

Health Research Needs for Older Workers

Anticipating the needs of a rapidly
aging global workforce

Objectives

- Identify major demographic changes that are changing the global workforce.
- Describe the occupational safety and health policy impact of a globally changing workforce.
- Identify research needs for meeting the needs of a globally aging workforce

Outline

Demographic changes

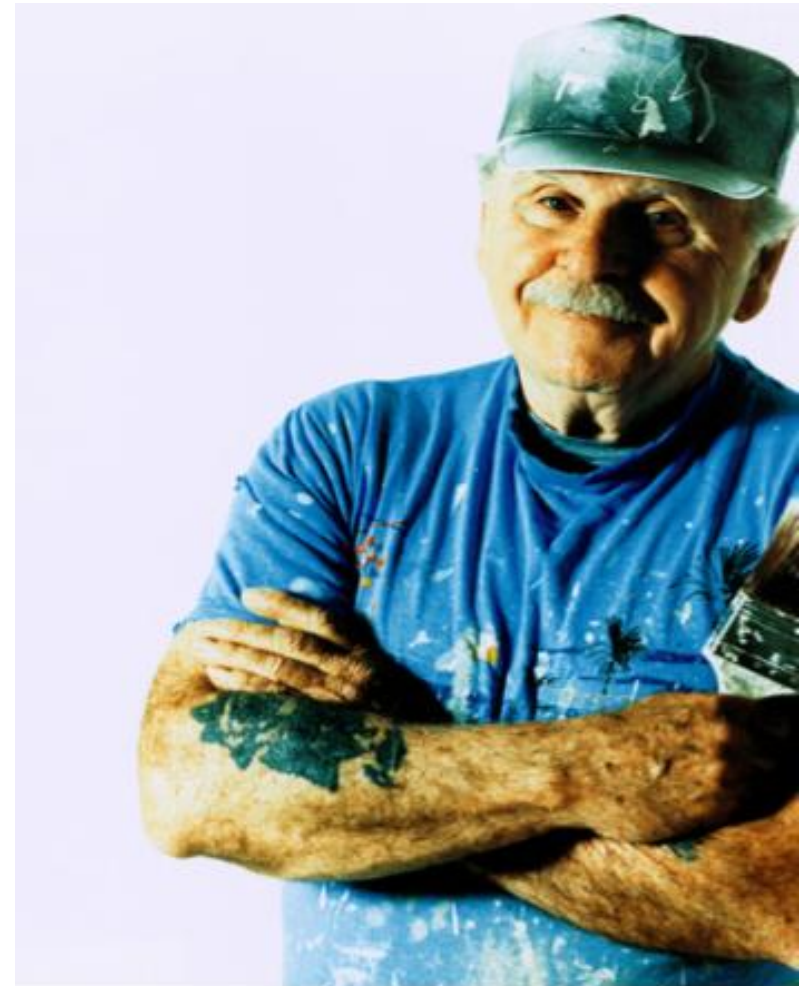
Policy implications

Research needs

Demographics and the Global Workforce

How old is “old”?

- U.S. Department of Labor: >40 years
- American Association of Retired Personal: Older citizen \geq 50 years
- Office on Aging: “Older citizen” = > 55 years
- United Nations: >60 years
- **Baby Boomers**: Born in 1946-1964



Target: “Older” Workers >45 Years

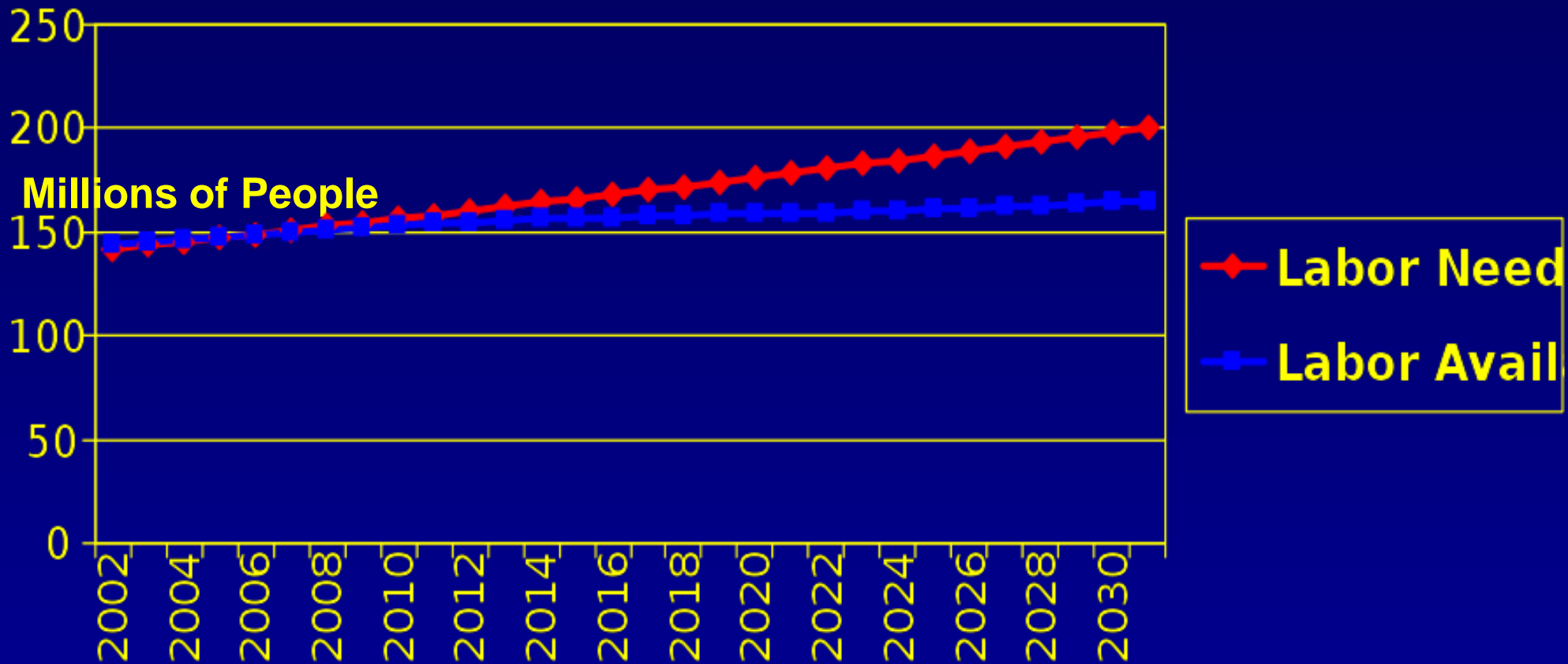
- Life course perspective emphasizes aging vs age
- Beginning clearly detectable age-related changes
- Can address disease risk factors to extend years of healthy living
- Promote research to capture precursors of age-related changes



"What we are looking for is somebody about twenty five with forty years' experience."

Growth Curves for U.S. Workers

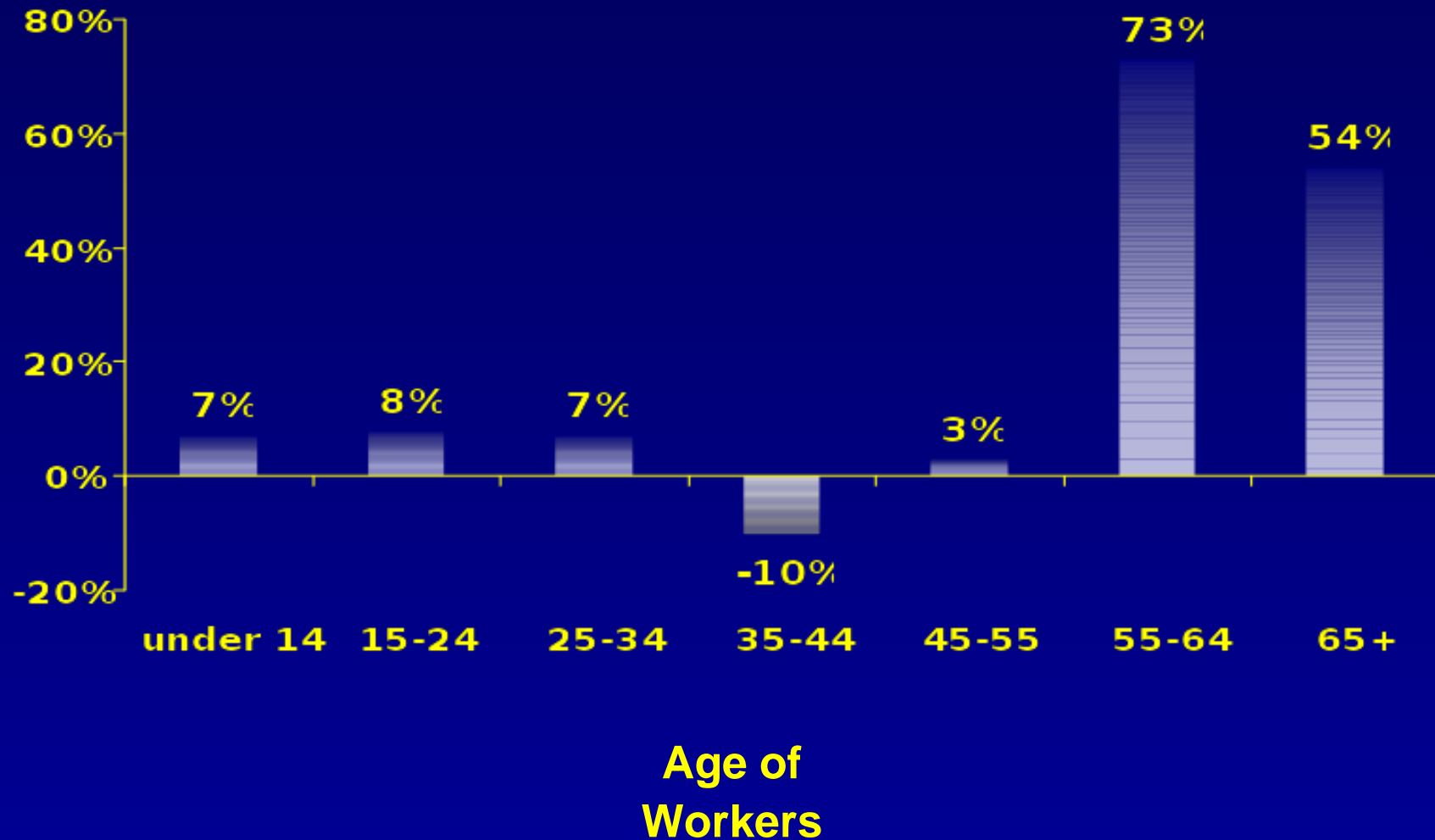
Expected Labor Force and Labor Force Demand



