

Table 2.4 Case-control studies of workers exposed to mineral oils and bladder cancer

Reference and study location	Characteristics of cases	Characteristics of controls	Exposure assessment	Exposure categories	Number of exposed cases	Relative risk (95% CI)*	Adjustment for potential confounders	Comments
Coggon et al. (1984) UK	291 bladder cancer decedents	Deceased controls from death certificates	Occupational exposures from job-exposure matrix	Cutting oils	52	1.3 (0.9-1.9)	Sex, year of death, year of birth, residence	
Siemiatycki et al. (1987) Canada	Men age 35-70, diagnosed at any of 19 participating hospitals	"Other" cancers for a given type of interest	Job history interpreted by industrial hygienists	Lubricating oils	149	1.0 (0.9-1.2)	Age, socioeconomic status, ethnic group, cigarette smoking, blue collar job history	
				Other mineral oils	24	1.3 (0.9-1.9)		
Cordier et al. (1993) France	765 cases under age 80, 658 men	765 controls from same hospital with other illnesses	Self-reported occupation and industry	Lubricating oils	117	1.2 (0.9-1.6)	Age, place of residence, hospital, smoking status (results for men only)	
				Cutting oils	64	1.9 (1.2-2.9)		
				Other mineral oils	21	1.6 (0.8-3.4)		
Ugnat et al. (2004) Canada	549 incident bladder cancer cases identified from cancer registries	1,099 population controls	Self-reported exposure to mineral, cutting, or lubricating oil		141	1.6 (1.1-2.6)	Province, age, pack-years of smoking, education, exposure years, coffee, and tea consumption	Study based on 4 western Canadian provinces