



A COMPENDIUM OF PROVEN COMMUNITY-BASED PREVENTION PROGRAMS

2013 EDITION

Acknowledgements

This project was made possible through joint collaboration and funding from Trust for America's Health (TFAH). We gratefully acknowledge the carefully researched and thoughtful contributions of Abigail Clafin and Jessica Steele. We also thank Danielle Aloia for her valuable reference service and support for this effort.

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INTRODUCTION

Introduction

It is well known that over the past 50 years U.S. health care costs have risen at an unsustainable rate, consuming approximately 18% of GDP.¹ Some of the costliest conditions in the U.S. include heart disease, cancer, trauma-related disorders, osteoarthritis, asthma, hypertension, and diabetes.² Fortunately, many of the significant risk factors for these diseases can be modified or prevented. The Agency for Health Research and Quality estimated in 2007 that \$29 billion—10% of total hospital expenditures—was spent on hospitalizations that could have been prevented.³

To inform action on this issue, in July 2008, Trust for America’s Health (TFAH), The New York Academy of Medicine (NYAM), and the Urban Institute collaborated on an analysis of health care costs and prevention interventions that was presented in the report *Prevention For A Healthier America: Investments In Disease Prevention Yield Significant Savings, Stronger Communities*.⁴ This report highlighted that disease and injury prevention interventions implemented outside of the clinical setting could generate dramatic savings for the health care system. It was already known that there could be savings through clinic-based screenings and medical therapies, but the savings that could be recouped through population-level interventions conducted by non-medical personnel were less well-known. The TFAH report showed that an investment of \$10 per person per year in community-based programs to increase physical activity, improve nutrition, and prevent smoking and other tobacco use could save the country more than \$16.5 billion annually within five years—a return of \$5.60 for every \$1 invested.

The literature review that underpinned *Prevention For A Healthier America* identified 23 examples of effective interventions and programs working in communities around the world to address behaviors (e.g., tobacco use) and preventable conditions (e.g., asthma, sexually transmitted infections). To help direct policymakers and program directors to these sound interventions, NYAM and TFAH issued the *2008 Compendium of Proven Community-Based Prevention Programs*,⁵ which summarized a sample of the articles found in the literature review and also highlighted some additional studies.

Table 1. Disease Categories for the 2008 and 2013 Compendium of Proven Community-Based Prevention Programs

Original 2008 Compendium	Updated 2013 Compendium
Cardiovascular Disease, Stroke & Diabetes	Cardiovascular Disease, Stroke & Diabetes
Tobacco Use	Tobacco Use
Asthma	Asthma
Falls Among the Elderly	Injuries (including falls) & Violence
Sexually Transmitted Infections	Sexually Transmitted Infections & HIV/AIDS
	Alcohol Use

Since 2008, the literature on effective community-based prevention programs and interventions has grown exponentially. Hundreds of interventions are being studied in communities around the world and some of the initial database searches conducted to generate this 2013 Compendium Update yielded literally thousands of results, including hundreds of systematic reviews of the literature. This update is therefore also a significant expansion on the first report, adding new disease categories (see Table 1), delineating new “Prevention Strategy” subheadings, and increasing the list of case examples to a new total of 79.

Through this Compendium update, we hope to direct policymakers to specific interventions ready for broader implementation and to inspire recognition of the potential to prevent disease and create a healthier population overall.

Jo Ivey Boufford, MD



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- 1 “Health expenditure, total (% of GDP),” accessed September 12, 2013, <http://data.worldbank.org/indicator/SH.XPD.TOTL.ZS>; “Health Costs: How the U.S. Compares With Other Countries,” last modified October 22, 2012, <http://www.pbs.org/newshour/runtdown/2012/10/health-costs-how-the-us-compares-with-other-countries.html>
 - 2 Wier LM, and RM Andrews. 2011. *The National Hospital Bill: The Most Expensive Conditions by Payer, 2008*. HCUP Statistical Brief #107. Rockville, MD: Agency for Healthcare Research and Quality, <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb107.pdf>.
 - 3 Russo, CA, HJ Jiang, and M Barrett. 2007. *Trends in Potentially Preventable Hospitalizations among Adults and Children, 1997-2004*. HCUP Statistical Brief #36. Rockville, MD: Agency for Healthcare Research and Quality, <http://www.hcup-us.ahrq.gov/reports/statbriefs/sb36.pdf>.
 - 4 Levi, Jeffrey, Laura M Segal, and Chrissie Juliano. 2008. *Prevention for a healthier America: investments in disease prevention yield significant savings, stronger communities*. Washington, D.C.: Trust for America’s Health, accessed at <http://healthyamericans.org/reports/prevention08/Prevention08.pdf>
 - 5 New York Academy of Medicine. 2010. *A compendium of proven community-based prevention programs*. New York, NY: New York Academy of Medicine.

METHODOLOGY

Methodology

This *Compendium* identifies categories of community-based programs and interventions proven to prevent or delay the onset or complications of certain health conditions (“Recommended Strategies”) and examples of successful implementation of such interventions (“Examples”).

As in the first edition of this *Compendium*, we defined community-based interventions as efforts that are 1) directed to a population rather than individuals and 2) implemented in community settings rather than hospital or health care settings. Examples of viable interventions include mass health education programs and social marketing campaigns, coalition building and empowerment activities, policy changes, and environmental remediation. Interventions were not included if they involved the direct delivery of personal health care services to individuals.

The interventions covered in the 2008 *Compendium* were identified through a rigorous review of 82 publically available systematic reviews. Since the release of the initial *Compendium*, there has been an explosion in the literature on community-based prevention, including the publication of hundreds of new systematic reviews, meta-analyses, and consensus recommendations from leading think tanks, advocacy organizations, research institutions, professional societies, and the federal government. We therefore adapted a “review of reviews” methodology for this edition.¹ “Review of reviews” is an emerging methodology developed precisely because of the growth in summary literature.² Our process modified the methods used in other recent “reviews of reviews” of prevention literature, and included the steps listed below. We aimed to identify intervention strategies that have the highest available level of evidence-based support to recommend their replication and dissemination.

STEP 1: Identified Topic Areas

The original *Compendium* addressed Cardiovascular Disease, Stroke & Diabetes; Tobacco Use; Asthma; Falls Among the Elderly; and Sexually Transmitted Infections. These topic areas represent leading causes of preventable health care expenditures. We maintained these original topics and added Alcohol Use, as it, like Tobacco Use, is now recognized as being among the leading risk factors for all deaths globally, including for cardiovascular deaths.³ We also expanded the STIs category to include HIV/AIDS, and expanded the Falls Among the Elderly category to the broader umbrella of Injury Prevention. Under Injury Prevention, we included interventions addressing violence and motor vehicle injuries. **TABLE 2** summarizes the significance of each of these topics to health promotion efforts.

Table 2. Health Topics Covered in this Compendium and Their Significance to Health Promotion Efforts

Topic Area	Significance to U.S. Health and Well-being Each Year
Cardiovascular Disease, Stroke & Diabetes	<ul style="list-style-type: none"> • Leading cause of death in the U.S. • \$312.6 billion total cost of CVD and stroke⁴ • \$245 billion in costs (includes \$176 billion in direct costs and \$69 billion in reduced productivity) for diagnosed diabetes⁵
Asthma	<ul style="list-style-type: none"> • Leading chronic condition among children in the U.S. • \$56.0 billion in costs (includes \$50.1 billion in direct costs and \$5.9 billion indirect costs, such as lost productivity)⁶
Injuries & Violence	<ul style="list-style-type: none"> • Violence is preventable • \$70 billion in costs (includes \$64.4 billion in lost productivity and \$5.6 billion on medical care)⁷ • Injury is among the leading causes of death in the U.S. • \$406 billion in costs (includes \$80 billion for medical treatment and \$326 billion for lost productivity)⁸
Sexually Transmitted Infections & AIDS	<ul style="list-style-type: none"> • Highly preventable • \$16 billion in direct medical costs⁹
Alcohol Use	<ul style="list-style-type: none"> • Leading contributor to preventable chronic disease • Excessive alcohol use costs \$223.5 billion (includes \$94.2 billion cost to government)¹⁰
Tobacco Use	<ul style="list-style-type: none"> • Leading contributor to preventable deaths in the U.S. • \$193 billion in costs (includes \$97 billion in lost productivity and \$96 billion in health care expenditures)¹¹

STEP 2: Identified leading sources for reviews and recommendations in our chosen topic areas.

We used The New York Academy of Medicine (NYAM) Library catalog, PubMed, Google searches, and expert consultation to identify leading U.S. and international health organizations that prepare English-language reviews and recommendations for health promotion, particularly in the spheres of population health, public health, and community-based prevention, and who had published on the chosen topics. The Appendix lists the identified organizations. We then searched the publications and recommendations of each organization for the topic areas above, widening the search to include key terms that might also be used to address the key topics. For example, we determined that recommendations to “increase physical activity” or to “reduce obesity” could be included under “cardiovascular disease, stroke, and diabetes.” As the search proceeded, additional authoring organizations were identified.

STEP 3: Established and implemented document inclusion criteria.

We searched the selected organization websites, the *NYAM Grey Literature Report*, and PubMed for publications by these organizational authors, and then sorted publications per the following criteria:

- **Date of Publication:** The 2008 Compendium contained a search from 1975 to 2008. For the categories cited in the first Compendium, we searched literature published after 2007, allowing for one year of overlap with the previous Compendium, up until 2012. For the newly added topics, we included publications from 2002 to present. If a search within these years returned too few results, we assessed whether to include recommendations and interventions prior to 2002.
- **Quality of the Review:** Each publication was examined to identify a description of the methodology undertaken to generate conclusions and recommendations. We retained only those reports and articles that included appropriate and detailed methodologies explaining how and by whom the evidence was weighed.

STEP 4: Developed a summary set of recommended prevention strategies.

The interventions and examples in the first Compendium were identified through a review of peer-reviewed articles that had been selected using a very high standard for inclusion. We replicated this high standard in the current review by seeking out and only including strategies that attained the highest level of recommendation within a given review process or study. For example, from among the *CDC's Guide to Community Preventive Services (The Community Guide)*,¹² we only included recommendations that achieve the level "Recommended," which is the highest possible ranking in their rubric. Figure 1 illustrates some of the various rubrics used by the reports we reviewed, and also shows that some studies did not apply a ranking rubric. If the level of evidence behind a recommended strategy was unclear, we reviewed the supporting literature to determine whether the recommendation was strong enough to include it in our findings.¹³ This process resulted in a total of 40 recommended community-based prevention strategies across the eight categories. If no rigorous validation for a recommendation could be found, we did not include it, even if it was strongly recommended.*

STEP 5: Selected case examples to illustrate the recommended strategies.

We conducted a search for case examples of interventions that illustrated implementation of the strategies. We restricted selection of examples to those that had been rigorously evaluated. Many case examples we included are interventions that were found in the reviews that we included. If all reviews supporting a recommendation did not detail one or more rigorously evaluated interventions, our reviewers conducted an independent search (e.g., through PubMed) to find case examples. For each case example, we sought to offer readers a minimum standard set of information, such as the intervention population, setting, the cost of the intervention, and the duration of the intervention. We particularly sought to identify case examples that had been shown to be effective in communities facing disproportionate levels of disease.

* The lack of supporting evidence for recommendations should not be interpreted as indicating inefficacy, but may in some cases be attributed to a research gap, and indicate an opportunity for further testing exploration.

STEP 6: Reviewed and updated examples from the first Compendium.

Additionally, we sought to confirm that interventions recommended in the first Compendium are still considered effective. The first Compendium did not highlight strategies, but rather specific examples. We searched for each program in PubMed (using the project title, report authors, and other distinguishing features). If there was no new study about the specific program, we then tried to find an update for a similar type of program. For instance, there was no update for the Ohio State University (OSU) Walking Program, but we sought more recent studies on similar interventions. If there was no update, we have included the example used in the first Compendium, since it is presumably still deemed effective (for example, there have been almost no new studies on the effectiveness of car seats on injury prevention). The “In original compendium” tab is used in the text to indicate that the example was in the first Compendium.

Figure 1. Examples of the Rating Rubrics Used in the Reviewed Reports

These examples were selected to illustrate various types of rubrics used to evaluate data.

The Guide to Community Preventive Services (The Community Guide), Centers for Disease Control and Prevention¹⁴

Recommended

The systematic review of available studies provides strong or sufficient evidence that the intervention is effective. The categories of “strong” and “sufficient” evidence reflect The Community Preventive Services Task Force’s degree of confidence that an intervention has beneficial effects. They do not directly relate to the expected magnitude of benefits. The categorization is based on several factors, such as study design, number of studies, and consistency of the effect across studies.

Recommended Against

The systematic review of available studies provides strong or sufficient evidence that the intervention is harmful or not effective.

Insufficient Evidence

The available studies do not provide sufficient evidence to determine if the intervention is, or is not, effective. This does NOT mean that the intervention does not work. It means that additional research is needed to determine whether or not the intervention is effective.

Task Force findings may include a rationale statement that explains why they made a recommendation or arrived at other conclusions.

The Surgeon General’s Vision for a Healthy and Fit Nation (2010), U.S. Department of Health and Human Services, Office of the Surgeon General¹⁵

This brief proposes health-promoting actions that can be taken by multiple sectors of society but does not detail criteria for the selection of these strategies.

*Interventions on Diet and Physical Activity: What Works (2009), World Health Organization*¹⁶

Effective

These interventions were based on a formative assessment, with a generally robust experimental design or sufficient sample size, and with significant effects on specified outcome variables. They generally met all or most of the planned objectives and would probably be applicable in other settings (disadvantaged communities and low- and middle-income countries), and demonstrated feasibility and sustainability in their current category. These interventions were most often considered the “example intervention” for the category and specific outcome.

Moderately Effective

These interventions lacked one or more of the critical components listed above, but were sufficiently robust to warrant consideration for application in specific settings or groups and met some, if not all of the planned objectives.

Promising/Insufficient evidence

These interventions demonstrated an important trend or a significant effect, but may not have been sufficiently robust in terms of experimental design or sample size, and may therefore benefit from further testing and research.

Minimally effective

Interventions in this ranking had significant, but perhaps not clinically relevant effects in at least one of the outcome areas. The study designs were sufficiently robust and therefore unlikely to yield different or better results through additional testing or in other settings.

Insufficient evidence/not shown to be effective

Here, the study design of the interventions was not robust, and the results sufficiently unremarkable or negative that no further testing or research application are warranted.

Not reported/not measured

The outcomes of these interventions were either not measured, or measured but not reported.

Finally, observations were made on the process and policy implications of each intervention, as well as its intervention fidelity, sustainability, feasibility and cost-effectiveness, where data were available or evaluated. Attention was particularly drawn to programmes that could be effective in a broader context, or specifically in under-resourced settings.

Local Wellness Policies: Assessing School District Strategies for Improving Children’s Health: School Years 2006-07 and 2007-08 (2009), Robert Wood Johnson Foundation ¹⁷

Strong Policy Provisions

Those that were definitely required and specified an implementation plan or strategy. They included language such as shall, must, will, require, comply and enforce.

Weak Policy Provisions

Offered suggestions or recommendations, and some required action, but only for certain grade levels or times of day. They included language such as should, might, encourage, some, make an effort to, partial and try.

