



FOCUSING ON HEALTH REFORM

RAND Research on Health Behavior and Lifestyle Change

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There is widespread consensus that making healthy lifestyle choices including diet, exercise, and avoiding smoking, are vital to a healthy population. However, according to the Centers for Disease Control and Prevention (CDC), Americans have a long way to go in attaining these goals. For example, the latest data from the CDC indicates that obesity rates continue to rise. Obesity is a known risk factor for diseases such as Type 2 diabetes, hypertension, cancer and coronary heart disease. RAND work on health behavior has focused on obesity and how the environment affects health through access to nutritious food, opportunity for exercise, stressors such as violence and poverty, and exposure to environmental hazards. In addition, RAND investigators have studied the effect of obesity on health spending, using a micro-simulation model to estimate lifetime cost. We found that there would be savings to Medicare from reducing obesity; this was the only behavior change that resulted in savings for Medicare. Although a strong link between lifetime health care costs and healthy behaviors has not been established, employers and public and private insurers have begun to focus attention on assisting consumers in making lifestyle changes. In particular, states and private organizations have looked to the use of incentives in health insurance programs to promote behavior change.

Project COMPARE: A Global Positioning System for Health Care Policy

COMPARE (Comprehensive Assessment of Reform Efforts) is a first-of-its kind online resource that provides one-stop shopping for objective analysis of health policy issues. COMPARE provides facts and figures about the current state of the U.S. health care system, focusing on key dimensions of health system performance; a description of policy options for changing the health care system; an inventory and the status of prominent federal, state, and private health care reform proposals; and an interactive tool to provide analyses of the effects of different health care policy options on multiple dimensions of health system performance, including cost, coverage, and outcomes.

<http://www.randcompare.org>

Pathways to Obesity: Are People “Hardwired” to Overeat?

(2008)

This fact sheet summarizes research on mechanisms that affect overeating but that operate below the level of individual awareness and beyond individual control.

http://www.rand.org/pubs/research_briefs/RB9361/

Constrained Choice: Why Are Some Women and Men Able to Create and Maintain Healthy Lifestyles, While Others Are Not?

(2008)

This fact sheet describes a model of constrained choice that explains how policy decisions at the family, work, community, and government levels can have unintended consequences that ultimately produce differences in men's and women's health.

http://www.rand.org/pubs/research_briefs/RB9339/

Why People Overeat: Rethinking the Causes of Obesity (2008)

This research brief summarizes a study suggesting that though lack of will power is blamed for failure to maintain a diet, the more likely culprit is automatic responses to cues to eat and the availability of cheap, convenient, high-calorie foods.

http://www.rand.org/pubs/research_briefs/RB9327/

Neurophysiological Pathways to Obesity: Below Awareness and Beyond Individual Control

Cohen DA. Diabetes, Vol. 57, No. 7, Jul 2008, pp. 1768-1773

Given that people have limited ability to shape the food environment individually and no ability to control automatic responses to food-related cues that are unconsciously perceived, it is incumbent upon society as a whole to regulate the food environment, including the number and types of food-related cues, portion sizes, food availability, and food advertising.

Disparities in the Food Environment Surrounding U.S. Middle and High Schools

Sturm R. Public Health [Epub Jan 18, 2008], Vol. 122, No. 7, Jul 2008, pp. 681-690

There are several clear differences across sociodemographic groups with, arguably, the most pernicious being the location of convenience stores near schools. These disparities may represent an important type of environmental injustice for minorities and lower-income youth, with potential adverse consequences for dietary behaviors.

Preventing Alcohol and Drug Use

D'Amico EJ, Stern SA, Trafton SA, Gordon WP (eds.). Best Practices in the Behavioral Management of Health from Preconception to Adolescence, Vol. III, Los Altos, Calif.: Institute for Brain Potential, Jun 2008, Chapter 13

The most cost-effective and health-effective interventions begin at the earliest points in the life cycle, from preventing unwanted pregnancy, fetal abnormalities, and infant mortality, to acquiring life-long habits that make children and teens resistant to obesity, smoking, use of illicit drugs, antisocial behavior, and intimate partner violence.

