that since both gonorrhea and HIV are transmitted sexually, the increase in MSM gonorrhea may suggest that more gay and bisexual men are having unprotected sex.⁴²

Syphilis reemerged as an infectious disease of note in the state in 2003. The 15 syphilis diagnoses that year represented the largest number of cases since 1991. About half of the syphilis diagnoses were among MSM.⁴² In 2004, the number of syphilis diagnoses declined to 2, both of which were among MSM.⁴³

An estimated 20,000 Mainers have chronic hepatitis C; individuals of all ages, ethnic groups, socioeconomic classes, and geographic areas (rural/urban) are affected by hepatitis C in the state. From 1997, when official case reporting was initiated, until 2002, there was a steady increase in the number of people diagnosed with the disease. In 2003, 1,020 diagnoses were reported, down from 1,248 in 2002. The Maine Division of Disease Control believes that the great majority of the reports represent chronic infections resulting from past exposures rather than newly acquired infections. In 2003, 32% of the reported cases were female and 68% were male; this is consistent with the gender distribution in 1997-2002.⁴²

1091 people were diagnosed with AIDS in 1982 through 2003; there were 46 new AIDS diagnoses and 16 AIDS-related deaths in 2003. The prevalence of people living with AIDS has increased, even as the number of new cases and deaths have decreased.^{42, 43} New HIV diagnoses declined steadily since the late 1980s and have been relatively stable in recent years. There were 46 new HIV diagnoses reported during 2004.⁴³ Approximately 1,002 people are living with diagnosed HIV in Maine, as of December 2004.⁴⁵ The Maine HIV/STD Program estimates that there may be an additional 300-400 people who do not know they are infected with HIV.⁴³ Nearly half (45%) of individuals testing positive for HIV in Maine in 1999-2003 got an AIDS diagnosis at or near the time of their positive HIV test; these people likely had been unknowingly infected with HIV for an extended period of time and may have unknowingly infected others if they engaged in risky sexual behavior or shared drug-injection equipment.^{42, 43}

The two most common modes of transmission for people who were newly diagnosed with HIV in 2004 were males having sex with males (72% of new diagnoses) and heterosexual contact with at-risk partners (13% of new diagnoses).⁴⁵ The proportion of HIV infections attributed to heterosexual contact could be inflated, since both MSM contact and injection drug use are underreported.⁴² The non-white and Hispanic population make up approximately 3% of Maine's population (based on the 2000 Census), but represent 13% of people living with diagnosed HIV.

20% of people living with diagnosed HIV in Maine were diagnosed at 13-30 years of age, which means that they could have been infected as teenagers or in their early twenties.⁴³

The proportion of Maine youth reporting being taught about AIDS or HIV infection in school has declined significantly in recent years. For middle school students, the decrease was from 85% in 1997 to 82% in 2001 to 73% in 2003. For high school students, the decline was from 94% in 2001 to 88% in 2003.⁴⁶

Other medical conditions among women. Maine women ages 18 and older self-reported the following additional medical conditions on the 2003 BRFSS:³⁴

- 32.3% had ever been told their cholesterol was high
- 7.0% had ever been told they had diabetes that was not pregnancy related
- 1.2% had ever been told they had diabetes that was pregnancy related
- 25.2% had ever been told they had high blood pressure

Injury. Unintentional injuries were one of the most common principal diagnoses for inpatient hospitalizations among Maine children 1-19 years of age and Maine women 20-44 years old in 2003. The proportion of hospitalizations for which unintentional injury was the principal diagnosis and the three leading causes of those injuries are given below for each age group:³⁶

- 1-4 year olds: Principal diagnosis for 7.0% of hospitalizations
Leading causes: Poisoning; fall; motor vehicle traffic
- 5-9 year olds: Principal diagnosis for 7.9% of hospitalizations
Leading causes: Fall; pedal cyclist, other; transport, other
- 10-14 year olds: Principal diagnosis for 7.3% of hospitalizations
Leading causes: Fall; transport, other; motor vehicle traffic
- 15-19 year olds: Principal diagnosis for 8.7% of hospitalizations
Leading causes: Motor vehicle traffic; fall; transport, other
- 20-44 year old women: Principal diagnosis for 2.8% of hospitalizations
Leading causes: Motor vehicle traffic; fall; poisoning

As mentioned earlier, Motor vehicle traffic refers to incidents involving motor vehicles that occur on public highways. “Pedal cyclist, other” includes injuries to a pedal cyclist that did not involve a motor vehicle on a public “highway.” “Transport, other” is a fairly broad category that includes riding snowmobiles and animals.

Injuries due to intentional self-harm were the principal diagnosis for 3.2% of inpatient hospitalizations among 15-19 year olds and 1.9% of hospitalizations among 20-44 year old women in 2003.³⁶

(Note: Please refer to the beginning of the Medical Conditions section above for information on exclusions from the hospitalizations analysis. Also, it is important to note that there likely were additional hospitalizations involving injuries where the injury was not the principal diagnosis and hence not included here. This may be especially likely with injuries involving intentional self-harm, for which the principal diagnosis may be one of the mental disorder ICD-9 codes.)

Child abuse and neglect. In 2002, Maine child protective services agencies received 16,127 referrals alleging child abuse or neglect. Investigations or assessments were conducted concerning 8121 Maine children; 46% of these children were found to have been maltreated. Maine has not yet met the Healthy Maine 2010 goal to reduce the annual number of substantiated child abuse and neglect cases to 2080.¹⁸ The rate of maltreatment in 2002 was 13.4 per 1000 children under age 18. The rate decreased with increasing age; the age-specific rates were 23.7 per 1000 for 0-3 year olds; 17.6 per 1000 for 4-7 year olds; 12.7 per 1000 for 8-11 year olds; 8.6 per 1000 for 12-15 year olds, and 3.4 per 1000 for 16-17 year olds. Of the 3,746 Maine victims of child maltreatment in 2002, 66.1% were victims of neglect; 55.0% suffered psychological maltreatment; 28.3% suffered physical abuse, and 16.9% suffered sexual abuse. (The percentages add to more than 100% because a given child could have been the victim of more than one type of maltreatment.) About half of the child maltreatment victims were boys (48.9%) and half were girls (51.1%).⁴⁷

Domestic violence. Police reported 5,364 domestic violence offenses in Maine in 2003, an increase of 11.4% from 2002. These incidents accounted for 45.8% of all reported assaults in the state. Six out of 10 (59.2%) domestic violence assaults were classified as male assault on female; 14.4% were female assault on male; 7.8% were parent assault on child; 8.5% were child assault on parent, and 10.2% were other domestic assaults. Nearly all (97.7%) reported incidents involved personal weapons such as hands, fists, or feet. Firearms were used in 0.3% of domestic assaults; knives or cutting instruments were used in 0.8%, and other dangerous weapons were used in 1.3%.⁴⁸

Findings from the 2002 PRAMS survey showed that 1.9% of Maine women were pushed, hit, slapped, kicked, choked, or physically hurt in another way by their husband or partner during their most recent pregnancy; 0.5% reported such abuse by another person.²⁷

Other physical fighting. On the 2003 YRBS, 55% of Maine middle school students reported that they had ever been in a physical fight; this figure is unchanged from 2001 (54%), but significantly less than the results for 1997 (68%). Males were significantly more likely than females to report having been in a fight (68% and 41%, respectively). 8% of middle school students reported ever having been in a fight in which they were hurt enough to be treated by a doctor or nurse.⁴⁶

A fourth (27%) of Maine high school students reported on the 2003 YRBS that they had been in a physical fight in the 12 months prior to the survey; this represents a statistically significant decrease from the 33% figure for 1997 and meets the Healthy People 2010 28% goal for adolescents. As with middle school students, male high school students were significantly more likely than females to report having been in a fight in the prior 12 months (33% and 20%, respectively). 12% of high school students reported they had been hit, slapped, or physically hurt on purpose by a boyfriend or girlfriend in the prior 12 months; there was no significant difference between males and females on this measure. 9% of high school students reported having been in a physical fight on school property in the prior 12 months. 4% of high school students reported that they had been hurt enough in a physical fight during the prior 12 months to need medical attention.^{18,46}

Mental health

Hospitalizations. Mental disorders (ICD-9 codes 290-319) were a leading cause of inpatient hospitalizations among Maine children ages 5-19 and Maine women 20-44 years old in 2003. The proportion of hospitalizations for which a mental disorder was the principal diagnosis and the three most common types of disorders are given below for each age group:³⁶

- 5-9 year olds: Principal diagnosis for 23.2% of hospitalizations
Most common types: Affective psychoses; hyperkinetic syndrome of childhood; adjustment reaction
- 10-14 year olds: Principal diagnosis for 39.3% of hospitalizations
Most common types: Affective psychoses; adjustment reaction; hyperkinetic syndrome of childhood
- 15-19 year olds: Principal diagnosis for 46.6% of hospitalizations
Most common types: Affective psychoses; adjustment reaction; depressive disorder, not elsewhere classified
- 20-44 year old women: Principal diagnosis for 29.0% of hospitalizations
Most common types: Affective psychoses; drug dependence; alcohol dependence syndrome

“Affective psychoses” include conditions such as major depressive disorder and bipolar disorder. “Adjustment reaction” includes conditions such as depressive reaction and posttraumatic stress disorder.”

(Note: Please refer to the beginning of the Medical Conditions section above for information on exclusions from the hospitalizations analysis.)

Children in rural areas. A population-based longitudinal study of children’s mental health began in 1997 in four rural Eastern Maine counties. The children were 4-12 years old at the start of the study. The information that follows is based on preliminary findings from the first two waves (1997-1998 and 1999-2000) of the study and reflects parental reports of psychiatric symptoms rather than clinical diagnoses. In 1997-1998, 16.0% of the children scored 60 or above (i.e., borderline to clinical range) on the Achenbach Child Behavior Checklist; scores in this range are considered to be predictors of the need for special services. 19.2% of the children met the criteria for one or more DSM-IV diagnoses, based on the DSM-IV Diagnostic Interview Schedule for Children; the figure drops to 17% if specific phobias are excluded. The two most common DSM-IV diagnoses were oppositional defiant disorder (10.1%) and attention deficit hyperactivity disorder (8.4%). Looking at the findings from the Achenbach checklist and the diagnostic interview schedule combined, about one in six rural Maine children has a significant behavioral health problem.⁴⁹⁻⁵⁰

Postpartum depression. 50.8% of Maine women who gave birth to a live infant in 2000 self-reported low to moderate postpartum depression on the PRAMS survey; another 7.7% reported severe postpartum depression.⁵¹

Suicidal behavior. The middle school survey for the 2003 YRBS included questions about suicidal behavior at any point in the student's life. 20.3% of Maine middle school students reported that they had seriously thought about killing themselves; 12.8% reported that they had made a plan to kill themselves, and 8.6% reported that they had tried to kill themselves.⁵²

The 2003 YRBS high school survey included questions about sadness/hopelessness and suicidal behavior during the 12 months prior to the survey. One in four (24.7%) Maine high school students reported they had felt so sad or hopeless almost every day for 2 weeks or more in a row that they stopped doing some usual activities. 17.1% had seriously considered attempting suicide. 15.0% had made a plan about how they would attempt suicide. 9.0% had attempted suicide one or more times. 2.9% had attempted suicide and had an injury, poisoning, or overdose that had to be treated by a doctor or nurse.⁵² Maine has not yet met the Healthy People 2010 goal to reduce the proportion of adolescents who have attempted suicide to 1%.⁵³

Suicide-related thoughts and behaviors are more commonly reported by females than by males on the YRBS. The proportions of students reporting such thoughts and behaviors is largely unchanged since 2001, but there have been significant decreases in most measures since 1997; one notable exception is the proportion of high school students who reported attempting suicide in the prior 12 months, which has not changed significantly since 1995.⁴⁶

Oral Health

Dental caries is the most common disease of childhood. Poor oral health across a person's lifespan can have a negative impact on general health, nutrition, school attendance, and education and employment opportunities.¹⁸ A 1998-1999 survey of 1-4 year olds in one Maine county found that 13% had early childhood caries, formerly known as baby bottle tooth decay (Table 9). Treatment of this condition can involve a hospital visit with general anesthesia and can cost thousands of dollars.⁵⁴

Table 9. Childhood dental caries experience and untreated tooth decay, Maine.

	1-4 year olds, 1998-1999 ¹²⁴	Kindergartners, 2002 ³⁵	3 rd graders, 1998-1999 ¹²⁶	2010 objectives
Early childhood caries	13%	---	---	---
Tooth decay (current or past) / dental caries experience	35%	31.2%	44.7%	Healthy People: ¹²⁷ 2-4 year olds: 11% 6-8 year olds: 42% Healthy Maine: ¹⁸ Children: 25%
Untreated tooth decay	30%	18.4%	20.4%	Healthy People: ¹²⁷ 2-4 year olds: 9% 6-8 year olds: 21%

Dental caries experience was found among roughly a third or more of Maine’s young children (Table 9). Maine has not yet met the Healthy People 2010 and Healthy Maine 2010 goals for dental caries experience. Untreated tooth decay was present in 18%-30% of the children studied. Untreated tooth decay in kindergartners was less common among children with private insurance (13.5%) than among children on MaineCare (26.4%) or children with no health insurance (34.1%).³⁵ Kindergartners who had not been to the dentist in the past year were twice as likely to have untreated caries.³⁵

Maine appears to have met the Healthy People 2010 objective for untreated tooth decay among 6-8 year olds; however Maine’s 3rd grade data are from 1998-1999 and might not accurately reflect 3rd graders today. The other Maine data presented in Table 9 should also be interpreted with caution. Information on 1-4 year olds is from a study done in a single county in 1998-1999 and may not generalize to the rest of the state or reflect current status. That particular county is one of Maine’s poorest and most underserved. The kindergarten survey had a low (40%) overall response rate and again the results might not be generalizable to the entire state. Maine will have better oral health information on kindergartners and 3rd graders once the 2004 Maine Child Health Survey results are available.

Disability

Children with special health needs. Prevalence estimates of childhood disability or special health needs are available from numerous sources, including the 2000 Census, the 2001 National Survey of Children with Special Health Care Needs, a 2002 survey of children’s health care in MaineCare and the State Children’s Health Insurance Program, and 2003 Department of Education data on children receiving services under the Individuals with Disabilities Education Act. The data sources do not use a common definition of disability or special health care need and as such yield different estimates of the proportion of children in Maine who have special needs.

The 2000 Census found that 9.4% of 5-15 year old males and 5.3% of 5-15 year old females in Maine had sensory, physical, mental, and/or self-care disabilities. 14.2% of Maine males and 10.9% of Maine females ages 16-20 reported that they had sensory, physical, mental, self-care, go-outside-home, and/or employment disabilities.⁵⁵

The 2001 National Survey of Children with Special Health Care Needs found that 15.5% of Maine's children ages 0-17 years had a special health care need; this translates to an estimated 46,243 children. The proportion of children who had special health care needs increased with age, from 6.4% of 0-3 year olds to 14.1% of 4-7 year olds to 16.6% of 8-11 year olds to 20.3% of 12-14 year olds and 19.7% of 15-17 year olds. Nearly 1 in 4 households (23.5%) had one or more children ages 0-17 years with a special health care need.⁵

Children qualified as having a special health care need on the survey if their parent/guardian answered "Yes" to one or more screening questions and "Yes" to both of the follow-up questions to that screening question. The questions were as follows:⁵

1. Screening:
 - Does child need or use more medical care, mental health or educational services than is usual for most children of the same age? (7.1% of Maine children qualified on this criteria)
 - Does child currently need or use medicine prescribed by a doctor? (11.4% of Maine children qualified on this criteria)
 - Is child limited in any way in his/her ability to do the things most children of the same age can do? (3.4% of Maine children qualified on this criteria)
 - Does child need or get special therapy such as physical, occupational, or speech therapy? (3.3% of Maine children qualified on this criteria)
 - Does child have any kind of emotional, developmental or behavioral problem for which he/she needs treatment or counseling? (4.4% of Maine children qualified on this criteria.)
2. Follow-up:
 - Is this because of a medical, behavioral, or other health condition?
 - Has this condition lasted or is it expected to last for at least 12 months?

Parents/guardians were asked to rank the severity of their child's condition or problem on a 10-point scale. 32.0% of parents/guardians said their child's condition or problem was mild (0-2 on scale); 46.1% said it was moderate (3-6); 17.4% said it was severe (7-8), and 4.5% said it was most severe (9-10).⁵

When asked whether their child's condition affected or limited his or her daily activities, 40.0% said activities were never affected; 37.0% said activities were moderately affected some of the time, and 22.9% said activities were consistently affected, often a great deal.⁵ 14.6% of the children had missed 11 or more days of school due to illness.⁶

A 2002 survey of family satisfaction with children's health care in MaineCare and the State Children's Health Insurance Program found that 25% of parents reported that their child "had an emotional, developmental, or physical condition that limits their ability to do what other children

their age do.” The proportion of children with such a condition increased with increasing age: 14% of children under 6 years; 25% of 6-12 year olds, and 32% of children 13 and older.⁵⁶

We can also learn about the number of children with certain special health needs by reviewing early intervention and special education data. The percentage of Maine 0-2 year olds receiving early intervention services under the Individuals with Disabilities Education Act (IDEA) rose from 1.1% on December 1, 1994 to 2.8% on December 1, 2003.⁵⁷ In 2003, Maine ranked 12th highest among states in the percentage of infants and toddlers receiving such services.⁵⁸

11.2% of Maine’s 3-5 year olds, 15.4% of 6-17 year olds, and 2.1% of 18-21 year olds also were receiving special education services through IDEA on December 1, 2003.⁵⁹ Maine ranks 2nd highest among the state in the percentage of 3-5 and 6-17 year olds served under IDEA.⁵⁹ The proportion of Maine’s 3-21 year olds that were receiving special education services rose from 9.3% in 1994 to 11.8% in 2003.⁶⁰

IDEA data on 3-21 year olds also include the child’s disability. Only one disability is reported per child; if a child has more than one disability, the primary disability on his or her individualized education plan is reported. In 2003, nearly half (47.5%) of the 3-5 year olds had “speech or language impairments”; another 39.3% had “developmental delay.” The five most common disability categories among 6-21 year olds were (1) specific learning disabilities (38.2%); (2) speech or language impairments (22.8%); (3) other health impairments (12.5%); (4) emotional disturbance (10.0%), and (5) multiple disabilities (9.7%).⁵⁹

Disability among adult women. On the 2000 Census, 17.7% of Maine women aged 21-64 reported that they had one or more of the following types of disabilities: sensory, physical, mental, self-care, go-outside-home, and employment disability.⁵⁵ In 2003, 22.5% of Maine women aged 18 years and older reported on BRFSS that they were limited in some way in some activity because of physical, mental, or emotional problems. 6.8% of women in this age group reported that they had a health problem that required the use of special equipment.³⁴

F. Health Behaviors

Physical activity. Results from the 2003 BRFSS showed that 77.1% of Maine women 18 years and older had participated in any physical activities during the past month. According to the women’s self-reports of physical activity, just over half (51.3%) met the recommended guidelines for moderate physical activity; this is well above the Healthy People 2010 goal of 30%. A quarter (24.2%) of the women met the recommended guidelines for vigorous physical activity; this is less than the Healthy People 2010 goal of 30%.^{18,34} Over half (58.6%) of Maine women reported using physical activity or exercise to lose weight or keep from gaining weight in 2000.³⁴

Healthy Maine 2010 physical activity goals for adolescents include: (1) Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on 5 or more of the previous 7 days to 40%; (2) Increase the proportion of adolescents who engage in vigorous physical activity that promotes cardiorespiratory fitness 3 or more days per week for 20 or more minutes per occasion to 85%, and (3) Increase the proportion of adolescents who view television 2 or fewer hours per day to 85%.

Table 10 presents information on various measures of physical activity from the 2003 Youth Risk Behavior Surveillance System (YRBS). Maine middle school students appear to be more physically active than high school students, whether measured by vigorous physical activity, participation in physical education classes, participation on sports teams, or time spent watching TV.⁴⁶

Nutrition.

Breastfeeding. The 2002 PRAMS survey found that 91% of Maine women reported a doctor, nurse, or other health care worker talked with them during a prenatal visit about breastfeeding their baby.²⁷

Data from the 2003 National Immunization survey show that the majority (71.3%) of mothers in Maine breastfeed their babies for at least some time. Nearly half of the women, however, stop breastfeeding before their baby is 6 months old. Half the women who breastfeed at 6 months have stopped by 12 months (Table 11). Breastfeeding rates in Maine are fairly similar to those in the United States, but Maine has not yet reached the Healthy People 2010 goals (Table 11).^{22, 61}

Table 10. Physical activity among adolescents in Maine: 2003 YRBS.⁴⁶

	Middle school	High school
Moderate physical activity ^a		
None during prior week	---	22%
3 or more days during prior week	---	45%
Every day during prior week	---	14%
Vigorous physical activity ^b		
None during prior week	11%	17%
3 or more days during prior week	72%	61%
Every day during prior week	29%	15%
Attend physical education class at least once per week	79%	41%
Play on community or school sports team	72%	57%
Watch TV for 2 or fewer hours per day	32%	26%
Use a computer for fun or play video games for at least 3 hours on an average school day	---	25%

^a Participated in at least 30 minutes of moderate physical activity that did not make them sweat or breathe hard.

^b Exercised or participated in vigorous physical activity for at least 20 minutes that made them sweat and breathe hard.

Breastfeeding is less common among mothers enrolled in WIC, though the same pattern is present for continuation of breastfeeding. The 2003 Pediatric Nutrition Surveillance data for Maine showed that 52.0% of infants enrolled in WIC were ever breastfed, 24.6% were breastfed for at least 6 months, and 16.5% were breastfed for at least 12 months.⁴⁰

The 2002 PRAMS survey asked mothers who had never breastfed their baby why they did not do so. The reasons they gave were: (1) I didn't like breastfeeding (44.3%); (2) I had other children to take care of (28.9%); (3) I went back to work or school (24.0%); (4) I didn't want to be tied down (15.5%); (5) I had too many household duties (13.5%); (6) I wanted my body back to myself (12.9%); (7) I was embarrassed to breastfeed (10.3%); (8) my husband or partner did not want me to breastfeed (4.5%), and (9) other (35.5%). (Note: Mothers could check one or more reasons.)²⁷

Mothers who had stopped breastfeeding at the time of the survey were asked why. The reasons they gave were: (1) breast milk alone did not satisfy my baby (41.0%); (2) I thought I was not producing enough milk (33.2%); (3) my baby had difficulty nursing (26.9%); (4) I had to go to work or school (23.5%); (5) my nipples were sore, cracked, or bleeding (20.4%); (6) I felt it was the right time to stop breastfeeding (17.4%); (7) I wanted or needed someone else to feed the baby (16.6%); (8) I thought my baby was not gaining enough weight (12.1%); (9) I had too many other household duties (12.1%); (10) I became sick and could not breastfeed (6.1%); (11) my baby become sick and could not breastfeed (2.9%); (12) my husband or partner wanted me to

Table 11. Breastfeeding in Maine and the United States: 2003 National Immunization Survey results, Maine and United States, and Healthy People 2010 objectives.

