

Ergonomics

Ergonomics and the Aging Workforce

Matt Middlesworth

Workforce Demographics Are Changing

Are you ready?

10,000

**people turn 65 every day. This will
continue every single day until 2030.**

AARP

79%

**of Baby Boomers say they don't plan
on fully retiring at 65.**

AARP

56

**is the average age of a highly skilled
manufacturing worker.**

Bureau of Labor Statistics

17%

of the labor force will be over 65 years old by 2025.

Bureau of Labor Statistics

The aging workforce presents a challenge to industry:

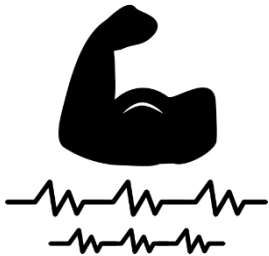
To design a safe and productive work environment that accounts for the characteristics that come with aging.

Characteristics of Aging Workers

PHYSICAL

PHYSIOLOGICAL

PSYCHOSOCIAL



DECREASED STRENGTH, FLEXIBILITY, BALANCE

DECREASED VISION

DECREASED REACTION TIME AND SPEED

DECREASED HEARING

DECREASED MANUAL DEXTERITY AND FEEDBACK

DECREASED BODY FAT

Characteristics of Aging Workers

PHYSICAL

PHYSIOLOGICAL

PSYCHOSOCIAL



DECREASED OXYGEN INTAKE

RISING SYSTEMIC BLOOD PRESSURE

FASTER ONSET OF FATIGUE

GREATER SUSCEPTIBILITY TO EXTREME TEMPERATURES

Characteristics of Aging Workers

PHYSICAL

PHYSIOLOGICAL

PSYCHOSOCIAL



DIFFERENT SHIFT PREFERENCES

DIFFERENT TRAINING AND LEARNING STYLES

**CAN TEND TO EXPERIENCE DISENFRANCHISEMENT
WITH THEIR WORK AND COWORKERS**

The characteristics of aging workers often puts them at a higher risk of injuries.

The solution?

**Improve workplace design with
Ergonomics.**

Ergonomics = Fitting the Job to the Worker

Accommodate aging workers by fitting jobs and tasks to the workers' capabilities and limitations.

1. Prioritize Jobs for Evaluation

2. Conduct Objective Ergonomic Evaluations

3. Develop Ergonomic Opportunity List

4. Determine Best Solution w/ Team Approach

5. Obtain Final Approval & Implement Solution

6. Evaluate Improvement for Effectiveness

Ergonomics Improvement Process

Ergonomics should be treated as a process that systematically identifies and reduces risk.

Engineering Controls.

Engineering solutions are the preferred method of controlling ergonomic risk factors. Engineering controls seek to enhance the physical aspects of the workplace such as workstations, tools, and equipment design or redesign. The focus is to design the job to fit the person, rather than forcing the person to fit the job.

Administrative Controls.

Administrative solutions should be considered when cost or practicalities of engineering controls are prohibitive.

Administrative controls consider adjustments in company procedures to minimize exposure to risk factors. Examples of administrative controls include job rotation, job enlargement, modified rest breaks, providing additional employees to perform high risk tasks, and work conditioning for new and returning employees.

