Public Health Council
State Health Plan Quality Improvement Committee
June 1, 2012

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Wisconsin Department of Health Services
Nutrition, Physical Activity and Obesity Program Coordinator
Presentation Objectives

- Current status of HW2020 objectives and indicators
- Identify evidence-based strategies that will impact health outcomes
- Build the case for evidence-based practices and environmental approaches in various settings to reduce obesity and other chronic diseases that results in aligned Public Health Council actions
- Identify infrastructure components necessary to advance movement in these HW2020 Focus Areas
Objective 1: By 2020, people in Wisconsin will eat more nutritious foods and drink more nutritious beverages through increased access to fruits and vegetables, decreased access to sugar-sweetened beverages and other less nutritious foods, and supported, sustained breastfeeding.

Objective 2: By 2020, all people in Wisconsin will have ready access to sufficient nutritious, high-quality, affordable foods and beverages.

Objective 3: By 2020, Wisconsin will reduce disparities in obesity rates for populations of differing races, ethnicities, sexual identities and orientations, gender identities, and educational or economic status.
Adequate, Appropriate, and Safe Food and Nutrition

Indicators with data sources
- Infant exclusively breastfed at 3 months (38.2%)
- Census tracts with health food retailers
- Farmers markets/100,000 population
- WI and Milwaukee schools that do not sell unhealthy “competitive foods”
- Farmers markets that accept EBT and WIC
- Households with low/very low food security
- Youth overweight and obesity (30.7% of WIC youth ages through 4 and 25% high school students are overweight or obese).

Indicators with tracking challenges/barriers
- Infants exclusively breastfed – disparity focus
- Adult overweight or obesity – LGBT
- Child overweight and obesity
Environmental Indicators of Access to Healthy Foods

Environmental Indicators for Breastfeeding
CDC Breastfeeding Report Card, 2011

![Graph showing environmental indicators for breastfeeding.](image-url)

- % Live births at Baby Friendly Hospitals: US 4.5, Wisconsin 12.2
- Number of International Board Certified Lactation Consultants per 1,000 live births: US 1.0, Wisconsin 1.2
- mPINCscore: US 65.0, Wisconsin 71.0
- % Breastfed infants not receiving formula before 2 days of age: US 75.5, Wisconsin 86.0
Prevalence of Food Insecurity and Very Low Food Security in Wisconsin Households
Families acquire emergency foods through food pantries and programs such as TEFAP. Entitlement foods are based on the state’s annual federal allocation. Bonus foods are offered to states as available from USDA.
Physical Activity

- **Objective 1:** By 2020, increase physical activity for all through changes in facilities, community design, and policies.

- **Objective 2:** By 2020, every Wisconsin community will provide safe, affordable and culturally appropriate environments to promote increased physical activity.

- **Objective 3:** By 2020, every Wisconsin community will provide safe, affordable and culturally appropriate environments to promote increased physical activity for individuals among populations of differing races, ethnicities, sexual identities and orientations, gender identities, and educational or economic status.
Physical Activity

Indicators with data sources
- High school students who meet PA guidelines
- Adults who meet PA guidelines (WI 49%, US 44%)

Indicators with tracking challenges/barriers
- Children living in a neighborhood with nearby PA facility (WI 48%, US 50%)
- Communities score well on Assessment of Social and Built Environment (TBD)
- Inventory of communities that have environments that support PA – disparity focus (SHOW - TBD)

1 Youth Risk Behavior Surveillance (YRBS) 2009 – Active 60 minutes, 5 or more days/week
2 2010 CDC Indicator Report for Physical Activity for WI – Highly active
Environmental Indicators of Access to Physical Activity