	Maine ⁶¹	United States ⁶¹	Healthy People 2010 ²²
Ever breastfeeding	71.3%	70.9%	75%
Breastfeeding at 6 months	39.6%	36.2%	50%
Breastfeeding at 12 months	20.6%	17.2%	25%
Exclusive breastfeeding at 3 months	44.6%	41.1%	
Exclusive breastfeeding at 6 months	18.9%	14.2%	

stop breastfeeding (1.5%), and (13) other (27.5%). (Note: Mothers could check one or more reasons.)²

Fruits and vegetables. Nearly a quarter (23%) of Maine high school students reported eating five or more servings of fruits and vegetables per day during the week before they completed the YRBS survey in 2003;⁴⁶ the Healthy Maine 2010 goal for adolescents is 35%.¹⁸

In 2003, a third (33%) of Maine women 18 years and older reported eating five or more servings of fruits and vegetables per day;³⁴ this is above the Healthy Maine 2010 goal for adults of 30%.¹⁸

Substance abuse. The Maine Office of Substance Abuse, in its 2004 Strategic Prevention Framework State Incentive Grant application, identified alcohol, marijuana, and cigarettes as the states' most extensive substance abuse problems.⁶²

Alcohol. The 2004 Maine Youth Drug and Alcohol Use Survey (MYDAUS) found that 6.7% of 6th graders, 32.5% of 9th graders, and 49.2% of 12th graders reported using alcohol in the last 30 days (Table 12). Nearly 1 in 6 9th graders (15.8%) and nearly 1 in 3 12th graders (29.0%) reported binge drinking in the 2 weeks prior to the survey.¹² Maine has not yet met the Healthy People 2010 goals to (a) increase the proportion of high school seniors who have never used alcoholic beverages to 29%; (b) to increase the proportion of adolescents who have not used alcohol in the last 30 days to 89%, or (c) to decrease the proportion of high school seniors who engaged in binge drinking during the last 2 weeks to 11%.⁶³

A 2002 phone survey of parents of Maine 8th-12th graders found that parents drastically underestimated the likelihood that their own child was drinking.⁶²

On the 2003 BRFSS, 55.4% of Maine women aged 18 years and older reported having at least one drink in the last 30 days; 5.7% reported having an average of more than one drink per day (i.e., heavy drinking), and 8.0% reported having 5 or more drinks on one occasion within the last 30 days (i.e., binge drinking).³⁴

The 2002 PRAMS survey found that 78.3% of Maine women reported that a doctor, nurse, or other health care worker had talked with them during a prenatal visit about how drinking alcohol during pregnancy could affect their baby. Almost all (95.1%) of the new mothers who completed the survey reported that they did not drink at all during the last 3 months of pregnancy; 4.8% reported drinking less than 1 drink in an average week. Less than 1% reported drinking 4-6 drinks in an average week during the last 3 months of their pregnancy. Only 1 of the 1,117 mothers who answered the binge drinking during pregnancy question reported that she had drunk five or more alcoholic drinks at one sitting once during pregnancy.²⁷

Marijuana. The 2004 MYDAUS found that 1.4% of 6th graders, 15.6% of 9th graders, and 26.8% of 12th graders reported using marijuana during the last 30 days (Table 12).¹² Maine has not yet met the Healthy People 2010 goal to reduce the proportion of adolescents reporting marijuana use during the past 30 days to 0.7%.⁶³ The proportion of youth who had ever used marijuana was nearly twice that of current users.¹²

Smoking. Results of the 2004 MYDAUS showed that 3.1% of 6th graders, 15.6% of 9th graders, and 24.8% of 12th graders had smoked cigarettes in the 30 days prior to the survey (Table 12). The proportion of students who had ever smoked cigarettes was about twice that of current smokers.¹² Maine has not yet met the Healthy Maine 2010 goal to reduce the proportion of 9th-12th graders who smoke cigarettes to 15%¹⁸ or the Healthy People 2010 goal to reduce the proportion of 9th-12th graders who smoked cigarettes in the last 30 days to 16%.⁶⁴

On the 2003 BRFSS, 20.0% of Maine women aged 18 years and older reported smoking every day; an additional 4.1% reported smoking on some days. About 1 in 4 women (27.1%) reported they were former smokers; 48.8% of the women reported they had never smoked.³⁴ Maine women have not yet met the Healthy People 2010 goal to reduce the proportion of adults who use tobacco to 12%⁶⁴ or the Healthy Maine 2010 goal to reduce the proportion of adults who use tobacco to 19.0%.¹⁸

One of the Healthy People 2010 goals is for 99% of women to abstain from smoking during pregnancy.²² A CDC analysis of birth certificate data found that 17.1% of Maine mothers reported smoking during pregnancy in 2002, a decrease of 20.5% from 1990, when 21.5%

Table 12. Substance use, Maine Youth Drug and Alcohol Use Survey, 2004.¹²

Substance	6 th graders	9 th graders	12 th graders
Alcohol			
Ever use	17.9%	54.9%	75.6%
Use in last 30 days	6.7%	32.5%	49.2%
Binge drinking in last 2 weeks ^a	2.2%	15.8%	29.0%
Marijuana			
Ever use	2.6%	27.4%	50.6%
Use in last 30 days	1.4%	15.6%	26.8%
Cigarettes			
Ever use	9.2%	31.9%	46.8%
Use in last 30 days	3.1%	15.6%	24.8%
Prescription Drugs Not Prescribed For You			
Ever use	7.2%	17.5%	22.3%
Use in last 30 days	2.8%	8.9%	10.3%
Smokeless Tobacco			
Ever use	3.5%	9.4%	17.7%
Use in last 30 days	1.3%	4.3%	7.3%
Cocaine			
Ever use	1.1%	4.3%	8.6%
Use in last 30 days	0.5%	1.9%	3.6%
Hallucinogens			
Ever use	0.7%	4.4%	8.8%
Use in last 30 days	0.6%	2.4%	3.2%
Stimulants			
Ever use	0.7%	3.8%	6.4%
Use in last 30 days	0.3%	1.6%	2.7%
Inhalants			
Ever use	10.1%	14.1%	9.3%
Use in last 30 days	5.3%	5.7%	2.1%
Ecstasy			
Ever use	0.7%	3.8%	7.3%
Use in last 30 days	0.4%	1.8%	1.6%
Heroin			
Ever use	0.7%	2.3%	2.5%
Use in last 30 days	0.4%	1.1%	1.0%
Other Illegal Drugs			
Ever use	2.1%	13.4%	16.5%
Use in last 30 days	0.9%	7.6%	8.4%

^a Defined as 5 or more alcoholic drinks in a row.

reported smoking during pregnancy. Teen mothers were more likely to smoke. In 2001-2002, 34.1% of Maine women ages 15-19 reported smoking during pregnancy, a decrease of 9% from 1990-1991, when 37.3% reported smoking.⁶⁵

The 2002 PRAMS survey found that 78.0% of Maine women reported that a doctor, nurse, or other health care worker had talked with them during a prenatal visit about how smoking during pregnancy could affect their baby.²⁷ 15.9% of Maine mothers smoked during the last 3 months of their pregnancy. The percentage was even higher among some subgroups of women: <20 years old (34.2%); 20-24 years old (25.1%); less than a high school education (48.0%); high school education (23.5%); not married (34.2%); household incomes of less than \$16,000 (38.3%); enrolled in WIC (30.9%); enrolled in MaineCare (33.1%), and women whose babies had birthweights less than 2500 grams (28.1%).⁶⁶ Maine has not yet met the Healthy Maine 2010 goal to increase the proportion of pregnant women who do not smoke during the last 3 months of pregnancy to 95%.¹⁸

A CDC study estimated that \$1,768,934 of neonatal expenditures were attributable to maternal smoking in Maine in 1996; this represented 2.9% of total neonatal expenditures and translated to \$693 per maternal smoker on average. Smoking attributable expenses per maternal smoker were higher for women who were enrolled in Medicaid or uninsured than for women who had private or other insurance (\$710 versus \$672, respectively).⁶⁷

Second-hand smoke. The 2002 PRAMS survey found that 21.6% of recent new mothers in Maine smoked. The percentage was even higher among some subgroups of women: <20 years old (47.9%); 20-24 years old (34.6%); less than a high school education (58.5%); high school education (31.3%); not married (43.7%); household incomes of less than \$16,000 (49.4%); enrolled in WIC (39.2%); enrolled in MaineCare (41.1%), and women whose babies had birthweights less than 2500 grams (35.0%).⁶⁶

The survey also found that 7.3% of mothers reported that their new baby was in the room with someone who was smoking 1 or more hours each day (on average). The mean number of hours per day that babies of these mothers were in rooms with people who were smoking was 2.1. Both the percentage of babies exposed to second-hand smoke and the amount of time they are exposed has decreased since 1995.⁶⁶

The Maine Child Health Survey found that 30.5% of kindergartners were exposed to second-hand smoke on a routine basis in 2002.³⁵

Other substances. Other substances which at least 5% of students at one or more grade levels reported using in the last 30 days on the 2004 MYDAUS included: (a) prescription drugs not prescribed for them (8.9% of 9th graders; 10.3% of 12th graders), and (b) inhalants (5.3% of 6th graders; 5.7% of 9th graders) (Table 12).¹² Maine has not yet met the Healthy People 2010 goal to reduce the proportion of adolescents who used inhalants in the past year to 0.7%.⁶³

Injury prevention.

Car seats. The 2002 PRAMS survey found that 99.7% of new mothers brought their baby home from the hospital in an infant car seat; 99.6% said their baby always or almost always rides in an infant car seat. Almost all agreed that new babies should be in rear-facing car seats (99.1%) and that car seats should not be placed in front of an air bag (95.9%).²⁷

Seat belts. Findings from the 2003 YRBS, 2002 PRAMS, and 2002 BRFSS included;

- Middle school: 75% of students reported that they wore seat belts always or most of the time when riding in a car; 12% reported wearing seat belts rarely or never. There has been no change since 2001 in the proportion of middle school youth reporting rare or never use of seat belts; however, the 2003 figure is a significant improvement from the 21% reported in 1997.⁴⁶
- High school: 72% of students reported that they wore seat belts always or most of the time when riding in a car driven by someone else; 15% reported wearing seat belts rarely or never. There has been no change since 2001 in the proportion of high school youth reporting rare or never use of seat belts; however, the 2003 figure is a significant improvement from the 22% reported in 1997.⁴⁶
- New mothers: 85% of women reported that since their baby was born, they always or almost always wear a seat belt when they drive or ride in a car; 8% reported wearing seat belts rarely or never.²⁷
- Women aged 18 and older: 89% reported that they use seat belts always or nearly always when driving or riding in a car; 5% reported seldom or never wearing seat belts.³⁴

None of these groups have yet met the Healthy People 2010 goal for 92% of people to use safety belts.⁶⁸

Helmets. The 2003 YRBS found that 63% of Maine middle school students rarely or never wore a helmet when they rollerbladed or rode a skateboard; this is a slight improvement from the 2001 figure of 67%, but still well above the 55% found in 1997. About half (49%) of middle schoolers reported they rarely or never wore a helmet when riding a bicycle; this is a slight improvement since 2001 and a significant improvement since 1997 (64%). The proportion of students who wear a helmet while bicycling decreases with age; 72% of high schoolers reported that they rarely or never wore a helmet when riding a bicycle. High school students were more likely to wear helmets when riding ATVs; only 21% reported that they had rarely or never worn a helmet when riding an ATV in the previous 12 months.⁴⁶

Smoke alarms. On the 2002 PRAMS, 97.9% of new mothers reported that their home had a working smoke alarm.²⁷ This figure is close to the Healthy People 2010 goal that 100% of the population live in residences that have functioning smoke alarms on every floor,⁶⁸ though it is not possible to tell whether the women who reported having working smoke alarms in PRAMS actually had one such alarm on each floor of their homes.

Driving under the influence of alcohol. The 2003 YRBS found that 30% of Maine middle schoolers had ever ridden in a car driven by someone who had been drinking alcohol. Nearly 1 in 4 high school students (24%) had done so in the 30 days prior to the survey. Both these figures represent non-significant decreases since 2001 and significant decreases from 1997, when

the proportions were 43% and 34%, respectively.⁴⁶ Maine has met the Healthy People 2010 goal to reduce the proportion of 9th-12th graders who report riding during the previous 30 days with a driver who had been drinking alcohol to 30%.⁶³

Also in 2003, 10% of high school students reported that they had driven a car or other vehicle when they had been drinking alcohol at least once in the prior 30 days. The proportion was higher among boys (14%) than girls (6%) and higher among 12th graders (19%) than among 9th graders (5%). The overall figure for 2003 is a non-significant decrease since 2001 and a significant decrease from the 16% reported in 1997.⁴⁶

Weapons. On the 2003 YRBS, 38% of middle schoolers reported ever carrying a weapon such as a gun, knife, or club. Male students were more likely to report ever carrying a weapon than were female students (55% and 22%, respectively). 17% of high school students reported that they had carried a weapon such as a knife, gun, or club in the prior 30 days. 7% of high school students reported carrying a weapon such as a knife, gun, or club on school property in the prior 30 days.⁴⁶ Maine has not yet met the Healthy People 2010 goal to reduce the proportion of 9th-12th graders who carried a weapon on school property during the past 30 days to 4.9%.⁶⁸ There were no significant changes in the measures of Maine students carrying weapons since 1991. It is important to note that the high middle school proportions might be due to hunting being common among Maine youth. The high school survey asks about the past 30 days and is administered in the spring semester, so the proportions for that age group are unlikely to have been influenced by hunting.⁴⁶

On the 2002 PRAMS, 97.1% of new mothers reported that there were no loaded guns, rifles, or other firearms in their home.²⁷

Sexual behavior. 13% of Maine middle school students reported on the 2003 YRBS that they had had intercourse; this is a significant decrease from 23% in 1997. 3% of middle school students reported having had intercourse before age 11. 3% reported having had four or more sexual partners. 71% of middle school students who had had intercourse reported having used a condom during their last sexual intercourse. Almost half (45%) of middle school students reported having talked with their parents/guardians about sex during the prior 6 months.⁴⁶

Almost half (43%) of Maine high school students reported on the 2003 YRBS that they had had intercourse; this is down from 52% in 1997, though the difference is not statistically significant.⁴⁶ Maine is close to meeting the Healthy Maine 2010 goal to increase the proportion of 9th-12th graders who have never had sexual intercourse to 60%.¹⁸ The proportion of Maine students reporting sexual intercourse increased from 22% of 9th graders to 59% of 12th graders. 5% of high schoolers reported having had intercourse before 13 years of age. 11% reported having had four or more sexual partners. Nearly a third (31%) of high school students reported having had intercourse within the past 3 months (i.e., sexually active). 58% of sexually active students reported using a condom during their last sexual intercourse.⁴⁶ Maine has met the Healthy Maine 2010 goal of increasing the proportion of 9th-12th graders who used condoms at last intercourse to 58%.¹⁸ 26% of sexually active students reported that they had drunk alcohol or used drugs before their last intercourse. One in 10 (10%) students reported that they had been forced to have sexual intercourse when they did not want to. Slightly more than half (56%) of

high school students reported having talked with their parents/guardians about sex in the past 6 months.⁴⁶

G. Qualitative Strengths and Needs Results

As discussed in the Needs Assessment Methodology Section, the Maine MCH Title V Program contracted with the University of Southern Maine's Edmund S. Muskie School of Public Service to conduct a series of dialogues with various stakeholders across the state to learn, from their perspective, the strengths and needs of the MCH population in Maine. Taking into account all of the dialogues, the following themes emerged from the questions posed.

Issues Affecting Women and Children

Muskie staff asked dialogue participants to think about the population that they served or represented, and in the case of service recipients, the services they received; and to share what they perceived as the key issues impacting women, children, and families in Maine. Muskie staff used a *Mind Map* activity (as described in Weisbord and Janoff, *Future Search: An Action Guide to Finding Common Ground in Organizations and Communities*. Berrett-Koehler Publications, 2000) to elicit information. Muskie staff placed the central subject of the dialogue – Maine's children in the center of a blank page. As the participants identified and described issues, they were recorded either as an individual line stemming from the central focal point or as a branch if there was an association with a previous item. This powerful process allowed participants to see the whole picture at once and gain a better understanding of the links and connections of one issue to another. Key strengths and needs identified through this process, not necessarily in priority order, are:

Strengths:

- The recent trend in Maine toward the change in language from childcare to early care and education. Participants talked about the importance of being child centered and developmentally appropriate. They raised concern that when the term "education" is included, it then becomes primarily academic and takes on a totally new meaning, one that is not developmentally appropriate. Having a balance between emotional and cognitive growth is important. If a child is growing emotionally the cognitive piece will follow;
- Expansion of healthcare coverage for children (SCHIP) and Dirigo;
- 18 federally qualified health centers that guarantee access to the population living in their service area;
- Quality of medical services and resources available in Maine in the form of individuals willing to volunteer;
- Home visiting for all first time families;
- Tobacco cessation efforts;
- Public Health Infrastructure through the Healthy Maine Partnerships;
- Low rates of infant mortality and teen pregnancy;
- Large number of people providing kinship care;

- Expanded Epidemiology capacity;
- Ability to use local agencies to disseminate information;
- Family access to public health nursing in rural areas.

Needs:

- Substance abuse (alcohol, marijuana, cocaine and heroine) and lack of services leading to domestic violence;
- Child abuse and neglect;
- Poverty;
- Mental health (adults and children) and lack of services for;
- Transportation, a limiting factor for many being able to access services that may be available;
- Affordable housing, increasing property values and increased rental costs are forcing many families deeper into poverty and others out of their homes;
- Affordable and quality child care that includes CSHN or any out of home early childhood services;
- Family stress and a breakdown in the nuclear family (many attributed this, in part, to economics);
- Lack of dental care resulting primarily from a demand that exceeds the number of providers;
- Lack of PT, OT, and Speech therapists for children;
- Poor nutrition in families;
- The need for parenting classes;
- Much discussion around an increased need for more coordination of services;
- Others talked about the need for advocacy stating that

“Rather than putting the burden on the family, have the system create a single point of access. The maze that families have to go through is just a nightmare.”

“We can’t think of advocating for children without advocating for adults to ensure they have economic security, housing, good nutrition and healthcare.”

What Maine is Doing Well

Dialogue participants praised the Division of Family Health for its strong leadership, good work and dedication and commitment to serving the MCH population. Specifically, they praised Parents Are Teachers Too (PATT); Women, Infants and Children (WIC); Children with Special Health Needs (CSHN); Newborn Screening (NBS); School Based Health Centers (SBHC); and Public Health Nursing (PHN) for their positive impact on the MCH population. There was, however, concern expressed about the decrease in the number of public health nurses. Many participants view the PHN contribution, particularly in the more rural areas as vital to family health. *“They are trusted and respected and hope there is funding to increase this valuable service.”* Participants shared that, in general, Maine has good developmental services for children through age 5 and in late middle and high school, but the *“pre-teens are those left*

behind...no services for them.” While participants cited the need for more parenting classes they did indicate that DHHS Child Protective Services has made a positive move by requiring more parenting classes and starting up a strengths-based approach to families. *“Family team meetings represents a shift from a deficit-based to an asset-based model.”* Other areas where Maine is doing well:

- Tobacco funds - Maine is one of a few states that focuses these funds on preventive healthcare issues – a model for other states. Maine is also seen as doing well in the area of tobacco cessation, and many would like to see the same level of emphasis on mental health and substance abuse.
- Home visiting for first time families, i.e. the universal approach to home visitation. *“It is important that it continues and that, home visiting in Maine is for any family, is what makes us unique, there have been some very positive outcomes for families.”*
- Expansion of healthcare coverage for children (SCHIP) as well as Dirigo for the gap population,
- Participants viewed the building of public health infrastructure at the local level through the Healthy Maine Partnerships (HMP) as a strength. The HMPs and other models such as Communities For Children and Youth provide collaborative opportunities to expand our reach by augmenting scarce resources.
- Lower rates of adolescent pregnancy,
- Low infant mortality rate,
- Despite lack of support and funding for private caregivers, there remain a large number of people providing care (kinship care) because *“it is the right thing to do. We would not change one thing, we love what we are doing,”* reported a grandmother who cares for two grandchildren. Grandparents and aunts are stepping in and raising these children in a loving, nurturing, caring environment. There was a sense that programs such as *“Families and Children Together”*, create greater awareness and kinship caregivers are gaining a sense of empowerment through their grass roots efforts. As one grandparent stated, *“we likely won’t get much benefit, but we are paving the way for the next generation”*
- Maine’s level of grass roots advocacy, when something important is threatened people come together around an issue

“ We have a whole society of young people who are not taking responsibility for the children they are bringing into the world and hopefully the children that are being raised in these homes (kinship caregiver) here will get enough to have the wherewithal to do better.”

Although the Maine Dental Association (MDA) was not able to participate in a formal dialogue, it provided feedback addressing oral health issues in Maine. They did acknowledge a lack of access to dental care in the state and shared with us steps, viewed as strengths, taken to reduce the number of underserved. To address workforce shortages, the MDA has developed a recruitment package for distribution to US and Canadian dental schools. A more recent effort was the development of a Power Point presentation for use by dentists in visiting Maine schools to encourage students to consider a career in dentistry. They have also been involved in an effort to potentially re-instate a general dentistry residency program in Maine.

Maine has 18 federally qualified health centers throughout the state that are required to guarantee access and serve all MaineCare clients and provide sliding fee and free care if necessary to the population living in the area served by a clinic. This was perceived as a strength in that access is

being made available for the underemployed and/or uninsured and underinsured residents in need of services. Other strengths shared were the quality of medical services and resources available in Maine in the form of individuals willing to volunteer.

What Maine is Not Doing Well

With respect to those areas in which Maine is not doing well, there was much discussion around the 1) increase in mental health issues; 2) fragmentation of services; 3) diversity and culture issues; 4) healthcare delivery; and 5) parenting services.

- Mental health issues across all age groups include the lack of services available as well as inadequate reimbursement. One participant shared this about an insurer response to a request for service for a child, *“this child is not suicidal enough”*

- Coupled with this is an overall increase in family stress. For parents, the stress is around lost jobs, job stability and inability to take time off to care for sick children out of concern for losing their job.

“Parents seem so completely stressed it seems like their life is literally scotch taped together and one strong puff of wind can break it all apart and they are teetering on the edge.”

- These pressures often lead to dependence on drugs as coping mechanisms and many participants felt there was an enormous gap in the availability of services to address these needs. This theme was reflected in a youth dialogue where they expressed concern about the environments in which youth are being raised.

“Youth are growing up with alcoholic parents, it’s a norm.”

- Fragmentation of services. These include, in particular, transitional services for refugees (moving from refugee assistance to being on their own); for CSHN in their transition from age 18 to young adulthood, when the needs remain generally the same, but the services change; and for young women leaving the prison system, especially with respect to transitional services to assist them in seeking housing, employment, education, and access to programs. Assistance on learning to navigate various systems is lacking.
- Cultural and Linguistic Competence. Maine is not seen as doing a very good job of supporting issues of diversity and culture and with an increasing diverse population in the state some feel this is an important issue to address. Translation, both verbal and written, is not available to many in need.
- Yet others wondered how or what the MCH Program could do about such issues as transportation, which has a significant impact on multiple family concerns such as access to health care, work, or childcare. In one area, the local YMCA offers free memberships but children have no means of transportation to utilize. Consistency, availability and accessibility around the state differs and particularly if children have disabilities and special health needs it’s often not there or looks different in different areas of the state.

- Others talked about the lack of access to health insurance and difficulty of many people not taking their medications as those prescribed are not always on the approved MaineCare list. Could BOH work with MaineCare around improving this system with respect to navigation (i.e., if the prescription is not on the approved list what they should do, many don't know what to do so just wait until they next see the doctor and tell him/her that they couldn't get it filled).
- According to many, Maine is not doing enough to help parents, to teach parents how to be good parents. One participant framed it as,

“the mythology of the independent family forces them to be isolated...and if you ask for help you are somehow wrong.”

As a result many parents, because they do not have an extended family, lack those basic skills that are learned by watching their parents and grandparents. Others talked about isolation disenfranchising families.

“There is no sense of community, families don't have people around who care about them, how do we bring it (community) back?”

- Maine is not perceived as doing a good job of engaging families in discussions about their priorities or in reaching out to families to participate on committees or councils that advise, make decisions or policy recommendations around their needs. Families should be included in this process from start to finish.
- With respect to oral health, in addition to the lack of dentists and inability of working poor to pay for dental services (those who do not qualify for Medicaid and have no dental insurance) there exists in Maine a *“lack of perceived value of good oral health”* and we (dentists and state) have not done a good job of educating the population on the importance of good oral health.
- Participants shared a concern over the emphasis, on the part of public health programs, to focus on treatment rather than prevention. Crisis management has prevented *“taking the leap to look down the road”* toward prevention. Silo funding provides access based upon diagnosis rather than functionality leaving many without services.
- Data collection was seen by some as uneven in that Maine has a great deal of data, for example, on substance abuse yet sparse if any on sexual assault or traumatic brain injury. Participants acknowledged this might be a result of dedicated funding streams or perhaps Epidemiology capacity. The Bureau was praised though for the work it has accomplished in recent years on expanding its Epidemiology Program and participants are hopeful this will enhance future data collection efforts.

What Maine Could Offer or Change

When asked about what could be changed or what they would like to see taking place, participants talked about the many good programs offered but that people are not aware of them, suggesting that the state needs to get into communities and neighborhoods to educate and promote programs.

- Participants suggested developing a comprehensive and updated list of available services, perhaps by county, and disseminating it to local agencies. Others felt that Maine did not do a good job of marketing its MCH programs, citing the Tobacco Free Maine TV Ads as a positive example of informing the public. *“Would like to see more of these (types of) ads for MCH, a lot of people watch TV.”* Others talked about educating families on the services available for children but then allow families to choose what they want and to support them in their choice so that we don’t value judge.
- CSHN families would like to see parent and youth support groups. Parents and children need to feel like they have someone who experiences the same issues to talk to.
- Other suggestions focused around the recognition of decreased funding and in light of this trend a greater need to coordinate and integrate services. For example having one case manager to coordinate all the families services – *“some families we work with have 5 legislatively assigned case managers.”* Frequently this creates redundancy and if agencies come together in a coordinated manner there will be better results for families. Integrated case management was seen as a mechanism to improve the consistency of services that in turn would provide improved service and support to families.
- To address concerns of Maine’s immigrant population, participants felt that *“Maine needs to educate itself on the various cultures”* stating that, *“what has occurred to date is the various immigrants and refugees have come to Maine and the expectation is they will assimilate into our community but no effort has been made on our part to change and respect others cultures and values.”* With this is a need for Maine to provide more translation services, as well as more ESL classes for adults.

“ the child is becoming the person empowered in the family as they understand the English language....seeing an increasing role of the child in the family” and recognize family values *“they (immigrants) appreciate all the services provided but we forget to look at the community and the spiritual side which is so important to them and what in their life gives them strength. We give them systems, they look at community, it is two different paradigms coming together, so how do we still give them healthy communities?”*

- While no solutions were offered, the issues of mental health and transportation were pervasive throughout, with participants asking how the MCH Program could get involved in looking at transportation issues and work toward making our families well mentally. The daily stresses are impacting heavily on children and families and we need to help families to face and deal with them. Some spoke about the need to increase funding for prevention programs stating

“we have damaged people raising damaged children. We talk about behavior change and enabling people to do for themselves yet what can we do to raise self-esteem and empower and nurture?”

Others talked about the on-going childcare dilemma sharing that until there is an infusion of money in the form of compensation this situation may not change. *“There are a number of childcare workers without healthcare and good housing because of compensation so we are going back to that basic family inclusion in that the people who are caring for the children – it’s pretty inconsistent – so we subsidize our early childhood and childcare system on the backs of those who work in it.”* Others would like to see a change in the perception of Maine people toward the profession of childcare by placing greater value.

MCH Experience

Overall, participants spoke highly of their MCH experience sharing that the programs do good work, staff has vision, is energetic – *“this is refreshing.”*

- Many expressed concern about the real possibility of reduced funding for essential and beneficial programs such as the Teen and Young Adult School-Based Health Centers and PHN.
- More assistance to help families navigate the system would certainly ease the pain for many who struggle.
- In general, we heard from many that more and better resource information on MCH programs would greatly benefit the MCH population. Local agencies would assist in getting out the word if they are better informed.

We observed from the dialogues that Maine families, in spite of the many challenges they face, are incredibly resilient. While they wish for improved access to services they acknowledge state structure and funding streams create challenges that impede the work of those who provide the services they wish to access. Participants shared their appreciation for being asked to share their insight indicating this sends a message that the MCH Program does want to hear all voices and ensure that scarce funds are directed to priority areas.

In the end what emerged from this process was validation by our external stakeholders and, in particular, by those benefiting from MCH services the same or similar results as generated by the quantitative analysis.

4. MCH PROGRAM CAPACITY BY PYRAMID LEVELS

A. Direct Health Care Services

B. Enabling Services

Insurance

Maine's Medicaid Program known as MaineCare provides coverage to some 200,000 people. MaineCare has evolved as the health needs of the population have changed. Over time, the program has incorporated new approaches such as managed care to delivery of care and provided coverage to meet such emerging needs as mental health and oral health care. The program does, however, face many challenges in fulfilling its mission. In recent years, the state has faced a budget shortfall, making it difficult to maintain coverage levels and requiring prioritization of needs. MaineCare also must work with other state programs to deliver services and is currently undergoing a large effort to coordinate behavioral health services across the state. MaineCare is an important component of the state's health reform efforts to extend insurance coverage and improve the health system for all residents.⁷³

Since the 2000 assessment, there has been a significant expansion of public insurance. Prior to Title XXI, MaineCare insurance was limited to pregnant women and infants up to 185% of federal poverty level (FPL), children 1 to 6 years up to 150% FPL, and children 7 to 18 years up to 133% FPL. Initially Title XXI permitted the expansion of MaineCare insurance to infants between 186% and 200% FPL, children 1 to 6 years between 151% and 200% FPL, and children 7 to 18 years 134% to 200%. Next it was increased for pregnant women between 186% up to 200% FPL. Building upon the advances achieved through Title XXI, the state Legislature voted to expand MaineCare benefits to adults whose children were enrolled in MaineCare up to 150% of FPL, then to adults without children up to 100% FPL.

