

# **AGING IN THE WORKPLACE: PROMOTING SAFE AND HEALTHY WORKPLACES FOR EVERYONE**

**REPORT FROM A ROUNDTABLE DISCUSSION  
CONVENED BY THE COMMISSION ON HEALTH AND SAFETY AND WORKERS' COMPENSATION  
NOVEMBER 13, 2015**

**SUBMITTED BY THE LABOR OCCUPATIONAL HEALTH PROGRAM AT THE  
UNIVERSITY OF CALIFORNIA AT BERKELEY**

## **I. Introduction**

By 2022, one out of every four workers will be aged 55 years or older. While there are some specific challenges associated with an aging workforce, there is also an opportunity to use this demographic shift to design workplaces that are healthy and safe for all. To surface some of the challenges and to take an initial step towards promoting age-friendly workplaces, the California Department of Industrial Relations' Commission on Health and Safety and Workers' Compensation (CHSWC) convened a roundtable discussion on Health and Safety and the Aging Workforce. The roundtable was held on November 13, 2015 and was facilitated by the Labor Occupational Health Program (LOHP) at the University of California at Berkeley.

The purpose of the roundtable was to: identify model programs, best practices, and messages that promote the health and safety of the aging workforce; use the experiences of older workers to encourage the creation of workplaces that are healthy and safe for everyone; support Return-to-Work policies that bring injured older workers back into the workforce; and develop recommendations and policies that help achieve age-friendly workplaces. Participants included representatives from unions, community-based organizations, private businesses, employer associations, insurance agencies, universities, and state agencies. (See Attachment A for a list of roundtable participants and speakers.)

This report captures the key themes and recommendations that emerged during the roundtable discussion and places these ideas in the context of the growing body of literature, practical tools, and strategies already developed in this area. In addition, this report references the results of a small survey conducted with 13 stakeholders from various unions, advocacy groups, and a state agency.

## **II. Occupational Injuries and Illnesses among Older Workers**

### **Are Older Workers a Significant Percentage of the Workforce?**

Since the early 1990s, the labor force participation rate of older workers has rapidly increased, with 41% of workers age 55 and over now participating in the U.S. workforce (Bureau of Labor Statistics, 2014). Older workers' share of the labor force has also been increasing. The proportion of workers age 55 and older is predicted to increase from 20.9% to 25.6% of the U.S. workforce by 2022, with the proportion of workers age 65 and older increasing from 5% to 8.3% (Toossi, 2013). Although older workers will not dominate the workforce, they make up a significant and growing segment of the working population. This demographic shift towards an older workforce has been attributed to the convergence of several societal trends. These trends include an overall aging population, dramatic increases in life expectancy, aging baby boomers, and changes in eligibility for Social Security retirement benefits, the economic climate, and employer-sponsored health and retirement plans (Loeppke, et al., 2013; Centers for Disease Control, 2012). As the older worker population continues to grow, ensuring the health and safety of older workers will be increasingly important for the prosperity and productivity of the national workforce. In order to promote the well-being of the aging workforce, the health and safety issues facing older workers need to be addressed.

### **Are Older Workers at Higher Risk of Occupational Injury?**

Workers age 65 and older tend to have lower rates of nonfatal occupational injury and illness compared to younger workers and workers overall (California Commission on Health and Safety and Workers' Compensation [CHSWC], 2015; Bureau of Labor Statistics, 2014; Silverstein, 2008). This trend is often attributed to older workers' higher levels of experience as well as the tendency of workers to move into less risky occupations or positions as they age (Neuhauser, Mathur & Pines, 2011). However, the relationship between age and nonfatal occupational injury and illness is complex and the average trends may not apply to a particular occupational class, industry or injury type. For example, older workers may experience comparatively higher rates of injury and illness in industries such as farming where low-wage workers lack access to jobs with the potential for upward mobility and therefore remain in physically demanding, high risk occupations as they age (Rice, 2015). Also, when analyzed by the cause of injury, the general patterns change. While rates of occupational injury resulting from contact with objects and equipment tend to be lowest among workers age 65 and over, falls on the same level occur more frequently among this population than any other age group (MMWR, 2013).

