Table 2.9. Case–control studies of wood dust and cancer of the nasal cavities and nasal sinuses

Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	Relative risk (95% CI)* OR	Adjustment for potential confounders	Comments
Battista *et al.* (1983) province of Siena, Italy, 1963–81	Nasal cavities (160)	36 (36 men) from the Ear, Nose and Throat department and the Radiotherapy Unit of Siena, any age; response rate 100%; 100% histologically confirmed as carcinomas	180 hospital controls selected from patients admitted to the Medical department of Siena, excluding cancer patients, matched by age; response rate 91%	Self-administered mailed standardized questionnaire	Never employed vs ever employed as woodworker or cabinetmaker: - all carcinomas - adenocarcinomas	 3.0 (0.8–11.1) 35.9 (6.5–198.4)		
Ghezzi *et al.* (1983) Brianza, Italy, 1976–1980	Nasal cavities (160)	7 men from the regional files of hospital discharge records and from the Ear, Nose and Throat department and the Radiotherapy Unit of local hospitals; response rate 100%; 100% histologically confirmed as adenocarcinomas	11 men from the regional files of hospital discharge records and from the Ear, Nose and Throat department and the Radiotherapy Unit of local hospitals; response rate 100%; 100% histologically confirmed as carcinomas	Clinical records and interview-administered standardized questionnaire, at telephone interview	Never employed vs ever employed as woodworker or cabinetmaker:	60.0 (2.2–3018)		Cases of non-adenocarcinoma malignant neoplasms of the nasal cavities and paranasal sinuses were used as controls
Brinton *et al.* (1984) North Carolina and Virginia, US, 1970–1980	Nasal cavities (160)	193 from four hospitals, age 18 or more; response rate 83%; 100% histologically confirmed	232 hospital controls, excluding patients with cancers of the upper aero-digestive tract or with non malignant diseases of the nose and nasal sinuses; 140 death certificate controls; all controls were matched to cases by sex, age, race and state economic area; response rate 78%	Interview-administered standardized questionnaire, at telephone interview	Ever/never working in furniture manufacture - all nasal cancers - adenocarcinomas	 0.8 (0.3–2.0) 5.7 (1.7–18.5)	Sex	

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Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	Relative risk (95% CI)* OR	Adjustment for potential confounders	Comments
Hayes *et al.* (1986) the Netherlands, 1978–1981	Nasal cavities (160)	116 (116 men) from six major centres for head and neck cancer treatment, age 35–79; response rate 78%; 100% histologically confirmed	223 living population controls, 36 deceased population controls; frequency matching by age; response rate 75%	Interview-administered standardized questionnaire	Ever/never working in furniture manufacture - all nasal cancers - adenocarcinomas Wood dust and adenocarcinomas: - low level - moderate level - high level	 12.5 (3.9–52.6) 139.8 (31.6–999.4) 0 (0–4.1) 1.6 (0.1–12.3) 26.3 (9.3–85.5)		
Takasaka *et al.* (1987) Tohoku University Hospital, 1971–1982	Nasal cavities (160)	119 (119 men) diagnosed at the Ear, Nose and Throat Department; response rate 89.9%; 91.6 histologically confirmed	576 hospital controls from the same Department, including other cancers and vocal cord polips; response rate 79.3%; matched to cases by sex, age, and year of admission (44 excluded because not satisfying matching criteria)	Self-administered mailed standardized questionnaire	Ever/never working in furniture manufacture - all nasal cancers	 2.5 (0.2–39.8)	Matching by sex, age, and year of admission	It is unclear whether the study included incident or prevalent cases. It is unclear whether controls included incident or prevalent patients. No data available on catchment area of the Hospital and of prevalence of past exposure in the area

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Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	Relative risk (95% CI)* OR	Adjustment for potential confounders	Comments
Fukuda & Shibata (1988) Hokkaido, Japan, 1982–1984	Nasal cavities (160)	120 (87 men, 33 women) from four hospitals, age 40–79, response rate 97%; 99% histologically confirmed	1319 population controls, matched by sex, age, and residence; response rate 93%	Self-administered mailed standardized questionnaire	Ever/never working as carpenters, joiners, furniture workers, or other woodworkers: - men - women	 2.9 (1.5–5.6) 2.0 (0.3–13.7)	Matching by sex, age class, and residence	Furniture making is not analysed separately from woodworking and other occupations with exposure to wood dus.t A previous report on the same study with partial results had been published in 1987.
Viren & Imbus (1989), Washington State, Oregon, Mississippi, Noth Carolina (US), 1962–1977	Nasal cavities (160)	536 (332 men, 204 women) persons dying from nasal cancer	1972 controls dying from other causes, excluding cancers, respiratory diseases, and accidents; matched by race, sex, county of death, year of death, age at death	Occupation from death certificates	Furniture and fixtures industry (men)	1.00		Confidence interval not given. Exposure assessment was particularly poor
Magnani *et al*. (1993), Biella; Italy, 1976–1988	Nasal cavities (160)	33 incident cases of sinonasal cancer in residents, diagnosed at the local hospital, response rate 79%; 88% histologically confirmed	131 hospital controls, matched by sex, age, and year of admission, excluding patients with respiratory cancers, response rate 85%	Self-administered mailed standardized questionnaire	Wood and furniture industry: - all carcinomas - adenocarcinomas	 4.4 (1.4–13.4) 22.0 (4.4–124)		Furniture making is not analysed separately from woodworking

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Reference, study location and period	Organ site (ICD code)	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	Relative risk (95% CI)* OR	Adjustment for potential confounders	Comments
Bouchardy *et al*. (2002) Geneva, Zurich, Berne, St. Gallo, Vaud, Switzerland, 1980–1993	Nasal cavities (160)	125 (125 men) from five population-based cancer registries serving 45% of the national population; response rate not given; proportion with histological confirmation not given (all sites: 4.9% cases registered based on death certificate or clinical evidence only)	All 58 009 other male cancer patients	Occupation identified by the registrar at the time of registration (last, or longest, or best specified occupation, from cantonal or local population registries)	Ever/never working as joiners, furniture workers	5.4 (2.9–10.0)	Age, registry, period of diagnosis, nationality, civil status, socioeconomic status	Year of start registration and year of last data submission vary across contributing cantonal cancer registries