MONITORING TRENDS IN MATERNAL AND CHILD HEALTH: REPORT AND RECOMMENDATIONS OF THE MATERNAL AND CHILD HEALTH ADVISORY TASK FORCE

DECEMBER 2006

MONITORING TRENDS IN MATERNAL AND CHILD HEALTH: REPORT AND RECOMMENDATIONS OF THE MATERNAL AND CHILD HEALTH ADVISORY TASK FORCE

DECEMBER 2006

2006 Maternal and Child Health Advisory Task Force Members

CONSUMER MEMBERS

Carolyn Byers Anderson
Bloomington, MN
(3/10/06 – 9/15/06)

Coral Garner
Dir., Community & Public Health Initiatives
Dept. of Health & Family Support
City of Minneapolis

Carol Grady
St. Paul, MN

Jean Larson
Public Health Analyst
St. Louis Co. Public Health & Human Services
Duluth, MN
(3/21/03 – 3/10/06)

Allison Senogles
Burnsville, MN

COMMUNITY HEALTH BOARD MEMBERS

Karen Adamson, PHN, MPH
Prog. Manager, Children, Youth & Families
Henn. Co. Human Services & Public Health

Neal Holtan, MD, MPH
Medical Director
St. Paul-Ramsey Co. Dept. of Public Health
   Alternate:
   Deborah Hendricks, RN, MPH
   Healthy Families Section Manager

Mary Jungwirth, PHN
MCH Coord., Countryside Public Health

Donna Lappe, PHN
Jackson Co. Public Health Nursing Service

Bev Wangerin
Commissioner, McLeod County

PROFESSIONAL MEMBERS

Linda Bearinger, PhD, RN, FAAN
Prof. and Dir., Center for Adolescent Nursing
School of Nursing, U of M

Richard Lussky, MD, MPH, FAAP
Co-Medical Dir., Newborn ICU, Henn. Co. Med. Ctr.
Assistant Professor of Pediatrics, U of M

Jessie Kemmick-Pintor
Supervisor of Planning & Operations
Youth Health Education, Centro, Inc., Minneapolis

Linda Matti, RN, MSN
Administrator for Multicultural & Leadership Dev.
Mayo Foundation, Rochester

Noya Woodrich, Chair
Executive Director, Division of Indian Work
Senior Vice Pres., Greater Mpls. Council of Churches

EX-OFFICIO MEMBERS

Kenneth Bence, MHA, MBA
Director, Community Health Initiatives
State Public Programs, Medica

Amos Deinard, MD, MPH
Dept. of Pediatrics, U of M

Marianne Keuhn
Director, Program Services
Minnesota Chapter, March of Dimes

Joan Patterson, PhD
MCH Program, Div. of Epi & Community Health
School of Public Health, U of M

Susan Castellano
MCH Assurance Manager
Perf. Measurement & Quality Improvement
Department of Human Services

Kathy Brothen
HIV Prevention Education Coordinator
Department of Education

VACANT - Office of Minority & Multicultural
Health Advisory Committee

PREVIOUS MEMBERS FOR THE 2003 TO 2006 TERM

Carolyn Allshouse (3/03 – 12/05) Consumer Member
Lazette Chang-Yit   (3/03 – 12/04) Consumer Member
Mary Lee Fredrickson (3/03 – 6/05) Consumer Member
Mitchell Davis (5/03 – 8/05) Ex-officio, Office of Minority & Multicultural Health Advisory Committee

MONITORING TRENDS IN MATERNAL AND CHILD HEALTH:
REPORT AND RECOMMENDATIONS OF THE MATERNAL AND CHILD HEALTH ADVISORY TASK FORCE

Executive Summary and Overview of the Recommendations

This report on trends in the health status of mothers, infants and children in Minnesota and the accompanying recommendations are the culmination of a multi-year project of the Maternal and Child Health (MCH) Advisory Task Force. The MCH Advisory Task Force was created by the Minnesota Legislature in 1982. The duties of the 15 member commissioner appointed Task Force are set out in Minnesota Statute section 145.881, and include advising the Commissioner of Health on:

- the health care needs of mothers and children throughout Minnesota;
- the type, frequency, and impact of maternal and child health services in the state; and
- priorities for funding maternal and child health services.

In the first phase of this project, a task force workgroup conducted interviews with public health staff in seven locations throughout Minnesota. The work group developed a set of questions about access to health and health related services for mothers and children. Local public health staff and administrators that were involved with the coordination and delivery of maternal and child health services for their community were chosen as the participants. These staff had first hand knowledge of the health care needs of mothers and children in their community, the services available to meet those needs, and the impact of recent budget and policy changes in the delivery of or access to services.

In the second phase of this project, three workgroups were formed to study quantitative data on the common themes identified in the interviews with local public health staff. The three task force workgroups were the perinatal health work group, the children and adolescent work group and the children and youth with special health care needs work group. The work groups used existing data to assess health status and trends. Based on the findings from this data and their expertise on public health interventions, the work group members developed, and task force members approved, recommendations and strategies to improve health outcomes for mothers and children in Minnesota for ten priority areas.

The recommendations for the ten priority areas are presented below, organized by population groups. The full report contains both the recommendations and strategies to address the recommendations.

Perinatal Health: Women of Child Bearing Age, Pregnant Women and Infants

Priority Area: Reduce infant mortality

    Recommendations:
1. Maintain current surveillance activities and explore new methodologies that may assist in identifying targeted populations or enhance understanding of trends and disparities.
2. Improve access to preventive services for mothers and infants by continuing to support grant programs such as Family Home Visiting and the Eliminating Health Disparities Initiative, by providing technical assistance and training, and by supporting the work of programs such as MN Sudden Infant Death Center and Twin Cities Healthy Start.
3. Focus efforts on eliminating racial and ethnic health disparities.
4. Collaborate with all partners to enhance and coordinate activities targeted at reducing infant mortality rates.

Priority Area: Reduce preterm and very preterm births

    Recommendations:
5. Promote healthy behaviors such as smoking cessation that are shown to reduce preterm and very preterm births.
6. Collaborate with all partners to enhance and coordinate activities targeted at reducing preterm and very preterm births.
7. Promote implementation of best practices by public health and primary care providers that improve birth outcomes.

Priority Area: Promote preconception and interconception health care

    Recommendations:
8. Maintain current surveillance activities and explore other data sources that may assist in identifying targeted populations or enhance understanding of issues, trends and disparities.
9. Promote and improve access to preconception and interconception health care.
10. Promote and improve access to family planning services.
11. Promote implementation of best practices by public health and primary care providers that improve birth outcomes.
12. Collaborate with all partners that serve racial and ethnic populations to enhance and coordinate activities targeted at improving preconception and interconception health care.

Children and Adolescents

Priority Area: Prevent child maltreatment

    Recommendations:
1. Maintain current surveillance activities and explore other data sources to better understand the contributing factors for child maltreatment and develop prevention strategies.
2. Promote healthy behaviors through activities such as promoting public understanding of child abuse prevention, implementing CDC health promotion strategies and promoting home visiting.
3. Collaborate with partners to enhance and coordinate activities targeted at preventing child maltreatment.
4. Promote implementation of best practices by local public health and others that promote healthy behaviors and prevent child maltreatment.

Priority Area: Promote the mental health of children and adolescents

    Recommendations:
5. Promote healthy behaviors by supporting a public health model of mental health promotion.
6. Collaborate with partners to enhance and coordinate activities targeted at promoting mental health.
7. Increase access to mental health assessments and services for children and adolescents and their families.
8. Strengthen capacity and infrastructure within the state to support mental health promotion and wellness.

Priority Area: Prevent underage alcohol use

    Recommendations:
9. Promote healthy behaviors by providing training, technical assistance and consultation on underage alcohol use prevention to local public health, tribal governments and community based organizations.
10. Foster relationships with partners to assure that programs are community driven and culturally appropriate.
11. Promote prevention efforts that focus on changing community norms.
12. Promote effective strategies to reduce youth access to alcohol.

Priority Area: Prevent teen pregnancy

    Recommendations:
13. Focus available resources on eliminating racial and ethnic disparities in teen pregnancy rates, directing resources to those organizations already serving youth of color and American Indian youth successfully.
14. Improve data collection with populations at high risk of teen pregnancy and improve program evaluation efforts.

15. Promote healthy youth development as an essential method of preventing teen pregnancies. Support continuity of funding over time for programs that promote healthy youth development.
16. Increase access to family planning services through targeted outreach and funding.

Children and Youth with Special Health Care Needs

Priority Area: Promote early identification and early intervention for children with special health care needs

Recommendations:
1. Increase access to early identification and early intervention for all children. Concentrate outreach efforts on hard to reach families.
2. Assure coordination and collaboration of early identification and referral systems to eliminate duplication and assure that all children receive appropriate screening and intervention.
3. Improve identification and treatment of mental health problems that are secondary to physical health conditions or disabilities.

Priority Area: Promote access to health care and related services for children and youth with special health care needs

Recommendations:
4. Improve access to health care by promoting the need for adequate health insurance coverage for families that have high utilization of health care resources.
5. Identify issues that may pose barriers to access care and the impact on children with special health care needs and their families.
6. Improve geographic access to care when distance or other factors create barriers.

Priority Area: Promote comprehensive care and coordination of services for children and youth with special health care needs

Recommendations:
7. Collaborate with local public health and state partners in the development of comprehensive coordinated systems and services to children and youth with special health care needs, with a special focus on issues of transition to adulthood.
8. Provide leadership, technical assistance and guidance to health care providers, public health and others on service coordination and the development of systems of care.
9. Improve the quality of services that children and their families receive through implementation of medical homes.

Introduction

The Maternal and Child Health (MCH) Advisory Task Force advises the Commissioner of Health on the health care needs of Minnesota's mothers and children; the type, frequency and impact of maternal and child health services; and funding priorities.

This report presents to the Commissioner of Health a set of recommendations and strategies to improve health outcomes for mothers and children in Minnesota. The recommendations were developed following a multi-year MCH Advisory Task Force project studying 1) the health status of mothers and children in Minnesota and 2) emerging issues in access to health care and related services.

The report is organized in four parts. The first part describes the two phases of this task force project. The second part of the report presents data on select maternal and child health indicators. The third part presents the Task Force recommendations, and strategies to address the recommendations. The fourth part of the report discusses how the recommendations support the Department of Health's strategic priorities and the federal Title V state priorities.

I. Description of the Project

PHASE ONE – Interviews with Local Public Health Staff

Beginning in 2003, a MCH Advisory Task Force work group developed and implemented the first phase of this project to monitor trends in maternal and child health. In this phase, the work group studied recent fiscal and policy decisions at the federal, state and local level related to maternal and child health services in Minnesota. Interviews were then conducted with staff and administrators working in local public health agencies[1] on the potential impact of these fiscal and policy changes. The work group selected these individuals because they work directly with families that rely on public health and publicly funded health care services.

Interviews were conducted at seven regularly scheduled maternal and child health coordinator meetings held throughout the state in March, April, and May of 2004. Meetings were held in Thief River Falls, Grand Rapids, Two Harbors, Alexandria, St. Cloud, Bloomington, and Sleepy Eye. A total of 72 local public health staff and administrators attended the seven meetings. The majority of staff attending the interviews were maternal and child public health nurses that make home visits, staff WIC clinics and well-baby clinics, and provide case management services. Other attendees included child and teen check ups coordinators, and county public health administrators

---

[1] The workgroup also recognized the value of interviewing administrators and staff in community based organizations that provide maternal and child health services. Due to limited resources, interviews with community based agencies were limited to two agencies: the American Indian Family Center and Twin Cities Healthy Start Program.

(public health nursing supervisors and directors, county public health associate directors and one county public health director). Appendix B is a map showing the participants by county.

The purpose of the interviews was to obtain information on local public health's capacity to provide services to mothers and children following budget changes at the federal, state and local level. The interview questions also sought information on the capacity of schools, other agencies, and community organization to provide maternal and child health services. The goal was to obtain information on how changes in capacity and access to services affected families in their community, particularly those who rely on publicly funded services.

In May 2005, The MCH Advisory Task Force shared the results of the interviews with the Commissioner of Health and, with the Commissioner's input, planned phase two of the project.

PHASE TWO: Work Groups Review Data and Develop Recommendations

In phase two, the MCH Advisory Task Force formed three workgroups to study quantitative data on 1) key maternal and child health indicators and 2) the current and emerging issues identified in the interviews with local public health staff. The three workgroups were: perinatal health (women of child bearing age, pregnant women and infants), children and adolescents, and children and youth with special health care needs. These workgroups met in succession during 2005 and 2006. After reviewing the data, each workgroup determined three to four priority areas for their population. The work groups recommended, and the task force approved, the following 10 priority areas, organized by population:

> Perinatal Health
>> Reduce infant mortality
>> Reduce preterm and very preterm births
>> Promote preconception and interconception health care

> Children and Adolescents
>> Prevent child maltreatment
>> Promote mental health of children and adolescents
>> Prevent underage alcohol use
>> Prevent teen pregnancy

> Children and Youth with Special Health Care Needs
>> Promote early identification and early intervention for children and youth with special health care needs
>> Promote access to health care and related services for children and youth with special health care needs
>> Promote comprehensive care and coordination of services for children and youth with special health care needs

At the beginning of phase two, workgroup members decided to choose a public health framework that would inform the process of developing the recommendations and assure that the recommendations are consistent with principles of public health practice. The work group chose the public health intervention wheel as the framework for developing the recommendations. A copy of the Public Health Intervention Wheel is provided in Appendix C. The wheel lists 16 public health interventions. Some examples of interventions that are frequently used in the recommendations are surveillance, outreach, case management, consultation, collaboration and policy development. These interventions may be directed at the entire population within a community, the systems that affect the health of those populations, and/or the individuals and families within those populations. Additional information on the public health intervention wheel is available at: http://www.health.state.mn.us/divs/cfh/ophp/resources/db.html.

# II. Select Maternal and Child Health Indicators and Data for Three Population Groups

The recommendations in this report were developed following a review of the most current state wide health and health related data on Minnesota's mothers and children. Data sources included Minnesota birth and death records, the Pregnancy Risk Assessment Monitoring System (PRAMS), the Minnesota Student Survey, the Minnesota Health Access Survey, Minnesota Medicaid claims, the National Survey of Children with Special Health Care Needs and the Maternal and Child Health Block Grant Statistical Report. Appendix D presents a list of the materials and resources, including data sources, used by the work groups.

After reviewing these materials, the task force work groups discussed the data and chose the areas that were a priority for improved outcomes. Most of the key indicators and data that were considered in those discussions are presented in this part of the report. The key indicators and data in the report are organized by the relevant population group: perinatal health, children and adolescents, and children and youth with special health care needs.

INFANT MORTALITY

- Infant mortality and its subset, neonatal mortality (deaths occurring in the first 28 days after birth) have both declined in Minnesota between 1990 – 2004, with overall infant mortality showing a more dramatic descent.

- The Healthy People 2010 objective for infant mortality (deaths occurring during the first year of life) is 4.5 deaths or less per 1,000 live births.

- Minnesota's rate of infant mortality fell from 7.3 deaths per 1,000 live births in 1990 to 4.7 deaths in 2004.

Minnesota Infant Mortality 1990 - 2004
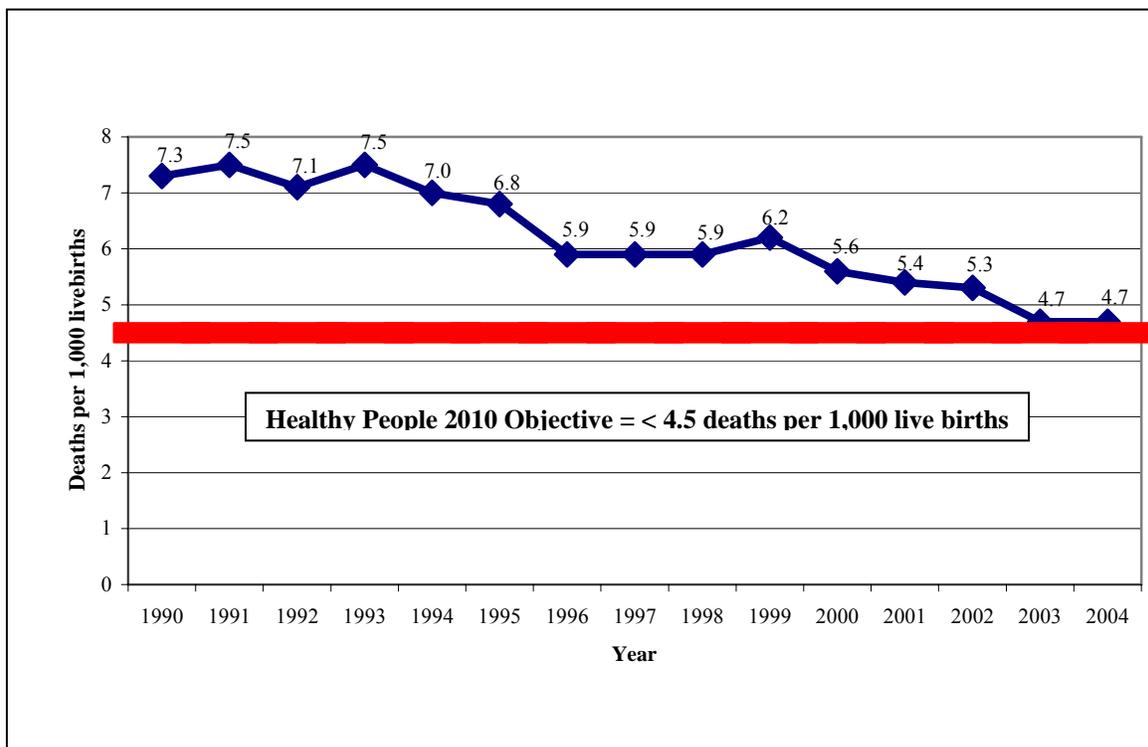
Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Vital Statistics / Death Certificate Data

INFANT MORTALITY (con't.)

- African Americans and American Indians show the highest rate of infant mortality, with both groups reducing their infant death rate substantially in recent years (1989 – 2003).

- However, African American and American Indian babies still have approximately double the mortality rate of White or Asian infants in Minnesota.

Minnesota Infant Mortality by Race*

| Race	1989-1993	1996-2000	2001-2003
African American	16.5	12.7	9.1
American Indian	16.5	12.0	10.0
Asian	6.2	7.0	4.0
Hispanic**	7.3	6.8	6.4
White	6.5	5.2	4.6

Infant Deaths/1,000 Live Births
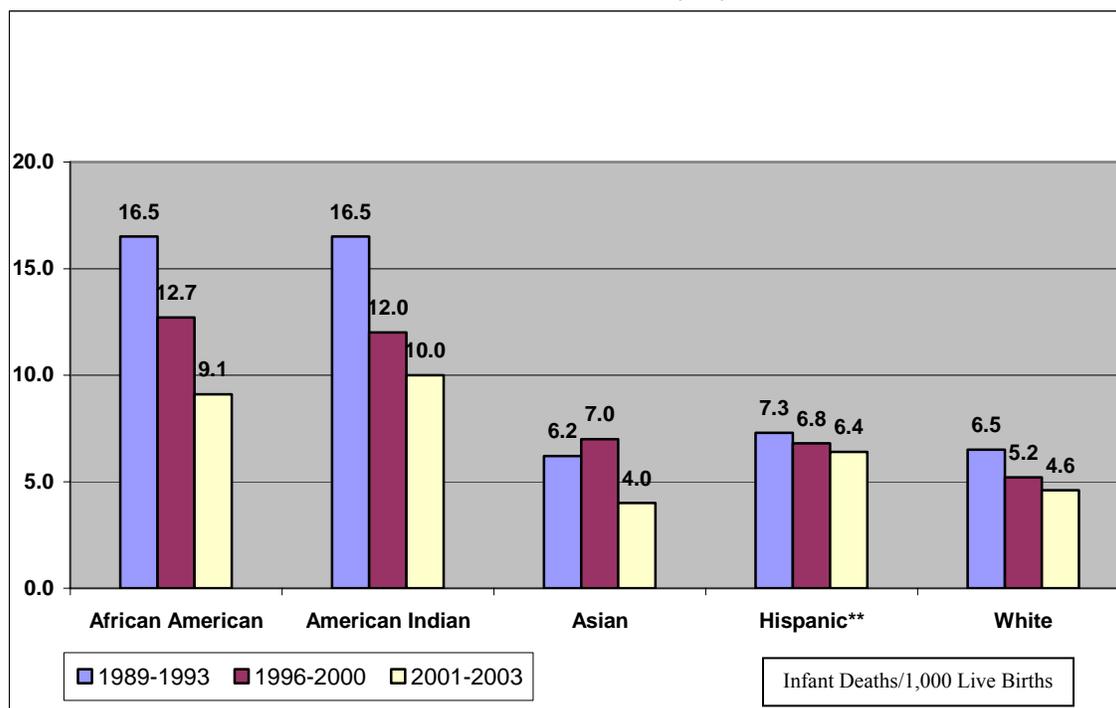
*Race = Race of Mother
Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Linked Birth /Infant Death Dataset.

