

Emerging Risks in Workers Compensation

Shades of Things to Come?

**Workers Compensation Educational Conference
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Presentation Outline

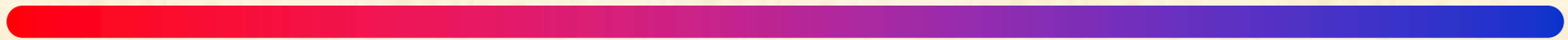
- 1. The Obesity Epidemic**
- 2. The Aging Workforce**
- 3. Resurgent Claims Severity**
 - **Inflation as a Driving Force**
- 4. War Veterans and Return-to-Work Issues**
- 5. Non-English Speaking Workers**

Q&A

#1

Emerging (Mega) Trend

The Obesity Epidemic





What Do We Mean by “Obesity” and How Do We Measure It?

Definitions:

- *Obesity*
 - Having a very high amount of body fat in relation to lean body mass
 - Body Mass Index of 30 or higher
- *Body Mass Index (BMI)*
 - A measure of an adult’s weight in relation to his or her height,
 - Specifically, the adult’s weight in kilograms divided by the square of his or her height in meters

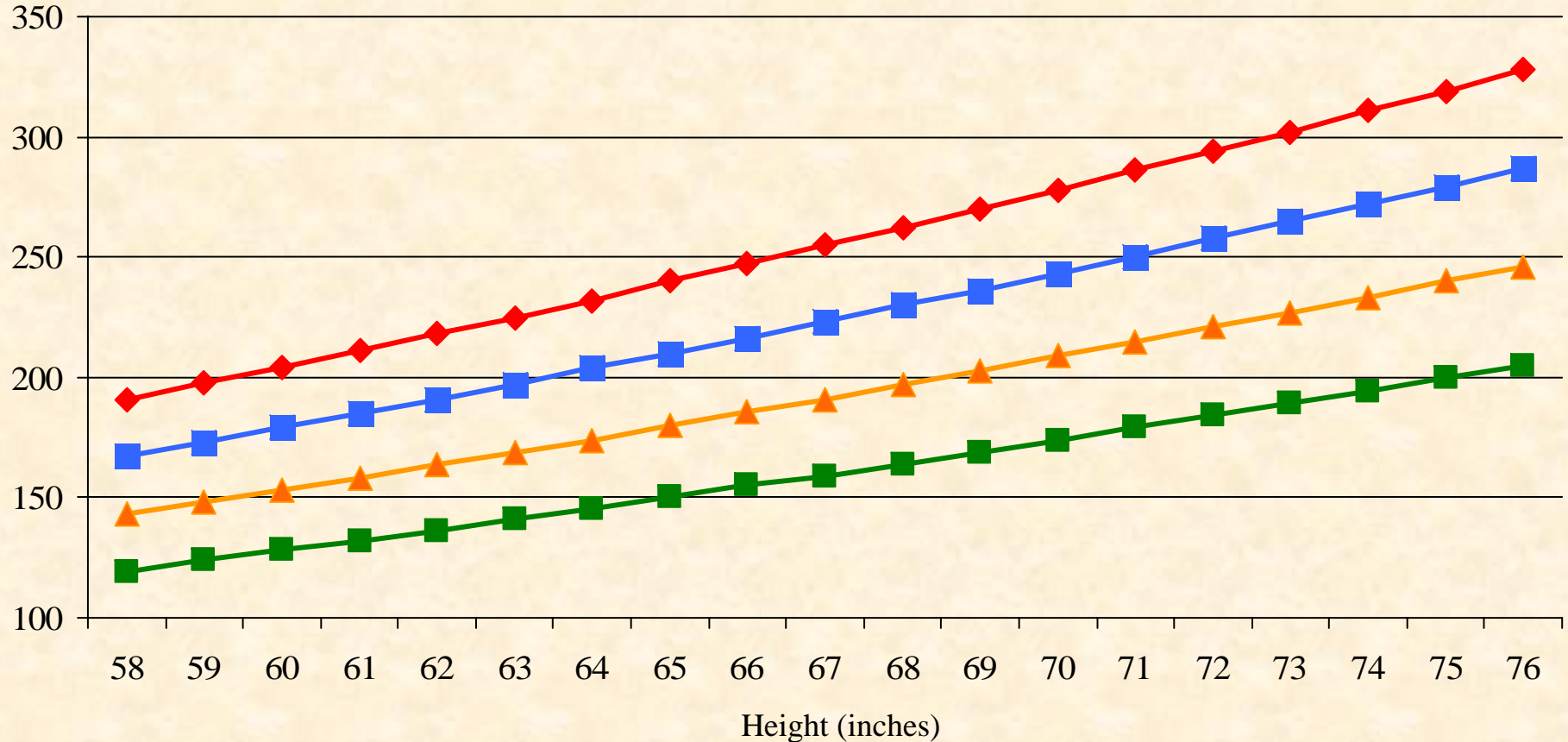
Source: Centers for Disease Control and Prevention.



BMI's for Various Heights and Weights

■ BMI=25 ▲ BMI=30 ■ BMI=35 ◆ BMI=40

Weight (lbs)

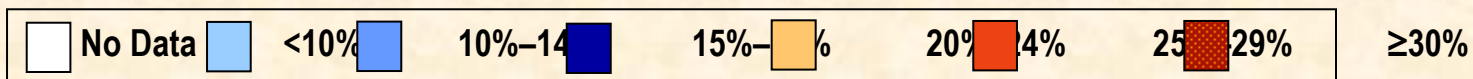
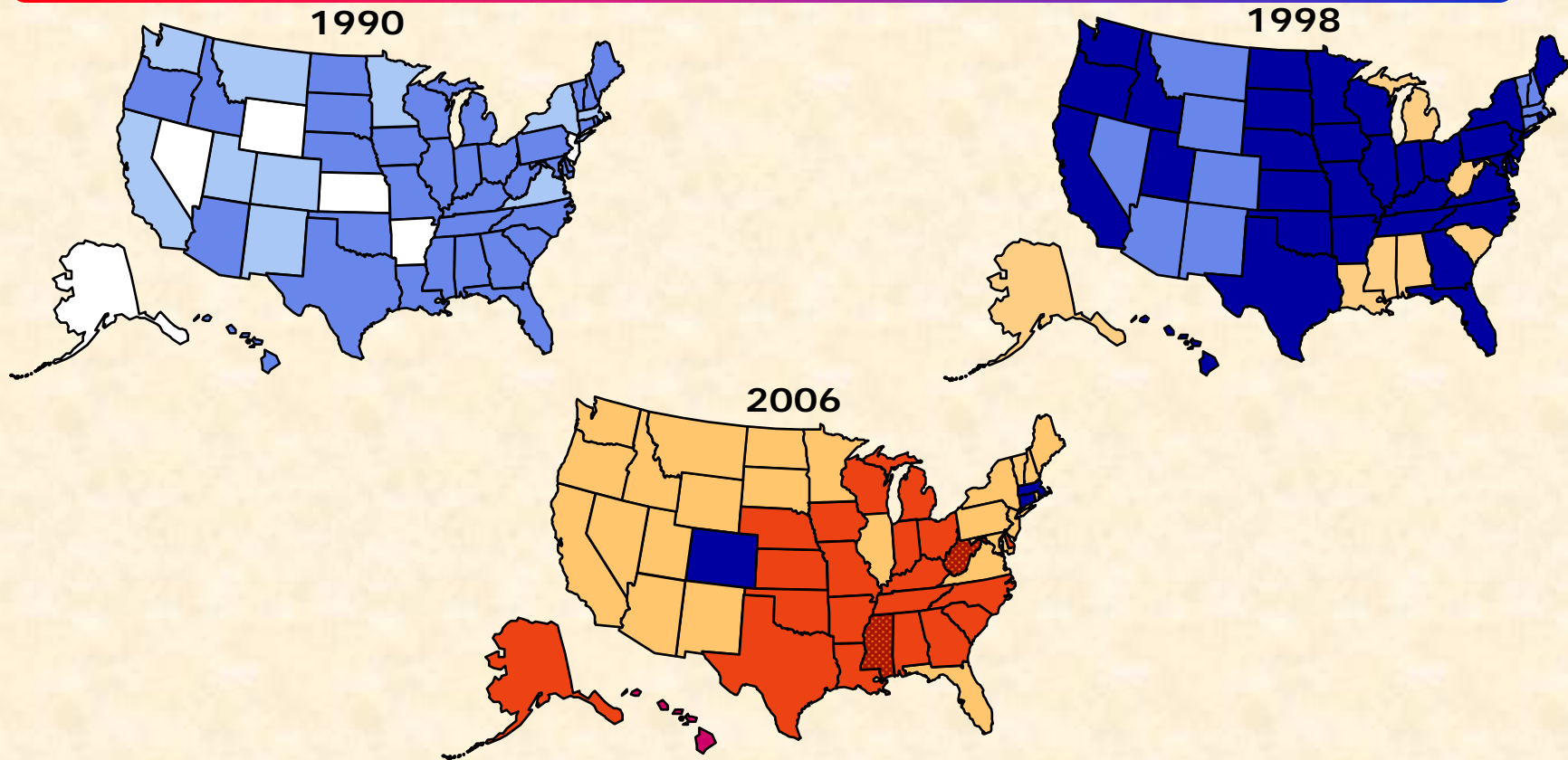




Obesity Trends* Among U.S. Adults

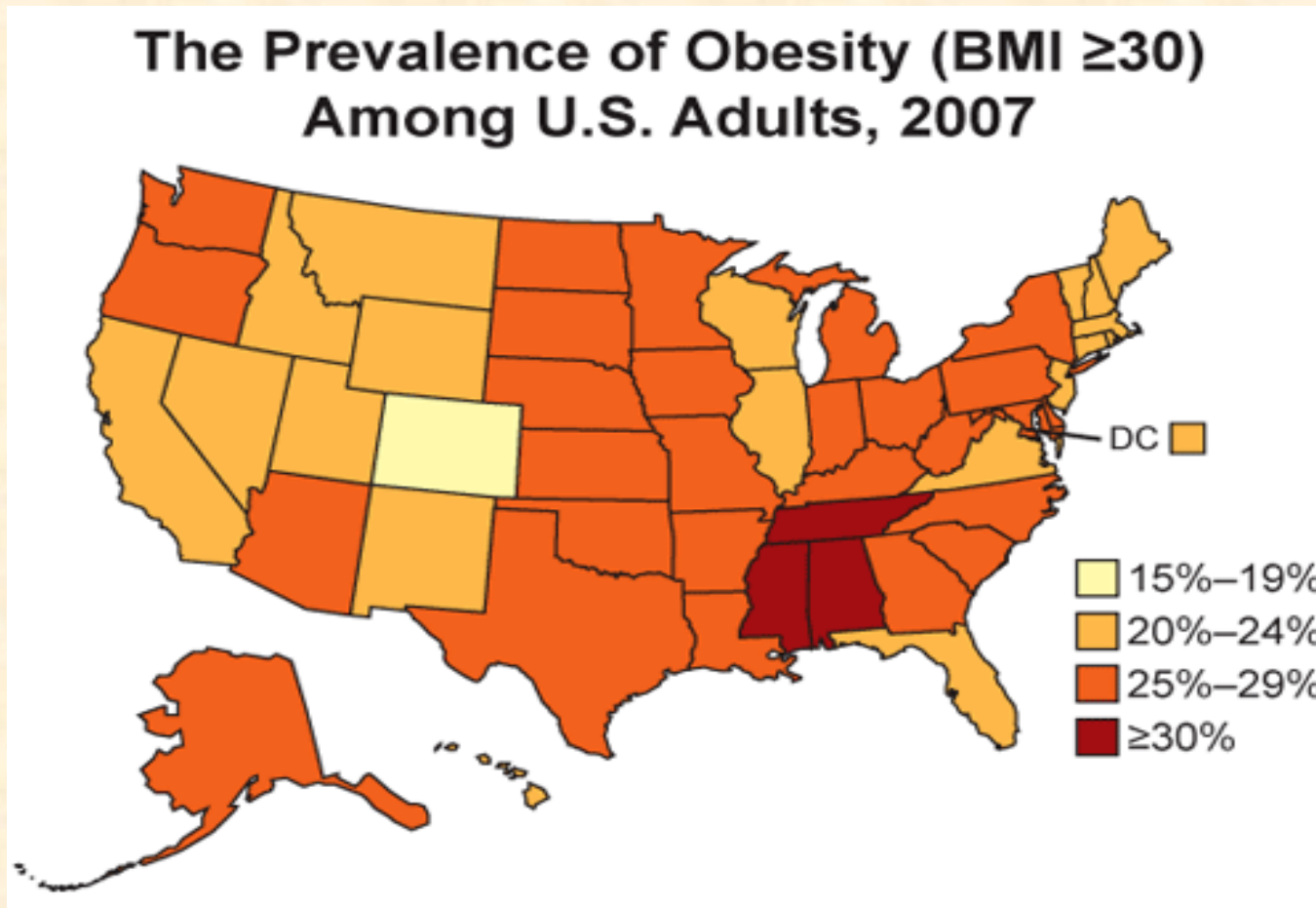
BRFSS, 1990, 1998, 2006

(*BMI ≥ 30 , or about 30 lbs. overweight for 5'4" person)





In Every State (except Colorado), Over 20% of the Adult Population is Obese



Source: Centers for Disease Control and Prevention, Behavioral Risk Factor Surveillance System
www.cdc.gov/Features/dsObesity



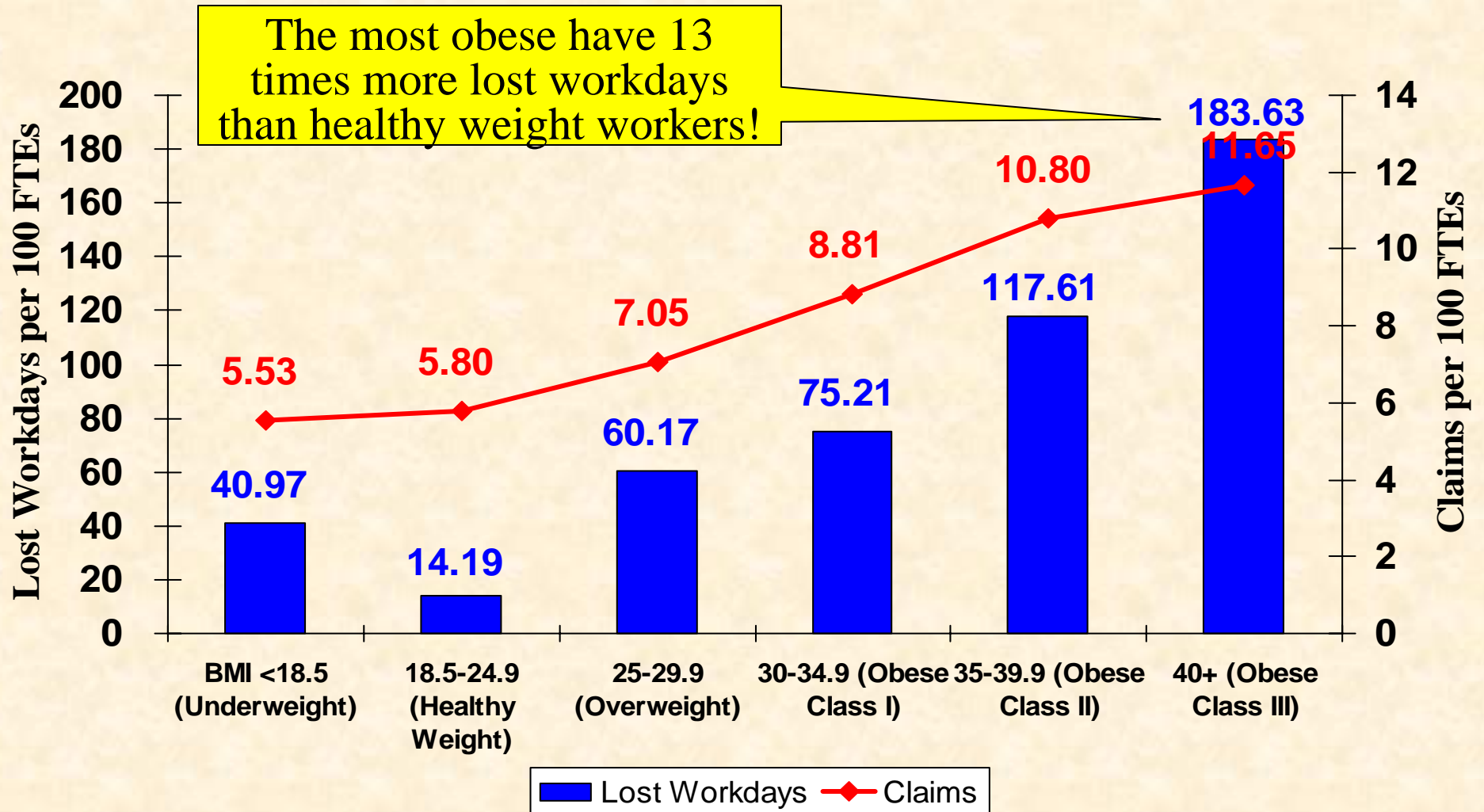
For Analysis Purposes, We Create BMI Categories

BMI Categories

- Underweight: BMI <18.5
- **Healthy Weight: BMI=18.5-24.9**
- Overweight: BMI=25.0-29.9
- Obese
 - Class I BMI=30.0-34.9
 - Class II BMI=35.0-39.9
 - Class III BMI>40.0



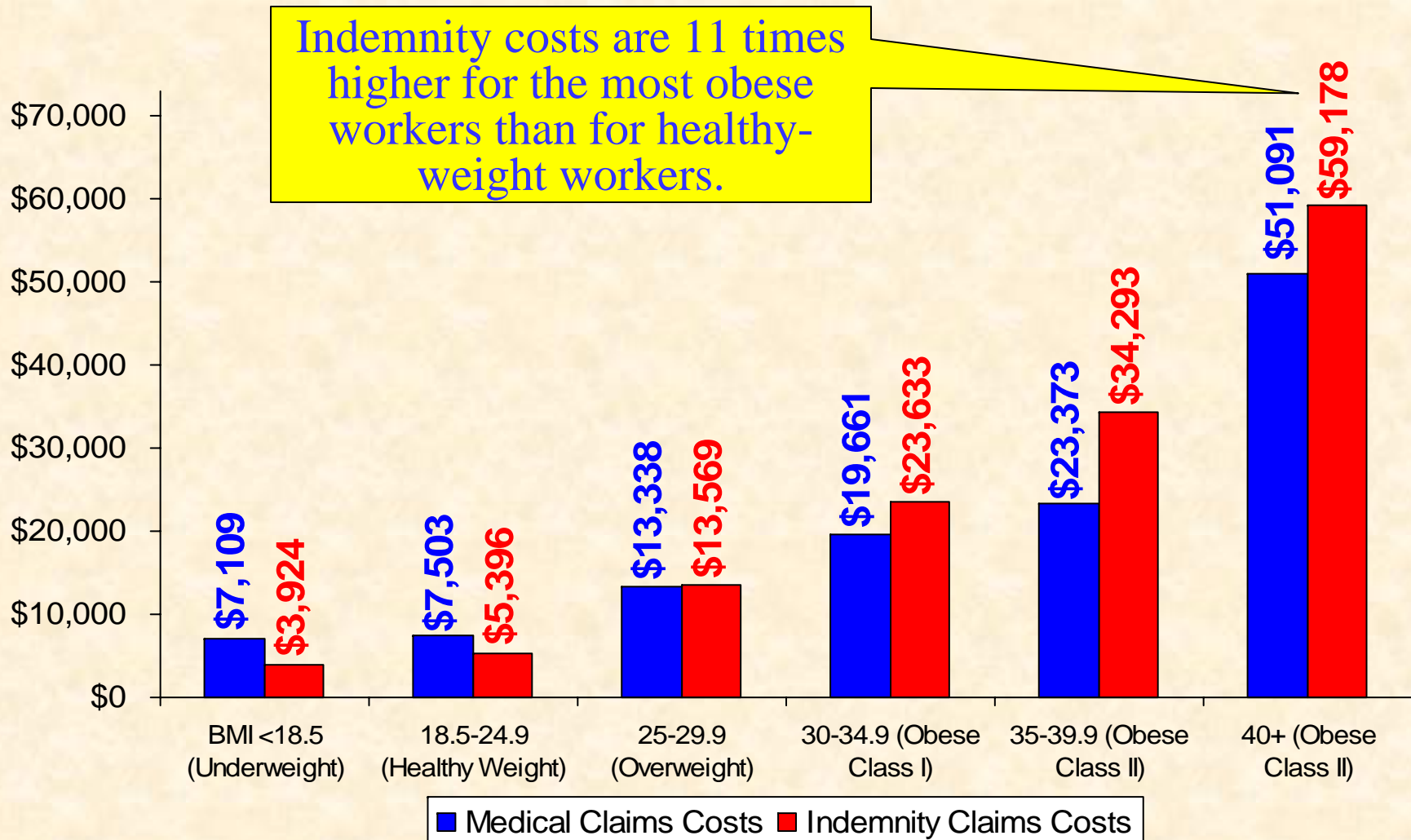
The Most Obese Workers File Twice as Many WC Claims as Healthy-Weight Workers



Source: Ostbye, T., et al, "Obesity and Workers Compensation," *Archives of Internal Medicine*, April 23, 2007.



