

# PROMOTING A HEALTHY WEIGHT IN WOMEN OF REPRODUCTIVE AGE:

EXPERIENCES & LESSONS LEARNED FROM  
EIGHT STATE/LOCAL HEALTH DEPARTMENT TEAMS



# Healthy Weight In Women of Reproductive Age

## Overview

Obesity is one of the ten leading health indicators used to measure the health status of the nation.<sup>2</sup> According to the National Health and Nutrition Examination Survey (NHANES), 61.3 percent of U.S. women aged 20 years or older are considered overweight or obese<sup>3</sup>. Overweight and obese individuals are more likely to develop chronic disease including hypertension, coronary heart disease, stroke, type 2 diabetes, high cholesterol, heart failure, certain kinds of cancers (endometrial, breast, and colon), osteoarthritis, sleep apnea and other respiratory problems and premature death.<sup>4,5</sup>

Women who enter pregnancy overweight or obese are at greater risk for maternal and infant morbidity and mortality. Obesity increases the risk that a woman will enter pregnancy with a chronic disease.<sup>6</sup> Furthermore, obese women are at an increased risk for complications in pregnancy such as infertility, gestational diabetes, gestational hypertension, and preeclampsia.<sup>7</sup> Maternal obesity is a significant contributor to birth defects including, spina bifida, heart defects, omphalocele, or multiple anomalies.<sup>8</sup> Maternal BMI has also been linked to childhood overweight and obesity, making maternal nutrition and physical activity a key component of comprehensive childhood obesity prevention.<sup>9</sup> Finally, while there have been limited studies conducted on the cost of prenatal care for overweight women, it is reported to be between 5 and 16 times higher than for women of a healthy weight, and the length of prenatal and postnatal hospitalization is 4.43 days longer for obese woman.<sup>10</sup>

In *Promoting Healthy Weight Among Women of Reproductive Age*, the Association of Maternal and Child Health Programs (AMCHP) and CityMatCH detailed reasons for working with local and state Maternal and Child Health (MCH) professionals to promote healthy weight among women

2 US Dep. Of Health and Human Services.(2000). *Healthy People 2010. 2<sup>nd</sup> ed.* Washington, DC: U.S.

3 Hedley, A.A., Ogden, C.L., Johnson, C.L., Carroll, M.D., Curtin, L.R., Flegal, K.M.(2004). Prevalence of Overweight and Obesity Among US Children, Adolescents, and Adults. *Journal of the American Medical Association*, 291, 2847-50.

4 Pi-Sunyer, F.X. (1993). Medical Hazards of Obesity. *Ann Intern Med*,119(7[Part2]), 665-660.

5 HHS, CDC. Division of Nutrition and Physical Activity, National Center for Chronic Disease Prevention and Health Promotion. *Overweight and Obesity: Health Consequences*. Retrieved August 5, 2008 from <http://www.cdc.gov/nccdphp/dnpa/obesity/consequences.htm>.

6 Grason, H., Misra, D. (2006). Application of a Lifecourse and Multiple Determinants Framework to Improve Maternal health. Women's and Children's Health Policy Center, Johns Hopkins Bloomberg School of Public Health. Baltimore, MD.

7 Siega-Riz, A.M. and Laraia, B. (2006). The Implications of Maternal Overweight and Obesity on the Course of Pregnancy and Birth Outcomes. *Maternal Child Health Journal*, 10: S153-S156

8 Reece, E A. (2008) Obesity, diabetes, and link to congenital defects: A review of the evidence and recommendations for intervention. *Journal of Maternal-Fetal and Neonatal Medicine*, 21(3), 173-180.

9 Kimbro, R.K., Brooks-Gunn, J., McLanahan, S. (2007). Racial and Ethnic Differentials in Children's Overweight and Obesity Among 3-Year-Olds. *American Journal of Public Health*, 97(2).

