Florida
Maternal and Child Health
2010 Needs Assessment

Florida Department of Health

July 1, 2010

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INTRODUCTION

The Title V Maternal and Child Health (MCH) Block Grant Program, enacted as part of the historic passage of the Social Security Act of 1935, is one of the largest Federal block grant programs and the only Federal program focusing exclusively on improving the health of all mothers and children. For the last 75 years, Title V legislation has led the nation in ensuring the health of all mothers, infants, children, adolescents, and children with special health care needs (CSHCN) – perhaps the broadest mandate of any Federal program. Title V is administered by the Maternal and Child Health Bureau (MCHB), part of the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS). Title V goals that are reflected in the MCH Block Grant Program include:

- Reducing infant mortality and the incidence of disabling conditions among children
- Increasing the number of children appropriately immunized against disease
- Increasing the percentage of low-income children who receive health assessments and follow-up diagnostic and treatment services
- Coordinating activities of the Title V programs with those of Medicaid; Women, Infants and Children (WIC); and other health and developmental disability programs
- Providing and ensuring access to:
    - Comprehensive perinatal health care for women
    - Preventive and primary child and adolescent health care services (including nutritional and developmental services)
    - Comprehensive health care, including long-term care services, for CSHCN
    - Access to rehabilitation services for children under 16 years of age who are blind and disabled and receive benefits under Title XVI, to the extent medical assistance for such services is not provided under Title XIX
- Facilitating the development of family-centered, community-based, and culturally competent comprehensive care for CSHCN and their families
- Putting into community practice national preventive health standards and guidelines (e.g., *Bright Futures Guidelines for Health Supervision of Infants, Children, and Adolescents*)
- Providing information to parents about health care practitioners who provide services under Title V and Title XIX

Since its inception, Title V has functioned as a federal-state partnership, with programs designed to identify and address persistent and emerging health issues of women, children, and families, and to measure the performance of such efforts. Over the years, despite conversion into a block grant program and refinements to increase accountability, Title V has remained a highly flexible source of Federal funding that states may use to develop and support a wide range of health-related services. States enjoy a great deal of freedom in determining priorities and allocating these Federal funds in order to most appropriately serve the needs of their particular populations. This flexibility has allowed states to develop effective and cost-efficient approaches to health service delivery through tailored programs and policies.

Title V legislation requires each state to conduct a statewide needs assessment every five years in order to identify the need for:

- Preventive and primary care services for pregnant women, mothers and infants up to age one
- Preventive and primary care services for children, and
- Services for children with special health care needs

This document has been prepared by the Florida Department of Health (DOH), as the agency responsible for the administration of Title V in Florida, in order to comply with this mandate, providing a comprehensive review of the current maternal and child health care needs of these population groups and an analysis of the Department's capacity to identify and address those needs. DOH also took the approach of integrating its capacity assessment into its assessment of Florida's overall needs. Two key factors in the selection of final priorities by central office management staff in these two Divisions were the agency's 1) ability to utilize existing resources and 2) ability to control the outcome.

As part of the needs assessment process, DOH and its stakeholders have defined eight top priorities upon which to focus efforts and resources over the next five years. In addition, DOH has chosen three broad themes for service delivery that are so universal in importance that they infuse every strategy for addressing each of the eight priorities. The needs assessment process resulting in the selection of these priorities and themes will be discussed in detail in the pages that follow.

For 2010, the reader will find this Title V Needs Assessment more data-driven than in previous years, and it will play a critical role in the state's ongoing planning cycle, taking in to account the importance of policy making, program development and resource allocation in public health.

SECTION 1 - PROCESS FOR CONDUCTING NEEDS ASSESSMENT

GOALS AND VISION

The goals for Florida's 2010 Title V Needs Assessment are deeply rooted in the vision, mission and goals of the federal and state agencies established to work toward assuring the health of all American women and children. Nearly a century ago, prior to the genesis of the historic Title V legislation, Congress recognized the special vulnerability of women, infants and children by creating the Children's Bureau and setting this noble goal:

"To investigate and report upon all matters pertaining to the welfare of children and child life among all classes of our people"

--P.L. 62-116; April 1912

For 75 years, beginning with its enactment in 1935 in Sections 501-510 of the Social Security Act, Title V legislation authorizing the creation of maternal and child health programs has echoed its predecessor in its own all-encompassing vision:

"To serve all children, to try to work out standards of care and protection which shall give to every child [a] fair chance in the world"

As the agency responsible for administering the Title V program in Florida, the Department of Health (DOH) has defined its broad mission to reflect these national precedents:

"To promote, protect and improve the health of all people in Florida"

Within the DOH, maternal and child health responsibilities are divided between the Division of Family Health Services (addressing health of all women and children) and the Division of Children's Medical Services (focusing on health for children with special health care needs) to specifically promote, protect and improve the health of *Florida's* women and children. Each of these DOH divisions is driven by objectives for their distinct service area that function as the cornerstone for defining their goal(s) for the 2010 Title V Needs Assessment process.

FAMILY HEALTH SERVICES

The Bureau of Family and Community Health (FCH) is the primary entity associated with maternal-child health (MCH) functions and activities in Florida. Within the Bureau are the Infant, Maternal and Reproductive Health Unit and the Maternal Child Practice and Analysis Unit. Throughout this document, the acronym MCH will be used interchangeably with FCH when referencing the functions of this Bureau.

MCH, which has adopted the slogan "Helping People Make Healthy Choices", strives to enhance quality of life by preventing mortality and reducing morbidity of infants, women and families through the following activities:

- Assessing the statewide health indicator status of the childbearing population and their infants and toddlers in Florida

- Developing policies and programs that assure access to quality health services
- Providing training, quality improvement and technical assistance to Healthy Start Coalitions and County Health Departments to assure that services are both effective and efficient

It is important to point out that in Florida, consistent with a life-span perspective of health, the concept of maternal and child health incorporates *all* women of child-bearing age in the population to be served, instead of limiting services to *pregnant* women and mothers. By expanding this population segment, Florida seeks to promote the health of both mothers and infants by increasing the likelihood of women being healthy *before* they become pregnant.

Based on these comprehensive endeavors, the MCH leadership team identified both short- and long-term goals for the 2010 Needs Assessment Process:

- *Short-term: Identify both the strengths and weaknesses of Florida's systems of care, determine the state's capacity to meet those needs, and set priorities in order to allocate resources to address needs effectively and;*
- *Long-term: Re-examine the program planning priorities and align programs, policies, and resources to address the most important maternal and child health issues in the state.*

To implement these ambitious goals, the MCH Needs Assessment Stakeholder Advisory Group (see Section 2) was established for the singular purpose of identifying the health priorities for two of the three Title V Block Grant population segments for the 2010 Title V application:

- Pregnant women, mothers and infants
- Children and adolescents

Notice that adolescents are included in the second population group, acknowledging Florida's identified need to extend services to youth, including young girls who reach child-bearing age. Decreasing the incidence of teen pregnancy and encouraging avoidance of unhealthy and risky behaviors among adolescents are key elements of a model aimed at improving the health of future mothers and infants.

CHILDREN'S MEDICAL SERVICES

The Division of Children's Medical Services (CMS), through its CMS Network (CMSN) and CMS Prevention and Intervention divisions, strives to protect the health and safety of Florida's youngest citizens who have special health care needs – the third population segment for the 2010 Title V Block Grant application – and their families. CMSN administers Florida's Title V program for Children with Special Health Care Needs (CSHCN) and is the principal provider to this targeted population via Florida's KidCare Program, the State Children's Health Insurance Program. The Network provides a comprehensive system of medical, developmental and supporting services for eligible children through 22 CMS area offices, 15 Early Steps offices, 12 Primary Care projects, and contracted specialty programs located throughout Florida.

CMS has adopted the Maternal and Child Health Bureau's (MCHB's) National Goals as its Six Program Goals for Florida:

Goal # 1: All children who are enrolled in CMS programs and their families will partner in decision-making at all levels and will be satisfied with the services they receive.

Goal # 2: All children who are enrolled in CMS programs will receive coordinated, ongoing, comprehensive care within a medical home.

Goal # 3: All children enrolled in CMS programs and their families will have the resources to fund services within the guidelines of the CMS program.

Goal # 4: All children will be screened early and continuously assessed for emerging or changing special health care needs.

Goal # 5: CMS offices will identify culturally competent, comprehensive community-based service systems for all children enrolled in CMS programs and their families.

Goal # 6: Beginning at age 12, all teens and young adults with special health care needs who are enrolled in the CMS Network and their families will receive the services needed to make transitions to all aspects of adult life, including adult health care, work, and independence.

Guided by these six MCHB goals, CMS is founded on the following ambitious vision and exemplary mission:

CMS Vision:

"Lead the nation in quality health care to enable children with special needs to reach their highest potential."

CMS Mission:

"Champion excellence in the delivery of health care to children with special needs through a comprehensive system of care."

CMS's Strategic Goals are aligned with the Sterling Criteria for Organizational Performance Excellence. The Florida Sterling Council was established in 1992, with support from the Executive Office of the Governor, to promote significant improvement and achievement in organizational management in both the public and private sectors. The Governor's Sterling Award is recognized as the preeminent state award process in the nation. The Sterling Criteria are:

- Leadership
- Strategic Planning
- Customer and Market Focus
- Measurement, Analysis and Knowledge Management
- Human Resource Focus
- Process Management (Transition)
- Process Management (Screening)
- Organizational Performance Results

CMS's primary goal for the 2010 Title V Needs Assessment (NA) Process was designed to assure that a system is in place for its targeted population:

Identify the service and organizational components required to implement and strengthen a community-based, family-centered, culturally competent, coordinated system of comprehensive care within the context of a medical home for Children with Special Health Care Needs and for their families who live in Florida.

The purpose of CMSN's collaboration with their leadership partners throughout Florida in creating a CMS Needs Assessment Team for the 2010 Title V NA Process was to:

- Establish an agenda for action
- Justify holistically expedient decisions
- Identify perceived unmet needs of families

HOW THE 2010 NEEDS ASSESSMENT WILL BE USED BY FLORIDA

The 2010 Title V Five-Year Needs Assessment (NA) process provides DOH leadership, stakeholders and partners throughout Florida a framework to systematically assess current and emerging health needs of mothers and children, to evaluate the effectiveness of delivery systems in place, and to examine the full spectrum of agency capacity required to address the most urgent priority issues. In preparing this document, participants were guided by the vision, mission and goals enacted nearly a century ago that evolved to shape the specific goals of the 2010 NA process. Through ongoing collaboration with MCH and CMSN advisors across the state at every step of the process, DOH now has the information needed to move forward in the next five years in improving both local service delivery and overall health outcomes for the mothers and children it serves.

The findings presented here will guide strategic planning efforts to expand the MCH and CMS infrastructure, to develop or modify performance measures to gauge success, and to improve the design and delivery of direct, population-based health services provided through state and local agencies and private health care providers. This NA document will be distributed to partners and stakeholders statewide and posted on the department website, serving as a catalyst to encourage further ongoing discussion, foster more intense and consistent collaboration, and support continuous assessment of program effectiveness. The application of the findings captured here will assure that policies, programs and resources of MCH and CMS are utilized equitably in protecting and promoting the health of the women and children in Florida.

LEADERSHIP

The Florida Department of Health's central office leadership team for the 2010 Title V Needs Assessment Process is comprised of the following seven health care professionals:

Annette Phelps, A.R.N.P., M.S.N.

Annette Phelps has served as Division Director of Family Health Services (FHS) since 2002. In that capacity, she provides leadership, policy and procedural direction for five bureaus, including the Bureau of Family and Community Health, where she served as Bureau Chief and was the Executive Community Health Nursing Director in the Office of Maternal and Child Health (currently renamed to Infant, Maternal and Reproductive Health, or IMRH) prior to holding her current position. Serving as State Title V Director, she shares the role of primary Title V contact with the Division Director of Children's Medical Services, Dr. Phyllis Sloyer.

Phyllis Sloyer, R.N., Ph.D.

Since 1996, Dr. Sloyer has served as Division Director for the Children's Medical Services Network (CMSN) and the Title V CSHCN Director. She has provided leadership in developing CSHCN systems of care in CMS since 1979 and previously served as Associate Director of the National Center for Policy Coordination at the Institute of Child Health Policy from 1990-1993. She is past Treasurer and current President of the Association of Maternal and Child Health Programs (AMCHP), an honorary fellow of the American Academy of Pediatrics, and a fellow of the Academy of Healthcare Management. Dr. Sloyer received the Title V Director of the Year Award in 2006 and the Vince Hutchins Partnership Award in 2009.

Terrye Bradley, M.S.W.

Ms. Bradley joined the Department of Health in 2002 as the Bureau Chief for the Bureau of Family and Community Health. She worked briefly in the Department of Juvenile Justice, where she served as the Chief of Volunteer Services. Prior to her work with the Department of Juvenile Justice, Ms. Bradley was the Chief Operating Officer for an eight-site Community Health Center. She also worked several years as an administrator within a community-based hospice program.

William M. Sappenfield, M.D., M.P.H.

Dr. Sappenfield has served as the State MCH Epidemiologist since 2005, leading the FHS planning efforts to develop the agency's epidemiology and evaluation capacity. He is Director of the MCH Practice and Analysis Unit, which aims to enhance and support policy and program decision-making through surveillance, health monitoring, epidemiology investigations, evaluation, training and capacity building. During his 20 years with the Centers for Disease Control and Prevention prior to joining DOH, he spearheaded national efforts to develop maternal and child health epidemiology capacity in state and local public health agencies. Dr. Sappenfield serves as IMRH's consultant to the MCH Needs Assessment Process and assisted in the development, design and analysis of the 2010 Needs Assessment Survey.

Kris-Tena Albers, A.R.N.P., C.N.M., M.N.

Kris-Tena Albers, Executive Community Health Nursing Director in the IMRH Unit since 2008, has oversight for the Title V MCH Needs Assessment Process and the statewide MCH, Healthy Start and Family Planning programs. She has prior work experience within the DOH in the Offices of Public Health Preparedness and Public Health Nursing. Before entering the public sector, Ms. Albers was a certified nurse midwife, an adjunct professor for nursing students, and served in other nursing positions focused on women's health issues.

Karen Wiggins, R.N.

In 2000, Karen S. Wiggins joined the DOH after 21 years in the private sector, where her clinical expertise included emergency services, pediatric nursing, pediatric trauma care, and injury prevention. For nine of those years, she was the trauma program manager at Miami Children's Hospital, serving as founder and leader of the Dade County SAFE KIDS Coalition. Prior to becoming the Director of the Child and Adolescent Health Unit in the DOH, Ms. Wiggins served as Executive Community Health Nursing Director in the DOH's Emergency Medical Services Bureau, with primary responsibility for the Emergency Medical Services for Children Program.

Charlotte Curtis, R.N., B.S.N., C.P.M.

Prior to joining CMS in 2006 as the Executive Community Health Nursing Director for the Partners in Care: Together for Kids Program/CHIPACC, Charlotte Curtis' work experience with DOH dates back to 1998. She formerly served as Nursing Consultant for the Maternal and Child Health Unit and Executive Community Health Nursing Director for the Child and Adolescent Health Unit. Ms. Curtis' involvement in the development, implementation and expansion of the first publicly funded palliative care program in the nation lead to her current role in providing technical assistance to other states hoping to replicate Florida's model. She has oversight of the Title V CMSN Needs Assessment Process.

METHODOLOGY

To clarify the 2010 Title V Needs Assessment Process for all parties involved, MCH leadership developed five steps to outline the overall framework and clearly communicate the scope of the 15-month implementation plan:

Step 1. Compile and summarize the potential health needs for consideration by population group

- Review official reports from various state and local task forces, organizations and groups
- Review the reports of various statewide and community listening projects
- Request public submission of potential needs by email, website and/or statewide conference call
- Collect input from individuals on the Stakeholder Advisory Group
- Summarize the lists of potential needs for approval by the Stakeholder Advisory Group

Step 2. Prioritize the potential health needs by population groups for the roughly top 10 needs per population group to be fully assessed

- Electronically survey stakeholders, partners, providers and consumers on priorities and permit submission of new needs
- Review of the top ten identified needs for each population group by the Stakeholder Advisory Group
- Final selection of top priority needs for each population group by DOH leadership

Step 3. Assess strengths, capacity, and gaps related to the roughly top ten needs for each population group

- Conduct and provide a written assessment of available qualitative and quantitative data, as well as assess the department's capacity to respond
- Meet with key population stakeholder groups to review and discuss
- Review and discussion by the Stakeholder Advisory Group

Step 4. Prioritize the final list of priorities across population groups

- Review the priorities with the Stakeholder Advisory Group and obtain recommendations
- Decision by DOH leadership on the final priorities

Step 5. Develop Departmental plans to address the identified priorities

The critical requirements of the 2010 Title V Needs Assessment Process for MCH were:

- Engagement of partners (see Section 2)
- DOH leadership support
- Data compilation and analysis (see Section 3)

To fully engage partners in the process, the Stakeholder Advisory Group, representing a broad spectrum of MCH leaders from the public and private sectors across the state (see Section 2), was established in the Spring of 2009 to function in an advisory capacity to the MCH central office leadership team. In each of the five steps of the process, the MCH group collaborated with the CMS Needs Assessment Team to identify, rank, evaluate and ultimately select the DOH's top priorities for 2010-2015.

Step 1

Step 1 implementation consisted of an extensive review of the most current MCH data available from a wide variety of published reports and information sources (see Data Sources subsection below), as well as a reassessment of the priorities identified in the 2005 Title V Needs Assessment. In like manner, CMS' leadership partners collected and reviewed a diverse array of publications, including national survey data to compare outcomes between Florida and the nation as a whole, as an initial step in their NA process. Ensuing communication through face-to-face meetings, conference calls, and email enabled frequent dialogue and idea exchange, resulting in the compilation of a comprehensive, summarized list of potential maternal and child health needs, including adolescents and CSHCN, through consensus of the MCH Stakeholder Advisory Group, the CMS Needs Assessment Team, and DOH central office leadership.

Step 2

Utilizing the 90 potential needs identified by all parties in Step 1 as a foundation, MCH and CMS leadership moved on to Step 2 by collaborating to design and develop a web-based Needs Assessment (NA) Survey to function as a tool for objectively ranking and prioritizing those needs. By soliciting and encouraging input from families, individual and institutional providers, and relevant government entities, the survey was designed to function as a channel to assure the inclusion of the opinions of a broad cross-section of experts and stakeholders. The survey also served as a mechanism to gauge the current status of MCH and CMS capacity in responding to clients with whom they interact, to define additional programmatic needs, to identify obstacles to the service-delivery process and goal achievement, and to determine emerging issues of concern since the last needs assessment in 2005.

A key feature of the design of the NA Survey was its focus on a specific area of Capacity Assessment. Using the Public Health Ten Essential Services as a framework (see Section 4), the survey asked respondents to assess the performance of DOH central office staff in responding to its constituents and clients. To control for respondent bias, responses were disaggregated according to the responder's classification as either a DOH central office employee in the Capital Circle Office Complex (CCOC) in Tallahassee, FL, or a Non-CCOC partner. Non-CCOC respondents included staff in

County Health Departments (CHDs), CMS area offices, or state and local non-DOH service centers, such as Healthy Start Coalitions. Analysis of the survey results related to agency capacity could then isolate areas needing improvement by DOH central staff, to inform and enhance the capacity assessment analysis.

DOH central leadership requested suggestions from the MCH Stakeholder Advisory Group and from the CMS Needs Assessment Team in creating a list of potential survey recipients. The final survey distribution list included a wide spectrum of partners:

- Assistant Community Health Nursing Directors
- CMS Early Step Directors
- CMS Family Health Partners
- CMS Regional Nursing Directors
- CMS Nurse Consultants
- CMS Nursing Directors
- CMS Nursing Supervisors
- CMS Program Directors, Managers
- Community Health Nursing Directors
- County Health Department Administrators
- County Health Department Directors
- County Health Department Nursing Directors
- Disease Control – Environmental Health
- Early Childhood Team
- Healthy Start Coalition Executive Directors
- March of Dimes Prematurity Work Group
- MCH Central Office Leadership Team
- Preconception Health Council
- Pregnancy Associated Mortality Review Team

The NA survey was distributed to partners and stakeholders in two "waves". In the first wave, 215 primary stakeholders received an email on August 19, 2009, directing them to a website for completion of the online survey. 129 responses were garnered from this wave, resulting in a 60% response rate. On August 27, 2009, the second wave was initiated by another email to the same distribution list, but with new instructions to "relay" the survey to other associates who play key roles in service delivery or decision-making in the area of maternal and child health. Distribution of the survey to as many stakeholders as possible in this manner is problematic from an analysis standpoint because there is no way to accurately determine how many MCH and CMS stakeholders actually received the survey. From this second wave, 260 responses were returned, yielding a total of 389 returned surveys from both waves. Because there is no way to determine how many potential respondents received the second wave of surveys, no response rate can be determined for either the second phase or for the total survey process. However, careful comparisons in the ranking of priorities between the first and second wave responses indicated there was no statistically significant difference in the distribution of priority rankings between the two waves. The cut-off date for receiving survey responses was set at September 12, 2009.

A breakout of the 129 wave 1 survey respondents according to their organization or affiliation is provided below:

- County Health Department Directors
- County Health Department Nursing Directors

- County Health Department Administrators
- CMS Managers
- CMS Nursing Directors
- CCOC CMS
- CCOC Disease Control
- CCOC Environmental Health
- CCOC Executive Staff
- CCOC Performance Improvement
- CCOC Public Health Nursing
- CCOC Family Health Services
- CCOC Women's Health
- Healthy Start Executive Directors

In October 2009, the MCH Stakeholder Advisory Group met formally to review the results of the Needs Assessment Survey, to discuss the ranking of the priorities and to combine and/or re-state priorities, where appropriate, by population group. The group review process considered using four types of prioritization techniques to build consensus and support:

- Group consensus
- Voting
- Q sort
- Criteria-based rating

Criteria-based decision-making, which was chosen as the primary method used in the rationalization process for determining maternal and child health priorities, takes into account seven paradigms, as described in Step 3 below.

At the conclusion of this ranking process, 22 priorities were identified by population group for MCH: seven each for the Women of Childbearing Age and for the Pregnant Women and Infants categories, and eight for the Children and Adolescent category, as shown below:

Women of Childbearing Age:

1. Health care for uninsured and underinsured women/ Primary care or medical home
2. Obesity/Physical activity
3. Unintended and unwanted pregnancy
4. Psychosocial health issues (including domestic violence)
5. Preconception health screening and education by health care provider
6. Iron deficiency anemia in pregnant women, postpartum women, and women of childbearing age
7. Tobacco use

Pregnant Women and Infants:

1. Prenatal care for uninsured women
2. Perinatal care for uninsured and underinsured high-risk women and infants
3. Infant abuse and neglect
4. Obesity/Physical Activity
5. Low maternal weight gain
6. Simplifying the Medicaid application process
7. Safe infant sleep behaviors

Children and Adolescents:

1. Teen pregnancy and sexually transmitted diseases
2. Obesity/Physical activity
3. Mental, developmental and behavioral health iIssues
4. Dental care, both preventative and treatment
5. Underage drinking
6. Depression and suicide
7. Tobacco use
8. Injury and death due to motor vehicles

These are discussed in detail in Section 3. For CMS, the NA survey results provided a starting point for intense discussion among members of the CMS Needs Assessment Team by initially ranking the following 18 priorities for Children and Adolescents with Special Health Care needs:

Priority	Count	Percent	Rank
Care coordination services	192	49.4%	1
Early intervention services for infant and toddlers	187	48.1%	2
Health insurance coverage	151	38.8%	3
Mental health and behavioral health services	132	33.9%	4
Transition of care to all aspects of adult life	117	30.1%	5
Vocation educational and life skills training	108	27.8%	6
Respite care	104	26.7%	7
Primary care and medical home	84	21.6%	8
Specialty care	81	20.8%	9
Families as partners in policies and delivery of care	79	20.3%	10
Dental services	78	20.1%	11
School health nurses and services	77	19.8%	12
Prevention of hospitalization of children with chronic illnesses	71	18.3%	13
Physical, mental and sexual abuse	66	17.0%	14
Obesity	63	16.2%	15
Home health based services	60	15.4%	16
Depression and Suicide	43	11.1%	17
Nutritional and special foods	0	0.0%	18

Not sure	**34**	**8.7%**
No Response	**10**	**2.6%**

Step 3

MCH central office staff worked diligently to compile and complete summaries of each identified priority by population group and to design a priority ranking spreadsheet, in order to create a rational analysis process by which all participants could systematically finalize the top MCH priorities for the next five years. By January 25, 2010, members of the Stakeholder Advisory Group were emailed documents outlining the structure and format of the upcoming summaries, to familiarize them with the process before the actual summaries were distributed. Each summary would include an overall issue description plus seven subsections, based on criteria-based prioritization topics, as follows:

1. Definition and General Description of the Issue/Problem
2. Narrative Regarding the Selection Criteria
    - Magnitude of the health outcomes for the state
    - Severity/Consequences based on qualitative and quantitative data
    - Trend data
    - National/State Goals
    - Potential for Improvement
    - DOH Capacity
    - Current State Priority or Objective

A sample summary was provided for participant review during the weeks before all summaries would be emailed in mid-February. The final document sent via email was a Stakeholder Ranking Summary Sheet to be used for assigning numerical rankings to each identified priority according to the seven selection criteria in the outline above.

Summary documents were then compiled by DOH central office staff for each of their MCH population groups, creating three separate reports that were distributed via email

to the advisory group on February 16, 2010. In addition to the ranking summary sheet, participants received a document to assist them in better understanding the scoring criteria. Results of the review and scoring process were to be reported to MCH leadership by March 2, 2010. This date was later extended to March 9, 2010, to allow more time for participant review and to collect as many responses as possible.

The CMS Needs Assessment Team also worked diligently to compile and present data addressing each of the 18 priorities identified and ranked in the NA survey to its membership of advisors and management staff. As a result of ongoing discussion and collaboration, some priority categories were collapsed and re-ranked for subsequent voting.

Step 4

After a thorough compilation of ranking results, an MCH conference call was held with review participants on March 15, 2010, to discuss the review process, the outcomes of the systemized rankings, and to reach consensus on the top maternal and child health priorities for the state. The outcome of the rankings of the 22 priorities is presented below:

Population	Issue	Average of total scores	Rank (1= highest priority)
WCA	Unintended and unwanted pregnancy	22.85	1
CA	Mental, Developmental and Behavioral Health Issues	21.50	2
WCA	Preconception health screening and education	21.45	3
PWI	Perinatal care for uninsured and underinsured high risk women and infants	21.42	4
WCA	Tobacco Use - women	21.25	5
PWI	Simplifying the Medicaid application process	21.10	6
WCA	Obesity/Physical Activity - Women	21.10	6
CA	Dental care, both preventative and treatment	21.00	8
WCA	Health care for uninsured and underinsured women/Primary care or medical home	21.00	8
CA	Teen pregnancy and sexually transmitted diseases	20.95	10
PWI	Safe infant sleep behaviors	20.95	10
CA	Tobacco use - adolescents	20.90	12
WCA	Iron deficiency anemia	20.90	12
PWI	Prenatal care for uninsured women	20.75	14
CA	Obesity/Physical Activity - Children	20.40	15
CA	Under aged Drinking	20.10	16
CA	Depression and suicide	19.40	17
PWI	Infant abuse and neglect	19.40	17

PWI	Obesity/Physical Activity - Pregnant women	19.35	19
CA	Injury and death due to motor vehicles	19.05	20
PWI	Low Maternal Weight Gain	18.47	21
WCA	Psychosocial Health Issues	18.15	22
CA = Children and Adolescents			
PWI = Pregnant Women and Infants			
WCA = Women of Childbearing age			

After a thorough review by the MCH central office leadership team during the next week, five final priorities were established on March 24, 2010 (see Section 5).

CMS central office management determined its final priorities by analyzing data from several sources, such as the National Survey of Children with Special Health Care Needs, CMSN annual reports, and the following documents:

- Florida Institute for Family Involvement 2008 Quarterly Report (issues reported by families)
- Journal of the American Academy of Pediatrics, a supplement to Pediatrics: National and State-specific Findings for the National Survey of Children's Health
- Florida Chartbook: FLICHQ
- Florida Strategic Plan for Health Care Transition, Task Force Report, 2008
- 2005 MCH Needs Assessment
- 2009 MCH Needs Assessment Survey

CMS leadership then reviewed the six MCHB performance goals, taking into consideration the Department's focus on improving overall access to health care, establishing medical homes and transitioning health services for its population group. Special emphasis was placed on relevant data pertaining to children's health, financial resources, and community/system needs, as well as legislative, political, and other internal/external mandates that CMS is required to implement, regardless of the results of the NA survey and process. Analysis by central office program experts resulted in the creation of a white paper entitled *The Title V and Children with Special Health Care Needs 2010 Needs Assessment.* This comprehensive document summarized the rationale for the priority ranking/selection process, provided data justifying the priorities chosen for analysis, and presented the Department's current capacity to address those priorities via established programs and initiatives. The CMS Needs Assessment Team met over several months in the Fall of 2009 and completed the selection of its top three priorities by January 2010 (see Section 5).

Step 5

The next step in the NA process for both MCH and CMS was the establishment of a five-year work plan by the Infant, Maternal and Reproductive Health Unit and CMSN, respectively, to address the identified priorities.

On March 26, 2010, just two days after finalizing MCH's top priorities, an MCH Needs Assessment Stakeholder Advisory Group conference call was held to share the performance measure for each priority and to obtain input from the group regarding

specific strategies for addressing those priorities in order to make a positive impact on MCH in Florida. A chart of 2010-2015 priorities, performance measures, and background information was distributed to each group member. Ensuing discussion included a review of existing programs and their effectiveness, followed by suggestions for improving those programs and/or developing new initiatives. See Section 5 for detailed coverage of the MCH performance measures and strategies resulting from this conference call.

The CMS white paper described above included numerous state performance measures aligned with national performance measures to address its three top priorities for 2010-2015. These measures will provide the framework for structuring a strategic plan to address those priorities and achieve optimal outcomes over the next five years.

METHODS FOR ASSESSING THREE MCH POPULATIONS

The construct of the Needs Assessment Survey permitted collection and evaluation of the most current available data by four distinct population categories:

- Women of Childbearing Age
- Pregnant Women and Infants
- Children and Adolescents
- Children and Adolescents with Special Health Care Needs

As mentioned earlier in this Section, the first two population segments above are breakouts of the general population category “pregnant woman, mothers and infants”. This category breakout is part of a new direction in MCH that enables priority ranking and capacity evaluation for each of these distinct cohorts, which is more in line with service delivery venues in Florida. By including women of childbearing age as a separate client group, DOH has expanded the served population beyond the HRSA requirements. To promote health in all women, Florida espouses a preventive philosophy in recognizing that positive pregnancy outcomes are increased when women are healthy before becoming pregnant. This significantly broadens the scope of public entitlement to health services.

Adolescents were included in the third and fourth population segments surveyed to enable the survey to be utilized by DOH staff specifically targeting the health of Florida’s youth. A newly developed Office of Positive Youth Development (PYD) incorporates the fundamentals of abstinence education into a broader adolescent health education model. PYD focuses on building assets in youth to help them avoid all risky behavior, including but not limited to premarital sex, drug and alcohol abuse, tobacco use, unintentional injury and obesity. These behaviors directly impact the health of tomorrow’s mothers and infants.

The NA survey presented 23 priority classifications for each of the first two population categories, 26 classifications for Children and Adolescents, and 18 classifications for Children and Adolescents with Special Health Care Needs. Respondents ranked each of those 90 priorities within the appropriate population group. At the conclusion of the survey ranking phase, 22 priorities were selected by MCH for the next stage, and 18 priorities were identified by CMS to review and collapse as their NA process continued.

MCH’s three detailed summary reports of the 22 priorities identified in the survey phase, one report for each targeted population group, provided stakeholders the opportunities to

participate in a systematic, rational, criteria-based process leading to selection of the final top MCH priorities by the DOH leadership team.

To assess the needs of CSHCNs, the CMS Needs Assessment Team incorporated the NA survey into their review of 2005 state priorities and comparisons of outcomes between Florida and the nation as whole. Performance measure data for each of the six goals listed previously were examined in conjunction with a CSHCN national survey that compared Florida's core outcomes to the nation, covering the following 15 indicators:

1. Extent to which CSHCN's health conditions affect their daily activities
2. CSHCN ages 5-17 missing 11 or more school days due to illness
3. CSHCN without insurance at some time during the past year
4. CSHCN without insurance at the time of the survey
5. Currently insured CSHCN whose insurance coverage is not adequate
6. CSHCN with any unmet need for any of 15 specific health care services or equipment, past 12 months
7. CSHCN ages 0-17 with any unmet need for family support services
8. CSHCN ages 0-17 needing a referral for specialty care/services and having problems getting it
9. CSHCN without a usual source of care when sick
10. CSHCN without any personal doctor or nurse
11. CSHCN without family-centered care
12. CSHCN whose families pay $1,000 or more out-of-pocket in medical expenses for child, past 12 months
13. CSHCN whose families experienced financial problems due to child's health conditions
14. CSHCN whose families spend 11 or more hours per week providing and/or coordinating child's health care
15. CSHCN whose health conditions cause family members to cut back or stop working.

The survey and summary review instruments were intended to be used in assessing the major components necessary to ensure that a system of care will be provided that meets the unique needs of each of the three population groups targeted by HRSA in the Needs Assessment process.

METHODS FOR ASSESSING STATE CAPACITY

Assessing the overall capacity of the health delivery system in Florida began with a thorough examination of each local and state MCH and CMS program currently in place, consideration of changes to those programs since 2005, and analysis of data such as the number of clients served and shifts in outcome measures in each program over the last five years. The Department's website features some of the data from the Community Health Assessment Resource Tool System (CHARTS) that were used as a guide in identifying areas where state capacity could be expanded to better serve the health needs of Florida's women and children. This evaluation process prompted discussions centered on individual and collective program effectiveness and improvements needed to address the identified priorities. It also pointed out gaps in the

overall system of service delivery and targeted areas where the capacity for agency response was minimal or lacking.

The next step involved a comprehensive review of DOH's current organizational structure and infrastructure, changes in the roster of medical experts working in and with the agency, and updates on legislative changes in recent years that could impact the Department's ability to address its priorities and implement needed programmatic improvements. As part of this review, DOH leadership focused on the political climate in Florida, especially in the area of confronting emerging issues that could require new initiatives in the MCH and CMS arenas during a period of overall decline in the state and national economy.

As stated previously, the NA Survey was designed to include a means of measuring the current capacity of the DOH central office in responding to the needs of constituents and clients that it serves. Thus, the needs assessed through this instrument were limited to those of stakeholders whose services require support from DOH. However, lessons learned from the analysis of survey respondents shaped the planning of activities and tasks to enhance internal agency capacity in serving this client group.

DOH capacity information was included in each of the summary reports for MCH's three population groups, providing valuable insight in narrowing 22 priorities down to the final five MCH priorities.

DATA SOURCES

The 2005 needs assessment process revealed a need for increased state and local data analysis capacity, and the 2010 NA survey results confirmed this perception in discovering that respondents felt a need for better integration of data trends and program activities. DOH leadership responded by charging its staff with making the 2010 NA process more data-driven than previous five-year assessments.

MCH data resources for the 2010 Title V Needs Assessment Process included:

- Alan Guttmacher Institute
- American Congress of Obstetricians and Gynecologists
- Behavioral Risk Factor Surveillance Survey (BRFSS)
- DOH 2009 Needs Assessment Survey
- Florida Community Health Assessment Resource Tool (CHARTS)
- Florida County Health Department Health Management System
- Florida Department of Highway Safety and Motor Vehicles
- Florida Medicaid Management Information System
- Florida Vital Statistics data
- Florida Youth Substance Abuse Survey
- Florida Youth Tobacco Survey
- Healthy People 2010
- Healthy Start Coalition service delivery plans
- Healthy Start Executive Summary reports
- Institute of Medicine

- Kaiser Family Foundation
- March of Dimes
- MCH Advisory Committee meetings and conference calls
- National Early Intervention Longitudinal Study
- National Health and Nutrition Examination Survey
- National Vital Statistics data from the National Center for Health Statistics
- Pediatric Nutrition Surveillance System
- Pregnancy Associated Mortality Review (PAMR) annual reports
- Pregnancy Nutrition Surveillance System
- Pregnancy Risk Assessment Monitoring System (PRAMS)
- Rand Corporation
- US Census Bureau
- Youth Risk Behavior Surveillance System

CMS collected data for the 2010 Title V Needs Assessment Process from the following sources:

- Child and Adolescent Health Measurement Initiative. *2005/06 National Survey of Children with Special Health Care Needs*, Data Resource Center for Child and Adolescent Health website. Retrieved 09/29/09 from www.cshcndata.org.
- Children's Multidisciplinary Assessment Team (CMAT) Program 2008-2009
- CMS 2009 Leadership Meetings
- CMS Brain and Spinal Cord Injury Program
- CMS Satisfaction Report 2008-2009
- DOH 2009 Needs Assessment Survey
- *DOH Executive Leadership Strategic Objectives 2009*
- *Florida Health Care Transition Services Task Force for Youth and Young Adults with Disabilities Report and Recommendations 2009*
- *Florida Interagency Coordinating Council for Infants and Toddlers 2008-2009 Annual Report*
- *Florida KidCare Coordinating Council 2010 Annual Report and Recommendations*
- *Integrated Care Systems Report 2008-2009*
- Medical Foster Care Program
- National Goals and National Performance Measures
- *Partners in Care: Together for Kids Annual Report 2008-2009*
- *Primary Care Bureau Annual Report 2007-2008*
- *Regional Perinatal Intensive Care Centers (RPICC) Annual Report, Fiscal Year 2008-2009*

- *State of Florida, Annual Report, Early Intervention Services (Fiscal Year 2008-2009)*
- U.S. Department of Health and Human Services, Health Resources and Services Administration, Maternal and Child Health Bureau. *The National Survey of Children with Special Health Care Needs Chartbook 2005-2006.* Rockville, Maryland: U.S. Department of Health and Human Services, 2008.

LINKAGE BETWEEN ASSESSMENT, CAPACITY, AND PRIORITIES

Throughout the NA process, both needs and capacity were assessed in an iterative process to select priorities. Activities linking assessment, capacity and priorities unfolded as follows:

- Information gathered from the NA survey, national surveys, publications, and a series of discussions with partners and stakeholders was compiled to identify an initial set of priorities by population group and to determine the degree of effectiveness of current programs in addressing those priorities.
- Data related to statewide maternal and child health outcomes were analyzed to assure the identified priorities correlated with trends and to evaluate the statewide health system capacity to address the identified priorities.
- Information about current agency and system capacity were reviewed and compared to the identified priorities in order to evaluate what the department can realistically hope to impact in the next five years concerning the priorities, considering factors such as resource availability, funding, and the Department's strategic direction.
- Identified priorities and capacity for the 2010 NA were compared to the 2005 NA goals and subsequent outcomes.
- The final list of priorities and how they will be systematically addressed and continuously monitored over the next five years was articulated.

DISSEMINATION

DOH leadership recognizes the importance of reporting back to all participating stakeholders the outcome of the 2010 Title V Needs Assessment Process for use as a comprehensive guide and strategic planning tool over the next five-year grant cycle. Additionally, it is vital to share this document with all public and private partners and citizens interested in the status and future of maternal and child health in Florida. To encourage maximum use of the findings, dissemination methods will include the following:

- Distribution by hand or email to central office DOH program managers to guide them in changing the focus of the programs they oversee and the local activities they fund to better communicate their activities and functions throughout the system
- Distribution by email to local program managers, Healthy Start Coalition executive directors, and county health department staff to encourage the incorporation of identified priorities in the programs they manage
- Posting on the Department of Health website for access by all partners and the public

- Distribution of priorities with future Requests for Proposals (RFPs) to guide the services that will be proposed by local and state agencies that receive support from DOH

STRENGTH AND WEAKNESSES OF PROCESS

The main strength of the 2010 Title V NA process was the ongoing collaboration between MCH and CMS leadership and their advisory groups in every phase of the process. The participation of a broad cross-section of program experts and stakeholders, from initial discussions to survey participation to priority ranking consensus to capacity assessment, was vital to developing a comprehensive strategy for improving health outcomes for Florida women and children in the next five years. These collaborations will continue and expand as the DOH develops and implements policies, strategies, and performance measures to gauge its success in addressing the articulated top priorities.

The data-driven analysis embodied in this year's assessment process was also a key component of its success. Careful examination of trends since the previous assessment guided priority selection and ranking at each stage in the process. The systematic, criteria-based ranking process utilized by MCH infused objectivity and structure to support a rationale approach to decision-making for the 2010 grant application. CMS utilized existing performance data linked to national goals in its systematic approach to reviewing, collapsing, and re-defining its key priorities. Taking into account the NA survey results regarding the importance of linking data trends to program functions, the DOH team of MCH and CMS analysts made sure that reliable data were utilized in each decision, from the determination of the top priorities by population group to the evaluation of agency capacity to deliver services to address those priorities in the current and emerging political and social environment. This focus on quality data also encompassed the establishment of performance measures for measuring future success of each policy and strategy designed to improve outcomes in each priority area.

One major strength of the needs assessment survey was the use of CAST-5 in developing questions for the agency capacity/ performance section. CAST-5 was developed by the Association of Maternal and Child Health Programs and national MCH leaders and experts using the 10 essential public health services, the core foundation for current efforts for accrediting state and local public health agencies. CAST-5 uses a qualitative group process. Select questions from the CAST-5 process were tailored for inclusion in the survey. This approach provided the state with aggregate information on capacity/performance with the 10 essential public health services.

This capacity/performance survey approach had many strengths, but some limitations were identified that should be taken into consideration if this approach is used again. In addition to the limitation imposed by the inability to determine a response rate for Wave 2 or for the NA survey, the MCH Stakeholder Advisory Group identified the following problems with the NA survey that impacted both the response rate by participants and the proper interpretation of survey results:

- The survey was challenging to complete due to its overall length (average completion time: 30 minutes), making participation and respondent fatigue a concern. This included completing the questions for four different population groups.
- The amount of time required to read and respond to each question, with limited staff to devote to the survey, was an issue.

- In the process of shortening the survey, some questions were actually two or three questions combined, making it difficult to respond with a single answer.
- Some questions were not as relevant to Florida as other state, were not worded in such a way as to make them relevant, or too broad or abstract to answer.
- The Ten Essential Services framework does not clearly assess clinical services beyond the section on linking the population to public health services. DOH provides a large amount of clinical services that were not adequately taken into consideration.
- More input from consumers and local stakeholders would be desirable. Surveying stakeholders and posting of the survey on the Internet did not provide a large volume of public feedback. Additional methods should be considered in the future.

These problems will be addressed in the design of future MCH Block Grant needs assessments.

It is important to understand that the needs assessment and the selection of priorities occur within a political and financial context that must be carefully considered. Today, state and local providers are struggling to respond to state and federal mandates in an atmosphere of extreme budgetary restraints as they attempt to develop community-based, family-centered, culturally competent, and coordinated systems of care for women, infants, children, and adolescents, including children with special health care needs. As a result, some priorities, though critical, cannot be considered or addressed due to lack of either resources or political will.

SECTION 2 - PARTNERSHIP BUILDING AND COLLABORATION EFFORTS

The Florida Department of Health (DOH) supports and enables community efforts throughout the state that have been established to assure the health of women, infants, children, adolescents, and children with special health care needs. It provides leadership in the areas of planning, prioritizing, and policy development in order to facilitate and mobilize community partnerships between local health care providers, families, the general public, and other local groups in both the public and private sector whose role is to identify and solve maternal and child health problems. Because each region of Florida is unique, the DOH does not dictate the nature of local programs and collaborations, but instead encourages the formation of local partnerships that will address health care needs specific to a given community. However, DOH does hold community leaders accountable and, in turn, expects those local leaders to hold local health care providers accountable to the population in need.

The DOH's overall role is to address comprehensive health issues at the state level, while local collaborations interact directly with the public. Community leaders involved directly in the delivery of maternal and child health services include directors and key staff in Healthy Start Coalitions, county health departments, CMS area offices, and school nurse programs. As new initiatives emerge in the maternal and child health arena, leadership at DOH either coordinates the integration of those initiatives into existing local collaborations or it assists in the development of new local or local-state partnerships to address emerging issues, as appropriate. An example of a recent new collaboration is a DOH partnership with Pinellas County, funded by a grant from the Kellogg Foundation, that involves the Action Learning Collaborative, the Association of Maternal and Child Health Programs (AMCHP), CitiMatCH, and the Pinellas County Healthy Start Coalition in a project examining the relationship between racism and racial disparities in the delivery of health care services. Numerous examples of existing local-state partnerships are enumerated in Section 4.

Recognizing the critical importance of making the 2010 Title V Needs Assessment (NA) process as open and participatory as possible, both MCH and CMS exerted comprehensive and continuous efforts to engage a cross-section of state and local stakeholders, program advisors, and medical experts throughout the entire NA process period. This engagement built upon an existing infrastructure of ongoing collaboration between MCH and CMS leadership at DOH and public and private partners in local communities throughout Florida.

MATERNAL AND CHILD HEALTH

To fully engage its partners, the MCH Needs Assessment Stakeholder Advisory Group, representing a broad spectrum of MCH leaders from the public and private sectors across the state, was established in the Spring of 2009 to function as an advisor to the MCH central office leadership team. Members were chosen by DOH leadership because they were recognized leaders and subject matter experts in MCH at the local and state levels. The advisory group has served as a forum for MCH partners to actively participate in discussions, planning, and decision-making in all five steps of the NA process (see Section 1), assisting the DOH central office leadership in ultimately prioritizing Florida's top five MCH needs for the 2010-2015 Title V grant cycle.

An Advisory Committee Charter was created early in the NA process to articulate the purpose of the Committee, as stated in Section 1 – namely, to identify the health priorities for two population segments targeted in the Title V MCH Block Grant program: pregnant women, mothers and infants; and children and adolescents – and it committed the membership to a 15-month period of active and ongoing involvement in the unfolding MCH Needs Assessment process. The short- and long-term goals established to guide the Committee are reiterated below:

> The *short-term* goal of the MCH Needs Assessment Advisory Group:
> *To identify and review the state's prioritized MCH needs.*
>
> The *long-term* goal of the MCH Needs Assessment Advisory Group:
> *To align programs, policies, and resources to address the identified maternal and child health needs of the state.*

The MCH Needs Assessment Stakeholder Advisory Group was composed of representatives from the following organizations, agencies, committees or associations, who often provide data and reports to DOH:

- Agency for Health Care Administration
- Association of Maternal and Child Health Programs Florida Consumer Representative
- Department of Children and Families
- Department of Education
- Department of Health
    - Division of Family Health Services
    - Division of Children's Medical Services
    - County Health Departments
    - Division of Disease Control
    - Division of Emergency Medical Operations – Injury Prevention
    - Division of Environmental Health
    - Office of Women's Health
    - Office of Minority Health
- Federal Healthy Start
- Federally Qualified Health Center
- Fetal Infant Mortality Review
- Florida Agriculture and Mechanical University
- Florida Association of Healthy Start Coalitions
- Healthy Families
- March of Dimes, Florida Chapter
- Ounce of Prevention
- Pregnancy Associated Mortality Review Committee
- State Head Start program
- University of South Florida

The overall responsibilities of the MCH Needs Assessment Stakeholder Advisory Group included the following:

- Initial and ongoing engagement
- Review and approval of the list of potential MCH needs to be included in the NA survey
- Review and provide feedback on the survey results' top ten identified needs for each population group
- Review and discuss the quantitative and qualitative data related to the top 22 needs identified by the NA survey
- Review and provide input into the final list of priorities across population groups

The specific activities involved in the 15-month time commitment were also defined to the advisory group members:

- To actively participate on several conference calls
- To meet face-to-face once or twice (dependent on budget and travel guidelines)
- To review various documents, including the NA survey results and summary trends for statewide health indicators, and assist in ranking and prioritizing the identified needs in terms of agency capacity
- To provide guidance on strategies that may assist the state to improve the health and well-being of women, infants and families in Florida

The NA process began in late March 2009 with a conference call to familiarize members with the MCH Needs Assessment process, inform them of the purpose in performing a five-year needs assessment, and establish a common understanding of the roles and responsibilities of each participant. Advisory group members were given the opportunity to review and provide input on the Charter, agreed to submit lists of their maternal health priorities and related resources to assist in designing the structure of the upcoming NA survey, and received an overview of their involvement in each stage of the process. MCH followed up this initial call with the distribution of a timeline indicating when members would be consulted to assist in the priority review and approval steps.

DOH leadership incorporated the health priorities provided by the Stakeholder Advisory Group members into the framework of the NA survey during the summer of 2009. Surveys were distributed to members and other key stakeholders and experts in areas of maternal and child health in Florida. Survey results were compiled for discussion at a formal meeting held on October 21, 2009.

The meeting agenda included an update on the status of the NA process, a review of Title V Block Grant program guidelines, and a presentation of the NA survey results by population group. Advisory Group members were directly involved in ranking the priorities to reach overall consensus. DOH leadership outlined the next process steps, which included analysis of the priorities and related data by subject matter experts within DOH, with supporting narrative summaries to be finalized for presentation to the advisory group by February 2010. These summaries would address the agency's capacity to adequately address the priorities and positively impact outcomes. At that point, the Stakeholder Advisory Group members would again be actively involved in reviewing the summaries, leading to another scoring/ranking process and, ultimately, to a group consensus on the top seven to ten priorities. Meeting minutes, including the priority list, were emailed to members unable to attend the meeting, in order to facilitate ongoing communication.

In November 2009, another conference call with the MCH Advisory Group provided a forum for the DOH's epidemiologist to present detailed results of the Capacity Assessment portion of the NA survey. Members collaborated on strategies the agency could implement to improve communication and marketing efforts in order to better inform its clients of ongoing activities of central office staff, as well as to enhance the integration of data, science and evidence into daily functions. Problems with the survey were discussed and documented for reference in designing future surveys.

On March 15, 2010, narrative summaries were ready for scoring by the advisory group. Central office leadership met on March 24, 2010, to finalize the priorities, based on these scores, other advisory group input, and a list of additional criteria of key importance to the final ranking/selection process. On March 26, the final priorities were presented to the advisory group, along with an open discussion among participants regarding current activities addressing those priorities, suggestions for improvement related to those activities or for setting up new initiatives, and determining performance measures to effectively gauge future success. This discussion continued in a follow-up conference call on April 26, 2010, as MCH continued to work toward establishing a five-year implementation plan.

DOH's collaboration with the Stakeholder Advisory Group for the 2010 Title V Needs Assessment process exemplified an extension of continuous efforts to communicate with and engage its partners on a daily basis. MCH has initiated a variety of outreach activities in the last several years to foster ongoing collaboration and support among its partners and stakeholders throughout the year, not only during the current 2010 NA period. In addition to face-to-face meetings as budgets allow, onsite visits and frequent conference calls and emails enable a continuous conversation and flow of ideas about issues related to all aspects of maternal and child health in Florida. For example, the county health department senior leadership has weekly calls on Mondays that MCH partners are welcome to join. The IMRH unit holds "meet me calls" bi-monthly to engage their stakeholders and share new information, ideas and concerns, often including guest speakers on the call agenda. Florida's Healthy Start Association president and president-elect have monthly conference calls with the Family Health Service (FHS) Division Director and IMRH's Unit Director. The state MCH epidemiologist frequently collaborates with representatives from the Agency for Health Care Administration (AHCA), Florida's state universities, the Center for Diseases Control (CDC) and the Association of Maternal and Child Health Programs (AMCHP). The Florida Obstetrics and Gynecology Society works with DOH in several collaborative efforts, such as the Caesarean Section and Late Pre-term Births Workgroup and a Perinatal Quality Improvement workgroup with the March of Dimes. The IMRH unit facilitates a statewide multi-disciplinary Pregnancy Associated Mortality Review Committee and works with the statewide Fetal Infant Mortality Review teams. Twice each year, the Florida Association of Healthy Start Coalitions meets for two to three days, with MCH leadership providing a department update to its local partners and receiving feedback on their issues and challenges. Research-to-practice groups collaborate every two months by phone, and "community liaison calls" bring together stakeholders involved with prenatal and infant screening issues.

The Florida Preconception Health Council was originally formed to integrate strategies identified in CDC recommendations for improving preconception health and health care into a model designed to draw state, community and individual partners together as advocates in promoting health among women. The Council sought opportunities for infusing core messaging into health care and public health services. Although the

Council was dissolved due to duplication and overlapping of membership with other MCH workgroups, its purpose was absorbed into the focus of the March of Dimes Prematurity Workgroup. The Florida Preconception Health Council met numerous times via conference calls and face-to-face meetings during 2008 and 2009:

CHILDREN'S MEDICAL SERVICES

The Children's Medical Services Network (CMSN) consists of coordinated services provided in area offices, primary care associations, tertiary care facilities, and contracted or private providers in the community. Services may also be provided in collaboration with other state agencies and organizations overseeing education, social and child welfare, the Medicaid and the KidCare insurance program, Social Security, emergency medical services, and alcohol, drug abuse, and mental health services. Coordination and communication among this diverse group of partners is vital to achieving optimal health outcomes and properly monitoring the health status of the CSHCN population. CMS recognized the importance of maintaining and enhancing these ongoing partnerships in order to effectively identify and address the priorities for the 2010 Title V NA process.

CMS tapped into its existing pool of stakeholders and program experts at both state and local levels to form the CMS Needs Assessment Team for systematic collaboration in the 2010 Title V Needs Assessment process. Through 22 area offices grouped into eight administrative regions, CMS central office management routinely provides support and direction to local teams of trained nursing and social work professionals and support staff who coordinate primary and specialty care services to children with special health care needs and their families throughout the year. The Network also includes partner organizations such as Early Steps and Partners in Care (see Section 4) that work together on a daily basis to create a continuum of care for CSHCN from birth to age 21 in the communities where they live and play. This extensive system of CMS partnerships focused on developing and maintaining an integrated, comprehensive infrastructure to improve services to their clientele, provided the expertise and commitment to enable these stakeholders to serve effectively as members of the 2010 CMS Needs Assessment Team.

As a first step in the NA process, CMS and MCH staff collaborated to develop the initial list of priorities for inclusion in the NA survey. CMS utilized findings in the CMS Family Satisfaction Report 2008-2009 and input from discussions at meetings with the newly-formed CMS NA Team in 2009 to collectively articulate what the families they serve say they need in terms of service provision, what health care providers need in order to deliver appropriate service, what obstacles are interfering with service delivery, and what governmental entities require to monitor the system of care, report progress, and identify emerging issues of concern. The Family Satisfaction Reports are a key tool utilized by CMS to receiving continuous input year by year, creating an ongoing collaboration and communication vehicle between central office leadership and the population it serves.

At an initial meeting in the Fall of 2009, CMS NA team members were provided an overview of the NA process about to unfold over the upcoming year, which included:

- Review of the NA requirements and HRSA guidelines
- Review of the NA survey results
- Review of CSHCN 2005 needs assessment and identified priorities
- Review of national survey data, state reports, and current data trends
- Selection of three to five CMS priorities

- Development of performance measures for the next five years to determine success in addressing CMS priorities

CMS NA team members learned that initial assessment would involve careful examination of Title V indicators, performance measurement outcomes, numerous reports and publications, and both quantitative and qualitative data. From this stage in the process, priorities for the next five years would emerge. Participants were advised that priority needs should include those areas in which the state believes it has a reasonable opportunity to maintain, modify, or enhance existing interventions, initiatives, or systems that have been successful, or begin new interventions, initiatives, or systems that are expected to result in needed improvements.

Capacity analysis focused on reviewing current resources, activities and services in order to describe the state's ability to continue to provide quality service in view of mandates. Ideally, this would lead to a better understanding of the relationship of existing programs and system capacity to the identified priorities for each area of the state, and strengths and weaknesses in capacity that were not previously identified would be revealed. The state may need to seek additional resources, funds or authority from the State Legislature in order to adequately address priority issues.

Finally, the NA process shifted to setting performance objectives, developing action plans, setting up a budget, considering political priorities, and re-examining partnerships. The final NA document will be shared with all stakeholders as a tool for monitoring progress and determining impact on outcomes over the next five years. By continuing to involve partners after the NA process is completed, there will be opportunities for modifying activities and shifting resource allocations to address performance levels and the availability of resources.

In November 2009, CMS leadership staff met to review NA survey results, combine and rank priorities, vote on the top priorities, and examine other data in CMS annual reports and other documents. Attendees included the following:

- Division Directors
- Bureau Chiefs
- Nursing Directors
- Program Directors
- Nursing Supervisors
- Nursing Consultants

A month later, Division Directors and Bureau Chiefs met again to reach consensus on priorities and begin to develop strategies for moving forward in the NA process. This collaboration among partners in the CMSN continued as a five-year plan to address priorities and measure program success was discussed.

Because effective state and community partnerships are essential elements in creating, maintaining and expanding a vibrant public health environment, DOH leadership has chosen to incorporate this paradigm as a principal theme infusing every aspect of planning, policy development, and performance measurement over the next five years. The new collaboration of MCH and CMS in every step of the 2010 Title V Needs Assessment process and in the preparation of this document underscores the Department's commitment to this effort.

SECTION 3 - STRENGTHS AND NEEDS OF THE MATERNAL AND CHILD HEALTH POPULATION GROUPS AND DESIRED OUTCOMES

For the 2010 Florida Title V Maternal and Child Health (MCH) Block Grant Needs Assessment process, MCH leadership at DOH decided to utilize a focused approach to assessing the strength, needs, and desired outcomes of the MCH population groups. Instead of considering every conceivable issue in the MCH arena, they chose to engage stakeholders throughout the state in identifying the most critical issues their key partners believed the current needs assessment should address. Through a variety of communication mechanisms, stakeholders were contacted for input and recommendations in initially defining, subsequently refining, and finally ranking those issues for the 2010 assessment. Throughout this process, intense exploration, review and summarization of key MCH issues occurred. This section describes the first phase of the needs assessment process as it relates to defining, researching and evaluating these issues by population group, and it provides the actual written summaries of each of the 22 MCH critical issues considered for final prioritization.

The written summaries, prepared by DOH program staff served as the basis of analysis for the advisory group members to rank the priorities. To examine the health status of the MCH population, the needs assessment work group began by assembling a list of possible issues to include in the stakeholder survey described in Section 1. This task was accomplished through the following activities:

- Review of past needs assessments and needs assessments related to other programs
- Review of state MCH work group, committee, and task force reports
- Review of local MCH needs assessments conducted by Florida Healthy Start Coalitions and other local groups
- Solicitation of input from MCH program leadership and staff
- Solicitation of input from the Stakeholder Advisory Group and the state's MCH program experts

At an early stage in the needs assessment process, MCH department leadership opted to divide the MCH Block Grant population group of pregnant women and infants into two specific population groups: Women of Childbearing Age, and Pregnant Women and Infants. Historically, DOH's approach to block grant applications consists of a long-term focus on addressing risk factors occurring *prior* to pregnancy that impact pregnancy and infant outcomes, with teen pregnancy and unintended pregnancy being two of those factors. For the 2010 assessment, the Department wanted an explicit emphasis on women of childbearing age, due to the well-defined approach to improving the preconception health of women that DOH has developed in concert with its partners.

The list of possible MCH issues provided by both identified and anonymous stakeholders in response to leadership's request for recommendations were initially ranked as a result of the stakeholder survey process. The Stakeholder Advisory Group then evaluated and revised the priority listing based on qualitative issues that needed to be taken into consideration, including DOH's capacity to respond. Recommendations from the advisory group formed the basis of the final selection of 22 possible priorities, divided

into seven to eight issue categories for each of the three MCH population groups, by MCH leadership.

In order to best describe the health status of Florida's MCH population groups and to provide sufficient descriptive information to the stakeholder advisory work group and MCH program leadership to select the final priorities for the 2010 needs assessment process, each of the 22 issues was analyzed by knowledgeable staff at DOH or partnering agency staff. Using both quantitative and qualitative information available, these program experts compiled research summaries that were closely reviewed by the needs assessment work group for sufficiency, accuracy and thoroughness. Each issue summary embodied the following organized content structure to assure adequate coverage of the issue and to facilitate the final selection of priorities:

- Magnitude of the issue/problem
- Trend
- Severity of the issue/problem
- Issue's status as a national objective / performance measure OR state objective / performance measure
- Potential for improving the problem
- Issue's being a current state and/or national goal and
- Ability of DOH to impact potential improvement of the issue/problem

The research summaries, aggregated by population group, are presented here in their entirety. Section 5 describes in detail the subsequent steps in the selection of the final state priority needs following the dissemination of these summaries to the Stakeholder Advisory Group for review, ranking and recommendations.

WOMEN OF CHILDBEARING AGE

HEALTH CARE FOR UNINSURED AND UNDERINSURED WOMEN

DEFINITION AND GENERAL DESCRIPTION OF THE ISSUE/PROBLEM

Uninsured women are women who do not have health insurance coverage and underinsured women have health insurance with limited or inadequate coverage. Insurance coverage for women is an important public health issue for women and for infants and children since the health of pregnant women and women of childbearing age affects the health of their infants and children.

Magnitude

According to the U.S. Census Bureau there were 5,644,000 women age 18 to 64 living in Florida in 2008. Of these 1,410,000 or 25 percent were uninsured. This percentage is the fourth highest among the states, which means there are 47 states with better (lower) uninsured percentages for women age 18 to 64 (Washington D.C is counted as a state). Louisiana, New Mexico and Texas are the three states with higher percentages. Nationally, the percentage of uninsured women age 18 to 64 was 18 percent. (source:http://www.census.gov/hhes/www/cpstc/cps_table_creator.html).

Severity/consequences

According to the Institute of Medicine report "Hidden Costs, Value Lost: Un-insurance in America":

- When people lack health coverage, society's costs are substantial.

- The uninsured lose their health and die prematurely. Uninsured children lose the opportunity for normal development and educational achievement when preventable health conditions go untreated.
- Families lose peace of mind because they live with the uncertainty and anxiety of the medical and financial consequences of a serious illness or injury.
- Communities are at risk of losing health care capacity because high rates of un-insurance result in hospitals reducing services, health providers moving out of the community, and cuts in public health programs like communicable disease surveillance. These consequences can affect everyone, not just those who are uninsured.
- The economic vitality of the country is diminished by productivity lost as a result of the poorer health and premature death or disability of uninsured workers." (source: http://www.iom.edu/~/media/Files/Report%20Files/2003/Hidden-Costs-Value-Lost-Uninsurance-in-America/Uninsured5FINAL.ashx).

According to another Institute of Medicine report "Uninsurance Facts and Figures":

- Lack of health insurance undermines health on multiple levels.
- Uninsured people are more likely to receive too little medical care and receive it too late; as a result, they are sicker and die sooner.
- Uninsured adults have a 25 percent greater mortality risk than adults with coverage. About 18,000 excess deaths among people younger than 65 are attributed to lack of coverage every year. This mortality figure is similar to the 17,500 deaths from diabetes and 19,000 deaths from stroke within the same age group in 2001.
- Uninsured women with breast cancer have a risk of dying that is between 30 percent and 50 percent higher than for insured women.
- Uninsured car crash victims were found to receive less care in the hospital and had a 37 percent higher mortality rate than privately insured patients.
- Uninsured individuals with diabetes, cardiovascular disease, end-stage renal disease, HIV infection, and mental illness have consistently less access to preventive care and have worse clinical outcomes than do insured patients." (source: (http://www.iom.edu/~/media/Files/Report%20Files/2004/Insuring-Americas-Health-Principles-and-Recommendations/Factsheet5Quality.ashx)

In summary, lack of health insurance is a preventable major risk factor for many illnesses and causes of death.

Trend

Following declines in the number of people with health insurance during the 1980s, the proportion has remained essentially level, at about 85 percent from 1989 to 1997 for persons under age 65 years (National Center for Health Statistics (NCHS). *National Health Interview Survey.* Hyattsville, MD: NCHS, unpublished data)".

In 2005, the University of Florida released a report entitled "Comparative Findings from The 1999 and 2004 Florida Health Insurance Studies" (available at: http://scistage.forumone.com/files/Comparative%20Findings%20from%20the%201999%20and%202004%20Florida%20Health%20Insurance%20Studies.pdf). This study was based on a survey of 17,435 Florida households conducted in 2004. Results from this

study indicate that an estimated 18 percent of female residents in Florida, under age 65 are without health insurance. In the 1999 study, this percentage was 16.4 percent. This translates into an estimated 1,071,981 uninsured females in 1999 and 1,330,854 uninsured females in 2004. This is an increase of 24.1 percent in the number of uninsured females from 1999 to 2004 or an annual percentage increase of 4.41 percent.

National/state goals

According to Healthy People 2010, the national goal for health insurance coverage for persons under age 65 is 100 percent (http://www.healthypeople.gov/document/html/objectives/01-01.htm). The baseline is the National Health Interview Survey for 1997 which estimated that 83 percent of persons under age 65 had health insurance coverage. The 2010 federal Health Reform Act has the intention to increase uninsured Americans access to affordable health insurance.

Potential for improvement

In 2006, Massachusetts passed legislation and began implementing a plan to provide health care coverage to its uninsured residents. For women aged 18 to 64, the percentage that were uninsured decreased from 10.7 percent in 2006 to 5.8 percent in 2008. However, according to a report from the Pioneer Institute in January 2009, data collected over the past three years indicates the program will become increasingly more expensive and supported by progressively less revenue.

(Sources: http://www.census.gov/hhes/www/cpstc/cps_table_creator.html, Michael Miltenberger and Steve Poftak, "Massachusetts Healthcare Reform: A Framework for Evaluation", Pioneer Institute, January 2009)

Health reform legislation was passed at the national level with the goal of expanding access to private insurance and Medicaid thereby decreasing the number of uninsured.

DOH capacity

DOH currently provides a variety of services to uninsured and underinsured women based on sliding fee scales.

Many county health departments offer primary care services directly or in partnership with community resources.

- Family Planning Services: county health departments offer services to reduce unplanned pregnancies, promote health for women prior to pregnancy, and increase access to reproductive health services. The Family Planning Medicaid Waiver is available to women ages 14-55 who have lost full Medicaid coverage.
- Florida Breast and Cervical Cancer Early Detection Program: The program offers reduced-cost or free mammograms, clinical breast exams, and Pap smears to low-income, uninsured women between the ages of 50 and 64. All 67 Florida counties have access to the program services through 16 lead sites throughout the state.
- Chronic Disease Services: Through the Bureau of Chronic Disease Prevention and Health Promotion, DOH offers insulin for uninsured, low-income, diabetics and epilepsy medical services for low-income residents diagnosed with epilepsy.
- Healthy Start: Pregnant women, infants, and children up to age 3 are universally screened to identify those at risk of poor birth, health, and developmental outcomes. Those identified to be at-risk are then offered targeted support services including: outreach, care coordination, childbirth education, parenting

education and support, nutrition counseling, psychosocial counseling, tobacco education and cessation counseling, breastfeeding education and support, and interconception education and counseling.

- Preconception Health: In partnership with the Florida Chapter of the March of Dimes, *EveryWomanFlorida.com* was developed with the goal of helping women reach their optimal level of health, thereby improving Florida's birth outcomes. The website provides resources for women and health care providers on how to improve the health and well-being of women.

Limited funding resources for the services provided through DOH may result in inadequate services available for Florida's uninsured and underinsured women.

Current State priority or objective

The Agency for Health Care Administration (AHCA) manages Florida's Medicaid program. Medicaid is a state and federal partnership that provides health coverage to low-income people that was implemented in Florida in 1970.

In 2008, The *Cover Florida* Health Care Access Program was approved by the Florida Legislature. Florida (with involvement of the AHCA, the Office of Insurance Regulation, and representatives from the Executive Office of the Governor) partnered with private insurance companies to make affordable health care coverage available to uninsured Florida residents. The policies became available in January 2009. A total of 3,289 females have been enrolled in program through November 30, 2009.

(Source: http://www.coverfloridahealthcare.com/)

In December 2007, the Florida Discount Drug Card program became available. The state contracts with Envision Pharmaceutical Services to manage the program. The goal of the program is to lower the cost of prescription drugs for low-income and uninsured Florida residents.

(Source: http://www.flgov.com/release/9743, http://www.floridadiscountdrugcard.com)

OBESITY/PHYSICAL INACTIVITY

Definition and General Description of the issue/problem

Obesity is a condition defined as having a body mass index (BMI) of ≥30 kg/m^2. Obesity increases an individual's risk for a number of chronic illnesses and heightened morbidity and mortality. Lack of physical activity is often a risk factor for obesity, but it also carries independent risk. Research has found that physical inactivity and low cardio-respiratory fitness are equally important predictors of negative health outcomes. Physically active obese individuals may have lower chronic disease morbidity and mortality than inactive individuals of normal weight.[1]

Magnitude

According to the 2008 Behavioral Risk Factor Surveillance Survey (BRFSS), 18.9 percent of women aged 18 to 44 years were obese. In 2007, the department released a state-level report of behavioral differences of women 18 to 44 years of age compared to women of other age groups. The following are the results of the comparison.