SCHIP participants are served through MaineCare. The 2004 MaineCare Chartbook states that MaineCare is designed primarily to serve the 15% of the state's population that have incomes below the poverty level, about \$14,000 for a family of three. Some individuals with higher incomes, generally below 200% of the poverty level also are served through MaineCare. The chartbook states that the program covers more than half of poor Maine residents and over 40% of low-income Maine residents.⁷³

In June 2004, MaineCare had a total enrollment of 189,672. One percent of the enrollees that month were pregnant women (n≈1,897), 3% were infants under a year old (n≈5,690), 45% were children aged 1-19 years (n≈85,352), and 7% were SCHIP (n≈13,277). MaineCare enrollees cycle on and off the program during the year; the total number of individuals enrolled at some point during 2004 was 308,453.⁷³

Based on Maine PRAMS data, it is estimated that just over a third of mothers of babies born in 2002 were enrolled in MaineCare just before pregnancy, during pregnancy, and/or at the time of delivery.²⁷

One of the Healthy Maine 2010 goals is that 100% of Mainers have health insurance.¹⁸ The Kaiser Family Foundation used data from the Current Population Survey to determine health insurance status of people in Maine in 2002-2003 and in the United States in 2003 (Table 14). Seven percent of Maine children 18 and under were uninsured, as were 13% of Maine women 19-64 years of age. The uninsured rates in Maine were lower than the US rates in both groups, due in large part to the higher percentage of people covered under Medicaid; 34% of Maine children 18 and under and 17% of Maine women 19-64 years of age were covered under Medicaid, as compared with 27% and 10% of the US population, respectively.⁸¹⁻⁸²

Table 14. Health insurance status, Maine 2002-2003, U.S. 2003.⁸¹⁻⁸²

	Children 18 and Under		Women 19-64	
	Maine	US	Maine	US
Employer	54%	57%	63%	63%
Individual	5%	4%	5%	6%
Medicaid	34%	27%	17%	10%
Medicare	0%	0%	2%	2%
Uninsured	7%	12%	13%	19%

A different Kaiser Family Foundation fact sheet found that while, overall, 13.2% of Maine women ages 18 to 64 were uninsured in 2002-2003, that proportion rises to 22.7% of low-income women in that age range, where low-income is defined as <200% of poverty.⁸³

The Current Population Survey uninsured figure for children is in keeping both with the Maine Child Health Survey, which found that 6.7% of kindergartners were uninsured in 2002³⁵ and with a 2003 American Academy of Pediatrics fact sheet which estimated that 1 in 17 Maine children was uninsured.⁸⁴

Maine, for many years, had a large manufacturing base that provided insurance benefits to employees. Between 2000 and 2004 the Maine Department of Labor reported that this sector of our economy lost 20,000 jobs as a result of plant closures. Service sector jobs are largely replacing the lost manufacturing jobs and are paying lower salaries and offering fewer or reduced benefits. Insurance is either not offered or if it is the employee is responsible for contributing a larger portion of the premium. Many employees choose not to accept coverage for economic reasons. Anecdotally we heard through our dialogues that, for some, to carry insurance would mean making choices around buying food, fuel or insurance so they opt not to be insured. Maine continues to be challenged as it seeks to find ways to eliminate barriers to care.

A State Health Access Data Assistance Center (SHADAC) report using 2002 BRFSS data found that 15.6% of working adults (ages 18-64, males and females) in Maine are uninsured. More than a third (38.6%) of uninsured adults in Maine lived in households with at least one child. 14.2% of uninsured adults reported they were unable to get needed medical care in the past 12 months, as compared with only 3.6% of insured adults in the state. 42.9% of uninsured adults in Maine did not have a personal doctor or health care provider; the comparable rate for insured adults was 8.4%.⁸⁵

A 2002 household survey of health insurance coverage among Maine residents identified the following characteristics that put non-elderly people (0-64 year olds; males and females combined) at higher risk of being uninsured:⁸⁶

- Age: 18-29 year olds were 3.7 times more likely and 30-44 year olds were 1.8 times more likely than 45-64 year olds to have been uninsured at some time during the prior year.
- Family income: The near poor (i.e., family income 100-199% of the federal poverty level) were 5.3 times more likely than people with family incomes at 300% or more of the poverty level to have been uninsured at some time during the prior year; the increased odds for people with incomes below the poverty level and people with incomes 200-299% of the poverty level were 3.8 and 2.6, respectively.
- Education: Individuals with less than a high school education or a high school education were about twice as likely as individuals with at least some college to have been uninsured at some point during the past year.
- Marital status: People who were not married were about twice as likely to have been uninsured during the prior year as were people who were married.
- Health status: Individuals with fair/poor health were 2.4 times more likely than people with excellent health to have been insured at some time during the prior year.
- Employer size: People who worked in businesses with 1-10 employees were 5.7 times more likely to have been uninsured at some time during the past year than were people who worked in businesses with more than 50 employees.

The household survey found that out-of-pocket annual premium costs for private health insurance varied widely between employer-based and non-group policies. 74.2% of people with employer-based coverage paid less than 5% of their family income on premiums for a single-person policy, compared with 47.3% of people with non-group coverage. For family policies, nearly 62.7% of people with employer-based policies paid less than 5% of their family income on premiums, compared with 34.7% of people with non-group policies.⁸⁶

Another finding of the household survey was that one-fifth (19%) of Maine's uninsured were eligible for private coverage through either their employer or a spouse or parent's employer. 76% of these individuals cited cost as the primary reason why they had not enrolled in the employer-based plan for which they were eligible.⁸⁶

The survey also found that employer-based plans tended to have more comprehensive coverage than did non-group policies. 94.2% of Mainers with private employer-based policies had prescription drug coverage, compared with only 56.3% of individuals with private non-group policies. 70.4% of people with employer-based policies had dental benefits, compared with only 22.2% of people with non-group policies.⁸⁶

Children with Special Health Needs

The 2001 National Survey of Children with Special Health Care Needs found that 95.2% of Maine children with special health needs were insured at the time of the survey.⁵ However, almost 1 in 11 children had been without insurance at some point during the prior year.⁶

Of the currently-insured children, almost three-quarters (72.8%) of families reported that their child's coverage was adequate; 27.2% reported the coverage was not adequate. These figures are consistent with three-quarters of families reporting that the costs not covered by insurance were always (41.0%) or usually (35.0%) reasonable; 24.0% reported that the costs not covered by insurance were never or only sometimes reasonable.⁵

One in six families (17.2%) reported that they experience financial problems due to their child's special health needs. Just over half (53.7%) of families reported that they paid less than \$250 per year in medical expenses for their children with special health needs; 23.9% paid \$250-\$500 per year; 12.2% paid \$501-\$1000 per year, and 10.1% paid more than \$1000 per year.⁵

Employment.

At the time of the 2000 Census, 79.2% of Maine women ages 22-44 were in the labor force; 3.9% of these women were unemployed (Table 16). The corresponding figures for the United States were 73.4% and 5.4%. The proportion of women ages 22-44 who were in the labor force ranged from 72.7% to 81.9% across Maine counties. The county-specific proportion of women in the labor force who were unemployed ranged from 2.8% to 7.8%.⁹⁶ The average unemployment rate for Mainers (male and female combined) in 2003 was 5.1%.

65.4% of Maine children under 6 years had all parents in the family in the labor force in 1999, as did 74.3% of 6-17 year olds (Table 16). Both proportions are higher than that found in the United States as a whole (58.6% and 67.4%, respectively). The county-specific range for children under 6 was 58.0% to 73.4%; for 6-17 year olds, the county-specific figures ranged from 67.6% to 79.1%.⁹⁷

Maine women ages 18-64 with disabilities are less likely to be employed than are women in the same age range who do not have disabilities. The 2000 Census found that 44.6% of women with a sensory disability, 30.7% of women with physical disabilities, 28.4% of women with mental disabilities, 18.4% of women with self-care disabilities, 31.7% of women with go-outside-home disabilities, and 56.7% of women with employment disabilities were employed. The employment rates for Maine women ages 18-64 without each of these disabilities ranged from 72.3% to 75.2%.⁹⁸⁻¹⁰³ Maine has not yet met the Healthy People 2010 goal to eliminate disparities in employment rates between working-age people with and without disabilities.¹⁰⁴

The 2001 National Survey of Children with Special Health Care Needs found that 28.5% of families with children with special health needs had cut back on work hours and/or stopped working because of their child's health needs.⁵

Table 16. Select employment measures, Maine and United States.

	% of females ages 22-44 in labor force, 2000 ⁹⁶	% of females ages 22-44 in labor force who are unemployed, 2000 ⁹⁶	% unemployed (male and female, combined), 2003 ¹²⁸	% of children under 6 years with all parents in family in labor force, 1999 ⁹⁷	% of children 6-17 years old with all parents in family in labor force, 1999 ⁹⁷
United States	73.4	5.4	6.0 ⁹	58.6	67.4
State of Maine	79.2	3.9	5.1	65.4	74.3
Androscoggin	81.9	3.1	4.6	73.4	79.1
Aroostook	74.9	4.5	5.7	63.0	69.5
Cumberland	81.2	2.8	2.8	64.9	75.5
Franklin	75.5	4.6	6.0	64.3	69.1
Hancock	79.6	4.5	4.8	62.8	74.2
Kennebec	81.4	4.2	4.8	70.6	75.8
Knox	78.0	4.1	3.7	62.7	75.0
Lincoln	80.2	4.5	3.5	68.7	75.3
Oxford	77.8	4.9	6.5	62.9	74.1
Penobscot	76.4	4.3	5.8	60.8	72.3
Piscataquis	74.0	6.4	7.7	58.0	67.6
Sagadahoc	81.4	3.2	3.5	64.1	78.2
Somerset	76.5	5.6	8.6	64.2	71.0
Waldo	77.5	4.8	4.7	64.5	69.9
Washington	72.7	7.8	9.0	61.7	67.9
York	79.6	3.6	4.7	66.2	76.0

Table 17. Select measures of income and poverty, Maine and United States.

	% of individuals under 5 years of age below federal poverty level, 1999 ¹⁰⁵	% of individuals 5-17 years of age below federal poverty level, 1999 ¹⁰⁵	% of individuals 18-64 years of age below federal poverty level, 1999 ¹⁰⁵	% of families with related children under 5 years below poverty level, 1999 ³	% of families with related children under 18 years below poverty level, 1999 ³	% of families with female householder, no husband present, with related children under 5 years below poverty level, 1999 ³	% of families with female householder, no husband present, with related children under 18 years below poverty level, 1999 ³	% of students receiving free lunch, 2003 ¹⁰⁷	% of students receiving reduced-fee lunch, 2003 ¹⁰⁷	Median household income, 1999 ³	Required annual income to meet basic needs budget for a single parent with 2 children, 2002 ¹¹⁰	Required annual income to meet basic needs budget for 2 parents (2 earners) with 2 children, 2002 ¹¹⁰
United States	18.2	16.0	11.1	17.0	13.6	46.4	34.3	---	---	\$41,994	---	---
State of Maine	16.2	12.9	10.0	16.0	11.9	54.7	36.4	25.1	7.7	\$37,240	\$35,466	\$44,964
Androscoggin	19.2	12.9	9.8	18.0	12.3	52.7	36.0	28.8	7.5	\$35,793	\$34,476 ^a	\$43,973 ^b
Aroostook	21.0	15.8	12.9	19.7	14.9	59.2	43.2	33.4	11.8	\$28,837	\$28,799	\$42,346
Cumberland	10.5	9.2	7.4	11.4	8.4	51.5	30.6	18.0	4.2	\$44,048	\$38,004 ^c	\$47,447 ^d
Franklin	19.2	18.5	14.2	20.4	17.2	53.6	46.4	31.0	12.0	\$31,459	\$29,773	\$43,014
Hancock	13.8	12.1	9.6	13.2	10.7	50.0	31.1	22.3	8.3	\$35,811	\$33,996	\$43,494
Kennebec	17.7	12.6	10.3	17.2	12.5	57.9	35.5	24.9	7.8	\$36,498	\$27,130	\$41,207
Knox	15.5	11.6	9.8	14.4	10.1	43.1	24.9	22.7	7.6	\$36,774	\$34,538	\$44,035
Lincoln	15.7	13.4	9.0	16.2	10.9	48.1	27.1	22.1	8.2	\$38,686	\$36,896	\$46,394
Oxford	19.5	14.4	10.8	19.1	13.2	61.2	41.8	30.2	9.8	\$33,435	\$28,976	\$42,473
Penobscot	19.3	15.1	13.3	19.6	14.6	62.2	44.1	27.6	7.9	\$34,274	\$29,075 ^e	\$42,535 ^f
Piscataquis	18.0	18.6	13.7	19.0	16.8	44.5	39.6	38.8	13.2	\$28,250	\$33,965	\$43,463
Sagadahoc	17.2	11.2	7.4	16.8	11.6	53.9	41.2	22.8	8.1	\$41,908	\$36,472	\$45,970
Somerset	23.4	19.5	13.3	23.1	16.8	61.2	43.4	35.1	10.1	\$30,731	\$28,102	\$41,875
Waldo	19.8	19.0	12.3	19.5	16.1	63.6	44.6	34.1	9.9	\$33,986	\$34,594 ^g	\$44,091 ^h
Washington	25.2	22.4	17.4	23.5	20.3	55.7	50.8	40.6	12.2	\$25,869	\$28,279	\$41,993
York	12.9	9.5	7.2	12.1	8.9	49.5	31.4	18.2	6.5	\$43,630	\$35,977 ^{c,i}	\$45,474 ^{d,j}

^a Excludes towns in the Lewiston/Auburn MSA, where the required income is \$33,894.

^b Excludes towns in the Lewiston/Auburn MSA, where the required income is \$43,392.

^c Excludes towns in the Portland MSA, where the required income is \$40,615.

^d Excludes towns in the Portland MSA, where the required income is \$50,111.

^{e,g} Excludes towns in the Bangor MSA, where the required income is \$34,129.

^{f,h} Excludes towns in the Bangor MSA, where the required income is \$43,627.

ⁱ Excludes towns in the Portsmouth-Kittery MSA, where the required income is \$39,761.

^j Excludes towns in the Portsmouth-Kittery MSA, where the required income is \$49,278.

Poverty / Income.

Table 17 presents various measures of poverty and income in Maine as a whole and by county; US measures are presented for comparison, when available. Statewide in 1999, 16.2% of children under 5 years were below the federal poverty level, as were 12.9% of children 5-17, and 10.0% of individuals ages 18-64.¹⁰⁵ The comparable percentages in 1989 were 15.7%, 13.1%, and 8.9%, respectively.¹⁰⁶

Looking at families in 1999, 16.0% of families with related children under 5 years of age were below the poverty level in Maine; the comparable figure for families with children under 18 years was 11.9%. A third (36.4%) of families with a female householder, no husband present, and related children under age 18 were below the poverty level; that figure rises to half (54.7%) of such families with children under age 5.³

A third (32.8%) of Maine students were eligible for free or reduced school lunches in 2003 (Table 17).¹⁰⁷

There is considerable variation in poverty and income measures across Maine counties (Table 17). For example, the county-specific proportions of children under age 5 who are below the federal poverty level range from 10.5% to 25.2%.

The Maine Center for Economic Policy has calculated estimates of what Maine families need to earn to make ends meet in today’s marketplace. This “livable wage” is based on a basic needs budget that takes into account actual living expenses, including housing, health care, child care, transportation, and taxes. The livable wage is considerably higher than both the federal poverty level and the income of a minimum wage earner. The federal poverty level for a family of four in 2002 was \$18,100. The annual income required for a 2-parent (2-earner) 2-child Maine family to meet a basic needs budget, in contrast, was \$44,964, or 248% of the federal poverty level. The county-specific livable wage for this type of family was \$41,207 to \$50,111, or 228% to 277% of the federal poverty level (Table 17).¹¹⁰ As such, while significant portions of the MCH population are under the federal poverty level, even higher proportions are in families that do not earn livable wages.

Table 18. Percentage of individuals with family incomes below the federal poverty level, by age, gender, and disability status, Maine, 1999.¹⁰⁹

	Individuals with disabilities	Individuals without disabilities
5-15 year olds:		
Males	23.3%	11.6%
Females	27.3%	12.3%
16-20 year olds:		
Males	17.3%	12.4%
Females	29.9%	18.2%
21-64 year olds:		
Females	23.5%	8.4%

The Maine Development Foundation reported in 2004 that for the past 8 years only about 66% of jobs in Maine had paid a livable wage.¹⁰⁸

Individuals with disabilities or special health needs. The 2000 Census found that Mainers with disabilities were more likely to be living in poverty in 1999 than were Mainers without disabilities (Table 18). For example, 23.5% of women with disabilities ages 21-64 lived in

families with incomes below the federal poverty level as compared with 8.4% of women in that age range who did not have disabilities.¹⁰⁹

The 2001 National Survey of Children with Special Health Care Needs found that 23.2% of Maine children with special health care needs lived in households with incomes at 0%-99% of the federal poverty level; 16.3% lived in households with incomes at 100%-199% of the federal poverty level; 14.9% lived in households with incomes at 200%-399% of the federal poverty level, and 14.1% lived in households with incomes at 400% of the federal poverty level or greater. The survey also found that 17.2% of Maine children with special health care needs had conditions that caused financial problems for the family⁶

a) Welfare Reform

Welfare reform has resulted in a decrease in the caseloads of families in need of temporary assistance (TANF). Enrollment in TANF has decreased from a high of 20,472 families in January of 1996 to a low of 9,054 in June of 2003. A particularly important component of Maine's success in people transitioning to work has been the Parents As Scholars Program (PaS). PaS is a student aid program that helps low-income parents in two or four-year college programs. PaS is run by the Maine Department of Health and Human Services (DHHS) through the ASPIRE Program. Only parents who are eligible for, but not necessarily receiving, TANF are eligible. While they can't use the state money for tuition, they can use it to make sure their families have the services they need to succeed. Concerns remain in regards to the amount and quality of childcare available for all populations, with particular concern for parents transitioning from TANF and those who work but receive low wages.

Childcare. A June 2003 report on the child care industry in Maine, presented to the Task Force on Early Childhood, stated that 72%, or approximately 158,000, of children ages 0-13 in the state lived in households where all parents were in the labor force. Nearly 43,000 children were enrolled in licensed child care, leaving as many as 115,000 children getting child care through an unlicensed child care provider or through a friend or relative. Some parents choose to have their child in an unlicensed setting; others cannot afford or access a licensed provider. Overall, there is about 1 licensed child care space for every 4 children who need child care. Availability, however, varies by age. 71% of licensed child care providers reported having a waiting list for infants; 56% had a waiting list for toddlers, and 59% had a waiting list for preschoolers.⁸⁷

The report states that full-time child care for a Maine toddler in a licensed center costs \$6,240 a year on average. This represents about half of the annual income of a minimum-wage earner in the state. Child care costs more than tuition at a public university; this cost differential is due in part to such factors as the higher staff-to-child ratios in child care settings and the high subsidy rates for public education.⁸⁷

A 2002 report on child care in Maine estimates that there have been as many as 30,000 children eligible for child care assistance (through vouchers or contracts) who were unable to access a subsidy. Many eligible families do not apply, either because they do not know the assistance is available or because they have heard that there is a waiting list with potentially long wait times. Other reasons for not receiving assistance included lack of funding and the use of informal child

care arrangements. Only 15% of children from income-eligible families got child care assistance in 1999. At the end of 2000, 2,069 children statewide were on voucher waiting lists.⁸⁸

In 2000-2001, more than 4000 children participated in Head Start in Maine. There were, however, an estimated 8,780 children (based on Census data) who were eligible for Head Start in the state but were not being served due to insufficient funding.⁸⁸

Efforts to improve the amount of available childcare and the quality of childcare are showing success. During FY04, \$2,358,202 from the Tobacco Settlement funds (Fund for a Healthy Maine) was used to purchase 1,100 childcare spaces. The Healthy Child Care America Grant permitted the Office of Head Start and Child Care to improve the educational foundation of childcare providers through the development of “Maine Roads to Quality” curriculum. NAEYC accreditation criteria recently approved include a requirement for programs to contract with a trained child care health consultant who will visit the site at least twice a year and four times a year for infant and toddler programs. The consultation will address such things as physical, socio-emotional, nutritional, and oral health, key components for quality early childcare and education programs. Sheryl Peavey, the coordinator of our Early Childhood Initiative, has been an instrumental force in working with other Region 1 states to encourage their contribution to the on-going regional work to train childcare health consultants.

Children with special health needs. On average, 25% of children enrolled in Head Start programs have a diagnosed special need. Head Start serves children with a broad range of special needs. In 2000-2001, 43% of the children with special needs had speech or language impairments; 27% had “non-categorical/developmental delay”; 10% had emotional/behavioral disorders, and 20% had other disabilities.⁸⁹

The Muskie School of Public Service at the University of Southern Maine recently completed a study in Maine and Connecticut titled “Child Care and Children with Special Needs: Challenges for Low Income Families.” The study’s survey results are not yet available, but preliminary results from the parent focus groups (39 families) have been released. The study authors commented that they were struck by how much the laws and missions of the various agencies working with the families conflicted and pulled the parents in many directions at once. For example, one agency encouraged parents to work, while staff at another agency encouraged parents to stay home either to facilitate delivery of special services or because no child care provider could ever take care of their child. The following major themes emerged from the focus groups: (a) many parents encountered significant problems finding providers who were willing to take their children; (b) parents of children with more severe disabilities were concerned about whether any provider could adequately meet their children’s needs; (c) parents whose children were cared for in a setting that served only children with disabilities or that had a mix of children but had significant experience with children with special needs tended to be more satisfied with the care their children received than were parents whose children were in regular child care programs; however, the limited hours that many of the more satisfactory programs were available made it difficult to get adequate coverage for the parents’ work hours, and (d) parents were concerned about a lack of inclusion and described situations in which their children were ignored by child care staff or excluded from activities in which other children were participating.⁹⁰

Education. Nearly 9 in 10 members (87.2%) of the Maine Class of 2003 public secondary school students completed high school with a regular diploma; the county-specific range was 81.1% to 92.4% (Table 15).⁹¹ 2.8% of public secondary school students dropped out during the 2002-2003 school year. The statewide dropout rate was 2.4% among girls and 3.2% among boys; a similar pattern (boys higher than girls) was found in all but one county (Lincoln). The statewide dropout rate has been between 2.8% and 3.2% since the 1990-1991 school year.⁹²

69.8% of Class of 2003 public high school graduates in Maine intended to enroll in some type of postsecondary program, including post secondary high school courses, junior college, college or university, vocational/technical, and other continuing education (Table 15). The range across Maine counties was 56.2% to 77.2%.⁹³

In 2000, 93.2% of Maine women ages 25-34 and 93.7% of Maine women ages 35-44 were high school graduates; both proportions are higher than that found for these age groups in the United States as a whole (85.9% and 86.6%, respectively) (Table 15). The county-specific proportion of women ages 25-34 who are high school graduates ranges from 89.7% to 94.9%; the county-specific range for 35-44 year old women ranges from 89.6% to 95.5%.⁹⁴

One in four (25.3%) Maine women ages 25-34 had bachelor's degrees or higher in 2000; the comparable figure for the United States was 29.4%. The county-specific range in Maine was from 12.7% to 38.9%. Among Maine women ages 35-44, 26.0% had a bachelor's degree or higher; this was identical to the 26.0% found for the United States as a whole. The range across Maine counties was 12.5% to 40.1%.⁹⁴

The 2000 Census showed that the proportion of Maine women ages 18 to 34 who were high school graduates or enrolled in school below college did not differ between women with disabilities and women who did not have disabilities (73.0% and 73.2%, respectively). However, women with disabilities were less likely to have a bachelor's degree or higher or be enrolled in college or graduate school than were women who did not have disabilities (22.0% and 37.8%, respectively).⁹⁵

Table 15. Select educational attainment measures, Maine.

	% of Class of 2003 public secondary school students who completed high school (regular diploma) ⁹¹	% of public secondary school students who dropped out during 2002-2003 school year ⁹²	% of public high school graduates who intend to enroll in post secondary programs (2003) ^{93, a}	% 25-34 year old women who are high school graduates or higher (2000) ⁹⁴	% 25-34 year old women who have bachelor's degree or higher (2000) ⁹⁴	% 35-44 year old women who are high school graduates or higher (2000) ⁹⁴	% 35-44 year old women who have bachelor's degree or higher (2000) ⁹⁴
United States	---	---	---	85.9	29.4	86.6	26.0
State of Maine	87.2	2.8	69.8	93.2	25.3	93.7	26.0
Androscoggin	83.9	2.9	73.2	91.3	17.5	92.2	17.9
Aroostook	92.4	1.3	76.2	90.7	17.7	92.1	17.5
Cumberland	90.4	2.8	77.2	94.9	38.9	94.7	40.1
Franklin	89.0	3.5	71.1	93.5	20.7	94.4	21.2
Hancock	81.1	4.0	66.7	94.2	26.9	94.6	27.2
Kennebec	88.6	2.4	70.8	93.2	18.9	94.1	22.2
Knox	88.7	2.5	59.9	94.2	22.7	94.4	26.4
Lincoln	89.2	2.5	66.1	92.5	22.3	95.2	25.4
Oxford	86.9	2.7	70.4	91.0	18.0	91.6	17.6
Penobscot	87.5	2.7	68.2	93.5	24.8	93.7	22.9
Piscataquis	87.3	4.5	61.5	90.8	20.1	90.4	12.5
Sagadahoc	82.1	3.9	58.9	94.0	24.3	95.5	27.4
Somerset	84.3	3.5	56.2	90.6	12.7	91.7	12.4
Waldo	84.4	3.7	64.0	93.1	23.3	91.6	22.8
Washington	81.7	2.4	69.8	89.7	14.0	89.6	17.6
York	86.2	2.8	68.1	93.6	24.9	94.9	26.3

^a Graduates include regular diploma recipients, other diploma recipients, and other high school completers. Post-secondary programs include post secondary high school course, junior college, college or university, vocational/technical, and other continuing education.