10 Galtier-Dereure, F., Boegner, C., Bringer, J. (2000). Obesity and pregnancy: Complications and cost. *American Journal of Clinical Nutrition*, 71(suppl),1242S-1248S.

in their communities. A select few are highlighted below:

- It is consistent with the identified needs of AMCHP and CityMatCH members.
- Obesity during pregnancy is directly and indirectly linked to maternal and infant morbidity and mortality.
- Obesity can be addressed by a community-based public health intervention.
- More effective collaboration is necessary between local/state/national agencies.
- A focus on a healthy weight has a positive impact on other MCH priority areas.

## The Women's Health Partnership

Promoting safe motherhood and enhancing the health of women before, during and after pregnancy are two important goals that are embedded in the missions of AMCHP and CityMatCH. To address these goals, the two organizations formed a Women's Health Partnership (the Partnership) to explore how they would build the knowledge base, gather promising strategies, develop tools, and influence policies and financing to improve health for women of reproductive age. With funding from the Center for Disease Control and Prevention's Division of Reproductive Health (CDC-DRH), the Partnership's efforts focused on identifying and promoting unique state and local MCH roles and opportunities to ensure and improve women's health during preconception and interconception periods.<sup>11</sup>

The overall objectives of the initial phase of the Partnership included:

- Working with federal, state and local MCH experts to draft a women's preventive health framework including evidence-based, data-driven strategies to improve preventive health services, policies and financing at state and local levels for women of reproductive age;
- Analyzing research findings on interventions to improve women's health status before and between pregnancies;
- Providing opportunities for federal, state and local partners to discuss implications of those findings for state and local MCH programs;
- Working with federal, state and local partners to identify an initial set of promising strategies supported by research that state and local MCH programs could implement to improve women's health status before and between pregnancies; and
- Assessing possible data sources and methods that state and local MCH programs could use to evaluate proposed strategies to improve women's health status before and between pregnancies.

Understanding that the preconception and interconception periods are critical to birth and pregnancy outcomes, AMCHP and CityMatCH selected healthy weight as the initial focus for the Partnership. By assisting women of reproductive age with maintaining a healthy weight, MCH programs would have a positive impact on birth outcomes as well as women's health overall.<sup>12</sup> To support these efforts and provide guidance for the project, an advisory committee was convened with representatives from the following organizations: American College of Obstetricians and Gynecologists (ACOG), America on the Move, AMCHP, Association of State and Territorial Nutrition Directors, Association of Women's Health, Obstetric and Neonatal Nurses, CDC-Division of Reproductive Health, CityMatCH, HRSA-MCHB, March of Dimes, National Association of Chronic Disease Directors, and USDA, WIC Program.

11 For purposes of the Partnership, the terms "preconception" and "interconception" do not presume a planned pregnancy but rather define specific periods of time when preventive health interventions may be effective; also, strategies discussed are not limited to clinical care interventions alone.

12 Kent, H., Skala, J., Desmarais, J. (2006). Promoting Healthy Weight Among Women of Reproductive Age. Association of Maternal and Child Health Programs, Washington, DC, CityMatCH, Omaha, Nebraska.

# Promoting Healthy Weight Among Women Of Reproductive Age Action Learning Collaborative

## Overview of the ALC

Over the last ten years, AMCHP and CityMatCH have conducted Action Learning and Practice Collaborative projects on a range of topics including Medicaid and State Children's Health Insurance Programs (SCHIP) reforms, smoking cessation, perinatal HIV transmission, and perinatal disparities. Action Learning Collaboratives (ALC) bring multi-disciplinary teams together to assess a key maternal and child health issue, review promising practices and research, and create a plan to address the issue on a systems-level within their community. Collaborative work is implemented at three levels: 1. team-based activities focused on meeting the specific needs and interests of the community and state of each team; 2. cross-team communication, collaboration, peer exchange, and technical assistance for mutual benefit; and 3. all-team collaborative activities to advance urban MCH practice overall, nationwide. Strategically implementing activities at each of these three levels leads to a greater likelihood that the efforts of those engaged in a collaborative will have impact both in their local communities and on a national scale.<sup>13</sup>

In October 2006, via the Women's Health Partnership, AMCHP and CityMatCH launched an ALC to address the impact of overweight and obesity on perinatal outcomes among women of reproductive age. As the first ALC convened jointly by AMCHP and CityMatCH, a particular focus was to mobilize state/local partnerships within teams to promote healthy weight among women of reproductive age within their communities over a 16-month period.

