

## Harvard School of Public Health Prevention Research Center

The mission of the Harvard School of Public Health Prevention Research Center (HPRC) is to work with communities, community agencies, state and local government, and other partners to develop, implement and evaluate methodologies and interventions to improve nutrition and physical activity and reduce overweight and chronic disease risk among children, youth and their families and to reduce and eliminate disparities in these outcomes.

ABOUT US
Our goals,
methods and
focus populations

Since 1998, the Harvard School of Public Health Prevention Research Center (HPRC), one of 37 PRCs funded by the Centers for Disease Control and Prevention (CDC), has participated in drawing national attention to the need for replicable, effective strategies to improve nutrition and physical activity and prevent obesity using a social ecological perspective. HPRC faculty and staff, with our community partners, have launched groundbreaking work in school, community and health care settings. We disseminate models, materials and curricula to partner communities and states, as well as nationally and internationally. Our focus populations are children and youth in Boston, Massachusetts and Maine.

## TRANSLATION OF RESEARCH INTO PRACTICE:

- Our work through partnerships with the Massachusetts Early Education and Care Commission
  and the Department of Elementary and Secondary Education has resulted in regulatory changes
  and provider training models to improve physical activity and nutrition in state-licensed
  afterschool and early child care sites.
- Boston's Mayor Menino called the Play Across Boston work "a 'playbook' for future sports and recreation plans by the City of Boston and its partners." This project resulted in documentation of substantial disparities in participation in 237 different out of school time programs in the city.

## **CHANGES TO ENVIRONMENTAL SYSTEMS:**

- The Out of School Nutrition and Physical Activity (OSNAP) intervention increased water availability by an average of 3.6 ounces per day among children in 20 afterschool programs in Boston; calories served dropped by 61 calories per day as water servings increased and servings of fruit juice were replaced with fresh fruit.
- The YMCA-Harvard Afterschool Food and Fitness Project intervention, which included implementation of activities to increase physical activity during afterschool time, was found to increase energy expenditure per day per student by about 25 kcal per day (our studies indicate that an energy imbalance of about 110-165 kcal/day is fueling the obesity epidemic).

## WIDESPREAD USE OF EVIDENCE-BASED PROGRAMS and POLICIES:

- Our Planet Health and Eat Well and Keep Moving curricula have been disseminated worldwide, with over 10,000 copies of Planet Health, and 5,000 copies of Eat Well and Keep Moving distributed in all 50 US states and more than 20 countries.
- The Food and Fun Afterschool Curriculum was implemented in 517 YMCA Associations nationwide, from Sept 2009 to June 2012.



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### **INCREASED SKILLED PUBLIC HEALTH PROFESSIONALS and COMMUNITY MEMBERS:**

 Our Leaders in Health (LIH) program provides introductory training in public health research and science to community members.

### EXPANDED RESOURCES FOR APPLIED PUBLIC HEALTH RESEARCHERS:

- The clinical materials used in MYOC have now been adopted by the American Academy of Pediatrics and are being distributed worldwide, indicating both substantial impact in the rural state and important gains in knowledge of effective strategies for delivering primary care prevention.
- The OSNAP Initiative materials include validated and reliable instruments for both researchers and afterschool program staff to use in evaluating snack consumption and physical activity, nutrition and screen time practices at afterschool sites.

#### RECOGNITION AND SUPPORT OF PRC RESEARCH and ACTIVITIES:

- Keep ME Healthy, an initiative of the Maine Youth Overweight Collaborative, *Planet Health* and *Eat Well and Keep Moving* have all been included in the National Cancer Institute's Research-Tested Intervention Program's site. Visit: http://rtips.cancer.gov/rtips/index.do.
- Our afterschool interventions, OSNAP and Food & Fun, have been included as evidence-based resources by a number of organizations, including the Center for Translational Research, the YMCA of the USA, Obesity180 Healthy Kids Hub and the Alliance for a Healthier Generation.

# Sectors and Settings for HPRC Projects and Activities

### **SCHOOLS**

<u>Planet Health</u> (Funded by CDC): Planet Health is an interdisciplinary curriculum focused on improving the health and well-being of sixth through eighth grade students while building and reinforcing skills in language arts, math, science, social studies, and physical education. Through classroom and physical education activities, *Planet Health* aims to increase activity, improve dietary quality, and decrease inactivity. Such healthy lifestyle habits can help prevent overweight, and if sustained, can lower risk factors for diabetes, cardiovascular disease, certain types of cancer, and osteoporosis.

Eat Well and Keep Moving (Funded by Department of Education): Eat Well & Keep Moving is a school-based program that equips children with the knowledge, skills, and supportive environment they need in order to lead healthier lives by choosing nutritious diets and being physically active. The program is designed for fourth and fifth grade students. Its six interlinked components—classroom education, physical education, school-wide promotional campaigns, food service, staff wellness, and parent and community involvement—work together to create a supportive environment that promotes the learning of lifelong good habits.

CURRENT
PROJECTS
We employ
community based
participatory
research
methods.

<u>Active School Day (Funded by Active Living Research):</u> The HPRC conducted an evaluation of the Boston Public Schools' Communities Putting Prevention to Work (CPPW)-funded initiatives to increase and improve physical education and physical activity in schools.



