Relative risk

	Diseased	Non-diseased	Incidence rates
Exposed	A	B	$\dfrac{A}{A+B}$
Non-exposed	C	D	$\dfrac{C}{C+D}$

Relative risk (RR) calculation

$$\text{Relative risk (RR)} = \frac{\text{Risk in exposed}}{\text{Risk in non-exposed}} = \frac{\dfrac{A}{A+B}}{\dfrac{C}{C+D}}$$

RR interpretation

= 1   Risk in exposed = Risk in non-exposed
No association

> 1   Risk in exposed > Risk in non-exposed
Exposure = Risk factor

< 1   Risk in exposed < Risk in non-exposed
Exposure = Protective factor

	Develop MI	Don't develop MI	
Smokers	16	3984	4000
Non-smokers	6	5994	6000

Smokers: $\dfrac{16}{4000} = 0.004 \times 100{,}000 = 400 / 100{,}000 / \text{Year}$

Non-smokers: $\dfrac{6}{6000} = 0.001 \times 100{,}000 = 100 / 100{,}000 / \text{Year}$

$$RR = \frac{400}{100} = 4$$

4 > 1
Exposure = Risk factor

Interpreting the data of a table or figure correctly:
The comparison group is the one with a RR of one.

	Incidence	RR
Non-smokers	100	1
Passive smokers	200	2
Smokers	400	4