

# Focus on the Aging Worker

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## ABSTRACT

This article discusses select characteristics of the aging work force, health-related issues that can impact work productivity, and strategies and resources that can foster a more productive work environment. The older work force is vital to the future of the U.S. economy. Employers should recognize the value of older workers. Occupational health nurses can assist older workers in maintaining and optimizing their health.

The 2008 economic recession has strained U.S. businesses and challenged U.S. workers to work beyond their anticipated retirement. The combination of lost retirement income and health care benefits and dramatic increases in life expectancy has resulted in continued employment in later life. This phenomenon appears to be a promising option for ensuring the financial security of older Americans (Sass & Munnell, 2008).

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Due to the improved health of both men and women, Americans are living to 84.5 years (Brandon, 2010). The current retirement age to receive full benefits from Social Security is 66. Older workers, as defined by the U.S. Census Bureau, are 65 years or older and their age is expected to increase during the next 20 years. Employers will benefit from hiring aging workers, who are efficient, versatile, able to make effective judgments, and capable of adjusting to workplace changes (Sass & Munnell, 2008).

To maximize the benefits of employing an older work force, employers must understand the challenges associated with retaining older workers. For example, employers will most likely pay higher salaries and rising health care costs. Health care costs associated with aging workers reflect the prevalence of chronic conditions among workers 50 to 64 years old. According to the American Hospital Association (Afable, Averbeck, Dziedzicki, & Nichols, 2007), at least one of six chronic conditions (i.e., hypertension, hypercholesterolemia, arthritis, diabetes, cardiovascular disease, and cancer) affects 62% of 50 to 64 year olds, which is directly reflected in general health care cost claims. Workers' compensation expenses for older workers are expected to be higher due to the higher prevalence of age-related conditions. In 2004, a State of Washington study concluded that costs were pro-

portionate to the injured worker's age; in fact, a constant of \$36.45 for every year of a claimant's age added to the median cost of a claim and drove claim costs higher for older workers (Higdon & Collins, 2004). In 2002, the average annual health insurance claim for workers 40 to 44 years was \$1,725 compared to \$3,863 for those 65 to 69 years (Johnson, Mermin, & Steuerle, 2006).

How does an employer manage the needs of an older work force? This challenge may be met, in part, through an effective occupational health and safety strategy. This article will focus on several issues related to the aging work force by providing information on the impact of physiological, cognitive, and psychosocial challenges. The health and wellness of the aging work force are explored, and the occupational health nurse's role as a primary component in sustaining an older work force is examined.

## THE OLDER WORKER

According to Pitt-Catsouphes and Smyer (2005), the term "older worker" does not indicate a specific age. Rocco, Stein, and Lee (2003) state that the "age at which one becomes an older worker seems not to be related to biological age, but instead to concerns faced by workers at various points in their lifespans" (p. 165). Workers are protected from age discrimination starting at age 40 (The Age Discrimination in Employment Act of 1967). Yet, the generally accepted or recognized age of retirement is 62 to 65 years based on Social Security eligibility (Pitt-Catsouphes & Smyer, 2005).

Many older workers are working longer due to both choice and necessity. According to the White House Office of Management and Budget (2009), improvements in health and changes in types of work and working patterns promote work force longevity. Also, shifting of pension plans from benefit to contribution and a decline in provider-sponsored health insurance may require working beyond traditional retirement age. Further, declines in the value of retirement assets for some workers older than 65 necessitate remaining in the work force longer.

The current landscape of employment and retirement is changing. Due to the older workers from the baby boomer generation, a greater number of older workers will be employed than in recent history (U.S. Bureau of Labor Statistics, 2008). In 2006, workers older than 65 years comprised 3.6% of the total work force. In 2016, it is projected that workers older than 65 years will comprise 6.1% of the total labor force (U.S. Bureau of Labor Statistics, 2008).

## MALE AND FEMALE WORKERS

Comparing employed men to employed women from 1977 to 2007, a 75% increase in men 65 years and older and a 147% increase in women 65 years and older was seen (U.S. Bureau of Labor Statistics, 2008). According to the MetLife Mature Market Institute (MMMI, 2006), which examined older workers' motivations for continuing employment, 43% of women worked because they needed the income compared to 30% of men. The occupations traditionally held by women generally favor

longer working careers (U.S. Bureau of Labor Statistics, 2008).

According to the U.S. Bureau of Labor Statistics (2008), married women older than 65 years now comprise a significant portion of older women in the work force; this is a transition from widowed, divorced, or separated women, who accounted for 56% of the women older than 65 years in the 1977 work force compared to 48% in 2007. In contrast, married women 65 years and older constituted 33% of the 1977 work force compared to 47% in 2007 (U.S. Bureau of Labor Statistics, 2008).

## EDUCATION

The current older worker is more educated. The U.S. Bureau of Labor Statistics (2008) reported a 6% increase in the proportion of older workers with a bachelor's degree or higher (31%) in 2007 compared to 1997. In 2007, only 13% of workers had less than a high school diploma compared to 21.3% in 1997 (U.S. Bureau of Labor Statistics, 2008).

