It’s More than the Sum of the Parts: Taking a Holistic Approach to Chronic Disease Prevention—

Examples from Tobacco Control and Obesity Prevention Policymaking

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No Disclosures to make
Presentation Overview

• Brief overview of tobacco-related disease and prevalence
• Highlight policy/environmental strategies designed to reduce tobacco use
• Brief overview of obesity prevalence
• Highlight policy strategies designed to reduce obesity prevalence
TOBACCO TRENDS AND POLICY/ENVIRONMENTAL STRATEGIES
Cigarette Smoking Prevalence and Policies in the 50 States:
An Era of Change
Smoking and Tobacco Smoke Pollution Damage Every Part of the Body

Smoking CANCERS
- Larynx
- Oropharynx
- Oesophagus
- Trachea, bronchus or lung
- Acute myeloid leukemia
- Stomach
- Pancreas
- Kidney and Ureter
- Colon*
- Cervix
- Bladder

Smoking CHRONIC DISEASES
- Stroke
- Blindness, Cataracts
- Periodontitis
- Aortic aneurysm
- Coronary heart disease
- Pneumonia
- Atherosclerotic peripheral vascular disease
- Chronic obstructive pulmonary disease (COPD), asthma, and other respiratory effects
- Hip fractures
- Reproductive effects in women (including reduced fertility)

Tobacco Smoke Pollution CHILDREN
- Brain tumours*
- Middle ear disease
- Lymphoma*
- Respiratory symptoms, Impaired lung function
- Asthma*
- Sudden Infant Death Syndrome (SIDS)
- Leukemia*
- Lower respiratory illness

Tobacco Smoke Pollution ADULTS
- Stroke*
- Nasal irritation, Nasal sinus cancer*
- Breast cancer*
- Coronary heart disease
- Lung cancer
- Atherosclerosis*
- Chronic obstructive pulmonary disease (COPD)*, Chronic respiratory symptoms*, Asthma*, Impaired lung function*
- Reproductive effects in women: Low birth weight; Pre-term delivery*

Source: Adapted from reference 9.

* Evidence of causation: suggestive
Evidence of causation: sufficient
Current Cigarette Smoking (%) Among Adults – 2006/07

Legend
Percentage of persons 18 years old who currently smoke either daily or occasionally
- **12.4 – 16.9**
- **17.0 – 19.4**
- **19.5 – 21.9**
- **22.0 – 26.2**

Note: Estimates represent the percentage of persons ≥ 18 years old who have ever smoked ≥ 100 lifetime cigarettes and currently smoke either daily or occasionally or on some days.
After a Systematic Review of the Scientific Literature, the Task Force on Community Preventive Services Recommends the Following Interventions to Reduce Tobacco Use and Protect Nonsmokers

<table>
<thead>
<tr>
<th>Intervention</th>
<th>Prevent Initiation</th>
<th>Promote Cessation</th>
<th>Protect Nonsmokers</th>
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</thead>
<tbody>
<tr>
<td>Federal, state, and local efforts to increase tobacco product excise taxes to raise tobacco prices</td>
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<td>The funding and implementation of long-term, high-intensity mass media campaigns using paid broadcast times and media messages developed through formative research.</td>
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<tr>
<td>Combinations of efforts to mobilize communities to identify and reduce the commercial availability of tobacco products to youth.</td>
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<tr>
<td>Proactive telephone cessation support services (quit lines).</td>
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<tr>
<td>Reduced or eliminated co-payments for effective cessation therapies.</td>
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<tr>
<td>Reminder systems for healthcare providers.</td>
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<tr>
<td>Clean indoor air legislation prohibiting tobacco use in indoor public and private workplaces.</td>
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</tbody>
</table>

Source: Fielding et al, 2005
States Providing Strong Protection from Tobacco Smoke Pollution in Private Worksites, Restaurants and/or Bars – as of April 30, 2009