CDC State Indicator Report on Physical Activity & School Health Profiles, 2010

<table>
<thead>
<tr>
<th>Indicator</th>
<th>US</th>
<th>Wisconsin</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Census tracts with park within 1/2 mile of boundary</td>
<td>20.3</td>
<td>23.4</td>
</tr>
<tr>
<td>% Youth with ready access to parks, community centers, and sidewalks</td>
<td>50.0</td>
<td>47.6</td>
</tr>
<tr>
<td>% Middle/ high schools that have assessed physical activity environment</td>
<td>46.1</td>
<td>51.2</td>
</tr>
<tr>
<td>% WI mid./high schools with no student exemption from PE due to participation in other activities</td>
<td>65.4</td>
<td>85.1 (policy change)</td>
</tr>
</tbody>
</table>
Children’s Food Environment State Indicator Report, 2011
State Indicator Report on Fruits and Vegetables, 2009
State Indicator Report on Physical Activity, 2010
Early Care and Education Report (coming soon)
Obesity Trends* Among U.S. Adults
BRFSS, 1990, 2000, 2010
(*BMI ≥30, or about 30 lbs. overweight for 5’4” person)
Percent of WI Third Grade Children with Overweight, Obesity, or Extreme Obesity by Racial or Ethnic Group & Economic Disadvantage

WI-DHS, Oral Health/ BMI Surveillance, 2008
Chronic Disease Prevention & Management

- **Objective 1:** By 2020, increase sustainable funding and capacity for chronic disease prevention and management programs that reduce morbidity and mortality.

- **Objective 2:** By 2020, increase access to high-quality, culturally competent, individualized chronic disease management among disparately affected populations of differing races, ethnicities, sexual identities and orientations, gender identities and educational or economic status.

- **Objective 3:** By 2020, reduce the disparities in chronic disease experienced among populations of differing races, ethnicities, sexual identities and orientations, gender identities and educational or economic status.
Chronic Disease Prevention & Management

Indicators with data sources

- Population group-specific incidence of chronic disease (heart disease, cancer), hospitalization and emergency department utilization rates (asthma)\(^1, 2, 3, 4\)
- Incidence of risk factors, early detection, and chronic disease management \(^1, 2, 3, 4, 5,\) and TBD
- Proportion of asthma patients receiving seasonal influenza vaccination \(^6\)

Indicators with tracking challenges/barriers

- State and Federal Funding for chronic disease prevention & management (TBD)
- Medicaid spending related to prevention of chronic disease prevention & management (TBD)
- Insurance coverage for chronic disease prevention & management (TBD)

\(^1\) Youth Risk Behavior Surveillance (YRBS); \(^2\) Behavioral Risk Factor Survey; \(^3\) WI Hospital data; \(^4\) WI Cancer Reporting System; \(^5\) Medicare Healthcare Data Reports; \(^6\) Survey of the Health of Wisconsin
## Top 10 Leading Causes of Death - 1900

<table>
<thead>
<tr>
<th>1900: Top 10 Leading Causes of Death</th>
<th>Rate/100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Pneumonia (all forms) and influenza</td>
<td>202</td>
</tr>
<tr>
<td>2 Tuberculosis (all forms)</td>
<td>194</td>
</tr>
<tr>
<td>3 Diarrhea, enteritis, and ulceration of the intestines</td>
<td>143</td>
</tr>
<tr>
<td>4 Diseases of the heart</td>
<td>137</td>
</tr>
<tr>
<td>5 Cerebrovascular (stroke)</td>
<td>107</td>
</tr>
<tr>
<td>6 Nephritis (all forms)</td>
<td>89</td>
</tr>
<tr>
<td>7 All accidents</td>
<td>72</td>
</tr>
<tr>
<td>8 Cancer and other malignant tumors</td>
<td>64</td>
</tr>
<tr>
<td>9 Senility</td>
<td>50</td>
</tr>
<tr>
<td>10 Diphtheria</td>
<td>40</td>
</tr>
</tbody>
</table>

