

# 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<sup>st</sup> 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**

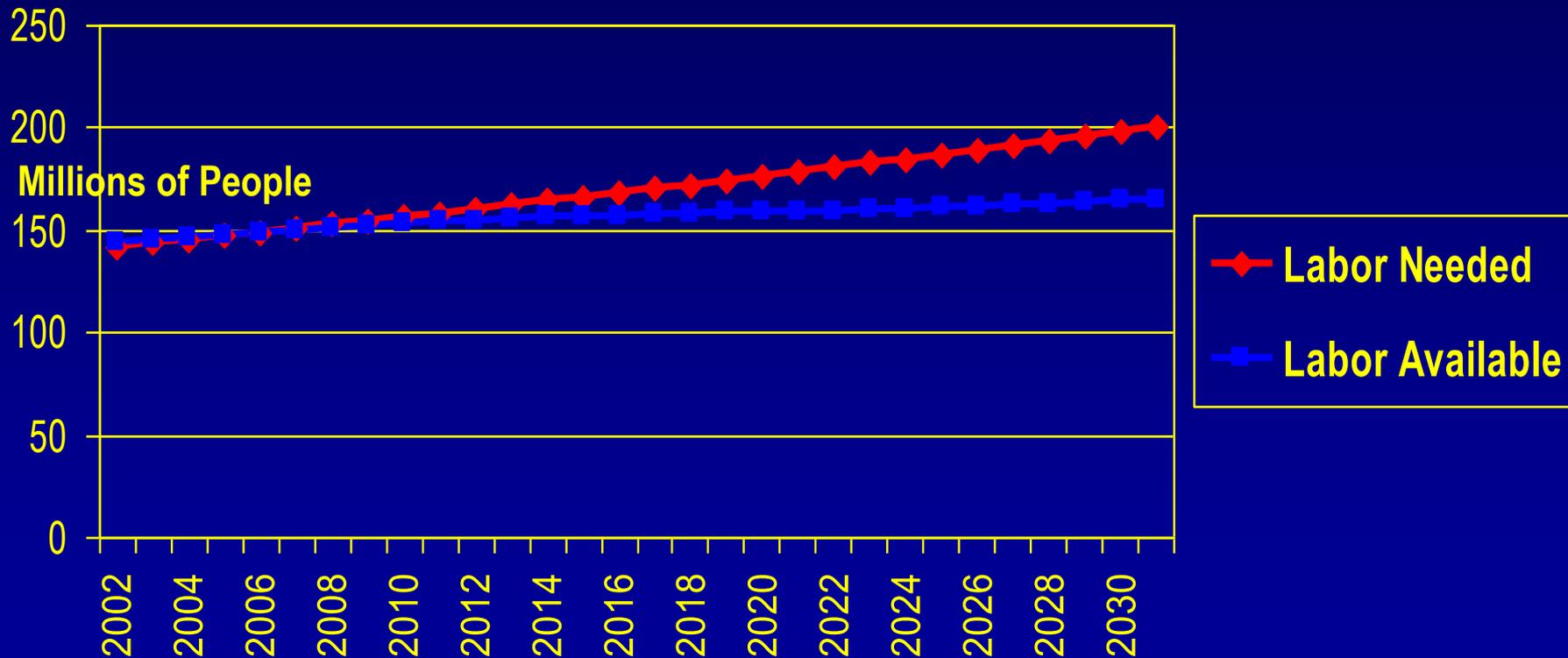
**Age-Related Challenges for Occupational Health and Safety**

**Social Benefits & Age Discrimination**

**Responsibility for the Health of Workers**

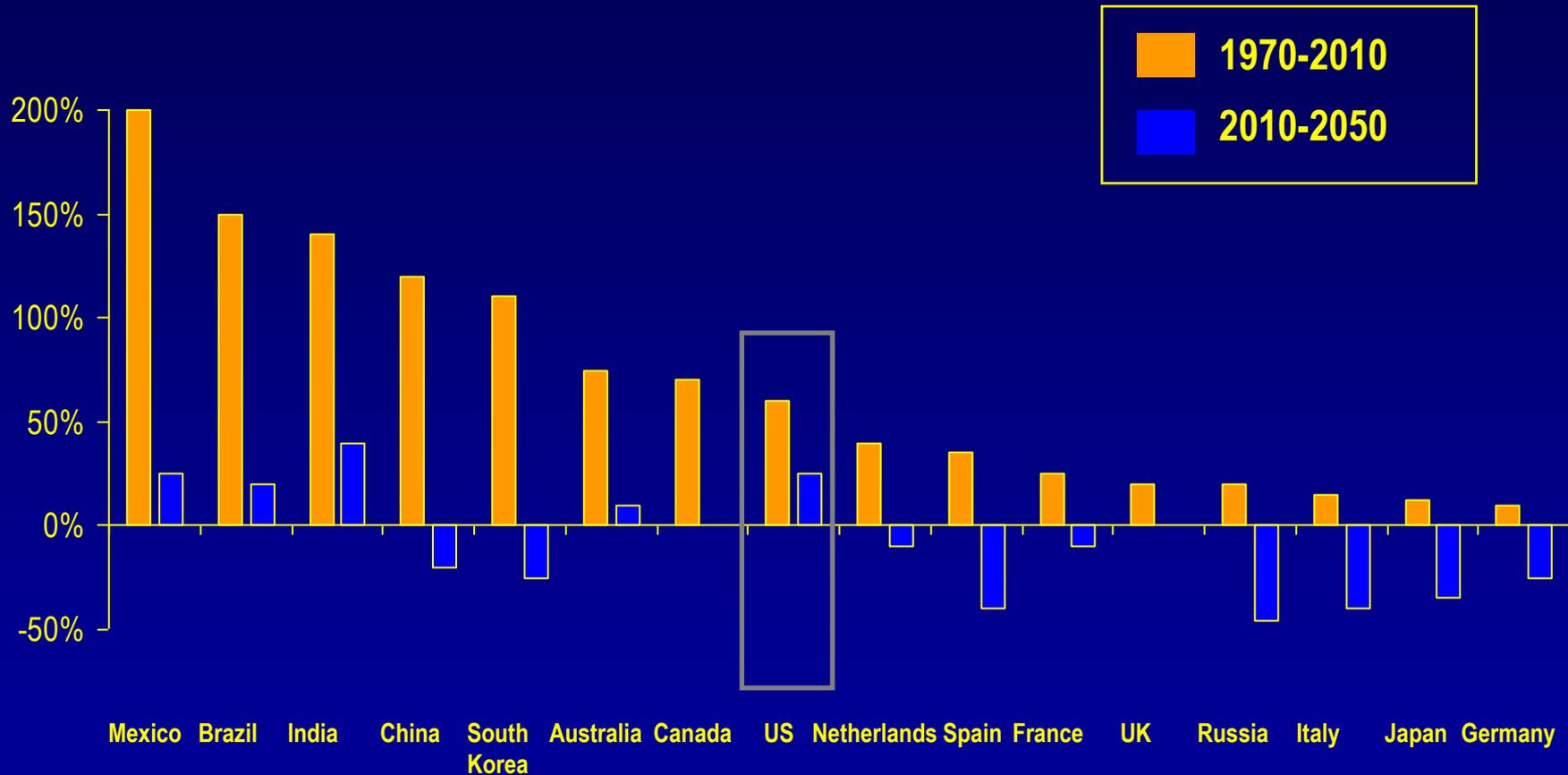
# Growing Shortage of U.S. Workers

Expected Labor Force and Labor Force Demand



Source: Employment Policy Foundation analysis and projections of Census/BLS and BEA data.

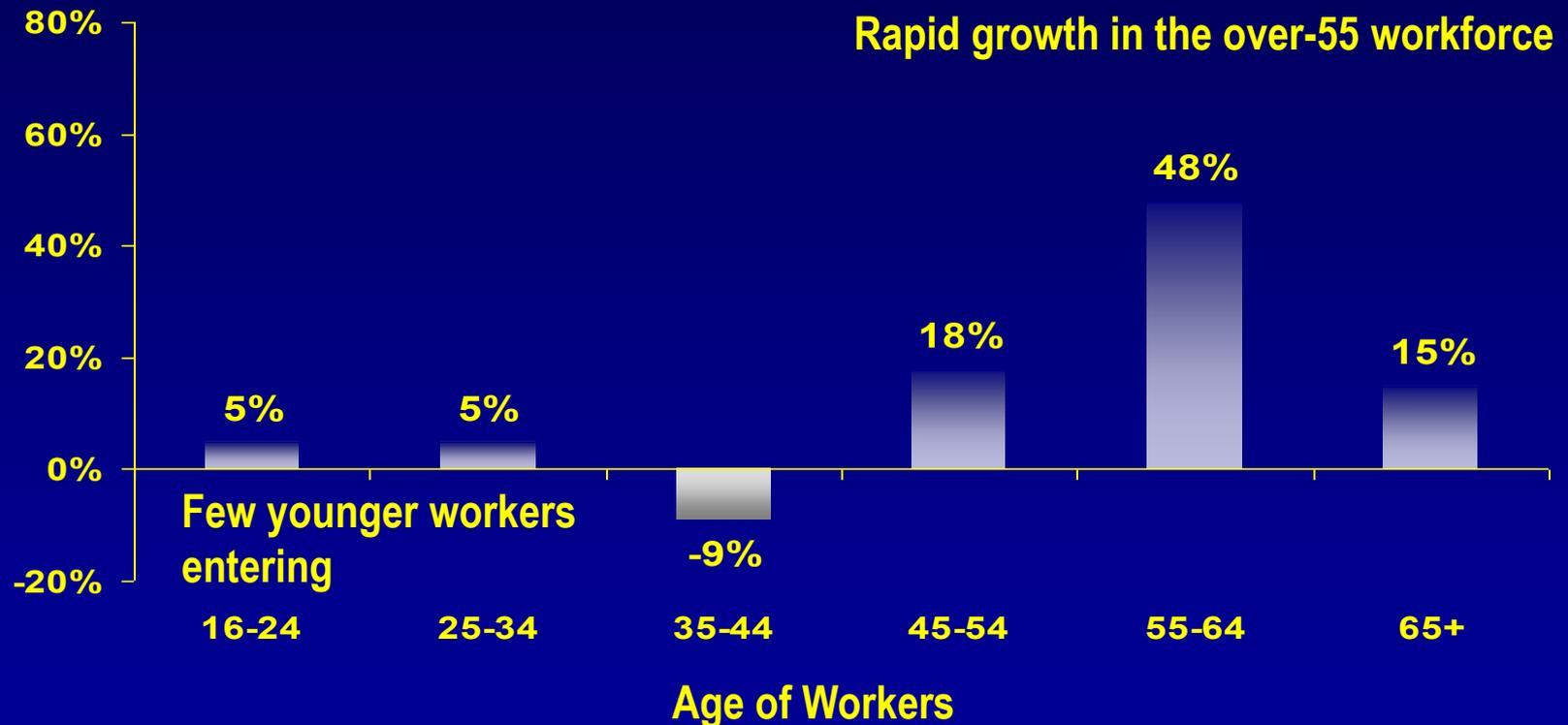
# Screeching to a Halt: Growth in the Working-Age Population



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

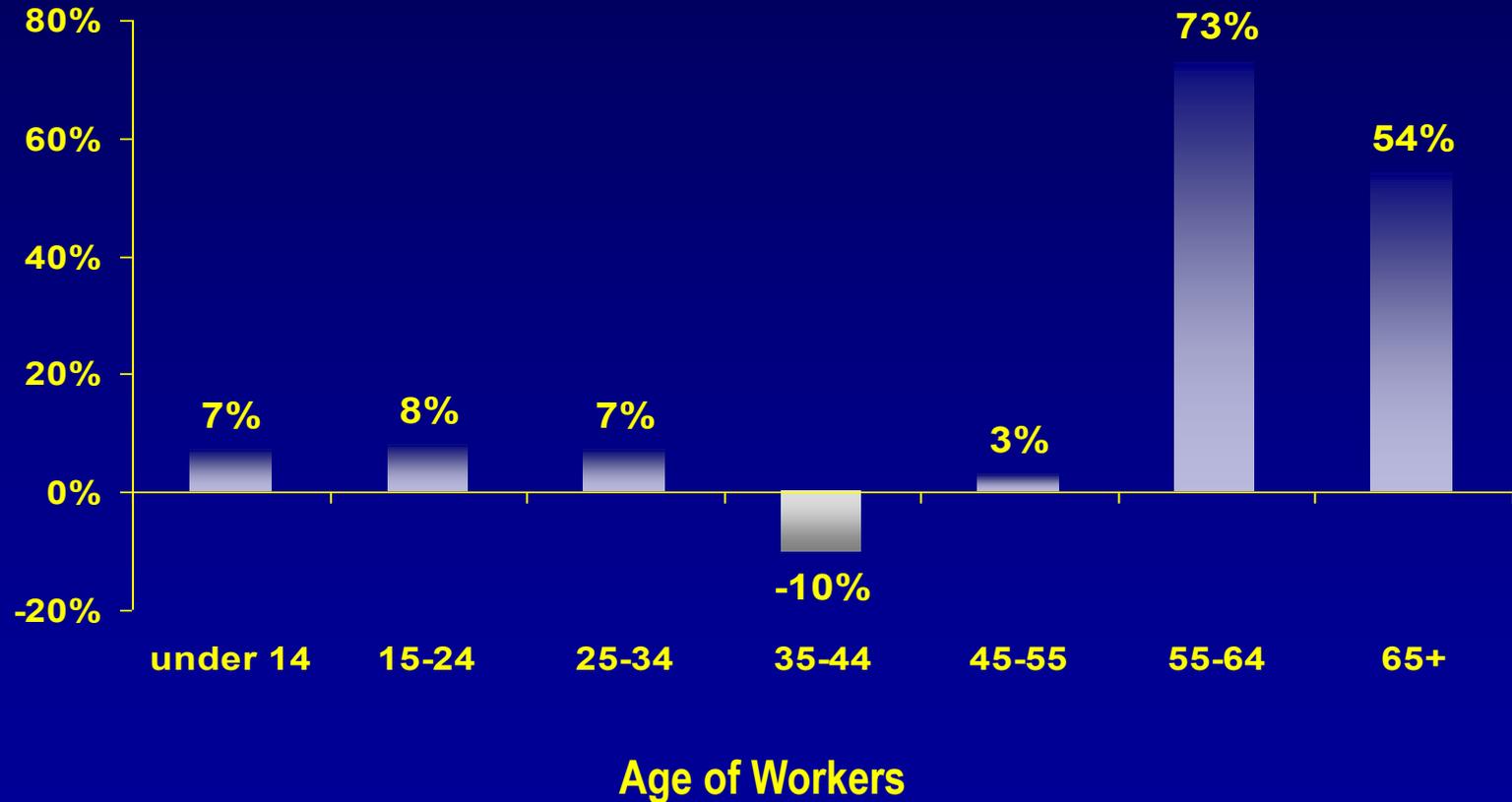
*Percent Growth in U.S. Population by Age: 2000-2010*



