

Realizing Public Health Advances Through Policy Change

There are many examples of national, State, and local policies that have had a positive and significant outcome on the public's wellbeing and safety. For example, the first generation of public health advances was won with a combination of public policy and service delivery innovations, such as developments in the areas of sanitation and nutrition. Sanitation improvements resulted in cities having sewer systems and clean water. Early food fortification programs eradicated once-common nutrient deficiency diseases such as rickets and pellagra (caused by vitamin D and riboflavin deficiencies, respectively). Other examples of the effects of policy change on health are described below.

Diet, Disease, and Food Labeling— Making Informed Food Choices

Problem: Diet contributes to almost every major chronic disease plaguing Americans, including heart disease, cancer, osteoporosis, diabetes, and obesity. Americans were in the dark about how to choose healthier diets because most food products did not contain a food label disclosing the nutrition content of the product.

Regulatory Solution: The National Food Labeling and Education Act, enacted in 1990, mandated that all FDA-regulated products carry nutrition labels by 1994. The law enabled the public to make informed food choices and also created an incentive to food manufacturers to introduce healthier versions of traditional foods.

Since the law's enactment, surveys show the following impacts:

Impact on Consumers.

- More than 65 percent of consumers regularly refer to the nutrition label the first time they buy a food.
- Thirty percent of consumers have either started or stopped buying a particular product because of what they've read on the label.
- Consumers who read the nutrition label are more likely to consume a lower percentage of fat in their diets compared with consumers who do not read the label, according to the National Cancer Institute.

Impact on Food Manufacturers

- More than 470 new reduced-fat products hit the market shelves within a year of the law's enactment.
- The percentage of market share for reduced-fat products including cookies, cheese, crackers, peanut butter, and corn chips rose significantly (in some cases more than doubling or tripling in one quarter), showing that consumers wanted to buy lower fat products.

Environmental changes can have a considerable impact on a community's health and economic well-being. Here's an example:

Creating Safer, Heart-Healthy Communities—the New Urbanism

Problem: Port Royal, South Carolina, was a dying rural town with a population under 3,000. The town needed a face lift, new vitality, a way to survive.

Solution: In 1994, the new town manager, John Perry, brought in a town planning company to establish a master plan to redesign the town. This piqued the interest of many, including developers seeking partnership opportunities to create an aesthetically pleasing, heart-healthy community where people could engage in some physical activity in the process of performing their day-to-day activities involving visits to the post office, school, shops, fine arts building, and town hall. Each of these

sites are now situated 1,000 feet apart from one another so that the average walker can move from site to site within the space of 5 minutes.

Perry also oversaw the development of walking paths and trails throughout the town that included park benches for resting and street lamps for security reasons. Half-mile markers along the paths tell walkers how far they've come and give them incentive to continue on.

Says Perry, "the more you make a community walkable, the safer you make the streetscape, the more attention you pay to exterior design and public space, the more you bring people out of the house. Promoting heart-healthy activities is a byproduct of what a town is all about."

Impact: Although the health impact of Port Royal's new urbanism has not been measured yet, more people are seen walking than driving, the town's population has substantially increased from 2,990 to nearly 5,000, and the town's assessed value has almost doubled. Further, Port Royal's elementary school students are learning the importance of physical activity in preventing heart disease and stroke. They hold parades and promote walking, and every child is provided with the opportunity to learn swimming techniques at the nearby YMCA before leaving school. This school, by the way, was facing the threat of closure due to a paucity of students before the town's renaissance began.

For more information, call (843) 986-2205.

School curriculum changes can have a revolutionary impact on students, parents, and teachers. Here's an example.

Getting Teens Heart Healthy for Life

Problem: Childhood obesity is a significant problem in the United States. Kids are less active than ever before and increasingly dependent on fast food. These youth are ripe for heart disease or a stroke in the prime of their lives.

Solution: Over the past 5 years, the school district coordinator of Naperville, Illinois,

Phil Lawler, has revolutionized physical education (P.E.) programs in 21 schools in his district. Beginning with Madison Junior High, Lawler transformed the emphasis of its P.E. classes from competitive sports skill drills to cardiovascular fitness and wellness.

Students no longer go to P.E., but rather to the school's "Madison Health Club." Club T-shirts boldly support the "Healthy People 2000" report with this caution written on their sleeves: "Surgeon General's Warning: An inactive lifestyle could be detrimental to your health." Panic over the weekly required mile run is nonexistent among 6th to 8th graders because there's no such thing. It's the 12-minute run, "so that no one finishes last," says Lawler. "We no longer focus on the best athlete. Kids get credit for what they do."

Through the aid of a software program, kids get a fitness analysis at the beginning of middle school and a health portfolio is created for each student. This is kept in their records so that their health and fitness can be tracked through high school.

When students work out (the gym has a 40-station fitness center available to parents and teachers alike), they wear heart rate monitors so that they know not to go beyond their healthy aerobic zone.

Now the school district has a business partnership with area cardiologists who offer cholesterol screenings through the schools. Most doctors in Naperville know not to give students medical excuses to get out of P.E. Instead, they write prescriptions for what the student can do in fitness class.

When students leave Madison, they know their blood pressure, body fat composition, and cholesterol levels, and they know that they are responsible for their health."

