Online supplementary material

Title: Use and reliability of exposure assessment methods in occupational case-control studies in the general population – past, present, and future

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Lead Author	Year	Country /Region s	Title	Journal Abbreviation	Pages	Issue	Volume
Adegoke	2004	China	Agreement of job-exposure matrix (JEM) assessed exposure and self-reported exposure among adult leukemia patients and controls in Shanghai	Am. J. Ind. Med.	281-288	3	45
Adegoke	2003	China	Occupational history and exposure and the risk of adult leukemia in Shanghai	Ann Epidemiol	485-494	7	13
Agudo	2000	Spain	Occupation and risk of malignant pleural mesothelioma: A case- control study in Spain	Am. J. Ind. Med.	159-168	2	37
Aguilar- Madrid	2010	Mexico	Case-control study of pleural mesothelioma in workers with social security in Mexico	Am. J. Ind. Med.	241-251	3	53
Ahrens	1993	German y	Retrospective assessment of asbestos exposureI. Case-control analysis in a study of lung cancer: efficiency of job-specific questionnaires and job exposure matrices	Int J Epidemiol	S83-95		22 Suppl 2

Ahrens	2007	EU	Occupational exposure to endocrine-disrupting compounds and biliary tract cancer among men	Scand J Work Environ Health	387-396	5	33
Ajani	1992	US	Occupation and risk of uveal melanoma. An exploratory study	Cancer	2891- 2900	12	70
Arbman	1993	Sweden	Do occupational factors influence the risk of colon and rectal cancer in different ways?	Cancer	2543- 2549	9	72
Aschengrau	1998	US	Occupational exposure to estrogenic chemicals and the occurrence of breast cancer: an exploratory analysis	Am. J. Ind. Med.	6-14	1	34
Band	2011	Canada	Prostate cancer risk and exposure to pesticides in British Columbia farmers	Prostate	168-183	2	71
Baris	2004	US	Occupation, pesticide exposure and risk of multiple myeloma	Scand J Work Environ Health	215-222	3	30
Becher	1993	Poland	Effect of occupational air pollutants on various histological types of lung cancer: a population based case-control study	Br J Ind Med	136-142	2	50
Becher	2005	German y	Occupation, exposure to polycyclic aromatic hydrocarbons and laryngeal cancer risk	Int. J. Cancer	451-457	3	116
Behrens	2010	9 EU countrie s	Hormonal exposures and the risk of uveal melanoma	Cancer Causes Control	1625- 1634	10	21
Behrens	2012	German y	Pesticide exposure in farming and forestry and the risk of uveal melanoma	Cancer Causes Control	141-151	1	23
Benke	1997	Australi a	Retrospective assessment of occupational exposure to chemicals in community-based studies: validity and repeatability of industrial hygiene panel ratings	Int J Epidemiol	635-642	3	26
Berrino	2003	EU	Occupation and larynx and hypopharynx cancer: a job-exposure matrix approach in an international case-control study in France, Italy, Spain and Switzerland	Cancer Causes Control	213-223	3	14
Beveridge	2010	Canada	Lung cancer risk associated with occupational exposure to nickel, chromium VI, and cadmium in two population-based case-control studies in Montreal	Am. J. Ind. Med.	476-485	5	53
Bhatti	2011	Canada	Wood dust exposure and risk of lung cancer	Occup Environ Med	599-604	8	68
Black	2004	Australi a	Artificial neural networks and job-specific modules to assess occupational exposure	Ann Occup Hyg	595-600	7	48
Blair	1993	US	Evaluation of risks for non-Hodgkin's lymphoma by occupation and industry exposures from a case-control study	Am. J. Ind. Med.	301-312	2	23

Blair	2001	US	Occupation and leukemia: a population-based case-control study in Iowa and Minnesota	Am. J. Ind. Med.	3-14	1	40
Boffetta	1999	7 EU countrie s	Exposure to environmental tobacco smoke and risk of adenocarcinoma of the lung	Int. J. Cancer	635-639	5	83
Boffetta	2001	Canada	Exposure to titanium dioxide and risk of lung cancer in a population-based study from Montreal	Scand J Work Environ Health	227-232	4	27
Bonassi	1989	Italy	Bladder cancer and occupational exposure to polycyclic aromatic hydrocarbons	Int. J. Cancer	648-651	4	44
Bourgkard	2013	France	Comparison of exposure assessment methods in a lung cancer case-control study: performance of a lifelong task-based questionnaire for asbestos and PAHs	Occup Environ Med	884-891	12	70
Brandi	2013	Italy	Asbestos: a hidden player behind the cholangiocarcinoma increase? Findings from a case-control analysis	Cancer Causes Control	911-918	5	24
Briggs	2003	US	Occupational risk factors for selected cancers among African American and White men in the United States	Am J Public Health	1748- 1752	10	93
Brown	1990	US	Pesticide exposures and other agricultural risk factors for leukemia among men in Iowa and Minnesota	Cancer Res.	6585- 6591	20	50
Brown	1993	US	Pesticide exposures and multiple myeloma in Iowa men	Cancer Causes Control	153-156	2	4
Brownson	1993	US	Occupational risk factors for lung cancer among nonsmoking women: a case-control study in Missouri (United States)	Cancer Causes Control	449-454	5	4
Bruske- Hohlfeld	1999	German v	Lung cancer risk in male workers occupationally exposed to diesel motor emissions in Germany	Am. J. Ind. Med.	405-414	4	36
Bruske- Hohlfeld	2000	German y	Occupational lung cancer risk for men in Germany: results from a pooled case-control study	Am. J. Epidemiol.	384-395	4	151
Cantor	1995	US	Occupational exposures and female breast cancer mortality in the United States	J. Occup. Environ. Med.	336-348	3	37
Carreon	2005	US	Gliomas and farm pesticide exposure in women: the Upper Midwest Health Study	Environ. Health Perspect.	546-551	5	113
Charbotel	2006	France	Case-control study on renal cell cancer and occupational exposure to trichloroethylene. Part II: Epidemiological aspects	Ann Occup Hyg	777-787	8	50
Chatzis	1999	Greece	Lung cancer and occupational risk factors in Greece	J. Occup. Environ. Med.	29-35	1	41

Chiu	2004	US	Agricultural pesticide use, familial cancer, and risk of non- Hodgkin lymphoma	Cancer Epidemiol. Biomarkers Prev.	525-531	4	13
Christensen	2015	Canada	Lack of a protective effect of cotton dust on risk of lung cancer: evidence from two population-based case-control studies	BMC Cancer	212		15
Christensen	2013	Canada	Risk of selected cancers due to occupational exposure to chlorinated solvents in a case-control study in Montreal	J. Occup. Environ. Med.	198-208	2	55
Clavel	1996	France	Hairy cell leukaemia and occupational exposure to benzene	Occup Environ Med	533-539	8	53
Coble	2003	Puerto Rico	Sugarcane farming, occupational solvent exposures, and the risk of oral cancer in Puerto Rico	J. Occup. Environ. Med.	869-874	8	45
Соссо	1998	US	Occupational risk factors for cancer of the central nervous system: a case-control study on death certificates from 24 U.S. states	Am. J. Ind. Med.	247-255	3	33
Соссо	2013	US	Occupational exposure to trichloroethylene and risk of non- Hodgkin lymphoma and its major subtypes: a pooled InterLymph [correction of linterLlymph] analysis	Occup Environ Med	795-802	11	70
Соссо	1998	Internati onal	Occupational risk factors for cancer of the gastric cardia. Analysis of death certificates from 24 US states	J. Occup. Environ. Med.	855-861	10	40
Colt	2014	US	A case-control study of occupational exposure to metalworking fluids and bladder cancer risk among men	Occup Environ Med	667-674	10	71
Colt	2011	US	Occupation and bladder cancer in a population-based case- control study in Northern New England	Occup Environ Med	239-249	4	68
Cordier	1993	France	Occupational risks of bladder cancer in France: a multicentre case-control study	Int J Epidemiol	403-411	3	22
Costantini	2008	Italy	Risk of leukemia and multiple myeloma associated with exposure to benzene and other organic solvents: evidence from the Italian Multicenter Case-control study	Am. J. Ind. Med.	803-811	11	51
De Matteis	2012	Italy	Impact of occupational carcinogens on lung cancer risk in a general population	Int J Epidemiol	711-721	3	41
DellaValle	2015		Validity of expert assigned retrospective estimates of occupational polychlorinated biphenyl exposure	Ann Occup Hyg	609-615	5	59
Demers	1994	US	Construction occupations, asbestos exposure, and cancer of the colon and rectum	J Occup Med	1027- 1031	9	36
Deng	2013	US	Occupational solvent exposure, genetic variation in immune genes, and the risk for non-Hodgkin lymphoma	Eur. J. Cancer Prev.	77-82	1	22