Declining number of mid-career workers

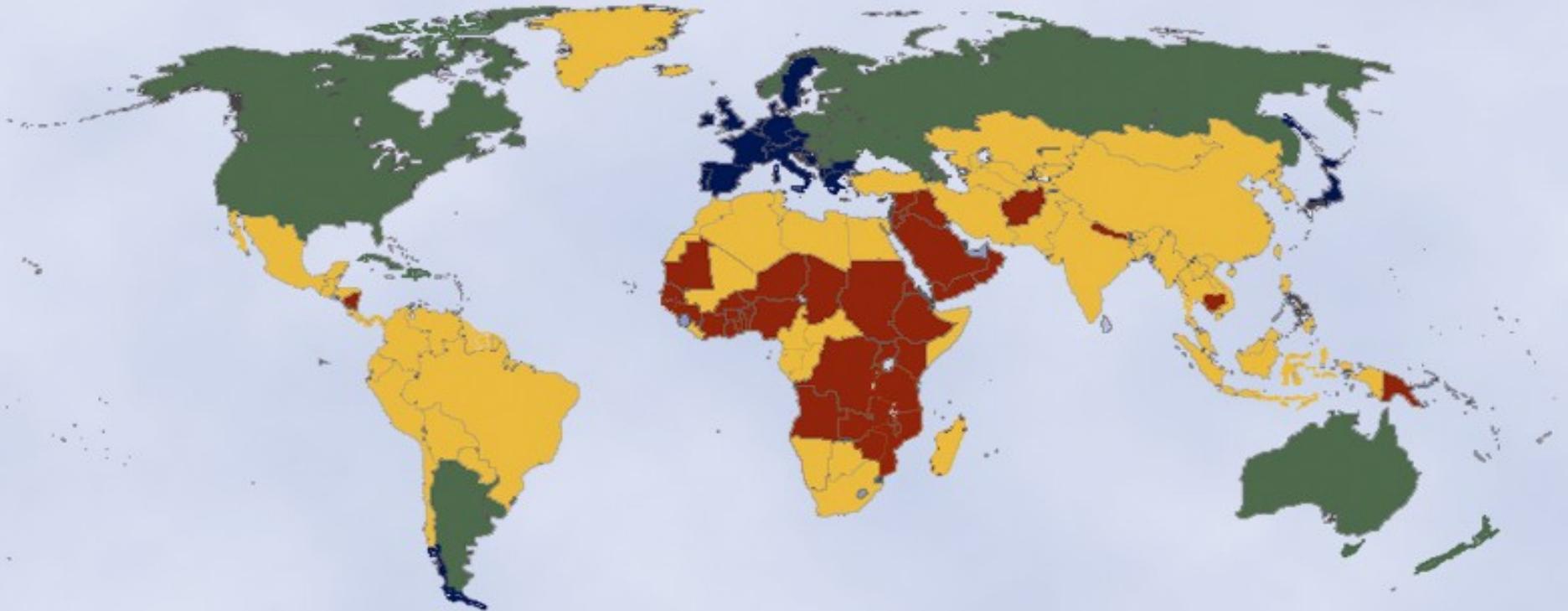
# ... Continuing Into the Future

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



Source: U.S. Census Bureau

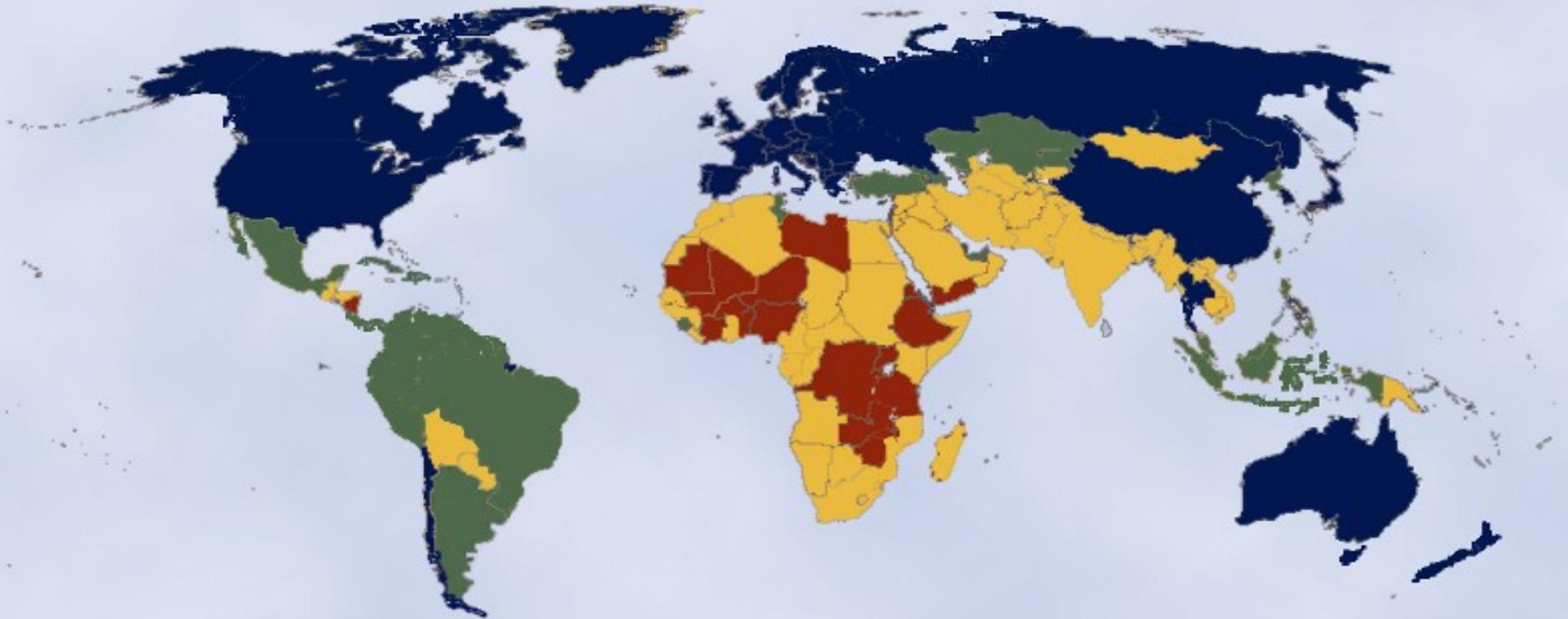
# In 2000, A Fairly “Young” World . . .



**Percent of Population Age 60+ in 2000**

Source: U.S. Census Bureau, 2000

# ... Rapidly Aging by 2025



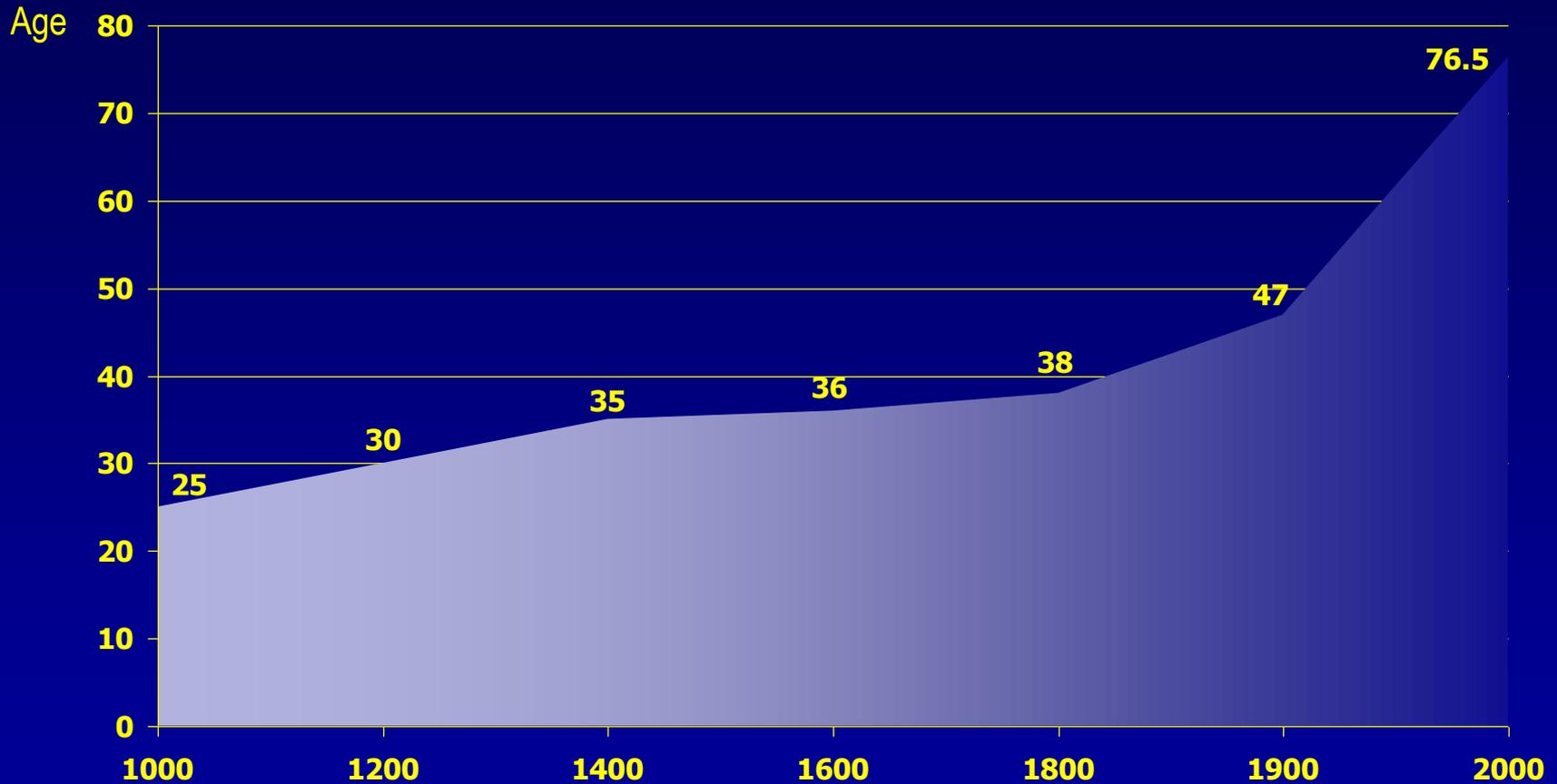
**Percent of Population Age 60+ in 2025**