Legend:
- Green: No ban
- Light Green: Private Worksite ban
- Dark Green: Restaurant ban
- Light Green: Private Worksite & Restaurant ban
- Light Green: Restaurants & Bars ban
- White: Private Worksites, Restaurants & Bars ban

Source: The MapaTech Corporation.
States that Preempt Local Jurisdictions from Passing Stronger Smoke-free Air Laws – as of September 30, 2008

Legend
- State law preempts local smoke-free air laws
- No preemption of local smoke-free air laws

Source: The MayaTech Corporation.
Preemption prevents local jurisdictions from providing stronger protection to residents and visitors in various locations.
Major Smoke-free Air Legislation in the 50 States and the District of Columbia – 1991-2008

Source: The MayaTech Corporation.
Notes: data are for effective laws through 9/30/2008.
Smokers’ Receipt of Advice to Quit from a Physician — 2006/2007

Note: Estimates represent the percentage of smokers ≥ 18 years old who visited a physician during the previous 12 months who reported that they were advised to quit by a physician.
Provision of Tobacco Dependence Treatment Services to Medicaid Recipients – 2006

Legend
Treatment Provided
- None
- Counseling only
- Medications only (NRT, Varenicline, or Bupropion HCl)
- Medications & Counseling

*Coverage for pregnant women only. C* = Counseling for pregnant women only.
Source: Reference 40.
Medicaid Coverage of Cessation Aids in the 50 States and DC: 1990-2006

Source: Reference 40.
Note: Iowa is included beginning in 2003 when cessation coverage for pregnant women was first reported. Iowa’s exact start date is unknown (40).
Establishment of Quitline Services in the 50 States and DC: 1991-2006

Source: North American Quitline Consortium.
States Offering Free/Discounted Cessation Medication to Eligible Smokers – as of September 30, 2008

Legend
Treatment Provided

- No
- Yes

Source: North America Quitline Consortium and University at Buffalo School of Public Health and Health Professions.
Implications of Tobacco Control Policymaking for Obesity Prevention

• Policy and environmental strategies across all levels of government have been effective at lowering tobacco consumption
• Tobacco control has largely been bottom-up policy making
• Prime examples of policy diffusion
• Core policy strategies to date focus on increasing price and reducing ability to smoke in public places combined with treatment options
  – New FDA regulation will add new frontier regarding advertising/marketing/labeling
• Primary challenge: Single industry—tobacco
OBESITY TRENDS AND POLICY STRATEGIES
Obesity Trends* Among U.S. Adults

(*BMI ≥30, or about 30 lbs. overweight for 5’4” person)
Physical Activity Trends in the U.S., 2007

The map illustrates the physical activity trends across the U.S. for the year 2007. Each state is color-coded based on the percentage of its population meeting physical activity guidelines:

- **Blue**: > 55%
- **Dark Blue**: 50 - 54.9%
- **Medium Blue**: 45 - 49.9%
- **Orange**: > 40 - 44.9%
- **Light Orange**: > 40 - 44.9%
- **Red**: < 40%
- **Pink**: < 40%
- **White**: No Data

The map indicates that some states have a higher percentage of their population meeting physical activity guidelines, while others have lower percentages. The data is visualized to highlight regional differences in physical activity trends.
Obesity-related Policies Address both sides of the Energy Balance Equation

Food

Physical Activity
**Obesity Policy/Environmental Strategies**

**State and National**
- State taxation of beverages, snack foods, and restaurant food
- State level policies and legislation around Safe Routes to School

**Local and Community**
- Presence and content of vending machines at school
- Availability and accessibility of healthy food and beverages in stores and restaurants
- Marketing of food/beverages at school

**School and Organizational**
- Height and weight, physical activity, and measures of healthy eating
- Availability of various foods/beverages in the school environment
- Implementation of school district wellness policies
- Awareness and implementation of Alliance for a Healthier Generation Guidelines
- Characteristics of the built environment that impact on physical activity

**Individual and Household**
- Frequency and length of physical education and recess
- Household food expenditures
- Information on healthy eating and physical activity opportunities from key informant interviews