Furthermore, there is evidence to suggest that rates of occupational injury and illness among older workers vary by gender. Despite the fact that men, on average, tend to work in riskier occupations than women, women report higher rates of occupational injury and illness. This

disparity increases with age peaking at age 55-64 when women appear to have a 50% higher risk of injury than men (Neuhauser, et al., 2011). This data, however, has not been adjusted for underreporting of injuries; if men are less likely to report injuries than women, this could account for some of the discrepancy.

### **Do Injury Rates Vary by Industry and Occupation?**

Rates of older worker occupational injury and illness can also vary by industry and occupation. The majority of injuries and illnesses reported by older workers occur in Health Care and Social Assistance (18%), Retail (13%), Transportation and Warehousing (9%), Manufacturing (9%), and Administrative Support and Waste Management and Remediation Services (8%) (CHSWC, 2015). Occupations in which older workers are reported to have higher than average rates of injury and illness include: Installation Maintenance and Repair, Transportation and Material Moving, Construction and Extraction, Farming Fishing and Forestry and Service (CHSWC, 2015). This data is consistent with survey findings that indicate Trucking, Retail, Construction and Agriculture as key industries of concern for older worker health and safety.

### **What Types of Injuries do Older Workers Face?**

In terms of the types of injuries, older workers tend to incur bruises and contusions, fractures, and multiple traumatic injuries at higher rates than younger workers and workers overall (Loeppke et al., 2013; CHSWC, 2015). However, the most common nonfatal occupational injuries experienced by older workers, as well as by workers overall, are sprains and strains (Bureau of Labor Statistics, 2014). In a small survey conducted by LOHP of members of the California Alliance for Retired Americans (CARA), survey participants reported strains and sprains (especially those resulting from heavy lifting) as well as slips and falls as top workplace health and safety concerns for older workers. Stress and long, inflexible work hours also emerged as a key concern. One respondent suggested that mental stress claims are especially high among workers age 45-65 who are worried about retirement and overburdened from working while caring for both their parents and their children (Kelly, 2015). It is important to note that mental stress may be less likely to be reported than other injuries or illnesses. Workers' compensation data thus may not provide an accurate reflection of the extent of mental stress experienced by workers.

Although older workers may have lower overall rates of nonfatal occupational injury, older worker injuries are much more likely to be fatal (Silverstein, 2008). The workplace fatality rate of older workers age 65 and over is nearly three times that of workers under 65 (Rodgers & Wiatrowski, 2005). The majority of older worker fatalities are the result of transportation incidents (43%), followed by falls, slips and trips (21%) (CHSWC, 2015).

## **Do Injured Older Workers Experience Longer Recovery Times?**

Recovery time following a nonfatal workplace injury also tends to increase with age. The median number of days spent away from work for occupational injury or illness is 8 for all workers, 13 for workers age 55-64 and 14 for workers 65 and older (Bureau of Labor Statistics, 2014). While the exact reasons for this differential have not been fully researched, there are at least two possible explanations. A higher proportion of older workers' injuries are relatively severe – 11% of injuries experienced by workers 55 years and older are fractures, which take a relatively long time to heal, compared to 5% of injuries among workers younger than 55. Also, even when experiencing the same type of injury, older workers take longer to heal. The median number of days away from work for a fracture is 30 days among older workers compared to 18 days for younger workers (National Research Council, 2004).

Since the frequency of non-fatal injuries among older workers is relatively low and older workers do not dominate the workforce, the increase in workers' compensation costs resulting from an older workforce is expected to be modest. One study estimates an increase of only 2% by 2030 (Neuhauser, et al. 2011). Increases in medical costs, however, could be a concern. The incidence and prevalence of common chronic diseases, such as diabetes, arthritis, heart disease and cancer, increase with age, leading to more frequent and intensive medical care (National Research Council, 2004). The cost of healthcare is much higher for older workers than younger workers which could be a disincentive for employers to hire or retain older workers (Neuhauser, 2015). However, it is important to note that individual risk factors like smoking and diet have a stronger influence on healthcare costs than aging (NIOSH, 2014).