Source: U.S. Census Bureau, 2000

# Why?

## “Sudden” Boom in Life Expectancy

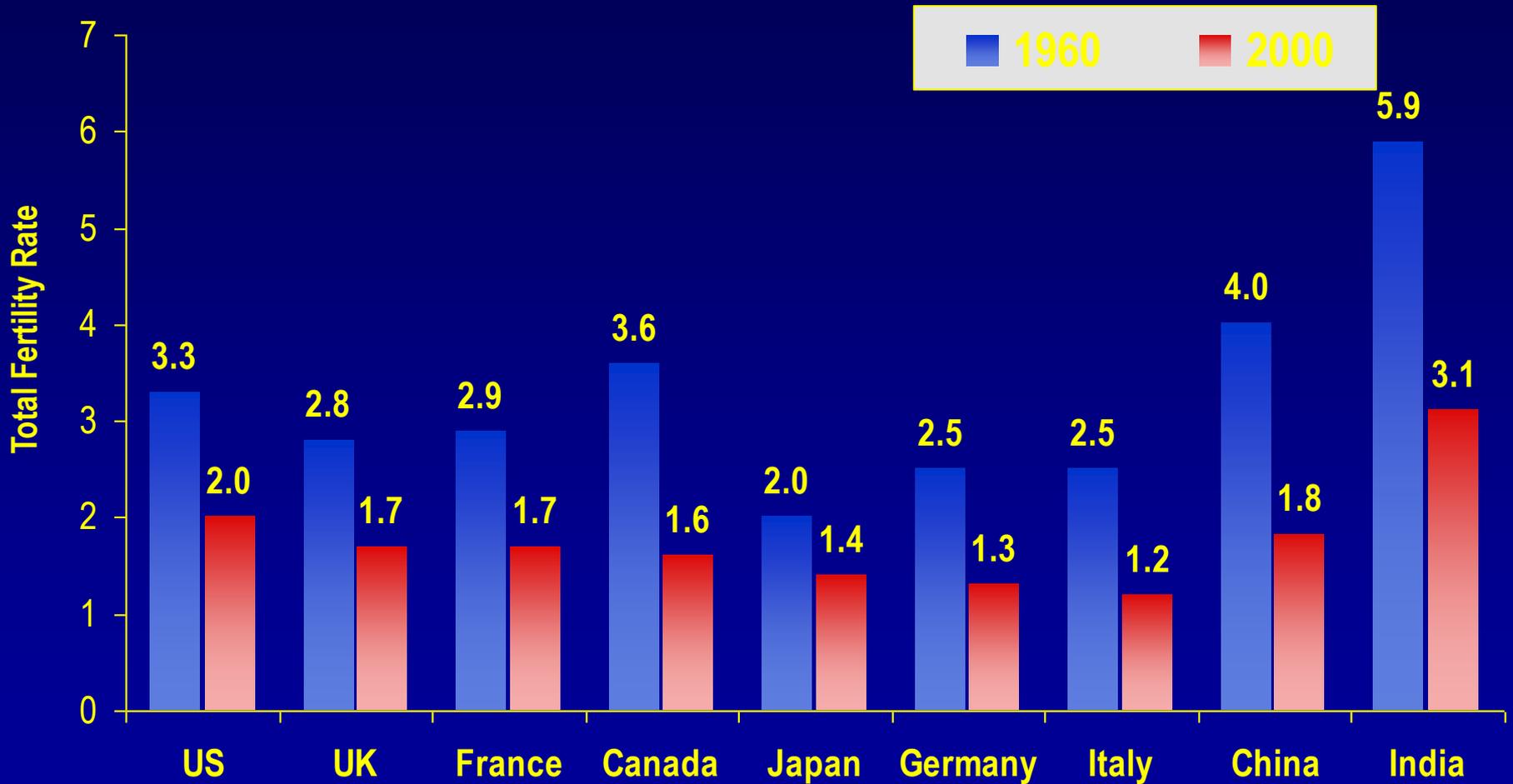
Life Expectancy at Birth: 1000 - 2000



Source: U.S. Census Bureau, 2000

# And a Dramatic Drop in Birth Rates

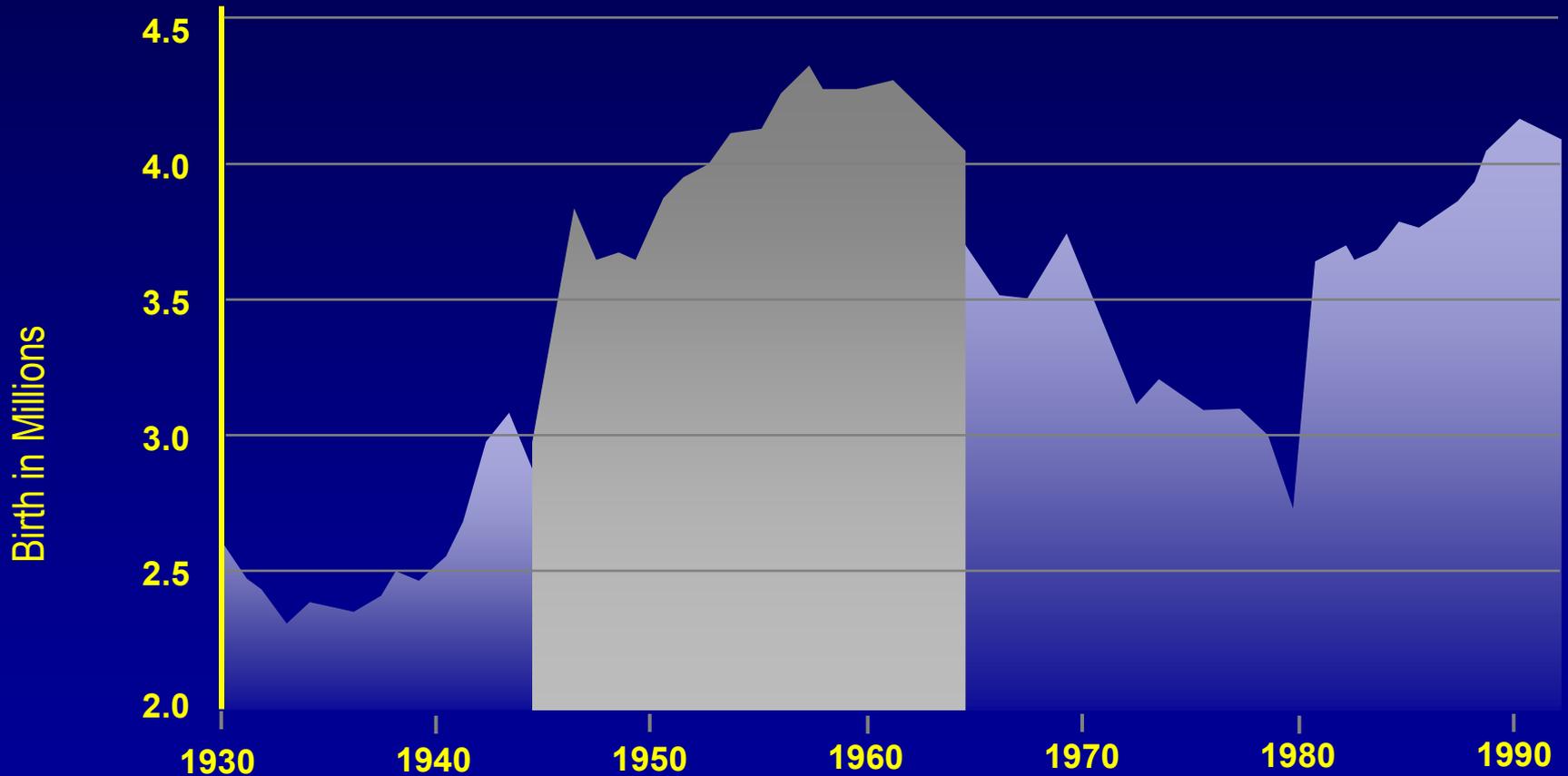
Total Fertility Rate: 1960 and 2000



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?*

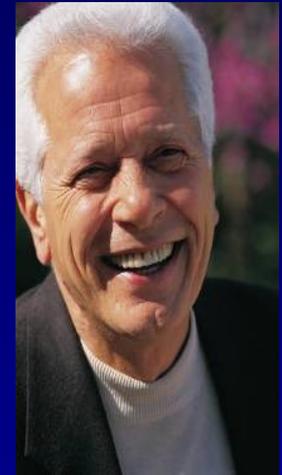
Where do I go for help with my health?

**How can I change my health?**

*I've Lost my health, now what?*



# Health challenges of the younger, older and those sandwiched between



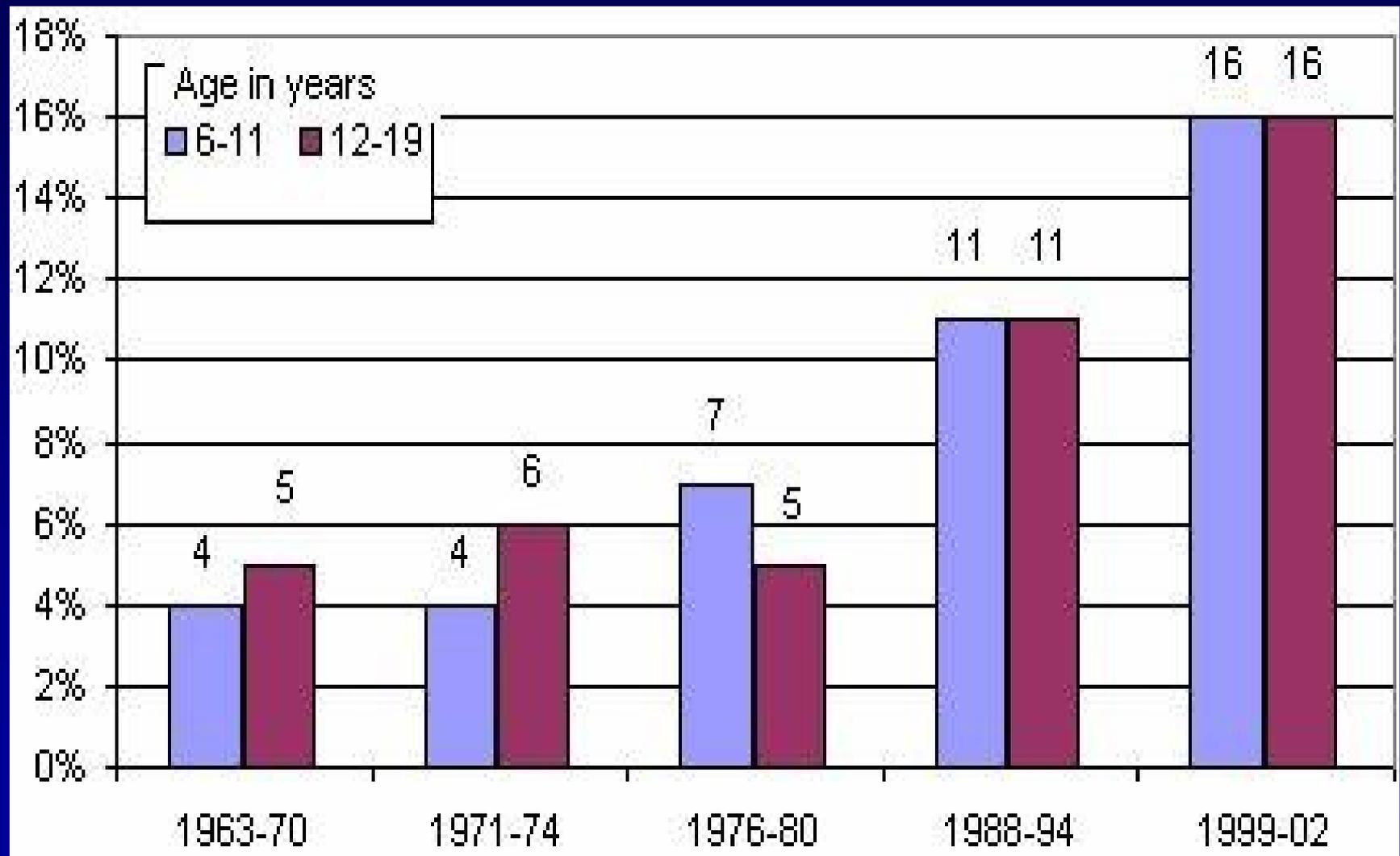
# Diabesity and the *Future Workforce*

- 39 States with 40% of young adults considered to be overweight or obese in just 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