Dietz	2004	German	Exposure to cement dust, related occupational groups and	Int. J. Cancer	907-911	6	108
		у	laryngeal cancer risk: results of a population based case-control study				
Dosemeci	1999	US	Gender differences in risk of renal cell carcinoma and occupational exposures to chlorinated aliphatic hydrocarbons	Am. J. Ind. Med.	54-59	1	36
Duell	2001	US	Reproducibility of reported farming activities and pesticide use among breast cancer cases and controls. A comparison of two modes of data collection	Ann Epidemiol	178-185	3	11
Dumas	2000	Canada	Rectal cancer and occupational risk factors: a hypothesis- generating, exposure-based case-control study	Int. J. Cancer	874-879	6	87
Eheman	1999	US	Estimating occupational radiation doses when individual dosimetry information is not available: a job exposure matrix	Am. J. Ind. Med.	348-359	3	36
Ekburanawat	2010	Thailand	Evaluation of non-viral risk factors for nasopharyngeal carcinoma in Thailand: results from a case-control study	Asian Pac. J. Cancer Prev.	929-932	4	11
Ekpanyaskul	2015	Thailand	Semi-quantitative exposure assessment of occupational exposure to wood dust and nasopharyngeal cancer risk	Asian Pac. J. Cancer Prev.	4339- 4345	10	16
Ekstrom	1999	Sweden	Occupational exposures and risk of gastric cancer in a population-based case-control study	Cancer Res.	5932- 5937	23	59
Elghany	1990	US	Occupation, cadmium exposure, and prostate cancer	Epidemiology	107-115	2	1
El-Zaemey	2014	Australi a	Household and occupational exposure to pesticides and risk of breast cancer	Int J Environ Health Res	91-102	2	24
Eriksson	1992	Sweden	Occupational and other environmental factors and multiple myeloma: a population based case-control study	Br J Ind Med	95-103	2	49
Fabbro- Peray	2001	France	Environmental risk factors for non-Hodgkin's lymphoma: a population-based case-control study in Languedoc-Roussillon, France	Cancer Causes Control	201-212	3	12
Ferrante	2016	Italy	Pleural mesothelioma and occupational and non-occupational asbestos exposure: a case-control study with quantitative risk assessment	Occup Environ Med	147-153	3	73
Fevotte	2006	France	Case-control study on renal cell cancer and occupational exposure to trichloroethylene. Part I: Exposure assessment	Ann Occup Hyg	765-775	8	50
Friesen	2014	US	Systematically extracting metal- and solvent-related occupational information from free-text responses to lifetime occupational history questionnaires	Ann Occup Hyg	612-624	5	58

Friesen	2014	US	Developing estimates of frequency and intensity of exposure to three types of metalworking fluids in a population-based case- control study of bladder cancer	Am. J. Ind. Med.	915-927	8	57
Friesen	2013	US	Comparison of algorithm-based estimates of occupational diesel exhaust exposure to those of multiple independent raters in a population-based case-control study	Ann Occup Hyg	470-481	4	57
Friesen	2015	US	Using hierarchical cluster models to systematically identify groups of jobs with similar occupational questionnaire response patterns to assist rule-based expert exposure assessment in population-based studies	Ann Occup Hyg	455-466	4	59
Fritschi	2005	Australi a	Occupational exposure to pesticides and risk of non-Hodgkin's lymphoma	Am. J. Epidemiol.	849-857	9	162
Fritschi	2007	Australi a	Occupational risk factors for prostate cancer and benign prostatic hyperplasia: a case-control study in Western Australia	Occup Environ Med	60-65	1	64
Fritschi	1996	Canada	Lymphoma, myeloma and occupation: results of a case-control study	Int. J. Cancer	498-503	4	67
Fritschi	1996	Canada	Melanoma and occupation: results of a case-control study	Occup Environ Med	168-173	3	53
Fritschi	1996	Canada	Self-assessed versus expert-assessed occupational exposures	Am. J. Epidemiol.	521-527	5	144
Fritschi	2005	Australi a	Risk of non-Hodgkin lymphoma associated with occupational exposure to solvents, metals, organic dusts and PCBs (Australia)	Cancer Causes Control	599-607	5	16
Fritschi	2015	Australi a	Occupational exposure to N-nitrosamines and pesticides and risk of pancreatic cancer	Occup Environ Med	678-683	9	72
Fritschi	2003		Validation of expert assessment of occupational exposures	Am. J. Ind. Med.	519-522	5	43
Fryzek	1997	US	A case-control study of self-reported exposures to pesticides and pancreas cancer in southeastern Michigan	Int. J. Cancer	62-67	1	72
Gago- Dominguez	2001	US	Use of permanent hair dyes and bladder-cancer risk	Int. J. Cancer	575-579	4	91
Gallagher	1996	Canada	Chemical exposures, medical history, and risk of squamous and basal cell carcinoma of the skin	Cancer Epidemiol. Biomarkers Prev.	419-424	6	5
Garabedian	1999	US	Occupational chlorophenol exposure and non-Hodgkin's lymphoma	J. Occup. Environ. Med.	267-272	4	41

Garabrant	1992	US	Asbestos and colon cancer: lack of association in a large case- control study	Am. J. Epidemiol.	843-853	8	135
Gerin	1998	Canada	Associations between several sites of cancer and occupational exposure to benzene, toluene, xylene, and styrene: results of a case-control study in Montreal	Am. J. Ind. Med.	144-156	2	34
Gerin	1989	Canada	Cancer risks due to occupational exposure to formaldehyde: results of a multi-site case-control study in Montreal	Int. J. Cancer	53-58	1	44
Glass	2015	Australi a	Occupational exposure to solvents and risk of breast cancer	Am. J. Ind. Med.	915-922	9	58
Goldberg	2001	Canada	A case-control study of the relationship between the risk of colon cancer in men and exposures to occupational agents	Am. J. Ind. Med.	531-546	6	39
Goldberg	1986	Canada	Inter-rater agreement in assessing occupational exposure in a case-control study	Br J Ind Med	667-676	10	43
Grimsrud	1998	Norway	Lung and bladder cancer in a Norwegian municipality with iron and steel producing industry: population based case-control studies	Occup Environ Med	387-392	6	55
Guida	2013	France	Risk of lung cancer associated with occupational exposure to mineral wools: updating knowledge from a french population- based case-control study, the ICARE study	J. Occup. Environ. Med.	786-795	7	55
Guo	2009	China	Evaluation of nonviral risk factors for nasopharyngeal carcinoma in a high-risk population of Southern China	Int. J. Cancer	2942- 2947	12	124
Gustavsson	2002	Sweden	Low-dose exposure to asbestos and lung cancer: dose-response relations and interaction with smoking in a population-based case-referent study in Stockholm, Sweden	Am. J. Epidemiol.	1016- 1022	11	155
Hardell	2004	Sweden	Testicular cancer and occupational exposure to polyvinyl chloride plastics: a case-control study	Int. J. Cancer	425-429	3	109
Hardt	2014	Canada	A comparison of exposure assessment approaches: lung cancer and occupational asbestos exposure in a population-based case- control study	Occup Environ Med	282-288	4	71
Hartge	1994	US	Occupation and ovarian cancer: a case-control study in the Washington, DC, metropolitan area, 1978-1981	J Occup Med	924-927	8	36
Hayes	1990	US	Occupation and risk for testicular cancer: a case-control study	Int J Epidemiol	825-831	4	19
Hayes	1993	US	Are the known bladder cancer risk-factors associated with more advanced bladder cancer?	Cancer Causes Control	157-162	2	4

