



AGENDA: DENVER FIELD HEARING

December 10, 2008 8:30 a.m. – 2:30 p.m.

Denver Athletic Club, Grand Ballroom
1325 Glenarm Place, Denver, Colo.

8:30 a.m.

Welcome

Mark McClellan and Alice M. Rivlin, Commission Co-Chairs

8:40 a.m.

Opening Remarks

Lt. Governor Barbara O'Brien

Keynote Speaker

Jody Heymann, Canada Research Chair in Global Health and Social Policy and Professor in Epidemiology and Biostatistics, McGill University; Founding Director, The McGill Institute for Health and Social Policy; Founder and Director, Harvard Project on Global Working Families

9:30 a.m.

Panel One: Workplace Wellness Initiatives

Moderated by Commissioner Katherine Baicker

- *USAA Take Care of Your Health*
Peter Wald, Vice President and Enterprise Medical Director
- *General Mills TriHealthalon, Total You, Health Number*
Karen Grafe, Health Communications Manager
- *Metro Denver Health and Wellness Commission*
Peter Kenney, Executive Director, Metro Denver Health and Wellness Commission
- *America On The Move/Colorado On The Move*
James O. Hill, Co-Founder and Director, Center for Human Nutrition, University of Colorado Health Sciences Center

10:20 a.m.

Panel Two: Occupational Health and Safety

Moderated by Commissioner Dennis Rivera

- *The High Plains Intermountain Center for Agricultural Health and Safety at Colorado State University (NIOSH Agricultural Center)*
Steve Reynolds, Center Director
- *Mountain and Plains Education and Research Center for Occupational and Environmental Health and Safety*
Karen Mulloy, Director Continuing Education MAP ERC and Director, Denver Health Center for Occupational Safety and Health
- *OSHA Voluntary Protection Program*
Gregory Baxter, OSHA Regional Administrator, Denver
- *Scott's Liquid Gold, Inc.*
Kelli Heflin, Regulatory Safety Manager



11:10 a.m.	<i>Break</i>
11:20 a.m.	Panel Three: Conditions and Benefits of Work Moderated by Commissioner Linda Dillman <ul style="list-style-type: none">• <i>Colorado Workplace Accommodations for Nursing Mothers Act</i> Jennifer Dellaport, WIC Breastfeeding Promotion Coordinator, Colorado Department of Public Health and Environment• <i>Experience Corps</i> Michelle Hynes, Director• <i>Corporate Voices for Working Families</i> John Wilcox, Vice President• <i>NIOSH Work Organization and Stress-related Disorders Program</i> Steven L. Sauter, Senior Scientist, NIOSH
12:10 p.m.	<i>Community Networking Luncheon</i>
1:10 p.m.	Opening Remarks for Public Comment Period Senator Nancy Spence, Minority Caucus Whip, Colorado State Senate
1:15 p.m.	Public Comment Period
2:20 p.m.	Comments from the Robert Wood Johnson Foundation Risa Lavizzo-Mourey, Robert Wood Johnson Foundation President and CEO
2:30 p.m.	<i>Adjourn</i>



BACKGROUND ON THE ROBERT WOOD JOHNSON FOUNDATION COMMISSION TO BUILD A HEALTHIER AMERICA

The Robert Wood Johnson Foundation launched the Commission to Build a Healthier America – a national, independent, non-partisan group of leaders with involvement both in and outside the health care field – to provide better opportunities for Americans in every community to grow up and stay healthy.

Traditionally, America's public debate on "health" has centered on access to and affordability of care, even though a large body of evidence tells us that, in most cases, whether or not a person gets sick has little to do with seeing a doctor. This Commission will focus on those factors beyond medical care that have an enormous influence on health and will ask what we can do about it. While data are collected on many of these factors, these data are rarely analyzed or acted upon with the intention of improving health.

WHY DO WE KNOW IT'S TIME TO ACT?

- Some of us can expect to live an average of 20 years less than others, depending on our race and which U.S. county we live in.
- While we spend more than \$2 trillion a year on health care – one sixth of our economy and more than any other country – our health falls short. In life expectancy and infant mortality, the United States ranks near the bottom in comparison with other industrialized nations.
- Poor health limits the productivity of our citizens. Nearly one in every three poor adults is limited by chronic illness. And when people are sick, they can't do as well at school, at home, or at work.
- Despite tremendous progress in medicine, science and technology, many health gaps have not decreased in more than a generation. In fact, some gaps within the United States and between the U.S. and other countries have grown wider.
- Within each racial and ethnic group, lower-income adults have higher rates of poor or fair health than their more affluent counterparts.

How did this happen in the richest country in the world? Why aren't Americans among the healthiest people and why are some Americans so much healthier than others?

There is no single reason – and no simple solution. While people must take responsibility for their own health, there are some factors and conditions beyond individual control. Research from the Robert Wood Johnson Foundation confirms that rather than linking our health shortfalls to flaws in our medical system, a far greater determinant is the relationship between how we live our lives and the surrounding economic, social and physical environment.

On average, American adults spend nearly half of their waking hours at work – a number that has steadily increased over the past three decades. How can someone be a productive worker if their workplace is stressful or unsafe? Without adequate benefits or support for healthy behaviors, how can someone improve their health and the health of their family?

The Commission was formed in February 2008 and has held three field hearings across the country to meet with experts and learn about non-medical interventions that have been proven to produce measurable health improvements. In April 2009, the Commission will recommend specific, feasible steps that foundations, corporations and government at every level can take to improve the health of *all* Americans.

For more information about the Commission and its activities, the Commission members, news related to the Commission and related data and reports, please visit www.commissiononhealth.org.



COMMISSIONER BIOGRAPHIES

Mark B. McClellan, Co-Chair

Mark B. McClellan is the director of the Engelberg Center for Health Care Reform at the Brookings Institution. The Center studies ways to provide practical solutions for access, quality and financing challenges facing the U.S. health care system. Additionally, McClellan is the Leonard D. Schaeffer Chair in Health Policy Studies and a Senior Fellow of Economic Studies.

McClellan was the former administrator for the Centers for Medicare and Medicaid Services (2004-2006) and the commissioner of the Food and Drug Administration (2002-2004). He served as a member of the President's Council of Economic Advisers and senior director for health care policy at the White House (2001–2002). He also served as the deputy assistant secretary for economic policy at the Treasury Department.

McClellan has also served as an associate professor in both economics and medicine at Stanford University where he directed Stanford's Program on Health Outcomes Research.

McClellan received a Master's Degree in Public Administration and Medical Degree from Harvard University and a Doctor of Philosophy in Economics from MIT.

Alice M. Rivlin, Co-Chair

Alice M. Rivlin is a Senior Fellow in the Economic Studies program at the Brookings Institution and a visiting professor at the Public Policy Institute of Georgetown University. She is the director of Brookings Greater Washington Research Project. Before returning to Brookings, Rivlin served as Vice Chair of the Federal Reserve Board (1996-1999) and served as the Director of the White House Office of Management and Budget in the first Clinton Administration. She also chaired the District of Columbia Financial Management Assistance Authority (1998-2000).

Rivlin was the founding Director of the Congressional Budget Office (1975-83) and served as the Assistant Secretary for Planning and Evaluation at the Department of Health, Education and Welfare. She is also a former director of the Economic Studies Program at Brookings.

In addition to receiving a MacArthur Foundation Prize Fellowship, Rivlin has taught at Harvard University, George Mason University, and The New School Universities. She has also served as President of the American Economic Association and is currently a member of the Board of Directors of the New York Stock Exchange.

Rivlin received a Bachelor's Degree in Economics from Bryn Mawr College and a Doctor of Philosophy from Radcliffe College (Harvard University) in Economics.



Katherine Baicker

Katherine Baicker is a professor of health economics in the Department of Health Policy and Management at Harvard University. Her background is in health economics and health insurance financing, as well as public and labor economics. Baicker served as a Senate-confirmed member of the Council of Economic Advisers from 2005-2007, where she focused on health reforms but had a wide-ranging portfolio including issues such as immigration, tax policy, and the education and training of American workers. She received her Bachelor's Degree in economics from Yale University and a Doctor of Philosophy in Economics from Harvard University.

Angela Glover Blackwell

Angela Glover Blackwell is founder and chief executive officer of PolicyLink, a national research and action institute advancing economic and social equity by Lifting Up What Works. Based in Oakland, California, PolicyLink works with local and national partners to use policy solutions to address inequity. Before founding PolicyLink, Blackwell was senior vice president for The Rockefeller Foundation where she directed the foundation's domestic and cultural divisions and developed the Next Generation Leadership and Building Democracy programs, centered on issues of inclusion, race, and policy. She received a Bachelor's Degree from Howard University, and a Juris Doctor Degree from the University of California at Berkeley.

Sheila P. Burke

Sheila P. Burke is faculty research fellow and adjunct lecturer in public policy at the Malcolm Wiener Center for Social Policy, Kennedy School of Government at Harvard University. Previously, Burke served as the executive dean of the Kennedy School of Government. Burke also served as deputy secretary and chief operating officer of the Smithsonian Institution and was chief of staff to former Senate Majority Leader Bob Dole and deputy staff director of the Senate Committee on Finance. Burke holds a Bachelor's Degree in Nursing from the University of San Francisco and a Master's Degree in Public Administration from Harvard University.

Linda M. Dillman

Linda Dillman is executive vice president of benefits and risk management for Wal-Mart Stores, Inc., where she has been instrumental in making changes to the company's health care benefits, concentrating on providing associates and family members with affordable, accessible and high quality options for health coverage. She previously served as executive vice president and chief information officer at Wal-Mart. Linda has been named to Fortune Magazine's "50 Most Powerful Women in Business" list for the past five years. Linda joined Wal-Mart in 1991, and also worked for Hewlett-Packard Company. Her degree in Business Administration is from the University of Indianapolis.



Sen. Bill Frist

Sen. Bill Frist is the Schultz Visiting Professor of International Economic Policy at Princeton University's Woodrow Wilson School of Public and International Affairs. He represented Tennessee in the U.S. Senate from 1995 until his retirement in 2007, serving as Majority Leader from 2003 to 2007. As a cardiothoracic transplant surgeon, Frist's primary legislative focus was health care. He co-chairs Save the Children's global campaign to reduce infant mortality (*Survive to 5*) and ONE Vote '08, a bipartisan effort to make global health a priority in the presidential election. He received a Bachelor's Degree from Princeton University and Medical Degree from Harvard University.

Allan Golston

Allan Golston is the president of the U.S. Program of the Bill & Melinda Gates Foundation where he oversees the Foundation's Education, U.S. Libraries, and Pacific Northwest grant initiatives, as well as U.S. Program Advocacy and Special Initiatives. Golston, who joined the Foundation in 1999, most recently served as the chief financial and administrative officer. Golston's professional background is in business including consulting, public accounting, software development, finance and health care. He holds a Master's Degree in Business Administration from Seattle University and a Bachelor's of Science in Accounting from the University of Colorado.

Kati Haycock

Kati Haycock is one of the nation's leading child advocates in the field of education. She currently serves as president of The Education Trust, a Washington-based education organization that provides hands-on assistance to urban school districts and universities seeking to improve student achievement. Before joining The Education Trust, Haycock served as executive vice president of the Children's Defense Fund, the nation's largest child advocacy organization. She received a Bachelor's Degree in Political Science from the University of California, Santa Barbara and a Master's Degree in Education Policy from the University of California, Berkeley.