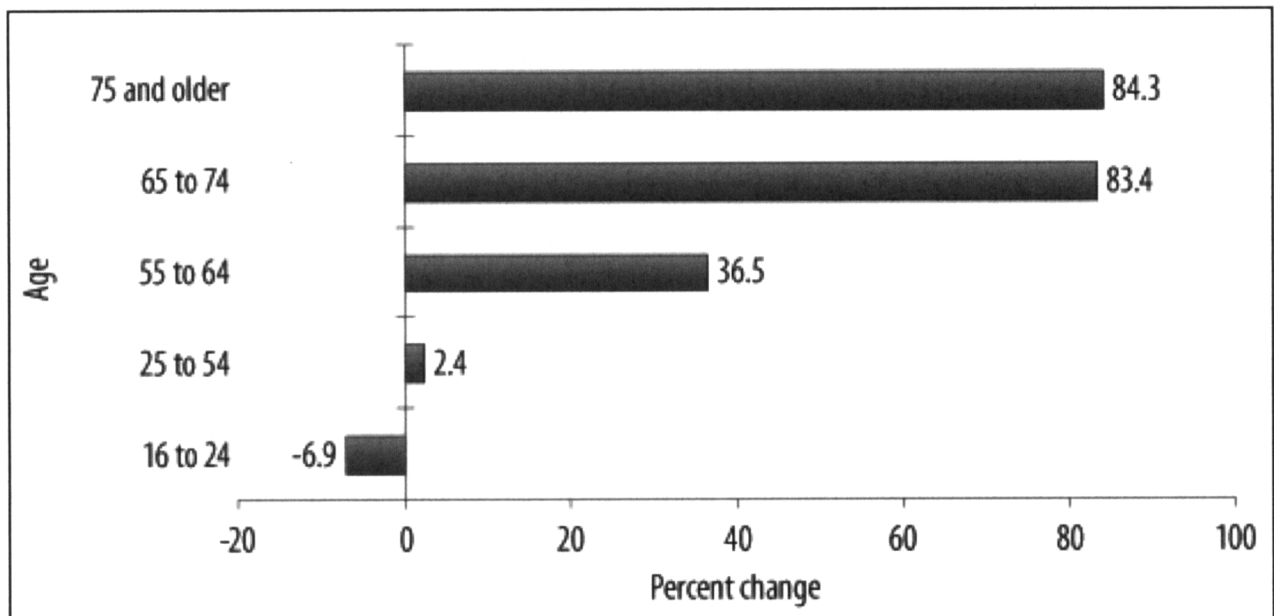
## ETHNICITY

Of all ethnic group growth, it is projected that the Hispanic older population will grow most rapidly. As of 2008, non-Hispanic White Americans accounted for 80.4% of the older U.S. population compared to 8.5% for African Americans, 6.8% for Hispanics, and 3.3% for Asians, with the remaining 1% other ethnic groups. In 2050, the anticipated older U.S. population will be 59% non-Hispanic White American, 20% Hispanic, 12% African American, and 9% Asian. In 2008, the older Hispanic population numbered just fewer than 3 million individuals in the United States; it is expected to grow to 17.5 million by 2050. Ranking second in growth will be the older Asian population, which will more than double by 2050, to about 7.5 million (Federal Interagency Forum on Aging-Related Statistics, 2010).

## HEALTH AND CHRONIC CONDITIONS

In 2010, the life expectancy for males and females in the United States was nearly 76 and 81 years, respectively (U.S. Census Bureau, 2010). These ages are predicted to increase by almost 2 years by 2020. By 2018, with almost 25% of the work force 55 and older (Toossi, 2009), companies must find strategies to meet the needs of an aging work force.

Chronic health conditions are common with advancing age. The five most prevalent chronic conditions affecting adults 65 and older are hypertension, arthritis, coronary heart disease, cancer of any type, and diabetes (Centers for Disease Control and Prevention [CDC], 2007). Due to advances in technology and health care, the older worker may be higher functioning and able to maintain employment longer; however, multimorbidity (i.e., more than one chronic condition) is now commonplace. According to the CDC (2007), at least 80% of older Americans are living with one chronic condition and 50% are living with at least two chronic conditions (CDC, 2007). By 2020, it is estimated that more than 80 million Americans will be afflicted with more than one



**Figure.** Projected percentage change in the labor force by age, 2006-2016. **Note.** "BLS data show that the total labor force is projected to increase by 8.5 percent during the period 2006-2016, but when analyzed by age categories, very different trends emerge. The number of workers in the youngest group, age 16-24, is projected to decline during the period while the number of workers age 25-54 will rise only slightly. In sharp contrast, workers age 55-64 are expected to climb by 36.5 percent. But the most dramatic growth is projected for the two oldest groups. The number of workers between the ages of 65 and 74 and those aged 75 and up is predicted to soar by more than 80 percent" (U.S. Bureau of Labor Statistics [BLS], 2008). (Source: U.S. Bureau of Labor Statistics, [www.bls.gov](http://www.bls.gov).)

chronic condition (University of Alabama Birmingham Center for Aging, 2009).

