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## Maternal, Infant, and Child Health

- Reproductive and Sexual Health
- Preconception and Pregnancy Care
- Birth Outcomes
- Infant and Child Nutrition
- Child Health and Well-being



## WORK GROUP ON MATERNAL, INFANT, AND CHILD HEALTH

### Co-Chairs

Ann Gionet  
*Connecticut Department of Public Health*

Erin Jones  
*March of Dimes*

Samantha Dynowski  
*Early Childhood Alliance*

Cynthia Fortner  
*March of Dimes*

Nadine Fraser  
*Connecticut Hospital Association*

### Members

Maggie Adair  
*Connecticut Early Childhood Alliance*

Linda Arpino  
*Linda Arpino & Associates, Inc. & Life Focus Nutrition Centers*

Stephen Balcanoff  
*Connecticut Children's Medical Center*

Mary Bawza  
*Planned Parenthood of Southern New England, Inc.*

Patricia Beirne  
*Greenwich Hospital*

Rosa Biaggi  
*Connecticut Department of Public Health*

Elizabeth Conklin  
*March of Dimes*

Pat Cronin  
*Connecticut Department of Social Services*

Bernadette D'Almeida  
*Community Health Network of Connecticut, Inc.*

Patricia A. DeWitt  
*Yale New Haven Hospital*

Amy Gagliardi  
*Community Health Center, Inc.*

Janice Gruendel  
*Connecticut Department of Children and Families*

Stephanie Knutson  
*Connecticut State Department of Education*

Sarah Levy, Intern  
*University of Connecticut, Master of Public Health Program*

Mary Kate Lowndes  
*Connecticut Commission on Children*

Leticia Marulanda  
*Hispanic Health Council*

Judith Meyers  
*Children's Fund of Connecticut & Child Health and Development Institute*

Jennifer Morin  
*Connecticut Department of Public Health*

Shital Shah, Intern  
*Goodwin College*

## GOAL

*Optimize the health and well-being of women, infants, children and families, with a focus on disparate populations.*

## WHY THIS GOAL IS IMPORTANT

The health and well-being of mothers, infants, and children are important indicators of community and state health, and are critical for our nation's future health, well-being, and prosperity. While infant mortality rates have declined in the US and Connecticut, racial and ethnic disparities in infant mortality, and low birthweight and preterm birth (risk factors for infant mortality) persist.<sup>5</sup>

## Reproductive and Sexual Health

### Rationale

Unplanned pregnancy has a public health impact. Births resulting from unintended or closely spaced pregnancies are associated with adverse maternal and child health outcomes, such as delayed prenatal care, premature birth, and negative physical and mental health effects for children.<sup>6</sup> Reproductive and sexual health education and support services enable young and adult men and women to make informed and healthier choices about family planning.

**OBJECTIVE MICH-1** Ph1  
Reduce by 10% the rate of unplanned pregnancies.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	34.5% (2010-2011)	31%	Connecticut Department of Public Health, Connecticut Pregnancy Risk Assessment and Tracking System (PRATS) Survey

### Strategies

#### *Communications*

- Support parents and guardians in their efforts to talk with adolescents about sexuality by providing culturally sensitive, developmentally appropriate information and materials.

#### *Education and Training*

- Educate women of childbearing age on increased risks of birth defects and multiple births among women over age 35.

#### *Partnership and Collaboration*

- Support reproductive and sexual health services.

#### *Surveillance*

- Support and monitor school district compliance with mandatory Health Education curriculum.

### Potential Partners

Connecticut Department of Public Health; Connecticut Department of Social Services; Connecticut Department of Children and Families; Commission on Children; community health centers and clinics; school based health centers; primary care providers; health professional associations; community service providers for family and youth; faith-based organizations; schools of public health, allied health, nursing, and medicine; and others.

## Preconception and Pregnancy Care

### Rationale

Poor preconception health and inadequate access to prenatal care increase the risk of adverse birth outcomes and negatively affect overall health and well-being later in life.<sup>7</sup> In Connecticut, inadequate prenatal care disproportionately affects black and Hispanic women. Only about one-third of black women and Hispanic women discuss preconception health with their health care providers, compared to more than half of white women. Preconception and prenatal health care enhances birth outcomes by providing an opportunity to discuss healthy behaviors such as diet, healthy weight, and abstaining from alcohol and tobacco, before and during pregnancy.