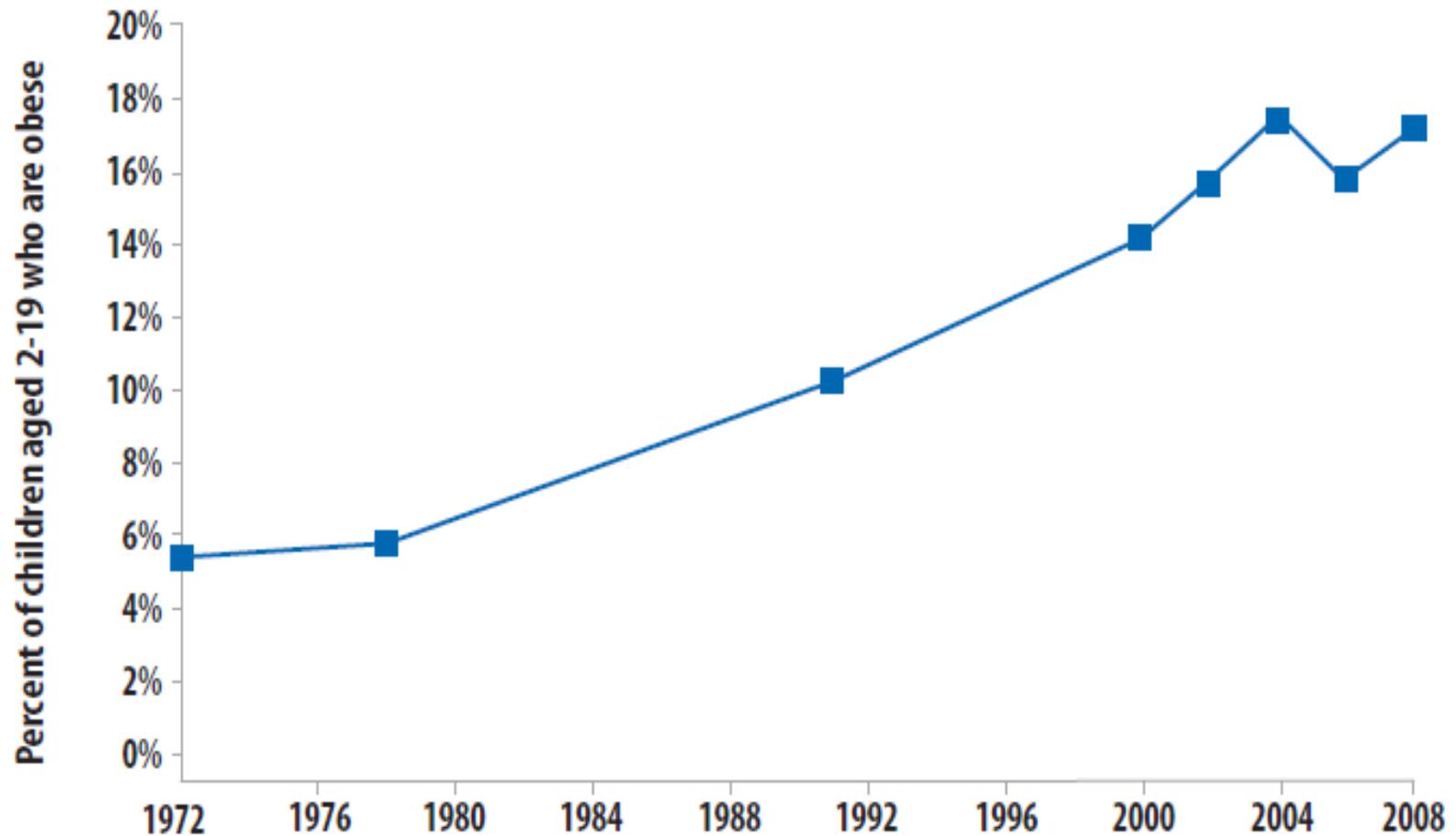
# Childhood Obesity by Country



# US Childhood Obesity: 1960 - 2002



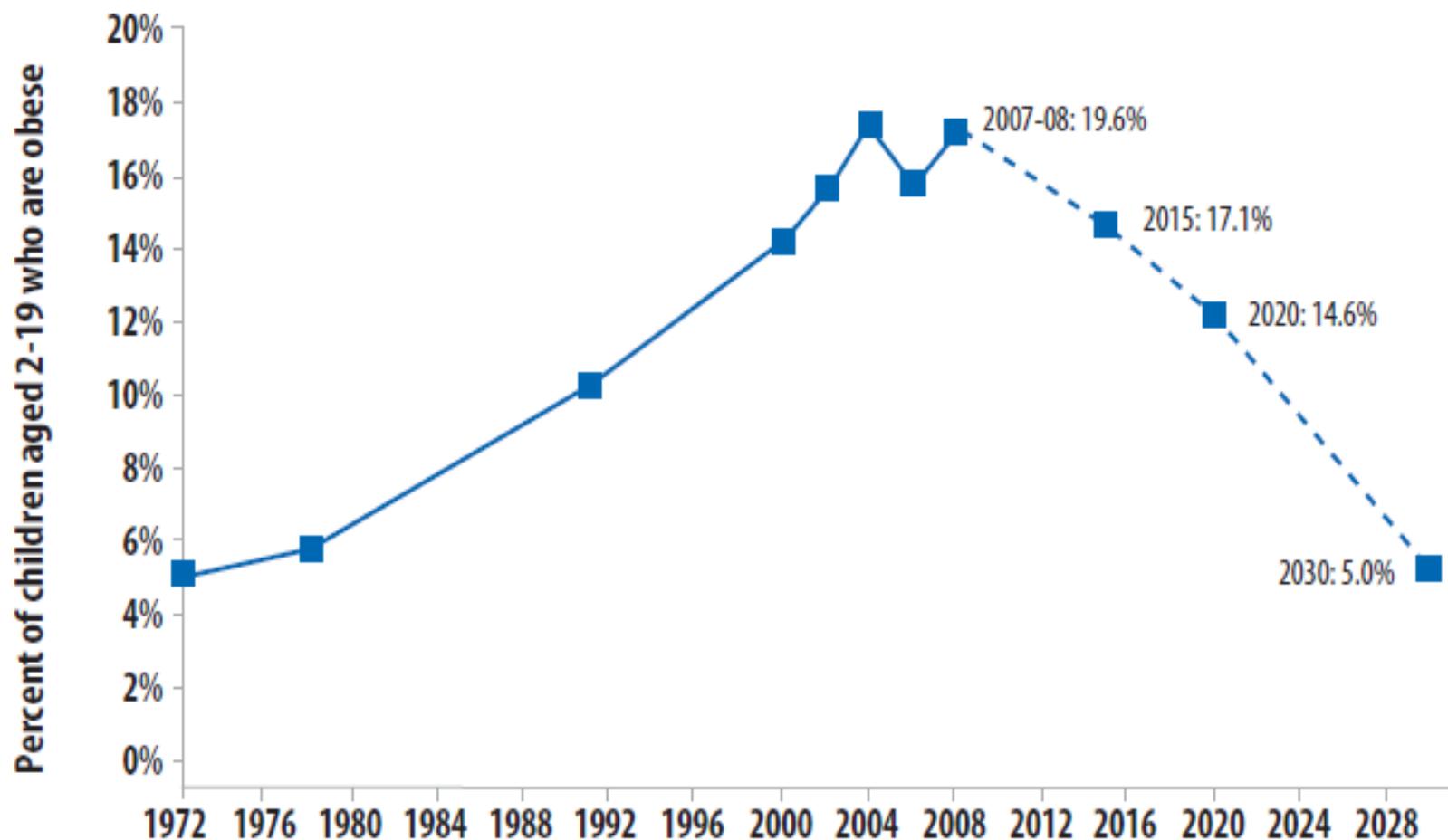
## Growth in Childhood Obesity, 1971 to Present



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

Note: Obesity is defined as BMI  $\geq$  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  $\geq$  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 <sup>11</sup>



# 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 contactors or not?

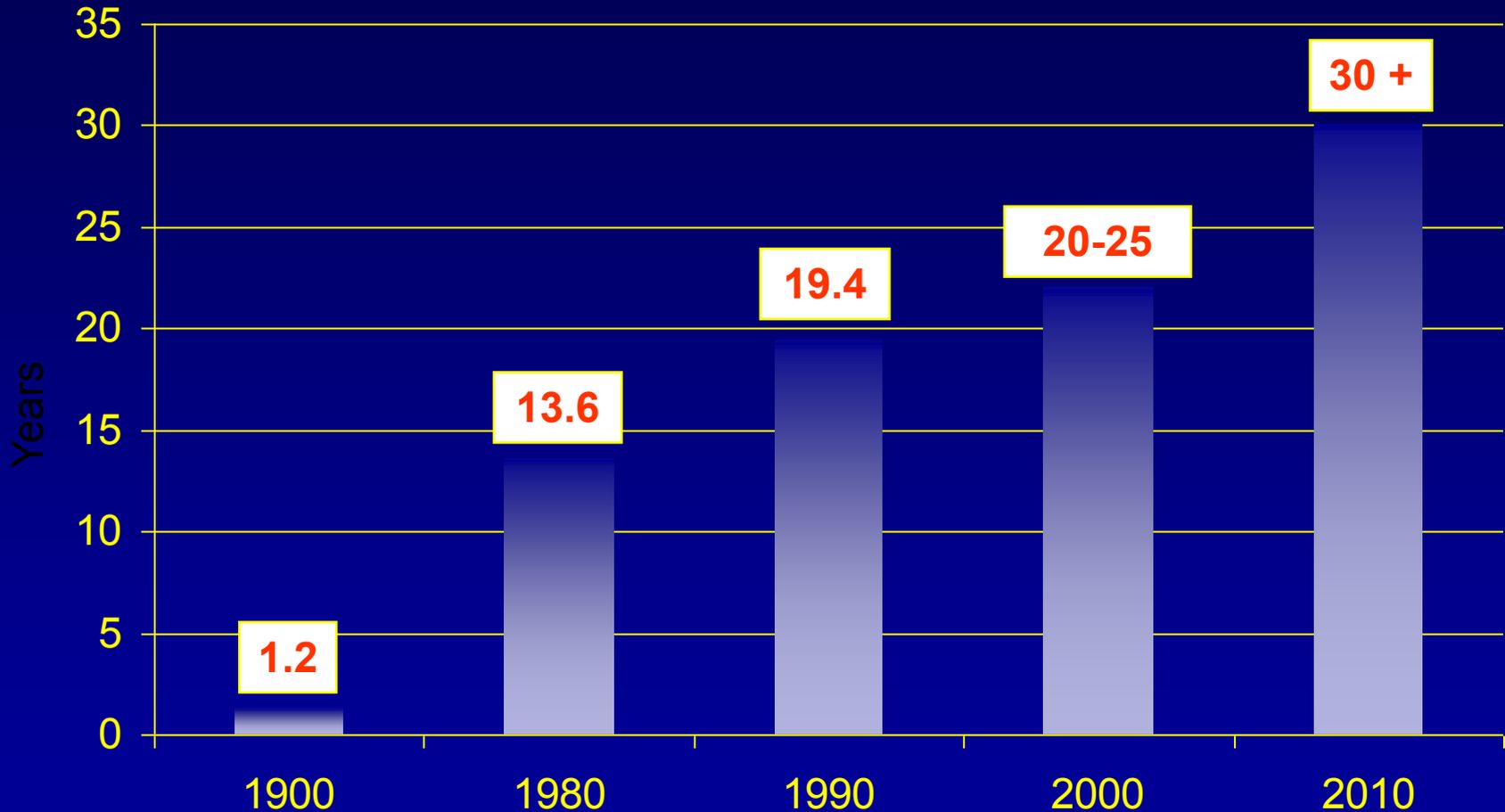
# Webster's Definition of Retirement

- *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



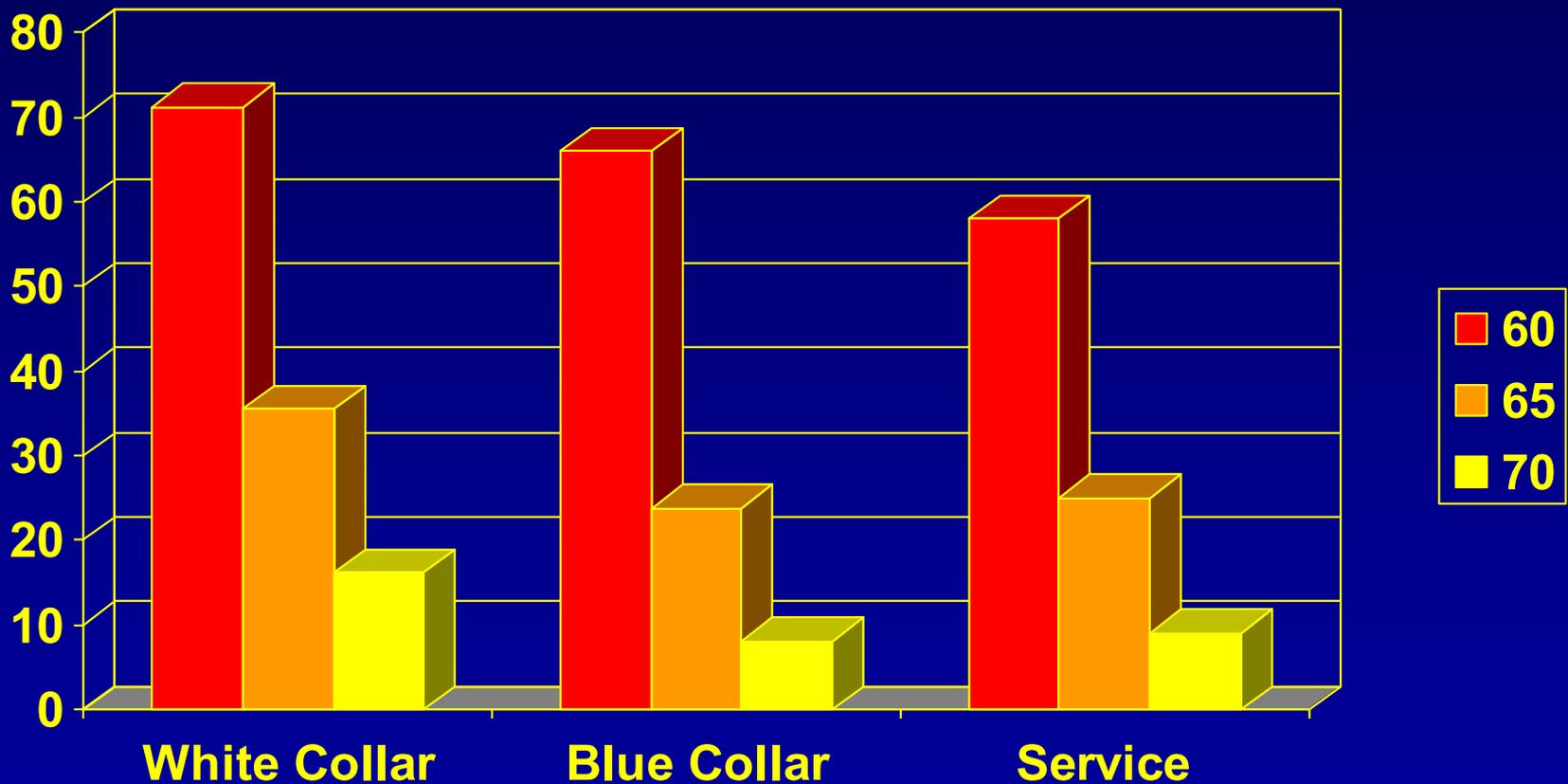
# Impact on Occupational Safety and Health