When considering illness and injury, it takes longer for an older worker to recover (Rogers & Wiatrowski, 2005). According to Wiatrowski (2005), workers 55 to 64 years accounted for 10.2% of the injury and illness cases that required missed days from work; workers 65 and older accounted for only 1.9%. Although suffering fewer injuries, workers 65 years and older had greater injury severity and lost workdays. For all workers, the median number of lost workdays was 8; for workers 55 to 64 years, the median number of lost workdays was 12; and for those 65 years and older, the median number of lost workdays was 18. Workers with at least 31 lost workdays, regardless of age group, comprised 26% of the total. Older workers exceeded this average, with 33.5% in the 55 to 64 age group and 40% in the 65 years and older group (Wiatrowski, 2005).

## RETIREMENT

The United States must increase retirement resources and decrease the period during which those resources are needed. Delaying the retirement of workers is one method to achieve this goal (Williamson & Higo, 2007). Due to recent economic issues worldwide, it is anticipated that the 76 million baby boomers, those born between 1946 and 1964, will work past the age of 65. The inability to save enough resources to meet retirement needs and a questionable Social Security system contribute to this situation. Currently, a 62-year-old individual can begin drawing a reduced Social Security pension. At age 66, full benefits can be received. However, for those born in 1960

or later, the eligibility age increases to 67 (Social Security Administration, 2011). The Metropolitan Life Insurance Company (MLIC, 2007) reported that baby boomers were considering delaying retirement. The reasons listed were lost value of their savings and financial insecurity. Affordable health care was a concern for 65% of baby boomers, outliving retirement resources concerned 61%, and 61% were concerned about providing for spouses' or partners' long-term care needs (MLIC, 2007).

## WORK FORCE SHIFT

At one time, 65 years was identified as "the age" of retirement for working Americans. However, with additional longevity and healthier lifestyles, Americans are working beyond the golden age of 65 (Wall & Wall, 2006). Not only are employees older than 65 choosing to work longer, but they are a larger population group. According to the U.S. Bureau of Labor Statistics (2008), the number of workers between the ages of 65 and 74 and those 75 and older is predicted to soar by more than 80% (Figure). As the aging work force continues to rise, employers must be cognizant of the increasing health care needs of their employees.

Pynoos and Liebig (2009) affirmed that the mid-1990s marked a gradual increase in participation of men 65 and older in the work force, from about 16% in 1995 to 22% in 2009. Social, personal, financial, and generative factors were identified by Peterson and Murphy (2010) as reasons Americans are choosing to work longer. As the United States struggles to reverse its economic downturn, the labor force is apprehensive about voluntarily terminating employment due to the uncertainty of future

employment (Peterson & Murphy, 2010). Some of the obstacles faced by employees planning to retire include lack of available pension funding, insufficient personal savings, and actual or anticipated health concerns that may require adequate health insurance coverage. Peterson and Murphy (2010) stated that economic exigencies often encourage older individuals to remain in the work force longer. The perception of financial insecurity is a compelling motivator for employees to delay retirement.

Another consideration for employees remaining in the work force beyond the traditional age of retirement may relate to employers' increased need for expert knowledge and skills. "With retiring boomers expected to cause a shortage of skilled staff, employers are making it easier for them to stay" (Gutner, 2006, p. 108). For example, in an effort to retain older employees, employers are likely to initiate flexible hours and additional time away from work. The improved attractiveness of work schedules encourages employees to remain working beyond the age of 65 years. Peterson and Murphy (2010) suggested that the less physically demanding a job, the more likely an employee is to remain in the work force due to the minimal risk of injury or adverse health.

### **AGING WORK FORCE CONCERNS**

The older worker has become an integral component of many companies' human capital strategy. Some call it an "encore career"; others call it life as a result of decreased economic prosperity and the need to accommodate "boomerang kids" (McCormack, 2009). Whatever the reason, workers contemplating retirement may decide to continue working.

Employers must understand that although older workers may have age-related limitations, they bring positive characteristics and behaviors to the job. Limitations can be accommodated with minor adjustments based on how aging affects workers' ability to perform tasks. As the body ages, many of its systems (i.e., respiratory, cardiovascular, gastrointestinal, and immune) perform less efficiently (Mangino, 2000). In addition, vision and hearing may become impaired, range of motion may be limited with decreased flexibility, and balance may be more difficult to maintain and may place older workers at increased risk of falls if working on unstable or slippery surfaces. Older workers are also less able to regulate sleep; consequently, changing work shifts without sufficient time to adjust can place them at risk of impaired judgment (Canadian Centre for Occupational Health and Safety [CCOHS], 2002).

As individuals age, thinking processes may be impaired, so learning new skills or adapting to new technologies may require extended time and additional training. Tasks that depend on short-term memory may take longer and areas that have auditory or visual distractions may affect focus, especially when workers must complete a variety of tasks quickly or simultaneously (Laville, 1998). However, older workers use previous experiences transferring previously learned skills to learning new tasks. Practical training and familiar tasks will be more successful when learning new skills (CCOHS, 2002).