- 1 Smith V, CM Begley, D Devane, and M Clarke. 2011. “Methodology in conducting a systematic review of systematic reviews of healthcare interventions.” *BMC Medical Research Methodology*. 11:15.
- 2 Physical Activity Guidelines for Americans Midcourse Report Subcommittee of the President’s Council on Fitness, Sports & Nutrition, and United States. 2012. *Physical activity guidelines for Americans midcourse report strategies to increase physical activity among youth*. Washington, D.C.: U.S. Dept. of Health and Human Services. <http://www.health.gov/paguidelines/midcourse/pag-mid-course-report-final.pdf>.
- 3 World Health Organization. 2009. *Global health risks mortality and burden of disease attributable to selected major risks*. Geneva, Switzerland: World Health Organization. <http://site.ebrary.com/id/10363978>
- 4 American Heart Association. 2013. “Heart Disease and Stroke Statistics- -2013 Update: A Report from the American Heart Association,” accessed June 12, 2013, <http://circ.ahajournals.org/content/127/1/e6.full.pdf>.
- 5 American Diabetes Association. 2013. “Economic costs of diabetes in the U.S. in 2012.” *Diabetes Care*. 36 (4): 1033-46.
- 6 “Asthma & Children Fact Sheet,” last modified October 2012, <http://www.lung.org/lung-disease/asthma/resources/facts-and-figures/asthma-children-fact-sheet.html>
- 7 Corso PS, JA Mercy, TR Simon, EA Finkelstein, and TR Miller. 2007. “Medical costs and productivity losses due to interpersonal and self-directed violence in the United States.” *American Journal of Preventive Medicine*. 32 (6): 474-482.
- 8 Corso P, E Finkelstein, T Miller, I Fiebelkorn, and E Zaloshnja. 2006. “Incidence and lifetime costs of injuries in the United States.” *Injury Prevention : Journal of the International Society for Child and Adolescent Injury Prevention*. 12 (4): 212-8.
- 9 National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (U.S.). 2013. *Incidence, prevalence, and cost of sexually transmitted infections in the United States*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
- 10 Bouchery EE, HJ Harwood, JJ Sacks, CJ Simon, and RD Brewer. 2011. “Economic costs of excessive alcohol consumption in the U.S., 2006”. *American Journal of Preventive Medicine*. 41 (5): 516-24.
- 11 “Smoking & Tobacco Use: Fast Facts,” accessed June 12, 2013, http://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/
- 12 “Guide to Community Preventive Services (The Community Guide),” accessed June 12, 2013, <http://www.thecommunityguide.org/index.html>
- 13 This process has been modified from the American Heart Association Scientific Statement on Population Approaches to Improve Diet, Physical Activity, and Smoking Habits.
- 14 “Systematic Review Methods,” accessed June 12, 2013, <http://www.thecommunityguide.org/about/methods.html>
- 15 The Surgeon General’s Vision for a Healthy and Fit Nation (2010), U.S. Department of Health and Human Services, Office of the Surgeon General United States. 2010. *The Surgeon General’s vision for a healthy and fit nation, 2010*. Rockville, MD: Office of the Surgeon General.
- 16 “Interventions on Diet and Physical Activity: What Works,” accessed June 12, 2013, <http://www.who.int/dietphysicalactivity/summary-report-09.pdf>.
- 17 Chriqui, Jamie F. 2008. *Local wellness policies assessing school district strategies for improving children’s health: school years 2006-07 and 2007-08*. Chicago, IL: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago. http://www.bridgingthegapresearch.org/research_products/.

RECOMMENDED PREVENTION STRATEGIES

Recommended Prevention Strategies

The “In original compendium” tab indicates that an example was also in the first Compendium. We searched the literature to identify updated studies. If there was no subsequent study, we retained the original entry.

Goal: Reduce the Risk of Cardiovascular Disease, Stroke & Diabetes

Cardiovascular disease is the leading cause of morbidity and accounts for 32.3% of all deaths in the U.S.¹ A major cause of cardiovascular disease is diabetes. People with diabetes are 2-4 times more likely to develop cardiovascular disease than non-diabetics. Several studies have shown that 95% of all diagnosed diabetics suffer from Type II diabetes, which can be controlled and prevented by healthy diet and regular physical activity.² Interventions that reduce obesity, blood pressure, and cholesterol and increase physical activity and healthy eating have been proven effective in reducing risks for cardiovascular disease as well as diabetes and stroke.

Use point-of-decision prompts to increase stair use

Example: Small Step #67 (Dolan et al. 2006)

The U.S. Department of Health and Human Services (HHS) and Centers for Disease Control and Prevention (CDC) initiated “Small Steps,” a national health campaign targeting 100 lifestyle changes to combat obesity that could cumulatively have big impacts on individuals and populations. Small Step #67 advocates the use of stairs instead of escalators in public settings. A quantitative and qualitative review of eight studies testing the effects of motivational prompts to promote the use of stairs found a 2.8% increase in stair usage. This would result in a weight loss and/or weight gain prevention of 300 grams per person per year among new stair users.

Implement community design and access that supports physical activity and active transportation

Example: Partnership for an Active Community Environment (PACE) (Gustat et al. 2012)

The Partnership for an Active Community Environment (PACE) steering committee in New Orleans, Louisiana installed a six-block walking path and a school playground in a low-income African American neighborhood. Physical activity levels in the intervention neighborhood and two matched comparison neighborhoods were assessed before and after the intervention using surveys and direct observation. Among residents who were observed engaging in physical activity, 41% were moderately to vigorously active in the section of the intervention neighborhood with the path intervention compared with 24% and 38% in the comparison neighborhoods without the path. PACE is an effective intervention that demonstrates how changes to the built environment may increase neighborhood physical activity.

Physical activity interventions in a school-based setting with a home component

Example: Intervention centered on adolescents' physical activity and sedentary behavior (Simon et al. 2008)

This intervention was implemented at eight middle schools in Eastern France (954 12-year-old six-graders) for four years starting in 2002. The intervention program was incorporated into the standard school curriculum as three 50-minute physical education classes per week. The program educated students about physical activity and sedentary behaviors, took into account the obstacles to being active by offering physical activity at lunchtime and during breaks and after school hours, and engaged less confident children in an active lifestyle by creating activities without a competitive edge. Parents and educators were encouraged to provide support to enhance the adolescents' physical activity level through regular meetings. After four years, 4.2% of the initially non-overweight adolescents were overweight in the intervention schools compared to 9.8% in the controls. The intervention adolescents also had an increase in supervised physical activity, a decrease of TV/video viewing and an increase of high-density cholesterol concentrations (good cholesterol).

Diet and physical activity interventions in a school-based setting with home and community components

Example: Be Active Eat Well (Sanigorski et al. 2008)

Be Active Eat Well (BAEW) was a multifaceted community capacity-building program promoting healthy eating and physical activity for children aged 4-12 years in the Australian town of Colac. The program used a multi-setting, multi-strategy approach and was based on community capacity-building principles. Interventions include the distribution of glossy children's newsletters, teacher fliers, and healthy lunchbox tip sheets. For support, the school appointed a dietitian, changed school nutrition policies, revised the cafeteria menu, and initiated events like healthy breakfast days, happy healthy families program, community garden, and walk to school days. Sporting club coach training, sporting club equipment, and two class sets of pedometers promoted physical activity in schools. Screen time strategies included "TV power down week." Healthy dietary habits were encouraged by a pediatrician and dietician at regular parent meetings. The intervention group was successful in reducing unhealthy increases in children's weight and waist measurement.

Community-wide campaigns to promote physical activity

Example: West Virginia Walks (Reger-Nash et al. 2008)

This social marketing intervention promoted walking among insufficiently active 40- to 65-year-olds in north-central West Virginia. The intervention included participatory planning, an eight-week mass media-based campaign, and policy and environmental activities. The campaign resulted in maximal message awareness and demonstrated a significant increase in walking behavior represented by an absolute shift of 12% of the target population from insufficiently active to active (i.e., greater or equal to 30 minutes, five days per week), versus the comparison community.

Example: Cardiovascular Health Awareness Program (CHAP) (Kaczorowski 2008)

In CHAP communities, residents aged ≥ 65 years were invited to attend cardiovascular risk assessment sessions held in pharmacies over 10 weeks in fall 2006. Sessions included blood pressure measurement and feedback to family physicians. Trained volunteers delivered the program with support from pharmacists, community nurses, and local organizations. The primary outcome measure is the relative change in the mean annual rate of hospital admission for acute myocardial infarction, congestive heart failure, and stroke among residents aged ≥ 65 years in intervention and control communities. Outcomes were measured using routinely collected, population-based administrative health data.

In original compendium

Example: The Rockford Coronary Health Improvement Project (CHIP) (Englert et al. 2007)

The Rockford Coronary Health Improvement Project (CHIP) was a community-based lifestyle intervention program aimed at reducing coronary risk, especially in a high risk group. The intervention included a 40-hour educational curriculum delivered over a 30-day period with clinical and nutritional assessments before and after the educational component, in which participants were instructed to optimize their diet, quit smoking, and exercise daily (walking 30 minutes per day). At the end of the 30-day intervention period, stratified analyses of total cholesterol, LDL, triglycerides, blood glucose, blood pressure, and weight showed highly significant reductions with the greatest improvements among those at highest risk.

UPDATE: Cardiovascular risk reduction and factors influencing loss to follow-up in the coronary health improvement project (Merill and Aldana 2008)

The CHIP program is an intensive four-week community-based health education intervention designed to improve coronary risk factors. Analyses were based on 1,712 community volunteers ages 30 to 87 from the Rockford, Illinois metropolitan area. Of the participants, 97.7% completed the lifestyle evaluation at both baseline and after four weeks, and 51% provided data through one year. Participants showed significant improvements in all cardiovascular risk factors considered (body mass index, resting heart rate, systolic blood pressure, diastolic blood pressure, cholesterol, high-density lipoprotein, low-density lipoprotein, triglycerides, and glucose) after both four weeks and one year.

In original compendium

Example: A community-oriented, coronary heart disease prevention program (Hoffmeister et al. 1996)

A community-oriented, coronary heart disease prevention program conducted in six regions of former West Germany included activities that emphasized healthy nutrition and increased physical activity, in addition to the reduction of smoking, hypertension, and hypercholesterolemia. Over a seven year period, the intervention saw a net reduction in the mean values of systolic (-2.0%) and diastolic (-2.0%) blood pressure, and total serum cholesterol (-1.8%), as well as the percentage of smokers (-6.7%), compared with the nationwide trend.

Worksite programs for obesity prevention and control

Example: Eat Smart, Move More NC (Dunn et al. 2013)

North Carolina State University developed Eat Smart, Move More, Weigh Less (ESMMWL), a weight management program for adults that lasts one hour a week for 15 weeks. Eighty-nine percent of participants in ESMMWL who completed the program were female and the mean age was 48.8. In 2009, North Carolina's State Health Plan for Teachers and State Employees enlisted its members to the ESMMWL program so they could better manage their weight and reduce associated health care costs. Participants receive instructions on how to live mindfully as they make choices about eating and physical activity. The percentage of participants with a BMI less than 30 kg/m² increased from 40% to 45% and those with a normal blood pressure increased from 23% to 32.5%. Participants reported being more mindful of what and how much they ate (92%), being more mindful of how much daily physical activity they got (88%), and eating fewer calories (87.3%).

In original compendium

Example: Ohio State University (OSU) Walking Program (Haines et al. 2007)

Researchers at Ohio State University recruited 60 women in their forties for a 12-week walking program that took place on the college's campus. At three months, the intervention group saw a 1 percent decrease in body mass index (BMI), a 3.4 percent decrease in hypertension, a 3 percent decrease in cholesterol, and a 5.5 percent decrease in glucose.

UPDATE: Walk@Work: An automated intervention to increase walking in university employees not achieving 10,000 daily steps (Gilson et al. 2013)

Academic and administrative staff at five campuses (Canada, Northern Ireland, the United States, and two in Australia) were given a pedometer, access to a web-based walking intervention (Walk@Work), and tasked with increasing workday walking by 1,000 daily steps above baseline, every two weeks, over a six-week period. Step count changes at four weeks after the intervention were evaluated relative to campus and baseline walking. Walk@Work increased workday walking by 25%.

Multilevel interventions

In original compendium

Example: Shape Up Somerville (Economos et al. 2007)

Shape Up Somerville, a comprehensive effort to prevent obesity in high-risk first through third grade students in Somerville, Massachusetts, included improved nutrition in schools, a school health curriculum, an after-school curriculum, parent and community outreach, collaboration with community restaurants, school nurse education, and a safe routes to school program. After one year, on average the program reduced one pound of weight gain over eight months for an 8-year-old child. On a population level, this reduction in weight gain would translate into large numbers of children moving out of the overweight category and reducing their risk for chronic disease later in life.

Example: A physical activity intervention targeting low-income adults in Oslo, Norway (Jenum et al. 2006)

A physical activity intervention targeting low-income adults in Oslo, Norway, provided individual counseling, walking groups, increased accessible areas for safe recreation, and information through leaflets and mass media. After three years, compared to the control group, the intervention group had an 8-9% increase in physical activity, 14% fewer individuals gained weight, 3% more quit smoking, and a significant decrease in blood pressure rates was reported.

Example: Well-Integrated Screening and Evaluation for Women Across the Nation Wisewoman (Finkelstein et al. 2006)

A CDC-funded lifestyle intervention program, the Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN), provides low-income uninsured women aged 40 to 64 with chronic disease risk factor screenings, lifestyle interventions, and referral services in an effort to prevent coronary heart disease and improve health. Over the course of a year, WISEWOMAN participants improved their 10-year risk of coronary heart disease by 8.7%, and there were significant reductions in the percent of participants who smoked (11.7%), had high blood pressure (15.8%), or had high cholesterol (13.1%).

Example: Diabetes Prevention Program (Hamman et al. 2006)

A study that followed Diabetes Prevention Program participants randomized to an intensive lifestyle intervention found that weight loss was the dominant predictor of reduced diabetes incidence. Participants experienced a 16 percent reduction in their diabetes risk for every kilogram of weight that they lost after a 3.2 year mean follow-up period.

UPDATE: Translating the Diabetes Prevention Program into American Indian and Alaska Native Communities (Jiang et al. 2012)

The Diabetes Prevention Program (DPP) was translated to an intervention in a diverse set of American Indian and Alaska Native (AI/AN) communities. The Special Diabetes Program for Indians Diabetes Prevention (SDPI-DP) demonstration project implemented the DPP lifestyle intervention among 36 health care programs serving 80 tribes (a total of 2,553 participants with prediabetes were recruited and started the intervention by July 31, 2008). They were offered the 16-session Lifestyle Balance Curriculum and underwent a thorough clinical assessment for an evaluation of their diabetes status and baseline risk. Soon after completing the curriculum, they were evaluated annually for up to three years. Significant improvements in weight, blood pressure, and lipid levels were observed immediately after the intervention and annually thereafter for three years. Class attendance strongly correlated with diabetes incidence rate, weight loss, and change in systolic blood pressure.

UPDATE: Translating the diabetes prevention program to an urban, underserved community (Piatt et al. 2012)

Eligible participants were screened from eleven targeted urban, medically underserved communities to examine the long-term effect of a Group Lifestyle Balance (GLB) program on weight, impaired fasting glucose, hypertension, and hyperlipidemia. Eligible individuals took part in a 12-week GLB intervention that addressed weight loss and physical activity. Subjects were followed for 24 months. The probability of being at risk for diabetes and cardiovascular disease was significantly reduced by 25.7% over the long-term follow-up. Of the participants who lost at least 5% of their body weight following the intervention, 52.6% maintained the 5% weight loss at their last follow-up time, weighing about 20 pounds less than they did at baseline.

In original compendium

Example: Epoque (2004)

EPODE, a multisectoral, five-year plan to improve nutrition among 5- to 12-year-old youths in 10 French towns, involved parents and families, medical providers, school nurses, teachers, towns, businesses, and media campaigns in the intervention. In the targeted towns, obesity rates have remained consistent while they have doubled in control areas, making youths who experienced the intervention less likely to develop obesity-related health conditions in the future. Mothers in the intervention towns have reported *weight loss as well*.

UPDATE: The VIASANO program in Belgium (Borys et al. 2013)

The VIASANO program, based on the EPODE methodology, began in 2007 and 2008 in two towns in Belgium. As part of VIASANO, two campaigns per year are launched: one about healthy food and one about physical activity. The campaigns provide different communication tools (poster, leaflet, actions sheets, mobilization sheets, recipes, a newsletter) per theme, and the national coordination team trains the local project leaders on each. During the school year 2007/2008, children in year 1 and 3 of nursery schools were weighed and measured by the School Health Prevention Services, as well as another group of children in 2009/2010. The prevalence of overweight in nursery school children showed a decrease of 22%, from 9.46% to 7.41%. In the same period in the control towns, the prevalence of overweight slightly increased, from 9.53% to 9.58%. There is evidence that the EPODE methodology can be transferable in other settings and cultures.

Goal: Reduce Asthma

Asthma is a leading chronic illness among children and youth in the United States. On average, in a classroom of 30 children, about three are likely to have asthma, and it is one of the leading causes of school absenteeism.³ Asthma is the third-ranking cause of hospitalization among children under 15.⁴ Asthma can be controlled with proper diagnosis, appropriate asthma care, and management activities, which makes community-based asthma prevention programs extremely important in reducing hospitalizations and absenteeism caused by asthma.

Retrofit buses to reduce emissions

Example: School buses, diesel emissions, and respiratory health (Beatty and Shimshack 2011)

School bus emissions collect within passenger cabins, pollute the environment near schools and residential areas, and contribute disproportionately to ambient air quality. The Washington State Clean School Bus Program found that school bus retrofits result in reductions of bronchitis, asthma, and pneumonia incidence for at-risk populations. Calculations suggest conservative benefit–cost ratios between 7:1 and 16:1.

