

Table 2.28. Case-control studies of second-hand tobacco smoke and other childhood cancers

Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	(Cases/Controls) OR (95% CI)* * $P < 0.05$ ** $P < 0.01$	Adjustment for potential confounders	Comments
Schüz <i>et al.</i> (1999) Germany	Neuroblastoma, Nephroblastoma, Bone tumour, Soft tissue sarcoma	2358 cases; German Childhood Cancer Registry; 1992–1997: < 15 yrs 160 cases of neuroblastoma; 147 cases of nephroblastoma; 97 bone tumour cases; 137 cases of soft tissue sarcoma	2588 population based controls; Matched on age, gender, sampled from the district where the case lived at the date of diagnosis	Structured questionnaire developed by US CCG; Telephone interview	<i>Maternal smoking during pregnancy (cigarettes per day)</i> No (reference) 1–10 11–20 > 20 <i>Paternal smoking before pregnancy (cigarettes per day)</i> Ref 1–10 11–20 > 20 <i>Maternal smoking during pregnancy (cigarettes per day)</i> No (reference) 1–10 11–20 > 20 <i>Paternal smoking before pregnancy (cigarettes per day)</i> No (reference) 1–10 11–20 > 20	Neuroblastoma ($n = 160$) (114/2062) 1.0 (39/426) 1.5 (1.0–2.2) (3/72) 0.6 (0.2–2.0) (3/11) 2.5 (0.6–10.4) (84/1336) 1.0 (11/293) 0.6 (0.3–1.1) (41/647) 1.1 (0.7–1.6) (19/264) 1.2 (0.7–2.1) Bone tumour ($n = 97$) (82/2062) 1.0 (10/426) 0.7 (0.3–1.4) (2/72) 0.9 (0.2–3.9) (1/11) 2.5 (0.3–22.4) (55/1336) 1.0 (6/293) 0.5 (0.2–1.2) (23/647) 0.8 (0.4–1.3) (11/264) 0.9 (0.4–1.8)		

Table 2.28. Case-control studies of second-hand tobacco smoke and other childhood cancers

Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	(Cases/Controls) OR (95% CI)* * $P < 0.05$ ** $P < 0.01$	Adjustment for potential confounders	Comments
Schüz <i>et al.</i> (1999) (contd)					<i>Maternal smoking during pregnancy (cigarettes per day)</i> No (reference) 1–10 11–20 > 20 <i>Paternal smoking before pregnancy (cigarettes per day)</i> No (reference) 1–10 11–20 > 20	Soft tissue sarcoma ($n = 137$) (113/2062) 1.0 (20/426) 0.9 (0.5–1.4) (3/72) 0.8 (0.2–2.6) (1/11) 1.6 (0.2–13.3) (67/1336) 1.0 (13/293) 0.8 (0.4–1.6) (41/647) 1.2 (0.8–1.8) (12/264) 0.9 (0.4–1.6)		
Sorahan <i>et al.</i> (2001) UK	All types of childhood cancers	555 children resident in Yorkshire, West Midlands, and North Western Regional Health Authority areas; < 15 yrs; 1980–1983; Not living with biologic mother excluded; Reticulo-endothelial system neoplasms: $n = 96$ cases and controls; Other childhood cancers: $n = 226$ cases and controls	555 controls matched for sex and date of birth; Practice lists of case GPs	Micro-filmed interview	<i>Fathers before pregnancy (cigarettes per day)</i> < 10 10–19 20–29 30–39 ≥ 40 P for trend (2-tailed) <i>Maternal smoking habit during 5th mo of pregnancy (cigarettes per day)</i> < 10	Other Childhood Cancers (11/14) 1.13 (0.46–2.80) (38/27) 1.81 (0.79–2.30) (57/50) 1.55 (0.91–2.65) (11/15) 1.01 (0.42–2.46) (7/8) 1.39 (0.46–4.21) 0.11 (17/13) 1.61 (0.72–3.59)	Socioeconomic grouping, ethnic origin, parental age of child at diagnosis	

Table 2.28. Case-control studies of second-hand tobacco smoke and other childhood cancers

Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	(Cases/Controls) OR (95% CI)* * $P < 0.05$ ** $P < 0.01$	Adjustment for potential confounders	Comments
Sorahan <i>et al.</i> (2001) (contd)					10-19	(52/37) 1.81 (1.04-3.14)*		
					20-29	(29/25) 1.42 (0.79-2.58)		
					≥ 30	(5/6) 1.01 (0.26-3.93)		
					<i>P</i> for trend (2-tailed)	0.39		
					<i>Fathers before pregnancy</i>	Other Reticulo-endothelial system neoplasms		
					Lifelong non-smoker (<i>cigarettes per day</i>)			
					Ref	(28/41) 1.0		
					< 10	(6/7) 1.32 (0.32-5.51)		
					10-19	(11/8) 2.65 (0.83-8.46)		
					20-29	(33/17) 3.69 (1.49-9.15)**		
					30-39	(2/7) 0.29 (0.03-2.56)		
					≥ 40	(4/6) 1.20 (0.29-5.05)		
					<i>P</i> for trend (2-tailed)	0.35		
					<i>Mothers before pregnancy</i>			
					(<i>cigarettes per day</i>)			
Lifelong non-smoker								
ref	(48/54) 1.0							
< 10	(9/8) 1.20 (0.41-3.47)							
10-19	(22/12) 2.81(1.07-7.39) *							
20-29	(15/13) 1.38 (0.58-3.26)							
≥ 30	(1/4) (combined with above point estimate)							
<i>P</i> for trend (2-tailed)	0.36							

Table 2.28. Case-control studies of second-hand tobacco smoke and other childhood cancers

Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	(Cases/Controls) OR (95% CI)* * $P < 0.05$ ** $P < 0.01$	Adjustment for potential confounders	Comments
Pang <i>et al.</i> (2003) UK	Other solid tumours	3838 cases; Hospital based; < 15 yrs; 1991–1994 in Scotland; 1992–1994 in England and Wales; for NHL until 1995; Leukemias until 1996	7629 control; matched for sex, date of birth and geographical area of residence at diagnosis; Randomly selected from Family Health Services Authorities	Face-to-face structured interviews; Computerized self-administered questionnaires	Other solid tumours <i>Paternal preconception cigarette smoking (cigarettes per day)</i> 1–19 20+ <i>P for trend</i> <i>Maternal preconception cigarette smoking (cigarettes per day)</i> 1–19 20+ <i>P for trend</i> <i>Maternal cigarette smoking during pregnancy (cigarettes per day)</i> 1–19 20+ <i>P for trend</i>	(158/1003) 1.05 (0.86–1.28) (205/1440) 0.98 (0.81–1.17) 0.909 (234/1490) 1.05 (0.88–1.25) (98/882) 0.75 (0.58–0.96)* 0.111 (191/1306) 0.94 (0.78–1.13) (55/528) 0.68 (0.49–0.93)* 0.030	Sex, date of birth, geographical area of residence at diagnosis, deprivation and parental age at birth of index child	

Table 2.28. Case-control studies of second-hand tobacco smoke and other childhood cancers

Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	(Cases/Controls) OR (95% CI)* * $P < 0.05$ ** $P < 0.01$	Adjustment for potential confounders	Comments
Chen <i>et al.</i> (2005) USA	Germ Cell Tumors (GCT) (Ovaries and Testes)	274 children with GCT diagnosed 1993–2001; < 15 yrs; COG; English speaking biologic mother; available for interview	421 controls matched on gender, age (± 1 yr), geographic area	Random Digit Dialing, Telephone Interview Self Administered Interviews	Maternal Smoking <i>during index pregnancy (cigarettes per day)</i> < 10 10–19 ≥ 20 <i>P for trend</i> Paternal Smoking <i>during 1 month before index pregnancy to the yr child born (cigarettes per day)</i> < 1 ≥ 1 <i>P for trend</i>	1.1 (0.7–1.5) 1.2 (0.7–1.9) 1.1 (0.6–2.1) 0.77 1.2 (0.7–1.9) 1.1 0.28	<u>Maternal:</u> Children gender, age, maternal education, race, and family income <u>Paternal:</u> Children gender, paternal education, race, age at index pregnancy, and family income	