### **BENEFITS OF OLDER WORKERS**

Older workers have less absenteeism, less turnover, and superior interpersonal skills and interact better with customers (Wharton School of the University of Pennsylvania, 2010). They bring wisdom, knowledge, and experience to their work and can be valuable mentors for younger, less experienced workers. Probably as a result of experience, older workers' ability to make rapid decisions while working, dependability, and greater accuracy may increase productivity for companies (McCarthy, 2005).

Older workers do not usually have childcare needs, but may face a similar issue with elder care. Aging parents or spouses may require older workers to have flexible schedules or use Family Medical Leave. Wagner and Takagi (2010) found that approximately one third of caregivers between the ages of 65 and 74 and one fifth of caregivers 75 years and older were employed while providing care to family members. Thus, elder care assistance may be another approach to aiding older workers.

Productivity remains the essential issue, and employers must maintain profitability and effectiveness. Consequently, as the U.S. economy continues to grow, so will the demand for adequate numbers of workers. With 3% estimated annual economic growth, the work force will have to increase by 58 million during the next 30 years to maintain current productivity rates (Schneider, 2009). With fewer workers entering the work force, the total number will increase by only 23 million, leaving a labor shortage of approximately 35 million (Schneider, 2009).

An important consideration is to determine the industries that will most notably be impacted. Schaefer (2006) reports that besides the shortages of skilled workers in fields such as nursing, teaching, and information technology, the U.S. Bureau of Labor Statistics (2010) reports that with the retirement of baby boomers, the industries most likely to be affected are educational services, public administration, transportation, and health services. From where will workers come? Importing workers is a possibility but a short-term solution. The logical answer is to tap the asset that already exists, older workers, and do all that is necessary to retain them in the work force. Experienced workers have a lifetime of knowledge, no longer have child-rearing responsibilities, and with lengthy company tenure, bring increased loyalty and personal interest in the success of organizations. Most importantly, these workers understand how the workplace functions and the significance of their contributions. In the past, the aging work force was viewed as an issue to be dealt with instead of an opportunity (Schneider, 2009). It is all too apparent that older workers must be appreciated as a net asset with their vast reservoir of skills, knowledge, experience, company loyalty, and productivity.

### **THE ROLE OF THE OCCUPATIONAL HEALTH NURSE**

Traditionally, the role of the occupational health nurse has focused primarily on the prevention of occupational injury and disease and the restoration of health. In the workplace, occupational health nurses usually serve as the first point of contact for workers who have work-

related health problems or health-related questions and concerns. Because of occupational health nurses' independent role, they can work with management, supervisors, and other health care providers to find solutions to health, safety, and social well-being concerns.

Older workers present new challenges for the occupational health nurse. The prevention of work-related health problems has always been a priority for occupational health services, but managing a safe workplace concurrent with the problems associated with chronic health conditions and diseases of an increasingly older worker population may be a greater challenge. Occupational health nurses will benefit from education about programs designed to promote the health of the aging work force and how to integrate these programs into their professional expertise and practice (Ilmarinen, 2006).

In addition to the attributes that older workers bring to the workplace, physical, cognitive, cultural, and attitudinal changes must be addressed for both the employee and the employer to succeed. A well engineered but flexible interface is needed between the demands of the workplace and the changing characteristics of older workers. In other words, the fit between worker and job assignment is essential and the occupational health nurse plays a major role in developing this fit. As part of an interdisciplinary team, the occupational health nurse is well positioned to encourage, initiate, and oversee corrective measures through worksite walk-throughs, employee encounters, and collaborative efforts with other team members. Overall, the workplace focus should include revising job duties, acquiring new equipment, and remodeling surroundings to minimize or eliminate work-related hazards. A prevention framework describes a proactive approach for integrating older workers into the work force, including primary, secondary, and tertiary prevention strategies.

### **Primary Prevention**

Primary prevention is defined as the promotion of well-being through protective or preventive measures, guarding against the development of health-related conditions, diseases, or injuries. Primary prevention in the workplace includes promoting both personal and occupational health and is intended to maintain or enhance the well-being of individuals or groups of employees and the company in general (Rogers, 2003). Activities to promote healthy choices include smoking cessation, weight loss, nutritional, and stress reduction programs. Regarding the work environment, knowledge of workplace safety as well as workplace hazards is crucial. Primary prevention programs related to regulatory mandates and health hazards include hearing conservation, respiratory protection, and ergonomic workstation designs (Rogers, 2003).

Primary prevention interventions are intended to reduce or eliminate the risk of injury or illness through specific protective actions for older workers (Rogers, 2003). Dunning et al. (n.d.), Langton (2003), and Berlin (2006) identified potential physiological processes of aging that may affect workers (Table). The occupational health nurse must work with the occupational health and safety team, workers, and management to identify poten-

tial hazardous situations and incorporate modifications to eliminate or mitigate these risks.