WC Medical Claims Costs are 6.8x Higher for the Most Obese Workers



Source: Ostbye, T., et al, "Obesity and Workers Compensation," *Archives of Internal Medicine*, April 23, 2007.



It's Not All Because of Obesity: “Confounding Factors”

Some people with high BMI also have other characteristics that contribute to disability and/or death. They

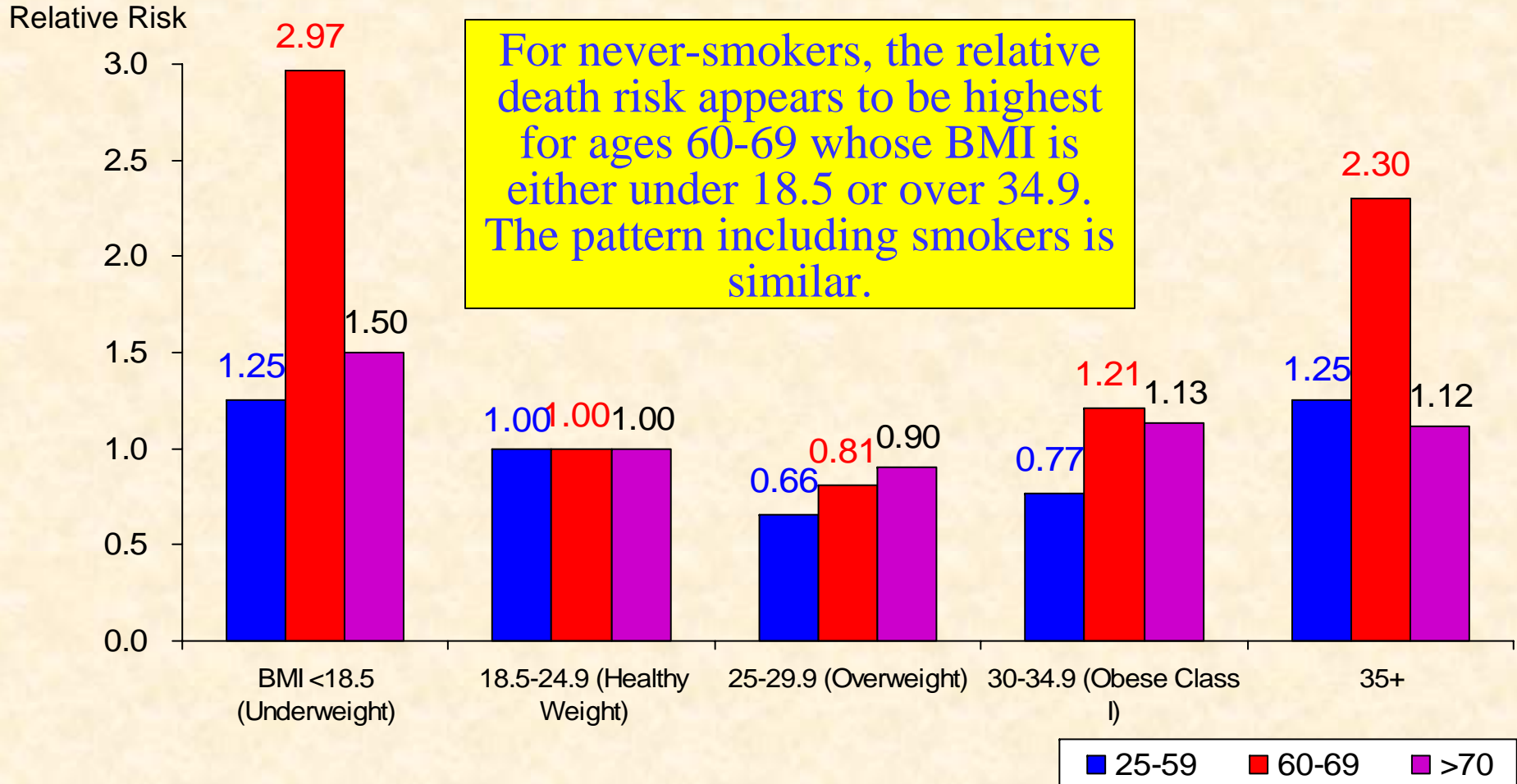
- Smoke and/or regularly drink alcohol heavily
- Are older and/or male
- Have chronic diseases (e.g., diabetes, heart disease)
- Have other conditions/circumstances (e.g., no health insurance, don't exercise) that are related to poor health

Failure to adjust for these “confounding factors” likely results in overstating the effect of obesity.

Source: Flegal, Graubard, Williamson, and Gail, “Excess Deaths Associated with Underweight, Overweight, and Obesity,” *JAMA* Vol. 293, No. 15 (April 20, 2005) pp. 1861-1867.



Relative* Death Risk for “Never-Smokers” by BMI and Age Category



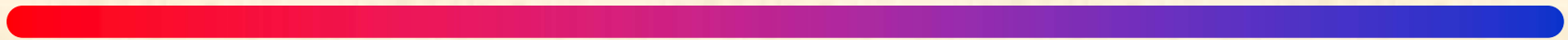
*Compared to people with BMI of 18.5-24.9.

Source: Flegal, Graubard, Williamson, and Gail, “Excess Deaths Associated with Underweight, Overweight, and Obesity,” *JAMA* Vol. 293, No. 15 (April 20, 2005) pp. 1861-1867.

#2

Emerging (Mega)Trend

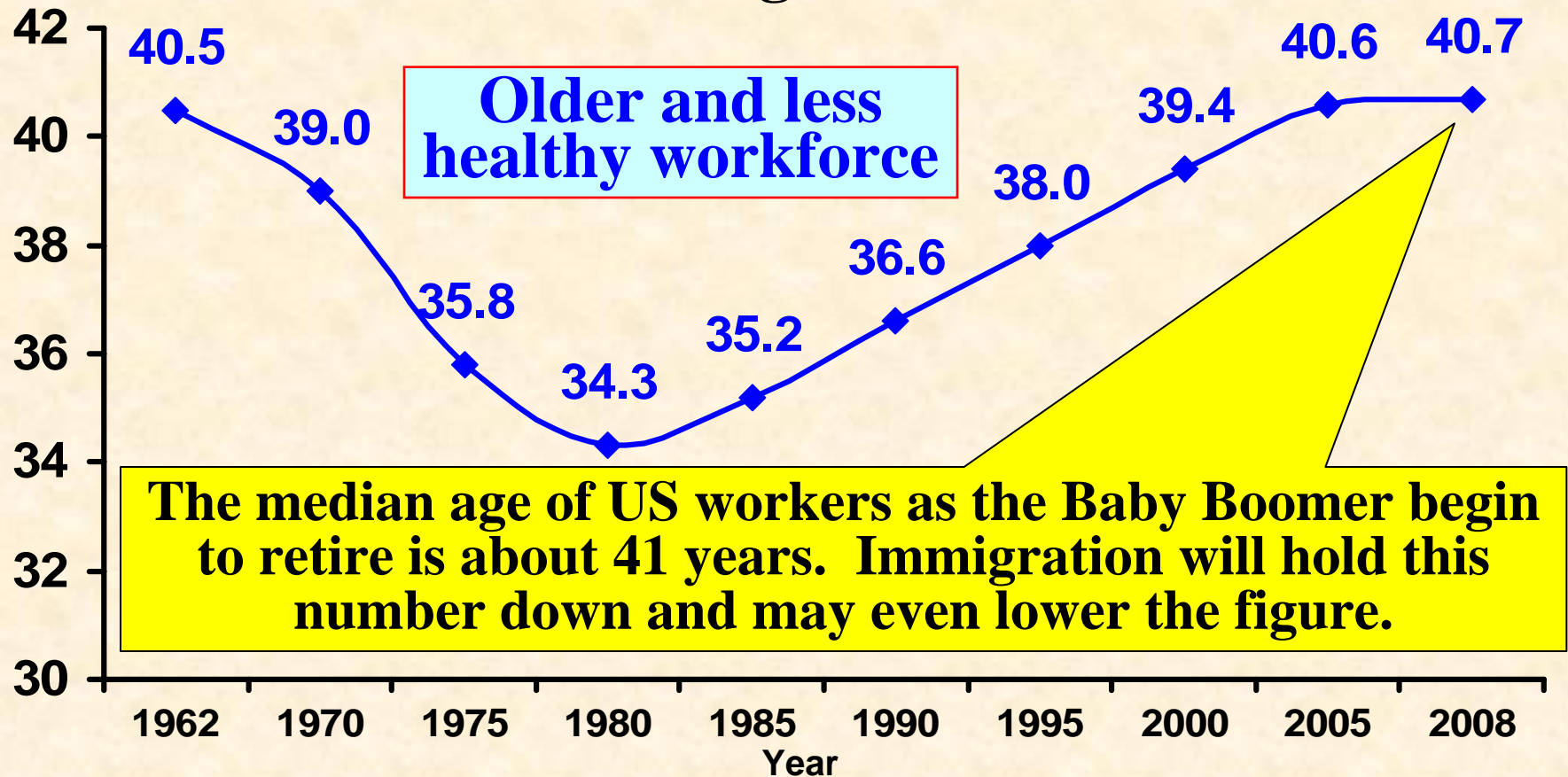
The Aging Workforce





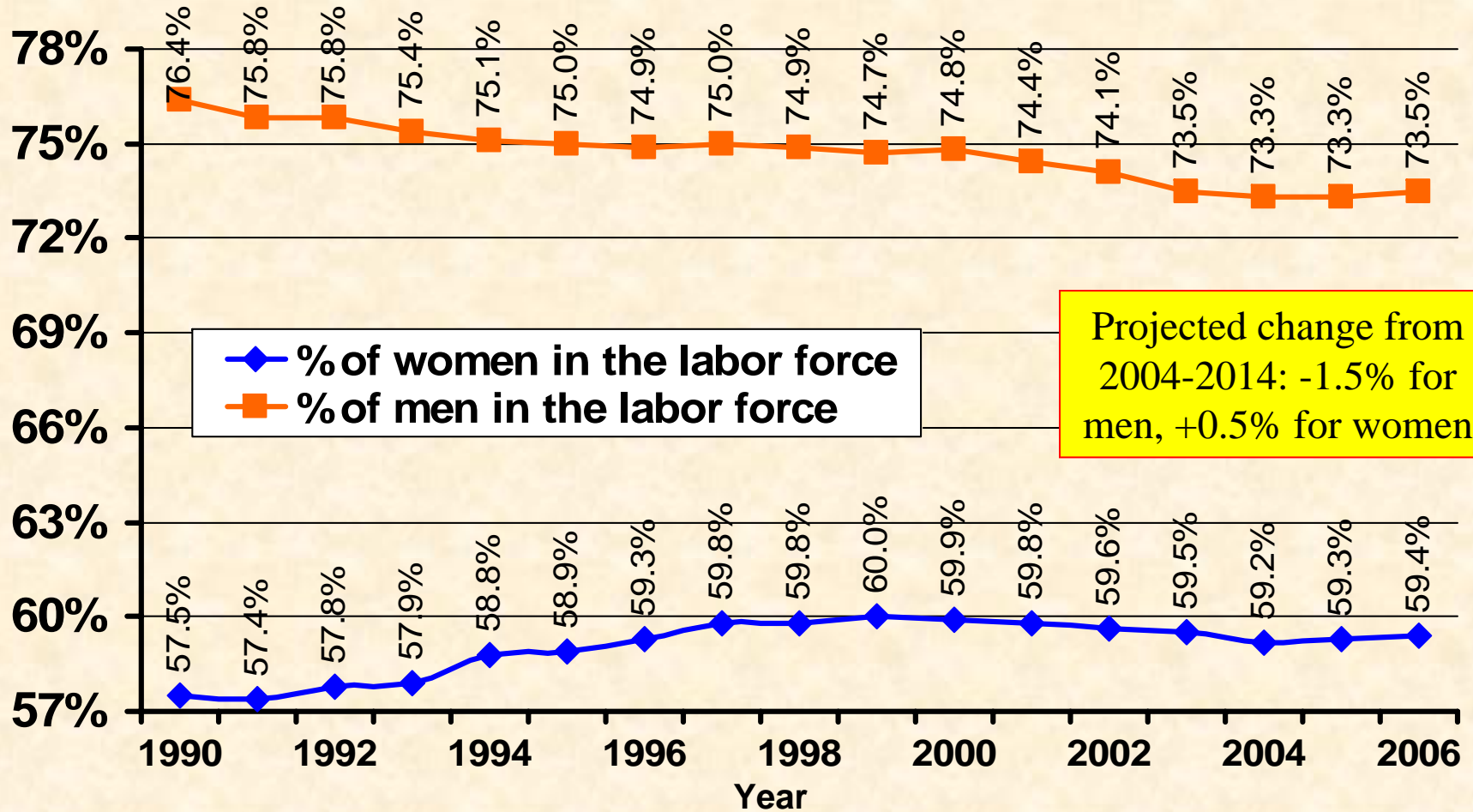
U.S. Workforce is Aging: Significant Implications for Workers Comp

Median Age of U.S. Worker





Changes in Labor Force Participation by Gender, 1990-2006



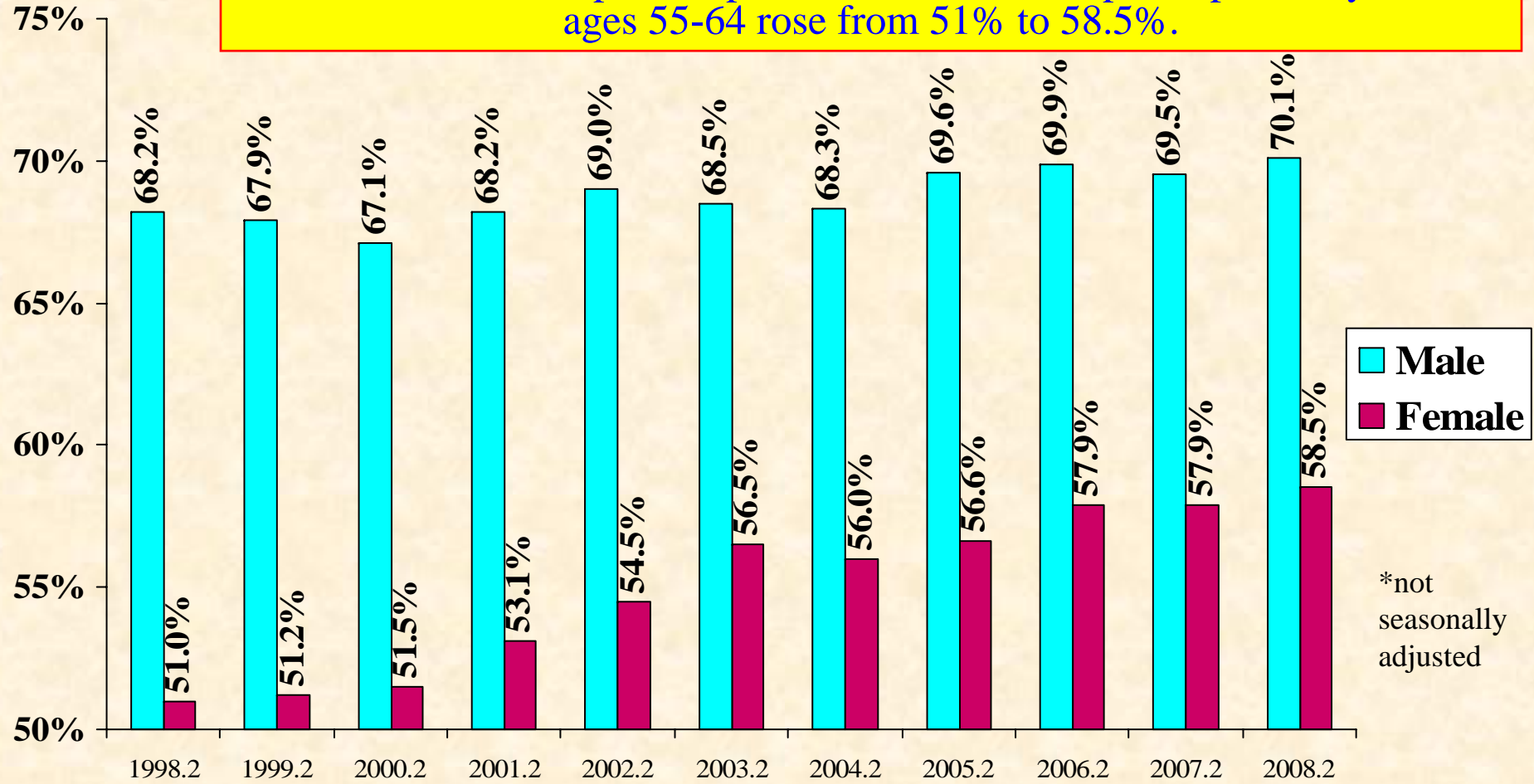
Sources: US Bureau of Labor Statistics, and Toossi, "Labor Force Projections to 2014: retiring boomers," *Monthly Labor Review*, November 2005, pp. 25-44.