Hugh Panero

Hugh Panero is co-founder and former president and chief executive officer of XM Satellite Radio. A business leader and media entrepreneur, Panero was a pioneer in both the cable TV and pay-per-view businesses and is credited with launching the satellite radio industry. Panero has served as chairman of the D.C. Chamber of Commerce, which honored him with the D.C. Business Leader of the Year Award in 2000 and is a board member on a number of nonprofit boards including The Marrow Foundation and Hope For Henry. Mr. Panero received Bachelor's Degrees in Government and Sociology from Clark University and has a Master's Degree in Business Administration from Baruch College.



Dennis Rivera

Dennis Rivera chairs SEIU Healthcare, a union of over one million health care workers dedicated to health care reform. SEIU Healthcare was launched in June 2007 as the health care division of the two million-member Service Employees International Union, America's largest labor union. In addition to heading SEIU Healthcare, Rivera chairs the Partnership for Quality Care. He served as president of New York-based 1199 SEIU from 1989 to 2007. Born in Aibonito, Puerto Rico, Rivera attended the Colegio Universitario de Cayey.

Carole Simpson

Carole Simpson retired from ABC News in 2006 to become Leader in Residence at Emerson College's School of Communication in Boston, where she is a full-time faculty member teaching courses in public affairs reporting, political communication, and broadcast journalism. Simpson is also a commentator for National Public Radio's "News and Notes" program. At ABC News, Simpson was the anchor of the weekend editions of "World News Tonight" from 1988-2003 and a senior national correspondent. She was the first African American woman to anchor a major network evening news broadcast. Simpson received a Bachelor's Degree in Journalism from the University of Michigan.

Jim Towey

Jim Towey is president of St. Vincent College in Pennsylvania. Previously, he served as director of the White House Office of Faith-Based & Community Initiatives and reported to the President on matters pertaining to federal grants to religious and community-based charities, corporate and foundation grantmaking to social service agencies, tax incentives for enhanced charitable giving, and the implementation of individual choice in housing and other federal programs. He served for 12 years as legal counsel to Mother Teresa of Calcutta and lived for one year in her Washington, DC, home for people with AIDS. He is also former secretary of the Florida Department of Health and Rehabilitative Services. Towey earned a Bachelor's Degree from Florida State University and a Juris Doctor from the Florida State University College of Law.

Gail L. Warden

Gail L. Warden is a professor at the University of Michigan School of Public Health and president emeritus of the Henry Ford Health System in Detroit, Michigan, one of the nation's leading health care systems. Before joining Henry Ford Health System, Warden served as president and chief executive officer of Group Health Cooperative of Puget Sound in Seattle. In 1997, he was appointed to the Federal Advisory Commission on Consumer Protection and Quality in the Health Care Industry. Since then he has worked on several boards and committees focusing on health care issues, including the RAND Health Board of Advisors. Warden received a Bachelor's Degree from Dartmouth College, a Master's Degree in Health Administration from University of Michigan, and an Honorary Doctorate in Public Administration from Central Michigan University.



SPEAKER BIOGRAPHIES AND PROGRAM DESCRIPTIONS

Welcome and Overview

Mark B. McClellan (Co-Chair), M.D., Ph.D., is the director of the Engelberg Center for Health Care Reform at the Brookings Institution. The Center studies ways to provide practical solutions for access, quality and financing challenges facing the U. S. health care system. Additionally, McClellan is the Leonard D. Schaeffer Chair in Health Policy Studies and a senior fellow of Economic Studies.

McClellan is the former administrator for the Centers for Medicare and Medicaid Services (2004-2006) and the former commissioner of the Food and Drug Administration (2002-2004). He also served as a member of the President's Council of Economic Advisers and senior director for health care policy at the White House (2001–2002). In addition, he served as the deputy assistant secretary for economic policy at the Treasury Department.

McClellan has also served as an associate professor in both economics and medicine at Stanford University where he directed Stanford's Program on Health Outcomes Research. McClellan received a Master's Degree in Public Administration and Medical Degree from Harvard University and a Doctor of Philosophy in Economics from MIT.

Alice M. Rivlin (Co-Chair), Ph.D., is a Senior Fellow in the Economic Studies program at the Brookings Institution and a visiting professor at the Public Policy Institute of Georgetown University. She is the director of Brookings Greater Washington Research Project. Before returning to Brookings, Rivlin served as Vice Chair of the Federal Reserve Board (1996-1999) and served as the Director of the White House Office of Management and Budget in the first Clinton Administration. She also chaired the District of Columbia Financial Management Assistance Authority (1998-2000).

Rivlin was the founding Director of the Congressional Budget Office (1975-83) and served as the Assistant Secretary for Planning and Evaluation at the Department of Health, Education and Welfare. She is also a former director of the Economic Studies Program at Brookings.

In addition to receiving a MacArthur Foundation Prize Fellowship, Rivlin has taught at Harvard University, George Mason University, and The New School Universities. She has also served as President of the American Economic Association and is currently a member of the Board of Directors of the New York Stock Exchange.

Rivlin received a Bachelor's Degree in Economics from Bryn Mawr College and a Doctor of Philosophy from Radcliffe College (Harvard University) in Economics.



Opening Remarks: Lt. Governor Barbara O'Brien

In January 2007, **Barbara O'Brien** was sworn in as Colorado's 47th Lieutenant Governor, becoming only the 4th woman to hold the position in Colorado's history. Lt. Governor O'Brien's portfolio in Governor Bill Ritter's administration includes: serving as co-chair of the newly created P-20 Education Council, co-chairing the Colorado Space Coalition, chairing the Metro Denver Health and Wellness Commission, serving as spokesperson for the Colorado CHIP (Children's Health Insurance Program), overseeing the Head Start State Collaboration Office, chairing the advisory committee for the development of a comprehensive early childhood system, overseeing the Governor's Commission on Community Service, and promoting the arts and art education. Prior to becoming Lt. Governor, O'Brien spent the last 16 years as president of the Colorado Children's Campaign, a statewide public policy and advocacy nonprofit organization. She led major policy initiatives that increased funding for schools, created charter schools, expanded early childhood education, increased access to health care for uninsured children, reduced teen smoking, and expanded after school programs. O'Brien credits her strong passion and commitment to children's issues to her education and health policy work for former Gov. Richard Lamm.

Keynote Speaker: Jody Heymann

Jody Heymann, M.D. Ph.D., is founder and director of the Project on Global Working Families. Dr. Heymann is currently a professor in the Faculties of Medicine and Arts at McGill University, where she is also founding director of the *Institute for Health and Social Policy*. In addition, Heymann is an Adjunct Associate Professor at the Harvard School of Public Health and Harvard Medical School and founding chair of the Initiative on Work, Family, and Democracy.

For more than a decade, Heymann has been involved in research on working families and their children in North America and globally. Heymann has authored more than a hundred publications, including, *Forgotten Families: Ending the Growing Crisis Confronting Children and Working Parents in the Global Economy* (Oxford University Press, 2006), *Healthier Societies: From Analysis to Action* (Oxford University Press, 2006), *Unfinished Work: Building Democracy and Equality in an Era of Working Families* (New Press, 2005), *The Widening Gap: Why America's Working Families Are in Jeopardy and What Can Be Done about It* (Basic Books, 2001), and *Equal Partners: A Physician's Call for a New Spirit of Medicine* (University of Pennsylvania Press, 2000). Her articles have been published in leading academic journals in a wide range of fields including *Science*, the *American Economic Review*, the *Journal of Policy Analysis and Management*, the *American Journal of Public Health*, *Pediatrics*, the *Journal of the American Medical Association*, the *American Educational Research Journal*, and *Community, Work, and Family* among others.

Heymann received her Ph.D. in Public Policy from Harvard University, where she was selected in a university-wide competition as a merit scholar, and her M.D. with honors from Harvard Medical School. She trained in Pediatrics at the Children's Hospital of Boston.

She has served in an advisory capacity to the United Nations Educational, Scientific and Cultural Organization (UNESCO), the U.S. Senate Committee on Labor and Human Resources, the U.S. Senate Committee on Health, Education, Labor, and Pensions, the World Health Organization, and the U.S. Centers for Disease Control and Prevention, among other organizations.



Panel One: Workplace Wellness Initiatives

Moderated by Commissioner Katherine Baicker, Professor of Health Economics, Department of Health Policy and Management at Harvard University

Peter Wald, Vice President and Enterprise Medical Director, USAA Take Care of Your Health

Peter Wald, M.D., joined USAA in December 2002. He is a physician executive with 21 years experience in population health care management, occupational and preventive medicine, and medical toxicology. In 2006, USAA's Wellness Program "Take Care of Your Health" was the sole winner of the C. Everett Koop National Health Award. Prior to joining USAA, Dr. Wald served as Corporate Medical Director for ARCO, Western Region Medical Director for Mobil, and Assistant Medical Director at the Lawrence Livermore National Laboratory. Wald is Board Certified in Occupational Medicine, Medical Toxicology and Internal Medicine. He is the lead author of "Physical and Biological Hazards of the Workplace," currently in its second edition, and has published numerous peer reviewed articles in occupational medicine and toxicology.

The **USAA Take Care of Your Health Program** is a comprehensive, multi-disciplinary, and integrated health and productivity management program for USAA employees and their families. It includes population health management elements (health risk appraisals, lifestyle coaching, incentives, effective communications, and health improvement campaigns), consumerism, effective benefit plan design and integrated productivity management. The program is data driven with comprehensive reporting and evaluation capabilities. It has achieved high participation rates with about two out of three employees engaged in the program in some way. The company makes available on-site fitness centers, healthy food choices in cafeterias and vending machines, 20-minute wellness breaks twice a week, and substantial incentives to employees who practice healthy lifestyles. USAA estimates that the program has increased worker productivity by 187,200 hours, which translates to making available an additional 90 workers to do their jobs and support their fellow employees.

Karen Seal Grafe, Health Communications Manager, General Mills

Karen Seal Grafe is a Health and Wellness Communications Manager for General Mills. In her 11 years with the company, she has developed and implemented communication strategies for virtually all major Human Resources initiatives of the past decade. In 2006, Ms. Grafe joined the General Mills Health, Safety and Environment team, using her extensive benefits and communication background to promote employee wellness programs. Grafe received her undergraduate business degree from the University of Wisconsin-Madison and her Master of Business Communication degree from the University of St. Thomas in Minneapolis.

The **General Mills TriHealthalon** was designed to create a healthier work environment for General Mills sales employees. The program has successfully reduced cholesterol and smoking rates and increased activity levels and seat belt usage for participants over a 20-year period. The **General Mills Total You** program gives employees convenient access to services that enhance both health and quality of life, such as an on-site fitness center, healthy cooking classes and same-day medical appointments at the company's health services department. **General Mills Health Number** is a personalized health risk assessment tool that can help employees identify health risks, motivate healthy lifestyle changes and learn about health and wellness resources.



