Health Science Statistics using R and R Commander by Robin Beaumont

Chapter 28 Risk and odds ratios

Learning Outcomes

* = more advanced outcomes

Learning outcome	Tick box
Be able to provide definitions for; risk, risk ratio, (absolute) risk difference and absolute risk reduction (Glossary entry **risk**)	q
Be able to provide definitions for; odds and odds ratio (Glossary entries **odds** and **odds ratio**)	q
Be able to explain why both variables involved in the above calculations should be binary	q
Be able to obtain many of the above measures using the OpenEpi software	q
Be aware that there is debate concerning the relative merits of reporting the relative risk versus odds ratios	q
*Be able to discuss the reporting of the relative risk versus odds ratios and how this is determined by study design and the value of the relative risk or odd ratio values (Glossary entries **odds** and **odds ratio**)	q
Be aware that it is easy to get the treatment (exposed) and control (unexposed) groups the wrong way round when calculating the above values and be able to run a quick check to see the odds ratio when the groups are reversed	q
Be able the state what value the odds ratio takes when each group has the same odds (zero effect = null hypothesis)	q
*create R code to obtain many of the above measures using the *epitab()* and *riskratio()* functions in the *epitools* package	q
*create R code to obtain many of the above measures using the *epi2x2()* function in the *epibasix* package	q