Childhood Obesity in NH
What are we doing about it?

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New Hampshire Department of Health and Human Services
Division of Public Health Services
Obesity in NH children, Is it a problem?

• How do we know?
• What do we know?
• For whom will this be a problem?
• What is the policy makers perception?
• What is the public’s perception?
What is DHHS

– Umbrella organization
  • Services for special needs populations
  • Insurance company (Medicaid)
  • “Keeper” of a health services infrastructure safety net
  • Population based policies
Epidemiology of Overweight and Obesity
New Hampshire Statistics
<table>
<thead>
<tr>
<th>Fast in Fat 2008 Key Facts</th>
<th>New Hampshire</th>
<th>Rank</th>
<th>U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Obesity Rates, % Adults (2005-07 average)</td>
<td>23.6% (+/- 0.8)</td>
<td>35</td>
<td>N/A</td>
</tr>
<tr>
<td>Hypertension Rates, % Adults (2003-07 average)</td>
<td>24.9% (+/- 0.7)</td>
<td>43</td>
<td>N/A</td>
</tr>
<tr>
<td>Diabetes Rates, % Adults (2005-07 average)</td>
<td>7.0% (+/- 0.4)</td>
<td>43</td>
<td>N/A</td>
</tr>
<tr>
<td>Adult Physical Inactivity: (2005-07 average)</td>
<td>20.1% (+/- 0.7)</td>
<td>35</td>
<td>N/A</td>
</tr>
<tr>
<td>Obesity Rates, % High School Students (2007)</td>
<td>11.7% (+/- 2.0)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Obesity Rates, % Children Age 10-17 (2004)</td>
<td>12.9%</td>
<td>33</td>
<td>14.80%</td>
</tr>
<tr>
<td>Medical Costs of Obesity, Per Capita (2003)</td>
<td>$235</td>
<td>36</td>
<td>$258</td>
</tr>
</tbody>
</table>

*Note: For rankings, 1 = Worst Health Outcome, 1 = Highest Rates of Obesity; Highest Rates of Hypertension; Highest Rates of Diabetes; Highest Rates of Physical Inactivity; Highest Number of Obese High School Students; Highest Number of Obese Children Age

^Note: BRFSS data is not an accurate source of national-level data.

^^Note: YBRSS data is not an accurate source of national-level data.
NH Data Sources

Weight Status

- Pediatric Nutrition Surveillance System
- Head Start Oral Health Healthy Weight Survey
- National Survey of Children's Health
- Youth Risk Behavior Survey
- Behavioral Risk Factor Surveillance System (adults)
Overweight, Children Aged 2-5 Years
PedNSS, 1990-2007
New Hampshire

Source: NH WIC
Overweight, Children Aged 2-5 Years, PedNSS, 2005-2007, NH, by County

Source: NH WIC
NH Head Start, 2007-2008
Head Start Oral Health Healthy Weight Survey

- 629 children aged 3-5 (310 males / 319 females)
  - **Underweight** (<5th percentile)
    - 2.1% (CI = 1.2-2.9%)
  - **Normal weight** (5th to <85th percentile)
    - 61.4% (CI = 58.5-64.2%)
  - **Overweight** (85th to <95th percentile)
    - 18.4% (CI = 16.5-20.4%)
  - **Obese** (≥95th percentile)
    - 18.1% (CI = 16.1-20.2%)
NSCH, 2003 for NH

Weight status, ages 10-17, based on BMI-for-age

• Sample size for NH weight status: 942
  – Underweight 3.3%
  – Normal weight 69.4%
  – Overweight \((\geq 85 - <95)\) 14.4%
  – Obese \((\geq 95)\) 12.9%