Heavner	2015	US	Working environment and myeloproliferative neoplasm: A population-based case-control study following a cluster investigation	Am. J. Ind. Med.	595-604	6	58
Heineman	1992	Denmar k	Occupational risk factors for multiple myeloma among Danish men	Cancer Causes Control	555-568	6	3
Hinds	1985	US	Application of a job-exposure matrix to a case-control study of lung cancer	J. Natl. Cancer Inst.	193-197	2	75
Hoffmann	2008	German y	Population-based research on occupational and environmental factors for leukemia and non-Hodgkin's lymphoma: the Northern Germany Leukemia and Lymphoma Study (NLL)	Am. J. Ind. Med.	246-257	4	51
Holly	1997	US	Non-Hodgkin's lymphoma in homosexual men in the San Francisco Bay Area: occupational, chemical, and environmental exposures	J. Acquir. Immune Defic. Syndr. Hum. Retrovirol.	223-231	3	15
Hoppin	1999	US	Occupational risk factors for sarcoma subtypes	Epidemiology	300-306	3	10
Horn-Ross	1997	US	Environmental factors and the risk of salivary gland cancer	Epidemiology	414-419	4	8
Hours	1994	France	Bladder cancer and occupational exposures	Scand J Work Environ Health	322-330	5	20
Howe	1980	Canada	Tobacco use, occupation, coffee, various nutrients, and bladder cancer	J. Natl. Cancer Inst.	701-713	4	64
Hu	1999	Canada	Risk factors for meningioma in adults: a case-control study in northeast China	Int. J. Cancer	299-304	3	83
Hu	2002	Canada	Risk factors for lung cancer among Canadian women who have never smoked	Cancer Detect. Prev.	129-138	2	26
Hu	1999	China	When to be skeptical of negative studies: pitfalls in evaluating occupational risks using population-based case-control studies	Can J Public Health	138-142	2	90
Iwatsubo	1998	France	Pleural mesothelioma: dose-response relation at low levels of asbestos exposure in a French population-based case-control study	Am. J. Epidemiol.	133-142	2	148
Jansson	2006	Sweden	Airborne occupational exposures and risk of oesophageal and cardia adenocarcinoma	Occup Environ Med	107-112	2	63
Jarvholm	1993	Sweden	Quantitative importance of asbestos as a cause of lung cancer in a Swedish industrial city: a case-referent study	Eur. Respir. J.	1271- 1275	9	6
Jayaprakash	2008	US	Wood dust exposure and the risk of upper aero-digestive and respiratory cancers in males	Occup Environ Med	647-654	10	65

Ji	1999	China	Occupation and pancreatic cancer risk in Shanghai, China	Am. J. Ind. Med.	76-81	1	35
Ji	2001	US	Occupational exposure to pesticides and pancreatic cancer	Am. J. Ind. Med.	92-99	1	39
Jiao	2012	US	Occupational solvent exposure, genetic variation of DNA repair genes, and the risk of non-Hodgkin's lymphoma	Eur. J. Cancer Prev.	580-584	6	21
Jockel	1998	German y	Occupational risk factors for lung cancer: a case-control study in West Germany	Int J Epidemiol	549-560	4	27
Jockel	1998	German y	Lung cancer risk and welding: results from a case-control study in Germany	Am. J. Ind. Med.	313-320	4	33
Johnson	2001	US	Lifetime residential and workplace exposure to environmental tobacco smoke and lung cancer in never-smoking women, Canada 1994-97	Int. J. Cancer	902-906	6	93
Johnson	1993	Canada	Data on prior pesticide use collected from self- and proxy respondents	Epidemiology	157-164	2	4
Kachuri	2014	Canada	Occupational exposure to crystalline silica and the risk of lung cancer in Canadian men	Int. J. Cancer	138-148	1	135
Kachuri	2016	Canada	Workplace exposure to diesel and gasoline engine exhausts and the risk of colorectal cancer in Canadian men	Environ Health	4	1	15
Kaerlev	2002	EU	Occupational risk factors for small bowel carcinoid tumor: a European population-based case-control study	J. Occup. Environ. Med.	516-522	6	44
Karunanayak e	2008	Canada	Occupational exposures and non-Hodgkin's lymphoma: Canadian case-control study	Environ Health	44		7
Karunanayak e	2012	Canada	Hodgkin lymphoma and pesticides exposure in men: a Canadian case-control study	J Agromedicine	30-39	1	17
Kasim	2005	Canada	Environmental tobacco smoke and risk of adult leukemia	Epidemiology	672-680	5	16
Kato	2005	US	Personal and occupational exposure to organic solvents and risk of non-Hodgkin's lymphoma (NHL) in women (United States)	Cancer Causes Control	1215- 1224	10	16
Kato	2004	US	Pesticide product use and risk of non-Hodgkin lymphoma in women	Environ. Health Perspect.	1275- 1281	13	112
Kauppinen	1992	Finland	Magnitude of misclassification bias when using a job-exposure matrix	Scand J Work Environ Health	105-112	2	18
Kauppinen	1992	Finland	Primary liver cancer and occupational exposure	Scand J Work Environ Health	18-25	1	18

Kellen	2007	Belgium	Does occupational exposure to PAHs, diesel and aromatic amines interact with smoking and metabolic genetic	Cancer Lett.	51-60	1-2	245
			polymorphisms to increase the risk on bladder cancer?; The				
			Belgian case control study on bladder cancer risk				
Kernan	1999	US	Occupational risk factors for pancreatic cancer: a case-control study based on death certificates from 24 U.S. states	Am. J. Ind. Med.	260-270	2	36
Kiran	2010	EU	Occupational exposure to ethylene oxide and risk of lymphoma	Epidemiology	905-910	6	21
Kogevinas	2003	EU	Occupation and bladder cancer among men in Western Europe	Cancer Causes Control	907-914	10	14
Koh	2014	US	Calibrating a population-based job-exposure matrix using inspection measurements to estimate historical occupational exposure to lead for a population-based cohort in Shanghai, China	J Expo Sci Environ Epidemiol	9-16	1	24
Kokouva	2013	Greece	Relationship between the paraoxonase 1 (PON1) M55L and Q192R polymorphisms and lymphohaematopoietic cancers in a Greek agricultural population	Toxicology	12-16		307
Kreuzer	1999	German y	Occupational risk factors for lung cancer among young men	Scand J Work Environ Health	422-429	5	25
Krstev	2005	Poland	Occupation and risk of stomach cancer in Poland	Occup Environ Med	318-324	5	62
Lacourt	2014	France	Occupational and non-occupational attributable risk of asbestos exposure for malignant pleural mesothelioma	Thorax	532-539	6	69
Lacourt	2013	13 countrie s	INTEROCC case-control study: lack of association between glioma tumors and occupational exposure to selected combustion products, dusts and other chemical agents	BMC Public Health	340		13
Lacourt	2012	France	Temporal patterns of occupational asbestos exposure and risk of pleural mesothelioma	Eur. Respir. J.	1304- 1312	6	39
Lacourt	2015	Canada	Lung cancer risk among workers in the construction industry: results from two case-control studies in Montreal	BMC Public Health	941		15
Lacourt	2010	France	Attributable risk in men in two French case-control studies on mesothelioma and asbestos	Eur. J. Epidemiol.	799-806	11	25
Langevin	2013	US	Occupational dust exposure and head and neck squamous cell carcinoma risk in a population-based case-control study conducted in the greater Boston area	Cancer Med	978-986	6	2