Housing. The 2000 Census estimated that there were 651,901 housing units in Maine. Almost half of the units (44.4%) were built before 1960.³ 79.5% of the units were occupied; most (75.9%) of the vacant units were for seasonal, recreational, or occasional use. 71.6% of occupied units were owner-occupied; 28.4% were renter-occupied.¹¹¹ For many units, housing costs account for roughly a third or more of the household income. 20.3% of owner-occupied units had selected monthly owner costs that were 30% or more of the household's 1999 income. A third (34.7%) of renter-occupied units had gross rents that were 30% or more of the household's 1999 income.³

Homelessness has increased significantly in Maine in recent years. It is estimated that in 2002 about 1,200 people were homeless in the state on any given night; 400-500 of these individuals were children. Over the course of a year, nearly 10,000 people spend time in homeless shelters;

about 12% of these individuals meet the federal definition of chronic or long-term homelessness. In March 2002, people who were chronically homeless used as much as 70% of shelter resources in the state. Maine State Housing Authority data for July 2002 showed that 36% of people seeking shelter were female and 28% were under 18 years of age. Over half of shelter guests had substance abuse issues, but only 16% were currently receiving substance abuse services. A third (33%) of homeless individuals had serious mental illnesses; 40% had dual substance abuse and mental illness diagnoses.¹¹²

The Maine State Housing Authority has identified five primary factors that contribute to the increasing level of homelessness in the state: (1) tight housing market and lack of affordable housing and supportive housing; (2) lack of access to mainstream housing and services resources by people who are homeless; (3) lack of state- and local-level coordination, planning, and progress measurement; (4) reduced availability of federal resources to fund homeless and affordable housing, and (5) inadequate wages that do not keep pace with overall housing costs.¹¹²

In 2002, housing resources for homeless people in Maine included 699 shelter beds for individuals, 356 shelter beds for families, 781 transitional housing units for individuals, 415 transitional housing units for families, 820 permanent supportive housing units for individuals, and 124 permanent supportive housing units for families. There are, however, gaps in program capacity. Shelters are sometimes completely filled and available beds are not always located within a reasonable distance of where homeless individuals are. As of 2002, 861 additional transitional housing units were individuals were needed, as were 994 transitional housing units for families, 621 permanent supportive housing units for individuals, and 640 permanent supportive housing units for families.¹¹²

b) The Pursuit for Cultural and Linguistic Competence

An emerging challenge in the provision of services to sectors of the MCH population is the journey toward the practice of cultural and linguistic competence. Because Maine's population is becoming more ethnically diverse there is an increasing need for service providers to develop their knowledge and skills in relation to the provision of health services to people of various cultures and ethnicity. The need for cultural and linguistic competence is necessary for both providers and users of services as there are now segments of the state where the health care provider is from another country and ethnic culture. Thus for some providers to understand how to effectively provide services to their clients they need to learn about the culture of long time Maine residents. Furthermore, an in-depth consideration of this topic, as we've discussed with the National Center for Cultural Competence at Georgetown University, shows that all people bring their own cultural backgrounds to bear on Maternal and Child Health. For example, unique cultural differences in gender, ethnicity, geography (urban vs. rural), class, and religion make clear the need for Maine to pursue cultural and linguistic competence for the entire MCH population.

Maine's population is 96.9% white with a growing minority population that includes four Native American tribes, populations of African American, Southeast Asian, Hispanic, Eastern Europe, and African decent. The BOH along with the University of New England, Portland Public Health Division, and other interested organizations are focusing attention upon the identification

of health disparities among the residents of Maine. The Bureau of Health in conjunction with the University of Southern Maine, Edmund S. Muskie School of Public Service, Institute for Public Sector Innovation worked together to define the collection and reporting of data by race and ethnicity in response to federal OMB-15. The result of this work was to include the following racial categories on various BOH forms: White, Black/African-American, American Indian/Alaska Native, Asian, Native Hawaiian/Pacific Islander, and Other. Ethnic categories include Hispanic and given the state's large Franco-American population the workgroup recommended that the BOH pilot "Franco-American" as an ethnicity option on forms and surveys. Pilots were conducted through the "Maine Child Health" 5th grade survey and the BRFSS. An analysis of the BRFSS pilot is currently underway to determine potential relationships and correlations with health outcomes.

Beginning around 2001, the number of people with Somali ancestry living in Maine began to steadily increase. People from Somalia who were assigned to Maine through the Refugee Resettlement Program found the size and safety of the communities in Maine and the values of Maine communities were compatible with the values of the communities they left behind in Somalia. Word spread through the network of Somali people in other parts of the United States resulting in an in-migration of people of Somali ancestry from other parts of the United States. Initially Maine's largest cities of Portland and Lewiston were not prepared to provide services of the magnitude needed by Maine's newest residents. The initial year or so had some rough waters; however over the past 2-3 years the capacity to provide more culturally appropriate services has grown and the dialogue about expanding services and resources has been positive.

The availability of interpreter and translation services has increased since 2000, with the greatest growth in capacity being in Portland and Lewiston, two of our largest cities. Public Health Nursing (one of the Title V programs) uses a combination of individual translators and a language phone line. The other Title V programs rely primarily upon language phone line translators.

c) Access to Care / Health Capacity

i. Availability of Services

Population and geography. Maine's 1.3 million population is spread across a geographic area that is larger than the other five New England states combined. The population is distributed unevenly across the state; a third (35.8%) of Mainers live in the two southernmost counties (Cumberland and York), which together account for only 7.0% of the square miles in the state (Table 19).^{1,113} Statewide there is an average of 41.3 people per square mile of land area, as compared with 79.6 people per square mile in the United States as a whole. The population density varies dramatically across the state, from 317.9 people per square mile in Cumberland County, where Maine's largest city, Portland, is located, to 4.3 people per square mile in Piscataquis County.¹¹³ Statewide, 59.8% of the population lives in rural areas, as compared with 21.0% of the US population overall. In five Maine counties, 90% or more of the population lives

in rural areas; two of these counties are 100% rural.¹¹³ Maine's large geographic area and widely-dispersed population create challenges for accessing health care.

Transportation. In 2000, 7.6% of Maine housing units overall had no vehicles kept at home and available for household use. This figure varied considerably by whether the housing unit was

Table 19. Selected measures related to access to care and health capacity, Maine and United States.

	Population / Geography				Transportation				Medical Care	Oral Health			
	Population, 2002 ¹	% of state population, 2002 ¹	Area (land + water) in square miles ¹¹³	# of people per square mile of land area, 2000 ¹¹³	% living in rural area, 2000 ¹²⁹	% of owner-occupied housing units with no vehicles available, 2000 ¹¹⁴	% of renter-occupied housing units with no vehicles available, 2000 ¹¹⁴	% of workers who use public transportation to commute to work, 2000 ³	Population per active primary care physician (MD/DO), 2002 ¹¹⁵	Population per active dentist, 2002 ^{17,119}	% of active general practice dentists who treat Medicaid patients, 2002 ^{119, a}	% of active general practice dentists who accept new Medicaid patients, 2002 ^{119, a}	Population per practicing registered dental hygienist, 2004 ¹²¹
United States	---	---	---	79.6	21.0	4.5	21.6	4.7	---	1,656	---	---	---
State of Maine	1,294,464	---	35,385	41.3	59.8	3.3	18.5	0.8	956	2,165	56.1	13.2	1,752
Androscoggin	104,805	8.1	497	220.7	42.6	3.3	24.5	0.9	1,008	2,118	45.9	5.9	2,015
Aroostook	73,122	5.6	6,829	11.1	77.1	3.5	22.0	0.5	1,002	3,215	80.0	40.0	2,812
Cumberland	269,083	20.8	1,217	317.9	34.1	3.0	19.9	1.6	695	1,355	47.7	10.3	1,112
Franklin	29,683	2.3	1,744	17.4	83.0	2.5	18.8	0.3	989	3,274	75.0	14.3	2,474
Hancock	52,359	4.0	2,351	32.6	95.1	3.3	14.6	0.5	873	2,158	90.5	33.3	1,454
Kennebec	118,244	9.1	951	135	61.3	3.6	18.9	0.8	876	1,920	65.9	10.0	1,598
Knox	40,477	3.1	1,142	108.3	61.9	3.7	15.1	0.4	1,038	1,723	64.3	15.4	1,687
Lincoln	34,407	2.7	700	73.7	100.0	4.4	12.5	0.2	956	2,241	53.8	0.0	1,811
Oxford	55,604	4.3	2,175	26.3	82.5	3.2	18.8	0.5	1,503	3,422	41.7	9.1	3,089
Penobscot	146,015	11.3	3,556	42.7	56.0	3.2	18.2	0.9	942	2,415	47.7	12.2	1,521
Piscataquis	17,203	1.3	4,377	4.3	100.0	3.8	17.5	0.1	1,012	3,447	75.0	50.0	2,150
Sagadahoc	35,983	2.8	370	138.7	58.9	2.7	11.0	0.5	1,894	2,515	20.0	20.0	1,799
Somerset	50,963	3.9	4,095	13.0	74.3	3.9	17.8	0.2	1,133	3,635	63.6	0.0	3,398
Waldo	37,628	2.9	853	49.7	90.9	4.1	15.0	0.2	1,214	4,535	85.7	14.3	2,509
Washington	33,401	2.6	3,255	13.2	92.3	5.4	19.0	0.5	742	3,394	77.8	50.0	3,340
York	195,487	15.1	1,271	188.5	53.7	2.6	14.6	0.8	1,386	3,012	57.1	7.3	2,715

^a Percentages based on all active general practice dentists in Maine; calculated excluding unknowns (4.3% for treat Medicaid patients and 11.5% for accept new Medicaid patients)

owner-occupied or renter-occupied (3.3% and 18.5%, respectively) (Table 19). Across Maine counties, 2.5%-5.4% of owner-occupied housing units did not have vehicles kept at home that were available for household use; for renter-occupied housing units, the range was 11.0% to 24.5%.¹¹⁴ Public transportation is not a viable option in most areas of the state; less than 1% of Mainers use public transportation to commute to work (Table 19).³

Medical care. A 2002 survey of Maine physicians found that there were 956 people per active primary care physician (MD/DO) in the state (Table 19). The county specific ratios ranged from 695:1 to 1,894:1. The smallest ratios of people to physicians were in the two most populated counties in the state, Cumberland and York.¹¹⁵

The 2002 survey also found that 178 active physicians (MD/DO) listed pediatrics as their primary specialty and another 18 listed a pediatric subspecialty (e.g., pediatric cardiology). 547 active physicians listed family practice as their primary specialty. Other primary specialties of particular interest for MCH populations included: internal medicine (n=397); general practice (n=94); psychiatry (n=212); child/adolescent psychiatry (n=49); obstetrics and gynecology (n=130); gynecology (n=8); neonatology/perinatology (n=14), and adolescent medicine (n=2).¹¹⁵

Fourteen of Maine's 16 counties contain at least one town that is a federally designated primary care health professional shortage area; 15 counties contain at least one town that is a federally designated medically underserved area or population.¹³³ Maps of these areas are included in the Appendix.

In 2000, there were 1,717 children under 18 years of age per clinically active pediatrician; the comparable figure for the United States was 1,769 children per active pediatrician. 57 (63.3%) of Maine's 90 primary care service areas had no clinically active pediatricians. Nine areas (10.0%) had less than 1,000 children under 18 per clinically active pediatrician; 14 areas (15.6%) had 1,000-2,000 children per active pediatrician; eight areas (8.9%) had 2,000-4,000 children per active pediatrician, and two areas (2.2%) had 4,000 or more children per active pediatrician.¹¹⁶

A 2000 survey of American Academy of Pediatric members in Maine found that 69.7% were at-capacity in terms of patient caseload, 9.0% were over capacity, and 32.6% were under capacity. Nearly all (99.0%) currently participated in Medicaid and 95.8% currently participated in SCHIP. 78.7% said they accept all Medicaid patients, 83.3% said they accept all SCHIP patients, and 80.9% reported they accept all private patients. Nearly two-thirds (64.8%) said that Medicaid payments did not cover overhead; 27.3% did not know if Medicaid payments covered their overhead. Low reimbursement was rated "very important" as a reason for limiting participation in Medicaid by 57.6% of pediatricians. Other reasons (and the proportion of pediatricians who rated each as very important) were: unpredictable payments (32.1%); increasing state managed care requirements (26.0%); emergency room use (25.6%); payment delays (25.6%); paperwork concerns (25.0%); missed appointments (22.4%); Medicaid patients less compliant (19.3%); Medicaid program too complex (18.8%), and regulations interfere with quality medical care (11.0%). A third (32.6%) of pediatricians who responded to the survey indicated they would see more Medicaid patients if there were increased reimbursement; they reported, on average, that reimbursement for 89.3% of the customary fee for well-child visits would be needed to accept all Medicaid patients.¹¹⁷

Efforts to enroll children in MaineCare health insurance through Title XXI has had the bonus effect of increasing the number of eligible children also enrolled in Title XIX. Because of the increase in insured children (last assessment revealed 94% of Maine children were insured either through public or private insurance plans) and the belief that all children should have a medical home, the Public and Community Health Nursing programs discontinued the provision of well child clinics. Prior to discontinuing the clinics, it was determined that most of the children seen in the clinics were insured and had a provider they saw regularly for acute care. It was also determined that pediatric and family health care providers had the capacity in their practice to assume primary care for these children. Public Health Nursing also significantly reduced the number of immunization clinics they operated, as primary care providers are the normal channel for administering immunizations.

Access to medical care varies by insurance status. The 2002 household survey of health insurance coverage among Maine residents found that:⁸⁶

- 99% of insured children got their medical care from one regular provider or usual source of care, as compared with 84% of uninsured children. Among non-elderly adults, 94% of those with insurance got their care from one regular provider or usual source of care, as compared with only 67% of those who are uninsured. (Healthy People 2010 includes a goal to increase the proportion of children under age 18 who have a specific source of ongoing care to 97%; the comparable goals for adults aged 18 and over is 96%.¹¹⁸ Healthy Maine 2010 includes a goal to increase the proportion of people with a usual primary care provider to 85%.¹⁸)
- Nearly all (96%) Maine children with insurance had parents who were confident they could get needed services for their children, as compared with 84% of uninsured children. 93% of non-elderly adults with insurance believed they could get services if needed, as compared with only 68% of those who are uninsured.
- Uninsured children were seven times more likely to have a delay in obtaining health care due to cost; 42% of uninsured children had had delayed care in the year prior to the survey, compared with only 6% of insured children. Nearly two-thirds (63%) of uninsured non-elderly adults had delayed getting care, compared with 21% of insured adults. (Healthy People 2010 includes a goal to decrease the proportion of families that experience difficulties or delays in getting health care or that do not receive needed care for one or more family members to 7%.¹¹⁸)
- 28% of uninsured children and 12% of insured children got care that was hard to pay for in the year prior to the survey; the same was true for 36% of uninsured adults and 14% of insured adults. The fact that almost 1 in 7 insured Mainers had trouble paying for care suggests that underinsurance may be a problem for a substantial number of people in the state.

The 2003 YRBS asked high school students where they usually go for health care. The top three settings reported were: (1) family doctor (76.8%), hospital/emergency room (5.7%), and neighborhood health clinic (3.2%). 7.8% reported that they never seek health care and 3.0% reported that they did not have one usual place of care.⁵²

The Maine Office of Licensing and Registration provided the following information on the number of individuals who were licensed in select professions in Maine as of April 2005.¹³⁸⁻¹³⁹

- Occupational therapists: 817
- Physical therapists: 547
- Speech language pathologists: 692 (includes one person with a dual speech language pathology – audiology license)
- Audiologists: 67 (includes one person with a dual speech language pathology – audiology license)
- Psychologists and psychological examiners: 619
- Social workers: 5364 (2645 bachelor’s degree level; 2719 master’s degree level)
- Registered Dietitians: 321 (includes 2 individuals specializing in metabolic disorders)

The above numbers do not include individuals with temporary or conditional licenses. Also, we do not know how many of these professionals are in active practice or how many work with children or women of childbearing age.

Mental health.

National trends, suggest that 14 to 20 percent of all children have one or more mental health disorders in the moderate to severe range and that the overall incidence is increasing. A large number of these children are neither identified nor treated. One national study estimates that pediatricians do not identify 80% of children with diagnosable behavioral and emotional problems, and that even fewer receive mental health services. Research indicates that a large percentage of children with the most significant behavioral and emotional symptoms never receive any services at all. Isolation and cultural attitudes complicate the use of mental health services in Maine, as they do in other rural states.

This lack of identification and treatment has major implications for Maine children and, indeed, for the state's social fabric. Untreated mental health problems often lead to high rates of medical services and place children at increased risk for chronic psychosocial illnesses. Early intervention, particularly in young children, can significantly reduce problems before they become more difficult and costly to treat.

Eight of Maine’s 16 counties contain at least one town that is a federally designated mental health professional shortage area;¹³³ A map of these areas is included in the Appendix.

Preliminary findings from a longitudinal study of children’s mental health in rural Maine showed that most parents expressed a preference for their children to receive mental health services from the child’s doctor or a mental health specialist. The preferred service setting was the doctor’s office, followed by home and mental health center. Preferences of parents of children who scored in the borderline to clinical range on the Achenbach Child Behavior Checklist did not differ from study parents overall.⁴⁹⁻⁵⁰

17.1% of the children had received mental health services in the past year for a problem identified on the Achenbach Child Behavior Checklist. The three most common settings in which children received services were schools, general medical (primary care) settings (e.g.,

family doctor, pediatrician), and specialty mental health settings (e.g., mental health centers, private practice). 11.5% of parents perceived a current need for mental health services for their child. Parents appeared to underestimate the need for treatment for girls and for younger (4-8 year old) children. 39.3% of children with scores in the borderline to clinical range on the Achenbach Child Behavior Checklist had never received mental health services.⁴⁹⁻⁵⁰

One hundred and fifty parents in the study reported service needs. The most common reported need was for child and family counseling (49.6%). Other reported needs were: treatment for hyperactivity (30.1%); professional evaluation (24.6%); child or family support (22.6%); medications (21.6%); special education (20.3%); play/recreation program (17.1%), and services for learning disabilities (14.0%).⁴⁹⁻⁵⁰

19% of parents identified barriers to accessing services. A factor analysis revealed four factors: access (30.2% of parents who identified barriers included one or more barriers in this factor); availability (28.1%); finance (24.5%), and mixed factor (14.6%). The rank ordering of specific service barriers was as follows (beginning with most common): (1) service costs too much; (2) service too far away; (3) work schedule problems; (4) do not know how to get service; (5) waiting list delays; (6) service does not exist; (7) not enough/no insurance; (8) appointment times are inconvenient; (9) problems of cooperation, communication among providers; (10) transportation problems, and (11) afraid child will be labeled a problem.⁴⁹⁻⁵⁰

The principal investigator of the study identified the following key policy implications: “increase and strengthen partnerships between primary care, mental health care, and schools; enhance the role of primary care practitioners; reduce barriers caused by access (hours, transportation), availability and finance; parents – the key to effective partnerships; increase attention to the treatment needs of girls – improve screening and identification, and improve prevention, developmental screening, and early intervention for infants, preschoolers, and in the first years of school.”⁵⁰

Oral health. A 2002 survey of dentists in Maine found that there were 2,165 people per active dentist in the state; this is considerably higher than the 1,656 persons per active dentist figure for the United States as a whole (Table 19). The county-specific range is from 1,355 people per active dentist in Cumberland County to 4,535 people per active dentist in Waldo County.¹¹⁹ Only 10 dentists specialized in treating children,¹³⁰ and not all of these have had advanced pediatric dental training. Most of the state (geographically speaking) is federally designated as dental health professional shortage areas; there are federally designated dental health professional shortage areas in every county in the state.¹³³ A map of these areas is included in the Appendix.

Just over half (56.1%) of active general practice dentists in 2002 reported that they treat Medicaid patients (county range: 20.0%-90.5%). Only 13.2% of active general practice dentists were accepting new Medicaid patients.^{17,119}

A 2004 survey of registered dental hygienists in Maine found that there were 1,752 people per practicing registered dental hygienist in the state; the county-specific range was from 1,112

people per practicing dental hygienist in Cumberland County to 3,398 people per practicing dental hygienist in Somerset County.¹²¹

Eight of Maine's 16 counties contain at least one town that is a federally designated dental health professional shortage area;¹³³ A map of these areas is included in the Appendix.

In FY 2003-2004, there were 19 community-based dental clinics with sliding-fee scales in Maine. Four more such clinics began operating after July 2004 and others are pending. One local health department had a dental program that offered preventive services; another local health department had a program that offered both preventive and restorative services. (Note: There are only three local health departments in the state.) One school-based dental clinic offered preventive dental services during that fiscal year; preventive dental services were also available through contractual arrangements at four other schools. Two mobile dental clinic programs operated in the state in FY 2003-2004; one offered preventive services only and the other offered both preventive and restorative services.¹³¹

None of Maine's hospitals have dental departments. Maine does not have a dental school.¹²⁰ The state has two dental hygiene schools;¹²² 81% of active hygienists received their education in Maine schools.¹²³

Dental visits. Healthy People 2010 seeks to increase the proportion of children and adults who use the oral health care system each year to 56%.⁵⁴ Maine data, while incomplete, suggest that Maine has likely met this objective. In 1998-1999, 56.4% of 1-4 year olds in one Maine county had had a dental visit in the past year.¹²⁴ In 2002, 76.9% of kindergartners surveyed in the Maine Child Health Survey had visited a dentist or dental hygienist in the prior year.³² On the 2003 YRBS, 77% of middle school students and 80% of high school students reported having seen a dentist or dental hygienist for a checkup, exam, teeth cleaning or other dental work in the past 12 months.⁴⁶ In 2002, 71.4% of women aged 18 years and older reported having visited the dentist or dental clinic within the past year for any reason; 73.7% reported having had their teeth cleaned by a dentist or dental hygienist within the past year.³⁴ The 2002 PRAMS found that 51.6% of new mothers had had their teeth professionally cleaned within the past 12 months; women who were least likely to have had their teeth cleaned within the past year were 20-24 years old (among whom 36.1% had had their teeth cleaned in the past year), had less than a high school education (33.0%) or a high school education (37.3%), were not married (32.4%), had incomes less than \$16,000 (28.8%) or \$16,000-\$24,999 (36.6%), were enrolled in WIC (29.1%), or were enrolled in MaineCare (27.9%).²⁷

The 1999 Smile Survey found that the three most common reasons why young children in Maine did not get dental care when they needed it were the inability to pay for it, lack of insurance, and dentists not accepting Medicaid/insurance.¹²⁰

In 2001, 10.7% of children with special health care needs under 18 years of age who needed dental care did not get all the care they needed.⁵

ii. Specialty Services

Access to pediatric specialty services remains problematic for large rural states like Maine. Children with special health needs who require specialty care are seen at one of two tertiary hospitals, Eastern Maine Medical Center (EMMC) in Bangor or Maine Medical Center (MMC) in Portland. Transportation to and from these major centers often presents hardship for families who must travel 3 to 8 hours to access services. Pediatric specialists practicing at EMMC and/or MMC have continued to provide outreach specialty services to families who must travel great distances to access services. For example, the pediatric gastroenterologist travels to Cary Medical Center in Aroostook County and EMMC once a month to provide care to patients requiring periodic follow-up visits. Pediatric cardiology also provides care to families living hours away by offering out-patient cardiac clinics at 9 hospitals across Maine. A 2002 survey of Maine physicians listed the following pediatric specialists practicing in Maine.¹¹⁵

- Pediatric hematology/oncology: 5
- Pediatric nephrology: 1
- Pediatric neurology: 1
- Pediatric cardiology: 6
- Pediatric endocrinology: 4

Since the 2002 survey, numbers of specialists have fluctuated due to relocation or retirement. A pediatric endocrinologist has retired and EMMC has added a pediatric neurologist. In addition, Maine has 3 pediatric geneticists and 3 developmental pediatricians. The limited number of specialists in Maine has resulted in waiting lists that exceed 6 months for some specialties such as developmental pediatrics. In an effort to lessen the effect of postponed or delayed interventions, Maine has started to use telemedicine to support specialty practices. Dr. Jonathan Wood, Medical Director, at the EMMC Pediatric ICU routinely uses telemedicine to assess acutely ill children in remote hospitals. The Foundation for Blood Research (FBR), a non-profit medical research and education institute, uses telemedicine for genetic counseling and education. FBR established 23 telemedicine sites in Northern, Central and Southern Maine. Core partners include rural family pediatrics and public health nursing.

For those specialty services not available in Maine, families must access services through Boston Children's Hospital or Massachusetts General Hospital. Out of state specialty services are pediatric rheumatology and urology.

Anecdotal information provided by Developmental Evaluation Coordinators, providers in the field and family members indicate an increase in the number of children identified with autism. Title V is working with other interested partners (DOE, Environmental Health Unit, and Developmental Clinic Providers) to better understand the suspected increase.

MCH continues to offer assistance with access to specialty services, especially for Children with Special Health Needs (CSHN). The CSHN program funded clinics include Spina Bifida, Cleft Lip and Palate, Metabolic, Developmental Evaluation, and Oncology/hematology. Partial funding is provided to the Cystic Fibrosis Clinics and those agencies that serve children with cerebral palsy. The Maine Genetics program funds Comprehensive Genetics services. The

CSHN program is in the process of transitioning its role in the Cleft Lip and Palate Clinics from one of organizing and coordinating the clinic services to one of quality assurance and provider of wraparound services. In late 2004 the organization and operation of the Metabolic Clinics was transitioned to the service providers at the two largest hospitals (Eastern Maine Medical Center and Maine Medical Center) along with the provision of Genetic Services. The Genetics and CSHN Programs are transitioning their participation to one of quality assurance and provider of wraparound services.

Children with special health needs (CSHN) often need a complex array of health-related services. The 2001 National Survey of Children with Special Health Care Needs included some general questions about children's and families' health care experiences. Results for Maine included:⁵

- 81.4% of CSHN used a doctor's office as their usual source for health care; 11.6% used a clinic, health center or other regular source; 7.0% did not have a usual source for health care or relied on the emergency room.
- 94.3% had a personal doctor or nurse.
- 26.1% did not usually or always have family-centered health care.
- 88.4% of families reported that doctors or other health providers usually (28.8%) or always (59.6%) provided needed information about causes of health problems, how to care for their child now, and what changes to expect in the future; 11.6% of families received never got this information or received it only sometimes.