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

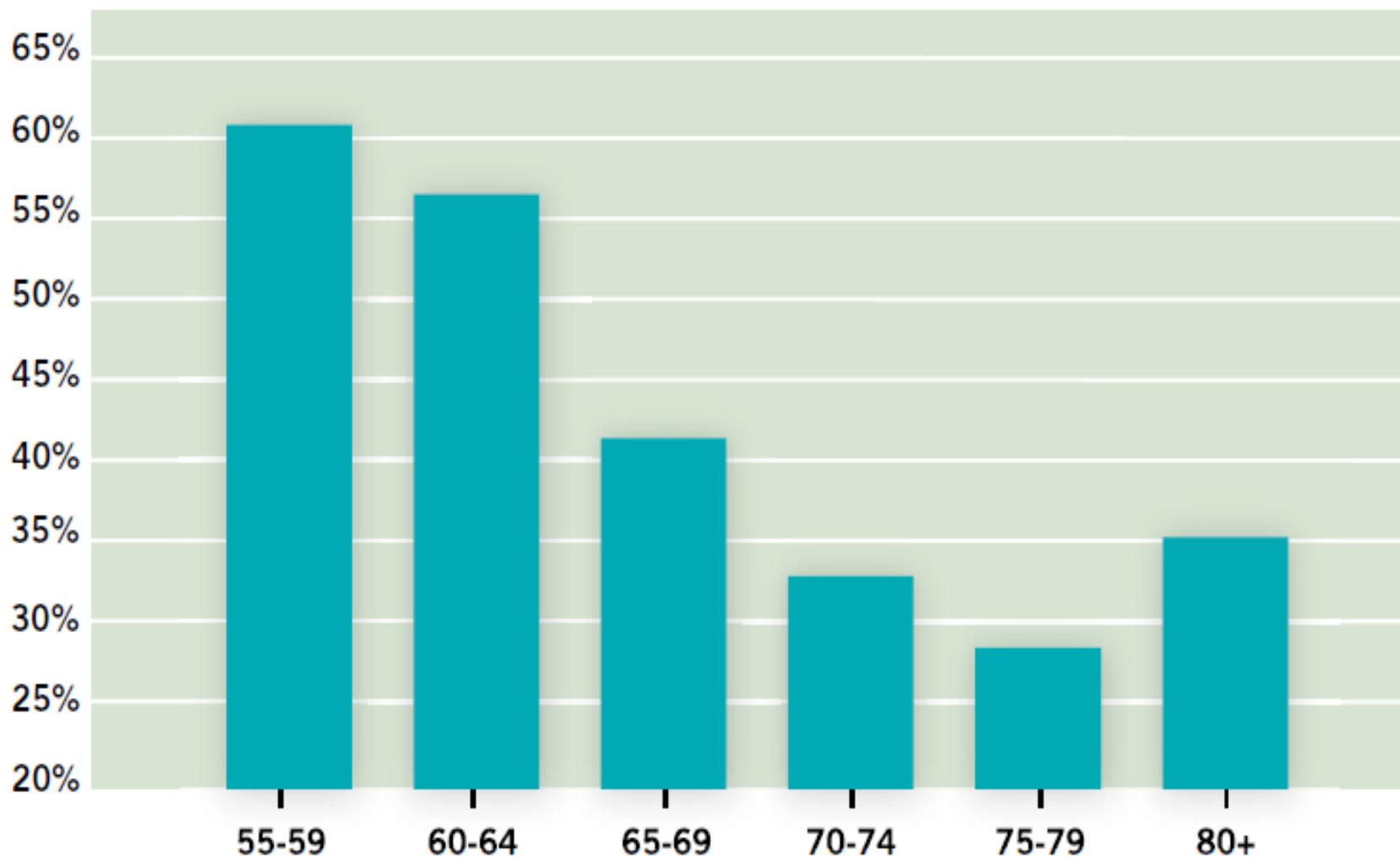
# Mental Capacity

- **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")*

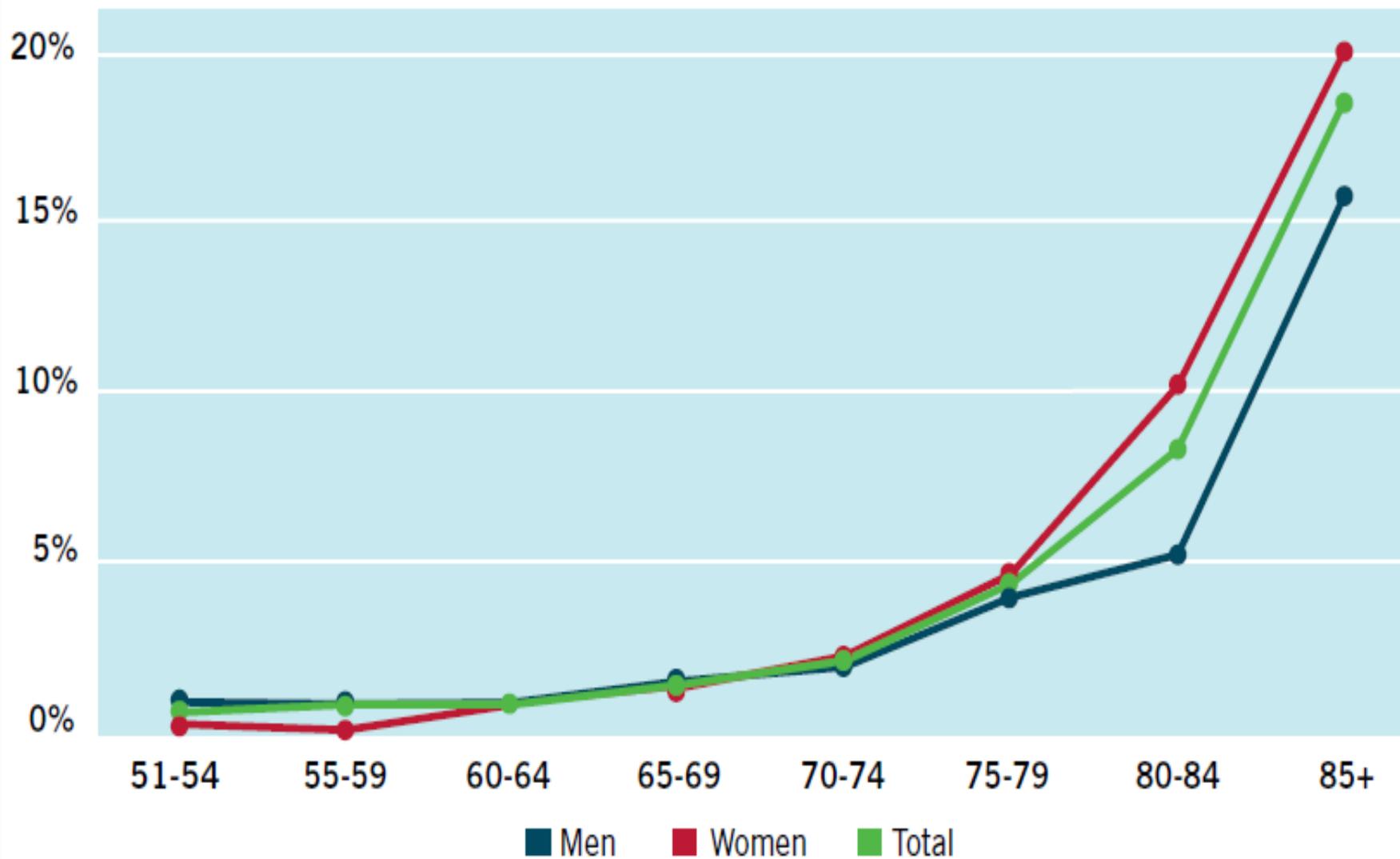


# Mental Capacity: Relevance to On-the-Job Performance

- 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





# Workers with >1 Chronic Condition by Age (U.S.)

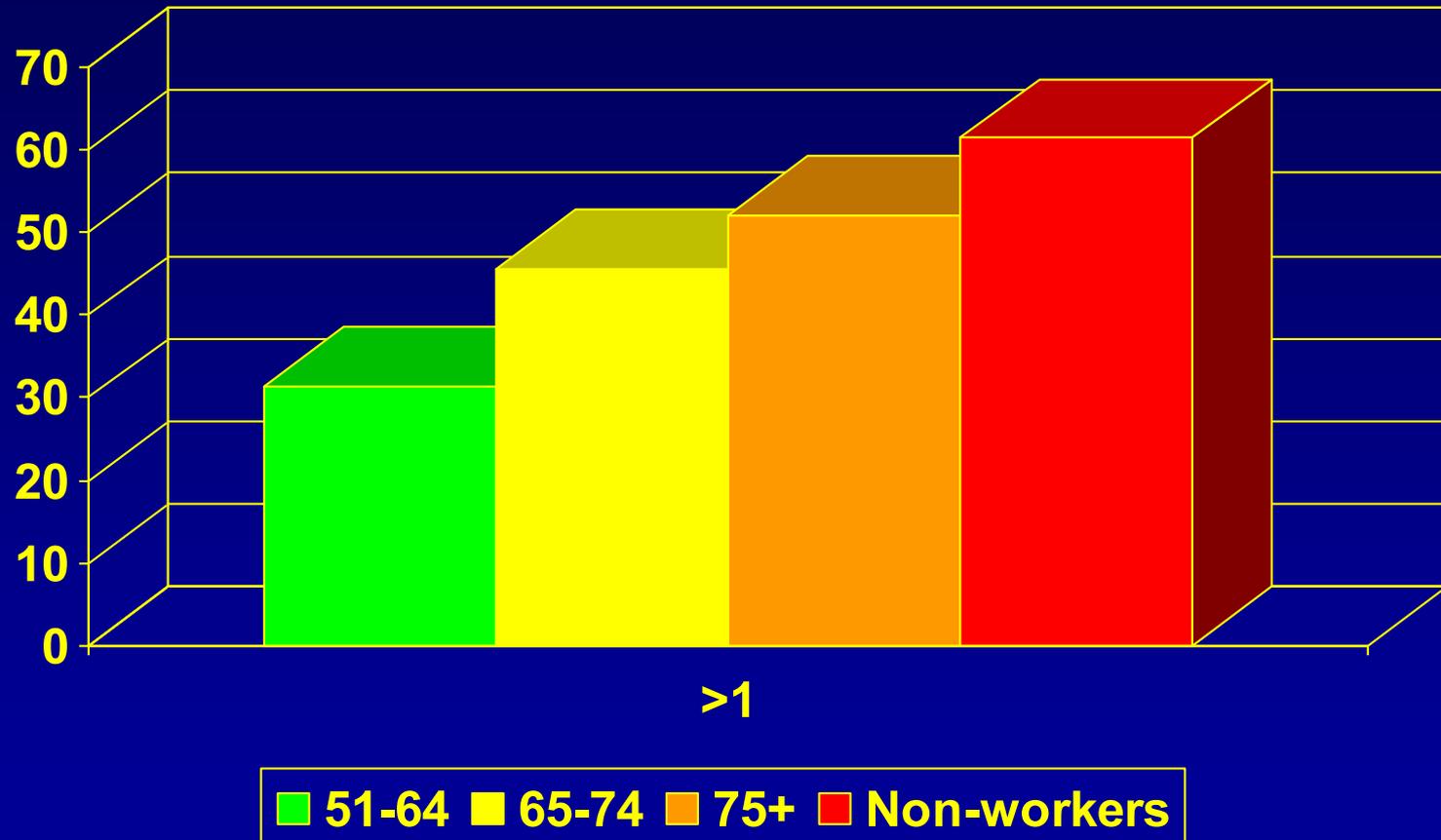
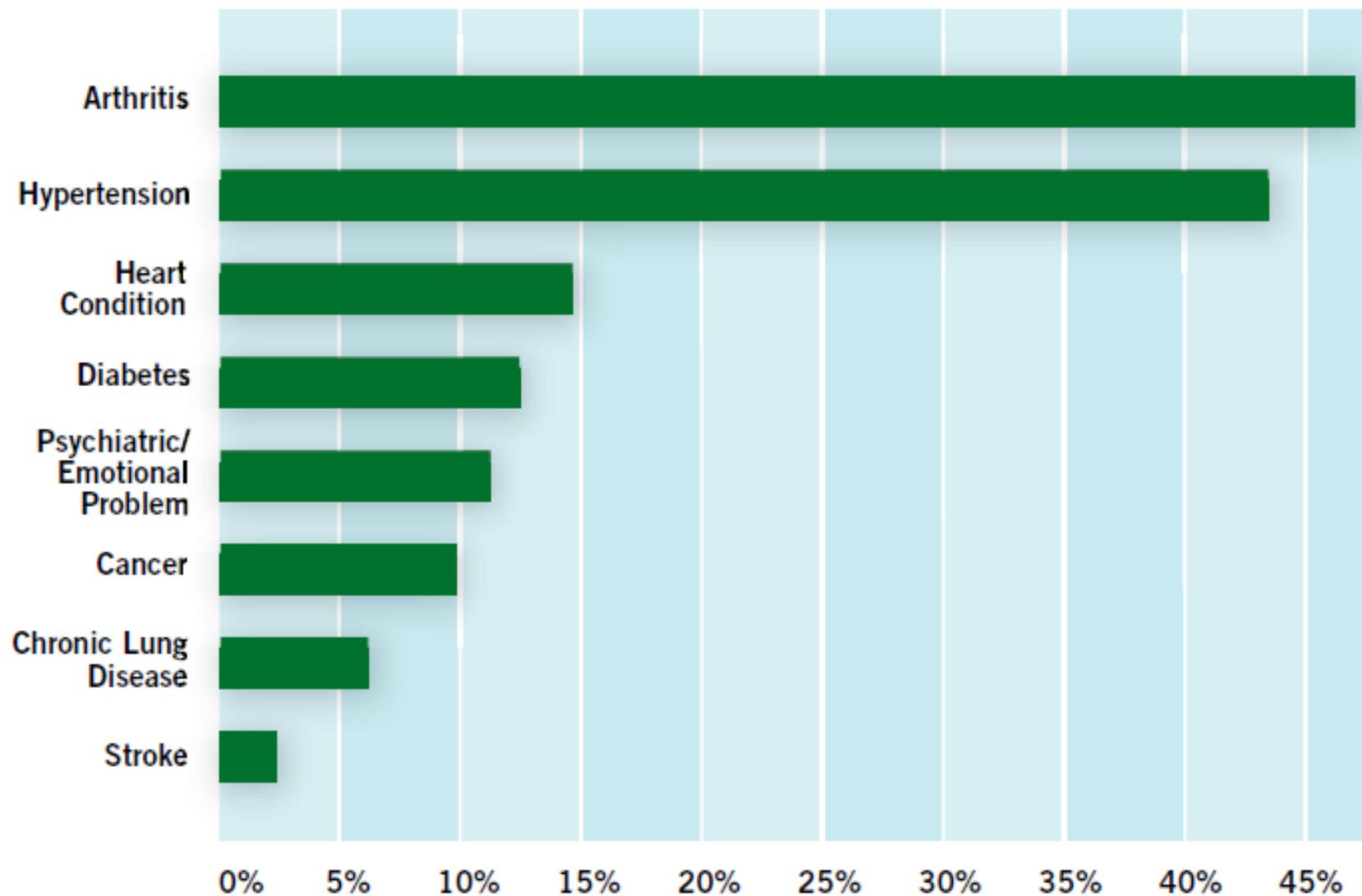