### OBJECTIVE MICH-2

Increase by 10% the proportion of women delivering a live birth who discuss preconception health with a health care worker prior to pregnancy.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	44.7% (2010-2011)	49.2%	Connecticut Department of Public Health, Connecticut Pregnancy Risk Assessment and Tracking System (PRATS) Survey

### Strategies

#### Communications

- Develop or adapt a media campaign about the importance of preconception health (radio, television, community brokers, and schools).

#### Education and Training

- Develop a plan to educate providers on the importance of preconception health, through a partnership between the Department of Public Health and the Department of Social Services.

#### Planning and Development

- Explore the impact of Neonatal Abstinence Syndrome, and identify mechanisms for addressing the issue.

#### Surveillance

- Support and monitor school district compliance with mandatory Health Education curriculum.

**OBJECTIVE MICH-3** Ph1

Increase by 10% the proportion of pregnant women who receive prenatal care during the first trimester of pregnancy.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	87% (2011)	95.7%	Connecticut Department of Public Health, Vital Statistics (Registration Reports, Table 4 )

**Strategies***Advocacy and Policy*

- Partner with Department of Social Services to encourage obstetricians and gynecologists to participate in Medicaid pay-for-performance.
- Advocate for the expansion of the Healthy Start Program statewide.
- Expand the Text-4-Baby initiative among hospitals, community health centers, private providers, women, and the Department of Social Services.

**OBJECTIVE MICH-4** Ph1

Increase by 10% the proportion of pregnant women who receive adequate prenatal care (defined by Kotelchuck Index).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	77.8% (2011)	85.6%	Connecticut Department of Public Health, Vital Statistics (Registration Reports, Table 4 )

**Strategies***Advocacy and Policy*

- Partner with Department of Social Services to encourage obstetricians and gynecologists to participate in Medicaid pay-for-performance.
- Advocate for the expansion of the Healthy Start Program statewide.
- Expand the Text-4-Baby initiative among hospitals, community health centers, private providers, women and DSS.

**Potential Partners**

Connecticut Department of Public Health; State Department of Education; Connecticut Department of Social Services; Connecticut Department of Children and Families; Commission on Children; State Legislature; faith- based organizations; community health centers; other health care facilities and providers; local boards of education; health professional associations; organizations and coalitions that support women, preconception and pregnancy care; community service providers that address women and families; schools of public health, allied health, nursing, and medicine; and others.

## Birth Outcomes

### Rationale

Preterm births (less than 37 weeks), low birthweight births (less than 2,500 grams (5 lbs 8 oz)), and very low birthweight births (less than 1,500 grams (3 lbs 5 oz)) are important predictors of infant survival and well-being.<sup>8</sup> Risk for infant illness and death increases with lower birthweight, which, in turn, is associated with gestational age (the number of weeks between conception and birth).<sup>9</sup> There are conspicuous disparities in birth outcomes among Connecticut residents, particularly for singleton, non-Hispanic black and singleton, Hispanic infants. Enhancing access to screening, preconception, prenatal, and postpartum (after delivery) care improves the potential for healthy infant and child well-being for all population groups.

### OBJECTIVE MICH-5

Reduce by 10% the proportion of low birthweight and very low birthweight among singleton births.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	6.5% VLBW (2010)	5.9%	Connecticut Department of Public Health, Vital Statistics, Registration Reports, Table 3
	8.0% LBW (2010)	7.2%	

### Strategies\*

#### Advocacy and Policy

- Address implementation of health promotion efforts.
- Promote Social Equity.
- Improve access to healthcare for women before, during, and after pregnancy.

#### Partnership and Collaboration

- Address quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

#### Surveillance

- Develop data systems to understand and inform efforts.

### OBJECTIVE MICH-6

Reduce by 10% the proportion of live singleton births delivered at less than 37 weeks gestation.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	8% (2011)	7.2%	Connecticut Department of Public Health, Vital Statistics, Registration Reports, Table 3.

### Strategies\*

#### Advocacy and Policy

- Address implementation of health promotion efforts.
- Promote Social Equity.

- Improve access to healthcare for women before, during and after pregnancy.

*Partnership and Collaboration*

- Address quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

*Surveillance*

- Develop data systems to understand and inform efforts.