Source: National Survey of Children’s Health

9th to 12th graders

<table>
<thead>
<tr>
<th></th>
<th>2003</th>
<th>2005</th>
<th>2007</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overweight</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(&gt;85% \text{ -}&lt;95%\text{tile})</td>
<td>13.4%</td>
<td>13.2%</td>
<td>14.4%</td>
</tr>
<tr>
<td><strong>Obese</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(&gt;95%\text{tile})</td>
<td>9.9%</td>
<td>11.4%</td>
<td>11.7%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>23.3%</td>
<td>24.6%</td>
<td>26.1%</td>
</tr>
</tbody>
</table>
## YRBS: 2007 by Gender

<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Obese &gt;95% tile</strong></td>
<td>15.9%</td>
<td>7.2%</td>
<td>11.7%</td>
</tr>
<tr>
<td><strong>Overweight &gt;85% - &lt;95%tile</strong></td>
<td>15.7%</td>
<td>13.1%</td>
<td>14.4%</td>
</tr>
</tbody>
</table>

New Hampshire Department of Health and Human Services
Division of Public Health Services
Prevalence of Overweight and Obesity among Adults 18+, BRFSS, 1990-2007

Percent

NH
USA

New Hampshire Department of Health and Human Services
Division of Public Health Services
Prevalence of Overweight and Obesity
Adults 18 Years Old and Older


Overweight & Obesity, by Gender
NH BRFSS, 2007

%

Overweight

Obese

Male
Female

New Hampshire Department of Health and Human Services
Division of Public Health Services
Obese Males & Females, by Age Group, NH BRFSS, 2007
Overweight & Obese Males, by Income, NH BRFSS, 2007

- 15,000-24,999
- 25,000-34,999
- 35,000-49,999
- 50,000-74,999
- 75,000+

% Overweight & Obese

New Hampshire Department of Health and Human Services
Division of Public Health Services
Overweight & Obesity, by Race and Ethnicity, NH
BRFSS, 2003-2006

* Estimates not reported, statistically unreliable
Weight Status
Versus General Health Status

Percentage of those reporting excellent general health by BMI categories, New Hampshire, BRFSS, 2005
Weight Status
Versus Poor Physical or Mental Health Status

Percentage of those reporting days of poor physical or mental health that kept them from doing their usual activities at least 5 days during past 30 days, BRFSS, 2005
Weight Status  
Versus Very Satisfied with Life

Percentage of those very satisfied with life, by BMI categories
New Hampshire, BRFSS, 2005

- Neither overweight nor obese: [Percentage]
- Overweight: [Percentage]
- Obese: [Percentage]

New Hampshire Department of Health and Human Services  
Division of Public Health Services
What should Public Health do?
PUBLIC POLICY
   national, state, local laws
COMMUNITY
   relationships among organizations
ORGANIZATIONAL
   organizations, social institutions
INTERPERSONAL
   family, friends, social networks
INDIVIDUAL
   knowledge, attitudes, skills
We can’t do it all.

We need to recruit the doers.
Broad considerations for Enhancing Evidence–Based Decision making in Public Health

Modified from Muir Gray

- Scientific Evidence
- Population needs and values
- Resources
Legislative Component

• Commission on childhood obesity
  – Health
  – Education
  – School Nutrition
  – Out of School activities/ after-school/Recreation
DHHS Component

- Health care access
  - Medicaid
  - Community Health centers
- TANF/ Food stamps
- Functional needs population
- Program Integration
  - Community Health centers
  - WIC
  - Food supplements
- Data gathering, analysis and dissemination
DHHS Role in HEAL

• Serve on HEAL Committees
  – Steering Committee
  – Communication Committee
  – Evaluation Committee
  – Practice Committee
• Evaluate HEAL Plan Implementation
• Technical Assistance to Community Grant Project Awardees
• Technical Assistance to Other Communities
CDC Cooperative Agreement

Background

- **In 1999**, CDC’s Nutrition, Physical Activity and Obesity Program (NPAO) was originally funded to support six states.
- **By 2004**, 28 states were funded.
- **Long-term success** of NPAO-funded state programs is based on their ability to:
  - Leverage resources
  - **Coordinate interventions with multiple partners**
CDC NPAO Program

Goal & Objectives

• **Goal** To prevent and control obesity and other chronic diseases through healthy eating and physical activity.

