

ETS AND LUNG CANCER META-ANALYSES

Exposure	Estimates included	Number of estimates	Relative risk (95% confidence limits)*	
			Fixed-effects meta analysis	Random-effects meta-analysis
Husband smoked [†]	All	69	1.17 (1.10-1.23)	1.21 (1.12-1.31)
	N America	21	1.11 (1.01-1.22)	1.11 (1.01-1.22)
	Europe	16	1.21 (1.07-1.37)	1.23 (1.05-1.44)
	Asia	32	1.19 (1.10-1.29)	1.29 (1.14-1.46)
	- Japan	7	1.25 (1.04-1.49)	1.25 (1.04-1.49)
	- Hong Kong	6	1.42 (1.17-1.74)	1.41 (1.10-1.81)
	- China	14	1.02 (0.91-1.14)	1.18 (0.96-1.45)
	- Other	5	1.54 (1.25-1.89)	1.54 (1.25-1.89)
	Published in 1981-1989	25	1.38 (1.23-1.55)	1.38 (1.23-1.55)
	Published in 1990-1999	27	1.09 (1.01-1.17)	1.15 (1.02-1.30)
	Published in 2000 onwards	17	1.17 (1.04-1.31)	1.16 (1.03-1.32)
	Published in 1981-1986	12	1.30 (1.11-1.52)	1.30 (1.09-1.55)
	Published in 1987-1989	13	1.50 (1.26-1.78)	1.50 (1.26-1.78)
	Published in 1990-1994	11	0.99 (0.89-1.09)	1.04 (0.84-1.28)
	Published in 1995-1998	11	1.23 (1.08-1.40)	1.25 (1.07-1.47)
	Published in 1999-2001	11	1.28 (1.10-1.49)	1.28 (1.10-1.49)
	Published in 2002 onwards	11	1.08 (0.94-1.24)	1.08 (0.94-1.24)
	1-49 cases	17	1.33 (1.04-1.69)	1.33 (1.04-1.69)
	50-99	22	1.33 (1.16-1.53)	1.33 (1.12-1.57)
	100-199	15	1.13 (1.02-1.26)	1.13 (1.02-1.36)
	200-399	10	1.35 (1.19-1.53)	1.35 (1.19-1.53)
	400+	5	1.00 (0.90-1.10)	1.01 (0.82-1.26)
	Case-control	58	1.16 (1.09-1.23)	1.21 (1.11-1.33)
Prospective	11	1.20 (1.04-1.39)	1.20 (1.04-1.39)	
Not age adjusted	12	1.55 (1.32-1.82)	1.58 (1.29-1.95)	
Age adjusted	57	1.12 (1.06-1.19)	1.15 (1.07-1.24)	
Dose-response results:				
not reported	23	1.02 (0.92-1.13)	1.10 (0.95-1.29)	
reported	45	1.24 (1.16-1.32)	1.26 (1.16-1.36)	
Spouse the index	48	1.16 (1.09-1.23)	1.22 (1.11-1.33)	
Spouse not the index	21	1.22 (1.07-1.39)	1.22 (1.07-1.39)	
Wife smoked [†]	All	26	1.15 (0.99-1.35)	1.15 (0.99-1.35)
	N America	11	1.06 (0.82-1.37)	1.06 (0.82-1.37)
	Europe	9	1.17 (0.91-1.50)	1.17 (0.91-1.50)
	Asia	6	1.31 (0.93-1.84)	1.28 (0.81-2.02)