Smoking bans

Example: Short-term impact of the smoke-free legislation in England on emergency hospital admissions for asthma among adults: a population-based study (Sims et al. 2013)

This studies whether the introduction of smoke-free legislation on July 1, 2007 was associated with an immediate reduction in adult emergency hospital admissions for asthma in England. It tracks if there is a difference in association between legislation and adult asthma hospital admissions across regions. Research found smoke-free legislation was associated with an immediate 4.9% reduction in emergency admissions for asthma in the adult population. This implies that approximately 1,900 emergency admissions for asthma were prevented in each of the first three years after legislation was introduced. The reduction in admissions did not vary significantly across regions.

Home based multi-trigger, multilevel interventions for children and adolescents

Example: A Community-Based Strategy for Improving Asthma Management and Outcomes for Preschoolers (Findley 2011)

The Northern Manhattan Asthma Basics for Children Initiative (ABC) is a coalition of community service organizations, early childhood educators, parenting programs, and community pediatric providers. The ABC program adapted their program to be implemented by daycare centers in low-resource communities by (1) shifting responsibility for parent education from nurses to social workers and trained health educators; (2) adding peer counselors to assist with tailoring the program to these communities; (3) promoting parent participation; (4) reinforcing messages to parents through daycare center activities for their children; and (5) adding a provider-education component. The intervention was conducted in two contiguous communities with some of the highest early childhood asthma hospitalization

rates in the city. One-third of residents live at or below the poverty level. Following program participation, 85% of parents reported reducing their child's triggers, 89% said it was easier to talk to their child's physician, and 80% were confident in their ability to manage their child's asthma. Children's daytime symptoms dropped from 78% to 42%, nighttime symptoms from 81% to 49%, daycare absences from 56% to 38%, asthma-related emergency department (ED) visits from 74% to 47%, and asthma-related hospitalizations from 24% to 11%.

Example: Community Asthma Initiative: Evaluation of a Quality Improvement Program for Comprehensive Asthma Care (Woods 2012)

Urban, low-income patients with asthma from four zip codes were identified through logs of Emergency Department (ED) visits or hospitalizations, and offered enhanced care including nurse case management and home visits. The program provided services to 283 children with 55.1% male, 39.6% African American, 52.3% Latino, 72.7% using Medicaid, and 70.8% with a household income below \$25,000. Twelve-month data show a significant decrease (≥ 1) in any asthma ED visits (68.0%) and hospitalizations (84.8%), and any days of limitation of physical activity (42.6%), patient missed school (41.0%), and parent missed work (49.7%). There was a significant reduction in hospital costs compared with the comparison community, and a return on investment of 1.46.

In original compendium

Example: New York State Healthy Neighborhoods Program (Lin et al. 2004)

The New York State Healthy Neighborhoods Program conducted an asthma intervention in which outreach workers conducted home visits and provided education about asthma, referrals, and controls for asthma triggers. During the program's 1997-1999 funding cycle, the average hospitalization (hospital admissions and *ER visits*) rate decreased by 23%.

In original compendium

Example: Environmental interventions in seven U.S. cities (Morgan et al. 2004)

A study of almost 1,000 children with asthma in seven major U.S. cities provided environmental interventions tailored to each child's allergic sensitization and environmental risk factors in an effort to improve asthma-related outcomes. The one-year intervention included education and remediation for exposure to both allergens and environmental tobacco smoke, with home environmental exposure assessments every six months. For every two-week period, the intervention group had significantly fewer days with symptoms than did the control group, both during the intervention year (3.39 vs. 4.20 days) and the year afterward (2.62 vs. 3.21 days), as well as greater declines in the levels of allergens at home. Reductions in the levels of cockroach allergen and dust-mite allergen on the bedroom floor had a significant correlation with reduced complications of asthma.

Goal: Reduce Sexually Transmitted Infections and HIV/AIDS

Sexually transmitted infections remain a major public health challenge in the United States. The CDC estimates that approximately 20 million new infections occur each year, and approximately 110 million people are currently living with a sexually transmitted disease.⁵ HIV, a virus that attacks the immune system and causes AIDS, is estimated to affect 1.1 million Americans and newly infects 56,000 people a year.⁶ Men who have sex with men (MSM) are most heavily affected by HIV and comprised more than half of new HIV cases in 2010. They experienced a 12% increase in HIV incidence in 2010 from 2008.⁷ Latex condoms, when used consistently and correctly, are highly effective in preventing the sexual transmission of HIV, and consistent and correct use of latex condoms also reduces the risk of other sexually transmitted infections.⁸ Community-based interventions that promote condom use and address additional risk factors, such as having multiple partners, have been shown to reduce the spread of HIV and other sexually transmitted infections.

Community-level behavioral interventions

In original compendium

Example: HIV Prevention Intervention for Women Living in 18 Low-Income Housing Developments (Sikkema et al. 2000)

A randomized, community-level intervention aimed at preventing high-risk women from contracting HIV targeted women living in low-income housing developments in five U.S. cities. Intervention activities included HIV risk reduction workshops and community HIV prevention events implemented by women who were popular opinion leaders among their peers. At the 12-month follow-up, the proportion of women in the intervention developments who had any unprotected intercourse in the past two months declined from 50% to 37.6%, and the percentage of women's acts of intercourse protected by condoms increased from 30.2% to 47.2%. Among women exposed to intervention activities, the mean frequency of unprotected acts of intercourse in the past two months tended to be lower at follow-up (mean = 4.0) than at baseline (mean = 6.0). These changes were corroborated by changes in other risk indicators. This study demonstrates that community-level interventions that involve and engage women in neighborhood-based HIV prevention activities can bring about reductions in high-risk sexual behaviors.

UPDATE: Outcomes of a randomized, controlled community-level HIV prevention intervention for adolescents in low-income housing developments (Sikkema et al. 2005)

A randomized, controlled, multi-site community-level intervention trial was undertaken with adolescents living in 15 low-income housing developments in five U.S. cities. The developments were randomly assigned to each of three conditions: experimental community-level intervention (five developments); "state-of-the-science" skills training workshops (five developments); and, education-only delayed control intervention (five developments). At long-term follow-up, adolescents living in the housing developments receiving the community-level intervention were more likely to delay onset of first intercourse (85%) than those in the control developments (76%), while those in the workshop developments (78%) did not differ from control condition adolescents.

Adolescents in both the community-level intervention (77%) and workshop (76%) developments were more likely to use a condom at last intercourse than those in control (62%) developments.

Example: Real AIDS Prevention Project (RAPP) (Lauby et al. 2000)

Real AIDS Prevention Project (RAPP) is a community-level intervention that mobilizes the networks of community volunteers, organizations, and business. The intervention consists of five main components: conducting community outreach using peer networkers; having one-on-one, safer sex discussions based on the participants' stage of readiness to change; distributing printed stories about community members and safer sex decisions (role model stories); obtaining program support from community organizations and businesses (community networking); and sponsoring small group activities in communities, such as safer-sex discussion parties and workshops conducted by outreach specialists. The intervention was implemented with low-income, primarily African American women in four urban communities. After two years of intervention activities, increases in rates of talking with main partners about condoms were significantly larger in intervention communities than in comparison communities. Intervention communities also had significant increases in the proportion of women who had tried to get their main partners to use condoms.

Condom availability programs

Example: Condom distribution: a cost-utility analysis (Bedimo et al. 2002)

In original compendium A social marketing campaign conducted in Louisiana between 1994 and 1996 made over 33 million condoms freely available in over 1,000 public and commercial sites throughout the state. Fifty-five percent of the condoms were taken by African Americans, a priority population. Surveys among 275,000 African Americans showed that condom use increased by 30%. The program was estimated to prevent 170 HIV infections and save 1909 quality-adjusted life years.

Group-level behavioral interventions for Men Who Have Sex with Men

Example: Community HIV Prevention Research Collaborative (Kelly et al. 1997)

In original compendium A community-level intervention aimed at lowering the risk of HIV infection focused on male patrons at gay bars in eight small U.S. cities, four of which served as intervention cities and four of which served as control cities. In the control cities, HIV educational materials were placed in the bars. In the intervention cities, popular homosexual men in the community were recruited and trained to spread behavior-change endorsements and recommendations to their peers through conversation. Population-level rates of risk behavior decreased significantly in the intervention cities compared with the control cities at one-year follow-up. In the intervention cities there was a reduction in the mean frequency of unprotected anal intercourse during the previous two months, from

1.68 occasions at baseline to 0.59 occasions at follow-up, and an increase in the mean percentage of occasions of anal intercourse protected by condoms, from 44.7% at baseline to 66.8% at follow-up.

UPDATE: D-up: Defend Yourself! (Jones et al. 2008)

A community-level intervention, d-up: Defend Yourself! is designed for and developed by black men who have sex with men (MSM). D-up! finds and enlists opinion leaders whose advice is respected and trusted by their peers, who are then trained to change risky sexual norms of their friends and acquaintances. D-up! opinion leaders are prepared to deliver messages that counter racial and sexual biases directed toward black MSM in society and to promote condom use among Black MSM. Research for this HIV behavioral intervention adapted for black MSM was conducted in three North Carolina cities over a year. Local prevention specialists conducted four two-hour sessions on the following topics: local and state epidemiology of HIV/AIDS and STDs, facts and myths about HIV/AIDS, and characteristics of an effective risk reduction conversation. Intervention participants had opportunities to role-play potential conversations that they could have with their friends and acquaintances. Participants were given tests measuring their knowledge before and after the intervention sessions. To compensate them for their time, opinion leaders received \$100 in gift cards, marketing materials that contained the project logo, and safer-sex materials. Significant decreases were found in unprotected receptive anal intercourse at 4 months (by 23.8%) and 8 months (by 24.7%), and in unprotected insertive anal intercourse (by 35.2%), unprotected receptive anal intercourse (by 44.1%), and any unprotected anal intercourse (by 31.8%) at 12 months. Additionally, at 12 months, the mean number of partners for unprotected receptive anal intercourse decreased by 40.5%. The mean number of episodes for unprotected insertive anal intercourse decreased by 53.0%, and by 56.8% for unprotected receptive anal intercourse. The percentage of respondents reporting always using condoms for insertive and receptive anal intercourse increased by 23.0% and 30.3%, respectively.

Youth development interventions with community service

Example: HoMBReS (Rhodes et al. 2009)

HoMBReS is a community-level intervention developed for a rural Latino soccer league. Each team, composed of 20 to 25 players, elects one opinion leader who is trained as a lay health adviser, known as a Navegante or navigator. Navegantes complete 16 hours of training in four sessions. After completing the training, the Navegantes work to improve their community's health (1) as lay health advisers providing HIV/STI information, condoms, and referrals and increasing condom use skills, (2) as opinion leaders bolstering positive attitudes and reframing negative attitudes about what it means to be a Latino man and changing sexual health attitudes and norms, and (3) as community advocates for environmental change bringing the community voice to health service agencies. Navegantes hold monthly meetings to plan, coordinate, and evaluate their ongoing activities.

Comprehensive risk-reduction interventions for adolescents

Example: Cuidate! (Villarruel et al. 2006)

¡Cuidate!, which means “take care of yourself,” is a culturally-based, group-level intervention to reduce HIV sexual risk behavior among Latino youth ages 13 to 18. ¡Cuidate! consists of six one-hour modules delivered over a minimum of two days to groups of six to 10 youth. ¡Cuidate! can be delivered in community centers, schools, etc. by health educators, counselors, health care providers, etc. HIV/AIDS knowledge, condom negotiation, refusal of sex, and correct condom use skills are taught through interactive games, group discussion, role-plays, video, music, and mini-lectures. A similar intervention was tested in Northeast Philadelphia schools among Latinos aged 13 through 18 years (249 males and 304 females) from April 2000 through March 2003. Data collection occurred before and after intervention and at three, six, and 12 months. The HIV and health-promotion control interventions consisted of six 50-minute modules delivered by adult facilitators to small, mixed-gender groups in English or Spanish. Analyses revealed that adolescents in the HIV intervention were less likely to report sexual intercourse, multiple partners, and days of unprotected intercourse and more likely to report using condoms consistently. Adolescents assigned to the HIV intervention who were sexually inexperienced at baseline reported fewer days of unprotected sex; Spanish speakers were more likely to have used a condom at last intercourse and had a greater proportion of protected sex compared with similar adolescents in the health-promotion intervention.

Example: HORIZONS (DiClemente et al. 2009)

HORIZONS is a group-level, gender- and culturally tailored STD/HIV intervention for African American adolescent females seeking sexual health services. African American women health educators conduct two group sessions (four hours each) and four individual telephone calls (15 minutes each) over nine months after the group sessions. Participants role-play informing male sex partners about their STD status and encouraging partners to seek STD screening/treatment. Participants also receive \$20 vouchers redeemable by their male partner(s) towards the cost of STD services. Over the 12-month follow-up, fewer adolescents in the intervention had a chlamydial infection (42 vs 67) or recurrent chlamydial infection (4 vs 14). Adolescents in the intervention also reported a higher proportion of condom-protected sex acts in the 60 days preceding follow-up assessments (mean difference, 10.84) and less frequent douching (mean difference, -0.76). Adolescents in the intervention were also more likely to report consistent condom use in the 60 days preceding follow-up assessments and condom use at last intercourse.

Goal: Reduce Injury and Violence

This goal includes three subheadings where we found effective interventions—violence prevention, injury prevention, and falls prevention. We did specifically seek to identify gun violence interventions, but due to a prohibition on use of federal funds for research related to this topic, there is a relative lack of evidence.

Violence Prevention

Acts of violence are among the top 15 causes of death in the United States for people of all ages. Violent acts may result in premature death or disability, which decreases productivity and contributes to poor mental health.⁹ Factors that influence violence include individual social experiences and relationships, community environment, and societal beliefs and attitudes. Preventative measures related to problem-solving skills may contribute to conflict dissolution. Introducing programs to schools that render violence unacceptable can positively change social norms and has been shown to decrease violent behavior across all grade levels.¹⁰

Early childhood home visitation to prevent childhood maltreatment

Example: Long-term effects of home visitation on maternal life course and child abuse and neglect. Fifteen-year follow-up of a randomized trial (Olds et al. 1997)

A study was conducted in a semirural community in New York to examine the long-term effects of prenatal and early childhood home visitation by nurses on women's life course and of child abuse and neglect. Families received a mean of nine home visits during pregnancy and 23 home visits from the child's birth through the second birthday. Women's use of welfare and number of subsequent children were based on self-report; their arrests and convictions were based on self-report and archived data from New York State. Verified reports of child abuse and neglect were abstracted from state records. Along with a number of other benefits, including fewer behavioral impairments due to drug and alcohol use and fewer arrests, during the 15-year period after the birth of their first child, there were fewer verified reports of child abuse in women who were visited by nurses during pregnancy and infancy, in contrast to women in the comparison group.

School-based programs to prevent violence and bullying

Example: Responding in Peaceful and Positive Ways (RIPP) among urban adolescents (Farrell et al. 2001)

Responding in Peaceful and Positive Ways (RIPP) is a sixth grade universal violence prevention program. Classes of sixth graders at three urban middle schools serving predominantly African American youth were randomized to intervention and control groups. The "RIPP-6" curricula, or curricula for sixth graders, focus on violence prevention broadly. A key element in the programs for all three grades (sixth, seventh, and eighth) is a trained prevention facilitator who implements the program and models pro-social attitudes and behaviors. Facilitators teach the 25-session RIPP-6 curriculum on a weekly basis throughout the school year. Each session is 50

minutes long and is typically taught during the academic subjects of social studies, health, and science. Results found RIPP participants had fewer disciplinary violations for violent offenses and in-school suspensions at posttest compared with the control group. The reduction in suspensions was maintained at 12-month follow-up for boys but not for girls. RIPP participants also reported more frequent use of peer mediation and reductions in fight-related injuries at posttest. Intervention effects on several measures approached significance at six-month and 12-month follow-up.

Example: Responding in Peaceful and Positive Ways (RIPP) in rural middle schools (Farrell et al. 2003)

The effectiveness of the RIPP violence prevention program that was originally developed for urban middle schools serving a predominantly African American student population was evaluated in rural schools serving an ethnically diverse student population. Outcomes were compared for over two years for students at four intervention schools where the RIPP program was implemented and four no-intervention control schools. Several significant intervention effects were found on self-report measures of aggression, victimization, life satisfaction, and mediating variables including knowledge and attitudes.

Injury Prevention

The leading cause of death of people aged 1-44 in the United States is injury. Regardless of race, socioeconomic status, or sex, injury is the leading cause of disability for all ages.¹¹ Injury is more common in children and the elderly as opposed to other age groups, and most incurred injuries can be controlled and prevented.¹² The physical environment of the home and community contributes heavily to unintentional injuries. Modifications of the environment in practical ways are necessary to prevent roadside accidents, falls, and drowning, among other injuries.