### **OUT OF SCHOOL TIME**

Out of School Nutrition and Physical Activity (OSNAP) Initiative (Funded by CDC): The HPRC's current core project is working with out of school time programs in Massachusetts to improve physical activity, nutrition and screen time related practices, policies and environments. Visit: <a href="https://www.osnap.org">www.osnap.org</a>.

YMCA-Harvard Afterschool Food and Fitness Project (Funded by Pritzker): The HPRC evaluated a YMCA-drive intervention focused on nutrition and physical activity practice changes for afterschool programs across the country. The HPRC developed standards and the Food & Fun curriculum materials that help afterschool programs and child care providers provide healthy environments for children. Visit: www.FoodandFun.org.

### **HEALTHCARE**

Clinical Interventions to Prevent Childhood Overweight (Funded by CDC): The Maine-Harvard Prevention Research Center (M-HPRC) is a collaboration between the University of New England, the Maine Center for Disease Control and Prevention, and the HPRC to enhance Maine's capacity in applied prevention research. The Maine Youth Overweight Collaborative (MYOC) applies community based research principals in developing materials for parents and clinical care providers around reducing television viewing and sugar-sweetened beverage consumption and increasing consumption of fruits and vegetables. MYOC has reached an agreement with the National American Academy of Pediatrics to market and promote internationally the *Pediatric Obesity Clinical Decision Support Chart*, available at http://www.hsph.harvard.edu/prc/files/2012/09/Ped-Obesity-flip-chart Maine FINAL.pdf.

### **COMMUNITY**

Childhood Obesity Research Demonstration (CORD) Project (funded by CDC): The HPRC is implementing evidence-based strategies in two communities through an initiative called Mass in Motion Kids (MiM Kids). MiM Kids seeks to impact children's: consumption of sugar-sweetened beverages; moderate and vigorous physical activity; screen time; sleep duration and quality; and consumption of fruits and vegetables.

Massachusetts Community Transformation Grant (CTG) (Funded by CDC): The HPRC is working with the Metropolitan Area Planning Counsel and the Massachusetts Department of Public Health to investigate corner store initiatives in Middlesex County. The study includes assessment of store environments and the purchasing behaviors of children and adults who shop at corner stores in urban areas.

The Boston Racial and Ethnic Approaches to Community Health: Obesity and Hypertension Demonstration Project (REACH) (Funded by CDC): The HPRC is evaluating the efforts of the Boston Public Health Commission to develop and implement replicable and scalable strategies that assure population-wide policy, systems and environmental improvements to reduce obesity and hypertension, and decrease health disparities. The strategies focus on healthy beverage availability and physical activity opportunities in neighborhoods, opportunities for physical activity and healthy snacks and beverages in out of school time settings and sodium reduction and clinical management of hypertension.

Facilitating Joint Use of School Facilities to Prevent Childhood Obesity (Funded by Harvard CATALYST): The HPRC is partnering with the Harvard Law school Center for Health Law and Policy Innovation to develop a tool kit to improve implementation of joint use or community use agreements in communities funded by Mass in Motion grants as part of the Massachusetts Department of Public Health Community Transformation Grant activities.



### **POLICY**

Childhood Obesity Intervention Cost-Effectiveness Study (CHOICES) (Funded by JPB): The HPRC is currently assessing the comparative-effectiveness and cost-effectiveness of approximately 40 interventions aimed at reducing childhood obesity, including policy changes and programs that have been identified as being effective, promising or prevalent. The analyses will be completed using comparable methods for both short- and longer-term measures.

Monitoring and Evaluating Policy and Environmental Interventions (Funded by RWJF): Working with colleagues from Columbia University in New York and Deakin University in Australia, the HPRC is examining actual and hypothetical policy and environmental obesity prevention interventions on identifying cost-effective options for policy and environmental change. See our Lancet Obesity series papers: http://www.thelancet.com/series/obesity.

RESEARCH NETWORKS

Nutrition and Obesity Policy Research and Evaluation Network (NOPREN) (Funded by CDC): As the coordinating center of this thematic research network of the PRC Program, the HPRC is coordinating local and national efforts among NOPREN members, national partners and the CDC to advance science and practice regarding policy approaches to promoting improved nutrition and reduce obesity. We have identified policy research

priorities and have conducted a pilot research project focused on policies related to improving access to health beverages and reducing access to beverages of low nutritive value. Visit: <a href="https://www.NOPREN.org">www.NOPREN.org</a>.

Physical Activity Policy Research Network (PAPRN) (Funded by CDC): The HPRC is a participating center in the CDC-sponsored PAPRN, a thematic research network of the PRC Program. The mission of PAPRN is to conduct trans-disciplinary policy research that addresses the determinants, dissemination, and implementation of evidence-based components of comprehensive physical education programs.

Massachusetts Cancer Prevention and Control Community Research Network (MCPCRN) (Funded by CDC, NCI): THE MCPCRN is a collaborative effort of the Dana-Farber/Harvard Center and Harvard's and Boston University's PRCs. The goal of this initiative is to foster collaborative research addressing disparities in cancer risk due to socioeconomic status and race/ethnicity by working with a range of community organizations.

<u>Collaborative Obesity Modeling Network (COMNet)</u>: COMNet is a collaborative project to create a network connecting leading childhood obesity modelers. See our Lancet Obesity series: <a href="http://www.thelancet.com/series/obesity">http://www.thelancet.com/series/obesity</a>.