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

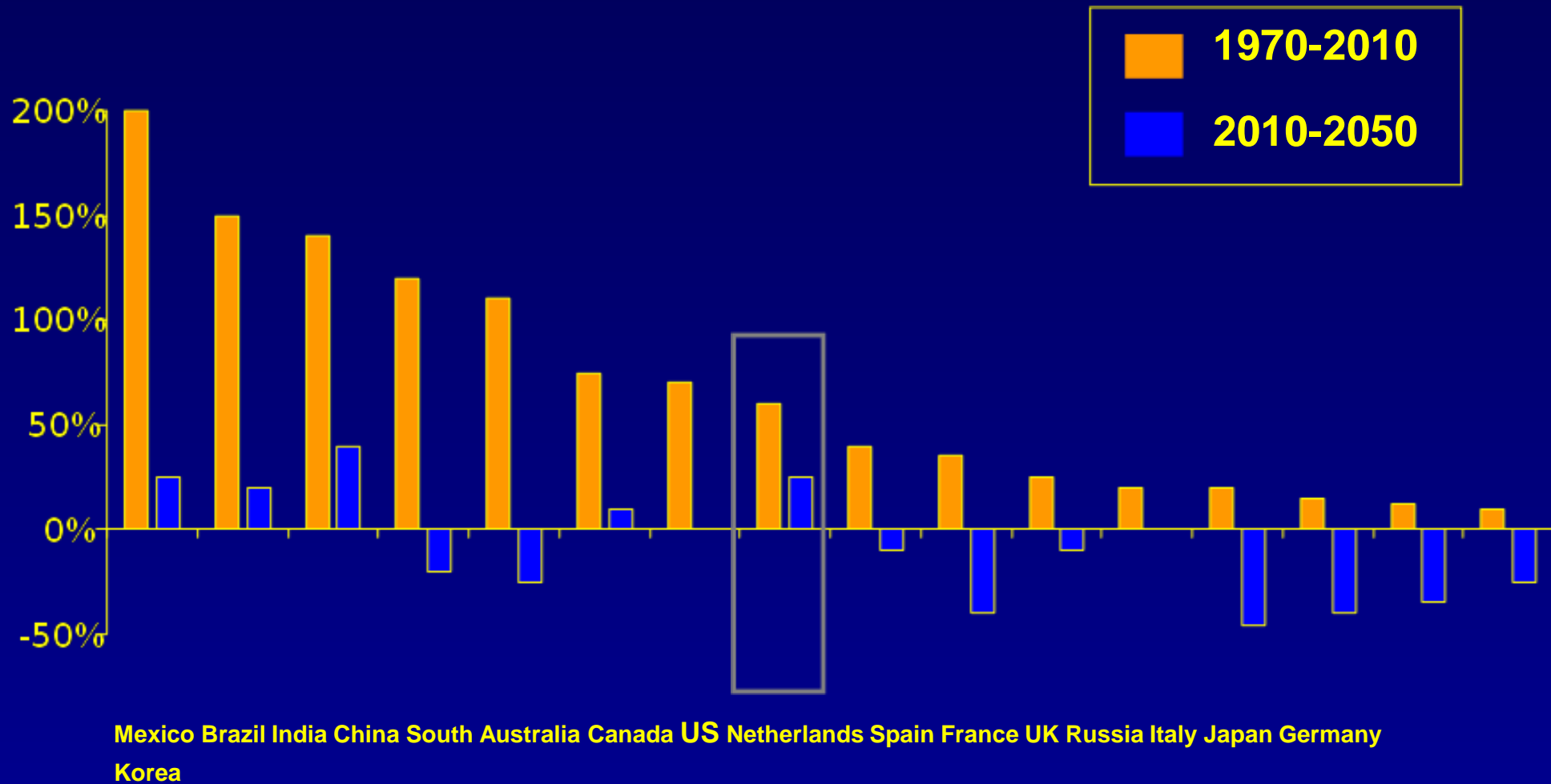
... Continuing Into the Future

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



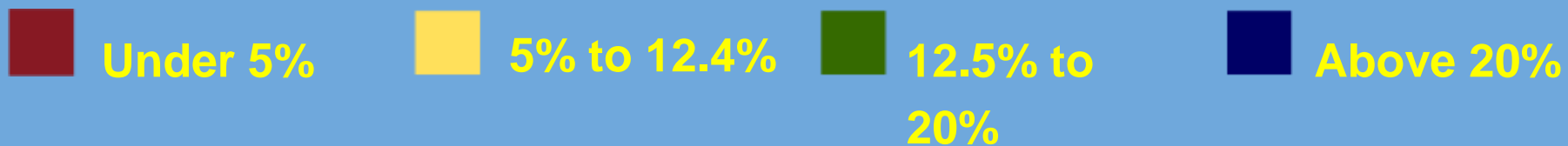
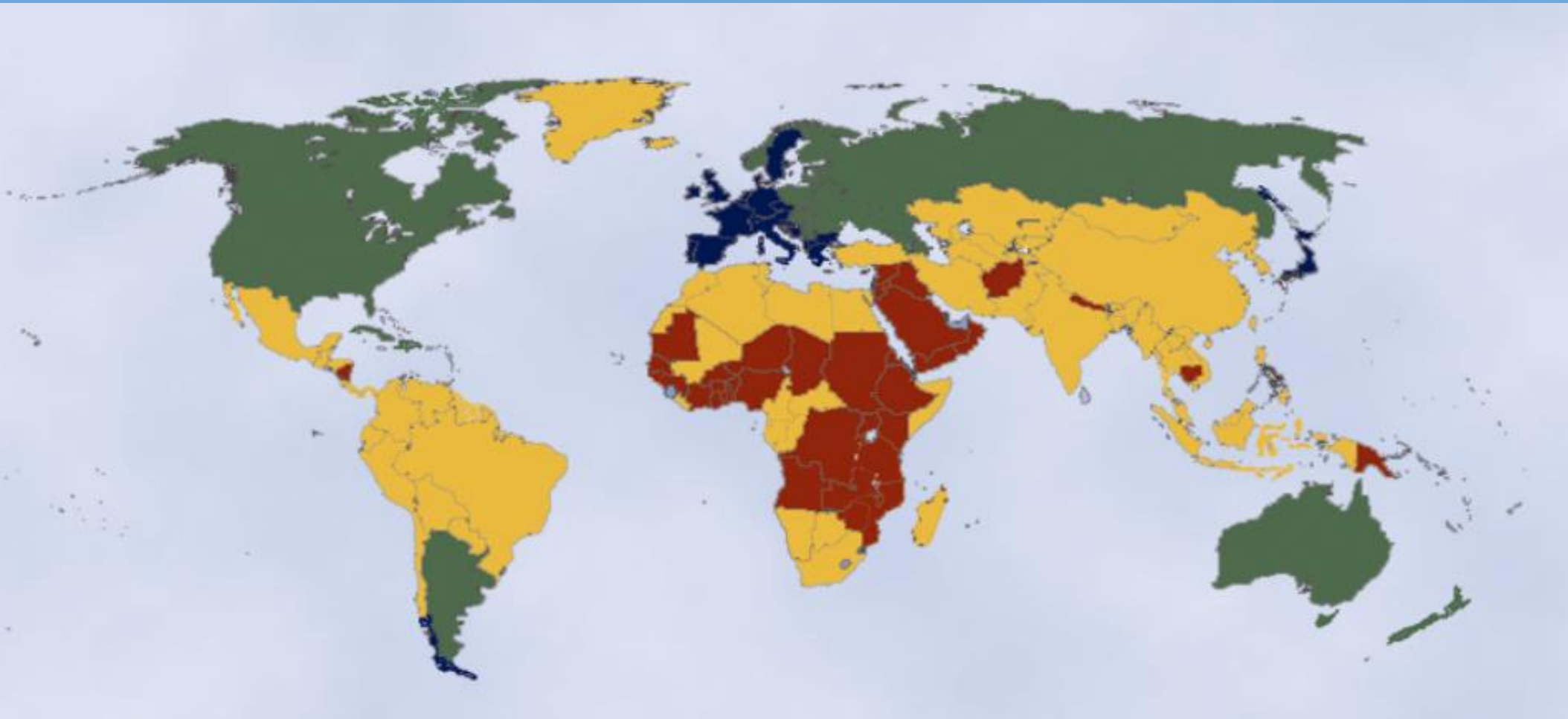
Source: U.S. Census
Bureau

