

Supplemental material

eTable 1. Categories of exposure indexes for all substances of interest.

Substance	Intensity of Exposure	Probability of Exposure	Frequency of Exposure	
Chlorinated solvents	TCE			
	PCE	<5 ppm; 5 - 25 ppm; 26 - 50 ppm; 51 - 100 ppm		
	DMC		<1%; 1 - 10%; 11 - 20%; 21 - 30%, ..., up to 91-100%	
	CT		<1%; 1 - 10%; ..., up to 91-100%	
	CF	not exposed; very low; low; medium; strong		
Fuels and Petroleum-based solvents	BZ	0.1 - 1 ppm; 1 - 5 ppm; 5 - 15 ppm; >15 ppm		
	WS			
	KDF	<1 ppm; 1 - 20 ppm; 20 - 50 ppm; >50 ppm	<1%; 1 - 10%; 11 - 50%; 51 - 90%; 91 - 100%	<0.5%; 0.5 - 5%; 5 - 30%; 30 - 70% ; 70-100%
	SBPs			
	GL	not exposed; low; medium; strong		
Oxygenated solvents	Alc			
	KetEst	not exposed; very low; low; medium; strong		
	Et ₂ O		<1%; 1 - 10%; 11 - 20%; 21 - 30%, ..., up to 91-100%	<1%; 1 - 10%; 11 - 20%; ..., up to 91-100%
	Glycol	not exposed; low; medium; strong		100%
	THF			
Asbestos ^a	<0.0001 f/ml; 0.0001 - 0.01 f/ml; 0.01 - 0.1 f/ml; 0.1 - 1 f/ml; 1 - 10 f/ml; > 10 f/ml	1 - 5%; 6 - 30%; 31 - 70%, > 70%	<5%; 5 - 30%; 30 - 70%; > 70%	

Abbreviations: TCE, trichloroethylene; PCE, perchloroethylene; DMC, methylene chloride; CT, carbon tetrachloride; CF, chloroform; BZ, benzene; WS, white spirits; KDF, kerosene/diesel oil/fuels oil; SBPs, special-boiling-point spirits and other aliphatic petroleum-based solvents; GL, gasoline; Alc, alcohol; KetEst, ketones/esters; Et₂O, diethyl ether; Glycol, ethylene glycol; THF, tetrahydrofuran.

a. The exposure due to working environment and to specific job tasks were defined in same classes, either for intensity and frequency of exposure.

eTable 2. Mean and standard deviation of smoking history dimensions by categories of CSI, Men, France, 2001-2007.

Classes of CSI ^a	Cases	Controls	OR	(95%CI)	Intensity (cig/day)	Duration (years)	TSC (years)	Pack-Years	CSI ^c
Never smokers	59	813	1.00	-	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)	0.0 (0.0)
Light	197	844	3.15	2.31 to 4.28	12.2 (10.4)	14 (8.7)	26.1 (11.0)	8.2 (7.7)	0.4 (0.2)
Medium-light	440	594	10.33	7.71 to 13.85	17.0 (9.0)	28.3 (8.1)	10.7 (8.6)	22.6 (12.3)	1.1 (0.2)
Medium-strong	677	354	28.30	21.02 to 38.10	19.8 (7.9)	35.8 (7.0)	2.9 (4.2)	34.2 (12.4)	1.7 (0.1)
Strong	868	166	70.08	51.14 to 96.03	27.3 (10.5)	44 (6.8)	0.9 (1.8)	58.9 (21.5)	2.2 (0.2)
P-value trend				<0.001					
Total^b	2182	1958			19.5 (10.8)	30.8 (13.3)	17.7 (11.7)	32.4 (23.0)	1.8 (0.4)

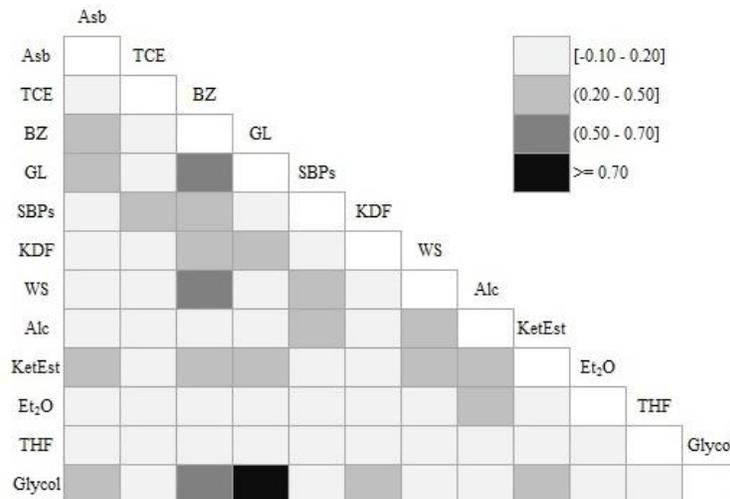
Abbreviations: CSI, Comprehensive Smoking Index, CI, confidence interval.

a. CSI in classes according to quartile distribution: Light, CSI ≤ 1st quartile; Medium-light, 1st quartile < CSI ≤ 2nd quartile; Medium-strong, 2st quartile < CSI ≤ 3rd quartile.

b. Total among ever smokers.

c. Mean value of the CSI as continuous variable and standard deviation.

eFigure 1. Image plot for Spearman's correlations coefficient among substances' CEI, Men, France, 2001-2007.



Abbreviations: Asb, asbestos; TCE, trichloroethylene; BZ, benzene; GL, gasoline; SBPs, special-boiling-point spirits and other aliphatic petroleum-based solvents; KDF, kerosene/diesel oil/fuel oils; WS, white spirits; Alc, alcohol; KetEst, ketones/esters; Et₂O, diethyl ether; THF, tetrahydrofuran; Glycol, ethylene glycol.

eFigure 2. Distribution of the three most common occupations for clusters with significantly highest log odds ratios of lung cancer, according to International Standard Classification of Occupation (ISCO), Men, France, 2001-2007.