Peter Kenney, Executive Director, Metro Denver Health and Wellness Commission (MDHWC)

Peter Kenney is a co-founder of the Denver-based Center for Regional and Neighborhood Action (CRNA) that created Civic Results, a nonprofit organization dedicated to linking the energy at the neighborhood level with regional strategies that involve collaboration among government, business, nonprofit organizations and citizens to improve the quality of life of all residents. Mr. Kenney is the Executive Director of the Metro Denver Health and Wellness Commission, a program of Civic Results. He has twenty years of policy development and management experience as an elected official in municipal and county government. He was a Clear Creek County Commissioner, chairman of the Clear Creek County Planning Commission, and was a member of the Board of Directors of the Denver Regional Council of Governments (DRCOG) for seven years, serving as chair of the Executive Committee and vice chair of the Board of Directors.

The mission of the **Metro Denver Health and Wellness Commission** (MDHWC) is to retain Colorado's leadership as the healthiest state and to slow and ultimately reverse the dangerous trends toward inactivity, unhealthy food, and growing obesity rates. The MDHWC believes that healthier people are more energetic, productive, and place fewer demands on the healthcare system than their overweight and obese peers; so arguably, healthy employees are better employees, healthier students are better students, healthier families make healthier communities. The MDHWC, comprised of key stakeholders and leaders from metro area cities, health care providers, and representatives from the academic, business and philanthropic communities, is charged with drafting a strategic plan to ensure that the Denver metro area is and remains "America's Healthiest Community."

James O. Hill, Co-Founder and Director, Center for Human Nutrition, University of Colorado Health Sciences Center

James O. Hill, Ph.D., is co-founder of America On the Move, a national weight gain prevention initiative that aims to inspire Americans to make small changes in how much they eat and how much they move to prevent weight gain. He is Professor of Pediatrics and Medicine and Director of the Center for Human Nutrition at the University of Colorado at Denver. Dr. Hill holds a B.S. degree from the University of Tennessee and M.S. and Ph.D. degrees in Physiological Psychology from the University of New Hampshire. He served as Chair of the first World Health Organization Consultation on Obesity in 1997 and is a Past President of the North American Association for the Study of Obesity. He was also a member of the Expert Panel on Obesity of the National Institutes of Health that developed first U.S guidelines for the treatment and prevention of obesity. Dr. Hill has published more than 350 scientific articles and book chapters in the area of obesity. Many of these focus specifically on the importance of physical activity in weight management. In particular, he is interested in how diet and physical activity influence body weight and how high fat diet and inactivity may contribute to the current global epidemic of obesity. He is the recipient of the 2007 TOPS award from The Obesity Society and has received the Centrum Center and McCollum awards from the American Society for Nutrition. Dr. Hill is a cofounder of the National Weight Control Registry, a registry of individuals who have been successful in maintenance of a reduced body weight. He is the author of the *Step Diet Book*, published in June 2004, which makes the case for why increasing physical activity is essential for addressing problems of body weight. He is leading an effort to make Denver, Colorado the healthiest community in the U.S.



America On The Move/Colorado On The Move

America On The Move Foundation (AOM) is a national non-profit organization. The mission of AOM is to improve health and quality of life by promoting healthful eating and active living among individuals, families, communities and society by:

- Bringing scientists and non-scientists together from multiple disciplines in order to synthesize and stimulate new knowledge
- Translating cutting-edge science into accessible information for easy use by individuals, groups and communities that can positively affect health behavior.
- Empowering individuals to take control of their health by making and sustaining small measurable changes to their daily eating and activity routines
- Encouraging public and private partnerships at the national, state and local level to build programs that reach individuals and communities and support sustainable behavioral change.

AOM provides free web-based programs, tools, and resources to individuals, families, groups and communities of all types and sizes.

Panel Two: Occupational Health and Safety

Moderated by Commissioner Dennis Rivera, Chair, SEIU Healthcare

Steve Reynolds, Center Director, The High Plains Intermountain Center for Agricultural Health and Safety (NIOSH Agricultural Center) at Colorado State University (CSU)

Steve Reynolds is a Professor in the Department of Environmental and Radiological Health Sciences (ERHS), at CSU, and is Head of the Occupational and Environmental Hygiene Section of ERHS. Reynolds is Director of the Centers for Disease Control/NIOSH funded High Plains Intermountain Center for Agricultural Health and Safety, a multidisciplinary research and outreach program serving federal region VIII. He is also Deputy Director for the Mountain and Plains Education Research Center, a collaboration of CSU and University of Colorado providing graduate training and continuing education for occupational health professionals. He has more than 25 years experience in exposure assessment/industrial hygiene, and is internationally recognized for his research involving exposure and health effects of organic dusts, bioaerosols, and endotoxins particularly in agricultural settings. Reynolds received a Fulbright scholarship in 2007 focused on public health in Armenia. In 2008 he began a four year term progressing to Chair (2010) for the American Conference of Governmental Industrial Hygienists, the international leader in developing science-based guidelines for occupational exposure levels.

The **High Plains Intermountain Center for Agricultural Health and Safety** (HICAHS) is dedicated to the improvement of the occupational health, safety, and well-being of the residents of Colorado, the High Plains and the Rocky Mountain Region. HICAHS has served the agricultural population of PHS Region VIII (Colorado, Utah, Wyoming, Montana, North Dakota, and South Dakota) for more than 10 years. The overarching goals of HICAHS are to reduce agricultural injury and illness through focused research, education, and intervention.



Karen Mulloy, Director Continuing Education, Mountain and Plains Education Research Center (MAP ERC) and Director, Denver Health Center for Occupational Safety and Health

Karen B. Mulloy, D.O., M.S.C.H., is board certified in Occupational Medicine and Family Practice. Mulloy is the Director of the Denver Health Center for Occupational Safety and Health, an Associate Professor at the Colorado School of Public Health, Department of Environmental and Occupational Health, and is a co-investigator and the Director of Continuing Education at the NIOSH funded MAP ERC. Mulloy has over 20 years experience in the field of occupational health research, education, and clinical work. Her research work has encompassed the health effects of mining, including work on the Navajo Nation and the Acoma and Laguna Pueblos with uranium miners and millers. She has had extensive involvement in agricultural health and safety with the Southwest Center for Agricultural Health, Injury Prevention and Education at University of Texas Health Center at Tyler and the establishment of an occupational illness, toxic exposure and injury surveillance program for the state of New Mexico. She has also developed occupational safety and health training modules and courses for primary care providers and lay health workers and conducted studies on the use of computer-based learning in occupational health and safety among workers in the manufacturing sector.

The ***Mountain and Plains Education and Research Center (MAP ERC)*** is one of 17 Education and Research Centers funded by the Centers for Disease Control/National Institute for Occupational Safety & Health (CDC/NIOSH). Spanning from the borders of Canada to Mexico, the MAP ERC helps to meet the occupational health education needs of Colorado, New Mexico, Arizona, Montana, Wyoming, North Dakota and South Dakota. Five institutions – University of Colorado Denver (CU), Colorado State University (CSU), National Jewish Medical and Research Center (NJMRC), Denver Health and Hospital Authority (DHHA) and the University of New Mexico Health Sciences Center (UNM) —have come together to provide graduate training, continuing education and outreach in the seven-state region in the area of occupational and environmental health and safety. As a Center within the Colorado School of Public Health Initiative, they share an established track record of commitment to training, research and continuing education.

Gregory Baxter, Occupational Safety and Health Administration (OSHA) Regional Administrator, OSHA Voluntary Protection Program

Gregory Baxter began his career with OSHA in 1975 as a Safety and Health Compliance Officer in the Long Island, New York Area Office. During his 33 years with OSHA he has worked as a Safety Program Evaluator in the New York Regional Office; a Grants Administrator in the New York Regional Office; a Consultation Program Manager in the Denver Regional Office; a Chief of the Division of Consultation Programs in the Washington, DC National Office; and a Deputy Regional Administrator in the Denver Regional Office. The highlights of his career included assignments at the World Trade Center Rescue and Recovery Operation, and the Katrina Hurricane Response where he served as field coordinator for the first-ever implementation of the Worker Safety and Health Annex. Baxter holds a B.A. in English Literature from Iona College in New Rochelle, NY.

The ***Occupational Safety Health Administration Voluntary Protection Program*** (OSHA VPP) promotes effective worksite-based safety and health. In the VPP, management, labor and OSHA establish cooperative relationships at workplaces that have implemented a comprehensive safety and health management system. VPP sets performance-based criteria for a managed safety and health system, invites sites to apply, and then assesses applicants against these criteria. OSHA's verification includes an application review and a rigorous onsite evaluation by a team of OSHA safety and health experts. Approval into VPP is OSHA's official recognition of the outstanding efforts of employers and employees who have achieved exemplary occupational safety and health.



Kelli Heflin, Regulatory/Safety Manager, Scott's Liquid Gold, Inc.

Kelli Heflin is the Regulatory/Safety Manager at Scott's Liquid Gold, a Voluntary Protection Program (VPP) Star site. She led the VPP team at the site. Kelli is very active in Region VIII, assisting OSHA at their information sessions and serving as an SGE. She is also very active in the VPP Participant's Association, serving as the Region VIII Chairperson and as Secretary on the National Board of Directors. In conjunction with these duties, she has made numerous presentations at both national and regional conferences on various VPP topics. She has also served as a mentor to numerous companies in Region VIII.

She started her safety career at Rocky Flats Environmental Technology Site, working in a research and development group setting up mock up areas for employees to practice decontamination techniques prior to entering radioactive areas. She also assisted in Waste Stream Identification. Kelli has a Master's degree in Environmental Policy and Management and a doctorate in Safety Management.

Scott's Liquid Gold, Inc., is an American manufacturing and distribution company of household and skin care products. The company is based in Denver, Colorado and employs 67 individuals. For over 60 years, Scott's has made a strong commitment to the health and safety of its employees. In 2003, Scott's Liquid Gold entered OSHA's Voluntary Protection Program (VPP) and in 2007, Scott's was recognized as an exemplary employee safety and health program and received a "star" rating – the highest level of recognition that OSHA offers. Scott's employees also serve as mentors and provide leadership to other workplaces interested in improving their health and safety programs.

Panel Three: Conditions and Benefits of Work

Moderated by Commissioner Linda M. Dillman, Executive Vice President of Benefits and Risk Management, Wal-Mart Stores, Inc.

Jennifer Dellaport, WIC Breastfeeding Promotion Coordinator, Colorado Department of Public Health and Environment

Jennifer Dellaport, R.D., M.P.H., is the breastfeeding promotion coordinator at the Colorado Department of Public Health and Environment, Prevention Services Division. For the past 12 years she has served as a nutrition consultant for the Colorado Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) Program and the last 6 years as the Program's breastfeeding promotion coordinator. She is the past Chair of the Colorado Breastfeeding Coalition. Dellaport has worked in public health for 25 years, including serving in the Peace Corps in Thailand and Benin, developing health education programs for refugees in Guinea, and working as either a nutritionist and/or local agency director for WIC Programs in Utah, Oregon, and Colorado. She firmly believes that promoting breastfeeding in communities and supporting new mothers to breastfeed successfully is a fundamental role of public health.

Colorado Workplace Accommodations for Nursing Mothers Act

Colorado is the 16th state to pass legislation regarding breastfeeding support in the workplace. Colorado employers are required to make the following accommodations for breastfeeding employees: provide reasonable time (unpaid or paid break and/or meal time) for mothers to express milk at work; make reasonable efforts to provide suitable, private space for this purpose; not discriminate against women for expressing milk in the workplace.



