Work and Health: Future Challenges and Opportunities

Congressional Office of Compliance
Future of Safety and Health in an Aging Workforce
October 26, 2010

L. Casey Chosewood, MD
National Institute for Occupational Safety and Health
Centers for Disease Control and Prevention
US Department of Health and Human Services
### Some Unknowns: 21\textsuperscript{st} Century Workforce

| **Immigration** | Will nations change policies to encourage or discourage immigration?  
|                | Will wage competition increase? |
| **Outsourcing** | Does it portend a global workforce?  
|                | How do employers taken on global health issues? |
| **Re-careering** | Will more workers remain in the workforce and take on an “encore” career?  
|                | Who will manage associated chronic health conditions?  
|                | Will hurdles to continued work at older ages be removed? |
Selected Workforce Challenges

- Limited availability of workers
- Chronologically gifted
- Health-challenged younger workers
- Innovative Employment Arrangements
- Global Competition for Workers
- Encore Careers vs. Retirement
- Age-Related Challenges for Occupational Health and Safety
- Social Benefits & Age Discrimination
- Responsibility for the Health of Workers
Growing Shortage of U.S. Workers

Expected Labor Force and Labor Force Demand

Source: Employment Policy Foundation analysis and projections of Census/BLS and BEA data.
Screeching to a Halt: Growth in the Working-Age Population

Source: Deloitte Research/UN Population Division (http://esa.un.org/unpp/)

It’s 2008: Do You Know Where Your Talent Is? Why Acquisition and Retention Strategies Don’t Work, p.6
Dramatically Different Patterns of Growth by Age

Percent Growth in U.S. Population by Age: 2000-2010

Age of Workers

- 16-24: 5%
- 25-34: 5%
- 35-44: -9%
- 45-54: 18%
- 55-64: 48%
- 65+: 15%

Rapid growth in the over-55 workforce

Declining number of mid-career workers

Source: U.S. Census Bureau. 2000
... Continuing Into the Future

Percent Growth in U.S. Workforce by Age: 2000-2020

Source: U.S. Census Bureau
In 2000, A Fairly “Young” World . . .

Percent of Population Age 60+ in 2000

Source: U.S. Census Bureau, 2000
Rapidly Aging by 2025

Percent of Population Age 60+ in 2025

Source: U.S. Census Bureau, 2000
Why?
“Sudden” Boom in Life Expectancy

Life Expectancy at Birth: 1000 - 2000

Source: U.S. Census Bureau, 2000
And a Dramatic Drop in Birth Rates

Total Fertility Rate: 1960 and 2000

Source: Age Wave
Why? The Baby Boom Pattern

The Boom Years: 1946-1964

Source: U.S. Census Bureau International Data Base
What is health?

Am I healthy?

Do I care if others in my life are healthy?

What influences my health?

Where do I go for help with my health?

How can I change my health?

I’ve Lost my health, now what?
Health challenges of the younger, older and those sandwiched between
Diabesity and the *Future* Workforce

- 39 States with 40% of young adults considered to be overweight or obese in just the last decade!
  - In Kentucky, Alabama and Mississippi, >50% young adults are overweight

- Medical Consequences:
  - High Blood Pressure
  - High Fats in the Blood
  - Type 2 Diabetes (formerly called adult-onset)
  - Hepatic steatosis epidemic (fat deposits in the liver)
  - Sleep apnea (too much fat around the upper airway)

- Psychological stress

- Musculoskeletal disorders
  - what the old and the young worker share
Childhood Obesity by Country

Prevalence of overweight and obesity in schoolchildren aged 10-16 years, as defined by body mass index, 2001-2

Source: The International Association for the Study of Obesity

www.yexen.co.uk
US Childhood Obesity: 1960 - 2002

The chart shows the percentage of childhood obesity in the U.S. from 1960 to 2002, divided by age groups (6-11 and 12-19) and time periods. The data indicates an increase in obesity rates over the years.
Growth in Childhood Obesity, 1971 to Present

Source: CDC, National Center for Health Statistics, National Health and Nutrition Examination Surveys.
Note: Obesity is defined as BMI ≥ gender- and weight-specific 95th percentile from the 2000 CDC Growth Charts.
Bending the Curve: Childhood Obesity, 1972 to 2030

Source: CDC, National Center for Health Statistics, National Health and Nutrition Examination Surveys.

