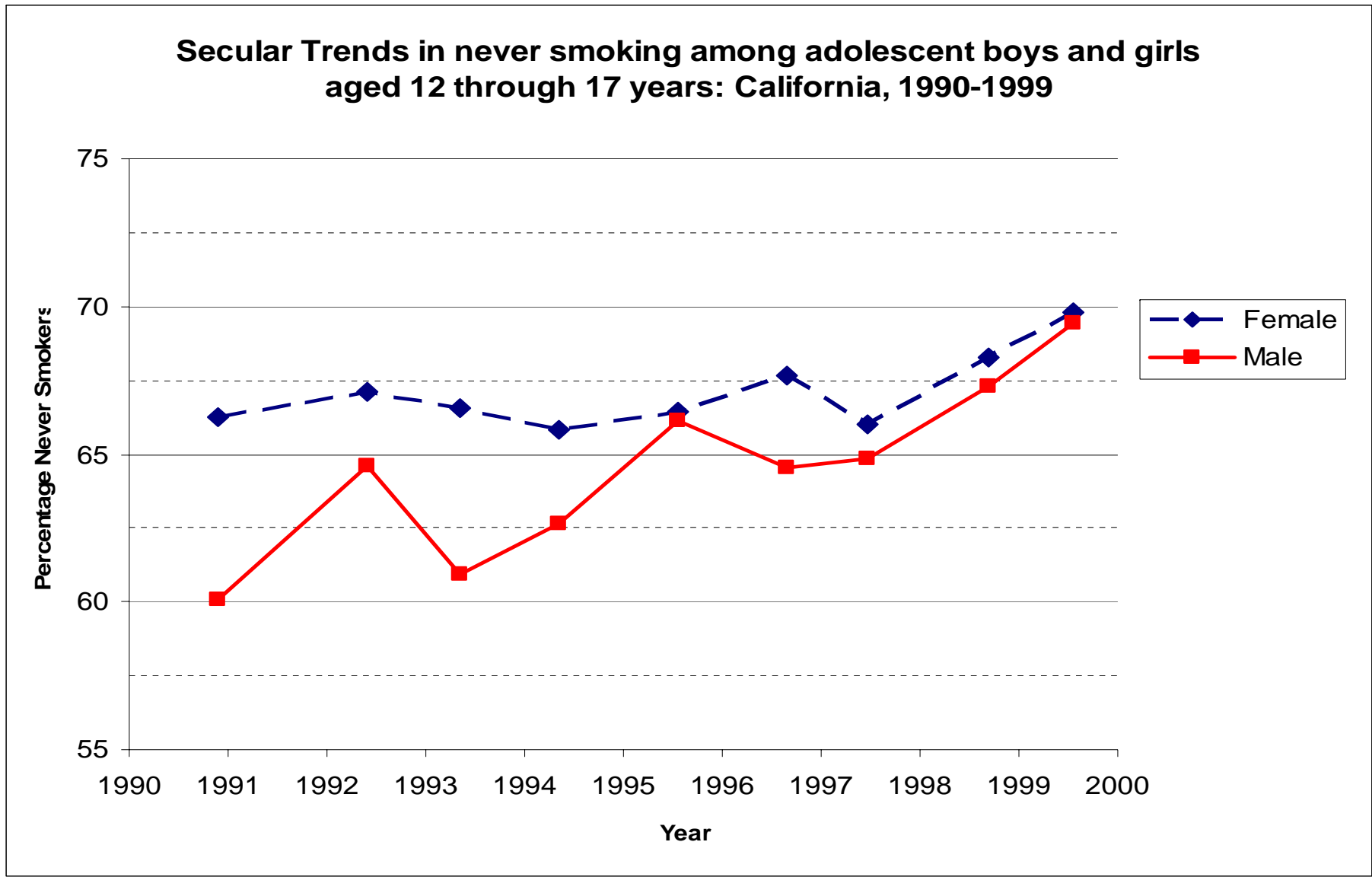


Module 6: Line Graphs

This module provides information on arithmetic scale and semi-logarithmic or ratio scale line graphs.