Michelle Hynes, Director, Experience Corps®

Michelle Hynes has been a leader in local and national efforts to increase children's academic achievement, engage the public in improving public schools, and create stronger, healthier communities for nearly 20 years. In her current role as Vice President of Civic Ventures and Director of Experience Corps, she works to engage Boomers and older adults in helping to solve their communities' most pressing problems. During her time at Experience Corps, this award-winning national program has doubled in size to engage 2,000 older adults serving 20,000 children and youth in 23 cities. Earlier in her career, Hynes directed a federally-funded children's literacy program at Reading Is Fundamental, designed an information clearinghouse at Public Education Network, and managed several programs focused on connecting community organizations with their local public schools. Hynes has volunteered with the Washington Area Women's Foundation, the DC VOICE Ready Schools Project, and Tranquil Space Yoga Foundation. She holds a B.A. from Georgetown University and a master's degree in education from the University of Pennsylvania.

Experience Corps® is a program that works to solve serious social problems by placing adults over 55 in urban public schools and after school programs to mentor and tutor children teaching them to read and develop the confidence and skills to succeed in school and in life. The program is active in 19 cities and has 2000 members. Research shows that Experience Corps boosts better overall health for Experience Corps members including physical activity, strength, and cognitive ability. These areas of improvement shown by Experience Corps members are important predictors of health outcomes in later life, including disability and dementia.

John Wilcox, Deputy Director, Corporate Voices for Working Families

John Wilcox manages Corporate Voices' family economic security work, focusing on lower-wage working families. He is also responsible for the internal operations of Corporate Voices, including project management, public policy and analysis, financial oversight and reporting, staff development and fundraising. Mr. Wilcox has worked in the nonprofit sector for the majority of his career, most recently as General Counsel to the Center for Policy Alternatives, a nonpartisan, nonprofit 501(c) (3) focused on public policy and leadership in the fifty states. He holds a J.D. from Washington University in St. Louis and a B.A. from Dickinson College.

Corporate Voices for Working Families is the leading national business membership organization representing the private sector voice in the dialogue on public policy issues involving working families. A nonprofit, nonpartisan organization, Corporate Voices for Working Families aims to improve the lives of all working families by developing and advancing innovative and sustainable policies that have bipartisan support built through collaboration among the private sector, government and other stakeholders. In helping to create this bipartisan support, we facilitate research in several areas that spotlight the intersecting interests of business, community and families: workforce readiness, family economic stability and flexibility in the workforce. Collectively our 50 partner companies, with annual net revenues of more than \$1 trillion, employ more than 4 million individuals throughout all 50 states.



Steven L. Sauter, Senior Scientist, National Institute for Occupational Safety and Health (NIOSH), Work Organization and Stress-related Disorders Program

Steven L. Sauter is a Senior Scientist in the Division of Applied Research and Technology at the National Institute for Occupational Safety and Health and serves as Coordinator of the NIOSH Research Program on Work Organization and Stress-related Disorders. In addition to his NIOSH position, Sauter also holds appointments as Adjunct Professor of Human Factors Engineering at the University of Cincinnati, College of Engineering, Adjunct Professor of Psychology at the University of Cincinnati, and Associate Graduate Faculty at Northern Kentucky University. He is a Fellow of the European Academy of Occupational Health Psychology and serves on editorial boards of several scholarly journals, including *Work and Stress*, *Journal of Occupational Health Psychology*, and *Industrial Health*. He has authored and edited several books and articles on psychosocial aspects of occupational health, and he is a senior editor of the *4th Edition of the ILO Encyclopedia of Occupational Health and Safety*. Sauter received his Ph.D. in Industrial Psychology from the University of Wisconsin-Madison and held an appointment in the University of Wisconsin, Department of Preventive Medicine prior to joining NIOSH.

NIOSH Work Organization and Stress-related Disorders Program

The mission of the NIOSH research program in work organization and stress-related disorders is to eliminate occupational stress, diseases, injuries, and fatalities in the workforce through a focused program of research and prevention addressing work organization risk factors for these outcomes. The program strives to fulfill its mission through:

- **High Quality Research:** NIOSH will continually strive for high quality research and prevention activities that will lead to improvement in work organization and reductions in occupational stress, illness, and injury in the workforce.
- **Practical Solutions:** The NIOSH program on work organization and stress-related disorders is committed to the development of practical solutions to the complex problems that cause occupational stress, illness, and injury in the workforce.
- **Partnerships:** We recognize that collaborative efforts in partnership with labor, industry, government, academia, and other stakeholders are usually the best means of achieving successful outcomes. Fostering these partnerships is a cornerstone of the NIOSH program on work organization and stress-related disorders.

Opening Remarks for Public Comment Period: Senator Nancy Spence

Senator Nancy Spence, Minority Caucus Whip, Colorado State Senate, was elected to the Colorado State House in 1998 where she served for six years before running for the Colorado State Senate. Spence is currently serving her second term as a state senator and was named Senate Minority Whip in November 2008. Prior to running for political office, Spence was elected to three terms on the Cherry Creek Schools Board of Education. Sen. Spence serves as a member of the Education, Legislative Council, and Transportation Committees. Sen. Spence is a Denver native, graduated from South Denver High School and attended Colorado State University.



Comments from the Robert Wood Johnson Foundation

Dr. Risa Lavizzo-Mourey, M.D., M.B.A., president and CEO of the Robert Wood Johnson Foundation, is a national leader in transforming America's health systems so people live healthier lives and receive the health care they need. A practicing physician with business credentials and hands-on experience developing national health policy, she was drawn to the Robert Wood Johnson Foundation by the opportunity, as she puts it, to "alter the trajectory and to push society to change for the better."

Lavizzo-Mourey was a leader in academic medicine, government service and her medical specialty of geriatrics before joining RWJF in 2001 as senior vice president and director of the health care group. Previously, at the University of Pennsylvania, she was the Sylvan Eisman Professor of medicine and health care systems and director of Penn's Institute on Aging. In Washington, D.C., she was deputy administrator of what is now the Agency for Health Care Research and Quality. She is a member of the Institute of Medicine of The National Academies.

Raised in Seattle by physician parents, Lavizzo-Mourey earned her Medical Degree from Harvard University Medical School, and a Master's of Business Administration from the University of Pennsylvania's Wharton School. She completed a residency in Internal Medicine at Brigham and Women's Hospital in Boston, was a Robert Wood Johnson Clinical Scholar at the University of Pennsylvania, and trained in Geriatrics at Penn. Always a physician as well as an agent for wide-scale social change, she still treats patients at a community health clinic in New Brunswick, N.J. She and her husband of 30 years have two adult children.



Meet Claudine Paris



At 71, Claudine Paris feels like a “rock star” every day she walks through the hallways of James John Elementary School in Portland, Ore., where she volunteers as a literacy tutor.

“I’m appreciated and I’m needed,” says Paris, who’s called “Auntsy” by the children. “It’s wonderful.”

Retirement didn’t quite suit Paris, a former management consultant. A self-described optimist, she says that even though she continued to lead an active life and maintained a “glass half-full” attitude after she stopped working, she felt something was missing. “There was an emptiness. I wasn’t ever quite satisfied.”

That changed after Paris started volunteering at James John through Experience Corps, a group that partners with schools and local community organizations in 23 cities throughout the country to create meaningful opportunities for adults over 55. Now Paris feels a sense of fulfillment that she didn’t have before. “I’m a healthier citizen because of my involvement with children,” she says. “I have a purpose.”

Plus she’s more active. On the three days each week that Paris volunteers, she walks a mile from her home to the light rail station, where she catches the bus that takes her to the school. Going home, she walks a mile back.

“I’m getting more regular exercise than I used to,” she says. “I don’t need to push myself to get the quality of exercise I need, because it’s built into my routine.”

These days, Paris walks with more of a “spring” in her step – a boost that she says comes from both physical activity and emotional satisfaction.

She’s not alone – research shows that meaningful work, either voluntary or paid, has positive health outcomes. In addition to increased physical activity, Experience Corps members report having increased strength and cognitive ability, which are important predictors of health outcomes later in life. Nationwide, Experience Corps has matched about 2,000 adults over age 55 with schools to serve 20,000 children and youth; most volunteers work about 10 hours per week in exchange for a small stipend.

Many of the children Paris works with are in the first, second or third grades. Initially, Paris had asked to work with older students and was disappointed when she was assigned to an elementary school. But now she realizes it’s the perfect place for her. Her own children and grandchildren are all grown. “The thing about children this age is that they’re all pretty eager learners and they hold me accountable for showing up: ‘Where were you yesterday?’ Or, ‘You’re late!’ Never mind that ‘yesterday’ wasn’t a school day for me, or that I was detained on my way to the classroom. It’s very funny.”

They’re caring, too. Paris says that one day on her way to school she fell and scraped her hand. Her accident did not go unnoticed. “One of the kids asked me, ‘What happened, Auntsy? Are you all right? Was there anyone to help you?’ He then proceeded to tell his classmates to come look at my hand, and with grave concern related my story.”

Paris says she likes having a reason to get up in the morning. “Especially during the winters in Oregon, when it’s rainy and dark, going off to school is a very good thing.”

Experience Corps requires a commitment of 450 hours over a 10-month period from its adult volunteers. Paris has completed her first commitment of 450 hours and is now starting her second year and an additional 450-hour commitment.

“Why stop?” she says. “You’d have to work hard not to feel really good about this and I like feeling good.”



Meet Kathleen Dolezal



When it came to warding off the threat of diabetes that has plagued her family, Kathleen Dolezal got a boost from an unexpected source: her employer, the State of Nebraska.

In the fall of 2007, Dolezal signed up for a 12-week program called N-Lighten that the state made available to its employees. She lost 17 pounds and substantially reduced her blood-glucose levels, which had been cause for concern previously.

"I might not be a size 4, but I am a healthier size," says Dolezal, 47, who works as a health and human services policy advisor to Nebraska Gov. Dave Heineman.

Dolezal's family has a strong history of diabetes. Both her grandmother and grandfather had diabetes, as well as all three of her mother's siblings.

Two of them ultimately lost their lives from complications of diabetes, after enduring kidney dialysis as well as the loss of a leg and a foot.

"Growing up, you see how diabetes affects people's lives," Dolezal says, adding that she has always been careful about getting her blood-sugar levels checked. If there's a problem, she says, "I want to catch it early and not let it get out of control and relive the whole story of my family."

When the opportunity to participate in N-Lighten came up, the timing was just right for Dolezal. She'd had a check-up recently and learned that her glucose levels were dangerously high. Her doctor wanted to put her on medication to prevent diabetes, but Dolezal first opted to try improving her health by shedding some weight, which could help reduce her glucose levels.

The state employees who enrolled in N-Lighten created teams according to the offices in which they worked. The teams competed against each other over the course of the 12-week program on both weight loss and physical activity.

Dolezal says the team approach was both supportive and fun. "You don't want to let your team down," she says. "You feel much more motivated and much more accountable."

Dolezal accomplished most of her physical activity by walking laps on her lunch break inside the state Capitol building. Four laps is a mile. "Every time I'd go to the bathroom, I tried to walk a lap," Dolezal says. "After a day, it adds up."

Indeed, after 12 weeks, Dolezal got a clean bill of health from her doctor. "My glucose level dropped enough that I am completely in safe zone now," she says.