Note: Obesity is defined as BMI ≥ gender- and weight-specific 95th percentile from the 2000 CDC Growth Charts.
HEAVY LOSSES

Military experts declare obesity a national security threat as more and more young Americans become too fat to fight.
Too Fat to Fight

• Since 1995, proportion of recruits who failed their physical exams because they were overweight has risen by nearly 70%.

• Being overweight is now the leading medical reason for rejection.
Global Competition for Workers

- Migration of talent now plays an important role in shaping skilled workforces
- In 1990s, U.S. benefited from inward migration
  - Brain drain and remittances dominated policy
- In 2000s, more opportunities in *sending* countries
  - India, Brazil, China, Europe, Africa, South America
- Increased Mobility = internationalization of the labor market
- Global competition for talent is growing fast
  - Previously favored nations like U.S. cannot count on having no competition for acquiring skilled workers
  - MNEs now face global health issues involving their employees
    - Not just chronic “American-type” diseases
    - Acute infectious diseases that are more prevalent in foreign countries
    - Most employer-based health promotion programs are based on American model
Innovative Employment Arrangements

• “Flexible” or “Precarious”
• Contingent = work without promise of longevity
• Evidence that contingent workers are at higher risk for work-related injury, illness, and death:
  – Outsourcing of more hazardous jobs
  – Lack of experience and familiarity with operations in a dangerous workplace
  – Inadequate safety training and protective equipment
  – Limited access to preventive measures such as medical screening programs
  – Components of current health and safety regulations, and the workers’ compensation system, which were designed in an era of different employment arrangements, play a role.

• Does your employee wellness program cover all persons who work for you or your contractors or not?
Webster's Definition of Retirement

- to disappear
- to go away
- to withdraw

Source: Webster's New Twentieth Century Dictionary
More Years Spent in “Retirement” After First Career

Source: Age Wave, based on U.S. data, and The Concours Group
Aging Productively
Impact on Occupational Safety and Health

Changing workforce demographics mean that we all need to be thoughtful about how to age and work productively.

Is aging always compulsory?
Proportion of 50 yr-olds Still Employed at Subsequent Ages by Age Attained and Class (U.S.)

Aging Workforce and Social Security

• Social Security
  – In 1935, average life span at birth was 62
  – So, retirement benefits started at 65!
  – Rising costs impacts discretionary spending

• Changing pension systems
  – Greece
    • Raised retirement from 63 from 61
    • Banned early retirement altogether
  – Other nations facing pension pressures?
  – Effect on blue collar workers?
Aging: A Balance of Factors

- Possible Limitations
  - Cognitive Limitations
  - Chronic Conditions
  - Physical Capacity

- Compensating Factors
  - Attitude
  - Judgment
  - Flexibility
  - Interest in learning
Mental Capacity

• **Laboratory Tests**
  - Cognition speed
    • Information retrieval slower, unless material is familiar
  - Learning and recall slower, but equally successful in the end
  - Greater retention, higher learning achievement and more likely to complete a new field of study than younger workers
FIG. 2-4
STRESS ON THE JOB, BY AGE: 2002
(Percent saying that their job involves “a lot of stress”)

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Stress Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>55-59</td>
<td>65%</td>
</tr>
<tr>
<td>60-64</td>
<td>60%</td>
</tr>
<tr>
<td>65-69</td>
<td>55%</td>
</tr>
<tr>
<td>70-74</td>
<td>50%</td>
</tr>
<tr>
<td>75-79</td>
<td>45%</td>
</tr>
<tr>
<td>80+</td>
<td>40%</td>
</tr>
</tbody>
</table>
Mental Capacity: Relevance to On-the-Job Performance