VERY PRETERM BIRTH

- *Very* preterm birth (< 32 weeks gestation) is a subset of preterm birth (< 37 weeks). The Healthy People 2010 objective for very preterm birth is 1.1% or less of total live births.

- African-American women had the highest percentage of *very* preterm births in Minnesota, when compared with all other racial/ethnic groups during 1990-1994 and 2000-2004. Although this percentage did decrease slightly (3.2% to 2.5%), it is still more than double the target goal of 1.1%.

- American-Indian women had the second highest percentage of very preterm births, which remained exactly the same (1.8%) over both five-year periods.

Percent of MN <u>very</u>* preterm births by time period and race/ethnicity of mother
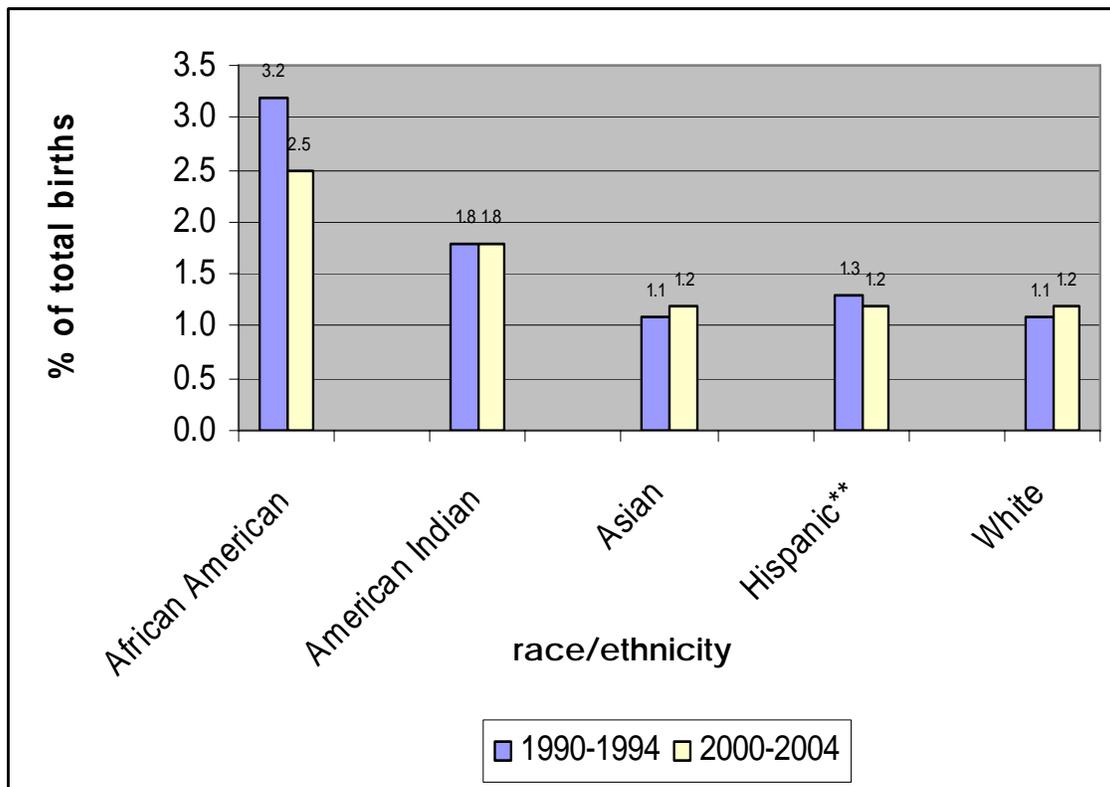
*Very preterm birth = less than 32 weeks gestation.
**Persons of Hispanic origin may be of any race.
Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Birth Certificate Data.

PRETERM BIRTH

- The rate of preterm delivery in Minnesota has been steadily rising since 1990, including total number of births as well as singleton births. Currently, we are moving away from the Healthy People 2010 objective: 7.6% or less of total live births.

- Overall, preterm births have increased from 7.6% in 1990 to 10.2% in 2004.

- Singleton preterm births have increased from 6.7% in 1990 to 8.4% in 2004.

Percent of MN preterm births, 1990 - 2004
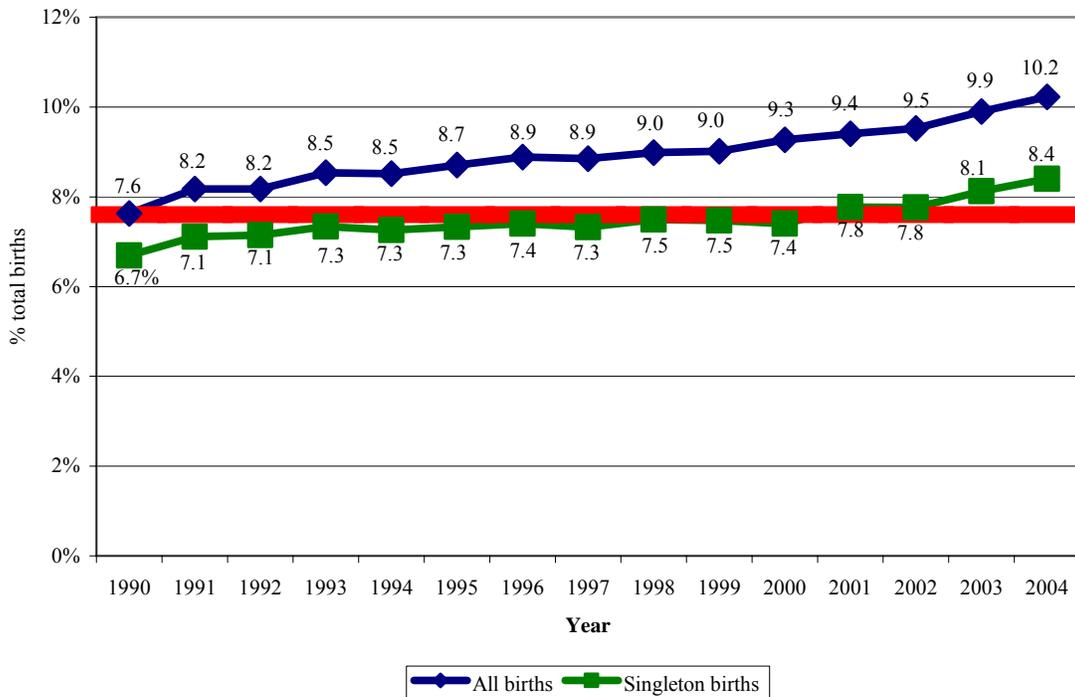
Preterm births = less than 37 weeks gestation
Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Birth Certificate Data, 1990 - 2004

- African-American women gave birth to the highest percentage of preterm infants (< 37 weeks) in Minnesota during both five-year periods shown below: 1990-1994 and 2000-2004.

- During the most recent time period (2000-2004), all racial/ethnic groups exceeded the federal Healthy People 2010 goal for preterm birth: 7.6%.

- During 2000-2004, the percentage of preterm deliveries by racial/ethnic group from highest to lowest in descending order is: African Americans, American Indians, Asians, Whites, Hispanics. Even the lowest group (Hispanics, 9.2%) exceeds the federal goal of 7.6%.

Percent of MN preterm births by time period and race/ethnicity of mother
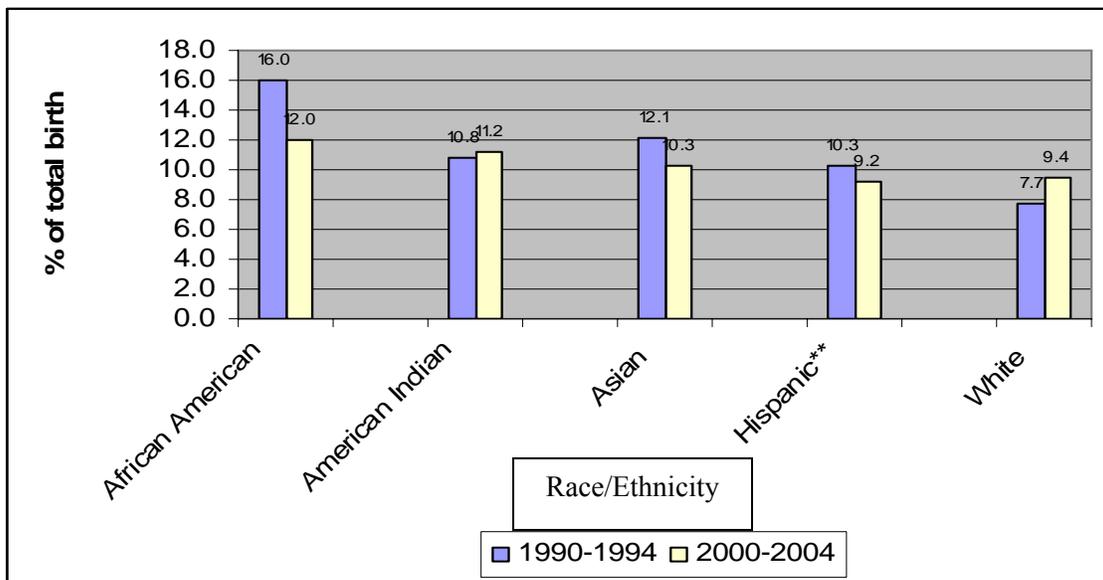
Percent of MN preterm births by time period and race/ethnicity of mother

Race/Ethnicity	1990-1994	2000-2004
African American	16.0	12.0
American Indian	10.8	11.2
Asian	12.1	10.3
Hispanic**	10.3	9.2
White	7.7	9.4

Y-axis: % of total birth (0.0 to 18.0)

**Persons of Hispanic origin may be of any race.
Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Birth Certificate Data

INSURANCE STATUS OF WOMEN

- The percent of women between the ages of 15 and 44 who were *uninsured* at some point during a given year ranged from a low of 10.3% (White women, 2001) to a high of 43.9% (Hispanic women, 2004).

- Hispanics had the highest percentage of uninsured women in both of these years: 29.7% in 2001, increasing to 43.9% in 2004.

- African American women had the second highest percentage of uninsured: 27.2% in 2001, increasing to 29.8% in 2004.

**Percent of women, 15-44, uninsured at some point during year
by race/ethnicity, 2001 and 2004**
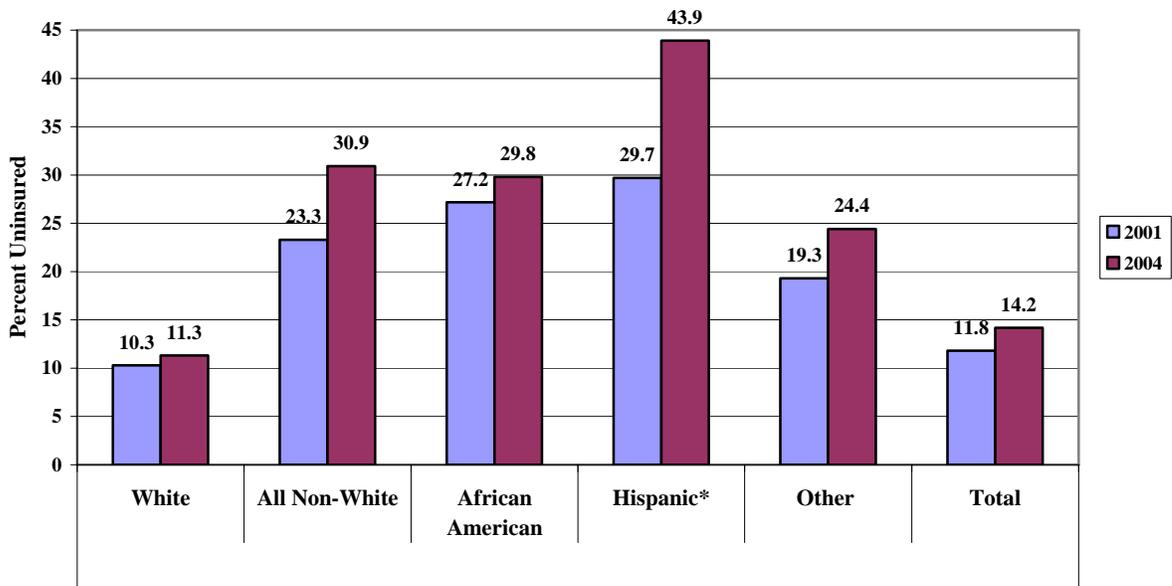
*Hispanics may be of any race.

Source: Health Economics Program, Minnesota Department of Health and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (Feb. 2006).

CHLAMYDIA

- Between 2004-2005, cases of Chlamydia, Gonorrhea and Primary and Secondary Syphilis increased to their highest levels ever.

- Between 1996 and 2004 the rate of Chlamydia infection doubled from 115 to 236 per 100,000. In 2005, it increased by 5 percent to 248 per 100,000.

STDs in Minnesota
Rate per 100,000 by Year of Diagnosis, 1995-2005
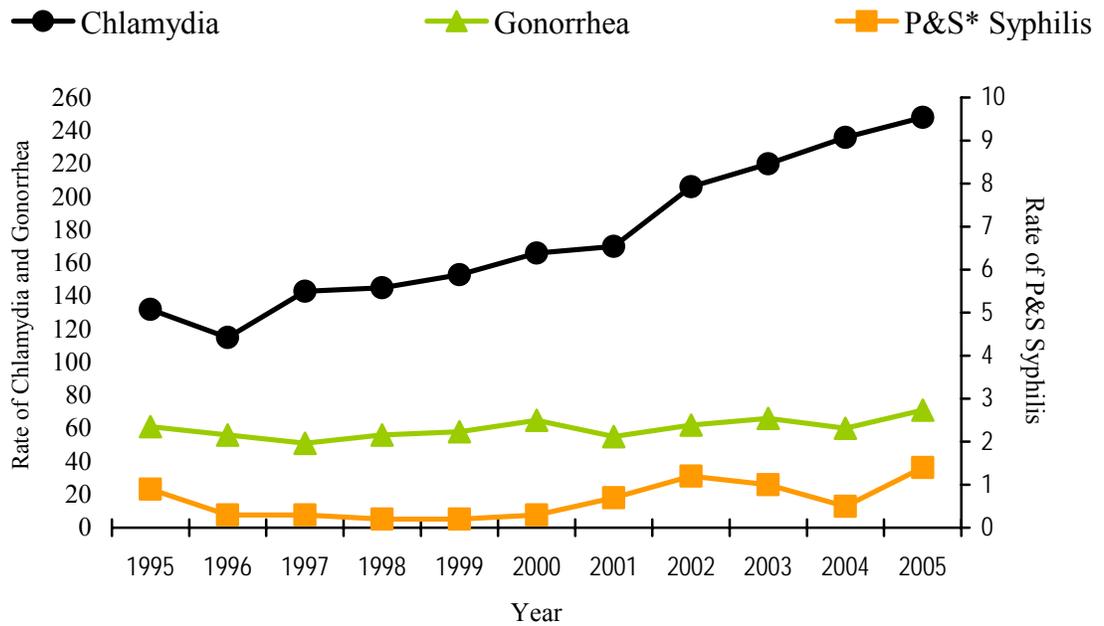
* P&S = Primary and Secondary.
Source: STD and HIV Section, Minnesota Department of Health, *Sexually Transmitted Disease (STD) Surveillance Report,* 2005.

CHLAMYDIA (con't)

- The highest chlamydia rates are among the 15-19 year olds and the 20-24 year olds. Among 15-19 year olds, rates have increased ½ times (640 to 989) and among 20-24 year olds, rates have increased 2 ½ times (567 to 1496).

- The rate has doubled both among men (54 to 138) and women (175 to 355)

- The rate is 2 ½ time higher among females than males, largely due to a higher level of Chlamydia screening among women.

Chlamydia Rates by Age, Minnesota, 1995-2005
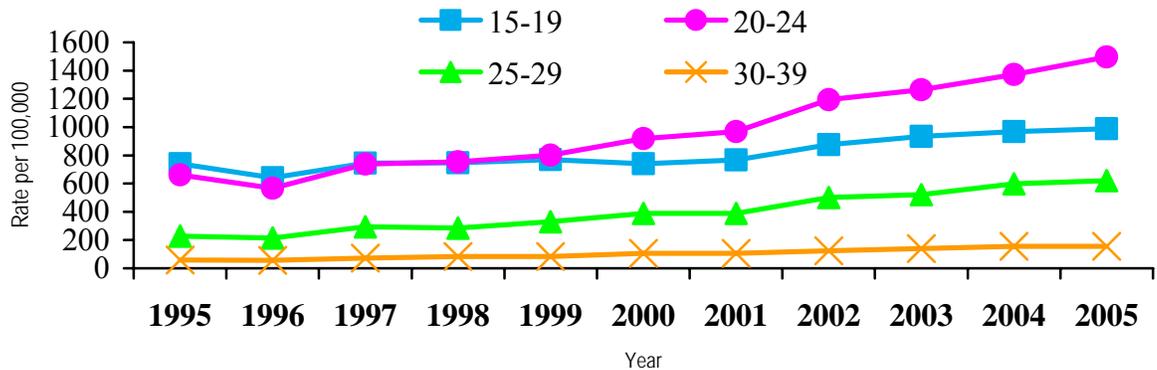
Source: STD and HIV Section, Minnesota Department of Health, *Sexually Transmitted Disease (STD) Surveillance Report*, 2005

**Chlamydia Rates by Gender
Minnesota, 1995-2005**
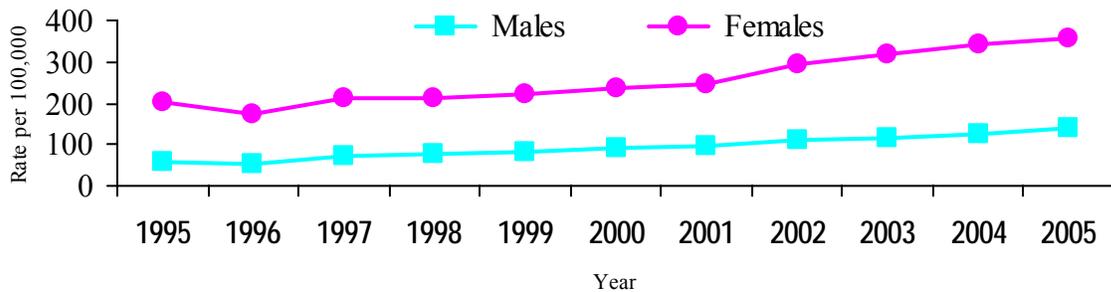
Source: STD and HIV Section, Minnesota Department of Health, *Sexually Transmitted Disease (STD) Surveillance Report*, 2005.

CHLAMYDIA (con't)

What's Behind the Increase?

The observed increase since 1996 is most likely due to the combination of four factors:
- Improved testing technology with increased sensitivity
- Improved screening practices by clinicians
- Addition of active surveillance component
- Increase of the disease in the population

However, the effect of the first three factors should have leveled off over time so the continued increase is most likely being driven by an actual increase of the disease in the population.

PREGNANCY INTENTION

- Less than one-half of Minnesota women (45.1%) responding to the PRAMS survey in 2002 and 2003 stated that they became pregnant at the time they intended. An additional 21.0% wanted to be pregnant sooner.

- Slightly more than one-third (33.9%) of Minnesota women participating in the survey said that their pregnancy was unintended. Of this number, 26.2% preferred to be pregnant at a later date, and 7.7% did not want to be pregnant ever.

