

## The Aging Workforce

### **WORKFORCE IS GETTING OLDER AND WORKING LONGER**

The Baby Boomers are getting older. Between 2008-2018, the number of U.S. workers age 55 and older is projected to increase by 12 million (43%). These workers are expected to make up 25% of the workforce (Bureau of Labor Statistics; Employment Projections 2008-2018). Adults are leading active, healthier lifestyles, which lead to a longer life. It is likely that there will be a higher percentage of older workers in the workforce as time goes on.

Age 65 is no longer the “normal” retirement age. Many employees are delaying retirements due to economics, including the need for medical benefits and sufficient resources to retire. Many choose to work longer because they find their jobs interesting or fulfilling, or plan to work or start a new career after age 65. According to AARP, 80% of baby boomers plan to work after retirement age.

### **IMPACT ON ACCIDENT RATE AND WORKERS' COMPENSATION COSTS**

Older workers tend to have fewer accidents than younger workers, but injuries tend to be more severe. Recovery time may be prolonged, resulting in more days away from work. In addition, chronic pre-existing conditions can make treatment more complex and difficult. Lower accident frequency may be due to a difference in type of job or difference in the way they act on the job. Examples of acting differently include engaging in fewer risk-taking activities, minimizing or not reporting injuries, or altering work styles to reduce speed, lower stress, or focus on a single task at a time. Older workers may not be in high-

risk jobs, and many are in supervisory positions or are self employed.

Severity of accidents increases as related to the aging process or pre-existing conditions. Joint and bone disease, including osteoporosis, may lead to fracture or severe strain. Older workers may have prior injuries related to sports, accidents, etc. Hearing loss may change a minor incident into a more severe one. Reduced vision, especially night vision, leads to increased severity in accidents. In addition, injuries heal more slowly or may be complicated by conditions such as diabetes and circulatory problems, in addition to heart disease and cancer.

### **DEALING WITH CHANGING DEMOGRAPHICS**

When dealing with older workers, management needs to understand the changing demographics and deal with workers according to their capabilities. Management should apply strategies for optimizing the use of older workers by understanding the tasks which increase risk of accidents. A strategy might include minimizing assignment of certain tasks to older workers (e.g. transportation and driving, heavy manual material handling, machine operation, tasks involving repetitive motions, farming) and maximizing effective workspace design.

Management should become aware of the physical and cognitive issues of an aging workforce and consider how these may impact tasks that need to be done at your facility. This should include identifying ways to reduce accident exposure. At the same time, management should encourage employees to improve their overall health by maintaining healthy diets to prevent disease, adequate physical activity to preserve bone mass

and build muscle, flexibility and balance training, and obtaining annual physicals.

### **COMMON EFFECTS OF AGING**

We lose muscle as we age, resulting in reduced strength. We may experience increased stiffness and reduced flexibility which affects our range of motion. Vision is challenged, causing most people over 50 to need corrective lenses. Hearing becomes more limited, with 30% of people over 65 losing their ability to hear high frequencies. Mental processes slow, leading to decreased response time and action and slower decision making and mental processing. Metabolism slows down, often resulting in weight gain vs. loss of sense of taste with weight loss. We tire more quickly and recover more slowly. We may have reduced sensations of pain, vibration, cold, heat, pressure and touch, and increased sensitivity to temperatures.

### **CHRONIC DISORDERS AND DISEASES**

As we age, chronic illnesses, such as high blood pressure, diabetes, arthritis, cataracts and cancer become more common. This may lead to increased absenteeism due to escalation in health care needs. Work hours may be limited and/or need to be flexible. Some medications have side effects, such as a decline in balance and coordination and reduced reaction capability. We may experience decreased sensations of pain, and may be more willing to “work through the pain.”

See the tables covered on pages 4 through 6 for specific information on common effects of aging and methods of accommodation.

### **WHAT CAN BE DONE?**

Here are some steps your company can take to reduce workplace injuries of older workers.

#### **Develop a safety program geared toward older workers**

Utilize job safety analysis to identify risks, noting tasks that could have a different impact on older

workers. This is particularly useful in evaluating ergonomic risks and implementing solutions to accommodate older workers. Conducting more frequent refresher training can reduce accidents resulting from omission errors.

#### **Enhance injury prevention through health and wellness programs**

This includes weight management programs, health risk assessments, smoking cessation programs, fitness coaching, health club discounts, walking programs and incentives for annual physicals.

#### **Provide training to all employees on safety issues of particular importance to older employees**

Training topics include safer lifting techniques, use of manual material handling aids and slip, trip and fall prevention. Emphasize job-specific safety guidelines, and provide time to practice new tasks and develop familiarity.

#### **Conduct ergonomic evaluation of workstations**

When evaluating workstations, consider ways to fit the work environment and work hours to the worker. Identify repetitive motion exposures and reduce or eliminate designs that compromise grip, leverage or mechanical advantage. Consider using the more senior staff to evaluate tasks and provide training.

