

Safety Pros and Cons of an Aging Workforce:

Examining the changing demographics and
implications in the workplace

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Overview

- Why we care
- Characteristics of Aging and the Older Worker
- How to Compensate
- Why These Changes Benefit Everyone

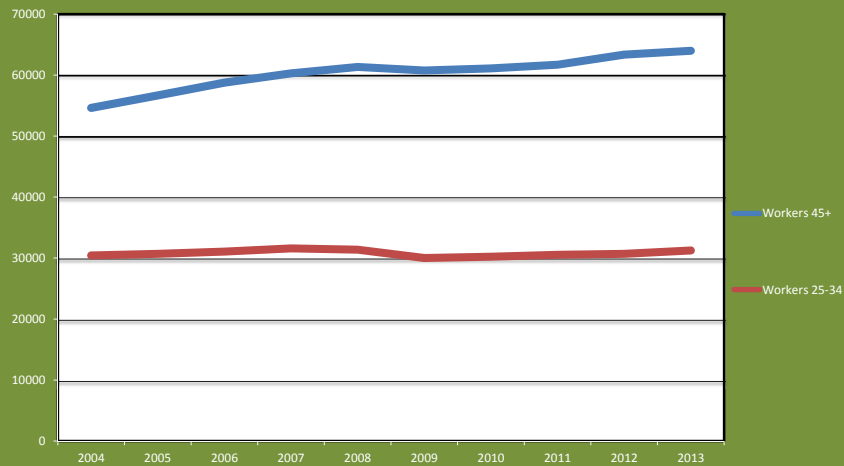
Definition

- What is an “older worker?”

Why We Care—Demographics

- 76 Million
- 55 million
- Working longer
- Greater risks

BLS Labor Force Data: Indiana



Why We Care

- 20% of the labor force
- Employment of adults 65 years+ increased 101%
- Estimated 210,830 nonfatal occupational injuries and illnesses

Why We Care—Costs



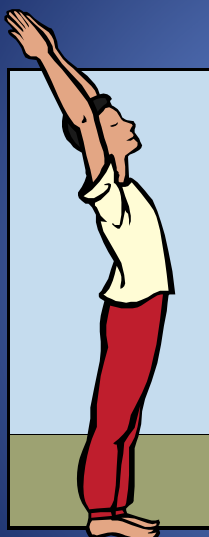
Paint a Picture of what an aging labor force looks like

Musculoskeletal



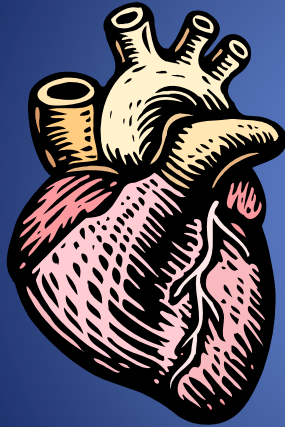
- Peak at about age 25
- Lose strength
- System weakens
- Decreased bone density
- Less elasticity

Range of Motion



- Loss with age
- Loss of flexibility
- Compensate
- Greater risk of injury

Cardiovascular and Respiratory Systems



- Oxygenated blood
- Functional breathing
- Physical Labor
- Hot/cold environments

Posture and Balance



- Good posture
- Body mechanics
- Falls
- Spinal instability

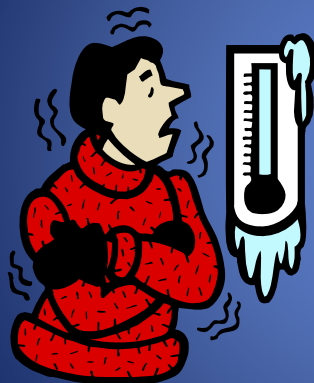
Sleep Regulation

- Regulate sleep
- Length and quality
- Reaction time



Thermoregulation

- Body temperature
- Environmental changes
- Physical activity



Vision

- Distance
- Peripheral vision
- Visual acuity
- Depth perception
- Glare
- Contrast and color



Contrast, High Readability

SIGNS FIRST

SIGNS FIRST

SIGNS FIRST

SIGNS FIRST

Contrast, Poor Readability

SIGNS FIRST

SIGNS FIRST

SIGNS FIRST

SIGNS FIRST

Font Choices

Seraph Font

- This is Times new Roman
- People commonly use this font
- However, it has seraphs.
- This makes it more difficult to read.

Non-Seraph Font

- This is Arial.
- People also use this font.
- It does not have seraphs.
- This makes it easier to read.

Hearing Loss



- Presbycusis
- Higher frequencies
- Background noise

Cognition



- Decision making
- New skills
- Fluid intelligence
- Short-term

Comorbidities



- Hypertension
- Tobacco use
- Obesity
- Alcohol abuse
- Diabetes
- Depression
- Arthritis
- Drug interactions

Racial and Economic Differences



Comparing the Two

Younger Workers



Older Workers



Comparing Injuries

Younger Workers



Older Workers



Comparing the Two—Technology

Younger Workers



Older Workers



Benefits of Older Workers



Mediating Factors

- Healthier older adults
- Survivor Bias
- Self-Selection



Compounding the Problem



Take-Home Message



Review

- Why we care
- Characteristics of older workers
- Compensatory measures
- Benefits of prevention and precautions
- Well designed workspaces benefit everyone

Questions



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