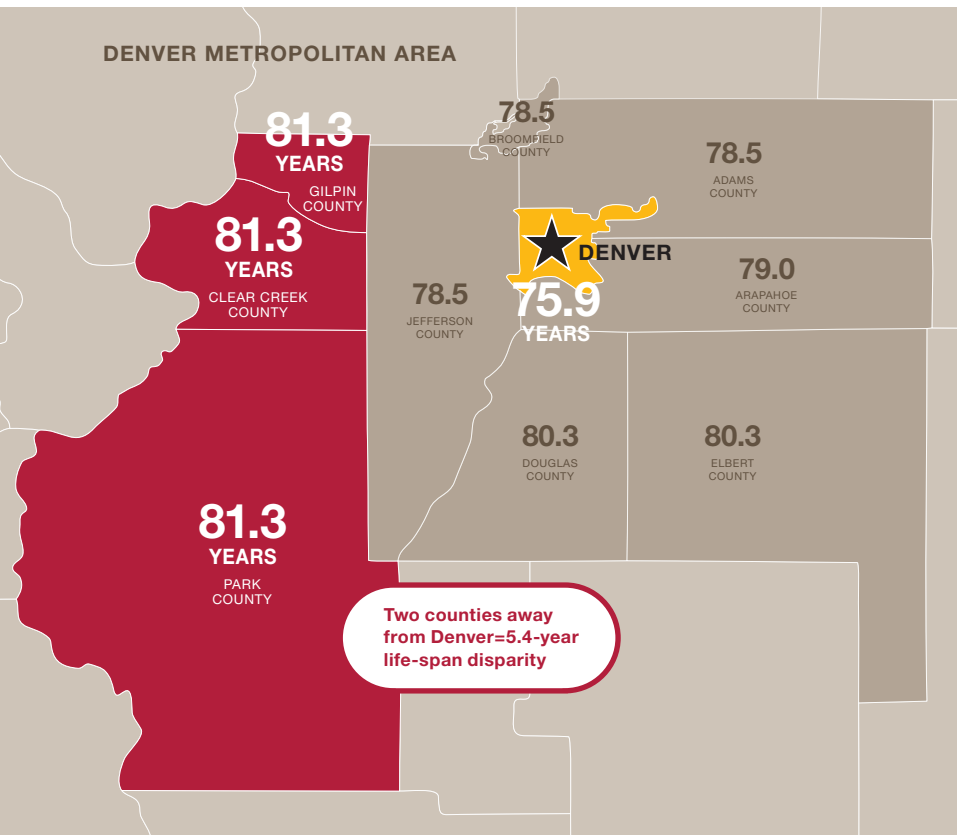
She's thrilled to be avoiding diabetes. "That's not where I want to go," she says.

Dolezal has participated in two more N-Lighten groups and is maintaining her weight. Health and physical activity are part of her workplace culture now, making her feel supported – even encouraged – in her endeavors to stay healthy. "You're not out there on your own," she says, noting that many other state employees walk their laps inside the Capitol as well.

N-Lighten has also provided nutrition and cooking tips, some of which Dolezal has incorporated into meal preparation for herself, her husband and their teenage daughter. She's a vegetable enthusiast and an avid baker, which she says helps her reduce stress. These days, though, she's likely to use applesauce instead of sugar and Cool Whip instead of cake frosting.



ROBERT WOOD JOHNSON FOUNDATION
Commission to Build a Healthier America



Life Expectancy: Where You Live Matters

In the Denver metropolitan area, life expectancy can vary by more than five years depending on where you live. The average life expectancy for people living in Denver County is 75.9 years. Just two counties away in Park County, for example, people can expect to live 5.4 years longer. Promising workplace programs in Colorado—designed to protect and promote workers' health—are striving to decrease these gaps and increase people's chances of living healthier and longer lives.



ISSUE BRIEF 4: WORK AND HEALTH

DECEMBER 2008

Healthy workers and their families are likely to incur lower medical costs and be more productive, while those with chronic health conditions generate higher costs in terms of health care use, absenteeism, disability and overall reduced productivity.⁴

Work Matters for Health

1. Introduction

Our work affects our health in many ways – and our health affects our work.

On average, American adults spend nearly half of their waking hours at work.¹ Where we work influences our health, not only by exposing us to physical conditions that have health effects, but also by providing a setting where healthy activities and behaviors can be promoted. In addition to features of worksites, the nature of the work we do and how it is organized also can affect our physical and mental health. Work can provide a sense of identity, social status and purpose in life, as well as social support. For most Americans, employment is the primary source of income, giving them the means to live in homes and neighborhoods that promote health and to pursue health-promoting behaviors. In addition, most Americans obtain their health care insurance through their jobs. Not only does work affect health; health also affects work. Good health is often needed for employment, particularly for low-skilled workers. Lack of employment among those who are unable to work because of ill health can lead to further economic and social disadvantage and fewer resources and opportunities to improve health, perpetuating a vicious cycle.

Employment-related health problems have significant human and economic costs for individuals and for society overall.

In 2007, over 5,000 fatal and 4 million nonfatal work-related injuries and illnesses were reported in private industry workplaces; about half of the non-fatal injuries resulted in time away from work due to recuperation, job transfer or job restriction.² Some reports have found that the total economic costs to the nation of occupational illness and injury match those of cancer and nearly those of heart disease.³ Healthy workers and their families are likely to incur lower medical costs and be more productive, while those with chronic health conditions generate higher costs in terms of health care use, absenteeism, disability and overall reduced productivity.⁴ Workplace injuries and work-related illnesses have a major financial impact on both large and small employers. In 2006, the cost to employers for workers' compensation totaled \$87.6 billion.⁵

This issue brief examines how work can affect health, exploring the health effects of both physical and psychosocial aspects of work as well as of work-related opportunities and resources. Examples of promising approaches to making work healthier also are provided.

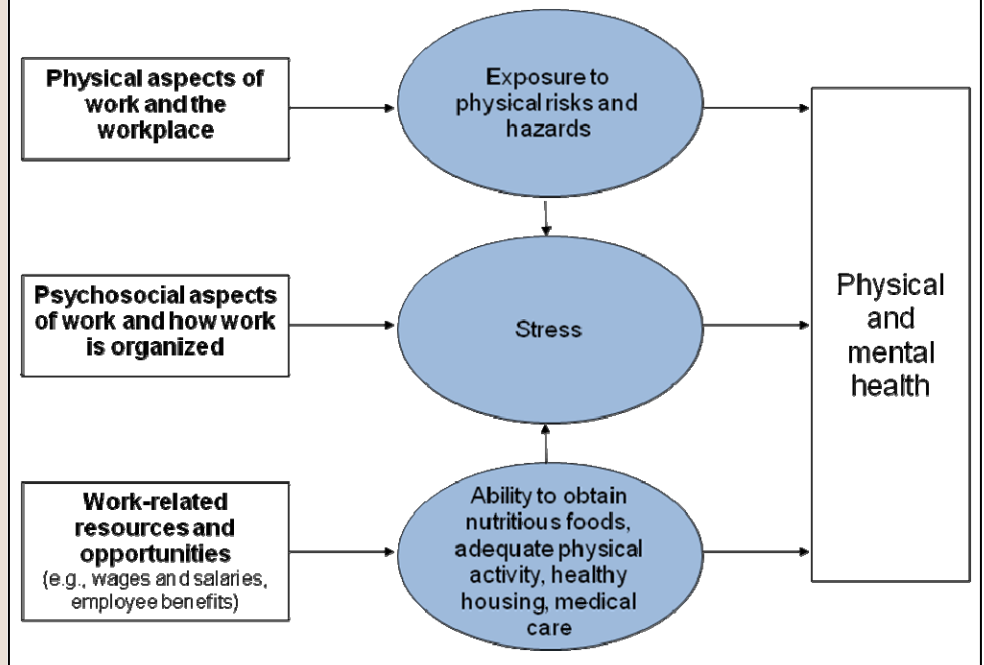




2. How does work affect health?

Measures to protect workers from physically hazardous conditions remain important, but the current context calls for new integrated strategies that not only will protect workers from major hazards but will promote healthier work and workplaces.

Figure 1. How work shapes health for workers and their families



Changes in work and in the workforce: Implications for health.

Both the profile of workers and the nature and structure of work in the United States have evolved over time. Today's workforce is older, more racially and ethnically diverse, and increasingly made up of women.⁶ Along with this growing demographic diversity, the "21st century workplace" features more multidisciplinary jobs, more collaborative work and reliance on technology, and a shift away from manufacturing jobs.⁷ As companies have restructured, both "knowledge work"—requiring a relatively high level of education or technical training—and service jobs have become more predominant.^{7, 8} The Bureau of Labor Statistics projects that the United States workforce will increase by 22 million workers by 2010, with the largest number of workers employed in professional and related occupations and in the service sector.⁹ Today's workers face greater job uncertainty; they are more likely to have many employers and to be required to enhance or expand their skills over the course of their working careers.⁸ These shifts in work may have outpaced knowledge about their implications for the quality of working life and for safety and health on the job.⁸ Measures to protect workers from physically hazardous conditions remain important, but the current context calls for new integrated strategies that not only will protect workers from major hazards but will promote healthier work and workplaces.



Certain jobs are associated with higher health risks. For example, operators, fabricators and laborers suffered nearly 40 percent of all reported occupational illnesses and injuries in 2001, while representing only 15 percent of workers.⁹

The links between health and the physical aspects of work.

There is widespread awareness that both the physical tasks involved in a job and the physical work environment can have important health effects. These concerns have been the traditional domain of occupational health and safety.

- **Physical working conditions and risk of injury and illness.** The type of work and the tasks involved influence a worker's risk of physical injury and illness.
 - Workers in particular sectors of the work force are at increased risk of work-related injuries and illness. Eight sectors—air transportation, nursing facilities, work with motorized vehicles and equipment, trucking services, hospitals, grocery and department stores, and food services—account for nearly 30 percent of nonfatal occupational injuries.⁹ Certain jobs are also associated with higher risks. For example, operators, fabricators and laborers suffered nearly 40 percent of all reported occupational illnesses and injuries in 2001, while representing only 15 percent of workers.⁹
 - Physically demanding daily tasks and uncomfortable working positions can lead to physical strain and injury, increasing the risk of long-term absence.¹⁰ Jobs requiring repetitive movements and those with high physical workload including lifting, pushing or pulling heavy loads put workers at higher risk for musculoskeletal injuries and disorders, overextension and repetitive strain injuries.¹¹ Carpal tunnel syndrome, caused by repetitive motion, accounted for the highest median days (25 days) away from work among all occupational illness or injuries in 2001.⁹ The ergonomics of equipment and work space are important contributors to occupational health. For example, poorly designed tools, keyboards and chairs have been linked with arm, back and shoulder pain, as well as other musculoskeletal disorders.¹²
 - Sedentary jobs allow few opportunities for movement or exercise, and physical inactivity contributes to risk of obesity and chronic diseases such as diabetes and heart disease.¹³
- **Hazardous exposures in the workplace.** In addition to workplace conditions like inadequate ventilation or temperature control that can aggravate allergies or asthma,¹⁴ the physical environment of a workplace can expose workers to a variety of potentially hazardous chemicals. Lead, pesticides, aerosols, ammonia and other cleaning products, and asbestos are just a few of the many workplace-related chemicals for which long-term exposure have been related to poisoning and serious illnesses.^{9,15} Hearing loss from noisy work environments is one of the most common occupational injuries worldwide, and workplace noise also creates a higher risk of accidents.^{16,17}

The psychosocial aspects of work and how work is organized also can affect health.