Arithmetic Scale Line Graph

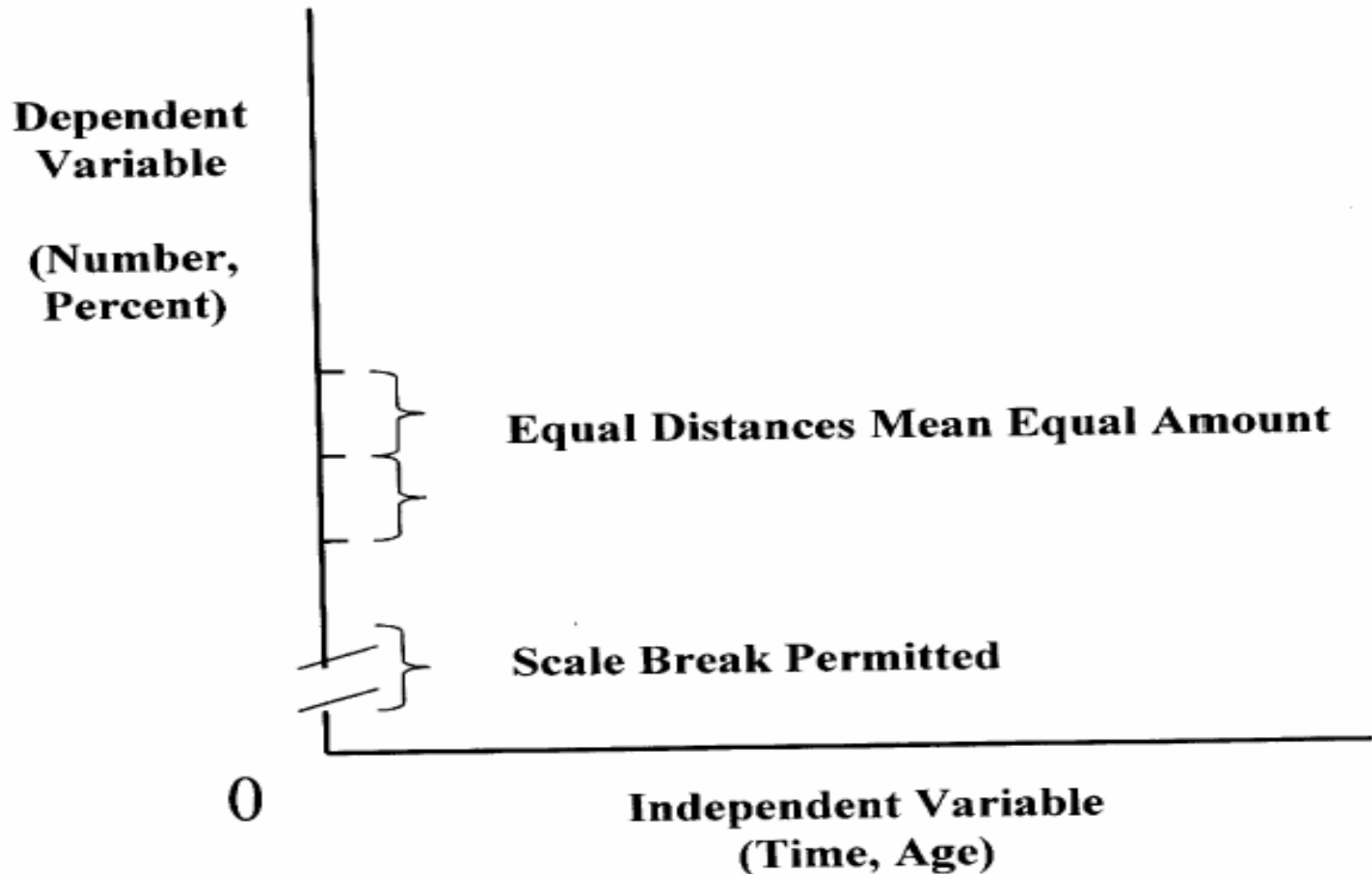


Source: *Am J Public Health, Dec.2003; 93:2101*

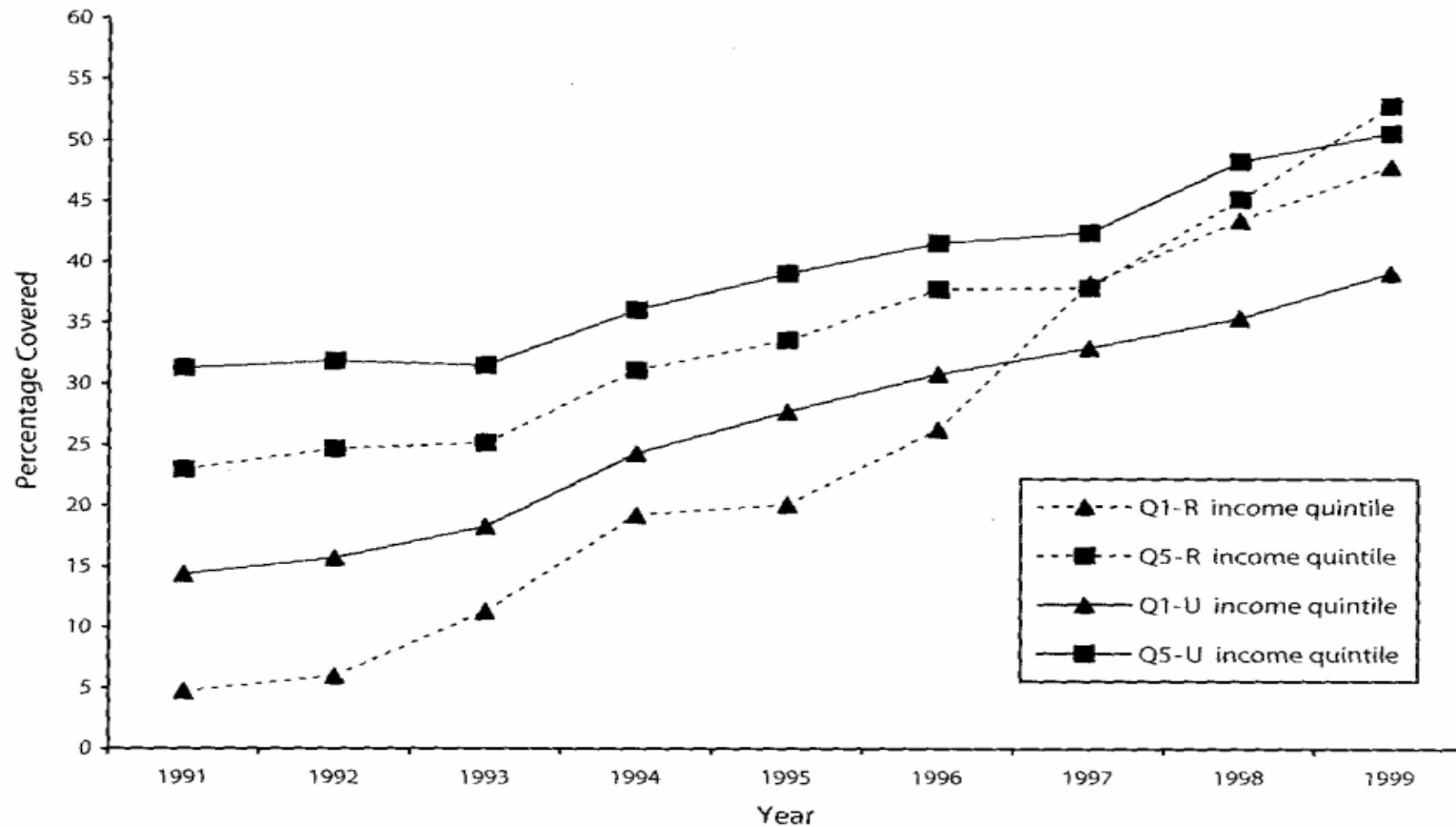
Arithmetic Scale Line Graph

- Use: Show *amount* of change or difference in the dependent variable (vertical axis) for the different points of the independent variable (horizontal axis).
- For: Interval or ratio data.

Arithmetic Scale Line Graph



Source: *Am J Public Health, Dec. 2003;93:2089*



Note. Q1-R = lowest income quintile, rural; Q5-R = highest income quintile, rural; Q1-U = lowest quintile, urban; Q5-U = highest quintile, urban.

Figure 1—Percentage of Women Aged 50 to 69 Years With 1 Screening Mammogram in 2 Years: Manitoba, 1990s.