## **III. Age-Friendly Workplaces**

### **What is an Age-Friendly Workplace?**

An age-friendly workplace is a workplace that promotes and preserves the ability to work safely among all workers as they age (Silverstein, 2008). This is done through workplace practices and policies that match the work to the worker and that create a culture of health throughout the workplace (Loeppke et al., 2013). Age-friendly workplaces employ strategies that take advantage of older workers' strengths, such as their experience and institutional knowledge, while finding workable solutions to their challenges, such as diminished physical capacity (University of Washington, 2009). Employers that establish age-friendly workplaces stand to benefit from increased safety, productivity and competitiveness of their workforce (CDC, 2012; Silverstein, 2008).

### **What Are the Strategies for Designing an Age-Friendly Workplace?**

Agencies including the Centers for Disease Control (CDC) and the National Institute for Occupational Safety and Health (NIOSH) have recommended a range of strategies workers and employers can utilize to promote healthy aging at work such as slower, more safely paced work and training supervisors to manage a multi-generational workforce (CDC, 2012; NIOSH, 2014).

However, the most comprehensive framework for designing an age-friendly workplace comes from a curriculum developed by the University of Washington ([www.agefriendlyworkplace.org](http://www.agefriendlyworkplace.org)). To develop an age-friendly workplace that preserves the capacity of workers to work safely and effectively as they age, the University of Washington recommends employers focus on enhancing four workplace variables: **work environment, health promotion and disease prevention, work arrangements, and community social support** (Univ of Washington, 2009).

An age-friendly **work environment** is an environment in which the jobs, equipment, tools, and workstations are designed to match the physical and psychological needs of workers. One key strategy for establishing an age-friendly work environment is designing the workplace utilizing the principles of universal design. Universal design is “the design of products and environments to be usable by all people, to the greatest extent possible, without the need for adaptation or specialized design” (The Center for Universal Design, 1997). Universally designed workplaces, products and services are created for individuals living with a set of physical or cognitive constraints *and* are better designs for all individuals even those without the same challenges.

A common example of universal design is the curb cut which was originally designed to help people in wheelchairs transition from the sidewalk to the street. Curb cuts, which are now widely disseminated throughout communities, also benefit parents with strollers, delivery drivers with carts and various other end users.

Age-friendly enhancements to workplace **health promotion and disease prevention** focus on integrating health and safety programs with workplace wellness programs and promoting a culture of health that incorporates strategies across homes, communities, and the workplace (Loeppke et al., 2013). Effective health promotion and disease prevention programs focus on strategies that have been proven to prevent illness, improve health, and save on health care costs throughout life (University of Washington, 2009). Some examples include promotion of seasonal, on-site influenza vaccinations and smoke-free policies (The Guide to Community Preventive Services).

Establishing age-friendly **work arrangements** involves developing human resource policy options that adapt a worksite to the interwoven demands of family, life, and work that change as people age (University of Washington, 2009). Examples include workplaces that allow for flexible work hours, job sharing, telecommuting and phased retirement.

Age-friendly **community social support** refers to strategies for influencing the larger community environment through public policies and programs that support older workers in the workplace. Examples include changes to retirement laws, health care, and public transportation that promote older worker recruitment and retention.

### **What Are Some Examples of Organizations with Age-Friendly Workplace Policies and Practices?**

The degree to which a given workplace is age-friendly can be viewed as being on a continuum. Few if any workplaces are as age-friendly as they could be, but employers that adhere to basic

workplace standards, including Cal/OSHA standards, the Age Discrimination in Employment Act and the Americans with Disabilities Act have a strong foundation for California's more age-diverse future. Several companies have successfully implemented policies and practices that exemplify the principles all employers should follow to prepare for an aging workforce. These policies and practices serve as practical case studies of how businesses can significantly enhance the work environment for older and younger workers alike, offer supportive work arrangements and strengthen protections against age-discrimination.

