**Risks**

As we have seen, relative risks can be calculated in cohort studies (and in RCTs). To calculate relative risk, it is useful to define the absolute risk (AR) in each group.

The absolute risk in the exposed group (ARe) is 30/100. The absolute risk in the unexposed (ARu) is 10/100.

|  |  |  |  |
| --- | --- | --- | --- |
|  | Outcome + | Outcome – | Total |
| Exposed | 30 | 70 | 100 |
| Unexposed | 10 | 90 | 100 |

The relative risk is then ARe/ARu = 3.0. The absolute risks can also be compared by subtracting one from the other. The absolute risk reduction (ARR) is ARe - ARu = 20/100 = 0.20 or 20%.

This number can be compared to the ARe to determine proportionately how much the risk was reduced. The relative risk reduction (RRR) = ARR/ARe = .20/.30 = 0.67 or 67%. The risk in the unexposed group was reduced by 2/3.