Source: *Am J Public Health, Aug. 2000;90:1399*

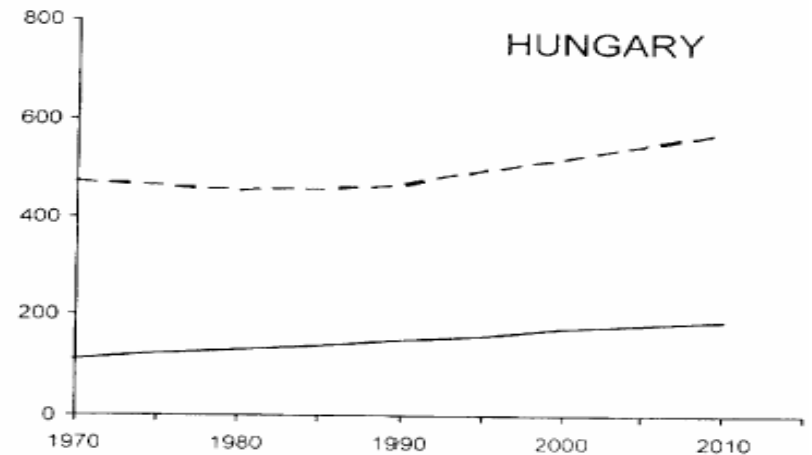
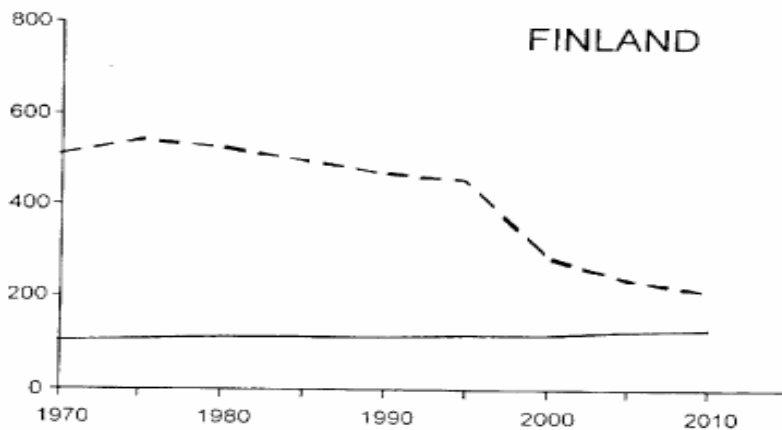
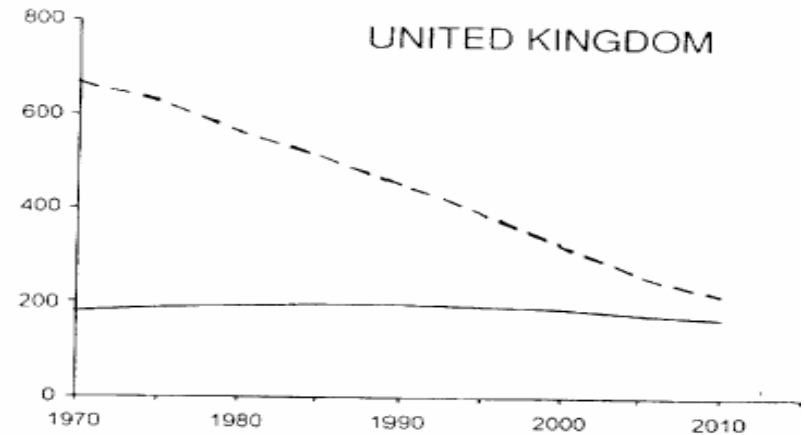
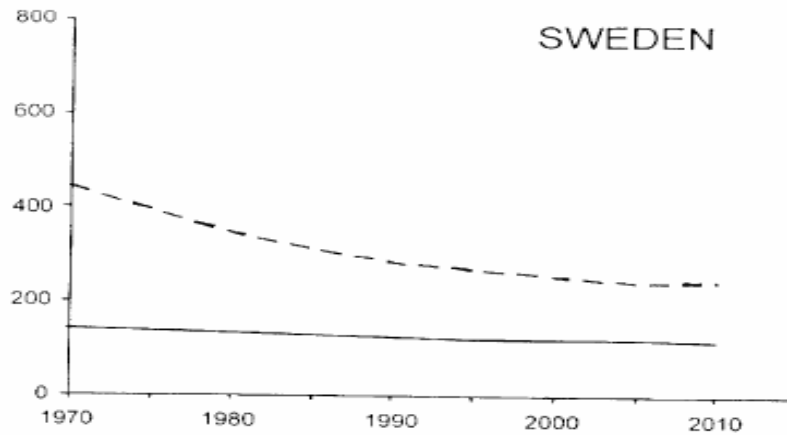


FIGURE 2—Observed (until 1992) and predicted cumulative risks of death from ischemic heart disease (dashed line) and breast cancer (solid line) in the absence of large-scale change in hormone replacement therapy use between ages 50 and 69 per 10000 women in Sweden, the United Kingdom, Finland, and Hungary.

Source: *Am J Public Health, July 2001;91:1061*

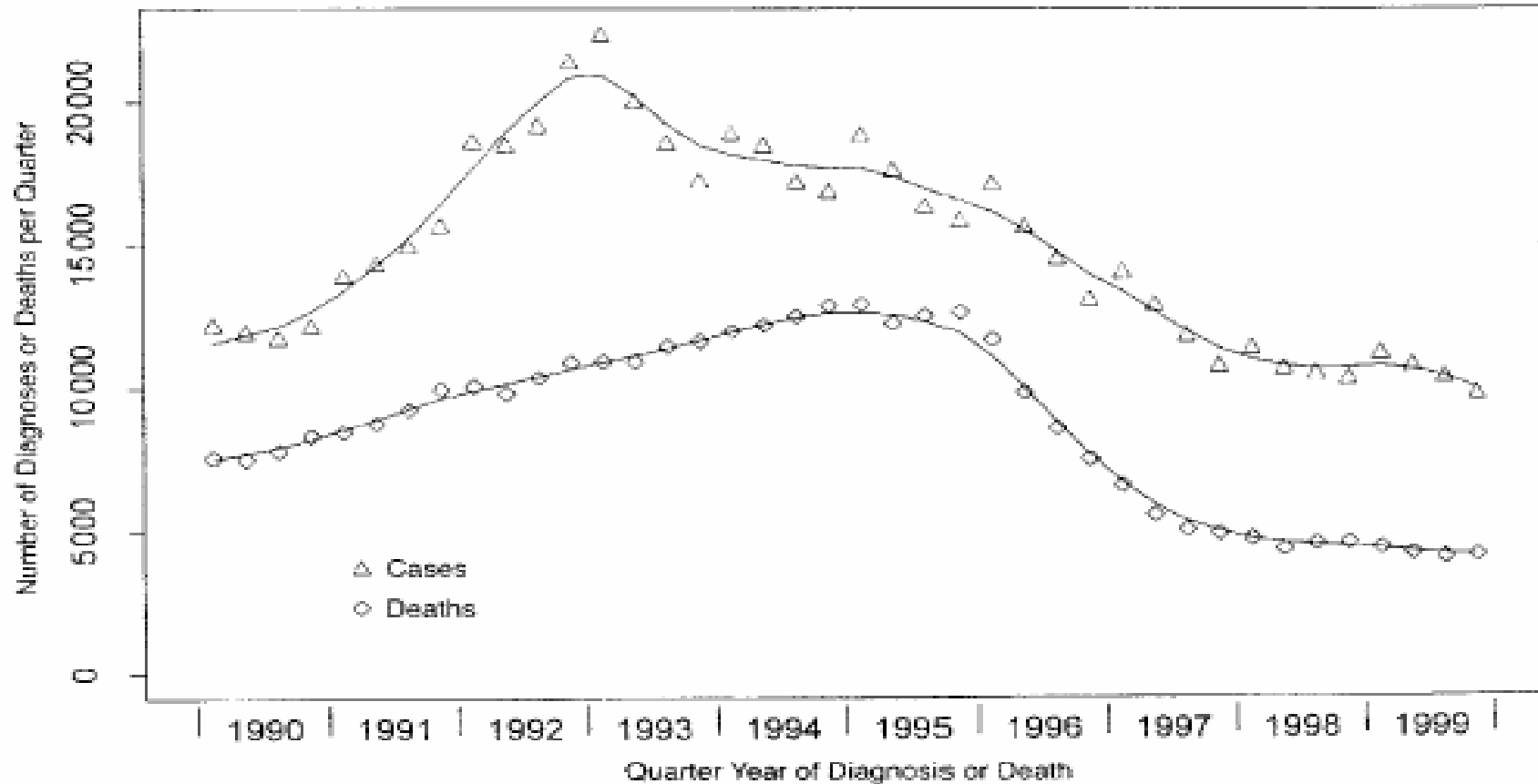


FIGURE 1—AIDS cases and deaths among adults and adolescents in the United States, by quarter year, 1990–1999.