### ***Work Environment:***

#### **BMW**

In 2007, BMW launched a pilot project focused on maximizing the productivity of an older production line (with an average age of 47) through changes to the physical environment and a worksite wellness initiative. Managers and foremen allowed workers to lead the processes as they voiced and prioritized their health and safety needs. Based on the workers' feedback, the company implemented 70 changes with an investment of approximately \$50,600. Changes included:

- Replacing cement floors with wooden platforms to reduce the impact on knees;
- Installing barbershop chairs to allow workers to alternate sitting and standing;
- Installing flexible magnifying lenses to help reduce eyestrain and mistakes; and
- Job rotation across workstations during a shift in order to lessen the load on workers' bodies

As a result of these changes, BMW saw a 7% increase in productivity after one year, matching the productivity of lines staffed by younger workers. They exceeded their quality target of 10 defects per million with a rate of zero defects after one year. Absenteeism also dropped from 7% to 2%, a rate below the plant average (Loch, Sting, Bauer & Mauermann, 2010).

### ***Work Arrangements:***

#### **Scripps Health**

Scripps Health employs several age-friendly workplace policies and practices and was named #2 on AARP's 2013 list of the 50 best employers for workers over 50. Scripps Health recruits older workers and retirees through senior placement agencies and hires former employees through their alumni program. Employees are able to work on temporary assignments in other departments and have access to formal job rotation and mentoring programs to gain new experiences. Scripps Health also has a comprehensive Return-to-Work program that provides individualized managed care by an assigned on-site nurse case manager. Employees working at least 16 hours per week have the option of alternative work arrangements including flextime, compressed work schedules, job sharing, and telecommuting. All employees can also participate in a formal phased-in retirement program (AARP, 2013).

## Gering Hout en Beton

Gering is a Dutch construction company that has implemented “age-aware” human resource policies. Different worker capacities are taken into account when assigning tasks with older workers being given less physical but possibly more complex tasks, while younger workers get more physically demanding tasks (Naegele & Walker, 2012).

## Accenture, BP, GE, IBM, and Procter & Gamble

These companies all offer formal “reverse mentoring” programs in which younger employees help older employees stay on top of workplace technology, master social media, and keep their job skills up to date (Bernard, 2012).

### ***Community Social Support:***

One example is a company that lobbied for an additional bus stop close to its workplace to support its older workers, out of concern that its older workers might be less tolerant of the stress, risks and costs of commuting by car. This company leveraged a community resource (transit) for its older workers but then found it was a helpful option for all of its workers (Scott 2015).

## **IV. Recommendations that Support the Occupational Safety and Health Needs of Older Workers**

Some of the workplace variables that contribute to an age-friendly workplace -- work environment changes, health promotion and disease prevention, work arrangements, and community social support -- are ones that “model” employers can choose to implement on their own. Promotion of age-friendly workplaces on a broader scale will likely require legislative or regulatory action as well as education campaigns that lay out the benefits to employers, older workers and society of these policies. More research may also be needed to inform and support these policies and campaigns.

During the roundtable discussion, small groups met to brainstorm recommendations for initiatives the state could take to promote safe and healthful, age-friendly workplaces. Below is a summary of the policy, education, and research recommendations specific to the aging workforce that emerged from the roundtable discussions.