Langevin	2013	US	Occupational asbestos exposure is associated with pharyngeal squamous cell carcinoma in men from the greater Boston area	Occup Environ Med	858-863	12	70
Latifovic	2015	Canada	Bladder cancer and occupational exposure to diesel and gasoline engine emissions among Canadian men	Cancer Med	1948- 1962	12	4
Lee	2015	Canada	Statistical Modeling of Occupational Exposure to Polycyclic Aromatic Hydrocarbons Using OSHA Data	J Occup Environ Hyg	729-742	10	12
Lee	2005	US	Agricultural pesticide use and risk of glioma in Nebraska, United States	Occup Environ Med	786-792	11	62
Lee	2006	US	Pesticide exposure and lung cancer mortality in Leningrad province in Russia	Environ Int	412-416	3	32
Lee	2006	Russia	Asthma history, occupational exposure to pesticides and the risk of non-Hodgkin's lymphoma	Int. J. Cancer	3174- 3176	12	118
Linet	1987	US	A case-control study of multiple myeloma in whites: chronic antigenic stimulation, occupation, and drug use	Cancer Res.	2978- 2981	11	47
Linet	1987	US	Comparison of methods for determining occupational exposure in a case-control interview study of chronic lymphocytic leukemia	J Occup Med	136-141	2	29
Luce	1993	France	Sources of discrepancies between a job exposure matrix and a case by case expert assessment for occupational exposure to formaldehyde and wood-dust	Int J Epidemiol	S113- 120		22 Suppl 2
Luce	2011	France	Investigation of occupational and environmental causes of respiratory cancers (ICARE): a multicenter, population-based case-control study in France	BMC Public Health	928		11
Luqman	2014	Pakistan	Risk factors for lung cancer in the Pakistani population	Asian Pac. J. Cancer Prev.	3035- 3039	7	15
Mahboubi	2013	Canada	Assessment of the effect of occupational exposure to formaldehyde on the risk of lung cancer in two Canadian population-based case-control studies	Scand J Work Environ Health	401-410	4	39
't Mannetje	2003	EU	Assessing exposure misclassification by expert assessment in multicenter occupational studies	Epidemiology	585-592	5	14
Мао	2000	Canada	Non-Hodgkin's lymphoma and occupational exposure to chemicals in Canada. Canadian Cancer Registries Epidemiology Research Group	Ann. Oncol.	69-73		11 Suppl 1
Marsh	1998	US	A case-control study of lung cancer mortality in four rural Arizona smelter towns	Arch. Environ. Health	15-28	1	53

Matos	2000	Argentin a	Occupational exposures and lung cancer in Buenos Aires, Argentina	J. Occup. Environ. Med.	653-659	6	42
Matrat	2015	France	Occupational Exposure to Diesel Motor Exhaust and Lung Cancer: A Dose-Response Relationship Hidden by Asbestos Exposure Adjustment? The ICARE Study	J Cancer Epidemiol	879302		2015
Matrat	2016	France	Welding, a risk factor of lung cancer: the ICARE study	Occup Environ Med			
Mattei	2014	France	Exposure to chlorinated solvents and lung cancer: results of the ICARE study	Occup Environ Med	681-689	10	71
Maule	2007	Italy	Modeling mesothelioma risk associated with environmental asbestos exposure	Environ. Health Perspect.	1066- 1071	7	115
McClean	2011	US	A case-control study of asphalt and tar exposure and lung cancer in minorities	Am. J. Ind. Med.	811-818	11	54
McHugh	2010	US	Assessing environmental and occupational risk factors for lung cancer in Mexican-Americans	Cancer Causes Control	2157- 2164	12	21
Menvielle	2003	New Caledoni a	Occupational exposures and lung cancer in New Caledonia	Occup Environ Med	584-589	8	60
Menvielle	2016	France	The joint effect of asbestos exposure, tobacco smoking and alcohol drinking on laryngeal cancer risk: evidence from the French population-based case-control study, ICARE	Occup Environ Med	28-33	1	73
Merler	1986	Italy	On the causal association between exposure to leather dust and nasal cancer: further evidence from a case-control study	Br J Ind Med	91-95	2	43
Merletti	1991	Italy	Occupation and cancer of the oral cavity or oropharynx in Turin, Italy	Scand J Work Environ Health	248-254	4	17
Merletti	2006	EU	Occupational factors and risk of adult bone sarcomas: a multicentric case-control study in Europe	Int. J. Cancer	721-727	3	118
Miligi	2006	Italy	Occupational exposure to solvents and the risk of lymphomas	Epidemiology	552-561	5	17
Miligi	2003	Italy	Non-Hodgkin's lymphoma, leukemia, and exposures in agriculture: results from the Italian multicenter case-control study	Am. J. Ind. Med. 627-636		6	44
Miligi	2006	Italy	Cancer and pesticides: an overview and some results of the Italian multicenter case-control study on hematolymphopoietic malignancies	Ann. N. Y. Acad. Sci.	366-377		1076

Mirabelli	2000	US	Occupational exposure to chlorophenol and the risk of nasal and nasopharyngeal cancers among U.S. men aged 30 to 60	Am. J. Ind. Med.	532-541	5	37
Mirabelli	2009	Italy	Occupational exposure to high molecular weight allergens and lymphoma risk among Italian adults	Cancer Epidemiol. Biomarkers Prev.	2650- 2654	10	18
Mommsen	1984	Denmar k	Occupational exposures as risk indicator of male bladder carcinoma in a predominantly rural area	Acta Radiol Oncol	147-152	2-3	23
Morabia	1992	US	Lung cancer and occupation: results of a multicentre case- control study	Br J Ind Med	721-727	10	49
Morales- Suarez- Varela	2005	EU	Occupational exposures and mycosis fungoides. A European multicentre case-control study (Europe)	A European Cancer Causes Control		10	16
Muscat	1998	US	Lung cancer risk and workplace exposures in black men and women	Environ. Res.	78-84	2	76
Nanni	1996	Italy	Chronic lymphocytic leukaemias and non-Hodgkin's lymphomas by histological type in farming-animal breeding workers: a population case-control study based on a priori exposure matrices	ing-animal breeding Med		10	53
Navaranjan	2013	Canada	Exposures to multiple pesticides and the risk of Hodgkin lymphoma in Canadian men	Cancer Causes Control	1661- 1673	9	24
Nordstrm	1998	Sweden	Occupational exposures, animal exposure and smoking as risk factors for hairy cell leukaemia evaluated in a case-control study	Br. J. Cancer	2048- 2052	11	77
Nyberg	2000	Sweden	Urban air pollution and lung cancer in Stockholm	Epidemiology	487-495	5	11
Ohlson	2000	Sweden	Testicular cancer and occupational exposures with a focus on xenoestrogens in polyvinyl chloride plastics	Chemosphere	1277- 1282	9-11	40
Olsson	2010	EU	Occupational exposure to polycyclic aromatic hydrocarbons and lung cancer risk: a multicenter study in Europe	Occup Environ Med	98-103	2	67
Olsson	2011	EU and Canada	Exposure to diesel motor exhaust and lung cancer risk in a pooled analysis from case-control studies in Europe and Canada	Am. J. Respir. 941-948 7		7	183
Orlowski	1993	German y	Retrospective assessment of asbestos exposureII. At the job level: complementarity of job-specific questionnaire and job exposure matrices	II. At the job Int J Epidemiol S96-105			22 Suppl 2
Orsi	2010	France	Occupational exposure to organic solvents and lymphoid neoplasms in men: results of a French case-control study	Occup Environ Med	664-672	10	67