- Lab tests do not translate well to actual work settings
- Factors other than psychometric cognitive abilities appear important to perform well at work
  - How well worker gets along with co-workers
  - Desire to perform well
- Individual measures are quite sensitive to occupational class
FIG. 1-4
SEVERE COGNITIVE LIMITATION, BY AGE AND GENDER: 1998

- Men
- Women
- Total
Age and Chronic Medical Conditions
FIG. 1-16
HEALTH CONDITIONS AMONG WORKERS AGE 55 AND OVER: 2002

- Arthritis
- Hypertension
- Heart Condition
- Diabetes
- Psychiatric/Emotional Problem
- Cancer
- Chronic Lung Disease
- Stroke

0% 5% 10% 15% 20% 25% 30% 35% 40% 45%
Exposure to Physical Stressors
EU - 1990-2000

Working Conditions in the EU – Euro. Fnd.
Exposure to Physical Hazards
By Type of Work Contract

- Permanent Employment
- Fixed-term
- Temporary

Working Conditions in the EU – Euro. Fnd.
Physical Capacity: Can Older Workers Keep Up?

• **Physiology Facts**
  - Maximal strength at 20-30 years
  - $O_2$ uptake reduced to 70% (max) by 65 years
  - Older adults work closer to capacity!

• **Decreased Performance, Yes But …**
  - For physically demanding work only
  - Work *uncommonly* demands maximal effort

• **Non-physical advantages that older workers bring to a job are rarely measured in studies!**
Physical Capacity: Match Task to Ability!

- Maintaining musculoskeletal health will be increasingly important
- Workers abilities matched to the job:
  - Results in less morbidity
  - Based on practical ergonomic principles
  - Accommodation practices not fully integrated yet into employment practices:
    - May change with ADA Amendments Act of 2008
    - Increases chances lawsuit will go to trial
Essential Points About Aging

• **Do aging workers need special accommodations?**
  – A well-designed workplace benefits everyone
  – Work stations and job tasks need to be matched to the capacity of each worker
  – There should be no conflict between ergonomic principles vs. reasonable accommodations

• **Are there any specific health and safety concerns related to aging workers?**
  – Older workers have fewer injuries, but when one occurs, that injury tends to be more severe and it takes worker longer to get better.
  – Injuries differ in older workers—there are more musculoskeletal injuries
  – No consistent relationship between aging and work performance!
Providing Opportunities for Health to Emerge at Work
What’s the Evidence-Base for Employee Health Promotion Practices?

• Evidence:
  – More than opinion or testimony

• “…Growing body of empirical evidence*
  – Large proportion of diseases are preventable (risks are modifiable)
  – Risk-dependent diseases are costly & reduce worker productivity within short time window
  – Targeting risk behaviors can decrease costs and increase productivity
  – Worksite health promotion and disease prevention programs save companies money and produce + ROI

* Goetzel & Reuters, Value in Health Care, IOM (2010)
Integration of Traditional Occupational Health with Health Promotion

WorkLife

www.cdc.gov/niosh/worklife

- WorkLife Centers of Excellence
- Essential Elements of Effective Workplace Programs for Health and Safety
- Resources Page: 99 Web-Links Worth Having
WorkLife

- Protect existing health and safety
- Provide respect to workers
- Build a healthy environment
- Develop understanding and partnership
- Seek to engage
- Recognize need for flexibility and autonomy
- Integrate safety and health at every opportunity
Examples of Integrated Programs

- **Respiratory protection programs** that comprehensively address tobacco abuse

- **Ergonomic consultations** that also discuss arthritis management strategies

- **Stress management efforts** that first seek to diminish workplace stressors, and only then work on building worker resiliency

- **Integrated training and prevention programs** (falls, motor vehicle safety, first aid, hearing conservation, stretching, flexibility, and lifting programs)
Selected References