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

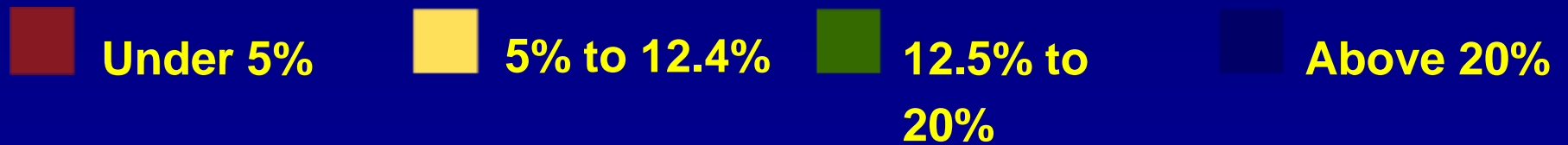
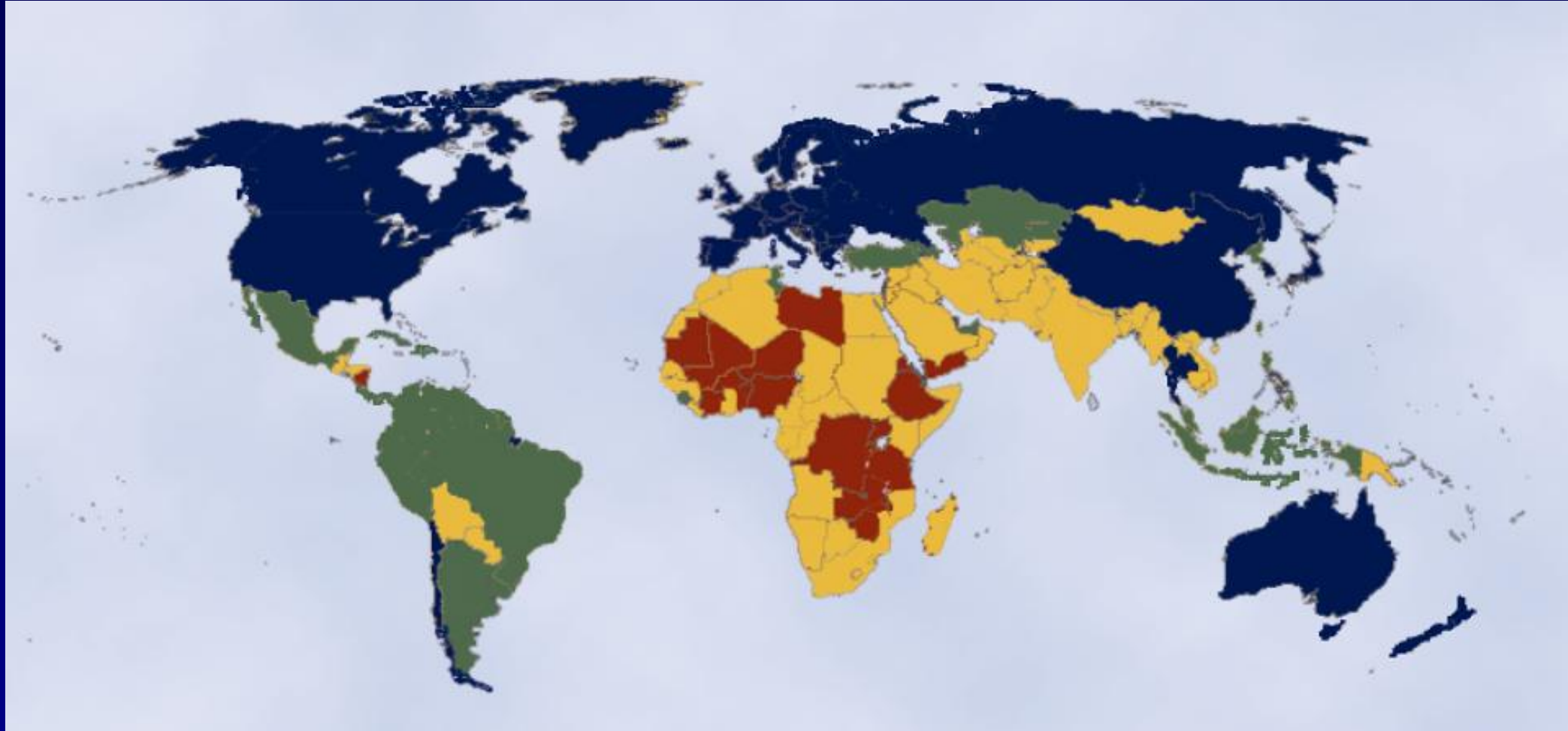
In 2000, A Fairly “Young” World . . .



Percent of Population Age 60+ in 2000

Source: U.S. Census Bureau

... Rapidly Aging by 2025



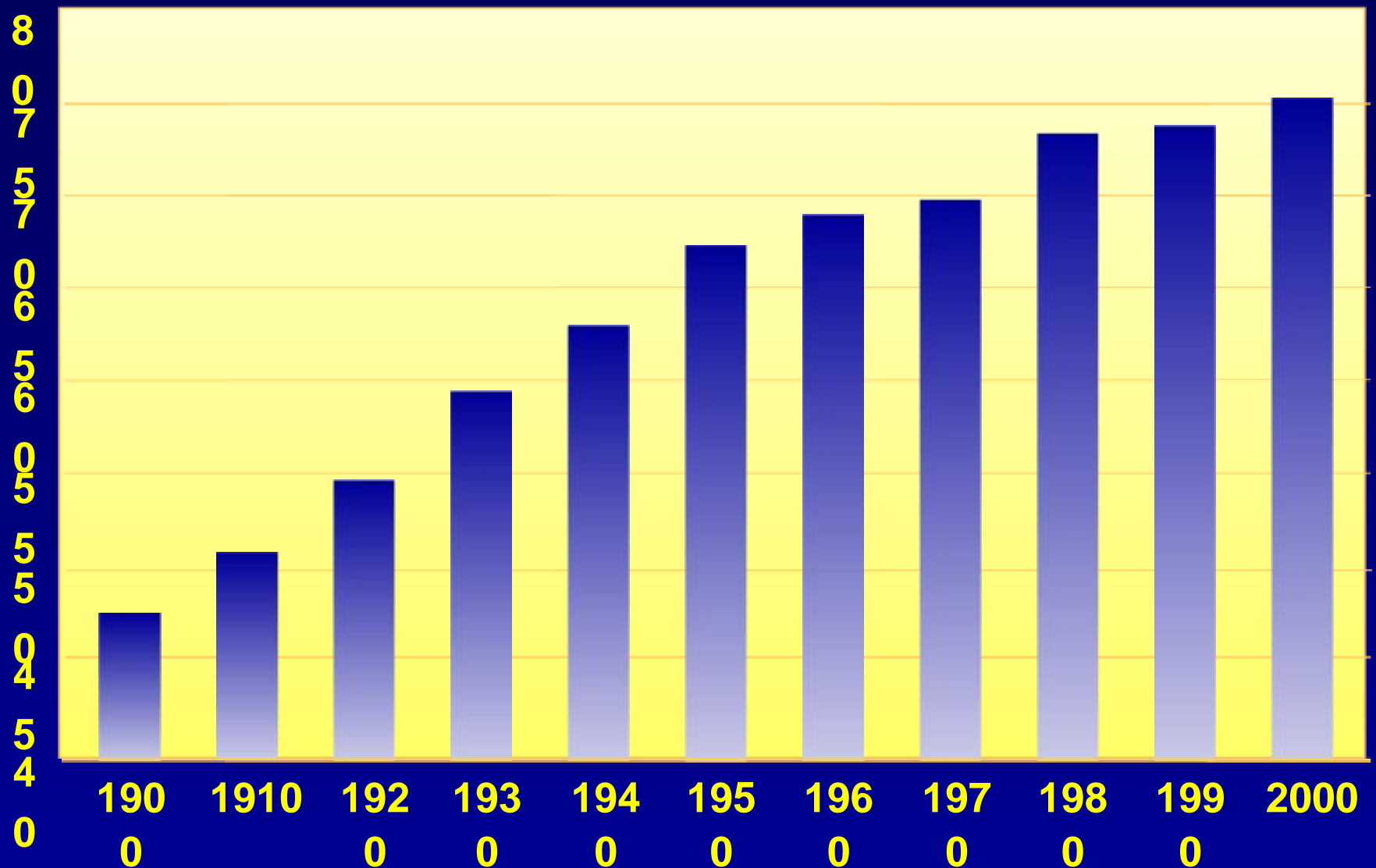
**Percent of Population Age 60+ in
2025**