Source: *Am J Public Health, July 2000;90:1067*

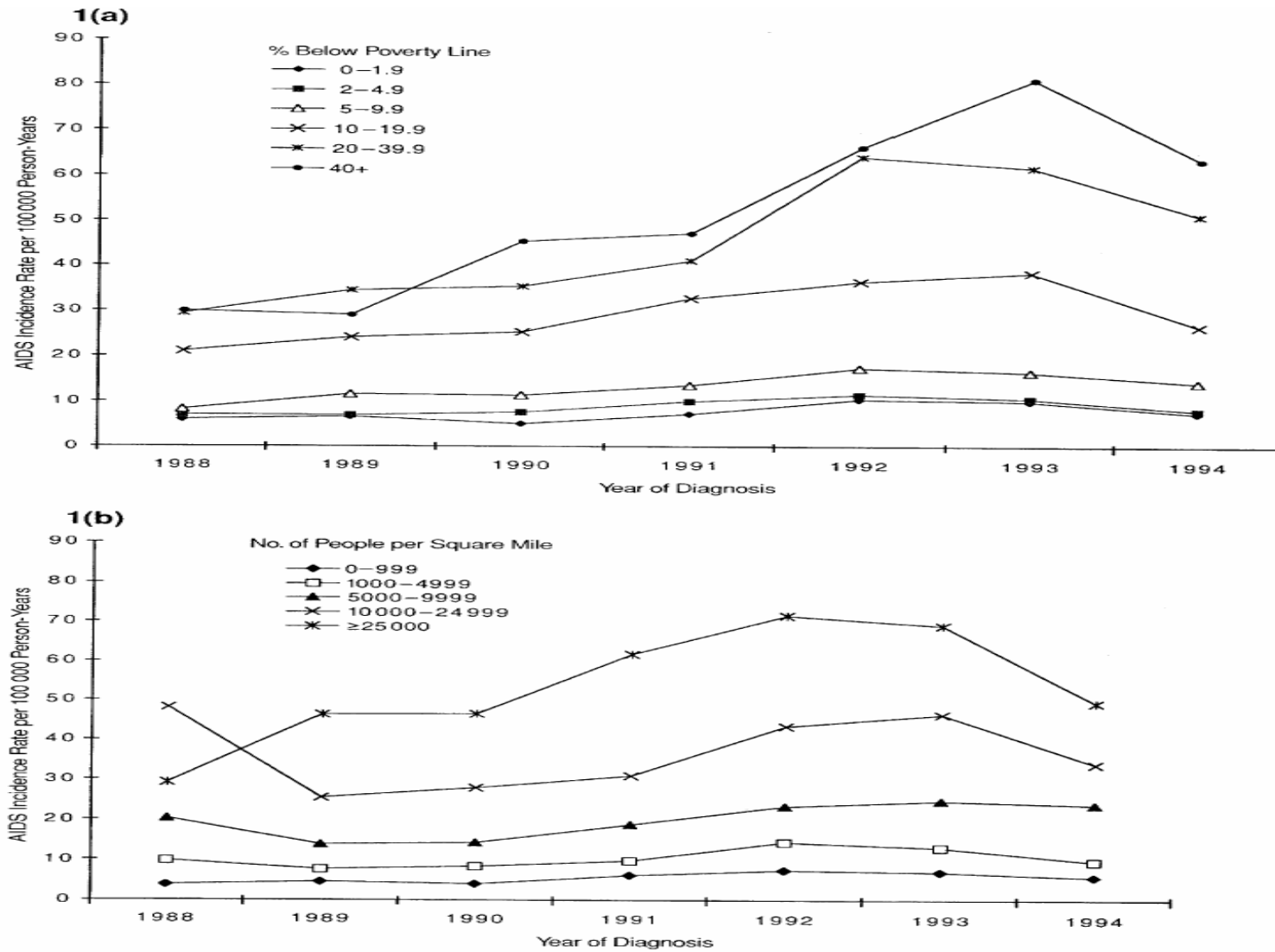
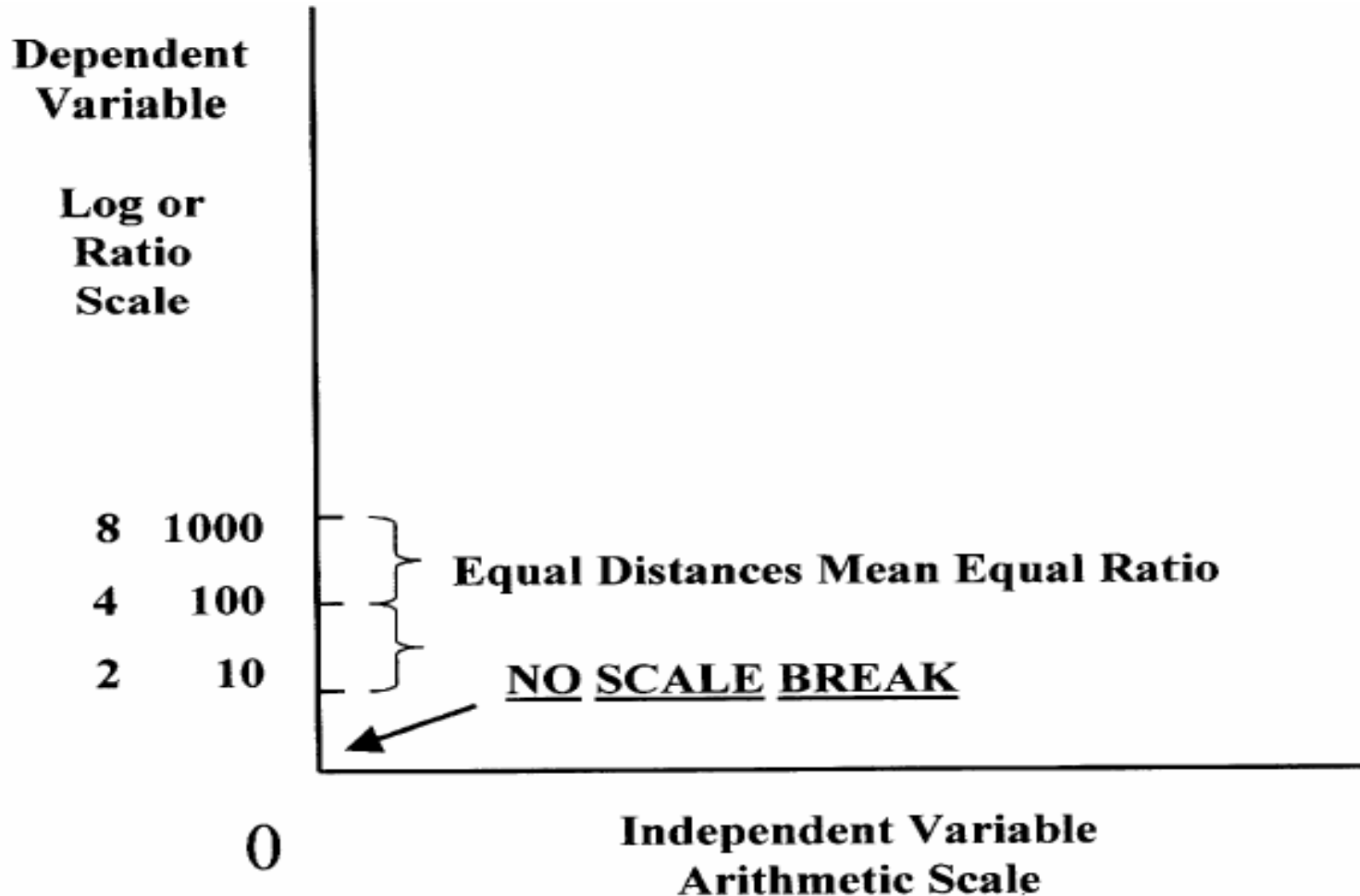


