

Table 2.56. Cohort studies of active smoking and risk of breast cancer: duration of smoking

| Study | Age | Follow-up | Cases | Duration (yrs) | RR (95% CI) |
|----------------------------------|-------|-----------|-------|----------------|------------------|
| <i>Incidence</i> | | | | | |
| Egan et al. (2002) (ever) | 30-55 | 1982-1996 | 1359 | Nonsmoker | 1.00 (ref) |
| | | | 621 | <20 | 1.04 (0.95–1.15) |
| | | | 450 | 20-29 | 1.11 (1.00–1.24) |
| | | | 475 | 30-39 | 1.08 (0.97–1.21) |
| | | | 235 | ≥40 | 1.05 (0.90–1.21) |
| | | | | p-trend=0.18 | |
| Al-Delaimy et al. (2004) (ever) | 25-42 | 1989-1999 | 596 | Nonsmoker | 1.00 (ref) |
| | | | 52 | <10 | 1.14 (0.85–1.52) |
| | | | 99 | 10-14 | 1.19 (0.96–1.48) |
| | | | 96 | 15-19 | 1.06 (0.85–1.33) |
| | | | 166 | ≥20 | 1.21 (1.01–1.45) |
| | | | | p-trend=0.04 | |
| Reynolds et al. (2004a) (ever) | | 1995-2000 | 1174 | Nonsmoker | 1.00 (ref) |
| | | | 176 | ≤10 | 0.99 (0.85–1.17) |
| | | | 193 | 11-20 | 1.17 (1.00–1.37) |
| | | | 163 | 21-30 | 1.17 (0.99–1.38) |
| | | | 251 | ≥31 | 1.15 (1.00–1.33) |
| | | | | p-trend=0.009 | |
| Gram et al. (2005) (current) | 30-50 | 1991-2000 | 137 | Nonsmoker | 1.00 (ref) |
| | | | 68 | 1-19 | 0.93 (0.68–1.28) |
| | | | 96 | 20-24 | 1.09 (0.81–1.45) |
| | | | 196 | ≥25 | 1.26 (0.98–1.63) |
| | | | | p-trend=0.05 | |
| Gram et al. (2005) (ever 20+ yr) | 30-50 | 1991-2000 | 137 | Nonsmoker | 1.00 (ref) |
| | | | 158 | 20-24 | 1.13 (0.88–1.45) |
| | | | 234 | ≥25 | 1.36 (1.06–1.74) |
| | | | | p-trend=0.02 | |
| Olson et al. (2005) (ever) | 55-69 | 1986-1999 | 1316 | Nonsmoker | 1.00 (ref) |
| | | | 140 | 1-19 | 1.01 (0.83–1.21) |
| | | | 319 | 20-39 | 1.13 (0.99–1.29) |
| | | | 209 | ≥40 | 1.18 (1.00–1.38) |

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|--|-------|-----------|-------|----------------|------------------|
| Cui et al. (2006) (ever) (updated Terry & Rohan (2002)) | 40-59 | 1980-2000 | 2249 | Nonsmoker | 1.00 (ref) |
| | | | 362 | 1-9 | 1.00 (0.90-1.12) |
| | | | 507 | 10-19 | 1.02 (0.93-1.13) |
| | | | 761 | 20-29 | 1.09 (1.00-1.19) |
| | | | 453 | 30-39 | 1.14 (1.03-1.27) |
| | | | 77 | ≥40 | 1.50 (1.19-1.89) |
| | | | | | p-trend=0.0003 |
| Thun et al. (2009) (current) | 50+ | 1992-2005 | 1737 | Nonsmokers | 1.00 (ref) |
| | | | 78 | <40 | 1.20 (0.95-1.52) |
| | | | 90 | 40-49 | 1.22 (0.98-1.51) |
| | | | 42 | ≥50 | 1.19 (0.87-1.63) |
| | | | | | |
| <i>Mortality</i> | | | | | |
| Calle et al. (1994) (current) | 30+ | 1982-1988 | 468 | Nonsmoker | 1.00 (ref) |
| | | | 4 | <10 | 1.10 (0.41-2.96) |
| | | | 11 | 10-19 | 1.04 (0.56-1.93) |
| | | | 38 | 20-29 | 1.10 (0.77-1.56) |
| | | | 70 | 30-39 | 1.26 (0.96-1.65) |
| | | | 62 | ≥40 | 1.38 (1.05-1.83) |
| | | | | | p-trend=0.0096 |
| Thun et al. (2009) (current) | 30+ | 1982-2006 | 3866 | Nonsmoker | 1.00 (ref) |
| | | | 21 | <10 | 0.72 (0.47-1.10) |
| | | | 105 | 10-19 | 1.09 (0.89-1.33) |
| | | | 355 | 20-29 | 1.17 (1.04-1.31) |
| | | | 568 | 30-39 | 1.32 (1.21-1.45) |
| | | | 413 | ≥40 | 1.47 (1.32-1.64) |
| | | | | | p-trend=0.0006 |