An \*\*odds ratio (OR) of 4\*\* means that the odds of an outcome occurring in the \*\*exposed group\*\* are \*\*4 times greater\*\* than the odds of the outcome occurring in the \*\*non-exposed group\*\*.### Example: If this was a study examining the association between smoking (exposure) and lung cancer (outcome), an odds ratio of 4 means that \*\*smokers are 4 times more likely\*\* to develop lung cancer than non-smokers, assuming other factors are controlled for in the study.### Important Note: - \*\*Odds ratio (OR)\*\* is commonly used in \*\*case-control studies\*\* or \*\*cross-sectional studies\*\* to quantify the association between exposure and outcome.