

Older Workers - Work and Injuries: Opportunity or Oblivion??

Glenn Pransky MD MOCcH Director, Liberty Mutual Center for Disability Research

Liberty Mutual Research Institute for Safety, Hopkinton, MA

Associate Professor, UMass Medical School and Harvard School of Public Health

Older workers...

- ✓ Who are they – now and in the future?
- ✓ What are the most important risk and performance issues?
- ✓ What influences injury occurrence and outcomes?
- ✓ What can we do to decrease their risks?

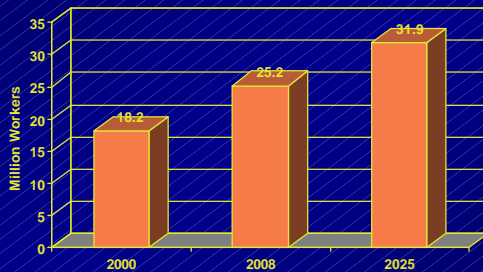
Who is an older worker?

- ✓ Scientists: >55 (or older than the scientist)
- ✓ Aging effects manual laborers > 40 y.o.
- ✓ Age Discrimination in Employment Act: any worker over age 40



Hell on Wheels, With a Few Creaky Parts

Persons > 55 in US Workforce



On average, 30% over age 55 are working

Why is the population of older workers increasing?



Why is the population of older workers increasing?

- Baby boom 1946 - 1963
- - retirement age (68 by 2003 for SSA)
- - life expectancy: death - chronic disease
- ? health insurance availability
- ? savings
- Women: divorce ® poverty
- Boredom? Social contacts? Contribution?

Post-retirement Employment

- ✓ Increase - 32% to 49% over past 10 years
- ✓ Primarily younger, pensioned retirees
- ✓ New industry, job, physical demands
- ✓ Risks due to worker-job mismatch



Aging transportation workforce

- ✓ US employees: median age 39
- ✓ Taxi drivers: median age 44 (10% > 65)
- ✓ Bus drivers: median age 47 (8% > 65)
- ✓ Common part-time post retirement jobs



Jobs of the future

- ✓ Analysts, retail sales, truck driver, clerk, RN, computer, home health



Perceptions about older workers

- | | |
|-------------------|--------------------------|
| ✓ Positive | ✓ Negative |
| Loyal | Costly - wages, health |
| Mature | Work injury - risk, sev. |
| Motivated | Less productive |
| Skilled | Inflexible |
| Safe | Training ROI, effective |
| Attendance | Union-seniority |
| Experienced | Retirement option |

The Aging Process

- variation > mean effect; lifestyle a key predictor
- employed persons = survivor population (selection)
- Population > worker data



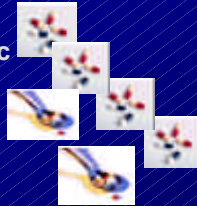
More likely age-related changes

- Visual accommodation
- Low-illumination sensitivity
- Glare rejection, persistence
- Hearing
- Hypertension
- Peak strength, aerobic capacity
- Shiftwork intolerance



Variable age-related changes

- Cognitive ability
- Selective (focused) attention
- Useful strength, aerobic work
- Chronic illness
- Obesity (30% > 55 y.o.)



Normal aging and work

- Average 5 - 15% functional change, less consistent actual job performance change
- Exception - rare job with high phys demand
- variability with age

Why don't these changes affect actual work capacity?

- Experience, training, maturity advantages
- Compensatory strategies
- Selective drop-out

Commercial Pilots – 1993 FAA Study

- 3306 commuter air pilots
- Age ? less crash error/risk
- Sudden events – rare, not predicted by medical screening, weak age-relatedness
- Age 60 mandatory retirement

Work injuries in older workers

- ✓ - reported risk (BLS) 4.5 vs 8.8 overall
- ✓ Falls: 17% vs 8% < age 55
- ✓ Fall @ fracture: 11% vs 5%
- ✓ Fatality risk:
 - < 55 40/M workers
 - 55-65 90/M workers
 - > 65 150/M workers

✓ Lost time

- < 55 6 days median
- 55-65 10 days median

✓ Adverse economic consequences for early retirement

✓ Unlikely due to diffs in job types

✓ Problems:

- reporting, recognition, treatment, vocational rehabilitation

LM Center for Disability Research-Older Worker Study

- ✓ All workers age > 55 with WC claim in 2001 in NH (n=1540)
- ✓ Matched (same gender / injury type) younger workers



Baseline Results (2)

Compared with younger workers, older workers pre-injury had:

- ✓ similar health and work limitations
- ✓ slightly more comorbidities
- ✓ half as many prior work injury absences
- ✓ fewer prior injuries to same body part
- ✓ survivor population!