FIGURE 1—AIDS incidence rates, by year of diagnosis, in total Massachusetts population, 1988–1994, in relation to percentage of people living below the poverty line (a) and to population density (b).

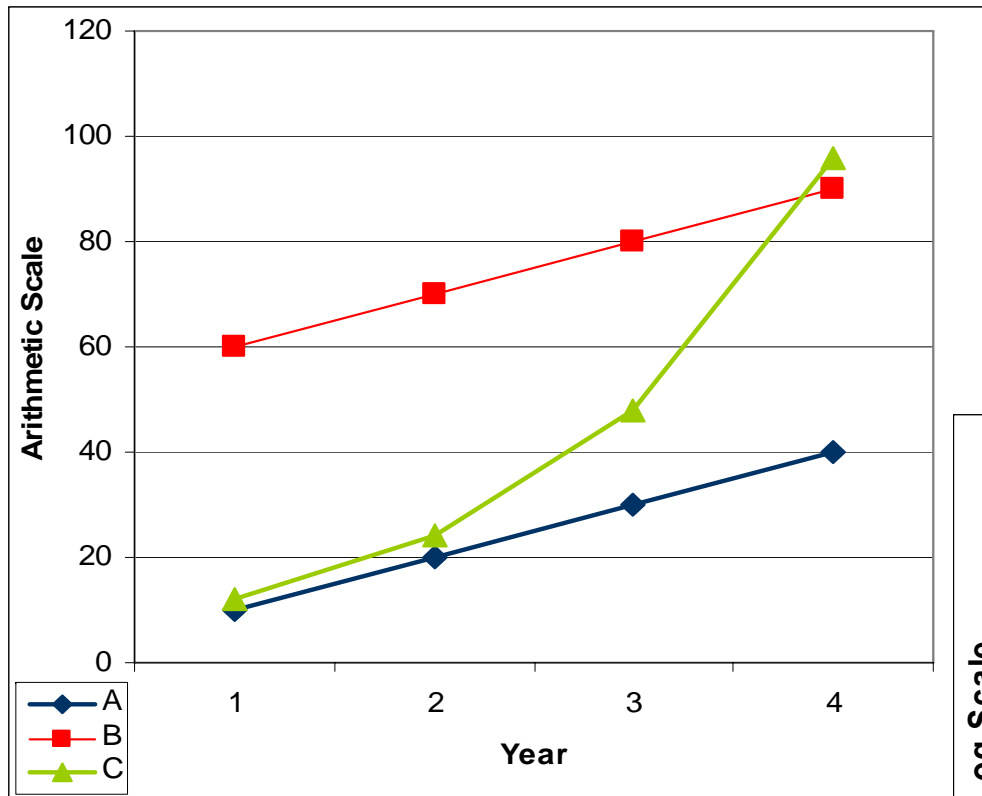
Semi-logarithmic or Ratio Scale Line Graph

- Use: Show *rate* of change in the dependent variable (vertical axis) for the different points of the independent variable (horizontal axis).
- For: Interval or ratio data.

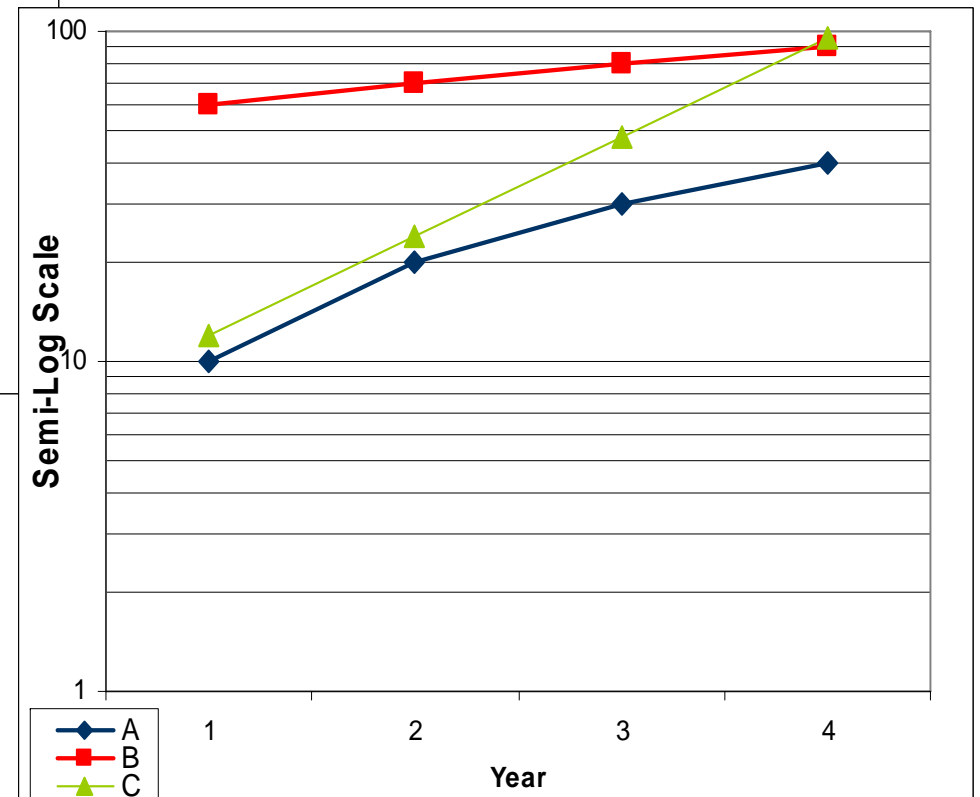
Semi-logarithmic or Ratio Scale Line Graph



