

Understanding Policy, Systems, and Environmental Change to Improve Health

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Institute of Medicine Quote

“It is unreasonable to expect that people will change their behavior easily when so many forces in the social, cultural, and physical environment conspire against such change.”

-Smedly and Syme (2000)



What is policy change?

- **Policy** interventions may be a law, ordinance, resolution, mandate, regulation, or rule (both formal and informal).
- Example: Organizational policies that provide time off during work hours for physical activity.





What is systems change?

- **Systems** interventions are changes that impact all elements of an organization, institution, or system.
- Types of systems include: school, transportation, parks and recreation, etc.



What is environmental change?

- Environmental interventions involve physical or material changes to the economic, social, or physical environment.
- Example: Incorporating sidewalks, paths, and recreation areas into community design.





Spectrum of Prevention



LEVEL OF SPECTRUM	DEFINITION OF LEVEL
6. Influencing Policy and Legislation	Developing strategies to change laws and policies to influence outcomes
5. Changing Organizational Practices	Adopting regulations and shaping norms to improve health and safety
4. Fostering Coalitions and Networks	Convening groups and individuals for broader goals and greater impact
3. Educating Providers	Informing providers who will transmit skills and knowledge to others
2. Promoting Community Education	Reaching groups of people with information and resources to promote health and safety
1. Strengthening Individual Knowledge and Skills	Enhancing an individual's capability of preventing injury or illness and promoting safety



Moving Upstream - Story

- *While walking along the banks of a river, a passerby notices that someone in the water is drowning. After pulling the person ashore, the rescuer notices another person in the river in need of help. Before long...*



Importance of PSE Change

- Health problems are influenced by societal policies and environments that in some way either sustain behaviors or fail to foster healthier choices
- Where you live affects how you live
- Major health problems will not be solved solely by individual actions and choices
- By moving upstream to address causes and improving environments where we live, work, learn, play, and receive health care, we can prevent many people from becoming chronically ill



Programs for Individual Behavior Change vs. PSE Change

- Programs are:
 - Activities, individual or group instruction, curricula, counseling, and training
 - Services targeted to individuals that teach behavioral skills
- Personal choices are made in context of larger environment
- Many health and social problems are related to conditions outside the individual's control
- Recently there is a growing sense of importance of broader societal trends and policies that affect behaviors
- While programs can lead to behavior changes in individuals and/or communities during course of programs, unless scaled up and instituted through formal and informal PSE changes, programs may not be sustainable



Events/Programs vs. Policy Change

Characteristics of Events/Programs

- One time
- Additive: often results in only short-term behavior
- Individual level
- Not part of ongoing plan
- Short term
- Non-sustaining

Characteristics of PSE Change

- Ongoing
- Foundational: often produces behavior change over time
- Policy level
- Part of an ongoing plan
- Long term
- Sustaining



Examples from Schools

Programs/Events	Policy, Systems, and Environmental Change
Celebrate National Nutrition Month	➡ Add fruits & vegetables to a la carte
Host a Family Fitness Night	➡ Make school athletic facilities regularly available to families
Participate in Walk to School Day	➡ Establish a Safe Routes to School Program
Provide healthy snacks or breakfast	➡ Adopt a Healthy Food & Beverage Policy
Participate in Kick Butts Day	➡ Establish a tobacco-free school taskforce
Provide health screenings for staff	➡ Establish a building-sponsored wellness team



A Comprehensive Approach

- PSE supported by:
 - Assessment and Evaluation
 - Community Engagement
 - Individual and Community Education
 - Skill building
 - Programs (as appropriate)
 - Promotion
 - Enforcement



Catalysts for PSE Change

- Add-on or extension of previous efforts
- Existence of compelling data to support change
- Change in environment/attitudes as a result of another policy
- Peer/constituent pressure for change
- Seed money/funding available to support initiative
- A group, or organization, and/or committed individual on a mission to effect a change they believe strongly in



Example of PSE Change: Community Fluoridation of Water

- Began in 1945 and is safe and cost-effective policy to prevent tooth decay for more than 184 million people in the United States (CDC 2009).
- Helps reduce dental health disparities in communities of low socioeconomic status with disproportionately higher burden of dental carries and minimal access to dental care services (MMWR 1999).
- Studies show fluoridation is cost-effective and results in cost savings (Griffin et al. 2001)
 - Reduction in costs of fillings greatly exceeds cost of fluoridation
 - Average cost savings is \$15.95/person/year to \$18.62/person/year

Example of PSE Change: Tobacco Free Worksites

- Most states have clean indoor air policies protecting all workers from secondhand smoke.
- First year of making all workplaces smoke free would (Ong & Glantz 2004):
 - Created 1.3 million new quitters
 - Prevented over 950 million cigarette packs to be sold annually
 - Saved \$279 million in direct medical costs annually

Example of PSE Change: Seatbelt Laws

- 1971, federal government set minimum standards for child safety seats and restraint systems to reduce the number of children killed or injured in car accidents (GHSA, 2009).
- In 2006 (NHTSA 2009): :
 - Child restraints saved 425 children under the age of 5
 - Seat belts saved 15,383 lives for those over 4 years old
- Overall, use of seat belts saved society \$585 billion in medical care, lost productivity, and other injury-related economic costs since 1975 (NHTSA 2008).



SHIP Menu of Interventions

- Address at least one SHIP risk factor (tobacco, physical activity, nutrition, or all three);
- Occur in at least one SHIP setting (school, community, worksite or health care);
- Are population-based versus individual-based;
- Emphasize prevention versus individual treatment;
- Address policy, systems, or environmental change;
- Are evidence-based or practice-based; and
- Have associated evaluation outcomes.

Definition of “Evidence-Based” Interventions

Have demonstrated effectiveness based on the principles of scientific evidence, including systematic uses of data and information systems, and appropriate use of behavioral science theory in order to explicitly demonstrate effectiveness.

Importance of Reporting and Evaluation

- Showcases grantee progress and strength
- Identifies areas where modification is needed
- Highlights areas for technical assistance
- Helps grantees “keep the end in mind”
- Builds grantees’ capacity to do PSE work
- Provides rationale and evidence for sustained funding



Lessons Learned

- Perseverance
- Flexibility
- PSE change does change behavior
- Ongoing, purposeful communication
- Champions
- Anticipate opposition and be fully prepared for it
- Skills required for PSE change work are different than required for program development
- Strong leadership on a day-to-day basis
- Developing arguments from/with a business perspective
- Identifying who can make PSE change
- Feedback to decision makers and community on results of PSE change



Importance of Partnership

Can this work be accomplished without partnerships? **No!**

Research shows the importance of:

- Public-private partnerships for policy change success.
- Embedding targeted policy and environmental changes in broader community initiatives whenever possible.
- Continually engaging and interacting with broader community.

QUESTIONS?

SHIP Website:

<http://www.health.state.mn.us/healthreform/ship.html>

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