• **Outcome Objectives**
  – Decrease prevalence of obesity.
  – Increase physical activity.
  – Improve dietary behaviors related to the population burden of obesity and chronic disease.
CDC Cooperative Agreement

- $388,000/year x 5 years
- Annual workplan required
- Utilizing evidence-based intervention strategies and promising practices
  - State Nutrition, Physical Activity and Obesity Program Technical Assistance Manual
Target Areas

- Increase physical activity.
- Decrease television viewing.
- Increase the consumption of fruits and vegetables.
- Decrease the consumption of sugar-sweetened beverages.
- Decrease the consumption of high-energy-dense (high-calorie-dense) foods.
- Increase breastfeeding initiation, exclusivity, and duration.
Target Area

Increase Physical Activity

• 54% NH adults engaged in physical activity for 30 minutes or more five or more times per week. (2007 BRFSS)

• 46.9% NH high school students were physically active for a total of 60 minutes per day on five or more of the past seven days. (2007 YRBS)
**BRFSS FV Module**

**Planned Revisions**

- **Current BRFSS FV Module** has been implemented since 1996
- **YRBS** has the same wording
- **BRFSS FV Module Revisions for 2011**
  - Discussions underway
  - Same number of questions (six)
  - Change focus of questions to match the *Dietary Guidelines for Americans, 2005*
    - Dark green vegetables
    - Orange vegetables
    - Legumes (dry beans)
Fruit and Veggie Quantity Recipe Cookbook

31 Tasty Fruit and Vegetable Based Recipes

- For use with School Lunch and Breakfast Programs; camps, etc.
- Recipes serve 25, 50, 100; USDA recipe format
- Low in fat, saturated fat, sodium, added sugars; no trans fat
- [http://www.dhhs.nh.gov/DHHS/NHP](http://www.dhhs.nh.gov/DHHS/NHP)
Year 1 Accomplishments

- Develop and maintain program infrastructure
  - Created four (4) position in DHHS

- Participation in HEAL committees
  - Steering Committee
  - Communication Committee
  - Evaluation Committee
  - Practice Committee (focusing on worksite wellness)
  - Advocacy Committee -- NH Commission on Prevention of Childhood Obesity to identify legislative and policy changes that will support the reduction of childhood overweight.
Year 1 Accomplishments (continued)

- **Community Grants**
  - Participation on the Selection Committee
  - Support through funding (in process)
  - **Provide technical assistance**
Year 2 Plans

- Develop and maintain program infrastructure
- Develop and use an implementation plan
- Develop and use a sustainability plan by Year 5
- Develop and use a surveillance plan and surveillance reporting plan
- Develop an evaluation plan for the HEAL Plan
NH Fit WIC Project
Obesity Prevention Starts at an Early Age

Fit WIC Goals

• Increase physical activity
• Decrease sedentary behaviors
• Slow the upward progression of BMI of 3-4 year-old NH WIC preschoolers
NH Fit WIC Project
Fit WIC Project Implementation Materials

New Hampshire Department of Health and Human Services
Division of Public Health Services
Among respondents who have used the Fit WIC materials 3 or more times in the last two weeks with their child, 60% have played at least one game described in the book with their child. 44% who have used the materials one or two times in the last two weeks played at least one game. These results suggest that the more a WIC parent uses the Fit WIC materials, the more likely they are to play the games described in the materials.
Respondents who use the Fit WIC materials are more likely to find their participation in the Fit WIC program helpful in helping them to learn about the importance of physical activity in keeping their child healthy.
NH Fit WIC Project
A Promising Practice

Preliminary data show Fit WIC to be successful at reaching families with preschoolers with information about physical activity and health. Fit WIC also helps parents understand the important role of physical activity and play for young children in preventing childhood overweight.
Technical Assistance

NH Department of Health and Human Services
Division of Public Health Services
Obesity Prevention Program
603-271-4551