As a primary prevention strategy, immunizations are essential for older adults, as they are especially vulnerable to diseases such as influenza and pneumonia. The occupational health nurse can be instrumental in increasing the vaccination rate of employees by holding annual on-site flu clinics. In the United States, influenza affects 5% to 20% of the population annually and causes more than 200,000 individuals to be hospitalized due to complications (New York State Department of Health, 2010). Eighty percent of the 23,500 individuals who die of influenza are 65 years and older (New York State Department of Health, 2010). The occupational health nurse should encourage older workers to be vaccinated annually, if they have no contraindications. Other vaccines recommended by the CDC for older adults include the tetanus, diphtheria, and acellular pertussis (Tdap) (onetime dose), regular tetanus and diphtheria (Td) (every 10 years), zoster, and pneumococcal (CDC, 2011).

One example of accommodating the older worker is from the automobile manufacturer, BMW. At a German facility, BMW confronted the potential risks of employing older workers. Realizing that older workers have more patience and skill due to experience, but less flexibility, strength, and vision (Edwards, 2010), the decision was made to not only decrease liability but also make proactive changes (Loch, Sting, Bauer, & Mauermann, 2010). An existing production line was modified to accommodate older workers. With input from employees, additional modifications were made to improve the line using magnifying glasses, special shoes for standing workers, wooden floors, chairs on assembly lines, and larger computer screens with larger type. Seventy changes were made in the workplace at a cost of \$50,000 (Edwards, 2010). These modifications and small expenditures led to significant results: productivity increased 7%, absenteeism fell below the plant's average, and the assembly line's defect rate dropped to zero (Edwards, 2010).

Health promotion initiatives, with an emphasis on the older worker, should be expanded. Increasing exercise, smoking cessation, and eating nutritious food will be as important as before. However, for the older population, the emphasis will also be on musculoskeletal and psychosocial disorders, as these health problems constitute the most prevalent causes of work disability among older workers (Ilmarinen, 2006).

Administrative measures can equal the importance of engineering controls. These actions include necessary relevant policies to limit potentially harmful effects of work on a worker. These policies can be initiated, encouraged, and supported by the occupational health nurse working closely with management and staff.

For tasks requiring strength and endurance, older workers can be teamed with younger workers so the physical burden may be effectively shared. An additional benefit to pairing is that younger workers, in turn, can learn from older workers. Schaefer (2006) recommends other company policies, including flexible work arrangements (i.e., job sharing, part-time hours, consulting, al-

Table

### Physiological Issues of an Aging Work Force and Related Modifications

<i>Possible Issue</i>	<i>Potential Modifications</i>
<b>Visual</b>	
Reduced vision with normal aging process.	An analysis of individual worker's situation and the need for light accommodation can be done by the occupational health nurse, with referral to a vision specialist as necessary. The occupational health nurse can identify products that magnify, reduce glare, have enlarged text or numbers, and offer tactile markings.
Use of corrective lenses with alteration in visual fields. Distortion of objects 2 to 3 feet away is possible if viewing occurs through the lower part of bifocal lenses.	
The need for more light resulting from the normal aging process.	Illumination should meet the needs of workers. Recommendations for optimal illumination (fluorescent, light-emitting diode) or daylight harvesting may be helpful.
Reduction in depth or contrast perception.	Overall lighting should be uniform. Avoid the need for light/dark adaptation by consistent assignments primarily in one type of lighting or the other. The design of gradual transition zones between areas of low and high lighting such as entrances to underground areas (i.e., tunnels and garages) will reduce the need for accommodation by the visual system.
	Stairwells with effective lighting and handrails, color contrast between stair risers and treads, and clear markings for the first and last two steps will reduce the risk of injury.
Increased sensitivity to glare.	To reduce glare, avoid direct lighting by using window shades, diffusers on light sources, and indirect and adjustable lighting sources.
<b>Auditory</b>	
Gradual loss of high frequencies, ability to distinguish between similar frequencies, and localization of sounds can occur.	Decrease background noise of loud machinery or air conditioning by ensuring repairs; sound reduction devices; and installation of sound-absorbing materials for walls, ceilings, and floors to reduce echoes.
	For workers with reduced hearing, devices, including phone or personal listening devices, can amplify. Signaling and alerting devices that blink or flash when a sound occurs can be attached to machines and office equipment.
<b>Somatosensory</b>	
Reaction times of aging workers can become slower due to changes in vision, proprioception, touch, and vestibular structures. Reaction to a hazardous situation or a dangerous machinery event may not be as quick as it once was.	Avoid assigning older workers to heights, particularly if windy conditions, moist or slippery surfaces, or moving equipment exist.

Balance may also be reduced, creating an increased risk for falls. Severity of injury may be increased due to decreased reaction time, osteoporosis, and thinner skin, possibly creating conditions for fractures and tearing of the skin.

#### Musculoskeletal

Muscular strength and muscle fiber gradually decline with age, with the lower extremities more affected than the upper. Cartilage atrophies, loses elasticity, and dehydrates and joints become stiff. Ligaments become less elastic and inhibit full range of joint movements.

Highly repetitive motions and sustained loading with prolonged standing or walking may have detrimental effects on the weight-bearing joints of the hips, knees, and ankles.

#### Cardiovascular and respiratory

Respiratory function and consumption of oxygen naturally decline with age, reducing physical capacity and making intense physical activity more difficult.