### Categories:
- **Communicable**
- **Chronic**
- **Injury**
# Top 10 Leading Causes of Death - 2010

<table>
<thead>
<tr>
<th>Rank</th>
<th>Cause</th>
<th>Rate/100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Diseases of heart</td>
<td>179</td>
</tr>
<tr>
<td>2</td>
<td>Cancer</td>
<td>173</td>
</tr>
<tr>
<td>3</td>
<td>Lower respiratory</td>
<td>42</td>
</tr>
<tr>
<td>4</td>
<td>Cerebrovascular(stroke)</td>
<td>39</td>
</tr>
<tr>
<td>5</td>
<td>Accidents</td>
<td>37</td>
</tr>
<tr>
<td>6</td>
<td>Alzheimer’s</td>
<td>25</td>
</tr>
<tr>
<td>7</td>
<td>Diabetes</td>
<td>21</td>
</tr>
<tr>
<td>8</td>
<td>Chronic and unspecified nephritis</td>
<td>15</td>
</tr>
<tr>
<td>9</td>
<td>Influenza and pneumonia</td>
<td>15</td>
</tr>
<tr>
<td>10</td>
<td>Suicide</td>
<td>12</td>
</tr>
</tbody>
</table>

The causes are categorized into Chronic, Communicable, and Injury.
Framework for Selecting Evidence-Based Strategies
The Social Ecological Model (SEM)

Policy
- Formal or informal
- “Big P” or “small p”

Environment
- Organizational
- Community

Behavior
- Individual
- Interpersonal

Greatest Impact is When We Work Across all SEM Levels
Factors that Affect Health

- Socioeconomic Factors
  - Poverty, education, housing, inequality
- Changing the Context
  - to make individuals’ default decisions healthy
- Long-lasting Protective Interventions
- Clinical Interventions
- Counseling & Education

Examples
- Eat healthy, be physically active
- Rx for high blood pressure, high cholesterol, diabetes
- Immunizations, brief intervention, cessation treatment, colonoscopy
- Fluoridation, 0g trans fat, iodization, smoke-free laws, tobacco tax

Source: Centers for Disease Control and Prevention
Other Frames

- Health in All Policies Approach
- Social Determinants of Health
- Systems Approach
  - Multiple levels of SEM
  - Multiple settings; multiple strategies
  - Variety of influences and levers
  - Opportunities and challenges
  - Intended and unintended consequences
Maximizing Public Health Impact

Impact = Reach × Exposure × Potency

Focus on changing things that affect...

Many people
With frequent exposure
In a comprehensive way

SOURCE: National Center for Chronic Disease Prevention Division of Population Health
Maximizing Public Health Impact

- 50% healthy vending slots
- Ban on unhealthy foods in cafeteria
- Whole school reform
- Schools + healthy corner stores
- Walk to school day
- Walk to school year
- Safe Routes to School
- Safe Routes to School + Complete Streets

SOURCE: National Center for Chronic Disease Prevention Division of Population Health
Aligning Partners and Strategies for Health
National Prevention Strategy
HW2020 Partnership Model
Coordinated Chronic Disease Prevention & Health Promotion Four Key Domains

- Evidence-Based Practice and Environmental Approaches
- Health Systems Change
- Community-Clinical Linkages
- Surveillance and Epidemiology
Accelerating Progress in Obesity Prevention

- IOM Report released May 2012
- Goals
  - Integrating physical activity every day in every way
  - Making healthy foods available everywhere
  - Marketing what matters for a healthy life
  - Activating employers and health care professionals
  - Strengthening schools as the heart of health
Settings

- Early Care and Education
- Schools
- Community
- Worksites
- Healthcare
Early Care and Education (ECE)

- **Rationale for setting**
  - ½ of day spent in ECE setting
  - Very controlled environment
  - Can easily incorporate physical activity and nutrition into the day

- **Potential Reach/Impact**
  - Almost 170,000 children in regulated care
  - 72% of parents of children ≤6 years are working; young children are in care outside of their home an average of 30 hours/week
  - Multiple strategies could be implemented to increase dose

- **ECE**: Head Start, 4K, Group and Family Child Care Centers
Early Care and Education
State Level Work