Baseline Results (3)

Older workers, after the injury

- ✓ fewer negative employer responses
- ✓ more severe injuries with more surgery
- ✓ more chronic medications for the injury
- ✓ more satisfied with medical care

Baseline Results (5) - Multivariate Models

- ✓ Job tenure, job satisfaction, treatment satisfaction account for more of variance in outcomes and problems in RTW
- ✓ Age + prior injury were not strong contributors to the model
- ✓ Importance of workplace attachment and response equal to or greater than severity or medical issues

Are there distinct subgroups?

- ✓ Detailed interviews of sample older workers suggest 3 distinct groups:
 1. **Healthy survivors** – still successfully working in first career for 40+ years
 2. **Post-retirement** (second career)
 3. **“Trapped”** (finances, health insurance, poor health) – want to retire but can't




Work injury leading to decision to retire earlier than expected

- ✓ 8% of all older respondents
- ✓ Significant consequence:
 - Higher poverty risk (SSA eligibility doubtful)
 - Prolonged WC claim
 - Loss of experienced workers

Those with changed retirement decision

- ✓ Worse baseline health (mental and physical)
- ✓ More severe and persistent injury
- ✓ More work problems pre- and post-injury

Risk Reduction Strategies

- ✓ Worker assessment 
- ✓ Workplace modification 
- ✓ Wellness 

1. Worker assessment



- ✓ Work capacity simulation/evaluation – age based?
- ✓ Avoid isolated/maximal testing that is not job-related
- ✓ Encourage discussion about health impact on FTW (ADA)

Public safety jobs

- ✓ 1981 – US Supreme Court allowed police/fire exception to ADEA
- ✓ 2001 – Penn State study: use performance, not age
 - many pre-retirement workers grossly unfit and hazardous
 - fit “post-retirement” workers very safe



2. Tailoring jobs to aging workforce (Hasegawa and Matsumoto, 1995)

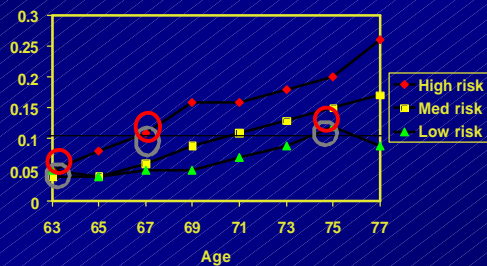


- ✓ Decrease manual handling of heavy loads (moderate load repetition ok)
- ✓ Comfortable working posture
- ✓ Avoid high-level continuous perceptual/concentration demands

Workplace modification

- ✓ Visual – size, illumination, glare
- ✓ High maximal weights
- ✓ Training – context, repetition, logical progression
- ✓ Workspace design, vehicle modification

Aging, health risks and cumulative disability index (Vita et al, 1998)



3. Wellness


- ✓ Exercise programs for older workers (Finn - Age)
- ✓ Diet
- ✓ Health risk behaviors



4. Post-injury

- ✓ **Care** - early attribution, needs, expectations, adequate recuperation, comorbidity
- ✓ Capture full value of **workplace attachment**
 - Communication, alternate duty
- ✓ **Accommodation**: CV > MS > lung, psych
- ✓ **Flexibility**: med care, part-time, job choices

- ✓ **Advocacy** - peer groups
- ✓ **Retraining** - slower, reinforcement, hands-on; more important than younger
- ✓ **Rehabilitation** - accessible, targeted, more proactive
- ✓ **Policy** - Total DCM, health ins. cost burden; women



**Resource Center on Aging
University of California
Berkeley**

"It doesn't cure anything, but the side effects are out of this world."

UC Berkeley San Francisco Joint Medical Program Develops Geriatric Curriculum

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Who We Are

- The Resource Center on Aging
- The Geriatric Program, University of California, Berkeley

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- UCL 2002 Lecture on Aging
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Summary

- Age-related risks are variable and individualized
- High-risk subgroup can be identified early on
- Complex circumstances in injured older workers may require more sophisticated responses
- Apportionment is challenging!

Questions?

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