[1]Blair ,SN, & Brodney ,S. (1999). Effects of physical inactivity and obesity on morbidity and mortality: current evidence and research issues. Med Sci Sports Exerc.(11 Suppl):S646-6`2.

Obesity decreases with increasing education level and income level. The prevalence of obesity among women aged 18 to 44 years who did not complete high school (29.8 percent) was higher compared to those who completed high school and or college (23.9 percent) and those who completed four or more years of college (19.7 percent). The prevalence of obesity among women of childbearing age who earn less than $25,000 a year (28.4 percent) was higher compared to those who earn between $25,000 and $49,999, (21.3 percent) and those who earn $50,000 or more a year (18.4 percent). Overall, the prevalence of obesity was highest among non-Hispanic black women (33.5 percent), followed by Hispanics (21.6 percent), and non-Hispanic whites (19.2 percent).

The major risk factors for obesity are lack of physical activity and poor nutrition. In 2007, BRFSS reported 26.6 percent of women aged 18 to 44 years were physically inactive. Physical inactivity also decreases with increasing education level and income level. The prevalence of physical inactivity among women aged 18 to 44 years who did not complete high school (52.3 percent) was higher compared to those who completed high school and or college (37.9 percent) and those who completed four or more years of college (16.9 percent). The prevalence of physical inactivity among women of childbearing age who earn less than $25,000 a year (42.3 percent) was higher compared to those who earn between $25,000 and $49,999, (28.2 percent) and those who earn $50,000 or more a year (14.0 percent). Overall, the prevalence of physical inactivity was highest among Hispanics (39.5 percent), followed by non-Hispanic black women (30.8 percent), and non-Hispanic whites (19.3 percent).

Severity/consequences

Approximately 280,000 deaths each year in the U.S. are attributable to obesity. Obese women are more likely to develop endometrial[2] and gallbladder cancers[3] as well as chronic conditions such as diabetes[4] and heart disease[5-6]. For women of childbearing age, excess body fat is related to menstrual abnormality, infertility, miscarriage, and difficulties with assisted reproduction. High pre-pregnancy weight is associated with an increased risk in pregnancy of hypertension, toxemia, gestational diabetes, urinary infection, macrosomia, and cesarean section.[7] Reduction in weight using exercise and diet has been found to significantly improve fertility outcomes.[8]

In 2008, direct health costs associated with obesity in Florida were over $4.8 million.[9] A recent study estimated that obese individuals pay 42 percent more annually for healthcare.[10]

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[2] Ballard-Barbash, R Swanson CA, Body Weight: Estimation of Risk for Breast and Endometrial Cancers. Am J Clin Nutr, 1996;63(suppl):4375-41S

[3] (2004). Obesity: Causes and Consequences. *Encyclopedia of Health and Behavior*.

[4] Venables, M.C. & Jeukendrup, A.E. (2009). Physical inactivity and obesity: links with insulin resistance and type 2 diabetes mellitus. *Diabetes/Metabolism Research and Reviews*, *25*, S18.

[5] Manson JE, Skerrett PJ, Greenland P, VanItallie TB. The escalating pandemics of obesity and sedentary lifestyle: a call to action for clinicians. *Arch Intern Med.* 2004;164:249-258.

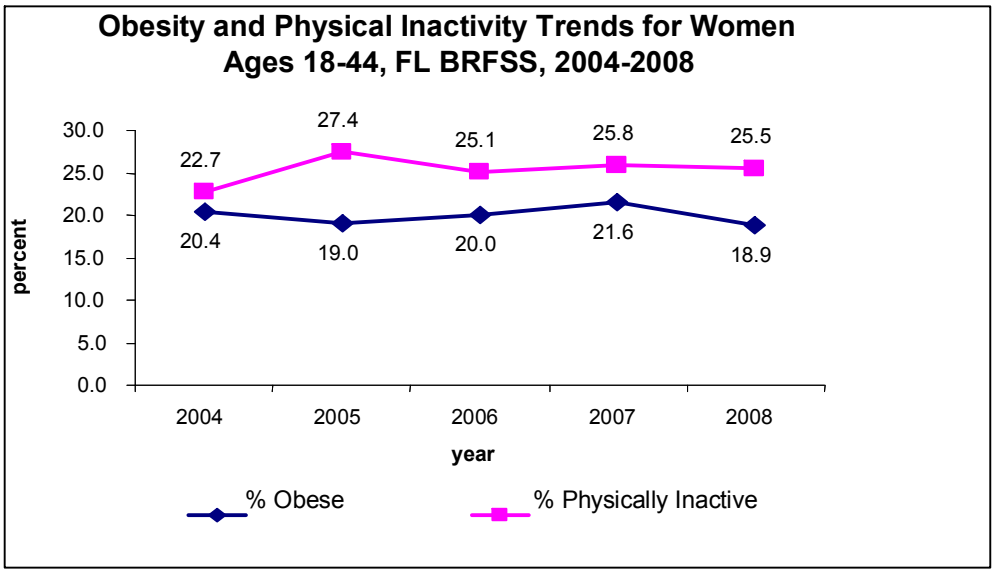
[6] Mosca L, Appel LJ, Benjamin EJ, et al. Evidence-based guidelines for cardiovascular disease prevention in women. *Circulation.* 2004;109:672-693.

[7] Norman RJ, Clark AM. Obesity and Reproductive Disorders: A Review. Reprod Fertil Dev, 1998;10:55-63.

[8] Clark AM et al. Weight loss in Obese Infertile Women Results in Improvement in Reproductive Outcome for All Forms of Fertility Treatment. Hum Reprod, 1998;13(6)1502-5.

[9] United Health Foundation (n.d.) Direct Health Care Costs Associated with Obesity: 2008. Retrieved from http://www.americashealthrankings.org/2009/obesity/ECO.aspx#2008.

Trend



Since 1986, the number of adults in Florida who are overweight has increased by 76 percent, and the number of adults who are obese has doubled.

Approximately 23 percent of adults had an increase in body weight by five pounds or more in the past year. The percentage of women aged 18 to 44 who were obese has been relatively stable for the past five years. There was a 13 percent decrease from 21.6 percent in 2007 to 18.9 percent in 2008. The percentage of women who had no leisure-time physical activity has increased from 22.7 percent in 2004 to 25.5 percent in 2008. Hispanic and non-Hispanic black women were more likely to be obese and physically inactive than non-Hispanic white women in the same age group.

National/state goals settling

Healthy People 2010 has set objectives to reduce overweight and obesity and to increase physical activity in the United States[11]:

- Reduce the proportion of adults who are obese to 15 percent. According to the 2008 BRFSS, Florida is at 25.2 percent.
- Reduce the proportion of adults who engage in no leisure-time physical activity to 20 percent. According to the 2008 BRFSS, Florida is at 25.9 percent.
- Increase the proportion of adults who engage regularly, preferably daily, in moderate physical activity for at least 30 minutes per day to 30 percent. According to the 2008 BRFSS, Florida is at 34.6 percent.

Potential for improvement

There are several evidence-based interventions and policies that facilitate the increase of physical activity and reduction of obesity. They are presented in Table 1 below.

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[10] Finkelstein, E.A., Trogdon, J.G., Cohen, J.W., & Dietz, W. (2009) Annual Medical Spending Attributable to Obesity: Payer- and Service-Specific Estimates. *Health Affairs, 28*(5), w822-w831.

[11] U.S. Department of Health and Human Services (2000, November). Healthy People 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office. [WWW document] www.healthypeople.gov/document/ tableofcontents.htm.

Table 1

	Nutrition	Physical Activity
Media	• Media and advertising restrictions consistent with federal law. • Promote healthy food/drink choices • Counter-advertising for unhealthy choices	• Promote increased physical activity • Promote use of public transit • Promote active transportation (bicycling and walking for commuting and leisure activities) • Counter-advertising for screen time
Access	• Healthy food/drink availability (e.g., incentives to food retailers to locate/offer healthier choices in underserved areas, healthier choices in child care, schools, worksites) • Limit unhealthy food/drink availability (whole milk, sugar sweetened beverages, high-fat snacks) • Reduce density of fast food establishments • Eliminate transfat through purchasing actions, labeling initiatives, restaurant standards • Reduce sodium through purchasing actions, labeling initiatives, restaurant standards • Procurement policies and practices • Farm to institution, including schools, worksites, hospitals, and other community institutions	• Safe, attractive accessible places for activity (i.e., access to outdoor recreation facilities, enhance bicycling and walking infrastructure, place schools within residential areas, increase access to and coverage area of public transportation, mixed use development, reduce community design that lends to increased injuries) • City planning, zoning and transportation (e.g., planning to include the provision of sidewalks, parks, mixed use, parks with adequate crime prevention measures, and Health Impact Assessments)
Point of Purchase/ Promotion	• Signage for healthy vs. less healthy items • Product placement & attractiveness • Menu labeling	• Signage for neighborhood destinations in walkable/mixed-use areas (library, park, shops, etc) • Signage for public transportation, bike lanes/boulevards
Price	• Changing relative prices of healthy vs. unhealthy items (e.g. through bulk purchase/procurement/ competitive pricing)	• Reduced price for park/facility use • Incentives for active transit (xxxvii, xxxviii) • Subsidized memberships to recreational facilities
Social Support & Services	• Support breastfeeding through policy change and maternity care practices	• Workplace, faith, park, neighborhood activity groups (e.g., walking hiking, biking)

Centers for Disease Control and Prevention (2009) Media, Access, Point of decision information, Price, and Social support/services (MAPPS) Interventions. (2010). Available at http://www.cdc.gov/chronicdisease/recovery/PDF/MAPPS_Intervention_Table.pdf.

DOH capacity

Several of the interventions listed above, particularly for increasing physical activity, lie beyond the Department of Health's purview. However, the Division of Environmental Health has four land use planners on staff to work on built environment projects, and

there is some potential to collaborate. At this time, no programs within the Department address any of the above interventions as a primary objective. However, several programs promote them as best practices. Current prevention efforts are primarily delivered as awareness messages. Additionally, the Department of Health is responsible for staffing the Governor's Council on Physical Fitness.

Current state priority or objective

Recently, the Bureau of Chronic Disease Prevention and Health Promotion applied for $2.1 million in American Recovery and Reinvestment Act stimulus funding to create a statewide infrastructure addressing two of the evidence-based interventions above: Increasing physical activity in schools by promoting Safe Routes to School Walking School Buses (in an effort to promote a lifelong habit of increased physical activity), and campaigning for breastfeeding-friendly worksites.

Unintended and Unwanted Pregnancy

Definition and General Description of the issue/problem

According to the U.S. Centers for Disease Control and Prevention, "An unintended pregnancy is a pregnancy that is either mistimed or unwanted at the time of conception." (http://www.cdc.gov/reproductivehealth/UnintendedPregnancy/index.htm). According to the National Center for Health Statistics: "An unwanted birth is one resulting from a pregnancy that a woman had despite wanting no more births at the time she became pregnant." (http://www.cdc.gov/nchs/data/nvsr/nvsr56/nvsr56_15.pdf).

Magnitude

The Pregnancy Risk Assessment Monitoring System (PRAMS) is a random population-based surveillance system of maternal behaviors and experiences before, during, and shortly after pregnancy. Each year Florida samples approximately 2,800 new mothers that have given birth to a live-born infant.

Florida PRAMS data for 2005 show that 35 percent of all births in Florida were mistimed (defined as being wanted later) and 11.3 percent were unwanted (defined as not being wanted then or at any time in the future). In 2007 there were 231,417 resident births. Based on the PRAMS data, we estimate there were 80,996 mistimed births and 26,150 unwanted births in Florida in 2007.

The number of mistimed/unintended births in Florida in 2008 was approximately 107,928, or 46.3 percent.

(Florida Department of Health, Bureau of Vital Statistics, Florida CHARTS: Total Resident Deliveries, 2007, available at: http://www.floridacharts.com/charts/report.aspx?domain=03&IndNumber=0024), and (Florida PRAMS, 2005, available at: http://apps.nccd.cdc.gov/cPONDER/default.aspx?page=display&state=5&year=6&category=17&variable=.).

Severity/consequences

Encouraging men and women to use a combination of barrier and effective contraceptives dramatically reduces unintended pregnancies as well as reduces sexually transmitted infections (STIs), if one of the methods is a condom. Consistent and correct use of a contraceptive method provides the best protection from a mistimed/unintended pregnancy. Abstinence remains available as an option and abstinence counseling is

included for Title X clients. (Contraceptive Technology. Hatcher et assoc., 19th edition. Choosing a Contraceptive: Efficacy, Safety and Personal Considerations, 33, 2007.)

The article entitled "Consequences for Children of Their Birth Planning Status" by Nazli Baydarit found that "by preschool age, mistimed and unwanted children receive fewer opportunities for skill development, have less-positive interactions with their mothers and experience more authoritarian parenting styles than wanted children." (Family Planning Perspectives Volume 27, Number 6, November/December 1995**,** available at: http://www.guttmacher.org/pubs/journals/2722895.html)

In 1995, the Institute of Medicine (IOM) published the book: "The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families", Sarah S. Brown and Leon Eisenberg, Editors, National Academy Press, Washington, D.C., available at: http://books.nap.edu/openbook.php?record_id=4903&page=R1

The following is quoted from pages 80-82 of the IOM book:

"The data and perspectives presented in this chapter demonstrate that unintended pregnancy has serious consequences. These consequences are not confined only to unintended pregnancies occurring to teenagers or unmarried women and couples; in fact, unintended pregnancy can carry serious consequences at all ages and life stages. \

First, unintended pregnancy often leads to abortion, a fact that underscores a point made at the outset of this report: reducing unintended pregnancy would dramatically decrease the incidence of abortion.

Second, a disproportionate share of the women bearing children who were unintended at conception are unmarried and/or at either end of the reproductive age span. These demographic attributes themselves carry increased medical and social burdens for children and their parents.

Third, a complex and extensive group of studies has attempted to measure the impact of a pregnancy's intention status on a wide variety of child and parental outcomes. These studies show that unintended pregnancies—especially those that are unwanted (as distinct from mistimed)—carry appreciable risks for children, women, men, and families. That is, unintendedness itself poses an added, independent burden beyond whatever might be present because of other factors, including the demographic attributes of the mother in particular. For an unwanted pregnancy, prevention of ill effects on the child is not dependent on whether the unintendedness itself caused the negative outcome. If the unwanted pregnancy can be prevented, any associated ill effects will also be prevented.

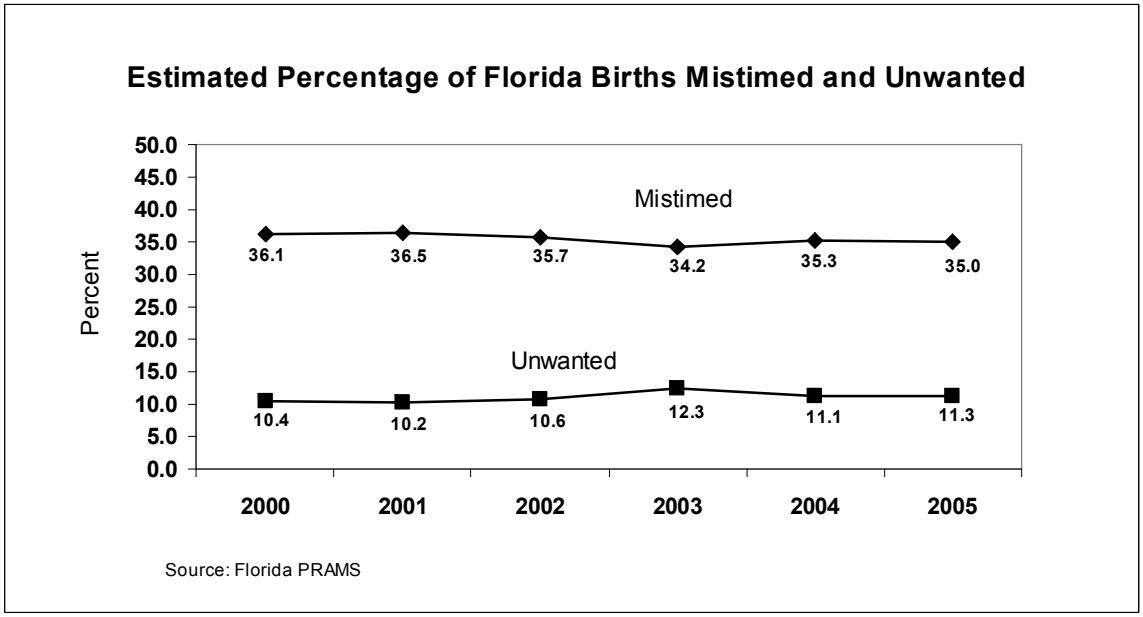
With an unwanted pregnancy especially, the mother is more likely to seek prenatal care after the first trimester or not to obtain care. She is more likely to expose the fetus to harmful substances by smoking tobacco and drinking alcohol. The child of an unwanted conception is at greater risk of weighing less than 2,500 grams at birth, of dying in its first year of life, of being abused, and of not receiving sufficient resources for healthy development. The mother may be at greater risk of physical abuse herself, and her relationship with her partner is at greater risk of dissolution. Both mother and father may suffer economic hardship and fail to achieve their educational and career goals. The health and social risks associated with a mistimed conception are similar to those associated with an unwanted conception, although they are not as great.

Fourth, it is also apparent that pregnancy begun without some degree of planning and intent often precludes individual women and couples from participating in preconception risk identification and management and may also mean that they are unable to take full

advantage of the rapidly expanding knowledge regarding human genetics. Certain specific diseases and conditions with serious consequences, such as diabetes, are best managed among pregnant women when care is begun before conception. Increased access to such care and increased provider training in this field will help more individuals take advantage of this developing area of clinical practice."

Trend

Based on Florida PRAMS data, the percentage of Florida births that are mistimed or unwanted did not change substantially in the period 2000 through 2005. The trend for both was essentially flat. The percentage mistimed reached a low of 34.2 in 2003 and a high of 36.5 in 2001. The percentage unwanted reached a high of 12.3 in 2003 and a low of 10.2 in 2001.



National/state goals

The goal of the Florida Department of Health Title X Family Planning Program is to assist individuals with the number and spacing of their children, which includes preventing unintended pregnancies. This goal promotes positive birth outcomes and healthy families, and prevents an array of negative consequences for men, women, and children. (http://www.hhs.gov/opa/familyplanning/index.html). These consequences include preventing increased poverty, decreased mental and physical health, decreased physical violence, and decreased positive educational and behavioral outcomes.

(The Consequences of Unintended Childbearing: A WHITE PAPER. The National Campaign to Prevent Teen and Unplanned Pregnancy, May, 2007, available at: http://www.thenationalcampaign.org/resources/pdf/consequences.pdf).

The Florida Department of Health, along with the Federal Title X Family Planning Program, provides low-cost comprehensive family planning services to men and women. These services also include comprehensive family planning services to the uninsured or underinsured and to the teen population.

Florida's Department of Health Family Planning Program goal to prevent unintended pregnancy is aligned with the following Healthy People 2010 Family Planning objectives:

- Increase the proportion of pregnancies that are intended to seventy percent.
- Increase the proportion of females at risk for unintended pregnancy (and their partners) who use contraceptives to 100 percent.
- Reduce the proportion of births occurring within 24 months of the previous birth to six percent.
- Reduce the number of females experiencing pregnancy despite using a reversible method of contraceptive method to seven percent.
- Increase the proportion of health care providers who provide emergency contraception. (Developmental)
- Increase male involvement in pregnancy prevention and family planning efforts. (Developmental)
- Reduce pregnancies among female adolescents to 43 pregnancies per 1,000.
- Increase to 90 percent the proportion of young adults who have received formal instruction before turning age 18 years on reproductive health issues, including all of the following topics: birth control methods, safer sex to prevent HIV, prevention of sexually transmitted diseases, and abstinence. (http://www.healthypeople.gov/Document/HTML/Volume1/09Family.htm).

A key health indicator for Healthy People 2010 is to increase responsible sexual behavior. Responsible sexual behavior reduces unintended pregnancies by increasing male involvement and by increasing the number of sexually active people who choose and use effective contraceptives. Additionally, responsible behavior encourages people to use deliberate forethought when planning sexual activity. (http://www.healthypeople.gov/Document/html/uih/uih_4.htm#sex).

Using the Healthy People 2010 objective of increasing the proportion of intended pregnancies to seventy percent as a guide, Florida needs to reduce the FY 2008 46.3 percent mistimed/unintended pregnancies to 30 percent.

(http://www.healthypeople.gov/Document/HTML/Volume1/09Family.htm).

Potential for improvement

In 2008, the Infant, Maternal and Reproductive Health (IMRH) unit conducted a comprehensive statewide Florida Department of Health Family Planning Needs Assessment. The needs assessment revealed four deficient areas: 1) adequate state and federal funding; 2) an adequate number of trained professionals in rural areas; 3) an adequate number of medical providers who are available and willing to accept Medicaid or Title X reimbursement for female and male sterilization procedures; and 4) an adequate supply of long-term family planning methods. Limited funding prevents the Florida Department of Health from purchasing more of the newer effective long-term contraceptive methods. Additional funding for services, staff and long-term effective contraceptives could assist the Florida Department of Health in achieving state and national goals to reduce unintended pregnancy.

(Florida's Statewide Plan: 2009-2010, Family Planning, III Project Narrative. A. 6. Unmet Family Planning Needs, pages 21-22.)

Provision of emergency contraception to women who want to keep emergency contraception on hand for emergency use, or to clients who may have a contraceptive method or user failure is an accepted national standard of care. Emergency contraceptive pill use can reduce pregnancy risk by 89 percent. (Contraceptive Technology. Hatcher et assoc., 19th edition. Emergency Contraception, 87, 2007.) Emergency contraception use is a topic of continuing education and training for Title X family planning providers and clients.

Provision of newer long-term contraceptive methods, such as the contraceptive implant, the intrauterine system, contraceptive ring and patch, may cost more initially. These methods reduce unintended pregnancies by eliminating errors of contraceptive method use as in missed oral contraceptive pills, or when a barrier contraceptive method is not used with each sexual intercourse. The overall cost to the people of Florida is reduced by providing men and women with effective long-term contraceptive choices to reduce mistimed/unintended pregnancy. Compared to the cost of services for pregnancy, childbirth, and Medicaid services for health care of uninsured infants and children, the lifetime cost of an IUD/IUS or any long-term contraceptive method is very low.

DOH capacity

In 2009, Florida Department of Health was awarded over $10.6 million of Federal Title X funds to support family planning services. The total number of clients served by the Florida Department of Health Title X Family Planning Program during calendar year 2008 was 213,394, and client encounters totaled 454,706. (Family Planning Annual Report (FPAR), 2008.) The services are provided in all 67 Florida counties in 177 family planning clinic sites. Title X provides opportunities for supplemental funding to county health departments (CHDs) to extend services to clients, provide outreach to men and women of childbearing age, and to provide outreach and services to high-risk or underserved populations such as teens and Hispanic women. Statewide, there are 19 projects that were awarded additional funding. Eight of these are special initiatives for high-risk populations, and five are projects expanding family planning services for males. There are also three expansion grants for increasing family planning services, and three HIV projects. A total of 27 CHDs submitted proposals in 2009 for additional funds, but only seven new projects were funded. The Florida Title X Family Planning Program utilized 2009 year end funds of $100,000, and was awarded additional Title X funds of $153,825 in the 2009-2010 grant to provide newer long-term FDA approved contraceptives for women, which included intrauterine systems (IUSs) and the vaginal ring. These long-term methods are popular with CHD providers and clients and supplies are depleted within two months of issue. CHD family planning clinic staff often contact the Family Planning Program Office asking if more of these long-term contraceptives will become available for use.

Additional support to Department of Health family planning clinics in 2009 included educational sources for providing services to teens. Information provided to the CHDs included “It’s a Guy Thing: Boys, Young Men, and Teen Pregnancy Prevention,” and “Making the List: Understanding, Selecting, and Replicating Effective Teen Pregnancy Prevention Programs.” Each Title X family planning clinic received contraceptive kits that included FDA approved samples or models of available contraceptive methods to use for hands-on educational programs for all ages. The program office received several requests from family planning clinic staff for additional contraceptive kits to use with the teen pregnancy prevention programs in schools.

Current state priority or objective

The priority populations to be served by the DOH Title X Family Planning Program include minority populations. The Hispanic population totals 21 percent of the Florida population. Uninsured, low income women and men, women and men living 150 percent below the federal level, and teens are all priority groups. The Family Planning program collaborates with the STD and HIV prevention programs to provide screening, treatment and referral as part of client services. Another priority includes Florida's low contraceptive use.

(Florida's Statewide Plan: 2009-2010, Family Planning, III Project Narrative. A. 3. Priority Populations to Be Served, pages 15-19.)

PSYCHOSOCIAL HEALTH ISSUES

Definition

Psychosocial risk factors such as stress, depression, and domestic violence can have a negative impact on maternal and child health outcomes (Larson, Russ, Crall, & Halfon N, 2008; Whitaker RC, Orzol SM & Kahn RS, 2006) . Stress is defined as a "state of threatened homeostasis or loss of balance" and its effects are regulated by an "integrated" system of behavior, physiological, and biochemical mechanisms (Hobel, 2004). A stressful life event such as trauma, loss of a loved one, financial difficulties, or any type of stressful situation often occurs before a depressive episode (National Institute of Mental Health (2009). Major depressive disorder (MDD) is defined as a state of "depressive mood or reduced interest/pleasure, accompanied by at least four vegetative, cognitive, and psychomotor symptoms, lasting for at least two weeks" (Cassano & Favo, 2002). Postpartum depression occurs within the first six weeks after a delivery event and can last for weeks to months after initiation (Robertson, Grace, Wallington & Stewart, 2004).

Magnitude

The 2005-06 National Health and Nutrition Examination Survey (NHANES), a population-based survey of households, shows that 5.4 percent of Americans over the age of 12 experience a form of depression within any two-week period (Pratt & Brody, 2009). Compared to the 11.1 percent of US population over 18 years of age in 2006-07, Florida's population over 18 years of age that experienced "Serious Psychological Distress in the Past Year" was lower at 10.2 percent and ranked 45th among states and the District of Columbia (Hughes, Sathe, & Spagnola, 2009). Also in 2006-07, 6.8 percent of Florida's population over 18 years of age experienced a "Major Depressive Episode", which was lower than the U.S. rate of 7.3 percent and ranked 43rd among states and the District of Columbia (Hughes, Sathe, & Spagnola, 2009).

In the United States, women tend to experience depression at higher rates than males. The 2001-03 NCS-R data shows a higher lifetime prevalence of MDD for women at 20.2 percent compared to 13.2 percent of US males (Kessler et al., 2005). The NHANES results also show a higher percentage of women (6.7 percent) will experience depression within any two-week period compared to men at 4.0 percent (Pratt & Brody, 2009). During the perinatal period, the incidence of depression appears to increase. For seven of the states participating in the 2000 Pregnancy Risk Assessment Monitoring System (PRAMS) that utilized questions about postpartum depression, 51.6 percent reported low-moderate depression and 7.1 percent reported severe depression (CDC, 2004). Data from 2004-05 PRAMS, representing 17 states, shows that 11.7 percent-

20.4 percent of women experience some form of postpartum depression symptoms after delivery (CDC, 2008).

In 2007, Florida PRAMS data shows that 37.9 percent of women reported at least one or two stress events and 29.8 percent reported three to five stress events in the 12-months prior to delivery (Florida Department of Health Bureau of Epidemiology, 2009). The 2005 Florida PRAMS data shows 19.7 percent of women reported experiencing depression during pregnancy or delivery (Yu, 2007). Similarly, for Florida pregnant women who completed the Florida Healthy Start Prenatal Risk Assessment Screen between April 2008 and August 2009, 19.1 percent reported "feeling down and depressed within the past 12 months" (Thompson, 2009). For an earlier cohort of Florida women completing Healthy Start Prenatal Risk Assessment between 2004 and 2007, 17.7 percent reported having a history of depression (Clark, 2010a).

Race/Ethnicity: According to 2005-06 NHANES results, 8.0 percent of non-Hispanic black Americans over the age of 12 experience depression within any two-week period, which is significantly higher than the 4.8 percent of non-Hispanic white Americans over 12 that experience depression within any two-week period (Pratt & Brody, 2009). The 2005-06 NHANES data also shows 6.3 percent of Mexican-Americans over the age of 12 experience depression within any two-week period, but this proportion is not significantly different than the proportion of non-Hispanic whites who experience depression within any two-week period. (Pratt & Brody, 2009).

For women in Florida, there are also differences in depression prevalence by race and ethnicity. For women completing Florida's Prenatal Risk Assessment Screen between 2004 and 2007, white women reported a higher prevalence of lifetime experiences of depression (21.8 percent) compared to black women (12.7 percent) and women in the "other" race category (15.2 percent). (Clark, 2010a) However, percentages from 2005 Florida PRAMS report women experiencing depression during pregnancy or delivery was higher for non-Hispanic blacks (22.0 percent) and Hispanics (21.3 percent) compared to non-Hispanic whites at 17.9 percent (Yu, 2007).

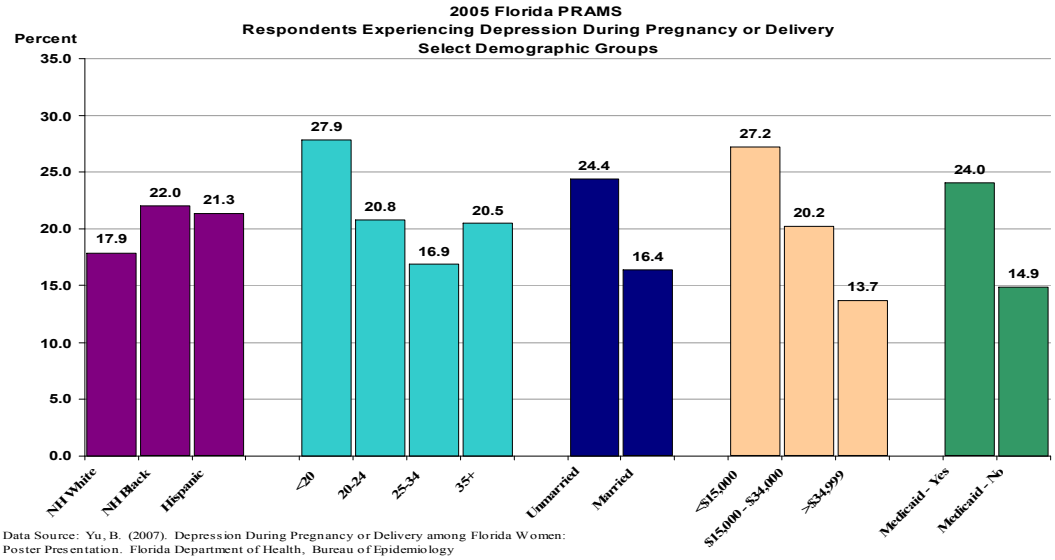
Income: According to 2005-06 NHANES results, the percentage of persons below poverty that will experience depression within any two-week period is nearly three times higher than the percentage of persons at or above the poverty level at 13.1 percent and 4.4 percent, respectively (Pratt & Brody, 2009) This difference between income levels is reported as statistically significant.

Among income subgroups, Florida PRAMS respondents with an annual income less than $15,000 comprised the largest proportion reporting experiencing depression during pregnancy or at delivery (Yu, 2007). According to 2005 Florida PRAMS data, women covered by Medicaid insurance experienced higher rates of depression during pregnancy or at delivery (24.0 percent) compared to women with non-Medicaid insurance (14.9 percent) (Yu, 2007).

Age: Nationally, the NHANES survey shows that women in the 12-17 and 18-39 age groups experience similar incidences of depression within any two-week period at 4.3 percent and 4.7 percent, respectively (Pratt & Brody, 2009). Among the age groups of Florida 2005 PRAMS, 27.9 percent of women that were ≤ 19 years experienced depression compared to the 16.9 percent of the 25-34 age group, who had the lowest rates of depression among the age groups (Yu, 2007).

Other demographic subpopulations within the 2005 Florida PRAMS dataset that showed a higher prevalence of depression within respective subpopulations were: unmarried

women, 24.4 percent (marital status); and women with less than high school, 23.1 percent, and women who are high graduates 22.1 percent (education) (Yu, 2007).



Identified Risk Factors: In a review of 2004-05 PRAMS findings among 17 states, the following risk factors were found to be significantly associated with self-reports of postpartum depression symptoms: tobacco use in the last three months of pregnancy, physical abuse before and/or during pregnancy, and traumatic and financial stress during pregnancy (CDC, 2008). A review of findings from two meta-analyses on over 14,000 subjects and subsequent studies of nearly 10,000 additional subjects found the following risk factors for postpartum depression:

- Depression or anxiety during pregnancy effect size
- Past history of psychiatric illness
- Stressful life events
- Lack of social support
- Marital problems
- Pregnancy complications
- Low socioeconomic status
  (Robertson et al., 2004)

Studies have shown that women who are breastfeeding and have adequate social support have fewer symptoms of depression (Cunningham & Zayas, 2002; Dennis & McQueen, 2009).

Severity/consequences

Research has addressed and confirmed the negative effects of stress on the body's physical and biochemical systems (Hobel, 2004; Wadhwa et al., 1993; Paarlberg et al., 1995). The spectrum of depressive disorders are often found to be a co-morbidity or causatively associated with a wide range of adverse health conditions, such as cardiovascular disease, musculoskeletal disorders, and intentional injuries (i.e., suicide and homicide) (Cassano & Favo, 2002). Depression also contributes to unhealthy behaviors including smoking, substance abuse, and overeating (Burgermeister, 2009;

Homish, Cornelius, Richardson & Day, 2004; La Coursiere, Baksh, Bloebaum & Varner, 2006).

Research has found associations between adverse perinatal outcomes (i.e., preterm delivery, low birth weight, intrauterine growth and infant mortality) and dysfunctional levels of maternal stress (Hobel, 2004; Wadhwa et al., 2001; Paarlberg et al., 1995). For example, a European prospective study found for women who received early and regular prenatal care, high depression scores on the Edinburgh Postnatal Depression Scale resulted in an adjusted odds ratio of 3.3 (CI 1.2-9.2) for a spontaneous preterm birth compared to women with lower depression scores (Dayan et al., 2006). For the 2001-02 Florida birth cohort, women who reported experiencing depression on the Healthy Start Prenatal Risk Assessment Screen had an adjusted odds ratio of 1.16 for delivering a low birth weight infant (<2500 grams) and an adjusted odds ratio of 1.20 for delivering a preterm infant (<37 gestational weeks); both odds ratios were significant with $\alpha < 0.05$ (Thompson, 2007).

Maternal stress is also often significantly associated with other perinatal health risk factors. In a study using 1997 PRAMS data from 24 states and one U.S. city, researchers found significant positive correlations between maternal smoking and stress, significantly with emotional and traumatic stress (Ahluwalia, Merritt, Beck & Rogers, 2001). Another study that assessed pregnant women as part of a prospective study found that women with poor psychosocial scores have higher risk of smoking (RR=1.4, α <0.001), drug use (RR=1.2, α <0.004), alcohol use (RR=1.3, α <0.001) and less than 13 years of education (RR=1.1, α<0.01) (Cooper et al., 1996). Psychosocial stress has also been associated with domestic violence and depression (Woods, Melville, Guo, Fan & Gavin, 2009; CDC, 2008). In Florida, women who reported "being hit or hurt" on the 2004-2007 Florida Healthy Start Prenatal Risk Assessment Screen had 2.8 times higher chance of also reporting experiencing depression (Clark, 2010a).

Infants with mothers experiencing depression or depressive symptoms have been shown to have an increased risk of poor psychological and physical outcomes (Windham, Rosenberg, Fuddy, McFarlane, Sia & Duggan, 2004; Robertson et al., 2004; McLearn, Minkovitz, Strobino, Marks & Hou, 2006; Chung, McCollum, Elo, Lee & Culhane, 2004). Lack of treatment for mothers with extreme postpartum depression may lead to maternal suicide or infant homicide at the hands of the affected mother (Robertson et al., 2004). Maternal depression can have a negative effect on the social and emotional health of young children, because depressed mothers are likely to have more difficulty providing safe and nurturing care to infants (McLearn et al., 2006). In a national study of families enrolled in Healthy Steps, a pediatric health care program, mothers with symptoms of depression had lower adjusted odds ratios for continuing breastfeeding (AOR= 0.73, CI 0.61-0.88) and for conducting the following positive interactive behaviors with their infants: talking (AOR= 0.74, CI=0.063-0.086), showing books (AOR=0.81, CI=0.68-0.97), and playing (AOR 0.70, CI=0.54-0.90) (McLearn et al., 2006). Infants of depressed mothers can be more irritable, harder to console, and less able to regulate their affective and behavioral states, and have sleep difficulties (Onunaku, 2005; Weinberg & Tronick, 1998). Poor maternal mental health has also been associated with children being overweight and having poor oral health (Larson et al., 2008). Long-term effects of maternal depression on child development include cognitive and language delays, behavioral problems and poor school performance (Onunaku, 2005).

Trend

Comparisons of the 2005-06 and 2006-07 National Surveys on Drug Use and Health show a slight, but not significant, decrease, in the percent of US population over 18 that experienced "Serious Psychological Distress" within the past 12 months of the respective survey years, 11.3 percent to 11.1 percent. For the same survey periods, Florida's population over the age of 18 that experienced "Serious Psychological Distress" within the past 12 months of the 2004-05 to the 2005-06 survey years declined, but also not significantly, from 10.3 percent to 10.2 percent (Hughes, Sathe, & Spagnola, 2009). For the U.S. population estimated to have experienced a major depressive episode within the past 12 months of the respective 2005-06 and 2006-07 survey years, there was a very small, insignificant decrease from 7.31 percent to 7.25 percent (Hughes, Sathe, & Spagnola, 2009). For Florida, the population proportion over 18 that experienced a major depressive episode within the past 12 months of the survey year increased, but not significantly, from 6.4 percent in the 2005-06 survey to 6.8 percent in the 2006-07 survey (Hughes, Sathe, & Spagnola, 2009).

Comparing 2005 and 2007 Florida PRAMS data, there are slight increases in the estimated percentage of non-Hispanic white and non-Hispanic black women that experienced a form of emotional stress: for non-Hispanic white women 31.4 percent in 2005 to 33.4 percent in 2007 and the non-Hispanic black women, 33.0 percent in 2005 to 35.2 percent in 2007 (Clark, 2010c). There was a significant decrease in the proportion of women completing Florida's Prenatal Risk Assessment screen who reported a lifetime prevalence of depression ($\alpha = 0.000$), from 20.4 percent in 2004 to 18.6 percent in 2007 (Clark, 2010a).

National/state goals

The Florida Department of Health does not have any goals related to depression or stress. Healthy People 2010 included an objective to increase the number of persons seen in primary health care who receive mental health screening and assessment **(**U.S. Department of Health and Human Services, 2000)**.** Also, in Healthy People 2010, the leading health indicator for mental health is adults with depression who received treatment**.** The 2010 target for adults diagnosed with depression who received treatment is 50 percent; in 1997, only 23 percent of adults diagnosed with depression received treatment **(**U.S. Department of Health and Human Services, 2000). This objective was retained for 2020 and two new objectives were added: to increase depression screening by primary care providers, and to decrease the annual prevalence for Major Depressive Disorder **(**http://www.healthypeople.gov/hp2020/Objectives/TopicArea.aspx?id=34&TopicArea=Mental+Health+and+Mental+Disorders).

Potential for improvement

All primary healthcare programs that serve women should provide psychosocial screening

Psychosocial screening is now recommended as part of primary healthcare for women (Barson, 2006). In 2006, the American College of Obstetricians and Gynecologists (ACOG) recommended screening all women for psychosocial stress and other psychosocial issues during each trimester of pregnancy and the postpartum period (ACOG Committee on Healthcare for Underserved Women, 2006). A study of pregnant women receiving services from a university prenatal clinic found psychosocial stress to

be very common with 6 percent reporting high stress and 78 percent reporting low/moderate stress (Woods et al., 2009). The Florida Department of Health developed the Tell Us About Yourself (TUAY) questionnaire, which contains questions about domestic violence, substance abuse, stress, and depression. Healthy Start programs and a few health department clinics are utilizing the TUAY, but use of the questionnaire is not mandatory. Many Healthy Start programs are also utilizing a formal screening tool, such as the Edinburgh Postnatal Depression Scale, to identify women with depression during pregnancy and the postpartum period.

Several studies have demonstrated the feasibility and effectiveness of psychosocial screening in pediatric primary care clinics (Dubowitz, Feigelman, Lane, Prescott, Blackman, Grube, Meyer & Tracy, 2007; Garg, Butz, Dworkin, Lewis, Thompson & Serwint, 2007; Chaudron, Szilagyi, Kitzman, Wadkins & Conwell, 2004). Psychosocial screening efforts could be expanded within the Department of Health to include settings such as pediatric clinics, maternity clinics, WIC programs, and family planning clinics. Increased screening would enable more women to receive appropriate diagnosis and intervention.

Enhance home visiting services to include interventions for depression within Florida's Healthy Start Program

The American Academy of Pediatrics references meta-analyses of home visiting programs in the U.S. and Europe that show evidence of improvements in detection and management of postpartum depression as well as enhancing/improving social support, breastfeeding rates, and parenting skills (American Academy of Pediatrics, 2009). Systematic reviews of home-based interventions specific to the treatment and prevention of postpartum depression found statistically significant improvement in postpartum depression following the interventions (Leis, Mendelson, Tandon & Perry, 2009; Dennis & Hodnett, 2007). Home-based interventions have the potential to effectively address depression because they serve high-risk, low-income families who often have the greatest need but the least access to mental health services (Leis et al., 2009). The National Center for Children in Poverty (NCCP) conducted a study of state-based home visiting programs and found that 17 programs in 14 states are using widely recognized home visiting models such as Healthy Families American, Nurse Family Partnership, and Parents are Teachers, while 14 programs in 14 states are using multiple programs and blended designs (Johnson, 2009). The NCCP report stated that home visitors may not have the skills, tools, and comfort level needed to effectively address the needs of families at highest risk and suggested improving training and supervision for home visitors as well as creating enhanced interventions that utilize more highly trained professionals (Johnson, 2009). The lack of positive impact on birth outcomes and maternal behavior found by recent evaluations of the Florida Healthy Start program would suggest consideration of this recommendation. Some examples of enhanced home visiting programs from other states which specifically address depression and stress include:

- Michigan's Maternity Support Services was funded by a Maternal and Child Health Bureau grant to implement a home visiting model using a nurse-community health worker (nurse-CHW) model that combines nursing interventions with intensive social support to low income pregnant women that have mental health problems (Roman et al., 2007). Rowan and her colleagues (2007) advocate the use of trained community health workers who have life experiences similar to their clients to provide social support using peer role modeling and empowerment strategies that address stressors, encourage

positive health behaviors, and increase access to resources. A randomized-controlled study was conducted to compare client outcomes of the traditional home visiting model (CC model), which only utilizes nurses, with client outcomes of the nurse-CHW model. The initial process evaluation found that the nurse-CHW team provided services to 86 percent of eligible women and provided more face-to-face contact compared to 57 percent of eligible women served by standard community care services ($p<0.001$) (Rowan et al., 2007). Compared to respective baseline measures, clients in both models had lower Center for Epidemiologic Studies Depression (CES-D) scores. However, the improvement from the baseline to the 15-month overall CES-D scores and components scores (high stress, low psychosocial resources, high stress & low psychosocial resources) was better for the clients in the nurse-CHW model compared with clients in the traditional CC model (Rowan et al., 2009). The weighted adjusted differences between the mean CES-D scores of the two models were: -2.4 (CI: -4.6, -0.2) for the overall CES-D score, -3.8 (CI: -6.9, -0.6) for the high stress component, -4.0 (-7.2, -0.8) for the low psychosocial resources component and -4.6 (CI:-8.5, -0.7) for the combination component of high stress and low psychosocial resources (Rowan et al., 2009).

- Colorado's Prenatal Plus program utilizes teams consisting of a care coordinator, a registered dietician and a mental health professional to provide home visiting to high-risk pregnant women (Ricketts, Murray, Schwalberg, 2005). Among the women who reported mental health problems, 55 percent resolved their risk during pregnancy (Ricketts et al., 2005). Women who resolved their psychosocial risks had a low birth weight rate of 8.5 percent compared to a low birth weight rate of 10.7 percent among women with unresolved risks (Ricketts et al., 2005). This difference was not statistically significant, but the difference in low birth weight rates between those who were able to quit smoking and those who were not (8.5 percent compared to 13.7 percent) did show a significant difference ($p<0.01$) (Ricketts et al., 2005).

Increase opportunities for pregnant and parenting women to receive counseling and social support.

A systematic review of interventions for treating postpartum depression found that psychosocial interventions, such as non-directive counseling and peer support, were effective (Dennis & Hodnett, 2007). Many women with mild to moderate depression can be treated by psychosocial approaches in lieu of medication (Yonkers, Wisner, Stewart, Oberlander, Dell, Stotland, Ramin, Chaudron & Lockwood, 2009.

- Group prenatal care is an integrated approach to prenatal care in a group setting providing peer support and education. A randomized controlled trial showed that women in group care had significantly better psychosocial outcomes than the women who received individual care (Ickovics, Kershaw, Westdahl, Magriples, Massey, Reynolds, Rising, 2007).
- Community based doula programs connect low income pregnant women with culturally matched paraprofessionals who provide support during pregnancy and the early months of parenting. An evaluation of the Chicago Doula project found that it significantly affected birth outcomes, breastfeeding rates, and maternal sensitivity (Cawthorne and Arons, 2010).

- Support groups for pregnant and postpartum women can provide opportunities to receive peer support and non-directive counseling to help women develop coping skills. Peer-to-peer support groups such as Sister Circles have been shown to reduce depression in women of color (Issacs, 2004).
- Support can be provided by trained peer volunteers via telephone. Telephone-based support is flexible, private, and non-stigmatizing and can reduce barriers to health care such as lack of transportation (Dennis, 2009). A multi-site randomized controlled trial found telephone-based peer (mother to mother) support to be effective at preventing postnatal depression among high-risk women (Dennis, 2009). Women who received peer support had half the risk of developing depression than those in the control group (Dennis, 2009).

Promote awareness about the impact of maternal depression and interventions for the general public, low income communities, early childhood and health practitioners.

- Include depression as part of health education that takes place at family planning clinics (Barson, 2006). Brochures or posters could be placed in exam rooms or videos on depression could be shown in waiting areas. Brochures on depression can be downloaded from the web free of charge.
- WIC clinics could provide education on depression. A 15 minute group education session was found to be effective in teaching women about the importance of safe sleep (Moon, Oden, & Grady, 2004).

DOH Capacity

Screening

Few of Florida's county health department clinics report screening for depression. Pinellas County health Department has implemented the "What About Mom" program at a pediatric clinic which provides screening for moms when they bring in their children for health care. County health departments cite reasons for not screening as lack of reimbursement, inadequate staff to perform screening, and lack of referral sources for treatment. In addition, Florida Medicaid does not pay for depression screening. States can make provision to pay for screening. For example, Illinois provides Medicaid reimbursement to primary care providers for maternal depression screening of pregnant women and women with children under the age of 1 (VanLandeghem, 2006). It would be difficult for WIC, family planning or pediatric clinics to provide screening for depression without additional staff. Because of funding constraints and increased demand for services, providers need to serve more clients in less time. Many of the staff do not have training in mental health and would require additional training in the identification and management of depression in order to provide appropriate follow-up. The U.S. Preventive Services Task Force recommends against routinely screening for depression when staff assisted care supports are not in place (Annals of Internal Medicine, 2009).

Home Visiting

In order to determine whether appropriate services are being provided to depressed women, Healthy Start could begin to specifically track those women who responded yes to the depression screening question on the prenatal risk screen to see how many of them received a psychosocial counseling service. Eventually, an outcome related to

depression such as “a decrease in depression symptoms” could be added to the HMS Healthy Start outcomes.

Modifications to the program model can be made within existing statutes, but funding limitations make if more difficult for the Healthy Start programs to implement enhanced interventions or provide increased training for staff. Many programs do not have the funds to hire professional versus paraprofessional staff.

Peer Support

Several health departments have successfully implemented group prenatal care and found it to be particularly effective with Hispanic women. It has been a challenge to implement group prenatal care at smaller, more rural health departments due to insufficient numbers of women who are delivering their babies at the same time. Lack of space for the group to meet has also been a barrier.

The Central Hillsborough Healthy Start program has implemented peer support groups for depressed women that provide emotional support and education on depression and other interconception care topics. The support groups are very well attended by Hispanic women.

Effective peer support services require recruitment and training of volunteers as well as on-going supervision. An additional staff person in Healthy Start would be needed to handle these responsibilities.

Education

Information on depression and stress is available through the Every Woman Florida Preconception Care website. Health departments and Healthy Start programs provide health education in their local communities, but may need specific training on depression in order to provide education on this topic. Educational materials on depression could easily be distributed at all clinic sites, but clinic staff would need training on depression in order to be able to respond to clients who have questions or need referrals.

Current State priority or objective

There is no state priority or objective related to stress or depression.

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PRECONCEPTION HEALTH EDUCATION

Definition and General Description of the issue/problem

The Centers for Disease Control and Prevention (CDC) defines preconception health as a woman's health before she becomes pregnant. Preconception care has been defined as a set of interventions aimed to identify and modify biomedical, behavioral, and social risks to a woman's health, to improve pregnancy outcome through prevention and management (*http://www.cdc.gov/ncbddd/preconception/whatispreconception.html*). Poor pregnancy outcome is a major public health concern, suggesting the need for an improved approach to ensuring a healthy birth. Prenatal care, which usually begins at week 11 or 12 of a pregnancy, comes too late to prevent a number of serious maternal and child health problems. The fetus is most susceptible to developing certain problems in the first 4-10 weeks after conception, before prenatal care is normally initiated. Because many women are not aware that they are pregnant before this critical period, they are unable to reduce risks to their own health and that of their baby unless intervention begins before conception. The key to promoting preconception health is working together to educate health providers, women, and men about the importance of preconception health and care. Despite advances in medical care, birth outcomes are worse in the United States than in other developed countries. Many babies are born prematurely or have low to very low birth weight. In some groups of people, the problems are actually getting worse according to the Centers for Disease Control report entitled *Preconception Health and Care, 2006: State Title V Priority Needs Focused on Preconception Health and Health Care, United States, 2005.*

Magnitude

According to the Centers for Disease Control report entitled Preconception Health and Care, 2006, State Title V Priority Needs Focused on Preconception Health and Health Care, United States, 2005, adverse pregnancy outcomes remain a prevalent health problem: 12 percent of babies born are premature, 8 percent are born with low birth weight, and 3 percent have major birth defects. Of women giving birth, 31 percent suffer pregnancy complications. Risk factors for adverse pregnancy outcomes remain prevalent among women of reproductive age. For example, 11 percent of women smoke during pregnancy, and 10 percent consume alcohol. Of women who could get pregnant, 69 percent did not take folic acid supplements, 31 percent are obese, and about 3 percent take prescription or over-the-counter drugs that are known teratogens. In addition, about 4 percent of women have pre-existing medical conditions, such as diabetes, that can negatively affect pregnancy if unmanaged. All of these factors pose risks to pregnancies that could be addressed with proper health interventions. Preconception care is recognized as a critical component of health care for women of reproductive age. The main goal of preconception care is to provide health promotion, screening, and interventions for women of reproductive age to reduce risk factors that might affect future pregnancies.
(http://www.cdc.gov/ncbddd/preconception/whatispreconception.htm)

According to the Centers for Disease Control Mortality and Morbidity Weekly Review, April 21, 2006 report on Recommendations to Improve Preconception Health and Health Care, every woman should be thinking about her health whether or not she is planning pregnancy. One reason is that about half of all pregnancies are not planned. Unplanned pregnancies are at greater risk of preterm birth and low birth weight babies.

Another reason is that, despite important advances in medicine and prenatal care, about 1 in 8 babies is born too early. Researchers are trying to find out why and how to prevent preterm birth. Experts agree women need to be healthier before becoming pregnant. By taking action on health issues and risks before pregnancy, a woman can prevent problems that might affect her or her baby later.

Nearly 50 percent of pregnancies in the United States are unintended. As a result, appropriate preconception care is important for all women of reproductive age. Many providers do not routinely offer preconception care to their female patients who are of reproductive age.
(*http://healthypeople.gov/hp2020/Objectives/CommentByView.aspx?cmd=sc)*
Therefore, the challenge of preconception care lies not only in addressing pregnancy planning for women who seek medical care and consultation specifically in anticipation of a planned pregnancy, but also in educating and screening all reproductively capable women on an ongoing basis to identify potential maternal and fetal risks and hazards to pregnancy before and between pregnancies

In 2007, approximately 35 percent of the 231,417 live births in Florida resulted from unintended pregnancies (*PRAMS 2007 Surveillance Data Book*). The challenge of preconception care lies not only in addressing pregnancy planning for women who seek medical care and consultation specifically in anticipation of a planned pregnancy but also in educating and screening all reproductively capable. According to the Centers for Disease Control Mortality and Morbidity Weekly Review, April 21, 2006 report on *Recommendations to Improve Preconception Health and Health Care,* we can improve preconception health for men and women, resulting in improved outcomes by focusing on health promotion in women and men of reproductive age before a woman conceives.

Severity/consequences

An increasing number of women are entering pregnancy in poor health. There is ample evidence to support that a healthy pregnancy outcome is strongly influenced by a woman's health status prior to becoming pregnant. Prenatal care does not address the contributing risk factors that can lead to a poor birth outcome.

- In Florida, over 13 percent of babies are born premature and 3 percent are born with serious birth defects.
- One-third of all infant deaths are caused by prematurity.
- In 2005, 43 percent of births were to women who were overweight or obese.
- Pregnancy-related death is strongly associated with chronic illness and obesity.

According to the *Florida Chapter of the March of Dimes 2009 Mission Report*, in an average week approximately 600 babies in Florida are born preterm; 98 babies are born very preterm; 1,517 babies are born by cesarean section; 380 babies are born low birth weight; 69 babies are born very low birth weight, and 29 babies die before their first birthday (*Source: 2005 NCHS via marchofdimes.com/Peristats).*

Unfortunately, birth defects, low birth weight births, preterm deliveries, and infant deaths continue to be higher than the goals outlined in Healthy People 2010, the nation's health agenda. We know that a woman's preconception health plays an important role in determining the outcome for her and her baby. This situation is a major public health concern, suggesting the need for an improved national approach to ensuring healthy birth. (*http://www.healthypeople.gov/hp2020/Objectives/document/html*)

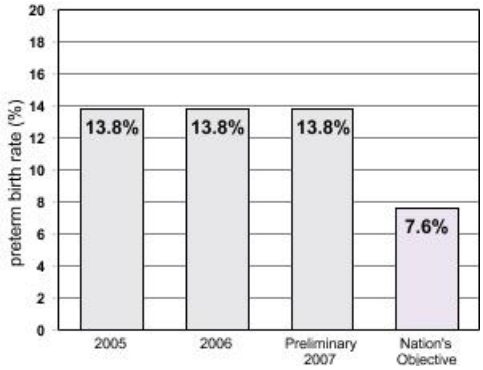
Preconception care is critical to improving the health of a nation. Healthy People 2000 set a goal of 60 percent of primary care physicians providing age-appropriate preconception care, yet only about one in four providers currently do so for the majority of women they serve. Preconception care could succeed in improving maternal and child health where current models or standards are failing, but most providers don't provide preconception care, most insurers don't pay for it, and most consumer don't ask for it. Several effective preconception interventions, such as smoking cessation, obesity control, folic acid supplementation, and some medication adjustments, take months to implement and therefore must begin long before conception. (*http://www.healthypeople.gov/hp2020/Objectives/document/html*)

Trend

The March of Dimes graded states by comparing each state's premature birth rate to the nation's objective of 7.6 percent or less by 2010. The graph below shows that Florida earned a grade of "F" with a 13.8 percent preterm birth rate from 2005-2007.

2009 March of Dimes Premature Birth Report Card

Grade for Florida Preterm Birth Rate: 13.8% F



Premature birth report card grades are based solely on the distance of a state's rate of preterm birth from the nation's Healthy People 2010 objective of 7.6 percent. The grading criteria established for 2008 report cards is used as a baseline and provides for annual preterm birth report card grade comparison. Each jurisdiction was assigned a grade based on the following criteria.

Between 2006 and 2007, the percentage of resident live births with birth weights less than 2,500 grams (5 lbs. 8.2 oz.) remained unchanged at 8.7 percent. The percentage of resident live births with birth weights less than 1,500 grams (3 lbs. 4.9 oz.) also remained unchanged from 2006 to 2007 at 1.6 percent. The percentage of resident live births with birth weights of 4,000 grams (8 lbs. 13.1 oz.) and heavier decreased from 6.7 percent in 2006 to 6.5 percent in 2007.

According to Florida's data in 2008, adverse pregnancy outcomes remain a prevalent health problem as evidenced by 7.4 percent of babies born to white mothers and 13.5 percent of babies born to black mothers at a birth weight less than 2500 grams (Florida Charts, 2008).

The infant mortality rate in Florida is higher than the national average (7.2 per 1,000 live births compared to 6.9 for 2005) and one third of all infant deaths in Florida are caused by prematurity (www.marchofdimes.com/peristats).

Each child born with an intellectual disability or a comparable condition leads to direct and indirect societal costs over his or her lifetime of more than $1 million. Adverse pregnancy outcomes avoided through preconception care represent both an alleviation of human suffering and a reduced burden on the health care system.

County Data For Birth Defects in Florida, 1998-2005

Birth Defects for **1,659,717** 1998-2005 Live Births

	Est. Cases	Frequency
Children with Structural Birth Defects	37,194	1 in 45
Specific Conditions		
Congenital Heart Defects	12,252	1 in 135
Chromosomal Abnormalities	2,555	1 in 650
Down Syndrome	2,181	1 in 761
Oral Clefts	2,258	1 in 735
Neural Tube Defects	765	1 in 2,170
Abdominal Wall Defects	1,072	1 in 1,548
Limb Malformations	489	1 in 3,394

The Florida Birth Defects Registry (FBDR) is a statewide system that identifies birth defects in children born in Florida. http://www.fbdr.org/index.html

National/state goals

Through a two-year collaborative effort, the Centers for Disease Control and Prevention has successfully aligned the efforts of a number of its external partners and internal programs to develop a set of 10 recommendations for improving preconception health and care. An internal workgroup on preconception care, with participants representing 22 programs from across the CDC, was convened in 2003-2004. In June 2005, in partnership with the Department of Health and Human Services and 35 national professional organizations, the CDC hosted a National Summit on Preconception to obtain a better understanding of current programs, knowledge, and practices related to preconception care and to allow practitioners to share their experiences with other participants. The summit was attended by over 400 professionals; and practitioners from 68 communities presented their work. The CDC convened a Select Panel on Preconception Care, which included experts from a variety of national organizations concerned about the health of women, infants, and families. Together, the CDC internal workgroup and the Select Panel developed a set of 10 recommendations for improving preconception health and care. The recommendations were published on *April 21, 2006, in the MMWR Recommendations and Reports, Volume 55, No. RR-6 as follows:*

Recommendation #1. Individual Responsibility Across the Lifespan. *Each woman, man, and couple should be encouraged to have a reproductive life plan.*

Recommendation #2. Consumer Awareness. *Increase public awareness of the importance of preconception health behaviors and preconception care services by using information and tools appropriate across various ages; literacy, including health literacy; and cultural/linguistic contexts.*

Recommendation #3. Preventive Visits. *As a part of primary care visits, provide risk assessment and educational and health promotion counseling to all women of childbearing age to reduce reproductive risks and improve pregnancy outcomes.*

Recommendation #4. Interventions for Identified Risks. Increase the proportion of women who receive interventions as follow-up to preconception risk screening, focusing on high priority interventions (i.e., those with evidence of effectiveness and greatest potential impact).

Recommendation #5. Interconception Care. *Use the interconception period to provide additional intensive interventions to women who have had a previous pregnancy that ended in an adverse outcome (i.e., infant death, fetal loss, birth defects, low birth weight, or preterm birth).*

Recommendation #6. Pre-pregnancy Checkup. *Offer, as a component of maternity care, one pre-pregnancy visit for couples and persons planning pregnancy.*

Recommendation #7. Health Insurance Coverage for Women with Low Incomes. *Increase public and private health insurance coverage for women with low incomes to improve access to preventive women's health and preconception and interconception care.*

Recommendation #8. Public Health Programs and Strategies. *Integrate components of preconception health into existing local public health and related programs, including emphasis on interconception interventions for women with previous adverse outcomes.*

Recommendation #9. Research. *Increase the evidence base and promote the use of the evidence to improve preconception health.*

Recommendation #10. Monitoring Improvements. *Maximize public health surveillance and related research mechanisms to monitor preconception health.*

These recommendations, which are not prioritized, should be used by consumers, public health and clinical providers, researchers, and policy makers. Therefore, the recommendations should be implemented simultaneously. In the action steps, persons, public health and clinical providers, communities, governments (i.e., local, state, and federal), and professional organizations all have roles. Finally, these recommendations are designed to meet the four goals to reduce disparities in maternal and infant health by improving the preconception health of women and men.

- Goal 1. Improve the knowledge and attitudes and behaviors of men and women related to preconception health.
- Goal 2. Ensure that all women of childbearing age in the United States receive preconception care services (i.e., evidence-based risk screening, health promotion, and interventions) that will enable them to enter pregnancy in optimal health.
- Goal 3. Reduce risks indicated by a previous adverse pregnancy outcome through interventions during the interconception period, which can prevent or minimize health problems for a mother and her future children.
- Goal 4. Reduce the disparities in adverse pregnancy outcomes.

The department's goal is to provide health promotion, screenings, and intervention for medical, behavioral, environmental risks before a woman becomes pregnant resulting in healthier future pregnancy outcomes. Every time a woman visits any healthcare provider there is an opportunity to teach some component of preconception health.

The goal of preconception care is to reduce the risk of adverse health effects for the woman, fetus, or neonate by optimizing the women's health and knowledge before planning and conceiving a pregnancy. Because reproductive capacity spans almost four decades for most women, optimizing a women's health before and between pregnancies is an ongoing process that requires access to and the full participation of all segments of the health care system.

Potential for improvement

Good preconception health care is about managing current health conditions. By taking action on health issues before pregnancy, future problems for the mother and baby can be prevented. Preconception health care must be tailored to each individual woman. It means helping women and their partners reduce risks and get ongoing care. Men and other family members also play a very important role in supporting the goals of preconception health. Several effective preconception interventions, such as smoking cessation, obesity control, folic acid supplementation, and some medication adjustments, take months to implement and therefore must begin long before conception. The key to promoting preconception health is to combine the best medical care, healthy behaviors, strong support, and safe environments at home and at work (*American College of Obstetrics and Gynecology (ACOG) Committee Opinion, number #313, September 2005).*

The 2004 annual report and evaluation of the *Save Our Babies* project in Orange County indicated an increased awareness of racial disparities in birth outcomes in the community, increased awareness of maternal child health issues, a willingness of citizens and businesses to form an advisory committee for the program in order to take ownership of the problem, and increased understanding of how to access the current healthcare system.

A 2004 assessment of project services conducted by the HRSA Office of Performance Review found high rates of success (>70 percent) in the resolution of key risks among participants at the Magnolia Project in Jacksonville (Brady, CM, unpublished data, 2005.)

DOH capacity

The mission of the Florida Department of Health is to "promote, protect and improve the health of all people in Florida." The mission of the department and the underlying goal of the Maternal and Child Health Bureau's Title V Block grant have similar intentions: continued improvement in the health, safety, and well-being of mothers and children. In Florida, there are many maternal and child health service providers that help families receive the care they need to have healthier mothers, babies, and children. The department's Office of Infant, Maternal and Reproductive Health is assisting these providers by furnishing information and guidance on a number of maternal and child health issues. In partnership with the March of Dimes Florida Chapter, the department is working to increase awareness on the importance of good preconception health. To date, the department has received multiple grants from the March of Dimes to fund the majority of our preconception health projects. Additionally, Healthy Start and the Title X

Family Planning programs have provided additional funding for preconception health projects.

- In 2006 a preconception education and counseling training module was developed and placed on the department's intranet site.
- Statewide training on preconception education and counseling is provided on a semi-annual basis through conference calls to target groups including county health department clinical staff, Healthy Start direct service staff, and Healthy Start coalition staff.
- Preconception education and counseling is a component of any nursing assessments and counseling services provided within the county health departments.
- Ongoing outreach and education occurs through the local Healthy Start coalitions.
- The department continues to provide communities with Perinatal Periods of Risk data.

Current State priority or objective

The Florida Department of Health is engaged in a number of preconception health initiatives including:

- ***Every Woman Florida (EWF)*** **–**is a statewide campaign to raise awareness and increase knowledge of risk factors that could lead to adverse birth outcomes. This initiative is responsible for garnishing support from healthcare providers and promoting the integration of preconception education into their professional practices. This will be achieved through the provision of grand rounds type presentations offered to a minimum of six hospitals throughout the state. The Every Woman Florida initiative has also developed a website that provides outreach to providers and consumers. ***(http://www.everywomanFL.com)***
- ***Core Indicators for Preconception Health*** **-**The Florida Department of Health is the lead agency in a seven state collaborative to establish standards for measuring preconception health.
- ***Preconception Keeping Tabs*** is a wallet-size card being developed to accommodate all of the stated preconception health information in an easy-to-read format.
- Promoting Positive Youth Development ***- The goal of Positive Youth Development is to establish multi-faceted programs that help young people grow into mature and successful adults.***
- ***Healthy Start*** established interconception health education and counseling as an enhanced service with the intent to improve the birth outcome of subsequent pregnancies. ***(http://www.healthystartflorida.com)***
- ***Family Planning Program (Title X)*** continues to incorporate the provision of preconception health education and counseling services during clinic visits to all family planning clients. Family Planning Waiver eligibility staff has been trained on preconception health issues. In July 2003, county health department preconception education and counseling technical assistance guidelines were developed and disseminated to all 67 counties.

- ***The Magnolia Project (Jacksonville) -*** a Healthy Start program offering comprehensive array of services in an effort to improve birth outcomes. The target population was high-risk African-American women aged 15-44 years who lived in five zip codes areas of Jacksonville. The project operates as a collaborative between the Northeast Florida Healthy Start Coalition, the Duval County Health Department, and local community-based organizations.
- ***Save Our Babies, Orange County, Florida -*** The primary target population of this project was black women who live in Orange County with zip codes with the poorest birth outcomes. Information was disseminated to the community - hosting training workshops and informational sessions in non-traditional environments such as beauty salons and churches, and engaging the community for action.

The Perinatal Periods of Risk (PPOR) analysis performed by the Florida Department of Health for the years 1999-2003, indicated that maternal health prior to and during pregnancy largely affected the health and well-being of the infant. Prenatal care is often too late to prevent serious maternal and infant health problems. Preconception care is now recognized as a critical component for all women of reproductive age (*Center for Disease Control Mortality and Morbidity Weekly Review (MMWR), April 2006)*.

Infant Death Plus Fetal Death Rates Per 1000 Births Plus Fetal Deaths and Difference (Excess) by PPOR Category and Reference Group Florida 1999 - 2003

PPOR Category	Reference Group	Non-Reference Group	Difference (Excess)	Percent Excess
Maternal Health	2.52	5.81	3.28	47.8%
Maternal Care	1.89	3.18	1.29	18.8%
Newborn Care	1.04	1.64	0.60	8.7%
Infant Health	1.09	2.79	1.70	24.7%
Total	6.54	13.42	6.88	100.0%

The table above shows that for every 1000 births plus fetal deaths in the non-reference group, there is an excess of 6.88 infant and fetal deaths. Almost half (47.8 percent) of the excess is in the maternal health category. The second highest category is the infant health category with an excess of 1.70 or 24.7 percent of the total 6.88 excess.

These results indicate that maternal health and infant health are the areas most in need of improvement in Florida. Referring to the figure above, improvement in these areas will require efforts in preconception health education, health behaviors, perinatal care for women, infant sleep position, breast feeding, and injury prevention for infants.

Promoting the health and wellness of women and couples before pregnancy improves birth outcomes. The Florida Department of Health, the March of Dimes, the Centers for Disease Control and Prevention, and partner organizations are working together to educate health providers, women, and men about the importance of preconception health and care (*Center for Disease Control Mortality and Morbidity Weekly Review (MMWR), April 2006*).