### **Policy recommendations**

A range of different federal, state, and/or local policies are needed to support age-friendly workplaces and each of the age-friendly elements identified above. The following captures some of the key policy recommendations suggested by roundtable participants:

- Require or encourage the use of **universal design** principles that promote health and safety for older workers in all workplaces. This would benefit the workforce as a whole as well.
- Establish **workload standards** so that the pacing of work reflects what a range of workers that includes older workers, can do safely and reasonably. Without this, employers, particularly those operating in low-wage industries, have no incentive to adjust pacing. Production standards will likely need to be created industry by industry, and research may be required to determine safe workloads.
- Strengthen **training programs for older workers who are injured at work** to allow them to learn new skills and to return to work. Such programs would benefit younger injured workers as well.
- Strengthen **family leave and sick leave** policies so that older workers caring for both children and elderly parents are supported.
- Prohibit **workers' compensation insurance carriers** from asking employers about the age of their employees. It is common when applying for workers' compensation coverage that employers are required to state whether they have employees over the age of 60 or employees with disabilities. Legislation may be needed to prohibit carriers from asking these kinds of questions.
- Support the **integration of workers' compensation medical treatment with regular health plan medical treatment**. This would remove an incentive for employers to discriminate against older workers if there is a concern about potentially higher costs of workers' compensation medical treatment.
- Promote **policies that protect older workers from age discrimination**. One example of this is the contract that IBEW has negotiated stating that 1 in every 5 workers on a team has to be age 50 or older (Ventura, 2015).
- Protect the traditional **employer-employee relationship**. Older workers, as is true for workers of all ages, who are misclassified as independent contractors will not have the benefit of labor law protections. Stronger penalties and enforcement could help curb the misclassification of workers. New legislation could give independent contractors expanded rights (such as workers' compensation benefits).
- Support programs and policies **beyond the arena of employment law** that enable people to work and that support the community social support component of age-friendly workplaces. For example, affordable and accessible housing and transportation infrastructures support aging workers and all workers. As another example, the creation of portable, individual retirement savings plans would assist workers who otherwise do not have access to an employer sponsored plan.

## Recommendations for Education/Outreach

To support age-friendly workplaces, the following education and outreach strategies were recommended by roundtable participants:

- Conduct a **needs assessment** to better understand employers' and employees' attitudes toward older workers and the needs of aging employees and their employers.
- Develop a **communications strategy and a campaign** that highlights the value that older workers provide and **makes the business case** for hiring and retaining older workers. Employers need to see a return on their investments, both in retaining an older workforce and in adopting universal design as an approach.
- Develop a **clearinghouse** that tracks best practices, models, case studies, initiatives for age-friendly workplaces, and specific companies that have adopted age-friendly practices. Part of the communications strategy could include ways to disseminate these models and practices through various media outlets.
- Encourage **insurance companies** to promote age-friendly workplaces. Insurance carriers could offer employers free training and other assistance to reduce workplace risks. This would be in their economic interest and also provide an important service to employers.
- Encourage employers to adopt **age-friendly workplace policies** in the areas of work environment, health promotion/disease prevention, and work arrangements, including:
  - Developing strong anti-discrimination policies that includes protection for older workers
  - Conducting ergonomic evaluations and looking for opportunities to make the work safer for everyone (BMW's program is one example of this)
  - Setting a production pace that all workers can meet reasonably and safely
  - Instituting flexible work schedules to accommodate workers who need to care for family members
  - Creating a mentoring program so that less experienced workers can learn from more experienced workers (Scripps' program is one example of this).

## Recommendations for Research

Roundtable participants also offered recommendations for additional research that is needed. These recommendations included the following:

- Enable better **sharing of data** between state agencies to deepen the understanding about the nature, event/exposure, and source of injuries and illnesses among older workers and to assess the extent of underreporting by this population.

- Obtain **more accurate data that takes into account widespread underreporting of work injuries and illnesses among older workers**. Without this data, it is difficult to understand the extent and nature of injuries and illnesses that older workers experience. To accomplish this, agencies should be encouraged to share data (from workers' compensation, state disability insurance, health care, etc.) to construct a more complete picture of work-related injuries and illnesses among older workers.
- Evaluate **production standards** to better understand the toll they take on workers' bodies. One example of this is to conduct time and motion studies, not to maximize production but to evaluate whether production standards are safe and reasonable for all workers, with respect to both acute and cumulative injuries.