Male/Female Labor Force Participation Rates*, Ages 55-64, 1998-2008

During the last decade, about 68-69% of men ages 55-64 were in the labor force. But over that span the percent of labor-force participation by women ages 55-64 rose from 51% to 58.5%.

Participation Rate



*not seasonally adjusted

Source: US Bureau of Labor Statistics, US Department of Labor; Rates shown are end of 2nd quarter each year.



Some Workers Are Planning to Start Retirement at a Later Age

In January 2008, 18 percent of workers said that, in the past year, they'd changed their expected retirement start.

- 14.2% postponed retirement,
- 3.8% accelerated it.

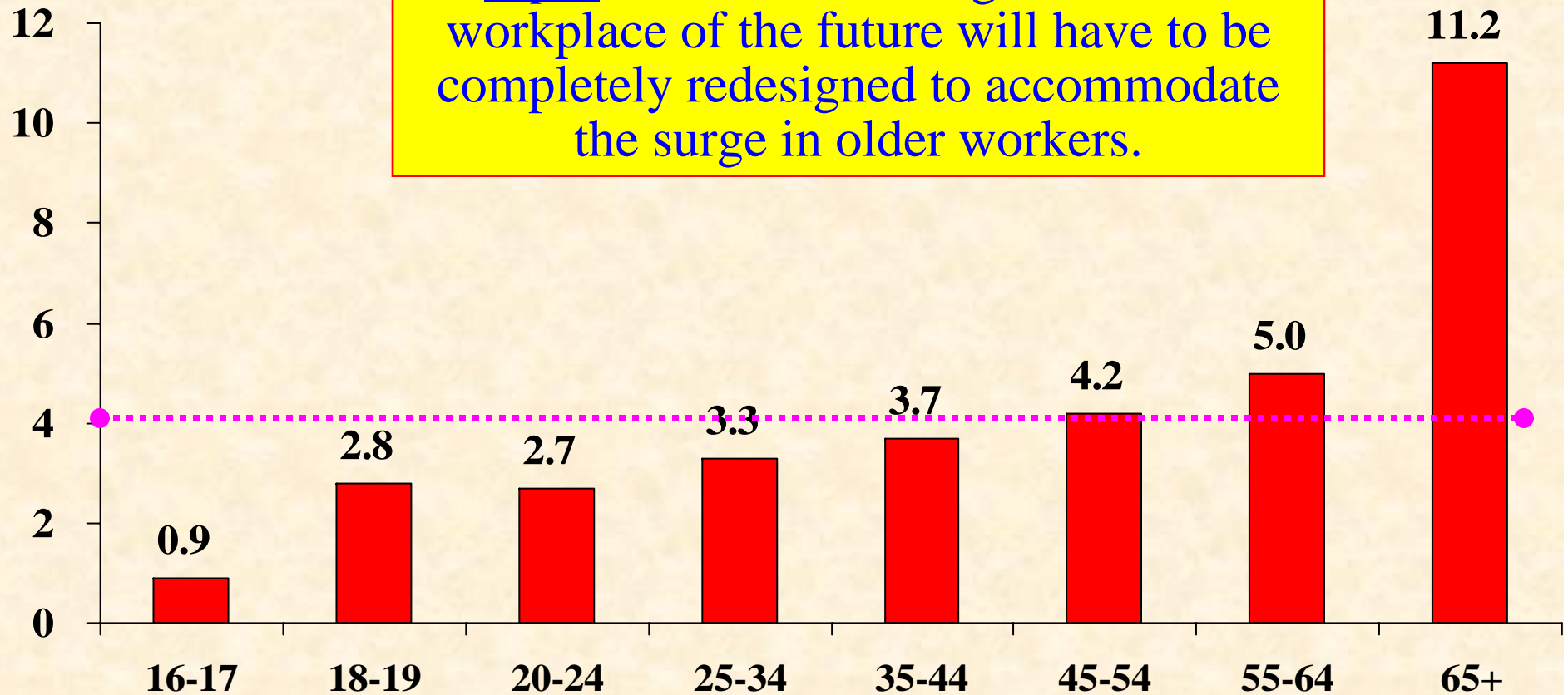
These percentages can change quickly: in 2003 the percent changing their planned retirement age in the prior year was 32%.



Fatal Work Injury Rates Climb Sharply With Age

Fatal Work Injuries
per 100,000
Workers (2006)

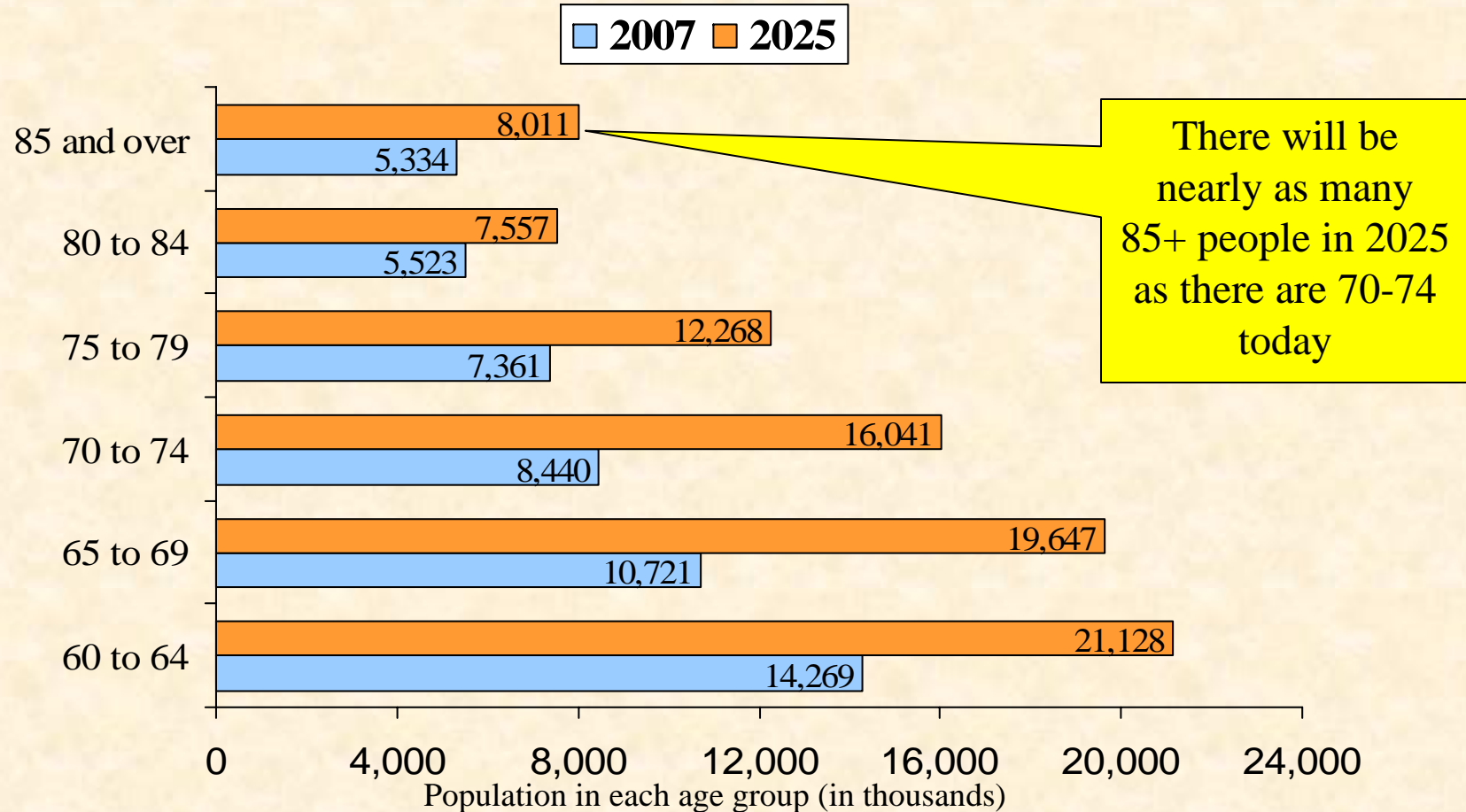
The fatality rate for workers 65 and older is triple that of workers age 35-44. The workplace of the future will have to be completely redesigned to accommodate the surge in older workers.



Source: US Bureau of Labor Statistics, US Department of Labor; Insurance Information Institute.



US Population: 2007 vs. 2025 Projection*



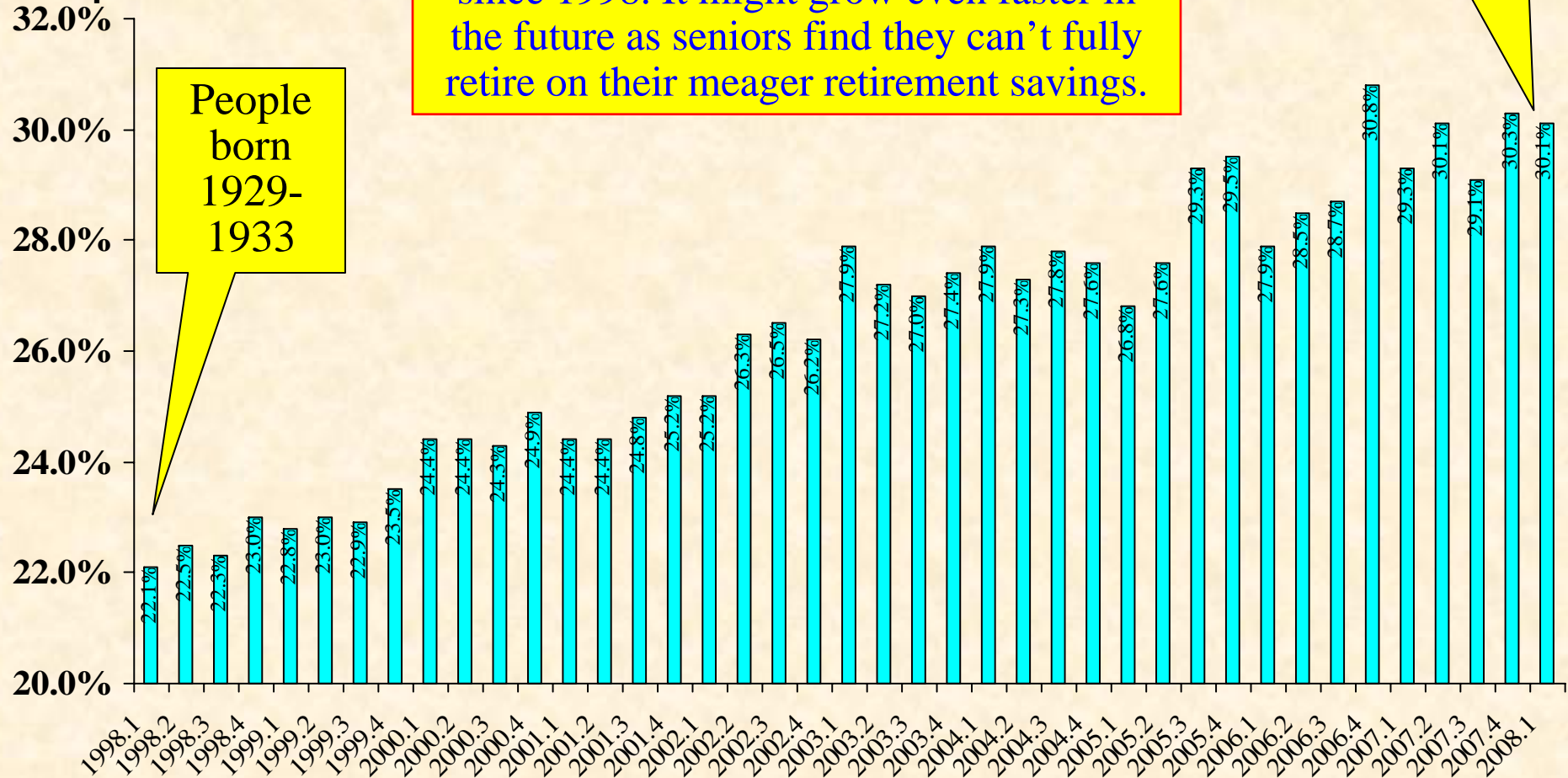
*Using the Census Bureau's Middle (i.e., most probable) projections

Source: National Projections Program, Population Division, U.S. Census Bureau



At What Once Was Retirement Age, More People Are Working

Labor Force
participation rate



The labor force participation rate for workers 65-69 has grown considerably since 1998. It might grow even faster in the future as seniors find they can't fully retire on their meager retirement savings.

People born 1939-1943

People born 1929-1933



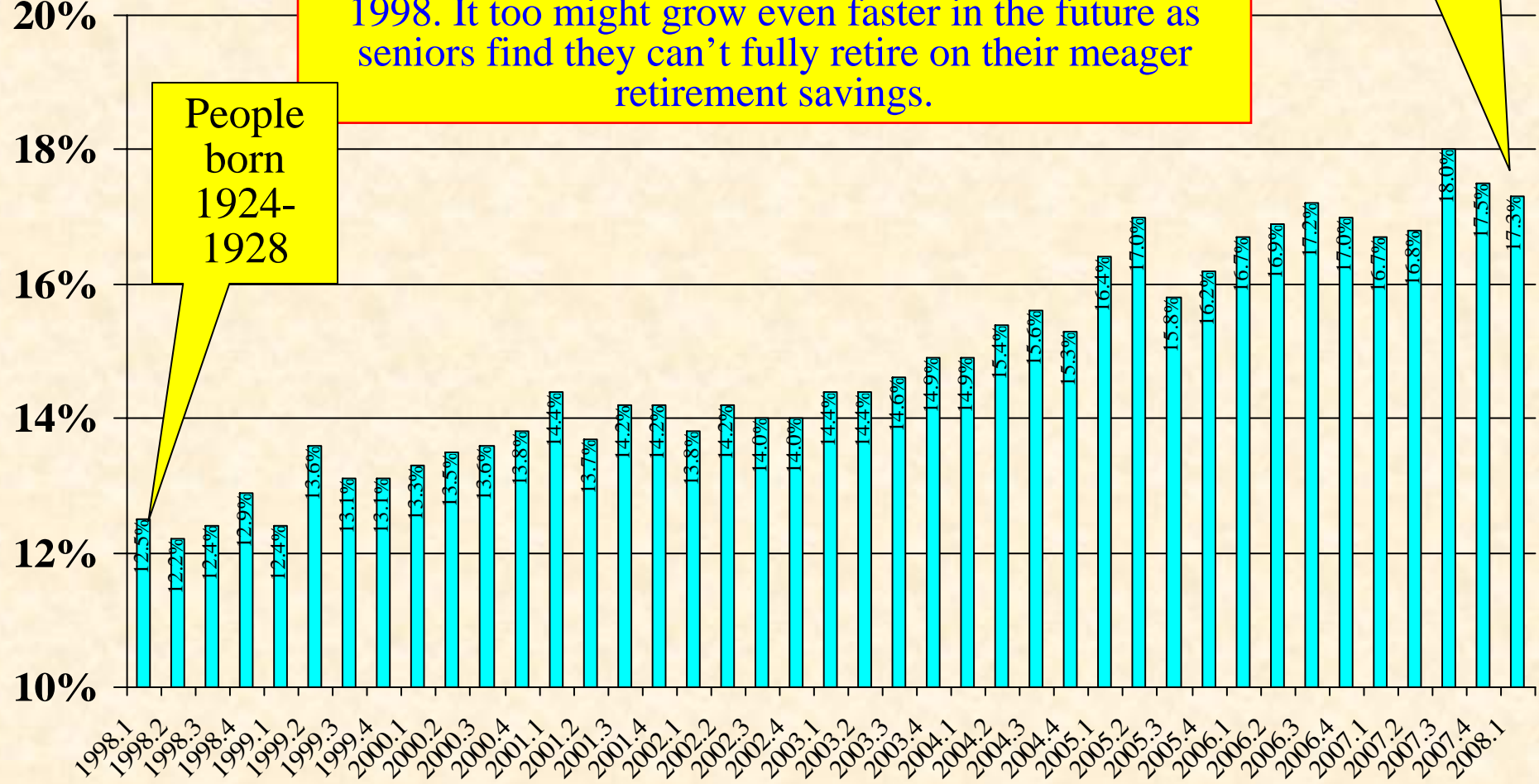
Quarterly Labor Force Participation Rate, Ages 70-74, 1998-2008

Labor Force participation rate

The labor force participation rate for workers 70-74 has also grown considerably—by about 50%—since 1998. It too might grow even faster in the future as seniors find they can't fully retire on their meager retirement savings.

People born 1934-1938

People born 1924-1928



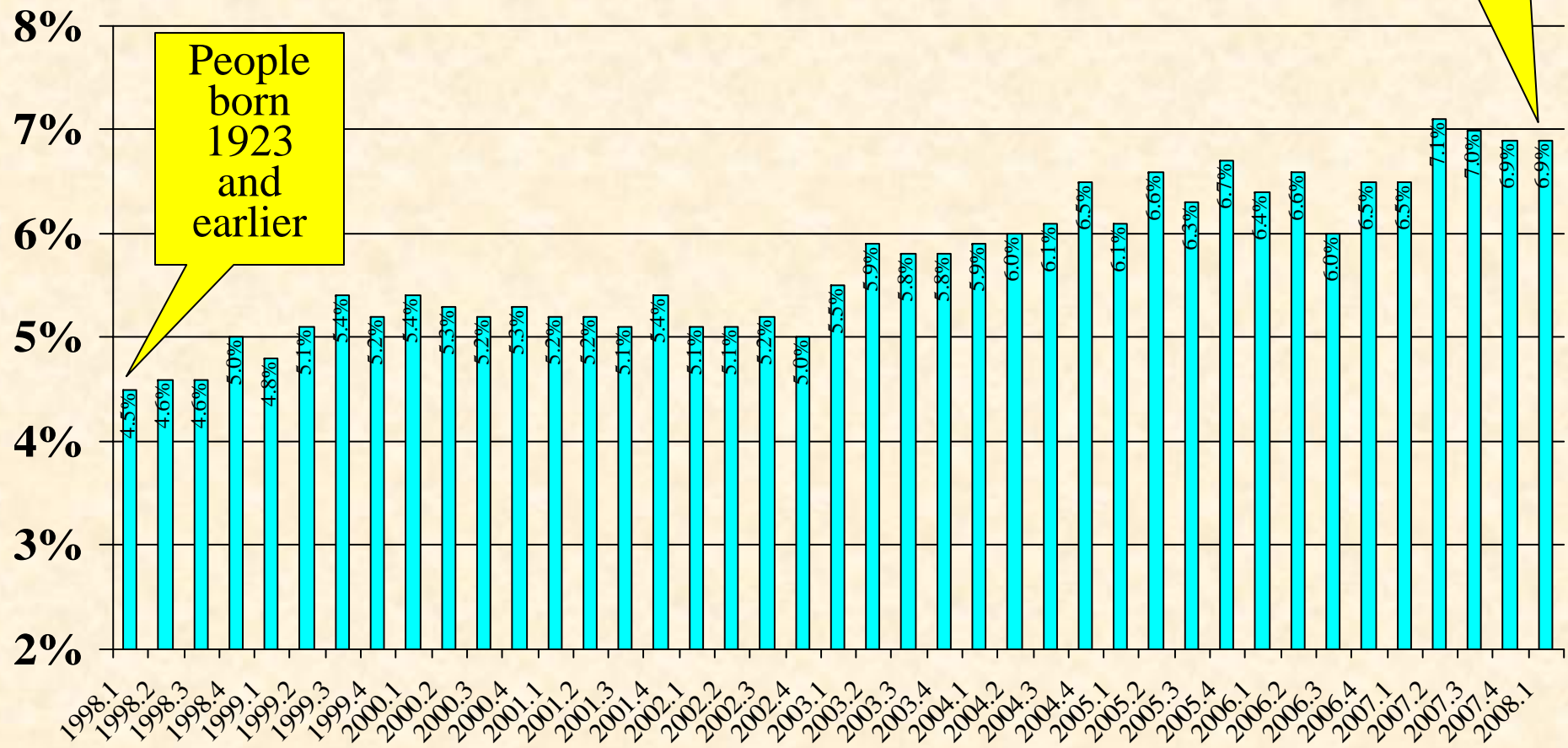
Source: US Bureau of Labor Statistics, US Department of Labor; Insurance Information Institute.