**OBJECTIVE MICH-7** Ph1  
Reduce by 10% the infant mortality rate (infant deaths per 1,000 live births).

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	5.3 per 1,000 (2008-2010)	4.8 per 1,000	Connecticut Department of Public Health, Vital Statistics, Registration Reports, Table 2A

**Strategies\***

*Advocacy and Policy*

- Address implementation of health promotion efforts.
- Promote Social Equity.
- Improve access to healthcare for women before, during and after pregnancy.

*Partnership and Collaboration*

- Address quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

*Surveillance*

- Develop data systems to understand and inform efforts.

**OBJECTIVE MICH-8** Ph1 =  
Reduce by 10% the disparity between infant mortality rates for non-Hispanic blacks and non-Hispanic whites.

Target Population(s)	Baseline	2020 Target	Data Source
Non-Hispanic black women and infants	2.9 times higher among non-Hispanic black infants than non-Hispanic white infants	2.6 times higher among non-Hispanic black infants than non-Hispanic white infants	Connecticut Vital Statistics Registration Report Table 12

**Strategies\***

*Advocacy and Policy*

- Address implementation of health promotion efforts.
- Promote Social Equity.
- Improve access to healthcare for women before, during and after pregnancy.

*Partnership and Collaboration*

- Address quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

*Surveillance*

- Develop data systems to understand and inform efforts.

**OBJECTIVE MICH-9 (DEVELOPMENTAL)**

Reduce the proportion of non-medically indicated inductions/Cesarean sections prior to 39 weeks gestation.

**Strategies\****Advocacy and Policy*

- Address implementation of health promotion efforts.
- Promote Social Equity.
- Improve access to healthcare for women before, during and after pregnancy.
- Partner with obstetricians, gynecologists, and hospitals to adapt hard-stop policy on elective Cesarean births.

*Education and Training*

- Educate pregnant women on the risk of elective Cesarean births.

*Partnership and Collaboration*

- Address the quality of care for all women and infants.
- Address improving maternal risk screening for all women of reproductive age.
- Enhance service integration for women and infants.

*Surveillance*

- Develop data systems to understand and inform efforts.

**Potential Partners**

Connecticut Department of Public Health; State Department of Education; Connecticut Department of Social Services; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Children and Families; Commission on Children; health care providers; health care facilities; health insurers; professional associations for nursing, dieticians, and pharmacists; organizations and coalitions that support women and infants; community service providers that address at-risk populations; schools of public health, allied health, nursing, and medicine; and others.

*\*Note: Strategies under the Birth Outcomes concentration area align with the State Plan to Improve Birth Outcomes to be released in 2014.*

## Infant and Child Nutrition

### Rationale

Breastfeeding is associated with improved maternal and infant health, including nutritional, immunologic, developmental, and psychological benefits.<sup>10</sup> Infants who are breastfed have lower risk of childhood infections, respiratory conditions, sudden infant death syndrome, childhood obesity, type 2 diabetes, and childhood asthma.<sup>11</sup>

Compared to white non-Hispanic infants, Hispanic and black non-Hispanic infants are less likely to have ever been breastfed; the same is true for infants born to women of lower socioeconomic status.<sup>12</sup> These data indicate a need to enhance outreach to these populations in Connecticut.

### OBJECTIVE MICH-10

Ph1

Increase by 10% the proportion of infants who are breastfed.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	88.5%	97.4%	Connecticut Department of Public Health, Connecticut Pregnancy Risk Assessment and Tracking System (PRATS) Survey
Ever breastfed (2010-2011)	37.1%	40.8%	
Breastfed exclusively through 3 months (2010-2011)	12.3%	13.5%	
Breastfed exclusively through 6 months (2010-2011)			

### Strategies

#### Advocacy and Policy

- Ensure access to lactation support, including breast pumps, consistent with the Women's Health Provisions of the Affordable Care Act.

#### Communications

- Increase employee and employer awareness and understanding of their 'rights and responsibilities' under State and Federal breastfeeding laws.

#### Education and Training

- Provide targeted technical assistance and support to breastfeeding friendly work places (schools), hospitals, and medical offices to ensure compliance with State and Federal workplace lactation accommodation laws.

#### Planning & Development

- Engage and plan with established community support networks to promote health equity in breastfeeding initiation, exclusivity and duration.