The survey also asked parents/guardians about 14 specific types of health care services their children might have needed during the prior 12 months: routine preventive care; care from a specialist; dental care; prescription medications; physical, occupational or speech therapy; mental health care; substance abuse treatment or counseling (only asked if child was 8-17 years old); home health care; eyeglasses or vision care; hearing aids or hearing care; mobility aids or devices; communication aids or devices; disposable medical supplies, and durable medical equipment. 3.0% of CSHN in Maine needed 0-1 of these services during the past 12 months, 54.7% needed 2-4 services, 36.6% needed 5-7 services, and 5.7% needed 8 or more services. About 1 in 7 (15.1%) children had an unmet need for one or more of these services. Table 20 shows the proportion of CSHN in Maine who needed each service and the proportion of those who needed the service who did not receive all the care they needed.⁵

Table 20. Health service needs and unmet needs among children with special health needs, 0-17 years old, Maine, 2001.⁵

Service	% needing service in past 12 months	% of those needing service who did not get all the care they needed
Routine preventive care	75.3%	1.8% ^a
Care from a specialist	47.6%	4.5% ^a
Dental care	83.4%	10.7%
Prescription medications	88.2%	0.6% ^a
Physical, occupational or speech therapy	31.2%	8.2% ^a
Mental health care	24.9%	11.7% ^a
Substance abuse treatment or counseling (8-17 year olds)	1.5% ^a	--- ^b
Home health care	4.4% ^a	--- ^b
Eyeglasses or vision care	34.9%	3.9% ^a
Hearing aids or hearing care	7.9%	12.5% ^a
Mobility aids or devices	5.8% ^a	--- ^b
Communication aids or devices	3.0% ^a	--- ^b
Disposable medical supplies	25.1%	0.6% ^a
Durable medical equipment	9.1%	--- ^c

^a Interpret with caution due to small numbers (i.e., unweighted numerator less than 50).

^b Not reported here due to small numbers (i.e., unweighted denominator less than 50).

^c Not available from the online query Web site.

While only 4.5% of children who needed care from a specialist did not get all the care they needed, 23.5% of those who needed specialty care had problems getting a referral.⁵

The survey also looked at certain categories of services and found that 25.1% of families that needed support services (defined as respite care, genetic counseling and/or mental health services), did not get all the services they needed.⁵

Just under half (42.4%) of families of Maine CSHN reported spending less than 1 hour per week providing and/or coordinating their child's health care; 36.4% spent 1-4 hours per week; 10.4% spent 5-10 hours per week, and 10.8% spent 11 or more hours per week.⁵

The Bureau of Medical Services in Maine's Department of Human Services commissioned a survey of children with special health care needs who get MaineCare benefits without the benefit of managed care. The telephone survey was conducted in 2003. One quarter (26%) of parents/guardians categorized their child's primary disability as a medical or physical condition; 42% said it was an emotional or mental health disability; 30% said it was developmental in nature. Many parents/guardians reported that their children also had serious secondary and tertiary conditions. Nearly 1 in 3 children (29%) had a physical disability that required accessible environments; for 6% of these children, their primary care provider's office was not accessible and for 2% specialists' offices were not accessible.³³

64% of respondents said their family had private health insurance in addition to the MaineCare coverage for their child with special health care needs. Despite this, many parents reported having \$500 or more out-of-pocket expenses for treatment or medication in the past 12 months. The proportion of parents/guardians reporting such expenses ranged from 2% of those whose children were in the foster care eligibility category to 33% of those whose children were in the Katie Beckett eligibility category.³³

The study included questions to elicit parent's/guardian's assessment of care from their child's primary care provider. The factors with the highest ratings included:³³

- 99% of the children had a medical professional that parents considered to be their child's primary care provider
- 90% of parents reported that their child usually or always sees the same provider.
- 99% of parents reported that their child's primary care provider always/usually respected their family's culture and ethnic background

Factors with lower ratings included:³³

- 15% reported that their child's primary care provider sometimes, rarely or never provides them with sufficient information about their child's condition
- 22% reported that their child's provider rarely or never helps them understand their child's emotional needs

Like the National Survey of Children with Special Health Care Needs, the MaineCare survey found that children with special health care needs received multiple services. Across the three regions in the state, 35%-43% of children received 2-4 services; 23%-28% used 5-6 services, and 24%-26% used seven or more services. The 10 most common services received were dental (received by 62% of the children); mental health services (61%), special education (53%), vision (43%); speech therapy (35%), physical/occupational therapy (33%), medication management (33%), behavioral health (31%), medication (22%), and mental health diagnosis (16%). Across the three regions in the state, 52%-61% of children had one or more unmet needs. The 10 most common unmet needs were behavioral health (an unmet need for 20% of the children); after-school services (19%), dental services (16%), nutrition management (9%), physical/occupational therapy (8%), mental health diagnosis (8%), in-home services (7%), special education (7%), special day care (6%), and transition (6%).³³

The survey asked about equipment, assistive technology and medical supplies separately from other services. Nearly a quarter (24%) of the children used or needed such services; 17% had one or more unmet needs in this area.³³

The American Academy of Pediatrics recommends that every child with special health care needs have a written health care plan that serves as the foundation for care coordination and is updated annually. (Note: The survey report uses the terms "case management" and "care coordination" interchangeably.) Just over half (56%) of the respondents in the MaineCare survey reported that their child had such a plan; 92% of the plans had been updated in the past 12 months. Additional questions on care coordination found that:³³

- 23% of parents/guardians reported that their child's provider was sometimes, rarely, or never involved in the planning and delivery of all of their child's health care

- 44% of parents/guardians did not think that their child’s mental health and primary care services were coordinated
- Parents/guardians believed that mental health specialists were less likely to talk with their child’s primary care provider about the child’s care than were other specialists.
- 51% of parents/guardians stated that their child’s primary care provider had not given them information about family support services or parent-to-parent groups.
- 43% of parents/guardians said their child had one case manager or care coordinator (someone who “helps you to get and to coordinate services for your child’s care”); 19% said their child had two or more case managers; 9% said their child needed a case manager but did not have one; 28% said their child did not need a case manager.
- Parents/guardians were less likely to rate community-based case management services as excellent or very good than they were to give such ratings to care coordination services provided by primary care providers or specialists.

Traumatic brain injury. The Brain Injury Association of Maine recently conducted surveys and held focus groups as part of a traumatic brain injury (TBI) resource and needs assessment in the state. Participants were limited to those people with TBI who were identified by providers or who were involved with brain injury support groups. By definition, therefore, respondents were receiving at least some services. Individuals not reached by the survey may have even more problems accessing services. A preliminary report of the study findings outlined the following obstacles to service utilization identified by people with TBI:¹²⁵

- individual’s attitude about their own injury (reported by 35% of survey respondents)
- provider’s lack of knowledge about brain injury (32%)
- other’s lack of knowledge about brain injury (32%)
- services do not exist (23%)
- services are too far away (22%)
- inability to pay for services or unable to access services when needed (21%)

Lack of available services was also reported by 26% of program providers. Nearly a quarter (23%) of providers cited lack of transportation as a problem.¹²⁵

Service needs reported by survey respondents included:¹²⁵

- Case management services (30% of survey respondents with TBI reported they were getting no case management services or that services received were inadequate; 36% of providers reported that they did not offer case management services. If TBI is the primary diagnosis, state funds are generally not available for case management services.)
- Information and referral services (34% of respondents with TBI reported getting no such services or that services received were inadequate; 50% of providers reported they did not provide such services)
- Vocational/educational training (reported by 52% of survey respondents with TBI)
- Special education services in school or college (47% of respondents with TBI reported not getting these services or that they were not adequate)
- Long-term supports and accommodations for employment (9% of respondents with TBI reported a lack of these supports as the reason they were not currently employed)

- Counseling/social support, recreational, and independent skills development services (identified as a need by 54% of survey respondents with TBI)
- Counseling and support services, both psychotherapeutic and social support groups/networks (identified as a need by 68% of respondents)
- Better development of services in general for children with TBI, including tutoring/learning support in local schools
- TBI education and awareness services (identified as a need by 84% of family members / significant others and 36% of providers)

The Bureau of Health and Maine's Title V Program appear to be well respected and appreciated as a partner in health care. The Title V Program has many partners in the public, private and non-profit sector to address inadequate, or poorly distributed, health care resources. Some partnerships focus on the provision of services to the MCH population, while others are focused on creating and sustaining systems of services and care. The Title V role in these partnerships varies depending upon the project or initiative. Sometimes it is that of convener, while others it is to be an active participant, a facilitator, or provider of technical assistance.

As discussed in the Needs Assessment Partnership Building Collaboration section of the SNA, Maine has made very positive gains in partnership building and collaboration during the past five years. Examples of the variety of Title V Program partnerships include the large hospital systems (Maine Medical Center, Eastern Maine Medical Center, and Central Maine Medical Center) working together to develop systems of service for special populations such as children with special health needs, and pregnant women experiencing substance abuse problems. Title V also partners with organizations such as the Maine Health Access Foundation (MeHAF). MeHAF, Maine's largest health care foundation was formed in April 2000 by the purchase of Blue Cross/Blue Shield now known as Anthem Blue Cross/Blue Shield. The Foundation's mission is to promote affordable and timely access to comprehensive, quality health care, and improve the health of every Maine resident. MeHAF supports strategic solutions to address Maine's health care needs through grants and other programs, with an emphasis on the uninsured and medically underserved. MeHAF is directing their funds toward the development of a sustainable, long-term health system. Another example is an MCHB funded partnership focused to improve health services related to women's behavioral health. The Title V Program also partners with Maine Primary Care Association (MPCA). MPCA is a nonprofit organization that exists to advance the strength and sustainability of its membership of safety-net primary care providers, facilitate access to primary care for the medically underserved or uninsured, and reduce health disparities in Maine. MPCA works to achieve its mission through the development and delivery of information, technical assistance, and advocacy for the MCH population. MPCA programs support its members in areas such as outreach and enrollment, clinician recruitment, tobacco cessation and domestic violence prevention. In addition MPCA provides its members a wide variety of technical assistance through community development, information technology, financial management, and support of chronic disease care initiatives such as the Chronic Care Model. Title V is working in partnership with the Maine Primary Care Association and the Mental Health Services in DHHS in integrating the assessment of depression and substance use into the primary care setting for early identification and treatment to prevent disabling and costly mental and behavioral health issues using the Chronic Care Model. Title V also works with organizations such as Community Action Programs (CAP) to assure the

provision of individual health and prevention services such as family planning, injury prevention, and parent education and support through home visitation. In addition, the Title V Program partners with the Maine Chapter of the March of Dimes to improve the health outcomes for the MCH population. Such a partnership became abundantly clear with the recent funding from March of Dimes to start up a Maternal and Infant Mortality Review Program for Maine.

The Title V Program partners with the Office of Rural Health and Primary Care (ORHPC) in the development and delivery of health care services for the MCH population. The ORHPC determines areas of health care service and provider shortages and works with the Federally Qualified Health Centers (FQHC), as well as, hospitals when they desire to change their status to critical access hospitals. The FQHCs provide primary health and other health care services to underserved populations. In Maine, the underserved is primarily due to poverty, lack of health insurance and geographic isolation. The FQHCs are intricately involved in the delivery of health services to the MCH population as they guarantee access to services for all patients regardless of the patients' ability to pay. The FQHCs are often the single provider of primary care services in many of the state's rural and underserved areas. In addition they provide mental and dental health services either on site or collaborate with private providers for those services for health center patients. The ORHPC works collaboratively with all areas of the Bureau of Health as well as the Governor's Office of Finance and Health Policy. The MPCA also works with the FQHCs in the area of systems development as well as quality assurance.

Maine continues to invest \$4.6 million from the Fund for a Healthy Maine into the provision of parent education and support services to families with newborns through programs such as Healthy Families, Parents as Teachers, and Parents Are Teachers Too Programs. Because the funds were not sufficient to provide services to all families, it was decided to focus services upon first time families, roughly 5,500 per year, representing about 40 percent of births per year. The program is universally available to first time families with voluntary enrollment. Services are available in all 16 counties, though in about a dozen communities in the southern part of the state families do not receive services due to the lack of a provider agency covering those communities.

Health care services for new residents coming to Maine through the Refugee Resettlement Program are primarily provided by the International Clinic at Maine Medical Center in Portland. St. Mary's Medical Center in Lewiston is making a concentrated effort to increase their capacity to provide primary care services to the immigrants and new resident populations.

iii. Impact of emerging issues on ability to provide direct and enabling services

The President's budget for FY 06 includes an elimination of the Preventive Health and Health Services Block Grant and if passed by Congress, will result in a roughly \$1.2 million annual loss. Several programs working with the MCH population will be impacted and include Tuberculosis Control, Oral Health, Injury Prevention and Control, and sexual assault hotlines. The elimination of the PHHSBG funding will result in a dismantling of systems developed to improve the health outcomes of numerous populations in Maine, including the MCH population. Also in the President's budget is the elimination of funding for Traumatic Brain Injury (TBI), Emergency Medical Services for Children (EMSC), and Newborn Hearing Screening (NHC). The justification posed was that states receive MCH Block Grant funds therefore can fund these

efforts on their own. Unfortunately this is the fourth year of level funding for the MCHBG and all funds are committed to important components of the Title V Program. There has been discussion with respect to an earmark for the TBI, EMSC and NHS Programs in the FY 06 budget for the MCHBG. In Maine the three programs total approximately \$500,000 and if the earmark becomes reality will require the Title V Program to reduce or eliminate funding of other activities that have supported Title V achieving such positive health outcomes. Additional cuts proposed in the President's budget will impact negatively upon the public health infrastructure in Maine. Most notably are cuts in the bioterrorism and emergency preparedness funds.

In January 2005 the Medicaid agency (Bureau of Medical Services, BMS) implemented a new information management system (MECMS, Maine Client Management System) that includes management of and payment for services. Unfortunately a number of problems were encountered during implementation of the system which negatively impacted the ability to pay providers for services, resulting in a negative effect upon providers of services for the MCH population and their acceptance of clients. The Governor has commissioned a Task Force to review and develop recommendations for resolution of the system's negative impacts.

In addition, the Bureau of Health is experiencing difficulty in hiring qualified nurses for public health nursing vacancies. Several years ago PHN salaries were increased to a level comparable to levels paid in the private sector. Unfortunately private sector salaries have continued to rise at a pace that the Civil Service sector has been unable to match.

One of the major challenges facing Maine health care providers in the southern part of the state is the need to expand access to health services for the refugee and immigrant populations, representing another challenge related to cultural and linguistic competence. Language and cultural barriers have limited access to treatment and preventive care among these high risk populations. Seeking assistance on such issues as child welfare, child protection and police protection is feared. In their country of origin, making contact with one of these authorities meant removal of children from the family or a family member going to jail.

The ability to better understand the cultural differences and provide the necessary supports to ease the difficult transition of our refugee and immigrant families as they assimilate into our communities is recognized by the Title V Program as an important need.

While genetic disorders are individually rare, they are cumulatively common and represent a significant public health issue. They are usually permanent and often accompanied by chronic medical and psycho-social problems. Few physicians or other health care providers are adequately trained to perform or interpret genetic procedures and tests.

Advances in genetics and the implications of the Human Genome Project offer the opportunity to take an innovative approach to genetics in public health. Identification of genes and a greater understanding of gene environment interactions may help to prevent and treat disease and disability in a new way. While the demand for new genetic services will continue to increase, human and fiscal resources are limited. These advances in genetics directly affect the Maine Newborn Screening Program. With newer technology and a large number of disorders that could be identified in the newborn period, states are challenged to assure a comprehensive screening

and services system for all infants. Public Health policy decisions need to be based on scientific research and systems capacity and be balanced with public opinion and public health responsibility.

Public Health screening is more than a lab test. It includes a system that assures all infants are appropriately screened, and those with unusual results are followed until a diagnosis is confirmed and they begin treatment or until a disorder is ruled out. There must be universal access to all components of the system, including treatment and management services.

Maine has several resources to assist in tackling this challenge. The Maine Department of Health and Human Services has statutory authority to make decisions related to newborn screening in consultation with the Advisory Committee. The Advisory Committee includes a broad range of stakeholders that advise the Department on decisions related to disorders on our panel, education, systems assessment and program evaluation. Maine currently contracts with the New England Newborn Screening Program for laboratory services for newborns. This regional laboratory provides us with experience and capacity to provide comprehensive screening for Maine infants. Maine has a small number of clinical geneticists that provide specialty care to infants with inborn errors of metabolism and other disorders. They are passionate about early identification, treatment, management and services for families. Another resource is the New England Regional Genetics Group, Inc, Newborn Screening and Genetics Collaborative. Representatives from Maine participate in all the activities of the collaborative as we work toward mutual goals, through education, assessment and evaluation.

Maine will continue to work with its many partners, as we continue to address public health screening issues and enhance a system of comprehensive services to meet the needs of individuals and families.

Although Maine has one of the lowest case rates in the nation for Tuberculosis (TB), (1.6 Maine, 4.9 National) our public health infrastructure is compelled to continue and enhance rigorous surveillance and prevention efforts in order to respond to the following challenges:

In 2003, an outbreak of TB occurred among Maine's homeless population. More than 1000 persons were exposed to the eight cases of active disease. Efforts to locate, screen and evaluate exposed contacts continue and surveillance must remain rigorous in the homeless shelter community in order to prevent future outbreaks.

In 2004, more than 400 new arrivals from areas of high TB prevalence were screened for TB upon their arrival in Maine. The majority of these new arrivals came from Somalia and Sudan and relocated in Lewiston and Portland. More than 60% of these new arrivals have clinical evidence of latent TB infection, and in 2004, one case of active pulmonary TB was diagnosed among this population. Maintaining aggressive surveillance efforts in Lewiston and Portland is critical to preventing an outbreak of TB in these two urban centers.

In 2005, Maine was identified as leading the nation in its aging population, with 16% of the population over age 65. Persons over age 65 comprised 50% of Maine's tuberculosis cases in 2004. As the population of our state ages, heightened awareness of TB among providers who

treat chronic disease in the elderly is needed so that active cases of tuberculosis disease is promptly identified and treated. Increasing age is a risk factor for progression from latent to active TB, because persons who were infected with TB in their youth may develop active TB disease when their immune systems are compromised by chronic disease, cancer or other infectious disease

C. Population-Based Services

The table below describes Maine's population-based services available statewide. Following the table is more detailed information on the status of select population-based services in the state.

Pregnant Women, Mothers and Infants

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Birth Defects Surveillance	Mandated reporting of selected birth defects began May 1, 2003. The Maine Birth Defects Program (MBDP) collects data on the occurrence of birth defects up to age 1, to monitor trends of birth defects in Maine, to improve access to services, to assess the full impact of birth defects on the family, to develop prevention strategies to decrease the incidence of birth defects in Maine. Currently, the MBDP is located within the CSHN Program.	Health care providers who diagnose a reportable birth defect and birth hospitals are mandated to report the occurrence of birth defects in the infant and/or fetus. The MBDP uses multiple sources of data including vital records, hospital discharge data, hospital case reports, newborn hearing and blood spot screening data to identify cases and links this data through our ChildLINK database system. Referrals and information for services are made through the CSHN program.	The MBDP Coordinator works closely with hospitals, health care providers, genetic agencies, and specialty clinics to assure the timely and accurate reporting of birth defects.	Statewide	MCHBG Funds

Pregnant Women, Mothers and Infants

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Maine Maternal and Infant Mortality Resiliency and Review (MMIMRR)	The BOH, in conjunction with CSHN, is developing a Maine Maternal and Infant Mortality Resiliency and Review (MMIMRR) Panel. The Panel's purpose is to identify factors contributing to maternal and infant mortality, determine strengths and weaknesses in the existing health systems and make recommendations to the Maine DHHS for systemic improvements. It is proposed that the Coordinator of this project will be located within the CSHN program. Legislation is currently being revised and will be presented January 2006 to the Committee on Health and Human Services to allow MMIMRR access to medical records and records from other state agencies.	The MMIMRR Coordinator will be responsible for obtaining medical and other records, data collection, summarizing case information and presenting this information to the MMIMRR panel. Recommendations from this review process will be shared using de-identified information to appropriate service providers and hospitals when applicable	The MMIMRR Coordinator will work closely with healthcare providers, hospital, and community agencies to assure collaboration between state government, health care professionals and communities to reduce maternal and infant mortality but also help to improve the health of the entire maternal and infant population of Maine.	Statewide	March of Dimes, MCHBG
Breastfeeding Programs	The goal is to ensure that women, families, and clinical providers in Maine have access to current, accurate information and technical assistance to make informed choices regarding breast feeding. Also access to support and clinical assistance if breastfeeding problems arise.	Services are provided by PHN/CHN, hospital staff, WIC, and staff from other programs.	Coordinate with WIC, PHN, CHN, Nutrition, Maine Breast Feeding Coalition.	Statewide Coalition.	USDA WIC, MCHBG, State Funds

Pregnant Women, Mothers and Infants continued...

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Child Traffic Safety	The goal of this program is to prevent serious traffic-related injuries and deaths to Maine's children by increasing the number of children served by the child safety seat loan programs, extending availability of special needs restraints, dissemination of educational material and resources, and provision of technical assistance.	Provide annual trainings, technical assistance, and resources to child safety seat loan programs.	Coordinates with Maine Transportation Safety Coalition (MTSC). The Bureau's representative is a key member of the MTSC Board of Directors and participates on several work groups. Also coordinates with various agencies and programs including safety seat loan programs, law enforcement, fire personnel and medical professionals.	Statewide	MCHBG and Bureau of Highway Safety
Comprehensive Genetic Services	The goal is to ensure that families and individuals in Maine have access to comprehensive genetic services that enable them to reach informed choices and increase their ability to live healthy and productive lives. It is estimated that over 100,000 people in Maine are at risk for adverse health effects of inherited disorders or birth defects and genetic providers are limited.	Provides oversight and manages grants to 2 agencies providing comprehensive genetic services in Maine	The Genetics Program provides grant funding to three agencies that provide comprehensive genetic services, including risk assessment, laboratory and clinical diagnosis, genetic counseling, case management/referral, and education to providers and the public.	Statewide via outreach clinics and education.	Grants are funded by state monies, MCHBG funds are used for coordination and education.

Pregnant Women, Mothers and Infants continued...

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Newborn Bloodspot Screening Program	Maine screens for PKU, hypothyroidism, galactosemia, homocystinuria, Maple Syrup Urine disease, biotinidase deficiency, MCAD, Congenital Adrenal Hyperplasia and hemoglobinopathies. In 2001 an optional panel of 19 additional disorders was added to the newborn bloodspot screening. 100% of Maine infants with positive test results receive proper treatment within one week of diagnosis.	Birth hospitals have responsibility for specimen collection. The State assures all infants are screened & report all screening test results to medical providers and hospitals. State is responsible for tracking abnormal results until a diagnosis is confirmed and the child receives therapy. State is a resource for technical assistance and problem resolution. 2 metabolic clinics receive partial funding through the state.	Coordinates with genetic specialists, agencies, hospitals, laboratories health care providers and families.	Statewide	Hospitals/ providers are charged \$47.00 per specimen for Newborn Screening. This funds lab, UPS contracts, and salary of program manager and Newborn Screening Coordinator. Daily program costs funded by MCHBG.
Family Planning	Maine youth initiate sexual intercourse at a lower rate than the national average; 42.8% of Maine students and 46.7% of US in 2003. This rate decreased from the 1997 rate of 51.6%.	Funds are granted to the Family Planning Association (FPA) of Maine. The BOH has sole responsibility for management of these grants.	Coordinates with the FPA who in turn coordinates with the direct service providers. Adolescent sexuality issues are also addressed through Family Life Education consultation, and HIV Prevention Education.	Family Planning services are available in 29 clinics throughout all of Maine's 16 counties.	Title XX Social Service Block Grant, state funds. There is no direct funding from Title V MCHBG

Pregnant Women, Mothers and Infants continued...

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Healthy Families	The goal is to ensure that first time families desiring support via home visitations have long-term access to programs such as Healthy Families, Parents as Teachers, Parents Are Teachers Too, and/or PHN/CHN.	Funds are granted to 14 agencies to provide direct services across the state. The BOH contracts with 1 agency for evaluation of the home visiting initiative. The BOH has sole responsibility for management of these grants.	Coordinates with funded sites, PHN, CHN, EHS and Maine Children's Trust Early Head Start	Statewide for first time families via HF, PAT, PATT. Statewide for identified health needs via PHN and CHN	State funds and MCHBG.
Multidisciplinary Review on Child Death & Injury Due to Abuse/Neglect	Multi-disciplinary Legislative Task Force empowered to review child deaths and serious injuries in Maine.	MCH Medical Director and PHN Nurse supervisors serve as representatives from BOH.	Task force membership is multi-disciplinary and includes law enforcement, Medical Examiner, BOH, CPS, and state forensics.	Statewide	Legislative funds
Newborn Hearing Screening	Development of program began in 2000. Program components include collection and analysis of newborn hearing screening data; monitoring of those screened for; refer for follow-up assessment and diagnosis; connecting families to needed services.	Hospitals and providers must report results to the Newborn Hearing Program. The Program provides technical assistance and is responsible for tracking to ensure hearing impaired infants receive appropriate interventions.	Coordinate with hospitals, audiologists, Child Development Services, families, primary care providers. Stakeholder representation on the Governor appointed Advisory Board include: Audiologist, Physician Speech-Language Pathologist, Nurse Certified Teacher of Deaf BGSD EI Service Provider Culturally deaf person Hard-of-Hearing Person Parent of culturally deaf child Parent of deaf child Parent of hearing child Hospitals, CDS, Health Carriers, and DHHS Representatives	Statewide	CDC, MCHBG.

Pregnant Women, Mothers and Infants continued...

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Oral Health Program Grants	With a minimal public infrastructure for the delivery of oral health services, there is a need for the provision of consultation and technical assistance to government agencies, non-profit organizations and other groups to facilitate access to and delivery of quality oral health care services in all areas of Maine. Schools and community agencies have received funding as well as consultation and technical assistance to assist them in delivering clinical services and implementing oral health promotion activities and educational programs.	Funds are provided (through grants) to assist non-profit dental clinics; school-based oral health education; community level oral health promotion (provided by community agencies); education and disease prevention activities; and system capacity building efforts.	Provides technical assistance and consultation as needed and participate in a number of workgroups and committees both within and outside of state government that have mutual concern for oral health.	Geographic distribution is uneven with priority given to rural and under served areas where funding is essential.	MCHBG, state funds, and Preventive Health & Health Services Block Grant
Perinatal Outreach	Provide consultation regarding perinatal issues including transport to birth hospitals and providers as requested.	Provides oversight of contract purchasing services.	Serves as liaison to any agency requesting assistance.	Statewide	MCHBG, state funds
Public Health Nursing (PHN)& Community Health Nursing (CHN) Referrals	PHN/CHN goal is to ensure that women and families in Maine have access to pre/post natal care and pediatric care. They also ensure that clients have sufficient information to make informed choices for themselves and their families.	Services are provided directly by PHNs and via contracts with CHN agencies. These contracts are managed by Public Health Nursing.	Coordinate with Community Health Nursing and other agencies providing home visitation. Coordinates with other appropriate programs in relation to communicable disease.	Statewide	MCHBG and state funds

Pregnant Women, Mothers and Infants continued...