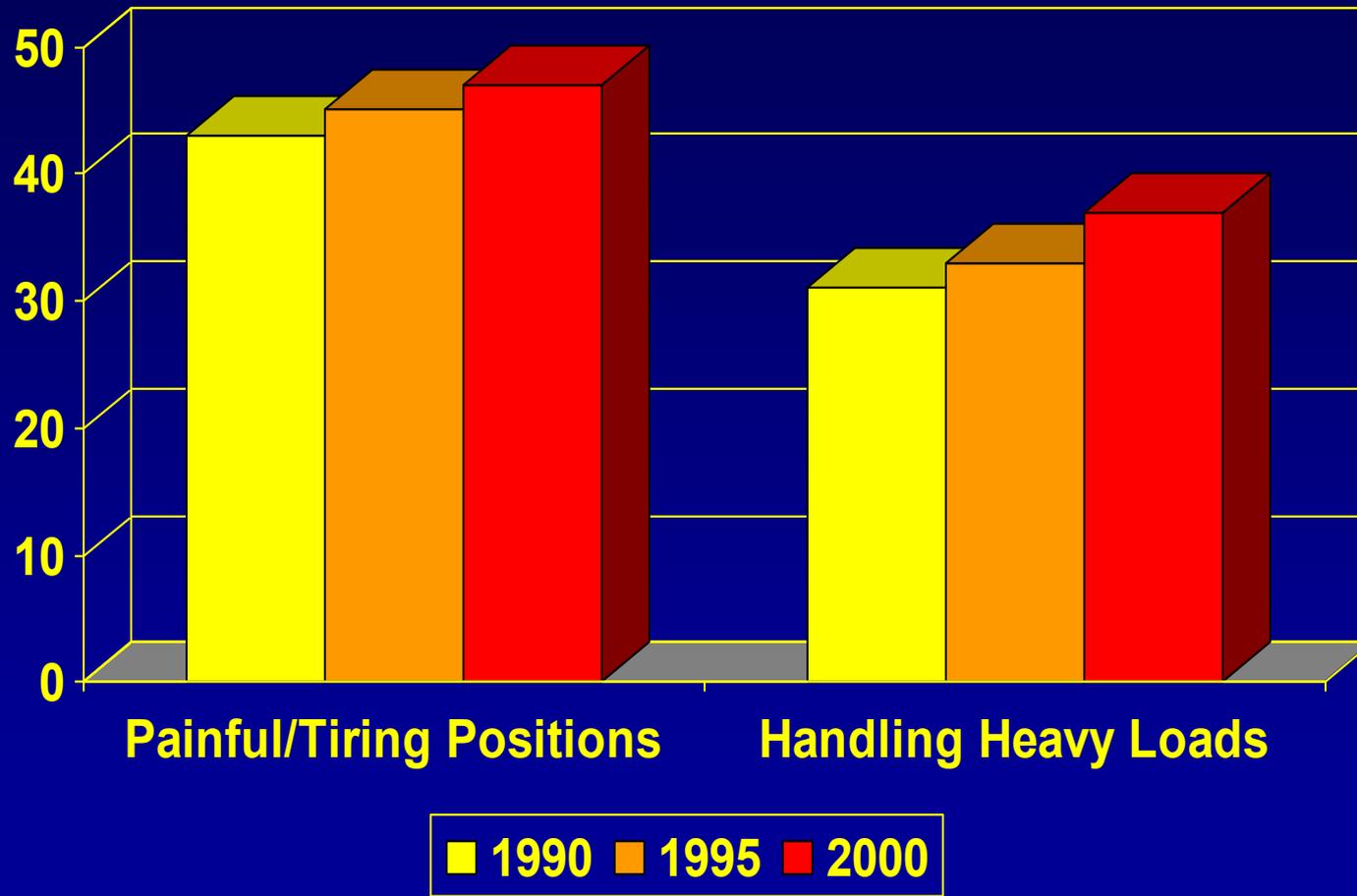
FIG. 1-16

HEALTH CONDITIONS AMONG WORKERS AGE 55 AND OVER: 2002

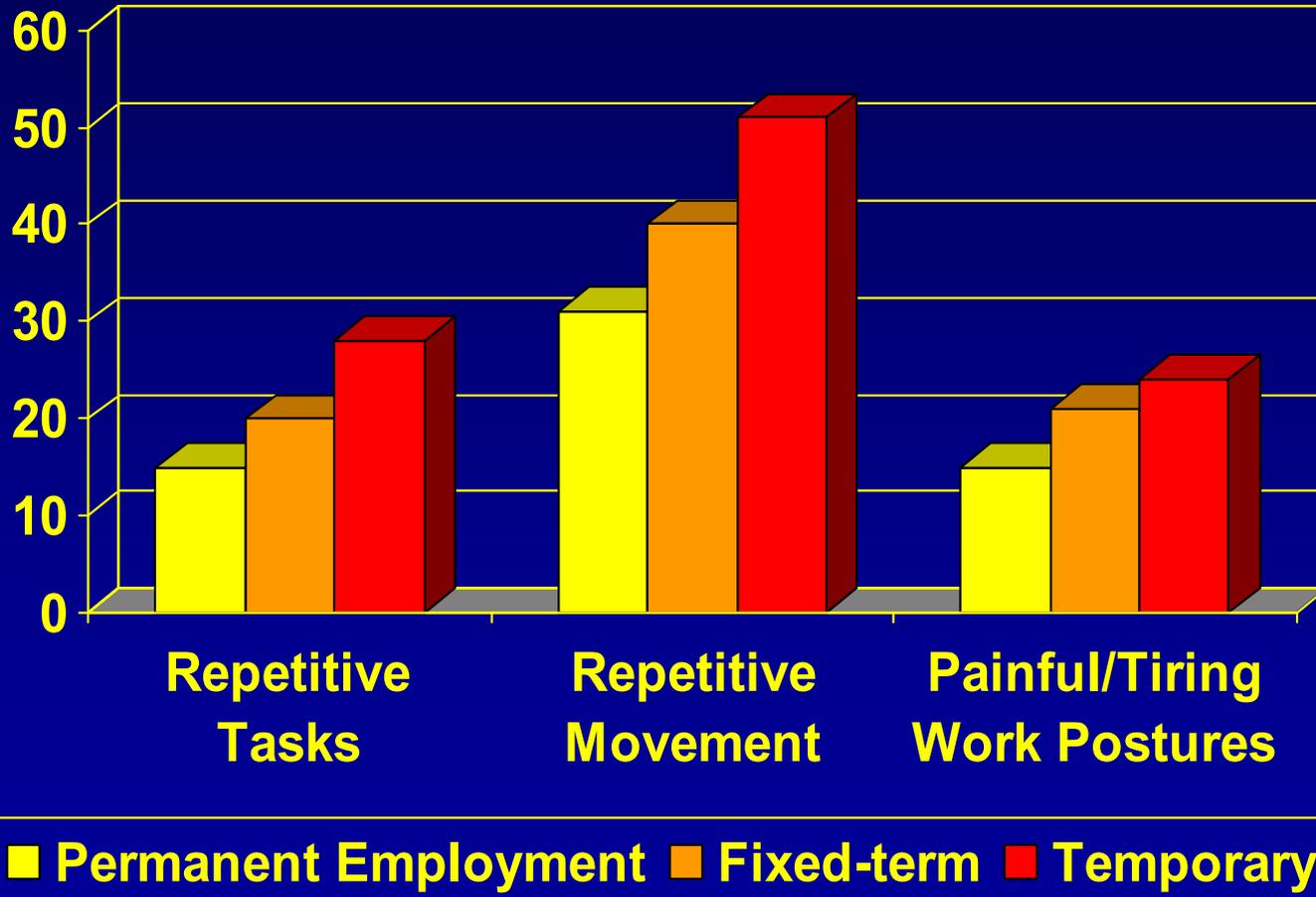


# Exposure to Physical Stressors

## EU - 1990-2000



# Exposure to Physical Hazards By Type of Work Contract



# Physical Capacity: Can Older Workers Keep Up?

- **Physiology Facts**
  - Maximal strength at 20-30 years
  - O<sub>2</sub> 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](http://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

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- Solving the Problem of Childhood Obesity Within a Generation (2010) Available at [http://www.letsmove.gov/tfco\\_fullreport\\_may2010.pdf](http://www.letsmove.gov/tfco_fullreport_may2010.pdf)



# **Healthy Work Makes Healthy Families**

**Celebrating National  
Work and Family Month**

**October, 2010**

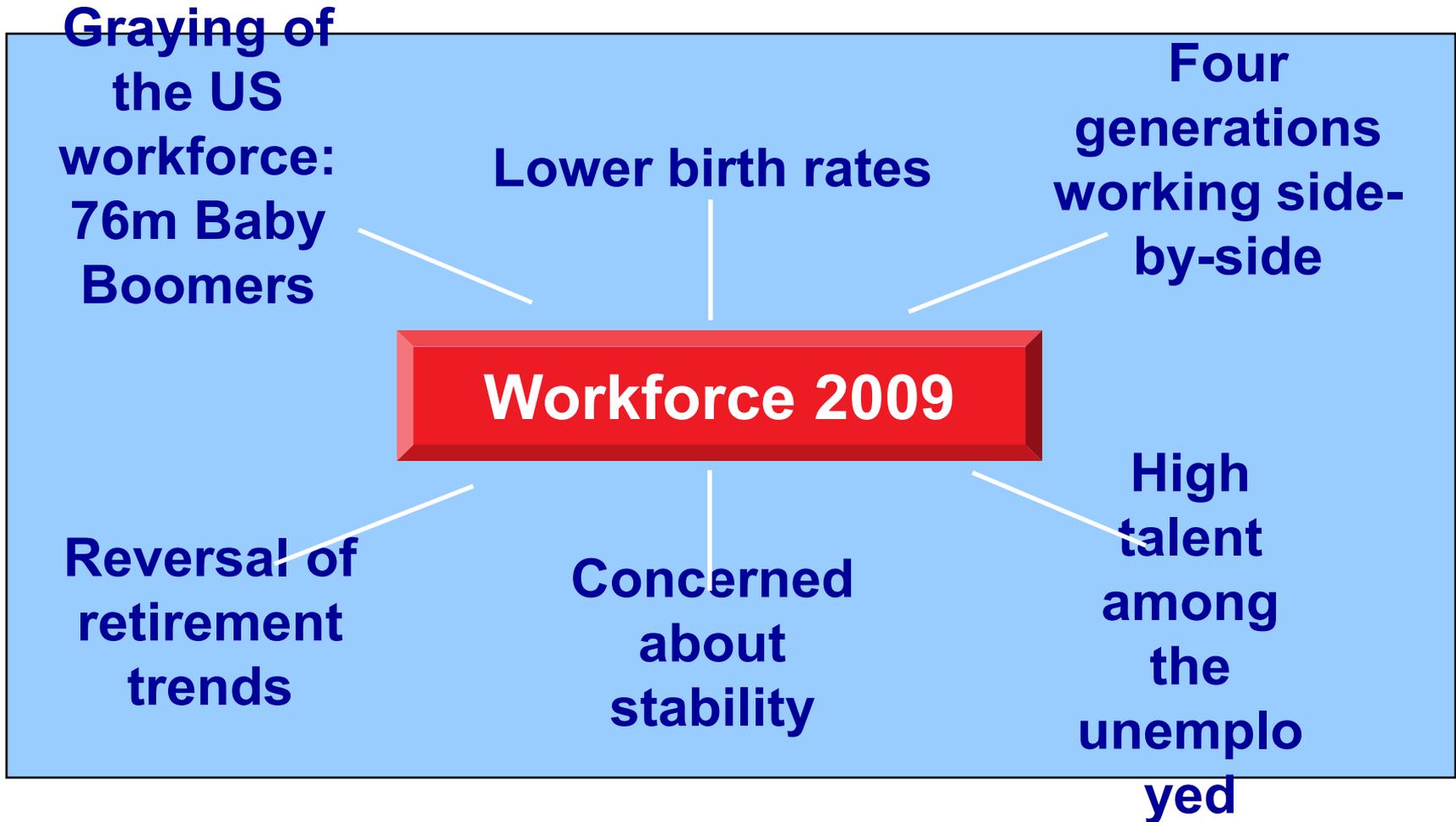
# The Future of Safety and Health in An Aging Workforce