The experience of work itself—how time is organized, and the social and psychological aspects of working conditions—affect both physical and mental health. Differences in the degree of control that workers feel they have over their working conditions are thought to be a major factor accounting for steep social gradients in health among employed civil servants in the United Kingdom.^{18,19} For many Americans, work is a major source of opportunities for personal development and building stable social networks. These opportunities are shaped by many characteristics of the work environment, including workplace culture, job demands and latitude in making decisions about one's work.



Reducing work-related stress can have positive health impacts not only for workers but for their children as well.

- **Work schedules.** Evening and night shifts, holding multiple jobs, long work hours and excessive overtime work can be detrimental to health by causing fatigue and disturbances in circadian rhythms. Sleep deprivation leads to decreased concentration and lower cognitive performance, and can cause mistakes that negatively impact an employee's health, work, or both.^{20, 21} Working more than 40 hours per week has been associated with poorer perceived overall health, increased injury and illness rates and increased mortality, with especially pronounced effects in conjunction with extended work shifts that are longer than 8 hours.²²
- **Commuting to work.** More Americans commute to and from work than in the past, and they are travelling longer distances; 3.3 million Americans have work commutes of 50 miles or more each way.²³ Longer commutes by both train and automobile have been associated with greater levels of stress.^{24,25} Car commuting also has been linked with physical ailments such as lower back pain,²⁵ increased likelihood of obesity,²⁶ and less time for leisure and social activities.²⁷ Of the 134 million people in the United States who worked outside their homes during 2007, 120 million commuted in cars, contributing to traffic congestion, air pollution, reduced physical activity and risk of injury and death due to accidents.²⁸ As an alternative to car commuting, public transit has been linked with greater physical activity.²⁹

Balancing work and family responsibilities: Health implications.

Since 1970, average hours worked by both parents in two-parent families with children under 18 years of age have increased by approximately 11 hours per week; over the same time period, more single mothers have joined the work force and are working longer hours.³⁰ For many families, these changes represent substantial declines in time for activities like housework, childcare, leisure and sleep—adding additional strain on families, especially in times of injury or illness.³⁰ Parents reporting stress due to the spillover of work to family life are more likely to suffer from mood, anxiety and substance dependence disorders.³¹ Reducing work-related stress can have positive health impacts not only for workers but for their children as well. By allowing workers to have more control over their schedules, workplace policies such as flextime (which permits employees to schedule workday start and end times to accommodate family responsibilities) and supportive breastfeeding policies can improve health and well-being for workers and their families.

- **Control at work, demands and decision latitude.** Jobs characterized by both high psychological demands and high levels of decision-making authority and skill utilization (“decision latitude”) can promote self esteem and self efficacy. Conversely, workers whose jobs make high demands yet offer little decision latitude experience what has been called “job strain.” They are more likely to suffer from psychological distress, and are at higher risk of chronic physical illnesses (such as cardiovascular disease) and unhealthy coping behaviors (such as smoking) that contribute to these illnesses.^{18,32} Control at work is considered by some experts to account for a large part of socioeconomic differences in health among employed persons.^{18,19}
- **The balance between efforts and rewards.** Perceived balance between a worker's efforts and rewards (in terms of earnings, benefits, esteem, job security and career opportunities) also has been shown to influence health. Imbalance of high efforts with low rewards has been associated with poor physical functioning³³ and increased incidence of coronary heart disease,³⁴ as well as with moderately elevated risks of impaired mental and social functioning and onset of mild psychiatric disorders.^{33,35}



Work environments that facilitate mutual support between coworkers can reduce job stress and may provide a buffer against physical and mental health stressors related to work.³⁴

- **Organizational justice.** Organizational justice characterizes both processes and relationships in the workplace. The former include whether decisions are made with input from affected parties, are consistently applied, and suppress bias; the latter include whether supervisors treat employees with respect, transparency and fairness. In the context of work, each of these components can affect both physical and mental health and well-being. Workers who experience low levels of relational justice have longer periods of illness-related absence compared with those who experience high levels of justice.³⁶ Lower levels of justice have been associated with poorer health, higher self-reported morbidity, and increased mental health problems;³⁷ a combination of high effort-reward imbalance and high organizational injustice was associated with a greater health risk than either alone.³⁸
- **Social support at work.** Work environments that facilitate mutual support between coworkers can reduce job stress and may provide a buffer against physical and mental health stressors related to work.³⁴ High levels of social support at work have protective effects on mental health and have been linked with reduced risk of illness-related absence,^{35,39} while low levels are associated with increased risk of psychiatric disorders.^{33,40}
- **Gender and racial discrimination in the workplace.** Among both men and women and across racial or ethnic groups, perceived discrimination can be harmful for mental health.⁴¹ The negative health impacts of discrimination in the workplace can be both short-term (increasing stress levels, blood pressure and other physiological symptoms) and longer-term (leading to musculoskeletal problems, arthritis, heart disease and other physical illnesses).⁴¹⁻⁴⁴

Work-related stress and health.

Working conditions can damage health not only through obvious physical hazards but also through stress. The last decade has seen marked increases in scientific knowledge about causal pathways and physiologic mechanisms that help explain the links between social and economic factors and health. Important examples include physiologic damage to multiple vital organ systems caused by chronic stress through neuroendocrine and immune pathways.⁴⁵⁻⁴⁹ Stressful experiences—including aspects of working conditions—can trigger the release of hormones and other substances in the body which, particularly with repeated stresses over time, can damage immune defenses and vital organs.⁵⁰ This physiologic chain of events can result in more rapid onset and progression of chronic illnesses including cardiovascular disease;⁴⁸ the bodily wear and tear associated with chronic stress may accelerate aging.⁵⁰⁻⁵² Accumulated strain from trying to cope with daily events may, over time, lead to far more physiological damage than a single stressful event, even if the event is dramatic.⁵⁰ Daily hassles can include constant challenges posed by work environments in which a person may feel disrespected, intimidated or under constant strain trying to balance the demands of work and family responsibilities with inadequate resources.



For most Americans, earnings from work represent the primary resources and opportunities enabling them to make health-related decisions about where and how they and their families live, play and go to school.

In 2006, 7.4 million workers—5.1 percent of workers ages 16 years and over who had been working for at least six months—were classified as working poor.⁵⁴



Work-related opportunities and resources also affect health.

For most Americans, earnings from work represent the primary resources and opportunities enabling them to make health-related decisions about where and how they and their families live, play and go to school. Other work-related benefits—including health insurance, paid sick and personal leave, workplace wellness programs, child and elder care resources and retirement benefits—also shape the major health-related choices available to individuals and families.

The role of unions in protecting and promoting workers' health.

Historically, unions have played a major role in protecting workers' health in this country. They have, for example, advocated for legislation and enforced standards, informed members about their rights with respect to working conditions and about available resources for addressing occupational illness/injury, helped members receive workers' compensation benefits and aided them in disputes over workplace safety. They have been instrumental in achieving better wages and benefits, including health insurance coverage, for a substantial proportion of the U.S. workforce. Beginning in the 1970s, however, union membership began to fall, accompanied by declines in resources and bargaining power. As foreign and domestic non-union competition and employer demands for concessions have increased, unions have become less likely to employ tactics (e.g., protests, strikes and lawsuits) that historically have been powerful tools used to protect worker's health.⁵³

- **Income.** For the vast majority of Americans, employment is the sole or main source of income—a work-related resource that affects health through multiple well-documented direct and indirect pathways. Well-paying jobs represent greater economic security and ability to accumulate wealth, enabling individuals to provide their families with more nutritious foods, to obtain quality child care (which can affect a parent's ability to keep a job and can also reduce stress), to educate their children, and to live in healthier homes and neighborhoods. The "working poor," in contrast, generally do not earn enough income to cover basic living necessities for themselves and their families; in 2006, 7.4 million workers—5.1 percent of workers ages 16 years and over who had been working for at least six months—were classified as working poor.⁵⁴ Income-related advantages or disadvantages—and the opportunities for or obstacles to good health they represent—are likely to be passed on to future generations as well.



78 percent of American workers who qualify for leave under the FMLA say they do not use it because they cannot afford to go without pay.⁶⁰

- **Health insurance.** Although most Americans receive their health insurance through their jobs, not all workers have access to this benefit. Overall, 56 percent of civilian workers have medical care benefits through their employment, but the proportion varies across occupational sectors: 78 percent of workers in management, business and financial sectors receive such benefits, compared with 35 percent of service industry workers.⁵⁵ Employers with lower-wage workers offer health insurance less frequently,⁵⁶ and, even if employment-sponsored benefits are available, low-wage workers may not be able to afford the necessary premiums, copayments or deductibles.
- **Workplace-based health promotion programs.** Workplace-based wellness and health promotion programs are employer initiatives directed at improving the health and well-being of workers and, in some cases, their dependents.⁵⁷ Although most workplace-based wellness programs focus primarily on providing traditional health-promotion and disease management programs on site, some model programs integrate on-site elements with health resources outside of the workplace and incorporate these benefits into health insurance plans. While larger worksites offer more health promotion programs, services and screening programs and policies, only seven percent of employers in 2004 offered a comprehensive worksite health promotion program that incorporated five key elements defined in *Healthy People 2010*: health education, links to related employee services, supportive physical and social environments for health improvement, integration of health promotion into the organization's culture, and employee screenings with adequate treatment and follow up.⁵⁸
- **Paid sick and personal leave.** Access to paid sick days can help workers recover from illnesses and provide care for sick family members, potentially preventing more severe illness and use of expensive hospital care. Although the Centers for Disease Control and Prevention recommend that workers who are ill stay home from work to prevent spread of disease in the workplace,⁵⁹ following this advice may be difficult or impossible when sick days are unpaid. Nearly all employers who provide this benefit in this country do so on a voluntary basis. Paid personal leave can also provide workers with flexibility to accommodate health-related issues. Overall, 41 percent of civilian workers receive paid personal days, but this percentage varies by occupation—from 58 percent in management, professional, and related fields to 30 percent in service fields.⁵⁵ At the federal level, the Family Medical Leave Act (FMLA) enacted in 1993 provides eligible employees with at least 12 work-weeks of unpaid, job-protected leave for circumstances such as childbirth, a serious personal medical condition or care of a child, parent or spouse with a serious medical condition; however, 78 percent of American workers who qualify for leave under the FMLA say they do not use it because they cannot afford to go without pay.⁶⁰
- **Child care and elder care resources.** Providing child and elder care assistance as a work benefit can be important for the health of both workers and their dependents. In addition to the benefits of high-quality child care for children themselves (see *Commission Issue Brief 1: "Early Childhood Experiences and Health"*), reliable and stable child care can help parents secure and maintain steady employment and reduce workplace absenteeism.⁶¹ Finding and paying for high-quality child care can often be difficult for working parents, however, and can be a major source of stress with potential adverse health consequences. Providing or finding elder care can become an additional financial and emotional burden for the 17 percent of the workforce with this responsibility.⁶² These burdens can be greatest on workers in low-wage jobs, who have particularly limited access both to child and elder care resource and referral services and to employer-provided financial assistance for purchasing care.⁶³ Employers have focused increasing attention on elder care by giving employees information about available services and paid or unpaid time off to provide care.⁶⁴



Workers in lower-status and lower-wage jobs are disproportionately exposed to health-impairing working conditions,⁶⁹ reinforcing the burden of ill health and social disadvantage among particular social groups in this country.