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Florida Department of Health, Florida Pregnancy Risks Assessment Monitoring System (PRAMS*)* information retrieved from the *PRAMS 2005 Surveillance Data Book* http://www.doh.state.fl.us/disease_ctrl/epi/Chronic_Disease/PRAMS/Local_Data.htm

Healthy People Information retrieved from *http://healthypeople.gov/hp2020/Objectives/CommentByView.aspx?cmd=sc)*

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Florida Department of Health, Healthy Start information retrieved from http://www.healthystartflorida.com

Centers for Disease Control and Prevention (CDC) and the National Center on Birth Defects and Developmental Disabilities **(**NCBDDD) information retrieved from ***http://www.cdc.gov/ncbddd/preconception/whatispreconception.html*** and **http://www.cdc.gov/ncbddd/preconception/cdc.html**

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IRON DEFICIENCY ANEMIA IN PREGNANT WOMEN, POSTPARTUM WOMEN, AND WOMEN OF CHILDBEARING AGE

Definition and General Description of the Issue/problem

Anemia: Low hemoglobin (Hgb)/hematocrit (Hct) is an indicator of iron-deficiency anemia. Cut off values vary by trimester for pregnant women and are different from nonpregnant women. The values are as follows:

Pregnancy Trimester	**Hemoglobin mg/dl**	**Hematocrit %**
First	11.0	33.0
Second	10.5	32.0
Third	11.0	33.0
Postpartum Age	**Hemoglobin mg/dl**	**Hematocrit %**
12 - < 15 years	11.8	35.7
15 - < 18 years	12.0	35.9
>=18 years	12.0	37.7

Pregnant women are at a higher risk for iron deficiency anemia because of the increased iron requirements of pregnancy. Hgb or Hct levels drop during the first and second trimester because of blood volume expansion. Pregnant women may not receive an adequate amount of iron if they do not take iron supplements during pregnancy or fail to take iron supplements during the first trimester of pregnancy. For a true reflection of the iron status of a postpartum woman, Hgb and Hct measurements should be taken at greater than four weeks postpartum when measurements are expected to return to pre-pregnancy or first trimester levels. Data source is Pregnancy Nutrition Surveillance (PNSS) 2008 Report, US Department of HHS, CDC.

Iron deficiency anemia is the most common nutritional risk during pregnancy. Women of childbearing age are at risk because of iron loss during menstruation coupled with inadequate intake of iron. (PNSS 2008 Report http:///www.cdc.gov/nutrition/everyone/basics/vitamins/iron.html)

Iron deficiency during the first two trimesters of pregnancy is associated with inadequate gestational weight gain, a two-fold risk for preterm delivery, and a three-fold risk of giving birth to an infant with low birth weight. Iron deficiency anemia during the third trimester of pregnancy reflects inadequate iron intake and can affect the woman's health postpartum. Iron deficiency in women of childbearing age can cause fatigue that impairs the ability to do physical work and can also affect memory and other mental functions in adolescents. http://www.cdc.gov/immpact/micronutrients/

Magnitude

Table 1: Anemia Status of Pregnant and Postpartum Women in the 2008 PNSS				
Trimester	Nationally 2008 (35 programs)	Florida 2008 %	Postpartum 2008 Nationally(36)	Postpartum 2008 Florida
			29.6%	37.4%
1st	7.6%	Not Available		
2nd	12.1%	Not Available		
3rd	33.8%	39.9		

Pregnant women may not receive an adequate amount of iron if they do not take iron supplements during pregnancy or fail to take iron supplements during the first trimester of pregnancy. As seen in Table 1, in the 2008 PNSS national data, 7.6 percent of women had low Hgb/Hct when they enrolled in the WIC program during their first trimester; 12.1 percent during the second trimester; and 33.8 percent during their third trimester. In the 2008 PNSS, 39.9 percent of the pregnant women in the Florida WIC program exhibited a low Hgb/Hct when they enrolled during their third trimester. In the 2008 PNSS nationally, 29.6 percent of postpartum women had low Hgb/Hct In the 2008 PNSS, 37.4 percent of postpartum women in Florida exhibited Hgb/Hct.

Table 2: Hgb/Hct Status in the 2008 PNSS In Regard to Race/Ethnicity and Age					
Race/Ethnicity	2008 3rd Trimester	2008 Postpartum	Age	2008 3rd trimester	2008 Postpartum
White	27.5%	22.8%	< 15 Yrs	45.2%	36.0%
Black	48.5%	46.8%	15-17 Yrs	39.1%	35.9%
Hispanic	30.1%	29.4%	18-19 Yrs	36.9%	33.9%
Am Ind/Alaskan	33.9%	35.0%	20-29 Yrs	33.5%	29.0%
Asian/Pacific Islander	29.0%	27.1%	30-39 Yrs	30.9%	27.0%
			> 40 Yrs	32.3%	28.3%

In reference to race/ethnicity in the 2008 PNSS nationally, the prevalence of low Hgb/Hct in the third trimester of pregnancy was highest for black mothers (48.5 percent) followed in descending order by 33.9 percent for American Indians/Alaskan Natives (AIANs), 30.1 percent for Hispanics, 29.0 percent for Asians and Pacific Islanders (APIs), and 27.5 percent for whites. For postpartum women in the national data, the prevalence was highest for black women (46.8 percent) followed in descending order by 35.0 percent for AIANs, 29.4 percent for Hispanics, 27.1 percent for APIs, and 22.8 percent for whites. In regards to age in the 2008 PNSS national data, the prevalence of low Hgb/Hct in the third trimester of pregnancy was highest for adolescents less than 15 years (45.2 percent) followed in descending order by teens 15–17 years (39.1 percent), teens 18–19 years (36.9 percent), 20–29 years (33.5 percent), women greater than 40 years (32.3

percent) and those 30–39 years of age (30.9 percent). In the 2008 PNSS national data, the prevalence for postpartum women was highest for adolescents less than 15 years (36.0 percent), followed in descending order by teens 15-17 years (35.9 percent), teens 18–19 years (33.9 percent), 20–29 years (29.0 percent), women greater than 40 years (28.3 percent), and those 30–39 years of age (27.0 percent). In the 2008 PNSS national data, 32.1 percent of women had less than a high school education. This proportion has changed little in the time period between 1998 through 2008. In the 2008 PNSS national data, the prevalence of low Hgb/Hct in the third trimester of pregnancy was highest for those with less than a high school education(36.5 percent), followed in descending order by high school (33.6 percent) and > high school (29.0 percent). In the 2008 PNSS national data, the highest prevalence for postpartum women was < High School (31.9 percent), followed in descending order by High School (29.1 percent) and > High School (24.7 percent). http://edr.state.fl.us/population/popsummary.pdf

Risk factors contributing to iron deficiency anemia include the race black, Hispanic ethnicity low socioeconomic status, recent immigrant status, and food insecurity. Over an eight-year period from April 2000 to April 2008, natural increase in population (difference between births and deaths) accounted for 14.4 percent of Florida's growth and an influx from other states within the United States and from other countries accounted for 85.6 percent of the population growth. In terms of race, Florida's population has become increasingly nonwhite over the last two decades. In the 1980 Census, 14.7 percent were nonwhite; in 1990, 15.2 percent were nonwhite, and in 2000 17.8 percent were nonwhite. This percentage is projected to increase to 19.7 percent in 2010. Florida's Hispanic population is increasing. In the 1980 Census, 8.8 percent were of Hispanic origin; in 1990 12.2 percent and in 2000 16.8 percent. Florida's Hispanic population is projected to represent 21.5 percent of the total population in 2010.

A study on the increase in anemia and iron deficiency prevalence among pregnant and postpartum women on the WIC program living in a specific region of the country was conducted. This study showed that living in a culturally traditional region was associated with an additional risk. The observed patterns made nutritional iron deficiency an unlikely major reason for the high incidence of anemia. A region-specific environmental factor supported the increased risk. In Florida there are counties where a higher prevalence of low Hgb/Hct \ may be attributed to living in a culturally traditional region. (http://edr.state.fl.us/population/popsummary.pdf; Household food security In the United States, 2008, Nord et al. Economic Research Report No. (ERR-83) 66 pp, November 2009. Geographic and Racial Patterns of Anemia Prevalence Among Low-income Alaskan Children and Pregnant or Postpartum Women Limit Potential Etiologies. 2009. Gessner BD. J Pediatr Gastroenterol Nutr Apr; 48 (4): 475-81.)

Severity/consequences

Iron deficiency during pregnancy is associated with multiple adverse outcomes for both mother and infant, including increased inadequate gestational weight gain, perinatal mortality, low birth weight, and preterm delivery. In the 2008 PNSS 25 percent of pregnant women experienced less than ideal weight gain. In Florida in the 2008 PNSS, 25.9 percent of women encountered less than ideal weight gain. Low gestational weight gain is associated with preterm births. In the 2008 PNSS, 11.5 percent were preterm births nationally. In Florida, 13.4 percent were preterm births. In the 2008 PNSS, 8.2 percent of infants were low birth weight nationally; compared to 8.6 percent in Florida. In September 2009, 8.9 percent of infants born to WIC mothers were low birth weight. This percent has fluctuated very little in the past five years.

According to the Florida Vital Statistic Annual Report 2008, the percentage of resident live births with birth weights less than 2500 grams (low birth weight per PNSS definition) increased slightly to 8.8 percent from 8.7 percent. The Healthy People 2010 objective is to reduce the incidence of low birth weight to 5 percent. Among all resident infant deaths during 2008, 37.1 percent of infant deaths occurred to infants who were less than one day old. The leading cause of resident infant deaths in 2008 was perinatal period conditions. Nationally premature birth is the leading cause of newborn death and a major cause of lifelong disability. The Healthy People 2010 preterm birth objective is to lower the rate to 7.6 percent of all live births. The latest available data (2005) show that the national preterm birth rate is 12.7 percent. The preterm birth rate has increased about 20 percent since 1990 and costs the nation more than $26 billion a year, according to the Institute of Medicine report issued in July 2006. (http://www.cdc.gov/nchs/data/databriefs/db09.htm http://www.cdc.gov/ncbddd/preconception/documents/At-a-glance-4-11-06.pdf)

Trend

In the PNSS from 1998 through 2008 nationally, the overall prevalence of low Hgb/Hct during the third trimester of pregnancy rose slightly from 29.3 percent to 33.8 percent and decreased for postpartum women from 38.6 percent to 29.6 percent. In the PNSS from 1998 through 2008 in Florida, the prevalence of low Hgb/Hct during the third trimester of pregnancy rose somewhat from 38.5 percent to 39.9 and decreased slightly for postpartum women from 38.2 percent to 37.4 percent.

The prevalence of low Hgb/Hct declined significantly among US women between 1988-1994 and 1999-2002, but this decline was not associated with changes in iron or folate deficiency, inflammation, or high blood lead. The prevalence of low Hgb/Hct for postpartum women has improved for all race/ethnicity groups in the PNSS from 1998 through 2008. There has been very little change in the prevalence of low Hgb/Hct during the third trimester for any race/ethnicity group from 1998 through 2008. Based on age in the PNSS, the prevalence of low Hgb/Hct for postpartum women has improved for all age categories except for women greater than 40 years of age. Based on age in the PNSS, the incidence of low Hgb/Hct during the third trimester rose slightly from 1998 through 2008. There is no comparison data available based on education from 1998 through 2008 for the prevalence of low Hgb/Hct for pregnant women in the third trimester and postpartum women. (PNSS data)

Low Hgb/Hct Based on Race/Ethnicity and Age				
Race/Ethnicity	2008 3rd Trimester	1998 3rd Trimester	2008 Postpartum	1998 Postpartum
White	27.5%	24,9%	22.8%	30.9%
Black	48.5%	46.1%	46.8%	54.4%
Hispanic	30.1%	29.5%	29.4%	42%
Am Ind/Alaskan	33.9%	32.4%	35.0%	43.4%
Asian/Pacific Islander	29.0%	27%	27.1%	42.6%

Age	2008 3rd Trimester	2008 Postpartum		1998 3rd Trimester	1998 Postpartum
< 15 Years	45.2%	36.0%	**<16 Years**	38.9%	45.4%
15 - 17 Years	39.1%	35.9%	**16 -19 Years**	33.9%	41.5%
18 - 19 Years	36.9%	33.9%	**20 – 29 Years**	30.2%	37.6%
20 - 29 Years	33.5%	29.0%	**30 – 39 Years**	29.5%	35.6%
30 - 39 Years	30.9%	27.0%	**40 – 49 Years**	29.0%	35.3%
>= 40 Years	32.3%	28.3%	**>= 50 Years**	66.7%	25%

The changes in the prevalence of anemia were calculated for women of childbearing age (20 to 49 years) based on data from National Health and Nutrition Examination Surveys (NHANES) 1988-1994 and 1999-2002. Anemia decreased significantly (10.8 percent to 6.9 percent) but the prevalence of iron deficiency anemia did not change significantly (4.9 percent compared with 4.1 percent). The decline in anemia was not associated with changes in iron deficiency, inflammation, or high blood lead (the known possible causes of anemia). For these women, however, there remains a significant disparity in the prevalence of anemia by race-ethnicity, with the prevalence of anemia in whites (3.3 percent) and Mexican Americans (8.7 percent) being lower than the prevalence in blacks (24.4 percent). In addition, there has not been a significant decline in the prevalence of iron deficiency anemia overall.

The condition of food insecurity includes both inadequate quantities and inadequate quality of nutrients available. Household food managers (usually mothers) trade off food quality for quantity to prevent household members from feeling persistent hunger. Evidence on the influence of food insecurity on nutrition and health during the interconception period and the risk of food insecure women entering pregnancy with insufficient iron stores is largely indirect. For low-income mothers, especially black, Hispanic and single mothers, food insecurity is a highly prevalent risk factor.

National/state goals

*Healthy People 2010 O*bjectives19-13 propose reducing the prevalence of third trimester anemia to no more than 20 percent and Objectives 19-12c propose reducing the prevalence of anemia for non-pregnant females of childbearing years (aged 12 years to 49 years) to no more than 7 percent.

In the 2008 PNSS, 39.9 percent of the pregnant women in the Florida WIC program had low Hgb/Hct when they enrolled during their third trimester which ranked Florida 4th for all of the programs that contributed data. In the 2008 PNSS, 37.4 percent of postpartum women in the Florida WIC program had low Hgb/Hct. Florida ranked 8th of all the programs that contributed data.

The consequences of not meeting these national goals are the increased possibility of adverse pregnancy or birth outcomes for Florida mothers and babies.

Potential for improvement

The WIC program is an important and wide-reaching federal initiative to reduce the incidence of low Hgb/Hct. The initiative offers nutrition counseling and iron-rich foods to low-income pregnant, postpartum, and breastfeeding women at nutritional risk. The nutrition counseling includes encouragement of the consumption of foods that are good sources of iron (for example, red meat, spinach, and iron-fortified breakfast cereals) and foods which enhance iron absorption such as vitamin C. The Use of Multiple Logistic Regression to Identify Risk Factors Associated with Anemia and Iron Deficiency in a Convenience Sample of 12 to 36 month old Children From Low-Income Families. (Schneider JM et al. Am J Clin Nutr. 2008. Mar: 87 (3): 614-20.)

DOH capacity

The Healthy Start Program and the WIC Program work to improve the nutritional and health status of pregnant and postpartum women and to increase access to early entry into prenatal care and enrollment in the WIC program.

The Healthy Start program provides screening for all pregnant women to identify risks and provide referrals for appropriate services to improve health outcomes for mother and babies.

There is potential to redirect funding within existing programs to address this health outcome. By redirecting funds and/or staff resources, it might be possible to target providing additional services for these pregnant and postpartum women to improve this health issue, including the provision of Fe supplements for these women.

Current State priority or objective

Healthy Start receives state and federal funding, evaluates programs, and makes modifications to increase benefits and improve health outcomes. The federally-funded WIC program targets and certifies pregnant and postpartum women who have low Hgbs or Hcts for participation in WIC services to improve their health and nutritional status. The Healthy Start Program offers some enhanced nutrition services for high-risk pregnant women who are screened and determined eligible for the Healthy Start program, if the funding is available for these services.

TOBACCO USE AMONG WOMEN OF CHILDBEARING AGE

Definition and General Description of the issue/problem

Smoking kills more people than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined. Thousands more die from other tobacco-related causes, such as fires caused by smoking (more than 1,000 deaths per year nationwide) and smokeless tobacco use.

Magnitude

Cigarette Use among Women of Childbearing Age

According to the 2007 Behavioral Risk Factor Surveillance System (BRFSS) survey, 19.8 percent of women ages 18-44 were current smokers. Non-Hispanic white women of childbearing age were more likely than non-Hispanic black and Hispanic women to be current smokers. Women with less than a high school education and those with a high school diploma or some college education were more likely than women with a college degree to be current smokers. Women whose annual household income is less than $25,000 are more likely to be current smokers that women whose annual household income is $50,000 or greater.

Cigarette Use during Pregnancy

According to the 2005 Pregnancy Risk Assessment Monitoring System (PRAMS), 8.3 percent of women smoked cigarettes during the last three months of their pregnancy. Non-Hispanic white women were more likely than non-Hispanic black and Hispanic women to smoke during pregnancy. Women who were not married were more likely than married women to smoke during pregnancy, as were women who receive Medicaid compared with non-Medicaid recipients. Women whose household income was less than $15,000 were more likely to smoke during pregnancy compared with women whose household income was $35,000 or greater. Also, women with less than a high school diploma were more likely to smoke during pregnancy than women with some education beyond high school.

Severity/consequences

In Florida, an estimated 28,600 adults die each year from their own smoking, and 2,570 adult nonsmokers die each year from exposure to secondhand smoke. An estimated $6.32 billion is spent on annual health care costs in Florida directly caused by smoking, and smoking-caused productivity losses in Florida total $6.87 billion.[1]

Women who quit smoking before or early in pregnancy significantly reduce the risk for several adverse outcomes. Compared with women who do not smoke:

- Women who smoke prior to pregnancy are about twice as likely to experience a delay in conception and have approximately 30 percent higher odds of being infertile.
- Women who smoke during pregnancy are about twice as likely to experience premature rupture of membranes, placental abruption, and placenta previa during pregnancy.

Babies born to women who smoke during pregnancy:

- Have about 30 percent higher odds of being born prematurely.
- Are more likely to be born with low birth weight (less than 2500 grams or 5.5 pounds), increasing their risk for illness or death.

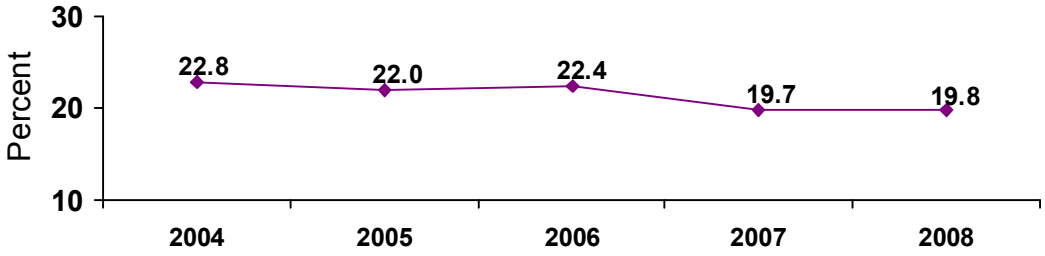
- Weigh an average of 200 grams less than infants born to women who do not smoke.
- Are 1.4 to 3.0 times more likely to die of Sudden Infant Death Syndrome (SIDS). [i]

Trends

Cigarette Use among Women of Childbearing Age, 2004-2008

From 2004 to 2008, there appears to be a decreasing trend in smoking among women of childbearing age from 22.8 percent in 2004 to 19.8 percent in 2008, however, these changes are not statistically significant.

Figure 1: Prevalence of current smoking among women of childbearing age, 2004-2008 Florida BRFSS



Cigarette Use during Pregnancy, 2000-2005

Since 2000, the prevalence of cigarette smoking during pregnancy among women in Florida has remained relatively unchanged. In 2005, the prevalence decreased to 8.3 percent, but this change is not statistically significant.

Figure 2: Prevalence of smoking during the last three months of pregnancy, 2000-2005 Florida PRAMS

National/state goals

Healthy People 2010 Objectives

27-1 Reduce tobacco use by adults

Target and baseline:

Objective	Reduction in Tobacco Use by Adults Aged 18 Years and Older	1998 Baseline*	2010 Target
		Percent	
27-1a.	Cigarette smoking	24	12
27-1b.	Spit tobacco	2.6	0.4
27-1c.	Cigars	2.5	1.2
27-1d.	Other products	Developmental	

27-6 Increase smoking cessation during pregnancy

Target: 30 percent.

Baseline: 14 percent of females aged 18 to 49 years stopped smoking during the first trimester of their pregnancy in 1998.

Potential for improvement – The DOH has been provided an increase in the appropriation of state tobacco settlement funds from $1 million in 2007 to the current $63 million. The potential of positively impacting tobacco avoidance and cessation are high provided funding does not decrease.

DOH Capacity – The Department of Health is funded to address tobacco prevention and cessation efforts, however, not at the level recommended by the Centers for Disease Control and Prevention.

Current State priority or objective --Tobacco prevention and cessation is currently one of the DOH strategic objectives.

PREGNANT WOMEN AND INFANTS

PRENATAL CARE FOR THE UNINSURED

Definition and General Description

Unfunded prenatal care refers to a lack of health insurance coverage throughout prenatal care and delivery. It is well established that unfunded prenatal care is more prevalent among the working poor who either do not have access to insurance or cannot afford employer health care benefits. Over the last 10 years, Florida has witnessed a steady increase in the number of births to women who are without insurance.

Magnitude

Nationally, 18 percent of women ages 18 to 64 were uninsured in 2008 (Kaiser Women's Health Policy Fact Sheet, October, 2009). A majority of the uninsured were found to be in working families with low incomes (Kaiser Medicaid and the Uninsured Fact Sheet, September 2009). In Florida, 24 percent of women ages 19-64 were uninsured in 2008. (Kaiserstatehealthfacts.org). Racial and ethnic minorities comprise a disproportionate number of the total uninsured in Florida, with approximately 32 percent being Hispanic and 19.5 percent black non-Hispanic (Duncan, Porter, Garvan, Hall, 2005). There is also a geographic disparity among the uninsured, with Miami-Dade encompassing 20.8 percent of the total uninsured adult population under the age of 65. (See Figure 1)

Severity and Consequences

"Uninsured women are twice as likely to delay seeking prenatal care until late in pregnancy and are four times as likely to obtain no prenatal care" (Haas, Udvarhelyi, Morris, & Epstein, 1993, p. 87). "Women who see a health care provider regularly during pregnancy have healthier babies, are less likely to deliver prematurely, and are less likely to have other serious problems related to pregnancy" (March of Dimes http://www.marchofdimes.com/pnhec/159_513.asp). The IOM cites that prenatal care is a cost-effective intervention aimed at improving pregnancy outcomes, particularly for women who are at increased medical and or social risk (Brown, Institute of Medicine, 1988).

It is important to consider the impact that a lack of insurance has on a women's health throughout her lifespan. According to the Kaiser Family Foundation, "uninsured women are more likely to lack adequate access to care, get a lower standard of care when they are in the health system, and have poorer health outcomes" (Kaiser Women's Health Policy Fact Sheet, October, 2009). Therefore, women who do not receive regular preventive health check-ups are more likely to enter pregnancy with chronic health disorders.

A national study performed by the CDC cited between 1993-1997 and 2001-2005, the rate of pregnancies complicated by pre-existing medical conditions increased from 21.8 percent to 28.3 percent (Berg, MacKay, Quinn, Callaghan, 2009). Florida's Pregnancy-Associated Mortality Review (PAMR) has found a strong association between chronic illness, such as diabetes, hypertension and obesity, and pregnancy related death (Florida Department of Health, PAMR Report 1999-2002). The PAMR report covering deaths from 1999-2005, found that women who did not receive prenatal care were 10 times more likely to suffer a pregnancy-related death than women who had prenatal care (Florida Department of Health, PAMR Report 1999-2005).

Historically, Florida has depended upon the public health system to serve as a safety net for the low income population. In the late 1980s, Medicaid expansion policies were enacted with the premise that reducing the number of uninsured pregnant women would lead to increased access to prenatal care and improved outcomes for mothers and infants. In 1989, Florida expanded Medicaid coverage to include women with an income up to 150 percent of poverty and in 1991 extended benefits to women up to 185 percent of poverty. Medicaid expansion of eligibility impacted not only the public health system but also private providers. In 1991, Florida county health departments saw a 38 percent increase in Medicaid funded prenatal clients compared to two years prior to the eligibility expansion (Marquis and Long, 1999). Additionally, growing numbers of private providers began accepting Medicaid for obstetrical services.

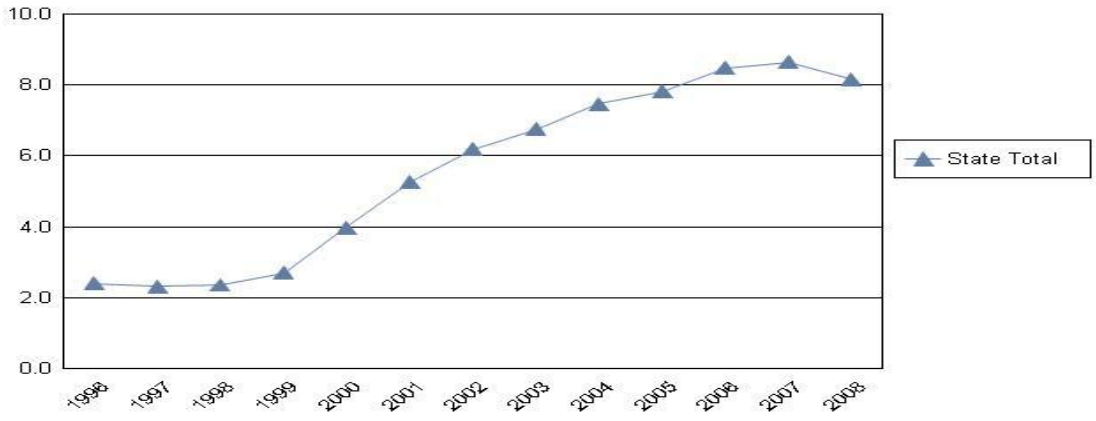
Previous studies measuring health effects and utilization of services associated with expansion of Medicaid coverage to uninsured pregnant women, showed mixed results. However, a survey of postpartum women in California found the timing of insurance coverage to be strongly associated with timing of prenatal care initiation (Egerter, Braveman, and Marchi, 2002). A study by Marquis and Long (1998) found that Florida's Medicaid expansion led to improved access to prenatal care services and a decrease in low birthweight infants.

From 1999-2008, Florida witnessed a drastic influx of undocumented immigrant women seeking prenatal care. In 1999, Florida Medicaid paid for 2.7 percent of deliveries to legal and illegal immigrants under the eligibility category referred to as Emergency

Medicaid. By state fiscal year 2008, the percentage of emergency Medicaid deliveries increased to 8.2 percent. (See Figure 2).

Figure 2

Births covered by Emergency Medicaid
Single-Year Percentage



Percentage

FloridaCHARTS.com is provided by the Florida Department of Health, Office of Planning, Evaluation and Data Analysis, (850) 245-4009

Data Source: Florida Department of Health, Bureau of Vital Statistics

Data Note(s): Emergency Medicaid covers deliveries of pregnant Aliens (non-US citizens)

Rates calculated using July 1 population estimates from the Florida Legislature, Office of Economic and Demographic Research

Over the last 10 to 15 years there has been a migration of Medicaid clients towards private providers leaving a large proportion of the unfunded population to be cared for by the safety-net organizations. In some areas, the public health system has become, as Peter Van Dyck describes, the "funder of first resort, as opposed to the last stop safety net" (Gold, Guttmacher Policy Review, 2007). Without sufficient Medicaid clients to help offset the cost of unfunded clients, the fiscal capacity of the safety net organizations is being stretched beyond its limit.

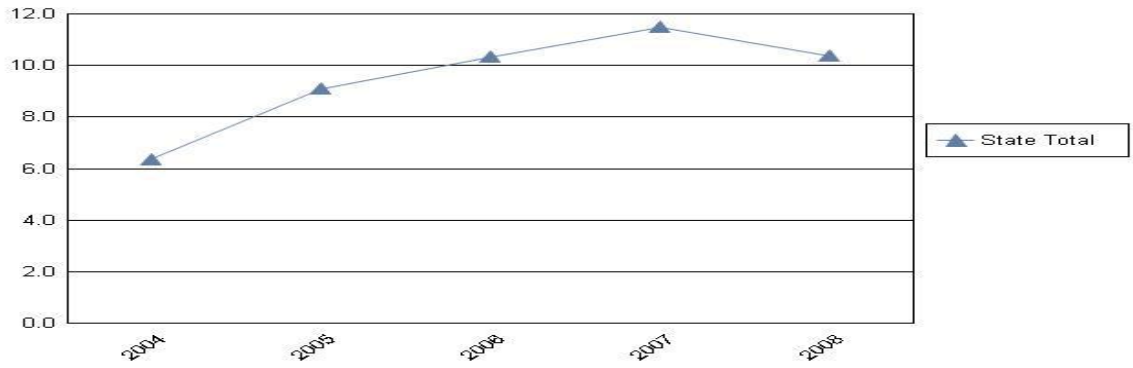
The disproportionate number of clients without a payer source has forced some public health clinics to shut down their prenatal services, leaving certain geographical areas of the state without any prenatal services for the poor and uninsured. As of September 2009, 46 of the 67 county health departments (68.7 percent) were providing prenatal care services and the remaining 21 county health departments (31.3 percent) were not.

Trends

The percentage of births to uninsured women in Florida in 2004 was six percent. This percentage rose to a high of 11.5 percent in 2007 and decreased slightly to 10.4 percent in 2008. (See Figure 3) This trend appears to mirror the percentage of births to women with no prenatal care. (See Figure 4)

Figure 3

Births to uninsured women
Single-Year Percentage



Percentage

FloridaCHARTS.com is provided by the Florida Department of Health, Office of Planning, Evaluation and Data Analysis, (850) 245-4009

Data Source: Florida Department of Health, Bureau of Vital Statistics

Data Note(s): Indicates births with a payment code of 'self-pay'

Rates calculated using July 1 population estimates from the Florida Legislature, Office of Economic and Demographic Research

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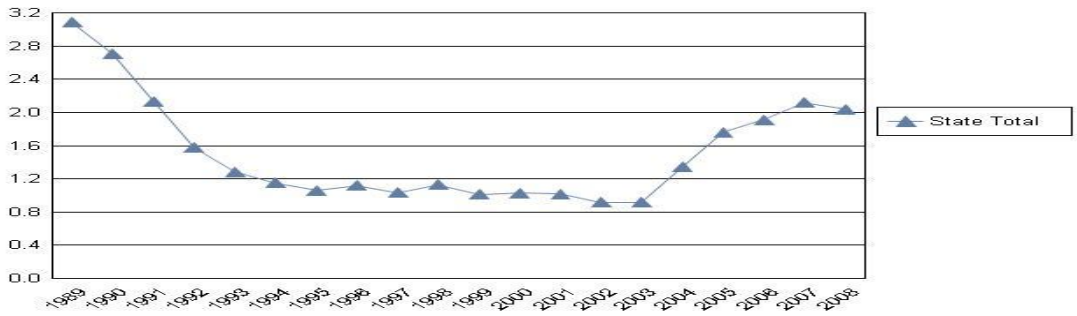
Figure 4

Births to Mothers with No Prenatal Care
Single-Year Percentage of Births with Known PNC Status



Percentage

FloridaCHARTS.com is provided by the Florida Department of Health, Office of Planning, Evaluation and Data Analysis, (850) 245-4009 Data Source: Florida Department of Health, Bureau of Vital Statistics.

Data Note(s): Starting in 2004, trimester prenatal care began is calculated as the time elapsed from the date of the last menstrual period to the date of the first prenatal care visit. Prior to 2004, these data were obtained by direct question that noted the trimester the mother began prenatal care. Consequently, these data are not comparable to data from prior years. Births with unknown information as to when prenatal care began are excluded from the denominator.

National & State Goals

While there is not a goal directly addressing insurance coverage for prenatal care, there are distinct goals that separately address health insurance and access to care. Healthy People 2010, Objective 1-1, calls for increasing the proportion of people who have health insurance from a baseline of 83 percent to the target of 100 percent. The underlying support for this is based on evidence that health insurance promotes access to care. The goal of Healthy People 2010, Objective 16-6, is to increase in the proportion of pregnant women who have early and adequate prenatal care. Underlying this goal is evidence that supports that the optimal benefit of prenatal care comes with early and continuous access and service.

Specifically, Objective 16-6a recommends increasing the percentage of women accessing prenatal care in the first trimester from the baseline of 83 percent to the target of 90 percent. Objective 16-6b calls for increasing the number of pregnant women who receive adequate prenatal care services. Assessment of the adequacy of prenatal care includes monitoring not only the month of initiation of prenatal care but also the frequency of visits they receive throughout pregnancy.
http://www.healthypeople.gov/document/html/objectives/16-06.htm

Florida utilizes the established national benchmarks to gage access to and quality of prenatal care services throughout the state. The established state goal related to the prenatal care entry indicator is that: 87 percent of pregnant women will enter prenatal care in the first trimester. For 2008, the percentage of women in Florida who entered care in the first trimester of pregnancy was 76.9 percent (FloridaCHARTS.com). In addition, a core performance indicator measured by the state is the percentage of women with late or no prenatal care. The percentage of Florida mothers with late or no prenatal care rose from 2.8 percent in 2003 to 5.8 percent in 2008 (FloridaCHARTS.com).

Potential for Improvement

While some may believe that the answer lies in provision of health insurance benefits to all, others have grave concerns over the cost and service ramifications of a nationalized health plan. With the state budget in a shortfall, it is unlikely that Florida will expand Medicaid eligibility beyond its current limits and may even be faced with reducing the eligibility limit.

Throughout Florida, county and local health providers have resorted to a variety of approaches in order to continue provision of health services to the uninsured. In 1991, Florida enacted legislation enabling counties to pass referenda for approval of tax levies to help finance the public health care system. In September 1991, Miami-Dade County voters approved a half-cent sales tax “for the operation, maintenance and administration of Jackson Memorial Hospital to improve health services.” (http://www.rand.org/pubs/monograph_reports/2007/MR1522.pdf) Alachua County voted in a quarter cent sales tax in 2004 which is slated to run through 2011. Polk County voters approved a half-penny sales tax also in 2004, which allows the uninsured to enroll in a county health plan (http://roe.redorbit.com/news/health/192728/sales_taxes_used_for_uninsured_health_care/index.html). While tax levying may assist individuals in obtaining access to primary care services, it often does not cover prenatal services and undocumented immigrants may not qualify for services.

Six years ago, Florida began searching for alternative approaches to prenatal care that would be cost-effective yet not compromise quality of services. The concept of group

prenatal care was emerging as a model that promised just that. Centering Pregnancy is an innovative model of group care that has proven to be effective in improving perinatal outcomes at no additional cost. The Centering model created by a certified nurse midwife at Yale University provides integrated prenatal care by combining three primary components: assessment, education and skills building, and support. In 2007, a multi-site randomized controlled trial concluded that "group prenatal care resulted in equal or improved perinatal outcomes at no added cost" (http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2276878/pdf/nihms-42174.pdf.

The Florida Department of Health explored the concept of group prenatal care through their Group CARE Pilot Study which ran from 2005-2008. Final conclusions of this pilot project are as follows:

- Patient and provider surveys showed an increase in satisfaction with the quality of care in the Group CARE model as opposed to the traditional model. The evidence of positive comments by the Group CARE participants may be viewed as a step towards empowerment of these women.
- A larger, urban clinic was found to be the most time-efficient and cost –effective setting for Group CARE. Rural clinic settings may need to adjust their group selection criteria as well as identify creative staffing approaches to be more efficient.
- Although the numbers of participants were small, the preliminary results mirror those found in larger national clinical trials. Overall, it is felt that the provision of prenatal care utilizing a group model is a safe and effective alternative to the traditional model of care.

(DOH, Group CARE Prenatal Project: Annual Report and Evaluation)

DOH Capacity

The mission of the Department of Health (DOH) is to "promote, protect and improve the health of all people in Florida." Providing care for the poor and underinsured is an integral aspect of this mission and must be interwoven throughout the various policies, programs and initiatives of DOH. However, the capacity for caring for the uninsured is beyond the ability of the Department of Health alone. In 2008, the Florida Legislature approved *Cover Florida*. The intent of this program is to improve access to health care services through the provision of affordable health insurance. Currently, the plans under *Cover Florida* do not cover prenatal care services.

State Priorities

The 2004, *Florida Health Insurance Study,* profiled the uninsured in Florida and shed light on the differences among the various segments of the state's population. http://www.fha.org/2004healthinsurancestudy.pdf In 2007, the Agency for Health Care Administration took the lead in the multi-agency *Uninsured Study Group,* to search for solutions to the dilemma of access to care for the uninsured. The study group identified that the issue surrounding the uninsured was a multifaceted problem that would involve a collaborative approach to resolve.
http://ahca.myflorida.com/docs/USG/Meeting1/UninsuredStudyGroupOutline.pdf

In recent years, a number of county health departments have been faced with ending their prenatal services due to the inability to offset the cost to provide such care. A number of CHDs have voiced a desire to charge a flat rate fee for prenatal clients who

are without insurance. This would enable the CHD to recoup a portion of the cost to provide the needed service. Currently, a CHD is bound by rule to charge prenatal clients according to the established sliding fee scale and are prohibited from charging gate, flat or minimum fees. (FAC 64F-16.004)

Currently, the federal government is debating whether insurance coverage can be made available to all citizens. Future access to services as well as type and quality of available services may ultimately hinge upon the decisions made at the national level.

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PERINATAL CARE FOR UNINSURED AND UNDERSINSURED HIGH RISK WOMEN AND INFANT

Definition and General Description of the issue/problem

Florida and the United States experienced substantial decreases in infant mortality from 1960 to 2000. Advances in perinatal care and technology and access to that care have been credited with most of this decline. In Florida, Medicaid provides health care coverage to low income individuals and families. The Department of Children and Families determines Medicaid eligibility for low income families with children, children only, pregnant women, non-citizens with medical emergencies, and aged and/or disabled individuals not currently receiving supplemental security income. At this time, two groups of pregnant women and infants are currently uninsured for prenatal and perinatal care: 1) the increasing number of pregnant women above 185 percent of poverty without health insurance coverage during pregnancy and 2) the increasing number of undocumented pregnant women (there has been a recent decrease in the number of undocumented pregnant women in the last year or so due to the economic recession). This lack of insurance delays and restricts necessary prenatal, perinatal, and postpartum care. Women above 185 percent of poverty must find ways to pay for health care or try to qualify for Medicaid as medically needy. Undocumented women only receive emergency Medicaid coverage to pay for the delivery but not prenatal or postpartum care.

Magnitude

During 2008 in Florida, 54.8 percent of pregnancies were women whose principal source of payment for their delivery were paid by Medicaid (44.4 percent) or self-pay (10.4 percent). Of these, 49.7 percent presented medical risks conditions (diabetes, high blood pressure, previous preterm births, infections, or other previous poor pregnancy outcomes) and 12.4 percent of their births presented abnormal conditions, congenital anomalies, or very low birth weight according to the birth certificate (Vital Records, FDOH).

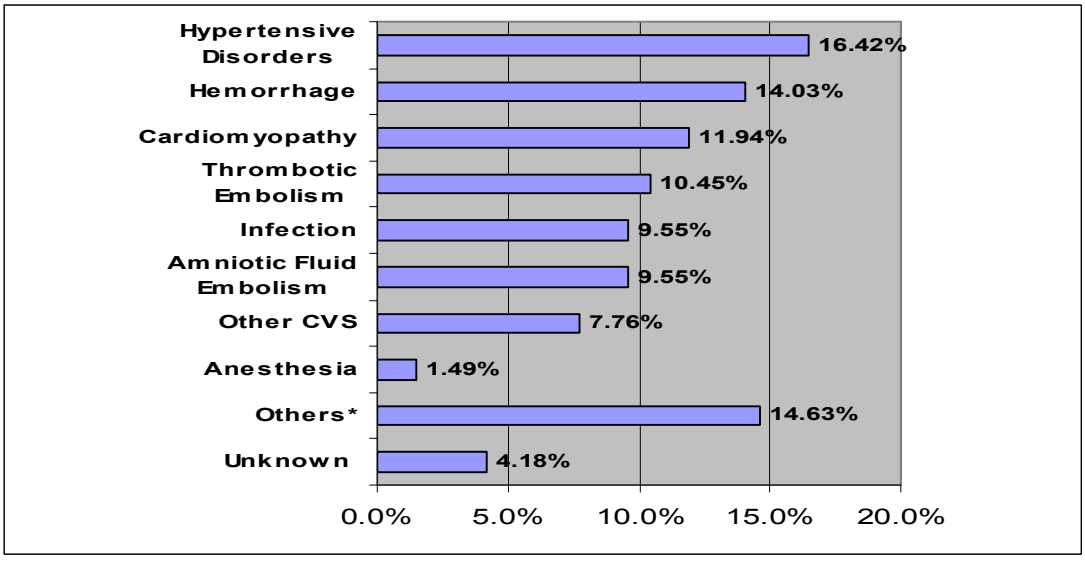
Adjusting for other risk factors, women who had risk pregnancies in 2008 and were in Medicaid or self-pay had significant less probability of having adequate prenatal care (RR= 0.77, 95 percent CI 0.76-0.78) and (RR= 0.65, 95 percent CI 0.64-0.67) respectively than women in private insurance according to the Kotelchuck index. Adjusting for other risk factors, women in Medicaid or self-paid and whose babies had abnormal conditions, congenital anomalies, or very low birth weight also had less probability of having adequate prenatal care (RR= 0.78, 95 percent CI 0.76-0.80) and (RR= 0.67, 95 percent CI 0.63-0.70) respectively than women in private insurance. To summarize, payment source for health care did impact the ability of high risk-mothers to participate adequately in prenatal care, both early entry and the adequacy of the number of visits.

In Florida, 70.5 percent (2,711) of 3,851 very low birth weights (VLBW) were born in hospital with level III neonatal intensive care units in 2008. Of VLBW paid by Medicaid at delivery 69.2 percent were born in hospital with level III while these percentages were 72.3 percent and 73.5 percent paid by private insurance or self-pay respectively. In other words, payment source for health care did not appear to have a large impact on the likelihood of a VLBW birth occurring in a Level III hospital.

Severity/consequences

Almost half of the deliveries in Florida are reimbursed by Medicaid and one tenth are self pay. A substantial portion of these women will have high risk deliveries and critically ill newborns. Access to prenatal and perinatal care are essential to reducing the risk of pregnancy-related deaths. During the period 1999-2007, the Pregnancy Associated Mortality Review (PAMR) committee reviewed 335 cases of pregnancy-related death, of which 46.2 percent were paid by Medicaid, 36.6 percent were paid by private insurance, and 8.6 percent were self-pay. The leading causes of pregnancy-related deaths during 1999-2007 (figure 1) were hypertension (16.4 percent), hemorrhage (14 percent), cardiomyopathy (11.9 percent), and thrombotic embolism (10.5 percent). Other causes (14.6 percent) include hematopoietic, metabolic, injury, pulmonary problems, multiple organ system failure and intracerebral hemorrhage.

Figure 1: Distribution of Pregnancy-Related Causes of Deaths, Florida 1999-2007 (n=335)

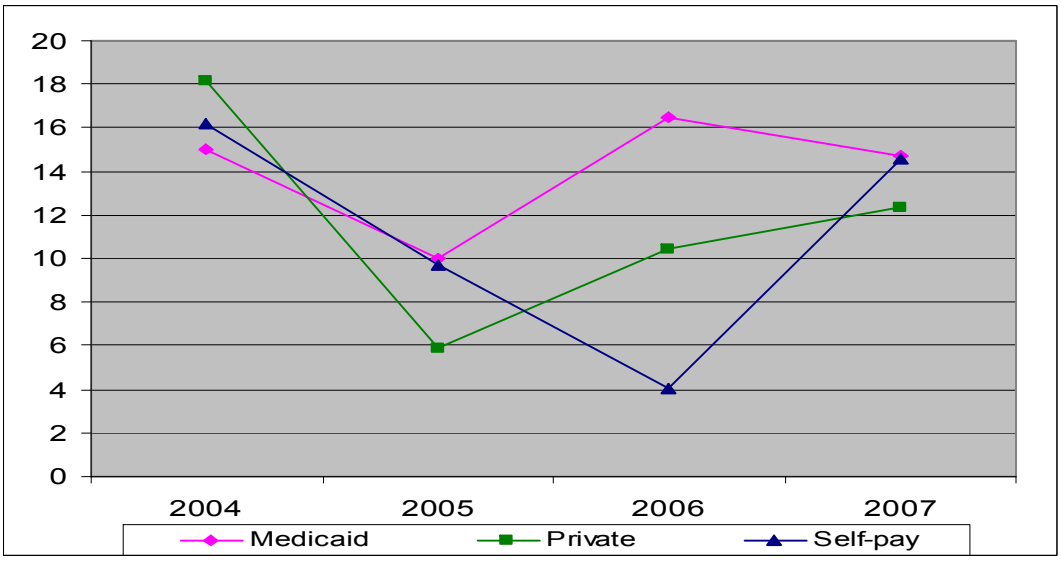


**Other includes deaths due to cancer, HIV, gastrointestinal disorders, and hematopoetic.

Source: PAMR database FDOH

Figure 2 shows the pregnancy-related mortality ratio by payment type at delivery during the period 2004 to 2007. The ratio of pregnancy-related death was high in 2004 for private and self-pay insurance. In 2005, there was a decline in the pregnancy-related mortality ratio for the three groups with the major decline observed in women whose delivery was paid by private insurance. In 2006, there were increases in the pregnancy-related mortality ratio for women whose delivery was paid by Medicaid and private insurance while self-pay presented the lowest rate of the period. In 2007, there were increases in the pregnancy-related mortality ratio for the three groups with major increase in self-pay. Although none of these comparisons are statistically significant, the literature suggests that pay source does increase the likelihood of these women not receiving the care they need in a timely way to reduced their risk of pregnancy-related mortality.

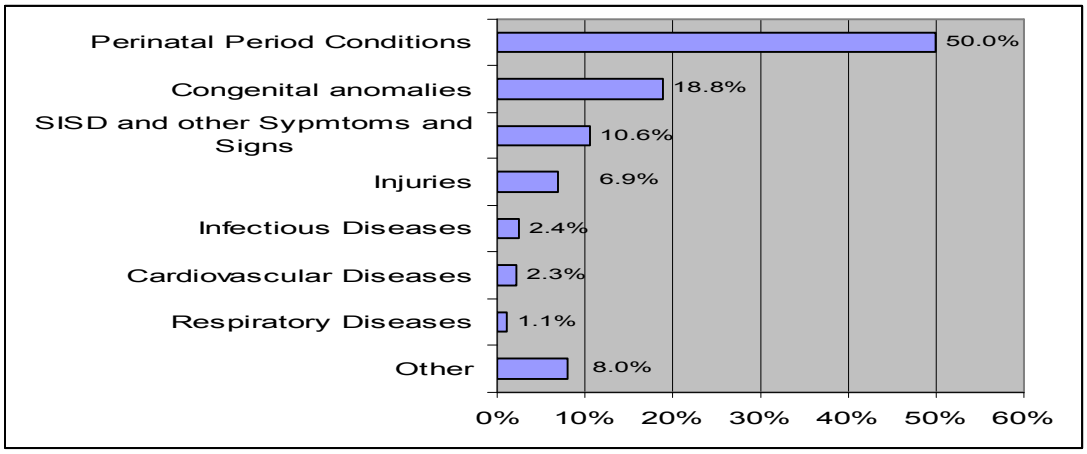
Figure 2: Pregnancy-Related Mortality Ratios by Type of Payment at Delivery



Source: PAMR database

In Florida, from 1999-2007, 71.1 percent of infant deaths were due to perinatal period conditions, congenital and chromosomal anomalies, and cardiovascular diseases all these causes related with poor maternal health during pregnancy, inadequate care during pregnancy or delivery, and preterm birth and its sequelae (Figure 3). The mother's lack of access to care in a timely way has been shown to impact infant mortality.

Figure 3: Underlying Causes of Infant Death, Florida 1999-2007

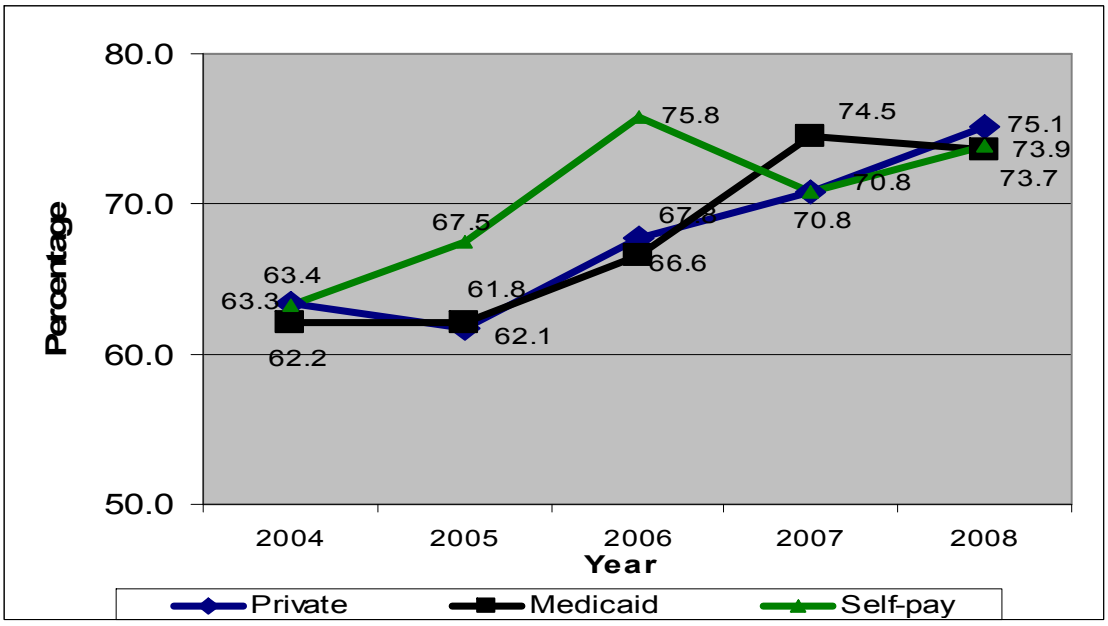


Source: Vital Statistics downloaded from CHARTS FDOH

Trend

Figure 4 shows the percentage of very low birth weight (VLBW or less than 1,500 grams) in level III hospitals among Florida residents during the period 2004-2008 by type of payment source at delivery. The percentages of VLBW who were delivered in Level III hospitals increased over time for births paid by private insurance and Medicaid, only self-pay type manifested a decrease in 2008 when compared with 2006.

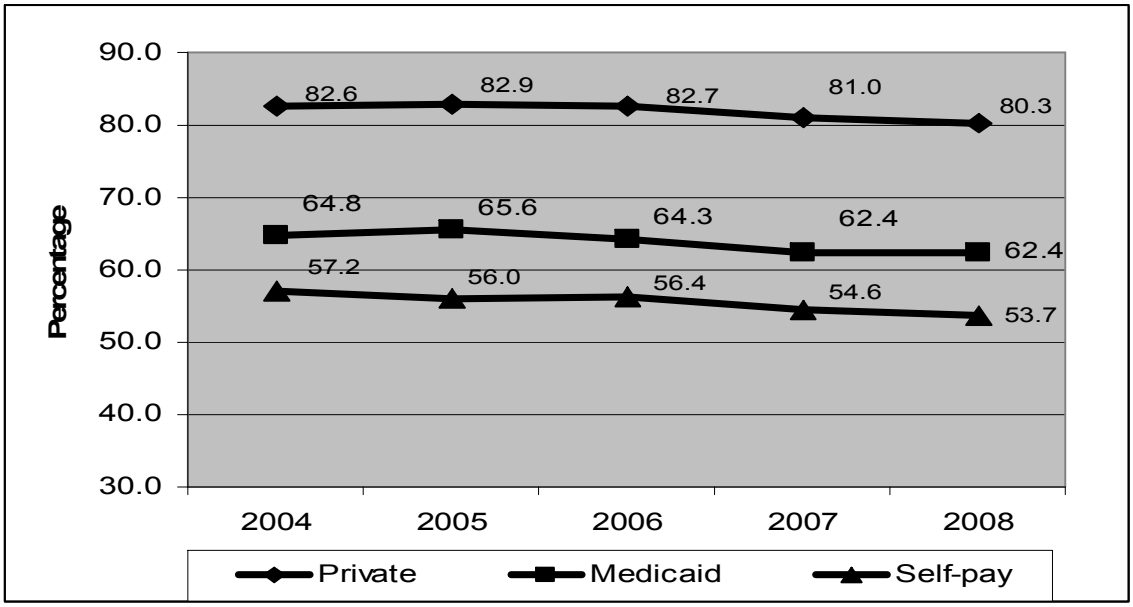
Figure 4: Percentage of Very Low Birth Weight by Type of Payment at Delivery Florida 2004-2008



Source: Vital Statistics FDOH

Figure 5 shows the percentage of births to Florida residents who had adequate prenatal care by type of payment source at delivery. Private insurance had significant higher adequacy of prenatal care than Medicaid or self-pay in each year of comparison. The slight downward trend for all three types of delivery from 2004 to 2008 is not statistically significant.

Figure 5: Percentage of Resident Births who had Adequate Prenatal Care by Type of Payment at Delivery, Florida 2004-2008



Source: Vital Statistics downloaded from CHARTS, FDOH

National/state goals

Increasing the proportion of pregnant women who receive early and adequate prenatal care to 90 percent by 2010 is a national Healthy People Objective (16-6). Prenatal care includes three major components: risk assessment, treatment for medical conditions or risk reduction, and education. Each component can contribute to reductions in perinatal illness, disability, and death by identifying and mitigating potential risks and helping women to address behavioral factors, such as smoking and alcohol use that contribute to poor outcomes.
http://www.healthypeople.gov/Document/HTML/Volume2/16MICH.htm#_Toc494699663

Title V block grant goals for Performance Measure 17 is for VLBW infants to be born in hospitals with Level III Neonatal Intensive Care units. The state's performance objective since 2004 has been that at least 90 percent of very low birth weight should be delivered in a Level III hospital. This is also a Healthy People 2010 national objective (16-8). "Much research has demonstrated the benefits of delivering high-risk infants in settings that have the technological capacity to care for them. Specifically, research has shown that VLBW infants have lower death rates when they are delivered at Level III hospitals, which are equipped to care for very small infants. To ensure high-risk pregnant women have access to appropriate levels of obstetric care, many states have implemented perinatal regionalization strategies and protocols for the transfer of high-risk women to level III facilities. Evidence indicates that these systems may be eroding as health care networks and financing systems change. The proportion of VLBW infants who are delivered in the Level III obstetric hospitals best equipped to provide appropriate neonatal care should be measured to monitor the continuing effectiveness of these systems and the appropriateness of the level of care delivered to high-risk pregnant women and infants.

Florida's performance on reaching this objective is shown in Table 1.

Table 1: Percentage of Very Low Birth Weight Delivered at Facilities for High-Risk Deliveries and Neonates. Florida, 2004-2008

	2004	2005	2006	2007	2008
Annual Performance Objective	90	90	90	90	90
Annual Indicator	86.8	79.1	86.5	88.1	86.9
Numerator	2,891	2,855	3,105	3,454	3,365
Denominator	3,331	3,610	3,589	3,920	3,874

Source: RPICC Annual Report 2008. CMS FDOH

Potential for improvement

1. Expand the OB satellite program. The current OB satellite program has a few centers that would expand and hold more clinics in the highest area of need if they could get funding. Other centers have contracted their outreach due to lack of Maternal Fetal Medicine (MFM) staff, financial feasibility and distance traveled to the clinics, even with funding. Children's Medical Services has established a system of specialty perinatal centers for high-risk pregnant women and newborns in Florida. The Regional Perinatal Intensive Care Centers (RPICC) provides specialized high-risk newborn care and prenatal care for high-risk pregnant women at 11 sites in Florida. Other areas of the state are not served by these specialty clinics at all because there is no RPICC in the geographic area. The panhandle is adding an additional location this year but due to funding restrictions we can only partially fund the clinic. While we could currently hold more clinics in existing locations, in general, there is not enough MFM staff and centers interested to expand to additional locations.

2. The data currently collected in the RPICC program is not inclusive of all perinatal high risk care in the state. The data is limited to the 11 RPICC programs and further limited to Medicaid recipients. There is no data system that is inclusive of all perinatal data statewide and this hinders initiation of statewide quality improvement initiatives.

3. The RPICC program serves Medicaid population, unfunded and aliens. The centers rely on the statewide low income pool, county health trusts and other public money for reimbursement for this population.

4. Other states such as California, North Carolina, and Ohio have developed population-based data-driven quality improvement initiatives to better monitor and improve the care provided to all women and infants regardless of pay source. Florida is attempting to develop a similar initiative which could help with this issue. This effort includes developing a vision and a short-term work plan to develop the vision and applying for a large national grant to help with implementation.

DOH capacity

RPICCs assist high-risk pregnant women, in receiving specialized care in an effort to achieve healthy outcomes for the woman and the newborn. Increasing early entry of

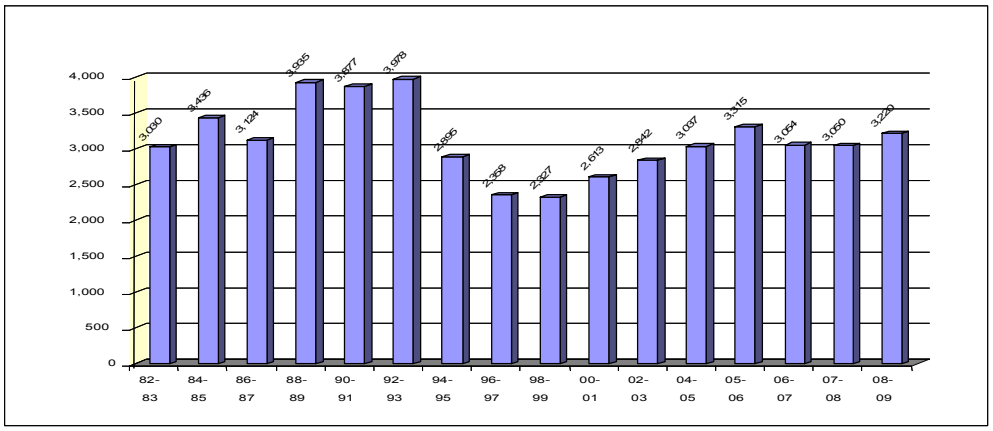
high-risk pregnant women into specialty obstetric care is especially important. For pregnant women at risk of a premature or low birth weight newborn, medical providers work to maintain the pregnancy long enough for optimal health and development inside of the womb.

When low birth weight infants and other at risk babies are born, RPICCs provide babies the specialized care their vulnerable situation demands at a critical juncture in their lives in neonatal intensive care centers. The RPICCs have been shown to improve outcomes and cost avoidance for high-risk pregnant and newborns through early identification and intervention with specialized care.

The Florida Department of Health currently does not have legislative authority to expand the RPICC centers designation and lacks funding to expand the outreach effort for the Obstetrical Satellite program.

Since the Regional Perinatal Intensive Care Center Neonatal Program began in 1974, more than 170,349, critically ill newborns have been served in RPICC designated hospitals. A total of 3,220 RPICC Program neonates were served in RPICC Neonatal Intensive Care units for fiscal year (FY) 2008-2009 (Figure 6).

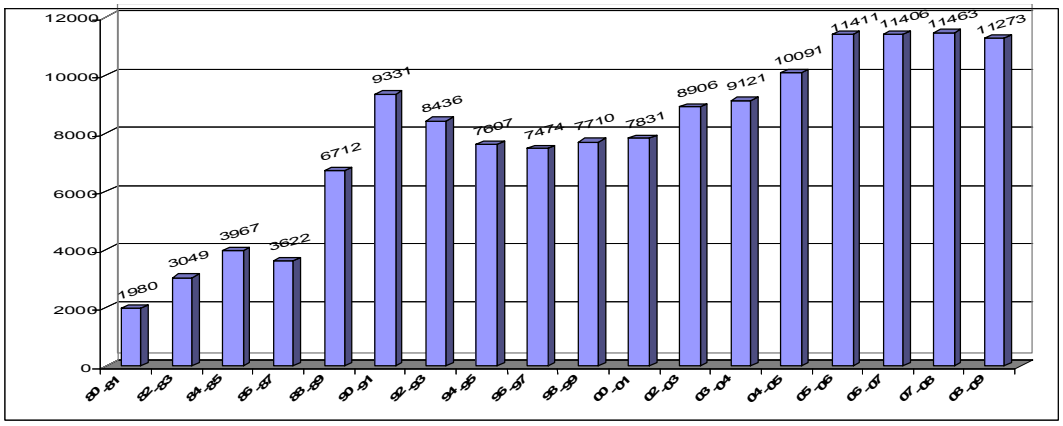
Figure 6: RPICC Neonatal Patients Served Since 1980



Source: RPICC annual report-CMS FDOH

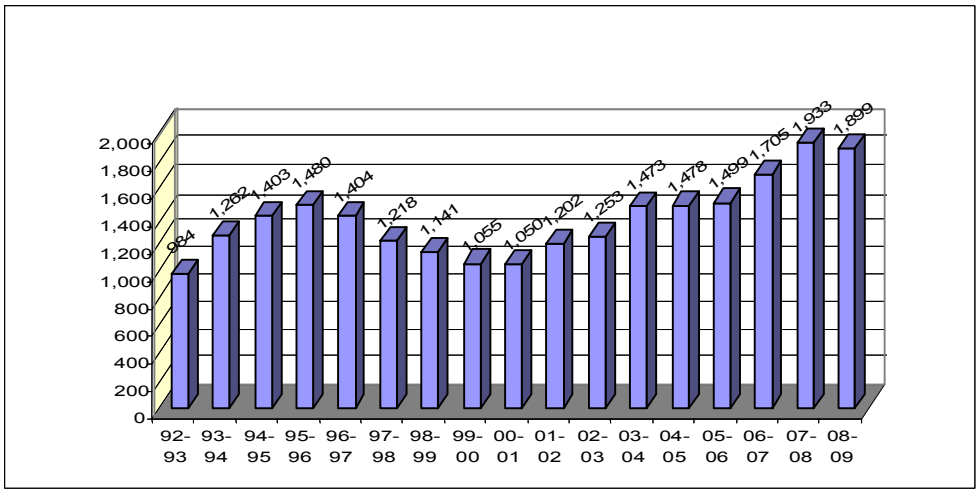
More than 213,044 women with high-risk pregnancies have been provided prenatal and obstetrical intensive care services since 1977 when the Regional Perinatal Intensive Care Center Program expanded to include obstetrical services. A total of 11,273 pregnant women received RPICC high-risk obstetrical services for FY 2008-2009. Figure 7 shows the number of patients served by the regional perinatal care center obstetrical program since 1980-until 2009.

Figure 7: Patients Served Since 1980-1981 by the Regional Perinatal Care Center Obstetrical Program



The high-risk obstetrical satellite clinic program began in 1991 as a part of Healthy Start initiative and has served more than 23,215 high-risk obstetrical patients. Figure 8 shows the number of RPICC obstetrical satellite clinic patients served since 1992-1993.

Figure 8: RPICC Obstetrical Satellite Clinic Patients Served Since 1993



Source: RPICC annual report. CMS FDOH

Current State priority or objective

The need for perinatal care for uninsured and underinsured high risk infants and pregnant women has been recognized in the state since 1974 when the RPICC program was created. The goal since the inception of the program has been to improve the outcomes of high risk pregnancies and critically ill newborns.

Additional goals and objectives:

- To support policies that reduce the number of preterm births which are at risk for complications.
- To continue the RPICC Program for regionalized perinatal care for high risk infants and high risk pregnant women.
- Continue the OB Satellite outreach program as the budget and provider availability allows.

INFANT ABUSE AND NEGLECT

Definition and General Description of the issue/problem

There is a strong link between adverse childhood experiences, including child maltreatment, and infant/child health and development and poor adult health and social outcomes.[1] 'Child Maltreatment' is an inclusive description for all forms of child abuse and neglect. It refers to a specific type of injury or harm. Maltreatment can include: physical abuse, sexual abuse, abandonment, neglect, emotional and psychological abuse/mental injury. Adverse childhood experiences include a variety of potentially harmful events such as loss of a parent or substance abuse in the home, but the most common event is child abuse and neglect.

Children are the foundation and the future of our society. The role of public health is to support and protect the health and well-being of our citizens – especially our children. Child abuse and neglect (maltreatment) has a significant effect on public health. Victims of maltreatment can experience physical injury, adverse mental health consequences, and harmful physical health consequences such as substance abuse or chronic diseases. Any of these consequences can lead to hospitalization, disability or death. Abused children often suffer physical injuries including cuts, bruises, burns, and broken bones. In addition, maltreatment causes stress that can disrupt early brain development.[2] Extreme stress can harm the development of the nervous and immune systems.[2] As a result, children who are maltreated are at higher risk for health problems as adults. These problems include alcoholism, depression, drug abuse, eating disorders, obesity, sexual promiscuity, smoking, suicide, and certain chronic diseases.

Magnitude

Nationally, the costs of child abuse and neglect exceed $103 billion annually in direct and indirect costs for programs, services, support, and lost economic and social capital. The human costs are most compelling: abuse and neglect severely impacts the infant's or child's short and long-term physical, mental, and emotional health outcomes.

Of the 240,263 children in reports to the Department of Children and Families' Child Abuse Hotline, 117,795 (49 percent) were verified or had some indication of abuse.[3B] The rate of verified maltreatment for child under age 18 was 28.4. Experts routinely report that the numbers of children reported or verified as having been maltreated grossly under estimates the number of child affected by child maltreatment and harsh parenting practices.

Although child maltreatment occurs across all sectors of American society, families in lower economic situations and racial/ethnic minorities tend to have higher rates of involvement with the child welfare system.[3] The five most significant risk factors that

consistently show a positive relationship to child maltreatment are the child's age (the youngest are most vulnerable), race, poverty, single parenting, and parental substance abuse.[3A]

In 2007, some children had higher rates of victimization.[4] Nationally, 32 percent of maltreated children were 4 or younger; of these, 22 percent were less than a year old. In Florida, 37 percent of maltreated children were 4 or younger. Nationally, girls (52 percent) were at slightly higher risk than boys (48 percent) for all forms of child maltreatment. In Florida, girls and boys are equally at risk.

The racial breakdown of children reported to the Florida Child Abuse Hotline was: 28 percent black; 56 percent white; 13 percent Hispanic; and 3 percent other. This is compared to statewide populations of 15 percent black; 65 percent white; 16 percent Hispanic; and 4 percent other. At the national level, the ethno-racial breakdown is: African-American (16.7 per 1,000 children); American Indian or Alaska Native (14.2 per 1,000 children); multiracial (14.0 per 1,000 children); and white (55.0 per 1,000).

Children under 4 are at greatest risk for child maltreatment and for the most severe consequences of maltreatment,[6] largely because of the dependent nature of children at very young ages. In 2007, in the U.S. approximate rates of child maltreatment victims were: 21.9 per 1,000 for 0 to 1 year-olds; 13.0 per 1,000 for 1 year-olds; 12.6 per 1,000 for 2 year-olds; 11.9 per 1,000 for 3 year-olds; and 11.5 per 1,000 for 4 to 7 year-olds.

Other risk factors address stressors that may be present in a family include: developmental disabilities or special health care needs of a child; social isolation of the family (no social supports); parent's lack of knowledge of child development; parental history of abuse; poverty or other socio-economic disadvantage; intimate parent violence in the home; substance abuse or mental health problems, especially in a caregiver; other parental stressors (e.g., natural disasters, homelessness, job concerns).[6] The more stressors the greater the likelihood of negative outcomes. Florida has seen spikes in reports of maltreatment following hurricanes similar to those reported in studies of the effect of Hurricane Hugo in South Carolina. The current economic downturn may also have an impact on child maltreatment as families deal with reduced income, job loss, and other financial stressors.

Severity/consequences

Nationally, the costs of child abuse and neglect exceeds $103.8 billion annually in direct and indirect for program, services, supports and lost economic and social capital. [6B]

In 2007, nationally, 1,760 children ages 0 to 17 were reported to have died from abuse and neglect (rate of 2.35 per 100,000 children).[7] The Florida Child Abuse Death Review Team 2008 Annual Report states that there were 163 verified child abuse deaths in 2007.[8]

Ill health caused by child maltreatment forms a significant portion of the global burden of disease. While some of the health consequences have been researched, others have only recently been given attention, including psychiatric disorders and suicidal behavior. Importantly, there is now evidence that major adult forms of illness – including ischaemic heart disease, cancer, chronic lung disease, irritable bowel syndrome and fibromyalgia – are related to experiences of abuse during childhood. The apparent mechanism to explain these results is the adoption of behavioral risk factors such as smoking, alcohol abuse, poor diet and lack of exercise. Research has also highlighted important direct

acute and long-term consequences. Similarly, there are many studies demonstrating short-term and long-term psychological damage.[6]

The Adverse Childhood Experiences (ACE) research study jointly undertaken by Kaiser Permanente and the Centers for Disease Control showed a significant link between adverse events occurring in childhood and poor adult health outcomes.[1] Adverse experiences included: child maltreatment, loss of parent (e.g., death or divorce), imprisonment of a household member, domestic violence in the home, or substance abuse or mental health problems in a member of the household. Individuals who reported four or more types of adverse experiences were found to have a significantly greater likelihood of poor adult health outcomes.