## V. Conclusion

The above recommendations in the areas of policy, education and research not only promote the health and safety of older workers but would help protect the health and safety of *all* workers. Universally designed work environments enable older workers to remain productive well into the future while also reducing the toll of arduous and repetitive work on younger workers' bodies. Setting reasonable production standards that protect the health of older workers will prevent musculoskeletal disorders among younger workers as well. Health promotion programs may be especially beneficial for older workers at increased risk of diabetes, heart disease, and other chronic conditions, but also help mitigate the toll of chronic disease on workers' lives across the age spectrum. Work arrangements that support older workers' lives outside of work may also be beneficial for workers with young children. Turning the spotlight on aging workers results in solutions that not only benefit older workers but all workers as well.

Given that the charge of the Commission on Health and Safety and Workers' Compensation is to examine the health and safety and workers' compensation systems in California and to recommend administrative or legislative modifications to improve their operation, the Commission is in a unique position to play a leadership role in bringing about the recommended initiatives. For example, the Commission could work with other state agencies to enable improved sharing of data to facilitate a deeper understanding about the occupational safety and health experiences of older workers. The Commission might also then conduct research studies, using this data, to learn more about the causes, nature, and sources of injuries and illnesses among older workers that could lead to more focused prevention efforts.

The Commission frequently works with the California Department of Industrial Relations to promote policies that protect California's workers. To discourage discrimination, the Commission could establish and promote policies among workers' compensation insurance carriers that prohibit them from asking insureds about the age of their employees.

The Commission also plays a significant role in workplace health and safety education and outreach efforts around the state through its Worker Occupational Safety and Health Training and Education Program (WOSHTEP). In partnership with its three WOSHTEP Resource Centers, the Commission could launch educational campaigns that encourage employers to implement universal design principles in their workplaces as well as safe production standards that promote safe pacing of work for all workers, benefitting older workers most of all.

## Acknowledgements

The authors of this report would like to express their appreciation for the input provided by all the attendees at the Health and Safety and the Aging Workforce Roundtable, and in particular the speakers. We especially want to acknowledge the many contributions made to the roundtable and to this report by Dr. Ken Scott of the Colorado School of Public Health.

## References

- AARP (2013). *Best Employers for Workers over 50 Winners*. Retrieved September 22, 2015 from: <http://www.aarp.org/work/on-the-job/info-06-2013/aarp-best-employers-winners-2013.html>
- Bernard, P. (2012). "Why you need a 'Reverse Mentor' at Work". Next Avenue. Retrieved September 22, 2015 from <http://www.nextavenue.org/why-you-need-reverse-mentor-work/>
- Centers for Disease Control, Center for Chronic Disease Prevention and Health Promotion. (2012). Issue Brief 1: Older Employees in the Workplace. Retrieved from [http://www.cdc.gov/nationalhealthyworksite/docs/issue\\_brief\\_no\\_1\\_older\\_employees\\_in\\_the\\_workplace\\_7-12-2012\\_final508.pdf](http://www.cdc.gov/nationalhealthyworksite/docs/issue_brief_no_1_older_employees_in_the_workplace_7-12-2012_final508.pdf)
- California Commission on Health and Safety and Workers' Compensation [CHSWC] (2015). Aging Workforce Paper (Draft).
- Guide to Community Preventive Services. Centers for Disease Control and Prevention. [www.thecommunityguide.org/worksites/index.html](http://www.thecommunityguide.org/worksites/index.html). Accessed: 01/21/2015.
- Kelly, Hene. "What Other Issues are Older Workers Facing in the Workplace?" Health and Safety and the Aging Workforce Roundtable. Oakland, CA. November 13, 2015. Presentation.

