



odds ratio (OR)

of disinformation and relative risk

example

# odds ratio and relative risk

- The **odds ratio (OR)** compares the odds of an event between two different groups.

$$OR = \frac{\frac{p_1}{1 - p_1}}{\frac{p_2}{1 - p_2}}$$

- OR > 1 (< 1) implies first event (numerator) has greater (smaller) risk of occurring
- An OR of 1 implies risk is equal for both events

## example

For example, suppose the probability of disease is 0.35 for men and 0.25 for women. The OR is:

$$\frac{0.35/(1 - 0.35)}{0.25/(1 - 0.25)} = \frac{0.54}{0.33} = 1.62$$

How do we interpret this?

