Two-by-Two (2x2) Tables

What they are

Two by two tables are created to evaluate the association between a possible risk factor and an outcome of interest.

General form

| | | Disease/outcome Status | | |
|-----------------|---------|------------------------|---------------------------|---------------------------|
| | | + (yes) | - (no) | Totals |
| | + (yes) | a | b | a+b |
| Exposure Status | - (no) | c | d | $\mathrm{c}{+}\mathrm{d}$ |
| | Totals | a+c | $\mathrm{b}{+}\mathrm{d}$ | a+b+c+d |

a represents individuals exposed to the exposure of interest who developed the outcome being studied.

b represents individuals exposed to the exposure of interest who did not develop the outcome being studied.

c represents individuals not exposed to the exposure of interest but who did develop the outcome being studied.

d represents individuals not exposed to the exposure of interest that did not develop the outcome being studied.