Pahwa	2011	Canada	Soft-tissue sarcoma and pesticides exposure in men: results of a Canadian case-control study	J. Occup. Environ. Med.	1279- 1286	11	53
Pahwa	2006	Canada	Hodgkin lymphoma, multiple myeloma, soft tissue sarcomas, insect repellents, and phenoxyherbicides	J. Occup. Environ. Med.	264-274	3	48
Pannett	1985	UK	A job-exposure matrix for use in population based studies in England and Wales	Br J Ind Med	777-783	11	42
Parent	2000	Canada	Occupational risk factors for renal cell carcinoma in Montreal	Am. J. Ind. Med.	609-618	6	38
Parent	1998	Canada	Occupational exposures and gastric cancer	Epidemiology	48-55	1	9
Parent	2000	Canada	Workplace exposures and oesophageal cancer	Occup Environ Med	325-334	5	57
Parent	1996	Canada	Case-control study of exposure to carbon black in the occupational setting and risk of lung cancer	rbon black in the Am. J. Ind. Med.		3	30
Parent	2007	Canada	Exposure to diesel and gasoline engine emissions and the risk of lung cancer	Am. J. Epidemiol.	53-62	1	165
Paris	2010	France	Relationships between lung adenocarcinoma and gender, age, smoking and occupational risk factors: A case-case study	Lung Cancer	146-153	2	68
Park	2014	US	Estimation of the probability of exposure to machining fluids in a population-based case-control study	J Occup Environ Hyg	757-770	11	11
Partanen	1991	Finland	Renal cell cancer and occupational exposure to chemical agents	Scand J Work Environ Health	231-239	4	17
Pastorino	1984	Italy	Proportion of lung cancers due to occupational exposure	Int. J. Cancer	231-237	2	33
Pearce	1986	US	Non-Hodgkin's lymphoma and exposure to phenoxyherbicides, chlorophenols, fencing work, and meat works employment: a case-control study	Br J Ind Med	75-83	2	43
Peplonska	2010	Poland	Occupational exposure to organic solvents and breast cancer in women	Occup Environ Med	722-729	11	67
Pesch	2000	German y	Occupational risk factors for urothelial carcinoma: agent- specific results from a case-control study in Germany. MURC Study Group. Multicenter Urothelial and Renal Cancer	. MURC		2	29
Pesch	cancer risk: results from the EPIC cohort Epidemiol.			2055- 2065	11	22	

Peters	2014	Australi	Rule-based exposure assessment versus case-by-case expert	Occup Environ	215-219	3	71
		а	assessment using the same information in a community-based study	Med			
Peters	2012	EU and Canada	Occupational exposure to organic dust increases lung cancer risk in the general population	Thorax	111-116	2	67
Peters	2011	EU	Comparison of exposure assessment methods for occupational carcinogens in a multi-centre lung cancer case-control study	Occup Environ Med	148-153	2	68
Peters	2011	Eu and Canada	Modelling of occupational respirable crystalline silica exposure for quantitative exposure assessment in community-based case-control studies	J. Environ. Monit.	3262- 3268	11	13
Peters	2016	EU and Canada	SYN-JEM: A Quantitative Job-Exposure Matrix for Five Lung Carcinogens	Ann Occup Hyg	mew034		
Pintos	2009	Canada	Risk of mesothelioma and occupational exposure to asbestos and man-made vitreous fibers: evidence from two case-control studies in Montreal, Canada			10	51
Pintos	2012	Canada	Occupational exposure to diesel engine emissions and risk of lung cancer: evidence from two case-control studies in Montreal, Canada	Occup Environ Med	787-792	11	69
Pintos	2008	Canada	Occupational exposure to asbestos and man-made vitreous fibers, and risk of lung cancer: evidence from two case-control studies in Montreal, Canada	J. Occup. Environ. Med.	1273- 1281	11	50
Pohlabeln	2000	German y	Lung cancer and exposure to man-made vitreous fibers: results from a pooled case-control study in Germany	Am. J. Ind. Med.	469-477	5	37
Pohlabeln	2002	German y	Asbestos fibreyears and lung cancer: a two phase case-control study with expert exposure assessment	Occup Environ Med	410-414	6	59
Preller	2010	Netherla nds	Occupational exposure to silica and lung cancer risk in the Netherlands	Occup Environ Med	657-663	10	67
Pronk	2012	US	Comparison of two expert-based assessments of diesel exhaust exposure in a case-control study: programmable decision rules versus expert review of individual jobs	Occup Environ 752-7 Med		10	69
Provost	2007	France	Brain tumours and exposure to pesticides: a case-control study in southwestern France	Occup Environ Med	509-514	8	64
Purdue	2009	US	Degreasing and risk of non-Hodgkin lymphoma	Occup Environ 557-560 8 Med		8	66
Purdue	2011	US	A case-control study of occupational exposure to trichloroethylene and non-Hodgkin lymphoma	Environ. Health Perspect.	232-238	2	119

Rabstein	2010	German v	N-acetyltransferase 2, exposure to aromatic and heterocyclic amines, and receptor-defined breast cancer	Eur. J. Cancer Prev.	100-109	2	19
Ramanakum ar	2008	Canada	Risk of lung cancer following exposure to carbon black, titanium dioxide and talc: results from two case-control studies in Montreal	Int. J. Cancer	183-189	1	122
Ramanakum ar	2011	Canada	Exposures in painting-related occupations and risk of lung cancer among men: results from two case-control studies in Montreal	Occup Environ Med	44-51	1	68
Ramroth	2011	German y	Occupational asbestos exposure as a risk factor for laryngeal carcinoma in a population-based case-control study from Germany			7	54
Ramroth	2008	German y	Occupational wood dust exposure and the risk of laryngeal cancer: a population based case-control study in Germany	Am. J. Ind. Med.	648-655	9	51
Rauscher	2003	US, Canada	Is family history of breast cancer a marker of susceptibility to exposures in the incidence of de novo adult acute leukemia?	Cancer Epidemiol. Biomarkers Prev.	289-294	4	12
Richardson	2008	German y	Occupational risk factors for non-Hodgkin's lymphoma: a population-based case-control study in Northern Germany	Am. J. Ind. Med.	258-268	4	51
Richiardi	2006	Italy	Occupational exposure to diesel exhausts and risk for lung cancer in a population-based case-control study in Italy	Ann. Oncol.	1842- 1847	12	17
Risch	1988	Canada	Occupational factors and the incidence of cancer of the bladder in Canada	Br J Ind Med	361-367	6	45
Rodelsperger	2001	German y	Asbestos and man-made vitreous fibers as risk factors for diffuse malignant mesothelioma: results from a German hospital-based case-control study	Am. J. Ind. Med.	262-275	3	39
Rodvall	1996	Sweden	Glioma and occupational exposure in Sweden, a case-control study	Occup Environ Med	526-532	8	53
Rousseau	2007	Canada	Occupational exposure to lead compounds and risk of cancer among men: a population-based case-control study	Am. J. Epidemiol.	1005- 1014	9	166
Ruder	2004	US	Gliomas and farm pesticide exposure in men: the upper midwest health study	Arch. Environ. Health	650-657	12	59
Ruder	2013	US	The Upper Midwest Health Study: gliomas and occupational exposure to chlorinated solvents	Occup Environ 73-80 Med		2	70
Russi	1997	US	Occupational exposure to machining fluids and laryngeal cancer risk: contrasting results using two separate control groups	Am. J. Ind. Med.	166-171	2	31