Source: U.S. Census
Bureau

Why? Dramatic Increase in

Life Expectancy

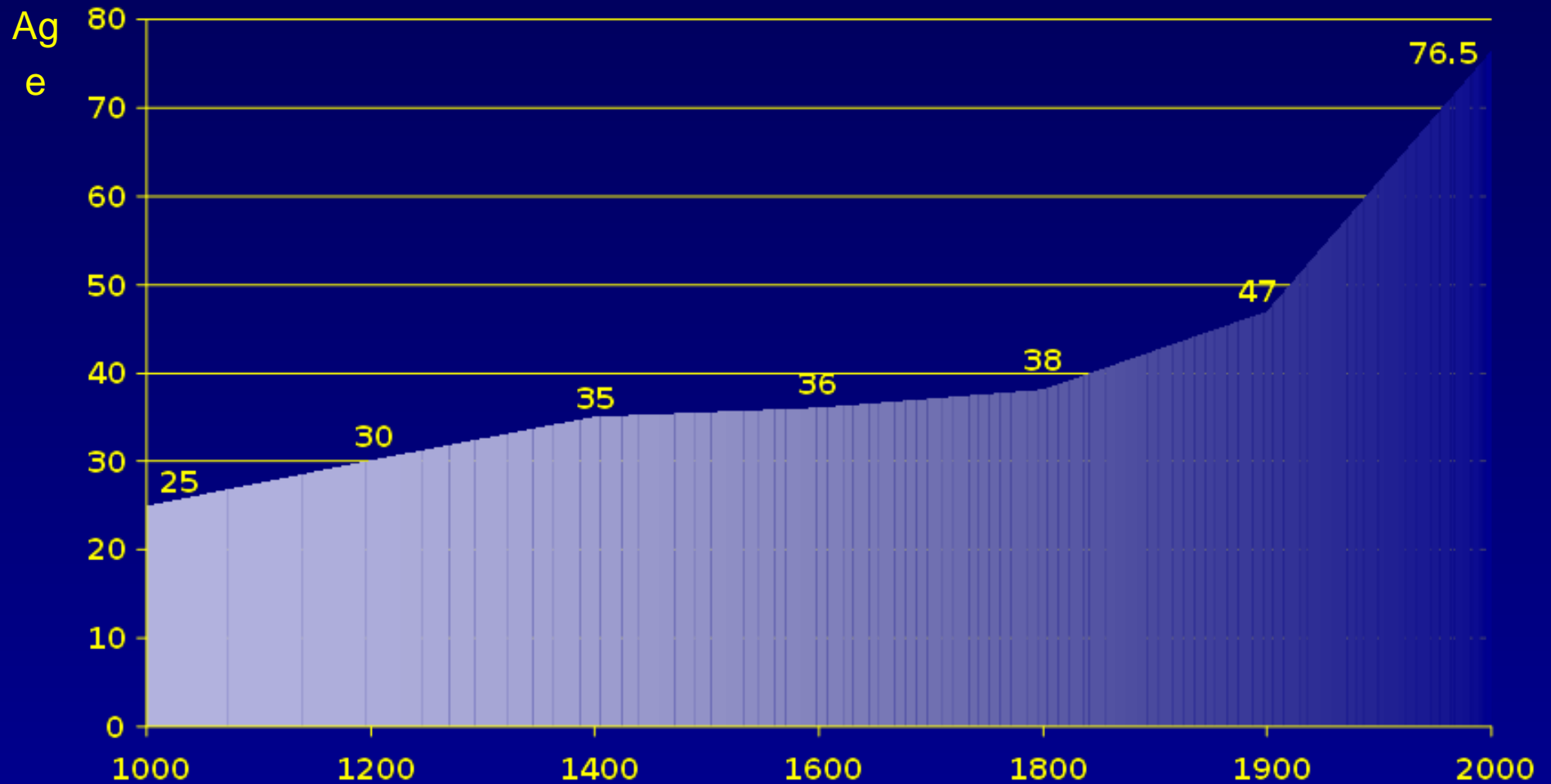
Average Life Expectancy at Birth in the U.S.