#### **Establish an employee wellness program for injury prevention**

A healthier lifestyle can delay or reduce the physical and mental effects of aging. Regular exercise and stretching can prevent injuries, and a healthy diet can help prevent ill effects of weight gain and chronic diseases. Provide appropriate health, sick and disability benefits to employees.

#### **Help employees to help themselves**

Provide incentives such as programs for weight management and smoking cessation. Provide

health risk assessments, fitness coaching, health club discounts or walking clubs.

### **OTHER EMPLOYER CONSIDERATIONS**

As you develop a wellness program, you should also consider the following:

#### **Consider employees' needs**

Communication and understanding between the production environment and Human Resources regarding issues facing older workers is key. EAP programs should emphasize needs related to aging.

#### **Consider experience as a resource**

Find opportunities to use the experience of older workers as a resource. Consider a mentoring program within the organization, include older workers in job-specific orientation and training of new employees, and reach out to schools which could provide future employees.

#### **Resistance to change**

The more "experienced" worker may be more resistant to change. Employees may perceive it costs them something to change or may be reluctant to engage in new skill learning. Present good reasons why it's in their best interest to take extra precautions.

### **WHAT DOES THIS MEAN FOR YOUR BUSINESS?**

Accommodating older workers provides enhanced intellectual capital, seasoned judgment, flexibility and creativity. Consider incorporating methods of accommodation into your business, such as including older workers in the design process, fitting the task to the person, adapting training to fit their style, seeking outside professional help, providing policy and procedures to fit their lifestyle, and job sharing.

When deciding on accommodations, consider the following impacts on your business:

- Impact of older workers on the business
- Advantages to having older workers
- Injuries to older workers that have already occurred
- Tasks and jobs that may increase risk to older workers
- Accommodations that can be made

Modifications made for older workers contribute to increased safety and productivity for everyone.

With the baby-boom generation about to start joining the ranks of those ages 65 and over, the graying of the American workforce is only just beginning.

For further information and assistance, contact your Zenith Safety & Health Consultant.

## Common Effects of Aging and Methods of Accommodation

Effects of Aging on Vision	Accommodating Vision Issues
<ul style="list-style-type: none"> <li>• Eyes lose ability to change shape and focus quickly.</li> <li>• Decreasing speed of eye reaction to dark/light conditions. Night vision more difficult.</li> <li>• Overall decrease in vision quality. Nearsightedness increases after age 40. Medical ailments increase after age 50 (e.g. cataracts, glaucoma and macular degeneration).</li> <li>• More difficulty with motion perception, contrast perception, distinguishing color (especially blue/green).</li> <li>• Greater problems with "dry eyes."</li> </ul>	<p><b>Modify the environment</b></p> <ul style="list-style-type: none"> <li>• Provide sufficient lighting in all areas. Add task lighting where additional light is needed.</li> <li>• Decrease glare on monitors, computer screens or other equipment.</li> <li>• Adjust equipment displays and computer settings to enhance visual communication (i.e., brightness and contrast, color, font size. Adjust the font size on printed materials.</li> <li>• Use pastel colors in areas requiring high level of concentration.</li> <li>• Use bright or contrasting colors on ramps, stairs and surfaces.</li> </ul> <p><b>Modify equipment and tasks</b></p> <ul style="list-style-type: none"> <li>• Use magnifiers to improve seeing small objects.</li> <li>• Use equipment with audio or tactile cues, such as sound notifications and speech-recognition features or software.</li> <li>• Limit driving to daytime hours.</li> </ul> <p><b>Utilize aids and other equipment (Computers and Video Displays)</b></p> <ul style="list-style-type: none"> <li>• Use software that includes audio or tactile cues, such as sound notifications and speech recognition features or software. Use Windows Accessibility Wizard to set optimal appearance.</li> <li>• Wear "computer glasses" with single lens rather than bifocals. If wearing bifocals, lower monitor to avoid raising chin.</li> </ul>

