

Sociology 291  
Population and Society  
Wednesday, February 3 1999

**Life expectancy at birth:** The average number of years a newborn can expect to live = the average age at death for a birth cohort.

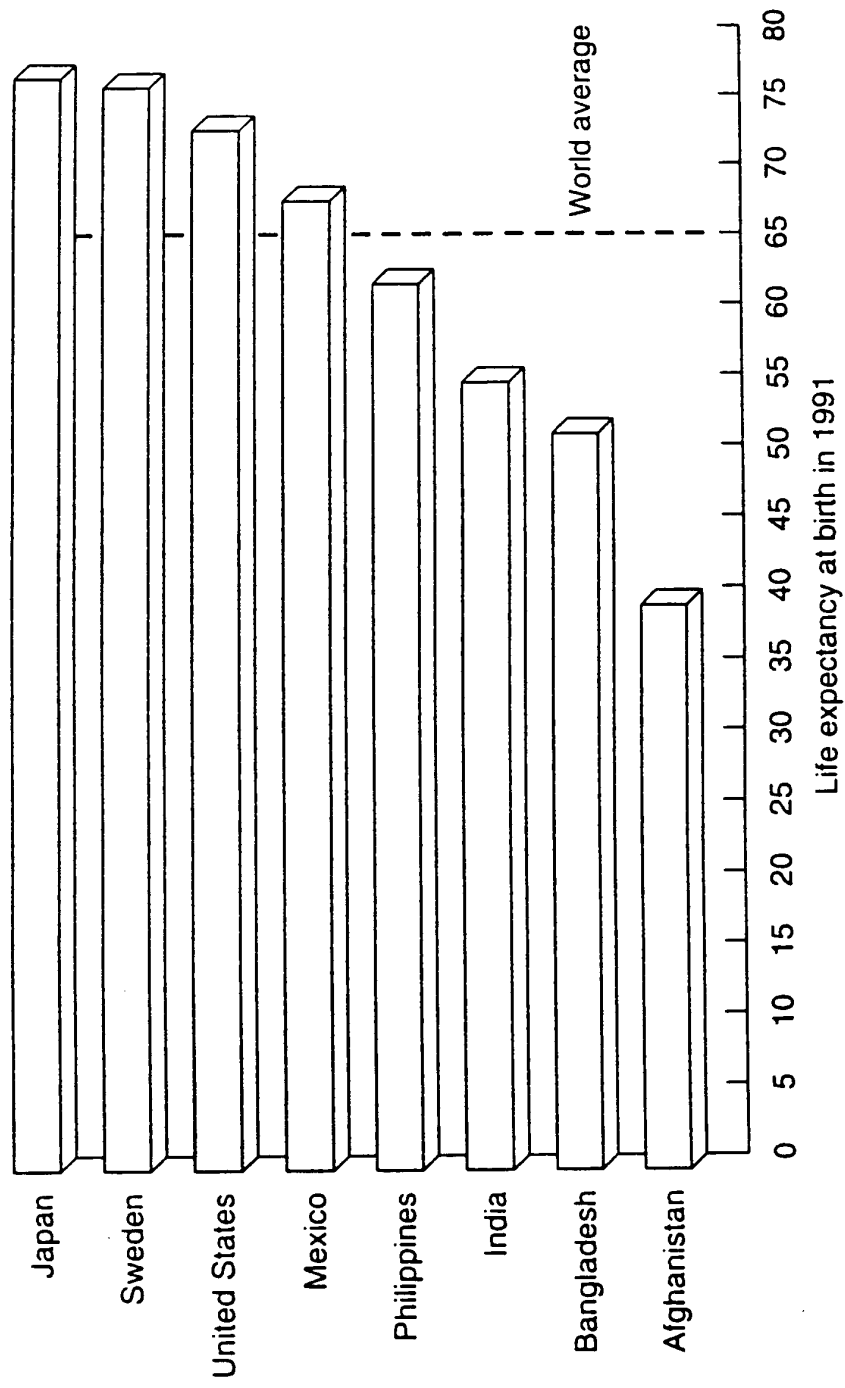
**Selected Figures:**

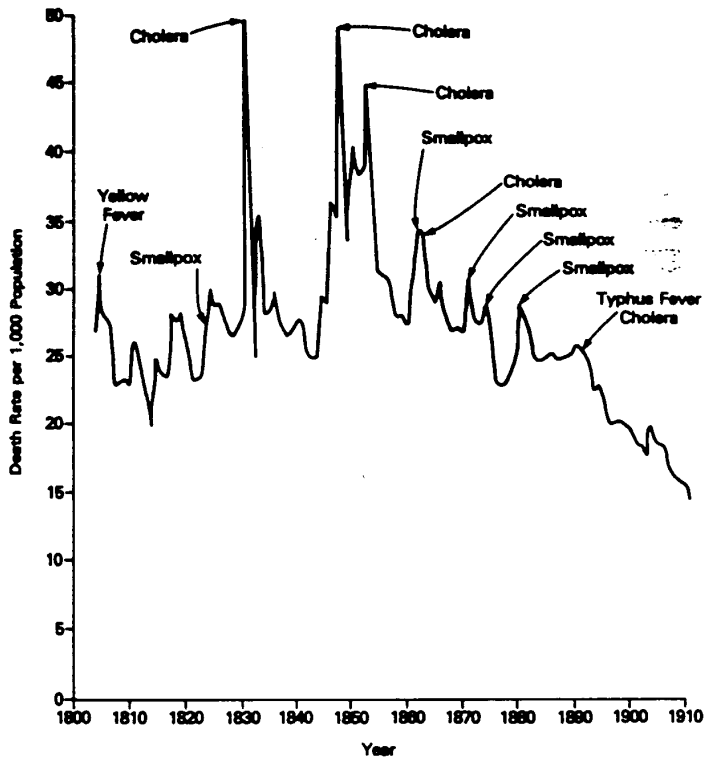
	Life Expectancy ( $e_0$ )
Pre-history	20-25
Greeks/Romans	20-30
British Aristocrats (1330-1650)	30
England (1600-1750)	35
England (1800-1850)	39
England (1900)	47
England (1990)	75
Developing Countries (1900)	20-30
Developing Countries	62

**Sources of information about longevity:**

1. Skeletal remains
2. Burial inscriptions
3. Genealogies
4. Parish or local registers
5. Censuses and national registration
6. Surveys in LDC's