Neighborhood Socioeconomic Status and Fruit and Vegetable Intake Among Whites, Blacks, and Mexican Americans in the United States

Dubowitz T, Heron M, Bird CE, Lurie N, Finch BK, Ricardo Basurto-Dávila R, Hale L, Escarce JJ. American Journal of Clinical Nutrition, Vol. 87, No. 6, Jun 2008, pp. 1883-1891

The positive association of neighborhood socioeconomic status (SES) with fruit and vegetable intake is one important pathway through which the social environment of neighborhoods affects population health and nutrition for whites, blacks, and Hispanics in the United States.

Body Mass Index Is Increasing Faster Among Taller Persons

Cohen DA, Sturm R. American Journal of Clinical Nutrition, Vol. 87, No. 2, Feb 2008, pp. 445-448

This study documents that the obesity epidemic has changed the height-BMI relation. The data cannot identify causal pathways, and there are numerous explanations. A plausible hypothesis is that changes in the food environment may have eliminated constraints on weight gain for taller people that existed in a more calorie-constrained environment.

Eating as an Automatic Behavior

Cohen DA, Farley TA. Preventing Chronic Disease, Vol. 5, No. 1, Jan 2008

The concept that eating is an automatic behavior is supported by studies that demonstrate the impact of the environmental context and food presentation on eating.

<http://www.rand.org/pubs/reprints/RP1326/>

Gender and Health: The Effects of Constrained Choices and Social Policies

Bird CE, Rieker PP. New York: Cambridge University Press, 2008

This is the first book to examine how men's and women's lives and their physiology contribute to differences in their health. In a thoughtful synthesis of diverse literatures, the authors demonstrate that modern societies' health problems ultimately involve a combination of policies, personal behavior, and choice.

Obesity and Disability: The Shape of Things to Come (2007)

This research brief summarizes studies that found that individuals who are obese face greater challenges in terms of disability and chronic disease than do their non-obese counterparts.

http://www.rand.org/pubs/research_briefs/RB9043-1/

How Neighborhoods Can Reduce the Risk of Obesity (2007)

This research brief explores the relationship of a neighborhood's characteristics to obesity in its residents.
Research Brief

http://www.rand.org/pubs/research_briefs/RB9267/

Social Context of Physical Activity and Weight Status in Working-Class Populations

Peterson KE, Dubowitz T, Stoddard AM, Troped PJ, Sorensen G, Emmons KM. *Journal of Physical Activity and Health*, Vol. 4, No. 4, Oct 2007, pp. 381-396

A social-contextual framework highlights the contribution of social class and race/ethnicity in the variance in leisure-time physical activity and weight status but suggests other behavioral influences vary in multiethnic, working-class populations.

Neighborhood Context and Ethnicity Differences in Body Mass Index: A Multilevel Analysis Using the NHANES III Survey (1988-1994)

Do DP, Dubowitz T, Bird CE, Lurie N, Escarce JJ, Finch BK. *Economics and Human Biology* [Epub Mar 24, 2007], Vol. 5, No. 2, Jul 2007, pp. 179-203

These data reveal evidence that ethnic enclaves are not in fact advantageous for the body mass index of Hispanics—a relationship counter to what has been documented for other health outcomes.

Increases in Morbid Obesity in the USA: 2000-2005

Sturm R. *Public Health* [Epub March 30, 2007], Vol. 121, No. 7, Jul 2007, pp. 492-496

The aggressive and costly expansion of bariatric surgery in recent years has had no visible effect on containing morbid obesity rates in the USA.

Contingencies for Change in Complacent Smokers

Lamb RJ, Morral AR, Kirby KC, Javors MA, Galbicka G, Iguchi MY. *Experimental and Clinical Psychopharmacology*, Vol. 15, No. 3, Jun 2007, pp. 245-255

The majority of smokers have no plans to quit in the near future. These complacent smokers are less likely to quit than other smokers, and few interventions are known to reduce smoking in this population.