Rybicki	2006	US	Prostate cancer risk from occupational exposure to polycyclic aromatic hydrocarbons interacting with the GSTP1 Ile105Val polymorphism	Cancer Detect. Prev.	412-422	5	30
Sadetzki	2000	Israel	Selected risk factors for transitional cell bladder cancer	Med. Oncol.	179-182	3	17
Samanic	2006	Spain	Smoking and bladder cancer in Spain: effects of tobacco type, timing, environmental tobacco smoke, and gender	Cancer Epidemiol. Biomarkers Prev.	1348- 1354	7	15
Sasco	2002	Morocco	A case-control study of lung cancer in Casablanca, Morocco	Cancer Causes Control	609-616	7	13
Schlehofer	1995	German y	Occupation, smoking and demographic factors, and renal cell carcinoma in Germany	Int J Epidemiol	51-57	1	24
Schlehofer	2005	Internati onal	Occupational risk factors for low grade and high grade glioma: results from an international case control study of adult brain tumours			1	113
Schmeisser	2010	EU	Occupational exposure to pesticides and bile tract carcinoma in men: results from a European multicenter case-control study			9	21
Schmidt- Pokrzywniak	2010	German y	A case-control study: occupational cooking and the risk of uveal melanoma	BMC Ophthalmol	26		10
Schoenberg	1987	US	Occupation and lung cancer risk among New Jersey white males	J. Natl. Cancer Inst.	13-21	1	79
Schoenberg	1984	US	Case-control study of bladder cancer in New Jersey. I. Occupational exposures in white males	J. Natl. Cancer Inst.	973-981	5	72
Seidler	2010	German y, Italy	Asbestos exposure and malignant lymphoma: a multicenter case-control study in Germany and Italy	Int Arch Occup Environ Health	563-570	5	83
Siemiatycki	1989	Canada	Cancer risks associated with 10 inorganic dusts: results from a case-control study in Montreal	Am. J. Ind. Med.	547-567	5	16
Siemiatycki	1994	Canada	Occupational risk factors for bladder cancer: results from a case-control study in Montreal, Quebec, Canada	Am. J. Epidemiol.	1061- 1080	12	140
Siemiatycki	1997	Canada	Reliability of an expert rating procedure for retrospective assessment of occupational exposures in community-based case-control studies	Am. J. Ind. Med. 2		3	31
Simpson	1998	US	Wood-dust exposures and cancer of the colon	Int J Occup 179-183 3 Environ Health		3	4
Smith	1992	Australi a	Phenoxy herbicides and chlorophenols: a case control study on soft tissue sarcoma and malignant lymphoma	Br. J. Cancer	442-448	3	65

Soskolne	2011	Canada	A population-based case-control study of occupational	Int J Occup	1-8	1	17
			exposure to acids and the risk of lung cancer: evidence for specificity of association	Environ Health			
Spinelli	2010	France	Occupational and environmental risk factors for brain cancer: a pilot case-control study in France	Presse Med	e35-44	2	39
Steineck	1990	Sweden	Increased risk of urothelial cancer in Stockholm during 1985- 87 after exposure to benzene and exhausts	Int. J. Cancer	1012- 1017	6	45
Stengel	1993	France	Retrospective evaluation of occupational exposure to organic solvents: questionnaire and job exposure matrix	uestionnaire and job exposure matrix			22 Suppl 2
Strom	2008	US	Prostate cancer in Mexican-Americans: identification of risk factors	Prostate	563-570	5	68
Swerdlow	1991	England	Cancer of the testis, socioeconomic status, and occupation	Br J Ind Med	670-674	10	48
't Mannetje	2011	EU	Occupational exposure to metal compounds and lung cancer. Results from a multi-center case-control study in Central/Eastern Europe and UK	g cancer. Cancer Causes Control		12	22
't Mannetje	2012	EU	Welding and lung cancer in Central and Eastern Europe and the United Kingdom	Am. J. Epidemiol.	706-714	7	175
Talibov	2014	Nordic	Occupational exposure to solvents and acute myeloid leukemia: a population-based, case-control study in four Nordic countries	Scand J Work Environ Health	511-517	5	40
Tatham	1997	US	Occupational risk factors for subgroups of non-Hodgkin's lymphoma	Epidemiology	551-558	5	8
Theis	2008	US	Smoking, environmental tobacco smoke, and risk of renal cell cancer: a population-based case-control study	BMC Cancer	387		8
Tinnerberg	2001	Sweden	Evaluation of occupational and leisure time exposure assessment in a population-based case control study on leukaemia	Int Arch Occup 533-540 Environ Health		8	74
Tinnerberg	2003	EU	Retrospective exposure assessment and quality control in an international multi-centre case-control study	Ann Occup Hyg 37-47 1		1	47
Tranah	2009	US	Solvent exposure and non-Hodgkin lymphoma: no risk in a population-based study in the San Francisco Bay Area	Cancer 3130- Epidemiol. 3132 Biomarkers Prev.		11	18
Tsuda	2001	Japan	A case-control study of the relationships among silica exposure, gastric cancer, and esophageal cancer	Am. J. Ind. Med.	52-57	1	39

Ugnat	2004	Canada	Occupational exposure to chemical and petrochemical industries and bladder cancer risk in four western Canadian provinces	Chronic Dis Can	7-15	2	25
Vajdic	2007	Australi a	Atopy, exposure to pesticides and risk of non-Hodgkin lymphoma	Int. J. Cancer	2271- 2274	10	120
Vallieres	2012	Canada	Exposure to welding fumes increases lung cancer risk among light smokers but not among heavy smokers: evidence from two case-control studies in Montreal	Cancer Med	47-58	1	1
Vallieres	2015	Canada	Occupational exposure to wood dust and risk of lung cancer in two population-based case-control studies in Montreal, Canada	Environ Health	1		14
van Loon	1997	Netherla nds	Occupational exposure to carcinogens and risk of lung cancer: results from The Netherlands cohort study	and risk of lung cancer: Occup Environ		11	54
Vaughan	1997	US	Work in dry cleaning and the incidence of cancer of the oral cavity, larynx, and oesophagus	idence of cancer of the oral Occup Environ Med		9	54
Vaughan	2000	US	Occupational exposure to formaldehyde and wood dust and nasopharyngeal carcinoma			6	57
Vaughan	1986	US	Formaldehyde and cancers of the pharynx, sinus and nasal cavity: I. Occupational exposures	nd cancers of the pharynx, sinus and nasal Int. J. Cancer		5	38
Vida	2010	Canada	Occupational exposure to silica and lung cancer: pooled analysis of two case-control studies in Montreal, Canada	Cancer Epidemiol. Biomarkers Prev.	1602- 1611	6	19
Villeneuve	2004	Canada	Environmental tobacco smoke and the risk of pancreatic cancer: findings from a Canadian population-based case-control study	Can J Public Health	32-37	1	95
Villeneuve	2012	Canada	Occupational exposure to asbestos and lung cancer in men: evidence from a population-based case-control study in eight Canadian provinces	BMC Cancer	595		12
Villeneuve	2011	Canada	Occupational exposure to diesel and gasoline emissions and lung cancer in Canadian men	Environ. Res.	727-735	5	111
Vineis	1985	Italy	Occupation and bladder cancer in males: a case-control study	Int. J. Cancer	599-606	5	35
Vizcaya	2013	Canada	Risk of lung cancer associated with six types of chlorinated solvents: results from two case-control studies in Montreal, Canada			2	70
Wang	2009	US	Occupational exposure to solvents and risk of non-Hodgkin lymphoma in Connecticut women	Am. J. Epidemiol.	176-185	2	169

