

# Confounding

## Prerequisites for a factor to be a confounder

- A** Must be a known risk factor for the disease.
- B** Is associated with the exposure of interest but is not a result of the exposure.

## Possible action



|                    | Population |          |          | < 40 years |        |                    | ≥ 40 years |        |
|--------------------|------------|----------|----------|------------|--------|--------------------|------------|--------|
|                    | CAD        | No CAD   |          | CAD        | No CAD |                    | CAD        | No CAD |
| Manual workers     | 176        | 136      | 57 years | 106        | 30     | Manual workers     | 70         | 106    |
| Non-manual workers | 124        | 164      | 45 years | 20         | 6      | Non-manual workers | 104        | 158    |
|                    | 300        | 300      |          |            |        |                    |            |        |
|                    | 59 years   | 42 years |          |            |        |                    |            |        |

  

$$OR = \frac{176 \times 164}{124 \times 136} = 1.7$$

$$OR = \frac{106 \times 6}{20 \times 30} = 1.06$$

$$OR = \frac{70 \times 158}{104 \times 106} = 1$$

The association between manual work and CAD was confounded by age in the hypothetical population in this example.