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Shaken Baby Education	Head trauma is the leading cause of death for infants and small children. SBS Specialist functions as a resource providing expertise and materials to appropriate parties for increased prevention education.	Staffed by SBS Specialist within Maine Injury Prevention Program. MIPP provides prevention ed upon request to any agency, group or organization in the state. Also coordinates a one-day informational conference for individuals who have regular contact with infants and small children. Program works directly with parents of SBS victims	Coordinate with interested parties including parents, Child & Family Services, Public Safety, Corrections, Health Centers, Day Care Providers, Hospitals, Public/Community Health Nurses, Physicians, Child Abuse & Neglect Councils, Health Educators, Community Action programs, Child Development Resource Centers, Community Counseling/Foster Parent Programs, Acquired Brain Injury Advisory Council, etc.	Statewide	PHHSBG, MCHBG, State funds
SIDS	PHN and CHN accept referrals from the Chief Medical Examiner's Office to contact families with a child that may have been a SIDS death. Referrals are made with days of the death in order to provide timely support and information to the family via PHN/CHN. On-going support is offered throughout the grieving process. Also coordinate workshops to update the greater provider community regarding SIDS research and prevention initiatives.	The CME office makes referrals to Public Health Nurse Supervisor who is designated as SIDS contact person for the state. This person is the liaison for information between the CME office and the PHN/CHN working with the family.	Coordinate with CME Office, Bureau of Child & Family Services, Public Health Nurses. CHN, Law Enforcement, Emergency Medical Services staff, and the Child Death and Serious Injury Task Force.	Statewide via PHN/CHN	MCHBG and General Fund

Children & Adolescents

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Maine Injury Prevention Program	Unintentional injury is the leading cause of death and disability among Maine children aged 1-24. This program's goal is to decrease the incidence of unintentional injuries to children and youth.	The MIPP contracts with the Maine Poison Center to provide education and outreach about both intentional and unintentional poisonings. Work with home visiting to conduct home safety assessments for families with young children. Provide education and instruction to law enforcement, PHN/CHN, medical staff, daycare providers, rural health centers, child development centers, and CAP agencies on correct installation of car and booster seats for children age 0-8. Work with fitting stations to ensure proper installation of car seats in vehicles. Offer free car seats to eligible families.	Coordinates with PHN to disseminate educational information. Program staff make presentations and provide training to groups and organizations. Work with PHN, Parents As Teachers, Parents Are Teachers Too, HealthReach and others to train home visitors to assess the home environment for child safety. Approximately 28 child safety seat sites located across the state. Recruit, maintain and manage a network of 32 fitting stations. Provide supplies to ensure proper installation of seats, and educational materials for caregivers.	Statewide	MCHBG, Bureau of Highway Safety

Children & Adolescents					
Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Lead Screening	Lead surveillance and monitoring throughout the state.	Does not provide direct services.	Coordinate with PHN for case management services for lead poisoned children and their families; coordinate with private lead inspectors for environmental investigations; Department of Environmental Protection for regulation abatement activities; Maine State Housing Authority for financing of lead abatement work; HETL for blood lead analysis. Referrals are made to the CSHN Developmental Evaluation Clinics.	Statewide	CDC and State Funds
Nutrition	The MCH Nutrition Program promotes good nutrition and healthy lifestyles for Maine's MCH population. The Program is also involved with the Maine Nutrition Council, a statewide nonprofit organization that promotes nutrition education.	The Program serves as grant manager and Bureau liaison for the Maine Nutrition Network. The Network is a statewide organization of public and private partners formed to promote nutrition messages consistent with the Dietary Guidelines for Americans and the Healthy People 2010 objectives.	Collaborate with the Maine Nutrition Network and the Maine Nutrition Council.	State wide	MCHBG, USDA, State Funds

Children & Adolescents					
Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Youth Involvement and Leadership	Effective youth involvement and youth-adult partnerships decrease adolescent risk behaviors by promoting leadership development and aspirations, and by improving programs through youth input. Local programs are supported through a statewide network, regional trainings, and a yearly conference. The Maine Youth Suicide Prevention Program also supports peer mediators in selected schools.	The state supports the Maine Youth Action Network through a contract with (PROP) in Portland.	Grantee provides regional training to local youth leadership groups supported by the Bureau of Health as well as by other departments, and provides all groups with opportunities to interact and cross train each other. Additional supports are provided to Youth Advocacy Projects that are part of the Healthy Maine Partnerships, and address tobacco, physical activity, and nutrition.	Approximately 100 programs statewide, including over 30 YAP groups	State funds, Federal funds (MCHBG match) and Master Tobacco Settlement Funds for Youth Advocacy Projects
School-Based Health Centers (SBHC)	National data shows that teens are the most under served age group for both preventive and acute health care. Maine has very few teen health specialists and few health centers with teen walk-in hours. School health centers are a point of access for comprehensive health care. In addition, these centers coordinate their activities with the adolescent's medical home.	SBHCs are sponsored by local medical organizations and receive reimbursement from Medicaid, and private insurers The Bureau provides some base funding, The centers operations are also supported by local grants and in-kind contributions.	Coordinates with local medical providers and the Bureau of Medical Services (Medicaid). SBHCs are part of the Coordinated School Health Program therefore there is coordination with school nursing and other school health supports provided by DOE. Some SBHCs provide mental health services and some provide oral health services, so there is also coordination with state agencies that work with schools in these areas.	There are 27 SBHC located throughout the state. 19 are supported by BOH grants, others are provided with technical assistance on request	State funds, Federal funds (MCHBG match) and Master Tobacco Settlement Funds

Children & Adolescents

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
School Oral Health Programs	School Oral Health Programs provide classroom-based education, fluoride mouth rinse, and increasingly dental sealants (for 2 nd grade students) in grades K-6. A major incentive for the program at its inception 20+ years ago was to provide the fluoride component. Schools must have a 30% free and reduced lunch rate to participate, and priority has been given to schools in non-fluoridated communities. Schools receive small grants on a per-capita basis to support these programs. Participation in this program has been relatively consistent, with about 40% of Maine's elementary school students involved.	OHP staff manages small grants to individual schools, school districts and several agencies on behalf of schools. These grants involve about 250 schools. The OHP coordinator provides consultation and technical assistance to local program directors throughout the school year, and provides an annual training meeting each fall.	We will provide consultation, technical assistance and materials to any school in Maine on request. Staff work with the Coordinated School Health Program and other groups to include and integrate oral health education into comprehensive school health education curricula.	Participation in the School Oral Health Program is voluntary. However, there are participating schools in all of Maine's 16 counties.	State Fund, PHHSBG, MCHBG
Youth Suicide Prevention	The Maine youth suicide rate is higher than the national youth suicide rate. This program is a program of Gov. King and the Children's Cabinet. Goals are to reduce the incidence of suicidal behavior among Maine Youth 10-24 years of age and to improve youth access to appropriate prevention and intervention services.	Commissioners and Senior Staff from Departments of Human Services, Education and Mental Health/Mental Retardation/SAS, Public Safety and Corrections cooperate to strengthen the state-supported infrastructure of service provider agencies and schools with a statewide crisis hotline, a statewide information resource center, training and technical assistance.	Gatekeeper training is offered via a contract with Medical Care Development, Inc. Program reaches medical professionals, college communities, clergy and substance abuse counselors.	State wide via gatekeeper training and other agencies directly involved with youth.	State Funds through the Children's Cabinet

Children & Adolescents

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Youth Violence Prevention	Maine youth do not experience violence at the same level as their urban counterparts, but violence remains a concern. Per the 1997 YRBS 40% of male and 24% of female students reported being in a physical fight within the past 12 months. Data from the AAG shows incidence of hate crimes is on the rise. This program's goal is to decrease violence among our youth and to monitors youth violence incidents and trends.	Program provides two universities with grants to provide youth violence prevention training. Provides a grant to the Attorney General's Office to set up a Civil Rights Team. Developed a website for dissemination of youth violence prevention information	MIPP provides funding for annual conference for school personnel to increase their knowledge and ability to integrate violence prevention practices into the educational setting. Cooperative agreements with two universities assist schools to establish school-based peer mediation and/or conflict resolution programs.	State-wide	MCHBG, Preventive Health & Health Services BG, State Funds

Children with Special Health Care Needs

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Maine Adolescent Transition Project	Youth with special health needs continue to exit public schools inadequately prepared for life as adults; age out of pediatric health care systems without adequate transition to medical homes; face lives of poverty on SSI, and services that are fragmented and scarce. In addition youth and their families are not engaged in affecting and influencing systems change.	The CSHN Program serves as project director and coordinates statewide activities that lead to the successful transition of young adults with special health needs to adulthood.	Collaboration with Maine's UCEDD and Maine's Support Network provide partnerships and access to schools; working with medical homes to coordinate transition to adult health care services; YEA ME conducts YOUTHSPEAK programs.	Statewide	HRSA, MCHBG, Division of Children with Special Health Care Needs (DCSHCN)
Traumatic Brain Injury Implementation Program	Expand and improve State and local capacity to enhance access to comprehensive and coordinated services to individuals with TBI and their families.	The CSHN Program as project director coordinates activities at a statewide level to promote and improve access to services.	Collaborate and build partnerships through the Acquired Brain Injury Advisory Council. Membership consists of Departments of Education, Labor, Corrections, and programs representing injury control, mental health, providers, elderly, and individuals with TBI and their families.	Statewide	HRSA, MCHBG, DCSHCN
Early Childhood Initiative	Development of a state Early Childhood Plan that will secure needed resources, assist parents of young children, balance cognitive development with emotional and physical needs of young children, and guarantee effective service systems for young children.	Does not provide direct services	Coordinates with public and private entities focused on and/or providing services to young children and their families.	Statewide	Federal Funds, (MCHBG)

Children with Special Health Care Needs

Program Name	Program Description and Need for Specific Services	State's Involvement in Direct Management of These Services and Programs	State's Involvement in Coordination with Other Agencies of These Services and Programs	Geographic Availability and Distribution	Funding mechanism
Women's Health Initiative	Integration of comprehensive women's health within the Bureau's publicly funded health programs and across state government departments and other private and public entities interested in promoting women's health.	Does not provide direct services	Coordinates with public and private entities focused on and/or providing services to women of reproductive age.	Statewide	Federal Funds (MCHBG)
EPSDT	PHN/CHN receive referrals from EPSDT to assist children needing services following a well child visit to a primary care physician	PHN provides services to review and triage all Bright Future Periodicity forms (BR19) generated from medical provider practices. Follow-up services to families are provided directly by PHNs and via contract with CHN agencies. The contracts are managed by Public Health Nursing.	PHN works cooperatively with the Maine Immunization Program and the Bureau of Medical Services to provide interventions to parents and guardians of children receiving MaineCare benefits.	Statewide	MCHBG and state funds

a) Status of select population-based services

Newborn bloodspot screening. 99.6% of Maine newborns were screened for 9 disorders in 2004; 99.9% of infants screened also received the optional expanded screening panel, which tests for an additional 19 disorders. There were 40 refusals for screening based on religious objections. Twenty-four, or 1 in 568 babies born in Maine in 2004 were identified with a heritable disorder. A total of 244 babies were diagnosed through the newborn screening program between 1976 and 2004; the optional expanded screening panel was available beginning July 1, 2001. The four most common conditions detected during this time period were congenital hypothyroidism (n=137; 56.1%); phenylketonuria (classical and hyperphenylalaninemia) (n=53; 21.7%); galactosemia and variants (n=17; 7.0%), and MCAD (n=10; 4.1%).⁶⁹

The Maine Genetics Program requires that specimens should be drawn by day 3 of age, or at the time of discharge from the hospital, whichever comes first; specimens drawn before 24 hours of age are not considered adequate for testing because there may not yet be any physiologic signs of a disorder. Specimens should be received at the lab within 4 days of being drawn.⁷⁰ In 2004, age at specimen draw was known for 96.3% of initial specimens; of the specimens for which age was known, 6.6% were drawn at ≤ 24 hours, 91.6% were drawn at 2-3 days, and 7.7% were drawn at 4 days of age or older. The days lapsed between initial specimen draw and receipt of the specimen at the regional screening lab was known for 99.9% of all specimens; of the specimens with known days lapsed, 98.1% were received at the lab within 4 days of being drawn. Less than 1% of the samples received from Maine birthing facilities were unacceptable for analysis; the facility-specific percentages ranged from 0% to 2.36%. The Genetics Program is working with facilities to reduce the number of unacceptable samples.⁶⁹

Newborn hearing screening. All birth hospitals in Maine conduct newborn hearing screening. Data entry of screening results for 2004 has not yet been completed, but the Maine Newborn Hearing Program estimates that 97% of the live births in the state were screened for hearing loss.⁷¹

There are 19 audiological evaluation facilities in Maine that can evaluate infants and young children. Of these, six facilities can complete the full panel of testing necessary for a presumptive diagnosis of hearing loss; the other 13 facilities can provide some of the testing. Audiologists began reporting to the Maine Newborn Hearing Program during 2004. Reporting is not mandatory; however, voluntary reporting has been going well. During 2004, 100 reports of audiological evaluations were submitted; 26 reports indicated that an infant or young child had a permanent hearing loss. All of these reports indicated that the hearing loss was found before the child was six months of age.⁷¹

Lead screening. Maine's Lead Poisoning Control Act was amended in 2002 to require that all children covered by MaineCare must have their blood lead levels tested at 1 and 2 years of age. Children who are not covered by MaineCare must have their blood lead levels tested at 1 and 2 years of age unless the child's primary health care provider, based on professional judgment and the lead poisoning risk assessment tool, determines that the child's level of risk does not warrant testing.⁷² One of MaineCare's quality projects for 2004 involved reviewing administrative and

claims information to see whether children were getting lead testing and to provide provider education, mailings and outreach to families, and payment incentives for lead testing.⁷³

The Maine Childhood Lead Poisoning Prevention Program reports that the proportion of 1 year old Maine children screened for elevated blood lead levels increased significantly from 39.2% in 2001 to 45.1% in 2002 and 47.7% in 2003. The proportion of children screened who were found to have elevated blood lead levels did not change significantly during this time period; in 2003, 3.8% of the screened children had elevated levels.⁷²

The screening rate for Maine 2-year-olds also increased significantly from 15.7% in 2001 to 22.0% in 2002 and 24.1% in 2003. 4.9% of 2-year-olds screened had elevated blood lead levels; this percentage was not significantly different from the corresponding percentages in 2001 and 2002.⁷²

At present, it is not known what proportion of 1- and 2-year-olds in Maine should be being screened for elevated blood lead levels, given the provisions of the state's Lead Poisoning Control Act. The Maine Childhood Lead Poisoning Prevention Program is working toward obtaining such an estimate.

The 2002 Maine Child Health Survey found that a third (35.8%) of kindergartners had possible lead exposure, based on regularly visiting or living in a home built prior to 1950. 41.9% of kindergartners had ever been tested for lead exposure; however, 31.4% of kindergartners who had a possible risk for lead exposure from pre-1950 housing had either not been tested or it was not known if they had been tested.³⁵

Cholesterol screening. The 2003 BRFSS found that 80.1% of Maine women aged 18 years and older reported having had their blood cholesterol checked within the last 5 years³⁴; this meets the Healthy Maine goal of 80%.¹⁸ 4.6% of Maine women in this age group reported that their last blood cholesterol check had been more than 5 years ago and 15.3% said they had never had a blood cholesterol check.

Breast screening. Healthy Maine 2010 includes a goal to increase the proportion of women aged 40-49 who report receiving both a mammogram and a clinical breast examination in the past 2 years to 75%. Current data on these two screenings are only available separately, but indicate that Maine might have met the Healthy Maine 2010 goal. The 2002 BRFSS found that 94.7% of women aged 40-49 years reported ever having had a clinical breast exam; most of these women (92.6%) had had the exam within the last 2 years. 86.4% of 40-49 year old women reported ever having had a mammogram; 88.8% of these women had had the test within the prior 2 years.³⁴ As such, for the 40-49 year old age group, Maine has met the Healthy People 2010 goal of increasing the proportion of women who have had a mammogram in the pasts 2 years to 70%.⁷⁴

BRFSS also includes data on clinical breast exams among younger women in Maine. In 2002, 91.0% of 18-39 year old women reported ever having had a clinical breast exam; of women who had had the exam, 93.8% had had it within the past 2 years.³⁴

Cervical screening. Healthy Maine 2010 includes a goal to increase the proportion of women who have received a Pap test in the past 3 years to 92%.¹⁸ Maine has met this goal for 18-39 year olds women; the 2002 BRFSS results showed that 97.2% of women in this age group had ever had a Pap smear and of those who had had the test, 95.9% had it within the past 3 years. Maine is just short of meeting the goal for 40-49 year old women; 2002 BRFSS results found that 98.2% of women in this age group reported ever having had a Pap test and of those who had had the test, 93.0% had had it within the previous 3 years.³⁴ Healthy People 2010 has a slightly lower goal of 90%, which has been met for both 18-39 and 40-49 year old women in the state.⁷⁴

Immunization. Healthy People 2010 goals include achieving 90% coverage among 19-35 month olds for six vaccines and 80% coverage in that age group for the 4:3:1:3:3 series.⁷⁵ Healthy Maine 2010 goals cover a larger number of vaccines and are generally higher than Healthy People 2010 goals.¹⁸ Maine overall has met the Healthy People 2010 goals for Hib, Hep B, MMR, and polio; however, the goal for polio has not been met among WIC participants and children below the federal poverty level and the HepB goal has not been met by WIC participants (Table 13); coverage information for HepB is not available for children below the poverty level. Non-WIC participants have met the DTaP goal and 4:3:1:3:3 goals; children above the poverty level have met the 4:3:1:3:3 goal. There was a significant increase in 1+ varicella and 3+ PCV coverage in Maine from Q1/2002-Q4/2002 to Q1/2003-Q4/2003.⁷⁶ Maine has not yet met any of the Healthy Maine immunization goals.

Table 13. Estimated vaccination coverage among children 19-35 months of age, Maine and United States, National Immunization Survey, 2003,⁷⁶ and Healthy People⁷⁵ and Healthy Maine 2010 goals.¹⁸

	Vaccination Coverage						Goals	
	United States	Maine					Healthy People 2010	Healthy Maine 2010
		Overall	WIC participants	Non-WIC participants	Below poverty level	At or above poverty level		
3+DPT	96.0	97.7	95.9	99.3	98.0	97.3	---	99
4+DPT	84.8	88.8	83.6	93.2	88.2	89.5	90	98
3+Polio	91.6	91.9	88.3	94.9	88.5	91.9	90	99
1+MMR	93.0	94.1	93.4	94.7	94.1	95.0	90	99
3+Hib	93.9	94.3	90.1	97.9	90.6	94.7	90	99
3+HepB	92.4	90.3	89.5	90.8	NA	90.7	90	95
1+Var	84.8	81.0	82.4	80.2	NA	81.3	90	90
3+PCV	68.1	75.1	70.0	79.2	NA	77.6	---	---
4:3:1	82.2	84.1	77.3	89.7	NA	85.6	---	95
4:3:1:3	81.3	81.8	74.1	88.2	NA	83.2	---	90
4:3:1:3:3	79.4	78.6	72.2	83.8	NA	80.0	80	90
4:3:1:3:3:1	72.5	68.6	64.0	72.9	NA	69.9	---	---

NA: Not available due to small numbers or inadequate precision.

Healthy People 2010 goals for kindergartners and 1st graders include 97% coverage for DTaP and polio vaccines and 96% for measles, mumps, and rubella vaccines.⁷⁵ Maine is close to meeting these goals; vaccination coverage among Maine children enrolled in kindergarten during the 2003-04 school year was:⁷⁷

- Polio: 93.3%
- DTP/DTaP/DT: 95.1%
- Measles: 93.8%
- Mumps: 93.8%
- Rubella: 93.8%
- Varicella: 93.1%

Healthy People 2010 immunization goals for adults include increasing the proportion of noninstitutionalized high-risk adults aged 18 to 64 years who receive the influenza and pneumococcal vaccines to 60% each.⁷⁵ The 2003 BRFSS survey found that 39.3% of Maine persons aged 18-64 years with asthma had received an influenza vaccination during the previous year. Nearly half (49.0%) of the 18-64 year olds with diabetes had received an influenza vaccination and 35.0% had received a pneumococcal vaccination during the prior year.⁷⁸

Oral health. Dental caries is largely preventable through community-based efforts that optimize the use dental sealants and fluoride (which, in combination, are considered to serve as an “immunization” against tooth decay in children).¹⁸

Healthy Maine 2010 includes a goal to increase the proportion of 8 year old children who have received dental sealants on their molar teeth to 50%.¹⁸ The 1998-1999 Smile Survey found that 47.6% of 3rd graders in Maine had at least one sealant on a permanent molar. However, the survey also found that 56% of the 3rd graders needed at least one additional sealant.⁷⁹

Healthy People 2010 seeks to increase the proportion of the U.S. population served by community water systems with optimally fluoridated water to 75%.⁵⁴ In 2004, 84% of the population in Maine that was on public water systems received fluoridated water. However, due to the relatively large proportion of Maine households that are not on public water supplies, only 38.5% of the total population in the state received fluoridated water.⁸⁰

The School Oral Health Program provides topical fluoride to children in many communities that do not have optimally fluoridated water systems. Weekly fluoride mouthrinses are provided for students in schools which meet eligibility criteria indicating that students are at increased risk of tooth decay.⁸⁰ In the 2003-2004 school year, 121 of the 245 School Oral Health Program sites in the state had sealant programs, providing sealants primarily to second-graders.¹³¹

b) Other State Population-Based Services

The following Table describes other population-based services provided by the State for Title V populations.

Pregnant Women, Mothers and Infants				
Program Name	Program Description	Agency/Organization Providing Service	Geographic Availability and Distribution	Funding Mechanism
TANF	Provides a wide range of services such as cash assistance, employment, training and education opportunities, and work supports such as childcare to qualified families with children.	DHHS/Bureau of Family Independence	Statewide	Federal and state general funds
Career Center, Employment Resource	The Career Centers offer a range of services to women from assistance with enhancing, through training if necessary, job skills, job searches, and career exploration. The centers also make referrals to local agencies such as WIC, Parents are Teachers Too, Adult Education if a GED is required, housing, and child care to assist women in obtaining employment	Department of Labor	Statewide	State Funds
Helping Incarcerated Parents	The focus of the program is to strengthen and support good parenting, reduce the losses to children and improve the parent-child relationship by providing time together, helping parents to communicate better with their children, and reduce the cycle of child abuse and neglect	Department of Corrections	Statewide for State Correctional System (Does not include County Corrections)	State General Fund, Inmate Benefit Fund at Maine Correctional Center

Children & Adolescents

Program Name	Program Description	Agency/Organization Providing Service	Geographic Availability and Distribution	Funding Mechanism
MaineCare	Health insurance for pregnant and postpartum women and infants with income \leq 200% of FPL	DHHS/Bureau of Medical Services (BMS)	Statewide	Federal and State funds
Children's Services	BDS provides a range of community based services and supports via contracts qualified providers through the State of Maine, ensuring that services are in place to support children's behavioral and mental health issues.	DHHS/Child Mental Health Services (CMHS)	Statewide through 3 Regional sites	State general funds, Federal funds
CareerCenters Youth Development System	The Maine Department of Labor provides, through a statewide CareerCenter System a resource for any person seeking work or training, or any employer seeking workers. For youth, services may also include tutoring, paid and unpaid work experiences, internships, job shadowing, leadership development which may include community service to encourage responsibility and other positive social behaviors, and assistance with transition to work.	Department of Labor	Statewide	Wagner-Peyser and Workforce Investment Act
MaineCare	Health insurance for children 1 to 18 years of age with incomes \leq 200% of FPL	DHHS/BMS	Statewide	Federal and State funds
Child Care and Head Start	The Maine Office of Child Care and Head Start administers licensed child care environments for children 6 weeks through 15 years. This office funds and contracts with a system of child care resource and referral centers, (Resource Development Centers), which make referrals to parents seeking quality child care, provide information on financial assistance and vouchers, and host professional development sessions for child care providers.	DHHS/CSC	Statewide	State and Federal funds
Special Education Services	The purposes is to ensure that all children with disabilities (ages 3-21) have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for employment and independent living.	Department of Education	Statewide	State General Funds

Children With Special Health Needs				
Program Name	Program Description	Agency/Organization Providing Service	Geographic Availability and Distribution	Funding Mechanism
Special Education Services	The purposes is to ensure that all children with disabilities (3-21) have available to them a free appropriate public education that emphasizes special education and related services designed to meet their unique needs and prepare them for employment and independent living;	Department of Education	Statewide	Federal and State funds
Child Care and Head Start	Child Care Plus ME offers training and assistance to support child care centers, child care homes, families, preschools, public schools, and community programs so that they may provide quality experiences for all children, including children with challenging behaviors and children with medical, physical, and developmental disabilities.	DHHS/CSC, University of Maine System	Statewide	Federal and State funds
MaineCare	Health insurance for children 1 to 18 years of age with income \leq 200% FPL	DHHS/BMS	Statewide	Federal and State funds
Service for deaf or hearing impaired children	The Early Childhood and Family Services (ECFS) Program, a component of Statewide Educational Services through the Governor Baxter, School for the Deaf, provides information, support and training to families and professionals statewide for children, birth to 5, who are deaf, hard of hearing or have a suspected hearing loss. ECFS services include home visits and are provided without cost to families.	Baxter School for the Deaf	Statewide	Sate funds
Family to Family Information and Resource Centers	Parent to Parent of Maine is a network of resources centers for families of children with special health care needs and disabilities. These centers provide information to parents on services, resources and support.	Maine Parent Federation	Statewide 6 regional centers	HRSA, MCHB, DCSHCN
Child Development Services (CDS)	The 16 CDS sites have primary responsibility to deliver services for children ages birth to five with disabilities under IDEA Parts C and B.	Department of Education	Statewide 16 sites	State General Funds
Children's Services	BDS provides a range of community based services and supports via contracts qualified providers through the State of Maine, ensuring that services are in place to support children's behavioral and mental health issues.	DHHS/CMHS	Statewide through 3 regional sites	State General Funds

D. Infrastructure Building Services

Maine State government has a lean state employee-based infrastructure with very minimal local or county health department presence. Historically, provision of services to our residents is via public-private partnerships with the state agencies providing funds and private sector agencies/individuals delivering direct services. (In some instances the private sector does obtain additional funds for augmenting specific services.) Service delivery by community agencies allows for tailoring of services specific to population needs and attention focused toward risk groups.