Mother's Pregnancy Timing and Intention

Survey Question 12
Thinking back to just before you got pregnant,
How did you feel about becoming pregnant?
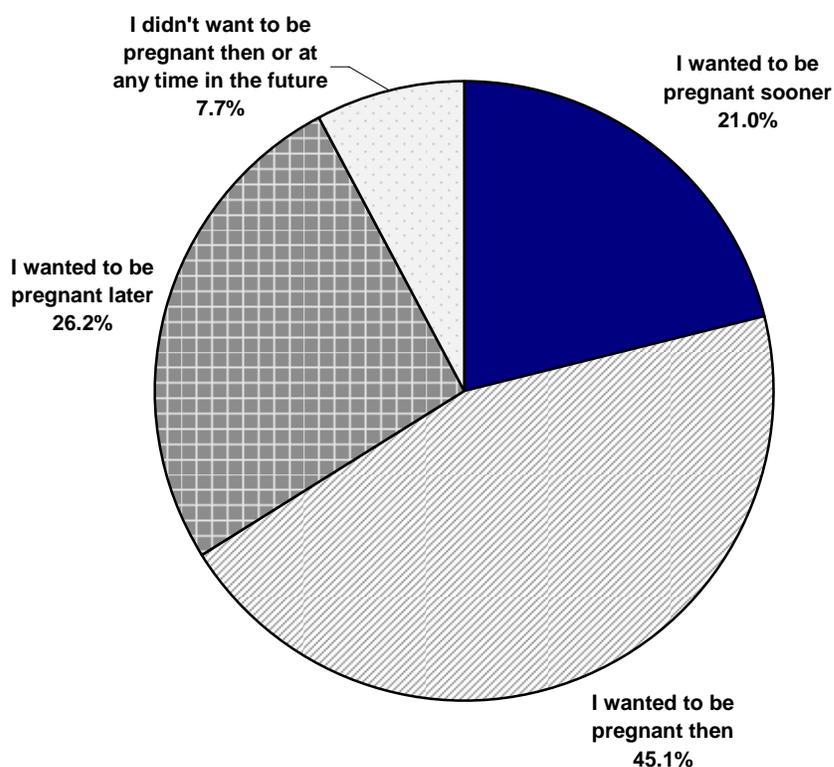
I didn't want to be pregnant then or at any time in the future
7.7%

I wanted to be pregnant sooner
21.0%

I wanted to be pregnant later
26.2%

I wanted to be pregnant then
45.1%

Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Pregnancy Risk Assessment Monitoring System (PRAMS), 2002-2003

PREGNANCY INTENTION (con't.)

As reported in the PRAMS survey (2002 – 2003), unintended pregnancy was more common among mothers who were:

- younger (less than 24 years old)
- had less education (12 years or less)
- were unmarried
- were non-White or Hispanic

Women who did not intend to become pregnant were also more likely to deliver a low birth weight baby.
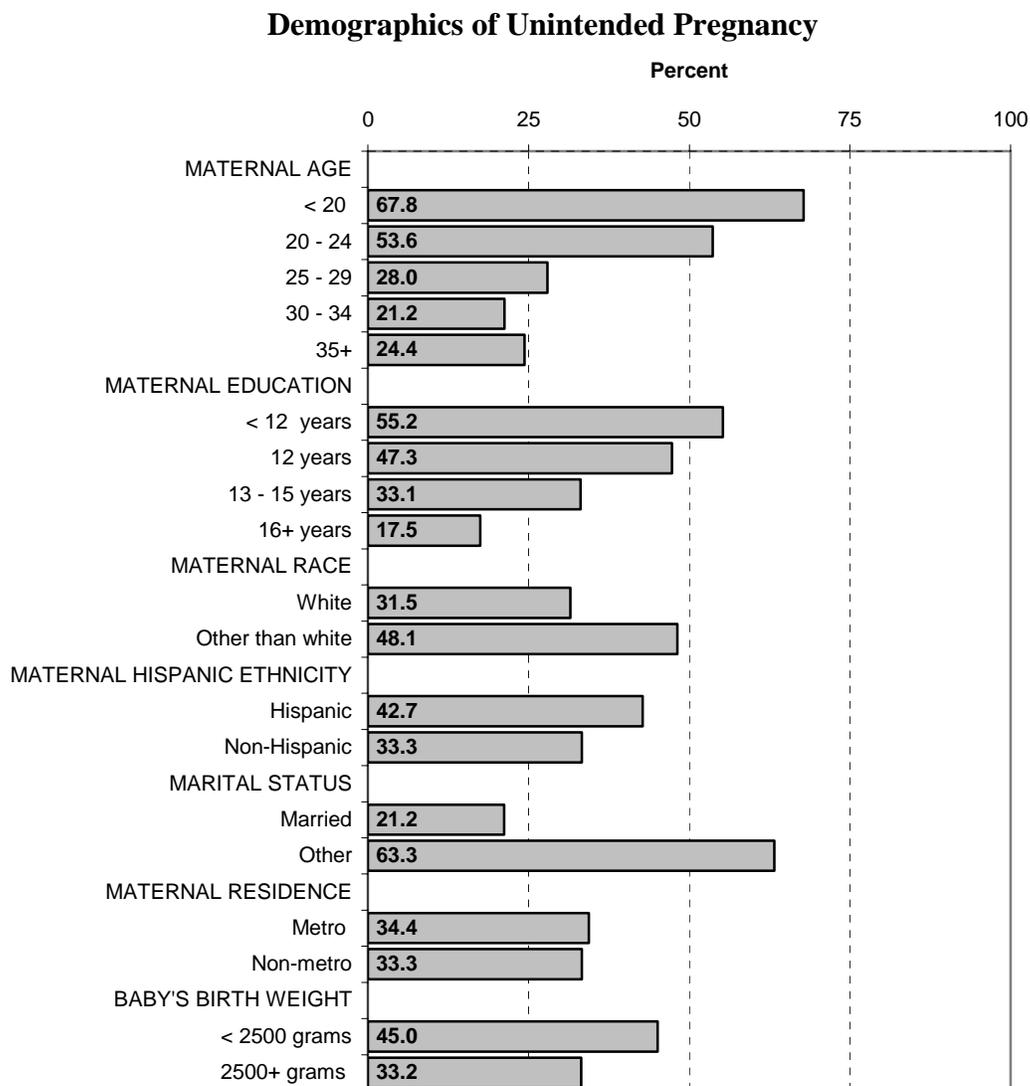
Demographics of Unintended Pregnancy

Percent

| Category	Value
MATERNAL AGE	
< 20	67.8
20 - 24	53.6
25 - 29	28.0
30 - 34	21.2
35+	24.4
MATERNAL EDUCATION	
< 12 years	55.2
12 years	47.3
13 - 15 years	33.1
16+ years	17.5
MATERNAL RACE	
White	31.5
Other than white	48.1
MATERNAL HISPANIC ETHNICITY	
Hispanic	42.7
Non-Hispanic	33.3
MARITAL STATUS	
Married	21.2
Other	63.3
MATERNAL RESIDENCE	
Metro	34.4
Non-metro	33.3
BABY'S BIRTH WEIGHT	
< 2500 grams	45.0
2500+ grams	33.2

Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Pregnancy Risk Assessment Monitoring System (PRAMS)

SMOKING AFTER PREGNANCY

- As reported in the 2002-2003 Minnesota PRAMS survey, tobacco use among women varied considerably before, during, and after pregnancy.

- Mothers who either continued to smoke, or returned to smoking, after pregnancy were likely to be: young (< 24 years old), with 12 years of education or less, unmarried, non-Hispanic, and living outside the seven-county metro area.

- Mothers who smoked after pregnancy also were more likely to have delivered a low birth weight baby.

MN PRAMS 2003: Smoking Now (3-6 months after pregnancy)
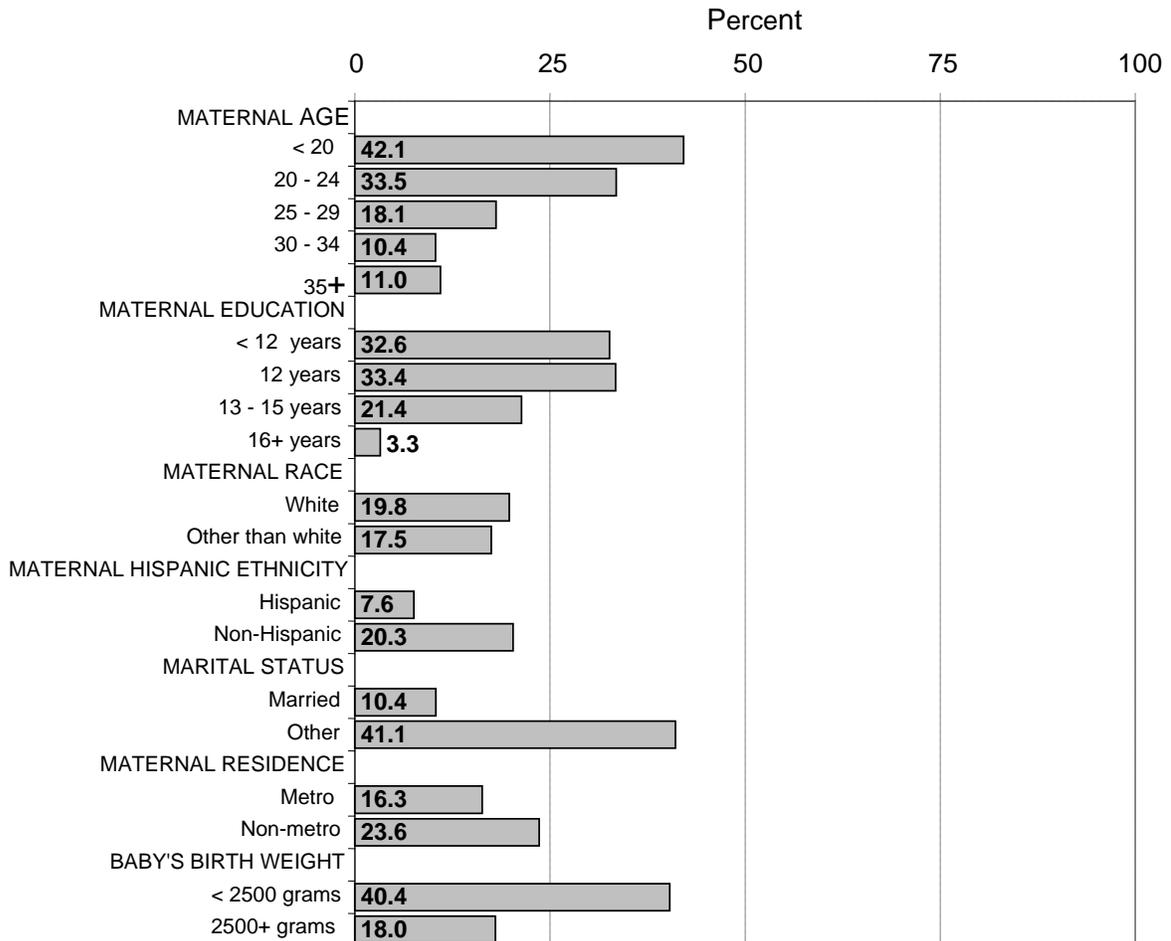
Percent

| Category	Percent
MATERNAL AGE	
< 20	42.1
20 - 24	33.5
25 - 29	18.1
30 - 34	10.4
35+	11.0
MATERNAL EDUCATION	
< 12 years	32.6
12 years	33.4
13 - 15 years	21.4
16+ years	3.3
MATERNAL RACE	
White	19.8
Other than white	17.5
MATERNAL HISPANIC ETHNICITY	
Hispanic	7.6
Non-Hispanic	20.3
MARITAL STATUS	
Married	10.4
Other	41.1
MATERNAL RESIDENCE	
Metro	16.3
Non-metro	23.6
BABY'S BIRTH WEIGHT	
< 2500 grams	40.4
2500+ grams	18.0

Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Pregnancy Risk Assessment Monitoring System (PRAMS)

SMOKING AFTER PREGNANCY (con't.)

- Fewer mothers of all ages reported using tobacco during the last three months of their pregnancy, compared with all other time periods before and after the baby was born.

- After birth of the baby, smoking at all age levels increased but did not return to previous levels for any age group.

- A greater proportion of young mothers (24 years or less) returned to smoking after pregnancy than women over 25 years of age.
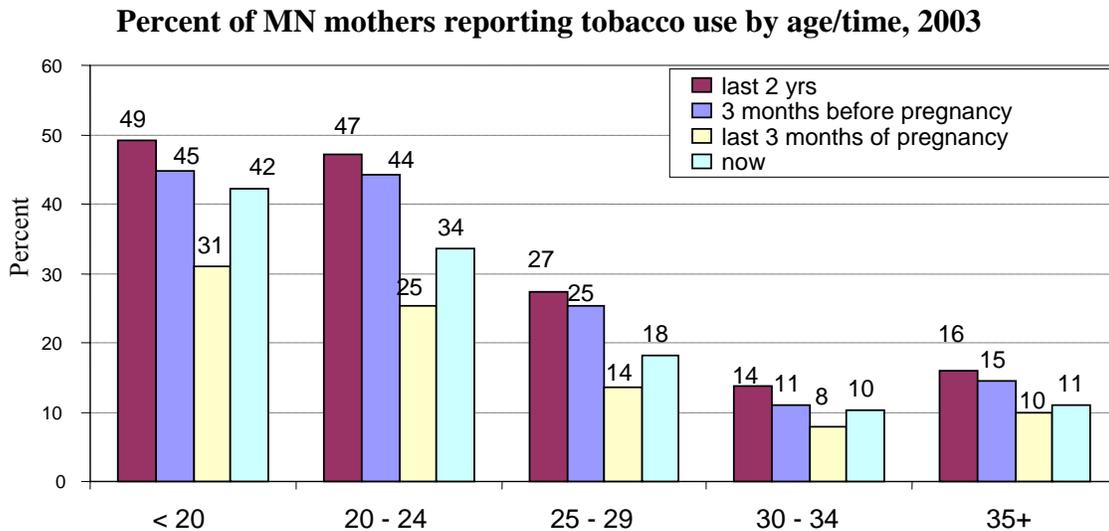
Percent of MN mothers reporting tobacco use by age/time, 2003

Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Pregnancy Risk Assessment Monitoring System (PRAMS)

Children and Adolescents
Select Indicators and Data

INSURANCE COVERAGE FOR CHILDREN, 2001 vs. 2004

- There has been a decrease in group coverage and increase in public program enrollment for all children.

- Uninsurance rates for young children ages 0 to 5 increased.

Distribution of Insurance Coverage for Children by Age, 2001 vs. 2004
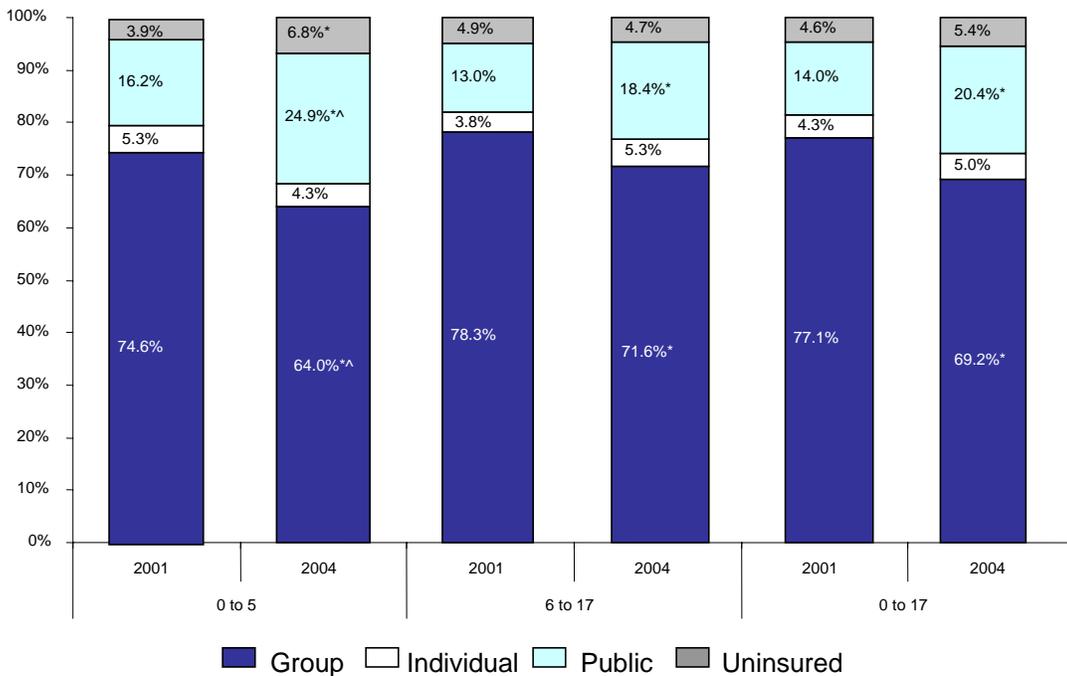
	0 to 5		6 to 17		0 to 17	
	2001	2004	2001	2004	2001	2004
Uninsured	3.9%	6.8%*	4.9%	4.7%	4.6%	5.4%
Public	16.2%	24.9%*^	13.0%	18.4%*	14.0%	20.4%*
Individual	5.3%	4.3%	3.8%	5.3%	4.3%	5.0%
Group	74.6%	64.0%*^	78.3%	71.6%*	77.1%	69.2%*

Legend: ■ Group □ Individual ☐ Public ■ Uninsured

*Indicates statistically different at 95% level from 2001.
^Indicates statistically significant difference between age group and all children at 95% level within year.

Source: Health Economics Program, Minnesota Department of Health, and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (February 2006).

INSURANCE COVERAGE FOR CHILDREN, 2001 vs. 2004 (con't)

- There has been a decrease in group coverage related to declines in employer offer and eligibility rates for all children, especially low income young children. (see graph and table below)

Distribution of Insurance Coverage for Children by Age and Income, 2001 vs. 2004
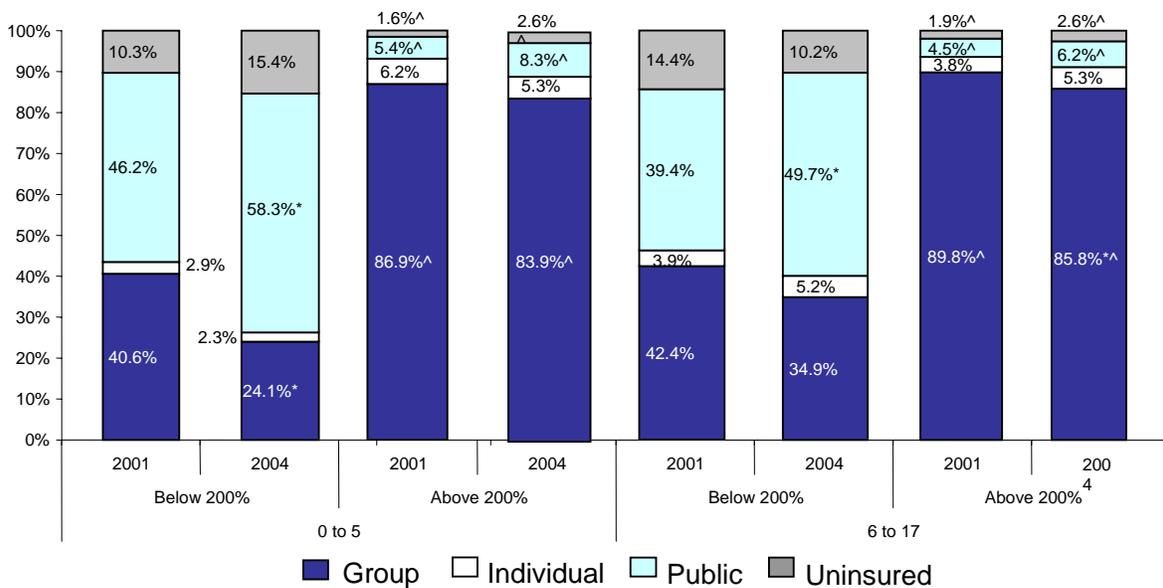
			Below 200%		Above 200%		Below 200%		Above 200%	

Chart data:

0 to 5

Below 200%:
- 2001: Group 40.6%, Individual 2.3%, Public 46.2%, Uninsured 10.3% (2.9%)
- 2004: Group 24.1%*, Public 58.3%*, Uninsured 15.4%

Above 200%:
- 2001: Group 86.9%^, Individual 6.2%, Public 5.4%^, Uninsured 1.6%^
- 2004: Group 83.9%^, Individual 5.3%, Public 8.3%^, Uninsured 2.6%^

6 to 17

Below 200%:
- 2001: Group 42.4%, Individual 3.9%, Public 39.4%, Uninsured 14.4%
- 2004: Group 34.9%, Individual 5.2%, Public 49.7%*, Uninsured 10.2%

Above 200%:
- 2001: Group 89.8%^, Individual 3.8%, Public 4.5%^, Uninsured 1.9%^
- 2004: Group 85.8%*^, Individual 5.3%, Public 6.2%^, Uninsured 2.6%^

Legend: Group ■ Individual □ Public ■ Uninsured ■

*Indicates statistically different at 95% level from 2001.
^Indicates statistically significant difference between lower and higher income children at 95% level within year.