## Common Effects of Aging and Methods of Accommodation (cont.)

Effects of Aging on Hearing	Accommodating Hearing and Sound Level Issues
<ul style="list-style-type: none"> <li>• Sounds seem less clear and lower in volume.</li> <li>• Tinnitus (ringing, hissing, roaring sound) may occur with aging or be induced by some medications.</li> <li>• High frequencies and low frequencies disappear first, affecting understanding of speech.</li> <li>• Normal part of aging process, even if not occupationally induced.</li> <li>• Hobbies may have contributed to the problem (e.g. woodworking, hunting, auto repair, listening to loud music).</li> </ul>	<p><b>Modify the environment</b></p> <ul style="list-style-type: none"> <li>• Reduce noise levels to lower demand on auditory system (including background and high-frequency noises).</li> <li>• Relocate, enclose or replace excessively noisy or loud equipment.</li> <li>• Consider noise levels in room design. Use sound-absorbing construction materials and avoid room designs that create echoes.</li> </ul> <p><b>Utilize aids and other equipment</b></p> <ul style="list-style-type: none"> <li>• Provide communications equipment with volume control.</li> <li>• Address sound-related employee complaints.</li> <li>• Use visual or tactile feedback for controls that are hard to hear. On computers, use Windows Accessibility Wizard to set audible signals.</li> <li>• Ensure alarms are audible.</li> </ul>
Effects of Aging on Cognitive Ability	Accommodating Cognitive Ability Issues
<ul style="list-style-type: none"> <li>• Given adequate time, there is little decline in the ability to store new information.</li> <li>• Older adults make fewer mistakes in decisions but take longer.</li> <li>• Some medications may impact cognitive abilities.</li> <li>• Short-term memory may decrease. This may make memorizing more difficult, may increase time to make decisions, add difficulty under pressure, impact ability to multitask, slow down response time with complex or unfamiliar tasks, and/or reduce ability to retrieve or transfer information.</li> </ul>	<p><b>Modify the tasks and environment</b></p> <ul style="list-style-type: none"> <li>• Minimize complexity of tasks.</li> <li>• Consider automating certain processes.</li> <li>• Lengthen time requirements between steps in tasks.</li> <li>• Reduce need for multitasking.</li> <li>• Increase decision-making time.</li> <li>• Eliminate clutter on computer screens and work areas.</li> <li>• Take advantage of experience.</li> </ul> <p><b>Provide training and time for practice</b></p> <ul style="list-style-type: none"> <li>• Use frequent and short hands-on refreshers.</li> <li>• Provide separate training classes incorporating different learning techniques for older and younger workers.</li> <li>• Provide opportunities to practice tasks.</li> </ul> <p><b>Teaching for the adult learner</b></p> <ul style="list-style-type: none"> <li>• Provide no more than 3 critical issues to be learned per session.</li> <li>• Highlight items that must be learned at the beginning, middle and end of session.</li> <li>• Adults remember concepts and place technical points in storage.</li> </ul>

## Common Effects of Aging and Methods of Accommodation (cont.)

Effects of Aging on Physical Ability	Accommodating Physical Ability Issues
<ul style="list-style-type: none"> <li>• Range of motion may become limited due to deterioration of joints and bones.</li> <li>• Bone mass decreases.</li> <li>• Muscles decrease in mass and elasticity.</li> <li>• Results in slower response time.</li> <li>• Stiffer muscle tissue.</li> <li>• Handling stress more difficult.</li> <li>• Physical activity may increase worker fatigue and lead to shortcuts.</li> <li>• Physical strength and manual dexterity degrade.</li> <li>• Handgrip strength decreases.</li> <li>• Fine motor skills decline.</li> <li>• Some medications may impact physical abilities.</li> </ul>	<p><b>Modify the task</b></p> <ul style="list-style-type: none"> <li>• Reduce or eliminate heavy lifts through use of manual material handling aids (e.g. carts, patient lifts, dollies, etc.).</li> <li>• Review tasks and processes to reduce back, shoulder and knee strains.</li> <li>• Ensure tasks have a comfortable range of motion.</li> </ul> <p><b>Modify the environment</b></p> <ul style="list-style-type: none"> <li>• Utilize job rotation to reduce repetitive motion exposures.</li> <li>• Communicate with process and design engineers regarding layout and configuration of production lines.</li> </ul> <p><b>Modify the environment</b></p> <ul style="list-style-type: none"> <li>• Make ergonomic changes in equipment and controls using easier methods (e.g. lever or push-button controls vs. knob controls, use of Windows Accessibility Wizard for alternatives to keyboard and mouse).</li> <li>• Create opportunities for strength training and balance exercise.</li> <li>• When walking, distance rather than speed counts.</li> </ul>
Effects of Aging on Slips and Falls	Accommodating Slip and Fall Risk
<ul style="list-style-type: none"> <li>• Loss of postural stability begins at age 50, increasing incidence of falls.</li> <li>• Cause and effect — did the hip fracture because of the fall, or did the fracture cause the fall?</li> <li>• Falls account for 16% of fatalities age 55 – 64 (Bureau of Labor Statistics, 2007)</li> <li>• Decrease in muscle elasticity causes a shorter stride or shuffle.</li> <li>• Trips more likely in areas where surface changes.</li> <li>• Vision issues may lead to falls down or up stairs.</li> </ul>	<p><b>Improve working/walking surfaces</b></p> <ul style="list-style-type: none"> <li>• Assess walkways for uneven surfaces or cracks.</li> <li>• Increase importance on use of slip-resistant flooring and foot wear to prevent injuries (injury severity is greater).</li> <li>• Improve stairway condition (e.g. anti-slip treads, handrails available and at correct height, lighting).</li> </ul>

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