The Healthy Weight ALC included eight state/local teams: *Arizona* – Maricopa County Department of Public Health, *California* – Los Angeles County Department of Public Health and County of Sonoma Department of Health, *Florida* – Duval County Public Health Department, Leon County Health Department, and Orange County Health Department, *Massachusetts* – Boston Public Health Commission, *Minnesota* – Minneapolis Department of Health & Family Support, *Nebraska* – Douglas County Health Department, and *Utah* – Salt Lake Valley Health Department.

The Healthy Weight ALC aimed to:

- Convene national, state and local maternal and child health (MCH) experts to implement a women's preventive health framework including evidence-based, data-driven strategies to improve preventive health services, policies and financing at state and local levels for women of reproductive age;
- Bring together teams of state/local MCH leaders to establish or strengthen partnerships within their state MCH system as well as with other public health professionals to improve

13 Thompson, B.K., Peck, M., & Brandert, K (2008). Integrating Preconception Health into Public Health Practice: A Tale of Three Cities. *Journal of Women's Health*, 17(5): 723-727.

- preventive health for women of reproductive age;
- Assist state/local teams to assess mutual readiness and priorities to improve preventive health for women of reproductive age;
  - Assist state/local teams to collaboratively incorporate evidence-based strategies from the women's preventive health framework into one-year action plans; and
  - Evaluate and share successes, challenges and lessons learned of state/local teams as they collaboratively implement their action plans to improve preventive health for women of reproductive age.

## The Work of the ALC Teams

Throughout the ALC, AMCHP and CityMatCH provided the eight teams with technical assistance including tools for planning and evaluation, informational calls, and resource referrals. The teams were composed of a traveling team of six to eight members who participated in on-site meetings of all ALC teams. In addition, each team had non-travel members, which included a diverse group of individuals within the state and community. Membership of the teams varied, but generally included the State Title V/MCH director, MCH leadership from local health department, a data analytic specialist, a professional from an existing community-based health initiative, and a nutrition and/or physical activity professional.

Over the course of 16 months, the work of the teams focused on developing local and state initiatives related to physical activity and nutrition, working and learning together with other participating teams, and collaborating as a larger group to identify similarities occurring in communities nationwide.

ALC teams were allowed to develop strategies to address any aspect of promoting a healthy weight in women that they thought was appropriate for their community and state. Although each team selected a unique aspect to focus upon, all teams engaged in the following key strategies:

- Collect and Analyze Data on Overweight and Obesity in Women of Reproductive Age
- Inform, Educate and Empower Women of Reproductive Age on Healthy Eating, Physical Activity, Effects of Overweight and Obesity
- Mobilize Community Partnerships
- Develop, Build, and Cultivate Sustainable Partnerships
- Foster Communication and Collaboration at the Local and State Level
- Integrate Healthy Weight with Multiple Aspects of Women's Health

The Healthy Weight ALC concluded its activities in February 2008 with a final face-to-face meeting in Washington, DC where teams had the opportunity to share lessons learned and recommendations. Both of which are included throughout this publication, as well as profiles of the participating teams. AMCHP and CityMatCH will continue to provide teams with resources and tools over the next couple of years to help them promote healthy weight among women of reproductive age. We are confident that the work they have done and will continue to do, will have a positive impact on the health of women within their states and communities, and others throughout the U.S.

# Team Recommendations From The Action Learning Collaborative



## **Assess and Address Community-Specific Needs**

Determining the needs of a community, such as their ability to access health services and resources, can ensure the intervention identified is the most appropriate and effective for the targeted population. Conducting a thorough needs assessment (utilizing both quantitative and qualitative methodologies) will help define a community's needs and target feasible interventions.

## **Develop and Implement Culturally Appropriate Initiatives**

It is extremely important to create and implement programs that are culturally relevant and reflect the values of community residents. Women want access to healthy food choices and physical activity options that mirror their customs and lifestyles.