Pedestrian safety education

Example: Safe Routes to School (SRTS) in New York City (Dimaggio and Li 2013)

The U.S. Congress created the federal Safe Routes to School (SRTS) program in 2005 to help address the health and societal consequences of the decline in walking and bicycling to school. The program allocated funds for state departments of transportation to build sidewalks, bicycle lanes, and safe crossings, improve signage, and make other improvements that allow children to travel more safely to school. This study used geocoded motor vehicle crash data for 168,806 pedestrian injuries in New York City between 2001 and 2010. Annual pedestrian injury rates per 10,000 population were calculated for different age groups and for census tracts with and without SRTS interventions during school-travel hours. During the study period, the annual rate of pedestrian injury decreased 33% among school-aged children (5- to 19-year-olds) and 14% in other age groups. The annual rate of school-aged pedestrian injury during school-travel hours decreased 44% from 8.0 injuries per 10,000 in the pre-intervention period (2001-2008) to 4.4 injuries per 10,000 in the post-intervention period (2009-2010) in census tracts with SRTS interventions. The rate remained virtually unchanged in census tracts without SRTS interventions.

Enhanced enforcement programs for the use of safety belts

Example: Multilevel intervention in Latino communities (Schaechter and Uhlhorn 2011)

Motor vehicle crashes are the leading cause of death for U.S. Latinos aged 1 to 35 years. Restraint use is an effective means of prevention of motor vehicle crash injury. This multilevel intervention consisting of a community awareness campaign, restraint use education with equipment distribution, and a two-staged law enforcement intervention was implemented in two of three Latino-majority communities. Restraint use observations were conducted in all three communities at baseline, after the warnings phase and again after the citations phase of the intervention were completed. The combined intervention was associated with a significant increase in both driver and child passenger restraint use in one intervention community, but only driver restraint increased to a level of significance in the other intervention community. Significant increase was also noted among nonintervention drivers. The citations phase of the intervention did not result in a significant increase in restraint use and was complicated by interruptions due to unlicensed drivers. The combined effort of community awareness, education, equipment distribution, and law enforcement intervention that included incentives and warnings may be effective at increasing seat belt use in Latino communities without the need for citations.

Child safety seat distribution and education programs

Example: Increasing car seat use for toddlers from inner-city families (Louis and Lewis 1997)

Families from Newark, NJ, were divided into two study groups. Both groups were given car seats, but one group also received education regarding car restraint use. Observations were made of car seat use before car seat distribution, immediately after distribution, four to five months later, and one year later. Car seat use increased markedly immediately after distribution and remained high one year later, regardless of education. This suggests that access to car seats was the deciding factor in car seat use.

Example: Child care centers: a community resource for injury prevention (Stuy 1993)

Usage rates of child restraint devices in poor and minority communities are disproportionately low despite state laws. Two urban child care centers enrolling high-risk two- through six-year-old children were monitored for correct child restraint use during a five-month educational intervention at one center. Key features of intervention programming included weekly, developmentally appropriate presentations by the staff to the children and documented parental awareness of the child care center's policy advisory regarding child restraint use. Results demonstrate statistically significant increases in use at the intervention center. This study finds that child care center policy and programming can be effective in promoting child passenger safety.

Support community and streetscape design that promotes safety and prevents injuries

Example: Low-cost traffic engineering measures (LCTEMs) (Yannis et al. 2013)

This paper investigates the impact of low-cost traffic engineering measures (LCTEMs) on the improvement of road safety in urban areas. A number of measures were considered, such as speed humps, woonerfs, raised intersections and other traffic calming measures, which have been implemented on one-way, one-lane roads in a municipality in the Greater Athens Area. The selected control group is composed of two municipalities in the greater Athens area, which present similar road network and land use characteristics with the area considered. The application of the methodology showed a statistically significant reduction in the total number of passenger car and single-vehicle crashes, which can be possibly attributed to the introduction of LCTEMs.

Reduce alcohol-impaired driving

Example: Checkpoint Tennessee (Lacey et al. 1999)

Tennessee implemented an extensive statewide sobriety checkpoint program (Checkpoint Tennessee). The volume of checkpoints increased from about 15 in the preceding year to nearly 900 in the program year. Grant funds were used to support training and equipment, but checkpoints were staffed using existing personnel resources. Extensive checkpoint activity was continued after the formal program completion. The checkpoint activity was publicized extensively both through public service advertising and earned media. The program resulted in a 20.4% reduction in alcohol-related crashes extending at least 21 months after conclusion of the formal program. This resulted in a savings of nine fatal alcohol-related crashes per month in Tennessee.

Reduce Falls Among the Elderly

Each year, one in every three adults age 65 and older falls, which can lead to moderate to severe injuries such as hip fractures and head traumas, and is the leading cause of injury death among those age 65 and older.¹³ For this age group, two-thirds to one-half of falls occur in or around the home. The risk of falling increases exponentially with age, and older adults who have fallen previously or who stumble frequently are two to three times more likely to fall within the next year.¹⁴ As the population ages, fall-related death rates and hip fracture hospitalization rates have been increasing, despite their preventability.

Exercise-based interventions

Example: Central Sydney Tai Chi trial (Voukelatos et al. 2007)

Seven hundred and two relatively healthy community-dwelling people aged 60 and older (mean age 69) participated in this sixteen-week program of community-based tai chi classes of one hour duration per week. Falls were less frequent in the tai chi group than in the control group after 16 weeks and 24 weeks. There was no difference in the percentage of participants who had one or more falls. There were statistically significant differences in changes in balance favoring the tai chi group on five of six balance tests. Participation in once per week tai chi classes for 16 weeks can prevent falls in relatively healthy community-dwelling older people.

Multilevel interventions

Example: A community-based multilevel fall-prevention intervention in active and independent older Chinese adults (Xia et al. 2009)

Four residential communities in Shanghai were randomized to either a multilevel intervention or a control condition. Baseline information was collected from a sample of older adults in each community. The intervention framework included behavioral components (education program, brochure distribution, poster exhibition, and healthcare consultation), environmental components (improving indoor and community safety through hazard assessment and hazard elimination), individual and group interventions, and interventions directed at older people and their caregivers. Before the intervention was conducted, a multidisciplinary group was established, including the local center for disease control and prevention, which led the intervention, representatives from the street government, the community health center (CHC), community committees, landowners within the community, and volunteers. Healthcare professionals from the CHC collected fall incidence information and carried out in-home hazard assessments. Street governments provided policy support to guarantee sustained fall-prevention efforts through follow-up and cooperation of landowners in fall risk factor elimination. Community committees assisted in organization of participants. Trained volunteers provided education on exercise techniques, as well as collected ideas from community members to add to the education program. A one-year annual fall rate was calculated after an 18-month comprehensive intervention. 7.19% of the intervention community reported falls, compared with 17.86% of the control community sample. The annual fall rate decreased by 10.52% in the intervention communities, whereas the difference in control communities was not statistically significant.

Example: Stepping On (Clemson et al. 2004)

Stepping On, a multilevel, community-based falls prevention program in Sydney, Australia, aimed to improve fall self-efficacy, encourage behavioral change, and reduce the incidence of falls among the elderly. Stepping On targeted community residents aged 70 or older who had had a fall in the previous 12 months or were concerned about falling. The program used a small-group learning environment focused on improving lower-limb balance and strength, improving home and community environmental and behavioral safety, encouraging regular visual screening, making adaptations to low vision, and encouraging medication review. The intervention group experienced a clinically meaningful 31% reduction in falls over a median period of 429 days, demonstrating that the Stepping On program is effective for community-residing elderly people. Secondary analysis of subgroups showed that the program proved particularly effective for men.

Example: The Stay On Your Feet program (Kempton et al. 2000)

The Stay On Your Feet program, which targeted 80,000 residents aged 60 years and older on the North Coast of New South Wales, addressed factors contributing to falls among the older population such as footwear, vision, physical activity, balance and gait, medication use, chronic conditions, and home and public environmental hazards. The program employed a range of strategies, including awareness-raising, community education, policy development (with both state and local governments), home hazard reduction, media campaigns, and working with clinicians and other health professionals. After four years, there was a 22% non-significant lower incidence of self-reported falls in the intervention compared to the control cohort, and this was supported by a statistically significant 20% lower fall-related hospitalization rate in target group residents from intervention compared to control areas. Increased falls knowledge, physical activity, and safe footwear were also observed in the intervention cohort, as were improved balance and reduced intake of fall-related medications.

Goal: Reduce Tobacco Use

Smoking harms almost every organ of the body, and the adverse health effects from cigarette smoking account for nearly one of every five deaths each year in the United States. The risk of dying from lung cancer is more than 23 times higher among men who smoke cigarettes, and about 13 times higher among women who smoke cigarettes, compared with individuals who have never smoked.¹⁵ Smoking is the underlying cause for 87% of all lung cancer deaths and 30% of all cancer deaths, such as those of the bladder, oral cavity, pharynx, larynx, esophagus, cervix, kidney, lung, pancreas, and stomach.¹⁶ Cigarette smokers are 2–4 times more likely to develop coronary heart disease than nonsmokers, and smoking approximately doubles an individual's risk for stroke.¹⁷ It is the leading cause of preventable death in America. Reducing tobacco use has proven effective in reducing risks for cardiovascular disease, lung cancer, and a range of other cancers.

Incentives and competitions to increase smoking cessation combined with additional interventions

Example: A randomized, controlled trial of financial incentives for smoking cessation: Worksite (Volpp et al. 2009)

A study randomly assigned employees of a multinational company based in the United States to receive information about smoking-cessation programs with financial incentive or without it. The financial incentives were \$100 for completion of a smoking-cessation program, \$250 for cessation of smoking within six months after study enrollment (confirmed by a biochemical test), and \$400 for an additional six months of abstinence after the initial cessation (confirmed by a biochemical test). Individual participants were grouped according to work site, heavy or nonheavy smoking, and income. The incentive group had significantly higher rates of smoking cessation than did the information-only group nine or 12 months after enrollment (14.7% vs. 5.0%) and 15 or 18 months after enrollment (9.4% vs. 3.6%). Incentive-group participants also had significantly higher rates of enrollment in a smoking-cessation program (15.4% vs. 5.4%), completion of a smoking-cessation program (10.8% vs. 2.5%), and smoking cessation within the first six months after enrollment (20.9% vs. 11.8%). Financial incentives for smoking cessation significantly increased the rates of smoking cessation.

Example: Financial Incentives to Promote Smoking Cessation: Evidence from 11 Quit and Win Contests (O' Connor et al. 2006)

Between 2001 and 2004, 11 different Quit and Win Contests involving adult smokers were sponsored in different communities across New York State. These contests offered contestants a chance to win a cash prize (usually \$1,000) for successfully stopping smoking for at least one month. Expenditures for promoting contests varied from a high of \$91,441 to a low of \$4,345, with a median of \$25,928. Among smokers who enrolled in a contest, nine out of 10 reported making a quit attempt, and between 53 percent and 72 percent reported quitting for the full month of the contest. At four to six months follow-up, self-reported quit rates among contestants ranged from 22 percent to 49 percent, with an average of 31 percent. Based on a statewide population survey, eight of the 11 programs showed quit rates that were significantly higher than the estimated quit rate of 21 percent seen among smokers making a quit attempt in the past year.

Example: Multilevel worksite health promotion program for cardiovascular risk factors (Prior et al. 2005)

A worksite intervention program targeting approximately 800 high-risk employees who smoked provided the individuals with worksite health promotion, cardiovascular risk factor screenings, and individualized counseling. At 3.7 years, the intervention group had a 12.6% decrease in the amount smoked, a 3.3% decrease in diastolic blood pressure, and a 7.8% decrease in cholesterol, decreasing the individuals' risks for developing cardiovascular disease.

Example: A multilevel intervention to prevent smoking (World Health Organization 1982)

A multilevel intervention designed to prevent coronary heart disease targeted male factory workers in the United Kingdom, Belgium, Italy, and Poland. At four years, the average participant had decreased the number of cigarettes he smoked daily by 8.4%, and the average high risk participant had decreased the number of cigarettes smoked daily by 13.9%.

UPDATE: A randomized controlled trial of financial incentives for smoking cessation (Volpp KG, et al. 2006)

A study was conducted at the Philadelphia Veterans Affairs Medical Center of smokers who reported smoking at least ten cigarettes per day. They were randomized into incentive and non-incentive groups. Both groups were offered a free five-class smoking cessation program at the medical center. The incentive group was offered \$20 for each class attended and \$100 if they quit smoking 30 days post program completion. Self-reported smoking cessation was confirmed with urine cotinine tests. The incentive group had higher rates of program enrollment (43.3% versus 20.2%) and completion (25.8% versus 12.2%). Quit rates at 75 days were 16.3% in the incentive group versus 4.6% in the control group. At six months, quit rates in the incentive group were not significantly higher (6.5%) than in the control group (4.6%).

Mass media campaigns when combined with other interventions**Example: A randomized controlled trial of a community intervention to prevent adolescent tobacco use (Biglan et al. 2000)**

Eight pairs of small Oregon communities were randomly assigned to receive a school-based prevention program, or the school-based program plus a community program. The community program included (a) media advocacy, (b) youth anti-tobacco activities, (c) family communications about tobacco use, and (d) reduction of youth access to tobacco. Effects were assessed through five annual surveys of seventh and ninth grade (ages 12–15) students. The results suggest that comprehensive community wide interventions can improve on the preventive effect of school based tobacco prevention programs and that effective tobacco prevention may prevent other substance use.

Example: A community health education program targeting both French- and German-speaking towns in Switzerland (Gutzwiller et al. 1985)

A community health education program targeting both French- and German-speaking towns in Switzerland found a mass media campaign and community programs to be effective in helping smokers quit. Four years into the intervention, 8% more smokers had quit the habit in intervention towns as compared with comparison towns.

UPDATE: Effects of tobacco-related media campaigns on smoking among 20–30-year-old adults: longitudinal data from the USA (Terry-McElrath, et al. 2013)

Self-report data were collected from a sample of young adults in the U.S. from age 20 to 30. This data was merged with tobacco-related advertising exposure data from Nielsen Media Research. The odds of quitting among all smokers and reduction among daily smokers in the two years between the prior and current surveys were positively related to anti-tobacco advertising, especially potential exposure levels of 104–155 ads over the past 24 months.

Quitline interventions**Example: The effectiveness and cost effectiveness of telephone counseling and the nicotine patch in a state tobacco quitline (Hollis et al. 2007)**

A study examining the effectiveness and cost effectiveness of offering quitline callers single session versus multisession counseling, with or without free nicotine patches, was conducted in Oregon. The study compared brief (one 15-minute call), moderate (one 30-minute call and a follow-up call) and intensive (five proactive calls) intervention protocols, with or without offers of free nicotine patches (nicotine replacement therapy, NRT). Staff who was unaware of the intervention assessed tobacco use by phone at 12 months. Offering free NRT and multisession telephone support within a state tobacco quitline led to higher quit rates, and similar costs per incremental quit, than less intensive protocols.

Example: Using a quitline plus low-cost nicotine replacement therapy (NRT) to help disadvantaged smokers to quit (Miller and Sedivy 2009)

Low-income smokers were recruited as participants via either a letter in the mail or a flyer inserted in a local newspaper. The intervention group received the usual service of multisession counseling from the quitline plus access to heavily subsidized NRT. A comparison group received the usual quitline service only. Trial participants were also compared with a sample of general callers to the quitline. Participants were followed up at three, six, and 12 months. The offer of subsidized NRT recruited more than twice as many low-income smokers than the offer of the cessation service alone, including 63% who were first-time callers to the quitline. In the intervention group, 73.5% of smokers tried to quit compared to 61.0% in the comparison group.

Reducing out of pocket costs for evidence-based tobacco cessation

Example: The Return on Investment of a Medicaid Tobacco Cessation Program in Massachusetts (Richard et al. 2012)

A cost-benefit analysis approach was used to estimate the return on investment for the tobacco cessation program implemented by the state of Massachusetts. Administrative data indicated that program costs including pharmacotherapy, counseling, and outreach were about \$183 per program participant (in 2010 dollars). The study also estimated inpatient savings per participant of \$571 (range \$549 to \$583). Every \$1 in program costs was associated with \$3.12 (range \$3.00 to \$3.25) in medical savings, for a \$2.12 (range \$2.00 to \$2.25) return on investment to the Medicaid program for every dollar spent. These results suggest that an investment in comprehensive tobacco cessation services may result in substantial savings for Medicaid programs. Further, federal and state policy actions to promote and cover comprehensive tobacco cessation services in Medicaid may be a cost-effective approach to improve health outcomes for low-income populations.

