

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	75	1.18 (1.11-1.24)	1.22 (1.13-1.31)
	N America	24	1.13 (1.03-1.24)	1.13 (1.02-1.25)
	Europe	16	1.21 (1.07-1.37)	1.23 (1.05-1.44)
	Asia	33	1.19 (1.10-1.29)	1.28 (1.14-1.45)
	- Japan	8	1.25 (1.05-1.48)	1.25 (1.05-1.48)
	- 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)
	Other	2	1.22 (0.78-1.89)	1.22 (0.78-1.89)
	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	23	1.20 (1.08-1.33)	1.20 (1.07-1.34)
	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 1999-2002	13	1.25 (1.10-1.43)	1.25 (1.10-1.43)
	Published in 2003 onwards	15	1.13 (0.98-1.30)	1.13 (0.97-1.33)
	1-49 cases	17	1.33 (1.04-1.69)	1.33 (1.04-1.69)
	50-99	24	1.31 (1.15-1.50)	1.30 (1.11-1.53)
	100-199	18	1.18 (1.07-1.30)	1.18 (1.07-1.30)
	200-399	9	1.31 (1.15-1.50)	1.31 (1.15-1.50)
	400+	5	1.00 (0.90-1.10)	1.01 (0.82-1.26)
	Case-control	61	1.17 (1.10-1.24)	1.23 (1.12-1.34)
	Prospective	14	1.21 (1.06-1.38)	1.21 (1.06-1.38)
	Not age adjusted	14	1.54 (1.32-1.81)	1.58 (1.28-1.95)
	Age adjusted	61	1.13 (1.07-1.20)	1.16 (1.08-1.25)
Dose-response results:				
not reported	27	1.04 (0.95-1.15)	1.14 (0.98-1.33)	
reported	47	1.24 (1.16-1.32)	1.26 (1.16-1.36)	
Spouse the index	49	1.16 (1.09-1.23)	1.22 (1.11-1.33)	
Spouse not the index	26	1.24 (1.10-1.41)	1.24 (1.10-1.41)	
Wife smoked [†]	All	32	1.18 (1.03-1.35)	1.18 (1.03-1.35)
	N America	14	1.20 (0.95-1.51)	1.21 (0.92-1.59)
	Europe	9	1.17 (0.91-1.50)	1.17 (0.91-1.50)
	Asia	7	1.14 (0.87-1.50)	1.16 (0.80-1.69)
	Other	2	1.25 (0.78-1.99)	1.25 (0.78-1.99)

ETS AND LUNG CANCER META-ANALYSES (Continued)

Exposure	Estimates included	Number of estimates	Relative risk (95% confidence limits)*	
			Fixed-effects meta analysis	Random-effects meta-analysis
Husband or wife smoked ^{†,‡}	All	97	1.18 (1.12-1.24)	1.22 (1.14-1.30)
	N America	33	1.14 (1.05-1.25)	1.15 (1.03-1.29)
	Europe	20	1.20 (1.07-1.34)	1.21 (1.05-1.40)
	Asia	40	1.19 (1.10-1.28)	1.27 (1.13-1.42)
	- Japan	10	1.29 (1.09-1.52)	1.29 (1.09-1.52)
	- Hong Kong	8	1.32 (1.12-1.57)	1.31 (1.06-1.63)
	- 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)
	Other	4	1.23 (0.90-1.70)	1.23 (0.90-1.70)
	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	31	1.18 (1.08-1.29)	1.18 (1.05-1.32)
	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 1999-2002	14	1.22 (1.09-1.38)	1.22 (1.09-1.38)
	Published in 2003 onwards	22	1.14 (1.02-1.29)	1.14 (0.98-1.32)
	1-49 cases	19	1.63 (1.27-2.08)	1.63 (1.27-2.08)
	50-99	28	1.25 (1.09-1.42)	1.23 (1.04-1.46)
	100-199	22	1.17 (1.06-1.29)	1.17 (1.06-1.29)
	200-399	21	1.28 (1.16-1.42)	1.28 (1.14-1.44)
	400+	7	1.03 (0.94-1.13)	1.06 (0.89-1.26)
	Case-control	78	1.17 (1.11-1.24)	1.22 (1.13-1.32)
	Prospective	19	1.20 (1.06-1.35)	1.20 (1.06-1.35)
	Not age adjusted	17	1.53 (1.31-1.79)	1.58 (1.27-1.96)
	Age adjusted	80	1.14 (1.08-1.20)	1.16 (1.09-1.24)
Dose-response results:				
not reported	34	1.07 (0.98-1.17)	1.14 (1.00-1.31)	
results reported	62	1.24 (1.16-1.31)	1.25 (1.16-1.34)	
Spouse the index	62	1.17 (1.10-1.24)	1.22 (1.12-1.33)	
Spouse not the index	35	1.21 (1.10-1.34)	1.21 (1.07-1.36)	
Workplace ETS exposure [§]	All	39	1.23 (1.15-1.33)	1.23 (1.14-1.33)
	N America	16	1.21 (1.08-1.36)	1.20 (1.05-1.38)
	Europe	10	1.18 (1.00-1.39)	1.18 (0.99-1.41)
	Asia	13	1.30 (1.15-1.47)	1.30 (1.15-1.47)
Childhood ETS exposure ^{**}	From any cohabitant	36	1.08 (1.00-1.17)	1.18 (1.02-1.36)
	N America	11	1.05 (0.92-1.19)	1.14 (0.93-1.39)
	Europe	11	0.94 (0.81-1.08)	1.03 (0.81-1.32)
	Asia	14	1.26 (1.11-1.44)	1.32 (1.00-1.73)
	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)

ETS AND LUNG CANCER META-ANALYSES (Continued /2)

Exposure	Estimates included	Number of estimates	Relative risk (95% confidence limits)*	
			Fixed-effects meta analysis	Random-effects meta-analysis
Household ETS exposure ^{††}	Any	48	1.11 (1.04-1.19)	1.11 (1.04-1.19)
	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	13	1.03 (0.92-1.16)	1.01 (0.82-1.25)
Total ETS exposure	All	30	1.26 (1.15-1.39)	1.29 (1.10-1.52)

* 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 64 estimates for women, 22 for men and 11 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; 2010. www.pnlee.co.uk/reflist.htm [Download LEE2010B]
2. Lee PN, Forey BA, Hamling JS. *Detailed meta-analysis on ETS and lung cancer*. Sutton, Surrey: P N Lee Statistics and Computing Ltd; 2010. www.pnlee.co.uk/reflist.htm [Download LEE2010D]

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