With Americans living longer they are also working longer, making older workers an invaluable part of any company. They bring wisdom, knowledge and experience to many aspects of business. They can become mentors for younger and less experienced workers. However, there are certain changes that occur to both the body and mind of every individual as they age, which can effect safety in the workplace if an employer is unaware of them and does not take steps to keep aging workers safe.

Some changes that occur as worker age can include: loss of former strength and muscular flexibility; range of motion becomes limited; loss of sense of balance; deterioration of vision; and the mind and thinking processes react more slowly. All these changes can have an impact on safety in the workplace.

**Muscular**

As muscles lose mass they also lose strength, making them respond more slowly and tire more quickly. To ensure safety on the workplace after the loss of strength and muscular flexibility, older workers should practice certain safety measures.

- Avoid keeping the muscles in a fixed posture or performing only one kind of movement.
- Avoid twisting the torso while lifting, as it leads to back injuries.
- Keep work activity in the “neutral” zone, the area from the thighs to the shoulders.
- Step up close to the object to be lifted and keep the object close to the body.
- Avoid prolonged bending, particularly below knee level.
- Choose a clear path to the object’s destination.
- Lift objects from waist level.
- Use a mechanical aid or get help from coworkers if the object is too heavy.
- Avoid repetitive tasks by incorporating job rotations.
- Avoid prolonged standing and prolonged sitting.
- If prolonged standing is necessary, provide anti-fatigue mats.
- Avoid extreme demands on the joints.
- Exercise at least 30 minutes every day to keep fit and flexible. Start with ten-minute increments.

**Balance**

Older workers may find they have a problem with balance. Inner ear problems and a tendency to deafness in one ear can also lead to problems with balance. This may be the reason why older people experience more falls and broken bones. Slips and falls account for 14 percent to 40 percent of non-fatal occupational injuries. Injuries involving falls are more common to older workers. Older workers can take certain safety measures to ensure safety in the workplace when there may be balance loss.

- Perform strength and balance training to maintain the sense of balance.
- Exercise in a swimming pool to provide a reduced weight-bearing environment. This can be especially helpful.
- Avoid marble, polished wood, and tile flooring were possible.
- Wear good fitting footwear with non-slippery soles and preferably lace up shoes.

Employers can apply safety practices in the workplace to prevent falls and other significant injuries to older workers and other employees.

- Maintain exterior walkways in good condition. Check for uneven surfaces, cracks, accumulation of debris, and weather hazards due to rain, snow, or ice.
- Match work with abilities. Some older workers are at risk if required to use ladders or scaffolds.
- Practice good housekeeping and keep walkways clean and free of obstructions.
- Clean up spills immediately and keep floors and carpets in good repair.
- Use absorbent materials to reduce slipping.
- Avoid equipment that obstructs vision, especially peripheral vision.
- Use high contrast colors on risers and treads on stairs.
• Use bright lighting and provide handrails.
• Use non-slip surfaces on the stair treads.
• Use color contrast to identify different raised or uneven areas.
• Provide good environmental lighting.
• Encourage the use of handrails.
• Encourage slip resistant low-heeled shoes on the job.
• Minimize background noises to accommodate hearing problems.
• Use sound-absorbing construction material.
• Avoid creating locations that have echoes.

**Vision**

Vision begins to deteriorate for many people in their forties sometimes requiring prescription glasses to correct various eye problems. Workers may need prescription safety glasses in their jobs. Employers can protect older workers with vision problems by making adjustments in the workplace.

• Improve contrast between objects by increasing the candlepower of the existing lighting.
• Install brighter lighting in the workplace.
• Install glare screens on computers to prevent eye-strain and headaches.
• Avoid shades of blue, blue on green or blue on black in the work environment; older workers have difficulty in distinguishing between these colors.
• Make signs clear, easily seen and easy to read and follow.
• Eliminate the need for older workers to constantly move between bright areas and shady or dim areas.
• Reduce glare by using shades, awnings, diffuse light sources, adjustable lighting, and indirect lighting.
• Encourage workers to get their eyes checked regularly.

**Circulatory**

Circulatory problems affect people as they age, causing them to feel cold and heat more acutely. In the summer time, employers are aware that outside workers need more water and rest breaks to cope with heat stress. These precautions especially apply to the older worker, since age, weight and medications often interfere with body functions that naturally cool the body. In the winter, employers should protect workers against low temperatures, dampness, cold water, and wind conditions. Hazard abatement should be an employer’s first choice in worker protection, followed by protective equipment for all workers, not simply the older workers.

**Respiratory**

Respiratory functions decline from 15 percent to 25 percent from age 20 to age 65. Oxygen uptake sharply declines after the age of 50, making intense physical activity more difficult for older workers. Older workers should practice safety when performing their duties and other physical activity in the workplace.

• Avoid strenuous work in hot/humid or cold environments.
• Reduce exposure to temperature extremes.
• Take precautions to avoid dehydration in hot environments. Drink plenty of non-caffeinated/non-alcoholic beverages.
• Avoid physically demanding work if the worker is not conditioned for such work.
• Take frequent breaks.
• Allow for self-paced work rather than machine-paced work.

**Mental**

Certain mental processes do tend to decline with aging. Studies have shown that the greatest mental abilities occur in the 30s and 40s and then start to minimally decline in the late 50s and early 60s, but only to a small extent. Not until after the early 80s do 30 percent to 40 percent of people experience a significant decline in their mental capacity.

Mental processing and reaction time does slow with age and older people will take longer to process mental tasks than their younger coworkers. Given enough time, older workers can perform mental tasks just as well as their younger counterparts. It is important to note that changes in physical condition and mental ability do not happen to everyone as they age. There is a wide variety in ability among aging individuals and since functional decline is small it should not interfere with normal day-to-day tasks. Older workers may take longer to learn new tasks, but they are still capable of learning new things.
Workers need to continue to exercise all their faculties, both mental and physical, if they wish to avoid a decline in their abilities. To keep the mind active and prevent further mental decline older workers can learn a new language, solve crosswords puzzles, and play games that require thought and strategy.

There are practices older workers can do to help their mental processes during their daily duties.

- Compile to-do lists.
- Make notes on the job.
- Keep a calendar to track events and appointments.
- Leave phone messages for oneself.

Texas Department of Insurance; Division of Workers’ Compensation has other publications to assist employers:

- Slips and Falls Take 5 for Safety
- Sun Safety Take 5 for Safety
- Heart Stress Safety Training Program

These may be found at:

www.tdi.state.tx.us/wc/safety/employers.html

This fact sheet was developed with information from the PMA Insurance Group (Maximizing An Older Worker’s Value, May 2005); US Department of Labor (OSHA Offers Tips to Protect Workers in Cold Environments, OSHA News Release 1998);

Occupational Hazards (How to Protect the Aging Workforce, Cynthia L Roth, January 2005).