Source: U.S. Social Security Administration

“Sudden” Boom in Life Expectancy

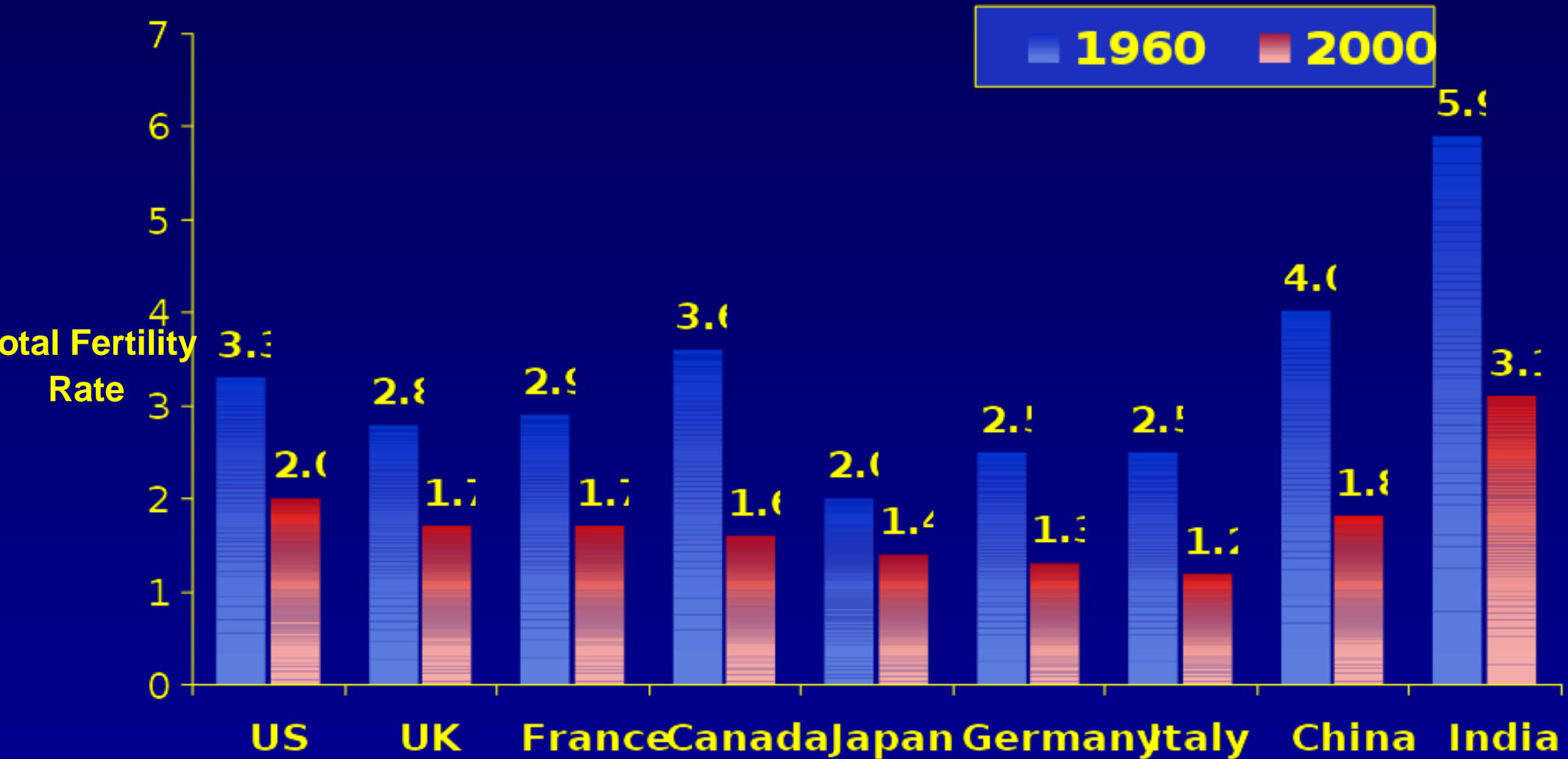
Life Expectancy at Birth: 1000 - 2000



Source: U.S. Census Bureau,
2000

And a Dramatic Drop in Birth Rates

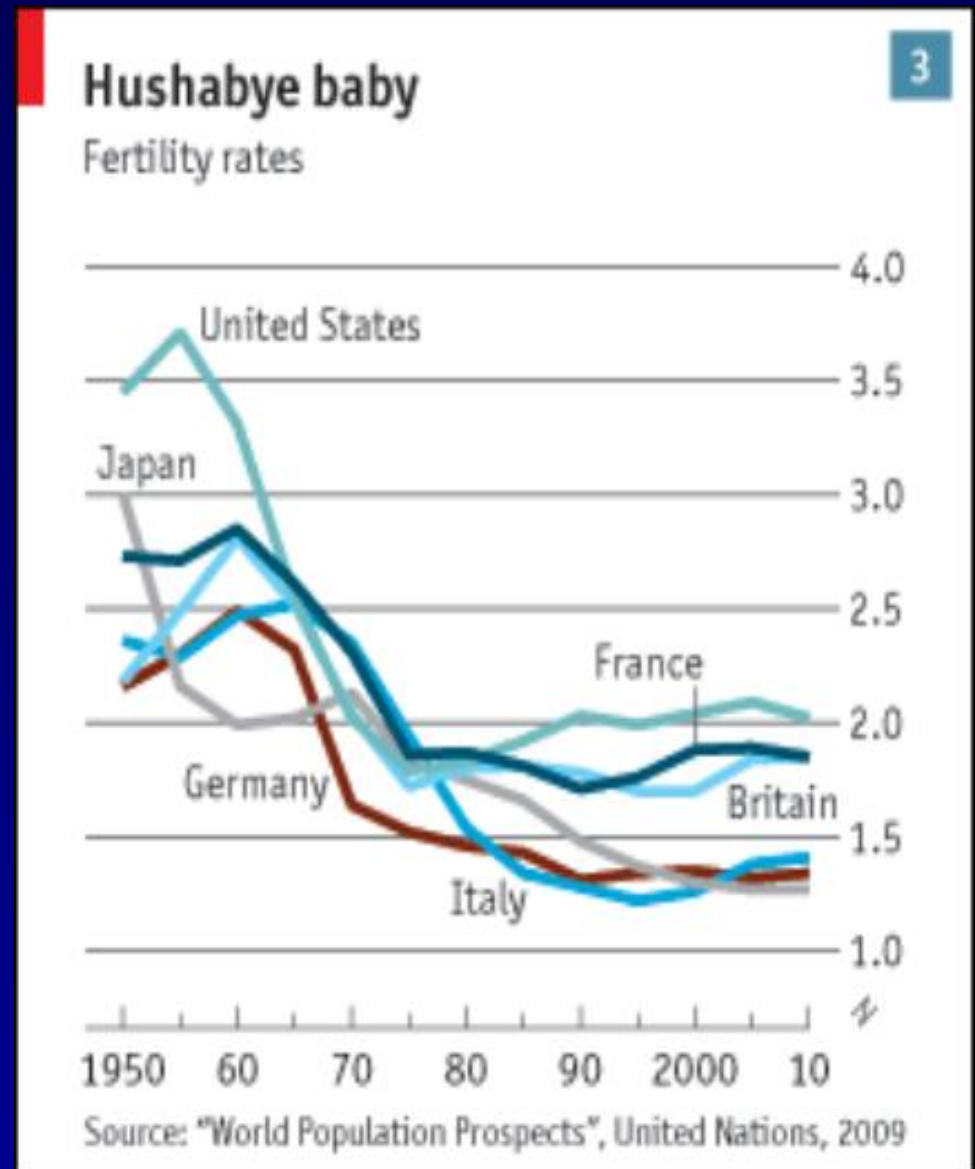
Total Fertility Rate: 1960 ■ and 2000 ■



Source: Age Wave

Reasons for Birth Rate Decline

- Economic
 - Children as liability
 - Versus asset
 - 30% more income
- Social
 - Germany
 - Rabenmutter
 - E.U. (Fascism)
 - WorkLife Balance?



Slower Workforce Growth: Can Labor “Imports” Make Up the Difference?

- New immigrants (those entering U.S. post-1990)
 - 50.3% of civilian workforce growth (1990-2001)
- Assuming today’s levels of immigration remain constant
 - Immigrants will account for 50% of workforce growth (2006-2015)
 - Immigrants will account for 100% of growth (2016-2050)
- But, labor “imports” are decreasing
 - U.S. immigration restrictions for “authorized” immigrants
 - Border fences and other methods may increase
 - Opportunities in developing countries
- Even if assumption holds, immigration is not expected to make up the difference between labor demand and labor supply

Diversity 2005-2050 Immigration

- US population will increase to 438 million by 2050
 - 82% from immigrants arriving and their US-born descendants
 - Of 117 million people added
 - 67 million will be immigrants, primarily from Mexico and Central and South America
 - 50 million will be US-born children or grandchildren
- White, Non-Hispanic and White, Hispanic
 - White, Hispanic population will triple in size and will account for most of the US population growth from 2005 to 2050
 - White, non-Hispanic population will be 47% by 2050
 - Hispanics will be 29% of US population in 2050, compared with 14% in 2005

Global and Physically Dispersed

- Labor shortages and cost drivers
 - Will lead to more “off shoring” or “smart shoring”
- Global Workplaces
- Corporations operate as digitally connected communities of various employees, contractors and partners
- Regional “hotspots” like Hong Kong, Bangalore, Dubai, Singapore
- Physically Dispersed Workplaces
 - Increasingly, work can be done anywhere, anytime rather than in fixed locations on 9 to 5 schedules
 - Virtual workplaces dispersed in time and location

Webster's Definition of Retirement

- *to disappear*
- *to go away*
- *to withdraw*



Source: Webster's New
Twentieth Century Dictionary

Summary:

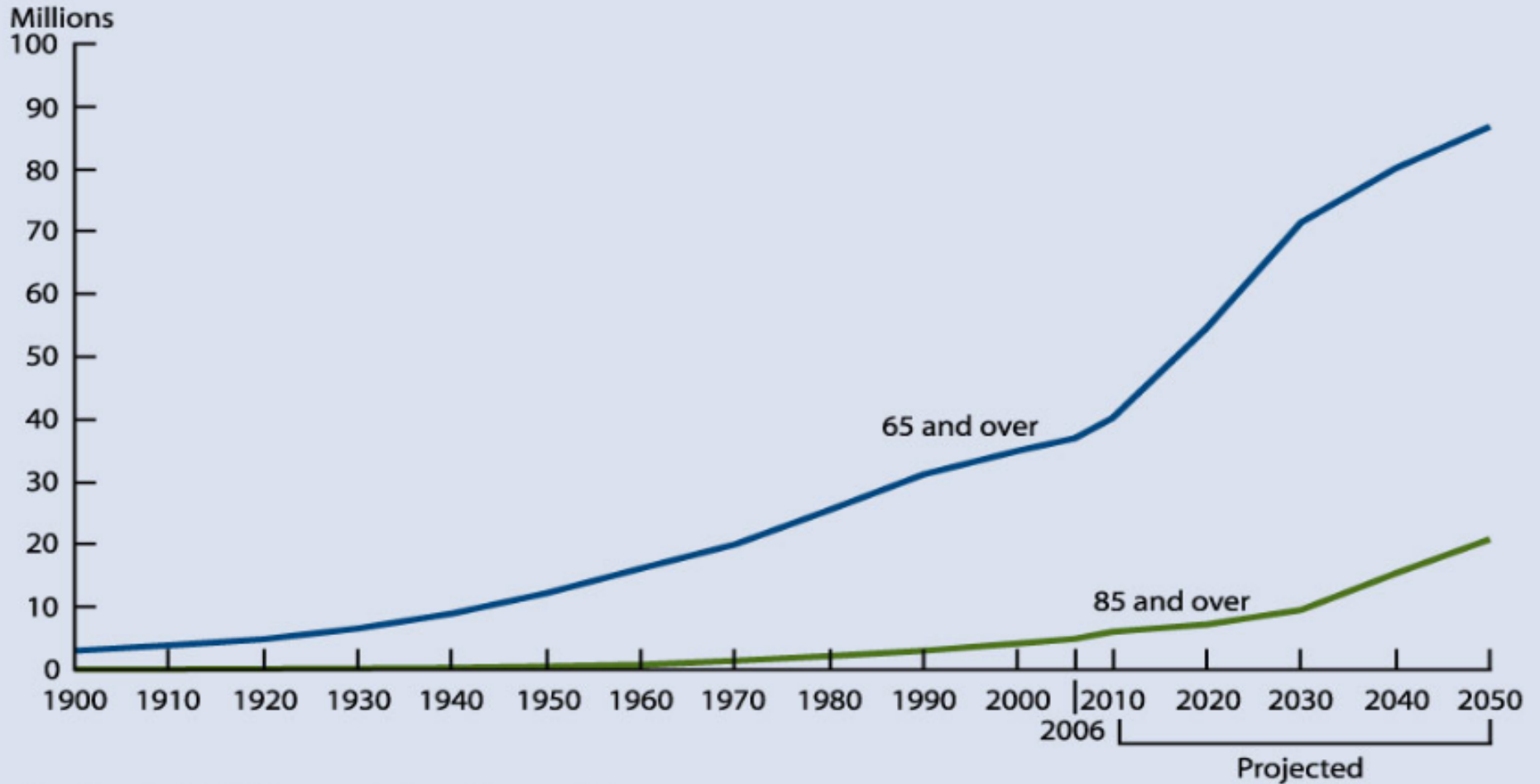
All workers are aging, but those that are older continue to grow as a proportion of the working population.

As the available worker population changes, many employers have jobs for which they want to attract and retain more experienced workers

Work-related Health Concerns
for an
Aging Workforce

Impact on Occupational Health & Safety

Number of people age 65 and over, by age group, selected years 1900–2006 and projected 2010–2050



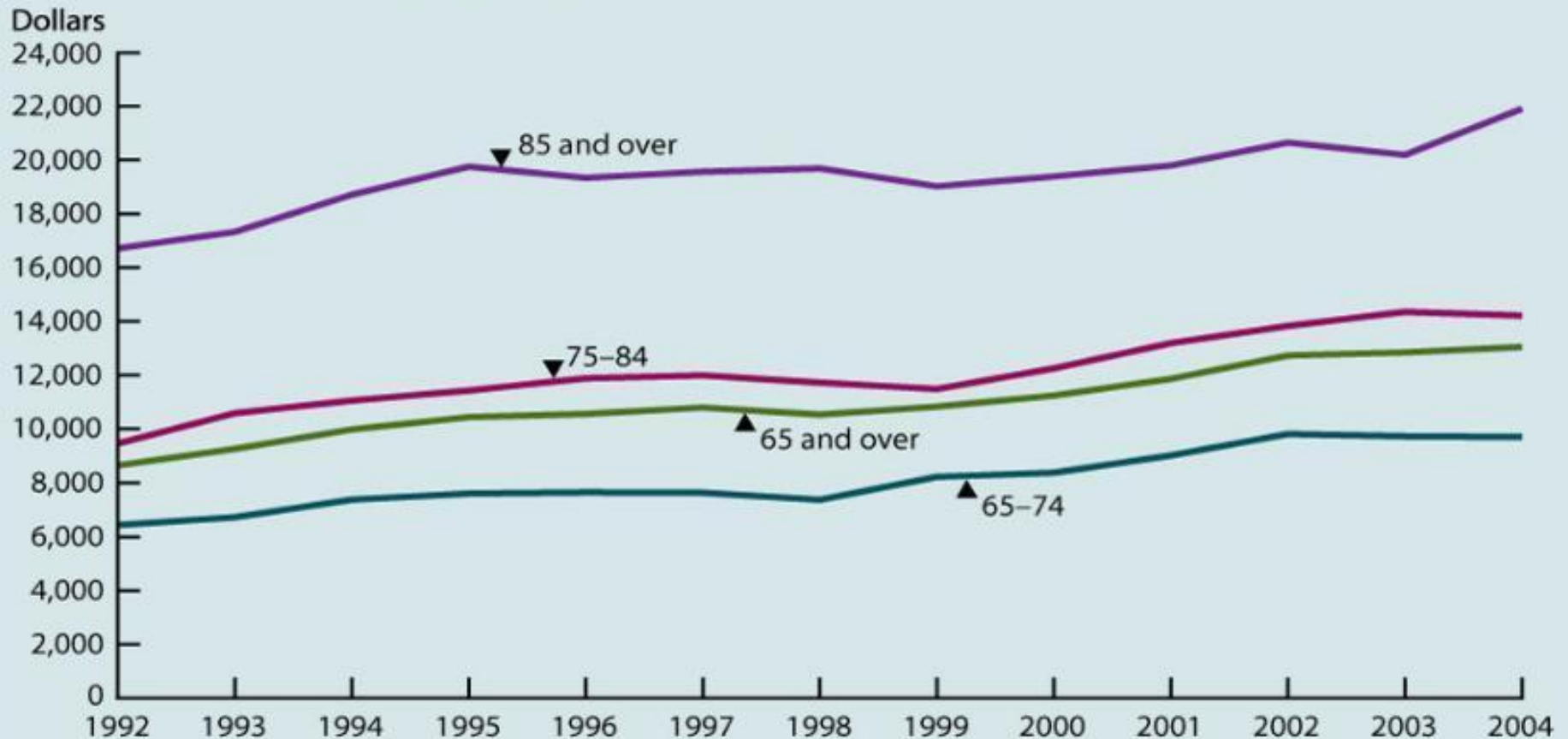
Note: Data for 2010–2050 are projections of the population.