Smoking bans and restrictions

Example: Myocardial Infarction and Sudden Cardiac Death in Olmsted County, Minnesota, Before and After Smoke-Free Workplace Laws (Hurt et al. 2012)

In 2002, a smoke-free restaurant ordinance was implemented in Olmsted County, Minnesota, and in 2007, all workplaces, including bars, became smoke-free. A study measured, through the Rochester Epidemiology Project, the incidence of myocardial infarction (MI) and sudden cardiac death in Olmsted County during the 18-month period before and after implementation of each smoke-free ordinance. All MIs were continuously abstracted and validated, using rigorous standardized criteria relying on biomarkers, cardiac pain, and Minnesota coding of the electrocardiogram. Sudden cardiac death was defined as out-of-hospital deaths associated with coronary disease. Comparing the 18 months before implementation of the smoke-free restaurant ordinance with the 18 months after implementation of the smoke-free workplace law, the incidence of MI declined by 33%, from 150.8 to 100.7 per 100,000 population, and the incidence of sudden cardiac death declined by 17%, from 109.1 to 92.0 per 100,000 population. During the same period, the prevalence of smoking declined and that of hypertension, diabetes mellitus, hypercholesterolemia, and obesity either remained constant or increased.

Mobile phone based interventions

Example: Smoking cessation support delivered via mobile phone text messaging (txt2stop) in the UK (Free et al. 2011)

Smokers in the UK were randomized to a mobile phone text messaging smoking cessation program (txt2stop) and a control group that received texts unrelated to cessation. Txt2stop sends motivational text messages as well as behavioral-change support to aid cessation. The system automatically generated cessation or non-cessation texts according to the control or intervention group. The primary outcome was self-reported continuous smoking abstinence, biochemically verified at six months. All analyses were by intention to treat. Biochemically verified continuous abstinence at six months was significantly increased in the txt2stop group (10.7% txt2stop vs 4.9% control). Similar results were obtained when participants that were lost to follow-up were treated as smokers (9% txt2stop vs 4% control), and when they were excluded (10% txt2stop vs 4% control). No significant heterogeneity was shown in any of the prespecified subgroups. The txt2stop smoking cessation program significantly improved smoking cessation rates at six months and should be considered for inclusion in smoking cessation services.

Comprehensive tobacco control policies

Example: Adult tobacco use levels after intensive tobacco control measures: New York City, 2002-2003 (Frieden et al. 2005)

In 2002, New York City implemented a tobacco control strategy of (1) increased cigarette excise taxes; (2) legal action that made virtually all work places, including bars and restaurants, smoke-free; (3) increased cessation services, including a large-scale free nicotine-patch program; (4) education; and (5) evaluation. The health department also began annual surveys on a broad array of health measures, including smoking. From 2002 to 2003, smoking prevalence among New York City adults decreased by 11% (from 21.6% to 19.2%, approximately 140,000 fewer smokers). Smoking declined among all age groups, race/ethnicities, and education levels; in both genders; among both U.S.-born and foreign-born persons; and in all 5 boroughs.

In original compendium

Example: California Tobacco Control Program (Fichtenberg and Glantz 2000)

A study of the California Tobacco Control Program examined the impact of a \$0.25 increase on the price of cigarettes that allocated \$0.05 of the net tax for an anti-tobacco educational campaign. At three years, coronary heart disease mortality had decreased by 2.93 deaths per year for every 100,000 members of the California population, and the amount Californians smoked decreased by 2.72 packs per person per year.

UPDATE: The Effect of the California Tobacco Control Program on Smoking Prevalence, Cigarette Consumption, and Healthcare Costs: 1989–2008 (Lightwood and Glantz 2013)

The study estimates the effect of California tobacco control funding on current smoking prevalence. It also analyzes how the prevalence of smokers and cigarette consumption per

smoker affect per capita healthcare expenditures. One additional dollar of cumulative per capita tobacco control funding is associated with reduction in current smoking prevalence of 0.0497 percentage points and current smoker cigarette consumption of 1.39 packs per smoker per year. Using the National Income and Product Accounts (NIPA) measure of healthcare spending, reductions of one percentage point in current smoking prevalence and one pack smoked per smoker are associated with \$35.4 and \$3.14 reductions in per capita healthcare expenditure, respectively (2010 dollars). Between fiscal years 1989 and 2008, the California Tobacco Program cost \$2.4 billion and led to cumulative expenditure savings of \$134 billion (NIPA measurement).

Increase unit price of tobacco through excise tax

Example: The recent and projected public health and economic benefits of cigarette taxation in Greece (Alpert et al. 2013)

The effects of the recent cigarette excise tax (total price per pack, including specific excise, ad valorem tax, and value-added tax consumption; tax revenue; and per capita consumption of cigarettes) in Greece were calculated. Additionally, smoking-attributable mortality, years of potential life lost, and productivity losses were estimated. An additional €2.00 per pack tax increase on consumption and tax revenue is estimated to result in reduced cigarette sales by 20% and lead to an increase in total cigarette tax revenues by nearly €1.2 billion. The cigarette excise tax increase in 2011 created €558 million in new tax revenue. Cigarette consumption reached a recent low of 24.9 billion sticks sold or 2,197 sticks per person in 2011, indicating a 16% decrease in per capita cigarette consumption from the previous year. Prevention of 192,000 premature deaths is estimated.

Example: Economic and public health impact of 2007–2010 tobacco tax increases in Ukraine (Ross et al. 2011)

Price elasticity of cigarette demand in Ukraine was estimated using data on cigarette sales, cigarette prices, and income and tobacco control policies. The higher excise taxes for real tobacco in 2009 and 2010 have significantly reduced tobacco consumption in Ukraine, which encourages public health and fiscal gains.

Goal: Reduce Alcohol Use

Alcohol is a nervous system depressant that impairs coordination and decision-making when not regulated properly. Excessive alcohol use may contribute to injuries, violence, liver disease, risky sexual behavior, and cancer. In the United States, excessive alcohol use is attributed to nearly 2.3 million years of potential life lost, also known as years lost due to premature death.¹⁸ It is the third leading lifestyle-related cause for death. Reducing the availability of alcohol, modifying alcohol-related driving laws, and changing the social norm of alcohol acceptance by educating adolescents are among the measures that can decrease the mortality and morbidity related to excessive and unregulated alcohol usage.

Server liability

Example: Effects of Alcoholic Beverage Server Liability on Traffic Crash Injuries (Wagenaar 1991)

A study assessed the effects of the substantial change in liability exposure in Texas on the frequency of injury-producing traffic crashes. Results revealed 6.5% and 5.3% declines in injurious traffic crashes following the filing of two major liability suits in 1983 and 1984, respectively. The study found that server liability reduces trauma due to automobile crashes, and the dramatic change in liability in Texas seemed to produce an important change in server behavior. The behavioral change appears to have sufficiently reduced the number of alcohol-impaired drivers on Texas highways to bring about a reduction in the death and injury toll.

Increasing alcohol taxes

Example: Effects of Alcohol Tax Increases on Alcohol-Related Disease Mortality in Alaska: Time-Series Analyses From 1976 to 2004 (Wagenaar 2009)

Increases in alcohol excise tax rates were associated with immediate and sustained reductions in alcohol-related disease mortality in Alaska. Reductions in mortality occurred after two tax increases almost 20 years apart. Statistically significant reductions in the numbers and rates of deaths caused by alcohol-related disease beginning immediately after the 1983 and 2002 alcohol tax increases in Alaska were observed.

Blood alcohol concentration laws

Example: Impact of lowering the legal blood alcohol concentration limit to 0.03 on male, female, and teenage drivers involved alcohol-related crashes in Japan (Desapriya et al. 2007)

In June of 2002, a revision to part of the Road Traffic Act drastically increased the penalties for drinking and driving offences in Japan. Most notably, the legal blood alcohol concentration (BAC) limit for driving was lowered from 0.05 mg/ml to 0.03 mg/ml. The introduction of reduced BAC limit legislation resulted in a statistically significant decrease in the number of alcohol-impaired drivers on the road in Japan, indicating responsiveness to the legal change among adults and teenagers. Also, the preliminary assessment appears to indicate that the implementation of 0.03 BAC laws and other associated activities are associated with statistically significant reductions in alcohol-involved motor vehicle crashes.

Example: “Effects of Lowering the Legal BAC to 0.08 on Single-Vehicle Nighttime Fatal Traffic Crashes in 19 Jurisdictions” (Bernat et al. 2004)

Effects of the 0.08 law (which specifies that if a driver’s BAC is at or above 0.08, a violation has occurred even if the driver does not show signs of intoxication) were examined separately in 18 states and the District of Columbia, and the overall effect on single-vehicle nighttime fatal traffic crashes was examined across states. State-specific analyses showed that fatal traffic crashes significantly decreased in three of the 19 states following the introduction of the 0.08 law. A statistically significant 5.2% reduction in single-vehicle-nighttime fatal traffic crashes was associated with the 0.08 law across all states, after adjusting for administrative license revocation, the number of Friday and Saturday nights in a month, and trends in all other types of fatal traffic crashes.

Example: “Does Setting Limits Save Lives? The Case of 0.08 BAC Laws” (Dee 2001)

Nineteen states have established laws that make it illegal per se to drive with a blood alcohol concentration (BAC) of 0.08. The results of this study indicate that 0.08 BAC laws have been effective in reducing the number of traffic fatalities, particularly among younger adults. These estimates suggest that the nationwide adoption of 0.08 BAC laws would generate substantial gains, reducing the annual count of traffic fatalities by at least 1,200.

Breath testing checkpoints

Example: Cost savings from a sustained compulsory breath testing and media campaign in New Zealand (Miller et al. 2004)

Three approaches to compulsory breath testing (CBT) where drivers are stopped tested was tested: (1) intensive, moderate-profile CBT (plus zero alcohol tolerance for drivers under age 20, which was implemented simultaneously, remains in effect, and unavoidably is commingled with CBT in the effectiveness estimates); (2) CBT plus an enhanced media campaign; and (3) shifting to aggressively visible “booze buses,” which also streamlined drunk-driver processing with enhanced community campaigns against drunk-driving. CBT plus zero tolerance reduced expected night-time crashes by 22.1% and enhanced media by 13.9%. Booze buses yielded a further 27.4% reduction where implemented. Estimated societal benefit-cost ratios were 14 for CBT, 19 for CBT plus enhanced media, and 26 for the comprehensive package. Government saved more than it spent on the program, especially with booze buses. Aggressive CBT plus zero alcohol tolerance for youth, media blitzes, and booze buses proved dramatically effective. Together, these four interventions halved late night serious and fatal injury crashes.

Ignition interlock devices

Example: Washington State's alcohol ignition interlock law: effects on recidivism among first-time DUI offenders (McCartt et al. 2013)

A study examined the effects of changes to Washington State's ignition interlock laws. In July 2003, issuance of interlock orders moved from courts to the driver licensing department and in June 2004, the interlock order requirement extended to first-time offenders with blood alcohol concentrations (BACs) below 0.15 percent. Mandating interlock orders for all first DUI convictions was associated with reductions in recidivism, even with low interlock use rates, and reductions in crashes. After the 2004 law change, the proportion of simple DUIs declined somewhat. Interlock installation rates for first simple DUIs were 3 to 6 percent in the year before the law change and one third after. Recidivism among first simple DUI offenders declined by an estimated 12 percent (e.g., expected 10.6% without law change vs. 9.3% among offenders arrested between April and June 2006 in the last study quarter). Among all first-time offenders, it decreased by an estimated 11 percent (expected 10.2% vs. 9.1%). The 2004 law change was associated with an 8.3 percent reduction in single-vehicle late-night crash risk.

Example: Breath alcohol ignition interlock devices: controlling the recidivist (Raub et al. 2003)

The recidivism rates of two groups of Illinois drivers who had their driver's licenses revoked for alcohol-impaired driving and who received restricted driving permits were compared. Drivers in both groups had more than two DUI actions against their record within five years or were classed as level III alcohol dependents. Drivers in one group were required to install breath alcohol ignition interlock devices in their vehicles and drivers in the other group were not. The research found that drivers with the interlock were one-fifth as likely to be arrested for DUI during the one year the device was installed as the comparison group, which did not have the device. However, once the ignition interlock was removed, drivers in this group rapidly returned to DUI arrest rates similar to those in the comparison group. This study also found that individuals who were removed from the interlock program and returned to revoked status continued to drive. Within three years, approximately 50% of this latter group were involved in a crash or were arrested for DUI or with an invalid driver's license. The findings suggest that the breath alcohol ignition interlock device is effective in preventing continued driving while impaired. The devices should remain installed until drivers can demonstrate an extended period of being alcohol-free.

Mass media campaigns to reduce alcohol-impaired driving

Example: Effectiveness of the anti-drunk driving advertising campaign in New Zealand (Tay 1999)

The main foci of the advertisements in the New Zealand media campaign were on alcohol-impaired driving and speeding, but these were later supplemented by the rural driving and seat belt use campaigns. This study tested whether advertising has an independent effect or its effectiveness is wholly dependent on the level of enforcement. Research found that the road safety advertising campaign had an independent effect in reducing the number of fatal crashes and that its effectiveness was not reinforced by higher levels of enforcement as expected.

Limits of days and hours of sales

Example: Saturday opening of alcohol retail shops in Sweden: an experiment in two phases (Norström and Skog 2005)

Prior to February 2000, all alcohol monopoly outlets were closed on Saturdays in Sweden. After this date, stores in an experimental area consisting of six counties were open on Saturdays. In the control area, consisting of seven counties, the shops remained closed. Because continuous evaluations of the trial did not reveal any negative consequences, the Saturday opening was implemented throughout Sweden after 17 months. The increased accessibility to alcohol rendered by Saturday opening seems to have increased consumption.

Multilevel interventions

Example: The Sacramento Neighborhood Alcohol Prevention Project: outcomes from a community prevention trial (Treno et al. 2007)

This Sacramento Neighborhood Alcohol Prevention Project (SNAPP) set out to reduce alcohol access, drinking, and related problems in two low-income, predominantly ethnic minority neighborhoods. It focused on individuals between the ages 15 and 29, an age group identified with high rates of alcohol-involved problems. Five project interventions included a mobilization component to support the overall project, a community awareness component, a responsible beverage-service component, an underage-access law enforcement component, and an intoxicated-patron law enforcement component. The study found significant reductions in assaults as reported by police, better aggregate emergency medical services (EMS) outcomes, and fewer EMS motor vehicle accidents and assaults.

Example: Preventing alcohol-impaired driving through community self-regulation training (Worden et al. 1989)

A community education program was designed to train the individual drinker to self-regulate his or her blood-alcohol concentration (BAC) below a level of impairment (.05 g/dl or 11 mmol/L). Drink calculators (cardboard wheels and wallet cards) were disseminated to customers of bars and licensed beverage outlets. Bartenders and counter clerks were trained to demonstrate use of the calculators and demonstrations were presented in television spots. Program components were evaluated in three matched Vermont communities, one receiving the full community education program, one receiving the TV spots only, and one serving as control. After six months of intervention, a roadside survey of nighttime drivers indicated 5.3 percent fewer drivers with BACs above 0.05 g/dl in the community program group and 1.0 percent fewer in the TV-only group compared to the control group. However, substantially fewer drivers were found above .00 BAC in either program community than in the control. Drivers reporting heavy drinking and youthful drivers both indicated higher utilization of the materials than did other drivers. This study suggests that a community education program can be effective in preventing alcohol-impaired driving.

Example: How Project Northland reduced alcohol use among young adolescents (Komro et al. 2001)

Project Northland was conducted in 24 school districts and adjacent communities in northeastern Minnesota with students in grades 6–8. The intervention consisted of social-behavioral curricula in schools, peer leadership activities, parental involvement and education, and community-wide activities. At the end of three years of intervention, significantly fewer students in the intervention school districts reported alcohol use than students in the reference districts. Important mediators of Project Northland’s effect on alcohol use were (1) peer influence to use, including normative estimates, (2) functional meanings of alcohol use, (3) attitudes and behaviors associated with alcohol and drug problems like stimulus seeking, rule violations, and bad judgment, and (4) parent-child alcohol-related communication around alcohol use. In addition, among those who did not use alcohol at baseline, self-efficacy to refuse offers of alcohol was a significant mediator.