#### Neurological

Gradual changes in memory, attention, and cognition may occur. Decision-making times are extended, multitasking ability decreases, response time with complex or unfamiliar tasks increases, and ability to retrieve or transfer information is reduced.

Avoid assigning older workers to work areas with marble, polished wood, or tile flooring, which are frequently slippery and void of texture.

Walkways should be well lit, in good repair, free of clutter, without obstructions, and without spilled liquids.

Well-fitted, low-heeled shoes that have firm, nonslippery soles should be required.

Older worker assignment to work on heights (ladders and scaffolds) should be made with consideration of individual abilities.

Uneven walking surfaces can be problematic. Walkway clutter (i.e., cords, debris, powder, dust, and oil) should be removed.

Because physical activity delays musculoskeletal declines associated with aging, regular exercise and training is recommended.

For tasks requiring strength and endurance, older workers could be teamed with younger workers so the physical burden may be effectively shared.

Design and assign jobs consistent with individual physical capabilities and restrictions. Workplace design can prevent above shoulder-height work. Repetitive tasks and prolonged standing assignments should be avoided for older workers. Anti-fatigue mats, mechanical aids, and waist-high working surfaces are recommended.

Adjustable furniture and office equipment, especially chairs that can be individually modified to accommodate muscle fatigue and postural changes throughout the shift, are available. Sit/stand workstations, padded or cushioned flooring, and standing stools are also available.

Regular exercise is needed. Assigning older workers to strenuous work in hot or humid or cold environments should be avoided. Physically demanding jobs should be carefully assigned to those who meet the requirements. Work should be self-paced and of appropriate duration if strenuous or cognitively demanding.

Assistive technology (e.g., personal digital assistants, electronic and software calendars, watches, timers, and graphic aids) are available. Instructive cues, both text and illustrative, promote executive functioning such as matching parts or deciding on process priorities.

Modifications in the workplace can include frequent and brief hands-on refresher training courses, separate teaching or learning techniques (i.e., decreased speed of presentation and large-print materials) and increased opportunities for practicing tasks.

Note. Information from Berlin (2006), Dunning et al. (n.d.), and Langton (2003).

ternative work schedules, and extended time away from work), consistent wages, effective benefit plans, and phased retirement programs.

### **Secondary Prevention**

Secondary prevention includes early detection and case finding and diagnosis of individuals with diseases or conditions that require interventions to halt further disease progression (Rogers, 2003). This process begins when employees are hired and is especially important for older workers. Pre-placement physical examinations can be used to identify suitable positions for workers by recognizing working conditions that may impact workers' health and safety, assessing workers' physical ability to perform essential functions of the job, and ensuring employees do not pose a substantial risk of harm to self and others.

On completion of the pre-placement assessment, a functional capacity evaluation (FCE) may provide additional data about workers' abilities to perform certain job duties. The FCE identifies existing physical deficits that may determine whether workers can safely perform the essential functions of jobs (Bunch, n.d.). This assessment must be Americans with Disabilities Act (ADA) and Equal Employment Opportunity Commission (EEOC) compliant, but is useful in assessing individuals' abilities to safely perform job-specific tasks such as lifting, carrying, pushing, pulling, climbing, and squatting (Bunch, n.d.). The FCE can also assist job transfers or job redesigns for older workers who can no longer meet the physical demands of their current positions but can still meet performance requirements of other positions within the company.

Periodic health examinations are secondary prevention interventions, the results of which can be measured against baseline data from the pre-placement examination to detect work-related health risks. These examinations are also used to assess the suitability of a worker to perform certain tasks and use specific equipment. Periodic health examinations may be required for employees in surveillance programs to detect signs or symptoms of health effects related to harmful workplace practices or exposures. Review of the information and warnings contained on Material Safety Data Sheets supports the design and implementation of health surveillance measures as well as initiates actions to eliminate the problem (Rogers, 2003).

First aid, emergency, and ongoing health care for work-related injuries and illnesses is often delivered or directed by the occupational health nurse. On-site treatment or prompt referral for both work and non-work-related conditions serves to interrupt the disease process and limit further impairment (Rogers, 2003). In view of normal health and wellness issues for older adults, Hall and Chyun (2010) noted that chronic diseases such as cancer, diabetes, cardiovascular diseases (i.e., coronary heart disease and hypertension), and dyslipidemia disproportionately affect older adults and are associated with disability and diminished quality of life. Health screenings and counseling on-site or at community health clinics

for workers 65 years and older may include mammography, Pap smears, colonoscopy, prostate examinations, exercise stress testing, blood pressure monitoring, obesity assessments, and lipid and diabetes testing (Hall & Chyun, 2010). Timely identification of disease may effectively promote the health of the older worker while easing the individual and societal burden of poor health.