Quarterly Labor Force Participation Rate, Ages 75 and Over, 1998-2008

The labor force participation rate for workers 75 and over has grown slowly in absolute terms— but relatively by about 50%—since 1998.

People born 1933 and earlier

Labor Force participation rate

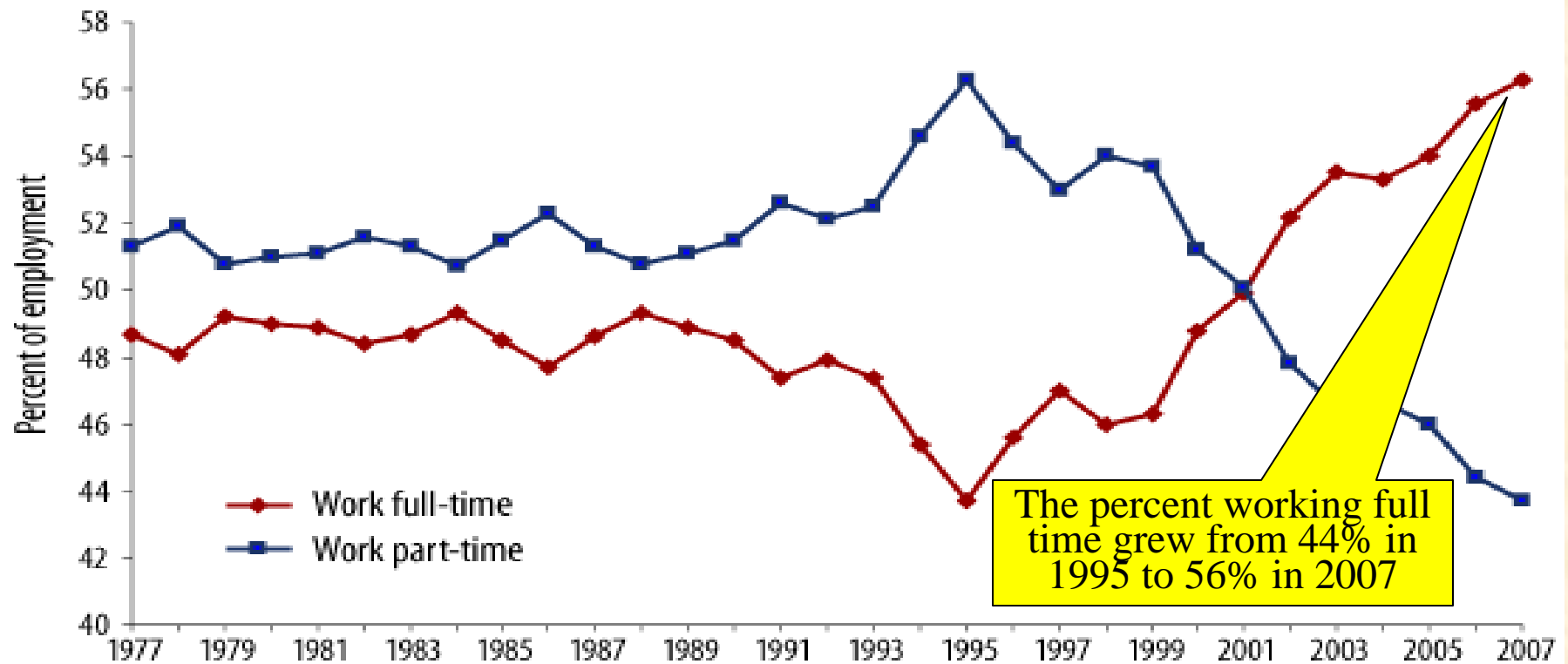


Source: US Bureau of Labor Statistics, US Department of Labor; Insurance Information Institute.



Workers 65+ by Work Schedule, 1977-2007

Workers 65 and over by work schedule, 1977-2007



Source: U.S. Bureau of Labor Statistics

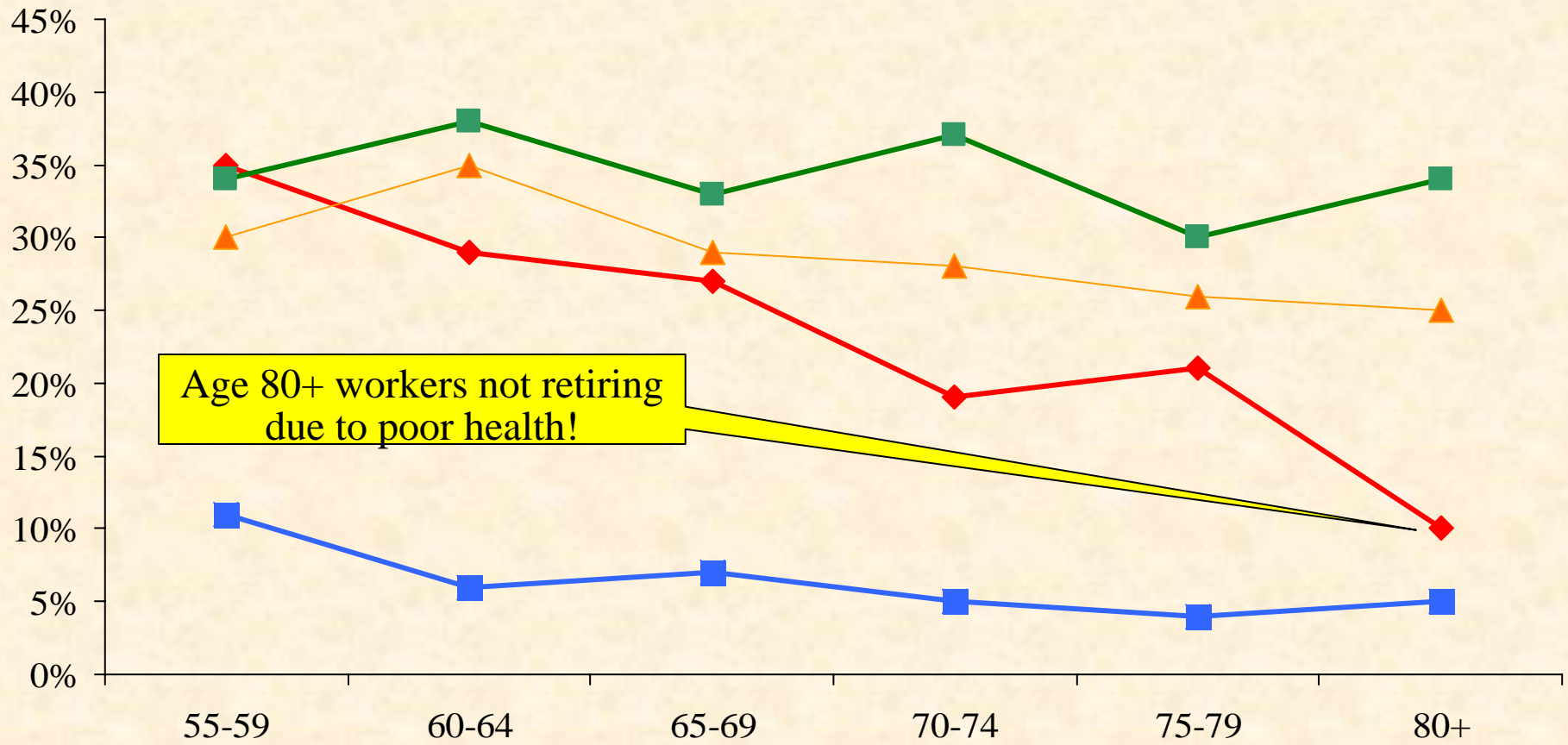
www.bls.gov



Why Elderly Stop Working, by Age Group: 2002

Percent who stop working

- ◆ Poor Health
- More Time With Family
- ▲ Wanted To Do Other Things
- Didn't Like Work

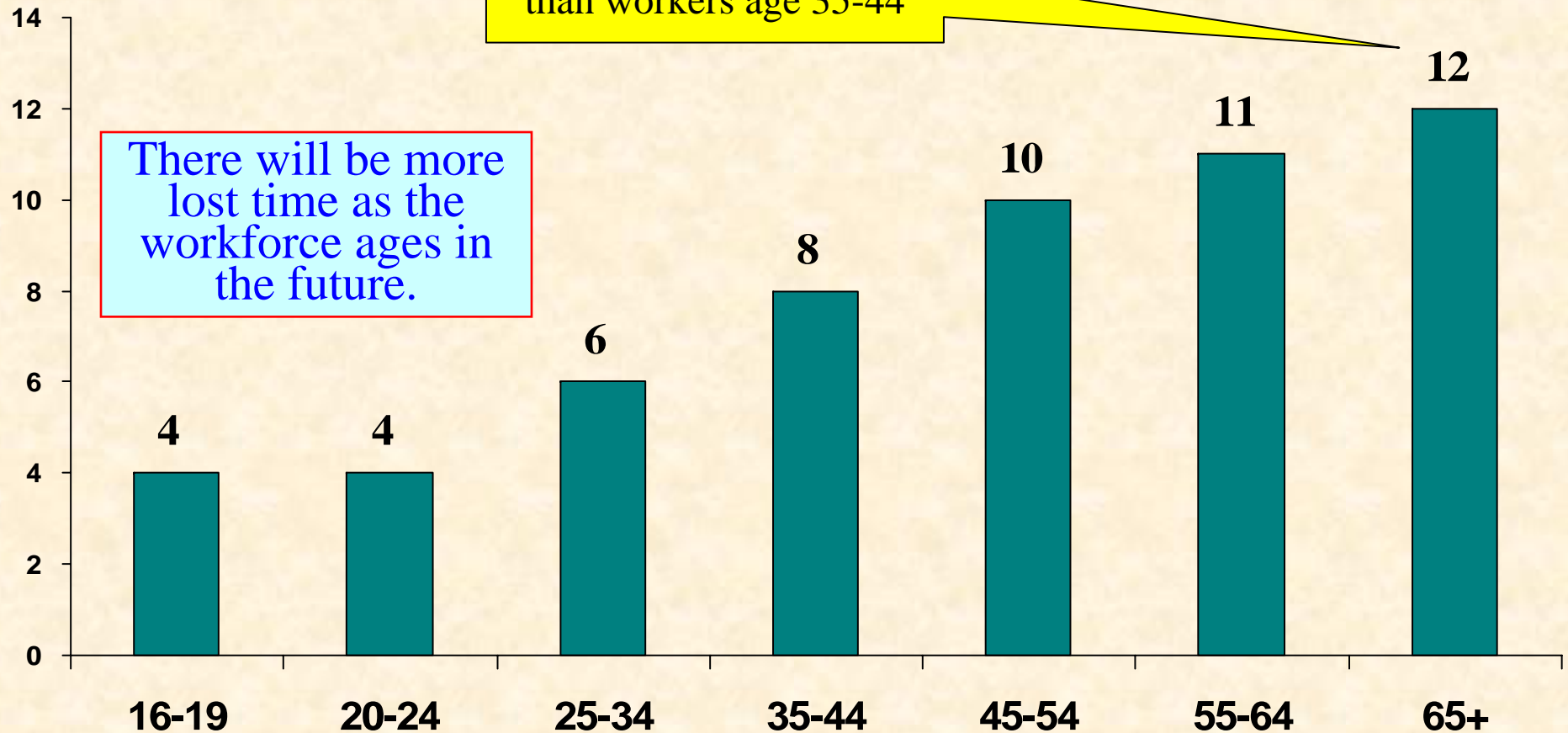


Source: *Growing Older in America*, US Department of Health and Human Services, p 47.



Older Workers Have More Lost Time from Work Due to Injury or Illness

Median Days Away From Work (2005)



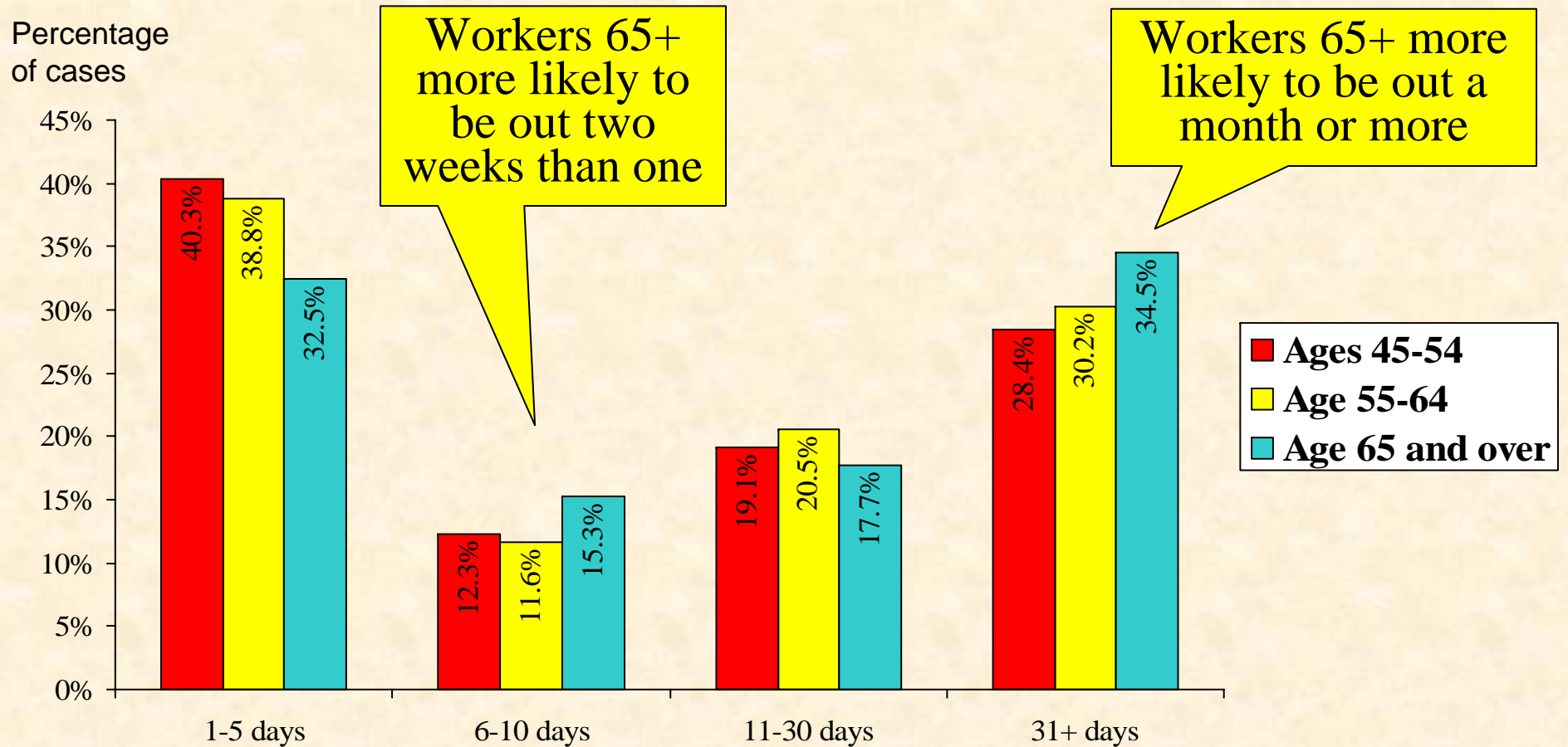
Age 65+ workers median lost time is 50% greater than workers age 35-44

There will be more lost time as the workforce ages in the future.

Source: US Bureau of Labor Statistics, US Department of Labor



Distribution of Non-Fatal Work Injury Days Away From Work, by Length of Period and Age group, Ages 45 and over, 2005



Source: US Bureau of Labor Statistics, US Department of Labor, Table 8 from 2005 Survey of Nonfatal Occupational Injuries and Illnesses Requiring Days Away from Work, Revised data released 11-17-2006.



Workers Compensation and Medicare

No Help from Medicare ...

Medicare law has long specified that

- If Workers Compensation is available, Medicare will pay nothing,
- Medicare will pay if costs remain after all WC medical benefits are exhausted, and
- If Medicare does pay a bill, it has a right of recovery from the employer or WC insurer.



