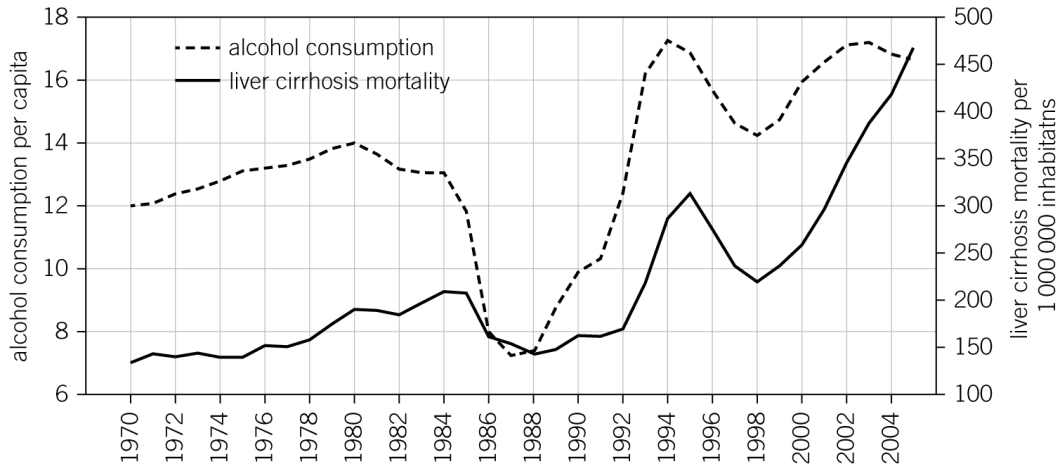# Non-Communicable Diseases

Analysing data

Answer the questions for data set 1 and data set 2

Data set 1: Alcohol consumption and liver disease

The graph shows the raw data collected in a study in Russia. The graph shows the trends in male liver cirrhosis death rates and alcohol consumption in Russia between 1970 and 2005.

Questions:

1. State the year of the highest alcohol consumption
2. State what you notice about the liver cirrhosis mortality rate in that year
3. Alcohol consumption fell sharply in 1984. Describe the trend in deaths from liver cirrhosis during this year
4. Describe the relationship between alcohol consumption and deaths from liver cirrhosis
5. Explain whether the data show any correlation between alcohol as a risk factor and deaths from liver cirrhosis.
6. Explain why you cannot be certain that this shows a causal link

Data set 2: Smoking and lung cancer

The table shows data about the numbers of men smoking in the UK and the proportion of men who die from smoking-related illnesses.

Year	Percentage of men who smoke	Percentage of smoking-related deaths in middle-aged men
1950	77	15
1955	74	18
1960	74	19
1965	68	20
1970	68	20
1975	62	17
1980	55	16
1985	46	14
1990	39	11
1995	37	8
2000	32	6

Questions:

1. Name a major smoking-related disease
2. Describe the trend in the numbers of men smoking in the UK
3. Describe the trend in smoking related deaths in men in the uk
4. In the 1950s professor Richard Doll first suggested that smoking affected our health
    a. State the impact on male smoking habits after that date
    b. Describe the relationship between the smoking habits and the number of smoking-relating deaths in men
    c. Suggest a reason for your answer to part b
5. Explain how this data can be used to:
    a. Support the idea that smoking is bad for our health
    b. Argue that smoking might not be causing the deaths