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- 1 American Heart Association. 2013. “Heart Disease and Stroke Statistics--2013 Update: A Report from the American Heart Association,” accessed June 12, 2013, <http://circ.ahajournals.org/content/127/1/e6.full.pdf>.
 - 2 National Center for Chronic Disease Prevention and Health Promotion (U.S.). 2012. *Diabetes report card 2012*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Division of Diabetes Translation. <http://www.cdc.gov/diabetes/pubs/pdf/DiabetesReportCard.pdf>.
 - 3 “Asthma and Schools,” last modified February 19, 2013, <http://www.cdc.gov/HealthyYouth/asthma/>
 - 4 Hall MJ, CJ DeFrances, SN Williams, A Golosinskiy and A Schwartzman. 2010. *National Hospital Discharge Survey: 2007 summary*. National health statistics reports; no 29. Hyattsville, MD: National Center for Health Statistics.
 - 5 National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention (U.S.). 2013. *Incidence, prevalence, and cost of sexually transmitted infections in the United States*. Atlanta, GA: Centers for Disease Control and Prevention, National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention.
 - 6 “30 Years of HIV/AIDS,” last modified June 2011, <http://www.cdc.gov/nchhstp/newsroom/docs/CDC-HIV-30th-Fact-Sheet-508c.pdf>.
 - 7 “HIV in the United States, At a Glance,” last modified April 23, 2013, <http://www.cdc.gov/hiv/statistics/basics/ataglance.html>
 - 8 “Male Latex Condoms and Sexually Transmitted Diseases: Fact Sheet for Public Health Personnel,” last modified March 25, 2013, <http://www.cdc.gov/condomeffectiveness/latex.htm>
 - 9 “Injury and Violence Prevention,” accessed June 12, 2013, <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=24>
 - 10 “Injury Prevention & Control: Saving Lives and Protecting People from Violence and Injuries,” last modified August 19, 2013, <http://www.cdc.gov/injury/overview/index.html>
 - 11 “Injury and Violence Prevention,” accessed June 12, 2013, <http://www.healthypeople.gov/2020/topicsobjectives2020/overview.aspx?topicid=24>.
 - 12 “How can injuries in children and older people be prevented?,” accessed June 18, 2013, http://www.euro.who.int/__data/assets/pdf_file/0004/74686/E84938.pdf.
 - 13 “Older Adult Falls,” accessed June 18, 2013, http://www.nsc.org/safety_home/HomeandRecreationalSafety/Falls/Pages/OlderAdultFalls.aspx
 - 14 “Farewell to Falls Program,” accessed June 18, 2013, <http://stanfordhospital.org/clinicsmedServices/medicalServices/emergency/fallPrevention.html>
 - 15 “Cancer Facts & Figures 2013,” accessed June 18, 2013, <http://www.cancer.org/acs/groups/content/@epidemiologysurveillance/documents/document/acspc-036845.pdf>.
 - 16 United States. 2010. *How tobacco smoke causes disease: the biology and behavioral basis for smoking-attributable disease : a report of the Surgeon General*. Rockville, MD: U.S. Dept. of Health and Human Services, Public Health Service, Office of the Surgeon General.
 - 17 “Smoking & Tobacco Use: Health Effects of Cigarette Smoking,” last modified August 1, 2013, http://www.cdc.gov/tobacco/data_statistics/fact_sheets/health_effects/effects_cig_smoking/index.htm
 - 18 “Alcohol and Public Health: Fact Sheets- Alcohol Use and Health,” last modified October 1, 2012, <http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>

APPENDIX

Appendix

List of organizations searched

- American Cancer Society - <http://www.cancer.org/>
- American Diabetes Association - <http://www.diabetes.org/>
- American Heart Association - <http://www.heart.org/HEARTORG/>
- American Journal for Public Health - <http://ajph.aphapublications.org/>
- American Legacy Foundation - <http://www.legacyforhealth.org/>
- American Lung Association - <http://www.lung.org/>
- American Public Health Association - <http://www.apha.org/>
- Amfar: The Foundation for AIDS Research - <http://www.amfar.org/>
- Association of Maternal and Child Health Programs - <http://www.amchp.org/Pages/default.aspx>
- Association of State and Territorial Health Officials - <http://www.astho.org/>
- Brookings Institution - <http://www.brookings.edu/ccf.aspx>
- California Endowment - <http://www.calendow.org/>
- California Healthcare Foundation - <http://www.chcf.org/>
- Campaign for Tobacco-Free Kids - <http://www.tobaccofreekids.org/>
- CDC Guide to Community Preventive Services - <http://www.thecommunityguide.org/index.html>
- Center for Advancing Health - <http://www.cfah.org/>
- Children's Health Fund - <http://www.childrenshealthfund.org/>
- Clean Air Task Force - <http://www.catf.us/>
- Cochrane - <http://www.cochrane.org/cochrane-reviews/about-cochrane-library>
- Congressional Research Service - <http://www.loc.gov/crsinfo/>
- County Health Rankings and Roadmaps - <http://www.countyhealthrankings.org/>
- Cure Violence - <http://cureviolence.org/>
- Guttmacher Institute - <http://www.guttmacher.org/>
- Institute of Medicine - <http://www.iom.edu/>
- International AIDS Society - <http://journals.lww.com/aidsonline/pages/default.aspx>
- Kaiser Family Foundation - <http://www.kff.org/>

- Let's Move:
 - <http://www.letsmove.gov/become-lets-move-city-or-town>
 - <http://www.letsmove.gov/white-house-task-force-childhood-obesity-report-president>
- Mathematica Policy Research, Inc. - <http://www.mathematica-mpr.com/>
- Mothers Against Drunk Driving (MADD) - <http://www.madd.org/>
- National Association of Community Health Centers, Inc. - <http://www.nachc.com/>
- National Association of County and City Health Officials - <http://www.naccho.org>
- National Academy for State Health Policy - <http://www.nashp.org/>
- National Academy of Sciences, National Research Council - <http://www.nationalacademies.org/nrc/>
- National Clearinghouse on Family Violence (part of Public Health Agency of Canada) - http://www.phac-aspc.gc.ca/ph-sp/preveco-02-eng.php#a4_1
- National Institute on Alcohol Abuse and Alcoholism - <http://www.niaaa.nih.gov/>
- National Institute of Health - <http://www.nih.gov/>
- National Business Coalition on Health - <http://www.nbch.org/>
- National Governors Association - <http://www.nga.org/cms/home.html>
- National Prevention Strategy - <http://www.healthcare.gov/prevention/nphpphc>
- New York State, Department of Health - <http://www.health.state.ny.us/>
- Partnership for Prevention - <http://www.prevent.org/>
- Partnership to Fight Chronic Disease - <http://www.fightchronicdisease.org/>
- Public Health Agency of Canada - <http://www.phac-aspc.gc.ca/index-eng.php>
- RAND - <http://www.rand.org>
- Rural Policy Research Institute (RUPRI) Center for Rural Health Analysis - <http://cph.uiowa.edu/rupri/>
- Robert Wood Johnson Foundation - <http://www.rwjf.org/>
- Substance Abuse & Mental Health Services Administration (SAMHSA) - <http://www.samhsa.gov/>
- Trust for America's Health - <http://healthyamericans.org/>
- UCLA Center for Health Policy Research - <http://healthpolicy.ucla.edu/Pages/home.aspx>
- United States Government Accountability Office - <http://www.gao.gov/>

- United States Department of Housing and Urban Development
- United States Department of Transportation - <http://www.dot.gov/>
- United States Environmental Protection Agency - <http://www.epa.gov/>
- United States Office of the Surgeon General - <http://www.surgeongeneral.gov/>
- Urban Institute - <http://www.urban.org>
- World Health Organization - <http://www.who.int/en/>
 - WHO Global Campaign for Violence Prevention and Centre for Public Health at Liverpool John Moores University - http://www.preventviolence.info/evidence_base.aspx
 - WHO and ISPCAN - http://www.phac-aspc.gc.ca/ncfv-cnivf/pdfs/nfnts-prev-maltr_e.pdf

Bibliography

Systematic Reviews

Cardiovascular Disease, Stroke and Diabetes

- Bellew B. 2008. Primary prevention of chronic disease in Australia through interventions in the workplace setting: An *Evidence Check* rapid review. Haymarket, NSW: The Sax Institute. https://www.saxinstitute.org.au/wp-content/uploads/29_Primary-prevention-chronic-disease....workplace-setting.pdf.
- Chiqui, Jamie F. 2008. *Local wellness policies assessing school district strategies for improving children's health: school years 2006-07 and 2007-08*. Chicago, IL: Bridging the Gap, Health Policy Center, Institute for Health Research and Policy, University of Illinois at Chicago. http://www.bridgingthegapresearch.org/research_products/
- Guide to Community Preventive Services. Environmental and policy approaches to increase physical activity: creation of or enhanced access to places for physical activity combined with informational outreach activities. www.thecommunityguide.org/pa/environmental-policy/improvingaccess.html, last updated May 2001.
- Heath GW, RC Brownson, J Kruger, R Miles, KE Powell, LT Ramsey, and Task Force on Community Preventive Services. 2006. "The effectiveness of urban design and land use and transport policies and practices to increase physical activity: a systematic review." *Journal of Physical Activity & Health*. 3: S55-S76.
- Institute of Medicine (U.S.), J Michael McGinnis, Jennifer Appleton Gootman, and Vivica I Kraak. 2006. *Food marketing to children and youth threat or opportunity?* Washington, D.C.: National Academies Press. <http://site.ebrary.com/id/10120677>
- Lehnert T, D Sonntag, A Konnopka, S Riedel-Heller, and HH König. 2012. "The long-term cost-effectiveness of obesity prevention interventions: systematic literature review." *Obesity Reviews: an Official Journal of the International Association for the Study of Obesity*. 13 (6): 537-53.
- Nocon M, F Müller-Riemenschneider, K Nitzschke, and SN Willich. 2010. "Review Article: Increasing physical activity with point-of-choice prompts--a systematic review." *Scandinavian Journal of Public Health*. 38 (6): 633-8.
- Pucher J, J Dill, and S Handy. 2010. "Infrastructure, programs, and policies to increase bicycling: an international review." *Preventive Medicine*. 50: 106-25.
- Roux L, M Pratt, TO Tengs, MM Yore, TL Yanagawa, Van Den Bos J, C Rutt, et al. 2008. "Cost effectiveness of community-based physical activity interventions." *American Journal of Preventive Medicine*. 35 (6): 578-88.

- Soler RE, KD Leeks, LR Buchanan, RC Brownson, GW Heath, and DH Hopkins. 2010. "Point-of-decision prompts to increase stair use. A systematic review update." *American Journal of Preventive Medicine*. 38 (2): 292-300.
- Task Force on Community Preventive Services. "Diabetes." In: Zaza S, Briss PA, Harris KW, eds. *The Guide to Community Preventive Services: What Works to Promote Health?* Atlanta, GA: Oxford University Press; 2005: 188-222.
- van Sluijs EM, S Kriemler, and AM McMinn. 2011. "The effect of community and family interventions on young people's physical activity levels: a review of reviews and updated systematic review." *British Journal of Sports Medicine*. 45 (11): 914-22.
- Verweij LM, J Coffeng, van Mechelen W, and KI Proper. 2011. "Meta-analyses of workplace physical activity and dietary behaviour interventions on weight outcomes." *Obesity Reviews : an Official Journal of the International Association for the Study of Obesity*. 12 (6): 406-29.
- Wu S, D Cohen, Y Shi, M Pearson, and R Sturm. 2011. "Economic analysis of physical activity interventions." *American Journal of Preventive Medicine*. 40 (2): 149-58.

Violence Prevention

- Hahn, Robert A. 2007. *The Effectiveness of Universal School-Based Programs for the Prevention Of Violent and Aggressive Behavior: A Report on Recommendations of the Task Force on Community Preventive Services*. Atlanta, GA: Dept. of Health & Human Services, Centers for Disease Control and Prevention.
- Hahn, Robert, Dawna Fuqua-Whitley, Holly Wethington, Jessica Lowy, Akiva Liberman, Alex Crosby, Mindy Fullilove, et al. 2007. "Effectiveness of universal school-based programs for the prevention of violent and aggressive behavior." *Morbidity and Mortality Weekly Report*. 56 (RR-7): 1-16.
- Hahn R, D Fuqua-Whitley, H Wethington, J Lowy, A Crosby, M Fullilove, R Johnson, et al. 2007. "Effectiveness of universal school-based programs to prevent violent and aggressive behavior: a systematic review." *American Journal of Preventive Medicine*. 33 (2): 114-29.
- Mikton, Christopher, and Butchart, Alexander. 2009. "Child maltreatment prevention: a systematic review of reviews." *Bulletin of the World Health Organization*. 87 (5): 353-61.
- Mytton JA, DiGuseppi C, Gough D, Taylor RS, and Logan S. 2009. "School-based secondary prevention programmes for preventing violence." *Cochrane Database of Systematic Reviews*. (4).

Falls Among the Elderly

- Frick KD, JY Kung, JM Parrish, and MJ Narrett. 2010. "Evaluating the cost-effectiveness of fall prevention programs that reduce fall-related hip fractures in older adults." *Journal of the American Geriatrics Society*. 58 (1): 136-41.

- Gillespie LD, MC Robertson, WJ Gillespie, C Sherrington, S Gates, LM Clemson, and SE Lamb. 2012. "Interventions for preventing falls in older people living in the community." *The Cochrane Database of Systematic Reviews*. (9).
- Hanley A, C Silke, and J Murphy. 2011. "Community-based health efforts for the prevention of falls in the elderly." *Clinical Interventions in Aging*. 6 (1): 19-25.
- McClure R, C Turner, N Peel, A Spinks, E Eakin, and K Hughes. 2005. "Population-based interventions for the prevention of fall-related injuries in older people." *The Cochrane Database of Systematic Reviews*. (1).

Injury Prevention

- Dinh-Zarr, Tho Bella, David A Sleet, Ruth A Shults, Stephanie Zaza, Randy W Elder, James L Nichols, Robert S Thompson, and Daniel M Sosin. 2001. "Reviews of evidence regarding interventions to increase the use of safety belts." *American Journal of Preventive Medicine*. 21 (4): 48-65.
- Duperrex O, F Bunn, and I Roberts. 2002. "Safety education of pedestrians for injury prevention." *The Cochrane Database of Systematic Reviews*. (2).
- Kwan I, and J Mapstone. 2006. "Interventions for increasing pedestrian and cyclist visibility for the prevention of death and injuries." *The Cochrane Database of Systematic Reviews*. (4).
- Retting, Richard A, Susan A Ferguson, and Anne T McCartt. 2003. "A review of evidence-based traffic engineering measures designed to reduce pedestrian-motor vehicle crashes." *American Journal of Public Health*. 93 (9): 1456-1463.
- Shults, Ruth A, Randy W Elder, David A Sleet, James L Nichols, Mary O Alao, Vilma G Carande-Kulis, Stephanie Zaza, Daniel M Sosin, and Robert S Thompson. 2001. "Reviews of evidence regarding interventions to reduce alcohol-impaired driving." *American Journal of Preventive Medicine*. 21 (4): 66-88.
- Zaza, Stephanie, David A Sleet, Robert S Thompson, Daniel M Sosin, and Julie C Bolen. 2001. "Reviews of evidence regarding interventions to increase use of child safety seats." *American Journal of Preventive Medicine*. 21 (4): 31-47.

Sexually Transmitted Infections

- Bailey JV, E Murray, G Rait, CH Mercer, RW Morris, R Peacock, J Cassell, and I Nazareth. 2010. "Interactive computer-based interventions for sexual health promotion." *The Cochrane Database of Systematic Reviews*. (9).
- Blankenship KM, SJ Bray, and MH Merson. 2000. "Structural interventions in public health." *AIDS (London, England)*. 14: 11-21.
- Charania MR, N Crepaz, C Guenther-Gray, K Henny, A Liao, LA Willis, and CM Lyles. 2011. "Efficacy of structural-level condom distribution interventions: a meta-analysis of U.S. and international studies, 1998-2007." *Aids and Behavior*. 15 (7): 1283-1297.