Impact. Through the new P.E. program, district staff were able to uncover heart disease in five students in the district and elevated cholesterol levels in 50 percent of the students at Madison—a percentage that is gradually decreasing, according to Lawler. Kids are understanding that staying active contributes to

heart health and that fitness is a lifelong endeavor. Kids get extra credit if they walk a mile with a parent, and parents, knowing the importance of being a good role model, are getting involved in fitness, too. Now a CDC model physical education program, Madison's Fitness Club serves as an example for all schools in the district and schools in and around Chicago and many across the Nation.

For more information, contact Phil Lawler at (630) 420-6408 or plaw@uss.net. For a copy of a short CBS broadcast tape (5/23/99) profiling the Madison P.E. program, contact Erica Zolberg at (212) 975-7586.

NOTE: The following example can be excluded if you believe it will be counterproductive in your State.

Preventing Illness from Secondhand Smoke Through Clean Indoor Air Policies

Problem: Exposure to environmental tobacco smoke is the third leading cause of preventable death in the United States, killing 53,000 nonsmokers every year. Each year approximately 3,000 lung cancer deaths and 40,000 deaths due to heart disease or stroke are due to exposure to secondhand smoke, according to the U.S. Environmental Protection Agency and the American Heart Association, respectively. Children exposed to secondhand smoke have higher rates of chronic respiratory symptoms, otitis media, bronchitis, and pneumonia compared with children who are not exposed. Asthmatic children exposed to secondhand smoke have more intense, more frequent episodes of the disease. The risk of hospitalization for severe bronchitis or pneumonia is estimated to increase up to 40 percent during the first year of life for babies exposed to secondhand smoke.

Regulatory Solution: To protect the health of nonsmokers, States and municipalities have enacted clean indoor air policies. In 1973 Arizona became the first state to restrict smoking in a number of public places.

Minnesota passed the first statewide Clean Indoor Air Act in 1975 covering workplaces, both public and private, and many other public places including restaurants. Most States now have laws requiring government buildings to be smokefree and restrict smoking in schools, daycare centers, and health facilities. Maine passed a statewide smokefree restaurant law in 1998. And California, which already had a smokefree restaurant law, passed a statewide smokefree bar law in 1998. According to the Americans for Nonsmokers Rights Foundation, more than 800 local jurisdictions have enacted clean indoor air ordinances more stringent than those at the State level, including 247 that completely eliminate smoking in enclosed workplaces and/or public places. Hundreds of communities have adopted voluntary clean indoor air policies including smokefree airports, malls, and office buildings.

Impact: According to a 1997 Gallup poll, 55 percent of Americans feel exposure to secondhand smoke is "very harmful," compared with 36 percent in 1994. The growing number of clean indoor air policies is helping to change society's attitude toward smoking and will ultimately help reduce tobacco use and the disease burden it causes. Smokefree policies can reduce health care costs to society and improve worker productivity through decreased absenteeism and disability. In California, bartenders reported improved respiratory health and lung function only 2 months after the smokefree bar law took effect. Failing to provide a smokefree workplace can result in sanctions under the Federal Americans with Disabilities Act. Asthma has been ruled a protected disability by the courts, and employers must provide a smokefree workplace for employees with the disease.

Protecting children was at the heart of this policy change.

Preventing Childhood Lead Poisoning

Problem: Childhood lead poisoning is a devastating and irreversible disease that causes brain damage and loss of neural and motor function due to high blood lead levels.

Regulatory Solution: To reduce the amount of lead that children are exposed to, several initiatives were undertaken, including the mandatory gradual elimination of lead in gasoline beginning in 1973, the Lead Contamination Control Act of 1988, and the 1992 Residential Lead-Based Paint Hazard Reduction Act.

Impact: Average blood lead levels for both children and adults have dropped more than 80 percent since the late 1970s. Specifically, average blood lead levels in children ages 1 to 5 years decreased from 15.0 to 2.7 micrograms per deciliter, according to the NHANES surveys performed between 1976–1980 and 1991–1994.

This policy change is intended to have a positive impact newborns.

Reducing Neural Tube Defects in Newborns Through Folic Acid Food Fortification

Problem: Each year, 2,500 children are born with a devastating type of birth defect called neural tube defects (NTDs), which include spina bifida (a hole in the spinal cord) and anencephaly (the partial or complete lack of a brain). The lack of folic acid, a B vitamin, in a mother's diet during the periconceptual period is a significant causative factor in the development of NTDs. In mothers who consume adequate amounts of the vitamin, the defect is 50 to 70 percent less likely to occur.

Regulatory Solution: As of January 1998, U.S. food manufacturers have been required by FDA regulations to add folic acid to most enriched breads, flours, corn meals, pastas, rice, and other grain products to reduce the risk of neural tube defects in newborns.

Impact: Although it is too soon to measure the impact of this regulation, scientific evidence projects that this intervention will contribute to the reduction of the frequency of neural tube defects by between 50 and 70 percent by helping women meet the dietary requirements for folic acid.

NOTE: For more information on any of the preceding policy examples that are not accompanied by a contact person, phone number, or Web address, please contact the agency, agencies, community, or States that enact the policies or visit the Internet for greater details.