Contingency management procedures may promote cessation among complacent smokers and provide a model for understanding the effects of environmental interventions (like workplace smoking bans) on the behavior of complacent smokers.

http://www.rand.org/pubs/external_publications/EP20070621/

Neighborhood Design and Walking Trips in Ten U.S. Metropolitan Areas

Boer R, Zheng Y, Overton Y, Ridgeway GK, Cohen D. American Journal of Preventive Medicine, Vol. 32, No. 4, Apr 2007, pp. 298-304

When considering the New Urbanism Smart Scorecard from the perspective of walking, some, but not all, of its criteria that appear to have a correlation with walking are likely to be useful for designing walkable communities.

Contribution of Public Parks to Physical Activity

Cohen D, McKenzie TL, Sehgal A, Williamson S, Golinelli D, Lurie N. American Journal of Public Health, Vol. 97, No. 3, Mar 2007, pp. 509-514

Public parks are critical resources for physical activity in minority communities. Because residential proximity is strongly associated with physical activity and park use, the number and location of parks are currently insufficient to serve local populations well.

Adolescent Participation in Preventive Health Behaviors, Physical Activity, and Nutrition: Differences Across Immigrant Generations for Asians and Latinos Compared with Whites

Allen ML, Elliott MN, Morales LS, Diamant AL, Hambarsoomian K, Schuster MA. American Journal of Public Health [Epub Nov 30, 2006], Vol. 97, No. 2, Feb 1, 2007, pp. 337-343

For the health behaviors we examined, Asian adolescents' health behaviors either improved with each generation or remained better than that of Whites. Latino adolescents demonstrated generally worse preventive health behaviors than did Whites and, in the case of nutrition, a worsening across generations. Targeted interventions may be needed to address behavioral disparities.

Daily Smoking Patterns, Their Determinants, and Implications for Quitting

Chandra S, Shiffman S, Scharf DM, Dang Q, Shadel WG. Experimental and Clinical Psychopharmacology, Vol. 15, No. 1, Feb 2007, pp. 67-80

This article examines daily temporal patterns of smoking in relation to environmental restrictions on smoking and cessation outcomes. Daily smoking patterns were related to environmental smoking restrictions, but the strength of this relationship differed among clusters and by time of day.

Religiosity, Denominational Affiliation, and Sexual Behaviors Among People with HIV in the United States

Galvan FG, Collins RL, Kanouse DE, Pantoja P, Golinelli D. Journal of Sex Research, Vol. 44, No. 1, 2007, pp. 49-58

This study sought to describe religiosity and denominational affiliation among the U.S. population living with HIV and to test whether either is associated with HIV-related sexual risk behaviors. Religiosity was associated with fewer sexual partners and a lower likelihood of engaging in unprotected sex and in high-risk sex. Results suggest that religiosity and some religious teachings may promote safer sex among people with HIV.

Getting to Outcomes: Improving Community-Based Substance-Use Prevention (2006)

This research brief summarizes research to create Getting To Outcomes (GTO), a science-based model and support tools to help local groups develop or improve substance-use-prevention programs.

http://www.rand.org/pubs/research_briefs/RB9172/

Do Neighborhood Economic Conditions Influence the Consumption of Fruits and Vegetables? (2008)

This fact sheet summarizes a study examining the variation of the intake of fruits and vegetables for blacks, whites, and Mexican Americans, in addition to the relationship between neighborhood socioeconomic status and this intake.

http://www.rand.org/pubs/research_briefs/RB9375/

Witness for Wellness: Preliminary Findings from a Community-Academic Participatory Research Mental Health Initiative

Bluthenthal RN, Jones L, Fackler-Lowrie N, Ellison M, Booker T, Jones F, McDaniel S, Moini M, Williams KR, Klap R, Koegel P, Wells KB. Ethnicity & Disease, Vol. 16, No. 1 (Suppl 1), Winter 2006, pp. S1-18-S1-34

Quality improvement programs promoting depression screening and appropriate treatment can significantly reduce racial and ethnic disparities in mental-health care and outcomes. However, promoting the adoption of quality-improvement strategies requires more than the simple knowledge of their potential benefits.