Trend

Nationally, between FFY 2003 and FFY 2007, the rate of victimization fluctuated between 12.2 and 10.6 per 1,000 children. This decrease can be attributed to several factors including the increase in children who received an "other" disposition, the decrease in the percentage of children who received a substantiated or indicated disposition, and the decrease in the number of children who received an investigation or assessment. It is not possible to tell whether this year's decrease indicates a trend until more data are collected.[6]

The rates of child maltreatment in Florida have been relatively stable for the past nine years ranging from a high of 32.16 (in 2006-07) to a low of 28.8 (in 2008).[9] Even though Florida has seen a drop in the child maltreatment rate from 2007 to 2008, the rate in Florida still exceeds the national average.

The Florida Department of Children and Families has been investigating an alternative response process that may impact the rate of verified child maltreatment by establishing mechanism to divert children/families to supportive systems. Research indicates that the best way to prevent or reduce all forms of child maltreatment is to improve parental knowledge and understanding of five keys domains: understanding of child development and parental expectations; knowledge about nurturing and attachment; parent resilience; social connections; and concrete supports for parents.

National/state goals

Child maltreatment has a significant effect on public health systems. Victims of trauma (including child maltreatment) can experience physical injury; adverse mental health consequences such as depression, anxiety, and low self-esteem; and harmful physical health consequences such as suicide attempts, cardiovascular disease, and substance abuse. Any of these consequences can lead to hospitalization, disability, or death.

The Healthy People 2010 initiative identified Injury and Violence (Abuse/Trauma) Prevention as a public health issue. Objective 15-33 is to "Reduce maltreatment and maltreatment fatalities of children". The "mid-course" report stated that "although a reduction occurred in the overall rate for maltreatment of children under 18 years of age, an increase was noted in maltreatment fatalities."[11] Child Death Review Teams, such as the Florida Child Abuse Death Review Committee, have been instrumental in providing data related to this objective. This objective has been continued in the proposed Healthy People 2020 goals.

Potential for improvement

The Centers for Disease Control and Prevention supports all child death review systems for states. In Florida, the Child Abuse Death Review Committee is only authorized to review deaths that have been verified by the Department of Children and Families as the result of maltreatment. Unlike other states, Florida is not in a position to review all child deaths - a process which in other states has resulted in some deaths originally labeled as something else begin identified as the result of caregiver maltreatment.

An All Child Death Review process will improve our understanding of how and why children die; demonstrate the need for policies and programs to improve child health, safety and protection; prevent other child deaths; reduce duplication of effort; and allow the Department of Health and other agencies to develop appropriate strategies to reduce the occurrence of child deaths from preventable situations.

By monitoring the occurrence of childhood deaths and performing an appropriate investigation when deaths occur, child death review teams have a unique ability to gather the detailed information that is necessary for effective injury/disease prevention activities. Collaboration among agencies enhances the ability to determine accurately the cause and circumstances of death. Information about the death of one child may lead to preventive strategies to protect the life of another. The benefits of implementing a comprehensive all child death review process would include increasing the number of thorough child death investigations by law enforcement and medical examiners, enhancing interagency cooperation, improving allocation of limited resources, and providing consistency in the certification of the cause and manner of death. The overall benefit is increasing the reliability of data from which to identify actions that will reduce child deaths.

Each day in Florida, an average of eight children from birth through aged 19 years die. The 2008 Kids Count Data Book ranks Florida as 39th out of 51 states (including the District of Columbia) for its child death rate for children ages one through 14. [12] This is a decrease in standings from 2006 when Florida ranked 27th. In 2006, a total of 3,241 children birth through 19 years of age died (Florida Vital Statistics). Of these, 1,713 were less than one year of age, and only a sampling of these would have been reviewed by a FIMR. The State CADR Team reviewed the deaths of 163 children who died in 2006.[6] However, nearly 70 percent of all Florida child deaths are not given a thorough review because they have not been verified as resulting from caregiver maltreatment. This means that conclusions and recommendations based on the deaths reviewed are limited in their generalization to the larger population of children who die in Florida. By identifying local factors related to mortality, heightening local awareness of these factors, and mobilizing communities to enact needed changes, the incidence of child deaths can be decreased.

DOH capacity

The Department of Health Divisions of Children's Medical Services and Family Health and the Office of Injury Prevention provide public awareness and educational information on several topics that are associated with infant abuse and neglect: Safe Sleep for Infants, Shaken Baby Syndrome/Abusive Head Trauma, and Drowning Prevention. There is a greater emphasis on providing parents with information to support their role as a parent.

The Florida Child Abuse Death Review Committee has recommended in each annual report since 1999 that Florida establish an all child death review process. A legislative proposal for establishing an all child death review has been submitted by the department to the governor. The submitted proposal does not have a fiscal note; it states that we will implement based on available resources. This would put Florida on a par with 44 other states that current have an all child death review process and align the state with national best practices established by the Centers for Disease Control and Prevention. Initially, the department could move in an incremental manner to implement an all child death review system within available resources. Input and guidance will be sought from the National FIMR and CDR programs, as well as other states that have implemented an all child death review process.

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Enhancing Protective Factors, Child Welfare Information Gateway, http://www.childwelfare.gov/preventing/promoting/protectfactors/

Mid-Course Review Healthy People 2010, Injury and Violence Prevention 15, Centers for Disease Control. http://www.healthypeople.gov/data/midcourse/pdf/FA15.pdf

Kids Count Data Book 2008, Annie E. Casey Foundation, http://datacenter.kidscount.org/Databook/2009/OnlineBooks/StateProfiles/AEC189%20profile_Florida.pdf

OBESITY AND PHYSICAL ACTIVITY PREGNANT WOMEN AND INFANTS

Definition and General Description of the Issue/Problem

Obesity poses a serious health challenge. Evidence indicates that obesity begets obesity: children of obese parents have a strong tendency toward obesity and a multitude of resultant complications (Reece, A., 2007). Obesity in pregnancy includes women who were obese before they became pregnant and the ones who became relatively overweight or obese from excess weight gain during pregnancy. Exercise during pregnancy increases benefits, prevents gestational diabetes, relieves stress, builds the stamina needed for labor and delivery, and it also helps women better cope during the postpartum period http://www.marchofdimes.com/pnhec/159_515.asp.

Magnitude

The prevalence of obesity is increasing among women in the United States. During the period 2004-2005, one in five women were obese at the end of their pregnancy (Chu SY, Kim SY, & Bish CL, 2008). Data from New York City and the 29 states that participated in PRAMS during 2004-2005 found that excessive gestational weight gain was common in all BMI groups and that prepregnancy BMI was the stronger predictor of the level of gestational weight gain (Chu, S.Y.; Callaghan, W; Bish, C; & D'Angelo, D; 2009).

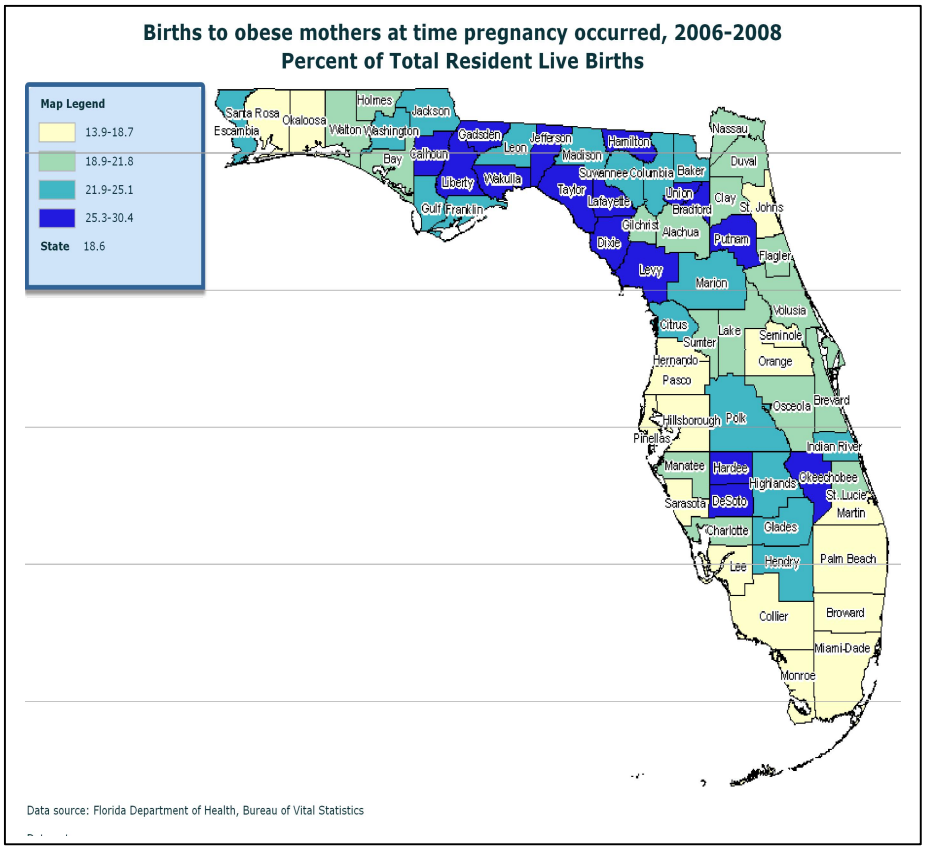
During FY 2000-2005, 28 percent of Florida women were overweight or obese before their pregnancy and 47 percent gained excessive weight during pregnancy based on information from the Florida PRAMS linked with birth certificate and WIC data. Table 1 shows the significant risk factors for gaining excessive weight during pregnancy: teens (1.1; 95 percent CI 1.0-1.3), age 20-34 (1.1; 95 percent 1.0-1.3), women that completed high school education (1.1 95 percent 1.0-1.2), obese (1.4; 95 percent 1.3-1.5)/overweight (1.4; 95 percent 1.4-1.5), primiparous women (1.1; 95 percent 1.1-1.2), women who smoke but quit during pregnancy (1.3; 95 percent 1.2-1.4), and women who smoke during pregnancy (1.1; 95 percent 1.0-1.2) had higher probability of gain excessive weight during pregnancy. The preventive factors were underweight (0.6; 95 percent 0.5-0.8) and foreign women (0.9; 95 percent 0.8-1.0). Of overweight or obese women, 43 percent were in WIC compared with 34 percent non-WIC respectively.

Table 1: Crude and Adjusted Risk Ratios for Gaining Excessive Weight during Pregnancy. Florida 2000-2005

Variables	CRR (95% CI)	ARR (95%CI)
Age/ Ref Age 35+		
Age Less than 20	1.21 (1.09-1.34)	1.13 (1.01-1.28)
Age 20-34	1.20 (1.09-1.32)	1.14 (1.04-1.26)
Education/ Ref More than HS		
High School	1.11 (1.04-1.17)	1.10 (1.03-1.17)
BMI/Ref Normal weight		
Underweight	0.67 (0.56-0.81)	0.62 (0.51-0.76)
Overweight	1.39 (1.31-1.47)	1.43 (1.35-1.52)
Obese	1.40 (1.31-1.50)	1.44 (1.34-1.54)
Parity (Previous LB)/Ref Yes		
No	1.11 (1.05-1.17)	1.14 (1.08-1.21)
Smoke/Ref Never smoke		
Smoke but quit during pregnancy	1.32 (1.23-1.41)	1.30 (1.21-1.39)
Smoke during pregnancy	1.12 (1.03-1.23)	1.12 (1.02-1.23)
Foreign born/Ref No		
Yes	0.86 (0.80-0.93)	0.91 (0.85-0.98)

There is a pattern of excessive weight gain by region. North Central Florida and the inland counties of South Florida present higher percentages of obese mothers at time of delivery, as is shown in the following figure by counties in Florida during the period 2006-2008. Sixty-four percent of births in Florida were in counties that had 16.7 percent obese mothers at the time of pregnancy, 22.1 percent of births occurred in counties that had 20.4 percent obese mothers at the time of pregnancy, 11.4 percent of births occurred in counties in that had 23.5 percent obese mothers at time of pregnancy, and 2.5 percent of births were in counties that had 27.5 percent obese mothers at time of pregnancy.

There is not information available about physical activity.



Severity/Consequences

Pregnant obese women are at an increased risk for pre-eclampsia, gestational diabetes, cesarean delivery, and postpartum infection. At the same time, the fetus is at increased risk for neural tube defects, birth trauma, and late fetal death (March of Dimes)

http://www.marchofdimes.com/aboutus/10651_12183.asp. Additionally, obesity increases the risk of having inadequate contraction patterns during the fist stage of labor and fetal monitoring is not as accurate as with non-obese patients. http://www.norcalmutual.com/publications/claimsrx/mar_09.pdf

Data from the PRAMS, birth certificate and WIC sources indicate that 74 percent of children who weighed more than 4000 grams at delivery were born to mothers who gained excessive weight during their pregnancy.

During 1999-2007, the pregnancy-associated mortality review (PAMR) process identified 324 deaths as pregnancy-related deaths. Of the pregnancy related deaths 63 percent were from women who were overweight (37 percent) or obese (63 percent). Thompson et al (1999-2004), found that the adjusted pregnancy-related mortality odd ratios for overweight (BMI 25.0-29.9), obese (BMI 30-39.9), and morbidly obese (BMI 40+) when compared with normal weight were 1.84, 3.58, and 8.46 respectively. The study "Maternal Obesity and Risk of Infant Death Based on Florida Birth Records for 2004" found that pre-pregnancy maternal obesity was associated with increased odds of infant death. The odd ratios when compared with normal weight were 1.23 and 1.70 for obese and morbidly obese; both are statistically significant at 0.05 levels (Thompson, Clark, Wood and Zeni, 2008).

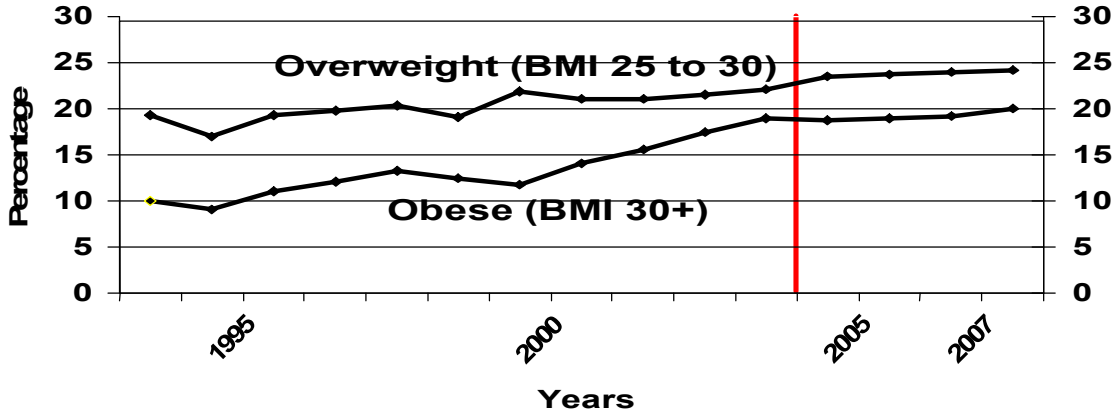
There is not information available about physical activity.

Trends

Figure 2 shows the percentage of live births to women who were obese and overweight before their pregnancy. The percentage of overweight and obese women before pregnancy has shown manifested increases in most of the years since 1993. Decreases for overweight women before pregnancy were observed in 1995, 1999, and 2001, while the percentage of obese women decreased in 1995, 1999, and 2000.

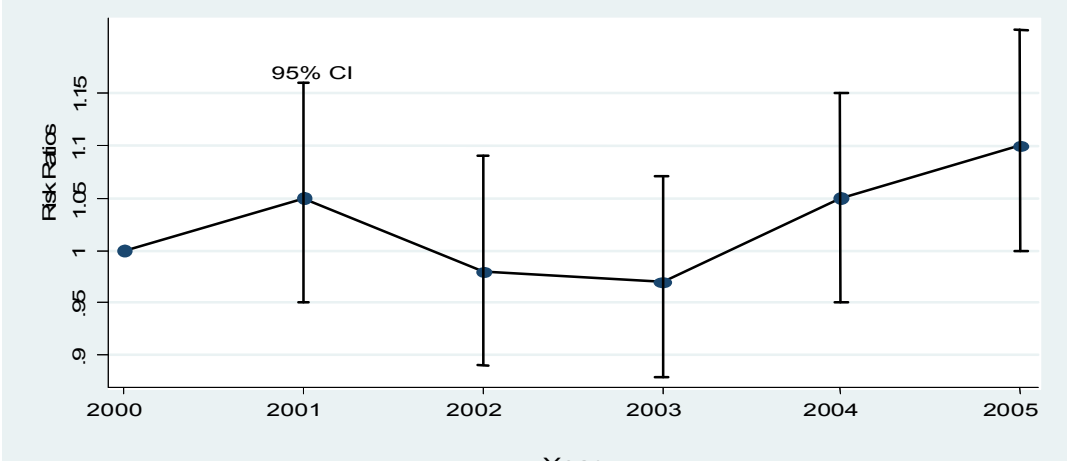
The adjusted risk ratios using the PRAMS (Figure 3) data linked with birth certificate and WIC data, showed that during the years 2001, 2004, and 2005, there was an increased probability of gaining excessive weight during pregnancy when compared with the year 2000 as a reference, but is worth mentioning that the year 2005 was statistically significant at the alpha 0.05 level. Other significant factors for gaining excessive weight during pregnancy using the link file were being overweight or obese prior to pregnancy, and being poor (Medicaid during pregnancy).

Figure 2 Percent of Live Births to Obese and Overweight Prepregnant Mothers.



Source: FDOH PRAMS Surveillance Reports (modified) until 2004 and Florida CHARTS 2005-2006

Figure 3 Risk Ratios of Gaining Excessive Weight during Pregnancy 2000-2005



Source: PAMR database

There is not information available about physical activity during pregnancy.

National or State Goals

Currently, there are no national or state goals regarding overweight and obesity prior to pregnancy, although there are national goals for overweight and obesity for the general population.

According to an updated set of pregnancy weight gain guidelines released by the Institute of Medicine in 2009 (www.iom.edu), obese women should limit weight gain to between 11 and 20 pounds during gestation. The Institute of Medicine also reevaluated the weight gain recommendations for overweight, normal weight, and underweight women. The Institute now suggests overweight women gain between 15 and 25 pounds, normal weight women gain 25 to 35 pounds, and underweight women gain 28 to 40 pounds during gestation.

These guidelines are based on multiple factors affecting the health of the mother and the fetus. Most central to the Institute's recommendations is the body mass index (BMI) of the expectant mother, a measurement based on acceptable weight to height ratios. Women with a BMI of 30 or greater are considered obese, while a BMI of 25 to 29.9 is considered overweight. Normal weight women have BMIs between 18.5 and 24.9 and a BMI below 18.5 falls in the underweight range.

The U.S. Department of Health and Human Services recommends that healthy pregnant women get at least 2 ½ hours aerobic exercise every week. http://www.marchofdimes.com/pnhec/159_515.asp.

Potential for Improvement

Healthy People 2010 in the *Dietary Guidelines for Americans* recommends that to build a healthy base, persons age 2 and older should choose a healthful assortment of foods that includes vegetables, fruits, grains (especially whole grains), fat-free or low-fat milk products; and fish, lean meat, poultry, or beans. The guidelines further emphasize the importance of choosing foods that are low in saturated fat and added sugars most of the time and, whatever the food, eating a sensible portion size. It is recognized, however, that this guidance may be particularly challenging when eating out because the consumer may be offered large portion sizes with unknown amounts of saturated fat and added sugars.

The *Dietary Guidelines for Americans* recommend that all adults be more active throughout the day and get at least 30 minutes of moderate physical activity most, or preferably all, days of the week. Adults who are trying to maintain healthy weight after weight loss are advised to get even more physical activity. The guidelines also

recommend that children get at least 60 minutes of physical activity daily and limit inactive forms of play such as television watching and computer games. http://www.healthypeople.gov/Document/html/uih/uih_bw/uih_4.htm#overandobese

Adults should do two hours and 30 minutes a week of moderate-intensity, or one hour and 15 minutes (75 minutes) a week of vigorous aerobic physical activity, or an equivalent combination of moderate and vigorous intensity aerobic physical activity. Aerobic activity should be performed in episodes of at least 10 minutes, preferably spread throughout the week.

- Additional health benefits are provided by increasing to five hours (300 minutes) a week of moderate-intensity aerobic physical activity, or two hours and 30 minutes a week of vigorous-intensity physical activity, or an equivalent combination of both.
- Adults should also do muscle-strengthening activities that involve all major muscle groups performed on two or more days per week.

http://www.health.gov/paguidelines/factsheetprof.aspx

DOH Capacity

The Healthy Start Program and the Supplemental Nutrition Program for Women, Infant and Children (WIC) target women with these health issues for services. In WIC, pregnant women are eligible to receive supplemental nutritious foods and nutrition education and counseling services. The new WIC food package that was implemented in October 2009 provides nutritious foods including: low fat or fat free milk, whole wheat bread, brown rice or soft corn tortillas, and fresh fruits and vegetables for eligible women. Also, the Healthy Start Program has enhanced nutrition services, if funded, to provide overweight and obese pregnant women with these qualifying health conditions, intensive nutrition services to supplement the WIC nutrition services.

The obesity grant is no longer available; however the department has several programs that promote obesity prevention through good nutrition and physical activity. Examples of the department's programs are: the Healthy Start Program focuses on improving the health of pregnant women through nutritional counseling and the Bureau of Chronic Disease Prevention and Health Promotion promotes obesity prevention through programs such as, the Fruit & Vegetables Program that is incorporated in worksites, health agencies, schools, restaurants, cafeterias and community groups and the "Step Up, Florida - On Our Way To Healthy Living!" statewide initiative promoting physical activity, nutrition and healthy lifestyles to Florida's citizens and visitors.

Current State Priority or Objective

The Orange County Health Department Nutrition Program developed a new initiative called Better Weight for A Better You (BABY). This program was funded with federal HRSA grant funds. This program targeted postpartum WIC mothers who were obese or overweight and developed a community-based intervention to assist with weight reduction and weight maintenance for these women. *Better Weight for A Better You (BABY): An Innovative Approach to Promoting a Healthy Weight Among Postpartum Overweight and Obese Black and Hispanic Women in Orange County WIC Program FL.* M.E. Mesa, et. al. Journal of the American Dietetic Association. September 2008 (108), Issue 9, Supplement, Page A41.

Healthy Start receives state and federal funding, evaluates programs, and makes modifications to increase benefits and improve health outcomes. The Florida WIC

program targets and certifies pregnant women who have a low hemoglobin or hematocrit for participation in WIC services to improve their health and nutritional status. The Healthy Start Program offers some enhanced nutrition services for high-risk pregnant women who are screened and determined eligible for the Healthy Start, if the funding is available for these services.

LOW MATERNAL WEIGHT GAIN

Definition and General Description of the issue/problem

Low maternal weight gain can be identified at any point in pregnancy, such that when using an Institute of Medicine (IOM)-based weight gain grid, a pregnant woman's weight gain plots beneath the bottom line of the appropriate weight gain range for her respective pre-pregnancy weight category.

Women who gain less than the IOM's recommended weight gain during pregnancy are at increased risk of giving birth to an infant with low birthweight (less than 2500 grams at birth) and who is preterm (less than 37 weeks gestation). Low birthweight (LBW) is an important determinant of neonatal and postneonatal mortality. When interviewed, many pregnant women have inaccurate knowledge of appropriate gestational weight gain and suggest a weight gain amount below the current recommendations.

The adverse outcomes associated with low maternal weight gain are incidence of LBW, neonatal and postneonatal mortality, and preterm birth.

Magnitude

In the 2008 PNSS (Pregnancy Nutrition Surveillance Survey), 25 percent of women nationally gained less than the ideal amount of weight during pregnancy compared to 25.9 percent of the women in Florida. In the same survey, 8.2 percent of infants nationally had LBW compared to 8.6 percent of the infants in Florida. In a comparison of the incidence of preterm births nationally to Florida, the prevalence was 11.5 percent and 13.4 percent, respectively.

Maternal health indicators were affected by race/ethnicity and age in the 2008 PNSS. When considering race and ethnic groups, 30.7 percent of Asian/Pacific Islander (API) women gained less than the recommended ideal weight gain, followed in descending order by Hispanic, Black Not Hispanic, American Indian/Alaska Native (AIAN), and White Not Hispanic. When comparing age ranges, 32.4 percent of women greater than or equal to 40 years of age gained less than the ideal recommended weight gain, followed in descending order by women aged 30 to 39 years, adolescents less than 15 years, teens 15 to 17 years, women 20 to 29 years and adolescents 18 to 19 years.

Infant health indicators were also affected by race/ethnicity and age in the 2008 PNSS. By racial and ethnic groups, the incidence of LBW was highest for Black Not Hispanic infants (11.8 percent) followed in descending order by API, AIAN, White Not Hispanic, and Hispanic. By racial and ethnic groups, the incidence of preterm birth was also highest for Black Not Hispanic infants (13.7 percent) followed by AIAN, Hispanic, White Not Hispanic, and API. Women greater than 40 years of age also had the highest incidence for LBW (10.6 percent) and preterm birth (13.0 percent). Non-Hispanic black mothers are 2.5 times as likely as Non-Hispanic white mothers to begin prenatal care in the third trimester, or not receive prenatal care at all according Office of Minority Health at http://minorityhealth.hhs.gov/templates/browse.aspx?lvl=2&lvlID=9

Effect of Race/Ethnicity and Age on Health Indicators For < Ideal Weight Gain, LBW, and Preterm Birth			
Race/Ethnicity	**< Ideal Weight Gain** (percent)	**LBW (percent)**	**Preterm Birth (percent)**
White, Not Hispanic	21.6	7.3	10.1
Black, Not Hispanic	27.2	11.8	13.7
Hispanic,	27.8	6.8	11.9
Am Ind/Alaska Native	24.9	7.4	12.6
Asian/Pacific Islander	30.7	7.6	9.2
Age			
< 15 years	25.8	8.7	15.4
15 to 17 years	24.6	8.0	12.0
18 to 19 years	22.7	7.5	11.1
20-19 years	24.5	6.7	10.8
30 to 39 years	27.6	7.5	13.0
> = 40 years	32.4	10.6	13.0

*PNSS, 2008 National Data

The federally-funded Supplemental Nutrition Program for Women, Infants, and Children (WIC) improves birth weight in infants of lower income women who participate early and stay longer in the program as compared to women who participate later in their pregnancies. In the 2008 PNSS comparison of maternal behavior indicators, the national prevalence of WIC enrollment in the first trimester was 31.7 percent compared to 30.1 percent in Florida during the same time period. The quarterly report of WIC indicators for July 2009 through September 2009 showed that 43.1 percent of pregnant women enrolled in the Florida WIC Program were certified in the first trimester. The *Florida Vital Statistics* reports between 2007 and 2008 indicate the percentage of resident live births in Florida with LBW increased slightly to 8.8 percent, and the neonatal death rate increased from 4.4 per 1,000 live births in 2007 to 4.6 per 1,000 live births in 2008. In 2008, the non-white neonatal death rate (7.4 per 1,000 live births) was more than twice for white infants (3.5 per 1,000 live births). LBW and preterm birth was the second leading cause of death of infants in Florida in 2007. Of the resident live births in Florida in 2007, 76.9 percent of the mothers began prenatal care in the first trimester, 17.3 percent in the second trimester, 3.7 percent in the third trimester, and 2.0 percent received no prenatal care. http://www.flpublichealth.com/VSBOOK/pdf/2008/Fetal.pdf;

Severity/consequences

The infant mortality rate is made up of two components: neonatal mortality (death in the first 28 days of life) and postneonatal mortality (death from the infants' 29th day but within the first year). The second leading cause of neonatal death in the US includes disorders related to preterm and LBW. Of the 10 leading causes, the most likely to be preventable are those related to preterm birth and LBW. LBW infants who survive are at increased risk for health problems ranging from neurodevelopmental disabilities to respiratory disorders. Preterm birth is associated with increased risk for newborn health

complications: long-term disabilities such as mental retardation, cerebral palsy, lung and gastrointestinal problems, and vision and hearing loss, and death. Each child born with an intellectual disability or a comparable condition leads to direct and indirect societal costs over his or her lifetime of more than $1 million. Adverse pregnancy outcomes avoided through preconception care represent both an alleviation of human suffering and a reduced burden on the health system. Each year, hospital care for preterm infants exceeds $13 billion. Mathews TJ et al. Infant Mortality Statistics From the 2005 Period Linked Birth/Infant Death Set. National Vital Statistics Reports 2008; 57 (2): 1-32. Lackritz E. Meeting the Challenges of Prematurity: CDC Prevention Efforts. Centers for Disease Control and Prevention, Before the U.S. Senate 5/12/2004. March of Dimes. Quick Reference Fact Sheet. Preterm Births.
http://www.marchofdimes.com/professional/14332_1157.asp

http://www.cdc.gov/washington/testimony/Ch5122004196.htm;
http://www.cdc.gov/nchs/data/databriefs/db09.htm

http://www.cdc.gov/ncbddd/preconception/documents/At-a-glance-4-11-06.pdf

Infant mortality is one of the most important indicators of the health of a nation, as it is associated with a variety of factors such as maternal health, quality and access to medical care, socioeconomic conditions, and public health practices. In the U.S., the rate of preterm births decreased 1 percent in 2007, to 12.7 percent. The rate of LBW also declined slightly in 2007, to 8.2 percent. http://www.cdc.gov/nchs/births.htm

Trend

From 1998 through 2008 in the PNSS, the following trends occurred nationally for relevant health indicators: the prevalence of women who gained less than the IOM's recommended weight gain during pregnancy dropped from 33.1 percent to 25 percent; the incidence of LBW increased from 7.7 percent to 8.2 percent; the prevalence of preterm birth increased from 10.9 percent to 11.5 percent; and the incidence of WIC enrollment in the first trimester increased from 27.4 percent to 31.7 percent.

Health disparities continue to exist between black and white maternal and infant outcomes nationally. From 1998 through 2008 in the PNSS the following trends occurred nationally for relevant health indicators in regards to race and ethnicity: the prevalence of women who gained less than the IOM's recommended weight gain during pregnancy dropped for all race and ethnic groups; the incidence of WIC enrollment in the first trimester increased for all race and ethnic groups; the prevalence of LBW increased for all race and ethnic groups and remained higher than the *Healthy People 2010* objective of 5 percent. The range was between 6.8 percent (Hispanic) and 11.8 percent (Black Not Hispanic); the incidence for preterm birth rose across all races and ethnic groups, remained the same for White Not Hispanic (10.1 percent), and decreased from 11.0 percent to 9.2 percent for APIs; the prevalence for preterm birth was lowest for API at 9.2 percent and was highest for Black Not Hispanic infants at 13.7 percent.

The midcourse review for the *Healthy People 2010 objectives* reports part of the increase in LBW rates may be due to recent increases in the rate for multiple births, which may be related to more widespread use of assisted reproductive technologies and pharmacologic treatment of infertility. Similarly, since twins and triplets are more likely to be born early, the rise in multiple births affected the preterm delivery rate as well. Also, average maternal age at first birth increased.

The condition of food insecurity includes both inadequate quantities and inadequate quality of nutrients available. Household food managers (usually mothers) trade off food quality for quantity to prevent household members from feeling persistently hungry. Adequate prenatal nutrition is critical for normal development of the fetal body and brain. There is a large volume of research that has confirmed the importance of nutrition during the prenatal and neonatal periods, but far fewer studies have specifically addressed the role of food security during the interconception period of the life cycle. Food insecurity has been associated with low birthweight deliveries. Household food security In the United States, 2008.Nord, Andrews, & Carlson, Economic Research Report No. (ERR-83) 66 pp, November 2009; Martin, J.A., et al. Births: Final data for 2002. ***National Vital Statistics Reports.*** Vol. 52. No. 10. Hyattsville, MD: NCHS, 2004; Borders, A.E.B., Grobman W.A., Amsden, L.B. Holl J.L. Chronic Stress and Low Birth Weight Neonates in a Low-Income Population of Women. Obstetrics & Gynecology, 2007; 109: 331-338. .http://www.cdc.gov/mmwr/preview/mmwrhtml/ss5610a1.htm

National/state goals

The *Healthy People 2010* Objective 16-12 proposes increasing the proportion of mothers who achieve recommended weight gain during their pregnancies to reduce the incidence of adverse pregnancy outcomes. Objective 16-10a recommends reducing LBW to no more than 5 percent of all live births. Objective 16-11a proposes reducing preterm births to 7.6 percent. Objective 16-1d recommends a reduction of neonatal deaths to 2.9 percent. Florida is not meeting any of the above *Healthy People 2010 O*bjectives.

Inadequate weight gain is a contributing factor for adverse pregnancy outcomes and adverse pregnancy outcomes can cause long-term health and developmental problems for the infant.

Potential for improvement

Preliminary results from a study conducted by Resnick et al, investigated the impact of prenatal WIC enrollment on birth outcome data for 1996 through 1998 among women who received Medicaid-funded pregnancy services in Florida. The study confirmed that infant and neonatal mortality and the prevalence of LBW and very low birth weight decreases if women are enrolled in WIC during the prenatal period. Buescher et al found that North Carolina WIC non-participants were significantly more likely than WIC participants to have LBW infants. A study by Avruck and Cackley correlated the reduced risk of LBW and very low birth weight with savings in the cost of medical services. This study estimated that for every dollar invested in prenatal WIC services, approximately three dollars was saved in infant medical services during the first year of life. These reports indicate that additional efforts to enroll more pregnant women in WIC could result in significant savings to Medicaid. Buescher, P.A. et al. Prenatal WIC Participation in Relation to Low Birth Weight and Medicaid Infant Costs in North Carolina-A 1997 Update, North Carolina Public Health Center for Health Information and Statistics (NCPH CHIS) Studies, No. 122, November 2000, 1-10. Avruch, S.; Cackley, AP. Savings Achieved By Giving WIC Benefits to Women Prenatally. Public Health Reports 1995; 110: 27-34.

DOH capacity

Pre-pregnancy Medicaid coverage appears to be associated with early initiation of prenatal care. More than a decade after welfare reform, it is essential to preserve the Medicaid expansions for pregnant women, foster Medicaid family planning waivers, and

promote access to primary care and early prenatal care, particularly for very low-income women. Rosenberg, D.; Handler, A.; Rankin, K.M.; Zimbeck, M.; Adams, E.K. Prenatal care initiation among very low-income women in the aftermath of welfare reform: does pre-pregnancy Medicaid coverage make a difference? Maternal Child Health J 11(1):11–17, 2007.

Current state priority or objective

Current priorities include more consistent emphasis on the provision of preconception care, nutrition education, and enrollment in WIC services early in the pregnancy. If substance abuse (drugs) is a problem, there is a need to improve services and referrals for mothers during the preconception period.

The 2006 and 2007 PedNSS reports recommended that public health programs need to support the prevention of LBW by promoting preconception nutrition care and outreach activities to identify pregnancy in its early stages and foster early entry into comprehensive prenatal care, including the WIC and the Title V Maternal and Child Health Program.

In the Progress Review of the Healthy People Objectives 2010 (April 2008), the following barriers to public health services were cited:

- The infrastructure of the nation's public health system and the resources of state and local health agencies have been weakened over time because of emerging health threats, such as bioterrorism, as well as the continuing responsibility to aid in disease prevention, respond to natural disasters, protect against environmental hazards, and encourage healthy behaviors.
- Although the United States is served by a broad range of health agencies, a report to the U.S. Congress by the Institute of Medicine (IOM), ***Public Health's Infrastructure: A Status Report***, found that only one-third of the U.S. population is effectively served by these public health agencies.
- The public health workforce is diminishing because of a number of factors, including attrition through retirement and the difficulty of hiring new staff as a result of State and local budget constraints and noncompetitive wages. In 2000, there were 50,000 fewer public health workers than in 1980. By 2012, over 50 percent will be eligible to retire. An additional 250,000 public health workers will be needed by 2020. http://www.healthypeople.gov/data/2010prog/focus23/

SIMPLIFYING THE MEDICAID APPLICATION PROCESS

Definition and General Description of the Issue/Problem

"No health insurance" is one of the most cited reasons for not seeing a doctor until late in pregnancy per callers to the state Maternal and Child Health hotline.[1] Additionally, callers to the Department of Health have stated "I faxed my papers to them 3 times" and my case is still pending; my doctor does not accept temporary Medicaid".

Florida Medicaid provides medical coverage to some low-income individuals and families. Medicaid coverage groups are enacted in the federal Social Security Act:

Title IV (Grants to States for Aid and Services to Needy Families with Children and for Child Welfare Services),

Title XIX (Grants to States for Medical Assistance Programs),and

Title XXI (State Children's Health Insurance Program-SCHIP).

Simplifying the Medicaid application process for pregnant women and infants is one of the needs identified during the 2010 Florida maternal and child health needs assessment. The Department of Children & Families', Automated Community Connection to Economic Self-Sufficiency (ACCESS) program determines Medicaid eligibility; the AHCA is the agency in charge of administering Medicaid services in Florida. All Medicaid applications must be approved or denied within 45 days from the date the application is received by DCF.

Florida has chosen to expand Medicaid eligibility for pregnant women and infants in higher income groups than mandated by federal law. A pregnant woman's gross family income must be less than 185 percent of the Federal Poverty Level (FPL) for the size of the family; an infant, may be covered with a family gross income up to 200 percent for the FPL for Medicaid financial eligibility. Medicaid funding covers the infant expansion up to 185 percent; from 185-200 percent is covered by State Child Health Insurance Plan funding.

Florida offers presumptive eligibility for pregnant women, which is "temporary" Medicaid coverage for outpatient services, such as doctor's visits, labs, and prescriptions. This temporary Medicaid coverage is in place until a full determination for "regular" Medicaid is made by DCF. This determination is made within 45 days of application for the temporary Medicaid.

Pregnant women can apply for temporary presumptive eligibility at prenatal care locations where qualified designated providers (QDPs) are trained to determine this temporary eligibility for pregnancy Medicaid. In Florida, QDPs are county health departments, Regional Perinatal Intensive Care Centers (RPICC) and other state approved providers.

Pregnant women may apply directly to DCF for "regular" Medicaid by completing a mail in one page application or applying on line via the ACCESS website. Applications submitted via ACCESS website will be evaluated for eligibility for food stamps, cash assistance and Medicaid; one page mail in applications are specifically only for Medicaid coverage.

The Florida Department of Children and Families implemented the ACCESS website in 2005 and was awarded the Ash Institute, Kennedy School of Government, Innovation in Government Award in 2007 for the streamlined and innovative eligibility process.

The DCF report, “Days to Process” (www.dcf.state.fl.us/ess/agencyforms.shtml) shows that most often, applications for benefits are processed and approved within 23 days of receipt, far in advance of the federally required timeframe of 45 days for Medicaid.

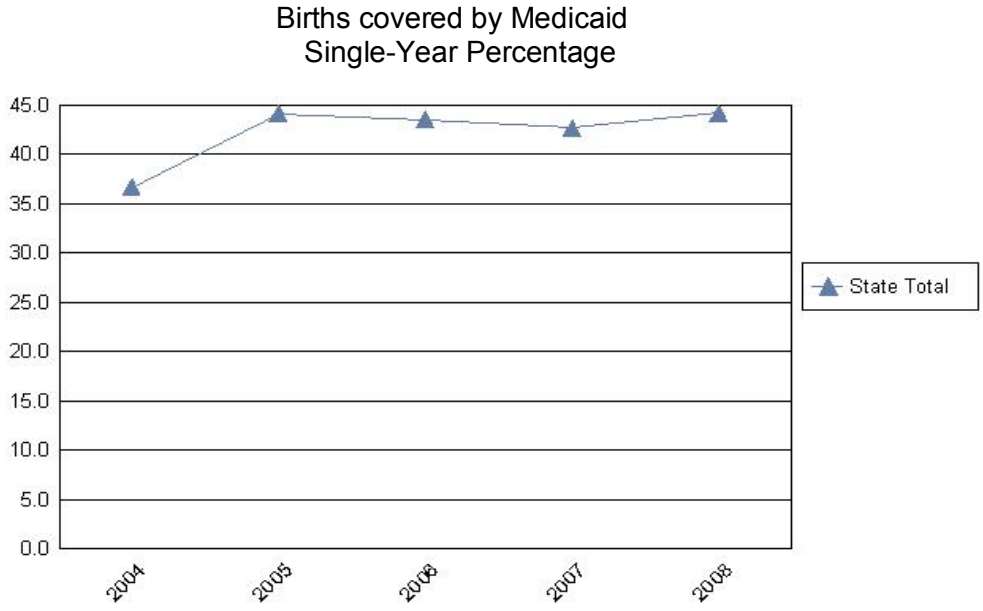
Florida also has a one page mail in application for the State Child Health Insurance Program, called Florida KidCare. All applications submitted to Florida KidCare are also evaluated for Medicaid eligibility. If the applicant is eligible for Medicaid, the enrollment will be processed. Families may also apply on line at http://www.floridakidcare.org/.

Newborn babies are presumptively eligible without filing an application, for up to a year of Medicaid if the mother is Medicaid eligible on the baby's date of birth. Florida requires proof of income, citizenship and identity to apply for regular Medicaid. Applications for pregnancy Medicaid also require proof of pregnancy. These documents are either mailed in to DCF with the application or faxed to a DCF service site when the application is made on line.

Magnitude

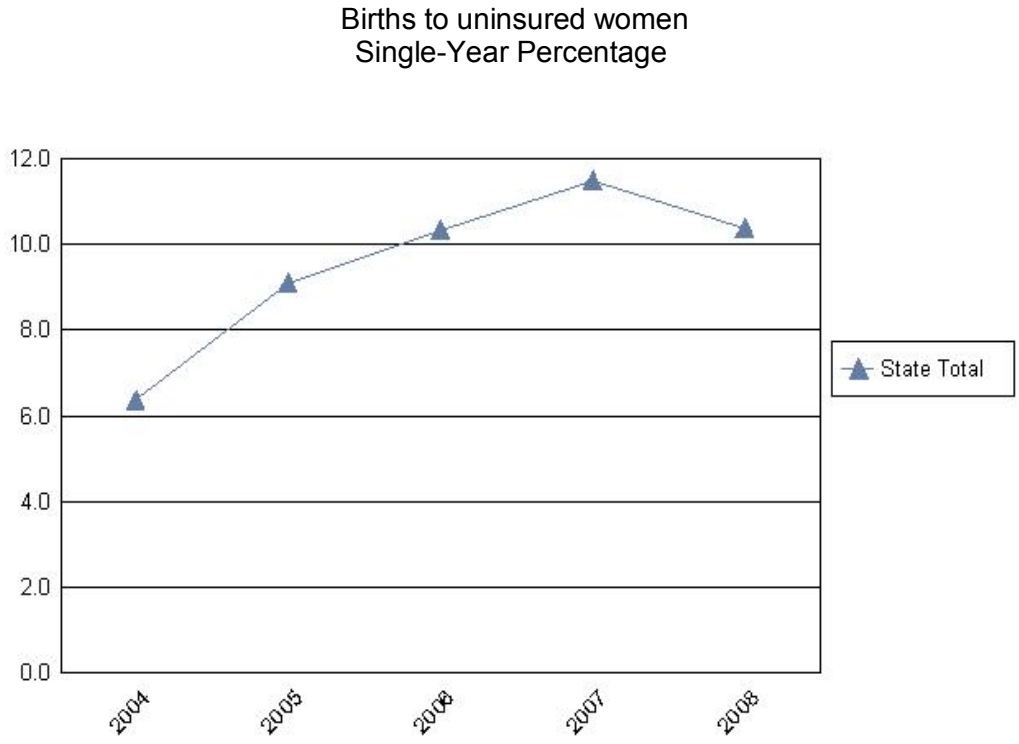
The need is great in Florida for medical coverage during pregnancy and infancy. In 2008, Florida had 231,417 births. Of those births, Medicaid covered 102,339 or 44.2 percent of all births. It is important to note birth certificate Medicaid coverage is underreported by 22 percent.

The Florida Pregnancy Risk Assessment Monitoring System (PRAMS) is a survey of women who have recently given birth. PRAMS is a random population-based surveillance system of maternal behaviors and experiences before, during, and shortly after pregnancy. Data collected by PRAMS include information on maternal health and behaviors, prenatal and postpartum care, and infant health. One of the questions asked on the survey is “Did you have any trouble getting Medicaid during your pregnancy?” The 2008 data shows that, among women who tried getting Medicaid during pregnancy, 36.3 percent had trouble.



In 2008, 24,008 or 10.4 percent of births were to uninsured Florida women.

Data Source: FloridaCHARTS



Data Source: FloridaCHARTS

Severity/consequences

In 2008, only 58.7 percent of live births to mothers covered by Medicaid entered prenatal care in the first trimester compared to 83.6 percent of live births to mothers covered by private insurance (http://www.floridacharts.com). Although low income mothers enter prenatal care later than higher income women, much of this disparity is due to the complexity of becoming eligible for Medicaid. In fact, women on Medicaid are entering prenatal care later, as demonstrated by using Medicaid claims data.

Delays in entry to prenatal care also impact and delay screening and health services for infections, poor health behaviors, and other risk factors that may have an adverse impact on a pregnancy outcome. These delays in health services include high-risk obstetrical clinics through RPICC, WIC, Healthy Start, sexually transmitted disease (STD) clinics, smoking cessation services, and more.

Trend

Florida PRAMS 2008 data reveals that overall the prevalence of having difficulty in getting Medicaid during pregnancy is 36.3 percent; this is an increase from the 33.6 percent reported in PRAMS 2005.

PRAMS Question: Did you have any trouble getting Medicaid during your pregnancy? (Among women who tried getting Medicaid during pregnancy.) *Answer: Yes.*

Prevalence (Percent) of Having Difficulty in Getting Medicaid During Pregnancy

Among Women Who Tried to Get Medicaid in Florida **2005**

	%	CI	
Overall	33.6	29.2	38.1
Race/Ethnicity			
NH Whites	25.8	18.1	33.4
NH Blacks	31.1	23.5	38.6
Hispanics	38.9	31.7	46.2

Prevalence (Percent) of Having Difficulty in Getting Medicaid During Pregnancy

Among Women Who Tried to Get Medicaid in Florida **2008**

	%	CI	
Overall	36.3	31.6	41.1
Race/Ethnicity			
NH Whites	32.9	26.3	40.4
NH Blacks	43.1	30.8	56.3
Hispanics	36.3	29.1	44.1

National/state goals

Simplifying the Medicaid application is related to the department's 2007-08 through 2011-12 Long Range Program Plan goal: "Improve Access to Basic Family Health Care Services", in addition to the national Healthy People 2010 leading health indicator "Access to Health Care." http://www.healthypeople.gov/LHI/

Potential for improvement

Florida has moved toward a simplified application for Medicaid. Applications are mail in or web based; face-to-face interviews are not required, and presumptive eligibility is allowed.

Many states are trying to simplify the application process for Medicaid benefits and renewals. Like Florida, many states have gone to mail in applications and the use of online applications, not requiring a face-to-face interview.

States are now attempting to streamline the paper documentation, by modifying systems to move away from paper documentation to more of a paperless verification system.

Nationwide, as of January 2009, 14 states do not require families to provide paper documentation of their income at enrollment for one or both of their child health programs.[2] These states are using available data bases to verify income. Louisiana has dropped the requirement to provide proof of pregnancy with applications for pregnancy Medicaid and has not seen an issue with fraudulent applications.[3]

More can be done to simplify the process. Strategies include one dedicated mail-in address and office staff to process pregnancy Medicaid applications; eliminate paper documentation requirements; delete proof of pregnancy; and design applications that are short, clear and at easy to read with 5th -6th grade literacy levels.[4]

DOH Capacity

The Department of Health has partnered with DCF and the AHCA in many initiatives designed to improve the health and wellness of the maternal and infant population. Further work can be done on simplifying the Medicaid application process with the partnership of these agencies. Each component of the process can be evaluated, from outreach, website and mail-in form design, to state application for a demonstration waiver from the Center for Medicare and Medicaid Services.

Current State priority or objective

Simplifying the Medicaid application process for pregnant women and infants is linked to the Governor's goal to strengthen families by improving access to basic family health care services. This is also aligned with the Department of Health's mission to promote, protect and improve the health of all people in Florida. Accomplishing this initiative will help to reduce the burden of morbidity and mortality in our state.

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SAFE INFANT SLEEP BEHAVIORS

Definition and General Description of the issue/problem

A safe sleep environment includes always placing an infant on their back to sleep, placing an infant to sleep on a firm sleep surface, such as a safety-approved crib mattress covered with a fitted sheet, keeping soft objects, toys, and loose bedding out of the infant's sleep area, and avoiding letting an infant overheat during sleep. An unsafe sleep environment increases the risk of infant death. Unsafe sleep is defined as an infant sleeping in the prone or face down position, sleeping on soft bedding, sleeping on a sofa or chair, or sleeping with adults or other children on the same sleep surface. Unsafe sleep behaviors increase the risk of Sudden Unexpected Infant Death (SUID). SUID is defined as an infant death that occurs suddenly and unexpectedly where the cause or manner of death is not obvious prior to investigation. When infants are in an unsafe sleeping environment such as sleeping face down, their airways can become compressed or they can re-breathe exhaled gases increasing their risk for suffocation and SUID. Some infants sleeping face down will fail to wake up and eventually stop breathing in response to reduced oxygen. Infants can also suffocate and die if they are caught in situations from which they cannot escape an unsafe sleep environment such as becoming wedged between furniture cushions on a sofa or chair. Suffocation can also result when infants bed share with adults or other children due to close bodily contact, roll over onto the infant, or smothering of the infant by adult bedding such as pillows or comforters. Numerous studies have demonstrated that unsafe infant sleep practices contribute to SUID. In a review article of sudden infant death written by Kinney and Thach, they report that between 30 percent to 50 percent of infants with SIDS are still found sleeping face down and 50 percent of deaths occur when infants are sharing a bed, sofa or chair with another person (Kinney and Thach, 2009). This is despite efforts to educate care givers on the risks of unsafe sleep environments.

Communities may not be aware that infants are dying from preventable causes because the deaths are not investigated thoroughly. Without complete information, medical examiners cannot accurately classify the cause and manner of death and communities will not receive the information needed to put appropriate prevention services in place to reduce infant deaths. The CDC developed a standard investigation reporting form and a training curriculum to improve the accuracy of SUID classification but the form is not widely used across Florida.

Magnitude

Each year more than 4500 infants die unexpectedly in the United States[1] (www.cdc.gov/sids/index.htm) with 250-300 cases in Florida alone. Sudden Infant Death Syndrome (SIDS) is the most frequently reported type of Sudden Unexpected Infant Death. SIDS is defined as the sudden death of an infant less than one year of age that cannot be explained after a thorough investigation. Since the early 1990s, the US SIDS rates have declined more than 50 percent, but SIDS still remains the third leading cause of infant mortality and the leading cause of death for infants aged one to twelve months in the United States (CDC).[2]

A study utilizing data from 1993 to 2007 obtained from the National Infant Sleep Position Study found that the proportion of infants placed to sleep on their backs increased between 1993 and 2001, but since 2001 the proportion has not changed (Colson, Rybin, Smith, Colton, Lister & Corwin, 2009). Fewer black infants are placed on their backs to

sleep and the number of black infant deaths continues to be higher than the number of white infant deaths. From 2003 to 2007 this difference in back sleeping between white infants and black infants seems to be due to caregiver concern over choking and infant comfort (Colson, et.al, 2009).

The disparity in following safe sleep recommendations was also found in an analysis of responses to the Infant Feeding Practices Study II collected from May 2005 through June 2007. Questions about infant sleeping practices were asked in the postnatal questionnaires administered at 3, 6, 9, and 12 months. Results of this analysis indicated that over 20 percent of respondents were not putting their infants to sleep on their backs and rates of bed sharing ranged from 42 percent at 2 weeks of age to 27 percent at 12 months of age (Hauck, Signore, Fein, & Raju, 2008). Black mothers were less likely to use the supine (back) position and more likely to bed share. The most common reasons given for bed sharing were to calm a fussy infant, to help mother and/or baby sleep, and to facilitate breastfeeding (Hauck, et al, 2008).

Both studies found that mothers were not receiving advice from their physicians about how their infants should sleep. Responses from the Infant Feeding Practices Study revealed that only 10 to 15 percent of mothers reported a physician or nurse had advised them not to bed share (Hauck, et al, 2008). In Dr. Colson's study, more than 45 percent of mothers reported either receiving no advice or being advised to use the non-supine position (Colson, et. al, 2009). Health care providers are an important source of information for parents on infant care but a 2005 survey of pediatricians and family physicians found gaps in physician knowledge about safe sleep recommendations (Moon, Kington, Oden, Iglesias & Hauck, 2007).

Many infants in newborn intensive care units or newborn nurseries are still placed on their stomachs to sleep. A 2004 survey of hospital nurses found that some disagreed with the AAP recommendations and were concerned about aspiration if infants were placed on their backs (Bullock, Mickey, Green & Heine, 2004). Studies of hospital nursing practices have shown that nurses are not educating parents before hospital discharge on the need for infants to sleep on their backs (Stastny, Ichinose, Thayer, Olson & Keens, 2004). Without this education, parents are placing their infants to sleep on their stomachs because they observed them in that position in the newborn intensive care unit or newborn nursery.

In Florida from 1990 to 2005, the prevalence of SIDS deaths has declined 65 percent; however, the prevalence of SUIDs excluding SIDS increased 290 percent (CHARTS). A study conducted by the Florida Department of Health determined that a change in medical examiner coding preferences accounted for the decrease in SIDS deaths and increase in SUID cases (Watson, 2007).[3] Specifically, many deaths previously classified as SIDS are now classified as accidental suffocation or cause unknown. Therefore SUID and SIDS are still key types of infant mortality. For the period 2003-2005, the SUID rate among black infants (19 per 10,000 live births) was more than twice the SUID rate for white infants (8.4 per 10,000 live births (Broussard, 2009). Some of this disparity is due to differences in unsafe infant sleep practices between races.

The American Academy of Pediatrics (AAP) updated their recommendations for reducing the risk of SIDS in 2005. In addition to recommending that infants sleep only on their backs, they also recommending against bed sharing (AAP Task Force on Sudden Infant Death Syndrome, 2005). According to the most recent data from the Florida Pregnancy Risk Assessment Monitoring System (PRAMS) survey, almost 35 percent of all mothers were not putting their infants on their backs to sleep and over 44

percent engaged in bed sharing with their infants. There is a wide disparity in back sleeping and bed sharing among black and white Florida women. In Florida for the period 2004-2005, 61 percent of black women reported infrequent back sleeping vs. 35 percent of white women. Additionally, among black women, 67 percent reported frequent bed sharing compared to 38 percent of white women (Broussard, 2009).

Comparing 26 states including Florida that reported and met CDC's requirements for PRAMS reporting in 2005 through CPONDER (CDC's PRAMS On-line Data for Epidemiologic Research), Florida reported that only 61.5 percent of infants are most often laid on his or her back to sleep. This ranks Florida 22nd out of the 26 states for placing infants in the recommended supine position to sleep (states ranged from 54.1 percent to 82.9 percent) and below the Healthy People 2010 goal of 70 percent. Additionally, Florida reported that 20.4 percent of women reported most often laying their infant on his or her stomach to sleep, a known risk factor for SUID. This finding ranked Florida as the state with the 4th highest percentage of women who reported most often laying their infant on his or her stomach to sleep out of 26 states (states ranged from 6.1 percent to 21.4 percent). Examining bed sharing among 16 states that reported information on whether or not an infant usually sleeps in a shared bed, Florida reported that 25.1 percent of infants are reported to bed share ranking Florida as the 8th highest state out of 16 for bed sharing (states ranged from 20.5 percent to 43.3 percent).

Specific to Florida, infrequent back sleeping was more likely among women with a mistimed or unwanted pregnancy or who experienced traumatic stress, but among black women, infrequent back sleeping was also more likely among those who did not acknowledge the infant's father on the birth certificate (Broussard). Bed sharing was more likely to occur among black women who had late or no prenatal care, breastfed for less than 4 weeks, and who experienced depression during or after pregnancy (Broussard). Black mothers who experienced depression were 7.5 times more likely to bed share than black mothers who were not depressed (Broussard).

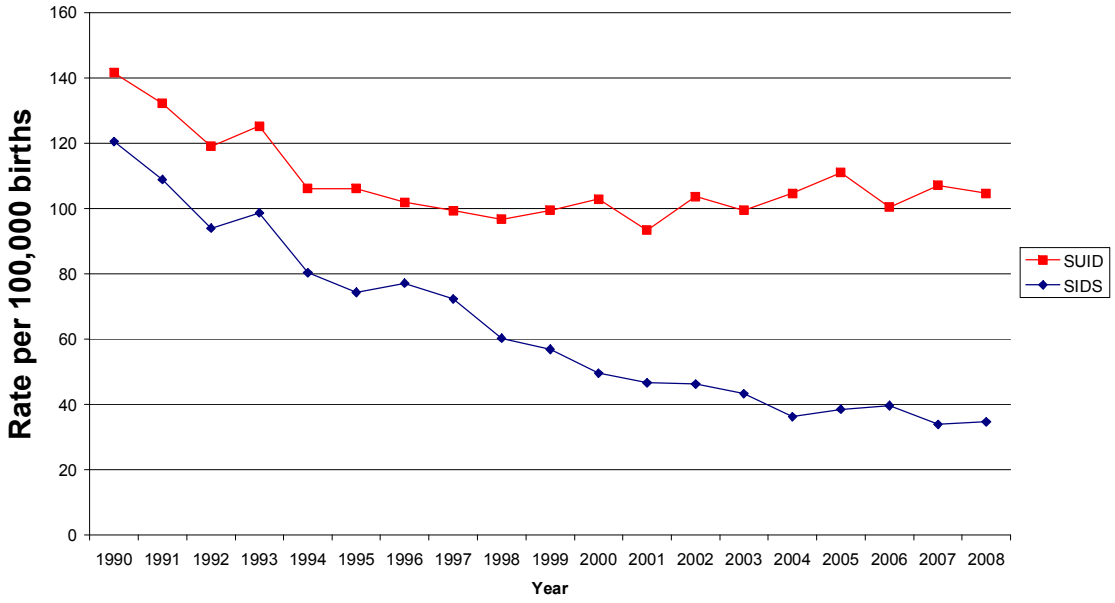
Severity/consequences

The ultimate consequence of unsafe infant sleep environment/behaviors is infant death. An infant death will likely have negative impacts on the parents of the infant, the family as a whole, and the community in which that family lives and works. Changing unsafe infant sleep environments/behaviors will reduce the risk of Sudden Unexpected Infant Death; however, studies have shown that risk factors related to unsafe infant sleep behavior are still an issue.

Trend

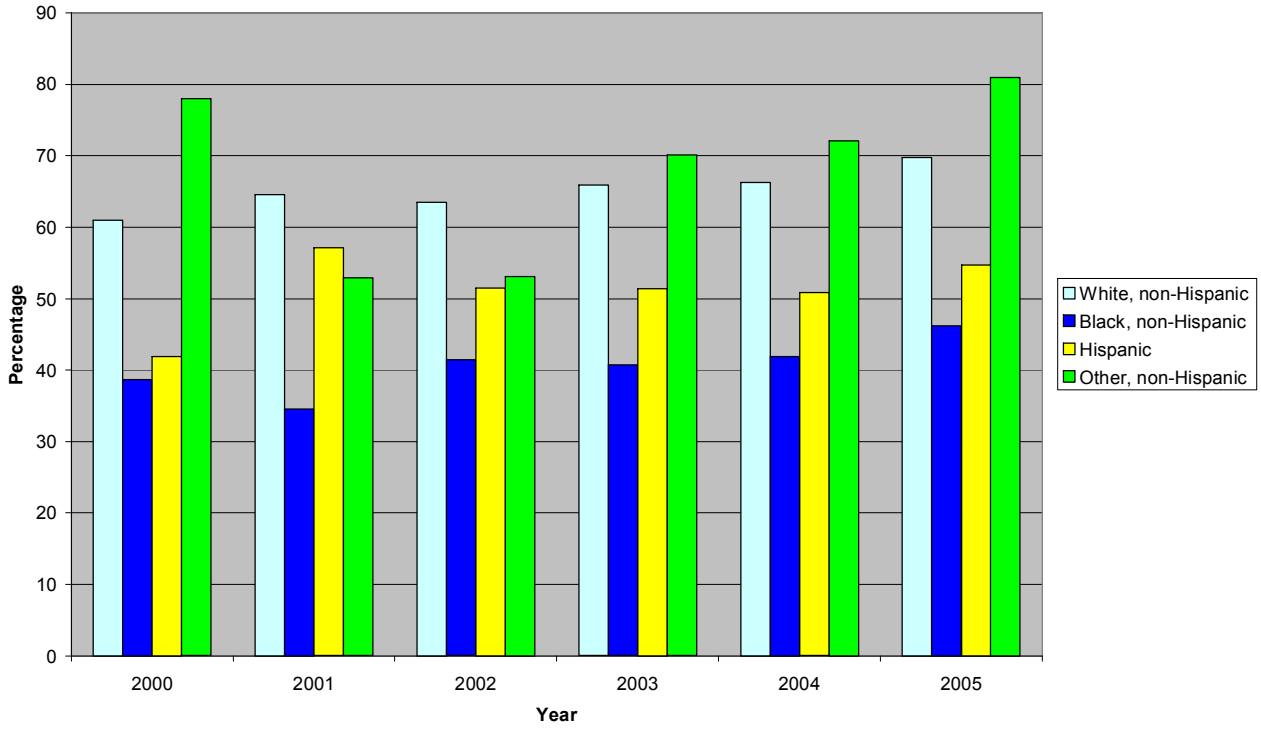
While the SIDS rate has been steadily declining over time, the SUID rate has remained relatively constant (Figure 1). This demonstrates the finding reported earlier that the way medical examiners are coding SUID is changing over time, in that fewer SUID cases are considered SIDS deaths and more are classified as accidental suffocation and strangulation in bed or unknown/undetermined cause of death.

Figure 1: Florida SUID vs. SIDS Single-Year Rates per 100,000 Births, 1990-2008



The Florida Pregnancy Risk Assessment Monitoring System (PRAMS) shows that from 2000-2005 Black, non-Hispanic women were least likely to report laying their infants on their back to sleep a majority of the time, compared to other race/ethnicities (Figure 2). In fact, Black, non-Hispanic women were the most likely to report laying their infants on their stomach a majority of the time compared to women of different race/ethnicities (data not shown). This is an important SUID risk factor distinction to make and shows that safe sleep messages may need to be targeted toward specific groups of women.

Figure 2: The Percentage of Infants that are Most Often Laid on their Back to Sleep by Race/Ethnicity, PRAMS Florida 2000-2005



Maternal Race/Ethnicity		NO	YES
White, non-Hispanic	%	30.2	69.8
	CI	25.9 - 34.8	65.2 - 74.1
	n	226	472
Black, non-Hispanic	%	53.8	46.2
	CI	48.3 - 59.2	40.8 - 51.7
	n	288	238
Hispanic	%	45.3	54.7
	CI	39.2 - 51.5	48.5 - 60.8
	n	173	254
Other non-Hispanic	%	19.0	81.0
	CI	10.9 - 30.9	69.1 - 89.1
	n	28	59

National/state goals

There is no specific goal in the Florida Department of Health Long Range Program Plan related to sudden unexpected infant death, but the goal for infant mortality for year 2010-11 is 6.9 per 1,000 live births.

At the national level, the Healthy People 2010 goal includes an objective to reduce deaths from SIDS. The target is 0.25 deaths per 1,000 live births. Florida's 2008 rate of SIDS deaths is 34.6 per 100,000 live births, which translates to 0.35 per 1,000 live births (Florida CHARTS). Healthy People 2010 also has an objective to increase the percentage of healthy full term infants who are put down to sleep on their backs. The target is 70 percent. PRAMS reported that in 2005 61.5 percent and in 2007 57.2 percent of Florida women were putting their infants to sleep on their backs, which are below the national target (CPONDER).

Potential for improvement

There is a large potential for improvement in the number and percent of women who place their infants in a safe sleep environment and therefore reduce the risk of Sudden Unexpected Infant Death.

A national telephone survey as well as focus groups conducted in Florida have documented that women are aware of the current recommendations regarding safe sleep but many choose not to follow them. Women who do not follow safe sleep recommendations are worried about infant safety and infant comfort. They also may lack knowledge of soothing techniques to use when infants are fussy and unable to sleep. To address this, the safe sleep education provided by health departments and Healthy Start coalitions can be expanded to include information about choking and comforting techniques.

Healthy Start coalitions could also provide safe infant sleep training to health care providers and hospital staff. This would likely improve the number of infants that are placed in a safe sleep environment since it has been shown that when hospital nurses receive education on the importance of back sleeping, more infants sleep on their backs in hospital nurseries and on their backs at home (Colson & Joslin, SC, 2002). The Florida Department of Health (DOH) has developed several trainings on SIDS risk reduction which could be utilized for local trainings. These PowerPoint presentations are available from the DOH web site (http://www.doh.state.fl.us/family/mch/training/library.) To ensure that physicians are aware of the safe sleep recommendations and the importance of discussing them with their patients, a distance learning satellite training for pediatricians and family practice physicians is planned for April 2010.

Improvements could also be made though the designing of specific targeted interventions for at risk groups such as those with mistimed pregnancies and black women as were identified through Dr. Broussard's study, and providing training on how to implement the targeted interventions. Trainings would need to include information on effective strategies for changing behavior such as Motivational Interviewing. Motivational Interviewing is a style of communication which elicits from persons their own motivations for changing their behavior (Rollnick, Miller, & Butler, 2008). A meta-analysis of 72 randomized controlled studies found positive effects of motivational interviewing in 74 percent of the trials (Rubak, Sandboek, Lauritzen & Christensen, 2005); therefore, Motivational Interviewing is considered as an effective strategy for behavior change.

There is also the potential for improvement in safe infant sleep environments through targeting women with depression. Studies have shown that women who are depressed are less likely to place their infants on their backs to sleep (Chung, McCollum, Elo, Lee & Culhane, 2004; Broussard, 2009) and black mothers with depression were much more likely to bed share than non-depressed black mothers (Broussard). Additionally, women who are depressed are more likely to smoke and to use drugs or alcohol (Burgermeister, 2009; Homish, Cornelius, Richardson & Day, 2004) and infants exposed to tobacco are at higher risk of sudden unexpected infant death (Anderson, Johnson & Batal, 2005). The Florida State Child Abuse Death Review Team has documented numerous infant deaths occurring when parents who have been drinking or using drugs sleep with their infants (Florida Child Abuse Death Review Annual Report, 2008).

Meta-analyses of home visiting programs in the U.S. and Europe show sufficient evidence that they can improve detection and management of postpartum depression, enhance social support, improve breastfeeding rates, and improve parenting skills (American Academy of Pediatrics Council on Community Pediatrics, 2009). These improvements and enhancements would likely reduce several risk factors for SUID. In addition, studies have shown that women who are breastfeeding and have adequate social support have fewer symptoms of depression (Cunningham & Zayas, 2002; Dennis & McQueen, 2009).

There have been several tested and recommended interventions and treatments for depression that could be explored as potential ways to reduce depression and reduce the risk of SUID. A systematic review of interventions for treating postpartum depression found that cognitive behavior therapy as well as non-directive counseling and peer support were effective (Dennis & Hodnett , 2007). Many women with mild to moderate depression can be treated by psychosocial approaches in lieu of medication (Yonkers, et al, 2009). A systematic review of home-based depression interventions which included non directive counseling as well as cognitive behavior therapy found statistically significant improvement in postpartum depression following the interventions (Leis, Mendelson, Tandon & Perry, 2009). Home-based interventions have the potential to effectively address depression because they serve high risk, low-income families who often have the greatest need but the least access to mental health services (Leis, et al, 2009). With appropriately qualified and trained staff, these types of interventions could be provided by Healthy Start. The Healthy Start program has the opportunity to improve training and supervision for home visitors as well as to create enhanced interventions that utilize more highly trained professionals from the fields of social work, mental health and/or substance abuse (Johnson, 2009). Several programs have already begun to hire clinical social workers to provide behavioral health services.

Therefore, screening and treating postpartum women for depression would be an effective intervention to increase the number of infants placed on their backs to sleep, reduce bed sharing, reduce alcohol, tobacco and other drug usage and ultimately reduce the risk of SUID.

Another possible strategy to reduce SUID is to increase protective factors such as pacifier use and breastfeeding. A meta-analysis of seven studies demonstrated a reduced risk of SIDS with pacifier use (Hauck, Omojokun, & Siadaty, 2005). A German case control study of 333 infants who died of SIDS and 998 age-matched controls found that breastfeeding reduced the risk of SIDS by nearly 50 percent (Vennemann,

Bajanowski, Brinkmann, Yucesan, Sauerland, Mitchell and the GeSID Stidu Group, 2009) A systematic review of interventions to promote breastfeeding found that lay support was effective at increasing the rate of short and long term breastfeeding (Chung, Raman, Trikalinos, Lau & Ip, 2008). Peer counseling is provided through the WIC program, but it is not currently available statewide.