Wheeler	2013	US	Inside the black box: starting to uncover the underlying	Occup Environ Med	203-210	3	70
			decision rules used in a one-by-one expert assessment of occupational exposure in case-control studies	Meu			
Wild	2012	France	Occupational risk factors have to be considered in the definition of high-risk lung cancer populations		1346- 1352	7	106
Wild	2016	France	The 2-phase case-control design: an efficient way to use expert- time	Scand J Work Environ Health			
Wilson	2004	US	Occupational exposures and salivary gland cancer mortality among African American and white workers in the United States	J. Occup. Environ. Med.	287-297	3	46
Wortley	1992	US	A case-control study of occupational risk factors for laryngeal cancer	Br J Ind Med	837-844	12	49
Wu	1995	US	A case-control study of wood dust exposure, mutagen sensitivity, and lung cancer risk	Cancer Epidemiol. Biomarkers Prev.	583-588	6	4
Wynant	2013	Canada	Occupational exposure to lead and lung cancer: results from two case-control studies in Montreal, Canada	Occup Environ Med	164-170	3	70
Yiin	2012	US	The Upper Midwest Health Study: a case-control study of pesticide applicators and risk of glioma	Environ Health	39		11
Young	2005	US	Triazine herbicides and epithelial ovarian cancer risk in central California	J. Occup. Environ. Med.	1148- 1156	11	47
Yu	1990	China	Occupational and other non-dietary risk factors for nasopharyngeal carcinoma in Guangzhou, China	Int. J. Cancer	1033- 1039	6	45
Zahm	1993	US	The role of agricultural pesticide use in the development of non-Hodgkin's lymphoma in women	Arch. Environ. Health	353-358	5	48
Zheng	2001	China	Agricultural exposure to carbamate pesticides and risk of non- Hodgkin lymphoma	J. Occup. Environ. Med.	641-649	7	43
Zheng	1992	China	A population-based case-control study of cancers of the nasal cavity and paranasal sinuses in Shanghai	Int. J. Cancer	557-561	4	52
Zheng	1992	China	Diet and other risk factors for laryngeal cancer in Shanghai, China	Am. J. Epidemiol. 178-191 2		2	136
Zheng	1996	US	Diet and other risk factors for cancer of the salivary glands:a population-based case-control study	Int. J. Cancer 194-198 2		2	67
Zhong	1999	China	A case-control study of lung cancer and environmental tobacco smoke among nonsmoking women living in Shanghai, China	Cancer Causes Control	607-616	6	10

Zhu	2002	US	Case-control study evaluating the homogeneity and	Int. J. Cancer	119-123	1	99
			heterogeneity of risk factors between sinonasal and				
			nasopharyngeal cancers				

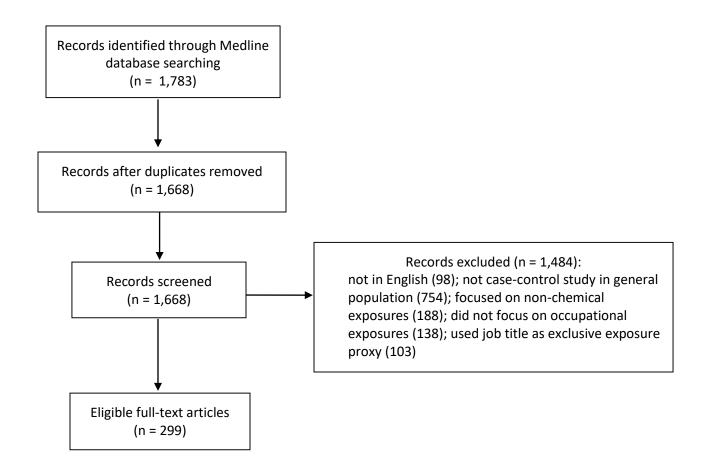


Figure S1: Prisma diagram for systematic review of occupational cancer case-control studies of chemical agents in the general population

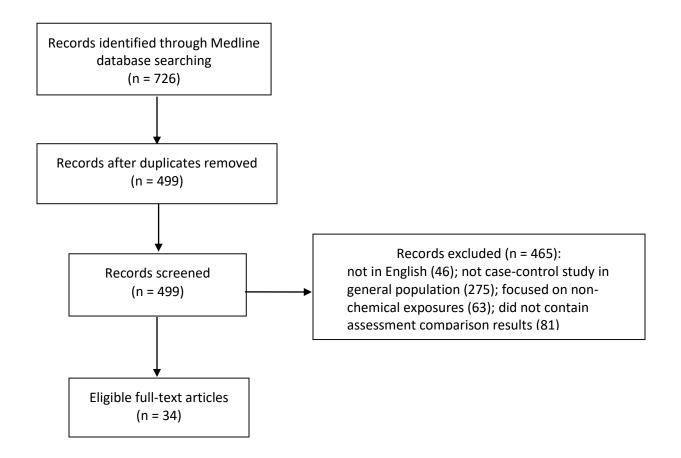


Figure S2: Prisma diagram for systematic review of retrospective occupational exposure assessment reliability comparison studies, where assessment was performed for chemicals in case-control studies in the general population

Reference	Substance As	ssessment			Kappa [95% CI]
Mannetje et al, 2003	Diesel / kerosene engine emission	EA			0.80
				•	
Friesen et al, 2013	Diesel engine exhaust	AL		⊨♠⊣	0.53 [0.45, 0.61]
Peters et al, 2014	Diesel engine exhaust	AL		•	0.75
Pronk et al, 2012	Diesel engine exhaust	AL		٠	0.62
Friesen et al, 2013	Diesel engine exhaust	EA		٠	0.53
Peters et al, 2011	Diesel engine exhaust	JEM		•	0.48
Mannetje et al, 2003	Gasoline engine exhaust	EA	٠		-0.02
Tinnerberg et al, 2001	Gasoline/diesel engine exhaust	EA		٠	0.58
Mannetje et al, 2003	Petroleum oil combustion fumes	EA		•	0.74
Mannetje et al, 2003	Plastics pyrolysis products	EA	•		0.28
Mannetje et al, 2003	Soot	EA		•	0.73
Mannetje et al, 2003	Wood combustion fumes	EA		•	0.79
			· · · · · · · · ·		
			-0.4 -0.1 0.1 0	0.3 0.5 0.7 0.9	
			Ka	ppa	

Figure S3: Forest plot of unweighted kappa values and 95% confidence intervals (95% CI) by substance (combustion products) and assessment method (AL = algorithmic assessment; EA = case-by-case expert assessment; JEM = job-exposure matrix) with case-by-case expert assessment as comparison reference

Reference	Substance	Assessment		Kappa [95% CI]
Mannetje et al, 2003	Abrasives dust	EA	•	0.40
Bourgkard et al, 2013	Asbestos	AL	⊢♦┥	0.73 [0.66, 0.80]
Bourgkard et al, 2013	Asbestos	EA	⊢	0.70 [0.62, 0.78]
Gramond et al, 2012	Asbestos	EA	⊢♦ -1	0.69 [0.58, 0.79]
Tinnerberg et al, 2003	Asbestos	EA	•	0.55
Nam et al, 2005	Asbestos	JEM	•	0.39
Offermans et al, 2012	Asbestos	JEM	•	0.23
Peters et al, 2011	Asbestos	JEM	•	0.17
Nam et al, 2005	Asbestos	SR	•	0.33
Mannetje et al, 2003	Asbestos (amphibole)	EA	•	0.08
Mannetje et al, 2003	Asbestos (chrysotile)	EA	•	0.17
Mannetje et al, 2003	Asbestos (general)	EA	•	0.27
Mannetje et al, 2003	Brick dust	EA	•	0.62
Mannetje et al, 2003	Cement dust	EA	•	0.81
Mannetje et al, 2003	Concrete dust	EA	•	0.75
Mannetje et al, 2003	Crystalline silica	EA	•	0.15
Peters et al, 2011	Crystalline silica	JEM	•	0.38
Tinnerberg et al, 2001	Fresh wood	EA	•	0.63
Mannetje et al, 2003	Glass fibres	EA	•	0.03
Mannetje et al, 2003	Hard wood dust	EA	•	0.41
Mannetje et al, 2003	Inorganic insulation dust	EA	•	0.37
Mannetje et al, 2003	Inorganic pigments dust	EA	•	0.79
Mannetje et al, 2003	Mineral wool fibres	EA	•	0.16
Mannetje et al, 2003	Sand	EA	•	0.86
Mannetje et al, 2003	Soft wood dust	EA	•	0.64
Mannetje et al, 2003	Wood dust (general)	EA	•	0.82
			-0.4 -0.1 0.1 0.3 0.5 0.7 0	.9
			Карра	
			Парра	

Figure S4: Forest plot of unweighted kappa values and 95% confidence intervals (95% CI) by substance (fibres and dusts) and assessment method (AL = algorithmic assessment; EA = case-by-case expert assessment; JEM = job-exposure matrix; SR = self-report) with case-by-case expert assessment as comparison reference

