

The following is hypothetical data comparing hospitalisation after a car crash (outcome) for male and female drivers (exposure).

#### Crude Data:

	Hospitalized	Not Hospitalized	Total
Male	1330	7018	8348
Female	798	6400	7198

Risk for hospitalisation amongst males:

$$Risk_{(males)} = \frac{1330}{8348} = 0.16$$

$$Risk_{(females)} = \frac{798}{7198} = 0.11$$

$$Risk\ Ratio\ (RR) = \frac{0.16}{0.11} = 1.45$$

i.e the risk of hospitalisation in males is 45% higher than in females.

But it is then suggested that age could be factor in the association between sex and hospitalisation risk. So, we re-calculate the associations stratified (grouped) by age < 40 and ≥ 40 yrs.

#### Age-Stratified Data:

##### Age <40

	Hospitalized	Not Hospitalized	Total
Male	966	3146	4112
Female	460	3000	3450

$$Risk\ Ratio\ (RR) = \frac{0.24}{0.13} = 1.84$$

i.e the risk of hospitalisation in males (< 40) is 84% higher than in females (< 40).

##### Age ≥40

	Hospitalized	Not Hospitalized	Total
Male	364	3872	4236
Female	348	3400	3748

$$Risk\ Ratio\ (RR) = \frac{0.086}{0.093} = 0.92$$

i.e the risk of hospitalisation in males (≥ 40) is 8% lower than in females (≥ 40).