As another way to increase breastfeeding, CenteringPregnancy group prenatal care includes peer support and self management training and activities. A retrospective medical record review of women enrolled in CenteringPregnancy found increased breastfeeding rates when compared to women receiving individual care (Klima Norr Vonderheid & Handler, 2009). In a multi-center randomized controlled trial, investigators found that women receiving the CenteringPregnancy model of group prenatal care were more likely to initiate breastfeeding (Ickovics, et al. 2007). Only a few health departments are currently providing group prenatal care.

DOH capacity

Safe sleep education is currently provided by Healthy Start and is included in the counseling and education provided by health departments to pregnant women and new parents. Healthy Start coalitions and health departments also provide information on sleep safety to the local community through health fairs and public awareness campaigns. Brochures on safe sleep have been developed by the Department of Health, the Ounce of Prevention, children's service councils and Healthy Start coalitions.

The Department of Health could assure that safe sleep education is provided in all programs that serve mothers with infants. Programs such as WIC or Family Planning could have continuously running videos on safe sleep in their waiting areas. A study conducted by Dr. Rachel Moon found that a 15 minute education session with small groups of black parents attending a WIC clinic was effective at conveying information and changing behavior (Moon, Oden, and Grady, 2004). At the present time, WIC does not feel they have the staff to provide a similar intervention in Florida.

An evaluation of sleeping behavior among Healthy Start infants did not demonstrate that safe sleeping increased as a result of participation in the Healthy Start program. This would seem to indicate that education alone is not sufficient to change behavior. Healthy Start staff would benefit from additional training on effective strategies for changing behavior such as Motivational Interviewing. Only limited training on Motivational Interviewing has been provided to date due to funding constraints. Additional funding would be needed to provide this type of training statewide.

Many Healthy Start programs do not have qualified staff to provide behavioral interventions such as treatment for depression. Women with depression are referred to community mental health providers where they receive brief treatment through Healthy Start funding. Healthy Start provides breastfeeding education and support but not peer counseling. Healthy Start coalitions would need additional funding to implement peer counseling services and to hire more professional staff to provide behavioral health services.

In order to give communities more accurate information on SUIDs, the Department of Health is collaborating with Florida medical examiners in a SUID investigation. The investigation objectives are to 1) Estimate the SUID rate, 2) Estimate the proportion of SUID deaths by underlying cause of death reported on the death certificate, 3) Describe the changes in reporting that may take place from the medical examiner report, to the death certificate, to the final underlying classification of SUID, 4) Identify the type(s) and

intensity of SUID investigation completed, 5) Determine the factors that impact accurate reporting of SUID causes, and 6) Estimate the prevalence of known SUID risk factors. The findings of the investigation will help communities to understand the SUID problem and develop SUID prevention messages and strategies, including safe sleep messages and strategies, to help prevent future SUID cases.

Current State priority or objective

There is no current state priority or objective specifically related to safe sleep practices.

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CHILDREN AND ADOLESCENTS

TEEN PREGNANCY AND SEXUALLY TRANSMITTED DISEASES

Definition and General Description of the issue/problem

There is virtually universal agreement that pregnancies in the teen years should be avoided. The reasons are many but a few of the major ones include: higher risk of poor birth outcomes, lower academic achievement and reduced future career potential, and less than ideal parenting skills. Sexually transmitted infections (STIs) among teens, an adolescent health issue in its own right, are closely associated with teen pregnancy.

Magnitude

Statewide, in 2008, there were 24,089 females age 15 to 19 who gave birth or 40.7 births per 1,000. The teen birth rate is substantially higher for black teens compared to white teens. For black females age 15 to 19 the rate was 61.3 births per 1000 female population for the same year, in comparison the rate for white females age 15 to 19 was 34.7. Source: FloridaCHARTS

According to the Annie E. Casey Foundation, Florida ranked 20th among the 50 states for teen birth rates in 2006. The rate for Florida was 45 births per 1,000 female teens age 15 to 19, while the rate for the U.S. was 42 in 2006. The ranking is from highest to lowest so there were 19 states with higher rates and 30 states with lower rates than Florida.

In 2008, the number of bacterial STI cases age 15 to 19 in 2008 was 30,695 or 2535.2 per 100,000 Bacterial STIs include: chancroid, Chlamydia, gonorrhea, granuloma inguinale, LGV, and syphilis.

In comparison to the other states, for the same year, Florida had the 19th highest rate for Chlamydia for teens age 15 to 19 with a rate of 2062.6 per 100,000 teens. The U.S rate was 1951.35. For gonorrhea, Florida had the 14th highest rate among the states with a rate of 581.96 per 100,000 teens age 15 to 19. The U.S. rate was 452.04. For primary and secondary syphilis, Florida had the 8th highest rate among the states with a rate of 6.96 per 100,000 teens age 15 to 19. The U.S. rate was 4.21. Source: CDC.

Severity/consequences

According to the March of Dimes “Infants born to teenage mothers are at higher risk for premature birth, low birth weight, and death. Teen mothers are more likely than mothers over age 20 to give birth prematurely (before 37 completed weeks of pregnancy). Between 2003 and 2005, preterm birth rates averaged 14.5 percent for women under age 20 compared to 11.9 percent for women ages 20 to 29. Babies born prematurely face an increased risk of newborn health problems, long-term disabilities and even death. Premature and low birth weight infants may have organs that are not fully developed. This can lead to breathing problems, such as respiratory distress syndrome, bleeding in the brain, vision loss and serious intestinal problems.

Babies of teenage mothers are also more likely to die in the first year of life than babies of women in their 20s and 30s. The risk is highest for babies of mothers under age 15. In 2005, 16.4 out of every 1,000 babies of women under age 15 died, compared to 6.8 per 1,000 for babies of women of all ages. (Mathews, M.S., and MacDorman, M.F. Mortality Statistics from the 2005 Period Linked Birth/Infant Death Data Set. National Vital Statistics Reports, volume 57, number 12, revised 8/18/08).

Teens that give birth are less likely to complete high school than teens who do not give birth. According to the March of Dimes: “Only 40 percent of teenagers who have children before age 18 go on to graduate from high school, compared to 75 percent of teens from similar social and economic backgrounds who do not give birth until ages 20 or 21.”

According to Family Health International “STIs can have severe medical consequences, including death. Untreated gonorrhea and Chlamydia can cause pelvic inflammatory disease, or PID, in women, which can lead to infertility or chronic pain. PID can also cause ectopic pregnancy with subsequent maternal death. Cervical cancer is closely associated with certain types of HPV infection. Some STDs, such as herpes and syphilis, may affect pregnancy outcome, causing spontaneous abortion, premature birth, and stillbirth. Gonorrhea and Chlamydia can also affect the babies born to infected women, causing eye infections and blindness. Syphilis, HIV and herpes can be transmitted to newborns, potentially causing chronic disease and death.”

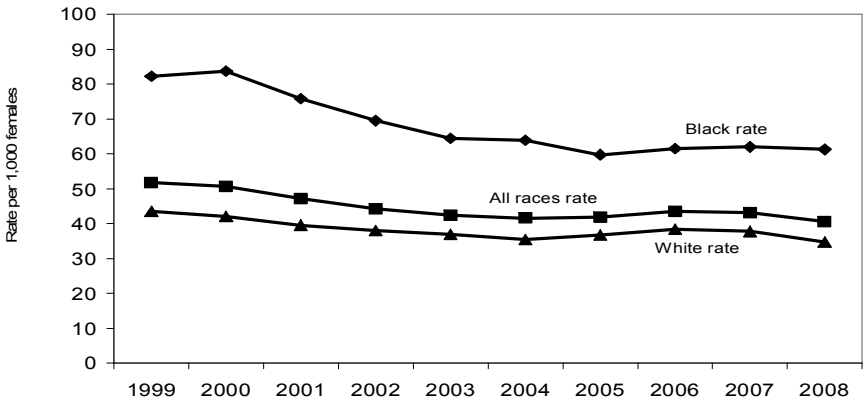
According to the CDC, “The harmful effects of STIs in babies may include stillbirth (a baby that is born dead), low birth weight (less than five pounds), conjunctivitis (eye infection), pneumonia, neonatal sepsis (infection in the baby’s blood stream), neurologic damage, blindness, deafness, acute hepatitis, meningitis, chronic liver disease, and cirrhosis. Most of these problems can be prevented if the mother receives routine prenatal care, which includes screening tests for STIs starting early in pregnancy and repeated close to delivery, if necessary. Other problems can be treated if the infection is found at birth.”

In a review article, Lee and Silver cite several studies that found an association between Chlamydia infection and premature rupture of membranes (PROM). The risk ratio associated with Chlamydia infection for PROM was 2.5 in one study and 5.0 in another study. (Etiology and Epidemiology of Preterm Premature Rupture of Membranes By Lee Thomas and Helayne Silver in Clinics in Perinatalogy, volume 28, number 4, December 2001).

Trend

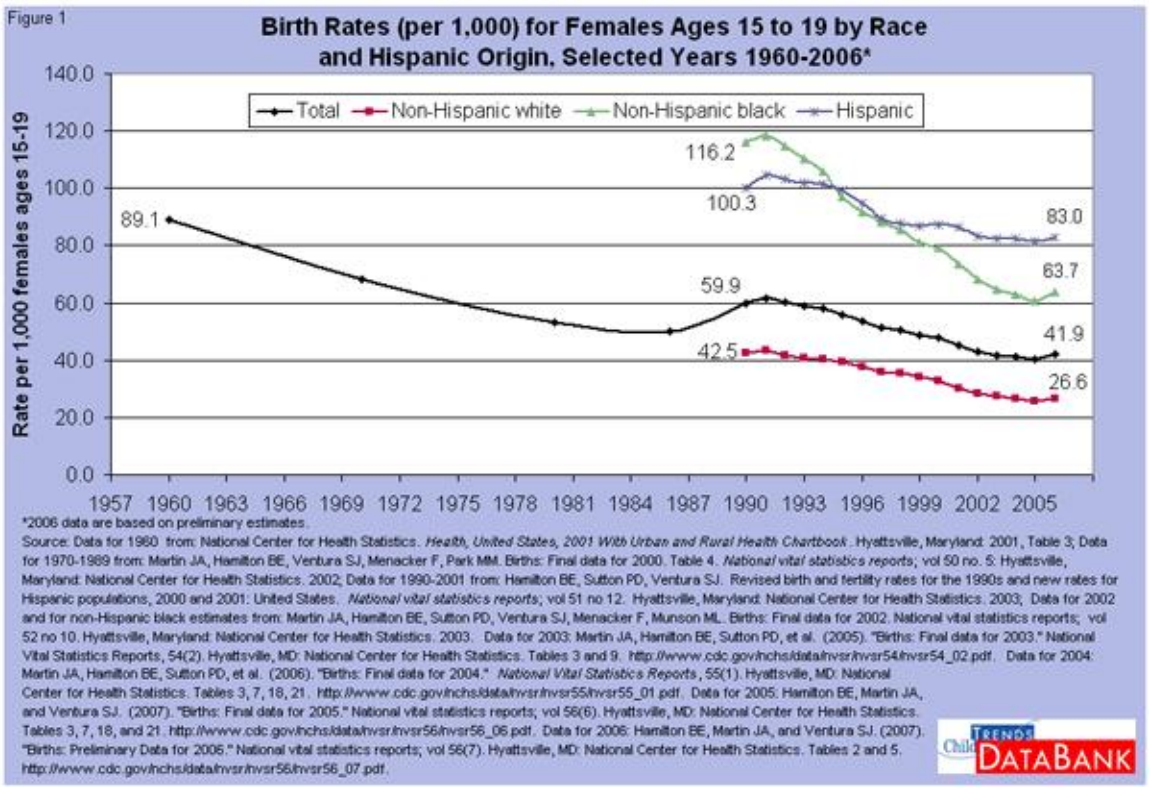
Birth rates for teens age 15 to 19 declined steadily from 51.8 per 1,000 females in 1999 to 41.6 in 2004 (see graph below). Since then the rates have fluctuated but have not changed substantially. This trend pattern is similar for black and white races and also for teens age 15 to 17. However, as shown on the graph below, the rate for black teens is substantially higher than the rate for white teens.

Florida Birth Rates Per 1,000 Females Ages 15-19
1999 - 2008



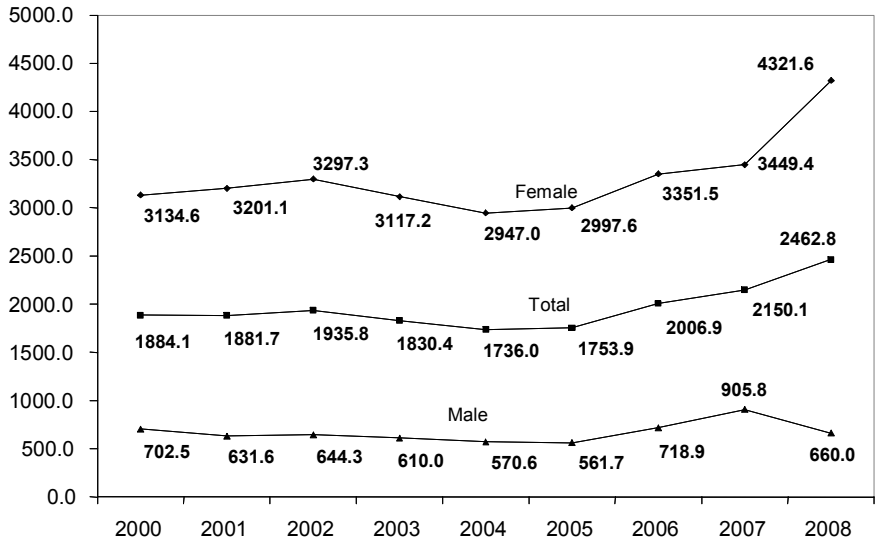
Source: Florida CHARTS

National data in the graph below shows patterns that are similar to Florida in regard to the rates by race and year.



Rates of bacterial STIs among teens age 15 to 19 were flat or decreasing slightly from 2000 through 2004. From 2005 through 2008 these rates increased substantially and steadily from a rate of 1,736 per 100,000 population age 15 to 19 in 2004, to a rate of 2,463 in 2008 (see graph below). (Note: the rate of 2,463 for 2008 is from the Bureau of STD and differs from the rate of 2,535 from CHARTS. The rates for all other years agree between the two sources.) This is an increase of 42 percent in four years, which translates to a 9.12 percent average annual increase. The rates for females are generally four to six times the rates for males.

Bacterial Sexually Transmitted Infection Rates
per 100,000 Population age 15 to 19
Florida 2000 - 2008



Source: Florida Department of Health: Bureau of Sexually Transmitted Diseases

In summary, it appears that both teen birth rates and teen STI rates have not done as well since 2004 as they did before 2004.

National/state goals

In the Florida Department of Health Long Range Program Plan, the goal for the teen birth rate for teens age 15 to 19 for state fiscal year 2010-11 is 39.8 per 1,000 female population ages 15 to 19. This goal seems achievable since the rate for 2008 of 40.7 is only slightly higher than this goal. At the national level, the Healthy People 2010 target focuses on pregnancy rates rather than birth rates. Birth rates do not include pregnancies that do not result in a live birth. The Healthy People 2010 target for 2010 is 43 pregnancies per 1,000 females age 15 to 17. The baseline rate for this goal was 68 in 1996. According to the Alan Guttmacher Institute, the pregnancy rate for females age 15 to 17 in the U.S. for 2002 was 42.3 per 1,000 females. In Florida, the rate was 55 in 2000. In that year, Florida had the sixth highest pregnancy rate among the states. In

terms of birth rates, Florida's birth rate of 45 per 1,000 female teens age 15 to 19 in 2006 was higher than 30 states and lower than 19 (source: Annie E. Casey Foundation.

Florida does not have goals pertaining to STDs among teens. Nationally, the Healthy People 2010 goal is: "Increase the proportion of adolescents who abstain from sexual intercourse or use condoms if currently sexually active." The target is "95 percent" and the baseline is: "85 percent of adolescents in grades 9 through 12 abstained from sexual intercourse or used condoms in 1999 (50 percent had never had intercourse; 14 percent had intercourse but not in the past 3 months; and 21 percent currently were sexually active and used a condom at last intercourse)."

In summary, Florida is close to achieving the state goal for teen birth rates but will need to make substantial progress to meet the national goals.

Potential for improvement

Effective public health strategies to reduce teen pregnancy and STIs exist in several different venues. Studies document the association of maladaptive decision making and contraceptive use in sexually active adolescent females. Interventions that focus on facilitating improved decision making skills relating to relationships and communication have the potential to impact teen's decision making capabilities.[1]

Increasing parental involvement in children's learning in preschool and elementary school has been shown to decrease pregnancy rates and to delay sexual intercourse initiation at age 18 of male and female teens.[2]

Additional interventions exist for teens who are sexually active. In Florida, 71 percent of mothers ages 18-19 report their pregnancies to be unplanned or unwanted, [3] and in the U.S., nearly 80 percent of teen pregnancies are unintended.[4] Comprehensive sexual, reproductive and contraceptive health education can reduce the number of teen births.[4] Widespread access to emergency contraception has the potential to greatly reduce the unintended pregnancy rate. Research indicates that the education of teens about the availability of emergency contraception prompted teens to be more conscientious about contraceptive behaviors.[5] The American College of Obstetricians and Gynecologists and the Society for Adolescent Medicine both recommend advance prescription of emergency contraception for clients that require a prescription,[6] and current national standards of care are to provide advance prescriptions for high risk groups such as those clients using barrier or less effective methods of contraception or that are likely to miss oral contraceptive pills. [7]

The United States Preventive Services Task Force recommends screening sexually active teens for Chlamydia trachomatis and Neisseria gonorrhea at least annually, and other specialists recommend testing high risk adolescents more often.[8]

DOH Capacity

Florida Department of Health was awarded over $10.6 million of Federal Title X funds to support family planning services. In 2008, 49,088 teens ages 15-19 were served in the Florida Department of Health's Family Planning (FP) Program. Department programs promote services for teen clients in the family planning program in 67 counties and in 177 clinical sites. The department's family planning programs support provision of comprehensive reproductive and contraceptive health information, including emergency contraception for sexually active teens. Section 581.0051(5), Florida Statutes, and the federal Title X Family Planning Program supports Florida Department of Health programs in providing minor teens, without parental consent, FDA approved

contraceptives, including emergency contraception, and limited treatment of STIs. STI screening is accomplished annually for clients in the FP program and as indicated by client's need. Department providers encourage teens to include their parents in the decision making process to use contraceptives, but parental notification is not required.

Limited funding prevents the Florida Department of Health from providing more outreach, counseling and educational programs, and family planning services for teens. A total of 27 county health departments applied for additional funding from Title X in 2009-2010 to provide special initiatives and male programs, but only seven were funded due to the limited availability of funds. Additional funding for services and staff could assist the Florida Department of Health in achieving the state and national goals to reduce teen birth rates.

Current State priority or objective

Title X funding supports additional programs that focus on areas of teen pregnancy prevention and family planning. Four special initiatives in county health departments support teen pregnancy prevention programs. Five male projects in county health departments provide family planning educational programs and family planning for males, including male teens. Three HIV projects focus on counseling, education and testing. Two expansion grants allow county health departments to increase services to family planning clients, which includes teens.

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2. Phillliber, S., Williams, K, and West, E. (2002, September/October). Preventing pregnancy and improving health care access among teenagers: an evaluation of the Children's Aid Society - Carrera Program. Perspectives on Sexual and Reproductive Health, 34(5):244-251.

3. Florida Pregnancy Risk Assessment and Management Surveillance (PRAMS).

4. National Campaign to Prevent Teen Pregnancy. (2004, September). Science says: "Another chance: preventing additional births to teen mothers."

5.Wadsworth, P. (2007, July/August). Plan b: Dual label, the nurse practitioners role in education and provision. The Journal for Nurse Practitioners, 3 (7):470-474.

6. Sanfilippo, J., Sucato, G., and Downing, D. (2007, November). What every pediatrician needs to know about emergency contraception. In Association with Contemporary Pediatrics, 1-7.

7. Hatcher, R., Trussell, J., Nelson, A., Cates, W., Stewart, F., and Kowal, D. (2007). Contraceptive Technology (19th ed.). New York: Ardent Media, Inc.

8. Holland-Hall, C. (2008, April). Sexually transmitted infections in teens: Scenarios from primary care. Contemporary Pediatrics, 25(4):57-65.

OBESITY/PHYSICAL ACTIVITY: CHILDREN AND ADOLESCENTS

Definition and General Description of the issue/problem

Adolescent overweight is defined as a body mass index (BMI) at or above the 85th percentile and lower than the 95th percentile. Obesity is defined as a BMI at or above the 95th percentile for children of the same age and sex. Overweight children are at high risk of becoming overweight adults.[12,13] Obese children are more prone to develop stress, sadness, and low self-esteem than normal weight children.[14] Research regarding the influence of childhood physical activity on health in later life is limited. However, preliminary findings suggest that childhood physical activity levels are inversely associated with adulthood cardiovascular risk factors.[15]

Narrative regarding selection criteria

Magnitude

According to the 2009 Youth Risk Behavior Survey (YRBS), approximately 67,700 Florida high school students (10.3 percent) were obese. Florida had a significantly lower prevalence of obesity than the nation in 2005 and 2007. In 2007, the percentage of students who were obese was 11.2 percent compared to 13.0 percent for the nation. YRBS data from 39 states indicated that obesity rates among high school students ranged from a low of 8.7 percent in Utah to a high of 17.9 percent in Mississippi, with a median obesity rate of 12 percent.

In 2009, non-Hispanic whites (8.6 percent) had a lower prevalence of obesity than non-Hispanic blacks (12.9 percent) and Hispanics (11.5 percent). Males (13.2 percent) had a significantly higher prevalence of being obese than females.

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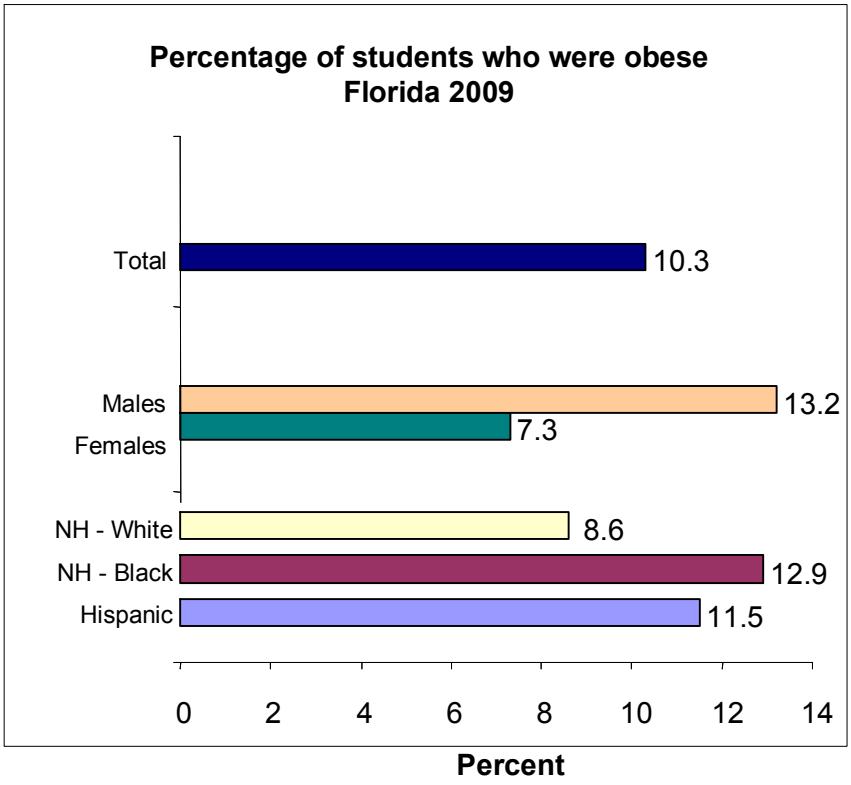
[12] Campbell, P.T., Katzmarzyk, P.T., Malina, R.M., Rao, D.C., Pérusse, L., & Bouchard, C. (2001), *Obesity Research 9*, 394–400.

[13] Maffeis C, & Tatò L., (2001). Long-Term Effects of Childhood Obesity on Morbidity and Mortality. *Hormone Research 55* (Suppl.1), 42-45.

[14] Clevland Clinic (n.d.) Obesity in children. Available at http://children.webmd.com/obesity-children.

[15] Kvaavik, E., Klepp, K.I., Tell, G.S., Meyer,H.E., & Batty, G.D. (2009). Physical Fitness and Physical Activity at Age 13 Years as Predictors of Cardiovascular Disease Risk Factors at Ages 15, 25, 33, and 40 Years: Extended Follow-up of the Oslo Youth Study. *Pediatrics 123*, e80-e86.



The major risk factors for obesity are lack of physical activity and poor nutrition. The 2009 Florida YRBS reported approximately 309,800 students (40.8 percent) met the current recommendation of being physically active for a total of 60 minutes per day on five or more of the past seven days. Males (53.8 percent) had a significantly higher prevalence of this behavior than females (28.0 percent). In 2007, the percentage of students that met the current recommendation of being physically active was higher in Florida (38.4 percent) than the US (34.7 percent). However, the CDC stated students in Florida were at greater risk of physical inactivity because the percentage of Florida students that watched television for three or more hours per day (40.2 percent) and did not attend physical education classes daily (77.0 percent) was greater than the average for students across the nation (35.4 and 69.7 percent, respectively).

In 2009, approximately 163,000 students (21.6 percent) ate fruits and vegetables five or more times per day during the past seven days. In 2007, the percentage of Florida students that ate fruits and vegetables five or more times a day (22.1 percent) was similar to US students (21.4 percent).

Severity/consequences

Obesity in childhood is associated with many negative health outcomes. Children can suffer immediate consequences as well as carry increased risk throughout their lives. Obese children are at greater risk of systematic social discrimination[16] which can lead to eating disorders,[17] poor academic performance and social functioning in adulthood.[18]

[16] Dietz W. Health consequences of obesity in youth: Childhood predictors of adult disease. ***Pediatrics*** 1998;101:518–525.

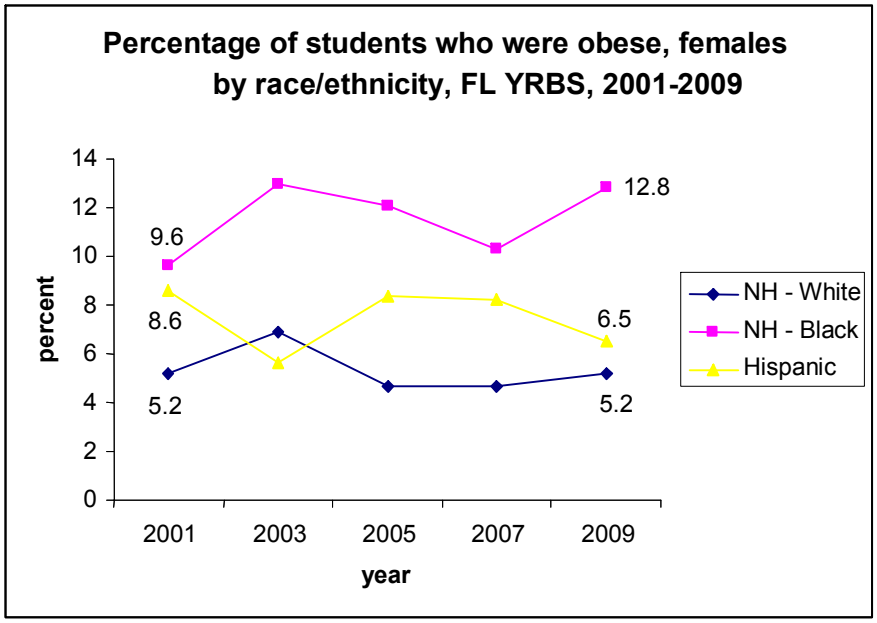
In addition to psychosocial risks, obese children can develop other conditions such as:

- Insulin Resistance
- Type 2 Diabetes
- Hypertension
- High Total and LDL Cholesterol and triglyceride levels in the blood
- Low HDL Cholesterol levels in the blood
- Sleep Apnea
- Early puberty
- Orthopedic problems such as Blount's disease and slipped capital femoral epiphysis
- Non-alcoholic steatohepatitis (fatty infiltration and inflammation of the liver)[11]

Trend

According to the Florida YRBS, from 2001 to 2009, the prevalence of obesity did not change significantly among high school students in Florida. Males had a significantly higher prevalence of being obese than females from 2001 to 2009. There were no significant changes within and between grade levels from 2001 to 2007. In 2007, non-Hispanic whites (9.5 percent) had a lower prevalence of obesity than non-Hispanic blacks (12.9 percent) and Hispanics (13.2 percent). Hispanic students (19.0 percent) had a significantly higher prevalence of being overweight than non-white Hispanics (13.1 percent).

The following graph shows that non-Hispanic black females had the highest prevalence of obesity from 2001 to 2009 and are significantly higher than non-Hispanic white females from 2005 to 2009.



The percentage of students having sufficient physical activity increased significantly by 33.3 percent from 2005 (30.6 percent) to 2009 (40.8 percent). Males had a significantly higher prevalence of this behavior than females during this time period. From 2001 to 2007, the

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[17] The Obesity Society (n.d.) Childhood overweight. Retrieved from http://www.obesity.org/information/childhood_overweight.asp.

[18] Swartz MB and Puhl R. Childhood obesity: a societal problem to solve. ***Obesity Reviews*** 2003; 4(1):57–71.

prevalence of this behavior increased significantly by 33.0 percent among non-Hispanic whites and by 28.8 percent among Hispanics. The percentage of students that ate fruits and vegetables five or more times a day of did not change significantly from 2001 to 2009. Males had a significantly higher prevalence of this behavior than females from 2001 to 2009.

In 2007, the Pediatric Nutrition Surveillance Survey reported approximately 14 percent of low-income children ages two to five in Florida were obese. This has remained relatively stable in the past five years. National Survey of Children's Health (NSCH) data showed 33.1 percent of children ages 10 to 17 were overweight (14.8 percent) and obese (18.3 percent), and only 34 percent of children ages 6 to 17 participated in vigorous physical activity every day.

National/state goals

Healthy People 2010 has set the following objectives to reduce overweight and obesity, and to increase physical activity in US adolescents[19]:

- Reduce the proportion of children and adolescents (ages 6-19 years) who are overweight or obese to 5 percent. According to the 2007 NSCH, for ages 10-17, Florida is at 18 percent.
- Increase the proportion of adolescents who engage in moderate physical activity for at least 30 minutes on five or more of the previous seven days to 35 percent. According to the 2007 YRBS, Florida is at 27 percent.
- Increase the proportion of adolescents who participate in daily school physical education to 50 percent. According to the 2007 YRBS, Florida is at 30 percent.

Potential for improvement

In addition to the interventions listed for women of childbearing age, other evidence-based interventions and policies for the reduction of obesity and promotion of physical activity for youth are: 1) Require daily quality physical education in schools; 2) Require daily physical activity in afterschool/childcare settings; 3) Restrict screen time in afterschool and daycare settings; 4) Safe Routes to School

DOH capacity

Three program areas address child nutrition: School Health, Child Nutrition, and WIC. Limited interventions including physical activity and general health through the Positive Youth Development Program are underway. The Governor's Fitness Challenge is a statewide initiative for youth obesity prevention and physical activity promotion. It is the main vehicle for Department of Health interventions for this age group. Additionally, the Department of Health is responsible for staffing the Governor's Council on Physical Fitness.

Current state priority or objective

Recently, the Bureau of Chronic Disease Prevention and Health Promotion applied for $2.1 million in ARRA stimulus funding to create a statewide infrastructure to address physical activity and obesity in schools. If funded, the program will promote Safe Routes to School Walking School Buses and the Governor's Fitness Challenge in schools.

[19] U.S. Department of Health and Human Services (2000, November). Healthy People 2010. 2nd ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office. [WWW document] www.healthypeople.gov/document/ tableofcontents.htm.

MENTAL, DEVELOPMENTAL, AND BEHAVIORAL HEALTH ISSUES

Definition and General Description

Disability is a general term that refers to any long or short-term reduction of a person's activity as a result of an acute or chronic condition.[1] Disability is the product of complex interactions of biological, psychological, social, cultural, and environmental factors, and may involve developmental, mental, behavioral, physical, or a combination thereof.

"In the United States, children's (ages 1-19) emotional and behavioral problems and associated impairments are most likely to lower their quality of life and reduce their life chances. Children with these disorders are at a much greater risk for dropping out of school and of not being fully functional members of society in adulthood. This burden of disease includes the prevalence of mental illness, morbidity, and cost. All sectors of society are involved."[15]

Efforts to address children's mental, behavioral and developmental well-being is a topic of increasing focus and concern nationally, in states and locally.[22] According to José Cordero, the Director of the National Center on Birth Defects and Developmental Disabilities recognizing that people with disabilities have many health concerns similar to people without disabilities—that is, exercise, nutrition, smoking, and alcohol use is critical.[23]

"People who have disabilities are more likely than people without disabilities to report lower levels of physical activity, to exceed the recommended body mass index for weight and height, to smoke currently, and to face financial barriers to health care. People with disabilities rarely receive the range of health promotion and disease prevention (HPDP) activities they may need or want, although they are susceptible to other chronic conditions to the same or greater degree than the general population and are at risk for secondary conditions."[23]

Health outcomes used to assess and monitor these issues are varied due to multiple factors. People with a "disabling" condition can be healthy regardless of the disease or disorder involved. The World Health Organization General Assembly developed the *International Classification of Functioning, Disability, and Health* which helps understand why two people with the same diagnosed condition have different health outcomes.[29] The classifications help define and gather information about various conditions, individual needs, and long-term consequences of disease, injuries or disorders.[29] Maternal infant health outcomes are also measured and include incidence and type birth defects. Another example of health outcomes that are measured and tracked include those linked to Healthy People 2010. Disabilities are represented in 207 of the 467 objectives that span 21 of the 28 *Healthy People 2010* focus areas.[3]

Magnitude

National surveys find that between 13 percent and 23 percent of all children have special health care needs, resulting in one out of every five households includes a child with a developmental delay.[2] "Children with special health care needs are those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally."[42] Birth defects can cause varying levels of disability. The Florida Department of Health reports that between 1998 and 2005, one in 45 children were born with a structural birth defect.[14] Florida is one of 15 states in the U.S. to have a cooperative agreement with the Centers for Disease Control and Prevention (CDC) to track birth defects. Comparable incidence is seen in birth defects when comparing Florida to the nation.

In 2007, 27.6 percent of Florida children ages 4 months to 5 years meet criteria for being moderate or high risk for developmental, behavioral problems, or social delays.[39]

Depression is the leading cause of disability in the U.S. for individuals ages 15 to 44. Estimated loss of productivity related to depression alone is in excess of $31 billion per year.[4] In 2007, 23 percent of children with a disability age 4-17 years reported sadness or depression.[6] In the United States, 17 percent of children have a developmental or behavioral disability such as autism, intellectual disability, or Attention-Deficit/Hyperactivity Disorder (ADHD)[5] "Attention Deficit Hyperactivity Disorder (ADHD or ADD/ADHD) is considered the most prevalent of childhood neuro-developmental disorders."[22] Of Florida children age 2-17, over 8 percent have been told by a doctor that they have ADHD.

According to the CDC, autism affects an estimated 1 in 110 children and has an estimated prevalence of about 1 percent.[7] The World Health Organization lists mental illness as the largest cause of disability.[13] Patients diagnosed with a serious mental disorder die 25 years earlier than the general population. Related behavioral issues such as substance abuse or domestic violence also remain persistent problems.[25]

The results of several epidemiological studies indicate that more than two-thirds of children placed in special education programs for emotional disturbances have the diagnosis of conduct disorder, yet more than half also meet criteria for internalizing diagnoses such as anxiety or depression.[8] The Florida Department of Education for the 2007-08 school year reported that student exiters identified as emotionally/behaviorally disabled totaled 2,926, with 53 percent of those exiters reported as completers and 47 percent reported as non-completers.[9] In 2008 the Florida Department of Education reported 375,721 (14 percent) students are enrolled in Exceptional Student Education Program due to disability. [9]

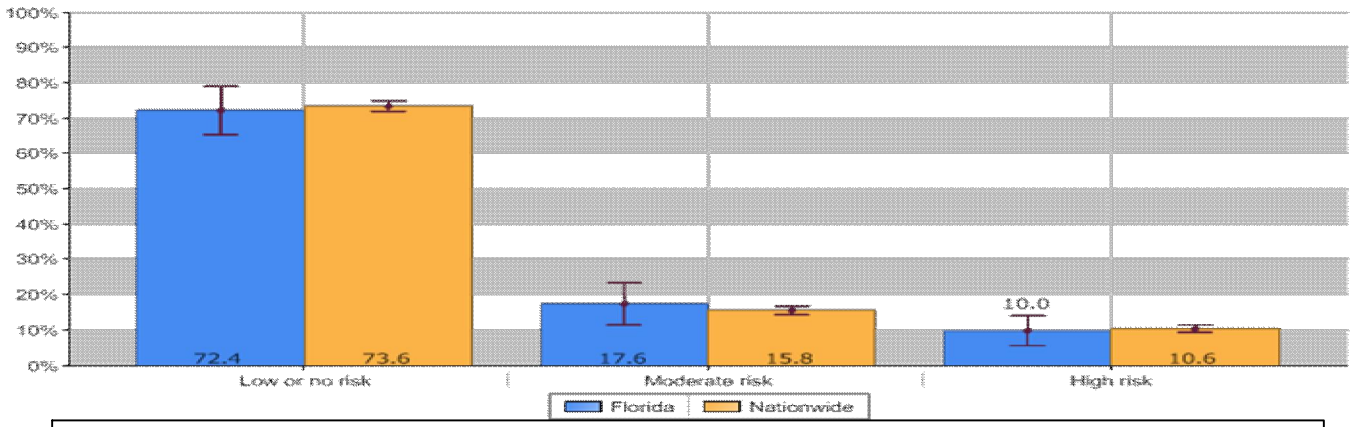
The Department of Children and Families (DCF) provides the bulk of direct mental health services to the children of Florida. During fiscal year 2007-2008, DCF reported services provided to 74,543 children who were enrolled in the three children's priority populations.[10]

Family stress caused by persistent poverty, threatening neighborhoods, and very poor child care conditions, elevate the risk of serious mental health problems and undermine healthy functioning in the early years.[16] "People in the lowest stratum of income, education, and occupation are about two to three times more likely than those in the highest stratum to have a mental disorder."[12] "In Florida, 44 percent (570,042) of young children live in low-income families (National: 44 percent), defined as income below 200 percent of the federal poverty level, 19 percent (108,877) of young children in low-income families do not have an employed parent, 82 percent (120,934) of young children whose parents do not have a high school degree live in low-income families, 57 percent (323,056) of young children in low-income families live with a single parent, 32 percent (195,693) of young white children live in low-income families, 64 percent (168,722) of young black children live in low-income families, and 54 percent (195,005) of young Hispanic children live in low-income families."[19]

Other contributing factors in actual and risks for disabilities in children include poor maternal care, nutrition, parental substance abuse, tobacco use, access to healthcare, illness and injury, lack of early intervention, neglect and abuse, and hazardous environmental exposures.

"Major family changes and chronic family stressors are among the most prevalent and important influences on the developmental and psychological well-being of young children."[2] During development, mental health can be compromised at many different critical times. The health care professional is challenged to promote mental health activities that are aimed at prevention, risk assessment, and diagnosis, and to offer an array of appropriate interventions."[2]

At risk for developmental, behavioral, or social delays
Children age 4 months to 5 years only
Nationwide vs. Florida



Data Source: 2007 National Survey of Children's Health

Severity and Consequences

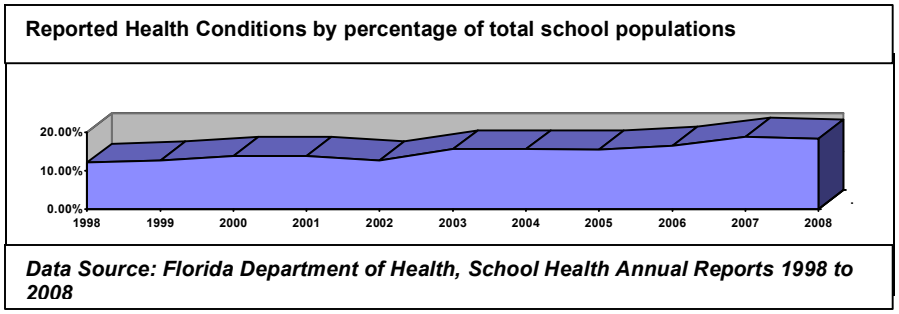
Significant adversity early in life can damage the developing brain and increase the likelihood of significant mental health problems that may emerge either early or years later.[16] "Young children with social-emotional delays that do not receive early intervention are more likely to develop serious behavior problems that can interfere with their ability to function and learn in school. There is a significant cost to society when these early intervention services are not provided."[17] "Most disabilities are subtle and children who have them often appear to be developing normally especially at younger ages. Nevertheless, under-detection is unfortunate because it eliminates the possibilities of early intervention. Children who participate in early intervention programs prior to kindergarten are more likely to graduate from high school, hold jobs, live independently and to avoid teen pregnancy or delinquency. These positive outcomes save society between $30,000 and $100,000 per child."[18]

According to the National Early Intervention Longitudinal Study most children were eligible for early intervention because of a developmental delay (64 percent), a lesser proportion had a diagnosed condition (20 percent), and far fewer were being served because they were at risk (16 percent).[40, 41]

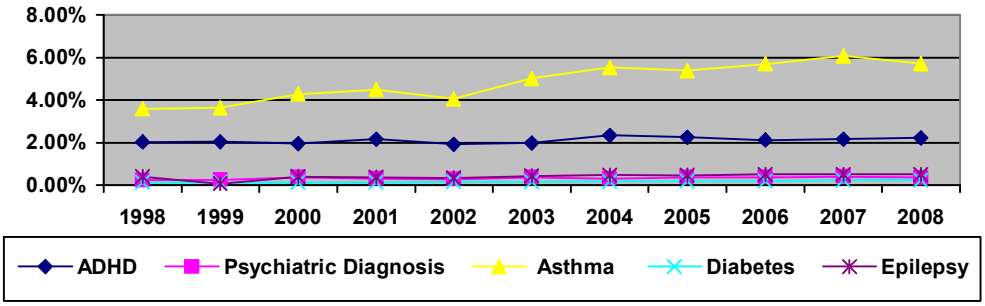
Concerns for all aspects of public health are related to budget shortfalls for our state. As the number of children are rising as they are identified as either having or are at risk for disability, funding is at risk for programs that address needs. Cost associated with direct care of children with various disabilities is dependent on the chronic nature and severity of the condition. Mental disorders were one of the five most costly conditions in the United States in 2006, with health care expenditures rising from $35.2 billion in 1996 to 57.5 billion in 2006.[25] More significantly is the cost to society related to loss of potential productivity.

Trend

Although Florida's total student population is declining, reported health conditions are rising. In 2008, over 18 percent of parents reported that their child has a health condition.[11] Prevalence of diabetes nationally for persons under 18 has doubled since 1997.[6]



In 2003 the Center for Disease Control and Prevention (CDC) reported that 10 percent of all youth ages 4 to 17 are diagnosed with Attention-Deficit/Hyperactivity Disorder. In the same year, approximately 2 percent of Florida public school students were reported by their parents as diagnosed with ADHD. This suggests that the under-reporting by parents may be related to stigma due to embarrassment and may result in students not receiving all the services and interventions available for future success.



Reported Health Conditions by percentage of total school populations

Data Source: Florida Department of Health School Health Annual Reports 1998 – 2008

In 2000, 4,473 or 1.22 percent of children ages 3-21 who received special education services in Florida have autism. In 2007-2008, 12,400 or 3.18 percent of children with disabilities ages 3-21 who received special education services have autism.[24]

IDEA Part B - Children with Autism in Florida for 1999-2000 and 2007-2008

	Count in 1999-2000	Count in 2007-2008
Age 3-5	847	1,799
Age 6-11	2,426	5,404
Age 12-17	977	3,068
Age 18-21	223	629
Age 6-21	3,626	9,101
Age 3-21	4,473	10,900

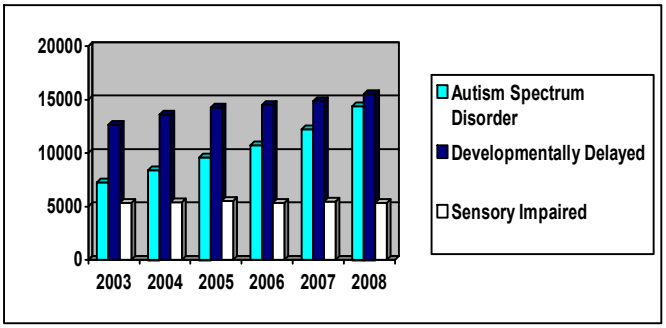
Source: Reported by the State of Florida in accordance with Section 618 of IDEA to U.S. Department of Education, Office of Special Education Programs

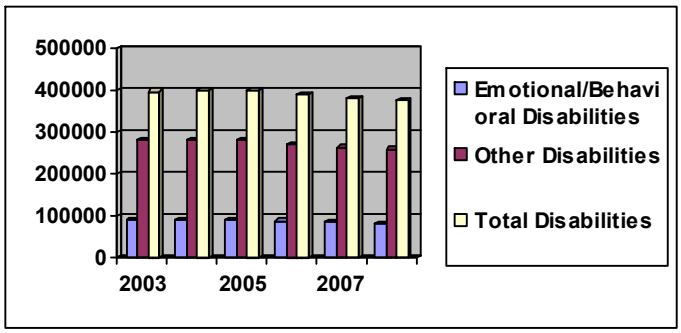
IDEA Part B - Children with Disabilities in Florida for 1999-2000 and 2007-2008
(Child Count by Age Group)

	Child Count 1999-2000	Child Count 2007-2008
Age 3-5	30,660	33,644
Age 6-11	169,052	164,193
Age 12-17	152,234	181,801
Age 18-21	15,389	18,651
Age 6-21	336,675	364,645
Age 3-21	367,335	398,289

Source: Reported by the State of Florida in accordance with Section 618 of IDEA to U.S. Department of Education, Office of Special Education Programs

Membership in Programs for Exceptional Students





Data Source: Florida Department of Education, 2003 – 2008

National/State Goals

Nationally, plans include to support and extend already-existing activity between government and non-government organizations, educational campaigns, work groups, provision for training and support of families, coordination of efforts that already exist, identify Healthy People 2010 (HP2010) objectives to those relevant to children with disabilities, and to clarify and resolve research issues.[23] Other plans include improved access for treatment, reducing barriers to treatment, improving quality of care, supporting capacity of care, and to promote mental health awareness.[12] he National Action Agenda identifies goals and multiple action steps that include promoting public awareness of children's mental health issues, reducing stigma associated with mental illness, and improving screening for mental health needs in children.[15]

The HP 2010 National Agenda includes six critical indicators of progress, and the National Centers are charged with helping the nation achieve these six goals.[28]

1. Children will be screened early and continuously for special health care needs.
2. Families of CSHCN will participate in decision making at all levels and will be satisfied with the services they receive.
3. CSHCN will receive regular ongoing comprehensive care within a medical home.
4. Families of CSHCN will have adequate public and/or private insurance to pay for the services they need.
5. Community-based service systems will be organized so families can use them easily.
6. Youth with special health care needs (YSHCN) will receive the services necessary to make transitions to all aspects of adult life.

The Report of the Surgeon General's Conference on Children's Mental Health: A National Action Agenda Goals are as follows:

- Promote public awareness of children's mental health issues and reduce stigma associated with mental illness.
- Continue to develop, disseminate, and implement scientifically-proven prevention and treatment services in the field of children's mental health.
- Improve the assessment of and recognition of mental health needs in children.
- Eliminate racial/ethnic and socioeconomic disparities in access to mental healthcare services.
- Improve the infrastructure for children's mental health services, including support for scientifically-proven interventions across professions.
- Increase access to and coordination of quality mental healthcare services.
- Train frontline providers to recognize and manage mental health issues, and educate mental healthcare providers about scientifically-proven prevention and treatment services.
- Monitor the access to and coordination of quality mental healthcare services. [15]

The Florida Children’s Mental Health Office is working with the Florida Department of Health to develop an early childhood strategic plan through the Early Childhood Comprehensive Systems grant. The five critical components are:

- Access to “medical homes” that coordinate comprehensive healthcare services;
- Services and supports to promote the positive social and emotional development and mental health of young children;
- Early care and education services;
- Parenting education services; and
- Family support services.

Florida envisions a system that is child-centered, family-focused, and recovery and resiliency-oriented. [10] "It is the intent of the Florida Legislature that there is a multi-agency network to provide education, mental health treatment and, when needed, residential services for students with severe emotional disturbance." [10] Through partnerships with the mental health, education, juvenile justice offices, social services providers and families, SEDNET facilitates collaboration across the local system of care to address the needs of children, youth and their families, and caregivers." [10]

Potential for Improvement

Florida operates one of the largest developmental disabilities programs in the country. Due to demand for services and limitations in available funding, it is not uncommon for states to have waiting lists. There are slightly less than 30,000 Floridians receiving services with a waiting list of 18,900 that has increased over the past three years.[36]

"There are hundreds of developmental screening tools available however there are no specific or recommended screening tools used in school readiness programs across the state."[31] Many screenings that assess school readiness do not address behavioral or mental health. Research studies indicated that virtually all schools have some type of mental health services available.[33] and on average, schools offer 14 different practices aimed at improving the social/emotional learning of students.[34] "Recent research points to public schools as the major providers of mental health services for school-aged children. The most common types of school mental health providers were school counselors, followed by nurses, school psychologists, and social workers. School nurses spent approximately a third of their time providing mental health services."[33] These efforts, however, are frequently not empirically based interventions. The challenge is to better coordinate and implement evidence-based mental health interventions targeting specific behaviors.[8]

"The goal of Healthy Start is to reduce infant mortality, reduce the number of low birth weight babies, and improve their health and developmental outcomes. The primary tasks of Healthy Start are to: identify, through a screening process, those who are at high risk; provide professional assessment of their needs and decide what resources are available to meet those needs; and provide timely and important linkages, referrals, or services to reduce the risk of having a poor outcome or poor infant development."[26] The Florida Healthy Start infant screening tool does not screen for maternal risk factors for psychosocial issues. Infants who are at risk for developmental delays including behavioral and mental health may not qualify for Healthy Start services.[17]

Recommendations based on current research include: screening and assessments, empirically supported and family responsive services, outcomes and accountability, promotion of wellbeing, prevention of ill health and early identification, support for service enhancement and service coordination especially for the most vulnerable children, and the need for further research. [32] Most states recommend the use of validated screening tools to detect social-emotional developmental delays.[32] "Early intervention and services that support healthy development in the years prior to starting school can reduce the incidence of disorders that have high costs and long-term consequences for the health, education, child welfare, and juvenile justice systems. However, fewer than half of children with problems are identified before starting school."[20] "Research suggests that pediatrician appraisal of a child's developmental status is often inaccurate with the use of a standardized developmental screening tool. It has been reported that pediatricians fail to identify and to refer 60 percent to 80 percent of children with developmental delays in a timely manner."[21]

Early learning coalitions focus on screening children for developmental delay, then linking children to appropriate services and supports. "Child screening of the full range of developmental, health and environmental factors is not available for most of Florida's children. Too many children miss out due to lack of health insurance, medical homes, policy and practice barriers to screening in medical settings or lack of trained and competent screeners. When screening is in place, too often it does not include attention to social-emotional needs, environmental hazards or family functioning. There is little consistency in the tools used by agencies and programs providing child screening, with differences even found in the same program offered in different parts of the state."[38]

"It is important to integrate behavioral health into pediatric primary care and the medical home environments. This integration should include use of identification tools, and appropriate referral processes. Pediatric behavioral, developmental, and mental health issues are more common than childhood cancers, cardiac problems, and renal problems combined. However, research has repeatedly shown that primary care physicians recognize less than 30 percent for children with substantial dysfunction." [2]

The use of individualized anticipatory guidance should be incorporated by the primary care provider at the level of the parent's cognitive, cultural, linguistically, and psychological readiness to partner with parents in identification of developmental delays.[35]

Families are the primary providers of care for their children. It is important to coordinate all services and connect children and their families to appropriate treatment and supports.

"Florida's strength is its ability to make available basic mental health services to all its residents regardless of location. The weakness of the service system is its inability to offer the same level of services at the same intensity as can be found in the more populated areas of the state. According to the U.S. Census Bureau, Florida has the third largest immigrant population in the United States. Data indicate that persons with several ethnic and linguistic backgrounds are receiving publicly-funded mental health services. A significant proportion of the immigrants live in rural areas. This drives the need for the Department to finalize a cultural and linguistic competency plan that addresses not only the immigrant population, but individuals and families in rural or remote areas of the state."[10]

Florida has maintained the rank of 48th in the nation in per-capita spending on community mental health services. Florida provides services to less than 1/5 of the approximately 784,558 adults and 331,496 children in need of mental health services in Florida.[27] It must be noted that there is no Department of Health representation on the Florida State Mental Health Planning Council.

Partnering with public and private organizations that have similar or compatible missions can strengthen programs already under way. State activities can also include avoiding duplication of currently available resources, improved access with integration of mental health and primary care services, leveraging existing funding, programs, and materials for a media campaign to improve the public's awareness, ensure evidenced-based treatment, develop and evaluate culturally responsive services, ensure cross-cultural communication, and establish programs and protocols that are designed by and with people with disabilities with expectations of full community inclusion and participation by people with disabilities.[12]

DOH Capacity

The Department of Health has the capacity to build upon programs and activities already in place. Capacity is limited especially in terms of growth as it is dependent on declining budgets at both the state and county levels. If adequate funding is provided the department has the capacity to provide for organizational activities including strategic planning, governance, financial management, leadership, training and education to practitioners, parents, and others involved in child health, program evaluation, as well as taking the lead or assisting in formation of coalitions, committees, and other collaborative efforts. These types of partnerships have been essential in meeting the needs of children in Florida. The Department of Health continues to build partnerships and maintain mutual participation in Florida's Mental Health Program, Florida's Child Health Insurance Program, and Florida KidCare which provides Behavioral Health Care Networks for children needing intensive mental health services. The Department of Health is the lead agency for the Interagency Coordinating Council for Infants and Toddlers.

Children's Medical Services coordination of social and health care for children with disabilities can improve outcomes by addressing individual health promotion needs. Under Title V, the Children with Special Health Care Needs Program collaborates with Children's Mental Health Specialists. Children's Medical Services network also provides the Medicaid service array to children with special

health care needs, expanding those services as necessary to meet the needs of each child. The transition health care task force has focus on the needs for youth with disabilities transitioning to adulthood.

Florida public school students in grades K-12 have access to the department's School Health Services Program, which provides direct services for minor injuries and illnesses, medical oversight of chronic conditions, medication administration, screenings, health education, assessments, care planning, education of school staff, students, and parents, and many other activities to meet the health needs of students. The School Health Program has the capacity to improve services to children through quality improvement processes. Local county general fund budgets have been cut resulting in recent decreases in school health staff across the state. Improved funding in this program coupled with quality improvement indicators with measurable outcomes would provide improved access and quality of services from health care professionals that address the mental, behavioral, and physical disability needs of school children.

The Youth Risk Behavior Surveillance System (YRBSS) assists in monitoring priority health-risk behaviors that contribute to the leading causes of death, disability, and social problems. It is within the capacity of the department to add CDC recommended Key National Indicators of Wellbeing to the Youth Risk Behavior Surveillance System and include: "Activities promoting health and development" and "Youth in the justice system".[37]

Current State Priority

Current plans to address these issues include building healthy communities and families, as well as decreasing the risk factors related to developmental, mental, behavioral, and physical disabilities in Florida. "Healthy citizens are crucial to Florida's continuing economic growth. Students must be healthy to learn, and healthy adults are the basis of a productive workforce."[36]

Key areas toward building healthy communities and healthy families:

The health status of women of reproductive age, which greatly influences pregnancy outcomes and the health and developmental outcomes of infants.

Teen use of alcohol and/or drugs, including tobacco; dropping out of school, being uninvolved in school, family, or community activities; perceiving little or no opportunity for success. All lead to greater likelihood of early childbearing.

Obesity, substance use, smoking, and untreated chronic disease or infections in pregnant women, which can cause a baby to be born too early or with serious health or developmental conditions.

Poverty, domestic violence and educational delays which may prevent a woman or infant from receiving timely prenatal and infant health care.

Florida's role includes activities to continue reducing teen pregnancy by ensuring availability of primary care services, mental health/chemical dependency services; adolescent well-care services and family-planning services and can focus policy on the idea that preventing teen pregnancy is more than a reproductive health issue, but also incorporates assisting teens to reach their life potentials and a host of other social issues.[36]

Florida strives to effectively support people with developmental disabilities to empower them to be valued and contributing members of their community.[36]

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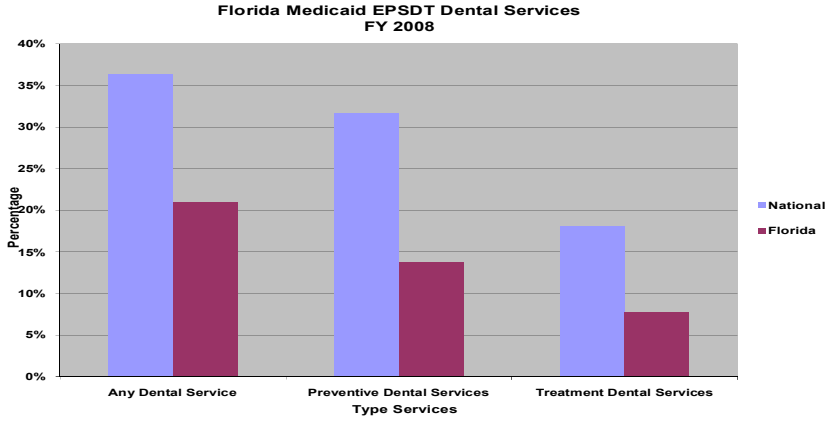
DENTAL CARE

Definition and General Description of the Issue/Problem

Preventive dental care for all children and restorative care for those children most in need are vital health issues in Florida. Dental problems range from dental infections such as cavities, toothaches, and gum diseases; to injuries; to malformations such as cleft lips and palates. They can affect a child or teen in many ways including a child's ability to eat, focus in school, communicate, sleep well and even may even affect self esteem and interaction with peers. Preventive care to ensure healthy teeth and mouths is important. Healthy teeth and mouths can help a child avoid or diminish the risks of cavities and gum diseases, and can reduce future risks of systemic diseases and conditions such as preterm labor, diabetes, obesity, cancer, and heart disease.

Magnitude

Nationally, close to 27 percent of preschoolers have tooth decay; with over 50 percent developing tooth decay by age 11; and nearly 70 percent by age of 19 (NHANES). Poor children suffer twice as much dental caries as their more affluent peers, and their disease is more likely to be untreated.[1, 2] The need for dental care always ranks high in surveys to assess the health needs of disadvantaged persons. Uninsured children are 2.5 times less likely than insured children to receive dental care.[1, 2] In FY 2007-2008 approximately 21.5 percent of Florida Medicaid-eligible children utilized dental services (AHCA/Medicaid Decision Support System (DSS)). In FY 2007-2008, Florida Medicaid expenditures for dental health services totaled less than 1 percent of total Florida Medicaid expenditures on health care. (AHCA/Medicaid DSS) Centers for Medicare and Medicaid data for Medicaid EPSDT dental services in FY 2008 (2008 CMS 416 Report) show a wide disparity between national and Florida numbers for children receiving any dental services as well as preventive and treatment services, as seen in the graph below.



In Florida, limited information is available on the incidence and prevalence of tooth decay in the general population. For the years 1999-2001, 71.4 percent of county health department patients age 15 (all races and genders) had untreated tooth decay, while 21.4 percent of the same population had no decay.[3] Moreover, 37.3 percent of 15-year-old Medicaid patients had

untreated tooth decay.[3] Although this data has not been updated since 2001, those numbers are probably similar today.

ECC, also known as Baby Bottle Decay, is a severe form of tooth decay that affects children ages 1 to 6. ECC occurs in up to 12 percent of the general population and it is more prevalent in native populations and populations with low socioeconomic status.[2] This disease has increased in the past 10 years and is mostly untreated in preschool children.[2] Advanced cases or cases involving very young children can cause systemic infection and even death and usually require anesthesia or sedation to treat. The application of fluoride varnish by dental and/or medical providers has been shown to reduce the incidence of dental caries (treated or untreated tooth decay) by up to 40 percent.

On February 2, the Pew Children's Dental Campaign, with support from the W.K. Kellogg Foundation and DentaQuest, will release its inaugural 50-state report that grades each state's policy responses to the crisis in dental health among America's children. In addition to using publicly available data, the Association of State and Territorial Dental Directors assisted in the collection of data from states. The report will assess and grade all 50 states and the District of Columbia, using an A-F scale, on whether and how well they are employing eight proven and promising policy approaches at their disposal to ensure dental health and access to care for children. These policies include preventative measures (such as sealants and fluoridation), expanded access to Medicaid, and innovative workforce models. It is projected that Florida will receive a D or F grade on the report.

Severity/Consequences

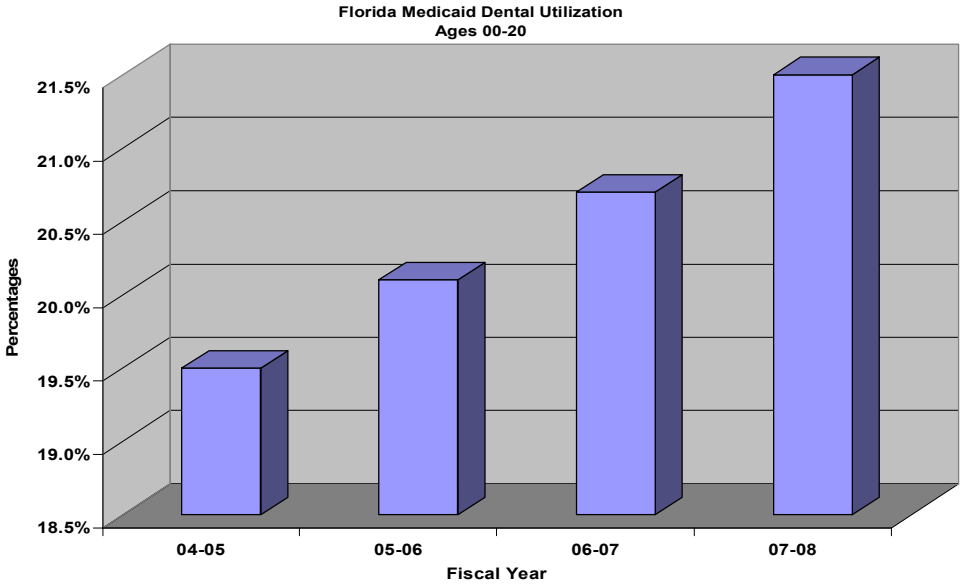
Nationally, there have been at least seven deaths attributed to untreated dental infections since 2006. In addition to a potential loss of life, dental disease has a significant socio-economic impact through a loss of school and work hours. National estimates suggest that over 51 million school hours and 164 million work hours are lost annually due to dental disorders and that approximately 60 billion dollars are spent on dental treatment services a year.[1, 2] Many of those dollars would not have been needed for treatment services if earlier diagnostic and preventive dental services had been available and utilized. In FY 2007-2008, Florida Medicaid expenditures on dental health services equaled $98.1 million with $79.3 million on children. (AHCA/Medicaid DSS) Florida Medicaid inpatient data claims between July 2006 and June 2007 indicate there were 196 Medicaid children under the age of 6 who were hospitalized for an average of 3.7 days with sinus infections related to a dental problem. Total expenditures for these 196 admissions were $1,076,229.28. (AHCA/Medicaid DSS).

Trend

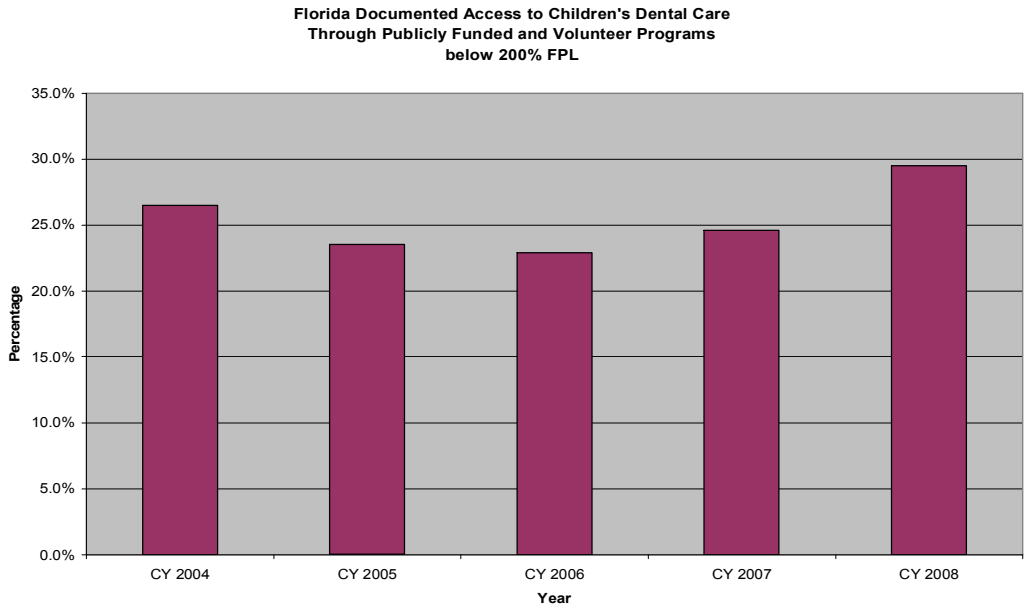
The prevalence of dental caries in the primary dentition of US children age 2 to 4 increased from 18.5 percent in 1988–1994 to 23.7 percent in 1999–2004.[2] Among children age 6 to 8, the prevalence of dental caries among non-Hispanic white children in that age group remained unchanged at about 49 percent; it increased among non-Hispanic black children from 49.4 percent to 56.1 percent and remained above 63 percent among Mexican American children.[2] Overall, dental caries in the permanent dentition declined among children age 6 to 11 and among adolescents 12 to 19, although the declines were not statistically significant among non-Hispanic blacks age 6 to 11 or among Mexican Americans in either age group.[2]

Dental care utilization by children moved toward the target of 56 percent, but use of preventive services by low-income children remained below half of the 2010 target of 66 percent.[2] Utilization of dental services by Medicaid children remains unchanged around 36 percent (2008 CMS 416 Report) with Florida being around 22 percent. As shown in the following graph, the

Medicaid utilization rates for children in Florida have gradually increased over the past four years from 19.5 to 21.5 percent (AHCA/Medicaid DSS).



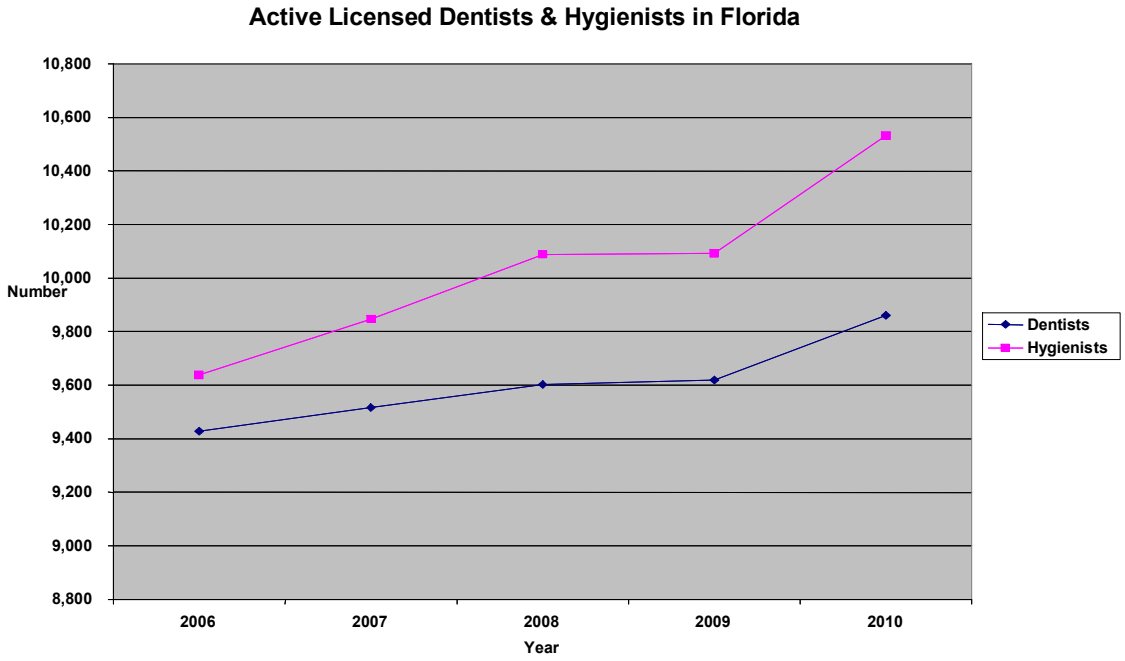
During the same period of time, the percentage of children having access to dental care through publicly funded and volunteer programs in Florida had a similar increase from 26.5 to 29.5 percent. (Florida DOH Public Health Dental Program) However, as shown in the next graph, there appears to be a decline in access during calendar years 2005 and 2006 with a small rebound in 2007.