Library of Congress  
October 26, 2010



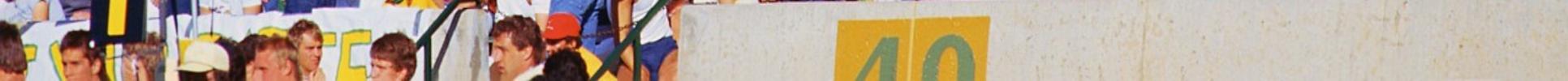
Phyllis C. Cohn, MSW  
Project Manager, Workforce  
Issues

# Demographic Trends of the Workforce





**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

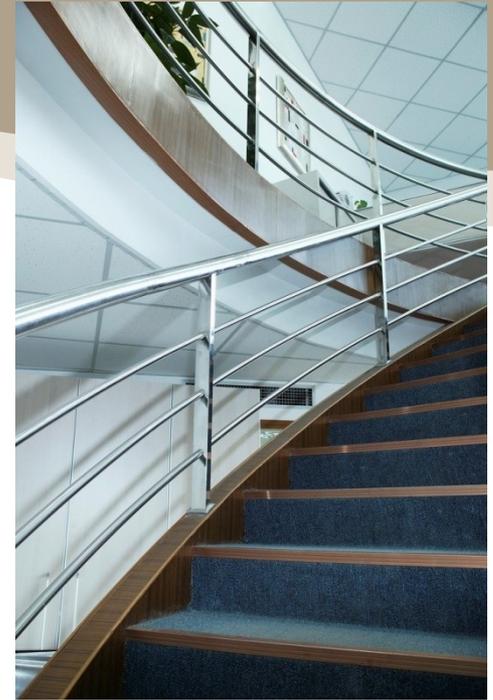
- Transitional work coordinator



- **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**

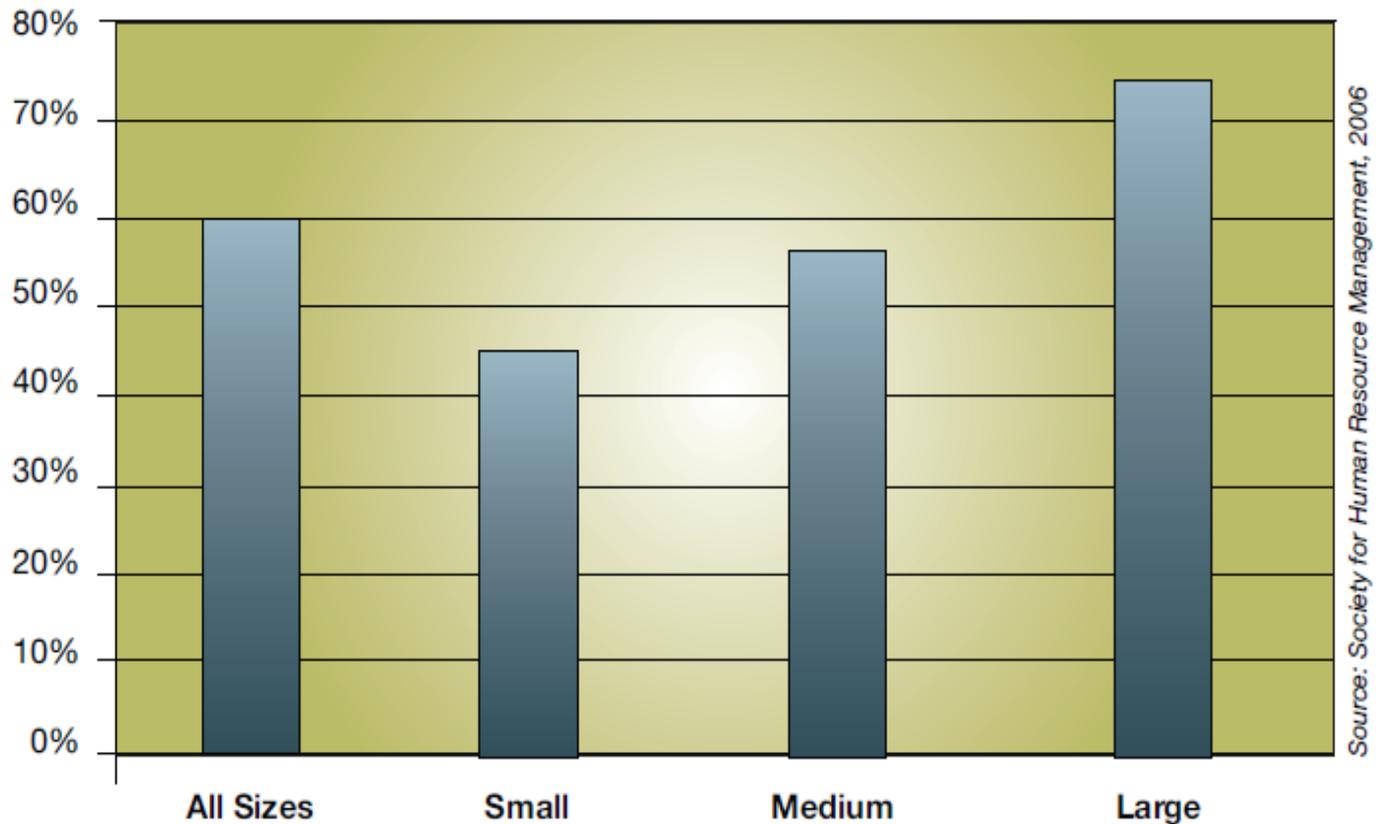
- **Productivity losses cost U.S. employers \$1,685 per employee per year, or \$225.8 billion annually**
  - **28% reduction in sick leave absenteeism**
    - **26% reduction in health costs**
  - **30% reduction in workers' compensation and disability management claim costs**
    - **\$5.93-to-\$1 savings-to-costs**



*\*Partnership for Prevention ([www.prevent.org](http://www.prevent.org))*

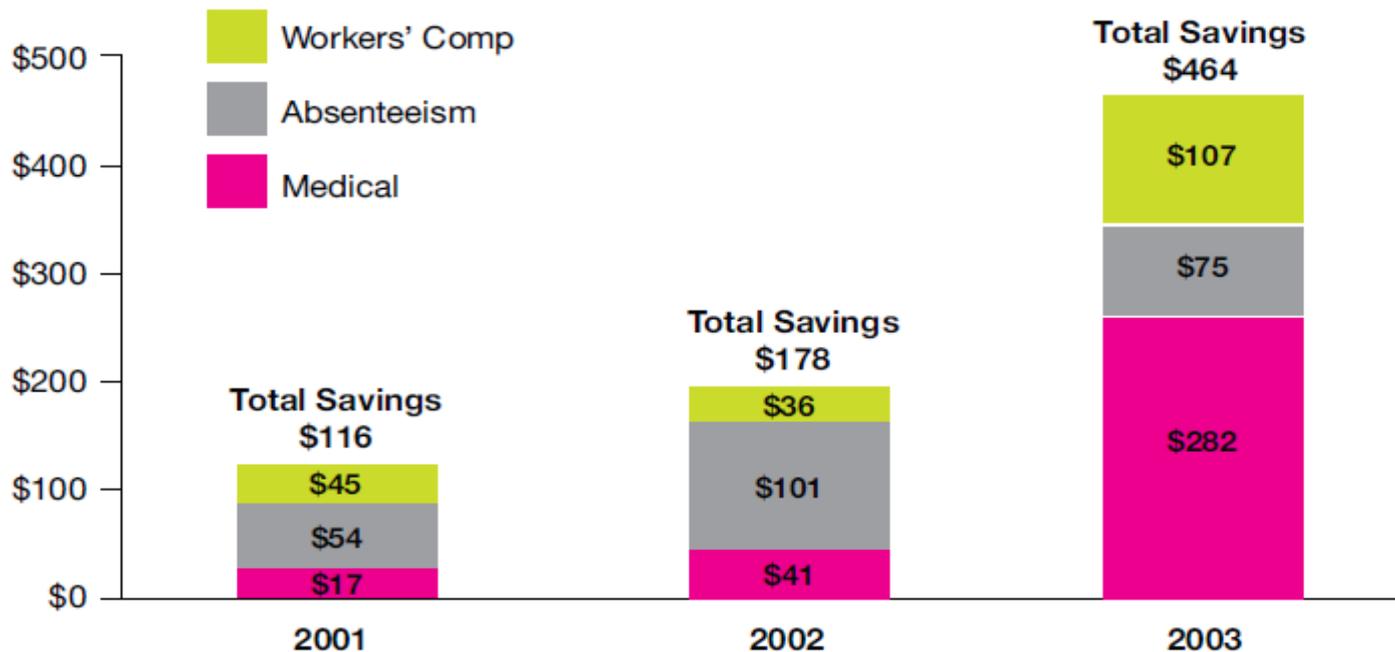
## Percentage of Employers Offering Wellness Programs

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

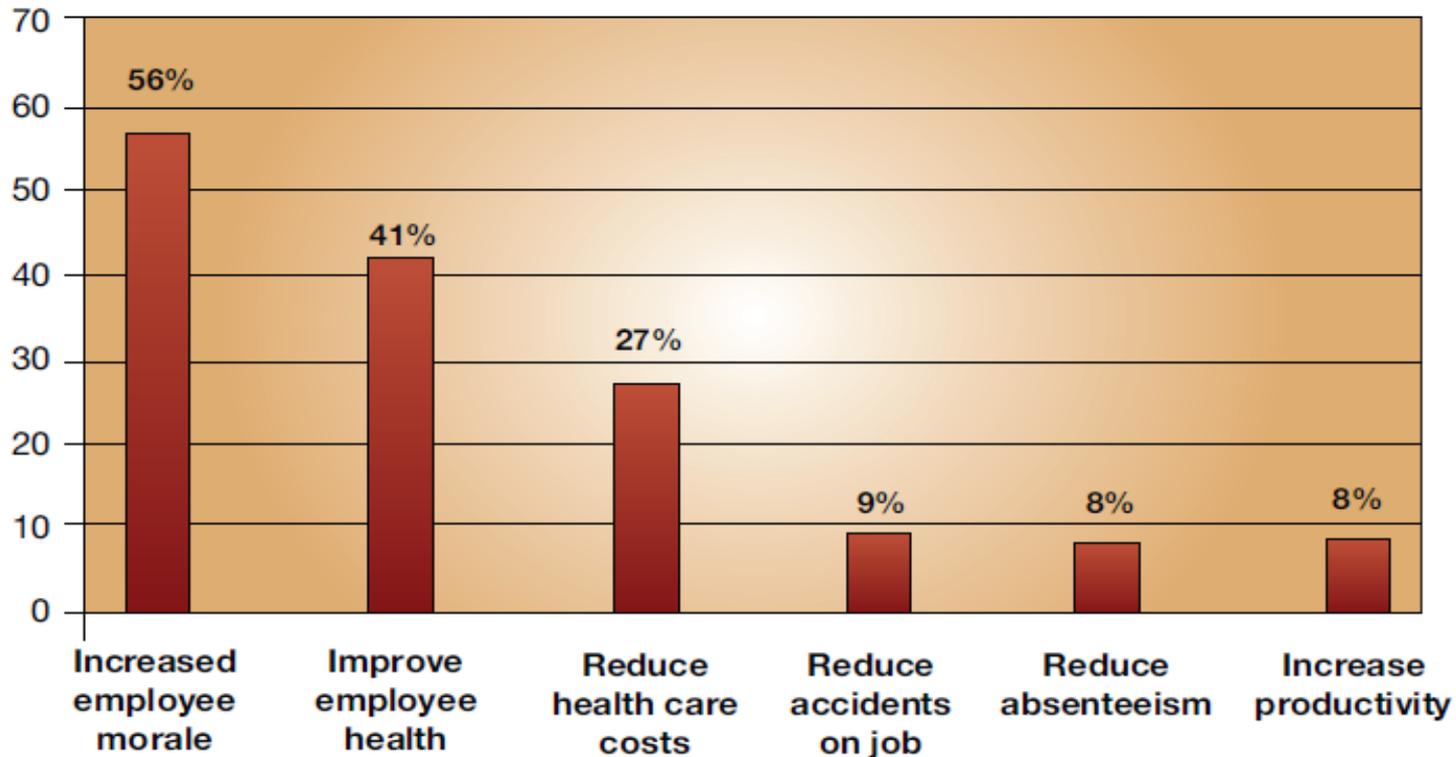
A three year study conducted at a health system in Minneapolis found that health risks decreased after the implementation of a comprehensive worksite wellness program. This led to increased savings due to reduced health care costs, absenteeism, and workers' compensation claims each year of the program.