Reference population: These data refer to the resident population.

Source: U.S. Census Bureau, Decennial Census, Population Estimates and Projections.

Do Older Workers Cost More?

Average annual health care costs for Medicare enrollees age 65 and over, in 2004 dollars, by age group, 1992–2004



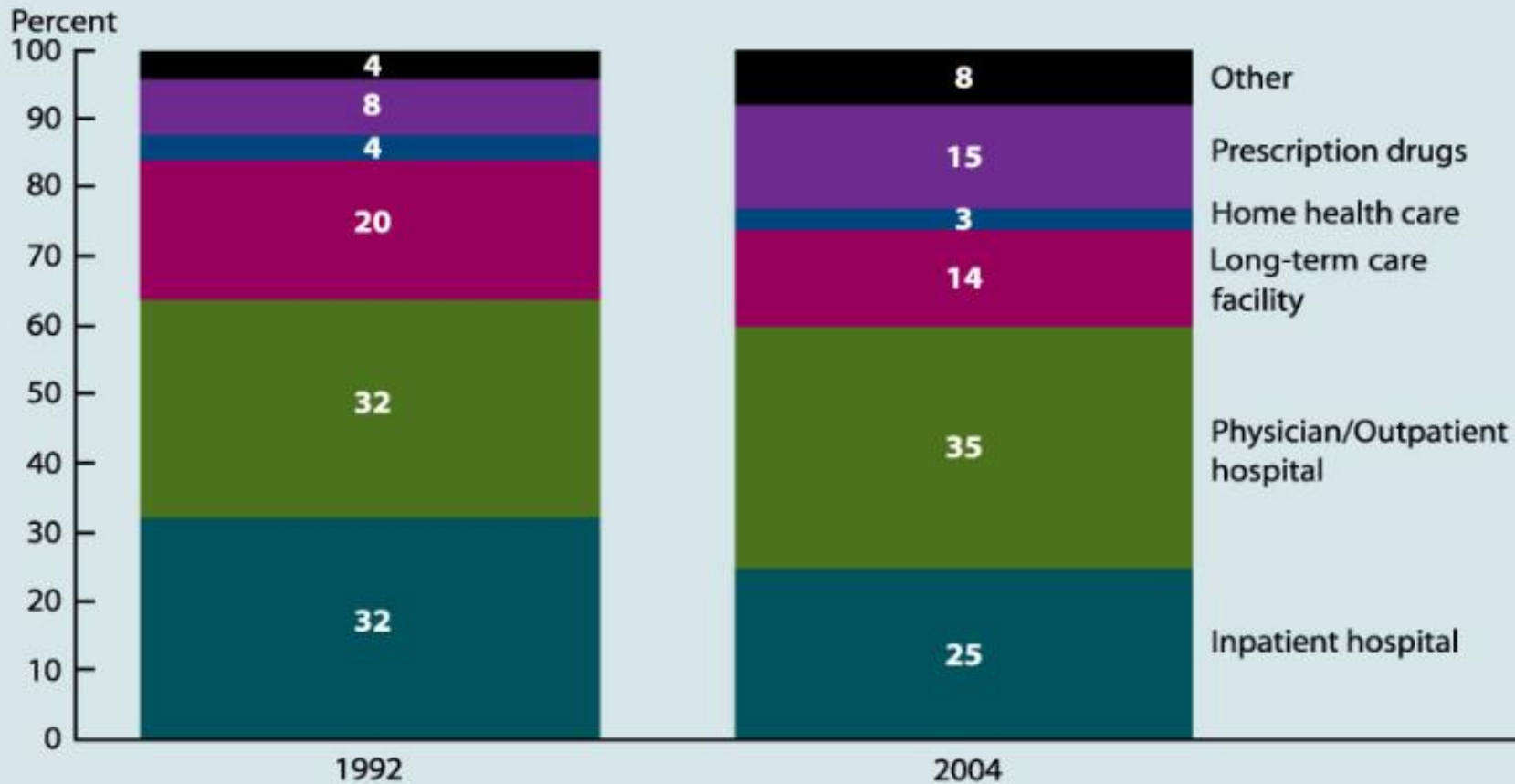
Note: Data include both out-of-pocket costs and costs covered by insurance. Dollars are inflation adjusted to 2004 using the Consumer Price Index (Series CPI-U-RS).

Reference population: These data refer to Medicare enrollees.

Source: Centers for Medicare and Medicaid Services, Medicare Current Beneficiary Survey.

General Health: Better Now

Major components of health care costs among Medicare enrollees age 65 and over, 1992 and 2004



Note: Data include both out-of-pocket costs and costs covered by insurance. "Other" includes short-term institutions, hospice services, and dental care.

Reference population: These data refer to Medicare enrollees.

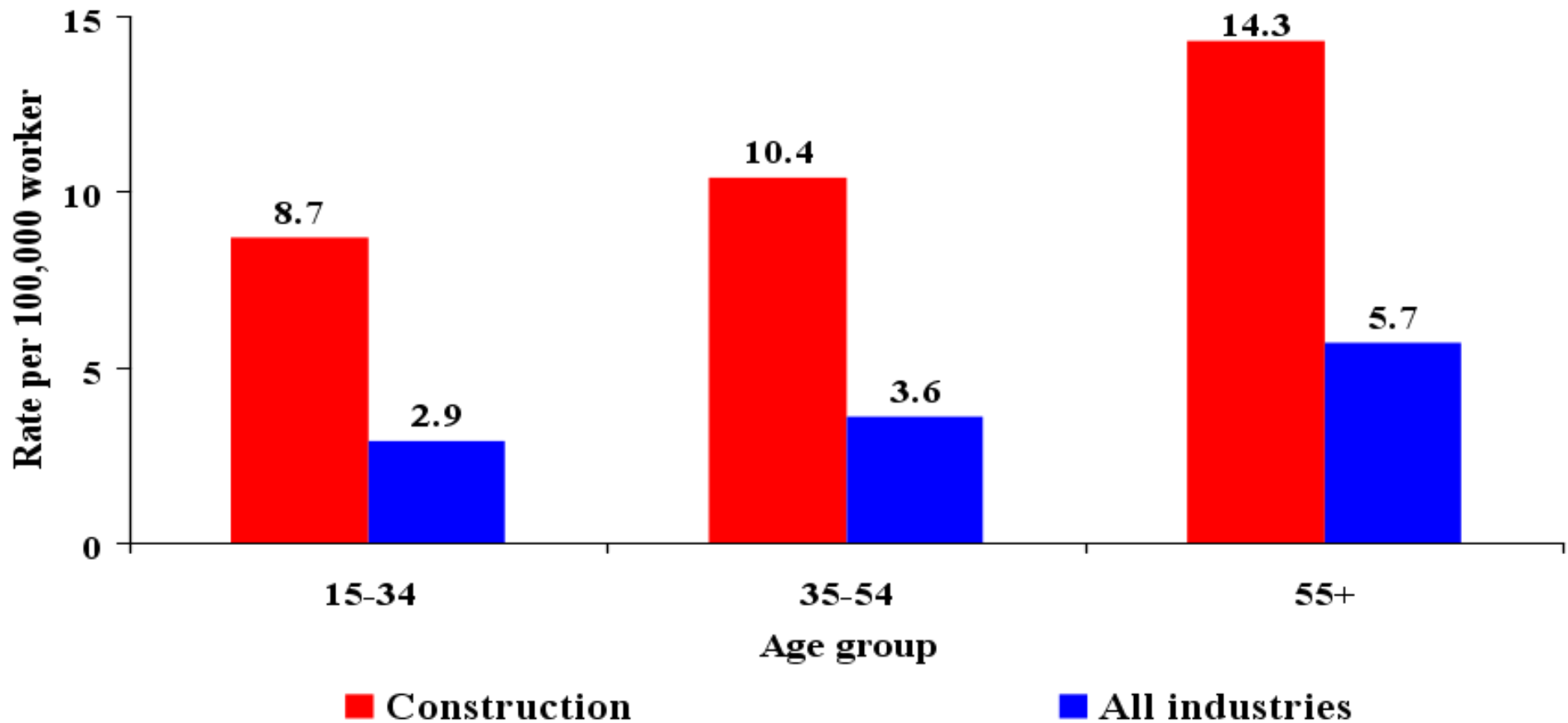
Source: Centers for Medicare and Medicaid Services, Medicare Current Beneficiary Survey.