Source: Health Economics Program, Minnesota Department of Health, and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (February 2006).

INSURANCE COVERAGE FOR CHILDREN, 2001 vs. 2004 (con't)

Access to Employer Coverage for Children by Age and Income, 2001 vs. 2004

|		Employer Offer 1		Eligibility Rate 2		Take Up Rate 3	
		2001	**2004**	**2001**	**2004**	**2001**	**2004**
0 to 5	Below 200%	59.0%	**42.7%***	97.1%	**86.3%***	71.0%	67.3%
	Above 200%	93.7%^	91.0%^	97.8%	98.3%^	95.7%^	95.8%^
6 to 17	Below 200%	56.9%	52.1%	93.8%	88.4%	79.4%	77.5%
	Above 200%	93.7%^	**91.3%*^**	98.8%^	97.8%^	97.6%^	97.2%^
0 to 17	Below 200%	57.6%	**48.8%***	94.9%	**87.8%***	76.5%	74.4%
	Above 200%	93.7%^	**91.2%*^**	98.5%^	97.9%^	97.0%^	96.8%^

1: Person works for or has a family member who works for an employer that offers health insurance.
2: Percent of those with a connection to an employer that offers coverage who are eligible for health insurance coverage offered by that employer.
3: Percent of those eligible for employer coverage who enroll.

*Indicates statistically different at 95% level from 2001.
^Indicates statistically significant difference between lower and higher income children at 95% level within year.

Source: Health Economics Program, Minnesota Department of Health and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (February 2006).

- Over 90% of uninsured children are potentially eligible for public or private coverage.

Potential Sources of Insurance Coverage for Uninsured Children, 2001 vs. 2004
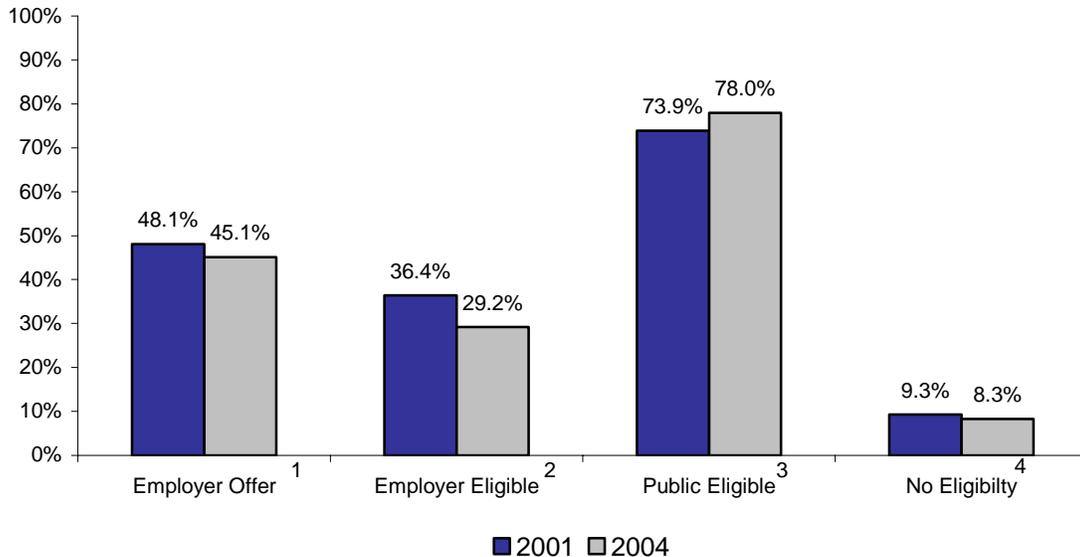
Employer offer: percent of uninsured who work for or have a family member who works for an employer offering coverage.
Employer eligible: percent of uninsured who are eligible for coverage through an employer.
Potentially public eligible: based on family structure, income, and eligibility for employer coverage.
No eligibility: not eligible for employer coverage or public coverage.
Note: None of the differences between 2001 and 2004 are statistically significant at the 95% level.

Source: Health Economics Program, Minnesota Department of Health and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (February 2006).

CHILD MALTREATMENT

- The MN Department of Human Services (DHS) reports that incidence of child maltreatment peaked in the late 1980s and early 1990s and began to decrease thereafter.

- Incidence of child maltreatment has remained stable from the mid-1990s to 2004.

**Incidence of Cases of Child Maltreatment in MN by
Number of Households and Number of Affected Children**
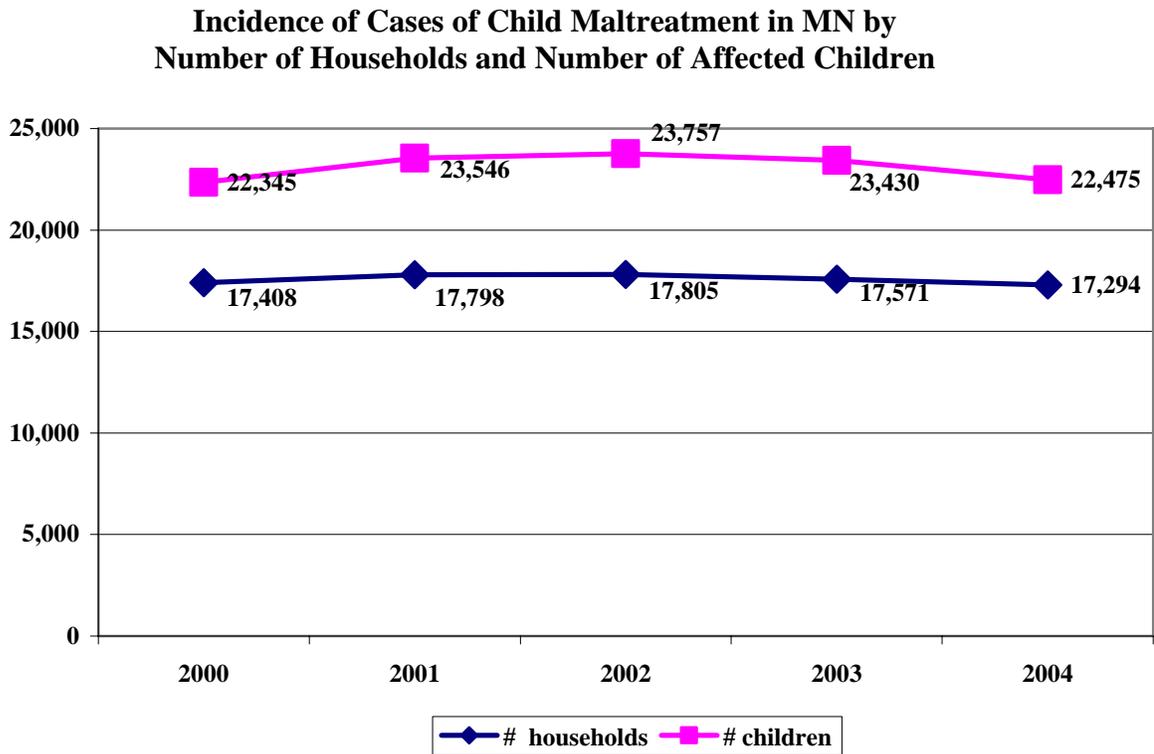
Case = child maltreatment report that has met initial screening criteria; includes both alleged and determined cases
Source: Minnesota Department of Human Services, MN Child Welfare Reports 2000-2004

CHILD AND ADOLESCENT MENTAL HEALTH

- Currently, there are very limited data available regarding incidence or prevalence of mental health issues for children and adolescents in Minnesota.

- The Minnesota Student Survey (MSS), 1992-2004, indicates that 10% - 15% of MN students in grades 6, 9, and 12 reported feeling "sad" all or most of the time during the month preceding the survey.

- Ninth graders scored highest on this question, increasing from 12.3% to 15.4% between 1992 and 2004.

**Felt sad all or most of the time in past month**

All students
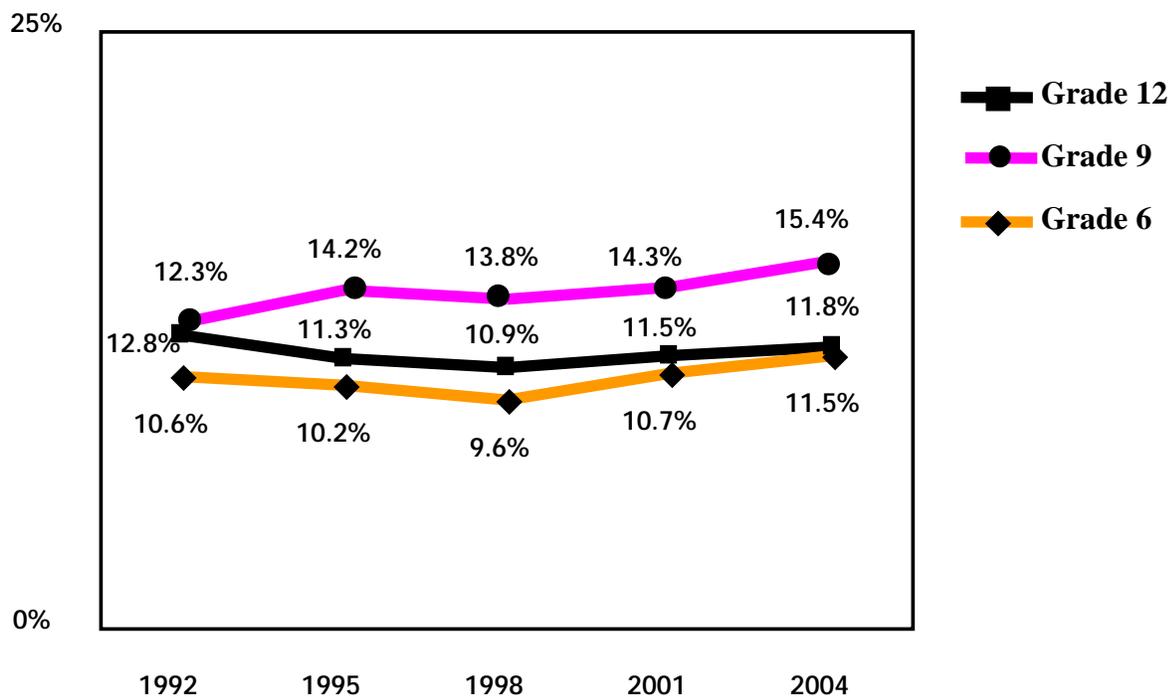
Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Minnesota Student Survey

CHILD AND ADOLESCENT MENTAL HEALTH (con't.)

- MN Student Survey also indicates that 13% to 24% of students at all three grade levels had suicidal thoughts during the past year.

- In general, a higher percentage of 9th graders (nearly one-quarter) and a higher percentage of female students at all three grade levels had suicidal thoughts during the year, when compared with total student population in these grades.

- Female students in 9th grade is the subgroup reporting the highest percentage of suicidal thoughts (28% - 31%) during all three years.

Had suicidal thoughts in past year
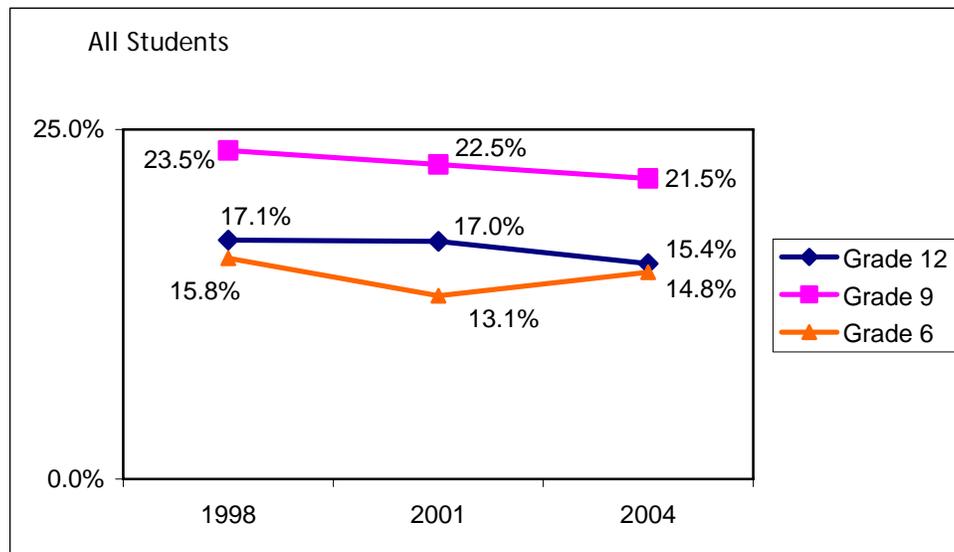
Source: MN Center for Health Statistics, Minnesota Department of Health, Minnesota Student Survey

Had suicidal thoughts in past year
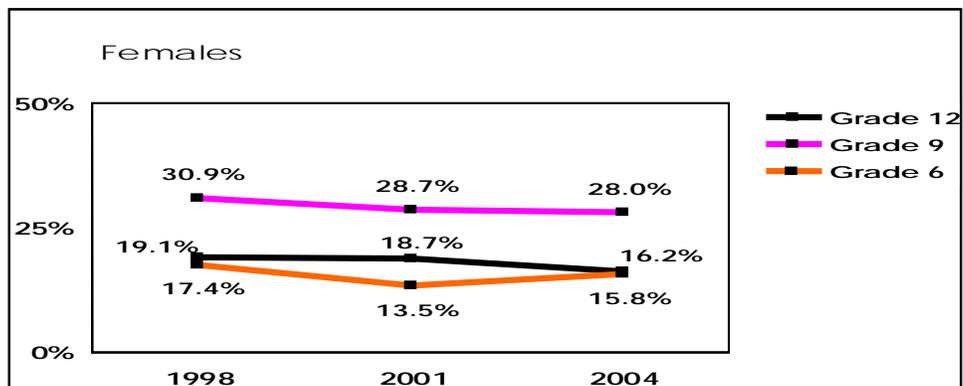
Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Minnesota Student Survey

-29-

ADOLESCENT ALCOHOL USE

- Self-reported use of alcohol by Minnesota adolescents has slowly but steadily decreased in recent years, as shown in the Minnesota Student Survey (MSS).

- Alcohol use by MN 12th graders during the month preceding the MSS survey declined from 54% in 1998 to 48% in 2004. Nationwide percentages for 12th graders were nearly identical.

- MN 9th graders showed a decline from 37% to 28% during this seven-year period.
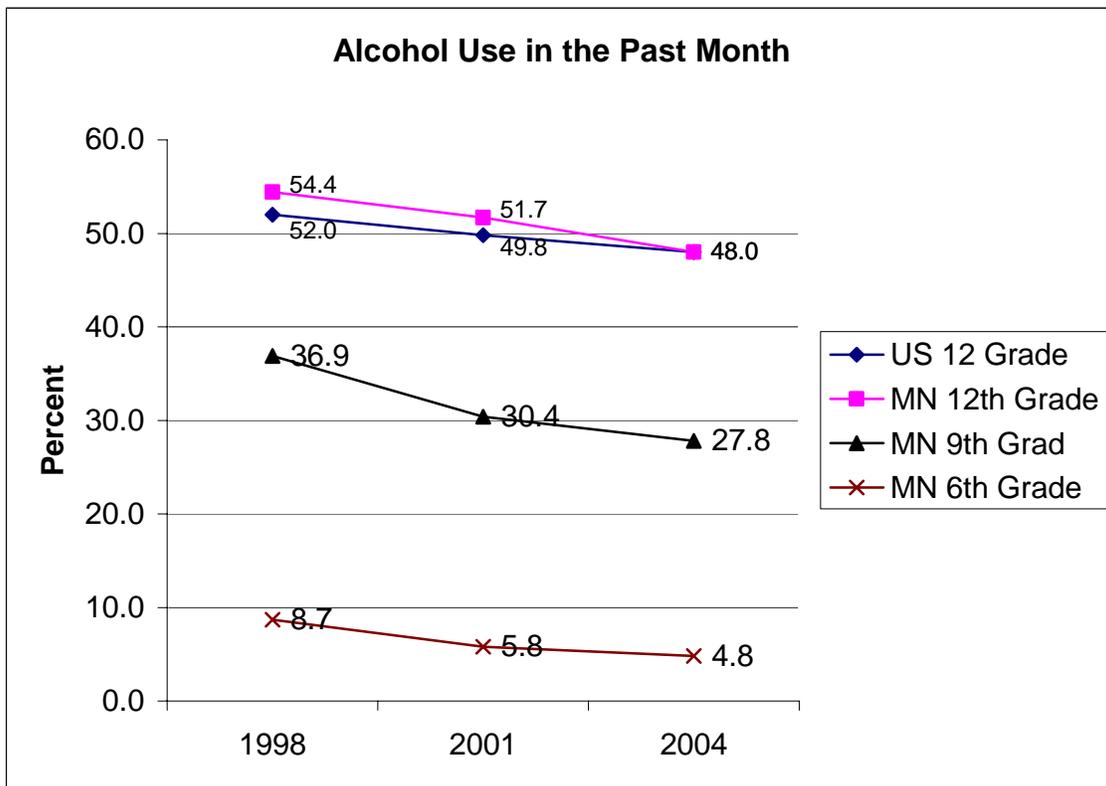
Alcohol Use in the Past Month

Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Minnesota Student Survey. National Monitoring the Future Survey, 2004.

ADOLESCENT ALCOHOL USE (con't.)

- In 2004, American Indian 9th graders reported the highest use of alcohol (38.2%) during the month immediately preceding the MSS survey, when compared with responses from all other racial/ethnic adolescents in the same grade.

- Approximately one-fourth (23% - 28%) of 9th graders from all other racial/ethnic groups said they used alcohol during that time.

- Asian 9th graders reported the lowest usage: 22.7%.

9th Grade Alcohol Use by Race/Ethnicity, 2004:
1+ drinks in past month
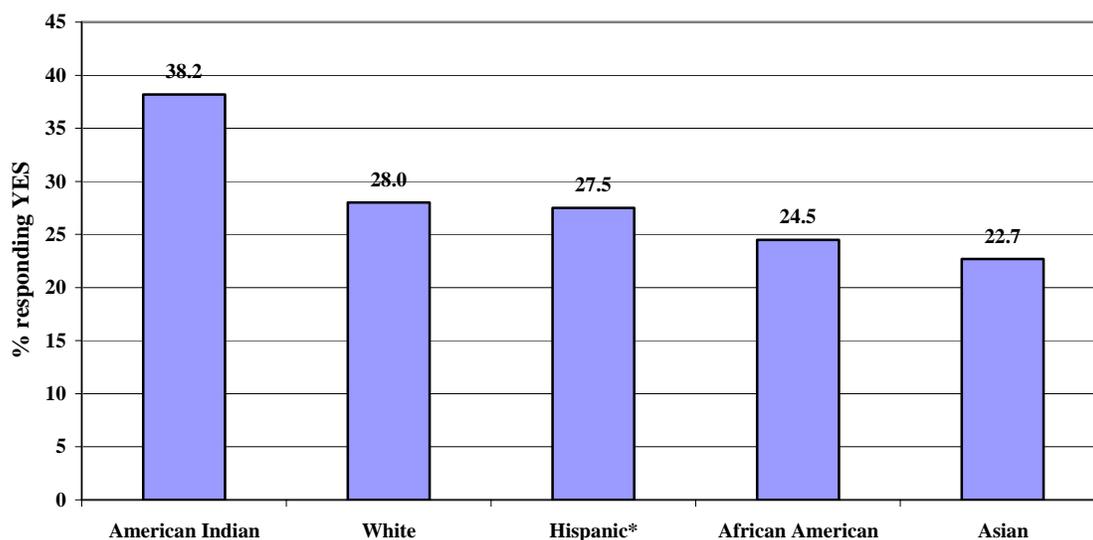
*Hispanic may be of any race.
Source: Minnesota Center for Health Statistics, Minnesota Department of Health, Minnesota Student Survey

TEEN PREGNANCY PREVENTION

- Pregnancy rates for total Minnesota teens ages 15-17 have shown a very slight downward trend during the five-year period 1999-2003—from 22 to 20 females per 1,000 females in that age group.