- **Wisconsin Early Childhood Obesity Prevention Initiative (WECOPI)**
  - Statewide partnership to prevent obesity in 0-5 year olds
  - DHS, DPI, DCF, Early Childhood Organizations and Associations, Advocacy Organizations
  - Leveraged over $2.7 million in grants since 2009 to create resources, trainings, and pilot interventions for the ECE setting

- **YoungStar (Quality Rating Improvement System)**
  - Nutrition and physical activity criteria included

- **Physical Activity Commentary in Licensing**

- **Governor’s Early Childhood Advisory Council**
  - Childhood Obesity Project Team
Early Care and Education
State Level Work

- **Training & Resources for ECE Providers:**
  - Active Early: A Wisconsin guide for improving childhood fitness
  - Healthy Bites: A Wisconsin guide for improving childhood nutrition
  - 10 Steps to Breastfeeding Friendly Childcare
Early Care and Education
Local Level Work

- **Active Early Pilots**
  - Group and Family Child Care Centers piloting 120 minutes of physical activity (including teacher-led)

- **Healthy Bites/USDA Wellness Grant Pilots**
  - Regulated child care sites piloting voluntary nutrition standards for the foods and beverages served with meals and snacks
Early Care and Education
Key Strategies for Advancement

**Individual/Family**
- Provide ECE providers with parent engagement strategies/tools

**Organizational/Community**
- Increase access to healthy foods/beverages and physical activity opportunities
- Support breastfeeding in ECE
- Expand/continue statewide technical consultation to ECE providers

**Policy**
- Educate on current status of licensing standards supporting nutrition and physical activity
- Training requirements for ECE providers
- Strengthen licensing rules to improve nutrition & PA
- Add additional criteria to YoungStar
Schools

- Rationale for setting
  - ½ of day spent in school setting
  - Fairly controlled environment
  - Able to incorporate physical activity and nutrition into the school day and in transit to and from school

- Potential Reach/Impact
  - Almost 900,000 students
  - Multiple strategies could be implemented to increase dose
Schools
State Level Work

- Active Schools Project
- Farm to School
- Got Dirt? Garden Initiative
- Fresh Fruit and Vegetable Snack Program
- Technical assistance to community coalitions working with schools
- Development/dissemination of resources for school wellness policy revisions
- Community Transformation Grant (CTG)
Schools
Local Level Work

- Active Schools Project implementation
- Farm to School implementation
- School gardens
- Shared use of school facilities
- Safe Routes to School
- School Wellness Policy revision and implementation
Schools
Local Level Work

Active Schools Programs in 21 school districts
Schools
Local Level Work

- Comprehensive Farm to School programs in over 45 school districts

- 1,000 youth gardens started since 2005
Schools
Key Strategies for Advancement

**Individual/Family**
- Provide opportunities to develop knowledge and skills for healthy eating and active living
- Provide opportunities and support for families and social networks to engage in healthy eating and active living behaviors

**Organizational/Community**
- Support the development and enforcement of strong school wellness policies
- Strengthen school-community partnerships (e.g., School Health Advisory Councils)

**Policy**
- Educate leaders about ways to create healthier school environments (e.g., increase school meal reimbursement rates, strengthen PE requirements)
- Open Gym bill
- Healthy Hunger Free Kids Act
Community Environments - Nutrition

- **Rationale:** Wisconsin’s nutrition environments support and promote healthy eating and healthy weight

- **Nutrition Environments:** Food stores, restaurants, farmers’ markets, farm stands, gardens, community supported agriculture, and food pantries

- **Food Security:** access to sufficient and nutritious foods in socially acceptable ways to lead active and healthy lives

- **Bottom Line:** Supply and demand related to food supply are core issues
Community Environments - Nutrition

- Making healthier food available can reach everyone in the state, community or neighborhood

- Example of Potential Impact:
  - Restaurant purchases are 50% of household food expenditures and 30% of daily caloric intake
  - Average adult eats out of the home approximately 5.8 times per week
  - Adults who eat away from home, on average, eat an additional 130 calories per meal
Community Environments – Nutrition