### **Tertiary Prevention**

Tertiary prevention minimizes residual disability through rehabilitation to restore individuals to optimal health and functioning within the constraints of their health problem or disability (Rogers, 2003). Not only do occupational health nurses deliver coordinated health care to older workers from the onset of the work-related illness or injury through recovery, they are a resource for workers who have non-work-related health conditions. Case management is a crucial function of the occupational health nurse for all work-related injuries; with an aging work force, those concepts extend further. The occupational health nurse, as an advocate for the employee, assesses the health-related condition, considers treatment options, coordinates care, and monitors progress according to the plan of care. Occupational health nurses encourage treatment compliance, devise needed changes in care, ensure that needs are met through appropriate interventions, make referrals, and provide continual feedback (Rogers, 2003). Occupational health nurses, with their knowledge of community resources and employee assistance programs, can be indispensable in providing valuable connections (Sidebar).

Monitoring and counseling for chronic diseases, efficiently provided by occupational health nurses, reinforces treatment plans while ensuring continuity of care. Counseling workers recovering from a stroke to work with appropriate community agencies is of value to both the individual worker and the company. Cardiac, substance abuse, and pulmonary rehabilitation programs incorporate recommendations for lifestyle changes as well as occupational and environmental modifications.

Occupational health nurses work closely with management on the development of innovative policies regarding job modification and accommodations to limit potential adverse effects on older workers with temporary or long-term disabilities. Occupational health nurses' involvement in the development of early return-to-work or transitional work policies for work-related and non-work-related conditions is important to aid workers' rehabilitative process through rapid constructive engagement and productivity.

Occupational health nurses, with knowledge of particular health-related conditions of older employees, can develop company policies regarding accommodations for those with residual disabilities. For example, for workers with diagnosed diseases or injuries of the hands that could potentially be aggravated by the work, occupational health nurses could recommend company-provided assistive devices such as specialized keyboards and mouse options, wrist or armrests, gripping and pointing aids, or software that could ease the strain of frequent grip-



## Key Resources for Assisting the Older Work Force

### American Association of Retired Persons (AARP)

Targeted to individuals age 50 and older. Provides information on a wide range of topics, including health insurance, independent living, and Social Security. Employer resources include the Workforce Assessment Tool (WAT), which addresses the impact of potential retirees on the bottom line of a company, how to address skill shortages that affect competitiveness, and how to determine if the work environment attracts qualified workers of all ages by assessing policies and programs.

[www.aarp.org](http://www.aarp.org)

[www.aarp.org/workforceassessment](http://www.aarp.org/workforceassessment)

[www.aarp.org/employerresourcecenter](http://www.aarp.org/employerresourcecenter)

### CTWorks

Provides employers' access to Career One Stop. Provides information regarding business tax credits, labor market, and bonding programs. Offers resources on shared work, disability resources, and career coaches.

[www.ctworkssw.org](http://www.ctworkssw.org)

### National Council on Aging (NCOA)

Advocates for seniors to find jobs and benefits, improve their health, live independently, and remain active in their communities.

[www.ncoa.org](http://www.ncoa.org)

### National Older Worker Career Center (NOWCC)

Brings together experienced workers and organizations seeking support to ensure that older workers can continue to contribute their skills and knowledge. Addresses employer issues ranging from interviewing to accommodating physical limitations.

[www.nowcc.org](http://www.nowcc.org)

### U.S. Department of Labor, Employment and Training Administration

[www.doleta.gov](http://www.doleta.gov)

#### *CareerOneStop*

Assists dislocated workers. Provides tools for employers, such as labor market information. Provides additional information regarding the Senior Community Service Employment Program (SCSEP) and the Older Worker Program.

[www.careeronestop.org](http://www.careeronestop.org)

#### *Senior Community Service Employment Program (SCSEP)*

Community service and work-based training program for older workers. Authorized by the Older Americans Act, the program provides subsidized, service-based training for low-income individuals 55 or older who are unemployed and have poor employment prospects.

[www.doleta.gov/Seniors](http://www.doleta.gov/Seniors)

### U.S. Department of Labor, Office of Disability Employment Policy (ODEP)

#### *Job Accommodation Network (JAN)*

Provides information on job accommodations. Assists employers to hire, retain, and promote qualified employees with disabilities by providing information on accommodation options and practical solutions; become educated about their responsibilities under the Americans with Disabilities Act Amendments Act; reduce workers' compensation and other insurance costs; and address issues pertaining to accessibility.

<http://askjan.org>

ping, grasping, and turning motions (Langton, 2003). For those in manufacturing or construction, tools with exten-

sion handles or large grips, power-assisted tools, portable kneeling contrivances, mechanical transport devices, and

## IN SUMMARY

### Focus on the Aging Worker

Rogers, B., Marshall, J., Garth, K., Mopkins, D., Remington, J., Siemerling, K., & Spivey, J.

*AAOHN Journal* 2011; 59(10), 447-457.

- 1 Older workers may have age-related limitations; however, they have many positive attributes that employers value, including experience, knowledge, and company loyalty.
- 2 Occupational health nurses work with management and workers to identify any needed accommodations, which often can be minor.
- 3 A prevention framework can be used to design programs and strategies that promote the health of the aging work force.

skid plates are available and might be helpful (Bamber, 2009).

Many personal and social aspects of the workplace are related to the successful retention of older workers. Because occupational health nurses often serve as a bridge between employees and management, their skills are critical in ensuring that these needs are acknowledged and met. Most significant are older workers' attitudes about themselves. Older workers with gradual biological and psychological losses are often viewed as less productive. When this view is incorporated in mature workers' belief systems, the problem is compounded. Aging should be viewed as a time of new development.