- African American teens demonstrate the largest decline—from a rate of 100 per 1,000 females ages 15-17 in 1999 to a rate of slightly over 60 per 1,000 in 2003.

- Although pregnancy rates for all non-White MN teens have decreased during this time period, large disparities are still evident when compared with White MN teens.

- In 1999, pregnancy rates for non-White MN teens were 3.5 (Asian) to 6.5 (African American) times greater than the rate for White MN teens, ages 15 to 17.

- By 2003, this rate had declined somewhat but was still 2 to 5 times higher than the pregnancy rate for white teens.

### Minnesota Teen Pregnancy Rate, Ages 15-17, by Race/Ethnicity
1999-2003
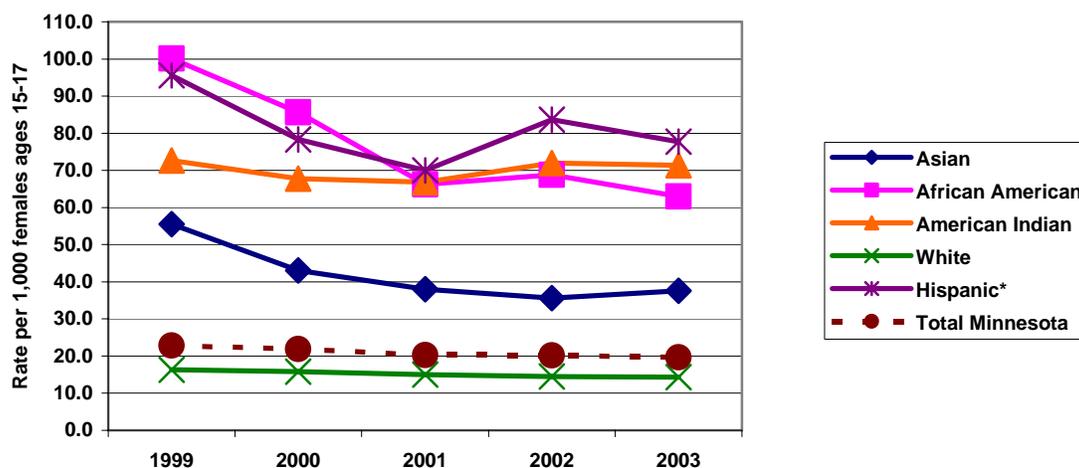
*Hispanics may be of any race.
Source: Minnesota Center for Health Statistics, Minnesota Department of Health

EARLY IDENTIFICATION OF CHILDREN'S NEEDS

- The Follow Along Program (FAP) is a primary means of identifying, screening, and tracking the health and developmental needs of all young children in Minnesota from birth to age three.

- The percentage of Minnesota counties that make the FAP available to *all* children from birth to three (not just those at risk for poor developmental outcomes) has risen dramatically, from only 14% in 2002 to 53% in 2004.

- Despite the availability of FAP, only 8.4% of all infants and toddlers in MN, birth to age three, are enrolled in the program.

- One of the outcomes of FAP screening is the identification of young children with special health care needs. Once identified as having a need, children are referred to a variety of community-based services, including early intervention.

Percent of MN counties with
universally offered Follow-Along Program
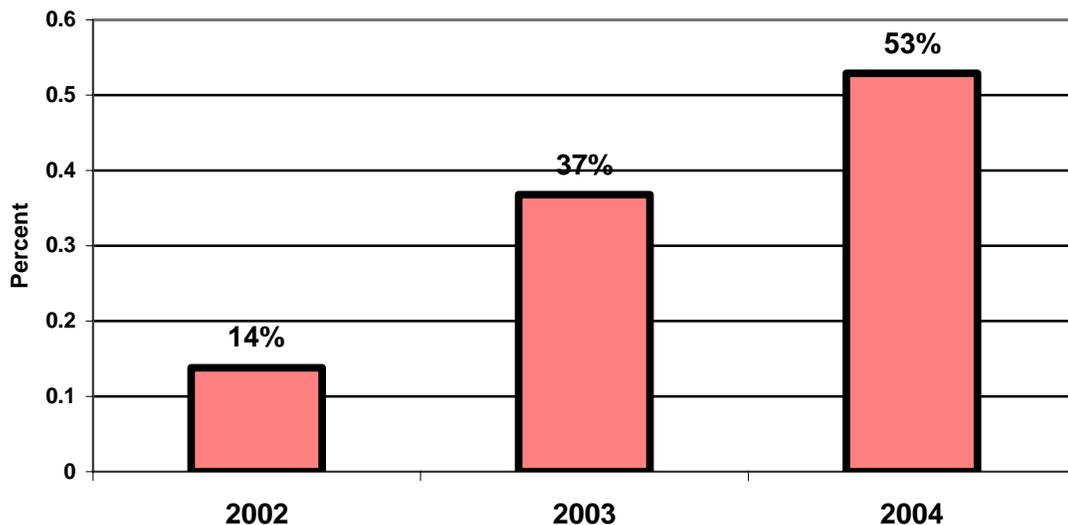
Source: Minnesota Children with Special Health Needs Section, Minnesota Department of Health, Follow-Along Program, 2002-2004.

EARLY IDENTIFICATION (con't.)

- Early Intervention (EI) services—a combined public health/education/human services program—is tailored to the specialized needs of children from birth to three years.

- Minnesota has consistently ranked lower than the national EI participation average for the last four years (2001-2004). In 2004, only 1.5% of MN children participated in the program, compared to the national average participation of 2.3%.

- Currently, MN serves approximately 3,000 young children annually in EI; it is estimated that an additional 2,000 young children are eligible for services.

Percent of Children, Birth to Three, Receiving Early Intervention Services

	2001	2002	2003	2004
MN %	1.56	1.72	1.78	1.50
US %	2.14	2.23	2.23	2.30

Source: Office of Special Education Programs, US Dept. of Education, Data Analysis System (DAS), 7/30/05.

ACCESS TO CARE
FOR CHILDREN AND YOUTH WITH SPECIAL HEALTH CARE NEEDS

Access to Care - Generally
- In four out of five service categories, as defined by the National Survey of Children with Special Health Care Needs (2001) and reported by parents, the percentage of MN children with unmet needs was higher than the U.S. average.

- Need for specialized services is common among CYSHCN. It is estimated that 21,823 (14.1%) Minnesota CYSHCN are not receiving the specialty care or services that they need.

Access To Care	MN	US
Children with Special Health Care Needs with any unmet need for specific health care services	14.1%	17.7%
Children with Special Health Care Needs with any unmet need for family support services	7.4%	5.1%
Children with Special Health Care Needs needing specialty care who had difficulty getting a referral.	23.5%	21.9%
Children with Special Health Care Needs without a usual source of care (or who rely on the emergency room)	11.0%	9.3%
Children with Special Health Care Needs without a personal doctor or nurse	15.4%	11.0%

Source: National Center for Health Statistics, Centers for Disease Control and Prevention, State and Local Area Integrated Telephone Survey, National Survey of Children with Special Health Care Needs, 2001

Access to Care - Medical Home
- A "medical home"—providing family-centered care with coordination of referrals and other services—is central to achieving seamless medical care for Children and Youth with Special Health Care Needs (CYSHCN).

- In Minnesota, slightly less than half of all CYSHCN (48.8%) have a medical home. The U.S. percentage is slightly more than half: 52.6%.

- Translated into numbers, it is estimated that 72,980 Minnesota CYSHCN who need a medical home have one, and 76,544 do not.

COMPREHENSIVE CARE
FOR CHILDREN AND YOUTH WITH SPECIAL HEALTH CARE NEEDS

- The number of children and youth with special health care needs served through Title V Maternal and Child Health Block Grant dollars, which are passed through to local public health, has decreased substantially since 2001.

- This decrease may impact the ability of local public health agencies to participate in collaborative planning with other agencies and departments, as well as provide actual services to children and families.

Services Received and Number of CSHN Served in MN, by year

	2001	2003	2005
Case Management/Care Coordination.	6454	2992	2749
Individual Education/Counseling	9464	5334	3141
# of visits	28584	20414	11278
# of children served in groups	7858	4530	4047
# of group sessions	1250	662	350
Visits per child served	3	3.8	3.6

Source: Community and Family Health Division, Minnesota Department of Health, Maternal and Child Health Block Grant Statistical Reports

- Percent of MN families with at least one child qualifying for special health care services in which:*

  ➢ child's condition has caused financial hardship: 19.5%.

  ➢ parent needed to leave the workforce: 10.4%.

  ➢ parent(s) needed to cut back their employment hours: 27.0%.

- Percent of MN CSHN with unmet service needs who have:*

  ➢ adequate insurance: 8.7%.

  ➢ inadequate insurance: 22.2%.

*Source: National Center for Health Statistics, National Survey of Children with Special Health Care Needs, 2001.

III. Recommendations and Strategies

The recommendations that follow are organized into the three population groups (perinatal health, children and adolescents, and children and youth with special health care needs), and within each population group, by priority area. Following each recommendation are strategies that address the recommendations. Some of the strategies acknowledge current initiatives at the Minnesota Department of Health, or in the state, that have a significant impact on improving health outcomes for mothers and children in our state.

Some of the strategies suggest new activities or current activities that could be expanded or modified. The number of strategies is a reflection of the diverse and extensive knowledge of the task force. Not all of the strategies can be implemented, but all of the strategies are valuable in planning state-wide maternal and child health programs for these priority areas.

Perinatal Health: Women of Child Bearing Age, Pregnant Women and Infants
Recommendations and Strategies

The perinatal health work group identified the following individuals as part of the target population: women of child bearing age, pregnant women, newborns and infants to one year of age. The perinatal health work group identified three priority areas: 1) reduce infant mortality, 2) reduce preterm and very preterm births, and 3) promote preconception and interconception health care.

Priority Area: Reduce Infant Mortality

RECOMMENDATION 1:
Maintain current surveillance activities and explore new methodologies that may assist in identifying targeted populations or enhance understanding of trends and disparities.

<u>STRATEGIES:</u>
> **Continue infant mortality data monitoring and reporting by race/ethnicity.** Infant mortality rates are important public health indicators of the health and well being of mothers, infants and communities. Monitoring and reporting of infant mortality rates by race/ethnicity informs the Department of Health of the need for further investigation when rates in smaller populations rise, and in planning and implementing programs that address racial and cultural needs of childbearing families.
>
> **Continue support for Minnesota's Newborn Screening Program.** Blood spot screening of newborns in Minnesota is statutorily mandated and currently screens for 54 conditions. This screening is done as "active opt out" which means that all

infants are screened unless their parent requests that they are not screened. It is important to, at a minimum, maintain the current statutory language on "active opt out" in order to provide this valuable screening to the maximum number of newborns in Minnesota.

Seek resources to maintain the existing Birth Defects Information System (BDIS) that monitors 45 birth defects occurring in Hennepin and Ramsey Counties and to expand that system statewide. Each year over 2,000 Minnesota infants are born with serious birth defects. Birth defects are the leading cause of death in Minnesota's infants. It is important to monitor birth defects to detect emerging health concerns, identify affected populations, prevent birth defects through targeted education, and assure appropriate services are provided to affected families.

Seek resources and authority to implement Fetal and Infant Mortality Review (FIMR) projects to assess current trends, obtain parental input, and inform program planning and resource development. FIMR is a population-based intervention implemented under guidance from the National Fetal and Infant Mortality Review (NFIMR) program, a joint effort of the federal Maternal and Child Health Bureau (MCHB) and the American College of Obstetricians and Gynecologists (ACOG), but ultimately delivered and conducted at the community level. FIMR's potential effects range from changes in provider practice to legislative or administrative changes that improve service delivery to women, infants, and their families. FIMR methodology combines quantitative data from vital records with qualitative data from maternal interviews of women who have had a fetal or infant death to present a complete picture of how systems functioned. It is conducted in a manner that protects families' privacy while at the same time provides communities with quality improvement information for their maternal and child health systems.

Utilize data from the Perinatal Periods of Risk (PPOR) methodology to better focus strategies and resources to address general trends and disparities in fetal and infant mortality.   The Perinatal Periods of Risk (PPOR) is a method for examining infant and fetal deaths to help communities focus prevention strategies. This innovative strategy is being used by city and state health departments and Healthy Start programs around the county. It is supported by the Centers for Disease Control, the March of Dimes, the World Health Organization, and CityMatCH. The PPOR examines the death rate over four critical perinatal periods in order to reduce fetal and infant deaths. The four critical periods are: Maternal Health/Prematurity, Maternal Care, Newborn Care, and Infant Health. This surveillance method has been used by the Minneapolis Department of Health and Family Support and the St. Paul Ramsey County Department of Public Health.

RECOMMENDATION 2:
Improve access to preventive services for mothers and infants by continuing to support grant programs such as Family Home Visiting and the Eliminating Health Disparities Initiative, by providing technical assistance and training, and by supporting the work of programs such as Minnesota Sudden Infant Death Center and Twin Cities Healthy Start.

<u>**STRATEGIES:**</u>

Sustain current funding and technical assistance for programs and services. Sustain both categories and levels of funding and technical assistance support for infant mortality programs and services, such as the Eliminating Health Disparities Initiative, Minnesota Sudden Infant Death Center, and Twin Cities Healthy Start. Assist other areas of the state in their attempts to secure federal Healthy Start funding.

Seek resources to provide baby beds and infant sleep safety information to local public health, tribal health, and community based organizations. Unsafe sleeping conditions were factors in 24 infant deaths in Minnesota in 2004. Nationwide, the federal Centers for Disease Control (CDC) reported that in 2002, 636 infants died of suffocation and 425 of those occurred while infants were sleeping in beds. Unlike deaths caused by Sudden Infant Death Syndrome (SIDS), most of these deaths were accidental and therefore preventable. The American Academy of Pediatrics revised policy on Sudden Infant Death Syndrome states: "the evidence is growing that bed sharing, as practiced in the United States and other western countries, is more hazardous than the infant sleeping on a separate sleep surface and, therefore, recommends that infants not bed share during sleep. In March 2006, a coalition of Minnesota organizations endorsed the American Academy of Pediatrics' revised safe sleep recommendations that recognize the need for a separate safe sleep area for baby.

Support ongoing funding for maternal and child health home visiting programs throughout the state to help prevent intentional and unintentional injuries to infants. Injuries contribute significantly to infant mortality and morbidity**.** Many excellent resources exist to educate new parents about injury prevention and appropriate expectations of infants. In addition to provider education during well child appointments, home visiting is an important strategy to educate new parents about injury prevention.

Adapt existing MDH trainings for local public health/public health nurses to reach expanded audiences including staff from community-based organizations, community health centers, tribal health and disciplines such as doulas, community health workers, and other home visitors.

Reach out to males and include them in services, education, and programs to reduce infant mortality. Male involvement is a critical element of a

comprehensive prevention strategy. Some community programs, such as the Division of Indian Work and Twin Cities Healthy Start have male involvement/fathers groups that can be used as models

RECOMMENDATION 3:
Focus efforts on eliminating racial and ethnic health disparities

STRATEGIES:

Continue to support or expand grant programs that provide opportunities to eliminate health disparities in infant mortality through social service organizations. Social service organizations play a critical role in addressing the social conditions that impact infant mortality, such as poverty, particularly in communities experiencing higher rates of infant mortality. Community organizations that are run by and for communities of color and American Indians should receive priority status in funding decisions. The Eliminating Health Disparities Initiative Grant Program that funds 42 organizations is a model of how community based social service organizations can work to decrease health disparities in infant mortality.

Eliminating health disparities continues to be a health priority in Minnesota. The Eliminating Health Disparities Initiative, enacted in the 2001 legislative session (Minnesota statute 145.928), sets the goal of reducing the infant mortality rate disparity in Minnesota by 50% by 2010. The infant mortality rate for Asian Americans and Hispanics has decreased 50% since the time the legislation passed. The infant mortality rates for the African American population and the American Indian population have not decreased 50% since the legislation was passed. A 50% reduction for African Americans is 9.4 deaths per 1,000 live births, and the most recent rate (1999-2003) is 10.2. A 50% reduction for American Indians is 9.5 deaths per 1,000 live births, and the most recent rate is 9.9.

RECOMMENDATION 4:
Collaborate with all partners to enhance and coordinate activities targeted at reducing infant mortality rates.

STRATEGIES:

Create and sustain partnerships to help assure:
- **implementation of existing standards for number of visits and content of prenatal care including early screening and identification of behavioral risks such as use of alcohol, tobacco, and other drugs, and screening for and identification of mental health issues**. (Standards of care refer to both American College of Obstetricians and Gynecologists— ACOG Guidelines and the Institute for Clinical Systems Improvement— ICSI Guidelines); and

- **implementation of the National Standards on Culturally and Linguistically Appropriate Services (CLAS) in Health, developed by the U.S. Department of Health and Human Services, Office of**

Minority Health. In addition, encourage and assist the provider community including health systems, hospitals, and local public health to evaluate themselves in terms of the CLAS standards.

Work with the Department of Human Services to evaluate the potential for third party reimbursement for doula and community health worker services. Collect data demonstrating cost savings and service benefits to encourage inclusion of these service providers in the Department of Human Services contracts with the health plans.

Collaborate with the Minnesota Council of Health Plans and the Minnesota Department of Public Safety to create a universal car seat safety education and distribution program.

Collaborate with the Department of Human Services' Child Mortality Review panel, the Minnesota Sudden Infant Death Center, Emergency Services for Children, Midwest Children's Resource Center, the Minnesota Chapter of the American Academy of Pediatrics and other partners. (e.g. family practice physicians, nurse practitioners, physician assistants) to further develop and implement strategies to prevent injuries to infants.

Priority Area: Reduce Preterm and Very Preterm Births

RECOMMENDATION 5:
Promote healthy behaviors such as smoking cessation that are shown to reduce preterm and very preterm births.

<u>**STRATEGIES:**</u>
Continue current activities and seek resources to expand smoking cessation efforts related to smoking during pregnancy. The "5 A's" counseling method for smoking cessation is an evidence-based clinical counseling approach that is effective in improving the quit rate of pregnant smokers. This approach, as well as other approaches such as referral to the Quitline, are activities that are important in promoting healthy behavior change.

Expand smoking cessation efforts to include encouraging women to not resume smoking after pregnancy. The 2003 Minnesota Pregnancy Risk Assessment Monitoring System data indicates a significant number of women who quit smoking during pregnancy, resumed smoking after birth. It is important to encourage women to not resume smoking for the women's health, the infant's health and for the health of a baby in subsequent pregnancies.

Encourage healthy behaviors prior to conception and during pregnancy that will result in a decrease in birth defects and the rate of preterm births. Folic Acid use, prior to and during pregnancy, is demonstrated to decrease the risk of neural tube birth defects. A healthy weight prior to conception, optimal weight gain during pregnancy, regular exercise and a healthy diet influence positive birth outcomes. Utilizing prenatal and preconception genetic counseling, as appropriate, allows women the opportunity to change or adopt behaviors that will decrease the impact of risk factors that may have a negative birth outcome.

Promote the utilization of community health workers, peer educators and others in building capacity in communities to increase utilization of services and resources that will impact the health of pregnant women.

RECOMMENDATION 6:
Collaborate with all partners to enhance and coordinate activities targeted at reducing preterm and very preterm births.

<u>**STRATEGIES:**</u>
Continue to participate in and utilize new opportunities for collaborative efforts related to surveillance, best practices and policy development to reduce preterm and very preterm births. Efforts such as the MN State Team on Smoking Cessation for Women of Childbearing Age, including Pregnant Women has been instrumental in addressing the issue of smoking by pregnant women. This collaborative effort demonstrates the importance of working with partners in

improving perinatal health and the importance of sustaining these efforts as well as finding new opportunities.

Encourage and participate in partnerships that recognize the importance of dental health during the preconception and early prenatal period on the impact of preterm and very preterm births. Research is demonstrating the impact of poor dental health in achieving a healthy birth outcome. Access to dental care is a concern for many individuals in the state. A priority population whose dental health needs should be addressed is women prior to conception and early in their pregnancy.

RECOMMENDATION 7:
Promote implementation of best practices by public health and primary care providers that improve birth outcomes.