Age and Chronic Conditions



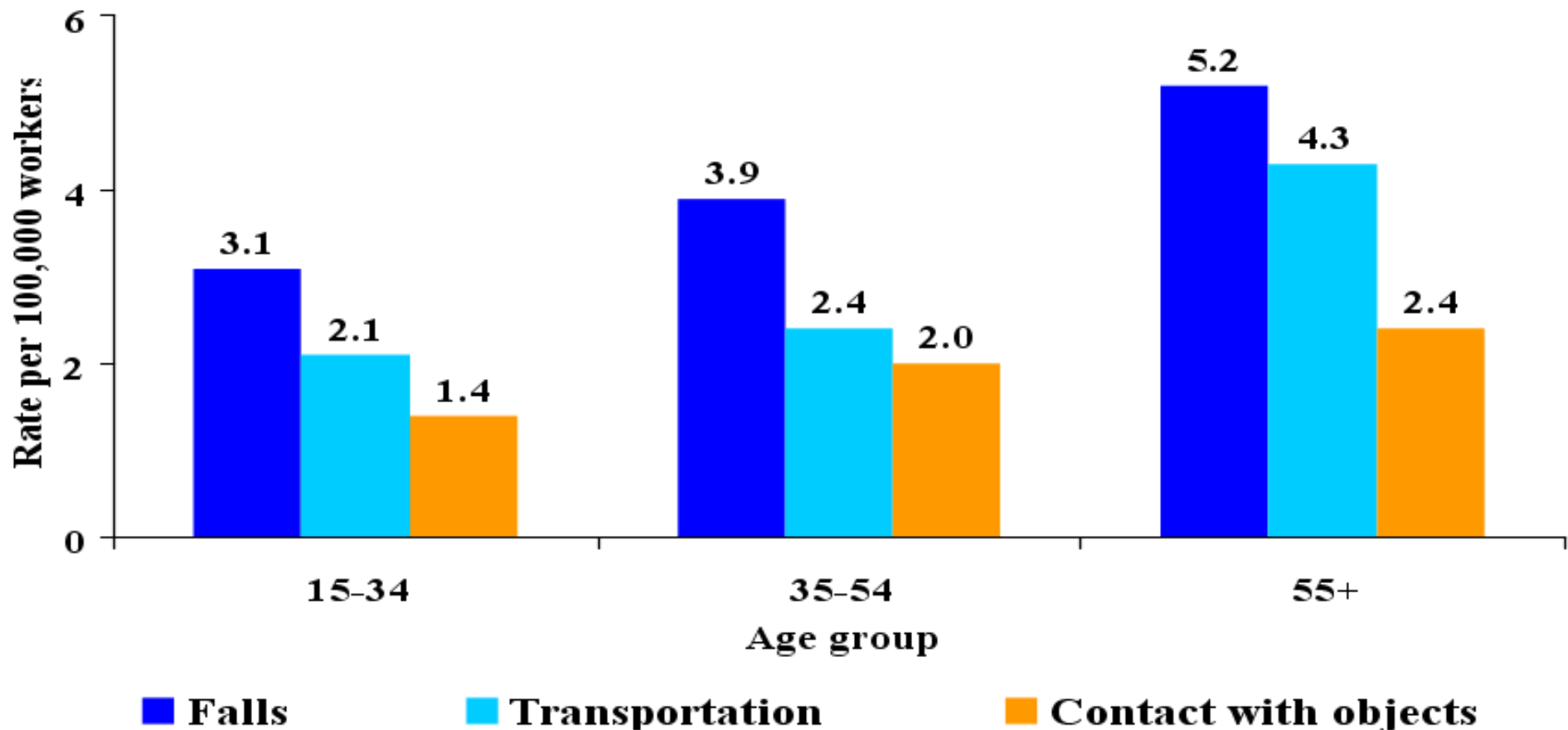
Older Construction Workers
as a
particular example.

Rate of fatal injuries per 100,000 workers, construction versus all industries, 2007



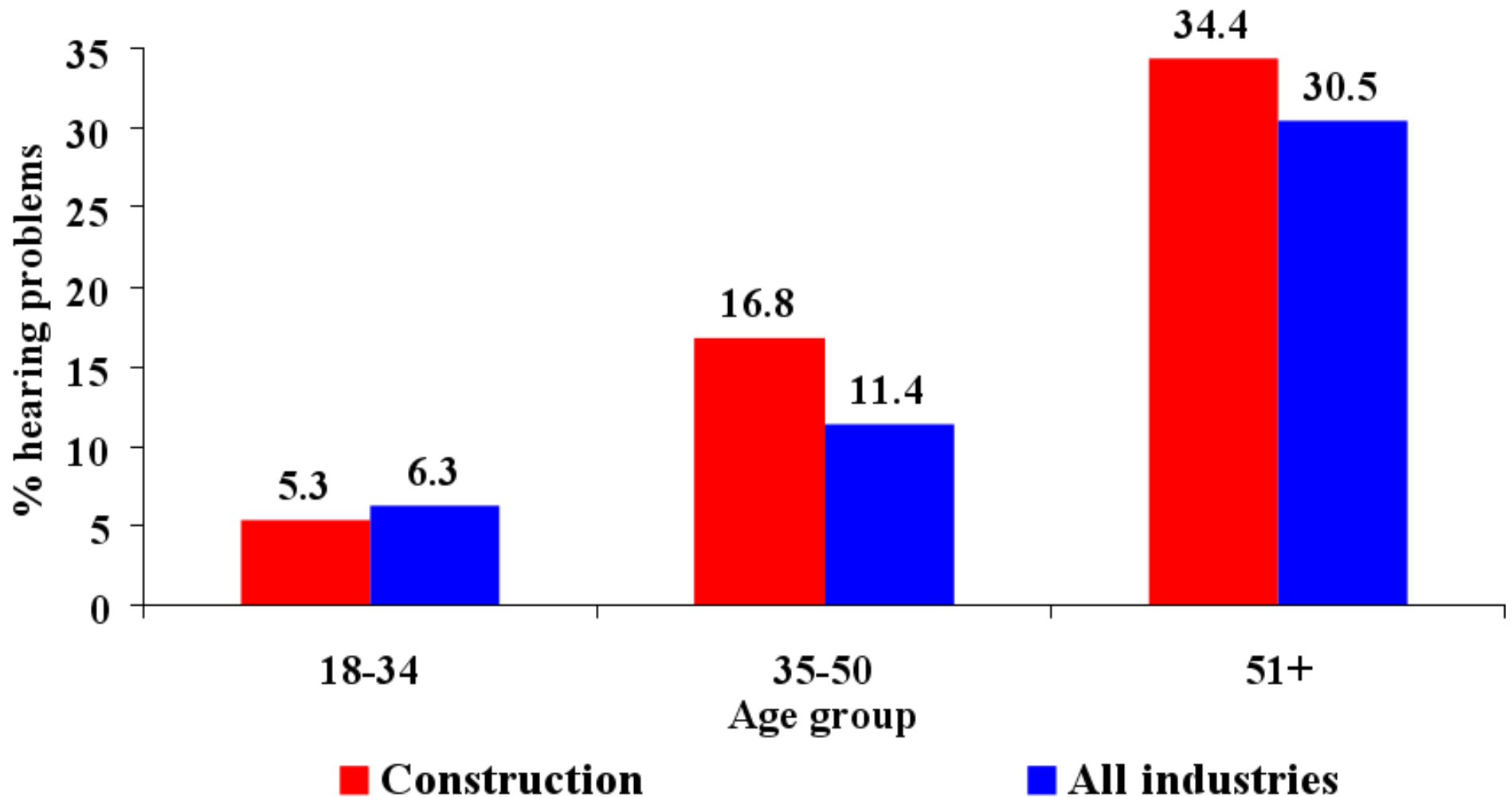
- The death rate steadily increases with age and is more than double for construction than for all industries