- Johnson, Richard et al. Older Workers on the Move: Recareering in Later Life (2009), AARP Public Policy Institute
Healthy Work Makes Healthy Families
Celebrating National Work and Family Month
October, 2010
The Future of Safety and Health in An Aging Workforce

Library of Congress
October 26, 2010

Phyllis C. Cohn, MSW
Project Manager, Workforce Issues
Demographic Trends of the Workforce

- Graying of the US workforce: 76m Baby Boomers
- Lower birth rates
- Concerned about stability
- Reversal of retirement trends
- High talent among the unemployed
- Four generations working side-by-side

Workforce 2009
76 MILLION!
Boomers are Reinventing Retirement

- Less likely to associate retirement with the traditional retirement age of 65.

- Nearly 86% of workers who have not retired report that they plan to work into their retirement years or never retire.
AARP Best Employers for Workers Over 50

- Announced in 2001
- Recognize companies with exemplary policies and practices for 50+ workers
- Communicates best practices to employers facing similar challenges of an aging workforce
- Over 400 employers recognized
- 2009 application closed in February
- Next application period – 2011

http://www.aarp.org/bestemployers
Best Practices – Workplace redesign

- Lee Memorial Health
  - Transitional work coordinator

- Pinnaco
  - Ergonomics program reduced workman’s compensation costs by 33%

- Other Best Employers
  - Large screen monitors, amplifiers and headsets
  - Adjustment of height of workstations
  - Modifying parking lot curbing
  - Improving parking-lot
Other Best Practices

- Providing a “buddy” to accommodate an employee on crutches
- Offering flex hours for an injured worker
- Adapting equipment for injury
- Paying special attention to fall potential (floors and carpet)
- Lighting, contrast and consistency in stairs
Fitness is GOOD for Business

- Productivity losses cost U.S. employers $1,685 per employee per year, or $225.8 billion annually

- 28% reduction in sick leave absenteeism

- 26% reduction in health costs

- 30% reduction in workers’ compensation and disability management claim costs

- $5.93-to-$1 savings-to-costs

*Partnership for Prevention (www.prevent.org)*
Percentage of Employers Offering Wellness Programs

Companies of all sizes implement wellness programs with the larger ones showing a slightly higher percentage. On average, 62% of all companies offer a wellness program.
Wellness Program Savings

A three year study conducted at a health system in Minneapolis found that health risks decreased after the implementation of a comprehensive worksite wellness program. This led to increased savings due to reduced health care costs, absenteeism, and workers’ compensation claims each year of the program.

Source: Fairview Alive Program Evaluation (SlayWell, 2004)
Benefits of Worksite Wellness Programs

Companies receive many benefits after implementing a worksite wellness program in addition to reducing costs. They include increases in employee morale, improved employee health, reduction in workers’ compensation claims, reductions in absenteeism, and increases in productivity.

Source: National Business Group on Health, 2005
Stress in the Workplace

- Workplace Stress **costs** employers an estimated **$200 billion** per year
  - Higher absenteeism
  - Lower productivity
  - Staff turnover
  - Worker’s compensation claims

- 60% of lost workdays each year can be attributed to stress

- 75-95% of visits to health care providers are due to stress related conditions
STRESS around ... Caregiving!

- Predominantly female (67%)
- Getting older (50 yrs old in 2009, 48 yrs old in 2004)
- 46% are college graduates
- 64% are married or living with partner

The Cost to Business:
$34 Billion in Lost Productivity
FLEXIBILITY is Key!

Find family-friendly solutions for working people who need flexibility for child care and elder care.

- job sharing,
- part-time employment,
- staff working from home or telecommuting,
- flexible starting and stop times and flexible core business hours, and periodic paid and unpaid work interruptions for child care and elder care.
“Prepare to Care Guide”
(www.aarp.org/foundation/preparetocare)

- Helps employees plan for future, better balance work and family responsibilities

- Prepared employees less likely to be absent from jobs for family emergencies
STRESS around ...the Changing Landscape of Work

For the first time in modern history, workplace demographics now span four generations.