STRATEGIES:
Identify and disseminate to local public health staff and other community providers best practices related to preventing preterm and very preterm births. Continue to provide training opportunities such as the Motivating Pregnant Smokers to Quit: Training, Tools & Techniques training.

Identify opportunities to promote access to early and regular prenatal care including care that is culturally relevant. Early access and regular access to prenatal care is important in identifying risk factors that may result in preterm or very preterm births. It is important to continue to support activities such as the Eliminating Health Disparities Initiative grants that provide culturally specific services to women. Ongoing efforts should be maintained and new opportunities identified that will provide education and resources that are culturally relevant.

Promote preconception care including the identification of risk factors that may adversely affect women during pregnancy. Certain risk factors such as high blood pressure, diabetes and obesity may have a negative outcome during pregnancy. These risk factors, if identified and addressed prior to conception, will have a greater positive impact on the health of women prior to and during pregnancy and may provide a better pregnancy outcome. It is important to provide education to health care providers on the importance of preconception care and best practice standards.

Develop, evaluate and disseminate practical screenings tools or best practice guidelines for screening tools to be used in a primary care setting for both preconception and pregnancy. Previously, the Minnesota Pregnancy Assessment Form was used by providers to identify risk factors during pregnancy. Because of difficulties with the assessment form, the mandatory use of that tool was discontinued a year ago and clinics are now encouraged to utilize a screening tool of their choice. A review of the literature and development, evaluation and dissemination of screening tools and/or best practice guidelines for screening

during the preconception or pregnancy period would enhance the standard of care provided in the state and increase positive birth outcomes.

Promote knowledge and increased awareness of social determinants that suggest an impact on premature births. Social conditions have an impact on pregnancy outcomes, including premature births. A number of studies have suggested that very high levels of stress increase the risk of preterm labor, based on a potential link between stress and elevated levels of a hormone that is linked to preterm labor. [2] In the United States, the primary cause of infant death for African Americans is prematurity, whereas the primary cause of infant death for the general population is birth defects. It is hypothesized that women who have been the targets of racism or personal violence may be at particularly high risk of preterm delivery.[3] This is valuable information for individuals, medical providers, and public health professionals, as well as policy makers.

---

[2] March of Dimes web page, "Stress and Pregnancy," http://www.march of dimes.com/professionals.
[3] Rich-Edwards J, Krieger N., Majzoub, J et. al., Maternal Experiences of racism and violence as predictors of preterm birth: rationale and study design, Paediatric and Perinatal Epidemiology 2001 15(Suppl. 2) 124-135.

Priority Area: Promote Preconception and Interconception Health Care

Preconception health care consists of preventive and primary care services before pregnancy that improve birth outcomes for the mother and infant. Important health care services during the preconception period include genetic counseling, screening and interventions to address risk behaviors (e.g. smoking, alcohol use and recreational drug use), periodontal care, and screening and management of chronic and infectious diseases. The timing of medical care and interventions to address risk behaviors during the preconception period and early pregnancy can be critical. However, approximately 34% of all pregnancies in Minnesota are unintended.[4] Therefore, all health care to women of child bearing age should provide risk screening, health promotion, and effective interventions to promote positive health outcomes for women, mothers and infants.

RECOMMENDATION 8:
Maintain current surveillance activities and explore other data sources that may assist in identifying targeted populations or enhance understanding of issues, trends and disparities.

STRATEGIES:

Continue to monitor Minnesota insurance rates for women of reproductive age to promote an understanding of women's access to preconception care. Many women receive preconception and interconception care through either private health insurance or public program health insurance. In the last few years, uninsurance rates have increased, eligibility criteria for public programs have changed, and enrollment in public health insurance programs has increased. [5] The Department of Health should continue to monitor the impact of these changes on women's access to medical care, particularly during the reproductive years.

Partner with the Minnesota Department of Human Services to conduct surveillance activities and data collection that will identify groups that are not receiving family planning services.

Some women access family planning services through community family planning clinics. However, these clinics are experiencing many changes. There is a transition currently underway in the way that these clinics receive funding for family planning services. In the summer of 2006, the Minnesota Department of Human Services began to roll out the Minnesota Family Planning Program that will allow more women to qualify for family planning services by accepting higher incomes for coverage of family planning services. At the same time, the dollars available to community family planning clinics through the Family

---

[4] PRAMS 2002/2003 data

[5] In 2004, there were 94,000 additional uninsured persons compared to 2001. Roughly 375,000 or 7.4% of Minnesotans were uninsured in 2004, compared to 281,000 or 5.7% in 2001. Public program enrollment increased 21.2% in 2001 to 25.1% in 2004. Minnesota Department of Health, Health Economics Program, *Health Insurance Coverage in Minnesota: Trends From 2001 to 2004.*

Planning Special Project Grants were reduced in 2003 and are scheduled to be reduced again "upon full implementation of the family planning project."[6] Thus, the public funding for family planning services at community family planning clinics is in transition; a larger portion of public funding will be provided through reimbursement for services rather than grant dollars. Many, but not all, of the women receiving family planning services from the clinics supported by the Family Planning Special Project dollars will be eligible to enroll and receive services through the Minnesota Family Planning Program. It will be important to monitor the number of women not eligible or not utilizing family planning services during and after this transition.

RECOMMENDATION 9:
Promote and improve access to preconception and interconception health care.

STRATEGIES:

Support policies and programs that improve low income women's access to preconception care and interconception care. Health insurance provides women access to health care for primary prevention, family planning, preconception care and prenatal care. Thus, health insurance for women is a key strategy in promoting preconception and reproductive health. The CDC Recommendations To Improve Preconception Health And Health Care state "[a]s states seek to expand Medicaid coverage to persons with low incomes and adults who do not have health insurance, women of childbearing age should receive priority for qualifying for Medicaid coverage."

The Minnesota Family Planning Program will provide family planning services to a group of women that would not otherwise qualify for Medicaid. However, the Minnesota Family Planning Program covers only family planning services; access to other health care services that would be included under primary prevention, preconception care or interconception care for this group of women is not assured. Some low-income women do not qualify for any public health care program, or at least not until they are pregnant. Supporting policies and programs that increase healthy women, healthy pregnancies and healthy births is in everyone's interest. Medicaid will reimburse for public health nurse home visits and can be used to increase women's access to the preconception and reproductive health services provided in public health nurse home visits.

---

[6] 2005 Special Session Minnesota Laws, Chapter 4, Art. 9, section 3, subd. 2.

RECOMMENDATION 10:
Promote and improve access to family planning services.

STRATEGIES:

Collaborate with the Department of Human Services to promote the utilization of family planning services:

- **Seek resources to market the Minnesota Family Planning Program.**
  Neither the Minnesota Department of Human Services nor the Department of Health has an adequate marketing budget for disseminating information on the Minnesota Family Planning Project. During the start-up of Minnesota Family Planning Project and prior to the decrease in Family Planning Special Project Grant funds in fiscal year 2008, it is critical that information about services is disseminated to providers and consumers about the Minnesota Family Planning Project program.

- **Partner with the Department of Human Services in efforts to create public awareness about family planning services available through Minnesota Health Care Programs (e.g. Medical Assistance and MinnesotaCare).**

- **Use existing communication avenues to create provider and consumer awareness about Minnesota Family Planning Project and Family Planning Special Project Grants.**

Collaborate with local public health agencies to increase utilization of the Minnesota Family Planning Program. Provide technical support and information to local public health agencies about the changes in funding streams and how to help consumers access services.

Target the distribution of Family Planning Special Project Grant dollars to provide services to persons who do not qualify for coverage under the Minnesota Family Planning Project.

Identify barriers to family planning services and seek resources to address the barriers:

- Monitor the impact of contraceptive costs and public and private insurance reimbursement rates and policies on access to reproductive health care.

- Pursue bulk purchasing agreements for contraceptive supplies and other drugs for appropriate Department of Health grant programs, such as the Department of Health Family Planning Special Project grants.

- Consider how community health workers could best be utilized to promote reproductive health care within their communities.

RECOMMENDATION 11:
Promote implementation of best practices by public health and primary care providers that improve birth outcomes.

STRATEGIES:

Evaluate with partners the opportunity to convene a forum on preconception / interconception care. The area of preconception health is not well known among some of our key health care and community partners. The Minnesota Department of Health and the Maternal and Child Health Advisory Task Force are in a unique position to bring a wide range of partners together to discuss preconception health topics. The CDC "Recommendations to Improve Preconception Health and Health Care"[7] could provide a framework for organizing the forum. A primary goal of the forum would be to increase knowledge of and support for preconception health and health care, as a means to optimize health throughout the life span.

Review and recommend a screening protocol for health care providers to use in the provision of preconception/interconception care. The protocol would include areas such as genetic counseling, risk behaviors, periodontal health, folic acid use, and chronic and infectious diseases that may affect the outcome of a pregnancy.

Identify and disseminate to public health nurse/home visiting staff best practices for preconception and interconception health; encourage public health nurse/home visiting staff to promote these practices.

RECOMMENDATION 12:
Collaborate with all partners that serve racial and ethnic populations to enhance and coordinate activities targeted at improving preconception and interconception health care.

STRATEGIES:

Utilize existing resources to build capacity in communities to promote preconception and interconception health and health care:
- Identify opportunities with the Office of Minority and Multicultural to promote preconception and interconception health and care. For example, utilize the Elimination of Health Disparities Initiative structure to provide information to providers and consumers.

- Promote preconception and interconception health care education as a part of the curriculum for community health workers.

---

[7] CDC, Morbidity and Mortality Weekly Report, *Recommendations to Improve Preconception Health and Health Care --- United States.* April 21, 2006.

Children and Adolescents
Recommendations and Strategies

The children and adolescent health work group identified the following individuals as part of the target population: children from one year to eighteen years old. The work group identified four priority areas for the recommendations: prevent child maltreatment, promote mental health, prevent underage alcohol use, and prevent teen pregnancy.

Priority Area: Prevent Child Maltreatment

RECOMMENDATION 1:
Maintain current surveillance activities and explore other data sources to better understand the contributing factors for child maltreatment and develop prevention strategies.

STRATEGIES:

Conduct surveillance activities to better understand the contributing factors for child maltreatment and develop prevention strategies. For example, continue to analyze hospital billing data for this purpose. Identify other data sources and surveillance activities that can be used to understand the contributing factors for child maltreatment and develop prevention strategies.

Continue current state specific data collection efforts such as the Minnesota Student Survey and the State Child Mortality Review Panel. Child maltreatment data is an important tool for local public health when it is consistently collected, easy to interpret and timely. Continue to review trends and provide recommendations and feedback to local agencies.

Seek resources to conduct studies using methods such as institutional ethnography that enable communities to identify not only individually based contributing factors to child maltreatment but community and systemic factors as well. An ethnography is an investigation that uncovers how everyday practices in case management procedures occur across a set of agencies. It has been used successfully in domestic violence and criminal justice reform efforts.

The Fetal Infant Mortality Review (FIMR) projects, conducted in different parts of the state prior to the year 2000,[8] are another model to consider. In the FIMR model, a public health nurse was able to extract critical data from the patient record. This data was then analyzed by a multidisciplinary team. Community and systemic recommendations were developed to both prevent and improve

---

[8] The statutory authority to access medical records without consent for the purpose of fetal and infant mortality review sunset in July, 2000.

responses to fetal and infant deaths. This model is different from, but closely related to, institutional ethnography.

RECOMMENDATION 2:
Promote healthy behaviors through activities such as promoting public understanding of child abuse prevention, implementing CDC health promotion strategies and promoting home visiting.

STRATEGIES:

Utilize the work being done by the FrameWorks Institute, sponsored by Prevent Child Abuse America (PCA) to promote public understanding of child abuse prevention. The mission of the FrameWorks Institute is "to advance the nonprofit sector's communications capacity by identifying, translating and modeling relevant scholarly research for framing and reframing the public discourse about social problems."[9] FrameWorks research has been sponsored by Prevent Child Abuse America with funding from the Doris Duke Foundation. The objective for the first phase of this research is to develop an understanding of the public beliefs that may influence policy support, with the ultimate goal of developing effective communications to advance policy.

Draw upon the expertise and resources of multiple disciplines to design and implement health promotion strategies to prevent child maltreatment. Preventing child maltreatment requires multidisciplinary solutions. The model developed by the Centers for Disease Control and Prevention (CDC)[10] is recommended because it was developed by a diverse team of experts representing multiple sectors including: public health, mental health, justice, academia, etc. This model describes the efficacy of health promotion as an effective violence prevention tool and outlines a long-term vision and plan for utilizing health promotion as a violence prevention strategy.

The Minnesota State Plan: "Toward an Injury-Free & Violence-Free Minnesota 2006-2010" is another model that includes multidisciplinary solutions. This plan can be implemented using a multidisciplinary approach by working across divisions within the Department of Health and across state agencies to implement health promotion strategies to prevent child maltreatment.

Promote home visiting as an effective tool for preventing child maltreatment. Support home visiting strategies that are developed specifically to prevent child maltreatment. These would include programs that target populations at risk and are of sufficient duration and intensity to meet program objectives, according to evidence-based practice.

---

[9] http://www.frameworksinstitute.org/.
[10] See http://www.thecommunityguide.org/violence. A logic model is available under "Additional Resources," at the bottom of the page.

Maintain current financial support for home visiting through federal and state funding sources. Encourage and assist local agencies in identifying funding opportunities available to them to support home visiting.

Recognize and support community-based social service organizations that provide home visiting services by persons who are a member of the community. Encourage the use of community health workers to effectively reach racial and ethnic families.

Provide training for home visitors regarding cultural diversity/cultural norms, how to work effectively with parents with developmental delays and advocacy skills.

Utilize state and local public health staff to promote the education of caregivers of children with special health care needs that will reduce the risk for child abuse and neglect.

RECOMMENDATION 3:
Collaborate with partners to enhance and coordinate activities targeted at preventing child maltreatment.

STRATEGIES:

Identify and participate in opportunities to collaborate on surveillance, best practices and policy development to reduce child maltreatment. Establish better partnerships with grassroots organizations, such as parish nurse programs, that are supporting families and addressing family issues in order to decrease the risk of child maltreatment. Identify and reach out to new partners on a broad range of issues surrounding child maltreatment, such as the Minnesota Department of Health Office of Minority and Multicultural Health and the Minnesota Children's Justice Initiative. Encourage and support ongoing collaborative efforts, such as the Family Service Collaboratives, that promote prevention and early intervention. Strengthen existing partnerships between the Minnesota Departments of Health, Education and Human Services.

RECOMMENDATION 4:
Promote implementation of best practices by local public health and others that promote healthy behaviors and prevent child maltreatment.

STRATEGIES:

Identify and disseminate to local public health staff best practices related to preventing child maltreatment in special populations, such as parents with cognitive delays or chemical health issues.

Identify and disseminate to local public health staff best practices for effectively supporting families with children with special health needs, for example assuring linkages between medical homes and other health related services.

Develop policies that support the implementation of these best practices.

Priority Area: Promote the Mental Health of Children and Adolescents

RECOMMENDATION 5:
Promote healthy behaviors by supporting a public health model of mental health promotion.

<u>**STRATEGIES:**</u>

Practice and support a public health model of mental health promotion.
Resources and activities for mental health must be balanced along the continuum of primary, secondary, and tertiary prevention/intervention if we are to enhance capacity for healthy coping and lessen the burden of mental illness:

- Work to increase prevention resources and activities to achieve better balance with intervention resources and activities.
- Support primary prevention programs and interventions that serve and promote the health of the whole child.
- Support programs that increase social networks and reduce stigma with special consideration to target populations at higher risk of future mental health issues, for example children and youth with special health needs, populations of color, American Indians, and children living in poverty.
- Promote understanding of the impact of parent's mental health on a child's well-being and healthy development and enhance the capacity of multi-disciplinary service providers to recognize and make referrals for parent's diagnosis and mental health support.
- Support the Local Public Health Association recommendations regarding a public health approach to mental health: to support policies that focus on a public health model (prevention, early identification and intervention); to support state and federal mental health policies and funding that encompasses the total population, focuses on health rather than illness, and views health and wellness on a broad spectrum.

RECOMMENDATION 6:
Collaborate with partners to enhance and coordinate activities targeted at promoting mental health.

<u>**STRATEGIES:**</u>

Create new and strengthen existing partnerships to promote mental health:

- Sustain and support public health's role in mobilizing community partnerships between policy makers, health care providers, families, the general public, and others to identify and solve mental health and wellness issues of children and adolescents
- Collaborate and build capacity across all systems to serve moderate risk families for whom services might have the greatest prevention impact.
- Partner with the Minnesota Department of Human Services to support and promote increased training and utilization of the Diagnostic Criteria (DC) 0-3 codes and crosswalk for diagnosis, treatment and reimbursement of services for children with mental health needs.

- Ensure representation of local public health on the Governor's Inter-Agency Coordinating Council on Early Childhood Activities.
- Facilitate collaboration among state agencies, counties, community organizations, and health plans to expand early childhood pre-school centers/services with a therapeutic component to serve young children with identified social emotional needs.

RECOMMENDATION 7:
Increase access to mental health assessments and services for children and adolescents and their families.

STRATEGIES:
Support expanding access to needed services:
- Work with partners to increase access to services for children who are found through screening to have a need for further assessment.
- Document unmet service delivery needs for children who are identified through screening.
- Work with partners to increase access to services for parent's mental health needs.
- Continue to work towards implementation of the Rural Health Advisory Committee (RHAC) recommendations on access in the RHAC Report on Mental Health and Primary Care of January 2005.

RECOMMENDATION 8:
Strengthen capacity and infrastructure within the state to support mental health promotion and wellness.

STRATEGIES:
Work to build the necessary capacity to support a statewide public health infrastructure and approach to mental health and wellness (policies, resources, training, data):
- Advocate for the investment of additional resources for prevention as a cost-saving measure that could reduce the need for expensive treatment intervention.
- Continue to work towards implementation of the RHAC recommendations regarding health professional education to build capacity – especially as they relate to the unique social emotional development of children.
- Encourage and support use of the screening tools for social-emotional and behavioral development of young children as recommended by the Minnesota Interagency Developmental Screening Task Force (Minnesota Departments of Health, Education, and Human Services).
- Document unmet service delivery needs for children who are identified through screening.
- Collect and analyze data from the Ages & Stages Questionnaires: Social – Emotional on both a statewide and regional level paying specific attention to referral and follow-up activity.

- Support and promote increased training and utilization of the DC 0-3 codes and crosswalk for diagnosis, treatment and reimbursement of services for children with mental health needs.

<div align="center">**Priority Area: Prevent Underage Alcohol Use**</div>

RECOMMENDATION 9:
Promote healthy behaviors by providing training, technical assistance and consultation on underage alcohol use prevention to local public health, tribal governments and community based organizations.

<u>**STRATEGIES:**</u>

Foster relationships with partners to keep communities focused on preventing underage drinking. Continue to work with the Minnesota Departments of Education, Human Services and Public Safety to provide training, technical assistance, and consultation to local public health, tribal nations and community-based organizations to coordinate, collaborate or assure that effective underage alcohol prevention efforts are instituted at the local level.

RECOMMENDATION 10:
Foster relationships with partners to assure that programs are community driven and culturally appropriate.

<u>**STRATEGIES:**</u>

Partner with tribal nations and racial and ethnic communities to assure that programs are community driven and culturally appropriate. The rate of underage alcohol use is too high among all groups. The highest rates have been documented among American Indian and Hispanic youth. Community driven prevention programs that are culturally driven and culturally appropriate will be most effective in reducing underage alcohol use among all groups. Support for community driven prevention programs can be in many forms, including sharing information about resources available to these programs.

RECOMMENDATION 11:
Promote prevention efforts that focus on changing community norms.

<u>**STRATEGIES:**</u>

Promote prevention efforts that focus on changing community norms to make underage alcohol use unacceptable. It will be very difficult to prevent underage alcohol use in communities where it is considered a "rite of passage" or a "kids will be kids" behavior. In order to change norms, the sectors of a community that engage youth and parents must be involved in sending consistent and congruent messages about underage alcohol use. Public health at the state and local level can support the governor's efforts to reduce underage alcohol use, by promoting effective strategies and the use of consistent messages that encourage community partnerships to work with various sectors in their communities. With this support, local groups can change the norms by encouraging schools to educate youth and enforce their policies; encouraging parents to communicate with their children and enforce their rules; encouraging law enforcement and the judiciary to enforce laws and hold violators accountable; encouraging health care

providers to screen patients about their use and provide brief interventions or referrals when appropriate; and encouraging employers of youth and park and recreation departments to send similar messages about use.