- **Retirement benefits.** Retirement benefits—including Social Security and employment-sponsored retirement plans, such as the 401 (k)—are important as a source of steady income support for seniors. Almost all workers are covered by Social Security, and this program has had positive health impacts by reducing poverty and increasing income among older Americans.⁶⁵ Low-wage workers are less likely than others to be covered by employment-sponsored defined benefit or contribution plans;⁶⁶ as a result, many low-wage workers enter retirement with very little savings, which can have serious adverse health consequences in the absence of adequate safety nets.

Social advantage and employment-related opportunities.

Among Americans in every racial or ethnic group, higher levels of education are associated with greater likelihood of being employed and with higher earnings among those in the work force. For example, lifetime earnings (in 1999 dollars, and based on a 40-year work life) for adults who have graduated from high school but not attended college have been estimated at \$1.2 million, compared with \$2.1 million for those with bachelors degrees and \$4.4 million for those with professional degrees.⁶⁷ Even as education levels have risen among blacks and Hispanics and they continue to move into higher-skilled and higher paying occupations, the proportion of blacks and Hispanics in management, professional and related jobs remains smaller and their earnings remain lower compared with whites and Asian Americans.⁶⁸ Workers in minority racial or ethnic groups are overrepresented in the service sector and low-paying jobs. The working poor—workers who have been employed for at least 27 weeks and live below the federal poverty level—are disproportionately comprised of racial minorities; rates of working-poor are twice as high among blacks or Hispanics as among whites or Asian Americans.⁵⁴

Members of the most socially-disadvantaged groups tend to have low-paying jobs with high levels of occupational hazards and work-related health risks. Workers in lower-status and lower-wage jobs are disproportionately exposed to health-impairing working conditions,⁶⁹ reinforcing the burden of ill health and social disadvantage among particular social groups in this country. Low-paying, blue-collar jobs present more occupational hazards, including environmental and chemical exposures (e.g., pesticides, asbestos), poor working conditions (e.g., shift work with few breaks, potentially harmful tools), and psychosocial stressors (e.g., less control).^{70,71} For example, bus drivers face numerous physical and psychosocial stressors in their jobs, including exposure to chemical fumes and high noise levels, high risk for musculoskeletal strain from addressing passengers and opening doors, pressure to arrive on time, and stress resulting from passenger behavior, traffic and required paperwork.⁷² Lower-wage workers also are less likely to have health-related benefits such as paid sick leave, job flexibility and access to workplace wellness programs.^{63,73}



During 2008 alone, the unemployment rate in the United States for individuals 16 years of age and older increased from 4.9 percent in January to 6.5 percent in October.⁸² And those who are already at greater disadvantage with respect to social factors like educational attainment and racial or ethnic group are most likely to be unemployed.

The health effects of unemployment and job insecurity.

People who are unemployed have a higher prevalence of poor health and excess mortality than their employed counterparts.⁷⁴⁻⁷⁷ While ill health itself can be a reason for unemployment, findings from longitudinal studies indicate that the health effects of unemployment appear to be independent of pre-existing health.^{78,79}

Unemployment may affect physical and mental health in several ways:

- **Lowered income and living standards.** Reductions in income associated with unemployment can lead to deteriorating physical health because of changes in ability to afford nutritious food, healthy housing, and/or appropriate medical care.
- **Increased stress.** Loss of employment is associated with changes in health such as increased blood pressure,⁸⁰ and can limit access to health-promoting aspects of work such as physical and mental activity, use of skills, decision latitude, social contact and social status.
- **Behavioral health risks.** The impact of unemployment on unhealthy coping behaviors like increased alcohol consumption, smoking and drug use has been widely studied; however, findings are inconsistent and longitudinal studies are rare.⁷⁸

Among those who are employed, job insecurity and threat of job loss can contribute to poorer health through similar pathways. Stress associated with the prospect of losing one's job can lead to risky coping behaviors such as smoking, lack of exercise and forgoing sick or vacation leave, and may place workers at increased risk of work-related injury and illness.⁸¹

The number of Americans at risk of the health-damaging effects of job insecurity and unemployment is growing. During 2008 alone, the unemployment rate in the United States for individuals 16 years of age and older increased from 4.9 percent in January to 6.5 percent in October.⁸² And those who are already at greater disadvantage with respect to social factors like educational attainment and racial or ethnic group are most likely to be unemployed.

3. Improving health by making work and workplaces healthier: a range of strategies.

Efforts to protect and promote workers' health and safety in the United States have historically focused on legislation and regulations intended to prevent work-related accidents and injuries by reducing physical hazards in the workplace. While such measures remain important, dramatic changes in the nature of work (i.e., shifts from manufacturing jobs to service jobs and "knowledge work") during recent years call for new strategies that not only will protect workers from major hazards but will promote healthier work and workplaces.

Conclusive knowledge of the most effective and efficient interventions to make work and workplaces healthier is limited. Our current understanding of the health effects of both physical and psychosocial aspects of work and workplaces needs to be broadened and deepened. The existing knowledge base is, however, adequate to point to promising directions. Listed below are selected examples of strategies and programs that have been explored as approaches to make work and working conditions healthier. Some, but not all, of the strategies described here have been evaluated with respect to health outcomes, with varying degrees of scientific rigor. Given current gaps in knowledge, high priority should be given to research focused on the impacts of these and other knowledge-based approaches on the health of workers and their families.



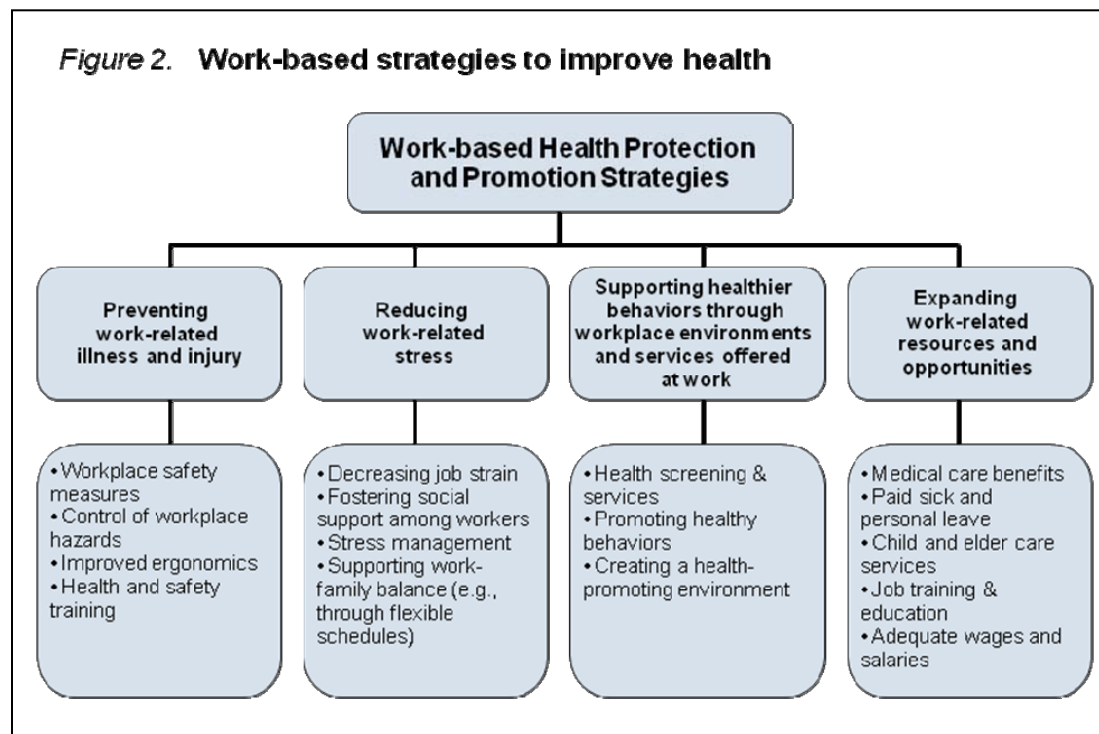
A growing body of evidence indicates that health promotion programs are cost-effective. One review found an average return of \$5.81 per \$1 invested in these programs, achieved through improved employee health, reduced medical benefit expenses and reduced absenteeism.⁸⁷

- There is great potential for improving workers' health through *improvements in the nature and structure of work and design of work tools and work space*. Strategies include flexible scheduling, a change in focus between team or individual efforts, improving decision-making processes and task distribution, and other procedural adjustments. Changes to the work environment, including social as well as physical conditions, may also improve workers' well-being and reduce stress and stress-related illness. More concrete interventions include incorporating new technologies and tools to prevent injuries and protect worker safety. Employee *education and outreach programs* also can help increase awareness about health and safety hazards and prevention; such efforts, as an adjunct to workplace design policies, can reduce injury rates.^{83,84}
- Given the amount of time most workers spend at their jobs, the workplace can also provide a setting for promoting health and healthy behaviors through *workplace wellness initiatives*. Healthy People 2010 goals include increasing the numbers of employers offering worksite health promotion programs and of employees participating in these programs.⁸⁵ Components of successful programs include high rates of participation, use of incentives, health risk assessments with follow-up plans, providing personalized health information, offering a variety of intervention types (e.g., group classes, online toolkits), and encouraging individuals to set goals and take responsibility for their health within a broader work culture promoting health and providing social support.⁵⁷ Although few programs have been rigorously evaluated, one recent study found that workplace wellness programs were effective in reducing tobacco use among participants, lowering high blood pressure, decreasing work absences due to illness or disability, and improving other general measures of worker productivity.⁸⁶ A growing body of evidence indicates that health promotion programs are cost-effective. One review found an average return of \$5.81 per \$1 invested in these programs, achieved through improved employee health, reduced medical benefit expenses and reduced absenteeism.⁸⁷
- Employers also can provide resources and opportunities for people to be healthier by *expanding benefits* to enable workers to take better care of themselves and their families. *Workplace-based education and training* give workers opportunities to increase skills and gain higher-status positions and better paying jobs—both preparing the future workforce and providing more Americans with additional resources for making healthy choices. Work-focused public policies can play an important role in supporting the health of all Americans.





Figure 2. Work-based strategies to improve health



Work-based health improvement strategy #1: Preventing work-related illness and injury.

