

No class or section Friday Nov 25
 Practice Final Exam A reviewed in next week's sections
 Practice Final Exam B available on course web page

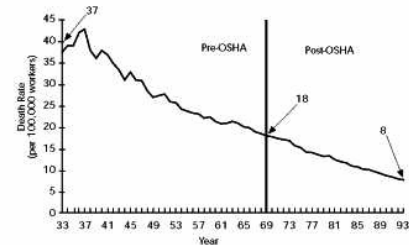
Please be sure to participate in online CAPE evaluation of Professor Hamilton

Chapter 14: The Environment, Health, and Safety

- A. The optimal amount of safety
 marginal benefit = marginal cost
- B. Workplace safety regulation
 question: do workers value safety improvements over higher wages?

Theory: Firm wants to keep its labor costs low as possible
 Implication: If safety improvements cost less to firm than they are valued by workers, firm has incentive to make them
 Case study: Textile firms did not improve air quality until forced to do so by OSHA

Figure 34.1
 Workplace Fatalities, 1933-93



Source: Authors' calculations based on National Safety Council, Accident Facts, 1994 (Basis, Ill.: NSC, 1994).

Source: <http://divisionoflabour.com/archives/004409.php>

Henry Morgan's articles for his pirates stipulated:

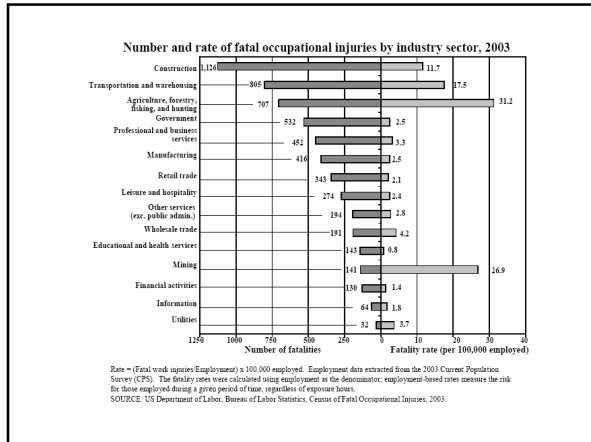
- 600 pieces of eight for loss of right arm (= \$20,000 at today's silver price)
- left arm- 500 pieces
- right leg- 500
- left leg- 400
- one eye- 100



Henry Morgan, 1635-1688

Chapter 14: The Environment, Health, and Safety

- A. The optimal amount of safety
- B. Workplace safety regulation
- C. Value of life



Fatality rates also differ greatly by type of job within industry.
For example, fatality rates per 100,000 in mining:
managerial: 4.35
clerical: 0.00
transportation and material moving: 37.62

Kip Viscusi, Economic Inquiry, Jan 2004:

Statistical summary of wage earned by individual as a function of risk of death on the job, education, race, gender, union membership, age,...

Conclusion:
For each 1/100,000 increase in probability of a fatal work-related accident, wages increase 0.17% (e.g., \$50 more each year for someone earning \$30,000)

To persuade 100,000 people to accept such an increase in risk, would have to pay them collectively \$5 million more

\$5 million = value of one "statistical" life

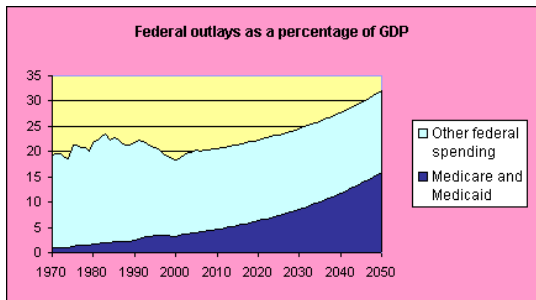
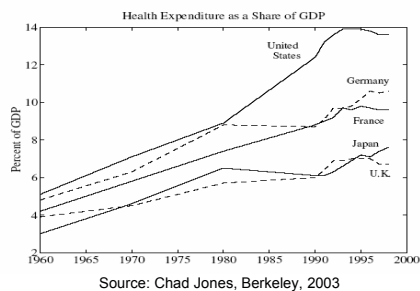
Distinguish between two questions:
(1) Before we know which individual we're talking about.
Given a pool of 100,000 people, if one will die, but don't know which, what would the group be willing to pay as a whole to eliminate the risk?

Distinguish between two questions:
(2) After we know which individual we're talking about.
How much beyond the resources that the individual controls should the rest of us contribute to help them?

Chapter 14: The Environment, Health, and Safety

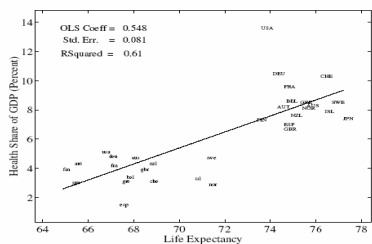
- A. The optimal amount of safety
- B. Workplace safety regulation
- C. Value of life
- D. Rising health expenditures

FIGURE 1. OECD Health Expenditures as a Share of GDP



One possibility:
economic progress makes us richer so we can afford to spend more on health care

FIGURE 2. OECD Health Share vs. Life Expectancy, 1960 and 1997



Notes: Observations for 1960 are plotted by country code with lowercase letters; uppercase letters correspond to observations for 1997. Data from OECD (2000), Tables 7 and 16. Life Expectancy is for males only.

Source: Chad Jones, Berkeley, 2003

Another possibility:
We have developed ways of paying for health costs that result in inefficiently too high spending