The access to dental care dip during the three middle years in the graph is attributed to the manner in which utilization data is reported. Over the 2005-2007 years, Medicaid dental in six counties was converted from fee-for-service to a managed care payment methodology and three of those counties are among the more populous counties in the state. Due to managed care, utilization and encounter data are not retrievable through Medicaid's DSS.

The proportion of the public water systems with optimally fluoridated water increased in the United States to 69.2 percent in 2006. However this is still shy of the 2010 target of 75 percent. As a comparison, in 2006, 77.6 percent of Florida's public water systems were fluoridated and are at 78.7 percent now. Florida surpassed the 2010 goal in 2005.

Nationally and in Florida, the dental workforce is changing, but the trend in Florida is the reverse of the country. Throughout the country, the number of dentists is decreasing as more dentists are retiring then graduating.[1, 4] In Florida though, both the number of dentists and dental hygienists has been growing, as seen in the graph below. (Florida Board of Dentistry)



Additionally, there is a mal-distribution of dental providers that has led to low numbers of providers for the Medicaid children and rural and inner city populations. Although the number of licensed dentists in Florida has increased over the past four years, proportionally, the number of dentists treating Medicaid patients has not kept up. Even though the number of dentists enrolled in the Medicaid Program has increased from 1,479 to 2,101 over the past four years, the number of dentists that treated Medicaid patients has risen only 183 during the same period of time. Only 11 percent of the active licensed dentists in Florida treat Medicaid patients. (AHCA/Medicaid DSS)

National/State Goals

Nationally, Healthy People 2010 (HP 2010)[5] presents a comprehensive, nationwide health promotion and disease prevention agenda. HP 2010 includes oral health as one of 28 focus areas. The oral health focus areas list 17 oral health objectives and outcome measures of which the following 11 are related to children and adolescents.[5] Some of these objectives with their targets and current baselines are:

- Reduce the proportion of young children with dental caries experience in their primary teeth;
- Reduce the proportion of children with dental caries experience in their primary and permanent teeth;
- Reduce the proportion of adolescents with dental caries experience in their permanent teeth;
- Reduce the proportion of young children with untreated dental decay in their primary teeth;
- Reduce the proportion of children with untreated dental decay in primary and permanent teeth;
- Reduce the proportion of adolescents with untreated dental decay in their permanent teeth;
- Increase the proportion of children aged 8 years who have received dental sealants on their molar teeth;
- Increase the proportion of children aged 14 years who have received dental sealants on their molar teeth;
- Increase the proportion of the U.S. population served by community water systems with optimally fluoridated water (objective exceeded in Florida as of 2005); and
- Increase the proportion of low-income children and adolescents who received any preventive dental service during the past year.[5]

Additionally, the section on oral health lists related objectives and outcome measures from 22 of the 27 other focus areas where oral health is a factor in these objectives and outcome measures.[5] Oral health is related to objectives and outcome measures in such sections as: access to quality health services; diabetes; educational and community-based programs; health communication; maternal, infant, and child health: service systems for children with special health care needs; nutrition and overweight: overweight or obesity in children and adolescents; and tobacco use, including adolescent tobacco use and smoking cessation by adolescents.[5]

Florida has not developed a state Healthy People Plan that includes oral health indicators or outcome measures.

Potential for Improvement

Prevention of dental caries in children and adolescents involves a range of population-level and individual-level strategies that may include oral health education, community water fluoridation, topical fluorides such as fluoride varnish, dental sealants, antibacterial rinses, and dietary interventions. Along with community water fluoridation, the community-based prevention strategies best supported by evidence and feasibility are dental sealants and fluoride varnish application.

Community water fluoridation is the most cost-effective method to prevent dental caries, which in Florida reaches 78.7 percent of populations served by community water systems. (CDC & DOH Public Health Dental Program) Dental sealants and fluoride varnishes are preventive procedures for dental caries and are widely used in public dental programs. Fluoride varnish has been shown to reduce the incidence of dental caries by up to 40 percent[1, 2] and dental sealants up to 74 percent[1, 2]. Florida has no statewide system of school-based dental fluoride varnish or sealant programs and there is no surveillance system to monitor fluoride varnish or sealant utilization.

Various Florida oral health workforce workgroups were formed to investigate ways to improve the oral health workforce in Florida. The Oral Health Florida Coalition in its State Oral Health Improvement Plan (SOHIP)[6], the Florida Health Practitioner Oral Healthcare Workforce Ad Hoc Committee[7], and the Florida Oral Health Workforce Workgroup[8] have each put forth recommendations to improve the oral health workforce. Each of these recommendations has shown promise in other states in increasing access to dental care for underserved populations including children.

Florida implemented an ECC prevention program approximately 1.5 years ago that trains physicians, ARNPs and PAs to apply fluoride varnish to children 0 to 4 years of age. Each month has produced continual increases in the number of billing providers, unduplicated recipients, and duplicated recipient counts participating in the program. Since its beginning, more than 230 non-dental providers have applied fluoride varnish to over 15,000 individual recipients. (DOH Public Health Dental Program).

DOH Capacity

County health department dental programs and community dental projects provide screenings, oral health education, diagnostic services, preventive services, and restorative treatment. The scope of services CHDs provide and the age groups they treat varies based on need and the availability of resources, but the primary focus is the treatment of Medicaid children. In FY 2007-2008, approximately 79 percent of total unduplicated CHD patients were children with 75 percent of those children patients being Medicaid eligibles. Additionally, in that fiscal year, 32.6 percent of all Medicaid children dental recipients were treated in CHDs with that percentage being second only to the private sector Medicaid dental providers at 46.5 percent. (AHCA/Medicaid Decision Support System (DSS)) The non-Medicaid children were mostly third party or sliding fee patients. During FY 2007-2008, 30 percent of children's dental services were diagnostic (examinations, radiographs, etc.), and 34 percent were preventive services (prophylaxis, fluoride applications, sealants, etc.) with the remaining 36 percent being various treatment services, including but not limited to restorations and extractions. (FDOH HMS Dental Activity Reports)

Onsite dental programs exist in 47 of Florida's 67 counties and two counties have developed partnerships to provide dental services - one with a community college and one with a community health center. The 47 CHD dental programs include 84 fixed clinical sites and 13 mobile dental units operating out of 10 counties. Two additional CHDs are in the process of developing dental programs. The CHD safety net programs presently reach approximately 18 percent of the targeted population. Three CHDs conduct volunteer programs out of CHD facilities. Thirteen CHDs provide care to Ryan White funded patients. Six CHDs conduct school-based sealant programs using mobile units that serve 11 counties and seven CHDs conduct school-based sealant programs using portable equipment or a referral process. Eleven community dental projects provide services in 30 counties through public-private partnerships and promote community and school-based preventive and educational programs. (DOH Public Health Dental Program)

CHD dental capacity growth has slowed in the past couple of years, reportedly due mostly to lack of facility space and funding. In September 2008, all 67 CHDs responded to a survey relative to their dental workforce and facilities. Survey results showed that 14 of the 18 CHDs not presently having a dental program said they were interested in developing one with 12 of the 14 not having space within existing facilities to accommodate a dental clinic. Thirty CHDs need additional staff to maximize efficiency with existing dental facilities with FTE dentists and dental assistants being the larger numbers indicated. About half of the CHDs with existing dental programs indicated they have recruitment problems with staffing the programs. A majority of

recruitment issues appear to be related to finding qualified staff (dentists, assistances, hygienists) due to pay limitations and that state salaries not being competitive with the private sector.

Current State Priority or Objective

The governor and the DOH have identified improving access to primary and preventive dental health care services and reducing oral health disparities as a priority - especially among low-income populations, special needs children, geographically underserved populations, and other disadvantaged populations. As such the DOH has established a Long Range Program Plan (LRPP) 2006-2007 through 2010-2011[9] that identifies goals and objectives to address these issues, such as, Improving access to dental health care services through early primary care and access to dental services as ways to improve access and reduce disparities to health care; provide access to care for children with special health care needs by providing for early intervention services for eligible children with special health care needs; ensuring health care practitioners meet relevant standards of knowledge and care; and increase the availability of health care in underserved areas. These all relate to improving access and reducing health disparities for disadvantaged and isolated populations. Further, these goals and objectives link to the Governor's Priorities[10], which aim to improve education by ensuring that health care practitioners meet relevant standards of knowledge and care; providing access to care for children with special health care needs by improving access to basic family health care services; and by increasing the availability of health care in underserved areas. Thus, the Governor's Priorities and DOH's Long Range Program Plan relate directly to improving the oral health of children and adolescents in Florida.

Additionally, in 2004, in response to the U.S. Surgeon General's Report and Healthy People 2010, the Florida Department of Health's Public Health Dental Program (PHDP) established Oral Health Florida, a broad-based coalition that developed and continues to advance a State Oral Health Improvement Plan for Disadvantaged Persons (SOHIP). Moreover, since 2008, the DOH and PHDP has promoted and facilitated a succession of three oral health workforce workgroups, the Oral Healthcare Workforce Ad Hoc Advisory Committee; the Oral Healthcare Workforce Workgroup; and the Oral Health Florida Coalition Workforce Workgroup, that continue to work on developing a strategic plan on dental workforce issues. The various goals, recommendations, and strategies from the SOHIP and the three Workforce Workgroups all address the oral health of children and adolescents.

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UNDERAGE DRINKING

Definition and General Description

Although the severe health problems associated with alcohol are not as common in adolescents as they are in adults, studies show that young people who drink put themselves at risk for a range of potential health problems. Underage drinking is a persistent public health problem that generates significant costs to society as well, due to alcohol-related consequences such as criminal activity, delinquency, antisocial behavior, academic difficulties, risky sexual behavior, health problems, unintentional injuries, and traffic crashes. We face a particularly tough challenge in this regard as Florida youth have higher rates of alcohol use than the national average (Florida's State Epidemiology Workgroup, 2007). Policies and programs that target underage drinking have the potential to generate significant savings to state government, taxpayers, businesses, schools, and other segments of society by reducing the negative consequences associated with underage drinking.

Magnitude

According to the 2009 Florida Youth Substance Abuse Survey (FYSAS), alcohol is the most prevalent substance used by Florida students; 53.9 percent reported any lifetime use and 29.3 percent reported past-30-days-use. On the national level, 75.0 percent of students had at least one drink of alcohol on at least one day during their life and 44.7 percent of students had at least one drink of alcohol on at least one day during the 30 days before the survey (YRBS). More than 78 percent of high school seniors in Florida report having tried alcohol at least once, 9 percent of 6th graders and more than 47.1 percent of 12th graders report using alcohol in the past month, and about one out of six Florida students (16.4 percent) report binge drinking within the past two weeks (FYSAS).

Parents and peers have a large impact on youth decisions to drink. Research clearly indicates that alcohol advertising and marketing also have a significant effect, by influencing youth and adult expectations and attitudes, and helping create an environment that promotes underage drinking. A national study published in January 2006 concluded that greater exposure to alcohol advertising contributes to an increase in drinking among underage youth. Specifically, for each additional advertisement a young person saw (above the monthly youth average of 23), he or she drank 1 percent more. For each additional dollar per capita spent on alcohol advertising in a local market (above the national average of $6.80 per capita), young people drank 3 percent more (Snyder, 2006).

Florida is also a popular tourist destination, attracting thousands of young people each year for spring break, sporting events, vacations, and holidays. Many tour companies sell all-you-can-drink vacation packages to teenagers, never questioning their underage drinking status. Spring break students in Florida average 18 drinks per day for boys, 10 for girls according to one study (Goffman).

Severity

The total estimated cost of underage drinking Florida in 2007 was $3.073 billion.

Table 1

This statewide total translates into a cost of $165 per Florida resident, $627 per youth under the age of 21, and $1,818 per youth 14-20 years of age. These costs were the result of approximately 180 youth deaths and 71,602 injuries and other events directly attributable to underage alcohol use (Economic Cost of Underage Drinking in Florida, 2009).

Table 2 presents the total cost of underage drinking by region. Counties located in the Suncoast and Central regions of the state generated the largest share of the total statewide cost. Costs per youth under the age of 21 and per youth between the ages of 14 and 20 are highest in the Suncoast region, averaging $679 and $2,021 per youth, respectively. The counties located in the Suncoast region are Charlotte, Collier, Desoto, Glades, Hendry, Hillsborough, Lee, Manatee, Pasco, Pinellas, and Sarasota (Economic Cost of Underage Drinking in Florida, 2009).

Table 2. Economic Costs of Underage Drinking in Florida per Florida Resident, by Region
(in 2007 dollars)

	Total Cost	Cost Per Person	Cost Per Youth under 21	Cost per Youth 14-20
	(millions of US$)	*(in US$)*	*(in US$)*	*(in US$)*
Total	**3,073**	**165**	**627**	**1,818**
Northwest	222	133	483	1,285
Northeast	458	181	664	1,820
Central	713	155	606	1,767
Suncoast	719	169	679	2,021
Southern	476	187	667	1,959
Southeast	482	157	602	1,826

Source: Population data is for 2007 from the Florida Office of Economic & Demographic Research.

Table 3 summarizes tangible and intangible costs, by category. Intangible costs represented approximately 68 percent of the total statewide cost of underage drinking. Property and violent crime and motor vehicle crashes accounted for a large share (81 percent) of total tangible cost, while violent crime was associated with the largest share of total intangible cost mainly due to the considerable pain and suffering resulting from these crimes (Economic Cost of Underage Drinking in Florida, 2009).

Apart from being illegal, underage drinking poses a high risk to the overall health of the adolescent population. Scientists currently are examining just how alcohol affects the developing brain, but it's a difficult task. Subtle changes in the brain may be difficult to detect but still have a significant impact on long-term thinking and memory skills. Add to this the fact that adolescent brains are still maturing, and the study of alcohol effect becomes even more complex. It is not known how alcohol and drugs affects the long-term memory and learning skills of people who began drinking and using drugs as adolescents. Elevated liver enzymes, indicating some degree of liver damage, have also been found in some adolescents who drink alcohol. In both males and females, puberty is a period associated with marked hormonal changes, including increases in the sex hormones estrogen and testosterone. These hormones, in turn, increase production of other hormones and growth factors, which are vital for normal organ development. Drinking alcohol and using drugs during this period of rapid growth and development (i.e., prior to or during puberty) may upset the critical hormonal balance necessary for normal development of organs, muscles, and bones (CDC).

Early alcohol use may have long–lasting consequences. People who begin drinking before age 15 are four times more likely to develop alcohol dependence at some time in their lives compared with those who have their first drink at age 20 or older (CDC). It is not clear whether starting to drink at an early age actually causes alcoholism or whether it simply indicates an existing vulnerability to alcohol use disorders (CDC). For example, both early drinking and alcoholism have been linked to personality characteristics such

as strong tendencies to act impulsively and to seek out new experiences and sensations (CDC). Some evidence indicates that genetic factors may contribute to the relationship between early drinking and subsequent alcoholism. Environmental factors may also be involved, especially in alcoholic families, where children may start drinking earlier because of easier access to alcohol in the home, family acceptance of drinking, and lack of parental monitoring (CDC).

Trend

On the 2009 FYSAS, 53.9 percent of high school students reported any lifetime use of alcohol and 29.3 percent reported past-30-days-use of alcohol. N This is down slightly from the reported lifetime use in 2008 of 53.2 percent, but is an increase of past-30-days-use of alcohol from 25.75 percent in 2008. Overall, the rates have stayed relatively stagnant over the last nine years of the survey, as noted in the chart below.

Alcohol Use

	Lifetime						Past 30 Days					
	2000 %	2002 %	2004 %	2006 %	2008 %	2009 %	2000 %	2002 %	2004 %	2006 %	2008 %	2009 %
Sex												
Female	55.0	57.3	58.7	58.1	54.9	55.0	33.0	31.4	32.9	33.1	30.6	29.4
Male	56.5	55.8	56.3	54.3	51.5	52.7	35.6	31.0	31.7	30.9	29.0	29.1
Race/Ethnic group												
African American	41.5	42.3	45.3	43.7	42.8	43.1	21.0	19.8	20.8	19.3	20.1	19.6
Hispanic/Latino	61.0	57.8	60.2	56.8	55.7	58.0	38.7	31.6	33.6	31.8	31.5	30.9
White, non-Hispanic	63.5	63.5	63.0	61.5	57.6	56.8	40.7	37.0	37.9	37.9	34.5	33.3
Age												
11	23.4	24.8	24.1	20.0	18.3	18.9	9.4	8.5	10.1	7.2	6.8	6.3
12	30.7	32.7	33.2	29.4	26.6	26.0	14.5	12.5	12.1	11.6	10.2	9.5
13	42.6	43.5	44.1	41.5	37.9	37.1	23.9	20.3	21.4	19.2	17.6	17.4
14	56.5	56.7	56.4	52.5	49.7	54.3	33.8	29.0	29.7	27.9	26.2	26.6
15	63.5	63.8	65.0	62.9	59.3	62.3	39.3	35.7	37.0	36.1	32.8	36.0
16	67.6	69.0	70.9	69.8	67.3	66.7	44.0	41.2	42.2	41.9	39.4	36.3
17	72.5	73.8	73.5	73.1	70.7	69.0	48.1	45.1	46.0	46.1	44.2	41.6
18	71.6	74.5	75.9	75.8	73.2	74.0	48.5	50.4	53.2	53.3	47.9	46.7
Grade												
6th	29.2	30.4	29.3	26.3	24.2	23.7	14.9	11.6	11.2	11.0	10.3	9.0
7th	39.3	42.0	43.1	39.4	37.0	36.4	21.2	19.4	20.7	17.5	17.0	16.4
8th	54.9	54.9	55.1	52.3	47.9	51.7	33.9	28.4	28.8	27.7	24.7	26.4
9th	62.4	62.2	63.9	60.3	57.3	62.0	38.4	34.7	35.8	34.4	31.6	34.2
10th	66.8	68.4	68.8	68.4	66.0	64.0	42.1	38.3	40.5	40.7	38.1	35.3
11th	71.2	73.0	73.9	72.6	70.0	69.6	46.1	44.7	45.4	44.0	42.5	39.7
12th	76.2	75.4	75.8	76.0	73.9	73.1	52.1	51.4	51.0	52.2	48.2	47.1
Overall Middle School	41.1	42.3	42.6	39.7	36.3	37.4	23.3	19.7	20.3	19.0	17.3	17.3
Overall High School	67.9	68.5	69.6	68.4	66.2	66.8	43.5	40.8	42.0	41.8	39.5	38.6
Total	**55.7**	**56.5**	**57.5**	**56.1**	**53.2**	**53.9**	**34.3**	**31.2**	**32.3**	**32.0**	**29.8**	**29.3**

On the national level, 75.0 percent of students had at least one drink of alcohol on at least one day during their life and 44.7 percent of students had at least one drink of alcohol on at least one day during the 30 days before the survey (US YRBS, 2007). This is significantly higher than the rates reported in Florida.

The table above illustrates the binge drinking rates in Florida. Binge drinking is defined as having had five or more alcoholic drinks in a row in the past two weeks. In 2009, 14.5 percent of females and 16.5 percent males report binges drinking. This is compared with 14.0 percent of females and 15.6 percent of males in 2008. This indicates a slight increase for 2009. However, since 2000 the percentages have decreased slightly each year.

On a national level, 26 percent of students report binge drinking. Broken down by gender, 24 percent of females and 27.8 percent of males report this behavior. This is also significantly higher than rates reported in Florida.

National and State Goals

On the national level, there is no specific goal that addresses the reported underage drinking rates. However, the Surgeon General's Call to Action to Prevent and Reduce Underage Drinking identifies six goals for the nation to reduce the number of underage drinkers and prevent children and adolescents from beginning to drink.

GOAL # 1: Foster changes in American society that facilitate healthy adolescent development and that help prevent and reduce underage drinking.

GOAL # 2: Engage parents, schools, communities, all levels of government, all social systems that interface with youth, and youth themselves, in a coordinated national effort to prevent and reduce drinking and its consequences.

GOAL # 3: Promote an understanding of underage alcohol consumption in the context of human development and maturation that takes into account individual adolescent characteristics as well as environmental, ethnic, cultural, and gender differences.

GOAL # 4: Conduct additional research on adolescent alcohol use and its relationship to development.

GOAL # 5: Work to improve public health surveillance on underage drinking and on population-based risk factors for this behavior.

GOAL # 6: Work to ensure that policies at all levels are consistent with the national goal of preventing and reducing underage alcohol consumption.

In addition, the National Initiative to Improve Adolescent and Young Adult Health is a collaborative effort to improve the health, safety, and well-being of adolescents and young adults This national initiative aims to achieve the 21 critical health objectives for adolescents and young adults found in *Healthy People 2010*. These objectives focus on individual health outcomes and related behaviors that pose the greatest threat to the health of adolescents and, subsequently, adults. Objective 26-11 of *Healthy People 2010* is to : Reduce the proportion of persons engaging in binge drinking of alcoholic beverages ages 12- 17. The goal for 2010 is 2.0 percent per 100,000 of the adolescent population ages 12- 17.

There are currently no state goals that address the underage drinking rates in adolescents.

Potential for Improvement

While Florida is making strides toward addressing underage drinking prevention, more emphasis can be placed on changing societal norms. Society plays the biggest role in determining views on underage drinking, so it is important to recognize the large impact community influences play in the fight against underage drinking. Whether done with awareness programs provided through churches and schools, or merely by providing area residents with literature about underage drinking, making the problem well-known will pay off by making the activity less acceptable to everyone involved.

Currently, the primary health care system is not sufficiently addressing the issue of underage drinking. Because screening for alcohol problems among youth is not routine, healthcare service organizations do not have an accurate estimate of the extent of underage alcohol consumption in the communities they serve. Although adolescents may be difficult to access and time in the physician's or other healthcare professional's office may be limited, primary health care systems, in partnership with the communities they serve, can play a vital role in addressing alcohol consumption by youth under the age of 21. Primary care practitioners can play a vital role in screening for alcohol, the psychoactive substance most often used by young people. As already mentioned, underage drinking is associated with considerable negative consequences, including substantial physical morbidity and mortality. Despite the magnitude of the problem, only 40 percent of a national sample of pediatricians and family doctors reported they screened their adolescent patients for alcohol use and only 52 percent provided alcohol education (Marcell et al. 2002). The situation may be even worse in rural areas. where primary care may be less available and the need to deliver early adolescent prevention services is greater.

Department of Health Capacity

The DOH addresses underage drinking through its representation on the Governor's Underage Drinking Prevention Taskforce, alcohol usage screenings done by the county health departments during the well child check up, and health education classes provide be some of the 46 counties that implement Comprehensive School Health Services Programs. The recently initiated Positive Youth Development Program also focuses on addressing risk and protective factors that increase youth engagement in high-risk behaviors, including underage drinking.

The Department of Health is limited in its ability to address underage drinking prevention, except in the role of providing health assessment and referral in a number of health related programs, such as county health department health clinics, Children's Medical Services, Positive Youth Development, and health education classes in Comprehensive School Health Services programs.

To adequately address this problem, establishment of new programs aimed specifically at increasing screening rates by physicians and increasing community awareness of underage drinking would be required. Additional funding and staff would be necessary. This type of program would have to be implemented on a state and county level to have the desired results.

Current State Priority

The Florida Office of Drug Control serves the people of Florida through the development, implementation, and assessment of sound strategies. The following strategies emphasize the linkages between objectives, outcomes, and resources.

In 1999, the Florida Drug Control Strategy identified prevention as critical to reducing drug abuse in Florida. Florida institutionalized a prevention approach with the publication of the ***Florida Prevention System***, a science-based approach to formulating and directing substance abuse prevention efforts. This system delineates the risk and protective factors that can be affected to decrease the incidence of substance abuse, and recognizes the six crucial areas that can be influenced to prevent the use of substances: the individual, the family, peers, schools, communities, and society as a whole.

The core principles for all state-level prevention efforts include collaboration of key stakeholders and agencies; support of community anti-drug coalitions, braiding of funding resources from multiple sources, and the use of the SAMHSA Strategic Prevention Framework model, which includes the following steps:

- Profiling community needs, resources, and readiness
- Mobilizing community resources and building capacity
- Developing strategic plans
- Supporting evidence-based prevention
- Monitoring local activity performance

The State Drug Control Strategy Plan addresses underage drinking through its objectives aimed at reducing youth access to alcohol. In Florida, adults who are 21 or older can legally purchase and consume alcoholic beverages. Those who are of legal age can purchase alcohol through on-license and off-license establishments. On-license establishments, like bars and restaurants, are permitted to sell alcohol for consumption at the place where the sale occurs. Off-license establishments, like liquor stores and convenience stores, are permitted to sell alcohol for consumption elsewhere. Young people can and do purchase alcohol in these commercial settings, even though it is against the law. They may also obtain alcohol from other social sources (friends, family members, parties, and adult purchasers). Research indicates it is common for retail outlets to sell to underage buyers, with rates of illegal sales affected by the location and the level of law enforcement.

The Governor's Safe and Drug-Free Schools and Communities Program is funded through the Title IV No Child Left Behind Act of 2001, which is administered by the United States Department of Education. Title IV supports programs that prevent violence in and around schools; prevent the illegal use of alcohol, tobacco, and drugs; involve parents and communities; and are coordinated with related federal, state, school, and community efforts and resources to foster a safe and drug-free learning environment that supports student academic achievement, through the provision of federal assistance.

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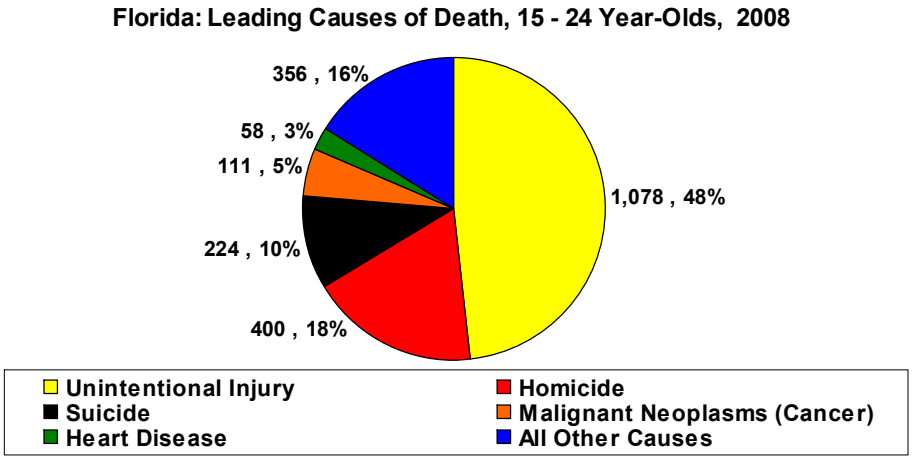
TEEN DEPRESSION AND SUICIDE

Definition and General Description of the issue/problem

Suicide, or the voluntary taking of one's life, is a major, preventable public health problem and the 11th leading cause of death among all age groups in the U.S. (NIMH, 2008). Among youth, suicide is the third leading cause of death nationally and in Florida. Florida's Vital Statistics for 2008 indicate that suicide is the third leading cause of death for 15 – 24 year-olds (DOH, 2008). This mimics national data from 2006 that also show suicide as the third leading cause of death for 15 – 24 year-olds (NCHS, 2006).

Figure 1



Source: Florida Department of Health, Office of Vital Statistics, 2008.

Not only do recorded deaths indicate that suicide is a public health problem, results from Florida's 2007 Youth Risk Behavior Survey indicate that 11.2 percent of Florida's 9th – 12th grade students have "seriously considered attempting suicide" compared to 14.5 percent nationally – and 5.7 percent have "attempted suicide" compared to 6.9 percent nationally. The implications of these statistics are alarming, especially when considering that Florida has no statewide, school-based screening or prevention programs to prevent further increases in suicidality and suicide.

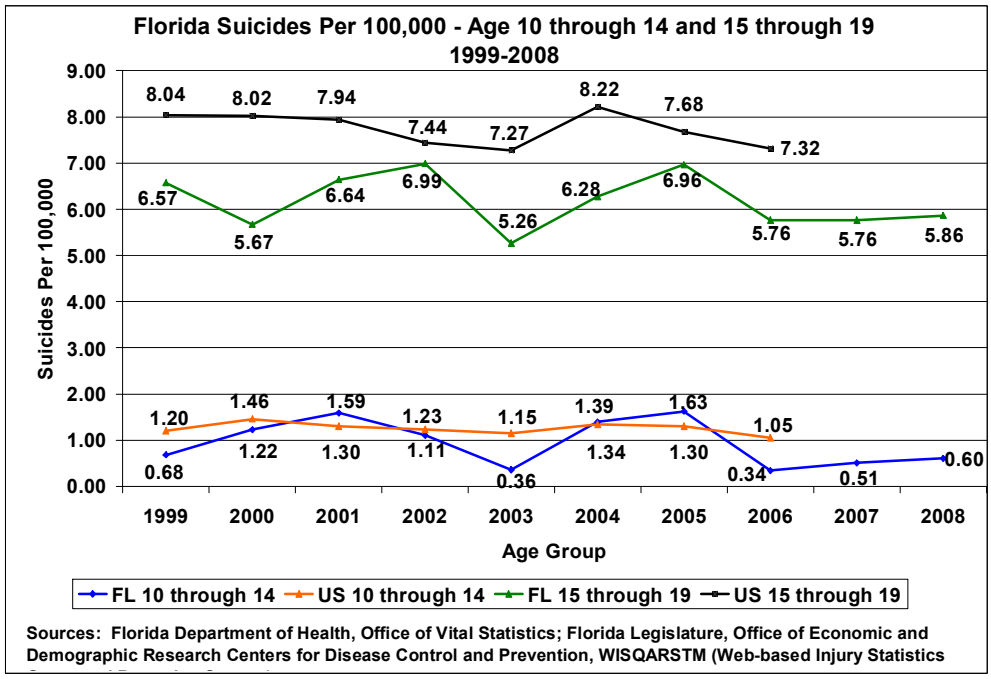
The prevalence of completed suicides is monitored by the Department of Health, Office of Vital Statistics. Relative to population, numbers of suicide are small, so it is represented as a rate per 100,000 to enable comparisons between age groups, racial ethnic categories, and other states.

Magnitude

Historically, suicides in the 15 through 19 year-old population have been monitored for the Maternal and Child Health block grant. In the following material, suicides in both the 15 through 19 year-old and 10 through 14 year-old age groups are examined. It can be noted in Figure 2 below that in the 15 through 19 year-old age group, there were 71 suicides (5.86 per 100,000) in 2008. In the 10 through 14 year-old age group, there

were 7 suicides (.60 per 100,000) in 2008. The national rates are 7.32 per 100,000 for 15 through 19 year olds and 1.05 per 100,000 for 10 through 14 year-olds.

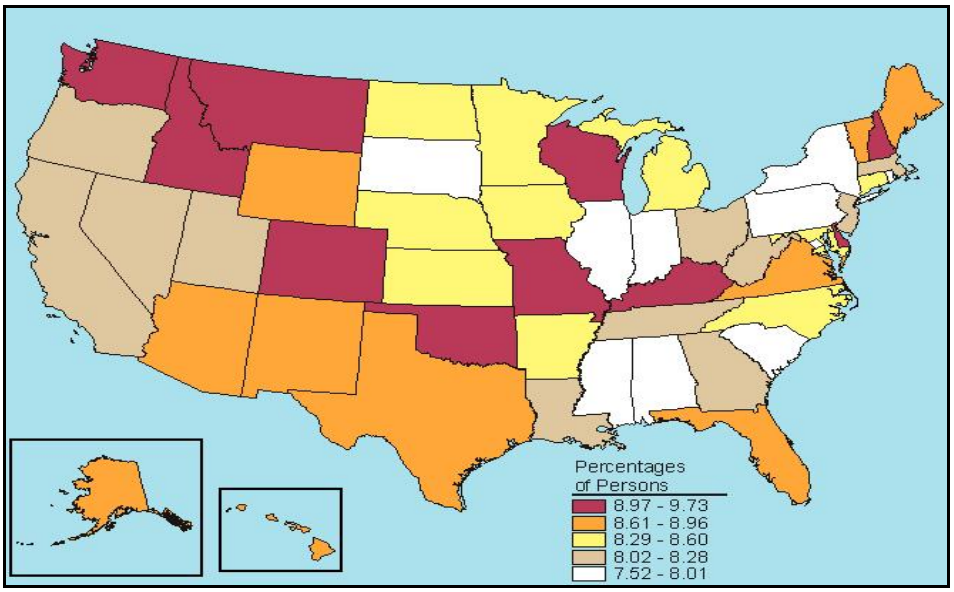
Figure 2



Ninety percent of people who die by suicide have a mental disorder such as depression and/or a substance abuse disorders. Additional risk factors are family history of mental disorder or substance abuse; family history of suicide; family violence, including physical or sexual abuse; firearms in the home; incarceration; and exposure to suicidal behavior of others, such as that of family members, peers, or media figures (National Institute of Mental Health, 2009). The National Survey on Drug Abuse results from 2005-2006 indicate that 125,000 (8.74 percent) of Florida 12-17 year-olds had a major depressive episode in the past year, placing Florida in the 2nd highest quintile nationally (SAMHSA, 2005, 2006; DOH, 2007). See Figure below:

Figure 3

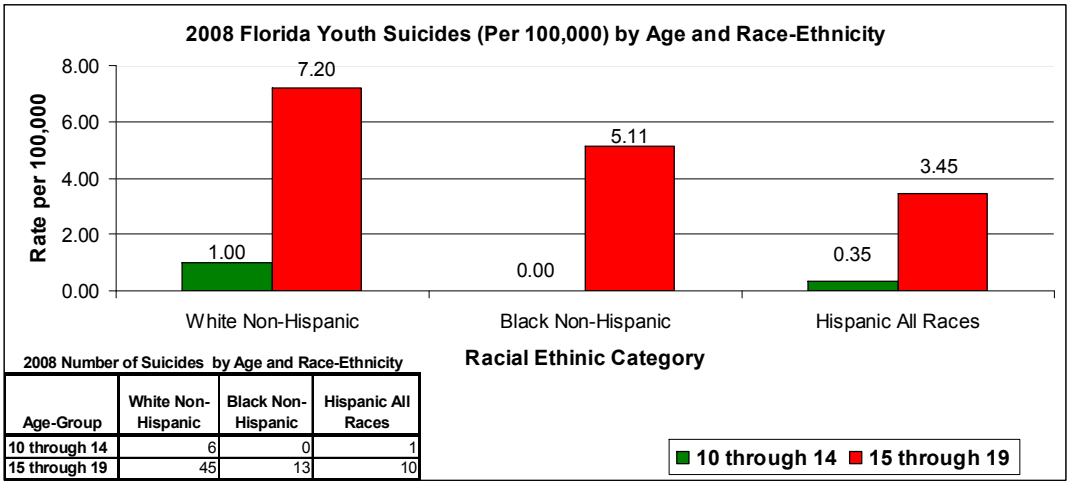
Having at Least One Major Depressive Episode in Past Year among Youths Aged 12 to 17
Percentages, Annual Averages Based on 2005 and 2006 National Surveys on Drug Abuse



Source: SAMHSA, Office of Applied Studies, National Survey on Drug Use and Health, 2005 and 2006.

As can be noted in Figure 4 below, in 2008, adolescents age 15 through 19 had a higher rate of suicide at 5.86 per 100,000 as compared to age 10 through 14 at .60 per 100,000. There is also a notable difference between the 2008 rate of suicide among male 15 through 19 year-olds at 8.73 per 100,000 (54 suicides) as compared to females at 2.87 per 100,000 (17 suicides). (DOH, 2009). By racial ethnic category, the highest rates of youth suicide are found in White Non-Hispanics, second highest – Black Non-Hispanic, and lowest – Hispanic All Races.

Figure 4



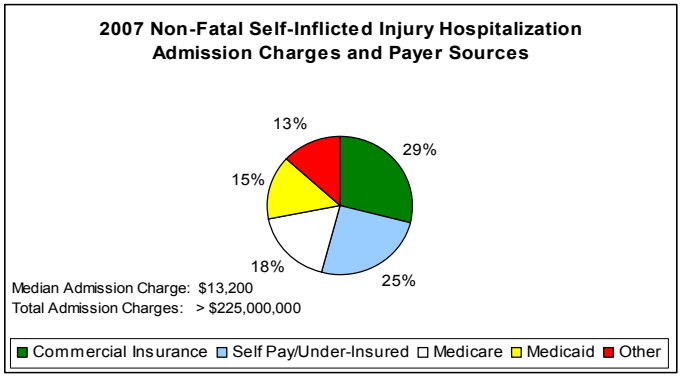
2008 Number of Suicides by Age and Race-Ethnicity

Age-Group	White Non-Hispanic	Black Non-Hispanic	Hispanic All Races
10 through 14	6	0	1
15 through 19	45	13	10

Severity/consequences

Suicide, or fatal self-inflicted injury, carries the ultimate price in lost lives. However, for every completed act of suicide, there are another 25 suicide attempts (NIMH, 2009). In 2007, the median admission charge for non-fatal self-inflicted injury hospitalizations was $13,200, with costs being borne as follows (DOH, 2007).

Figure 5

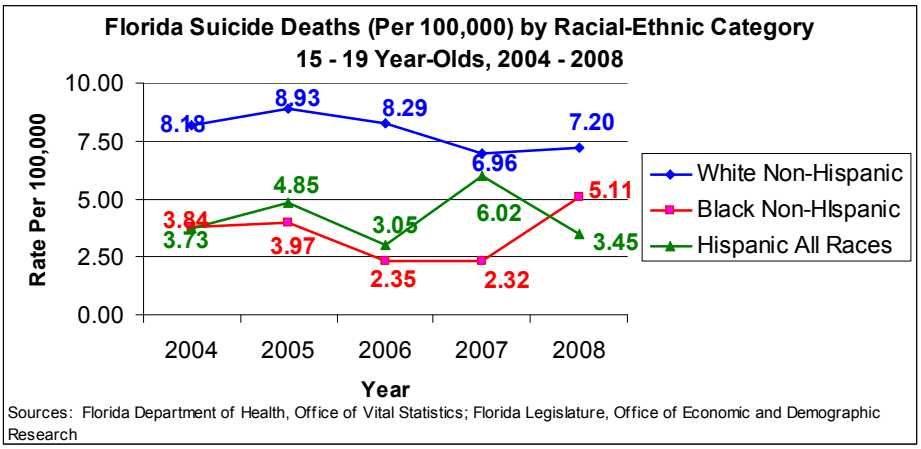


Source: Florida Department of Health, Office of Injury Prevention

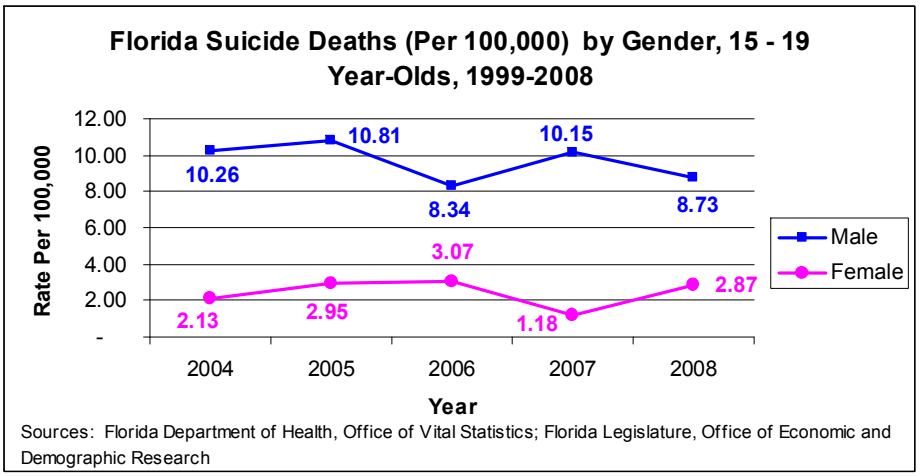
Trends

As can be noted in Figure 2 (P. 177), child and adolescent suicide has been declining over the past 10 years, both nationally and in Florida. Suicide among Florida 10 – 14 year-olds decreased from .68 to .34 per 100,000 between 1999 and 2006, while the national rate decreased from 1.20 to 1.05 per 100,000. Among Florida 15 – 19 year-olds suicides decreased from 6.57 to 5.76 per 100,000 between 1999 and 2006, while the national rate decreased from 8.04 to 7.32 per 100,000. Florida, for which there is more current data, had a 2008 suicide rate of .60 per 100,000 for 10 – 14 year-olds and 5.86 per 100,000 for 15 – 19 year-olds, compared to the rate for all age-groups of 14.5 per 100,000 (DOH, 2009; WISQARSTM, 2009). Although this progress is encouraging, it is too early to determine if this trend will continue.

The five-year trend for suicides among 15 – 19 year-old Florida youth by racial ethnic category shows White Non-Hispanics with higher rates than Black Non-Hispanics and Hispanics All Races for all five-years.



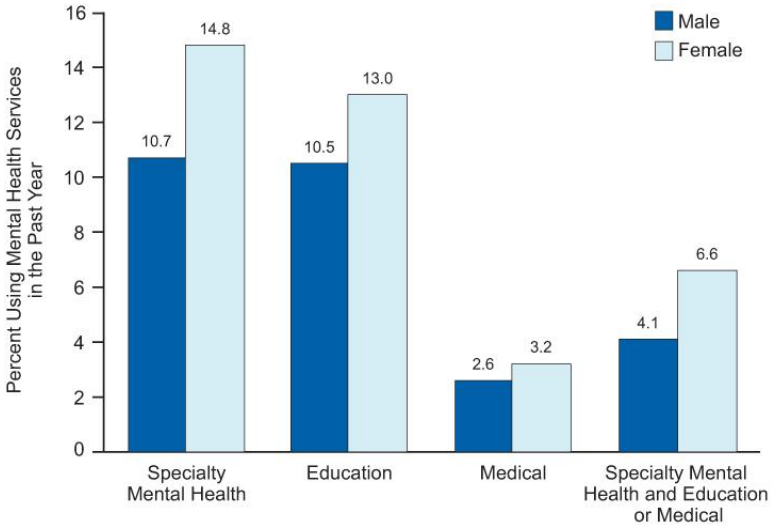
The five-year trend for suicides among 15 – 19 year-old Florida youth by gender shows males with higher rates than females for all five-years.



In addition to the above trends in suicide rates, levels of the suicide risk factor – depression – are also decreasing. Results from the National Survey on Drug Abuse indicate that nationally, the percent of 12 – 17 year-olds that had major depressive episode in the past has gone down from 9 percent in 2004 to 8.3 percent in 2007 (SAMHSA, 2009). As noted above, male teen suicide rates are higher than those of females, but as can be seen below, male teens access less mental health services than females.

Figure 6

Past Year Mental Health Service Use
Among Youths Aged 12 to 17, by Gender: 2008



SOURCE: NATIONAL SURVEY ON DRUG USE, 2008

National/state goals

The national Healthy People 2010 Goal 7-2d for teen suicide is for 80 percent of middle, junior and senior high schools to receive health education on suicide prevention. The baseline of 58 percent is from the 1994 School Health Policies and Programs Study (CDC, 1995). A school is considered to provide health education on key risk behavior and content areas if they report having a required course on suicide prevention (DHHS, 2000). Florida currently has no means of tracking the numbers of schools that implement health education in suicide prevention, so it is unknown whether progress is being made towards national goal. The consequences of not having a means to provide the resources, training and monitoring to meet the above Healthy People goal is that Florida has no mechanism for statewide implementation and monitoring (in all 67 counties) of proven suicide prevention strategies.

In 2005, the Governor's Office of Drug Control published Florida Suicide Prevention Strategy 2005 – 2010 with the following goal to reduce teen suicide: *Decrease the incidence of teen suicide in Florida to 6.3 per 100,000 by the end of 2010 (Governor's Office of Drug Control, 2005).* This goal has already been met in both the 10 through 14 year-old age group (.60 per 100,000) and the 15 through 19 year-old age group (5.86 per 100,000) (DOH, 2009; FL Legislature, 2009).

Potential for improvement

Depression is a well documented risk factor for suicide (NIMH, 2009), and 8.74 percent (125,000) of Florida 12 -17 year-olds experienced a major depressive episode in the past year (SAMHSA, 2009). Increasing access to mental health services and promoting early detection and treatment of mental health issues, especially in male teens may offer a means to reduce suicide among Florida youth. Table 1 illustrates the low per capita rates of selected mental health professionals in 2009 (DOH, 2009). Not all mental health

professionals work with children and adolescents, which further reduces their ability to access mental health services for depression and other mental health disorders.

Table 1

Psychiatrists, Psychologists, Licensed Clinical Social Workers Licensed to Practice in Florida (2009), Rate Per 100,000 (unduplicated by primary county of practice)

Practitioner Type	Number of Practitioners	Rate Per 100,000
Psychiatrists	2,507	13.32
Psychologists	3,788	20.13
Licensed Clinical Social Workers	6,284	33.39

Source: Department of Health, Division of Medical Quality Assurance; Florida Legislature, Office of Economic and Demographic Research

Findings from "The Treatment of Adolescent Suicide Attempters Study show that adolescent depression that can lead to suicidality can be treated by a number of treatments together or separately: cognitive behavioral therapy only, anti-depressant medication only, or a combination of both of the aforementioned. Randomized trials will need to be done to confirm the above findings. Increasing the number of Florida licensed mental and behavioral health practitioners and access to health insurance with mental health parity may in tandem help the reduce the numbers of Florida teens suffering from depression and suicidality.

DOH Capacity

The Department of Health addresses suicide through its representation on the Governor's Suicide Prevention Taskforce, mental health screenings done by the Healthy Start Program, and health education classes provide be some of the 46 counties that implement Comprehensive School Health Services Programs. The recently initiated Positive Youth Development Program will also be focusing on addressing risk and protective factors that increase or ameliorate youth engagement in high-risk behaviors that can lead to depression and suicide. The single state agency for mental health, the Florida Department of Children and Families (DCF), funds children's mental health services through a combination of federal (Mental Health Block Grant, Medicaid) and state revenues. During fiscal year 2007-2008, DCF provided services to 74,543 children who were enrolled in the three children's priority populations as follows (DCF, 2009):

- Children with Serious Emotional Disturbance: 46,611
- Children with Emotional Disturbance: 27,932
- Children At-Risk of Mental Health Problems: 4,680

All DCF funded children's mental health services are delivered through contracts using rate agreements or fee-for-service purchase from private for-profit and non-profit service providers. Providers include community mental health centers, private mental health agencies and facilities, and private mental health professionals such as psychiatrists,

psychologists, and clinical social workers. Circuits/Regions may also contract with other governmental entities such as school districts. Local governments provide matching funds for portions of the budget. Recently, some Circuits have contracted with managing entities, in an effort to ensure coordination with Florida's Medicaid managed mental health care systems. Currently, all mental health treatment services under Medicaid for children involved with the Child Welfare program are in the prepaid mental health system.

The DOH is limited in its ability to address suicide prevention, except in its role in providing health assessment and referral in a number of its health related programs, such as Healthy Start, Children's Medical Services, Positive Youth Development, and health education classes in Comprehensive school health services programs. To address the prevention of youth suicide in a substantive manner would not necessarily entail statutory changes, but would require concrete collaboration between DOH, the Department of Education and its school districts, and an infusion of prevention and intervention dollars for coordination, training and curriculums in proven programs that are now recognized as "best practice," such as *Columbia Teen Screen* and *Signs of Suicide* (SAMHSA, 2009).

Current State priority or objective

In 2008, the state legislature established and funded the Statewide Suicide Prevention Office (SOSP), based in the Office of the Governor. Subsequently, this office, in collaboration with Duval County, was awarded a Garret Lee Smith grant for Early Prevention and Intervention of Youth Suicide. This grant will fund the Adolescent Suicide Awareness and Prevention Project (ASAP), a three-year program addressing suicide prevention in the 10 – 24 age group. The ASAP project involves use of Question, Persuade, Refer and entails a high level of community-level collaboration and social marketing. The Garret Lee Smith grant offers Florida the opportunity to pilot community-based, suicide prevention strategies that if proven effective can possibly be replicated in other Florida counties.

The SOSP collaborates with the Florida Suicide Prevention Coordinating Council and the Florida Mental Health Institute in implementing the Florida Suicide Prevention Implementation Project that involves needs assessment, resource provision, community mobilization, communications initiatives, and training of trainers. The SOSP website can be viewed at: http://www.helppromotehope.com. In addition to the initiatives coordinated through SOSP, there are a wide array of local initiatives being implemented in Florida counties.

- The Well Aware Campaign, in collaboration with the Department of Education, to make education leadership in Florida aware of the role of suicide prevention in academic achievement.
- College Suicide Prevention Resource Newsletter and resource packet
- Workplace Resources Newsletter for Employers to assist employers with recognition of the signs of suicide, intervention and support for employees
- Customizable PowerPoint presentations for a wide array of stakeholders
- Annual statewide Suicide Prevention Symposium
- Annual Suicide Prevention Day at the Capitol
- Media response effort to educate the media on responsible coverage of suicide to create awareness and reduce the risk of contagion

- Constituent technical assistance and support that provides resources and referrals for crisis intervention, treatment, the Baker Act law, and many other mental health related topics.

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TOBACCO USE AMONG ADOLESCENTS

Definition

Smoking kills more people than alcohol, AIDS, car crashes, illegal drugs, murders, and suicides combined. Thousands more die from other tobacco-related causes, such as fires caused by smoking (more than 1,000 deaths per year nationwide) and smokeless tobacco use. (Campaign for Tobacco Free Kids, http://www.tobaccofreekids.org

Magnitude

Cigarette Use

According to the 2009 Florida Youth Tobacco Survey (FYTS), 5.4 percent of middle school students smoked at least once during the past 30 days. The prevalence of current cigarette smoking did not vary significantly by sex, race, or ethnicity. The prevalence of this behavior was higher among 7th and 8th graders in comparison to 6th graders. Overall, 14.3 percent of high school students smoked at least once during the past 30 days. The prevalence of current cigarette smoking did not vary significantly by sex. Non-Hispanic white students had a higher prevalence of this behavior than both Hispanic and non-Hispanic black students, and Hispanic students had a higher prevalence than non-Hispanic black students. Students in 12th grade had the highest prevalence of current smoking.

Cigar Use

Overall, 5.6 percent of middle school students smoked cigars at least once during the past 30 days. Males had a significantly higher prevalence of this behavior than females. The prevalence of current cigar smoking did not vary significantly by race or ethnicity. The prevalence of this behavior increases significantly with each increasing grade level. Overall, 14.5 percent of high school students smoked cigars at least once during the past 30 days. Male students had a significantly higher prevalence of current cigar smoking than female students. Non-Hispanic white students had a significantly higher prevalence of this behavior than both Hispanic and non-Hispanic black students. The prevalence of this behavior increases with each increasing grade level.

Smokeless Tobacco Use

Overall, 3.0 percent of middle school students used smokeless tobacco at least once during the past 30 days. Male students had a significantly higher prevalence of current smokeless tobacco use than females. Non-Hispanic white students had a higher prevalence of this behavior than both non-Hispanic black and Hispanic students. The prevalence of this behavior increased with each increasing grade level. Overall, 5.9 percent of high school students used smokeless tobacco at least once during the past 30 days. Male students had a significantly higher prevalence than female students of current smokeless tobacco use. Non-Hispanic white students had a higher prevalence of this behavior than both non-Hispanic black and Hispanic students. The prevalence of this behavior increased with each increasing grade level.

Severity/consequences

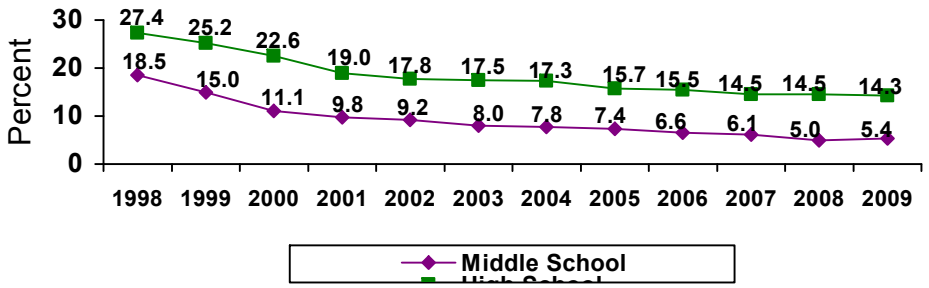
In Florida, an estimated 19,800 children under age 18 become new daily smokers each year. Children smoke an estimated 30.4 million packs of cigarettes each year. Of children now under 18 in Florida, 369,000 will ultimately die prematurely from smoking.

Trends

Cigarette Use, 1998-2009

In 2009, 5.4 percent of middle school students and 14.3 percent of high school students smoked at least once during the past 30 days. Since 1998, the prevalence of current smoking has decreased by 70.8 percent among middle school students and by 47.8 percent among high school students.

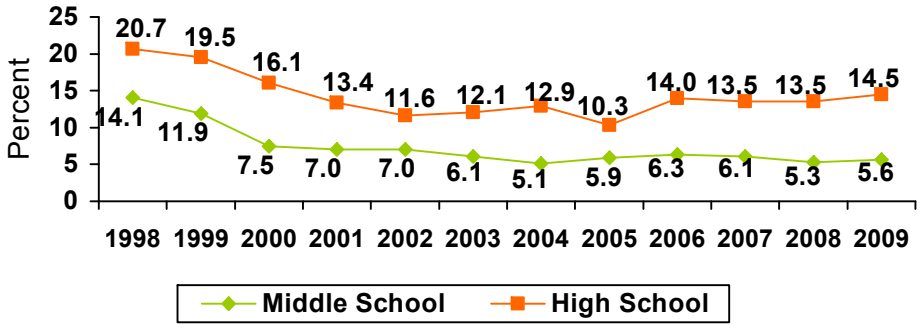
Figure 1: Prevelance of current cigarette use among Florida middle and high school students, 1998-2009 FYTS



Cigar Use, 1998-2009

In 2009, 5.6 percent of middle school students and 14.5 percent of high school students smoked cigars at least once during the past 30 days. Since 1998, the prevalence of current cigar smoking has decreased by 60.3 percent among middle school students. From 1998 to 2002, the prevalence of this behavior decreased significantly among high school students, but from 2002 to 2009, this prevalence increased significantly by 25.0 percent.

Figure 2: Prevalence of cigar use among Florida middle and high school students, 1998-2009 FYTS

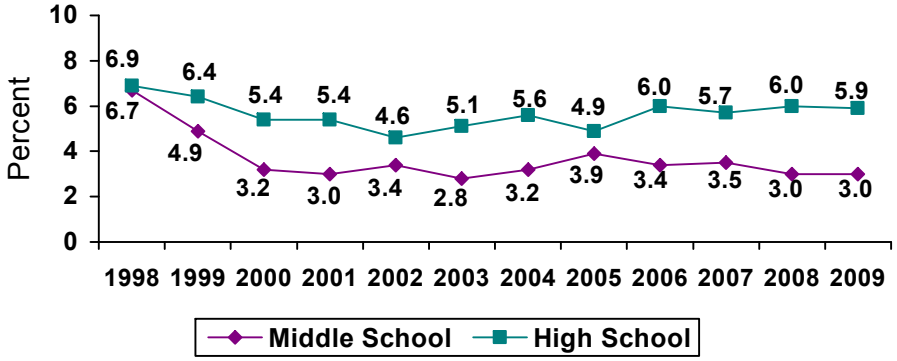


Smokeless Tobacco Use, 1998-2009

In 2009, 3.0 percent of middle school students and 5.9 percent of high school students used smokeless tobacco at least once during the past 30 days. Since 1998, the

prevalence of current smokeless tobacco use has decreased by 55.2 percent among middle school students. From 1998 to 2002, the prevalence of this behavior decreased significantly among high school students, but from 2002 to 2009, this prevalence has increased by 28.3 percent.

Figure 3: Prevalence of smokeless tobacco use among Florida middle and high school students, 1998-2009
FYTS



National/state goals

27-2 Reduce tobacco use by adolescents.

Target and baseline:

Objective	Reduction in Tobacco Use by Students in Grades 9 Through 12	1999 Baseline	2010 Target
		Percent	
27-2a.	Tobacco products (past month)	40	21
27-2b.	Cigarettes (past month)	35	16
27-2c.	Spit tobacco (past month)	8	1
27-2d.	Cigars (past month)	18	8

Potential for improvement – The Department of Health has been provided an increase in the appropriation from state tobacco settlement funds from $1 million in 2007 to the current $63 million. The potential of positively impacting tobacco avoidance and cessation are high provided funding does not decrease.

DOHealth Capacity – The Department of Health is funded to address tobacco prevention and cessation efforts, however, not at the level recommended by the Centers for Disease Control and Prevention.

Current State priority or objective --Tobacco prevention and cessation is currently one of the DOH strategic objectives.

INJURY AND DEATH DUE TO MOTOR VEHICLES IN THE CHILDREN AND ADOLESCENT POPULATION AGED 3 TO 14

Definition and General Description of the issue/problem

Motor vehicle crashes (including pedal cyclists and pedestrians) are the leading cause of preventable injuries and deaths for children age 3 to 14. Deaths, severity, and frequency of injuries are assessed and monitored by the Department of Health Office of Injury Prevention through mortality data, hospital and emergency department discharge data, and Florida crash reports.

Magnitude

Motor vehicle crashes are the leading cause of death for ages 3 to 14 in the US [20] (based on 2006 figures, which are the latest national mortality data currently available from the National Highway Traffic and Safety Administration-NHTSA, National Center for Health Statistics). Florida's age-adjusted injury death rate, compared to the U.S., was:

- 14 percent higher for all unintentional injuries (ages 3-14);
- 13 percent higher for unintentional motor vehicle traffic injuries (ages 3-14);

(Source: CDC WISQARS)

In addition, Florida's age-adjusted death rates for all unintentional injuries and unintentional motor vehicle traffic injuries were the second highest among the nation's five most populous states, California, Texas, New York, Florida and Illinois as shown below:[21]

	US	Florida	California	Texas	New York	Illinois
All Unintentional Injuries (ages 3-14)	5.9	6.7	4.8	7.9	3.2	4.1
- Motor Vehicle Traffic (ages 3-14)	3.0	3.4	2.7	4.4	1.6	1.9

(Age-adjusted rates per 100,000 population)

There were 37,261 traffic fatalities in the United States in 2008. Children 14 and younger accounted for 4 percent (1,347) of those traffic fatalities. This age group accounted for 3 percent (968) of all vehicle occupant fatalities, 8 percent (193,000) of all the people injured in motor vehicle crashes, and 8 percent (168,000) of all the vehicle occupants injured in crashes. During 2008, an average of four children 14 and younger died and 529 were injured every day in motor vehicle crashes nationwide.[22].

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[20] *Traffic Safety Facts-2008 Data Children*-NHTSA's National Center for Statistics and Analysis Traffic Safety Facts http://www-nrd.nhtsa.dot.gov/Pubs/811157.PDF)

[21] *CDC WISQARS http://www.cdc.gov/injury/wisqars/index.html*

[22] *Traffic Safety Facts-2008 Data Children*-NHTSA's National Center for Statistics and Analysis Traffic Safety Facts http://www-nrd.nhtsa.dot.gov/Pubs/811157.PDF

In Florida, there were 2,983 traffic fatalities in 2008. Children 14 and younger accounted for 3 percent (79) of those traffic fatalities. This age group accounted for 3 percent (51) of all vehicle occupant fatalities, 7 percent (14,308) of all the people injured in motor vehicle crashes. Every month in Florida, an average of seven children 14 and younger died and 1,192 were injured in motor vehicle crashes during 2008.[23]

Pedal cyclists

In 2008, 716 pedal cyclists died and an additional 52,000 were injured in traffic crashes. Pedal cyclists accounted for 14 percent of all non-occupant traffic fatalities in 2008. Children 14 and younger accounted for 11 percent of those fatalities and 21 percent of those injured.[24] Bicycles are associated with more childhood injuries than any other consumer product except the automobile. More than 70 percent of children ages 5 to 14 (27.7 million) ride bicycles. This age group rides 50 percent more than the average bicyclist and accounts for approximately 21 percent of all bicycle-related deaths and nearly half of all bicycle-related injuries.[25] Bicycle safety remains a challenge in Florida. In 2008, 511 children ages 5 to 14 were injured or killed on bicycles in Florida due to motor vehicle traffic crashes which is lower than the numbers injured or killed in 2007 and 2006, 643 and 718 respectively.[26] From 1999-2006, Florida had the 3rd highest number of pedalcyclists ages 5 to 14 killed in motor vehicle traffic crashes and the 6th highest fatality rate in the United States.[27] Pedal cyclists can also be injured in crashes not involving motor vehicle traffic. In 2008, 192 children ages 5 to 14 were hospitalized for non-fatal injuries due to non-motor vehicle traffic crashes and another 6,571 were treated in emergency departments.[28]

Males account for approximately 85 percent of bicycle-related deaths and 70 percent of nonfatal injuries and have higher bicycle-related death and injury rates than females. Children ages 10 to 14, especially males, have the highest death rate from bicycle-related head injury of all ages.[29]

Specific to Florida, In 2008, among residents ages 5 to 14, Broward, Miami-Dade, Pinellas, and Orange counties had the highest numbers of bicycle-related injury deaths[30], hospitalizations, and emergency department visits combined while Union, Suwannee, Taylor, and Liberty counties had the highest injury rates.[31]

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[23] Florida Department of Highway Safety and Motor Vehicles, Crash Reports

[24] *Traffic Safety Facts-2008 Data Children*-NHTSA's National Center for Statistics and Analysis Traffic Safety Facts http://www-nrd.nhtsa.dot.gov/Pubs/811157.PDF

[25] National Safe Kids Campaign Bicycle Injury Fact Sheet, 2004 http://www.usa.safekids.org/tier3_cd.cfm?folder_id=540&content_item_id=1010

[26] Florida Traffic Crash Statistics, Florida Department of Highway Safety and Motor Vehicles

[27] CDC WISQARS http://www.cdc.gov/injury/wisqars/index.html

[28] Agency for Health Care Administration, Hospital and Emergency Department Discharge Data

[29] National Safe Kids Campaign Bicycle Injury Fact Sheet, 2004 http://www.usa.safekids.org/tier3_cd.cfm?folder_id=540&content_item_id=1010

[30] Florida Department of Health, Mortality Data

[31] Agency for Health Care Administration, Hospital and Emergency Department Discharge Data

Pedestrians

There were 4,378 pedestrian fatalities in 2008, of which children 14 and younger accounted for 270 (6 percent) of those fatalities. About one-fifth (20 percent) of the traffic fatalities in the 14 and younger age group were pedestrians. Of the total 270 pedestrian fatalities among children 14 and younger in 2008,173 (64 percent) of those killed were males. In 2008, an estimated 69,000 pedestrians were injured, 13,000 of those injured were age 14 and younger, and males accounted for 52 percent (7,000) of those 13,000 injured.[32] In Florida in 2088, there were 461 pedestrian fatalities. Of this number, 153 children ages 5 to 14 were injured or killed as pedsestrians due to motor vehicle traffic crashes which is lower than the numbers injured or killed in 2007 and 2006, 180 and 172 respectively.[33] From 1999-2006, Florida had the 3rd highest number of pedalcyclists ages 5 to 14 killed in motor vehicle traffic crashes and the 6th highest fatality rate in the United States.[34]

Children under 10 are unable to correctly gauge the speed of vehicles putting them at greater risk for injury and death. Driveways, parking lots, and on sidewalks are where young children ages 0-2 years suffer the highest number of injuries as pedestrians. A total of 83 percent of child pedestrian deaths occur at non-intersection locations. One in four child pedestrian deaths occur between 6 – 9 p.m. Males sustain almost two-thirds of all child pedestrian deaths. Black children have a pedestrian injury death rate almost twice that of white children. Four out of five driveway-related incidents occur to children ages 4 and under. Parents of children who suffer from a pedestrian-related injury are three times less likely to practice other preventive behaviors and are more likely to be single parents, young mothers, or both.[35]

Major contributing risk factors for this issue in Florida are lack of public education to parents concerning the risk for children improperly restrained in motor vehicles and a weak child restraint law. Section 316.613(1) (a), Florida Statutes, states, “Every operator of a motor vehicle as defined herein, while transporting a child in a motor vehicle operated on the roadways, streets, or highways of this state, shall, if the child is 5 years of age or younger, provide for protection of the child by properly using a crash-tested, federally approved child restraint device. For children aged through 3 years, such restraints device must be a separate carrier or a vehicle manufacturer’s integrated child seat. For children aged 4 through 5 years, a separate carrier, an integrated child seat, or seat belt may be used.”

As of January 2010, 44 states and Washington D.C. have enacted booster seat laws. Florida is one of six states, including Arizona, Colorado, South Dakota, Ohio, and Pennsylvania, that do not have a booster seat law at all, or their laws are not subject to primary enforcement.[36] Florida has the lowest age-3 and younger- at which children

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[32] *Traffic Safety Facts-2008 Data Children*-NHTSA’s National Center for Statistics and Analysis Traffic Safety Facts http://www-nrd.nhtsa.dot.gov/Pubs/811157.PDF

[33] Florida Department of Health, Mortality Data and Agency for Health Care Administration, Hospital Discharge Data

[34] CDC WISQARS http://www.cdc.gov/injury/wisqars/index.html

[35] National Safe Kids Campaign Pedestrian Injury Fact Sheet, September, 2007 http://www.usa.safekids.org/content_documents/FactSheet_Pedestrian.pdf

[36] *The 2010 Roadmap to State Highway Safety Laws*: Advocates for Highway and Auto Safety-January 2010 http://www.saferoads.org/files/file/Roadmap%20Report%20COMPLETE%20011310.pdf

must be in a restraint or a booster seat. Best practice recommendation for children ages 4 through 7, as recommended by advocates, the National Traffic Safety Board, the National Highway Traffic Safety Administration, and other child safety organizations, is that booster seats be used once a child outgrows a car seat and until he or she is at least 8 years old. Floridians need to be better educated about the need to follow this best practice recommendation although not required by law.

Motor Vehicles

During 2008, males 14 and younger accounted for 60 percent of the fatalities and 48 percent of those injured in motor vehicle crashes.[37] Black children between the ages of 5 and 12 are three times more likely to die in a motor vehicle crash than white children due to the lower use of child restraints. Restraint use is lower in rural areas and low-income communities. Lack of access to affordable child safety seats contributes to a lower usage rate among low-income families[38].

Table 1: Child Restraint Use by Age and Race/Ethnicity, 2008[39]

	Age Birth-12 Months	Age 1–3 Years	Age 4–7 Years	Age 8–12 Years
Hispanic	96%	84%	82%	79%
African American Non-Hispanic	94%	74%	84%	72%
White Non-Hispanic	100%	99%	93%	90%
Asian Non-Hispanic	NA	99%	95%	91%
Other	NA	86%	76%	77%

NA: Data not sufficient to produce a reliable estimate

Severity/consequences

Among Florida residents, the median charge for Florida hospital admissions in 2008 for crash-related injuries was $42,113; total charges equaled $1.2 billion. Children 14 and younger accounted for 3 percent of these charges or $39,921,220.[40]

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[37] *Traffic Safety Facts-2008 Data Children*-NHTSA's National Center for Statistics and Analysis Traffic Safety Facts http://www-nrd.nhtsa.dot.gov/Pubs/811157.PDF

[38] National Safe Kids Injury Facts Motor Vehicle Occupant Injury, September, 2007 http://www.usa.safekids.org/tier3_cd.cfm?folder_id=540&content_item_id=1133

[39] *Traffic Safety Facts-2008 Data Children*-NHTSA's National Center for Statistics and Analysis Traffic Safety Facts http://www-nrd.nhtsa.dot.gov/Pubs/811157.PDF

[40] Florida Agency for Health Care Administration, Hospital Discharge Data

A $46 child safety seat generates on average $1,900 in benefits to society. A $31.00 booster seat generates $2,200 in benefits to society.[41] If 85 percent of all child cyclists wore helmets every time they rode bikes for one year, the lifetime medical cost savings could total between $134 million and $174 million.[42] The single most effective safety device available to reduce head injury and death from bicycle crashes is a helmet. National estimates report that bicycle helmet use among child pedal cyclists ranges from 15 percent to 25 percent. Universal use of bicycle helmets by children ages 4 to 15 could prevent between 135 and 155 deaths, between 39,000 and 45,000 head injuries, and between 18,000 and 55,000 scalp and face injuries annually. Helmet use can reduce the risk of head injury by 85 percent and severe brain injury by 88 percent.[43]

Unintentional injuries are the leading cause of death among Florida residents age 1-44. Specifically, motor vehicle crashes are the leading cause of death among those ages 5 to 14. However, fatalities are only the tip of the iceberg in terms of childhood injury. In 2008, the leading causes of unintentional injury-related deaths, hospitalizations, and emergency department visits combined, among children ages 14 and under, were (1) Falls - 106,914, (2) Struck By, Against - 62,597, and (3) Motor Vehicle Crashes - 14,262. Motor vehicle crashes are, however, the leading cause of injury-related deaths, hospitalizations, and emergency department visits combined among residents age15 to 19.[44]

Trend

During 2008, U.S. traffic fatalities in the 14 and younger age group (1,347) decreased 20 percent from the 1,680 fatalities in 2007.[45] In Florida during 2008, traffic fatalities in this age group (79) decreased 30 percent from the 114 fatalities in 2007.[46] The motor vehicle injury and death rates show a steady decline, which will influence the overall population. This is due to factors such as more experience in delivering public education messages, more aggressive enforcement of safety laws, more states adopting booster seat laws, primary enforcement of seat belt laws, and improved vehicle safety features. Wider use of seat belts and helmets should contribute to a continued reduction in death and disability.