► **Improving health through programs/policies to prevent work-related injuries and illness, by modifying the workplace environment to decrease workers' exposures to risky and unsafe physical conditions and educating workers about safe workplace practices.**

Examples:

- *Smoke-free workplace policies* prohibit smoking in all enclosed areas within worksites. Implementation of smoke-free workplace policies has been associated with reduced prevalence of smoking, decreased consumption of cigarettes among smokers, and reduced exposure to environmental tobacco smoke among non-smokers.⁸⁸ As of October 2, 2008, 21 states had 100 percent smoke-free workplace laws in place. www.no-smoke.org
- The *Ohio Bureau of Workers' Compensation's Safety Grants Program* provides financial and informational assistance to Ohio public employers to incorporate evidence-based "best practices" for ergonomic design in the workplace, such as redesigning video display terminal workstations and modifying methods of providing patient care in health care settings. Findings from data collected by companies before and after interventions indicate reductions in incidence of and days lost to cumulative trauma disorder.⁸⁹ <http://www.ohiobwc.com/employer/programs/safety/EmpGrants.asp>



**Work-based health improvement strategy #2:
Reducing work-related stress.**

► **Improving health through programs/policies to reduce work-related stress and associated mental and physical health problems, by improving psychosocial aspects of the working environment and promoting balance between work and family responsibilities.**

Examples:

- In 2005, Best Buy established an innovative workplace flexibility initiative called *Results Only Work Environment (ROWE)*, which focuses on productivity and results of employees' work efforts rather than on time at work. For example, the program allows the individual worker and his/her team, rather than supervisors, to set work hours and schedules. Employees reported significant positive changes in their control over their work time, their sense of work-family balance, and health and health behaviors.⁹⁰ <http://www.flexiblework.umn.edu/>
- AETNA provides a breastfeeding support program as part of its *New Child Program*, a comprehensive benefits program that includes preconception planning, preparation for a baby's arrival, and return to work initiatives. During maternity leave, employees can consult with lactation specialists and may receive home visits; once back at work, they have access to "mothers' rooms" with breast pumps and private cubicles. Participants have noted benefits including reduced stress and improved support from other breastfeeding mothers and from their employer's commitment to promoting family-career balance. In the program's first year, Aetna reported savings of more than \$1,400 and three sick days per breastfeeding employee, with a nearly 3-to-1 return on investment.⁹¹ <http://womenshealth.aetna.com/WH/ihWH/r.WSIHW000/st.36127/t.36576.html>
- Twenty-one states, Washington, D.C. and Puerto Rico have *laws related to breastfeeding in the workplace*. In Colorado, for example, a law implemented in August 2008 protects an employee's right to breastfeed in a private room (other than a toilet stall) during her break time for up to two years after giving birth; the law also requires the Department of Labor and Employment to provide information to employers on accommodating employees who breastfeed. At the Federal level, the Breastfeeding Promotion Act introduced in 2007 by Representative Carolyn Maloney would amend the Civil Rights Act of 1964 to protect breastfeeding mothers and provide tax incentives to employers offering breastfeeding support. <http://www.ncsl.org/programs/health/breast50.htm#Res>
<http://www.govtrack.us/congress/bill.xpd?bill=h110-2236>

► **Improving health through work-based promotion of healthier behaviors and disease prevention, by using approaches such as education, health risk assessments, on- and off-site services and fitness programs, and by creating work environments that are more conducive to healthy behaviors.**

Examples:

- The *Wal-Mart Personal Sustainability Project (PSP)* is a voluntary, employee-driven program that encourages Wal-Mart and Sam's Club associates to integrate small changes—Personal Sustainability Projects, or PSPs—into their lives to benefit their own health and well-being as well as the health of the environment. As of September 2007, 480,000 Wal-Mart associates reported that they adopted a PSP; to date, nearly 20,000 associates have quit smoking, and associates collectively have lost more than 184,000 pounds by eating healthier foods and exercising more frequently. The PSP model has been adapted and implemented by the CDC and WellPoint. <http://walmartstores.com/FactsNews/NewsRoom/6379.aspx>

**Work-based health improvement strategy #3:
Supporting healthier behaviors through workplace environments and services offered at work.**



The next three work-based health promotion programs are recent winners of the C. Everett Koop National Health Award. To qualify, programs must focus on Healthy People 2010 goals and document effectiveness in reducing health risks and medical care costs. (The Health Project: <http://healthproject.stanford.edu/>)

- *Johnson & Johnson's Healthy People 2005* (2003 Koop Award recipient) provides benefit credits as incentives for employees to participate in comprehensive physical and mental health programs. More than 90 percent of U.S.-based employees participate in Health Risk Assessments, which are followed by "Pathways to Change" interventions designed to address elevated risks related to tobacco use, physical inactivity, blood pressure and cholesterol. The program also offers disability management and occupational medicine, on-site gyms, support for balancing work and life responsibilities, and counseling to resolve job performance issues. A study investigating the long-term outcomes of the LIVE FOR LIFE program—the precursor to Healthy People 2005—found it achieved \$224 in savings per employee per year, primarily through reductions in inpatient hospital stays, mental health visits and outpatient services.⁹²
<http://healthproject.stanford.edu/koop/JohnsonandJohnson/description.html>
- *USAA Take Care of Your Health* (2006 Koop Award recipient) centers around simple health messages to employees and their families that are reinforced by programs at several levels (i.e., individual health risk assessments and campus-wide policies). Wellness programs—ranging from on-site fitness centers and healthier food choices in worksite cafeterias to lifestyle coaching—are integrated with disability management, a consumer-driven health plan and paid time off. Participants have achieved reductions in weight, smoking rates and overall health risk status. The program has a strong data collection system to track participation, health and cost outcomes, and has resulted in fewer absences from work and \$105 million in savings over three years.
<http://healthproject.stanford.edu/koop/USAA/description.html>
- *Pepsi Bottling Group's Healthy Living* program (2007 Koop Award recipient) includes components for wellness and prevention, lifestyle management, chronic disease management and case management for acute diseases. A marketing campaign aims to promote a culture of health, with resources including worksite clinics, flu shots, and work and home safety programs. Participants are rewarded with a variety of incentives, and 72 percent of employees and domestic partners completed Health Risk Assessments in 2006. The program has achieved significant risk reduction from baseline to one-year follow-up in all six areas targeted by interventions, with a reported return-on-investment of \$1.70 for every dollar spent.
<http://healthproject.stanford.edu/koop/Pepsi%20Bottling%20Group/PBG%20Documentation.pdf>
- *The Washoe County School District Wellness Program* (2008 Koop National Health Honorable Mention certificate recipient) in Reno, NV, emphasizes healthy living for employees, retirees and dependents. The program is funded by mandatory monthly contributions from all employees; the contribution is waived for employees who both participate in risk assessments for tobacco use, blood pressure and Body Mass Index and follow up with steps to address their personal health risks. A cost-benefit analysis found that each dollar spent on the program saved an average of \$15.60 in reduced absenteeism.⁹³
http://promisingpractices.fightchronicdisease.org/programs/detail/washoe_county_good_health_incentive_program
- In 2007, Representative Tom Udall reintroduced the *Healthy Lifestyles and Prevention America Act* (HeLP), which would provide tax incentives to employers who implement wellness programs and workplace wellness marketing campaigns for their employees. Representative John Cornyn



Work-based health improvement strategy #4: Expanding work-related resources and opportunities.

sponsored the *Workforce Health Improvement Program (WHIP) Act* to ensure that wellness benefits covering off-site fitness facilities would not be taxed as additional income for employees; this legislation was intended to encourage employers to offer more wellness programs to their employees and decrease costs to employers related to employees' health care.

<http://www.govtrack.us/congress/bill.xpd?bill=h110-2633>

<http://www.govtrack.us/congress/bill.xpd?bill=s110-1038>

► **Improving health through programs/policies focused on work-related resources and opportunities, by expanding work-related compensation and benefits to enable workers to take better care of themselves and their families and by providing worker education training to increase access to higher-status and higher-wage jobs.**

Examples:

- *Corporate Voices for Working Families* is a national non-profit corporate membership organization created in 2001 to address issues affecting working families, including early childhood education and after-school care, lower-wage work, worker flexibility, youth transitions and the future of the mature workforce. Corporate Voices facilitates research and develops innovative policy solutions to improve the lives of working families through partnerships linking the private sector, government and other stakeholders. <http://www.cvworkingfamilies.org/>
- *Job Corps* is the nation's largest federally-funded job training and education program for disadvantaged youth ages 16 to 24. It provides career training, job placement, counseling services and the opportunity to earn a high school diploma or GED. Rigorous evaluations have documented positive impacts for Job Corps participants including higher-paying jobs and increased levels of educational attainment and literacy.⁹⁴ <http://jobcorps.dol.gov/>
- *The Job Center* in Dayton, Ohio, is the largest employment and job training center in the country, and is an example of the one-stop career centers mandated by the 1998 Federal Workforce Investment Act. The center's mission is to provide resources for workforce development as well as services to improve quality of life of job-seekers and their families. The public-private partnership is comprised of 47 organizations in one location that offer unemployment services, career counseling, GED and vocational training classes, and assistance with social services such as food stamps and Medicaid; it also serves as a resource for employers to reach a large pool of potential employees. The program has received several awards for innovative design and integration of government services. www.thejobcenter.org
- As of 2008, twenty-four states offered programs that supplement the federal Earned Income Tax Credit (EITC). In addition, local governments can also offer EITC-supplement programs. For example, the "*San Francisco Working Families Credit*"—San Francisco's city/county supplement to the federal EITC, created in 2004 with a broad-based coalition of organizations from the public, private and non-profit sectors—administers tax credits for low-income workers with children, and also boosts participation of eligible recipients in the federal EITC. <http://sfgov.org/site/frame.asp?u=http://www.workingfamiliescredit.org>
- At the Federal level, passage of legislation such as *The Healthy Families Act*, introduced in 2007, would require certain employers to provide a minimum paid sick leave. City ordinances passed in San Francisco, Washington, D.C., and Milwaukee require employers to provide paid sick leave to all employees. At least eleven states have introduced but not yet enacted paid sick leave legislation. <http://www.govtrack.us/congress/bill.xpd?bill=s109-932>



About the Robert Wood Johnson Foundation

The Robert Wood Johnson Foundation focuses on the pressing health and health care issues facing our country. As the nation's largest philanthropy devoted exclusively to improving the health and health care of all Americans, the Foundation works with a diverse group of organizations and individuals to identify solutions and achieve comprehensive, meaningful and timely change. For more than 35 years the Foundation has brought experience, commitment, and a rigorous, balanced approach to the problems that affect the health and health care of those it serves. When it comes to helping Americans lead healthier lives and get the care they need, the Foundation expects to make a difference in your lifetime.

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The Robert Wood Johnson Foundation Commission to Build a Healthier America is a national, independent, non-partisan group of leaders that will raise visibility of the many factors that influence health, examine innovative interventions that are making a real difference at the local level and in the private sector, and identify specific, feasible steps to improve Americans' health.

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ADDITIONAL RESOURCES

- California Task Force on Youth and Workplace Wellness, <http://www.wellnesstaskforce.org/about.html>
- Center for Disease Control and Prevention, Healthier Worksite Initiative, <http://www.cdc.gov/nccdphp/dnpa/hwi/index.htm>
- Families and Work Institute, <http://www.familiesandwork.org/>
- Institute for Work & Health, <http://www.iwh.on.ca/>
- Job Stress Network, <http://www.workhealth.org/>
- National Business Group on Health, <http://www.businessgrouphealth.org/>
- Sloan Work and Family Research Network at Boston College, <http://wfnetwork.bc.edu/>
- The Health Project, <http://healthproject.stanford.edu/koop/work.html>
- The National Institute for Occupational Safety and Health (NIOSH), <http://www.cdc.gov/niosh/>
- NIOSH WorkLife Initiative, <http://www.cdc.gov/niosh/worklife/>
- The Partnership to Fight Chronic Disease, <http://promisingpractices.fightchronicdisease.org/>
- U.S. Department of Labor Occupational Safety & Health Administration (OSHA), <http://www.osha.gov/>
- Wellness Council of America, <http://www.welcoa.org/>