## **Integrate Healthy Weight with Preconception Health and Health Care**

We must place greater emphasis on a systematic and coordinated approach to preconception care. It is essential that we begin discussing healthy messages and actions with women before they become pregnant, rather than waiting until they are pregnant.

## **Increase Community Involvement and Engage Outside Partners**

It is imperative to engage community stakeholders early in the process and to identify partners outside of the public health arena, such as school boards and small businesses. A diverse representation of community members and leaders can help to create innovative initiatives.

### **Educate and Work With Providers**

Health care providers are an important resource to motivate health behavior changes among women. Providers are in a unique position to deliver healthy messages and encourage healthy options to the women they treat. Through partnership we can educate, empower and encourage providers to have open conversations with their patients about their health and daily habits.

### **Integrate and Improve Upon Existing Programs**

It is important for MCH professionals to partner with and learn from existing overweight and obesity prevention programs. The goal is not to duplicate efforts, but to and apply these programs in unique and special ways to women of childbearing age.

### **Find Alternative Funding and Resources**

Promoting a healthy weight in women of reproductive age at the community level will require seeking out funding streams that may be non-traditional to the MCH sector. For example, foundation funding (i.e. Robert Wood Johnson Foundation and the W.K. Kellogg Foundation) are examples of good sources for funds to build the diverse partnerships needed to address the overweight and obesity epidemic. Also, joint work with local universities, both via faculty expertise and students, is a mutually beneficial way to do work with limited financial resources.

### **Use a Systemic Approach**

It is imperative to address the issue of healthy weight using a systems approach. By working with a variety of partners on an issue and looking beyond standard clinical and public health sectors, the intent is to influence more permanent and sustainable change in the health behaviors of women of reproductive age.

### **Address Behavioral Health and Well-Being**

Effective interventions rely on understanding and attending to the behavioral and social aspects of healthy weight and obesity, especially with regard to women.

### **Establish Team Communication and Commitment**

Gathering public health professionals together who are dedicated to seeking new methods for improving the lives of women throughout the lifecycle is time-consuming, but yields valuable results. Frequent face-to-face communication can foster stronger collaboration. Continued dedication from partners also requires continually reexamining the goals of the collaboration and each partner's role. ALC teams found that when the partners gathered together and had a clear understanding and shared commitment, they were able to pool together resources (such as existing incentives available to their agencies) and expertise of colleagues to complete the work.

### **Use a Preventive Life-Course Approach to Health**

When adolescent girls and young women have the tools and resources needed for a healthy lifestyle, they will more than likely maintain these habits throughout their lifetime. Chronic disease is often exacerbated by excess weight due to lack of physical activity and poor eating habits. Encouraging women to maintain a healthy weight early in life, creates an opportunity to prevent chronic diseases like hypertension and diabetes.

# Action Learning Collaborative Team Profiles

This publication has been created and designed as a product for states and communities to use as they work to reduce overweight and obesity among women and to improve pregnancy and birth outcomes. The following section presents profiles for each of the Healthy Weight ALC teams. While this may provide only a snapshot of work conducted over the last two years, these profiles demonstrate the teams' commitment and dedication to improving maternal and child health outcomes. Their efforts can serve as valuable resources and potential best practices for other communities throughout the U.S. The following table will assist in reading through the profiles and identifying teams whose work is relevant to your community.



Strategies used by teams during the ALC period include:

- A. Identify Relevant Healthy Weight Messages through Focus Groups
- B. Develop Tools and Resources to Promote Healthy Weight
- C. Inform and Educate Community Members
- D. Conduct Needs Assessment of Community
- E. Train and Educate Providers
- F. Utilize University Students to Complete Work

## Team Strategies

City/State/County	Strategies	Page
Boston, MA	A, B, C, D, E	8
Douglas County, NE	D, E, F	11
Duval/Leon/Orange Counties, FL	B	16
Los Angeles County, CA	A, B, C, F	20
Maricopa County, AZ	D, F	24
Minneapolis, MN	B, C, E, F	27
Sonoma County, CA	B, C, E	30
Salt Lake Valley, UT	A, C, D, E, F	34