This presents both challenges and opportunities!
Generations!

- World War II/Traditionalists: Before 1945
- Boomers: 1946 – 1964
- Gen X: 1965 – 1980
- Gen Y: 1980 on
The Business Case for Addressing Intergenerational Dynamics

- Builds on the unique values and strengths of all generations – promotes teamwork!

- Bottom Line Impact:
  - Recruitment
  - Employee Engagement
  - Retention
  - Productivity
Root Causes of Conflict

- Work ethic
- Technology
- Perspective
- View of Authority
- Relationships
- Outlook
- Leadership
WWII Generation/Traditionalists
WWII Generation/Traditionalists

- Words that Motivate
  - “Your experience is respected here.”

- Rewards that Motivate
  - Tangible symbols of loyalty,
  - commitment and service

- Management Actions that Motivate
  - Connect their actions to overall good of organization

- Communication Style
  - Linear, logical, respectful

- Turn Offs
  - Profanity, slang, poor grammar, disrespect
Myths about older workers

- Can older workers adapt?
- Can they handle new technologies?
- Are their job skills up to date?
- Can they get along with younger bosses?
Positive Perceptions of Older Workers

- Loyalty and dedication to the company
- Come to work on time; low absenteeism
- Commitment to doing quality work
- Someone you can count on in a crisis
- Solid performance record
- Solid experience in job/industry
- Basic skills in reading, writing, arithmetic
- Getting along with co-workers
Baby Boomers
Baby Boomers

> Words that Motivate
> “We need you. You can make a difference.”

> Rewards that Motivate
> Personal appreciation, promotion, recognition, status symbols

> Management Actions that Motivate
> Managers get them involved and show them how to make a difference

> Communication Style
> Personable, Informative = Reward

> Turn Offs
> Brusqueness, one-upmanship
Generation X
Generation X

> Words that Motivate
  > “Do it your way.” and “There is life beyond work.”

> Rewards that Motivate
  > Free time, upgraded resources, opportunities for development, bottom-line results, certifications to add to resumes

> Management Actions that Motivate
  > Managers give choices and permit work autonomy

> Communication Style
  > Direct, straightforward, results-oriented

> Turn offs
  > Using time poorly, corporate-
> Words that Motivate
  - “We respect you here.” and “What are your goals?”

> Rewards that Motivate
  - Awards, certificates, tangible evidence of credibility

> Management Actions that Motivate
  - Managers connect actions to employees’ personal and career goals

> Communication Style
  - Positive, motivational, personal and goal-oriented
Multigenerational “To Do” List

- Appreciate and honor the perspectives of all employees
- Develop a system to effectively transfer skills and knowledge
- Turn multi-generational teams into intergenerational collaboration
- Maximize all employees’ capabilities and strengths
- Recognize what the generations (people!) have in common
- Evaluate how policies will affect each generation
- Examine how decisions will be perceived by each generation
Life Stages

Career Stage

Traditional:

School ↔ Explore / Launch ↔ Establish / Maintain ↔ Reach Pinnacle ↔ Disengage ↔ Retire

New:

School ↔ Explore ↔ School ↔ Establish ↔ Career Peak ↔ Re-Invent ↔ Re-Engage ↔ Re-Invent ↔ Career Peak ↔ Establish ↔ School ↔ Explore ↔ School
AARP Resources

AARP Website
http://www.aarp.org

Employer Resource Center
http://www.aarp.org/employerresourcecenter/

Workforce Assessment Tool
http://www.aarpworkforceassessment.org

AARP SmartBrief
Bi-weekly E-newsletter/Clipping Service
http://www.smartbrief.com/aarp
Resources

“Prepare to Care Guide”
www.aarp.org/foundation/preparetocare

“Healthy Behaviors”
www.aarp.org/healthpros


Phyllis Cohn, Project Manager, AARP
pcohn@aarp.org