Source: Fairview Alive Program Evaluation (StayWell, 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 in the Workplace: A Costly Epidemic**

by Rebecca Maxon Copyright © 1999, Fairleigh Dickinson University.

# **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.



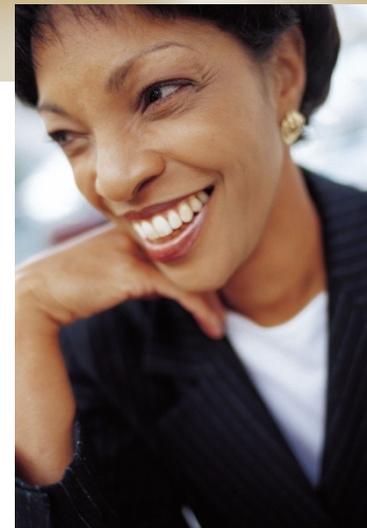
## **“Prepare to Care Guide” ([www.aarp.org/foundation/preparetocare](http://www.aarp.org/foundation/preparetocare))**

- 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

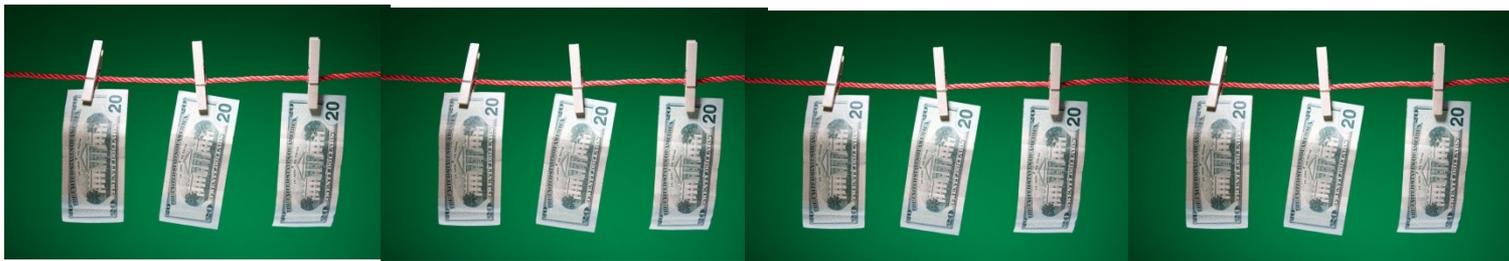


■ Gen X: 1965 – 1980

■ Gen Y: 1980 on

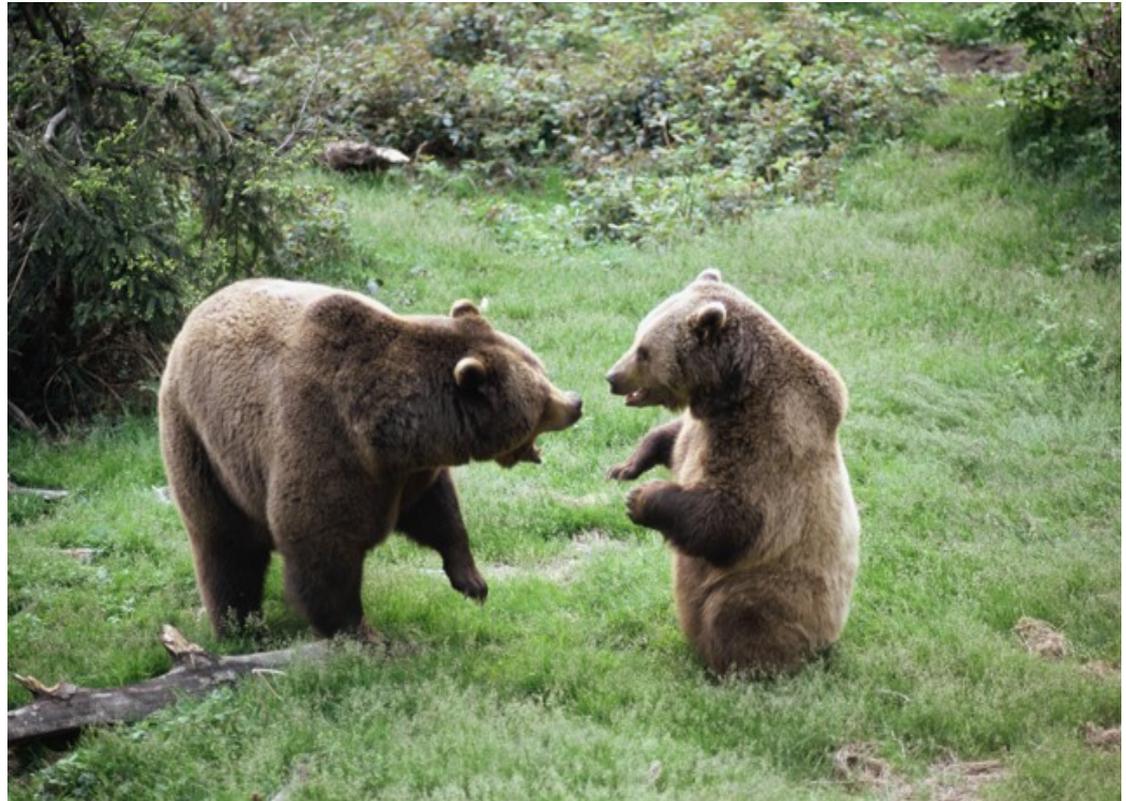
# The Business Case for Addressing Intergenerational Dynamics

- Builds on the unique values and strengths of all generations – promotes teamwork!
- Bottom Line Impact:
  - Recruitment
  - Employee Engagement
  - Retention
  - Productivity

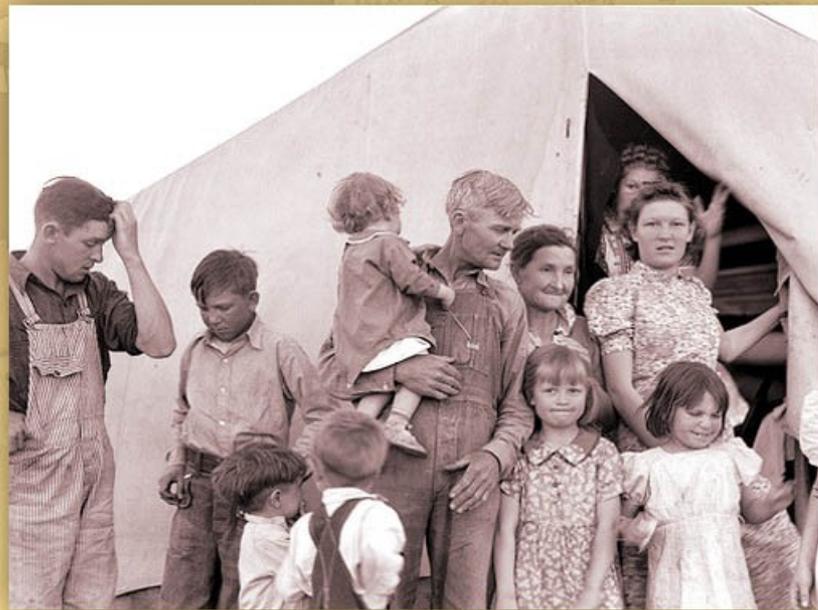


# Root Causes of Conflict

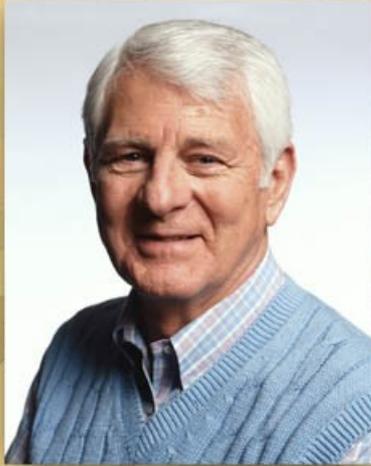
- > Work ethic
- > Technology
- > Perspective
- > View of Authority
- > Relationships
- > Outlook
- > Leadership



# 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**

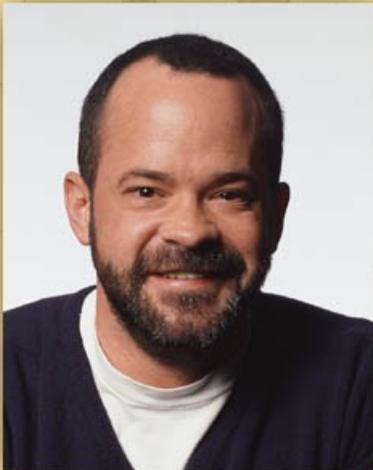
- Loyalty and dedication to the company
- Come to work on time; low absenteeism
- Commitment to doing quality work
- Someone you can count on in a crisis
- Solid performance record
- Solid experience in job/ industry
- Basic skills in reading, writing, arithmetic
- Getting along with co-workers

# Baby Boomers



1973-74	1,001.15	65,113.57
1964-65	1,589	11.9
1977-78	2,765	1.11
1980-81	2,879.4	1.27
1982-83	6,436.22	2,769.35
1971-72	2,548.70	2,562.40
1967-68	6,387.11	2,948.35
1965-66	2,187.08	7,281.04
1963-64	1,241.10	1,637.38

# 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

# Millenials / Gen Y

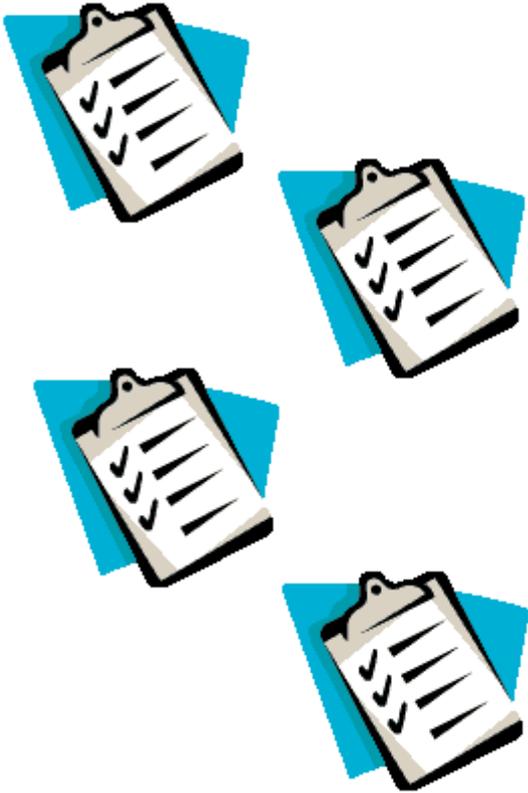


# Millennials / Gen Y



- > 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

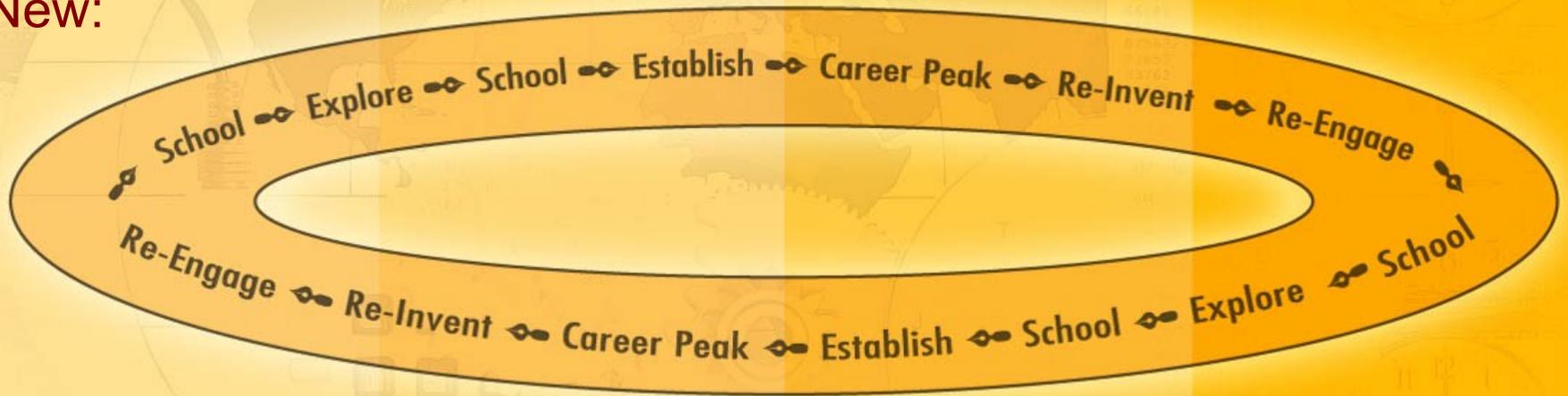
# Life Stages

## Career Stage

### Traditional:

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

New:



# 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](http://www.aarp.org/foundation/preparetocare)

“Healthy Behaviors”

[www.aarp.org/healthpros](http://www.aarp.org/healthpros)

*“Leading a Multigenerational Workforce”*, AARP, 2007.

*“Decoding Generational Differences”*, W. Stanton Smith,  
Deloitte LLP, 2008

Phyllis Cohn, Project Manager, AARP

[pcohn@aarp.org](mailto:pcohn@aarp.org)