**Potential Partners**

Connecticut Department of Public Health; Connecticut Department of Labor; Connecticut Department of Social Services; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Children and Families; State Legislature; professional associations for businesses; community health centers; primary care providers; health professional associations for lactation consultants and nutrition; faith-based organizations; community service providers for family, youth, and child development; food industry; federal and state nutrition programs; other organizations and coalitions that focus on breastfeeding and nutrition for women, infants, and children; schools of public health, allied health, nursing, and medicine; and others.

## Child Health and Well-being

### Rationale

Preventive health and dental care for children provide a foundation for good health well into adulthood. Although most Connecticut children saw a health care provider for preventive medical care in 2011, far fewer of those enrolled in the Medicaid Program, who are lower income children, received such care.

This disparity continues for those receiving any dental care, preventative dental care, or dental treatment. The result is a higher incidence of childhood dental caries (decay) for infants of lower socioeconomic status.

Ensuring access to well-child visits and preventive dental care will provide early intervention in treating disease and will improve health outcomes and reduce costs, especially for those at greatest risk.

*“My concern is that there is not enough awareness in the community about how we can work together so that people are aware of children with special needs and how to interact with them so that there are not circumstances or situations where they may not be able to communicate and/or are misunderstood.” (Hartford)*

### OBJECTIVE MICH-11

Increase by 10% the percentage of children up to 19 years of age at greatest risk for poor health outcomes that receive well-child visits (e.g., enrolled in HUSKY A).

Target Population(s)	Baseline	2020 Target	Data Source
Low income and uninsured children	62.8% (2011)	69.1%	Well-child care utilization rate for children who were continuously enrolled in HUSKY A for the calendar year, Connecticut Voices for Children (August 2013).

### Strategies

#### Communications

- Develop and implement an education campaign for parents around patient-centered medical home (e.g., Text-4-Child and Text-for-Teen).

#### Partnership and Collaboration

- Explore opportunities to identify cultural barriers to using primary care physicians.
- Support school-based health centers, community health centers, and other community-based organizations to offer comprehensive reproductive health services. (Connecticut Adolescent Health Strategic Plan).
- Partner with AccessHealth CT to encourage youths under 21 years of age to obtain primary care.

**OBJECTIVE MICH-12** Ph1 =

Increase by 10% the percentage of children under 3 years of age at greatest risk for oral disease (i.e., in HUSKY A) who receive any dental care.

Target Population(s)	Baseline	2020 Target	Data Source
Low income children < age 3	41.6% (2011)	45.8%	Connecticut Voices for Children. 2013. <i>Dental Services for Children and Parents in the HUSKY Program: Utilization Continues to Increase Since Program Improvements in 2008</i> , Table 1.

**Strategies**

*Advocacy and Policy*

- Advocate for more funding for *Home by One*.
- Support enrollment and utilization of HUSKY.
- Ensure maintenance of appropriate pool of providers accepting HUSKY.

*Communications*

- Provide public education on importance of annual preventive dental services.
- Conduct public education and awareness campaigns that include cultural and linguistic issues.

*Education and Training*

- Educate providers; include cultural and linguistic issues.

[See also strategies under Objectives CD-20, CD-21, and CD-22.]

**OBJECTIVE MICH-13** Ph1

Increase by 10% the percentage of parents who complete standardized developmental screening tools consistent with American Academy of Pediatrics (AAP) guidelines.

Target Population(s)	Baseline	2020 Target	Data Source
Connecticut Overall	26.6% (2011)	29.3%	National Survey of Children’s Health

**Strategies**

*Advocacy and Policy*

- Advocate for primary care providers to incorporate parental education on developmental milestones.

*Communications*

- Communicate benefits of standardized developmental screening tools to parents and providers in primary care settings.

**Potential Partners**

Connecticut Department of Public Health; State Department of Education; Connecticut Department of Social Services; Connecticut Department of Mental Health and Addiction Services; Connecticut Department of Developmental Services; Connecticut Office of Early Childhood; Connecticut Department of Children and Families; Commission on Children; community health centers; school based health centers; primary care and dental providers; health professional associations for pediatricians and other primary care providers; faith-based organizations; community service providers for family, youth and child development; local boards of education and special education; schools of public health, allied health, nursing and medicine; and others.