Public Parks and Physical Activity Among Adolescent Girls

Cohen D, Ashwood JS, Scott MM, Overton A, Evenson KR, Staten LK, Porter D, McKenzie TL, Catellier D. Pediatrics, Vol. 118, No. 5, Nov 2006, pp. e1381-e1389

Adolescent girls who live near more parks, particularly near those with amenities that are conducive to walking and with active features, engage in more nonschool metabolic equivalent-weighted moderate/vigorous physical activity than those with fewer parks.

Affective and Behavioral Responses to Health-Related Social Control

Tucker JS, Orlando M, Elliott MN, Klein DJ. Health Psychology, Vol. 25, No. 6, Nov 2006, pp. 715-722

Results emphasize the need to better understand the regulatory influence of relationships on health behavior and the conditions under which social control is most likely to have health-promoting effects.

Talking Parents, Healthy Teens: A Worksite-Based Program for Parents to Promote Adolescent Sexual Health

Eastman KL, Corona R, Schuster MA. Preventing Chronic Disease, Vol. 3, No. 4, Oct 2006, pp. 1-10

Parents play an important role in the sexual health of their adolescent children. Based on previous research, formative research, and theories of behavioral change, Talking Parents, Healthy Teens, an intervention designed to help parents improve communication with their adolescent children, was developed to promote healthy adolescent sexual development, and reduce adolescent sexual risk behaviors.

<http://www.rand.org/pubs/reprints/RP1238/>

Structural Interventions to Prevent HIV/Sexually Transmitted Disease: Are They Cost-Effective for Women in the Southern United States?

Cohen DA, Wu S-Y, Farley TA. Sexually Transmitted Diseases, Vol. 33, No. 7 (Suppl), Jul 2006, pp. S46-S49

Although the assumptions used in cost-effectiveness estimates have many limitations, they do allow for a relative comparison of different interventions and help to inform policy decisions related to the allocation of HIV prevention resources. Structural interventions hold the greatest promise in reducing HIV transmission among low-prevalence populations.

Patterns and Correlates of Deliberate Abstinence Among Men and Women with HIV/AIDS

Bogart LM, Collins RL, Kanouse DE, Cunningham W, Beckman R, Golinelli D, Bird CE. American Journal of Public Health [Epub May 2, 2006], Vol. 96, No. 6, Jun 2006, pp. 1078-1084

Perhaps because HIV is more common in gay communities, abstinence choices may be more closely linked to a higher sense of responsibility for reducing transmission among gay/bisexual men, and their illness may be less of an impediment to sexual activity.

Improving Quality of Care and Promoting Health Care System Change: The Role of Community-Based Coalitions

Lara M, Cabana MD, Houle CR, Krieger JW, Lachance LL, Meurer JR, Rosenthal MP, Vega I. Health Promotion Practice, Vol. 7, No. 2 (Suppl), Apr 2006, pp. 87S-95S

As part of their community action plans, the Allies Against Asthma coalitions have developed efforts to improve quality of care and promote health care system change. The coalitions' collective experience suggests that coalitions provide three key forces for quality improvement and change that may be lacking in the current fragmented U.S. health care system--motivation to change the status quo, integration across systems, and accountability for results.

Physical Activity and Changes in Health Care Costs in Late Middle Age

Andreyeva T, Sturm R. Journal of Physical Activity and Health, Vol. 3 (Suppl 1), Feb 2006, pp. S6-S19

Regular physical activity in late middle age may lower health expenditures over time, and the effect is likely to be more pronounced for the obese, smokers, and individuals with some baseline health problems. While substantially large for the health care system, our estimates are much smaller than health-unadjusted comparisons or cross-sectional effects.