Reference	Substance As	sessment		Kappa [95% CI]
Mannetje et al, 2003	Arsenic compounds and dust	EA	•	0.03
Mannetje et al, 2003	Arsenic compounds and fumes	EA	•	0.05
Rocheleau et al, 2011	Cadmium	EA	•	0.49
Mannetje et al, 2003	Cadmium compounds and dust	EA	•	0.19
Mannetje et al, 2003	Cadmium compounds and fumes	EA	•	0.47
Mannetje et al, 2003	Chromate (Cr VI) dust	EA	•	0.27
Mannetje et al, 2003	Chromate (Cr VI) fumes or mist	EA	•	0.27
Mannetje et al, 2003	Chromium compounds and dust	EA	*	0.25
Mannetje et al, 2003	Chromium compounds and fumes	EA	*	0.30
Rocheleau et al, 2011	Cobalt	EA	•	0.45
Rocheleau et al, 2011	Elemental nickel	EA	•	0.20
Mannetje et al, 2003	Hard alloys dust	EA	•	0.25
Mannetje et al, 2003	Iron compounds and fumes	EA	•	0.69
Correa et al, 2006	Lead	EA	H♦H	0.32 [0.25, 0.39]
Tinnerberg et al, 2003	Lead	EA	•	0.77
Mannetje et al, 2003	Mild steel dust	EA	•	0.56
Tinnerberg et al, 2003	Nickel	EA	•	0.74
Rocheleau et al, 2011	Nickel compounds	EA	•	0.48
Mannetje et al, 2003	Nickel compounds and dust	EA	•	0.31
Mannetje et al, 2003	Nickel compounds and fumes	EA	•	0.06
Mannetje et al, 2003	Stainless steel dust	EA	•	0.10
			· · · · · · · · · · · · · · · · · · ·	
			-0.4 -0.1 0.1 0.3 0.5 0.7 0).9
			Карра	

Figure S5: Forest plot of unweighted kappa values and 95% confidence intervals (95% CI) by substance (metals) and assessment method (EA = case-by-case expert assessment) with case-by-case expert assessment as comparison reference

Reference	Substance	Assessment		Kappa [95% CI]
Mannetje et al, 2003	Arc welding fumes	EA	•	0.93
Tinnerberg et al, 2003	Aromatic hydrocarbons	EA	•	0.57
Mannetje et al, 2003	Asphalt- bitumen fumes	EA	•	0.48
Mannetje et al, 2003	Coal tar and pitch fumes	EA	•	0.55
Mannetje et al, 2003	Creosote fumes	EA	•	0.03
Mannetje et al, 2003	Cutting fluids mist	EA	•	0.74
Mannetje et al, 2003	Diesel / kerosene	EA	•	0.26
Mannetje et al, 2003	Gas welding fumes	EA	•	0.84
Mannetje et al, 2003	Gasoline	EA	•	0.46
Tinnerberg et al, 2001	Gasoline/diesel fuel	EA	•	0.61
Tinnerberg et al, 2003	Herbicides	EA	•	0.92
Mannetje et al, 2003	Lubricating oil mist	EA	•	0.49
Rocheleau et al, 2011	Oil mist	EA	•	0.63
Vannetje et al, 2003	Other mineral oils mist	EA	•	0.35
Bourgkard et al, 2013	PAHs	AL	⊢ ♦–i	0.40 [0.30, 0.50]
Bourgkard et al, 2013	PAHs	EA	⊢	0.47 [0.37, 0.57]
Mannetje et al, 2003	PAHs	EA	•	-0.04
Rocheleau et al, 2011	PAHs	EA	•	0.46
Tinnerberg et al, 2003	PAHs	EA	•	0.60
Offermans et al, 2012	PAHs	JEM	•	0.41
Neilson et al, 2007	PAHs	SR	•	0.54
Peters et al, 2014	Pesticides	AL	•	0.78
Daniels et al, 2001	Pesticides	EA	•	0.60
Tinnerberg et al, 2001	Pesticides	EA	•	0.62
Daniels et al, 2001	Pesticides	JEM	± 1000	0.50
Daniels et al, 2001	Pesticides	SR	•	0.50
Hepworth et al, 2006	Pesticides	SR	•	0.50
Offermans et al, 2012	Welding fumes	JEM	I∳I	0.70 [0.65, 0.74]
Mannetje et al, 2003	Wood preservatives	EA	•	0.66
				г
			-0.4 -0.1 0.1 0.3 0.5 0.7 0.9	
			Карра	

Figure S6: Forest plot of unweighted kappa values and 95% confidence intervals (95% CI) by substance (mixtures) and assessment method (EA = case-by-case expert assessment; JEM = job-exposure matrix; SR = self-report) with case-by-case expert assessment as comparison reference

Reference	Substance	Assessment		Kappa [95% CI]
Peters et al, 2014	Aliphatic solvents	AL	•	0.65
Tinnerberg et al, 2001	Aromatic solvents	EA		0.50
Peters et al, 2014	Chlorinated solvents	AL	•	0.44
Mannetje et al, 2003	Chlorinated solvents	EA	•	0.11
Rocheleau et al, 2011	Chlorinated solvents	EA	•	0.70
Tinnerberg et al, 2001	Chlorinated solvents	EA	•	0.36
Rocheleau et al, 2011	Glycol ethers	EA	•	0.41
Mannetje et al, 2003	Mineral spirits	EA	•	0.65
Mannetje et al, 2003	Organic solvents	EA	•	0.36
Tinnerberg et al, 2001	Organic solvents	EA	•	0.52
Tinnerberg et al, 2003	Organic solvents	EA	•	0.57
Peters et al, 2014	Other aromatic solvents	AL	•	0.62
Orsi et al, 2010	Solvents	JEM	r∳i	0.46 [0.40, 0.51]
Hepworth et al, 2006	Solvents	SR	•	0.22
Peters et al, 2014	Solvents combined	AL	•	0.64
Rocheleau et al, 2011	Stoddard solvent	EA	•	0.74
			-0.4 -0.1 0.1 0.3 0.5 0.7 0.9	
			Карра	

Figure S7: Forest plot of unweighted kappa values and 95% confidence intervals (95% CI) by substance (solvents) and assessment method (AL = algorithmic assessment; EA = case-by-case expert assessment; JEM = job-exposure matrix; SR = self-report) with case-by-case expert assessment as comparison reference

Reference	Substance	Assessment		Kappa [95% CI]
Tinnerberg et al, 2003	Anticancer agents	EA	•	1.00
Peters et al, 2014	Benzene	AL	•	0.71
Tinnerberg et al, 2001	Benzene	EA	•	0.48
Tinnerberg et al, 2003	Benzene	EA	•	0.54
Orsi et al, 2010	Benzene	JEM	F + 1	0.50 [0.43, 0.56]
Tinnerberg et al, 2001	Cattle/poultry	EA	•	0.73
Mannetje et al, 2003	Formaldehyde	EA	•	0.23
Tinnerberg et al, 2001	Fresh meat	EA	•	0.64
Mannetje et al, 2003	Inorganic acid mist	EA	•	0.32
Tinnerberg et al, 2003	Other IARC class 1 agents	EA	•	0.39
Westberg et al, 2005	Polyvinyl chloride	SR	÷	0.56
Tinnerberg et al, 2003	Propylene oxide	EA	•	1.00
Tinnerberg et al, 2003	Rubber	EA	•	0.86
Tinnerberg et al, 2003	Styrene	EA	•	0.90
Mannetje et al, 2003	Vinyl chloride	EA	•	-0.02
Tinnerberg et al, 2003	Vinyl chloride	EA	•	1.00
			-0.4 -0.1 0.1 0.3 0.5 0.7 0.9 Kappa	
			nappa	

Figure S8: Forest plot of unweighted kappa values and 95% confidence intervals (95% CI) by substance (others) and assessment method (AL = algorithmic assessment; EA = case-by-case expert assessment; JEM = job-exposure matrix; SR = self-report) with case-by-case expert assessment as comparison reference