**Market-level**
- National food and beverage television advertising
- Market-level PSAs related to healthy eating, physical activity, and obesity

**Federal and State level**
- Federal and state policies related to school district wellness policies
- State policies related to healthy eating and physical activity

**School district**
- State level policies addressing the built environment
- Comprehensive school district wellness policies
- Comprehensiveness of school district wellness policies

**State level**
- Federal and state policies related to school district wellness policies
- State policies related to healthy eating and physical activity

**National**
- National food and beverage television advertising
- Local zoning codes, regulations, and ordinances that can impact on healthy eating and physical activity

**Awareness and implementation of Alliance for a Healthier Generation Guidelines**
- Implementation of school district wellness policies
- Presence and content of vending machines at school
- Frequency and length of physical education and recess
State and Local Menu Labeling Policies

*Superceded by state law.

Source: Center for Science in the Public Interest
Selected Physical Activity-related Topics Addressed in Public Policies

- Policies affecting the built environment
  - Growth management
  - Smart Growth
  - Zoning laws/subdivision ordinances
    - Code reform efforts
    - Design standards
- Master planning
  - Bike plans, trail plans, open space/parks, recreation plans, etc.
Selected Built Environment-related Policy Issues

- Traditional, *Euclidean*, zoning
  - Focus on use and density
    - e.g., Residential zone *only for* residential use
  - Does not support mixed-use

- Design standards/guidelines
  - Street connectivity/networks vs. cul-de-sacs and lack of connectivity to parks/trails
Zoning Code Reforms

Source: Talen, 2006 (Adapted to add in vehicular/pedestrian orientation)
Local Government Form-Based Codes

Source: Placemakers, 2009
Selected School-related Public Policies

• Nutrition-related policies
  – Nutrition education, school meals, competitive foods

• Physical activity-related policies
  – Physical education, physical activity, recess, safe routes to school

• Federal wellness policy requirement (P.L. 108-265, Sec. 204)
  – District wellness policies
20 States Require BMI or Other Weight-Related Assessments for Children and Adolescents

Map Legend
- Orange: State Law Requiring Assessment
- Gray: No State Law Requiring Assessment

27 States Have Nutritional Standards for Competitive Foods


State SRTS Program Laws and Other SRTS-Related Laws
(As of January 1, 2009)

Source: The MayaTech Corporation for the Bridging the Gap Program, UIC
Local Wellness Policies—Nationwide Evaluation

- Executive Summary, Monograph and backup data available at:
  - www.bridgingthegapresearch.org
Data reflect policies in place by the first day of the 2006–07 or 2007–08 school year. Due to rounding, some bars may not sum to exactly 100. Exact numbers are available at www.bridgingthegapresearch.org.

Source: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago, 2009.
Most District Physical Activity (PA) Policies are Relatively Weak

% Students in Districts with Policy, SY 07-08

- No policy
- Weak policy
- Strong policy

E=Elem, M=Middle, H=High

FW: Goals for PA
PA for every grade level
PA opps. (breaks) during day
Not using PA as punishment
Daily recess
...and Most Address Physical Education (PE) but the Provisions also are Weak

% Students in Districts with Policy, SY 07-08

- No policy
- Weak policy
- Strong policy

E = Elem, M = Middle, H = High

- PE* Addressed
- Mins PE/week NASPE std
- PE teaches lifelong skills
- PE devotes 50% time to MVPA
- Req. PE Taught by Auth. PE Teacher
Obesity Policymaking: Status and Opportunities

- Policy and environmental strategies seen as principal interventions early on
- Policy change rapidly diffusing across all levels of government
  - Congress much more active role than in tobacco control
- Primary challenges
  - Multiple industries (food, beverage, restaurant, agriculture)
  - Food/beverages needed to live (unlike tobacco)
  - Do not face the illegalities like with tobacco and youth
- Need time to understand true impact of policy strategies on system, community and individual behavior/attitudinal changes
For more information:

www.bridgingthegapresearch.org

www.impacteen.org

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