State Level Work

- Statewide collection of Nutrition Environment Survey with Survey of Health of Wisconsin (SHOW)
- Access to healthier foods and beverages
  - Restaurant Resource
  - Grocery Store/Convenience Store Resource
  - Partnerships with WGA and WRA
- Access to fruits and vegetables
  - Got Access? Resource
- Community Transformation Grant
- Food System
  - State Food Policy Council
  - Wisconsin Local Food Network
  - Food Hubs
  - Understanding supply/demand issues
Community Environments – Nutrition

- Increasing community gardens
- Improving access to fruits and vegetables in food pantries
- Community Supported Agriculture farm shares reimbursed by health insurance
- Electronic Benefits Transfer (EBT) at farmers’ markets
- Establishing farmers’ markets
- Establishing food hubs
Community Environment - Nutrition
Key Strategies for Advancement

Individual/Family
- Social marketing campaign to promote healthier food choices (Demand)

Organizational/Community
- Increased access to healthier foods and beverages in communities
- Food Procurement Standards for Government
- Healthier children’s menus at restaurants

Policy
- Educate key decision makers on the need to assist farmers on local & regional food system development (Supply)
- Statewide food policy council
- Incentives for farmers to support distribution, storage, & procurement of local foods
- *Ending Hunger in Wisconsin* actions
Community Environments - Physical Activity

- **Rationale for setting**
  - Provide access for physical activity in the community

- **Potential Reach/Impact**
  - Supports initiatives occurring in other settings and provides opportunities for all citizens to be active
Community Environments – Physical Activity
State Level Work

- Active Community Environments (ACEs) resource kit
- “Ped & Pedal” Network
- Bike-Ped interest group
- Community Transformation Grants
Community Environments – Physical Activity
Local Level Work

- Walkability & bikeability assessment
- Street/sidewalk/path improvements
- Signage & mapping to increase visibility of safe walking & biking routes
- Complete Streets policy initiatives
Community Environments – Physical Activity
Local Level Work

Marathon County:
Increasing connectivity and signage to highlight walking & biking routes
Community Environment - Physical Activity
Key Strategies for Advancement

**Individual/Family**
- Provide opportunities to develop knowledge and skills for regular, safe physical activity (PA) (e.g., bike rodeos)

**Organizational/Community**
- Provide opportunities & support for families & social networks
- Allow public access to facilities for PA
- Increase safety and connectivity of walking and biking routes; improve safety and visual appeal of parks and other public spaces for PA

**Policy**
- Implement local Complete Streets ordinances
- Utilize local zoning laws to provide places for PA
Worksites

- Rationale for setting
  - ½ of day in worksite setting
  - Fairly controlled environment
  - Able to incorporate physical activity and nutrition into the work day and in transit to and from work
  - Return on investment (ROI) documented at ~$3 to $5 for each dollar invested in a wellness program

- Potential Reach/Impact
  - ~ 3 million workers
  - Multiple strategies can be implemented to increase dose
Worksites
State Level Work

- Nationally recognized Worksite Wellness Kit (used by 18 other states)
- 20+ workshop trainings reaching ~ 1000 trainers and/or worksites
- Web listing of regional trainers that do outreach on the kit
- Reach from survey of 15% of those trained projected to be 250,000 employees
- Website library of favorite initiatives
- Coordinated effort with WI Wellness Council
- 80 Governor’s Worksite Wellness Award winners
Worksites
Local Level Work

- Outreach training being done by local health departments, health insurance providers, healthcare organizations and YMCAs using the kit as part of their client services
- Increase interest on return of investment to modify healthcare costs and increase productivity
- Well City™ Initiatives
Worksites
Key Strategies for Advancement

Individual/Family
- Provide opportunities to develop knowledge and skills for regular, safe physical activity (PA) and good nutrition
- Provide opportunities & support for families & social networks to engage in healthy eating and active living behaviors (e.g., walking groups)

Organizational/Community
- Implement comprehensive worksite wellness programs to fit each worksite’s unique scenario
- Increase outreach trainers (health depts, health insurers, healthcare providers, YMCAs, etc.) to provide worksite wellness among their client services package