Workers Compensation and Medicare

and Maybe a Fight from Medicare

Medicare is worried that, for workers who are covered by, or eligible for, Medicare, *it will be stuck with costs shifted from those responsible for paying WC costs.*

So, in those cases,

- It wants to review, *and maybe disapprove*, Workers Compensation settlements, if it believes there is insufficient WC money to pay for future medical costs,
- This may align Medicare *with* workers *against* employers and WC insurers
- This will increase WC administration costs



Workers Compensation and Social Security

Effect on WC Claims of Social Security Retirement Income

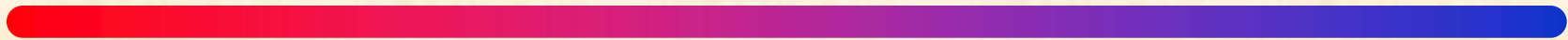
When a SS DI recipient reaches the “full benefit” retirement age, the DI benefit becomes a retirement benefit

- Social Security Retirement Income is not offset for WC indemnity payments
 - So disabled workers age 66 and over can collect both – **moral hazard?**

#3

Emerging (Mega) Trend

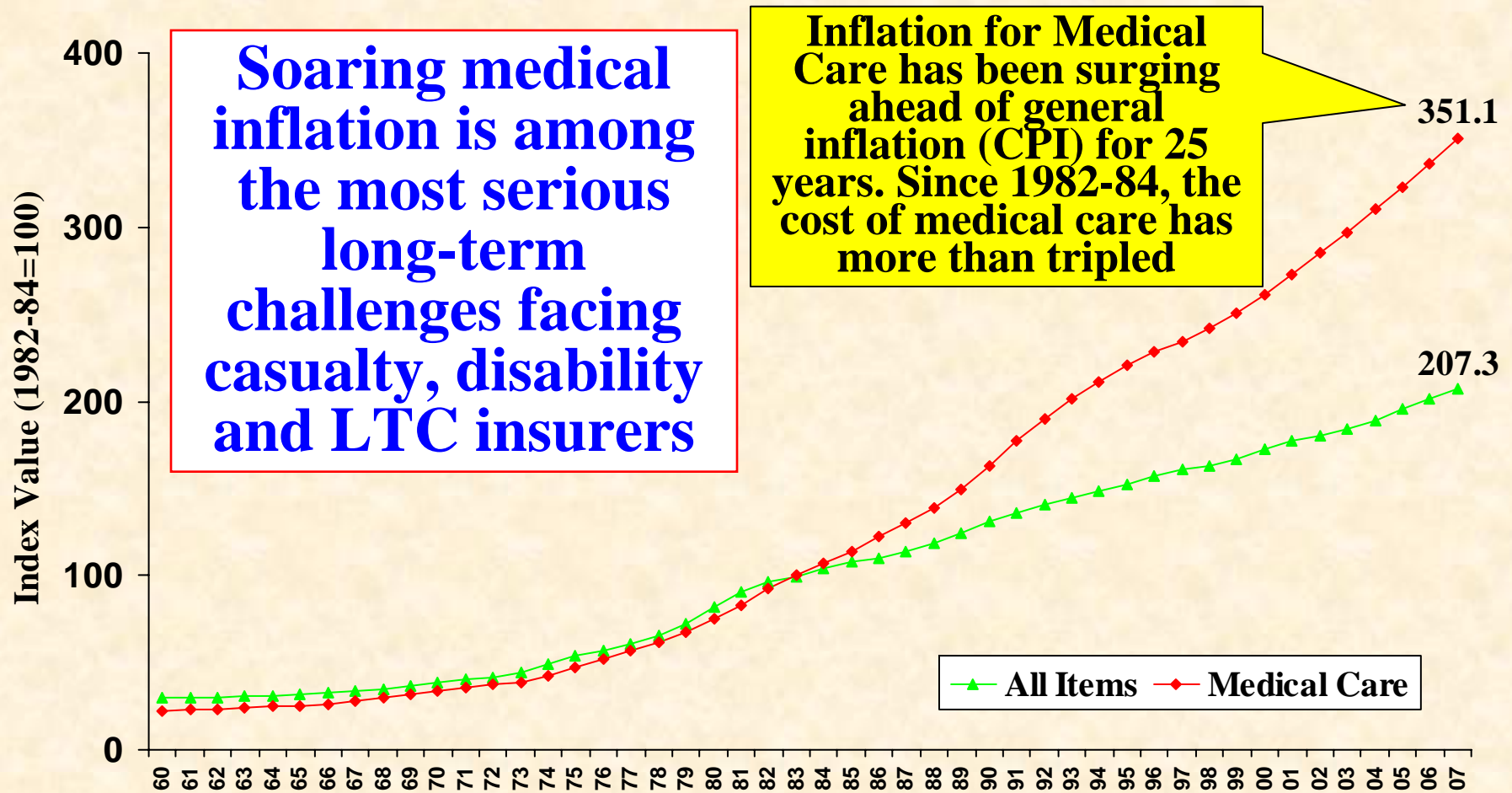
Resurgent Claim Severity





Consumer Price Index for Medical Care vs. All Items, 1960-2007

(Base: 1982-84=100)

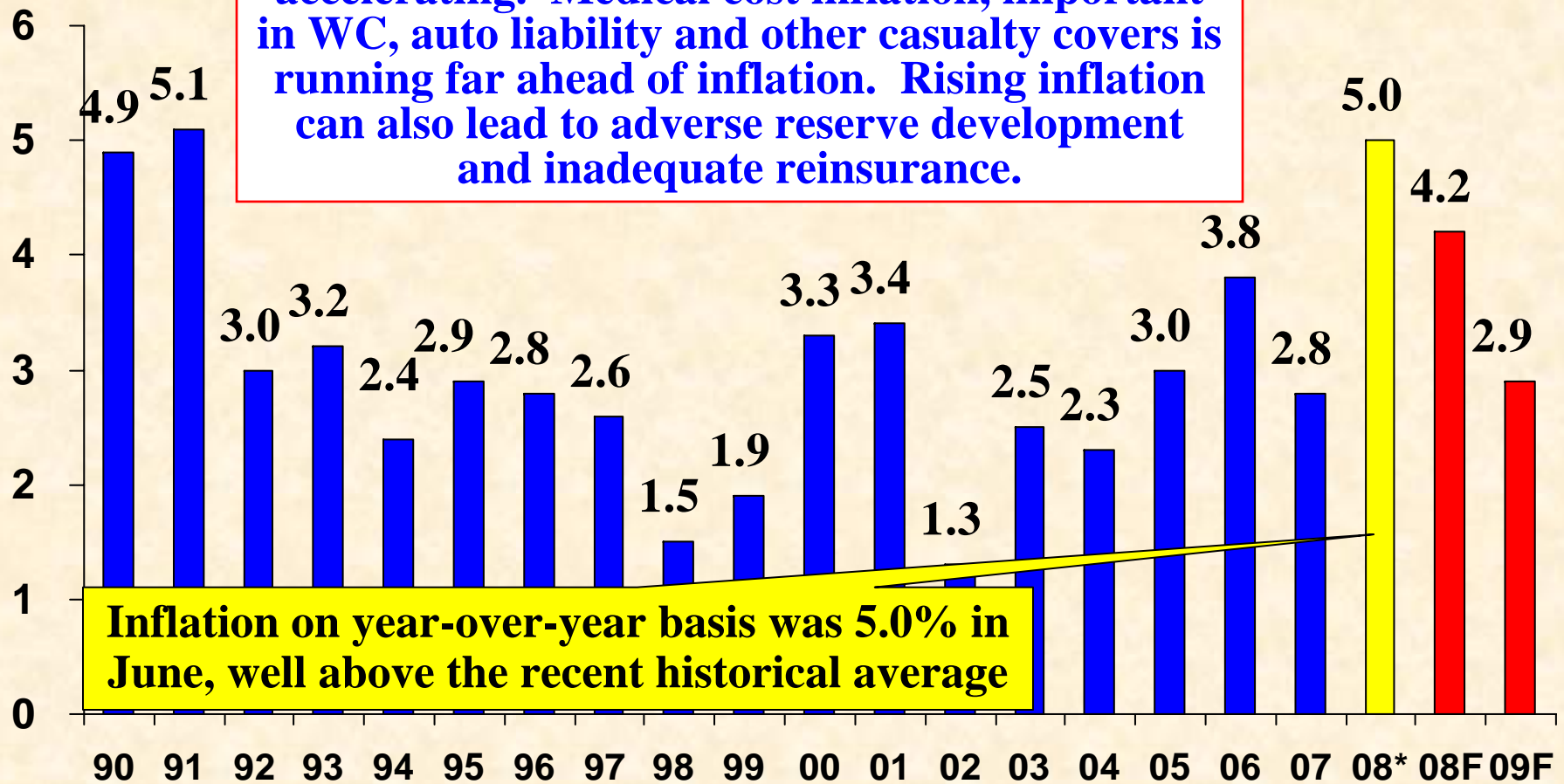


Source: Department of Labor (Bureau of Labor Statistics; Insurance Information Institute).



Inflation Rate (CPI-U, %), 1990 – 2009F

Inflation was just 2.8% in 2007 but is accelerating. Medical cost inflation, important in WC, auto liability and other casualty covers is running far ahead of inflation. Rising inflation can also lead to adverse reserve development and inadequate reinsurance.

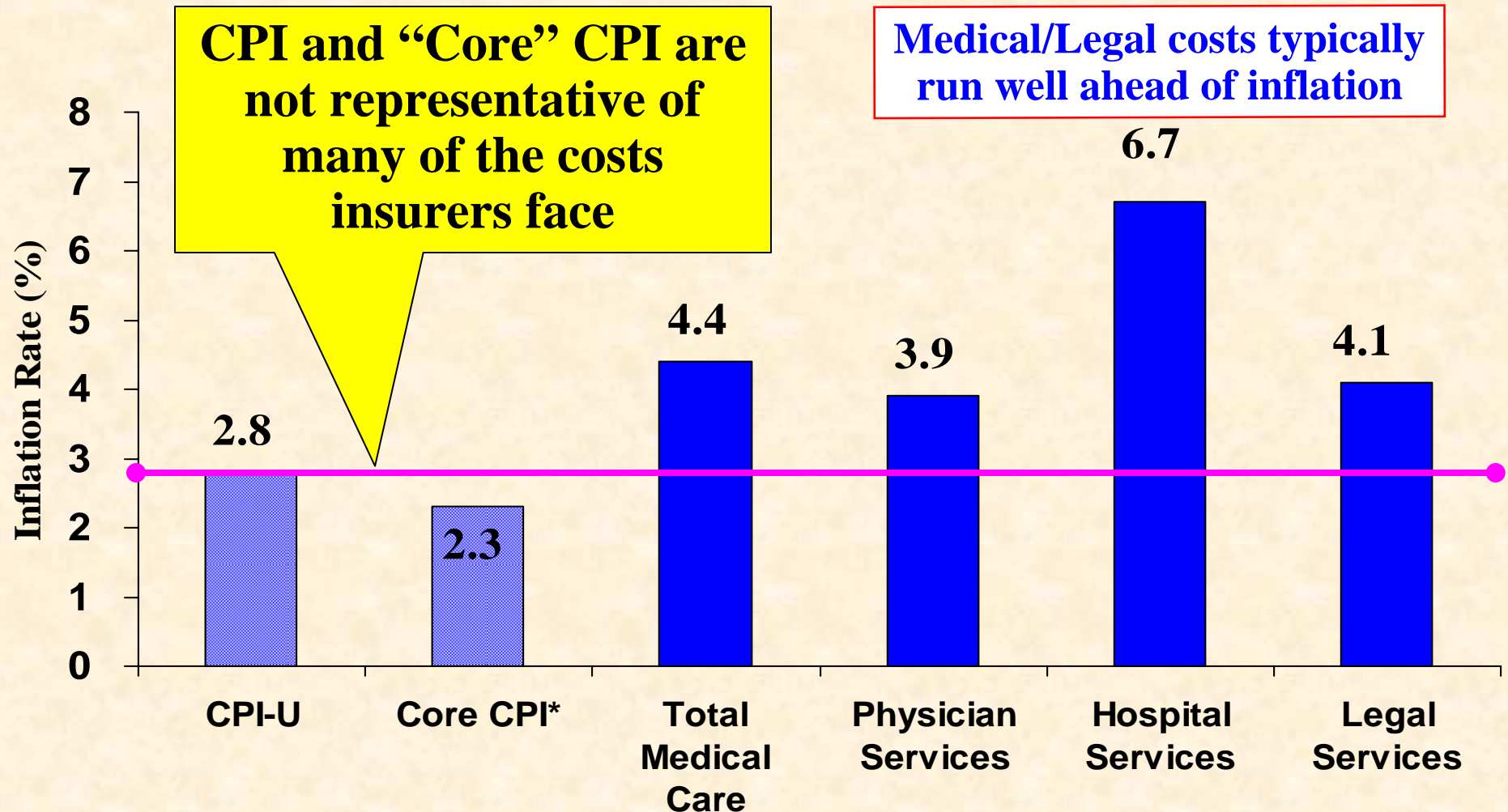


*12-month change June 2008 vs. June 2007;

Source: US Bureau of Labor Statistics; Blue Chip Economic Indicators, July 10, 2008; Ins. Info. Institute.

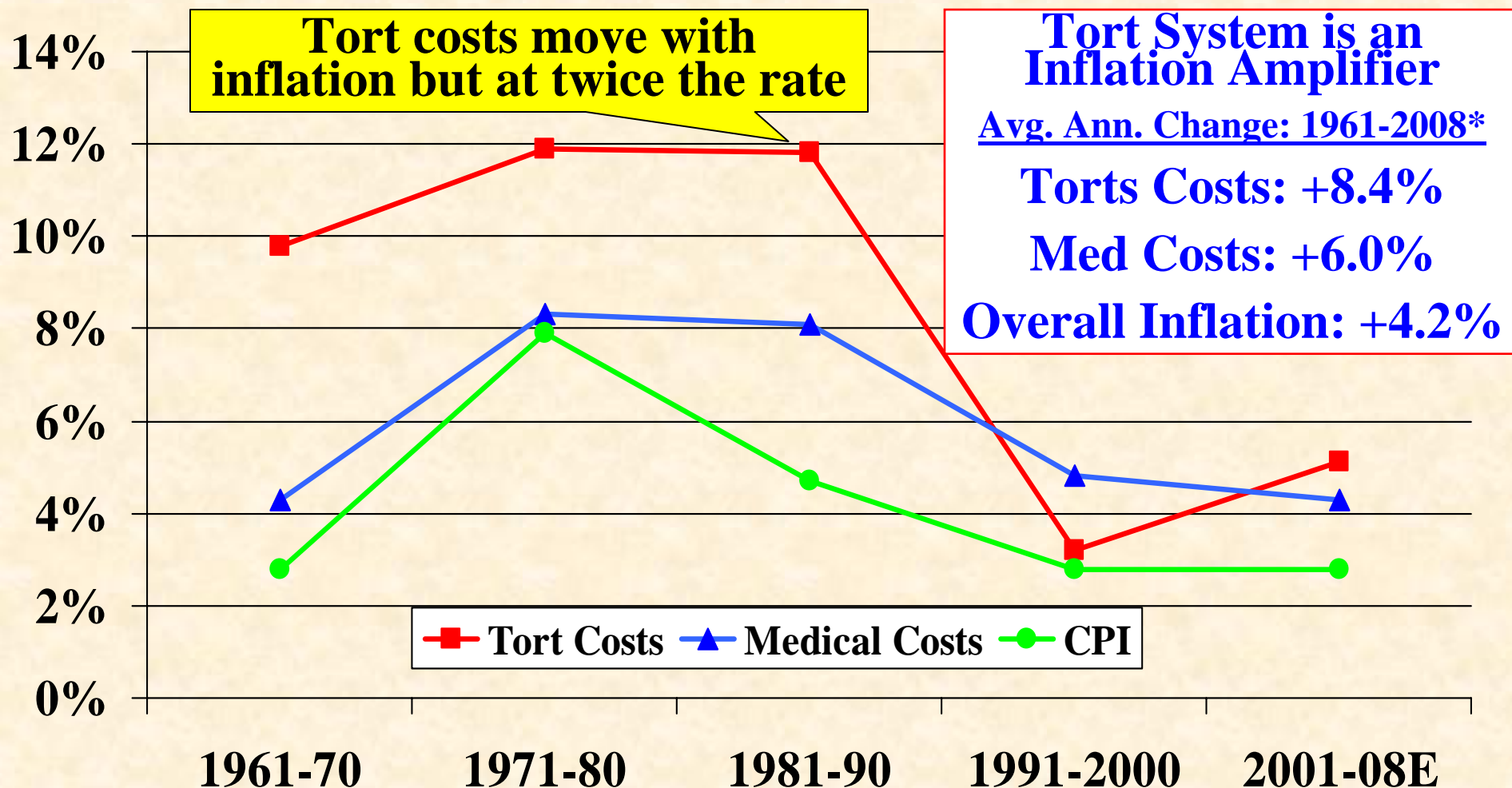


Comparative 2007 Inflation Statistics Important to Insurers (%)



*Core CPI is the Consumer Price Index for all Urban Consumers (CPI-U) less food and energy costs.
Source: US Bureau of Labor Statistics; Insurance Information Institute.

Tort Cost Growth & Medical Cost Inflation vs. Overall Inflation (CPI-U), 1961-2008*



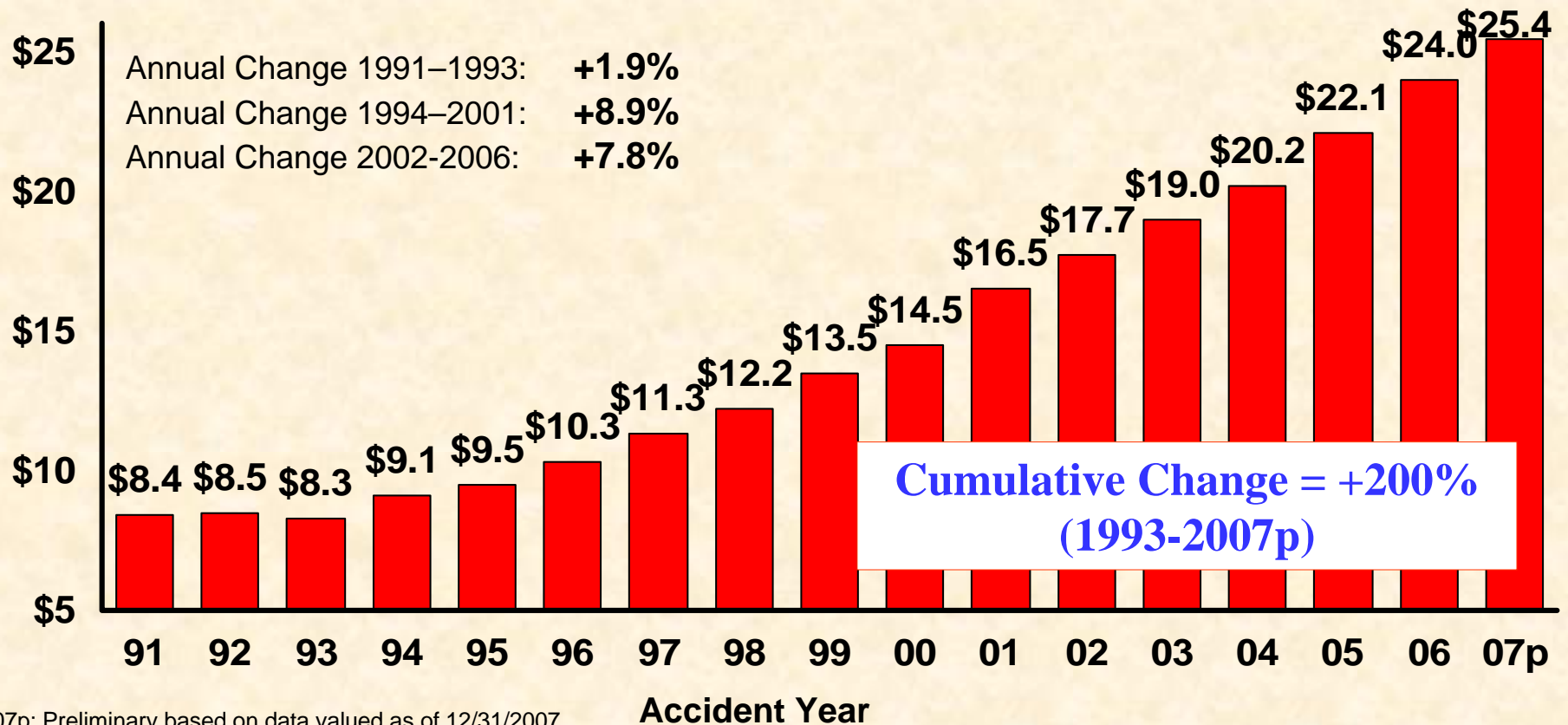
*Medical cost and CPI-U through April 2008 from BLS. Tort figure is for full-year 2008 from Tillinghast.