Pedal cyclists

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[41] National Safe Kids Motor Vehicle Safety Fact Sheet, September, 2007 http://www.usa.safekids.org/content_documents/ACF2AE4.pdf

[42] National Safe Kids Campaign Bicycle, Rollerblade and Skateboard Safety Injury Fact Sheet, September, 2007 http://www.usa.safekids.org/content_documents/Factsheet_Wheel.pdf

[43] National Safe Kids Campaign Bicycle, Rollerblade and Skateboard Safety Injury Fact Sheet, September, 2007 http://www.usa.safekids.org/content_documents/Factsheet_Wheel.pdf

[44] Florida Department of Health, Mortality Data and Agency for Health Care Administration, Hospital and Emergency Department Discharge Data

[45] *Traffic Safety Facts-2008 Data Children*-NHTSA's National Center for Statistics and Analysis Traffic Safety Facts http://www-nrd.nhtsa.dot.gov/Pubs/811157.PDF

[46] Florida Department of Highway Safety and Motor Vehicles, Crash Reports

The number of U.S. pedal cyclist fatalities in 2008 is 6 percent lower than the 760 fatalities reported in 1998.[47] In 2008, 511 children ages 5 to 14 were injured or killed on bicycles in Florida due to motor vehicle traffic crashes, which is lower than the numbers injured or killed in 2007 and 2006, 643 and 718 respectively.[48] From 1999-2006, Florida had the 3rd highest number of pedalcyclists ages 5 to 14 killed in motor vehicle traffic crashes and the 6th highest fatality rate in the United States.[49] Section 316.2065 (3)(d) Florida Statutes, requires a bicycle rider or passenger under 16 years of age to wear a helmet. This requirement has contributed to a decrease in the number of helmet related deaths and injuries. School resource officers have been diligent in making sure students are wearing helmets when they enter and exit school grounds and issue warnings or citations to non-compliant ones.

Pedestrians

There were 4,378 pedestrian fatalities in 2008, of which children14 and younger accounted for 270 (6 percent) of those fatalities. About one-fifth (20 percent) of the traffic fatalities in the 14 and younger age group were pedestrians. In 1998, there were 540 pedestrian fatalities in the 14 and younger age group. From 1998 to 2008, the number of pedestrian fatalities in this age group decreased by 50 percent, with children age4 to 7 showing the largest decrease (59 percent).

National/state goals

The National Highway Traffic Safety Administration has encouraged all states to adopt booster seat laws and primary seat belt use. Florida enacted primary seat belt legislation in June 2009, but has not enacted booster seat legislation.

Potential for improvement

Existing effective public health strategies, best practices, and national recommendations reduce injury and death due to motor vehicles crashes in the child and adolescent population. Children die or are injured due to the lack of use or improper use of child restraints while riding in motor vehicles in collisions with other automobiles or other objects, and while riding bicycles without wearing helmets. Use of child safety seats or restraints and bike helmets (evidenced based best practices) would greatly reduce the number of injuries and deaths among children.

DOH capacity

The DOH, Office of Injury Prevention (OIP), continues to receive a Florida Department of Transportation (DOT) grant that funds the Florida Special Needs Occupant Protection Program. The program staff evaluates children with special health care needs to determine the appropriate child safety seat or restraint, and provides loaner special needs seats or restraints when necessary. This program has seven sites located in children's hospitals in Orlando, Tampa, Miami, St. Petersburg, Gainesville, Ft. Myers, and Hollywood.

The DOH-OIP is also the lead agency for SAFE KIDS Florida, which is part of the SAFE KIDS Worldwide Campaign, a global effort to prevent unintentional injuries to children 14

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[47] *Traffic Safety Facts-2008 Data Children*-NHTSA's National Center for Statistics and Analysis Traffic Safety Facts http://www-nrd.nhtsa.dot.gov/Pubs/811157.PDF

[48] Florida Traffic Crash Statistics, Florida Department of Highway Safety and Motor Vehicles

[49] CDC WISQARS http://www.cdc.gov/injury/wisqars/index.html

and under. Through the local SAFE KIDS Florida coalitions and state chapters, numerous car seat check-up events are conducted on an ongoing basis and during National Child Passenger Safety Week, National SAFE KIDS Week, and Buckle Up America Week.

The Office of Injury Prevention continues to receive the Florida Bicycle Helmet Promotion Program grant through the Florida Department of Transportation. This program provided almost 18,000 bicycle helmets to 100 community partners located in all 67 counties who fitted and distributed the helmets within their community. This program is designed to increase the helmet usage among children in low income households, rural counties, and in counties that experience a high incidence of bicycle-related injuries and death.

The Office of Injury Prevention is in the process of implementing its 2009- 2013 Florida Injury Prevention Strategic Plan[50] that encourages evidence-based interventions to address motor vehicle injuries, a leading cause of death and injury among children in Florida. Goal 2 of the plan is to "Facilitate opportunities for collaborative injury prevention efforts in: Traffic Safety, Poisoning, Interpersonal Violence, Suicide, Child Maltreatment and other injuries." A key partner in the implementation of this plan related to motor vehicle injury and deaths is the FDOT Office of Safety. The Florida Injury Prevention Advisory Council and the Goal Team Leaders are also integral to the plan implementation. Within current resources, DOH-OIP will continue to address motor vehicle safety issues through activities, projects, and grant as described through leadership, partnerships, collaboration, and coordination.

[50] Florida Department of Health Office of Injury Prevention

SECTION 4: MATERNAL AND CHILD HEALTH PROGRAM CAPACITY BY PYRAMID LEVELS

A major strength of the federal-state maternal and child health (MCH) program embodied in Title V legislation is its potential to both identify and address persistent and emerging health issues for pregnant women and children, while being adaptive to changes in the larger health services environment. The challenge is to translate this potential into specific core MCH public health functions that can be operationalized at federal, state and local levels. A 1988 Institute of Medicine (IOM) report, *The Future of Public Health*, characterized these core functions as assessment, policy development, and assurance. Building on the foundation of these core functions, the Johns Hopkins University Child and Adolescent Health Policy Center formulated 10 Essential Public Health Services to promote maternal and child health in America, as shown below. Their 1995 report, *Public MCH Program Functions Framework,* was a collaborative effort with the Association of Maternal and Child Health Programs (AMCHP), the Maternal and Child Health Bureau (MCHB), and numerous other public and private MCH experts. Together, the three core MCH public health functions and the 10 Essential Public Health Services became the blueprint for state and local agencies to articulate their top priorities. States must then determine their agency capacity – namely, the spectrum of resources available and/or required – to address those top priorities. This detailed process of Capacity Assessment for State Title V funding is given the acronym CAST-5.

10 Essential Public Health Services to Promote Maternal and Child Health in America

1. Assess and monitor maternal and child health status to identify and address problems.

2. Diagnose and investigate health problems and health hazards affecting women, children, and youth.

3. Inform and educate the public and families about maternal and child health issues.

4. Mobilize community partnerships between policymakers, health care providers, families, the general public, and others to identify and solve maternal and child health problems.

5. Provide leadership for priority setting, planning, and policy development to support community efforts to assure the health of women, children, youth and their families.

6. Promote and enforce legal requirements that protect the health and safety of women, children and youth, and ensure public accountability for their well-being.

7. Link women, children and youth to health and other community and family services, and assure access to comprehensive, quality systems of care.

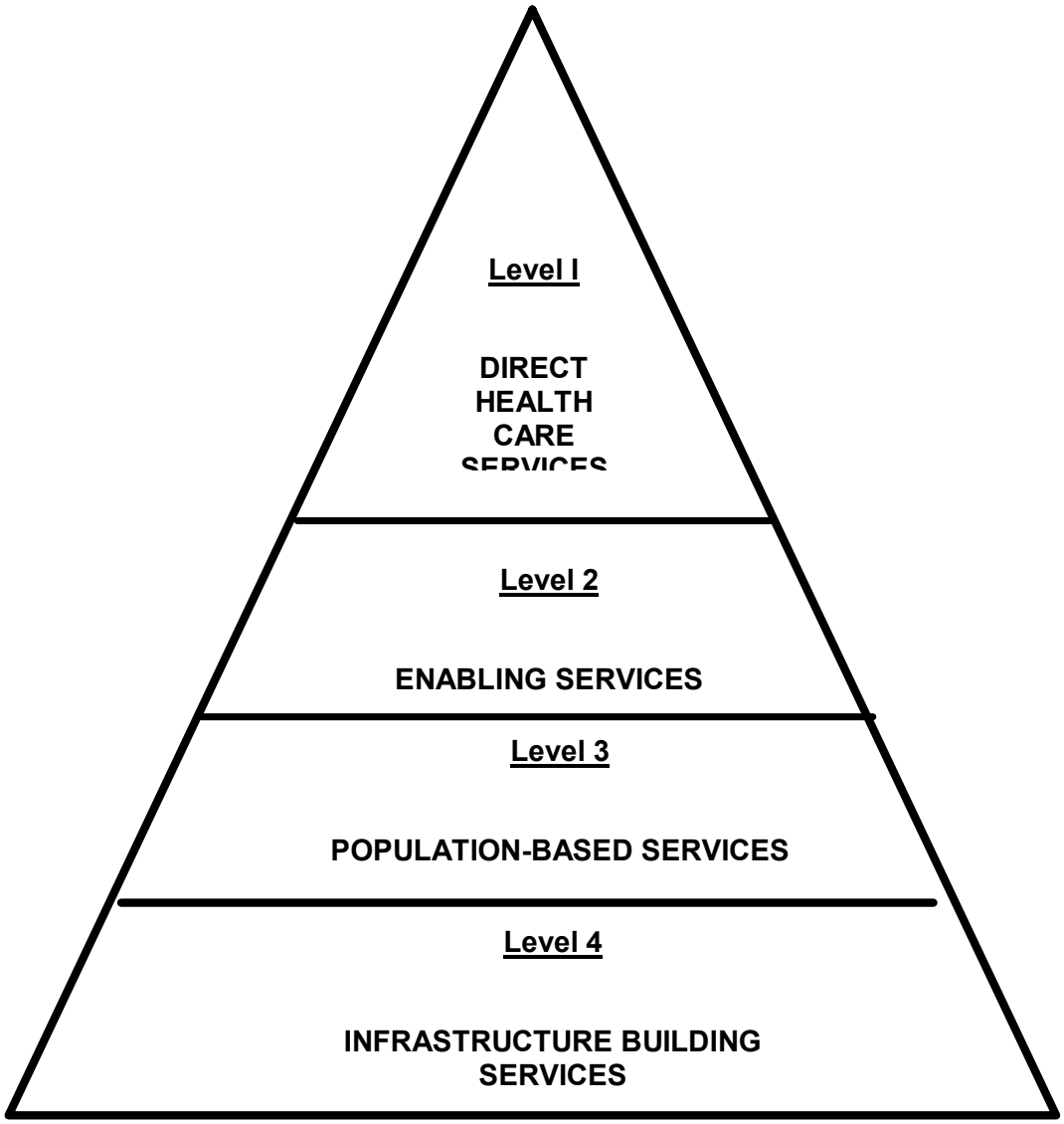
8. Assure the capacity and competency of the public health and personal health workforce to effectively and efficiently address maternal and child health needs.

9. Evaluate the effectiveness, accessibility, and quality of personal health and population-based maternal and child health issues.

10. Support research and demonstrations to gain new insights and innovative solutions to maternal and child health-related problems.

The MCHB went a step further in developing a four-level Title V pyramid to visualize and describe the MCH and CSHCN program activities and tasks designed to implement the three core functions and ten essential services. Each of the 10 Essential Public Health Services can be classified according to a corresponding level of the pyramid. The MCH Title V Block Grant awarded to states has the unique distinction of being the *only* federal program that provides services at all four levels of the pyramid.

MCH PYRAMID



CAPACITY BY PYRAMID LEVEL

The first part of this section addresses each of the four levels of the Title V MCH pyramid in terms of Florida's capacity to provide maternal and child health services through the DOH's extensive network of programs and partnerships across the state. Within each pyramid level, these services are further categorized according to the specific population group(s) they are designed to serve. The unique role of Florida's Healthy Start program is presented first, however, as its broad scope encompasses every level of the pyramid at once, making it the cornerstone of services provided to pregnant women, infants and children (up to age three) in the state.

Florida's Healthy Start Program

The Department of Health's capacity to promote and protect the health of all mothers and children in Florida begins with its Florida Healthy Start Program. In 1991, the Florida Legislature established statutory authority for the Florida Healthy Start Program. The legislative intent was that local communities could best determine the maternal and child health needs of the community and implement strategies to best address those needs to improve birth, health and developmental outcomes of the residents. This program assists pregnant women, interconceptional women, infants, and children up to age three to obtain the health care and social support needed to reduce the risks for poor maternal and child health outcomes including infant mortality, and to promote good health and developmental outcomes. In January 1992, recognition and funding for local Healthy Start Prenatal and Infant Care Coalitions began. The coalitions' membership includes business, professional and political leaders, health care providers, consumers, educators and representatives from professional and community associations. These coalitions have the authority to conduct assessments of community assets and needs, identify gaps and barriers to effective service delivery, and develop improved local maternal and child health service delivery systems based on the findings. Healthy Start direct service funding is allocated by the coalition via contract with community healthcare providers to meet the needs for Healthy Start services in their community. The Healthy Start program components are as follows:

- Universal prenatal and infant risk screening to identify pregnant women and infants at risk for adverse birth, health, and developmental outcomes. Prenatal risk screening is offered by the prenatal care provider, and infant risk screening is offered at the birthing facility.
- Healthy Start care coordination and services that support families in reducing the factors and situations that place pregnant women, interconceptional women and children up to age three in jeopardy for poor outcomes. Services are dependent on the needs of the family.

    In 2001, Florida received a federal 1915(b) Medicaid Managed Care waiver for Healthy Start to provide program participants a higher intensity of services and case management, including SOBRA (Sixth Omnibus Budget Reconciliation Act) women. Waiver eligibility criteria included pregnant

women and children up to age three, and services were to be provided in compliance with the Healthy Start Standards and Guidelines. The overall goal of this initiative is to improve birth outcomes and infant health for Medicaid-eligible clients, thereby ultimately decreasing costs to the Medicaid program.

- Community based prenatal and infant health care coalitions that conduct assessments of community needs and resources; develop and implement community-based service delivery plans; allocate funds for prenatal care, child health care, and other Healthy Start services; and leverage additional non-state dollars for maternal and child health community needs.

The Healthy Start initiative is Florida's public health infrastructure for the delivery of maternal-child health (MCH) care. There are thirty state Healthy Start Coalitions (HSC) and three county health departments (CHD) who receive Healthy Start funding for delivery of services. The Healthy Start system is the organization of activities and services within a community that supports and enhances the community's ability to promote optimal health and developmental outcomes for all pregnant women and babies born in Florida. Responsibility for coordination of the Healthy Start system resides with the local Healthy Start prenatal and infant health care coalitions or the county health department, in the event there is no approved local Healthy Start service delivery plan. The coalition is responsible for the establishment and oversight of the Healthy Start system within its local area, once the Department of Health has approved their service delivery plan.

The Healthy Start coalitions interact and interface with the public and private sectors, including DOH Healthy Start, Children's Medical Services (CMS), the Department of Education (DOE), the Department of Children and Families (DCF), Healthy Families Florida, the Agency for Health Care Administration (AHCA), the March of Dimes, Children's Services Councils, DOH Environmental Health, Ounce of Prevention, and Head Start.

The broad range of services available through Healthy Start to assist pregnant women and infants in securing the health care and social support they need are listed below. The numbers in parentheses refer to the level(s) of the pyramid each service represents:

- information and referral (1-4)
- initial and ongoing assessment of service needs informed by family and community resources (2-4)
- universal risk screening for all pregnant women and newborn infants (3)
- ongoing care coordination to assure access to services (1-2)
- childbirth, breastfeeding, interconceptional and parenting education and support (1-2)
- psychosocial, nutritional and smoking cessation counseling (1-2)
- home visitation (1-2)
- identification and intervention in areas of risk such as domestic violence, substance abuse, potential child abuse or neglect (1-2)
- a toll-free Family Health Line, 1-800-451-BABY, to provide information and referral to the general public (3)

The Department of Health's Infant, Maternal and Reproductive Health (IMRH) staff maintains an ongoing collaboration with the Florida Association of Healthy Start

Coalitions, local county health departments, and other key partners to develop and implement public health interventions that focus on maternal and child health issues, including assessment of agency capacity at all four levels of the pyramid.

Section 383.2161, Florida Statute, requires DOH to report annually on the status of the Healthy Start program.

DIRECT HEALTH CARE SERVICES (LEVEL 1)

Direct Health Care Services are generally described as basic medical services delivered by a health professional to an individual patient in an office, clinic, emergency room, laboratory or pharmacy. These professionals include primary care physicians, nurses, registered dieticians, medical social workers, nutritionists, dentists, audiologists, occupational therapists, physical therapists, speech/language therapists, and sub-specialty physicians who serve high-risk pregnant women and children with special health care needs. In addition to ordinary medical care, basic services comprise inpatient and outpatient medical services, allied health services, drugs, laboratory testing, x-rays, dental care, and pharmaceutical products/services. Direct Health Care Services are linked to Essential Service #7, which relates primarily to the first level, but is represented in all four levels, of the MCH pyramid.

Florida's Title V programs, which are carried out directly by DOH and its partners or by funding local providers, deliver support services such as prenatal care, child immunizations and treatment or referrals, school health and family planning. Services provided by CSHCN include specialty and subspecialty care for those with HIV/AIDS, hemophilia, birth defects, chronic illness, and other conditions requiring sophisticated technology, access to highly trained specialists, or an array of services not generally available in most communities.

Level 1 Services to All Population Groups

Florida's 67 county health departments deliver a variety of direct services to the MCH population, while increasingly working with community providers to ensure service delivery. These services vary throughout the state and may include the following:

- Pregnancy testing
- HIV pre- and post-test counseling
- Prenatal care
- Family planning
- Immunizations
- Health history and physical examinations
- Preconception and interconception education and counseling
- Laboratory screening tests for health indicators (lead, anemia, etc.)
- Developmental screening
- Risk assessment
- Provision of anticipatory guidance
- Accident prevention
- Substance abuse treatment and prevention

Level 1 Services to Pregnant Women and Infants

Through initial assessment and continuous monitoring and coordination, Healthy Start links pregnant mothers and infants directly with health professionals and resources

suited to their needs. Care coordination includes direct contact with the participant and family, plus contact with other service providers on their behalf, addressing financial, legal, geographical, and personal barriers to promote progress toward problem resolution.

To serve women of child-bearing age, county health departments offer primary care services directly or in partnership with community resources to reduce unplanned pregnancies, promote health for women prior to pregnancy and increase access to reproductive health services. The Family Planning Program (Title X) continues to incorporate the provision of preconception health education and counseling services during clinic visits to all family planning clinics.

Through the Bureau of Chronic Disease Prevention and Health Promotion, DOH offers insulin for uninsured, low-income diabetics and epilepsy medical services for low-income residents diagnosed with epilepsy.

Level 1 Services to Children and Adolescents

County health departments are also responsible for ensuring students have access to quality health services that assess, protect and promote their health and ability to learn. More than 2,000 health personnel provided over 18 million services to approximately 2.6 million K-12 Florida students in 3,300 schools. [Check to what year.] Basic school services are listed below:

- Nursing and nutritional assessments
- Student health record reviews to ensure completion of physical exam and immunization requirements, with appropriate attention to chronic or complex health conditions
- First aid
- Medication administration
- Complex medical procedures
- Age/grade appropriate vision, hearing, growth, and scoliosis screening
- Emergency health services for injured or acutely ill students
- Health education classes
- Parent and staff consultations on student health issues impacting school participation
- Consultation for student placement in exceptional education programs

In schools with a large proportion of high-risk and medically-underserved children, comprehensive and full service school health programs provide a broad range of health and social services, in addition to the basic services. These services emphasize prevention of high-risk behaviors, pregnancy prevention and support services for pregnant and parenting teenagers.

The Department of Children and Families' Behavioral Health Networks collaborates with CMS to address the behavioral health needs of children from age 5-19 who are between 101 and 200 percent of the Federal Poverty Level. Diagnoses covered under this joint effort include mood, psychiatric, or anxiety disorders; severe emotional disturbance; and substance dependence. Children who are eligible can receive behavioral health services through Medicaid.

LEVEL 1 SERVICES TO CHILDREN WITH SPECIAL HEALTH CARE NEEDS

The Children's Medical Services (CMS) program in the Florida Department of Health serves children with special health care needs with a family-oriented, comprehensive, and coordinated statewide managed system of care that links community-based health care with multidisciplinary, regional, and tertiary pediatric care. Children with Special Health Care Needs are those children under age 21 whose serious or chronic physical or developmental conditions require extensive preventive and maintenance care beyond that required by healthy children.

The CMS Network serves children with special health care needs who are enrolled in Medicaid (Title XIX) and KidCare (Title XXI). It comprises services ranging from prevention and early intervention programs to primary and specialty care programs, including long-term care for children with medically complex conditions. Through 22 CMS area offices staffed by private physicians, 15 local Early Steps (early intervention) offices, 12 Primary Care projects, and contracted specialty programs located throughout the state in local private physician offices or other health care organizations, CMS enrollees receive direct medical and support services. A team of trained nursing and social work professionals and support staff at each CMS location coordinate services with the family through local community providers. The CMS Network served 73,700 clients in Fiscal Year 2008-2009.

The purpose of the CMS Network's Infants and Toddlers Early Intervention Program (Early Steps) is to provide quality early intervention services to infants and toddlers with developmental delays, or established medical conditions that place them at risk for developmental delays, in order to enhance the child's well-being, development, learning and community participation. Children from birth to 36 months of age who are eligible under the Individuals with Disabilities Education Act (IDEA) Part C Program or who have been served by Developmental Services under Chapter 393, Florida Statutes, are the population served by Early Steps. Through 15 contracted local offices across the state, the overall goal of this program is to increase opportunities for infants and toddlers with disabilities to be integrated in their families and communities, as well as to play, learn and interact with children without disabilities. In 2008-2009, 41,940 children were enrolled in the program, and 26,660 of those enrollees were identified as eligible and had an Individual Family Support Plan (IFSP). For children with an IFSP, 68.5% of their early intervention services were authorized to be provided in natural environments – namely, in conjunction with services provided to children who do not have disabilities.

Originally offered as a pilot study in 1984, CMS' Primary Care programs were approved by the Florida Legislature in the early 1990s to provide a Medical Home to CMS enrollees and their siblings. A full range of services include care coordination activities, parenting, and both safety and health education. The Primary Care program is a collaborative effort between state government, local pediatric physician groups, and community providers. In FY 2008-2009, 17,630 clients were served.

Long-term care services for medically complex or fragile children are also included in the CMS system of care. Medical foster care, medical day care, in-home wrap-around services and nursing home care are examples of provided services. A cost-effective home-based program allowing medically complex children to grow and develop in a family environment, foster care includes specialized training and 24/7 medical support to foster care parents through the CMS Network. Florida's Medical Foster Care (MFC) program is a coordinated effort between AHCA's Florida Medicaid Program, CMS, and the Child Welfare and Community Based Care Program in the Department of Children

and Families. MFC delivers family-based care for medically complex children in foster care who cannot safely receive care in their own homes. A cost-effective alternative to hospitalization, long-term, in-home, private duty nursing, or skilled nursing facility placement, MFC served 719 children in FY 2008-2009. Sixty-five (65%) of children discharged from MFC were reunited with their birth parents or adopted, and 92% of all MFC referrals were placed in MFC homes.

The CMS Network Safety Net serves children who are not eligible for other insurance programs, who are underinsured, or whose cost of care spends the family income to eligible financial levels. Each child has 24/7 access to a personal primary care physician for provision or authorization of medically necessary services, as well as access to a CMS care coordinator. Safety Net services are provided to the extent that local CMS area office budgets can support the services.

The CMSN care coordinator is a critical link in the development of a true medical home for the child and family. CMS has designed the Child Assessment and Plan (CAP), a web-based application, to document comprehensive care coordination services to all CMSN enrollees. The integration of the six National Goals into the CMS program goals, performance measures and CAP enhances care coordination activities by ensuring the provision of ongoing, culturally competent, comprehensive care, within the context of a medical home.

In 2009, the Agency for Health Care Administration (AHCA) approved the CMS network as the provider of comprehensive services to special needs children in the Medicaid Reform Pilot Project in Broward and Duval counties. The project is expected to be expanded to Nassau, Clay and Baker counties in 2010.

CMS's Kidney Disease Program serves patients with chronic renal failure and end stage renal disease at three Comprehensive Children's Kidney Failure Centers located in four Florida hospitals: the University of Florida, the University of South Florida, the University of Miami, and Joe DiMaggio Children's Hospital. Services include clinic visits, hemodialysis, peritoneal dialysis and post kidney transplantation services. Patients must be under 21 years of age, meet financial criteria, and have less than 75% kidney function. In FY 2008-2009, 737 clients were served by this program, and data reveal that post-transplant survival rates meet or exceed national survival rates.

The CMS Pharmacy Benefits Program provides increased pharmacy access for families of CMS enrollees. CMS contracts with MedImpact Health Care Services to link national, regional, and locally owned pharmacies throughout Florida to facilitate prescription processing and decrease wait time for prescription refills, improve evening and weekend coverage, and provide a toll-free help desk to answer questions.

CMS has established a system of specialty perinatal centers for high-risk pregnant women and newborns in Florida. The Regional Perinatal Intensive Care Centers (RPICC) provide this specialized care at 12 sites in Florida. Increasing early entry of high-risk pregnant women into specialty obstetric care is especially important in achieving healthy outcomes for the high-risk woman and her newborn. For pregnant women at risk of a premature or low birth weight newborn, medical providers work to maintain the pregnancy long enough for optimal health and development inside the womb. When low birth weight infants and other at-risk babies are born, RPICCs provide the expert care their vulnerable situation demands at a critical juncture in their lives. RPICCs have been shown to improve outcomes and avoid costs through early identification and intervention. Since the program began in 1974, over 170,349 critically ill newborns have been served in RPICC designated hospitals. A total of 3,086 RPICC

program neonates were served in these centers during FY 2008-2009. Since 1977, 213,044 women with high-risk pregnancies have been provided prenatal and obstetrical intensive care services. A total of 11,273 pregnant women received these services for FY 2008-2009.

ENABLING SERVICES (LEVEL 2)

Enabling Services focus on facilitating client access to the full range of basic health care services through tasks such as transportation, translation, outreach, respite care, health education, family support, acquiring health insurance, case management, and coordination of services with Medicaid, the Women, Infants and Children's (WIC) program, and education. Enabling services are essential for low income, disadvantaged, geographically or culturally isolated clients, and those with complex health care needs. CSHCN's enabling services address transportation, care coordination, translation services, home visits, and family outreach. Examples of family support activities are parent support groups, family training workshops, advocacy, nutrition, and social work. Essential Public Health Services 3 and 7 are represented in the Enabling Services level of the MCH pyramid.

Level 2 Services to All Population Groups

The CMS Sexual Abuse Treatment Program (SATP) promotes the safety and well-being of Florida's children through comprehensive, multidisciplinary assessment and treatment services for children experiencing sexual abuse, their siblings, and their non-offending caretaker. SATPs work with Child Protection Teams (CPTs), child protective investigators, community agencies, other professionals and individuals. A 2005 grant through the federal Victims of Crime Act (VOCA) allowed for expansion of services to not only the victims of intrafamilial sexual abuse, but also to their siblings and non-offending caretakers. Since 2005, the number of SATP providers has expanded from 11 to 17, with all areas of the state served by an area provider. During FY 2008, SATP served 5,716 child victims, along with their siblings and families.

The CMS Child Protection Team (CPT) program is based on the premise that reports of suspected child abuse and neglect involve complex issues that require professional expertise across multiple medical disciplines. Twenty-five CPTs throughout the state are available 24 hours a day, seven days a week, to supplement the assessment and protective supervision activities of the Department of Children and Families, local Sheriffs Office child protective staff, and other community-based care providers, offering services to child victims, siblings, and other family members. These services may include medical diagnosis and evaluation, medical consultation, forensic interviews of child victims, interviews of family members, psychosocial assessment, nursing assessment, psychological evaluation, multidisciplinary staffing and expert court testimony.

Florida mandated the reporting of suspected child abuse and neglect in 1971, resulting in a dramatic increase in abuse reports to be investigated by the state. Section 827.07, Florida Statutes, required that child abuse investigators "include a determination of harm or threatened harm to each child, the nature and extent of present or prior injuries, abuse, or neglect, and evidence thereof."

The need for a specialized medical resource was recognized and a plan was developed to provide a medically directed multidisciplinary team pilot project administered by the

Children's Medical Services Program, culminating in a legislative appropriation in 1978. The 1999 Florida Legislature passed comprehensive child protection reform that greatly expanded the role of the Child Protection Teams. Criteria were developed for mandatory referral by the Department of Children and Families (DCF), or other agencies responsible for child protective investigations, to the Child Protection Teams. Teams are now responsible for reviewing all reported cases of child abuse and neglect to the DCF hotline to determine which reports meet mandatory referral criteria and are in need of team services

In 1998, Children's Medical Services (CMS) developed a real-time telemedicine network for the evaluation of children suspected to be abused or neglected as an alternative to establishing additional child protection teams to reduce travel times and improve access to medical expertise.

Some CPT's operate satellite offices to decrease travel time and provide services more timely, although operating satellite offices is an additional expense for the CPT's, which have limited budgets. These teams also provide medical exams for children in rural and underserved areas using telemedicine. Currently CPT Telemedicine medical exams are provided in the following counties: Santa Rosa, Escambia, Monroe, Hernando and Citrus. The major benefit of providing CPT telemedicine exams is: reduced travel time to receive medical assessments, improved access to medical expertise, reduced additional trauma for the child, and expedited child safety decisions.

Level 2 Services to Pregnant Women and Infants

Increasing access to early prenatal care is an important role of Healthy Start. Eligiblity for Medicaid is facilitated through the Healthy Start program, as at-risk women may receive additional assistance accessing care, such as transportation to and from prenatal visits. Referral and follow-up care provided by Healthy Start care coordinators ensures pregnant women receive the continuous care they need throughout their pregnancy. Depending on available resources, Healthy Start may facilitate a variety of enabling services, such as prenatal care, laboratory testing, nutrition counseling, referral to WIC, social services, and health education opportunities. Home visitations, counseling, and case management services provide individual attention to pregnant women and infants. The new WIC food package that was implemented in October 2009 provides nutritious foods, including: low fat or fat free milk, whole wheat bread, brown rice or soft corn tortillas, and fresh fruit and vegetables for eligible women. The Healthy Start program has enhanced nutrition services, providing overweight and obese pregnant women intensive assistance that supplements the WIC program.

Complementing the community-based nature of Healthy Start Coalitions, the Fetal and Infant Mortality Review (FIMR) teams is another MCH collaborative effort, serving as a continuous quality improvement mechanism that focuses on two issues: the medical aspects of prenatal and infant health care delivery systems, and the psychosocial, environmental and structural processes contributing to fetal and infant deaths. In 2007, the DOH established quarterly conference calls with all funded FIMR teams in Florida to share information and best practices, and to offer technical assistance to FIMR teams. The Division of Family Health Services epidemiologist is also readily available to assist local FIMR teams.

MomCare assists all Medicaid-eligible pregnant women in accessing prenatal care, regardless of their risk status. During FY 2008-2009, the Medicaid waiver provided over $12 million in federal funds to Florida for at-risk pregnant women and children, enabling Healthy Start to provide additional services to its clients. The waiver also provided over

$5.9 million of federal funding for MomCare during the same fiscal year, translating into assistance in selecting a health care provider, keeping medical appointments, and obtaining other help through the WIC program, Healthy Start, and other services. By linking eligible women to the services they need, MomCare is integral to the maternal and child health care delivery system.

Centering Pregnancy is an innovative model of group care that has proven to be effective in improving perinatal outcomes. Created by a certified nurse midwife at Yale University, the model provides integrated care by combining three primary components: assessment, education and skills building, and support. In 2007, a multi-site randomized controlled trial concluded that "group prenatal care resulted in equal or improved perinatal outcomes at no added cost". DOH explored this concept through their Group CARE Pilot Study, which took place from 2005-2008. Final conclusions are as follows:

- Patient and provider surveys showed an increase in satisfaction with the quality of care as opposed to the traditional model. The evidence of positive comments by the Group CARE participants may be viewed as a step towards empowerment of these women.
- A larger, urban clinic was found to be the most time-efficient and cost-effective setting for Group CARE. Rural clinic settings may need to adjust their group selection criteria, as well as identify creative staffing approaches to improve efficiency.
- Despite the small number of participants, preliminary results mirror those found in larger national clinical trials. Overall, it is felt that the provision of prenatal care utilizing a group model is a safe and effective alternative to the traditional model of care.

Level 2 Services to Children and Adolescents

The DOH's Family Planning Program supports provision of comprehensive reproductive and contraceptive health information to sexually active teens. Section 581.0051(5), Florida Statutes and Title X support providing minor teens, without parental consent, FDA approved contraceptives, including emergency contraception, and limited treatment of sexually transmitted infections (STIs). STI screening is accomplished annually for clients in the program, as needed. Parental notification is not required, but teens are encouraged to include their parents in the decision-making process.

Level 2 Services to Children with Special Health Care Needs

The CMS partnered with AHCA and Florida Hospices and Palliative Care to develop and implement a pediatric palliative care (PPC) program for children up to age 21 with life-threatening conditions. Providing palliative care services from the time of diagnosis through the course of treatment, program services include pain and symptom management; patient and family counseling; expressive therapies; and respite, nursing and personal care. In 2004, Florida received state plan approval to provide palliative care services to eligible CMSN children enrolled in the state's Title XXI program (KidCare). In March of 2005, AHCA submitted a revision to the CMSN component of the 1915(b) Managed Care Waiver, to allow the extension of palliative care services to children on Medicaid who have life-threatening conditions. Approval of this revision in June of 2005 was the first Federal Medicaid Waiver granted to provide comprehensive services to enhance the quality of life for this vulnerable population. Over 400 children were served by this program from the Waiver's inception through December 31, 2009, and by the end of 2010, program sites are expected to expand to cover two-thirds of the

state. Florida's Partners in Care: Together for Kids program, which offers specialized palliative care support services for children and adolescents up to age 21, has served 759 children since 2005 through Title XXI, XIX and Safety Net. 350 clients were served in FY 2007-2008.

CMS, in coordination with Medicaid, has established ten Children's Multidisciplinary Assessment Teams (CMAT) to provide cost containment, quality assurance, and utilization review for children receiving complex, high cost, long-term medical care. CMAT functions through a multidisciplinary, inter-agency effort, with team membership composition representing the CMS and Early Steps Programs of DOH, Child Welfare and Community Based Care of the Department of Children and Families, the Agency for Persons with Disabilities, and AHCA's Medicaid program. CMS leads this collaboration effort. In FY 2008-2009, CMAT served 1,145 clients.

The CMS genetics program delivers evaluation, diagnosis and counseling to children with, or at risk of having, a genetic disorder. Services include initial and follow-up diagnosis and evaluation; genetic counseling; lab studies to confirm genetic disorders; confirmatory testing for infants with abnormal PKU and galactosemia results, plus dietary consultation for treatment of these two disorders; and education programs for CMS staff. The genetics telemedicine project, whereby a pediatrician and a University of Florida geneticist communicate via two-way interactive video technology, reduced the wait for a genetic screening consultation from one year to less than two months in 2004. Similar telemedicine projects using video conferencing were implemented at the University of Miami, providing consultation capabilities for the Ft. Pierce, West Palm Beach and Fort Lauderdale CMS offices. In FY 2008-2009, the genetics program served 1,779 eligible clients.

BSCIP is a Brain and Spinal Cord Injury Program for children and adolescents up to age 18 and their families in Florida who sustain a traumatic brain or spinal cord injury, enabling them to successfully attain community reintegration. Services include provision of information and resources, care coordination, and access to evaluation and treatment. Community reintegration comprises return to school, involvement in family activities, and recreational opportunities. In-patient and out-patient medical care is provided at acute care and rehabilitation hospitals throughout the state. Follow-up continues for up to two years. In FY 2007-2008, 448 clients were served in the BSCIP.

Infants and children with HIV/AIDS have access to a continuum of services through a network of six pediatric HIV Referral Centers and 10 CMS satellite clinics provided by the pediatric HIV/AIDS program. Services include evaluation, diagnosis, care coordination, nutrition counseling, permanency planning, and transportation assistance. The HIV program at the University of South Florida conducts monthly pre-clinic chart reviews with CMS staff in Fort Myers via two-way interactive video technology, enabling the HIV specialist to see more patients at satellite clinics. A similar arrangement occurs between CMS staff in Pensacola and the HIV specialist from the University of Florida. In FY 2008-2009, 2000 clients received services through the Pediatric HIV/AIDS program.

The safety and well being of Florida's children is promoted by the Division of Prevention and Intervention in CMS. The division consists of three units: Child Protection, Prevention, and Special Technologies. Specialized services are provided to children with special health care needs associated with abuse and neglect.

CMS provides telehealth services in order to assure access to specialty services in underserved areas of the state. These telehealth specialty care services currently include endocrinology/diabetes care, genetics, nutritional counseling, neurology, and

dermatology. As the needs and resources in an area change, the types of clinics provided are also subject to change.

CMS clinics survey parents and CMS enrollees regarding the quality of telemedicine services received. Over 95% of parents and CMS enrollees surveyed rated the telemedicine service received as “excellent” or “good”. Many parents reported that without telehealth services they would have longer wait times to see a specialist, or perhaps receive no care at all, due to distance and lack of services where they live.

Endocrine/Diabetes telemedicine clinics currently serve children who live in Bay, Calhoun, Holmes, Jackson, Washington, Flagler, and Volusia Counties.

Genetics telemedicine clinics serve children who live in the following counties: Glades, Hendry, Lee, Indian River, Martin, Okeechobee, St. Lucie, Palm Beach, and Broward. Additionally, CMS provides telemedicine equipment to the neonatal intensive care unit at Sacred Heart Hospital in Pensacola to provide for crucial timely consultations and follow-up care with genetic specialists at the University of Florida’s Division of Genetics and Metabolism.

Specialized nutritional counseling for children with diabetes, metabolic disorders and other conditions affected by nutrition is provided for children in Indian River, Martin, Okeechobee, and St. Lucie Counties.

Neurology telemedicine clinics serve children who live in the following counties: Indian River, Martin, Okeechobee, Palm Beach, and St. Lucie.

Dermatology telemedicine clinics serve children who live in the following counties: Indian River, Bay, Calhoun, Holmes, Jackson, Washington, Martin, Okeechobee, Palm Beach, and St. Lucie.

The Pediatric Hematology/Oncology Program provides coordinated and family-centered healthcare services such as evaluations, diagnosis and treatment to eligible individuals under 21 years of age with blood disorders, including sickle cell disease, hemophilia, or cancer. A network of 10 centers and CMS community-based clinics are located throughout the state. CMS nurses and social workers coordinate care to families and assist them in obtaining needed services. Diagnosis and follow-up of infants with hemoglobinopathies encourages adherence to treatment and reduces incidence of morbidity and mortality. 1,906 clients were served in the program in FY 2008-2009.

POPULATION-BASED SERVICES (LEVEL 3)

Population-Based Services center on preventive interventions and personal health services that are developed and available for the entire MCH population in Florida, rather than directed at individual clients with specific needs. Disease prevention, health promotion, and statewide outreach are key aspects of these services. Common activities falling into this category are newborn screening, lead screening, immunization, Sudden Infant Death Syndrome (SIDS) counseling, oral health, injury prevention, and nutrition and outreach/public education. Level 3 of the MCH pyramid, Population-Based Services, addresses Essential Services 3, 7 and 8.

Level 3 Services to All Population Groups

In 2008, the Cover Florida Health Care Access Program was approved by the Florida Legislature. By involving the Agency for Health Care Administration (AHCA), the Office of Insurance Regulation, and representatives from the Executive Office of the Governor, Florida partnered with private insurance companies to make affordable health care

coverage available to uninsured Florida residents. The policies became available in January 2009. A total of 3,289 females had been enrolled in the program, as of November 30, 2009.

In December 2007, the Florida Discount Drug Card program was initiated through a contract with Envision Pharmaceutical Services. The goal of this program is to lower the cost of prescription drugs for low-income and uninsured Floridians.

Various Florida oral health groups have been formed to investigate ways to improve the oral health workforce in Florida. The Oral Health Florida Coalition in its State Oral Health Improvement Plan (SOHIP), the Florida Health Practitioner Oral Healthcare Workforce Ad Hoc Committee, and the Florida Oral Health Workforce Workgroup have each put forth recommendations to improve the oral health of Florida's residents. Each of these recommendations has shown promise in other states in increasing access to dental care for underserved populations, including children. Florida implemented a prevention program 1.5 years ago to train physicians, ARNPs and PAs to apply fluoride varnish to children 0-4 years of age. Each month, the number of billing providers, unduplicated recipients, and duplicated recipient counts participating in the program have increased.

County health department dental programs and community dental projects provide screenings, oral health education, diagnostic services, preventive services, and restorative treatment, focusing primarily on Medicaid children. Onsite dental programs exist in 47 of Florida's 67 counties, and two counties have developed partnerships to provide dental services – one with a community college and one with a community health center.

The DOH addresses suicide through its participation on the Governor's Suicide Prevention Taskforce, Healthy Start mental health screenings, and health education classes that are part of the Comprehensive School Health Services program.

Level 3 Services to Pregnant Women and Infants

Healthy Start provides screening of pregnant women and newborns covering environmental, medical, nutritional and behavioral risk factors. Contingent upon available resources, Healthy Start seeks to deliver services targeting women and infants with identified risk factors. During state fiscal year 2009, Healthy Start provided screening services to 175,335 women and 197,720 infants, identifying 133,963 women and infants at risk for poor outcomes. Every pregnant woman and every infant born in Florida is eligible for the screening process. A total of 2,250,749 services were provided to 121,270 pregnant women, and 1,393,113 services provided to 78,722 infants. Healthy Start also established interconception health education and counseling as an enhanced service with the intent of improving birth outcomes in subsequent pregnancies.

In June of 2007, DOH launched the first statewide public information campaign to promote completion of the Healthy Start risk screening, the gateway into the Healthy Start program. Over a three-month period, the campaign included television and radio public service announcements, billboards, printed reminders in doctors' offices, and point of purchase displays at the pregnancy test aisle in Winn Dixie grocery stores throughout the state, raising awareness of the importance of Healthy Start risk screenings and providing contact information and the address of the Healthy Start website: www.HealthyStartBaby.com. The official website of the Florida Association of Healthy Start Coalitions is www.healthystartflorida.com.

The Newborn Screening Program provides testing at birthing facilities for certain metabolic, endocrine, and hemoglobinopathy disorders, including cystic fibrosis, with potentially adverse consequences that can be identified before the illness is apparent. CMS follows up on cases with abnormal screening results, offering referrals for evaluation and diagnostic services. Early detection and treatment can prevent severe mental retardation, physical deformities, infections, and even death. All babies born in Florida are eligible, and in FY 2007, 243,381 babies were screened.

In 2005, tandem mass spectrometry was first used to screen for disorders recommended by the American College of Medical Genetics and the Florida Genetics and Newborn Screening Advisory Council. In 2006, statewide screening of 24 additional disorders was initiated, followed by screening for cystic fibrosis in 2007. All babies with one or two mutations for cystic fibrosis and ultra-high IRT levels are referred to one of 11 designated Cystic Fibrosis Centers for evaluation, diagnosis, and genetic counseling.

The CMS Early Hearing Loss Detection and Intervention (EHDI) program has resulted in improvements toward achieving the Healthy People 2010 goals of screening by one month of age, diagnosis by three months of age and receipt of intervention services by six months of age. Newborn hearing screening is statutorily mandated and has been fully integrated into screening and reporting procedures for metabolic and genetic disorders since 2005.

CMS, Family Health Services, and the Office of Injury Protection provide public awareness and educational information on several topics that are associated with infant abuse and neglect: Safe Sleep for Infants, Shaken Baby Syndrome/Abusive Head Trauma, and Drowning Prevention. Safe Sleep education is currently provided by Healthy Start and is included in the counseling and education provided by health department to pregnant women and parents, as well as to the local community through health fairs and public awareness campaigns. CMS has responsibility for the Shaken Baby Syndrome (SBS) information program. Since 2005, “Coping with Crying” brochures have been given to parents of every newborn prior to hospital discharge. In FY 2008, over 350,000 brochures were distributed. A three-part initiative aimed at reducing the most common causes of SBS – caregivers’ reaction to babies crying – includes developing and conducting training for hospital nurses, conducting a pilot poster awareness program targeting young men, and a collaboration with the Florida Pediatric Society to increase educational information provided by the pediatrician to new parents at the first post-discharge visit to the doctor. This initiative is ongoing.

In order to give communities more accurate information on Sudden Unexpected Infant Deaths (SUIDs), DOH is collaborating with Florida medical examiners in an SUID investigation. The objectives of this investigation are to: 1) estimate the SUID rate, 2) estimate the proportion of SUID deaths by underlying cause as reported on the death certificate, 3) describe the changes in reporting that may occur on the medical examiner report, the death certificate, and the classification of the SUID, 4) identify the type(s) and intensity of SUID investigations completed, 5) determine the factors impacting accurate reporting of SUID cases, and 6) estimate the prevalence of known SUID risk factors. Findings from this investigation will help communities better understand the SUID problem and develop prevention messages and strategies to reduce the number of SUID cases.

Level 3 Services to Children and Adolescents

The DOH's Office of Injury Prevention (OIP) is the lead agency for SAFE KIDS Florida, which is part of the SAFE KIDS Worldwide Campaign, a global effort aimed at preventing unintentional injuries to children age 14 and under. Through the local SAFE KIDS Florida coalitions and state chapters, numerous car seat check-up events are conducted on an ongoing basis and during National Child Passenger Safety Week, National SAFE KIDS Week, and Buckle Up America Week.

The OIP continues to receive the Florida Bicycle Helmet Promotion Program grant through the Florida Department of Transportation (FDOT). Nearly 18,000 bicycle helmets have been supplied to 100 community partners for distribution throughout the communities in all 67 counties. This program's goal is to increase helmet usage among children in low-income households, rural counties, and counties experiencing a high incidence of bicycle-related injuries and death.

The OIP is also in the process of implementing its 2009-2013 Florida Injury Prevention Strategic Plan, which encourages evidence-based interventions to address motor vehicles injuries, a leading cause of death and injury among children in Florida. The second goal of the plan is to "facilitate opportunities for collaborative injury prevention efforts in Traffic Safety, Poisoning, Interpersonal Violence, Suicide, Child Maltreatment and other injuries". A key partner in the implementation of this plan is the FDOT Office of Safety. DOH's OIP will continue to address motor vehicle safety issues through activities, projects, and grants focusing on leadership, partnership, collaboration, and coordination.

Promoting Positive Youth Development's goal is to establish multi-faceted programs that help young people grow into mature and successful adults. One such program addresses risk and protective factors that increase or ameliorate youth engagement in high-risk behaviors that can lead to depression and suicide. The single state agency for mental health, the Florida Department of Children and Families (DCF), funds children's mental health services through a combination of federal (Mental Health Block Grant, Medicaid) and state revenues. Providers of DCF services include community mental health centers, private mental health agencies and facilities, and private mental health professionals such as psychiatrists, psychologists, and clinical social workers. During FY 2007-2008, services were provided to 74,543 children who were enrolled in the three children's priority populations as follows:

- Children with Serious Emotional Disturbance: 46,611
- Children with Emotional Disturbance: 27,932
- Children At-Risk of Mental Health Problems: 4,680

The Governor's Fitness Challenge is a statewide initiative for youth obesity prevention and physical activity promotion and is the main program of its type for this age group. DOH is responsible for staffing the Governor's Council on Physical Fitness.

DOH addresses underage drinking through its representation on the Governor's Underage Drinking Prevention Taskforce, alcohol usage screenings done by the county health departments during well child checkups, and health education classes offered by some of the 46 counties that implement Comprehensive School Health Services programs.

To address mental, developmental, and behavioral health issues, DOH continues to build partnerships and maintain mutual participation in Florida's Mental Health Program, Florida's Child Health Insurance Program, and Florida KidCare, which provides networks

for children needing intensive mental health services. The DOH is the lead agency for the Interagency Coordinating Council for Infants and Toddlers, as well.

The Youth Risk Behavior Surveillance System assists in monitoring priority health-risk behaviors that contribute to the leading causes of death, disability and social problems.

CMS also oversees the statewide Poison Information Center Network, providing poison prevention and management information 24 hours a day through a toll-free number. The Poison Centers provide access to poison information, triage the potentially poisoned patients, collect pertinent data, and offer professional consultation for health care providers. Since FY 2004, the Poison Centers receive HRSA bioterrorism funds to develop, enhance, and maintain a system for rapid response to bioterrorism threats, natural disasters, and man-made disasters. The system involves real-time data reporting and analysis. In FY 2008, the network handled 191,494 calls, provided 6,395 consults, provided education services to 1,766 community programs, 372 professional events, and participated in 824 health fairs or other special events. Over half a million informational materials were distributed, and 78 media/public relation activities were provided.

Level 3 Services to Children with Special Health Care Needs

Under Title V, CMS collaborates with Children's Mental Health Specialists. CMSN also provides the Medicaid service array to children with special health care needs, expanding those services to meet the needs of each individual child. The transition health care task force focuses on the needs of youth with disabilities who are transitioning to adulthood.

The Office of Injury Protection continues to receive a Florida Department of Transportation grant that funds the Florida Special Needs Occupant Protection Program. The program staff evaluates children with special health care needs to determine the appropriate child safety seat or restraint and provides loaner special needs seats or restraints when necessary. Children's hospitals in Orlando, Tampa, Miami, St. Petersburg, Gainesville, Fort Myers, and Hollywood administer this program.

INFRASTRUCTURE-BUILDING SERVICES (LEVEL 4)

All Ten Essential Services are linked to the base of the MCH pyramid, Infrastructure-Building Services, forming a broad foundation of integrated activities aimed at improving and maintaining the health of all women and children. The development and maintenance of comprehensive health service systems, including the formulation of standards/guidelines, training, strategic planning, and the building of extensive information structures characterize Level 4 of the pyramid. Tasks range from needs assessment, evaluation, planning, policy development, coordination with multiple other local, state and federal programs, quality assurance, standards development, monitoring, training, applied research, and the development of systems of care. These systems of care must be family-centered, community based and culturally competent.

Level 4 Services to Pregnant Women and Infants

Healthy Start services are delivered statewide through local coalitions whose Boards of Directors (boards) typically include a diverse group of local community volunteers. By statute, their boards are comprised of health care providers, hospitals, consumers, social service agencies, county and municipal governments, private businesses, educational representatives, and charitable organizations such as the March of Dimes and United

Way. These coalitions assess local needs, develop plans to meet those needs, allocate funding to local providers, and monitor the Healthy Start system of care.

In 2008, the DOH partnered with the Healthy Start Coalitions to establish a Research to Practice (R2P) workgroup, ensuring that Florida continues to employ best practices to help reduce infant mortality. The purpose of the ongoing meetings and joint collaboration is twofold: 1) evaluate the Healthy Start Program by reviewing existing and ongoing research to foster the continued effectiveness of the Healthy Start model and 2) identify best practices and evidenced-based programs to implement at the state and local levels.

Healthy Start does not appear to impact birth outcomes and overall Medicaid costs. Given these evaluation findings, and in view of the fact that there have been no substantial revisions to the program since 1992, the Florida Department of Health and the Health Start Coalitions are launching on a Planning for the Future Journey. This initiative is designed to strengthen the Healthy Start program based on current research and evidence related to pregnancy support services. The DOH envisions this being a two-year process, using outside expertise to reshape the program, structure its implementation and prepare for future evaluation.

The DOH Bureau of Epidemiology provides additional agency capacity by periodically conducting risk analyses of the factors contributing to fetal and infant mortality; environmental epidemiology, addressing issues such as lead poisoning; birth defects surveillance; and the Pregnancy Risk Assessment Monitoring System (PRAMS). A cooperative agreement between the Centers for Disease Control (CDC) and the Florida Department of Health, PRAMS conducts population-based surveillance of selected maternal behaviors that occur during pregnancy and early infancy. Through an ongoing random survey of Florida mothers of newborns, PRAMS was designed to provide information about risk factors for adverse pregnancy outcomes and ill health in newborns, generating data used for the planning and evaluation of prenatal health programs.

Initiated in 1996, the Pregnancy Associated Mortality Review (PAMR) project seeks to improve the surveillance and analysis of pregnancy-related deaths in Florida. A pregnancy-related death is defined as "a pregnancy-associated death resulting from 1) complications of the pregnancy itself, 2) the chain of events initiated by the pregnancy that led to death or 3) aggravation of an unrelated condition by the physiologic or pharmacologic effects of the pregnancy that subsequently caused the death." PAMR focuses on linking data from maternal and fetal death certificates, birth certificates, and Healthy Start screenings to accurately identify and examine occurrences of deaths associated with pregnancy.

In 2001, a collaborative effort between the Florida Association of Healthy Start Coalitions, the Agency for Health Care Administration, and DOH resulted in a Medicaid waiver authorized by Section 1915 (b) of the Social Security Act. By waiving compliance with certain portions of the Medicaid statute, the Healthy Start Medicaid waiver accomplishes three things for women ages 14-55 who have lost full Medicaid coverage:

- Provides more intensive Healthy Start services for at-risk, Medicaid-eligible women and infants
- Helps Medicaid-eligible women receive prenatal care through the MomCare program as early as possible
- Provides family planning services for up to two years to women whose pregnancies were covered by Medicaid.

Florida was one of the first states in the nation to allow pregnant women to apply for Medicaid using a simple, one-page application and a streamlined process to review Medicaid applications. Results of an independent evaluation conducted in 2005 by the Lawton and Rhea Chiles Center for Healthy Mothers and Babies revealed positive impacts associated with both the Medicaid waiver and MomCare programs. MomCare clients entered prenatal care earlier and had more frequent prenatal care visits, while Healthy Start staff had more face-to-face encounters and more time with beneficiaries after initiation of the Medicaid waiver. Improvements in perinatal outcomes for infant were observed for Healthy Start participants, in contrast to a worsening of those same outcomes for a comparison group.

Level 4 Services for Children and Adolescents

Coordinating and strengthening the health care system for children is also an important focus of the overall strategic plan for maternal and child health. Infant and child health issues that are targeted include: racial disparity in infant and child health outcomes, quality improvement, asthma, SIDS, fetal and infant mortality review, lead poisoning, shaken baby syndrome, school readiness/health component, day care, and immunizations.

Level 4 Services for Children with Special Health Care Needs

The CMS Network serves as a managed care choice for Medicaid beneficiaries who must choose a managed care option. Families of Medicaid eligible children who meet the clinical screening criteria may choose CMSN as their provider, with services directly reimbursed by Medicaid on a fee-for-service basis. The Florida legislature charged CMS with maximizing federal Titles XIX and XXI funds for its salaried staff, and the CMS program obtained federal approval to draw down Title XIX funds. (States maximize federal funds by identifying General Revenue (GR) funds that can be matched against federal funds, enabling the state to receive additional federal dollars via the match.) In addition to two CMSN insurance projects funded by Title XIXs and XXI, CMSN provides the original Safety Net services for children with special needs who are not eligible for either of the other funding sources.

CMS is also responsible for coordinating policy and procedures across departments that relate to children and youth with special health care needs and has responsibility for both the Part C Program of the Individuals with Disabilities Education Act and for the newborn screening program.

DOH ORGANIZATIONAL STRUCTURE AND MEDICAL EXPERTISE

In addition to a thorough review of MCH and CMS programs and progress over the last five years in delivering services to the MCH population, the agency capacity assessment process must also include: an examination of the organizational structure of the DOH, including the level and diversity of medical expertise inherent in both internal DOH staff and external partners; agency coordination with multiple service delivery partners throughout the state; and legislative authority related to the provision of MCH services in Florida. The next portion of this section addresses these components.

The DOH is directed by the State Surgeon General, Ana M. Viamonte Ros, M.D., M.P.H., who answers directly to the Governor and is responsible for overall leadership and policy direction of the Department. The Surgeon General is assisted by a Chief of Staff and five deputy secretaries.

The DOH is responsible for the administration of programs carried out with allotments under Title V legislation. Many of these programs fall within the auspices of the Division of Family Health Services and the Division of Children's Medical Services, whose directors serve as the primary Title V contacts for the state and play a significant role in Title V direction. The Deputy Secretary for Health and Minority Health Director, Shairi Turner, M.D., oversees the Division of Family Health Services. The Deputy Secretary for Children's Medical Services, Joseph Chiaro, M.D., oversees the Division of Children's Medical Services.

As Division Director of Family Health Services, Annette Phelps, A.R.N.P., M.S.N., provides leadership, policy, and procedural direction for Family Health Services, which includes the Bureaus of Family and Community Health; Women, Infants and Children (WIC) and Nutrition Services; Public Health Dental; Chronic Disease Prevention and Health Promotion; and the Child Nutrition Program.

The Bureau of Family and Community Health is responsible for many of the Title V activities related to pregnant women, mothers, infants and children. The Chief of the Bureau of Family and Community Health directs the units of 1) Infant, Maternal, and Reproductive Health; 2) Child and Adolescent Health; 3) MCH Practice and Analysis, and 4) Adult and Community Health. Programs within the Adult and Community Health unit include the Sexual Violence Prevention Program, Domestic Violence, the Strengthening Families Initiative, and the Men's Health Initiative. Programs within the Child and Adolescent Health unit include Abstinence Education and School Health. MCH Practice and Analysis conducts epidemiology studies and surveillance, supports needs assessment activities, evaluates policies and programs, provides data support for the Pregnancy Associated Mortality Reviews, and other related activities.

As of March 2010, there were 42 central office staff members in the Division of Family Health Services, Bureau of Family and Community Health, who perform duties for Title V funded programs. The Healthy Start Coalitions establish partnerships with the private sector, the public sector, state and local governments, community alliances, and maternal and child health care providers, along with linkages with state and national work groups and associations, increase capacity and provide MCH infrastructure statewide.

Programs within the Infant, Maternal, and Reproductive Health (IMRH) unit include Title V, Family Planning (Title X), state Healthy Start program, Pregnancy Associated Mortality Review, county Health Departments' MCH and Family Planning Quality Assurance Program and Fetal and Infant Mortality Review. In July 2003, the Family Planning Program merged with the Office of Maternal and Child Health to form the Infant, Maternal, and Reproductive Health unit, and in May 2006 all staff moved to the same physical setting to complete the integration process. This reorganization reflects a desire to fully integrate women's health care through the preconception, prenatal, and interconception periods and to promote optimal health prior to and between pregnancies, in order to help ensure positive birth outcomes. MCH and family planning staff perform onsite quality assurance visits to the county health departments. Prior to the visit, staff conduct advanced planning meetings where data are reviewed, and ideas or problems are discussed. Onsite, they conduct coordinated entrance and exit reviews with county health department staff. The site visits allow for monitoring of activities and more effective follow-up to meet technical assistance needs.

In 2009, DOH was awarded over $10.6 million of Federal Title X funds to support family planning services. The total number of clients served during 2008 was 213,394,

including 49,088 teens aged 15-19, and client encounters totaled 454,706. These services are provided in all 67 Florida counties in 177 family planning clinic sites. Title X provides opportunities for supplemental funding to county health departments to extend services to clients. Of the ten projects statewide that have been awarded additional funding, eight are special initiatives for high-risk populations, five expand family planning services to males, three increase overall family planning services, and three are HIV projects.

As of March 2009, there were approximately 77 central office staff members in the Children's Medical Services division and 674 out-stationed staff members in the 22 CMS area offices located throughout the state. Under the direction of Phyllis Sloyer, R.N., Ph.D.**,** the CMS Network Division implements programs for the Title V component of eligible children with special health care needs.

INTER-AGENCY COORDINATION

The Department of Health provides or coordinates public health services through central office programs, Healthy Start Coalitions, county health departments, CMS area offices, primary care associations, and tertiary care facilities. Services are often provided in collaboration with other local, state and federal agencies, including: education; juvenile justice; corrections; social services; child welfare; Medicaid and SCHIP; social security; emergency medical services; and alcohol, drug abuse, and mental health. This effort focuses on health and preventive care services, the promotion of optimal health outcomes, and the monitoring of the health status of the population.

ALL POPULATION GROUPS

The Department of Health has a letter of agreement with the Department of Children and Families (DCF) that details collaboration between the two agencies to facilitate services for clients of both agencies. The letter of agreement includes interagency collaboration relating to providing the following health care services to DCF clients and its contracted service providers: HIV counseling, testing, and AIDS clinic services; family planning; Healthy Start; Early Intervention Program (Infants and Toddlers) services; prenatal care; immunizations; primary care/EPSDT; Special Supplemental Nutrition Program for Women, Infants, and Children (WIC); dental care; multiple handicap assistance teams; medical foster care; and other services, as appropriate.

The Interagency Methamphetamine Workgroup was established in 2005 to review the issue of public environmental health concerns at clandestine methamphetamine labs (homes, apartments, motels, businesses, automobiles, etc.) and ways to reduce the impact on children involved. Agencies participating in this work group include the Department of Business and Professional Regulation, the Department of Environmental Protection, the Department of Children and Families, Department of Health, and law enforcement agencies.

The Department works collaboratively with Florida universities to implement maternal and child health initiatives, enabling the state to access resources unique to the university setting. The Perinatal Data/Research Center, located at the University of Florida, provides a warehouse for maternal and child health data. The center stores and validates data, links related data files, publishes and analyzes data, and studies the impact of program interventions on health status outcomes. The Department also serves as a site for public health, nursing, and social work interns from Florida A&M University, the University of Florida and Florida State University.

Florida utilizes funding from HRSA through the State Systems Development Initiative Grant Program (SSDI) to enhance and improve statewide data capacity. Over the last three years, efforts have included: establishing and improving linkages between existing data files; developing and expanding local level data access and capacity; expanding the agency's data capacity for national reporting; and increasing the evaluation and analytic activities for MCH issues. Immediate goals include: improve access to linked and unlinked files for the department, for state partners and for Florida communities while protecting confidentiality and program integrity; improve accuracy, efficiency and sustainability of current file linkage activities; and improve use of linked and unlinked files for policy and program purposes. The ultimate goal of the SSDI grant, the new Office of Surveillance, Evaluation and Epidemiology, and other departmental efforts is to have information needed to improve the health of women, children and families in a useable format that is readily available to people who can make decisions at individual, family, neighborhood, community, or state levels.

Community health centers play an important role in Florida's health care delivery system. There are 41 community health centers in Florida and 283 clinic locations, though not every clinic provides a full-range of services. Centers are located in 54 of the 67 counties in Florida. Funded in part by the U.S. Public Health Service, they provide care in federally designated medically underserved areas. The centers offer primary health care, preventive health services, emergency medical services, transportation services, preventive dental care, and pharmaceutical services. Their patients include high-risk clients such as migrant farm workers, low birth weight infants, the elderly, homeless people, and HIV patients. A number of Healthy Start coalitions contract with the centers for prenatal care and infant services, based on need and available resources. In some areas, the centers play an active role as members of the local Healthy Start coalition, which might include activities such as service delivery planning.

The Department of Health offers programs that address many of the leading causes of death for women including the Heart Disease and Stroke Prevention Program, the Comprehensive Cancer Control Program, the Breast and Cervical Cancer Program, and the Diabetes Prevention and Control Program.

The Heart Disease and Stroke Prevention Program (HDSPP) was developed to prevent and reduce the burden of cardiovascular disease in Florida. This program's priority strategies focus on controlling high blood pressure and cholesterol, recognizing signs and symptoms of heart attack and stroke, the importance of calling 911 in an emergency, improving emergency response, improving quality of care, and eliminating health disparities between population groups. The HDSPP provides support and staff for the Florida Cardiovascular Health Council (FCHC) and brings together diverse public and private organizations to coordinate resources and collaborate to improve the overall cardiovascular health in Florida. The program provides technical assistance and contract management to 12 Chronic Disease Health Promotion and Education projects and eight cardiovascular Closing the Gap projects. Program activities are implemented at both the community and statewide level. This program is funded by the CDC.

The Florida Comprehensive Cancer Control Program (CCC) works to reduce the burden of cancer in Florida on individuals, families, and communities by improving communication, coordination, and collaboration among public and private organizations at local, regional, and state levels. The CCC Program serves as the convener to the Florida Cancer Plan Council, which is comprised of statewide representatives who assist

with the implementation of the Florida Cancer Plan. This program is also funded by the CDC.

To address breast and cervical cancer disparities, the Breast and Cervical Cancer Program (BCCP) provides free or low-cost screening tests (Pap smears, clinical breast exams, and mammograms) and some diagnostic tests to uninsured/underinsured women. Eligibility includes women between the ages of 50 and 64 years of age, who are at or below 200 percent of the federal poverty level. Funds for treatment for women screened through the Florida BCCP are available through the state and federally funded Breast and Cervical Cancer Treatment Act (treatment monies are available through the AHCA). The Florida Breast and Cervical Cancer Program is also funded through CDC. In 2008, DOH awarded 16 grants to community-based organizations and county health departments for innovative demonstration projects aimed to improve breast cancer awareness, mammography utilization, and coordination of breast cancer treatment services. Projects target women ages 40-49 as well as racial and ethnic minorities affected disproportionately by breast cancer.

The Diabetes Prevention and Control Program (DPCP) was created in 2007 to reduce the burden of diabetes and the health-related complications of Floridians with diabetes by improving the access to, and quality of, diabetes care. This program has implemented strategies for increasing patient advocacy, promoted medical practice guidelines to improve healthcare standards, implemented awareness campaigns with statewide partners, and provided technical assistance to all county health departments on diabetes issues. The program administers the Insulin Distribution Program, and manages contracts for the Alpha One Project, the Diabetes Research Institute Foundation, and eight diabetes-related Closing the Gap grants. A statewide grassroots partnership, the Florida Alliance for Diabetes Prevention and Care, assists the DPCP in facilitating health-system improvement activities. The Diabetes Advisory Council develops recommendations to the DPCP, the Surgeon General, and the Governor of Florida on statewide issues affecting individuals with diabetes. The program implements the CDC National Diabetes Education Program for increasing diabetes prevention activities, awareness of the disease, and the long-term benefits of disease management**.** This program is also funded through the CDC.

The Florida Department of Health Public Health Dental Program coordinated a teledentistry pilot program in Nassau County in September 2007, utilizing a fixed remote-site that linked via live two-way interactive videoconferencing to their fixed facility. The study showed that the teledental programs' effectiveness was linked to its high sensitivity and specificity. The intent of the Florida DOH teledentistry program is to extend the department's reach as an oral health safety-net provider for disadvantaged and isolated populations. Due to the success of the teledentistry pilot project in Nassau, the county health department recommends continuation of teledentistry methods, as several advantages have been identified by the study, including a high accuracy in detecting dental abnormalities when compared to in-person examinations.

PREGNANT WOMEN AND INFANTS

In order to present an integrated, seamless service delivery system to families of the most vulnerable population segment served by Title V, the Division of Family Health Services works in close collaboration with Children's Medical Services to ensure communities have procedures for coordinating services for those eligible for both Healthy Start and the CMS Early Steps Program.

In order for Florida to effectively respond to the challenges presented by Fetal Alcohol Spectrum Disorders (FASD), state agencies providing services to individuals with FASD and their families have been working together to reduce the number of children exposed to alcohol prenatally and to insure those with FASD have the resources needed for optimal outcomes. To that end, the Florida Fetal Alcohol Spectrum Disorder Interagency Action Group was established in September 2000 to improve the system of care for individuals with Fetal Alcohol Spectrum Disorder and their families. This action group has been meeting quarterly since 2000 to strategically and systemically address Florida's FASD needs. It is comprised of representatives from a variety of public and private disciplines including the Florida Departments of Health, Children and Families (Substance Abuse Program and Family Safety Office), Education, and Law Enforcement; Florida State University; the Governors Drug Policy Office; and families with children with FASD.