Figure 6.2 There Still Is Wide Variation in Longevity Around the World

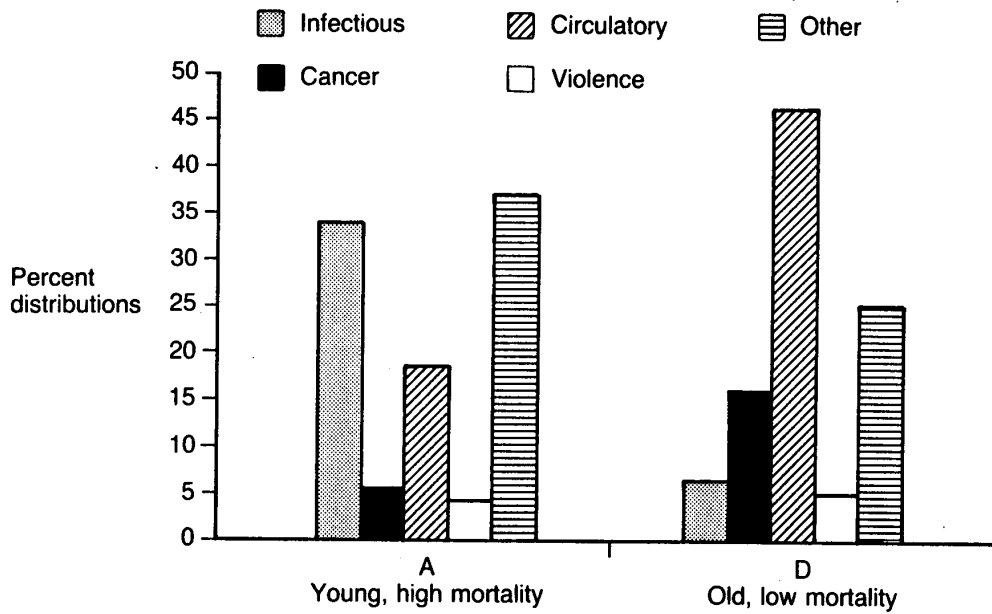




**FIGURE 2-2: Death Rate, New York City, 1800-1910**

Source: Reprinted by permission of the publishers from *Introduction to Demography* by Mortimer Spiegelman (Cambridge, Mass.: Harvard University Press, 1968), p. 88. Copyright © 1955 and 1968 by the President and Fellows of Harvard College.

*Disease and Health through the Ages*

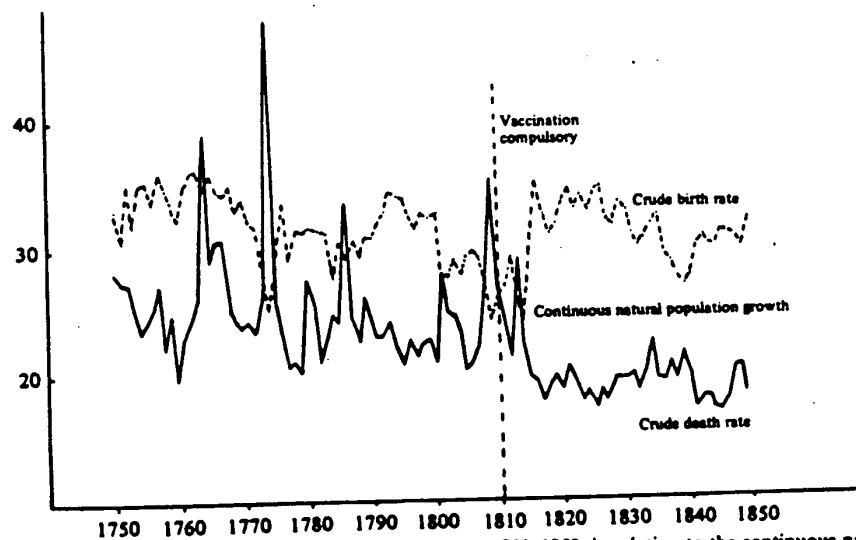


**Table 1. Smallpox deaths and numbers inoculated in smallpox epidemics in Boston, U.S.A., before vaccination was used**

	Smallpox deaths	Death rate per 1000	Natural cases of smallpox	Percentage case fatality	Numbers inoculated	Percentage case fatality
1702	213	31.5	Not available	Not available	Not available	Not available
1721	850 (6)*	77.3	5,759	14.7	247	2.4
1730	500 (12)	33.3	3,600	13.6	400	3.0
1752	569 (30)	36.2	5,545	9.7	2,124	1.4
1764	170 (46)	10.9	669	18.5	4,977	0.9
1776	57(28)	10.0	304	9.5	4,988	0.6
1778	61 (19)	6.1	122	34.4	2,121	0.9
1792	198 (165)	9.9	232	14.2	8,114	2.0

Source: *Royal Commission on Vaccination, 1889-96, 3rd Report* (Appendix, p. 200. See also P. E. Razzell, *The Conquest of Smallpox*, Firlie, Sussex: Caliban, 1977), p. 142, who gives data for 1702.

\* Smallpox deaths among the inoculated (in parentheses), excluded in calculating case fatality among natural cases.



**Figure 7. Crude birth and death rates per 1,000 in Norway, 1750-1850, in relation to the continuous natural increase in population after smallpox vaccination became compulsory. Source: Data taken from B. R. Mitchell, *European Historical Statistics, 1750-1850* (London: Macmillan, 1971), pp. 104-107.**