- Loch, C.H, Sting, F.J, Bauer, N, & Mauermann, H. (2010). How BMW Is Defusing the Demographic Time Bomb. *Harvard Business Review*, 88(3), 99–102. Retrieved from <http://hdl.handle.net/1765/20802>
- Loeppke, R. R., Schill, A. L., Chosewood, L. C., Grosch, J. W., Allweiss, P., Burton, W. N., et al. (2013). Advancing workplace health protection and promotion for an aging workforce. *Journal of Occupational and Environmental Medicine / American College of Occupational and Environmental Medicine*, 55(5), 500-506. doi:10.1097/JOM.0b013e31829613a4
- National Research Council and the Institute of Medicine. (2004). *Health and Safety Needs of Older Workers*. Committee on the Health and Safety Needs of Older Workers. D.H. Wegman and J.P. McGee, editors. Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.
- Naegele, G., & Walker, A. (2012). A guide to good practice in age management. Luxembourg: Office for Official Publications of the European Communities. Retrieved from <http://www.eurofound.europa.eu/publications/report/2006/labour-market-social-policies/a-guide-to-good-practice-in-age-management>
- Neuhauser, Frank. “What Does the Data Tell Us about the Occupational Safety and Health Issues Facing Older Workers?” Health and Safety and the Aging Workforce Roundtable. Oakland, CA. November 13, 2015. Presentation.
- Neuhauser, F., Mathur, A., Pines, J. (2011). Working Safer or Just Working Longer? The Impact of an Aging Workforce on Occupational Injury and Illness Costs. Retrieved from [https://www.dir.ca.gov/chswc/Reports/2011/CHSWC\\_AgingWorkforceOccupationalInjuryIllnessCost.pdf](https://www.dir.ca.gov/chswc/Reports/2011/CHSWC_AgingWorkforceOccupationalInjuryIllnessCost.pdf)
- NIOSH (2014). “Healthy Aging at Work.” Retrieved July 13, 2015 from <http://www.cdc.gov/niosh/topics/healthyagingatwork/>
- Rice, Cynthia. “Policies and Enforcement Issues that Affect Older Workers.” Health and Safety and the Aging Workforce Roundtable. Oakland, CA. November 13, 2015. Presentation.
- Rogers, E., & Wiatrowski, W. J. (2005). Injuries, Illnesses and Fatalities among Older Workers. Bureau of Labor Statistics Monthly Labor Review, pg. 24-30. Retrieved September 18, 2015 from <http://www.bls.gov/opub/mlr/2005/10/art3full.pdf>
- Scott, Kenneth. “Age-Friendly Workplaces and Examples of Model Workplaces”. Health and Safety and the Aging Workforce Roundtable. Oakland, CA November 13, 2015. Presentation.
- Silverstein, M. (2008). Meeting the Challenges of an Aging Workforce. *American Journal of Industrial Medicine*. 51:269–280. doi: 10.1002/ajim.20569.

Toossi, M. (2013). Labor force projections to 2022: the labor force participation rate continues to fall. Bureau of Labor Statistics Monthly Labor Review. Retrieved September 18, 2015 from <http://www.bls.gov/opub/mlr/2013/article/overview-of-projections-to-2022.htm>

University of Washington. (2009). Designing the age friendly workplace. Retrieved July 13, 2015 from <http://www.agefriendlyworkplace.org/index.html>

U.S. Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating state agencies, December 16, 2014. "2013 Non-fatal occupational injuries and illnesses in California - case and demographic tables". Retrieved July 20, 2015 from <http://www.dir.ca.gov/OPRL/Injuries/Demographics/2013/Menu.htm>

Wuellner, S.E., Walkers, J.K., et al. (2011) *Nonfatal Occupational Injuries and Illnesses among Older Workers --- United States, 2009*. Morbidity and Mortality Weekly Report.