The Department of Health and the Department of Children and Families continue coordinated efforts to prevent substance abuse during pregnancy and to reduce the impact of such abuse on affected children. DOH has had the lead on the FASD Interagency Workgroup (FASD IAD) since its inception in 2002. Under the leadership of DOH, the FASD IAG accomplished the following:

- Developed a comprehensive interagency strategic plan (2002)
- Hosted a FASD Town Hall meeting in the state (2002)
- Planned and provided the first state conference on FASD (2003)
- Developed the *Florida Resource Guide on FASD* (2003), which has been included on the Center for Substance Abuse Prevention's (CSAP's) FASD Center for Excellence website as a recommended resource. The guide may be seen at www.doh.state.fl.us/family/socialwork/pdf/fasd.pdf.
- Developed a companion Department of Education resource guide for Florida Educators (2005)
- Secured a $280,000 appropriation from the Florida Legislature for an Integrated System of Care for Children and Families with FASD to establish Florida's first FASD Diagnostic and Intervention Clinic. The Florida Center for Child and Family Development in Sarasota is implementing the pilot project, which seeks to improve functioning of young children with FASD and their families, prevent the development of secondary disabilities, and provide training to community professionals on FASD.
- Coordinated with the Florida Developmental Disabilities Council on a social marketing campaign, "Florida Fights Fetal Alcohol Spectrum Disorders," to engage and educate Floridians about the dangers of alcohol consumption during pregnancy. "Florida Fights FASD" is committed to implementing awareness, prevention, education, intervention and advocacy efforts in communities throughout Florida. The purpose of Florida Fights FASD is to eliminate alcohol consumption by pregnant women, those who may become pregnant and to reduce the prevalence of FASD. (2010)

The Department of Health continues to increase the proficiency of health care providers in recognizing and getting needed treatment for women who abuse drugs during pregnancy and for substance-exposed infants, and in identifying and working toward resolution on issues impacting continuous and comprehensive prenatal and infant care for this high-risk population.

Coordination with WIC includes collaboration regarding breastfeeding initiatives, early entry into prenatal care, coordination with Healthy Start, addressing nutrition issues such as folic acid to prevent neural tube defects, and the development of general nutrition guidelines for inclusion in the Healthy Start standards. Coordination with other grant programs administered outside of the Department of Health includes working with Florida's Federal Healthy Start projects in selected counties, and other MCH-funded projects, including the Pediatric Pulmonary Project at the University of Florida, the MCH program of the College of Public Health at the University of South Florida, the Lawton and Rhea Chiles Center for Healthy Mothers and Babies, the Florida State University Center for Prevention and Early Intervention, and Community Integrated Services Systems (CISS) grants related to reproductive health and child abuse and neglect prevention.

In the Fall of 2008, the Infant, Maternal, and Reproductive Health unit successfully applied for the HRSA First Time Motherhood/New Parents Initiative. Grant funding in the amount of $223,362 enabled DOH to partner with the Healthy Start Coalition of Pinellas, Inc. on a project entitled Florida Right from the Start. The project will create a statewide social marketing campaign to promote positive birth outcomes by increasing awareness of preconception and interconception care, prenatal care, and parenting among first time parents. An evaluation team will gauge the effectiveness of the social marketing campaign based on increased awareness as measured by pre-intervention and post-intervention surveys. They will administer Web-based surveys to a convenience sample of first-time mothers and parents. They will also conduct Web-based post-implementation key informant surveys, and compile utilization statistics from the website and hotline to evaluate actual use. Funding for the second year was $230,064.

In partnership with the Florida Chapter of the March of Dimes,

www.everywomanFL.com was developed with the goal of helping women reach their optimal level of health, thereby improving Florida's birth outcomes. This statewide campaign aims to raise awareness and increase knowledge of risk factors that could lead to adverse birth outcomes. This initiative is responsible for garnishing support from health care providers and promoting the integration of preconception education into their professional practices. The website provides resources for women, consumers, and health care providers on how to improve the health and well-being of women.

The Department of Health also partnered with the March of Dimes Florida Chapter to establish the Vita Grant project in 2007. When the project ended in December 2007, it had distributed over 565,000 bottles of multivitamins containing folic acid and provided folic acid education and preconception health education materials to both providers and consumers. Evaluation results indicate the public health delivery model of the VitaGrant project was effective in reaching the population at highest risk for neural tube defects. They also indicate VitaGrant was a successful model for influencing vitamin consumption behavior, ultimately resulting in better birth outcomes and fewer neural tube defects among babies born to women in Florida.

In ???? DOH sponsored nine two-day trainings around the state utilizing the *Promoting Maternal Mental Health During Pregnancy* curriculum developed by Dr. JoAnne Solchany from the University of Washington. The curriculum was specifically designed to provide clinicians and home visitors with a series of relationship-based interventions that support the emotional and psychological course of pregnancy. Topics included the typical progression of pregnancy, high risk pregnancies, domestic violence, pregnant

women with unresolved grief or loss, and those women experiencing depression or other mental health disruptions. The curriculum also covered issues critical to the development of the early mother-child relationship.

The Florida Department of Health (DOH) is the lead agency in a seven-state collaborative called *Core Indicators for Preconception Health*, designed to establish standards for measuring preconception health. *Preconception Keeping Tabs* is a wallet-size card being developed to accommodate all of the stated preconception health information in an easy-to-read format.

The Magnolia Project is a Healthy Start program offering a comprehensive array of services in an effort to improve birth outcomes. The target population is high-risk African-American women, ages15-44, living in five zip codes in Jacksonville, FL. The project functions as a collaborative effort between the Northeast Florida Healthy Start Coalition, the Duval County Health Department, and local community-based organizations. The project was the first federally-funded Healthy Start program to focus on the health of women before pregnancy as a strategy for addressing racial disparities in birth outcomes. Initially funded in 1999, *The Magnolia Project* currently serves more than 700 women annually. A CDC-funded longitudinal evaluation, conducted in 2007, found the project had a significant impact on low birth weight rates in the subsequent pregnancies of participants who received case management and related risk reduction services.

The Orange County Healthy Start Coalition (OCHSC) initiated the *Save Our Babies* (SoB) campaign in 2002 and has successfully maintained grant funding to support it since its inception. This project has been instrumental in laying the foundation for efforts in Orange County to strengthen neighborhood awareness of the importance of infant mortality reduction. SoB places workers in non-traditional outreach sites in targeted zip code areas to inform the Black community about the severity of the problem of racial disparities in birth outcomes. Outreach workers educate both community leaders and citizens about the issues, as well as educating pregnant women about positive health practices that decrease their risks for poor birth outcomes. In 2008, *shower power* presentations at private baby showers became a very popular and successful education vehicle. Through typical baby shower games adapted to an educational message, a festive atmosphere with refreshments, SoB provided preconception, infant safety and racial disparities information to pregnant women and their guests. OCHSC has presented the *shower power* concept at national and state conferences, where it was featured as a “promising practice”. This program has been the primary focus for ongoing fundraising and grant writing efforts, including seeking federal funding opportunities. Unfortunately, *Save Our Babies* is functioning with limited staff due to a growing demand for outreach. The coalition recognizes the need to secure additional resources to continue this critical initiative aimed at reducing racial and ethnic birth outcome disparities in Orange County.

CHILDREN AND ADOLESCENTS

School health services are provided under the direction of the Department of Health and in cooperation with the Florida Department of Education. Comprehensive school health service projects provide health care services in schools with high incidences of underserved high-risk children, teenage pregnancy, and poor birth outcomes.

Under Title XXI and Medicaid, the MCH role in the State Children’s Health Insurance Program is to ensure access to care through outreach and the eligibility application

process, provide interagency coordination, and staff the KidCare Coordinating Council. The Florida KidCare plan provides services to children under 200 percent of the federal poverty level from birth to age 19, through either a Medicaid managed care plan, MediPass, or through the Title XXI programs, MediKids and Florida Healthy Kids. MediKids targets children age 1 to 5.

The Department of Health works in partnership with DCF and the Ounce of Prevention Fund of Florida to implement the Healthy Families Florida initiative. Healthy Families Florida provides a community-based approach that uses intensive home visiting and coordination with other support services to build an integrated, coordinated, and comprehensive system of support for the prevention of child abuse and neglect. The agencies work together to avoid duplication of services and to facilitate services needed by families served in either program.

Coordination with the Family Planning Program, which includes work on reducing teen pregnancy, reducing subsequent births to teens, preconception and interconception education and counseling, and abstinence education, has long been an integral part of MCH efforts. This relationship was further enhanced in 2003 when the Family Planning Program (formerly housed within Women's Health) merged with the Maternal and Child Health Unit, to form the Infant, Maternal, and Reproductive Health Unit.

Family Planning Waiver marketing campaign is designed to increase the usage and increase pregnancy intervals. "The Family Planning Waiver Social Marketing Campaign is a relatively new initiative charged with increasing public awareness of the Family Planning Medicaid Waiver program, the services it provides and how an individual may access and apply for the Waiver. The campaign will target women of childbearing age who are eligible for the program. The campaign will also target healthcare providers, encouraging their participation in the program. The Social Marketing Campaign will utilize outreach methods such as focus groups, flyers, brochures, website, and educational kiosks."

RESULTS OF CAPACITY ASSESSMENT

As stated previously in Section 1, a key feature of the design of the Needs Assessment Survey was its focus on Capacity Assessment as it applies to the quality of services DOH renders to stakeholders outside the agency. The survey asked respondents to assess the performance of DOH central office staff in responding to its constituents and clients in each of the 10 essential service areas. Responses were disaggregated according to the respondent's classification as either a DOH central office employee in the Capital Circle Office Complex (CCOC) in Tallahassee, FL, or a Non-CCOC employee, to control for bias. Non-CCOC respondents included staff in County Health Departments (CHDs), CMS, or state and local non-DOH service centers, such as Healthy Start.

The NA survey found that CCOC staff consistently rated their job performance higher than non-CCOC respondents, which may signal a breakdown in articulating central office service delivery activities to outside partners. This finding resulted in a recommendation by the MCH Advisory Committee that CCOC focus on improving communicating and marketing of their functions in order to improve perception by non-CCOC staff.

Non-CCOC survey respondents also pointed out a perceived disconnect between objective data collected and daily service delivery activities. The Advisory Committee

pointed out that central office needs to improve the process of integrating data, science and outcome evidence into its daily functions.

In Step 3 of the MCH Needs Assessment Process described in Section 1, members of the Stakeholder Advisory Group were provided with three summary documents, one for each of the three targeted population groups, to use in the final priority ranking process. These summaries included a chapter focusing on each of seven or eight identified priorities, and each chapter included information about DOH capacity among seven criteria to guide evaluation in ranking that particular priority. Thus, MCH's priority ranking system was based on an analysis of DOH's ability to respond to each stated need. DOH leadership then carefully reviewed the input from the Stakeholder Advisory Group before selecting the final set of priorities, and DOH capacity was a key factor in determining which needs have the potential to realize positive outcomes as a result of DOH intervention.

SECTION 5: SELECTION OF STATE PRIORITY NEEDS

LIST OF POTENTIAL PRIORITIES AND METHODOLOGIES FOR RANKING/SELECTING PRIORITIES

MCH / FCH

As outlined in Section 1, MCH developed a five-step, 15-month implementation plan to provide structure to the process of identifying, ranking and selecting priorities and to ensure inclusion of a broad cross-section of program experts as advisors. These five steps are repeated below:

Step 1. Compile and summarize the potential health needs for consideration by population group

Step 2. Prioritize the potential health needs by population groups for the roughly top ten needs per population group to be fully assessed

Step 3. Assess strengths, capacity, and gaps related to the roughly top ten needs by population group

Step 4. Prioritize the final list of priorities across population groups

Step 5. Develop Departmental plans to address the identified priorities

As described in Section 3, MCH leadership decided to engage stakeholders from the onset of the Title V Needs Assessment (NA) process in initial development, ensuing refinement, and ultimate ranking of critical MCH issues, rather than considering an exhaustive list of every possible issue of importance to maternal and child health. From the engagement of the broader stakeholder community in choosing the first set of 90 priorities for inclusion in the stakeholder survey, to the refinement of survey rankings by the Stakeholder Advisory Group, through the selection of 22 possible top priorities for intensive research and evaluation into the strengths, needs and desired outcomes for each of the three MCH populations groups by the advisory group and MCH leadership, Steps 1 and 2 of the Title V Needs Assessment process was a collaborative effort with key partners across Florida.

The 22 priority issue summaries (see Section 3) were sent via email to the Stakeholder Advisory Group in February 2010 for systematic review, scoring and ranking as the third step in the implementation plan and the next step in the ranking/selection process. Once ranked by the advisory group, a composite of the scores by population group was developed and shared with all participants via conference call on March 15, 2010. The table below displays the results of the rankings.

Lengthy and intense discussion among members of the Stakeholder Advisory Group and MCH leadership on this conference call revealed that the following four broad themes impacted each and every one of the 22 priorities researched in the summaries and reviewed by participants:

- health disparities
- social determinants of health
- life course issues
- state and local partnerships

Summary of MCH Needs Assessment Key Informant Survey - Total Score

Population	Issue	Average of total scores	Rank 1= highest priority
WCA	Unintended and unwanted pregnancy	22.85	1
CA	Mental, Developmental and Behavioral Health Issues	21.50	2
WCA	Preconception health screening and education	21.45	3
PWI	Perinatal care for uninsured and underinsured high risk women and infants	21.42	4
WCA	Tobacco Use - women	21.25	5
PWI	Simplifying the Medicaid application process	21.10	6
WCA	Obesity/Physical Activity - Women	21.10	6
CA	Dental care, both preventative and treatment	21.00	8
WCA	Health care for uninsured and underinsured women/Primary care or medical home	21.00	8
CA	Teen pregnancy and sexually transmitted diseases	20.95	10
PWI	Safe infant sleep behaviors	20.95	10
CA	Tobacco use - adolescents	20.90	12
WCA	Iron deficiency anemia	20.90	12
PWI	Prenatal care for uninsured women	20.75	14
CA	Obesity/Physical Activity - Children	20.40	15
CA	Under aged Drinking	20.10	16
CA	Depression and suicide	19.40	17
PWI	Infant abuse and neglect	19.40	17
PWI	Obesity/Physical Activity - Pregnant women	19.35	19
CA	Injury and death due to motor vehicles	19.05	20
PWI	Low Maternal Weight Gain	18.47	21
WCA	Psychosocial Health Issues	18.15	22

CA = Children and Adolescents

PWI = Pregnant Women and Infants

WCA = Women of Childbearing age

As a result of this discussion, consensus was reached among MCH leadership and members of the Stakeholder Advisory Group that the pervasive issues of health disparities, social determinants of health, life course perspective, and state and local partnerships should become overarching themes when addressing the final MCH

priorities and considering DOH agency capacity. The advisory group specifically recommended that the Department's approach to ranking/selecting the final priorities include a perspective that encompasses the life course model, reflecting the paradigm that biological, behavioral, psychological, and societal factors contribute to a person's health across his/her lifespan.

Of the 22 priority areas summarized, reviewed and ranked, the Stakeholder Advisory Group and needs assessment advisory group in IRMH reached consensus on recommending 11 priority areas for the final stage of consideration and approval by the Department's MCH leadership team, as outlined below:

Women of Childbearing Age

1. Unintended and unwanted pregnancy
2. Preconception health screening and education (including anemia)
3. Obesity/physical activity – women
4. Tobacco use – women

Pregnant, Women and Infants

1. Perinatal care for uninsured and underinsured high risk women and infants
2. Prenatal care for uninsured women including simplifying the Medicaid application process
3. Safe infant sleep behaviors

Children and Adolescents

1. Mental, developmental and behavioral health issues
2. Dental care, both preventative and treatment
3. Teen pregnancy and sexually transmitted diseases
4. Tobacco use – adolescents

It should be noted here that at this stage of the ranking/selection process, Children's Medical Service (CMS) had already determined that increasing access to medical homes and primary care for Children with Special Health Care Needs would be one of Florida's top priorities. Therefore, the MCH leadership team decided to make medical homes and primary care a *combined* MCH and CMS priority for all children in Florida, rather than a separate MCH priority.

The goal of the DOH MCH Leadership team was to select the final MCH state priorities from the list of 11 recommended priorities submitted by the Stakeholder Advisory Group. The following factors informed the leadership team's decision-making task on March 24, 2010:

- The Title V MCH Block Grant requires the state to submit seven to 10 state priorities (three of the 2010-2015 priorities were identified by CMS, and the other four to seven would be defined by maternal-child health).
- The priorities submitted must be measurable, with results reported to HRSA.
- The selection of priorities for the Title V MCH Block Grant application does not preclude the state from having other program priorities.
- The Department must have the capacity, or the ability to develop the capacity, to address the chosen priorities.

- The Stakeholder Advisory Group identified themes that are appropriate and important to be incorporated into the implementation of all strategies for meeting the goals associated with the priorities (health disparities, psycho-social issues, state and local partnerships and life course model).
- Building state and local relationships, improving communication, and possibly marketing of DOH programs to increase awareness among partners were identified as potential needs in discussions following the completion of the stakeholder survey.
- The literature does not support a direct correlation between early prenatal care and improved maternal and birth outcomes, and the Department is only one of many partners responsible for providing prenatal care access and services.
- Obesity and physical activity issues are already being addressed through the Department's Bureau of Chronic Disease Prevention, with the Title V population groups included in prevention activities. Obesity and physical activity were also a part of preconception health education.
- Tobacco use is being addressed through the Division of Health Access and Tobacco.
- Child and adolescent mental, developmental and behavioral health is an extremely broad construct, the Department's capacity to impact these issues is limited, and the state's Department of Children and Families has the primary responsibility in this area.
- Teen pregnancy and sexually transmitted diseases could be included when addressing unintended and unwanted pregnancy.
- Perinatal care for high risk women and infants lies within the purview of Children's Medical Services.

Based on input from the Stakeholder Advisory Group and the factors stated above, the MCH leadership team selected the following five final state priorities to be included in the 2010 Title V MCH Block Grant Application:

2010 Title V Maternal and Child Health Block Grant Top Priorities

For Women of Childbearing Age:

1. Prevent unintended and unwanted pregnancies.
2. Promote preconception health screening and education.

For Pregnant Women and infants:

1. Promote safe and healthy infant sleep behaviors and environments.

For Children and Adolescents:

1. Improve dental care access, both preventative and treatment, for children.
2. Prevent teen pregnancy.

These five selected MCH priorities are supported qualitatively by the results of the group consensus process described above and by quantitative analysis, as described in the summaries pertaining to these issues. Needs assessment activities confirm that the Florida Department of Health has the capacity, partnerships, and infrastructure needed to address the selected priorities. This discussion of agency capacity is provided in detail in the Section 3 summaries.

The MCH leadership also concurred with the advisory group's recommendation that the overarching themes will be interwoven into all MCH activities to improve the health of mothers and babies. Two of the themes were combined to create three overall themes.

Three Overarching Themes

1. State and local partnerships
2. Life course
3. Health disparity and social determinants of health

CMS

As a first step in the ranking/selection process, the CMS Needs Assessment Team reviewed the 2005 state priorities related to Children with Special Health Care Needs (CSHCN), comparing outcomes between Florida and the nation utilizing a national survey comprised of the following 15 indicators:

1. Extent to which CSHCN's health conditions affect their daily activities
2. CSHCN ages 5-17 missing 11 or more school days due to illness
3. CSHCN without insurance at some during the past year
4. CSHCN without insurance at time of the survey
5. Currently insured CSHCN whose insurance coverage is not adequate
6. CSHCN with any unmet need for any of 15 specific health care services or equipment, past 12 months
7. CSHCN ages 0-17 with any unmet need for family support services
8. CSHCN ages 0-17 needing a referral for specialty care/services and problems getting it
9. CSHCN without a usual source of care when sick
10. CSHCN without any personal doctor or nurse
11. CSHCN without family-centered care
12. CSHCN whose families pay $1,000 or more out-of-pocket in medical expenses for child, past 12 months

13. CSHCN whose families experienced financial problems due to child's health conditions
14. CSHCN whose families spend 11 or more hours per week providing and/or coordinating child's health care
15. CSHCN whose health conditions cause family members to cut back or stop working

CMS central office leadership held two meetings in November and December of 2009 to reach agreement on the areas of the NA survey impacting their population segment. As a result of their collaboration in Steps 1 and 2 of the Needs Assessment Process, CMS leadership initially selected the following three top priorities by combining and collapsing several of the 18 priorities ranked by the NA survey results:

1. Medical Homes and Primary Care for Children with Special Health Care Needs
2. Health Care Transition for Adolescents and Young Adults with Special Health Care Needs to all aspects of adult life
3. Early Intervention Services

After careful review and discussion throughout the evaluation period, including reviewing background information and data related to these priorities as described in Section 3, these were confirmed as the final three priorities for CMS.

2010 Title V Maternal and Child Health Block Grant Top Priorities

For Children with Special Health Care Needs:

1. Increase access to medical homes and primary care for all children, including children with special health care needs.
2. Improve health care transition for adolescents and young adults with special health care needs to all aspects of adult life.
3. Increase early intervention services for children with special health care needs.

PRIORITIES COMPARED WITH PRIOR NEEDS ASSESSMENT

MCH, CMSN and their advisory teams began the NA data review process by studying the 2005 Title V Needs Assessment document, comparing the final priorities in maternal and child health five years ago to the list of potential priorities. As the 90 initial priorities were reduced to 22 for MCH and 18 for CMS, then to eight for both Divisions combined, it became clear that some priorities have not changed significantly during the interim, while others have been narrowed or re-defined to isolate a specific area where marked improvement in services could result in better maternal and child health outcomes. The table below lists 2005 and 2010 final priorities side-by-side to portray both similarities and differences in the issues deemed to be most critical at the conclusion of the 2010 needs assessment.

Florida's Ten 2005 MCH Priorities	Florida's Eight 2010 MCH & CMSN Priorities and Three Themes
Improve preconceptional and interconceptional health and well-being.	Preconception health screening and education
Decrease racial disparities in maternal and child health outcomes.	Theme # 3: Health Disparity
Increase access to health care for the maternal and child health population, including children with special health care needs.	Early intervention services (for children with special health care needs) Medical homes and primary care for children with special health care needs Unintended and unwanted pregnancy Transition Care Dental Care for children and adolescents
Decrease maternal, infant, and child morbidity.	Safe infant sleep behaviors Preconception health screening and education Early intervention services (for children with special health care needs)
Decrease maternal, infant, and child mortality.	Safe infant sleep behaviors Preconception health screening and education Early intervention services (for children with special health care needs)
Decrease risk factors associated with poor maternal and child health outcomes.	Safe infant sleep behaviors Preconception health screening and education Dental care, both preventative and treatment for all populations Unintended and unwanted pregnancy Teen pregnancy prevention Theme # 2: Life Course Perspective / Social Determinants
Decrease teen pregnancy.	Teen pregnancy prevention Unintended and unwanted pregnancy
Ensure consumer-friendly, culturally competent systems of care.	Medical homes and primary care for children with special health care needs
Increase awareness of public health preparedness issues unique to the maternal and child health population, including children with special health care needs.	
Increase statewide and local data and analysis capacity.	Theme # 1: State and local/community partnerships

NOTE: Each of the three themes for the 2010 Needs Assessment is woven throughout each of the new priorities

The final eight top priorities for 2010 concentrate even ore on preventative interventions to improve maternal and child health outcomes than the top ten 2005 issues: preventing teenage pregnancy, raising public awareness of the importance of good health prior to pregnancy, and early intervention through screening, education, and services aimed both at reducing infant mortality and morbidity and enhancing quality of life for all children, including those with special health care needs. Unlike 2005, the 2010 NA process included direct participation from CMS staff, resulting in the identification of three goals in the final top eight that are specifically targeting children with special health care needs. The focus on medical homes and on transition services for children and adolescents are new and distinct CMS goals for 2010 and beyond. Two new MCH priorities have emerged for 2010: preventive and ongoing dental care for children and adolescents, and safe and healthy infant sleep behaviors and environment. Six of the

eight priorities target avoiding risky behavior and/or encouraging optimal health prior to pregnancy, with the remaining two aimed at early discovery and comprehensive treatment of infant, child and adolescent physical, mental and social health problems.

New for 2010 are the two all-encompassing themes that have emerged from the compiled results of the NA survey and from other feedback received by stakeholders during the NA process: 1) state and local partnerships and 2) life course. Continuous and ongoing communication with stakeholders at each step in the NA process strengthened collaborations already in place, while shining a spotlight on gaps in communication that can be reduced or eliminated through expanded or new efforts. Life course is an intergenerational perspective on maternal health, based on research by Dr. Michael C. Lu, Associate Professor in the Department of Obstetrics and Gynecology at the David Geffen School of Medicine at UCLA. He argues that reducing racial disparities and poor outcomes involves more than improving access to prenatal health care and enhancing the economic environment for underserved population groups. His findings reveal that the risk for preterm birth is the result of complex interactive social, biological, and economic factors, some of which span generations. The life course model postulates that disparities in health outcomes for maternal and child health can be overcome with a lifespan and generational approach that "closes the gap for one generation to give the next an equal start". Thus, risk reduction and protective strategies should target *all* sensitive developmental periods for reproductive health. Racial disparities in health outcomes continue to be a targeted issue in both 2005 and 2010, but for the next five years health disparity will be a third pervasive theme infusing every MCH and CMS program and activity designed to address the top priorities.

PRIORITY NEEDS AND AGENCY CAPACITY: MCH POPULATION GROUPS

The Florida Department of Health's current capacity to meet stakeholder and citizen's needs related to the three overarching themes and eight final selected priorities for 2010 was carefully analyzed during Steps 3 and 4 of the implementation plan, with each MCH population group isolated and studied intensively utilizing the NA survey, structured summary reports, outcomes realized and documented since the 2005 needs assessment, and ongoing collaboration with key stakeholders regarding the possibilities for actually improving health outcomes at every stage of the 15-month implementation period. DOH's ability – or lack thereof – to appropriately and adequately address each priority was evaluated, with the final analysis centering on current economic, environmental, and funding limitations at the local, state and federal levels that will directly impact Florida's ability to make significant and measurable improvements in the outcomes of the indentified top priorities. This capacity analysis was then used to select new strategies to address the needs and desired outcomes of the targeted population groups, as well as in structuring modifications to existing programs.

The MCH Stakeholder Advisory Group and central office leadership met via conference calls on March 26, 2010, with an agenda aimed at discussing current initiatives, suggesting additional collaborative efforts and strategies the Department may want to consider to support each of the five MCH final priorities, and establishing performance measures. These initiatives and strategies are included in the breakouts by MCH population group below.

Women of Childbearing Age

The Florida Department of Health (DOH) already has the infrastructure in place to address the issue of unintended/unwanted pregnancy (Priority #1), which encompasses

teen pregnancy prevention (Priority #5). The Department receives Title X funds to support family planning services throughout all 67 Florida counties in 177 family planning clinic sites and in additional special projects. DOH's Title X needs assessment, however, revealed four deficient areas:

- inadequate state and federal funding
- inadequate number of trained professionals in rural areas
- inadequate number of medical providers who are available and willing to accept Medicaid or Title X reimbursement for female and male sterilization procedures
- inadequate supply of long-term family planning methods

Additional funding for services, staff and long-term effective contraceptives could assist DOH in achieving state and national goals to reduce unintended/unwanted pregnancy. Data related to this issue reveal that the estimated percentages of unintended and unwanted pregnancies have remained relatively stable the last five years. The rate of teen births has fluctuated over the past several years, showing some reduction the past two years, yet repeat births to teens appear to be rising. These findings, along with a general perception that a faltering economy is placing more people in need and without the family support that was once available to them, underscore the importance of addressing pregnancy prevention.

Current state initiatives targeting Priority #1, Unintended and unwanted pregnancy include:

- Every Woman Every Time – in the Every Woman website at www.everywomanflorida.com
- Research on effective use of contraceptives by a student at a local college: Florida Agricultural and Mechanical University (FAMU)
- Ounce of Prevention Program – Family Planning Waiver Marketing Campaign to increase the number of participants
- DOH's Health Practice and Analysis Unit collection and analysis of contraceptive use data by staff member L. Hernandez

Suggestions for further efforts targeting Priority #1:

- Include postpartum in the Family Planning Waiver Marketing Campaign
- Post a nurse at Women, Infants and Children (WIC) sites to counsel mothers in family planning and preconception health (PCH) care
- Place Healthy Start workers in obstetrical and pediatrician offices

With an increasing number of women entering pregnancy in poor health, preconception health screening and education has become an even more important issue. There is evidence to support the perception that a healthy pregnancy outcome is strongly influenced by a woman's health status prior to becoming pregnant. The Department has an excellent relationship with the March of Dimes Florida Chapter, with whom it is working to increase awareness of the importance of preconception health. Collaboration with Healthy Start coalitions and Title X programs further enhance the Department's ability to promote preconception health, education, and counseling. Increased focus on preconception health is expected to have a positive effect on all birth outcomes.

Current state initiatives targeting Priority # 2, Preconception (PCH) health screening and education (iron deficiency anemia) include:

- Every Woman Every Time – in the Every Woman website at www.everywomanflorida.com
- Six Grand Round presentations conducted throughout Florida at hospitals, targeting health care providers
- "Meet Me" calls sponsored by Healthy Start Coalitions – works with inter-conception care
- Federal Office of Minority Health offers Peer-to-Peer PCH training on university campuses
- March of Dimes has three interconceptions projects and plans to add one more
- Text 4 Baby website - provides pregnant women and new mothers with free information to help them care for their own health and give their babies a healthy start in life via messages covering preconception up to one year past birth
- What about Mom? – WIC education tool on their kiosk is an initiative with head nurses

Suggestions for further efforts targeting Priority # 2:

- Adding a section to the DOH website for pediatricians – healthy tips to discuss with new moms on how to stay healthy
- Dr Hartner (Lee CHD) suggested developing partnerships with primary care and pediatrician offices to emphasize PCH education during these types of visits. Dr Dharamraj stated that in Pinellas they have a Senior Community Health Nurse outposted to pediatrician offices to see moms while their baby is being seen (family planning and checking blood pressures).
- Add a Pediatrician PCH tip sheet in the EWF toolkit (needs to be very short and succinct)
- Providers receive reimbursement for completing Healthy Start Screening – consider developing a Healthy Woman Screening and determine if reimbursement can be connected to this (there was a screening like this during Dr Mahan's time at the Department)
- Healthy Baby Test / Healthy Pregnancy Test - consider adding these to EWF – currently there is a PCH test on the EWF website
- Work towards making the EWF more interactive (Wahi)
- Need to be more technologically savvy in using social media marketing – phones, iPods, MP3 players and other marketing vehicles (Governor's office is evaluating how the Department can do this)
- Post a nurse at WIC sites to see moms (family planning and PCH)
- Healthy Start workers in obstetrical offices – why not put them in pediatrician offices?

Pregnant Women and Infants

Title V needs assessment activities identified the importance of providing education to promote safe and healthy infant sleep behaviors and a safe sleeping environment. Data confirm the importance of this issue. In a comparison of 26 states meeting the Center for Disease Control's (CDC's) requirements for PRAMS reporting in 2005 through

CPONDER (CDC's PRAMS On-line Data for Epidemiologic Research), Florida reported that only 61.5% of infants are laid on their back to sleep most of the time. This ranks Florida 22nd of the 26 states for placing infants in the recommended supine position to sleep. An aggressive national *Back to Sleep* campaign in the late 1990s made a considerable impact on increasing infant back sleeping and reducing infant deaths, but since that time additional improvement in rates has been difficult to accomplish. Sudden unexpected infant death takes the lives of between 250-300 infants in Florida each year. Additional focus on safe sleep issues through partnerships with Healthy Start coalitions, DOH county health departments, and other providers will allow us to target populations that have not yet embraced the safe infant sleep message.

Current state initiatives targeting Priority # 3, Safe and healthy infant sleep behaviors and environment include:

- Webcast on Sudden Infant Death Syndrome (SIDS) – work with Florida SIDS alliance
- Ounce of Prevention activities on website at www.ounce.org/safe_sleep.html
- Fetal and Infant Mortality Review – www.hscmd.org/FIMR.asp
- Back to Sleep campaign – www.facebook.com/note.php?note_id=400055186384

Suggestions for further efforts targeting Priority # 3:

- Educate medical professionals to provide consistent information to new parents
- Request that the Florida Hospital Association, OBGYN society, include relevant information in their newsletters to constituents
- Teach day care center staff to educate parents (two-fold approach)
- Continue to partner or establish stronger partnerships with:
    - DCF
    - Injury Prevention
    - FL SIDS Alliance
    - Florida Hospital Association – hospital discharge education
    - Florida Obstetric and Gynecology Society
    - CMS and child death reviews
- Educational materials
    - Child care centers
    - Shaken Baby Training
    - Pediatric offices
    - Newsletters, campaigns, etc.
- Promote evidenced-based strategies to improve behaviors

Children and Adolescents

Florida's Governor and the Department of Health have identified improving access to primary and preventive dental health care services and reducing oral health disparities as a priority - especially among low-income populations, special needs children, geographically underserved populations, and other disadvantaged populations. Agency capacity to address this need includes the county health department (CHD) dental programs and community dental projects that provide screenings, oral health education, diagnostic services, preventive services, and restorative treatment. Onsite dental programs exist in 47 of Florida's 67 counties, and two counties have developed partnerships to provide dental services - one with a community college and one with a

community health center. The 47 CHD dental programs include 84 fixed clinical sites and 13 mobile dental units operating out of 10 counties. Two additional CHDs are in the process of developing dental programs.

Current initiatives targeting Priority # 4, Dental Care, both preventive and for all populations, include:

- Communicable nature of dental caries campaign (increasing funding for caries prevention)
- Current legislation to increase the number of dental providers, increase Medicaid reimbursement rate, and require new dental school graduates to provide care to low income kids for one year
- Expansion of clinics with dental care and expansion of who can provide fluoride prescriptions
- Agency for Disability – access to dental care for disabled clients

Suggestions for further efforts targeting Priority #4:

- Need good mechanisms for Medicaid reimbursement
- Education to dentists re: caring for children
- Access such a barrier (Medicaid geographic distribution issues as well)

Current initiatives targeting Priority # 5, Teen Pregnancy Prevention, include:

- TOP – Teen Outreach Program (evidence-based) in some counties
- Positive Youth Development Initiative – www.teentruth.org – focuses on teen assets vs issues and has a representative in each county health department (CHD)
- Teen Truth organization
- Teen clinic hours at some CHDs
- Coordinated and comprehensive school health programs
- The Child and Adolescent Unit within the Division of Family Health has recently applied for a Teen Pregnancy Prevention Grant

Other Teen Pregnancy Prevention activities are included in the above discussion of agency capacity for Women of Childbearing Age.

Suggestion for further efforts targeting Priority # 5:

- Expand social norming strategies (Lee CHD)

Children with Special Health Care Needs

The CMS Needs Assessment Team's Title V and Children with Special Health Care Needs 2010 Needs Assessment white paper was generated as a result of ongoing collaboration regarding the relationship between identified needs and agency capacity to adequately address the needs of this population segment. The information below was taken from that comprehensive document.

Current initiatives targeting Priority # 6, Medical Homes and Primary Care for Children with Special Health Care Needs include:

- Agreement/commitment that MCH will partner with CMS to work on creating medical homes for *all* children, not just children with special health care needs.
- American Academy of Pediatrics (AAP) 5-year CHIPRA demonstration grant was awarded to DOH to provide training and evaluation of medical homes for CSHCN and is currently in the planning phase, with implementation to follow in 2010-2011.
- AAP will provide training on the use of the medical home toolkit to approximately 10 pediatric practices in Florida during 2010-2011, followed by a collaborative effort between those practices and CMS to improve the quality of medical homes.
- Newborn Screening and Early Hearing Detection programs link newborns to a medical home

Suggestions for further efforts targeting Priority # 6:

- Incorporating the medical homes concept into the Early Steps Program for Infants and Toddlers with Disabilities to create and enhance partnerships between providers and parents
- Implement the President's New Freedom Initiative, which requires DOH to develop a strategic plan provided access to a medical home for every CSHCN

Additional strategies specific to Priority # 6 are included in the Performance Measure subsection below.

Current initiatives targeting Priority # 7: Health Care Transition for Adolescents and Young Adults with Special Health Care Needs to all aspects of adult life include:

- CMS has established local/regional health care transition coalition pilot sites support health care transition initiatives on a local level, including training and education activities.
- CMS training liaisons at headquarters and throughout Florida work with representatives from the Departments of Education and Vocational Rehabilitation, the Agency for Persons with Disabilities, and organizations that are advocates for youth and young adults with disabilities such as Able Trust and Ability First.

Suggestions for further efforts targeting Priority # 7 are included in the Performance Measure subsection below.

Current initiatives targeting Priority # 8: Early Intervention Services include:

- The Early Steps Program for Infants and Toddlers with Disabilities seeks to control future medical costs for specialized health care services by providing a variety of early intervention activities addressing developmental issues very early in a child's life and providing ongoing support and information to the parents of children with chronic disabilities or at risk of developing disabilities.

Suggestions for further efforts targeting Priority # 8 are included in the Performance Measure subsection below.

PRIORITY NEEDS AND STATE PERFORMANCE MEASURES

State performance measures for each of the eight final priorities are displayed in the table below. Notice that the MCH leadership team decided to have pregnancy-related mortality ratios as an official state outcome measure in support of the Department's current Pregnancy Associated Mortality Review Committee's (PAMR's) work. The MCH leadership team concluded that all work within MCH and the priority areas supported this new state outcome measure because all efforts to improve the health of mothers and infants impact pregnancy-related deaths.

PRIORITY	MEASURE
STATE OUTCOME MEASURE: Pregnancy-related death	Pregnancy-related death ratio per 100,000 live births
WCA = Women of Childbearing Age	
Unintended and unwanted pregnancy	% of births with inter pregnancy interval less than 18 months
Preconception health screening and education (including iron deficiency anemia)	% of women having a live birth who received preconception counseling about healthy lifestyle behaviors and prevention strategies from a health care provider prior to pregnancy.
PWI = Pregnant, Women and Infants	
Safe infant sleep behaviors	% of infants not bedsharing % of infants back sleeping
CA = Child and Adolescents	
Dental care, both preventative and treatment for all populations	% of low-income children under age 21 who access dental care
Teen pregnancy prevention	% of teen births, ages 15-17, that are subsequent (repeat) births
CSHCN = Children with Special Health Care Needs	
Medical homes and primary care for children with special health care needs	% of CSHCN ages 0-18 who receive coordinated, ongoing, comprehensive care within a medical home
Health care transition for adolescents and young adults with special health care needs to all aspects of adult life	% of CSHCN ages 12-17 who receive services needed for transition to adult health care, work and independence
Early intervention services	% of infants and toddlers who receive early intervention services on their IFSPs in a timely manner % of infants and toddlers with ISFPs from birth to age 3 # and % of ISFPs completed within 45 days of referral

CMS has adopted the Maternal and Child Health Bureau's (MCHB's) Six National Goals as its Six Program Goals. Listed below are the national performance measures, states program goals, performance outcome measures and strategies for the three selected CMS priorities, as presented in the CMS white paper described above. These three priorities, which are interwoven into the measures and strategies supporting the national and state program goals, are reiterated here:

CMS Priority Number 1: Medical Homes and Primary Care for Children with Special Health Care Needs

CMS Priority Number 2: Health Care Transition for Adolescents and Young Adults with Special Health Care Needs to all aspects of adult life

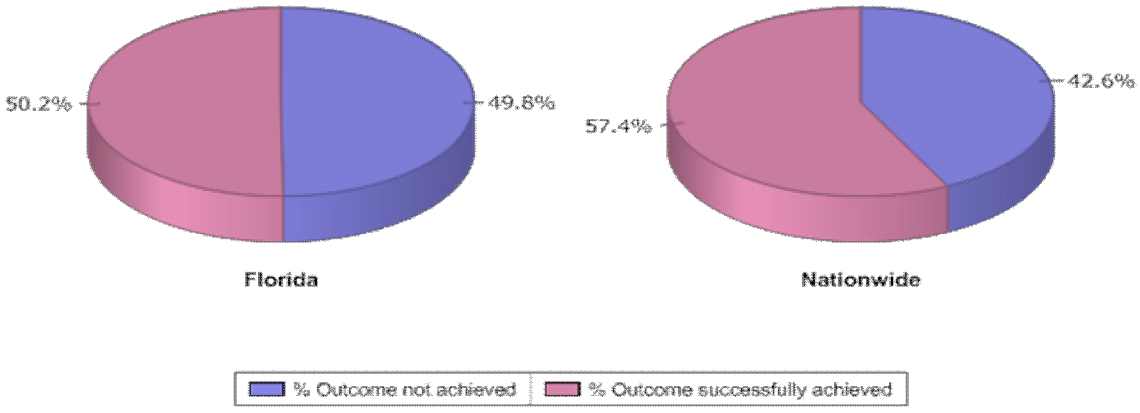
CMS Priority Number 3: Early Intervention Services

Comparison data shown in the pie charts were taken from the National Survey of Children with Special Health Care Needs 2005/2006.

National Performance Measure 1*: Family participation*

CMSN State Program Goal 1*: All children who are enrolled in CMS programs and their families will partner in decision-making at all levels and will be satisfied with the services they receive.*

Outcome #1: CSHCN whose families are partners in decision-making and satisfied with services.



CMSN Measures:

- Children and their families will have a positive perception of care. (Data source: CMSN Family Satisfaction Report)
- Children and their families are partners with CMS-decision-making. ((Data source: CMSN Family Satisfaction Report)
- Percent of infants and toddlers with IFSPs who receive the early intervention services on their IFSPs in a timely manner. (Data source Early Steps Federal Indicator 1)

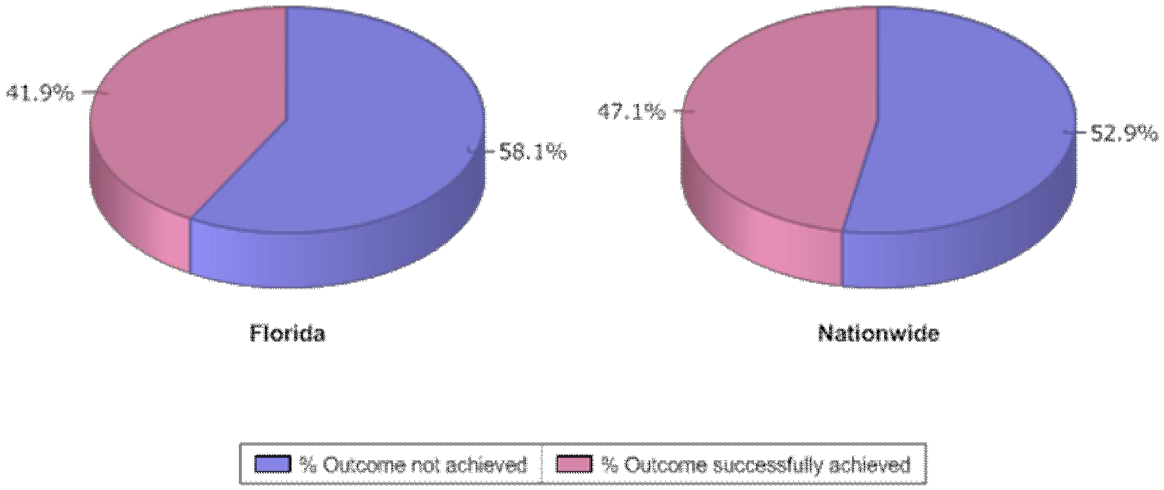
CMSN Strategies:

1. Information provided to families in language they can easily understand, about the care provided in a medical home
2. Involve families/youth in designing, implementing, and evaluating systems of care and providing appropriate compensation and time and expertise
3. Provide access to family-to-family support services

National Performance Measure 2: *Medical Home*

CMSN State Program Goal 2: *All children who are enrolled in CMS programs will receive coordinated, ongoing, comprehensive care within a medical home.*

Outcome #2: The percent of CSHCN age 0 to 18 who receive coordinated, ongoing, comprehensive care within a medical home



CMSN Measures:

- CMS parents will report overall satisfaction with the CMSN program and the CMCN primary care physician. (Data source:CMSN Family Satisfaction Report)
- All children will be offered care coordination and know who the CMSN NCC is. (Data source:CMSN Family Satisfaction Report)
- A care plan will be established, implemented, and reviewed for all children who choose care coordination in the CMSN. (Data source:CMSN Family Satisfaction Report)
- Parents will report that they had a say in the development of my child's plan of care. (Data source:CMSN Family Satisfaction Report)
- All children will receive education regarding well child check-ups in accordance with the American Academy of Pediatrics (AAP) Guidelines. (Quality Assurance Measures, CMSN)
- All children will receive immunizations in accordance with the AAPPP Guidelines.(Quality Assurance Measures, CMSN)

- Families will report that early intervention services have helped the family effectively communicate their children's needs. (Data source Early Steps Federal Indicator 4)

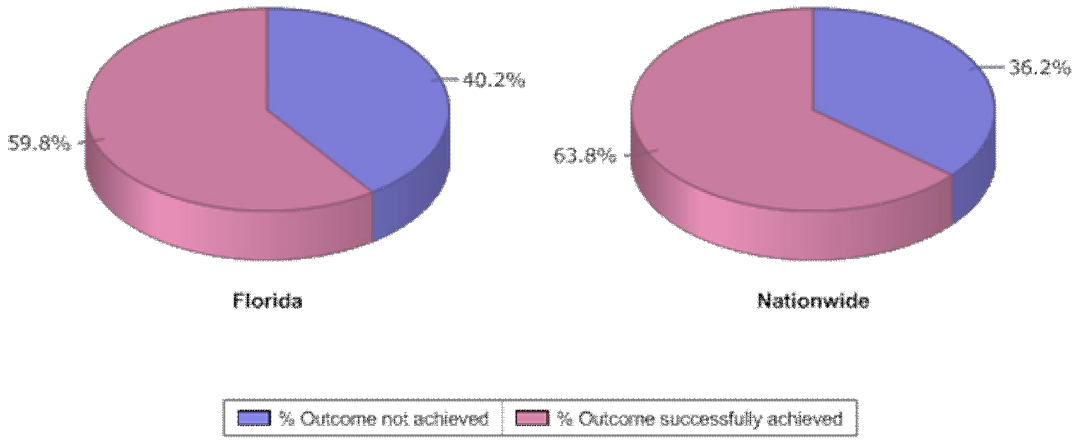
CMSN Strategies:

1. Involve families/youth in the development of the plan of care.
2. Connect families with medical homes in their community.
3. Involve physicians, nurse practitioners, and other health care professionals in the planning and implementation of service systems for CYSHCN.
4. Develop partnerships with local and state professional organizations.
5. Facilitate educational and Training opportunities for health care professionals and families to learn about the provision of medical homes.
6. Work with partners to appropriate reimbursement for services provided within the medical home.

National Performance Measure 3: *Early and Continuous Screening*

CMSN State Program Goal 3: *All children enrolled in CMS programs and their families will have the resources to fund services within the guidelines of the CMS program.*

Outcome # 3: CSHCN who are screened early and continuously for special health care needs



CMSN Measures:

- Percent of infants and toddlers with IFSP birth to 3. (Data source Early Steps Federal Indicator 6)
- An evaluation and assessment and initial IFSP were conducted within 45 days of the date of referral. (Data source Early Steps Federal Indicator 6)

- Number of children identified through the Newborn Screening identified with hearing loss that is referred to Early Steps. (Data source Newborn Screening data system.)

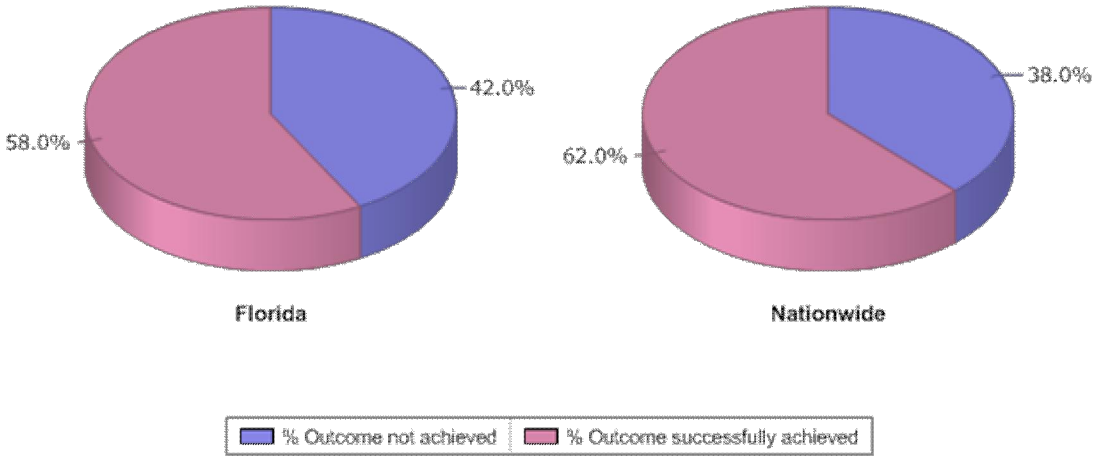
CMSN Strategies:

1. Make effort to identify the child's medical home prior to birth (RIPP would co here.)
2. Ensure that results of all screening performed outside the primary care setting are communicated to the medical home in a timely manner.
3. Create state data/information systems that are accessible to the medical home.
4. Foster relationships between medical home and agencies/organizations providing follow-up care.

National Performance Measure 4*: Adequate Health Insurance*

CMSN State Program Goal 4: *All children will be screened early and continuously assessed for emerging or changing special health care needs.*

Outcome #3: The percent of CSHCN age 0 to 18 whose families have adequate private and /or public insurance to pay for the services they need.



CMSN Measures

- All children are identified and enrolled in the appropriate benefit program for which they are eligible.
- All CMS financial management guidelines will be followed.
- All CMS offices will document unmet need due to lack of resources.

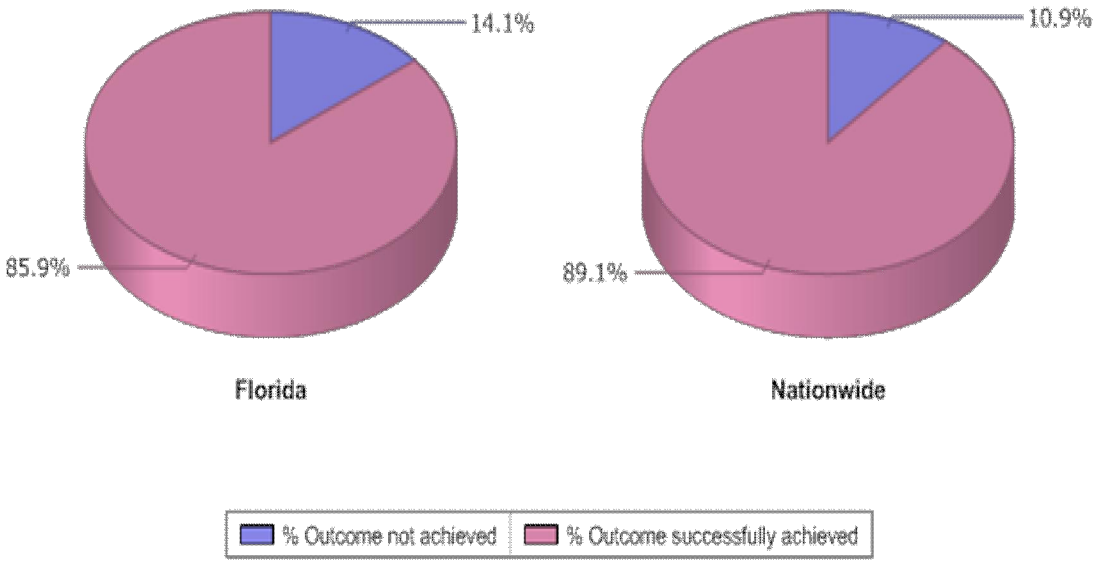
CMSN Strategies:

1. Permit children and their families to choose health care professionals who will serve as medical homes.

National Performance Measure 5: *Community Integrated Systems*

CMSN State Program Goal 5: *CMS offices will identify culturally competent, comprehensive community-based service systems for all children enrolled in CMS programs and their families.*

Outcome #5: The percent of CSHCN age 0 to 18 whose families report the community-based service system are organized so they can use them easily.



CMSN Measures*:*

- Each child enrolled in CMSN will have access to comprehensive, community-based service systems.
- Decrease the amount of time required for approval of CMS physicians.

CMSN Strategies:

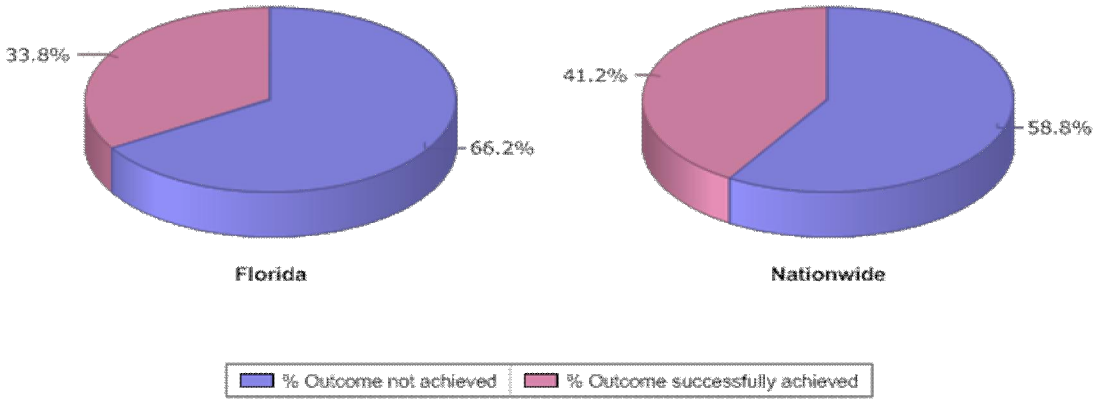
1. Create a system with a single point of entry that allows for access to multiple services (P. T. KC, screening)
2. Provide opportunities for organizations, agencies, providers including direct service providers to discuss effective mechanisms to improve service systems.
3. Develop interagency agreements that allow for easy transfer of information between programs while maintaining appropriate confidentiality.

National Performance Measure: *6 Transitions to Adulthood*

CMSN State Program Goal 6: *Beginning at age 12, all teens and young adults with special health care needs who are enrolled in the CMS Network and their families will*

receive the services needed to make transitions to all aspects of adult life, including adult health care, work, and independence.

***Outcome #6: The percentage of youth with special health care needs who received the services necessary to make transition to all aspects of adult life. CSHCN ages 12-17 who receive services needed for transition to adult health care, work and independence**.*



CMSN Measures:

- Parents and youth will report that someone has discussed with them how to obtain or keep some type of insurance coverage as they entered into adulthood. (Data source: CMSN Family Satisfaction Report)
- Parents will report that doctor's discussed a shift to an adult provider.
- Teens and young adults will participate in the development and periodic review of their care coordination and transition plans. (Data source: CMSN Family Satisfaction Report)
- Teens and young adults will receive transition services that are age appropriate. (Data source: CMSN Family Satisfaction Report)
- 100% of patients followed in the Adolescent and Young Adult program receive transition assistance for all aspects of adult life, including adult health care, work, and independence. (QA Report, CMS Network)

CMSN Strategies:

1. Develop agency protocols that provide families and youth sufficient time to plan for transition between programs and providers.
2. Establish interagency agreements that allow for shared responsibility between agencies and organizations in the transition process.

SECTION 6: OUTCOME MEASURES

Needs assessment activities over the past two years confirm the strong relationship between selected state priorities, current maternal and child health program activities and national outcome measures embodied in Title V (see table at the end of this section). Interventions to address infant mortality also affect the neonatal, postneonatal, and perinatal death rates. These interventions include increasing access to care, improving awareness of infant mortality issues at the local level, targeting funding towards areas of greatest need, and increasing the level of services provided to those identified as most at-risk. DOH has implemented a simplified eligibility form for Medicaid and established a program that facilitates enrollment with a Medicaid provider. The Department will also continue and expand efforts to increase funding opportunities for projects designed to reduce racial disparity in birth outcomes.

Other efforts to improve upon these outcome measures include additional focus on preconception health, better access to care, developing a Florida Perinatal Quality Collaborative and further study by the Pregnancy-Associated Mortality Review and Fetal and Infant Mortality Review projects. DOH is committed to continuing these efforts and initiating new strategies to reduce the incidence of these outcome measures.

Following are brief descriptions of the national outcome measures data. Complete data for these measures can be found in Form 12 of the 2010 Title V Block Grant Application.

Outcome Measure # 01: The infant mortality rate per 1,000 live births.

Over the past 10 years, the infant mortality rate in Florida has remained virtually unchanged. The 1999 overall infant mortality rate of 7.3 per 1,000 dipped only slightly to 7.2 per 1,000 in 2008. During that 10-year span, the lowest rate was 7.0 per 1,000 (2000 and 2004), and the highest rate was 7.5 per 1,000 (2002 and 2003). Clearly, Florida is not meeting the objectives for this outcome measure.

Outcome Measure # 02: The ratio of the black infant mortality rate to the white infant mortality rate.

Over the past decade, the ratio between black and white infant mortality has ranged from a low of 2.3 to a high of 2.6. In 2008, the latest year for which mature data are available, black infants had an infant death rate 2.4 times the rate for white infants. During the same period, the black infant mortality rates ranged from a low of 12.4 per 1,000 in 1999 to a high of 13.7 per 1,000 in 2003, declining slightly to 12.9 per 1000 in 2008. The comparable white infant mortality rate ranged from a low of 5.2 per 1,000 in 2007 to a high of 5.9 per 1,000 in 2002, also dropping marginally to 5.5 per 1,000 in 2008.

Outcome Measure # 03: The neonatal mortality rate per 1,000 live births.

The neonatal mortality rate has fluctuated between a high of 5.0 per 1,000 in 2002 to a low of 4.4 per 1,000 in 2007, then rose to 4.6 per 1,000 births in 2008, the most recent year for which mature data are available. During the past 10 years, white neonatal mortality varied from a low rate of 3.3 per 1,000 in 2007 to a high rate of 3.8 per 1,000 in 1999. In 2008, the white neonatal mortality rate was 3.5 per 1,000. The black neonatal mortality during the same period ranged from a low of 7.8 per 1,000 in 2000 to a high of 9.1 per 1,000 in 2002, and in 2008, the rate was 7.8 per 1,000. The ratio of black neonatal mortality to white neonatal mortality closely follows the racial discrepancy in

infant mortality, with black infants between 2.3 and 2.5 times more likely to suffer a neonatal death than white infants.

Outcome Measure # 04: The postneonatal mortality rate per 1,000 live births.

Between 1999 and 2008, the postneonatal mortality rate has ranged between a high of 2.7 per 1,000 in 2005 and a low of 2.4 per 1,000 in 1999. In 2008, the latest year for which mature data are available, the postneonatal mortality rate in Florida was 2.6 per 1,000 births. During the same time span, white postneonatal mortality ranged between a low rate of 1.7 per 1,000 in 1999 and a high rate of 2.1 per 1,000 in 2003. In 2008, the rate for whites was 1.9 per 1,000. Black postneonatal mortality rates varied from a low of 4.3 per 1,000 in 2006 to a high of 5.2 per 1,000 in 2007. In 2008, this rate for blacks was 5.0 per 1,000. Within the past 10 years, black infants were 2.2 to 2.8 times more likely to suffer a neonatal death than white infants.

Outcome Measure # 05: **The perinatal mortality rate per 1,000 live births plus fetal deaths.**

Over the past 10 years, the perinatal mortality rate per 1,000 live births plus fetal deaths ranged between a high of 12.9 per 1,000 in 1999 and a low of 11.7 per 1,000 in 2005. In 2008, the rate was 11.8 per 1,000 live births plus fetal deaths.

Outcome Measure # 06: The child death rate per 100,000 children aged 1 through 14.

The child death rate per 100,000 children ages 1 through 14 ranged from a high of 26.4 per 100,000 in 1999 to a low of 17.9 per 1,000 in 2008, the last year for which mature data are available.

Proposed State Outcome Measure # 01: Pregnancy-related death ratio per 100,000 live births

Over the past 10 years, the pregnancy-related mortality ratio in Florida fluctuated from 20.3 deaths per 100,000 live births in 1999 to a high of 22.9 in 2004 and a low of 13.3 in 2005. In 2007 and 2008, the ratios rose to 15.1 and 14.3 deaths per 100,000 live births, respectively. This slight downward trend in more recent years is not considered statistically significant.

Table—Relationship of Florida Title V Activities to National Title V Outcomes Measures

National (N) and State (S) Title V Outcome Measure	Title V National Performance Measures	Florida Needs Assessment Selected Themes (T) and Priorities (P)	Major Current Florida Title V Activities
N-1. Infant mortality rate per 1,000 live births.	1. Newborn screening 2. CSHCN family partners 3. Medical home 4. Coverage of CSHCN services 5. Community-based CSHCN services 7. Immunizations 8. Teen birth 11. Breastfeeding 13. Health insurance 15. Maternal smoking 17. High risk deliveries 18. Prenatal care	T-1. Life course T-2. Health disparities T-3. State and community partnerships P-1. Unintended and unwanted pregnancy P-2. Preconception health screening & education P-3. Safe and healthy sleep behaviors and environment P-4. Teen pregnancy prevention P-6. Medical home	• Preconception Health: Every Woman Florida Initiative • Florida Family Planning Program • Florida's Medicaid Family Planning Waiver • Closing the Gap, preconception health screening and education activities • Florida Healthy Start • Text for Babies • MomCare • Black Infant Health Practice Collaborative • Regional Perinatal Intensive Care Centers (RPICC) • Safe sleep education • Child abuse death review • Fetal & infant mortality review (FIMR) • Breastfeeding promotion • Florida Perinatal Quality Collaborative • Family Health Line
N-2. Ratio of the black infant mortality rate to the white infant mortality rate.	1. Newborn screening 2. CSHCN family partners 3. Medical home 4. Coverage of CSHCN services 7. Immunizations 8. Teen birth 11. Breastfeeding 13. Health insurance 18. Prenatal care	T-1. Life course T-2. Health disparities T-3. State and community partnerships P-1. Unintended and unwanted pregnancy P-2. Preconception health screening & education P-3. Safe and healthy sleep behaviors and environment P-4. Teen pregnancy prevention P-6. Medical home	• Florida Healthy Start • Regional Perinatal Intensive Care Centers (RPICC) • Safe sleep education • Child abuse death review • Fetal & infant mortality review (FIMR) • Preconception Health: Every Woman Florida Initiative • Florida Family Planning Program • Florida's Medicaid Family Planning Waiver • Closing the Gap, preconception health screening and education activities • MomCare • Black Infant Health Practice Collaborative • Breastfeeding promotion •

National (N) and State (S) Title V Outcome Measure	Title V National Performance Measures	Florida Needs Assessment Selected Themes (T) and Priorities (P)	Major Current Florida Title V Activities
N-3. Neonatal mortality rate per 1,000 live births.	2. CSHCN family partners 4. Coverage of CSHCN services 8. Teen birth 15. Maternal smoking 17. High risk deliveries 18. Prenatal care	T-1. Life course T-2. Health disparities T-3. State and community partnerships P-1. Unintended and unwanted pregnancy P-2. Preconception health screening & education P-4. Teen pregnancy prevention	• Preconception Health: Every Woman Florida Initiative • Florida Family Planning Program • Florida's Medicaid Family Planning Waiver • Closing the Gap, preconception health screening and education activities • Florida Healthy Start • Text for Babies • MomCare • Black Infant Health Practice Collaborative • Regional Perinatal Intensive Care Centers (RPICC) • Fetal & infant mortality review (FIMR) • Florida Perinatal Quality Collaborative • Family Health Line
N-4. Postneonatal mortality rate per 1,000 live births.	1. Newborn screening 2. CSHCN family partners 3. Medical home 4. Coverage of CSHCN services 5. Community-based CSHCN services 7. Immunizations 8. Teen birth 11. Breastfeeding 13. Health insurance 15. Maternal smoking 17. High risk deliveries	T-1. Life course T-2. Health disparities T-3. State and community partnerships P-3. Safe and healthy sleep behaviors and environment P-4. Teen pregnancy prevention P-6. Medical home	• Florida Family Planning Program • Florida's Medicaid Family Planning Waiver • Florida Healthy Start • MomCare • Black Infant Health Practice Collaborative • Regional Perinatal Intensive Care Centers (RPICC) • Safe sleep education • Child abuse death review • Fetal & infant mortality review (FIMR) • Breastfeeding promotion • Florida Perinatal Quality Collaborative • Family Health Line

National (N) and State (S) Title V Outcome Measure	Title V National Performance Measures	Florida Needs Assessment Selected Themes (T) and Priorities (P)	Major Current Florida Title V Activities
N-5. Perinatal mortality rate per 1,000 live births plus fetal deaths.	2. CSHCN family partners 4. Coverage of CSHCN services 15. Maternal smoking 17. High risk deliveries 18. Prenatal care	T-1. Life course T-2. Health disparities T-3. State and community partnerships P-1. Unintended and unwanted pregnancy P-2. Preconception health screening and education P-4. Teen pregnancy prevention	• Preconception Health: Every Woman Florida Initiative • Florida Family Planning Program • Florida's Medicaid Family Planning Waiver • Closing the Gap, preconception health screening and education activities • Florida Healthy Start • Text for Babies • MomCare • Black Infant Health Practice Collaborative • Regional Perinatal Intensive Care Centers (RPICC) • Fetal & infant mortality review (FIMR) • Florida Perinatal Quality Collaborative • Family Health Line
N-6. Child death rate per 100,000 children aged 1 through 14.	2. CSHCN family partners 3. Medical home 4. Coverage of CSHCN services 5. Community-based CSHCN services 7. Immunizations 8. Teen birth 10. Motor vehicle deaths 13. Health insurance 16. Suicide	T-1. Life course T-2. Health disparities T-3. State and community partnerships P-4. Teen pregnancy prevention P-6. Medical home	• Florida Healthy Start • Coping with Crying education • Child abuse death review • Family Health Line • Injury Prevention Program • Healthy Homes
National (N) and State (S) Title V Outcome Measure	**Title V National Performance Measures**	**Florida Needs Assessment Selected Themes (T) and Priorities (P)**	**Major Current Florida Title V Activities**
S-1. Pregnancy-related death ratio per 100,000 live births	8. Teen birth 15. Maternal smoking 17. High risk deliveries 18. Prenatal care	T-1. Life course T-2. Health disparities T-3. State and community partnerships P-1. Unintended and unwanted pregnancy	• Preconception Health: Every Woman Florida Initiative • Florida Family Planning Program • Florida's Medicaid Family Planning Waiver • Closing the Gap, preconception health screening and education

		P-2. Preconception health screening and education P-4. Teen pregnancy prevention	activities • Florida Healthy Start • Text for Babies • MomCare • Black Infant Health Practice Collaborative • Regional Perinatal Intensive Care Centers (RPICC) • Florida Perinatal Quality Collaborative • Family Health Line • Pregnancy Associated Mortality Review Committee

STATE OUTCOMES MEASURES FOR MCH AND CMS

The table below combines the outcomes measures for the eight final priorities selected by MCH and CMS in the 2010 Title V Needs Assessment process, plus the one additional outcome measure added by MCH, as discussed in Section 5. CMS measures in this table were derived from the lists of performance measures described in Section 5, incorporating only those that were quantifiable as outcome measures.

PRIORITY	MEASURE
STATE OUTCOME MEASURE: Pregnancy-related death	Pregnancy-related death ratio per 100,000 live births
WCA = Women of Childbearing Age	
Unintended and unwanted pregnancy	% of births with inter pregnancy interval less than 18 months
Preconception health screening and education (including iron deficiency anemia)	% of women having a live birth who received preconception counseling about healthy lifestyle behaviors and prevention strategies from a health care provider prior to pregnancy.
PWI = Pregnant, Women and Infants	
Safe infant sleep behaviors	% of infants not bedsharing % of infants back sleeping
CA = Child and Adolescents	
Dental care, both preventative and treatment for all populations	% of low-income children under age 21 who access dental care
Teen pregnancy prevention	% of teen births, ages 15-17, that are subsequent (repeat) births
CSHCN = Children with Special Health Care Needs	
Medical homes and primary care for children with special health care needs	% of CSHCN ages 0-18 who receive coordinated, ongoing, comprehensive care within a medical home
Health care transition for adolescents and young adults with special health care needs to all aspects of adult life	% of CSHCN ages 12-17 who receive services needed for transition to adult health care, work and independence
Early intervention services	% of infants and toddlers who receive early intervention services on their IFSPs in a timely manner % of infants and toddlers with ISFPs from birth to age 3# and % of ISFPs completed within 45 days of referral