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Exposure	Estimates included	Number of estimates	Relative risk (95% confidence limits)*	
			Fixed-effects meta analysis	Random-effects meta-analysis
Husband or wife smoked ^{†,‡}	All	88	1.17 (1.11-1.23)	1.21 (1.12-1.29)
	N America	30	1.11 (1.01-1.21)	1.11 (1.01-1.21)
	Europe	20	1.20 (1.07-1.34)	1.21 (1.05-1.40)
	Asia	38	1.20 (1.11-1.30)	1.29 (1.14-1.45)
	- Japan	9	1.29 (1.09-1.54)	1.29 (1.09-1.54)
	- Hong Kong	7	1.41 (1.17-1.70)	1.40 (1.14-1.73)
	- China	16	1.01 (0.90-1.13)	1.13 (0.93-1.39)
	- Other	6	1.55 (1.26-1.90)	1.55 (1.26-1.90)
	Published in 1981-1989	33	1.40 (1.25-1.57)	1.40 (1.25-1.57)
	Published in 1990-1999	33	1.09 (1.01-1.17)	1.15 (1.02-1.28)
	Published in 2000 onwards	22	1.15 (1.04-1.27)	1.14 (1.01-1.28)
	Published in 1981-1986	18	1.32 (1.14-1.53)	1.32 (1.13-1.54)
	Published in 1987-1989	15	1.53 (1.28-1.81)	1.53 (1.28-1.81)
	Published in 1990-1994	12	0.99 (0.89-1.10)	1.05 (0.85-1.29)
	Published in 1995-1998	16	1.21 (1.08-1.37)	1.22 (1.07-1.39)
	Published in 1999-2001	12	1.24 (1.08-1.42)	1.25 (1.08-1.43)
	Published in 2002 onwards	15	1.08 (0.95-1.23)	1.08 (0.94-1.23)
	1-49 cases	18	1.56 (1.21-2.00)	1.56 (1.21-2.00)
	50-99	28	1.25 (1.09-1.42)	1.23 (1.04-1.46)
	100-199	18	1.16 (1.04-1.29)	1.16 (1.04-1.29)
	200-399	17	1.27 (1.14-1.41)	1.26 (1.11-1.44)
	400+	7	1.03 (0.94-1.13)	1.06 (0.89-1.26)
	Case-control	74	1.16 (1.10-1.23)	1.21 (1.12-1.31)
	Prospective	14	1.19 (1.04-1.36)	1.19 (1.04-1.36)
	Not age adjusted	15	1.53 (1.31-1.80)	1.56 (1.27-1.91)
	Age adjusted	73	1.13 (1.07-1.19)	1.15 (1.08-1.23)
Dose-response results:				
not reported	28	1.02 (0.93-1.12)	1.08 (0.94-1.24)	
results reported	59	1.24 (1.17-1.32)	1.26 (1.17-1.36)	
Spouse the index	61	1.16 (1.10-1.24)	1.22 (1.12-1.33)	
Spouse not the index	27	1.18 (1.05-1.32)	1.18 (1.05-1.32)	
Workplace ETS exposure [§]	All	36	1.24 (1.14-1.34)	1.23 (1.13-1.35)
	N America	15	1.21 (1.07-1.36)	1.20 (1.03-1.39)
	Europe	10	1.18 (1.00-1.39)	1.18 (0.99-1.41)
	Asia	11	1.31 (1.15-1.50)	1.31 (1.14-1.51)
Childhood ETS exposure ^{**}	From any cohabitant	33	1.06 (0.98-1.15)	1.16 (1.00-1.35)
	N America	9	0.98 (0.86-1.12)	1.03 (0.85-1.24)
	Europe	11	0.94 (0.81-1.08)	1.03 (0.81-1.32)
	Asia	13	1.28 (1.12-1.46)	1.36 (1.01-1.81)
	From the mother specifically	9	0.96 (0.77-1.20)	0.98 (0.77-1.25)
	From the father specifically	11	0.90 (0.80-1.00)	1.00 (0.78-1.29)
	From parents specifically	7	0.74 (0.60-0.91)	0.74 (0.60-0.91)

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Exposure	Estimates included	Number of estimates	Relative risk (95% confidence limits)*	
			Fixed-effects meta analysis	Random-effects meta-analysis
Household ETS exposure ^{††}	Any	42	1.12 (1.04-1.20)	1.12 (1.04-1.20)
	From sources other than the spouse	8	1.04 (0.87-1.24)	1.17 (0.83-1.65)
ETS exposure in travel ^{‡‡}	All	8	1.24 (1.01-1.53)	1.34 (0.94-1.93)
Social ETS exposure ^{‡‡}	All	12	1.04 (0.92-1.17)	1.02 (0.80-1.28)
Total ETS exposure	All	26	1.19 (1.07-1.32)	1.22 (1.03-1.43)

* Relative risk estimates and 95% confidence limits used in these meta-analyses are adjusted for covariates if adjusted data are available, and otherwise are unadjusted. If the source publication provides more than one adjusted estimate, the data that are normally presented are those adjusted for most covariates.

[†] Index of exposure based on smoking by the spouse or, if not available, the nearest equivalent.

[‡] Based on 61 estimates for women, 19 for men and 8 for sexes combined.

[§] Results are based on analyses limited to the working population, if available. Otherwise the unexposed group includes those who do not work.

^{**} Where estimates are available for more than one period of childhood, those for the earliest period have been used.

^{††} Where estimates are only available for specific household members, those for the mother have been used.

^{‡‡} Where estimates are available for more than one index of social or travel ETS exposure, those for the index with the highest frequency of exposure have been used.

A document¹ and a full computer output² provide more information on the individual relative risks, significance tests of heterogeneity and other detail.

References

1. Lee PN, Forey BA, Hamling JS. *Epidemiological evidence on environmental tobacco smoke and lung cancer*. Sutton, Surrey: P N Lee Statistics and Computing Ltd; 2006. www.pnlee.co.uk/reflist.htm [Download LEE2006G]
2. Lee PN, Forey BA, Hamling JS. *Detailed meta-analysis on ETS and lung cancer*. Sutton, Surrey: P N Lee Statistics and Computing Ltd; 2006. www.pnlee.co.uk/reflist.htm [Download LEE2006E]

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