- Chin HB, TA Sipe, R Elder, SL Mercer, SK Chattopadhyay, V Jacob, HR Wethington, et al. 2012. "The effectiveness of group-based comprehensive risk-reduction and abstinence education interventions to prevent or reduce the risk of adolescent pregnancy, human immunodeficiency virus, and sexually transmitted infections: two systematic reviews for the Guide to Community Preventive Services." *American Journal of Preventive Medicine*. 42 (3): 272-94.
- Crepaz N, KJ Marshall, LW Aupont, ED Jacobs, Y Mizuno, LS Kay, P Jones, DH McCree, and A O'Leary. 2009. "The efficacy of HIV/STI behavioral interventions for African American females in the United States: a meta-analysis." *American Journal of Public Health*. 99 (11): 2069-78.
- Darbes L, N Crepaz, C Lyles, G Kennedy, and G Rutherford. 2008. "The efficacy of behavioral interventions in reducing HIV risk behaviors and incident sexually transmitted diseases in heterosexual African Americans." *AIDS (London, England)*. 22 (10): 1177-94.
- Herbst JH, C Beeker, A Mathew, T McNally, WF Passin, LS Kay, N Crepaz, et al. 2007. "The effectiveness of individual-, group-, and community-level HIV behavioral risk-reduction interventions for adult men who have sex with men: a systematic review." *American Journal of Preventive Medicine*. 32 (4): 38-67.
- Johnson WD, Diaz RM, Flanders WD, Goodman M, et al. 2008. "Behavioral interventions to reduce risk for sexual transmission of HIV among men who have sex with men." *Cochrane Database of Systematic Reviews*. (3).
- Lightfoot M, WS Comulada, and G Stover. 2007. "Computerized HIV preventive intervention for adolescents: indications of efficacy." *American Journal of Public Health*. 97 (6): 1027-30.
- Mullen PD, G Ramírez, D Strouse, LV Hedges, and E Sogolow. 2002. "Meta-analysis of the effects of behavioral HIV prevention interventions on the sexual risk behavior of sexually experienced adolescents in controlled studies in the United States." *Journal of Acquired Immune Deficiency Syndromes (1999)*. 30 (Suppl. 1): S94-S105.
- Noar SM, HG Black, and LB Pierce. 2009. "Efficacy of computer technology-based HIV prevention interventions: a meta-analysis." *AIDS (London, England)*. 23 (1): 107-15.
- Noar, Seth M, Larson B Pierce, and Hulda G Black. 2010. "Can computer-mediated interventions change theoretical mediators of safer sex? A meta-analysis." *Human Communication Research*. 36 (3): 261-297.
- Wetmore CM, LE Manhart, and JN Wasserheit. 2010. "Randomized controlled trials of interventions to prevent sexually transmitted infections: learning from the past to plan for the future." *Epidemiologic Reviews*. 32 (1): 121-36.

Asthma

- Beatty TK, and JP Shimshack. 2011. "School buses, diesel emissions, and respiratory health." *Journal of Health Economics*. 30 (5): 987-99.
- Borak J, and G Sirianni. 2007. "Studies of self-pollution in diesel school buses: methodological issues." *Journal of Occupational and Environmental Hygiene*. 4 (9): 660-8.
- Crocker DD, S Kinyota, GG Dumitru, CB Ligon, EJ Herman, JM Ferdinands, DP Hopkins, BM Lawrence, and TA Sipe. 2011. "Effectiveness of home-based, multi-trigger, multicomponent interventions with an environmental focus for reducing asthma morbidity: a community guide systematic review." *American Journal of Preventive Medicine*. 41 (2): 5-32.
- Labre, Magdala P, Elizabeth J Herman, Gema G Dumitru, Kristine A Valenzuela, and Christy L Cechman. 2012. "Public health interventions for asthma: an umbrella review, 1990-2010." *American Journal of Preventive Medicine*. 42 (4): 403-410.
- Press VG, AA Pappalardo, WD Conwell, AT Pincavage, MH Prochaska, and VM Arora. 2012. "Interventions to improve outcomes for minority adults with asthma: a systematic review." *Journal of General Internal Medicine*. 27 (8): 1001-15.

Tobacco

- Cahill K, and R Perera. 2011. "Competitions and incentives for smoking cessation." *The Cochrane Database of Systematic Reviews*. (4).
- Callinan JE, A Clarke, K Doherty, and C Kelleher. 2010. "Legislative smoking bans for reducing secondhand smoke exposure, smoking prevalence and tobacco consumption." *The Cochrane Database of Systematic Reviews*. (4).
- Carpenter C, and PJ Cook. 2008. "Cigarette taxes and youth smoking: new evidence from national, state, and local Youth Risk Behavior Surveys." *Journal of Health Economics*. 27 (2): 287-99.
- Chaloupka FJ, K Straif, and ME Leon. 2011. "Effectiveness of tax and price policies in tobacco control." *Tobacco Control*. 20 (3): 235-8.
- Ciecierski CC, P Chatterji, FJ Chaloupka, and H Wechsler. 2011. "Do state expenditures on tobacco control programs decrease use of tobacco products among college students?" *Health Economics*. 20 (3): 253-72.
- Durkin S, E Brennan, and M Wakefield. 2012. "Mass media campaigns to promote smoking cessation among adults: an integrative review." *Tobacco Control*. 21 (2): 127-38.
- Guindon GE. 2013. "The impact of tobacco prices on smoking onset: a methodological review." *Tobacco Control*. Published online first March 8.

- Leeks KD, DP Hopkins, RE Soler, A Aten, and SK Chattopadhyay. 2010. "Worksite-based incentives and competitions to reduce tobacco use. A systematic review." *American Journal of Preventive Medicine*. 38 (2): 263-74.
- Reda AA, D Kotz, SM Evers, and van Schayck CP. 2012. "Healthcare financing systems for increasing the use of tobacco dependence treatment." *The Cochrane Database of Systematic Reviews*. (6).
- Stead LF, R Perera, and T Lancaster. 2007. "A systematic review of interventions for smokers who contact quitlines." *Tobacco Control*. 16 (Suppl. 1): i3-i8.
- Stead LF, R Perera, and T Lancaster. 2009. "Telephone counselling for smoking cessation." *The Cochrane Database of Systematic Reviews*. (3).
- Whittaker R, H McRobbie, C Bullen, R Borland, A Rodgers, and Y Gu. 2012. "Mobile phone-based interventions for smoking cessation." *The Cochrane Database of Systematic Reviews*. (11).
- Wilson LM, Avila Tang E, G Chander, HE Hutton, OA Odelola, JL Elf, BM Heckman-Stoddard, et al. 2012. "Impact of tobacco control interventions on smoking initiation, cessation, and prevalence: a systematic review." *Journal of Environmental and Public Health*. 2010 (6): 1-36.

Alcohol

- Anderson P, D Chisholm, and DC Fuhr. 2009. "Effectiveness and cost-effectiveness of policies and programmes to reduce the harm caused by alcohol." *Lancet*. 373 (9682): 2234-46.
- Bouchery EE, HJ Harwood, JJ Sacks, CJ Simon, and RD Brewer. 2011. "Economic costs of excessive alcohol consumption in the U.S., 2006." *American Journal of Preventive Medicine*. 41 (5): 516-24.
- Coben, Jeffrey H, and Gregory L Larkin. 1999. "Effectiveness of ignition interlock devices in reducing drunk driving recidivism." *American Journal of Preventive Medicine*. 16 (1): 81-87.
- Collins D, K Johnson, and BJ Becker. 2007. "A meta-analysis of direct and mediating effects of community coalitions that implemented science-based substance abuse prevention interventions." *Substance Use & Misuse*. 42 (6): 985-1007.
- Elder RW, B Lawrence, A Ferguson, TS Naimi, RD Brewer, SK Chattopadhyay, TL Toomey, and JE Fielding. 2010. "The effectiveness of tax policy interventions for reducing excessive alcohol consumption and related harms." *American Journal of Preventive Medicine*. 38 (2): 217-29.
- Elder, Randy W, Ruth A Shults, David A Sleet, James L Nichols, Stephanie Zaza, and Robert S Thompson. 2002. "Effectiveness of sobriety checkpoints for reducing alcohol-involved crashes." *Traffic Injury Prevention*. 3 (4): 266-274.

- Elder RW, RA Shults, DA Sleet, JL Nichols, RS Thompson, and W Rajab. 2004. "Effectiveness of mass media campaigns for reducing drinking and driving and alcohol-involved crashes: a systematic review." *American Journal of Preventive Medicine*. 27 (1): 57-65.
- Elder RW, R Voas, D Beirness, RA Shults, DA Sleet, JL Nichols, and R Compton. 2011. "Effectiveness of ignition interlocks for preventing alcohol-impaired driving and alcohol-related crashes: a Community Guide systematic review." *American Journal of Preventive Medicine*. 40 (3): 362-76.
- Fagan AA, JD Hawkins, and RF Catalano. 2011. "Engaging communities to prevent underage drinking." *Alcohol Research & Health: the Journal of the National Institute on Alcohol Abuse and Alcoholism*. 34 (2): 167-74.
- Guerette RT, JL Flexon, and C Marquez. 2013. "Instigating bystander intervention in the prevention of alcohol-impaired driving: analysis of data regarding mass media campaigns." *Journal of Studies on Alcohol and Drugs*. 74 (2): 205-11.
- Gruenewald PJ. 2011. "Regulating availability: how access to alcohol affects drinking and problems in youth and adults." *Alcohol Research & Health: the Journal of the National Institute on Alcohol Abuse and Alcoholism*. 34 (2): 248-56.
- Hahn RA, JL Kuzara, R Elder, R Brewer, S Chattopadhyay, J Fielding, TS Naimi, T Toomey, JC Middleton, and B Lawrence. 2010. "Effectiveness of policies restricting hours of alcohol sales in preventing excessive alcohol consumption and related harms." *American Journal of Preventive Medicine*. 39 (6): 590-604.
- Hingson R, T Heeren, and M Winter. 2000. "Effects of recent 0.08% legal blood alcohol limits on fatal crash involvement." *Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention*. 6 (2): 109-14.
- Holder HD, K Janes, J Mosher, R Saltz, S Spurr, and AC Wagenaar. 1993. "Alcoholic beverage server liability and the reduction of alcohol-involved problems." *Journal of Studies on Alcohol*. 54 (1): 23-36.
- Mann, Robert E, Scott Macdonald, Gina Stoduto, Susan Bondy, Brian Jonah, and Abdul Shaikh. 2001. "The effects of introducing or lowering legal per se blood alcohol limits for driving: an international review." *Accident Analysis & Prevention*. 33 (5): 569-583.
- Rammohan V, RA Hahn, R Elder, R Brewer, J Fielding, TS Naimi, TL Toomey, SK Chattopadhyay, and C Zometa. 2011. "Effects of dram shop liability and enhanced overservice law enforcement initiatives on excessive alcohol consumption and related harms: Two community guide systematic reviews." *American Journal of Preventive Medicine*. 41 (3): 334-43.
- Shults RA, RW Elder, JL Nichols, DA Sleet, R Compton, and SK Chattopadhyay. 2009. "Effectiveness of multicomponent programs with community mobilization for reducing alcohol-impaired driving." *American Journal of Preventive Medicine*. 37 (4): 360-71.

- Toomey TL, and KM Lenk. 2011. "A review of environmental-based community interventions." *Alcohol Research & Health: the Journal of the National Institute on Alcohol Abuse and Alcoholism*. 34 (2): 163-6.
- Villaveces A, P Cummings, TD Koepsell, FP Rivara, T Lumley, and J Moffat. 2003. "Association of alcohol-related laws with deaths due to motor vehicle and motorcycle crashes in the United States, 1980-1997." *American Journal of Epidemiology*. 157 (2): 131-40.
- Xu X, and FJ Chaloupka. 2011. "The effects of prices on alcohol use and its consequences." *Alcohol Research & Health: the Journal of the National Institute on Alcohol Abuse and Alcoholism*. 34 (2): 236-45.
- Zwerling, Craig, and Michael P Jones. 1999. "Evaluation of the effectiveness of low blood alcohol concentration laws for younger drivers." *American Journal of Preventive Medicine*. 16 (1): 76-80.

Case Examples

- Alpert HR, CI Vardavas, F J Chaloupka, A Vozikis, K Athanasakis, I Kyriopoulos, M Bertic, PK Behrakis, and GN Connolly. 2013. "The recent and projected public health and economic benefits of cigarette taxation in Greece." *Tobacco Control*. Published Online First, 6 March.
- Beatty TK, and JP Shimshack. 2011. "School buses, diesel emissions, and respiratory health." *Journal of Health Economics*. 30 (5): 987-99.
- Bedimo, Ariane Lisann, Steven Pinkerton, Deborah Cohen, Bradley Gray, and Thomas Farley. 2002. "Condom distribution: a cost-utility analysis." *International Journal of STD & AIDS*. 13 (6): 384-392.
- Bernat DH, WT Dunsmuir, and AC Wagenaar. 2004. "Effects of lowering the legal BAC to 0.08 on single-vehicle-nighttime fatal traffic crashes in 19 jurisdictions." *Accident; Analysis and Prevention*. 36 (6): 1089-97.
- Biglan A, DV Ary, K Smolkowski, T Duncan, and C Black. 2000. "A randomised controlled trial of a community intervention to prevent adolescent tobacco use." *Tobacco Control*. 9 (1): 24-32.
- Borys J-M, L Valdeyron, E Levy, J Vinck, D Edell, L Walter, H Ruault du Plessis, P Harper, P Richard, A Barriguette. 2013. "EPODE-a model for reducing the incidence of obesity and weight-related comorbidities." *US Endocrinology*. 9 (1):32-36.
- Boyle-Holmes T, L Grost, L Russell, BA Laris, L Robin, E Haller, S Potter, and S Lee. 2010. "Promoting elementary physical education: results of a school-based evaluation stud." *Health Education & Behavior: the Official Publication of the Society for Public Health Education*. 37 (3): 377-89.

- Clemson, Lindy, Robert G Cumming, Hal Kendig, Megan Swann, Robert Heard, and Kirsty Taylor. 2004. "The effectiveness of a community-based program for reducing the incidence of falls in the elderly: a randomized trial." *Journal of the American Geriatrics Society*. 52 (9): 1487-1494.
- Dee, Thomas S. 2001. "Does setting limits save lives? The case of 0.08 BAC laws." *Journal of Policy Analysis and Management*. 20 (1): 111-128.
- Desapriya E, S Shimizu, I Pike, S Subzwari, and G Scime. 2007. "Impact of lowering the legal blood alcohol concentration limit to 0.03 on male, female and teenage drivers involved alcohol-related crashes in Japan." *International Journal of Injury Control and Safety Promotion*. 14 (3): 181-7.
- DiClemente RJ, GM Wingood, ES Rose, JM Sales, DL Lang, AM Caliendo, JW Hardin, and RA Crosby. 2009. "Efficacy of sexually transmitted disease/human immunodeficiency virus sexual risk-reduction intervention for African American adolescent females seeking sexual health services: a randomized controlled trial." *Archives of Pediatrics & Adolescent Medicine*. 163 (12): 1112-21.
- Dimaggio C, and G Li. 2013. "Effectiveness of a safe routes to school program in preventing school-aged pedestrian injury." *Pediatrics*. 131 (2): 290-6.
- Dolan MS, LA Weiss, RA Lewis, A Pietrobelli, M Heo, and MS Faith. 2006. "Take the stairs instead of the escalator? effect of environmental prompts on community stair use and implications for a national 'Small Steps' campaign." *Obesity Reviews*. 7 (1): 25-32.
- Dunn C, LM Whetstone, KM Kolasa, KS Jayaratne, C Thomas, S Aggarwal, C Herget, and AB Rogers. 2013. "Delivering a behavior-change weight management program to teachers and state employees in North Carolina." *American Journal of Health Promotion: AJHP*. 27 (6): 378-83.
- Economos CD, RR Hyatt, JP Goldberg, A Must, EN Naumova, JJ Collins, and ME Nelson. 2007. "A community intervention reduces BMI z-score in children: Shape Up Somerville first year results." *Obesity (Silver Spring, Md.)*. 15 (5): 1325-36.
- Englert, Heike S, Hans A Diehl, Roger L Greenlaw, Stefan N Willich, and Steven Aldana. 2007. "The effect of a community-based coronary risk reduction: The Rockford CHIP." *Preventive Medicine*. 44 (6): 513-519.
- Ensemble Prevenons L'Obesite Des Enfants (EPODE). 2004. "Together, we can Prevent Obesity in Children." Paris, France: French Ministry of Health, http://ec.europa.eu/health/ph_determinants/life_style/nutrition/documents/ev_20041029_co07_en.pdf, accessed June 30, 2009.
- Farrell AD, AL Meyer, and KS White. 2001. "Evaluation of Responding in Peaceful and Positive Ways (RIPP): a school-based prevention program for reducing violence among urban adolescents." *Journal of Clinical Child Psychology*. 30 (4): 451-63.