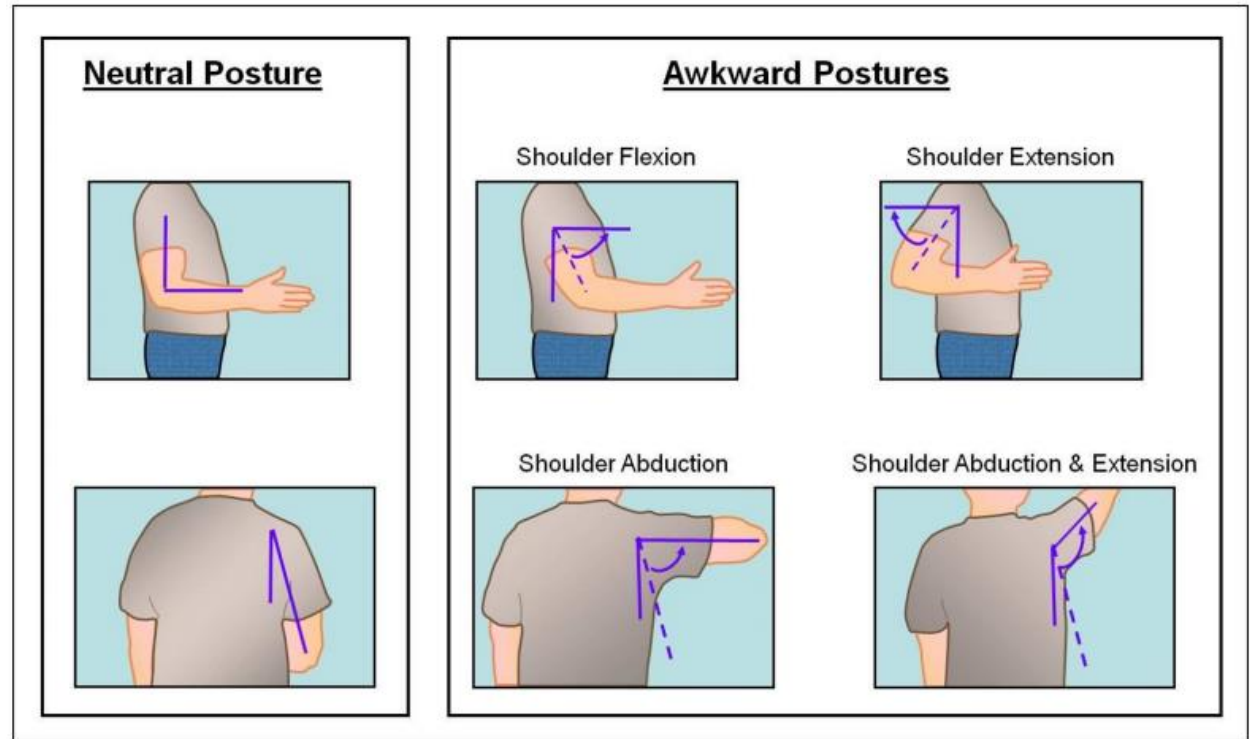
1

Work in neutral postures.

Working with the body in a neutral position reduces stress and strain on your musculoskeletal system.

1

Work in neutral postures.



[image source](#)

2

Allow for movement and stretching.

Working in the same posture or sitting for prolonged periods of time is bad for you. Your body's musculoskeletal (or movement) system is designed to move.

Arrange workstations and tasks to allow for posture changes.

2

Allow for movement and stretching.



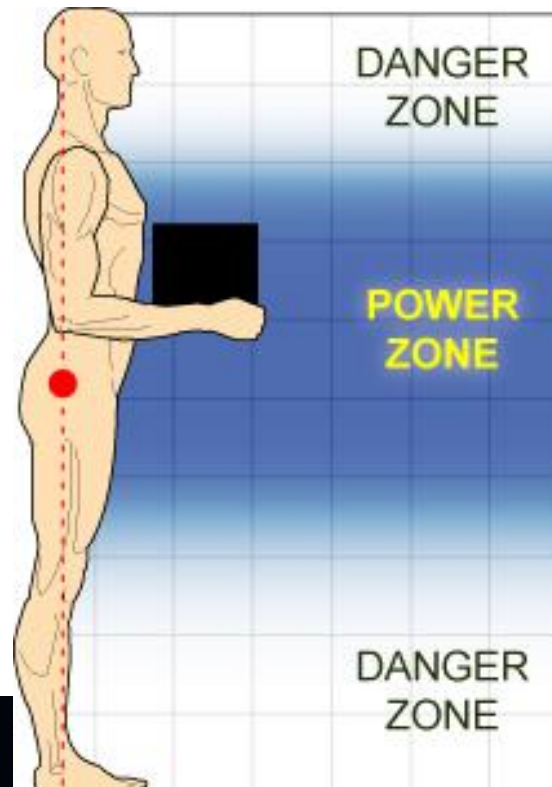
3

Work from the power / comfort zone.

The “power” zone or the “comfort” zone is also referred to as the “hand shake” zone – this is an easy way to remember the optimal location to perform work, which is within easy reach and at a proper height.

3

Work from the power / comfort zone.



[image source](#)

4

Provide adequate lighting.

A common issue with older workers is lighting. Visual acuity deteriorates with age, so make sure work areas are properly lit.

Adjustable task lighting is a common fix for this problem.

4

Provide adequate lighting.



[image source](#)

5

Use a power grip.

Providing “power grips” instead of pinch grips for jobs and tasks is another ergonomics “low hanging fruit” to help accommodate aging workers.

Ergonomic Tips for the Aging Workforce

5

Use a power grip.



[image source](#)

Get more ergonomics and injury prevention tips at Ergo-Plus.com.

Click the link below:

www.ergo-plus.com