The ability to continue to learn should be emphasized and a focused education about the full complexity of aging and ageism should be incorporated into the organizational culture. Piktialis (2007) suggests that age-based stereotypes be confronted and dispelled; this can be accomplished by incorporating age-related education into diversity training for older and multigenerational work forces (Piktialis, 2007). Managers and supervisors play a crucial role in encouraging respect among all workers and especially for fostering a positive culture for an intergenerational work force (Ilmarinen, 2006). Acute and chronic health conditions may impair workers' abilities to work. When they are able to return to work, the reason for the inability to work, if related to the work environment, will also need to be addressed. Ilmarinen (2006) suggests that the primary focus be promoting work ability during aging; this is best achieved by cooperation between management and employees. Ilmarinen (2006) also argues that the strengths of aging provide a foundation for a productive workplace. Others argue for eliminating mandatory retirement, strategies to retire older workers, and any culture that retires workers at a specific age (Berlin, 2006).

## CONCLUSION

The older work force is vital to the economic future of the United States. Employers and employees will work with established resources to ensure the overall health of the work force and workplaces. Occupational health nurses' functions and roles demonstrate how overall health will be achieved for the aging population.

Occupational health nurses' efforts have been successful in curbing rising health care and workers' compensation costs, enhancing work force wellness, and decreasing health-related absences. Corporations have recognized the significant return on investment of occupational health nurses because they assist employers to maximize employee health and reduce health-related costs through lowered disability claims, fewer on-the-job injuries, and improved absentee rates (Denniston & Whelan, 2005). Occupational health nurses have opportunities to significantly impact general work force health and economic sustainability of the older work force.

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## Focus on the Aging Worker

This issue of the AAOHN JOURNAL contains a Continuing Nursing Education Module on "Focus on the Aging Worker." 1.0 contact hour of continuing nursing education credit will be awarded by AAOHN upon successful completion of the posttest and evaluation.

A certificate will be awarded when the following requirements are met by the participant: (1) Participant logs on to the AAOHN LMS website at <http://lms.aaohn.org> and enrolls in the course (\$10 members; \$15 non-members); (2) The completed posttest and course evaluation are entered online at <http://lms.aaohn.org> on or before September 30, 2012; (3) A score of 70% (7 correct answers) is achieved by the participant.

Upon completion of this lesson, the occupational health nurse will be able to:

1. Analyze the forces that have led to an aging U.S. work force.
2. Describe the "older worker" in the United States.
3. Define the issues that affect older workers.
4. List ways occupational health nurses can positively impact older workers, their health, and their safety.

AAOHN is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

AAOHN is additionally approved as a provider by the California Board of Registered Nursing (#CEP9283) and the Louisiana State Board of Nursing (#LSBN3).

Contact hour credits received for successful completion of the posttest and evaluation may be used for relicensure, certification, or re-certification.

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**1. According to the American Hospital Association (Afbale et al., 2007), \_\_\_\_% of 50 to 64 year olds reported they had at least one of six chronic conditions.**

- A. 50.
- B. 62.
- C. 74.
- D. 86.

**2. In 2016, it is projected that workers older than 65 years will comprise \_\_\_\_% of the total labor force (U.S. Bureau of Labor Statistics [BLS], 2008).**

- A. 4.8.
- B. 5.7.
- C. 6.1.
- D. 7.8.

**3. According to the Centers for Disease Control and Prevention (2007), at least \_\_\_\_% of older Americans are living with one chronic condition.**

- A. 80.
- B. 75.
- C. 70.
- D. 65.

**4. According to Wiatrowski (2005), workers at least 65 years and older exceeded the averages of lost workdays by \_\_\_\_%.**

- A. 40.
- B. 50.
- C. 55.
- D. 60.

**5. The BLS (2008) reports that the number of workers between the ages of 65 and 74 and those 75 and older is predicted to soar by more than \_\_\_\_%.**

- A. 65.
- B. 70.
- C. 75.
- D. 80.

**6. Wagner and Takagi (2010) found that about \_\_\_\_ of caregivers between the ages of 65 and 74**

**were employed while providing care to family members.**

- A. One fourth.
- B. One third.
- C. Three fourths.
- D. Two thirds.

**7. The BLS (2010) reports that with the retirement of baby boomers, the industries that will most likely be affected include all of the following except:**

- A. Unskilled workers.
- B. Educational services.
- C. Transportation.
- D. Health services.

**8. Secondary prevention activities of the occupational health nurse include:**

- A. Smoking cessation programs.
- B. Stress reduction programs.
- C. On-site flu clinics.
- D. Early detection and case finding.

**9. Primary prevention strategies include all of the following except:**

- A. Job sharing.
- B. Alternative work schedules.
- C. Part-time hours.
- D. Early diagnosis of individuals with disease.

**10. All of the following are examples of tertiary prevention except:**

- A. On-site screenings and counseling.
- B. Case management.
- C. Care coordination.
- D. Rehabilitation to restore individuals to optimal health.