RECOMMENDATION 12:
Promote effective strategies to reduce youth access to alcohol.

STRATEGIES:

Identify and promote effective strategies to reduce youth access to alcohol from both social and commercial sources. The Minnesota Department of Health has a critical role in identifying, developing, and promoting strategies to share with other state agencies, local public health and law enforcement for reducing youth access to alcohol. For example, communities can control youth access to alcohol by enforcing laws for individuals who provide alcohol to minors, as well as conducting compliance checks of alcohol merchants, prosecuting adults and businesses that supply alcohol to youth, and assuring that law enforcement officers include the source of alcohol as part of any investigation of underage alcohol use.

Priority Area: Prevent Teen Pregnancy

RECOMMENDATION 13:
Focus available resources on eliminating racial and ethnic disparities in teen pregnancy rates, directing resources to those organizations already serving youth of color and American Indian youth successfully.

STRATEGIES:

Target teen pregnancy prevention funding and resources to eliminate ethnic and racial disparities in teen pregnancy.

Support continuity in funding for those community-based organizations that are successful working with youth of color and American Indian youth to develop protective factors and reduce teen pregnancy. Community organizations that are run by and for communities of color should receive priority in funding decisions. In addition, community organizations should be encouraged to:
- Target men and boys as well as girls;
- Serve populations experiencing the highest disparities in teen pregnancy;
- Provide a safe and youth friendly environment (youth centers);
- Partner with other agencies and or programs; and
- Involve the community in the development, implementation, and evaluation of teen pregnancy prevention programs.

RECEMMENDATION 14:
Improve data collection with populations at high risk of teen pregnancy and improve program evaluation efforts.

STRATEGIES:

Develop and promote innovative strategies to improve data collection for under represented populations, while recognizing data privacy concerns for small samples. Teen pregnancy data on the American Indian and Asian populations is often not available because of their relatively small numbers. This is also true for teen pregnancy data for some rural areas.

Develop and promote innovative strategies to improve program evaluation related to teen pregnancy prevention. Program evaluation should measure success in developing protective factors in addition to pregnancy prevention. Evaluation of programs should be realistic due to the time frame and financial constraints of the program, and should happen at several levels, i.e. not just outcome evaluation. It is difficult to show population change with short term funding.

RECOMMENDATION 15:
Promote healthy youth development as an essential method of preventing teen pregnancies. Support continuity of funding over time for programs that promote healthy youth development.

STRATEGIES:
> **Promote and support programs for healthy youth development by leveraging resources and community partnerships (state, local and non-profit), and by supporting the following policies:**
> - Promote approaches that focus on parents of youth, fathers as well as mothers.
> - Promote training of school staff and others who work with youth to identify mental health needs early and promote adequate funding for mental health services.
> - Work with other state agencies and community partners to increase the number, types, and quality of extracurricular activities that are <u>free</u> so that all students can participate regardless of socioeconomic status.
> - Promote comprehensive age appropriate sexuality education.
> - Promote and support initiatives that promote success in secondary education and improve access for minors to higher education and career opportunities.

RECOMMENDATION 16:
Increase access to family planning services through targeted outreach and funding.

STRATEGIES:
> **Target Family Planning Special Projects grants to focus on funding agencies that serve populations that 1) won't qualify for family planning services under Minnesota Health Care Programs, including the new Minnesota Family Planning Program, and 2) are at a higher risk of teen pregnancy.**
>
> **Partner with and provide support to the Department of Human Services in outreach activities to promote the new Minnesota Family Planning Program.** Outreach activities could include: provide information to providers through communicating with professional organizations, publishing articles in newsletters and journals (e.g. Minnesota Medicine), and presenting at conferences.

Children and Youth with Special Health Care Needs
Recommendations and Strategies

The children with special health care needs workgroup identified the following individuals as part of the target population: "[children] 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."[11]

The work group identified three priority areas for the recommendations: promote early identification and early intervention, promote access to health care and related services for children and youth with special health care needs, and improve comprehensiveness of care and coordination of services for children and youth with special health care needs. For all three priority areas, the work group stressed the importance of services and systems that address the needs of high risk populations.

Priority Area: Promote Early Identification and Early Intervention for Children and Youth with Special Health Care Needs

RECOMMENDATION 1:
Increase access to early identification and early intervention for all children. Concentrate outreach efforts on hard to reach families.

STRATEGIES:
Promote early identification and intervention for all children so that special health care needs and secondary conditions are identified early and interventions are initiated as quickly as possible after a concern or condition is identified. Outreach efforts should emphasize populations that experience health disparities and are thereby at greater risk of experiencing a special health care need. Early identification and intervention promotes better health and developmental outcomes for children with, or at risk for, special health needs. Outreach efforts to children in populations that experience health disparities are important in order to address risk factors and secondary conditions. For example, American Indians are one of the population groups that have higher rates of overweight and obese children and adolescents. Obesity is a risk factor for diabetes. And, in fact, American Indian youth age 15 – 19 have the highest prevalence of type 2 diabetes among all children and adolescents in the U.S.[12] A child with diabetes requires health care services to control and monitor the disease

---

[11] McPherson M., et al. A New Definition of Children with Special Health Care Needs. *Pediatrics* 1998, 102:137-39

[12] Fagot-Campagna, A., Pettitt, D., Engelgau, M., Burrows, N., Geiss, L., Valdez, R., Beckles, G., Saaddine, J., Gregg, E., Williamson, D., & Narayan, K. (2000). Type 2 diabetes among North American children and adolescents: An epidemiologic review and a public health perspective. Journal of Pediatrics, 136(5):664-672.

and prevent additional problems. However, these children may have less access to, or utilization of, health care services.

Develop and implement methods to increase the number of hard-to-reach families whose children are screened for special developmental and health conditions.   A new approach to reach these families would include training community health workers to administer the Follow-Along screening tool. The Department of Health staff could partner with community agencies to identify additional methods of reaching these families.

Assure the sustainability of current grant-dependent screening and early identification programs. The early identification of children with health and developmental needs is a low cost strategy to (1) improve the lives of children and their families, (2) reduce risks, (3) increase optimal health and development, and (4) prevent the onset of and/or reduce the impact of secondary complications of chronic illness or disability.[13] The bulk of funding required to conduct Minnesota's lead, newborn hearing, and birth defects surveillance programs relies on federal sources via grants and/or cooperative agreements. These grants are generally time-limited and the amounts available from year to year can vary depending upon federal priorities

Promote continuous screening throughout infancy and childhood with particular attention to increased screening for race-linked disorders.

Assure adequate and equitable fiscal resources are available to support the Follow-Along Program at the local level.

RECOMMENDATION 2:
Assure coordination and collaboration of early identification and referral systems to eliminate duplication and assure that all children receive appropriate screening and intervention.

<u>STRATEGIES:</u>
Improve follow-up and referral by providing technical assistance and support for coordination and collaboration among existing programs, primary care providers and public health agencies. The importance of an effective early childhood identification and intervention system is reflected in current early childhood state and national priorities. These include national Healthy People 2010 goals; the Minnesota Early Childhood Comprehensive Screening Systems (MECCSS) initiative, the federal Title V performance measures, the Minnesota state Title V priorities and performance measures, the Healthy Minnesota Public Health Improvement Goals, and the American Academy of Pediatrics screening initiatives. Minnesota has a variety of early identification/screening and referral systems. However, these systems are not uniformly and fully implemented

---

[13] Minnesota Children with Special Health Needs, "Early Identification and Intervention". Minnesota Title V Needs Assessment Fact Sheet. Fall 2004.

throughout the State, thereby limiting health and developmental potential for many children and their families who do not have the benefit of early and continuous screening, appropriate referrals and adequate follow-up.

Assure Public Health Participation in Early Intervention at the State and Local Level. Clarify with interagency partners the role of public health in implementing Part C of IDEA – Interagency Early Intervention for Infants and Toddlers with Disabilities.   Provide technical assistance and develop strategies that promote effective collaboration and partnerships through Part C interagency agreement processes and assures public health participation.

Part C of the federal Individuals with Disabilities Education Act created an interagency system of services for infants and toddlers with disabilities in order to (a) enhance the development of young children with disabilities; (b) reduce educational costs by minimizing the need for special education through early intervention; (c) minimize the likelihood of institutionalization and maximize independent living; and (d) enhance the capacity of families to meet their children's needs. Through a state interagency agreement, the state Departments of Health, Education and Human Services share responsibility for this program. The program is implemented through 95 interagency early intervention committees at the local level. Public health plays an important role in the early intervention system. Its primary responsibilities include increasing public awareness, outreach and child find.

RECOMMENDATION 3:
Improve identification and treatment of mental health problems that are secondary to physical health conditions or disabilities.

STRATEGIES:
Provide technical assistance to local public health agencies on strategies and resources to meet the mental health needs of children that are secondary to a physical condition or disability. During the most recent Title V needs assessment process, the vast majority of local public health agencies in Minnesota identified mental health and well being for all children and adolescents, including children and youth with special health care needs, as a priority. However, some local public health staff do not screen for mental health problems for a variety of reasons, including the fact that they lack the community resources to provide mental health assessment and treatment for children. Minnesota Department of Health staff could provide technical assistance to local public health staff, encourage them to use the social–emotional component of the Ages and Stages Questionnaire or other validated tools, and facilitate discussions of existing community resources and strategies for identifying / developing additional resources.

Support the integration of mental health screening and treatment into the primary care setting, to increase the number of children with special health needs that receive all needed mental health services.

Children with chronic physical conditions, physical disabilities and developmental disabilities are at an increased risk for developing mental health problems. According to a national survey,[14] more than ⅓ of adolescents with special health care needs and more than ¼ of children ages 6 – 11 years with special health care needs are in need of mental health services. However, some studies report that physicians, regardless of specialty, infrequently discuss common behavioral issues with adolescents with specific chronic illnesses.[15]

Two strategies for increasing access to mental health screening and treatment are integrating screening into primary care services and co-locating mental health providers into primary care and education settings.

Pilot programs are currently underway to integrate mental health screening into primary care settings. However a number of different strategies and screening tools are being used in these programs. The Department of Health is the lead agency in an interagency initiative, the Minnesota Early Childhood Comprehensive Screening Systems (MECCSS) Initiative that is planning to develop and distribute guidance to practitioners on developmental screening materials that are evidence based and appropriate in a clinical setting. The dissemination of appropriate tools is the first step in developing capacity within primary care settings for screening for mental health problems; staff training and referral resources should also be addressed.

Co-locating mental health providers in primary care clinics and educational settings could improve access to screening, diagnosis and treatment. Some communities have utilized collaborative funding to hire school-based social workers or Family Support Workers who are able to provide some community-based mental health services. For example, a Southwestern Minnesota Medical Center has two child psychologists in their office, and a Central Minnesota primary care clinic successfully utilizes a consultative model whereby a staff pediatric psychiatrist is available to consult with primary care physicians caring for children with mental health needs. Additional innovative efforts should be encouraged in primary care settings.

---

[14] National Center for Health Statistics, Centers for Disease Control and Prevention, *State and Local Area Integrated Telephone Survey, National Survey of Children with Special Health Care Needs, 2001.* [hereinafter National Survey of Children with Special Health Care Needs, 2001].
[15] Britto, M. et al. *Preventive Services Received by Adolescents With Cystic Fibrosis and Sickle Cell Disease.* Arch Pediatr Adolesc Med. 1999;153:27-32.

Priority Area: Promote Access to Health Care and Related Services for Children and Youth with Special Health Care Needs

RECOMMENDATION 4:

Improve access to health care by assuring the availability of adequate health insurance coverage for families whose children require additional health care resources.

STRATEGIES:

Advocate for adequate health insurance coverage in public and private programs for all children and youth with a special health care need. Conduct public awareness and outreach programs to promote the importance and value of coverage. Access issues such as lack of insurance, discontinuous insurance coverage, lack of providers, and the structure of delivery systems are barriers to receiving continuous, comprehensive, and coordinated health care services. In 2004, approximately 68,000 Minnesota children under the age of 18 were uninsured.[16] Uninsured children are at risk for health problems. Uninsured children are less likely to receive proper medical care for childhood illnesses. Using the definition of "uninsured" from the National Center for Health Statistics, an estimated 7,077 children with special health care needs in Minnesota were uninsured on the date of the above survey.

Study the impact of cost sharing on families that have high utilization of health care resources due to the needs of a child with a special health condition. Families of children with special health care needs experience out of pocket costs associated with health care services due to increased use of cost sharing in private and public insurance programs. 49,972 (26.7%) families of children with special health care needs spend more than $500.00 per year on health care for their child. More than 31,000 families indicate that their child's special health care need caused a financial hardship for their families.

While cost sharing is a response increasingly being used by employer-based insurance and publicly funded programs, little is known about its impact on families who need high levels of health care resources. This information will become increasingly important if use of high deductible health plans become more widespread. A study of the impact of cost sharing on the cost, quality and utilization of health care resources would provide important information to policy makers.

It is also important to educate and inform families, providers, and other stakeholders about issues of concern to families of children and youth with special health care needs about the impact of cost sharing, such as coinsurance, deductibles, co-payments and premiums.

---

[16] Health Economics Program, Minnesota Department of Health, and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (February 2006).

RECOMMENDATION 5:
Identify issues that may pose barriers to access to care and the impact on children with special health care needs and their families.

STRATEGIES:

Work with partners and communities to assure that services and systems of care reach targeted populations. Children with special health care needs require access to a variety of specialized services. Of those children who needed specific specialty services in Minnesota, 22,698 (14.1%) have one or more unmet needs for specific health care services.[17] Methods for improvement include working with partners to increase beneficiary outreach and education through training, technical assistance, and the development of resources.

Encourage, continue and expand state medical home initiatives. The American Academy of Pediatrics supports a medical home that promotes access and coordinates care for children. Having a usual source of health care facilitates access to health care and is associated with higher rates of preventive care use, as well as higher ratings of the patient-physician relationship and fewer unmet needs.[18]

RECOMMENDATION 6:
Improve geographic access to care when distance or other factors create barriers.

STRATEGIES:

Expand network of specialty care through existing telemedicine efforts. Telemedicine is one methodology that has been used successfully in reaching children and youth with special health care needs in rural, medically underserved communities without subspecialty care. The Minnesota Department of Health's 2004 Minnesota Rural Health Plan reported that the "potential for telecommunications to improve access to health in rural areas in Minnesota is promising." Given the shortage of health professionals and resources in greater Minnesota, a modern telecommunications infrastructure is considered to be an important part of the future of medicine in rural areas.[19]

---

[17] *National Survey of Children with Special Health Care Needs 2001*, supra note 14.

[18] Inkelas M., Schuster, M., Olson, L., Park C., Halfon, N., (2004). *Continuity of Primary Care Clinician in Early Childhood*. Pediatrics, June 2004; 113: 1917-1925.

[19] Office of Rural Health and Primary Care, Minnesota Department of Health. *Minnesota's Rural Health Plan*. April 2004: 27.

Priority Area: Promote Comprehensive Care and Coordination of Services for Children and Youth with Special Health Care Needs

RECOMMENDATION 7:
Collaborate with local public health and state partners in the development of comprehensive coordinated systems and services to children and youth with special health care needs, with a special focus on issues of transition to adulthood.

STRATEGIES:

Encourage state and local policy and planning initiatives that are charged with addressing the employment, health, and housing needs of persons with disabilities (such as the State Council on Disabilities and the Governor's Council on Developmental Disabilities), to work collaboratively to improve the transition of youth with special health care needs into adulthood, considering factors at the individual, community and systems level. There are an estimated 53,875 youth ages 14 to 18 who have special health care needs living in Minnesota – 17.8% of all 14 to 18 year olds in the State.[20] Many youth with special health care needs require specialized services to make successful transition to adult life, including moving from pediatric to adult health care, moving from school to advanced education and /or employment, and moving from living with their families to greater independence in their communities.[21] People are healthiest when they feel safe, supported and connected to others in their families, neighborhoods, workplaces and communities. Lack of transportation, income, or encouragement and support from people and organizations in the community, as well as personal fears or perceived negative attitudes all pose obstacles and diminish community connectedness for people with chronic illnesses and disabilities. Comprehensive transition planning with implementation of programs and policies at the individual, family and community levels are needed to more adequately address these issues and assure a better quality of life for young people – and people of all ages – with disabilities and chronic conditions.

Provide technical assistance and support to individual health care providers and public health professionals to develop effective transition planning partnerships with youth, families, educators, employment programs and employers. If young people are not healthy they cannot reach their full potential in the classroom or on the job. Knowing how to manage health issues increases their chance of a successful transition from school to work and a productive adulthood.[22] Health care providers need to be a partner in transition planning.

---

[20] *National Survey of Children with Special Health Care Needs 2001*, supra note 14.
[21] Independence might include living arrangement, managing one's health, or developing adult relationships.
[22] Healthy and Ready to Work. *What's Health Got to Do With Transition? Everything!,* 2004. www.hrtw.org.

Identify strategies to assist local public health identify and utilize resources for collaborative planning and service coordination. The number of children and youth with special health care needs served through the Title V / Maternal and Child Health Block Grant dollars, which are passed through to local public health, has decreased significantly since 2001.[23] The number of public health visits per child served has increased slightly. It is important to understand why this decrease has occurred.

Identify service coordination funding sources and promote their sustainability. Nearly 27% of families of children with special health needs in Minnesota find that services are not organized so they are easy to use.[24] Poorly organized and poorly coordinated systems and services result in inefficient, sometimes duplicative, and therefore more costly services. In partnership with families, service coordinators assist families in identifying strengths, resources, concerns and priorities; integrate identified child and family outcomes with resources and service options; evaluate services provided; and identify and access federal, state and local funding sources to assist families in meeting their desired outcomes.[25] Linking people to needed personal health services is an essential public health service.[26] Local public health providers coordinate services for a small subset of the children and youth with special health care needs population. Maximizing the utilization of funding sources will assure that this role can not only be sustained, but also expanded.

Encourage local public health agencies to identify one individual responsible for serving children and youth with special health care needs. Provide support, training and technical assistance to that individual. Historically, responsibility for policy and expertise relating to children and youth with special health care needs has been concentrated at the state and district office levels. Public health capacity at the local level has focused on the provision of individual health services. Improving service delivery systems at the local level requires an in-depth understanding of the population as well as an in-depth understanding of local resources and needs.

---

[23]Community and Family Health Division, Minnesota Department of Health, *Maternal and Child Health Block Grant Statistical Reports.*

[24] *National Survey of Children with Special Health Care Needs 2001*, supra note 14.

[25] http://www.waisman.wisc.edu/birthto3/Txt/selfassess.html, Last updated 7/13/2006.

[26] Adopted: Fall 1994, Source: Public Health Functions Steering Committee, Members (July 1995): American Public Health Association·Association of Schools of Public Health·Association of State and Territorial Health Officials·Environmental Council of the States·National Association of County and City Health Officials.

RECOMMENDATION 8:

Provide leadership, technical assistance and guidance to health care providers, public health and others on service coordination and the development of systems of care.

<u>STRATEGIES:</u>

Along with preparing youth to be partners with health care providers in their own health care, prepare families, communities and systems to support transitions. Transition planning must begin at diagnosis. Adolescents need to know about their medical condition and its treatment, health insurance, Supplement Security Income, and the supports and services they need to have a successful transition. Public health has a role in assuring that resources, training, technical assistance and support are in place for families, community health providers, educators and counselors.

Improve the quality of service coordination by (a) clarifying the role of public health, (b) identifying necessary skills for service coordinators, (c) identifying training needs, and (d) providing training and technical assistance to service coordinators.

Decrease the risks of secondary conditions through family education and by improving the capacity of individual providers and communities. There are over 160,000 children and youth with special health needs in Minnesota.[27] More than 200 chronic conditions and disabilities affect children and youth. Some of the conditions and disabilities include, but are not limited to, asthma, diabetes, sickle cell disease, spina bifida, cerebral palsy, epilepsy and autism. Children with special health needs live, learn, work, play and actively participate in community life throughout Minnesota. In doing so, they interface with a variety of adults - teachers, physicians, dentists, nurses, therapists - who may or may not understand the child's health condition or know how to effectively manage the care needs of the child.