Arithmetic and Semi-log Scale Line Graphs



Year	A	B	C
1	10	60	12
2	20	70	24
3	30	80	48
4	40	90	96

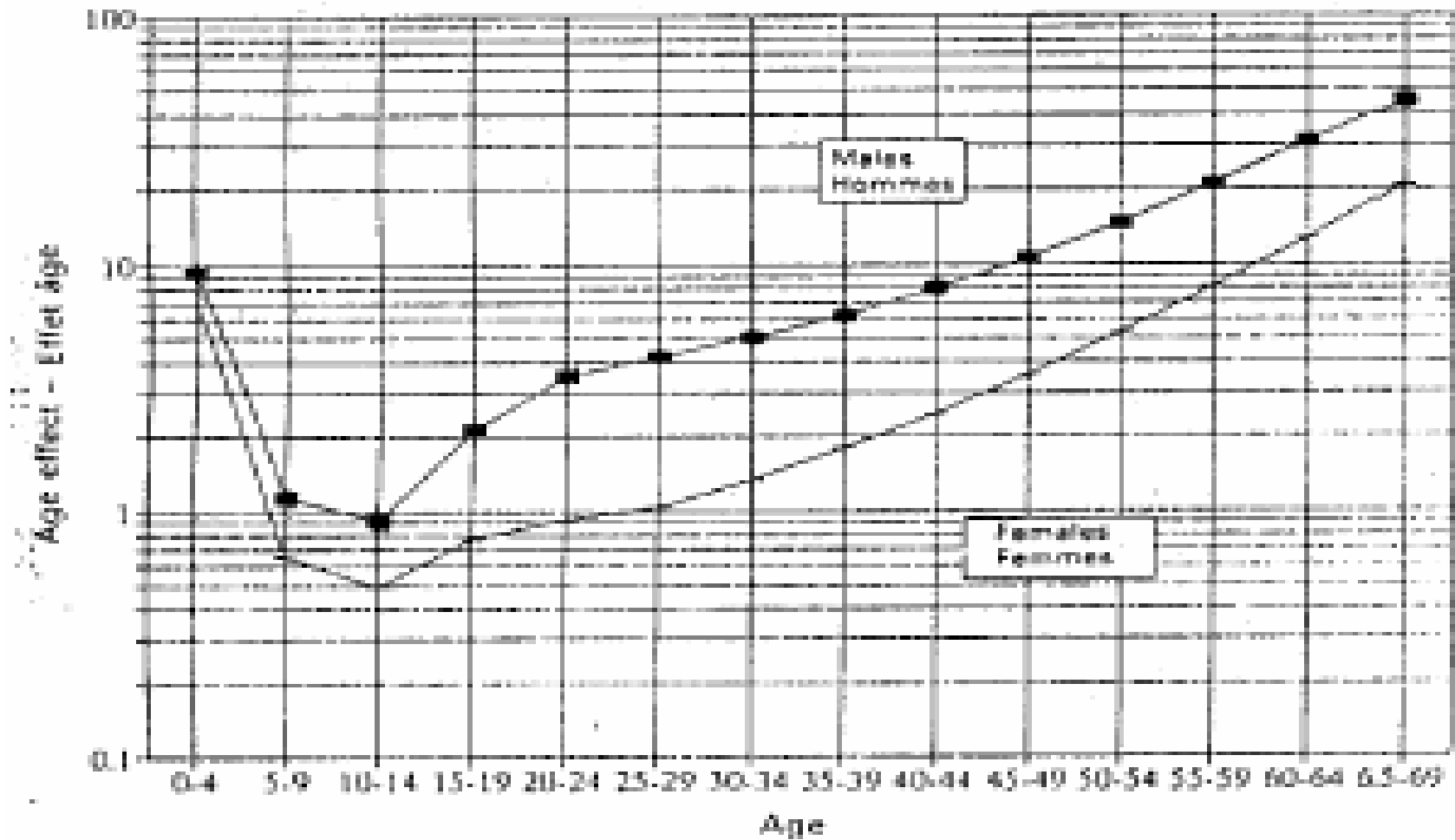


Semi-logarithmic Scale

REGIONAL AGE-PERIOD-COHORT ANALYSIS, RUSSIAN FEDERATION

ANALYSE RÉGIONALE ÂGE-PÉRIODE-COHORTE, FÉDÉRATION DE RUSSIE

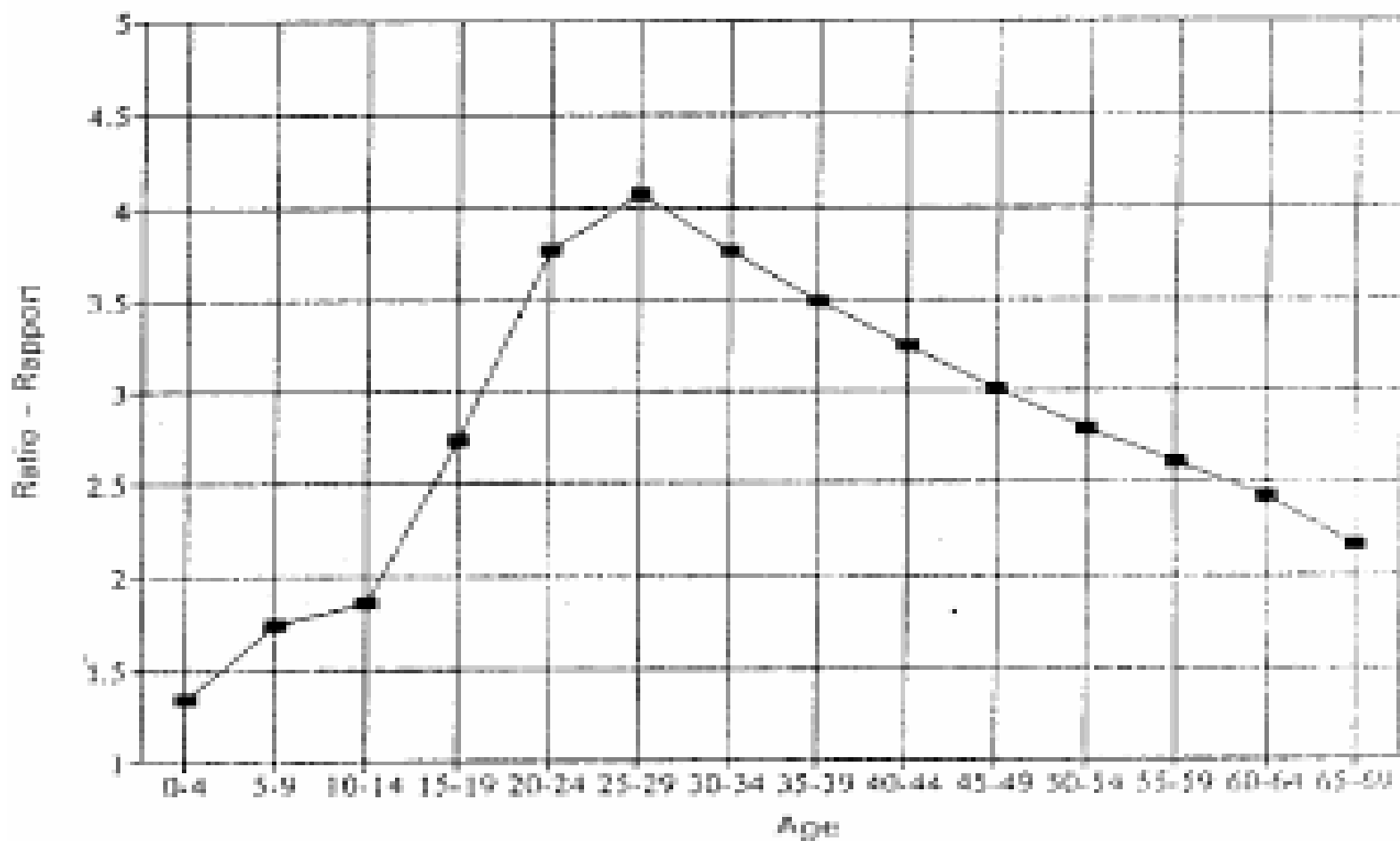
A. Age effects, males and females aged 0-69 Effets âge, hommes et femmes de 0 à 69 ans