Sources: US Bureau of Labor Statistics, Tillinghast-Towers Perrin, 2007 Update on U.S. Tort Costs; Insurance Info. Inst.



Workers Comp Medical Claims Costs Continue to Climb

Medical
Claim Cost (\$000s)



2007p: Preliminary based on data valued as of 12/31/2007

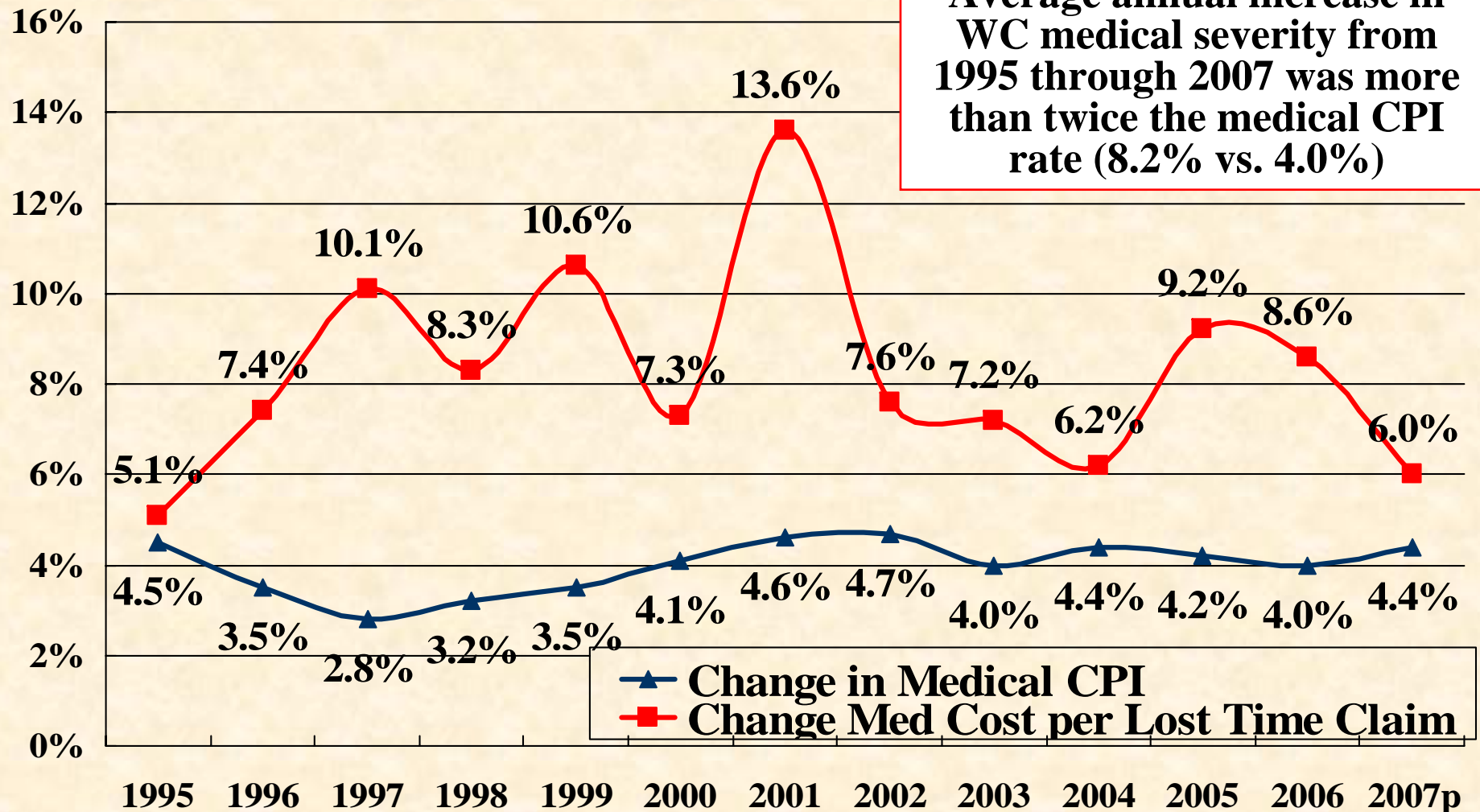
1991-2006: Based on data through 12/31/2006, developed to ultimate

Based on the states where NCCI provides ratemaking services; Excludes the effects of deductible policies



WC Medical Severity Rising at Double the Medical CPI Rate

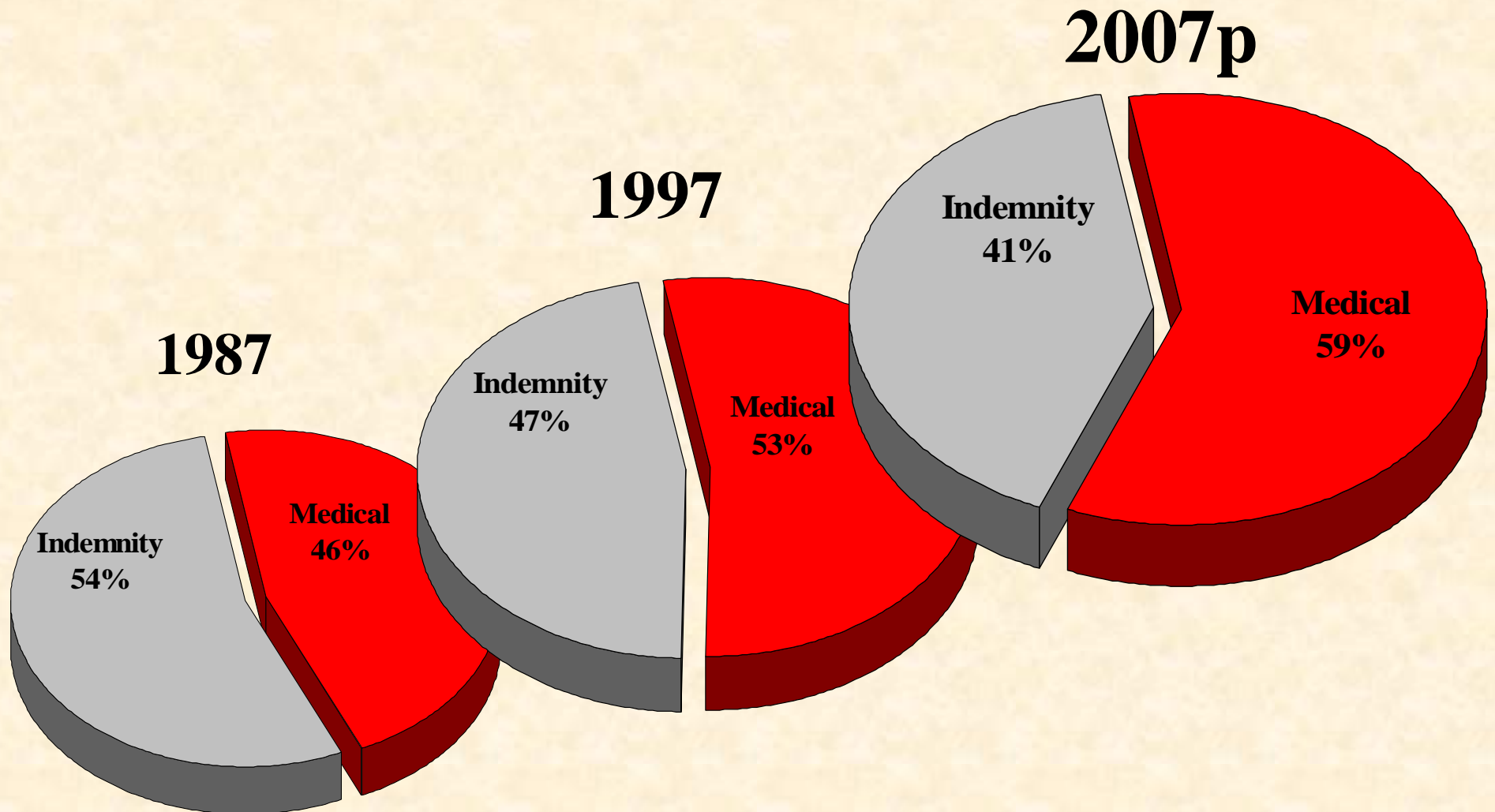
Average annual increase in WC medical severity from 1995 through 2007 was more than twice the medical CPI rate (8.2% vs. 4.0%)



Sources: Med CPI from US Bureau of Labor Statistics, WC med severity from NCCI based on NCCI states.



Med Costs Share of Total Costs is Increasing Steadily

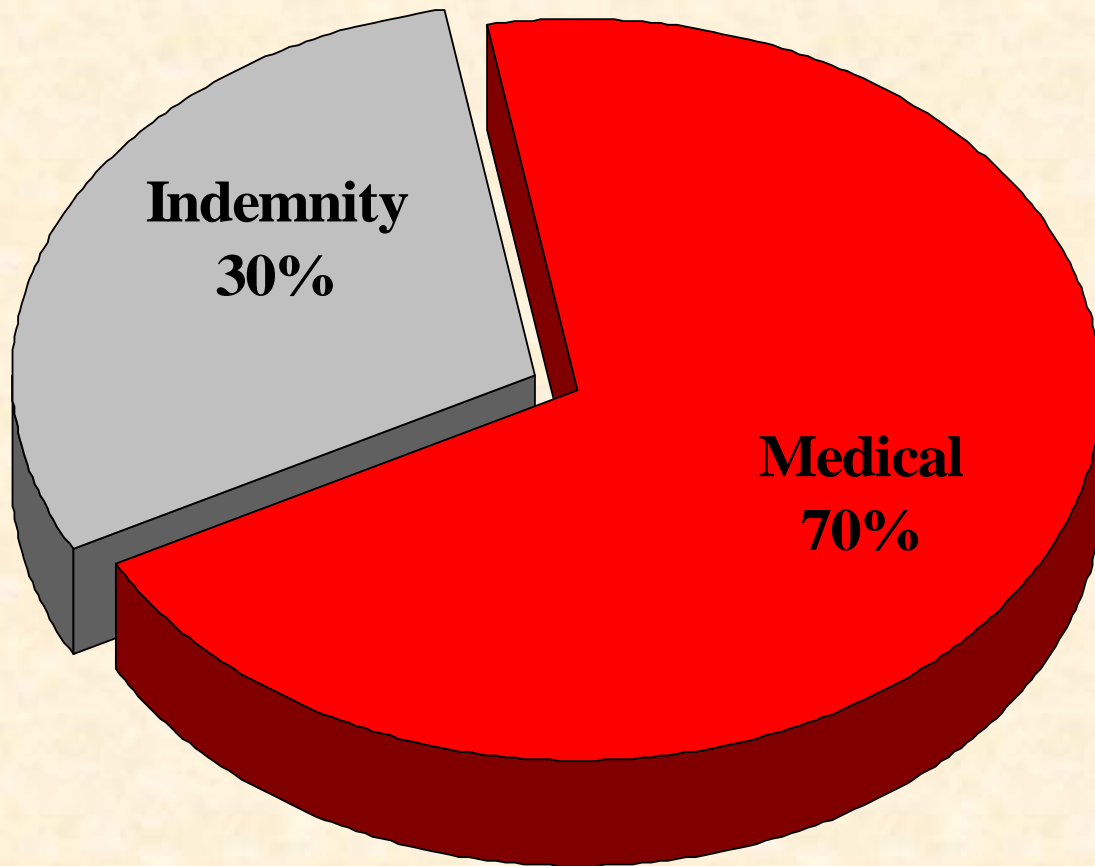


Source: NCCI (based on states where NCCI provides ratemaking services).



WC Med Cost Will Equal 70% of Total by 2017 if Trends Hold

2017 Estimate



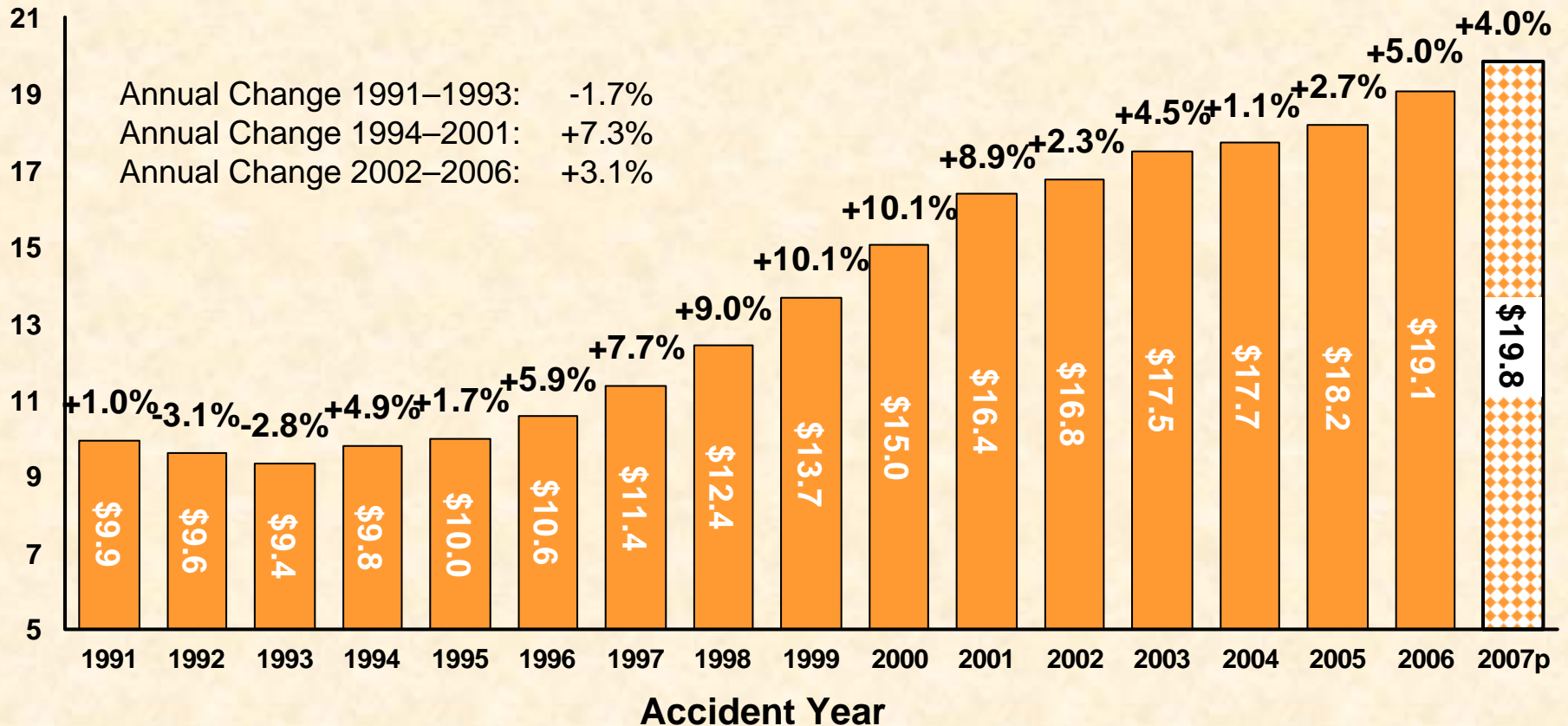
This trend will likely be supported by the increased labor force participation of workers age 55 and older.



Workers Compensation Indemnity Claim Costs Growth Is Moderate

Indemnity
Claim Cost (\$ 000s)

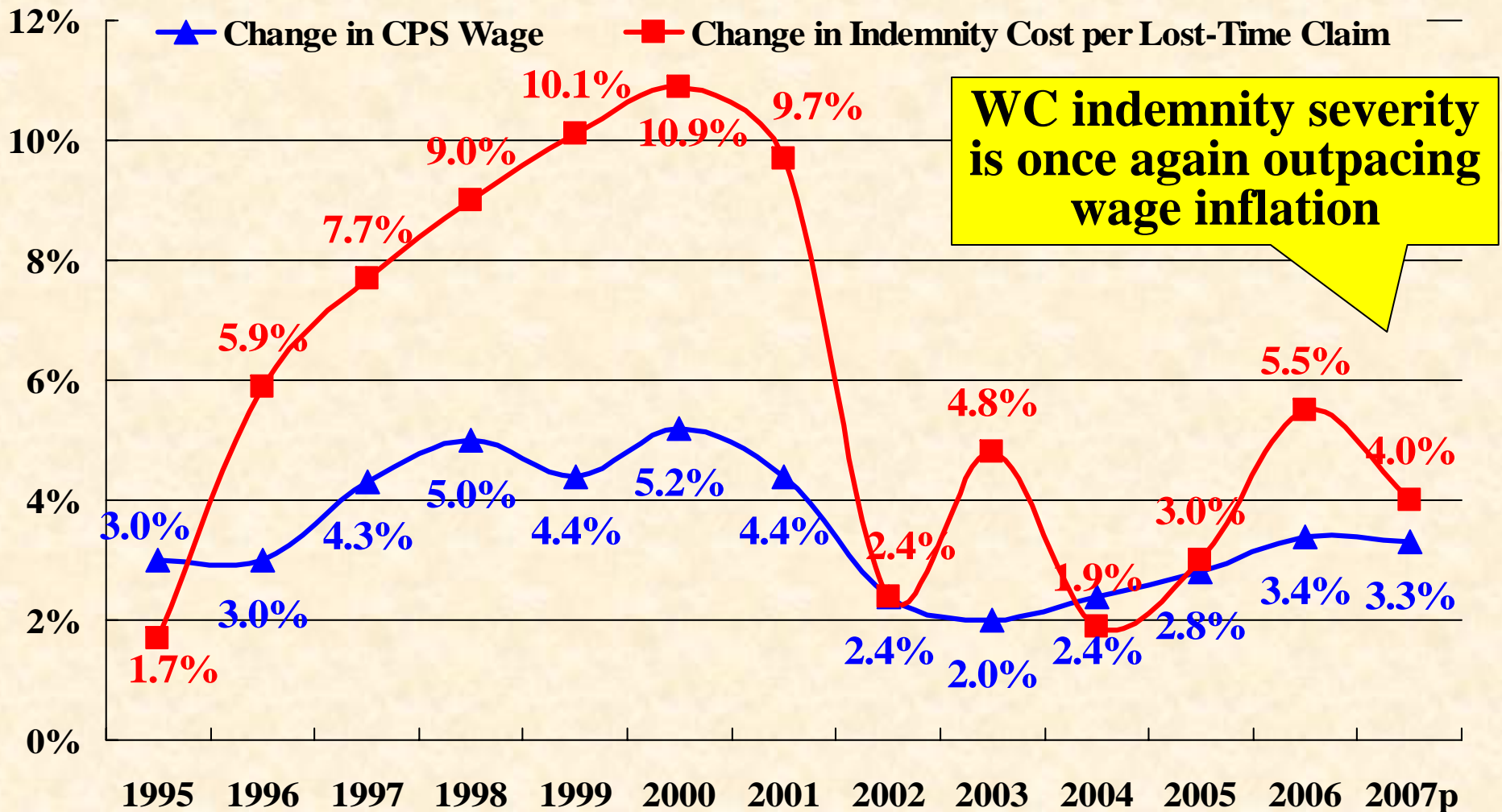
Lost-Time Claims



2007p: Preliminary based on data valued as of 12/31/2007
1991–2006: Based on data through 12/31/2006, developed to ultimate
Based on the states where NCCI provides ratemaking services
Excludes the effects of deductible policies



WC Indemnity Severity vs. Wage Inflation

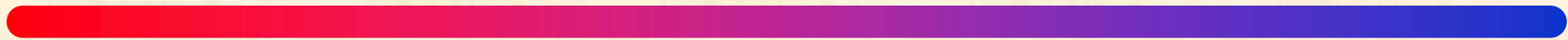


2006p: Preliminary based on data valued as of 12/31/2006; 1991-2005: Based on data through 12/31/2005, developed to ultimate. Based on the states where NCCI provides ratemaking services. Excludes the effects of deductible policies. CPS = Current Population Survey.
Source: NCCI

#4

Emerging (Mega) Trend

**Returning Injured
War Veterans to the
Workforce**





Non-Fatal Injuries to Military Personnel Deployed in Iraq

Injury Count from March 19, 2003
through Aug 2, 2008



Source: Brookings Institution, *Iraq Index Archive*, updated August 18, 2008.