Individual capacity-building activities include both formal and informal models of continuing education. Many capacity-building models embrace a formal structure that typically relies on academic institutions to provide structured, continuing education programs targeting working professionals. Some of these formal approaches also include less structured elements in their programs, such as networking and mentoring opportunities to enhance the educational process. Other models embrace a more informal learning structure that creates and makes available educational resources that professionals access as they choose. In order to improve provider capacity to decrease risks of secondary conditions, all educational opportunities should be evidenced based.

Community capacity-building includes information sharing, conducting community-wide assessments of services and needs, facilitating training

---

[27] *National Survey of Children with Special Health Care Needs 2001*, supra note 14.

experiences in communities, collaboration and cooperation among community entities, increasing access to medical professionals in communities, and the provision of technical assistance for data analyses to communities.

RECOMMENDATION 9:
Improve the quality of services that children and their families receive through implementation of medical homes.

STRATEGIES:

Encourage, continue and expand MDH medical home initiatives. There are over 160,000 children with special health needs in Minnesota. Fewer than half of them have a medical home, which is defined as accessible, continuous, comprehensive, family centered, coordinated, compassionate, and culturally effective primary care.[28] MDH is currently leading a collaborative learning, quality improvement project for 19 pediatric primary care clinics. Lessons learned from this project should be documented in guidelines for other pediatric primary care clinics, and training and technical assistance should be made available to providers and health care administrators to assure adoption of a medical home for ALL children and youth with special health care needs.

---

[28] *National Survey of Children with Special Health Care Needs 2001*, supra note 14.

IV. How the Recommendations Support the Department of Health's Strategic Priorities and the Title V State Priorities

Minnesota Department of Health Strategic Goals for 2005-2008

The MCH Advisory Task Force recommendations are consistent with the MDH strategic goals for 2005-2008. This report and the recommendations support the Department of Health's work on two of the strategic goals: 1) focus on clear priorities for improving health outcomes and 2) increase policy impact.

One of the Department of Health priorities, the elimination of health disparities, is a focus of many of the task force recommendations. The task force reviewed data that demonstrated continuing health disparities in infant mortality rates, teen pregnancy rates and preterm birth rates among populations of color and American Indians compared to the white non-Hispanic population. As a result, these are three of the priority areas for the recommendations.

In addition to choosing three priority areas that focus on health disparities, the task force identified strategies for most of the priority areas that will improve health outcomes in populations of color and American Indians. For example, improving or expanding surveillance activities, improving access to and utilization of health care services, and promoting best practices and healthy behaviors are intended to reduce disparities. These strategies will also improve health outcomes for all Minnesotans.

A second strategic goal, increasing policy impact, is realized in part, by engaging the community and key stakeholders in policy initiatives. The MCH Advisory Task Force members are key partners for the Department of Health's work to improve health outcomes for mothers and children. The Department's role in convening the MCH Advisory Task Force provides a unique opportunity to engage task force members and their organizations in developing and promoting policies. These recommendations and the accompanying strategies are intended to provide a rich foundation for ongoing discussions and activities around a broad range of current and emerging policy issues.

Title V State Priorities

The Title V MCH Block Grant is a federal grant distributed to all states from the Federal Maternal and Child Health Bureau (MCHB). The purpose of the Block Grant is to promote continued improvement in the health, safety and well being of mothers and children. For federal fiscal year 2006, Minnesota received approximately $9.1 million from the Title V MCH Block Grant. Two thirds of the block grant goes to community health boards as directed by state statute.

In 2004, the Minnesota Department of Health conducted a state-wide needs assessment as required by the MCHB. The needs assessment is a tool to determine Minnesota's priority needs for the maternal and child health population and the corresponding performance measures that Minnesota will report on annually to the MCHB.

The recommendations in this report build upon the Title V state priorities and provide strategies for improving statewide outcomes on the performance measures. The following table demonstrates the common priorities for Title V and the MCH Advisory Task Force recommendations.

Title V State Priorities 2005-2010	MCH Advisory Task Force Report and Recommendations: Priority Areas
1. Improve early identification of and intervention for CYSHCN birth to three.	Promote early identification and early intervention for CYSHCN
2. Assure that children and adolescents receive comprehensive health care, including well child care, immunizations, and dental health care.	Promote mental health; promote access to health care and related services for CYSHCN; promote coordination and comprehensiveness of care for CYSHCN
3. Prevent teen pregnancy and sexually transmitted infections.	Prevent teen pregnancy
4. Prevent child abuse and neglect	Prevent child maltreatment
5. Promote planned pregnancies and child spacing.	Promote preconception and interconception health care
6. Assure early and adequate prenatal care.	Reduce infant mortality; reduce preterm births and very preterm births; promote preconception and interconception health care.
7. Promote mental health for children and adolescents, including suicide prevention.	Promote mental health
8. Eliminate racial and ethnic health disparities impacting mothers and infants.	Reduce infant mortality; reduce preterm births and very preterm births; prevent teen pregnancy; promote early identification and early intervention for CYSHCN
9. Improve access to care for CYSHCN: Medical home, specialty care and services, oral health, services organized for easy use.	Promote access to health care and related services for CYSHCN; promote comprehensiveness of care and coordination of services for CYSHCN
10. Improve access to comprehensive mental health screening, evaluation, and treatment for CYSHCN.	Promote mental health; promote early identification and early intervention for CYSHCN

* CYSHCN – children and youth with special health care needs

There recommendations provide an opportunity for increased collaboration. MCH Advisory Task Force members are critical community partners for the Title V goal of "continued improvement in the health, safety and well being of mothers and children."

With a common focus on these priorities, state and community partners can make significant progress.

Conclusion

This report is the culmination of a multiyear project of the MCH Advisory Task Force to monitor trends in maternal and child health. In the first phase of this project, the task force conducted interviews to collect information from local public health on women and children's ability to access health and health related services in their community and on emerging health issues. In the second phase of the project, three work groups were formed to review data on key maternal and child health indicators and the current and emerging issues identified by the interviews. The work groups used the data to identify priority areas for recommendations to the Commissioner of Health to improve health outcomes for women, mothers and children in Minnesota. Included with the recommendations are strategies for the Department of Health and others to consider in developing maternal and child health policies and programs. Some of the strategies acknowledge the vital role of current Department of Health programs and express support for the continuation, expansion or modification of those programs. The recommendations are also a tool for further collaboration between task force members, their agencies, and the Department of Health in improving outcomes for Minnesota's maternal and child population.

Appendix A

Work Group to Design and Conduct Interviews With Local Public Health Staff

Mary Lee Fredrickson	Coral Garner
Deb Hendricks	Jean Larson
Noya Woodrich	

Perinatal Health Work Group

Kenneth Bence	Coral Garner
Deb Hendricks	Jessie Kemmick
Marianne Keuhn	Rich Lussky
Noya Woodrich	

Child and Adolescent Health Work Group

Karen Adamson	Coral Garner
Deb Hendricks	Neal Holtan
Jessie Kemmick	Jean Larson
Noya Woodrich	

Children and Youth with Special Health Care Needs Work Group

Karen Adamson	Carolyn Byers Anderson
Carol Grady	Donna Lappe
Joan Patterson	Allison Senogles

Project Manager: Michelle Strangis, Maternal and Child Health Planner Principal
Student Interns: Elizabeth Ralston and Elizabeth Radel, University of Minnesota, School of Public Health.
Research Scientist: Marilyn Kennedy
**Administrative Assistant:** Pat Gerbozy

Thank you to the following staff of the Minnesota Department of Health that consulted with the work groups and provided technical assistance: Mary Jo Chippendale, Maggie Donohue, Cheryl Fogarty, Maureen Fuchs, Ann Gaash, Debra Hagel, Maureen Holmes, John Hurley, Jay Jaffee, Jan Jernell, Barb Lundeen, Gabriel McNeal, Jen O'Brien, Diane O'Connor, Rosemarie Rodriguez-Hager, Jon Roessler, Sharon Smith, and Sarah Thorson.

Appendix B
Local Public Health Staff that Participated in Group Interviews
by County
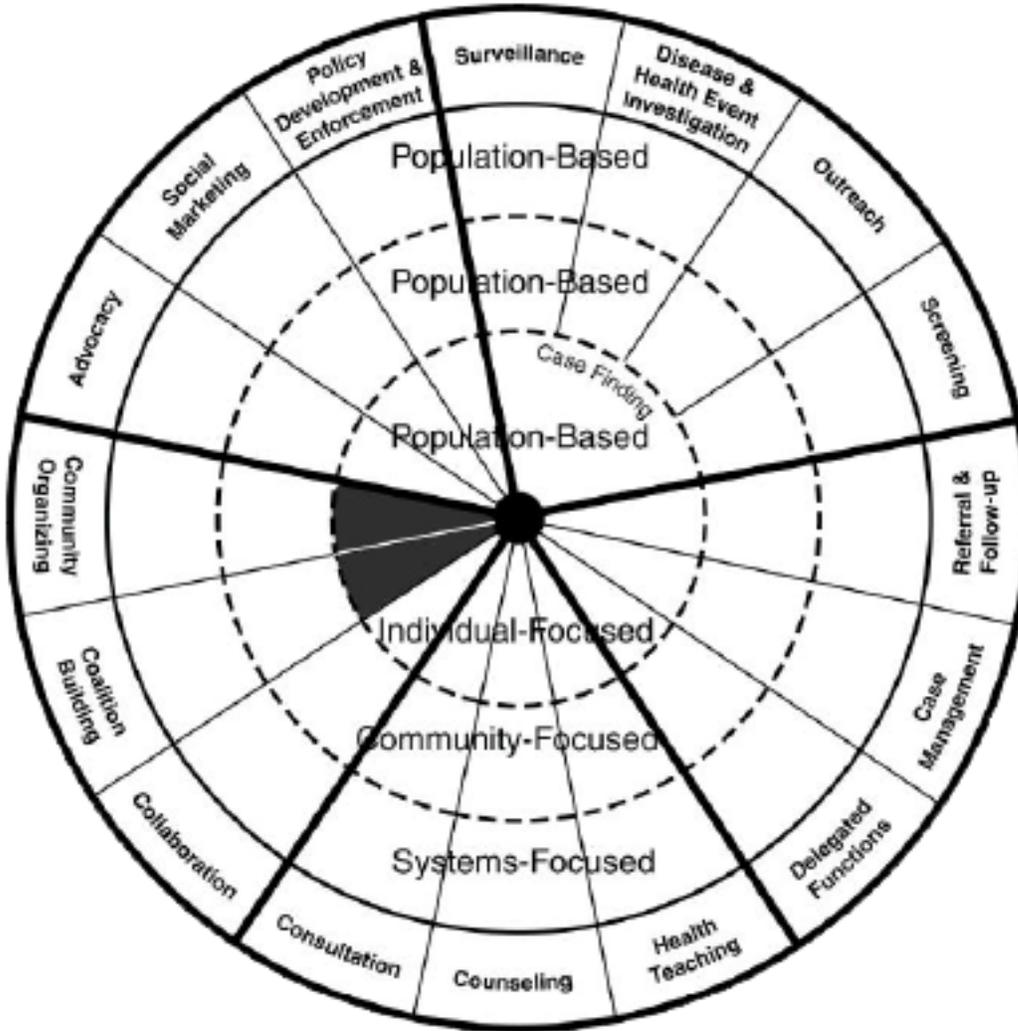
Northwest Region
North Central Region
Northeast Region
West Central Region
Central Region
Southwest and South Central Region
Metro Region
★ Leech Lake Reservation

Appendix C

Public Health Interventions

March 2002

Appendix C

Public Health Interventions with Definitions

Public Health Intervention	Definition
Surveillance	Describes and monitors health events through ongoing and systematic collection, analysis, and interpretation of health data for the purpose of planning, implementing, and evaluating public health interventions. [Adapted from MMWR, 1988]
Disease and other health event Investigation	Systematically gathers and analyzes data regarding threats to the health of populations, ascertains the source of the threat, identifies cases and others at risk, and determines control measures.
Outreach	Locates populations-of- interest or populations-at-risk and provides information about the nature of the concern, what can be done about it, and how services can be obtained.
Screening	Identifies individuals with unrecognized health risk factors or asymptomatic disease conditions in populations.
Case-finding	Locates individuals and families with identified risk factors and connects them with resources.
Referral and follow-up	Assists individuals, families, groups, organizations, and/or communities to identify and access necessary resources in to prevent or resolve problems or concerns.
Case management	Optimizes self-care capabilities of individuals and families and the capacity of systems and communities to coordinate and provide services.
Delegated functions	Direct care tasks a registered professional nurse carries out under the authority of a health care practitioner as allowed by law. Delegated functions also include any direct care tasks a registered professional nurse entrusts to other appropriate personnel to perform.
Health teaching	Communicates facts, ideas and skills that change knowledge, attitudes, values, beliefs, behaviors, and practices of individuals, families, systems, and/or communities.
Counseling	Establishes an interpersonal relationship with a community, a system, family or individual intended to increase or enhance their capacity for self-care and coping. Counseling engages the community, a system, family or individual at an emotional level.

Consultation	Seeks information and generates optional solutions to perceived problems or issues through interactive problem solving with a community, system, family or individual. The community, system, family or individual selects and acts on the option best meeting the circumstances.
Collaboration	Commits two or more persons or organizations to achieve a common goal through enhancing the capacity of one or more of the members to promote and protect health. [adapted from Henneman, Lee, and Cohen "Collaboration: A Concept Analysis" in *J. Advanced Nursing* Vol 21 1995: 103-109]
Coalition building	Promotes and develops alliances among organizations or constituencies for a common purpose. It builds linkages, solves problems, and/or enhances local leadership to address health concerns.
Community organizing	Helps community groups to identify common problems or goals, mobilize resources, and develop and implement strategies for reaching the goals they collectively have set. [adapted from Minkler, M (ed) *Community Organizing and Community Building for Health* (New Brunswick, NJ: Rutgers Univ. Press) 1997; 30]
Advocacy	Pleads someone's cause or act on someone's behalf, with a focus on developing the community, system, individual or family's capacity to plead their own cause or act on their own behalf.
Social marketing	Utilizes commercial marketing principles and technologies for programs designed to influence the knowledge, attitudes, values, beliefs, behaviors, and practices of the population-of interest.
Policy development	Places health issues on decision-makers' agendas, acquires a plan of resolution, and determines needed resources. Policy development results in laws, rules and regulation, ordinances, and policies.
Policy enforcement	Compels others to comply with the laws, rules, regulations, ordinances and policies created in conjunction with policy development.

Appendix D

Materials and Resources Used In Choosing the Priority Areas and Developing the Recommendations

The Maternal and Child Health Advisory Task Force consists of a diverse group of individuals who contributed their unique skills, knowledge, and experience to the process of studying trends in maternal and child health. The task force used information obtained from interviews with local public health staff, and the following materials to develop the recommendations and strategies in this report.

Perinatal Health: Women of Child Bearing Age, Pregnant Women and Infants

---

Health Economics Program, Minnesota Department of Health, and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (February 2006).

Maternal and Child Health Section, Minnesota Department of Health, Title V MCH Block Grant Needs Assessment Fact Sheets, Fall 2004. http://www.health.state.mn.us/divs/cfh/na/factsheets/index.html under heading "Pregnant Women, Mothers and Infants."

Minnesota Center for Health Statistics, Minnesota Department of Health, Birth and Death records.

Minnesota Center for Health Statistics, Minnesota Department of Health, *Minnesota Pregnancy Risk Assessment Monitoring System, 2002 – 2003 Survey Results* (2004).

Morbidity and Mortality Weekly Report, Center for Disease Control, *Recommendations to Improve Preconception Health and Health Care – United States, A Report of the CDC/ATSDR Preconception Care Work Group and the Select Panel on Preconception Care*, Volume 55, No RR6; 1 (April 21, 2006).

Performance Measurement and Quality Improvement, Minnesota Department of Human Services, *Minnesota Pregnancy Assessment Form (MPAF), Report #1: Demographic Data, 1998-2001,* **http://edocs.dhs.state.mn.us/lfserver/legacy/DM-0101-ENG** and *Report #2: Managed Care Organizations and Fee-for-Service Data, 1998-2001,* **http://edocs.dhs.state.mn.us/lfserver/legacy/MS-2251-ENG**

STD and HIV Section, Minnesota Department of Health, *Sexually Transmitted Disease (STD) Surveillance Report,* 2005.

Women, Infants and Children (WIC) Nutrition Program, Minnesota Department of Health, *Pediatric Nutrition Surveillance System, Health Indicators, Minnesota Children Enrolled in WIC 1995-2004,* November 2005.

Women, Infants and Children (WIC) Nutrition Program, Minnesota Department of Health, *Pregnancy Nutrition Surveillance System,* unpublished data.

Children and Adolescents

Health Economics Program, Minnesota Department of Health, and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (February 2006).

Teen Pregnancy

Minnesota Center for Health Statistics, Minnesota Department of Health, Minnesota Teen Births and Pregnancy Rates, 1999 – 2003.

Maternal and Child Health Section, Minnesota Department of Health, Title V MCH Block Grant needs assessment fact sheet, *Preventing Teen Pregnancy and Sexually Transmitted Infections,* September 2004.
http://www.health.state.mn.us/divs/cfh/na/factsheets/index.html.

T. Hoisington, Minnesota Family Planning Program, Minnesota Department of Human Services *Family Planning in Minnesota,* power point presentation to the MCH Advisory Task Force, September 23, 2005.

Child Maltreatment

Injury and Violence Prevention Unit, Minnesota Department of Health, *Toward an Injury-Free & Violence-Free Minnesota: A Working Plan, 2006-2010,* February 2006 draft.

Maternal and Child Health Section, Minnesota Department of Health, Title V MCH Block Grant needs assessment fact sheet, *Child Abuse and Neglect,* August 2004.
http://www.health.state.mn.us/divs/cfh/na/factsheets/index.html.

Minnesota Department of Human Services, *Minnesota Child Welfare Reports* 2000-2004.

J. Roesler and D. Hagel, Injury and Violence Prevention Unit, Minnesota Department of Health, *Child Maltreatment, Value of Hospital Data*, power point presentation to the MCH Advisory Task Force Children and Adolescents Workgroup, December 21, 2005.

Child and Adolescent Mental Health

KIDS COUNT, Children's Defense Fund Minnesota, *Children's Mental Health Data in Minnesota*, Summer 2004.

Maternal and Child Health Section, Minnesota Department of Health, Title V MCH Block Grant needs assessment fact sheets, *"Promoting Mental Health and Suicide Prevention,"* and *"Comprehensive Mental Health Services and Systems,"* September 2004. http://www.health.state.mn.us/divs/cfh/na/factsheets/index.html.

Minnesota Department of Education, Minnesota Student Survey. http://education.state.mn.us/mde/Learning_Support/Safe_and_Healthy_Learners/Minnesota_Student_Survey/index.html

Office of Rural Health and Primary Care, Minnesota Department of Health, *Rural Health Advisory Committee's Report on Mental Health and Primary Care*, January 2005.

Underage Alcohol Use

Maternal and Child Health Section, Minnesota Department of Health, Title V MCH Block Grant Needs Assessment Fact Sheets, *Substance Use: Alcohol, Tobacco and Other Drugs,* September 2004.
http://www.health.state.mn.us/divs/cfh/na/factsheets/index.html

Minnesota Department of Education, Minnesota Student Survey, available at: http://education.state.mn.us/mde/Learning_Support/Safe_and_Healthy_Learners/Minnesota_Student_Survey/index.html

---

Children and Youth with Special Health Care Needs

Community and Family Health Division, Minnesota Department of Health, Maternal and Child Health Block Grant Statistical Report, 2001, 2003 and 2005.

Health Economics Program, Minnesota Department of Health, and the School of Public Health, University of Minnesota, *Insurance Coverage in Minnesota: Trends from 2001 to 2004* (February 2006).

Minnesota Children with Special Health Care Needs Section, Minnesota Department of Health, Follow Along Program, 2002, 2003, and 2004.

Minnesota Children and Youth with Special Health Care Needs Section, Minnesota Department of Health, Title V Maternal and Child Health Block Grant Needs Assessment Fact Sheets, Fall 2004. http://www.health.state.mn.us/divs/cfh/na/factsheets/index.html under heading "Children and Youth with Special Health Needs."

National Center for Health Statistics, Centers for Disease Control and Prevention, State and Local Area Integrated Telephone Survey, National Survey of Children with Special Health Care Needs, 2001.

U.S. Department of Education, Office of Special Education Programs, Data Analysis System (DAS), 7/30/05.