Ratio Scale

REGIONAL AGE-PERIOD-COHORT ANALYSIS, RUSSIAN FEDERATION
ANALYSE RÉGIONALE ÂGE-PÉRIODE-COHORTE, FÉDÉRATION DE RUSSIE

B. Ratio of male-to-female age effects, ages 0-69 Rapport hommes-femmes des effets âge, de 0 à 69 ans



Source: *Am J Public Health*, Mar. 2004;94:456

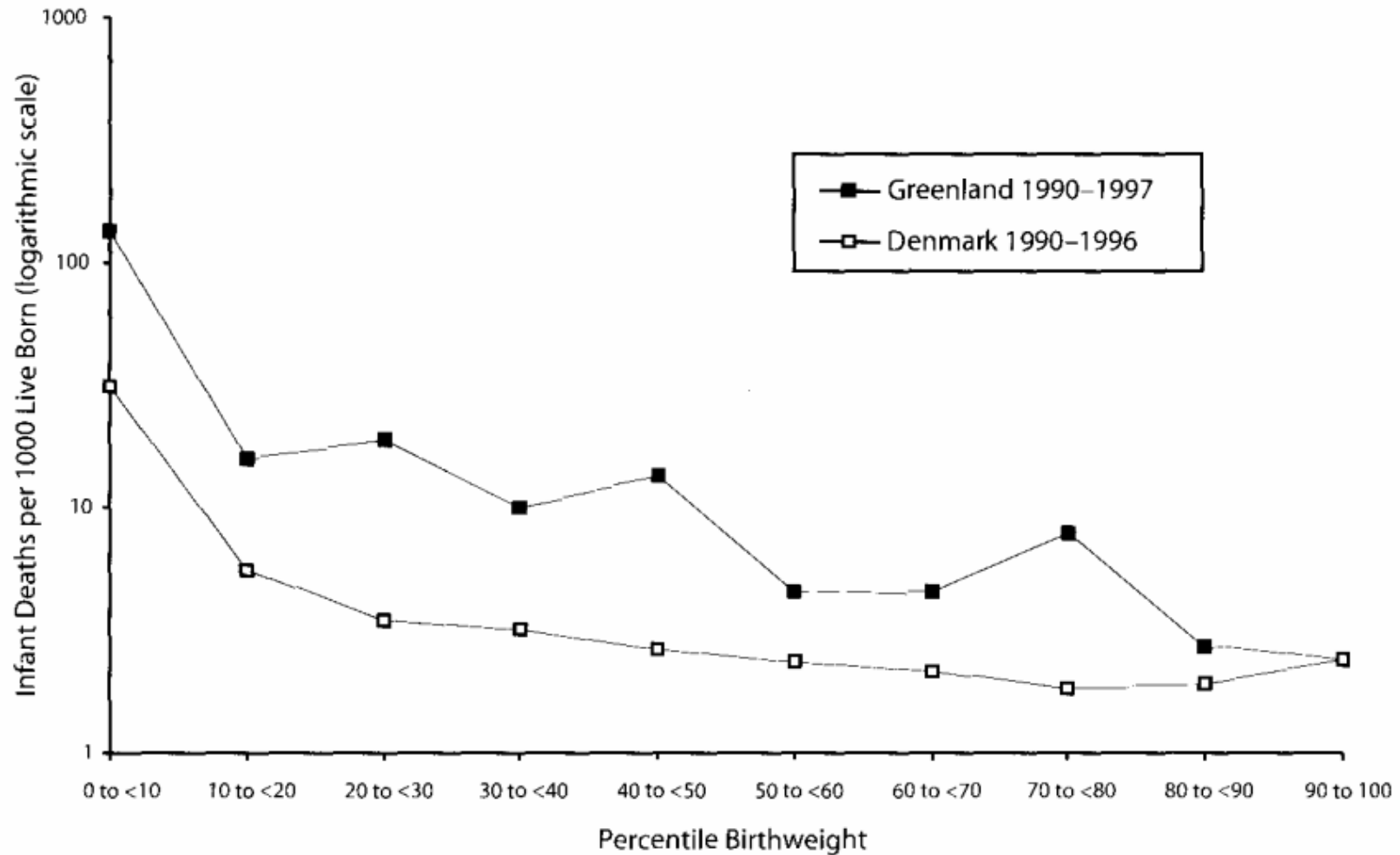
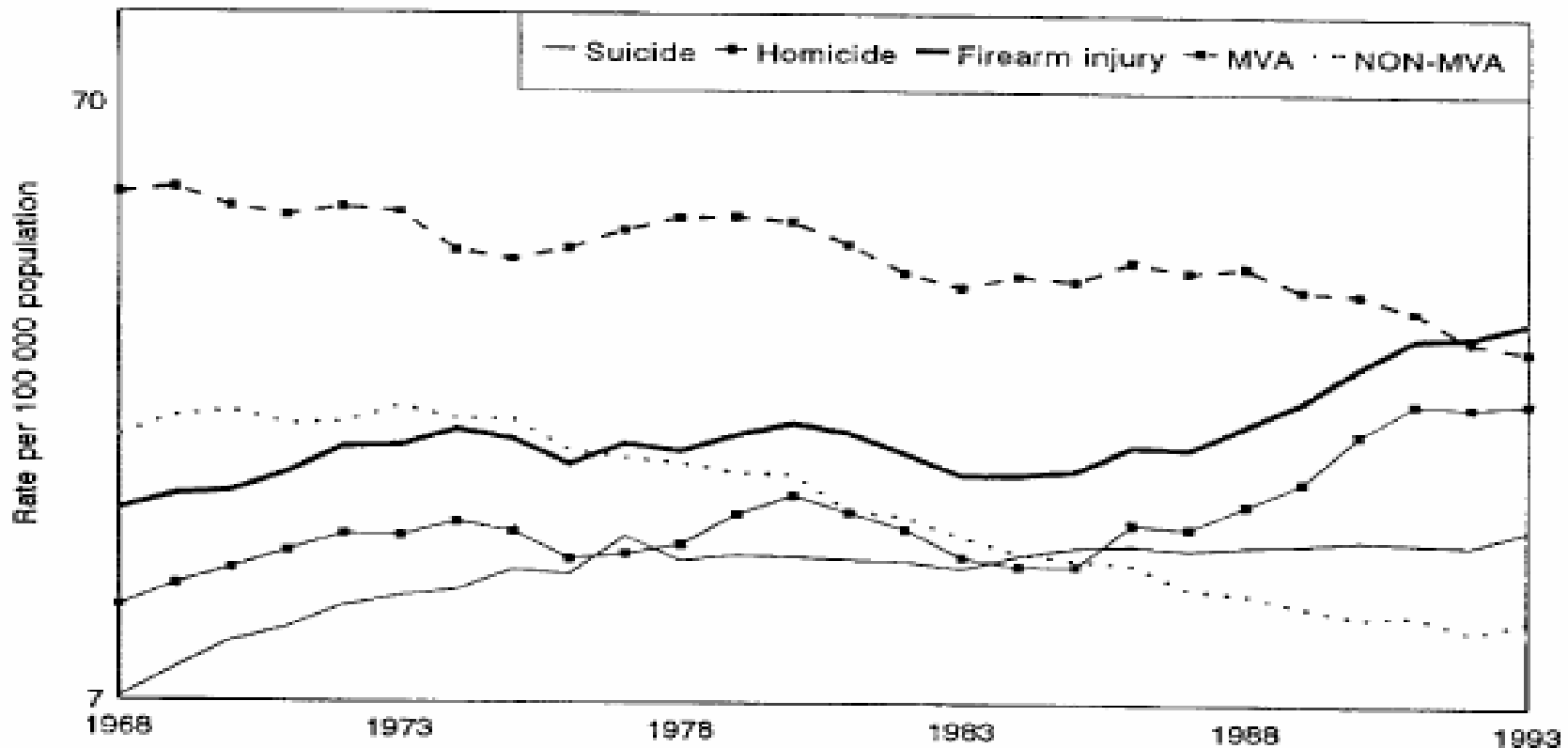