The coordination of services across funding sources, state departments, and geography is the biggest challenge to achieving an efficient and comprehensive system of services and care. Programs serving the MCH population are housed in various departments including the Department of Health and Human Services (Health, Integrated Access, and Strategy, and Integrated Services), Department of Public Safety (Emergency Medical Services for Children), Department of Corrections (Adult and Juvenile Corrections), Labor, and Education (Coordinated School Health Program and School Nurse Consultation). The complexity of such a broad delivery system has led to efforts to coordinate service delivery and surveillance activities as well as programs and policy development. Maine is one of 18 States awarded funds from the Division of Adolescent and School Health, Centers for Disease Control and Prevention for coordinated school health. Two positions, one in the Department of Education and one in DHHS, Directors of Coordinated School Health Programs (CSHP) are funded through this grant. The primary responsibilities of this effort have been to promote coordination between departments and to build a statewide infrastructure for school health programs.

The CSHP Directors have established two statewide groups to assist with coordination; the CSHP Interdepartmental Coordinating Committee, composed of State agency program managers that benefit youth in schools, and a committee consisting of representatives of Non-Government Organizations (NGOs) that advise on and advocate for coordinated and comprehensive school health programs. Both groups include programs and organizations that address many of the national and State performance measures for the MCHBG; suicide prevention, family planning and sexuality education, oral health, injury prevention, nutrition, health services etc.

The Directors and their programs work very closely with each other at the local level as well as through the Healthy Maine Partnerships (HMP). The Directors work with 54 School Health Coordinators within the partnerships to address a variety of health issues using a collaborative approach. School Health Coordinators are responsible for conducting a needs assessment, convening leadership teams, using data to develop action plans and evaluate progress. The primary emphasis is on physical inactivity, poor nutrition and tobacco use as required by funding, however, some coordinators also address other health issues identified as priorities in their area such as teen pregnancy, bullying, suicide, and oral health.

Comprehensive health education is an important component of CSHP and the departments work closely in this area. The Bureau of Health funds two positions in the Department of Education to assist with health education curriculum development, instruction and assessment. Maine has established a solid reputation as a leader in health education and coordinated school health. The

extent to which departments share resources and collaborate on systems change at the State and local levels has fostered this reputation. An example of the positive collaborative efforts is the work currently being done around school surveying. Data for adolescent health are based in large part on reports of healthy and risky behavior, and factors that influence it. Schools are frequently asked to conduct surveys, such as the Youth Risk Behavior Survey (YRBS). Since schools are attempting to maintain or increase classroom instruction time, these requests can create a burden and they are often unwilling to participate. Multiple surveys from different state agencies increases their reluctance. An Interdepartmental Survey Committee is working to develop a coordinated approach to student health surveys that will be more predictable, reduce school burden, and increase the availability of a full range of local data that schools can utilize.

A working relationship has existed for many years with the DHHS, Disability Determination Services (DDS) and Title V, specifically the CSHN Program. DDS is the State unit that makes disability determinations for the Social Security Administration. Those applications for youth less than 16 years of age are forwarded to the CSHN Program for further review and the provision of supports if appropriate. Additional services may include assisting families with obtaining medical services and specialty care, obtaining referrals, addressing insurance issues both private and public, assisting with transportation and rehabilitation services.

In Maine the Ryan White Comprehensive AIDS Resources Emergency Act (CARE) funds primary healthcare and support services for people with AIDS. The opportunity to further collaborations between Title V and the Ryan White CARE Program is in its infancy. The Ryan White Program is housed in the DHHS, Bureau of Health. Maine receives funds under Title II and Title III of the CARE Act. Title II funds are used for 2 types of services: HIV Case Management and AIDS Drugs Assistance Program (ADAP). Six non-profit organizations receive the Title II funds: Frannie Peabody Center (York and Cumberland counties), St. Mary's Regional Medical Center (serving Androscoggin and Oxford counties), Dayspring AIDS Support Services (serving Franklin, Kennebec, Somerset, Lincoln, and Sagadahoc counties, as well as parts of Knox and Waldo counties), Eastern Maine AIDS Network (serving Penobscot, Piscataquis, and Aroostook counties, as well as parts of Waldo and Knox counties), Down East AIDS Network (serving Washington and Hancock counties) and AIDS Lodging house. HIV Case Management services are provided at 6 sites across Maine. ADAP services are provided at the same sites and provide assistance to people who cannot afford HIV medications. Title III funding is provided to three non-profit organizations that provide comprehensive HIV primary care: Regional Medical Center at Lubec (serving Northern Maine), Maine General Health (serving Central Maine), and Portland Public Health (serving Southern Maine).

The coordination between Title V and Special Services to serve children and youth with disabilities and special health needs has a long history in Maine. Efforts to maximize services include:

- CSHNs participation on the Maine Advisory Council for the Education of Children with Disabilities (MACECD), specifically, serving in an advisory capacity to the Unmet Needs subcommittee. Other committees that exist are Early Childhood, Legislative and Transition.

- Special Services has served in an advisory capacity to the Acquired Brain Injury Advisory Council providing in-depth knowledge and data on those children with brain injury being served through special education.
- Using the Healthy Ready to Work grant (MCHB, DCSHN) as a vehicle to partner with special services to create a seamless system of transition for youth and young adults.
- Providing an opportunity for youth to address special education teachers using YOUTHSPEAK “What We Want Our Teachers to Know.”

The Maine Department of Education (DOE) is embarking on an ambitious statewide project focused on delivering an information management system that will link the agency with schools around the state. The Maine Education Data Management System (MEDMS) will allow MDOE to communicate with local school administration districts and cooperatively manage their data for state and federal regulatory and assessment compliance, while managing the department’s internal database and information flow. MEDMS also has the potential to provide other state agencies aggregate information on various student enrollment data. Of particular interest to Title V is 504 Status, which has been unavailable in the past.

The DOE, through Child Development Services (CDS), is charged with implementing the Individuals with Disabilities Act (IDEA) through Part C – infants and toddlers (Birth – 2) and Part B Section 619 – Preschoolers (3 – 5). Funds for both Part C and Part B are distributed to 16 regional sites across Maine under approval agreements with DOE. The CDS system is currently undergoing reorganization resulting from a proposed 16% reduction in FY07 funding. The reorganization plan will encourage all sixteen sites to create efficient administration, service delivery and service coordination. The 16 sites are encouraged during the process to include local and regional partners who could assist in the redesign. Opportunities to assist the CDS system include:

- Use the Family-to-Family Information and Resource Sites to assist CDS sites to include families.
- Act as a conduit between AAP members and the regional sites.
- Address services through the medical home to ensure resources are utilized by families
- Participate in work group activities that provide CDS the opportunity to streamline services.

The Disability Rights Center (DRC) is Maine's federally funded protection and advocacy agency and has a mandate to advance and enforce the rights of individuals with disabilities in a wide range of areas including institutional and facility treatment and care, housing, employment and education. The DRC is a statewide, nonprofit organization that provides focused advocacy services based upon clearly defined priorities and case selection criteria to individuals with disabilities who meet federal eligibility requirements. The DRC represents individuals with disabilities who have experienced a violation of rights directly related to disability, with the primary focus on abuse and neglect. Attorneys and advocates can assist individuals by providing information and technical assistance, referral to appropriate services, direct representation in hearings or court, and training on rights. Title V has developed a collaborative relationship with DRC specifically in the area of brain injury. The DRC submitted legislation to designate DHHS as the lead state agency for TBI and legislation to form a commission to study the current services resources available in Maine for individuals with traumatic brain injury (TBI).

The Maine Developmental Disabilities Council (DDC) assures that individuals with disabilities and their families participate in the design of and have access to community services, and individualized supports that promote independence. Title V has been involved with the Council on several issues that concern individuals with disabilities:

- Newborn Hearing Screening Initiative
- Traumatic Brain Injury Initiative
- Design and development of recommendations on individuals with disabilities

Additional collaboration includes the Task Force on Early Childhood and its critical role in the SECCS grant and its outcomes. In 2003, at the direction of the Governor's Office, the Bureaus of Health and Medical Services (Medicaid) initiated a series of discussions to enhance the partnership between the public health and Medicaid systems. Such a partnership is of vital importance to MCH. The discussions so far have revolved around tobacco use and diabetes. They have focused on the potential for Medicaid to build prevention and education into its reimbursement system with respect to these two areas of public health.

A collaborative effort of the Title V Program, the Maine Chapter of the American Academy of Pediatrics, and the Hood Center at Dartmouth Medical School has fostered a new relationship with the Bureau of Medical Services (Medicaid). The Bureau of Medical Services has agreed to share data on cost utilization for special needs children for specific pediatric practices. It is similar to an agreement we have with Anthem Blue Cross and Blue Shield.

Coordination efforts which address mental health strive to put into practice comprehensive, interdisciplinary, and evidence-based systems of care for children with mental health problems. A growing partnership between Title V and Children's Behavioral Health Services in the Department of Health and Human Services (formerly the Department of Behavioral and Developmental Services - BDS) has led to the following examples of coordination:

- Integrating mental health services into primary health care for children through two Maine Health Access Foundation Grants, one through the Maine Center for Public Health and the other through Kennebec Valley Mental Health.
- Raising public awareness throughout Maine of the causes and effects of childhood trauma.
- Child Mental Health (CMH) involvement in and support of the Maine Youth Suicide Prevention Program.
- Developing a humane and resiliency-based approach for dealing with the mental health aspects of natural disasters and terrorism, through a Substance Abuse and Mental Health Services Administration (SAMHSA) grant to CMH.
- Fostering opportunities for state public health and mental health to come together, especially as we start to develop the new Department of Health and Human Services, including a federal CMH grant proposal, "Implementing a Trauma-Informed System of Care for Children with Serious Emotional Disturbance in Maine," prepared for submission in May 2005.
- CMH involvement in the Task Force on Early Childhood (MCH Statewide Early Comprehensive Child Service System Grant), which has a major focus on mental

health system planning for preschool children and their families. Later this year, the Task Force will release a series of recommendations, many of which will relate to strengthening linkages among MCH, Early Care and Education, Medical Home, and Mental Health.

- CMH support for Title V's successful application to the Maine March of Dimes to start up a Maternal and Infant Mortality and Resiliency Review Program.

Underlying this coordination is a shared ecological approach to health that eliminates the idea that mental health is distinct from public health. This approach embraces the key role of social connectedness and support in enhancing child, family, and community health. Research consistently shows that a key determinant of health is the extent to which people of all ages, but especially children, feel affirmed, nurtured, respected, and honored.

We also share with our mental health partners, both at the state and local level, an emphasis on evidence-based and preventive practices that achieve positive outcomes; a shared belief that health promotion and prevention efforts must start early in fostering optimal social and emotional development and must involve families in design and implementation from start to finish; and a commitment to systems of care such as home visitation. The Maine Healthy Families Program, which Title V administers, provides home visits to first-time parents throughout the State. In seeking to promote positive parenting and healthy child growth and development, this program is central to preventing childhood trauma such as abuse and neglect and in supporting children already affected by trauma by connecting them as early as possible with preventive services so that they are poised to achieve optimal health and well being.

Finally, Title V coordination with Mental Health further strengthens our efforts to humanize and dignify the ways in which we all work, talk with, and relate to each other. And for us in Title V, such coordination is a timely opportunity to continue to change how we think about the public health of children so that it embraces the physical, social, emotional, spiritual, and environmental context of their lives; and to elevate parenting so that it is honored and celebrated as the most important of all occupations in our society. Our shared long-term goal is to apply what we learn from our partnerships so that Maine has collaborative and synergistic systems to support children, families, and communities in the healing, hope, and resiliency essential for the social and emotional components of healthy child development.

Maine utilizes the State Systems Development Initiative (SSDI) to increase the data collection and analysis functions of the Title V Program. SSDI funds are used to support a computer programmer position to work with many of the MCH related programs on the development of program specific databases for electronic data collection. The Access databases have proven useful to programs. For example the development of a program to cross match the electronic birth certificate (EBC) with the electronic newborn bloodspot screening results reduced a bi-weekly multi-hour process to a 10 to 15 minute process that can be conducted several times a week. The programmer is working with an Epidemiologist, the WIC program, the MCH Medical Director and Title V Director in developing a program that will link birth certificates with the WIC database to support cross analyses.

WIC's position within the Division of Family Health helps to ensure their investment and participation in MCH issues. They routinely work closely with the CSHN, PHN, and Genetics programs to help insure access to nutrition education and supplements critical to the well-being of residents at risk. They also routinely collaborate with the MCH Nutrition and Home Visiting Programs.

During the past two years, the Maine Chapter of the AAP and the State MCH Program in the Bureau of Health have coordinated on a number of efforts. This coordination is a vital way to maximize resources for child health advocacy in Maine. These efforts include the following:

1. Strong Maine AAP involvement in the State Task Force on Early Childhood and the Federal MCH Early Childhood Grant, "Humane Systems for Young Families in Maine". This involvement, especially the partnership between MCH Medical Director Dr. Aronson and retired Winthrop pediatrician, Dr. Burt Richardson, resulted in a successful Community Access to Child Health (CATCH) grant. This project aims to link families of all infants born during a one-year period in three Central Maine communities to their school systems and medical homes through promoting parent networks that aims to establish family parent networks starting at birth in several Central Maine communities.
2. A partnership between the Maine AAP Chapter and the State Children with Special Health Needs Program that, through another Federal MCH grant submitted by CSHN Director Toni Wall, will enable the Chapter to start up a Web Site in the summer of 2005.
3. A collaborative effort, "Physicians and Schools Working Together", to strengthen the leadership role of pediatricians in Maine schools, and specifically linking them to the School Health Coordinators. A June 2004 meeting of Title V, the Coordinated School Health Program, Maine AAP, and the Maine American Academy of Family Physicians resulted in the following recommendations that we are now starting to refine and implement:
 - Clarify role of school physicians as child advocacy and systems change leaders rather than just clinical services.
 - Establish a joint Maine AAP and Maine AAFP Chapter school health committee.
 - Develop and disseminate basic information to primary care physicians.
 - Make presentations at Maine conferences on how to address key issues of interest to pediatricians and family practitioners through a coordinated approach, e.g. obesity, asthma
 - Look for grant funds to help develop or sustain this group.
 - Develop work group to discuss issues regarding cooperation between school based health centers and physicians.
 - Involve other interested parties/stakeholders, e.g. families, youth, other providers, administrators, Healthy Maine Partnerships school health coordinators and advisory council members.
4. An AAP grant that aims to strengthen the capacity of medical homes to manage children with asthma and their families, with support from Maine's Asthma Prevention and Control Program.

5. The Maine Oral Health Program is working with the Chapter to address ongoing oral health access issues. The Fall 2005 Maine AAP Annual Conference will highlight oral health for pediatricians.
6. The Bureau of Health, with strong Maine AAP support, received a one-year planning grant from the Maine March of Dimes to start up a maternal and infant mortality and resiliency review program. In addition, the Vice-President of the Maine ACOG Chapter played a key leadership role in the summer of 2004 for the maternal component of this review program. He strongly supported and helped with the grant preparation in September 2004, and has been promoting this effort at state and national ACOG meetings.
7. A Perinatal Substance Abuse Prevention Work Group, started up by Title V in October 2003, has strong representation from the Maine AAP Chapter.
8. The creation of the new Maine Health and Human Services Department provides an opportunity for the Chapter to support our Title V MCH vision for a public health systems approach to humanizing and dignifying policies and programs for children and families.

Maine Title V Programs are committed to collaborating with the many family and parent advocacy organizations throughout the state. We recognize that family, youth, and community involvement is essential when developing services, programs, policies, and systems that directly impact them. The Maine Parent Federation (MPF), Maine's largest parent organization, routinely collaborates with the CSHN Program on numerous initiatives. These efforts include:

- Project REACH, a collaborative effort to train parents and/or guardians on all aspects of parent leadership and advocacy.
- Family to Family Information Centers, the development of 6 regional sites has moved the CSHN Program forward in its efforts to establish community-based programs for children with special health needs. This initiative is currently funded through HRSA, MCHB, and DCSHCN grants with plans to move continued funding to the MCHBG.
- Family Voices is housed at MPF with combined efforts to enhance and improve health/health related services to children with special health needs and their families. Beverly Baker, Family Voices representative, is actively involved in Title V and American Academy of Pediatric medical home efforts, specifically the Medical Home Learning Collaborative.

The CSHN Family Advisory Council (FAC) is a partnership between the CSHN Program and parents of children with special health needs. The FAC strives to enhance, maintain, and improve the functioning and quality of life for all children and their families. Collaborative efforts include:

- Development and distribution statewide of the Health Care Notebook, a record keeping tool for parents.
- Continued support for the annual Parent Conference.

- Continued participation in all efforts to enhance family-centered care in all aspects of MCH.

Southern Maine Parent Awareness coordinates activities such as working with parents on special education and disabilities, in York and Cumberland counties and the city of Lewiston.

Finally Child Mental Health Services sponsors Gaining Empowerment Allows Results (GEAR), a program of Crisis Counseling and Supports. GEAR empowers parents of children with special health needs to make decisions based on individual strengths and needs. There are 19 groups across Maine. The MPF collaborates with GEAR to provide support and resources.

As Maine moves forward to “foster the conditions that enable the CSHN Program to move from a program with a direct care focus to one with a community-based focus” it is critical that we identify and establish collaborative relations with key partners in the design and implementation of a system of care for children and youth with special health needs (CYSHN). Many of these collaborative relationships have been established through multiple initiatives involving various state agencies, private organizations, families, youth, and others interested in creating a system of care for CYSHN. Key partners include state agencies, MaineCare (Medicaid), Anthem Blue Cross Blue Shield, the Maine Chapter of the AAP, tertiary medical facilities, early intervention agencies, parent advocacy organizations, Family Voices, University Center for Excellence in Developmental Disabilities (UCEDD), families and youth. Coordination efforts which address state support for communities, coordination of health components of community-based systems, and coordination of health services with other services at the community level include:

- *Healthy and Ready to Work*, a youth transition systems initiative involving multiple partners to ensure that youth transition to adult health care, employment, post secondary education and independence. Partners include UCEDD, Departments of Labor, Education, Behavioral and Developmental Disabilities, early intervention systems, the Maine Chapter of AAP, Family Voices, Maine Parent Federation, Maine Support Network, the CSHN Family and Youth Advisory Councils, MaineCare, and Advisory Council to Special Family Weekend.
- *Champions for Progress*, a medical home initiative that assisted the Maine Chapter of AAP in the development of the chapter website and a survey of all its members on medical home. Partners include Maine Support Network, Maine Chapter of AAP, and the CSHN Family and Youth Advisory Councils.
- *Partners in Chronic Care*, a multi-systems approach to provide care coordination in the primary care setting for families with special health care needs. Partners include the Hood Center for Children and Families at Dartmouth Medical Center, Maine Chapter of AAP, Anthem Blue Cross/Blue Shield, Maine Care, families and youth.
- *Family to Family Resources Centers*, provides training and leadership skills to parents of children with special health needs. Partners include Family Voices, Maine Parent Federation and the CSHN Family Advisory Council. Funding provides parents the ability to access training.
- *Traumatic Brain Injury Initiative*, a state systems approach to building a system that is responsive to the needs of individuals with TBI across the life span and their families. Partners include Departments of Education, Correction, Labor, Child and Adult Mental

Health Services, Injury Control Programs, Bureau of Elder and Adults Services, Providers of services, hospitals and individuals with TBI and family members.

- *Medical Home Learning Collaborative*, implements medical home improvement activities at both the practice and state level. Partners include Maine Chapter of AAP, private practices, Maine Support Network, Family Voices and MaineCare.

State support to communities is in the form of grants or contracts to community partners and tertiary medical facilities. These include the provision of services for Spina Bifida, Cystic Fibrosis, Cerebral Palsy, Cleft Lip and Palate, Metabolic Disorders, Oncology and Hematology, Hemophilia, and Developmental Evaluation Clinics.

Members of the CSHN Family Advisory Council and the Youth Advocators and Educators of Maine participated in the needs assessment dialogues. The CSHN Family Advisory Council annually completes Form 13 of the MCHBG application.

Preventive and primary care services for pregnant women, mothers, and infants

Services for prenatal and postpartum care are provided through the private provider practices (OB/GYN, family practice, nurse practitioners, and midwives), federally funded health centers, city public health clinics (Portland), and hospital based clinics. Additional preventive and support services are provided in the home via PHN, contracted Community Health Nurses (CHN), and home visitation programs such as Healthy Families (HF), Parents as Teachers (PAT), and Parents Are Teachers Too (PATT) programs. Monies from Maine's Tobacco Settlement (Fund for a Healthy Maine, FHM) have been appropriated for the expansion of visitation via the HF, PAT, and PATT models. As the number of home visit providers has increased, agencies (state and community) have needed to be diligent in identifying and eliminating duplicative services.

Primary and preventive care services for infants are provided through private provider practices (by physicians, nurse practitioners, and physician assistants with specialization in pediatrics and family practice), and hospital based clinics. The Title V Program is starting to promote the concept of the health home model for all categories of the MCH population. The health home is a modification of the American Academy of Pediatrics (AAP) Medical Home model developed for children with special health needs. A health home goes beyond the medical home in that it explicitly integrates mental health and oral health into the Medical Home Concept, encompasses challenges such as how the Medical Home can best interface with education, and includes a deeper level of collaboration as we have described in this Comprehensive Strengths and Needs Assessment. Like the Medical Home, it is not a building or physical facility, but rather a system that taps into the synergy and synchronicity that provide the foundation for partnerships, as described in the Needs Assessment Partnership Building and Collaboration Section, that unite and integrate into a rainbow like web of humane support for all families.

Preventive and primary care services for children

As with infants, the provision of preventive and primary care services is provided primarily by private provider practices composed of physicians, nurse practitioners, and physician assistants with specialization in pediatric and family practice.

Services for CSHN

Pediatricians and Family Care Physicians provide primary and preventive care services for children with special health care needs and their families. Specialty care services are provided through individual specialists, group practices, and hospitals including outpatient clinics. The service delivery mode is dependent on the availability of the service in Maine (for example, we don't have a pediatric rheumatologist), a family's choice to seek services outside of Maine, and a child with a compromised, significant or rare medical condition's need for specialized services in another state.

Payers of specialty services include MaineCare (Medicaid), private insurers, and Title V, specifically the CSHN Program. The MCH Nutrition Program and WIC pay for some medically necessary formulas. MaineCare covers primary and most specialty services for children with special health needs with the exception of foods for children with PKU or other metabolic disorders, implants for children with craniofacial disorders and orthognathic surgery for children with clefts. The benefit packages for private payers vary across insurers. For those services not covered, the CSHN Program will assist families with the appeals process and if deemed medically necessary will cover the service.

The CSHN Program pays for special medical services for children who are both medically and income eligible. Currently the CSHN Program covers children up to 250% of the Federal Poverty Level. In addition, the program coordinates and staffs the Southern Maine Cleft Lip and Palate Clinic, and ensures, through grant monies, the provision of specialty clinic services for Spina Bifida, Metabolics, the Northern Cleft Lip and Palate Clinic, Developmental Disabilities Clinics, Hemophilia, Oncology, Cystic Fibrosis, and Cerebral Palsy Clinic.

CSHN staff provide care coordination to all program clients, assist agencies in locating resources for clients, coordinate with schools and early intervention agencies in the provision of appropriate services to assist the child and family, and provide transportation and lodging services to clients. Public Health and Community Health Nursing provide assessment, preventive education and access to additional resources to CSHN clients via home visitation. Key to the success of any community-based program is the collaboration/cooperation with local primary care providers to assure statewide access to quality services. The CSHN Program continues to strengthen its partnership with the Maine Chapter of the AAP and its members to spread the concept of medical home. Finally, the CSHN Program ensures that families and youth are involved in the development of policies that directly affect them through established advisory council: the Family Advisory Council (FAC) and the Youth Advocators and Educators of Maine (YEA ME). Their connections with the community have proven invaluable.

Standards of Care/Quality Assurance/Research

All HMOs in Maine along with MaineCare have adopted the Bright Futures Guidelines and physician report cards as part of an on-going monitoring system. The Childhood Lead Poisoning Prevention Program (CLPPP) is working with MaineCare to assess the proportion of children insured through MaineCare who receive a blood test for lead poisoning at 1 and 2 years of age. There has been a long standing discrepancy between the CLPPP and MaineCare screening data. The new Acting Director of the Bureau of Medical Services (the state Medicaid agency) recently charged her agency to work with the CLPPP to accurately identify the proportion of MaineCare children who are screened. This is providing a first time opportunity to link CLPPP data directly with MaineCare data. A workgroup was formed to review existing data collection methods and to determine how the Bureau of Medical Services (BMS) and CLPPP could make the data match occur. A component of this process was the assignment by BMS and CLPPP of unique identifiers to the children to protect confidentiality. Some preliminary data sampling has occurred and is being reviewed for accurate data match. The next step will involve a full data match.

Programs such as Public Health Nursing (PHN) and Home Visiting have set up quality assurance and improvement processes. In January 2003, Public Health Nursing began using an electronic documentation and information management system based on the Omaha Nursing classification system, called CareFacts. The system requires documentation on the outcomes of clients served through PHN, and the PHN leadership team (Director, Consultants and Supervisors) provides leadership on organization based quality improvement (QI) and also support unit level QI activities. The QI activities related to home visitation are a combination of provider agency initiated and an overall system and program evaluation.

The Title V Program successfully applied for a March of Dimes planning grant for the purpose of developing a Maternal and Infant Mortality and Resiliency Review Program. The planning grant began in January 2005 and will take the full year to outline the structure and responsibilities of the Review Panel, Community Action, and Resiliency Teams, as well as an implementation plan and timeline. Title V has mobilized about 100 people from a wide array of sectors who are committed to making maternal and infant mortality review a reality for Maine. The resiliency component of this project (i.e. what enables families to do well in the midst of adversity) is unique and fits in with our efforts to approach MCH issues with strategies that increase protective factors as well as those that reduce risk. In addition, the MCH Medical Director and one of the PHN Supervisors continue to participate on the Child Death and Serious Injury Review Panel which meets monthly, and every effort is taking place to assure that the maternal and infant review process is in synch with the child panel.

5. SELECTION OF STATE PRIORITY NEEDS

The Maine MCH Title V Program uses the 1988 Institute of Medicine definition of public health as “the process of assuring the conditions in which people can be healthy”. The Maine Title V Program is rooted in the vision that families and communities, and our state as a whole thrive when children of all ages enjoy optimal health; feel physically and emotionally safe; are treated with dignity and respect; enter adulthood equipped with intense curiosity about the world, a deep desire to learn, a resilient spirit, and a healthy balance of cognitive and emotional skills; and have a sense of purpose, hope, and power about their lives, so that they can become compassionate and productive individuals.