- Farrell, Albert D, Robert F Valois, Aleta L Meyer, and Ritchie P Tidwell. 2003. "Impact of the RIPP violence prevention program on rural middle school students." *Journal of Primary Prevention*. 24 (2): 143-67.
- Fichtenberg CM, and SA Glantz. 2000. "Association of the California Tobacco Control Program with declines in cigarette consumption and mortality from heart disease." *The New England Journal of Medicine*. 343 (24): 1772-7.
- Findley SE, G Thomas, R Madera-Reese, N McLeod, S Kintala, Andres Martinez R, B Ortiz, and E Herman. 2011. "A community-based strategy for improving asthma management and outcomes for Preschoolers." *Journal of Urban Health: Bulletin of the New York Academy of Medicine*. 88: 85-99.
- Finkelstein EA, O Khavjou, and JC Will. 2006. "Cost-effectiveness of WISEWOMAN, a program aimed at reducing heart disease risk among low-income women." *Journal of Women's Health*. 15 (4): 379-89.
- Flay BR, and CG Allred. 2003. "Long-term effects of the Positive Action program." *American Journal of Health Behavior*. 27: 6-21.
- Free C, R Knight, S Robertson, R Whittaker, P Edwards, W Zhou, A Rodgers, J Cairns, MG Kenward, and I Roberts. 2011. "Smoking cessation support delivered via mobile phone text messaging (txt2stop): a single-blind, randomised trial." *Lancet*. 378 (9785): 49-55.
- Frieden TR, F Mostashari, BD Kerker, N Miller, A Hajat, and M Frankel. 2005. "Adult tobacco use levels after intensive tobacco control measures: New York City, 2002-2003." *American Journal of Public Health*. 95 (6): 1016-23.
- Gilson ND, G Faulkner, MH Murphy, MRU Meyer, T Washington, GC Ryde, KP Arbour-Nicitopoulos, and KA Dillon. 2013. "Walk@Work: An automated intervention to increase walking in university employees not achieving 10,000 daily steps." *Preventive Medicine*. 56 (5): 283-287.
- Goldberg JP, JJ Collins, SC Folta, MJ McLarney, C Kozower, J Kuder, V Clark, and CD Economos. 2009. "Retooling food service for early elementary school students in Somerville, Massachusetts: the Shape Up Somerville experience." *Preventing Chronic Disease*. 6 (3).
- Gustat J, TA Farley, J Rice, KM Parker, and AB Becker. 2012. "Effect of changes to the neighborhood built environment on physical activity in a low-income African American neighborhood." *Preventing Chronic Disease*. 9 (2).
- Gutzwiller F, B Nater, and J Martin. 1985. "Community-based primary prevention of cardiovascular disease in Switzerland: methods and results of the National Research Program (NRP 1A)." *Preventive Medicine*. 14 (4): 482-91.

- Haines DJ, L Davis, P Rancour, M Robinson, T Neel-Wilson, and S Wagner. 2007. "A pilot intervention to promote walking and wellness and to improve the health of college faculty and staff." *Journal of American College Health: J of ACH*. 55 (4).
- Hamman RF, RR Wing, SL Edelstein, JM Lachin, GA Bray, L Delahanty, M Hoskin, et al. 2006. "Effect of weight loss with lifestyle intervention on risk of diabetes." *Diabetes Care*. 29 (9): 2102-7.
- Hayashi T, MA Farrell, LA Chaput, DA Rocha, and M Hernandez. 2010. "Lifestyle intervention, behavioral changes, and improvement in cardiovascular risk profiles in the California WISEWOMAN project". *Journal of Women's Health*. 19 (6): 1129-38.
- Hoffmeister H, GB Mensink, H Stolzenberg, J Hoeltz, H Kreuter, U Laaser, E Nüssel, KD Hüllemann, and JV Troschke. 1996. "Reduction of coronary heart disease risk factors in the German cardiovascular prevention study." *Preventive Medicine*. 25 (2).
- Hollis JF, TA McAfee, JL Fellows, SM Zbikowski, M Stark, and K Riedlinger. 2007. "The effectiveness and cost effectiveness of telephone counselling and the nicotine patch in a state tobacco quitline." *Tobacco Control*. 16: 53-9.
- Hurt RD, SA Weston, JO Ebbert, SM McNallan, IT Croghan, DR Schroeder, and VL Roger. 2012. "Myocardial infarction and sudden cardiac death in Olmsted County, Minnesota, before and after smoke-free workplace laws." *Archives of Internal Medicine*. 172 (21): 1635-41.
- Jenum AK, SA Anderssen, KI Birkeland, I Holme, S Graff-Iversen, C Lorentzen, Y Ommundsen, T Raastad, AK Odegaard, and R Bahr. 2006. "Promoting physical activity in a low-income multiethnic district: effects of a community intervention study to reduce risk factors for type 2 diabetes and cardiovascular disease: a community intervention reducing inactivity." *Diabetes Care*. 29 (7): 1605-12.
- Jiang L, SM Manson, J Beals, WG Henderson, H Huang, KJ Acton, and Y Roubideaux. 2012. "Translating the Diabetes Prevention Program into American Indian and Alaska Native communities: results from the Special Diabetes Program for Indians Diabetes Prevention demonstration project." *Diabetes Care*. 36 (7): 2027-34.
- Johns M, MH Coady, CA Chan, SM Farley, and SM Kansagra. 2013. "Evaluating New York City's smoke-free parks and beaches law: a critical multiplist approach to assessing behavioral impact." *American Journal of Community Psychology*. 51 (1-2): 1-2.
- Jones, Kenneth T, Phyllis Gray, Y Omar Whiteside, Terry Wang, Debra Bost, Erica Dunbar, Evelyn Foust, and Wayne D Johnson. 2008. "Evaluation of an HIV prevention intervention adapted for black men who have sex with men." *American Journal of Public Health*. 98 (6): 1043.

- Kaczorowski, Janusz, Larry W Chambers, Tina Karwalajtys, Lisa Dolovich, Barbara Farrell, Beatrice McDonough, Rolf Sebaldt, et al. 2008. "Cardiovascular Health Awareness Program (CHAP): a community cluster-randomised trial among elderly Canadians." *Preventive Medicine*. 46 (6): 537-544.
- Kelly, Jeffrey A, Debra A Murphy, Kathleen J Sikkema, Timothy L McAuliffe, Roger A Roffman, Laura J Solomon, Richard A Winnett, and Seth C Kalichman. 1997. "Randomised, controlled, community-level HIV-prevention intervention for sexual-risk behaviour among homosexual men in US cities." *The Lancet*. 350 (9090): 1500-1505.
- Kempton, Anne, Eric van Beurden, Tim Sladden, Everald Garner, and John Beard. 2000. "Older people can stay on their feet: final results of a community-based falls prevention programme." *Health Promotion International*. 15 (1): 27.
- Komro KA, CL Perry, CL Williams, MH Stigler, K Farbaksh, and S Veblen-Mortenson. 2001. "How did Project Northland reduce alcohol use among young adolescents? Analysis of mediating variables." *Health Education Research*. 16 (1): 59-70.
- Lacey, John H, RK Jones, and Randall G Smith. 1999. *Technical report: evaluation of checkpoint Tennessee : Tennessee's statewide sobriety checkpoint program*. Washington, D.C.: U.S. Dept. of Transportation, National Highway Traffic Safety Administration.
- Lauby JL, PJ Smith, M Stark, B Person, and J Adams. 2000. "A community-level HIV prevention intervention for inner-city women: results of the women and infants demonstration projects." *American Journal of Public Health*. 90 (2): 216-22.
- Lightwood J, and SA Glantz. 2013. "The effect of the California tobacco control program on smoking prevalence, cigarette consumption, and healthcare costs: 1989-2008." *PLoS One*. 8 (2).
- Lin S, MI Gomez, SA Hwang, EM Franko, and JK Bobier. 2004. "An evaluation of the asthma intervention of the New York State Healthy Neighborhoods Program." *The Journal of Asthma: Official Journal of the Association for the Care of Asthma*. 41 (5): 583-95.
- Louis B, and M Lewis. 1997. "Increasing car seat use for toddlers from inner-city families." *American Journal of Public Health*. 87 (6): 1044-5.
- McCartt AT, WA Leaf, CM Farmer, and AH Eichelberger. 2013. "Washington State's alcohol ignition interlock law: effects on recidivism among first-time DUI offenders." *Traffic Injury Prevention*. 14 (3): 215-29.
- Merrill RM, and SG Aldana. 2008. "Cardiovascular risk reduction and factors influencing loss to follow-up in the coronary health improvement project." *Medical Science Monitor: International Medical Journal of Experimental and Clinical Research*. 14 (4): 17-25.
- Miller CL, and V Sedivy. 2009. "Using a quitline plus low-cost nicotine replacement therapy to help disadvantaged smokers to quit." *Tobacco Control*. 18 (2): 144-149.

- Miller, Ted, Michael Blewden, and Jia-fang Zhang. 2004. "Cost savings from a sustained compulsory breath testing and media campaign in New Zealand." *Accident Analysis and Prevention*. 36 (5): 783-94.
- Morgan WJ, EF Crain, RS Gruchalla, GT O'Connor, M Kattan, Evans R 3rd, J Stout, et al. 2004. "Results of a home-based environmental intervention among urban children with asthma." *The New England Journal of Medicine*. 351 (11): 1068-80.
- Norström, Thor, and Ole-Jørgen Skog. 2005. "Saturday opening of alcohol retail shops in Sweden: an experiment in two phases." *Addiction*. 100 (6): 767-76.
- O'Connor R, B Fix, P Celestino, S Carlin-Menter, A Hyland, and KM Cummings. 2006. "Financial incentives to promote smoking cessation: evidence from 11 quit and win contests." *Journal of Public Health Management and Practice: JPHMP*. 12 (1): 44-51.
- Olds DL, J Eckenrode, Henderson CR Jr, H Kitzman, J Powers, R Cole, K Sidora, P Morris, LM Pettitt, and D Luckey. 1997. "Long-term effects of home visitation on maternal life course and child abuse and neglect. Fifteen-year follow-up of a randomized trial." *JAMA : the Journal of the American Medical Association*. 278 (8): 637-43.
- Piatt GA, MC Seidel, HY Chen, RO Powell, and JC Zgibor. 2012. "Two-year results of translating the diabetes prevention program into an urban, underserved community." *The Diabetes Educator*. 38 (6):798-804.
- Prior JO, van Melle G, A Crisinel, B Burnand, J Cornuz, and R Darioli. 2005. "Evaluation of a multicomponent worksite health promotion program for cardiovascular risk factors-correcting for the regression towards the mean effect." *Preventive Medicine*. 40 (3): 259-67.
- Raub, Richard A, Roy E Lucke, and Richard I Wark. 2003. "Breath alcohol ignition interlock devices: controlling the recidivist." *Traffic Injury Prevention*. 4: 199-205.
- Reger-Nash B, A Bauman, L Cooper, T Chey, KJ Simon, M Brann, and KM Leyden. 2008. "WV Walks: replication with expanded reach." *Journal of Physical Activity & Health*. 5 (1): 19-27.
- Rhodes SD, KC Hergenrather, FR Bloom, JS Leichter, and J Montaño. 2009. "Outcomes from a community-based, participatory lay health adviser HIV/STD prevention intervention for recently arrived immigrant Latino men in rural North Carolina." *AIDS Education and Prevention: Official Publication of the International Society for AIDS Education*. 21 (5): 103-8.
- Richard P, K West, and L Ku. 2012. "The return on investment of a Medicaid tobacco cessation program in Massachusetts." *PloS One*. 7 (1).
- Ross H, M Stoklosa, and K Krasovsky. 2011. "Economic and public health impact of 2007-2010 tobacco tax increases in Ukraine." *Tobacco Control*. 21 (4): 429-35.

- Sanigorski AM, AC Bell, PJ Kremer, R Cuttler, and BA Swinburn. 2008. "Reducing unhealthy weight gain in children through community capacity-building: results of a quasi-experimental intervention program, Be Active Eat Well." *International Journal of Obesity*. 32 (7): 1060-1067.
- Schaechter J, and SB Uhlhorn. 2011. "Restraint use law enforcement intervention in Latino Communities." *The Journal of Trauma*. 71 (5): 517-21.
- Sikkema KJ, ES Anderson, JA Kelly, RA Winett, C Gore-Felton, RA Roffman, TG Heckman, K Graves, RG Hoffmann, and MJ Brondino. 2005. "Outcomes of a randomized, controlled community-level HIV prevention intervention for adolescents in low-income housing developments." *AIDS (London, England)*. 19 (14): 1509-16.
- Sikkema KJ, JA Kelly, RA Winett, LJ Solomon, VA Cargill, RA Roffman, TL McAuliffe, et al. 2000. "Outcomes of a randomized community-level HIV prevention intervention for women living in 18 low-income housing developments." *American Journal of Public Health*. 90 (1): 57-63.
- Simon C, B Schweitzer, M Oujaa, A Wagner, D Arweiler, E Tribby, N Copin, S Blanc, and C Platat. 2008. "Successful overweight prevention in adolescents by increasing physical activity: a 4-year randomized controlled intervention." *International Journal of Obesity*. 32 (10): 1606-1606.
- Sims M, R Maxwell, and A Gilmore. 2013. "Short-term impact of the smokefree legislation in England on emergency hospital admissions for asthma among adults: a population-based study." *Thorax*. 68 (7): 619-24.
- Stuy M, M Green, and J Doll. 1993. "Child care centers: a community resource for injury prevention". *Journal of Developmental and Behavioral Pediatrics*. 14 (4): 224-9.
- Tay R. 1999. "Effectiveness of the anti-drink driving advertising campaign in New Zealand." *Road And Transport Research*. 8: 3-15.
- Terry-McElrath YM, S Emery, MA Wakefield, PM O'Malley, G Szczyпка, and LD Johnston. 2013. "Effects of tobacco-related media campaigns on smoking among 20-30-year-old adults: longitudinal data from the USA." *Tobacco Control*. 22 (1): 38-45.
- Treno AJ, PJ Gruenewald, JP Lee, and LG Remer. 2007. "The Sacramento Neighborhood Alcohol Prevention Project: outcomes from a community prevention trial." *Journal of Studies on Alcohol and Drugs*. 68 (2): 197-207.
- Villarruel AM, JB Jemmott 3rd, and LS Jemmott. 2006. "A randomized controlled trial testing an HIV prevention intervention for Latino youth." *Archives of Pediatrics & Adolescent Medicine*. 160 (8): 772-7.

- Volpp KG, Levy A Gurmankin, DA Asch, JA Berlin, JJ Murphy, A Gomez, H Sox, J Zhu, and C Lerman. 2006. "A randomized controlled trial of financial incentives for smoking cessation." *Cancer Epidemiology, Biomarkers & Prevention: a Publication of the American Association for Cancer Research, Cosponsored by the American Society of Preventive Oncology*. 15 (1): 12-8.
- Volpp KG, AB Troxel, MV Pauly, HA Glick, A Puig, DA Asch, R Galvin, et al. 2009. "A randomized, controlled trial of financial incentives for smoking cessation." *The New England Journal of Medicine*. 360 (7): 699-709.
- Voukelatos, Alexander, Robert G Cumming, Stephen R Lord, and Chris Rissel. 2007. "A randomized, controlled trial of tai chi for the prevention of falls: the Central Sydney tai chi trial." *Journal of the American Geriatrics Society*. 55 (8): 1185-1191.
- Wagenaar AC, and HD Holder. 1991. "Effects of alcoholic beverage server liability on traffic crash injuries." *Alcoholism, Clinical and Experimental Research*. 15 (6): 942-7.
- Wagenaar AC, MM Maldonado-Molina, and BH Wagenaar. 2009. "Effects of alcohol tax increases on alcohol-related disease mortality in Alaska: time-series analyses from 1976 to 2004." *American Journal of Public Health*. 99 (8): 1464-70.
- Woods ER, U Bhaumik, SJ Sommer, SI Ziniel, AJ Kessler, E Chan, RB Wilkinson, et al. 2012. "Community asthma initiative: evaluation of a quality improvement program for comprehensive asthma care." *Pediatrics*. 129 (3): 465-72.
- Worden JK, BS Flynn, DG Merrill, JA Waller, and LD Haugh. 1989. "Preventing alcohol-impaired driving through community self-regulation training." *American Journal of Public Health*. 79 (3): 287-90.
- World Health Organization European Collaborative Group. 1982. "Multifactorial trial in the prevention of coronary heart disease: 2. Risk factor changes at two and four years." *European Heart Journal*. 3(2):184-90.
- Xia QH, Y Jiang, CJ Niu, CX Tang, and ZL Xia. 2009. "Effectiveness of a community-based multifaceted fall-prevention intervention in active and independent older Chinese adults." *Injury Prevention: Journal of the International Society for Child and Adolescent Injury Prevention*. 15 (4): 248-251.
- Yannis, George, Alexandra Kondyli, and Xenia Georgopoulou. 2013. "Investigation of the impact of low cost traffic engineering measures on road safety in urban areas." *International Journal of Injury Control and Safety Promotion*. (2): 1-9.