FIGURE 2—Infant mortality rates in Greenland and Denmark, 1990-1997.

Source: *Am J Public Health, Mar. 1996;86:560*



Note. MVA = motor vehicle accidents; NON-MVA = accidents excluding motor vehicle crashes.
Source. Data are from National Vital Statistics System, 1968 through 1993. The 1993 data are provisional, estimated from a 10% sample of deaths.

FIGURE 1—US death rates from selected major causes of death for the 15- to 24-year-old age group, 1968 through 1993.

A Line Graph and a Bar Chart with a Scale break

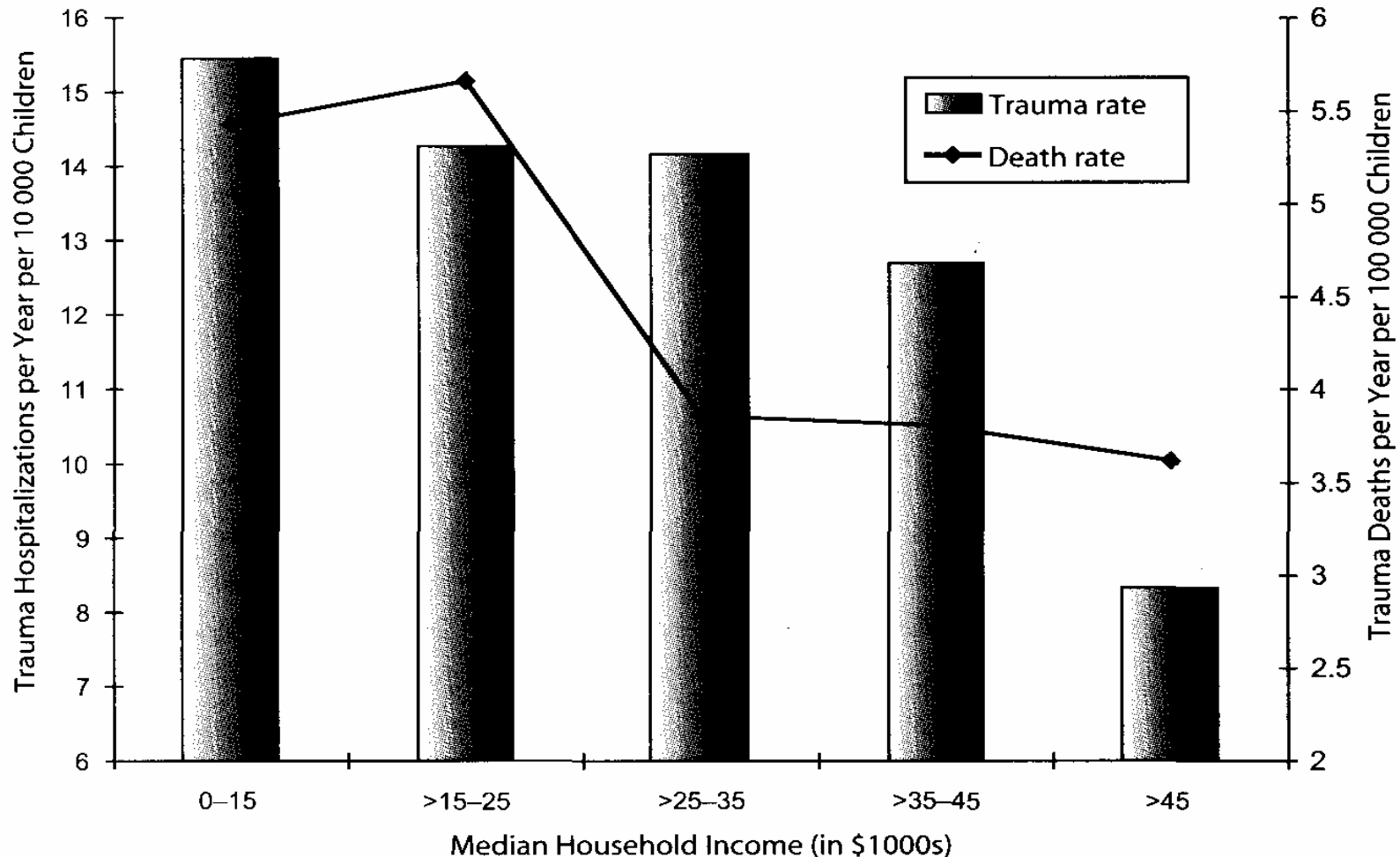


FIGURE 1—Trauma hospitalization and death rate by median household income in Sacramento County, 1988-1998.