Non-Fatal Physical Injury Rates Among Troops in Iraq

**Injury Rate of Troops Deployed in Iraq May 2003
through July 2008 (Injuries as % of Total Troops Deployed)**



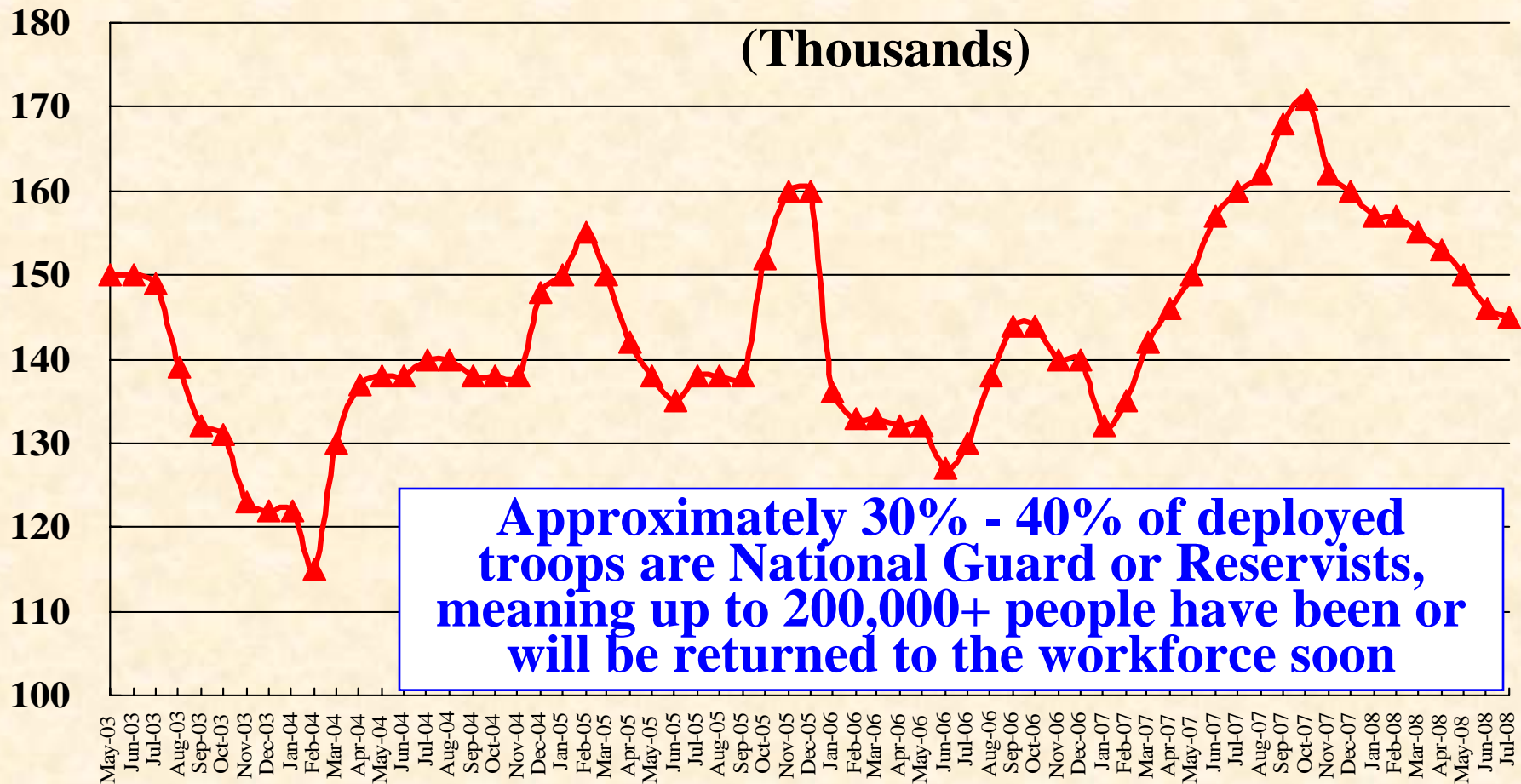
Source: Insurance Information Institute calculations based in data from the Brookings Institution, *Iraq Index Archive*, updated August 18, 2008.



Troop Strength Levels in Iraq

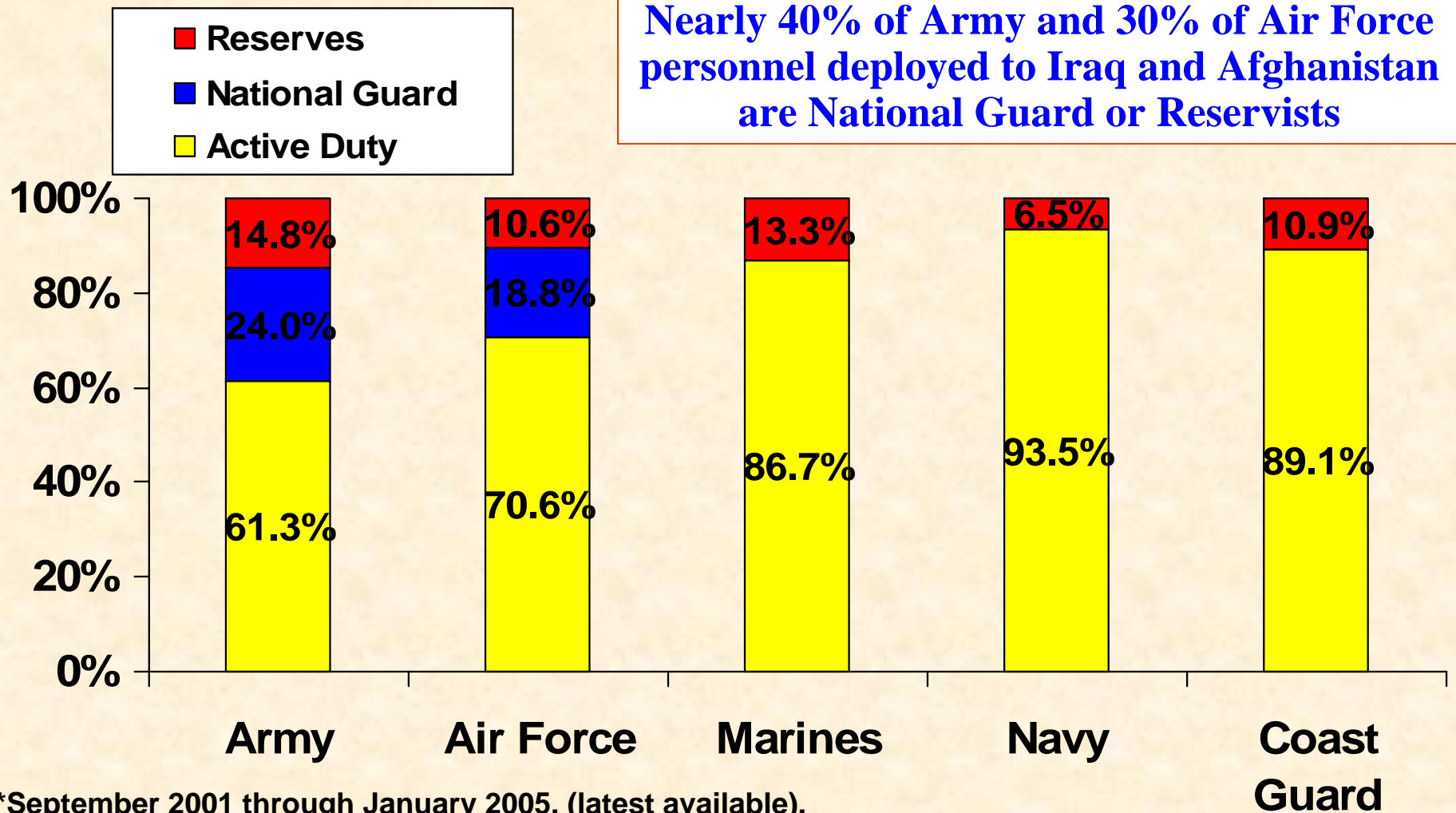
Guarantee Significant Flow of Injured

Troops Deployed from May 2003 through July 2008



Source: Brookings Institution, *Iraq Index Archive*, updated August 18, 2008.

Status of Personnel Deployed to Iraq and Afghanistan*

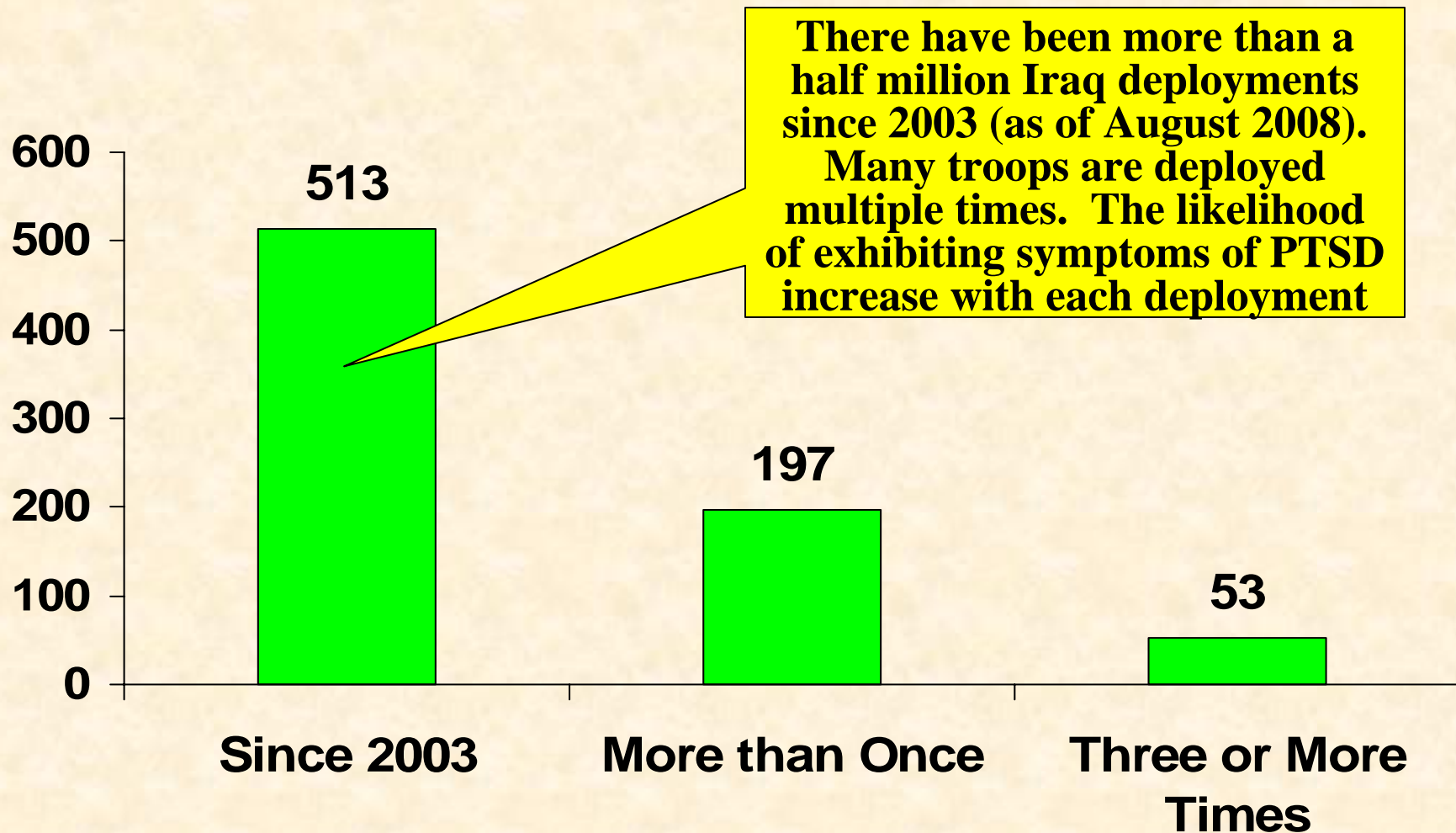


*September 2001 through January 2005. (latest available).

Source: Brookings Institution, *Iraq Index Archive*, updated June 5, 2006.



Total Number of U.S. Army Troops Deployed to Iraq (Thousands)



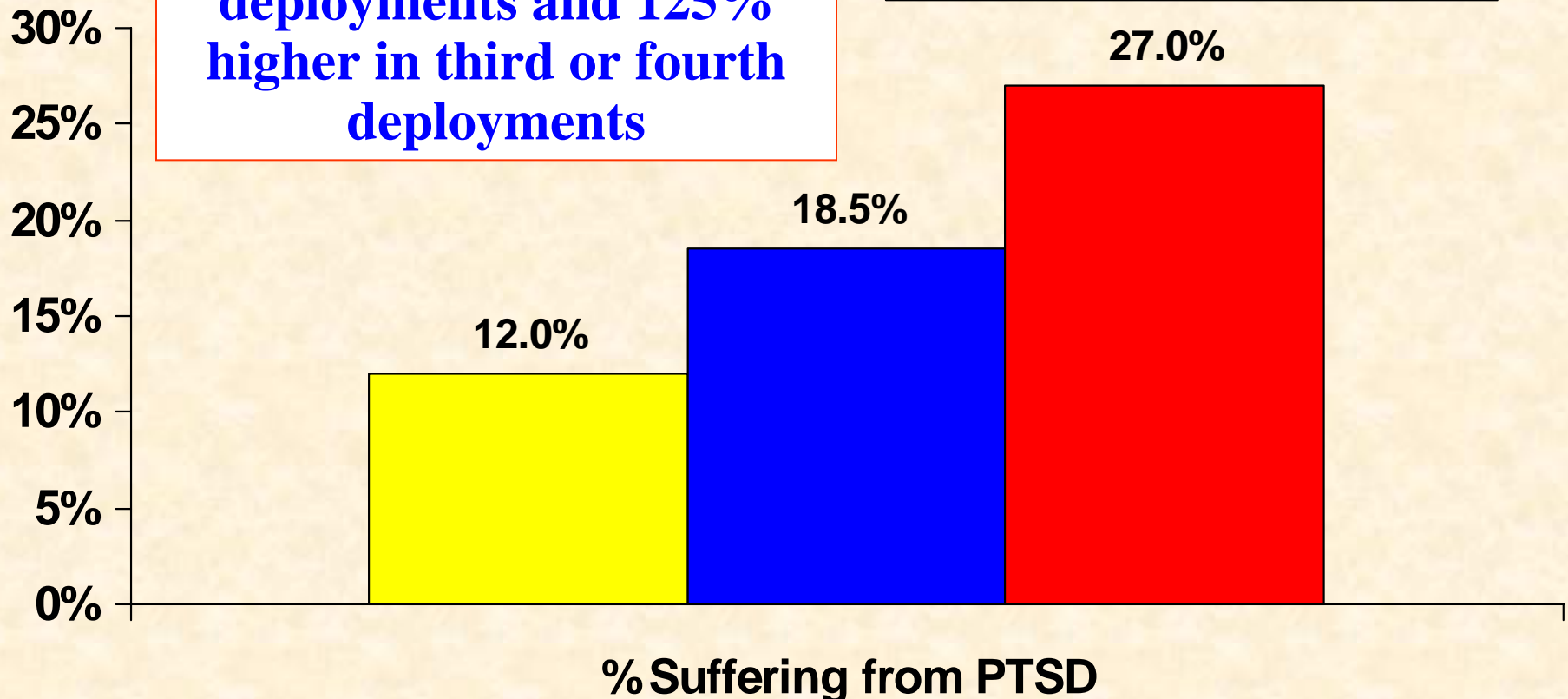
Source: Brookings Institution, *Iraq Index Archive*, updated August 18, 2008.



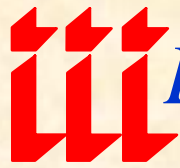
Percentage of Non-Commissioned Officers Suffering from Symptoms of PTSD by Number of Deployments...

Symptoms of PTSD are 54% more likely to be observed in second deployments and 125% higher in third or fourth deployments

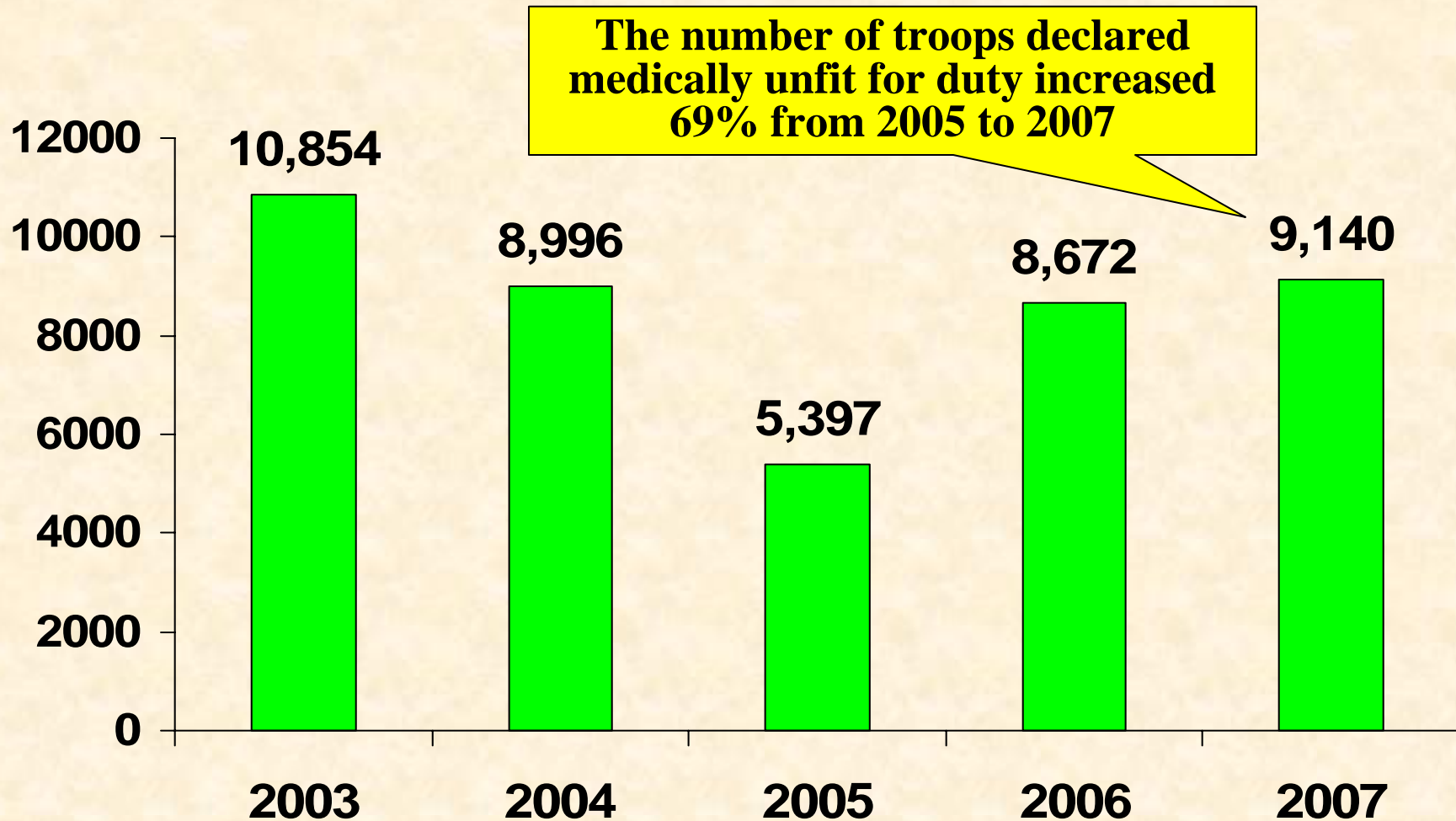
- First Deployment
- Second Deployment
- Third or Fourth Deployment



Source: Brookings Institution, *Iraq Index Archive*, updated August 18, 2008.