Collective Efficacy and Obesity: The Potential Influence of Social Factors on Health

Cohen D, Finch BK, Bower A, Sastry N. Social Science & Medicine, Vol. 62, No. 3, Feb 2006, pp. 769-778

The associations between the body mass index (BMI) and collective efficacy could potentially be explained by several factors, including a metabolic pathway, neighborhood differences in the physical and social environments, or a combination of these two. If group-level collective efficacy is indeed important in the regulation of individual-level net energy balance, it suggests that future interventions to control weight by addressing the social environment at the community level may be promising.

Family History of Type 2 Diabetes: A Population-Based Screening Tool for Prevention?

Hariri S, Yoon PW, Qureshi N, Valdez R, Scheuner MT, Khoury MJ Genetics in Medicine, Vol. 8, No. 2, Feb 2006, pp. 102-108

Family history of diabetes is a risk factor for the disease and also positively associated with risk awareness and risk-reducing behaviors. It may provide a useful screening tool for detection and prevention of diabetes.

Pathways to Sexual Risk Reduction: Gender Differences and Strategies for Intervention

Longshore D, Stein JA, Chin D. AIDS and Behavior [Epub Dec 30, 2005], Vol. 10, No. 1, Jan 2006, pp. 93-104

Stronger commitment to safer sex predicted less sexual risk behavior for both men and women. For men but not women, greater AIDS knowledge predicted safer sex commitment. For women but not men, higher self-efficacy predicted stronger commitment to safer sex, and peer norms favoring sexual risk reduction predicted higher self-efficacy. Intervention for men should focus on increasing safer sex commitment and AIDS knowledge. Intervention for women should promote safer sex commitment by raising self-efficacy for sexual risk reduction.

Park Use and Physical Activity in a Sample of Public Parks in the City of Los Angeles

Cohen D, Sehgal A, Williamson S, Sturm R, McKenzie TL, Lara R, Lurie N. Santa Monica, Calif.: RAND Corporation, TR-357-HLTH, 2006

The City of Los Angeles has made a significant investment in its public parks and is committed to improving them. This report systematically measures what activities occurred in twelve public neighborhood parks as well as two skate parks and two senior citizens centers.

http://www.rand.org/pubs/technical_reports/TR357/

The Value of Elderly Disease Prevention

Goldman DP, Cutler DM, Shang B, Joyce GF. Forum for Health Economics & Policy, Vol. 9, No. 2 (Biomedical Research and the Economy), 2006, Article 1

While smoking cessation reduces lung disease and lung cancer, these are relatively low prevalence compared to the other diseases. Its impact on heart disease is negligible.

The Health and Cost Consequences of Obesity Among the Future Elderly

Lakdawalla DN, Goldman DP, Shang B. Health Affairs, Web exclusive, Sep 26, 2005, pp. W5-R30-W5-R41

Obese seventy-year-olds will live about as long as those of normal weight but will spend more than \$39,000 more on health care. Moreover, they will enjoy fewer disability-free life years and experience higher rates of diabetes, hypertension, and heart disease. Medicare will spend about 34 percent more on an obese person than on someone of normal weight. Obesity might cost Medicare more than other diseases, because higher costs are not offset by reduced longevity.

Welfare-Enhancing Technological Change and the Growth of Obesity

Lakdawalla D, Philipson TJ, Bhattacharya J. American Economic Review, Vol. 95, No. 2, May 2005, pp. 253-257

There has been concern about the dramatic growth in obesity seen in developed countries. This paper advances the view that a neoclassical interpretation of weight growth that relies on changing incentives does surprisingly well in explaining the observed trends, without resorting to psychological, genetic, or addictive models.

Prescription for a Healthy Nation: A New Approach to Improving Our Lives by Fixing Our Everyday World

Farley T, Cohen DA. Boston, Mass.: Beacon Press, Jan 2005

Taking us step by step through the real causes of death in our time and the factors that influence them, Prescription for a Healthy Nation is an exposé of how various industries influence our health for the worse, a paradigm-shifting argument about health and disease, and a positive blueprint for how to create a healthier society.

The Office of Congressional Relations provides any of the listed documents to Congressional offices and U.S. Federal agencies on request, at no charge.

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