Rate of fatal injuries in construction, leading causes, 2007

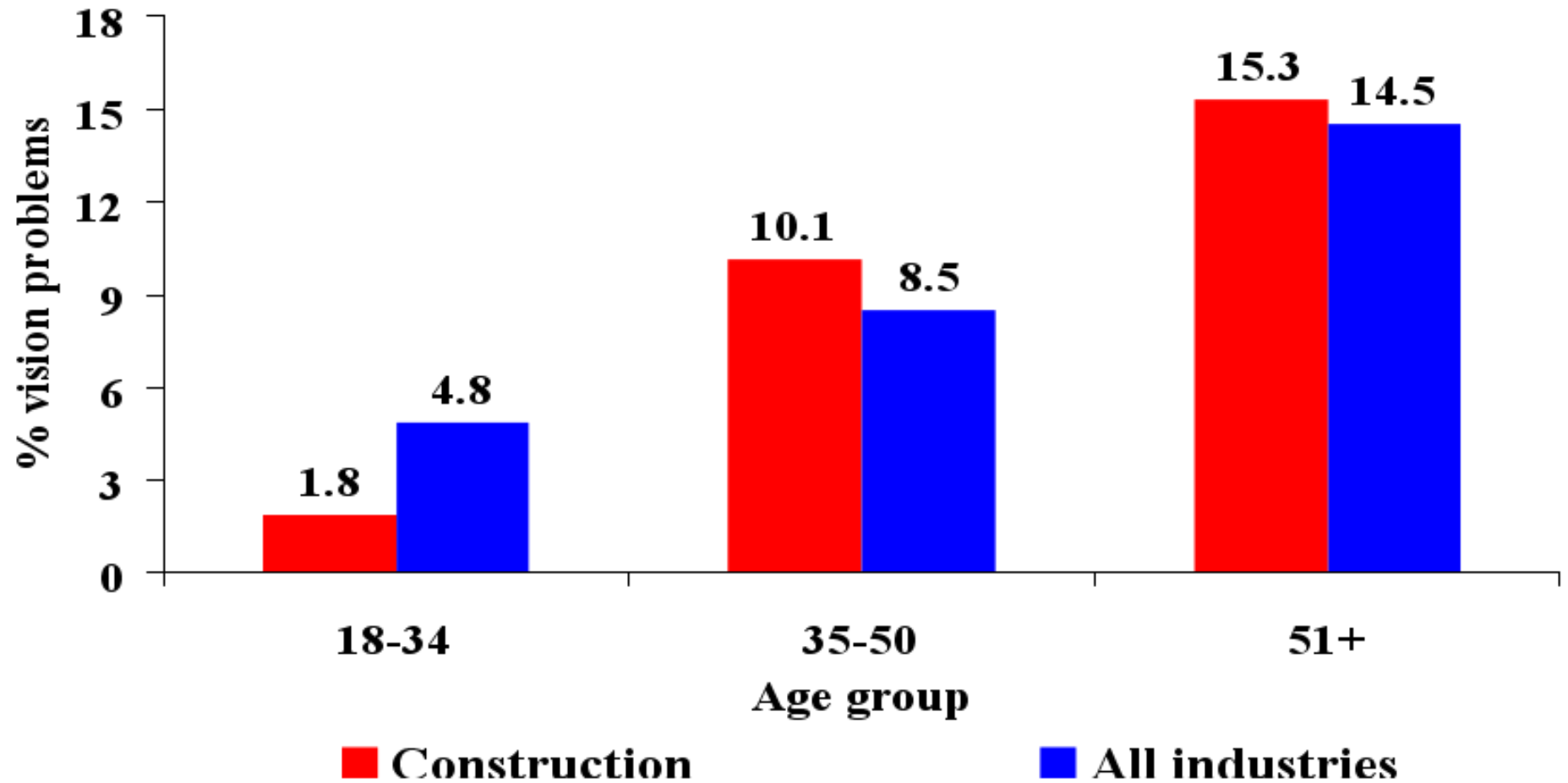


- The death rate steadily increases with age for each of the leading causes

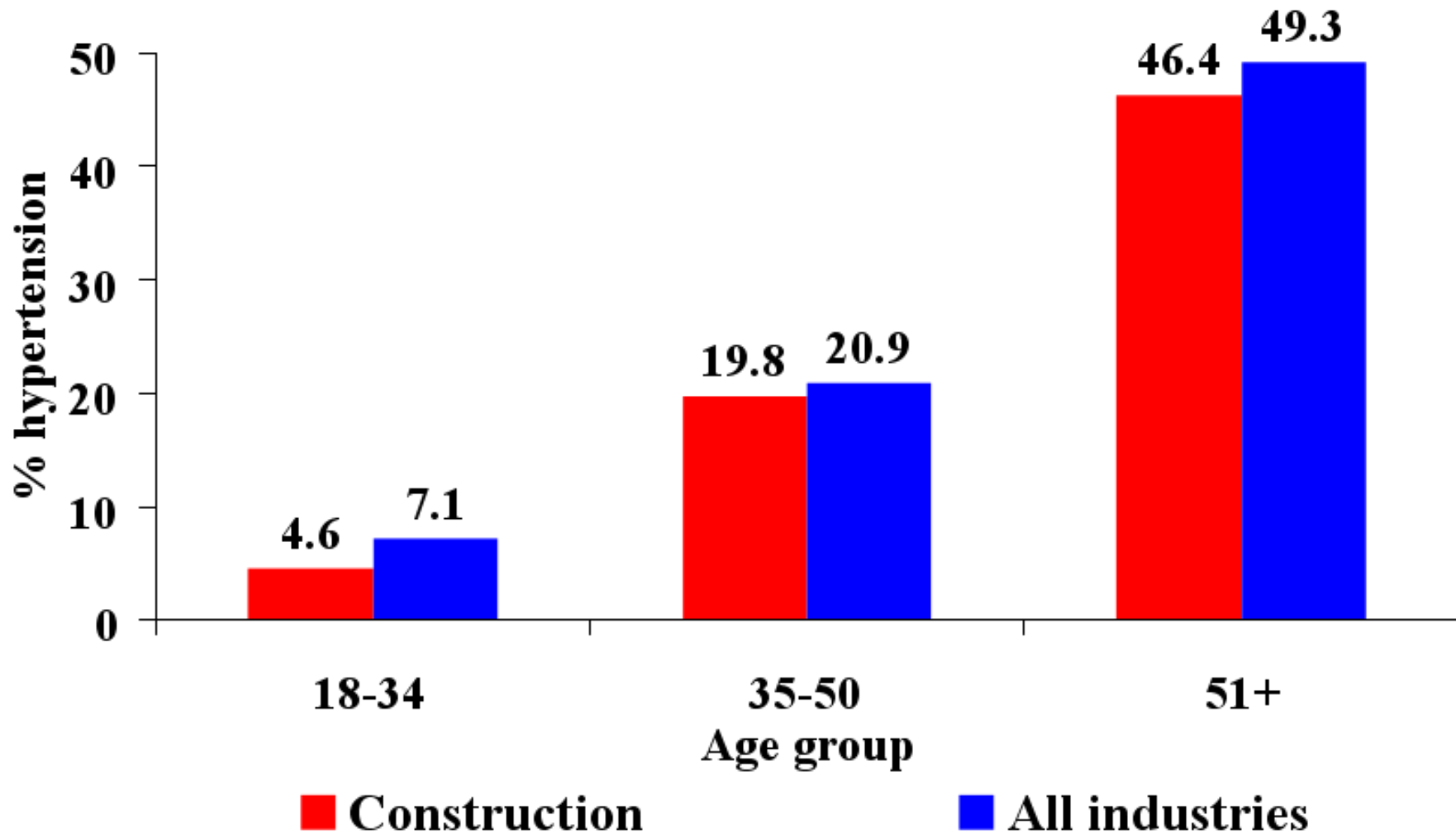
Hearing problems, 2006



Vision problems, 2006



Hypertension, 2006



Study of Aging Workers

- In 2003, NIOSH asked National Research Council to:
- Characterize the older adult workforce over next 20-30 years
- Identify the key policy and research issues
- Address retirement patterns and characteristics of the older adult workforce and their jobs
- Conduct workshop on differential effects of environmental hazards

National Research Council Study (2004)

- Life course perspective emphasizes aging productively (functional category) versus age (status category)
- Begin early to detect age-related changes that can be adversely affected by working conditions
- Disease risk factors should be addressed to extend years of healthy working
- Promote research to capture precursors of age-related changes

Aging: A Balance of Factors

- Possible Limitations

- Mental Capacity
- Chronic Conditions
- Physical Capacity

- Compensating Factors?

- Attitude
- Judgment
- Flexibility
- Experience

Aging Productivity

- Injury risk and its consequences differ in older workers
- Medical costs rise with age
 - Estimated 25% increase from age 40 to 50 to 35% from age 50 to 60
- BUT, age is less a factor in health care costs than the presence of such risk factors as smoking, obesity, lack of exercise, and diabetes!
- There is indeed such a thing as “aging productively” or “healthy aging”!

Future Research Needs

- **Conduct Longitudinal Studies of Older Workers**
 - **Impact of work risks on older workers**
 - **Interactions with chronic health conditions**
 - **Socio-Economics Status relationships to:**
 - **Hazardous employment**
 - **Retirement decisions and barriers to continued work**
- **Surveys**
 - **Update National Occupational Exposure Survey (NIOSH and OSHA)**
 - **Develop a new Quality of Employment Survey (NIOSH and OSHA)**
- **Develop ability to measure rates by age, gender and ethnicity (BLS)**

Summary:

All workers are aging, but those that are older continue to grow as a proportion of the working populations

As the available -worker population changes, many employers have jobs for which they want to attract and retain more experienced workers.

Workers are living longer than ever before and many are staying in the workforce past age 55.

Summary (continued)

The current economic crisis puts continuing pressure on workers' families and their retirement plans. Retirements are likely to be postponed.

Consequences of injuries are, on average, more severe for older workers than younger workers and require more days away from work to recover. (US BLS)

Death resulting from work-related injuries occurs at higher rates among older workers than younger workers. (US BLS)

Summary (continued)

Current knowledge about keeping older workers safe and healthy at work is insufficient.

Yet, enough is known to mount campaigns to improve protections to support the health and well-being of the current and growing numbers of aging workers.

We must guard against age-related work-place discrimination.

Data Sources

- Census of Fatal Occupational Injuries (CFOI), 1992-2007
- Survey of Occupational Injuries and Illnesses (SOII), 2007
- Current Population Survey (CPS), 1985-2007
- March Supplement to the Current Population Survey, 2007
- February Supplement to the Current Population Survey, 2007
- National Health Interview Survey (NHIS), 2006
- Medical Expenditure Panel Survey (MEPS), 2006
- Health and Retirement Survey (HRS), 1994-2006
- BLS Employment Projection, 2006-2016
- BLS Current Employment Statistics, 2007-2009