The priorities selected for the next five years were developed based upon the in-depth analysis of the health of the MCH population through quantitative and qualitative data. While the priorities are listed as 1-10, this does not mean that number 1 has a higher rating than 10. From the Title V Program perspective, they are all of equal value. The priorities are very broad in nature. This was intentional in that all people who work with and care about the MCH population have a stake in working together in a synergistic way on achieving these priorities. Also, while the MCH Block Grant is the fuel that drives our leadership, the MCH Title V Program is much more than the Block Grant itself. In addition, we decided to word the priorities in positive phrases such as “improve”, “increase”, and “foster conditions” to reflect our commitment to measuring strengths as well as needs.

Although the priorities are broad, they are more specific than the priorities selected in 2000. The 2000-2005 priorities were more focused upon how we would achieve our work and a couple of specific health priorities. The 2005-2010 priorities identify specific areas of health, but at the same time are broad enough to ensure inclusion of the whole MCH population in focused activities and in all aspects of a priority. We felt that too much specificity would jeopardize the obvious importance of many issues not making the list, and give the false impression that we favor addressing only certain segments and age groups of the MCH population.

The 10 priorities and the rationales are as follows:

1. Improve Birth Outcomes

While Maine does better on many birth outcomes than does the nation as a whole, the state has not yet met many birth-related Healthy People 2010 and Healthy Maine 2010 objectives, and the proportion of premature births has increased significantly during the past decade. We view the following objectives as examples of what we intend to address for achieving this priority: reductions of prematurity, low birth weight, and perinatal morbidity and mortality, including perinatal substance abuse; reductions in teen pregnancy; and increases in social support for pregnant women and early prenatal enrollment for WIC and home visiting.

2. Improve the safety of the MCH population, including the reduction of intentional and unintentional injuries

Unintentional injuries are the leading cause of death for 1-19 year olds and the second leading cause of death for women ages 20-44 in Maine. Unintentional injuries also are one of the most common principal diagnoses of hospitalizations among these groups. Suicide is the second-leading cause of death among 15-24 year olds and the fourth leading cause of death among women ages 20-44 in the state. The definition of safety encompasses physical, psychological, and emotional safety and includes a public health approach to the prevention of violence. Injuries range from those sustained in automobile crashes or falling off the equipment at the playground to those intentionally inflicted by another or by oneself. The ability of our families and children to feel safe at all times is paramount and this can only be accomplished through a variety of mechanisms to include a wide variety of violence prevention, including domestic, physical, sexual, child abuse and neglect, bullying, suicide and poisoning prevention initiatives.

3. Improve the respiratory health of the MCH population

Almost 1 in 11 kindergartners in Maine have asthma, as do nearly 1 in 8 women ages 18 and older. Only 37% of the kindergartners with asthma have a written management plan. Asthma also is one of the most common principal diagnoses in hospitalizations of 1-9 year olds in the state. Smoking, and second-hand smoke affect the respiratory health of a large proportion of the MCH population in Maine. Research has shown that children are able to learn and adults are more productive if living and working in healthy environments. We feel this can only occur if we support efforts that include the reduction of environmental [indoor and outdoor] hazards, such as first and second hand smoke, mold, and smog; and the reduction of the incidence and burden of asthma.

4. Increase the proportion of the MCH population who are at a healthy weight and physically active

Large segments of the MCH population in Maine are overweight or at risk for overweight. The problem begins in early childhood (where 16% of 2-4 year olds enrolled in WIC are overweight and another 17% are at-risk-for-overweight) and continues through adulthood (where nearly half of women aged 18 and older are at risk for health problems related to being overweight). In addition, significant proportions of the Maine MCH populations are not physically active. For all our children, including CSHN and people with disabilities, to thrive and be healthy and happy they need to engage in physical activity and have access to information on nutrition as well as nutritious food. This is an area that a wide range of partners in public health can contribute to both individually and collectively.

5. Improve the mental health system of services and supports for the MCH population

Mental disorders affect a large proportion of the MCH population in Maine. For example, these disorders are one of the most common principal diagnoses for hospitalizations among Maine children ages 5-19 and Maine women 20-44 years old. One study estimated that 1 in 6 rural Maine children has a behavioral health problem. One in four high school students reported feeling so sad or hopeless for 2 or more weeks in a row that they stopped doing some usual activities. More than half of all new mothers in the state reported at least some degree of postpartum depression. Mental health and the lack of available services, as well as family stress, were identified as key needs by dialogue group participants. When we use the word “mental health”, we are including all aspects of social, emotional, and behavioral health as important components of the mental health system. It is time to formalize the reality that mental health is integral to MCH. Research indicates that a large percentage of children with the most significant behavioral and emotional symptoms never receive any services at all. A lack of licensed clinicians and psychiatrists results in primary care physicians having to provide services. Through enhanced partnerships with our colleagues in mental health at the state and local level, and through such initiatives as the Behavioral Women’s Health Grant, Early Childhood Comprehensive Systems Grant, and the Harvard Prevention Resource Center we will aim to integrate mental health into primary health for the MCH population.

6. Foster conditions to improve oral health services and supports for the MCH population

Our state’s large geography coupled with a shortage of dentists has resulted in large numbers of the MCH population lacking adequate dental care. Dialogue group participants identified the lack of dental care resulting primarily from a demand that exceeds the number of providers as a key issue in the state. Poor oral health can and does impact the overall health of individuals. We will work to support efforts that enable increased access for our children and families to integrate oral health into primary health care and schools for the MCH population.

7. Foster the conditions that enable the CSHN Program to move from a direct care focus to a community-based system of care that enables the whole CSHN population to achieve optimal health

CSHN must have the opportunity to achieve their optimal potential in all areas of health and development. We can be much more successful in this effort through systemic change that uses a public health approach to serving this population. Our challenge is to transform our CSHN Program so that it aims to put into practice systems of care that support family-centered and culturally and linguistically competent service in all communities for all children with special health needs.

8. Foster conditions to expand the medical home model to a comprehensive health home system for the entire MCH population

We know that the quality of life for families improves when obstacles to needed services and resources are removed. Our care coordination approach, as currently incorporated into the medical home model for children with special health needs, is an example of what we should make available to the whole MCH population. A Health Home includes but goes beyond the Medical Home. It is rooted in our vision of health and includes the physical, mental, emotional, and spiritual realms of the person and family. It represents a standard that we will aim to make available for all children in our state.

9. Improve cultural and linguistic competence within the system of services for the MCH population

It is essential that we honor and respect the culture and language of all children, families, and communities in Maine; and that we incorporate cultural and linguistic competence into every aspect of MCH in Maine. Such an approach is necessary in aiming to move toward the Healthy People 2010 objective of 100% access to health care and zero disparities in health status for all citizens. It depends on the capacity of all of our health and human systems, including education, childcare and mental health, to deliver culturally and linguistically competent care and services. Dialogue group participants felt that Maine is not yet doing a very good job of supporting issues of diversity and culture and that this is an important issue to address. We will begin this process by first conducting a self-assessment of cultural and linguistic competence within the Title V Agency and MCH supported agencies, and identify organizational goals and actions for improvement. We will use these self-assessments to work with our partners on areas of improvement.

10. Integrate existing services and supports for adolescents and young adults into a comprehensive system that draws upon their own strengths and needs

To foster life-long healthy habits and health, youth need services, supports and opportunities. Health care services, including oral and mental health care, must be provided where young people are and be sensitive to the unique concerns and barriers that they face. Supportive environments and adult allies can help them develop competencies and connections that help prevent unhealthy risk behaviors and promote overall health. Actively partnering with youth in meaningful ways fosters conditions for successful endeavors and continued participation.

The Maine Title V Program has selected 7 performance measures related to the above priorities. We anticipate over the next two to three years we will develop one to three additional measures related to the 10 priorities. Areas under consideration for developing future state performance measures include: tobacco use in pregnancy, mental health, cultural and linguistic competence, early childhood, child abuse, and something state specific related to asthma. The performance measures selected for Maine are:

1. The percentage of births in women less than 24 years of age that are unintended.
2. The percentage of 0-11 month old children enrolled in WIC who were ever breastfed.
3. The motor vehicle death rate per 100,000 among children 15 to 21 years of age.
4. The percentage of high school students (grades 9-12) who are overweight.
5. The percentage of high school students (grades 9-12) who feel like they matter to people in their community.
6. The percentage of elementary schools that have developed and implemented a comprehensive approach to the prevention of bullying in collaboration with the Maine Injury Prevention Program.
7. The rate per 1,000 of emergency department visits for asthma among women ages 15-44.

6. NEEDS ASSESSMENT SUMMARY

We were guided in the selection of the priority needs by the quantitative and qualitative analyses we completed. For example, quantitative data (e.g., hospital discharge, YRBS, PRAMS) showed that mental disorders are an important issue affecting the MCH population in Maine. Qualitative data from the dialogue groups also identified mental health and the lack of available services, as well as family stress as key needs. As such, one of our new priority areas is to improve the mental health system of services and supports for the MCH population.

The assessment work group consisted of the Title V Director, MCH Medical Director, CSHN Director, Epi Team member and CSNA writer. We developed our 10 priorities based on the data results. We presented the priorities to Title V Program Managers, a wide array of stakeholders, and the public at large for their review and response, including all of the participants in the dialogues. From the responses, we finalized the priority list.

The priorities are broad in nature. This was intentional in that all people who work with and care about the MCH population have a stake in working together in a synergistic way on achieving these priorities. Furthermore, the wording of the priorities, expressed in terms such as “improve”, “increase”, and “foster conditions”, reflect our commitment to viewing MCH issues within a positive context and our vision for this document as a strengths and needs assessment.

Although the priorities are broad, they are more specific than the priorities selected in 2000. The 2000-2005 priorities focused more on how we would achieve our work. The 2005-2010 priorities identify specific areas requiring health status improvement, but at the same time are broad enough to ensure inclusion of the whole MCH population in focused activities and in all aspects of a priority. We felt that too much specificity would jeopardize the obvious importance of many issues not making the list, and give the false impression that we favor addressing only certain segments and age groups of the MCH population. Our priorities, not expressed in rank order, are the following:

1. Improve birth outcomes
2. Improve the safety of the MCH population, including the reduction of intentional and unintentional injuries
3. Improve the respiratory health of the MCH population
4. Increase the proportion of the MCH population who are at a healthy weight and physically active
5. Improve the mental health system of services and supports for the MCH population
6. Foster conditions to improve oral health services and supports for the MCH population
7. Foster the conditions that enable the CSHN Program to move from a direct care focus to a community-based system of care that enables the whole CSHN population to achieve optimal health
8. Foster conditions to expand the medical home model to a comprehensive health home system for the entire MCH population
9. Improve cultural and linguistic competence within the system of services for the MCH population

10. Integrate existing services and supports for adolescents and young adults into a comprehensive system that draws upon their own strengths and needs

The MCH Dialogues in the fall and winter of 2004-2005 confirmed what we had hypothesized going into the Assessment: That we have made great strides in partnership building and collaboration during the past five years. Some examples include:

1) Enhanced partnerships between the Title V Agency and the Maine Chapter of the American Academy of Pediatrics; 2) Collaboration among Title V, the CDC funded Coordinating School Health Program, the Department of Education, AAP, Academy of Family Physicians, and schools; 3) A new statewide Maternal and Infant Mortality and Resiliency Review Program; 4) The success of the Early Childhood Comprehensive Systems Grant in uniting people from the public and private sectors and from the state and local level; 5) Improved collaboration between the CSHN Program and the Bureau of Medical Services; and 6) A commitment to involve family representation within all of our programs.

Internal to the MCH Title V Program is our much strengthened epidemiological capacity through the addition of several new staff. We are now able to assign a liaison to each program within MCH permitting the epidemiologists to develop expertise about a program and its relevant data resources. This enhanced epi capacity will have a positive long-term impact on our ability to collect, track, analyze, and apply accurate data to program planning and design.

On the other hand, we continue to be challenged in our work by ongoing federal and state budget reductions. Therefore, during the next two years we will carry out a detailed review of how we are utilizing our Maternal and Child Health funds, both federal and state, and make necessary adjustments so funding is more closely aligned with our priorities.

In spite of the many challenges that we face, Maine people and organizations come together to help their neighbor or anyone in need. We have put a great deal of energy into cultivating and strengthening these relationships in recent years and feel that our collaborative efforts will pay off as we embark on our next 5-year journey to improve the lives of the children and families of Maine.

7. HEALTH STATUS INDICATORS

Multi-year health status indicators are reported on Form 20. Single year health status indicators are reported on Form 21, both for the state overall and by race and Hispanic ethnicity. Additional information on select health status indicators (e.g., low birthweight, fatal unintentional injuries, poverty, geographic living area) is provided in our comprehensive strengths and needs assessment. In reviewing Form 21 Readers should be **very cautious** when comparing numbers on the "All children 0 through 19" line with the numbers for any given program for the following reasons:

1. The "All children" numbers (obtained from the U.S. Census Bureau) uses a different set of race categories than that used by most programs indicated on Form 21. As such, a given child could be counted in different race categories on different lines of the form. For example, a child whose mother is white and whose father is black would be included in the "More than one reported" category on the "All children" line, but might be included in the "Black or African American" category on the "Number enrolled in Medicaid" line. (This likely is a major part of the explanation why there appears to be more Black or African children enrolled in the Medicaid program than are living in the state.)
2. Race is unknown for a large proportion of the children in certain programs.
3. The "All children" numbers are estimates; the program numbers are actual counts.
4. The "All children" numbers are as of July 1, 2003 while many of the program numbers are from other time periods.
5. The "All children" numbers are for 0-19 year olds and the WIC numbers are for 0-4 year olds.

We **strongly** recommend that readers do not calculate percentages using the "All children" numbers as the denominator.

8. OUTCOME MEASURES

This report discusses Maine's progress toward the six National Outcome Measures. No additional state outcome measures were added. Maine compares favorably with the nation, although we do not do as well as several other states on these measures. Detailed discussion of the outcome measures is included in the Mortality section of this comprehensive strengths and needs assessment, pages 43-49.

Both national and state performance measures contribute to Maine's achievement of the outcome measures. Thinking broadly they are as follows:

Outcome Measure #1: NPM 1, 7, 10, 11, 13, 15, 17, 18, SPM 2, 3

Outcome Measure #2: NPM 1, 7, 10, 11, 13, 15, 17, 18, SPM 2, 3

Outcome Measure #3: NPM 13, 15, 17, 18, SPM 2

Outcome Measure #4: NPM 11, 13, 15, 17, 18, SPM 2

Outcome Measure #5: NPM 13, 15, 17, 18, SPM 2

Outcome Measure #6: NPM 1, 7, 10, 13

The only significant change in activity currently on the horizon that is likely to influence achievement of the national outcome measures is the development of a maternal and infant mortality and resiliency review (MIMRR) panel. As mentioned earlier, the Bureau of Health received a grant from the Maine Chapter of the March of Dimes to plan the development of a MIMRR. Initiation of reviews by the MIMRR panel will begin sometime in calendar year 2006.

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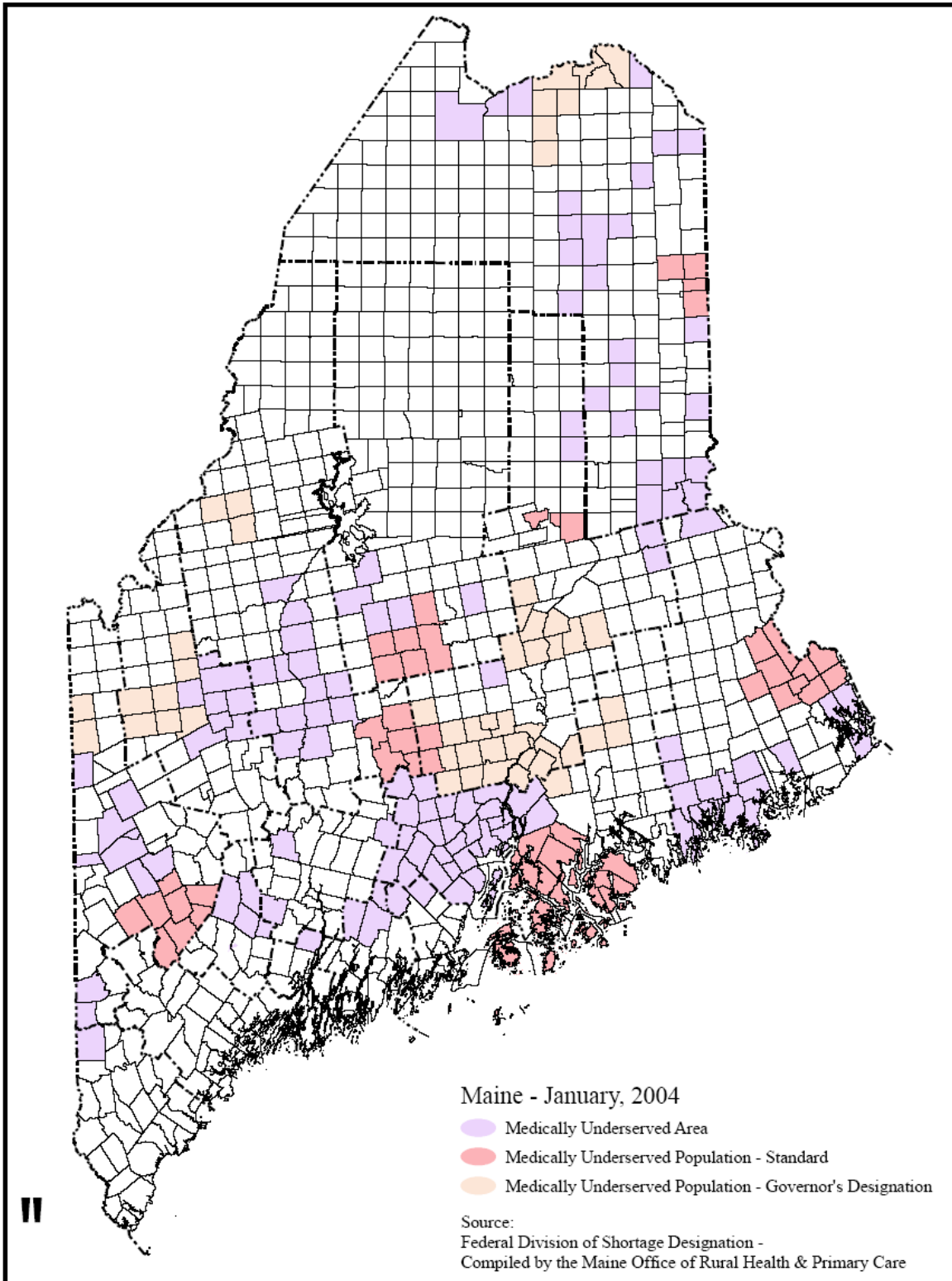
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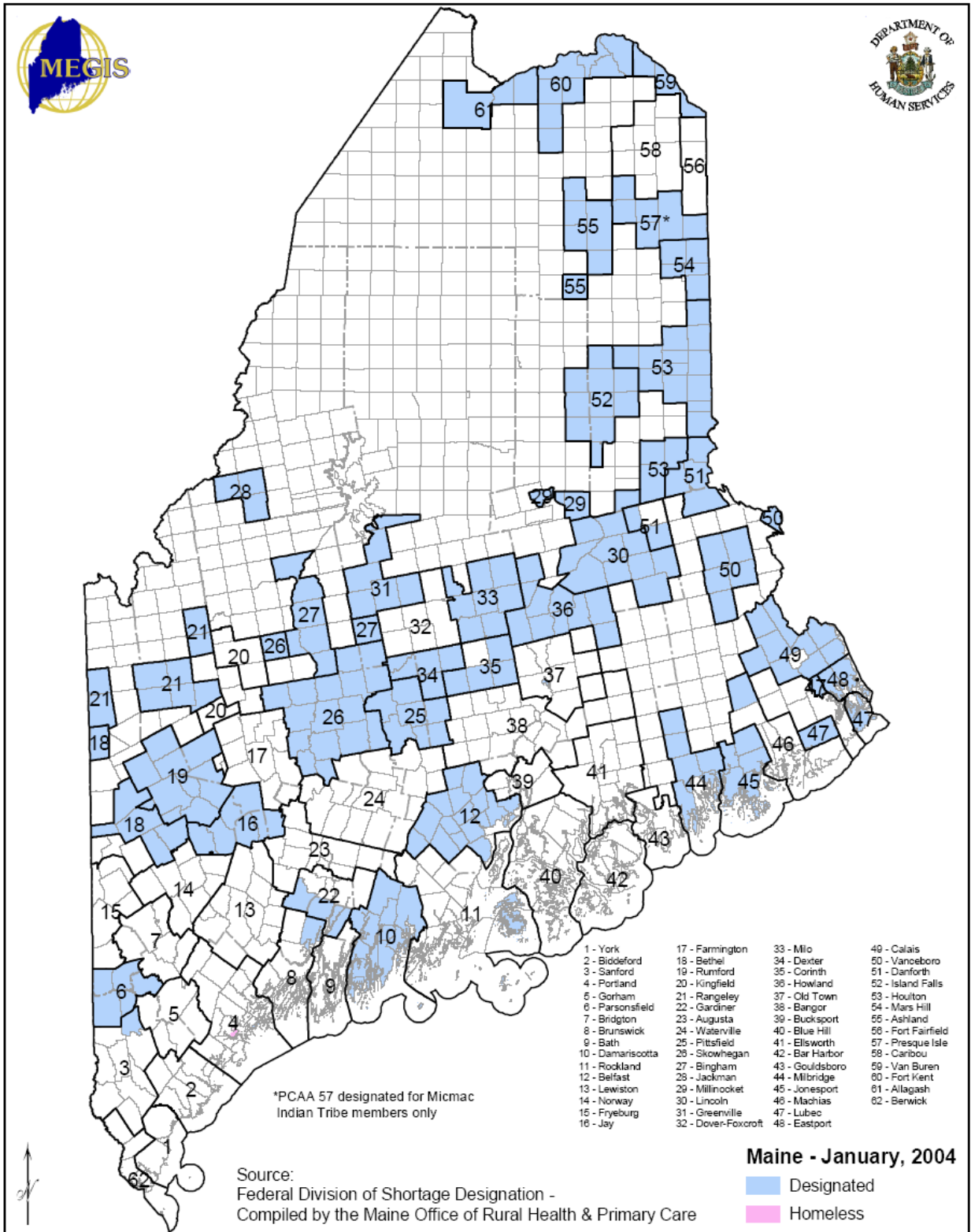
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Appendix

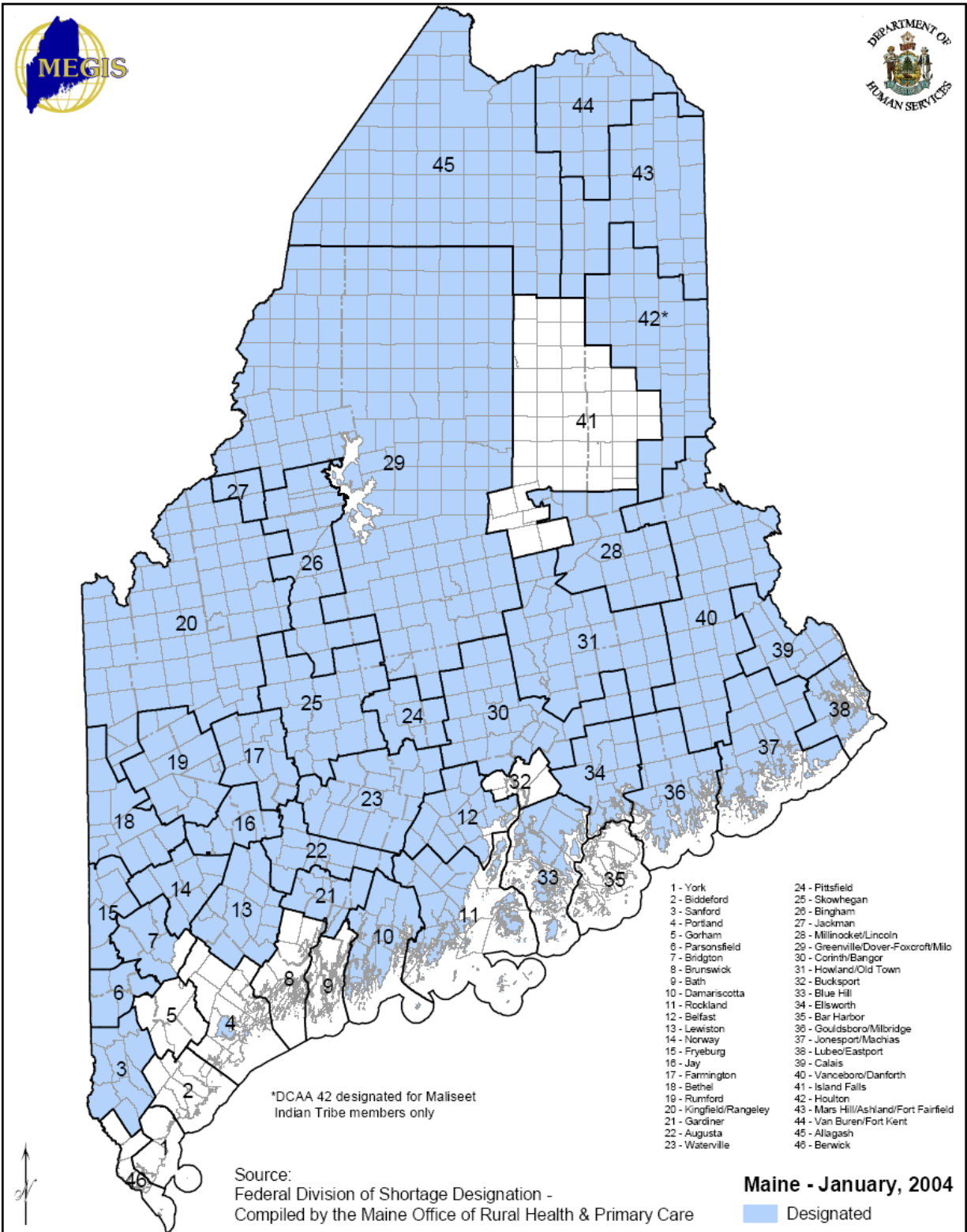
- Map: Federally designated medically underserved areas and populations, Maine¹³⁴
- Map: Federally designated primary care health professional shortage areas, Maine¹³⁵
- Map: Federally designated dental health professional shortage areas, Maine¹³⁶
- Map: Federally designated mental health professional shortage areas, Maine¹³⁷



Federally Designated Primary Care Health Professional Shortage Areas



Federally Designated Dental Health Professional Shortage Areas



Federally Designated Mental Health Professional Shortage Areas

