

Talking about risk: a side-by-side comparison

Assume a scenario in which a physician is trying to explain to a patient the risks of heart attack and the potential benefits of taking a certain drug. The chance of a heart attack over the next eight months if the patient takes the drug is 3%, and the chance of a heart attack if the patient does not take the drug is 5%.

Format	Formula	Statement
Absolute risk reduction	$5\% - 3\% = 2\%$	Taking the drug reduces the risk of heart attack by 2 percentage points; that is, if 100 people take the drug there will be two fewer heart attacks than if they did not take the drug.
Relative risk	$3\% \div 5\% = 60\%$	The chance of heart attack for people who take the drug is 60% that of people who do not take the drug.
Relative risk reduction	$100\% - (3\% \div 5\%) = 40\%$	The drug lowers the risk of heart attack by 40%.

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