U.S. Troops Deployed to Iraq or Afghanistan Deemed Medically Unfit for Combat, 2003-2007

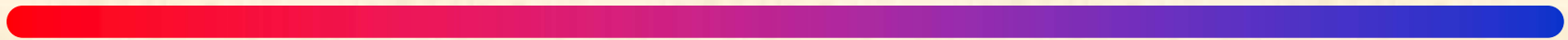


Source: Brookings Institution, *Iraq Index Archive*, updated August 18, 2008.

#5

Emerging (Mega) Trend

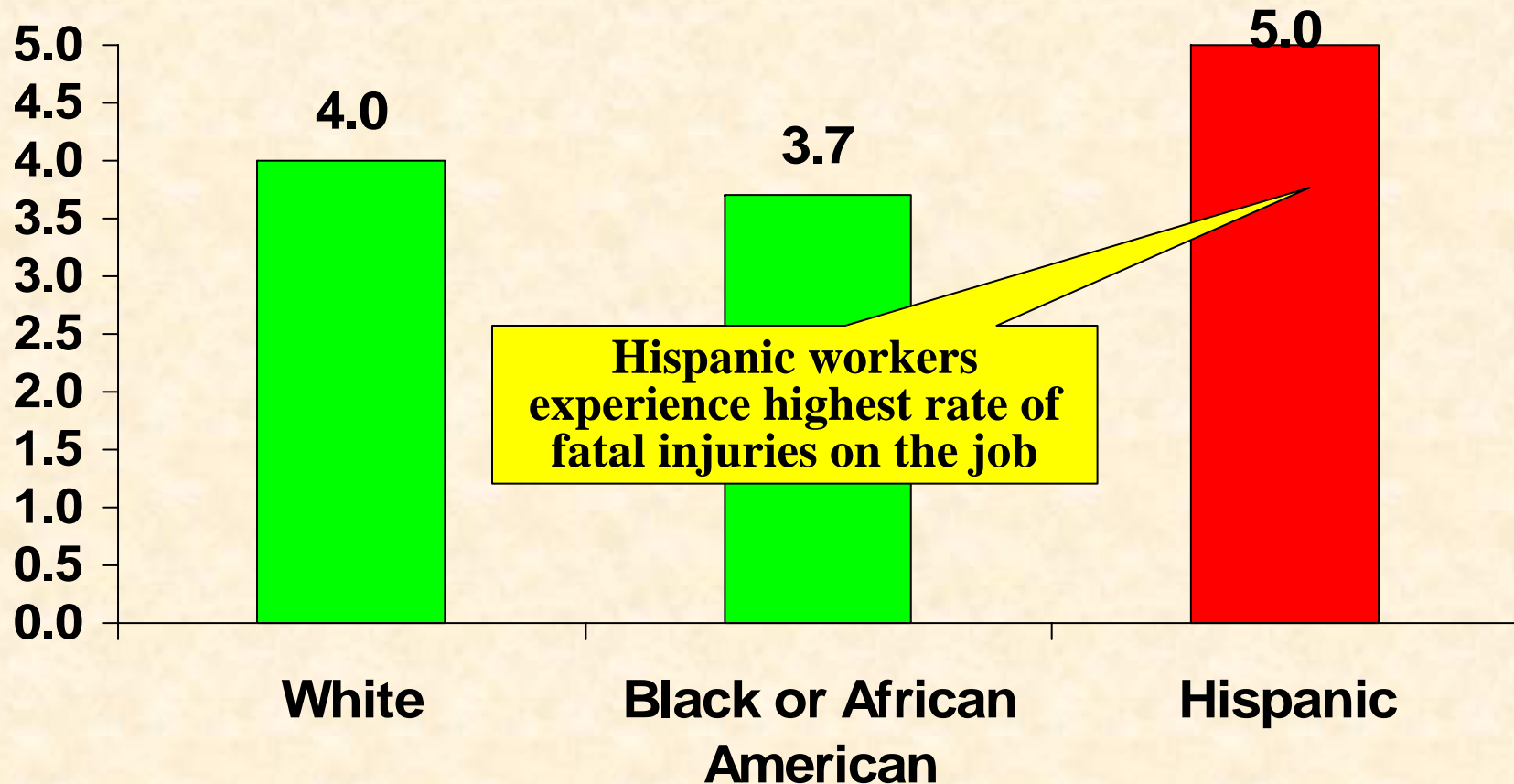
Non-English Speaking Workers





Fatal Worker Injury Rates by Race and Ethnicity, 2006

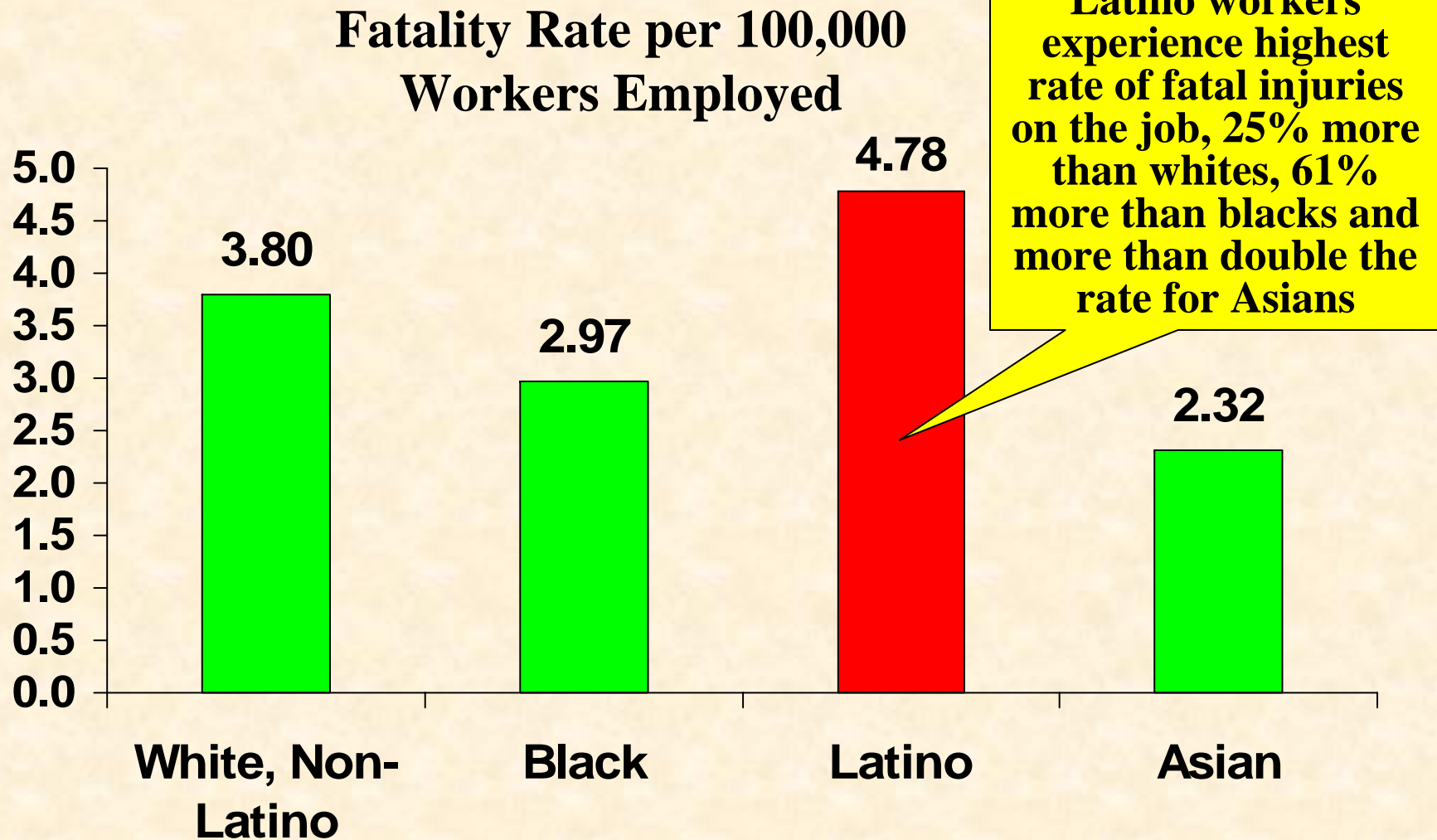
**Fatality Rate per 100,000
Workers Employed**



Source: U.S. Dept. of Labor, Bureau of Labor Statistics, Census of Fatal Occupational Injuries, 2006



*Fatal Worker Injury Rates by Race and Ethnicity, 2002**

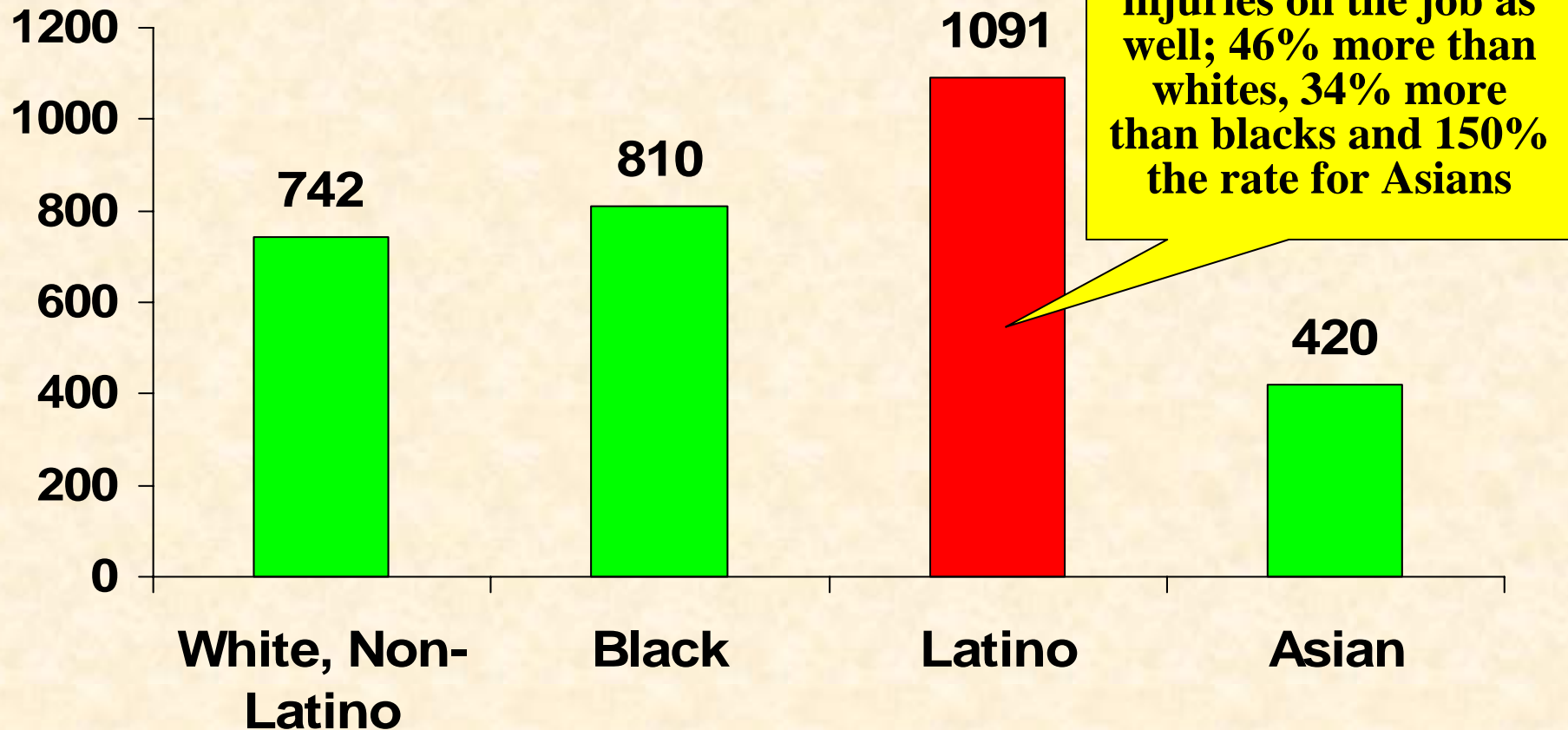


Source: Worker Health Chart Book, 2004: Centers for Disease Control and ILL calculations.



Non-Fatal Worker Injury Rates by Race and Ethnicity, 2002

**Injury Rate per 100,000
Workers Employed**

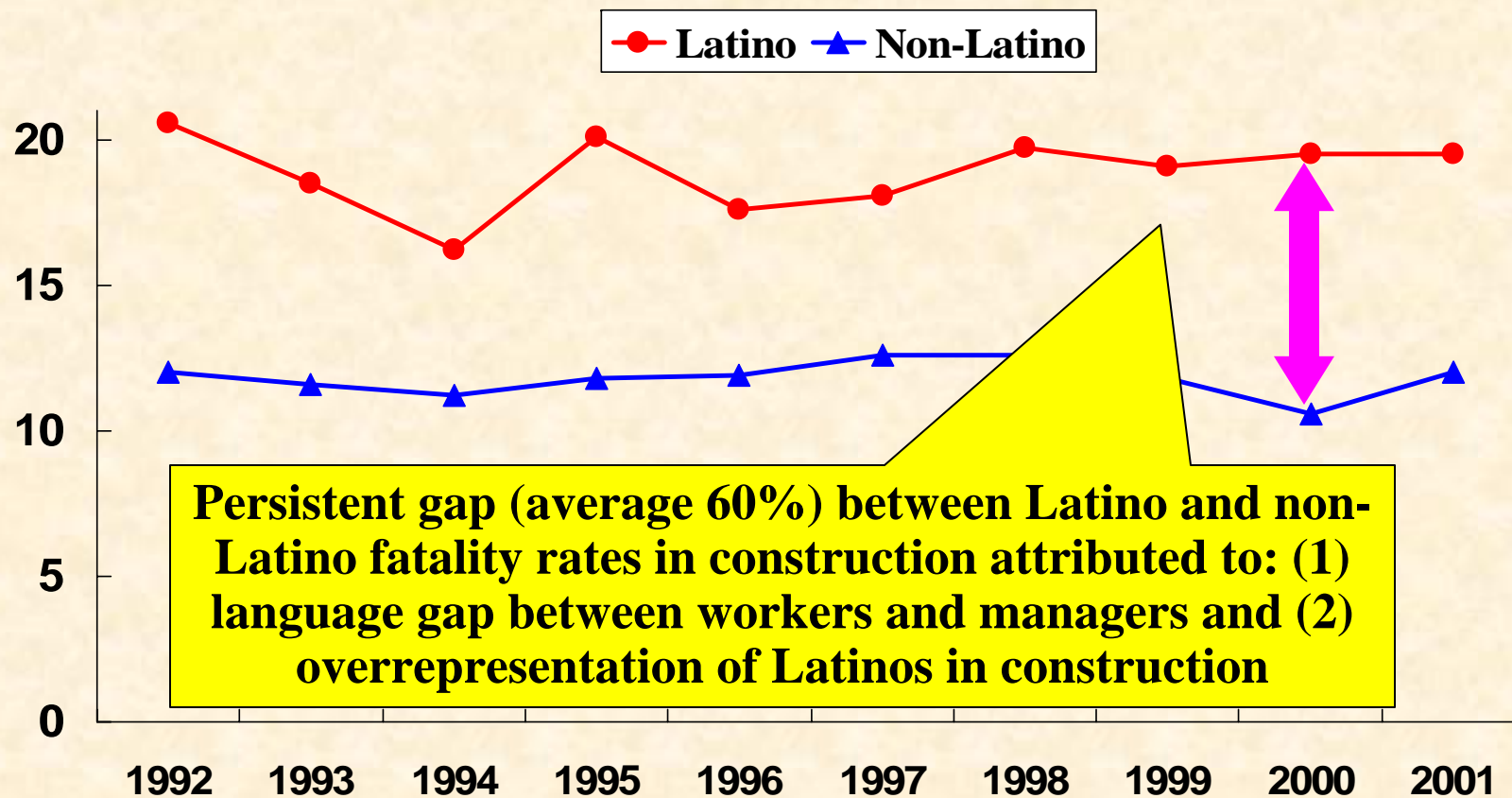


Source: Worker Health Chart Book, 2004: Centers for Disease Control and ILL calculations.



Fatality Rates in Construction: 1992-2001

Fatality Rate per 100,000 Workers Employed



Source: Worker Health Chart Book, 2004: Centers for Disease Control and author's calculations.



Employment and Non-Fatal Injury by Race, 2002

Latino workers experience a disproportionate share of non-fatal injuries relative to their share of employment as compared to all other groups

Group	Percent of Injuries	Percent Employment
White, Non-Latino	68.2%	74.1%
Latino	17.1%	10.2%
Black, Non-Latino	11.9%	9.8%
Asian	2.3%	3.8%

Source: Worker Health Chart Book, 2004: Centers for Disease Control and author's calculations.



A Look Ahead...

- Rapid rise in Latino population over the next decade (including a substantial share of undocumented workers) suggests increasing worker injury and death in industries where Latinos are over-represented.
- Shift of Latino populations to lower risk jobs due to improvements in educational attainment will reduce Latino workplace injury and deaths rates.



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