## **Attachment A: Roundtable Participants**

### **Commission on Health and Safety and Workers' Compensation Aging Workforce Roundtable November 13, 2015 Oakland, CA**

#### **Attendees**

Munish Arora, State Compensation Insurance Fund  
Oliva Artadi, Department of Industrial Relations  
Chris Bailey, Department of Industrial Relations  
Christine Baker, Department of Industrial Relations  
Don Barbe, SEIU, IAM, & SMCLC  
Gail Bateson, Worksafe  
Doug Bloch, Teamsters Joint Council 7  
Laura Boatman, State Building & Construction Trades  
Helen Chen, Labor Occupational Health Program at UC Berkeley  
Amy Coombe, Department of Industrial Relations  
Rupali Das, Department of Industrial Relations  
Robin Dewey, Labor Occupational Health Program at UC Berkeley  
Shiffen Getabecha, Labor Occupational Health Program at UC Berkeley  
John Gordon, Department of Industrial Relations  
Andrea Gorman, California Alliance for Retired Americans  
Scott Hauge, Cal Insurance & Associates  
Beth Hostetler, Albertsons Company  
\*Ira Janowitz, UC Berkeley Ergonomics Program  
Stacy Jones, California Workers' Compensation Institute  
Lori Kammerer, Small Business California  
\*Hene Kelly, California Alliance for Retired Americans  
Nabeela Khan, Department of Industrial Relations  
Erika Martinez, Labor Occupational Health Program at UC Berkeley

Barbara Materna, California Department of Public Health  
Nancy McPherson, American Association of Retired Persons (AARP)  
Gene Nardi, Kaiser Permanente  
Irina Nemirovsky, Department of Industrial Relations  
\*Frank Neuhauser, UC DATA/Survey Research Center  
Patty Quinlan, Center on Occupational and Environmental Health  
\*Cynthia Rice, California Rural Legal Assistance, Inc.  
\*Ken Scott, Colorado School of Public Health  
Mitch Seaman, California Labor Federation, AFL CIO  
Glenn Shor, Department of Industrial Relations  
Laura Stock, Labor Occupational Health Program at UC Berkeley  
Jackie Sudia-Reno, Warren G. Bender Co.  
Nurgul Toktogonova, Department of Industrial Relations  
Sal Ventura, International Brotherhood of Electrical Workers  
Len Welsh, State Compensation Insurance Fund  
Chellah Yanga, Department of Industrial Relations  
\*Speakers

## Attachment B: Roundtable Agenda



### Health and Safety and the Aging Workforce Roundtable Meeting

Elihu M. Harris State Building  
1515 Clay Street, 13<sup>th</sup> Floor, Room 1304  
Oakland, CA  
November 13, 2015  
10:00 am – 3:00 pm



### Agenda

**10:00 Welcome and Introductions** – Christine Baker and Eduardo Enz, Commission on Health and Safety and Workers' Compensation, DIR

#### Roundtable Goals

1. Promote model programs, best practices, and messages that promote the health and safety of the aging workforce
2. Use the experiences of older workers to promote workplaces that are healthy and safe for everyone
3. Promote Return-to-Work policies that bring aging workers back into the workforce
4. Develop recommendations and policies that help achieve age-friendly workplaces.

**10:30 Overview of the Health and Safety Issues of the Aging Workforce**

**Panel** – Facilitated by Irina Nemirovsky

1. What Does the Data Tell Us About the Occupational Safety and Health Issues Facing Older Workers? – Frank Neuhauser, UC Berkeley
2. What Other Issues are Older Workers Facing in the Workplace? – Hene Kelly, California Alliance for Retired Americans
3. Policies and Enforcement Issues that Affect Older Workers – Cynthia Rice, California Employment Lawyers Association
4. Age-Friendly Workplaces and Examples of Model Workplaces – Ken Scott, University of Colorado, Denver
5. Ergonomics and Age-Friendly Work – Ira Janowitz, University of California and Ergonomics Consultant

**Discussion**

**12:15 Lunch Break**

**1:00 Promoting Model Age-Friendly Workplaces – What’s Needed?**

**Facilitator:** Laura Stock

**Small Group Discussions**

1. Policies That Promote Age-Friendly Workplaces – Helen Chen, facilitator
2. Education and Outreach Activities – Robin Dewey, facilitator
3. Research Needed – Irina Nemirovsky, facilitator

**Large Group Discussion**

1. Report backs from the small groups
2. Next Steps

**3:00 Closing and End – Eduardo Enz**