Policy
- Provide financial incentives (tax credits, insurance rebate, etc.) for having and/or participating in a wellness program
Healthcare

- **Rationale for setting**
  - Provides a management and treatment component to complement the prevention component
  - Provides an additional source for promoting prevention
  - Chronic Care Model

- **Potential Reach/Impact**
  - Healthcare systems are large employers
  - Community Benefit
  - Credible source of information in communities
Expanded Chronic Care Model

Community

Build Healthy Public Policy
Create Supportive Environments
Strengthen Community Action

Self-Management/Develop Personal Skills
Delivery System Design/Re-orient Health Services
Decision Support

Information Systems

Health System

Activated Community
Informed Activated Patient

Prepared Proactive Practice Team
Prepared Proactive Community Partners

Population Health Outcomes/Functional and Clinical Outcomes

Productive Interactions and Relationships

SOURCE: National Center for Chronic Disease Prevention
Division of Population Health
Healthcare
State Level Work

- Community Transformation Grant
- Chronic Disease Programs
  - Living Well With Chronic Conditions
  - Guidelines
  - Federally Qualified Health Care Centers QI Project
  - HMO Collaborative
Healthcare
Local Level Work

- Maternity care practices to support breastfeeding
- Coordinate Community Health Improvement Planning Process (CHIPP) with Local Health Departments
- Part of local coalitions and leadership teams for planning, implementation and evaluation
## Healthcare
### Key Strategies for Advancement

<table>
<thead>
<tr>
<th>Individual/Family</th>
<th>Organizational/Community</th>
<th>Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>➢ Provide information and resources for self-management</td>
<td>➢ Link healthcare to community initiatives to support self-management</td>
<td>➢ Ensure coverage and access to prevention, screening, diagnosis and treatment of obesity and chronic conditions</td>
</tr>
<tr>
<td>➢ Support exclusive breastfeeding</td>
<td>➢ Screening according to guidelines</td>
<td></td>
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<tr>
<td></td>
<td>➢ Quality improvement initiatives</td>
<td></td>
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<tr>
<td></td>
<td>➢ Baby Friendly Maternity Care Practices</td>
<td></td>
</tr>
<tr>
<td></td>
<td>➢ Community Benefit</td>
<td></td>
</tr>
</tbody>
</table>
Wisconsin Community Stories

- **La Crosse County:** A Community Collaborates for Health
- **Wood County Get Active**
Maintaining and Advancing the Movement
Connecting the Dots

Finding Common Ground
- Settings
- Sectors
- Partners
- Resources
- Health in All Policies Approach
Maintaining and Advancing the Movement

- The Importance of Infrastructure
  - Public Health Role
- Partners
- Stable and Flexible Funding
- Reducing Disparities
- Communication & Media
- Surveillance and Epidemiology
- Evidence-based Strategies w/Impact
Nutrition, Physical Activity & Obesity (NPAO) Coalitions in WI: Results from the 2011 Annual Coalition Survey

Based on completion of the 2011 annual coalition survey
All white counties have no known coalition
May 2012
Who’s at the Table?

- Public Health
- Schools
- YMCAs
- Non profit organization
- Businesses
- Hospitals
- Elected officials
- School superintendents
- Mayors
- Tribal leaders
- Local aging centers/senior centers

- Recreation and Park Departments
- State Health Departments
- City Planners
- Redevelopment agencies
- Transportation agencies
- Faith based organizations
- Philanthropic leaders
- Community leaders
- Health Plans
- Foundations
- Many more…

SOURCE: National Center for Chronic Disease Prevention
Division of Population Health
Making Healthy Choices Easier

Individual
- Culture
- Skills
- Knowledge
- Time

Environment
- Affordability
- Price/Economic
- Access
- Policy
- Advertising

Breastfeeding, Healthy Eating & Physical Activity
Thank You!

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Nashville Takes Action: A City Battles Obesity
Discussion

General Q & A
Facilitated Discussion