

Description of studies used in meta-analysis of hexavalent chromium and stomach cancer

Author	Year	RR	CI-L	CI-U	%W	RR type	Cases	Location and occupation or data source	Exposure type
1 Ahn et al	2006	13.65	0.76	66.26	0.0%	SRR	2	Korea, iron and steel production, one large company, 28 subsidiaries	stainless steel
2 Amandus	1986	1.27	0.73	2.06	0.0%	SMR	16	US, 23 non-asbestos cement plants	cement
3 Andersen et al	1999	0.98	0.76	1.24	0.0%	SIR	70	Denmark, bricklayers	cement
4 Andersen et al	1999	0.97	0.73	1.29	0.0%	SIR	54	Finland, bricklayers	cement
5 Andersen et al	1999	1.18	0.92	1.49	0.0%	SIR	72	Norway, bricklayers	cement
6 Axelsson et al	1980	0.78	0.21	2.01	0.0%	SMR	4	Sweden ferrochromium plant	ferrochromium arc furnace
7 Becker	1999	1.12	0.30	2.86	0.0%	SMR	4	Germany, arc welders	Cr welding
8 Boice et al	1999	1.03	0.51	1.84	0.0%	SMR	11	US, California, aircraft manufacturing	chromate work
9 Costantini et al	1989	0.43	0.16	0.94	0.0%	SMR	6	Italy (Tuscany) leather tanneries, 1950-83	leather tanning
10 Dab et al	2011	0.38	0.08	1.26	0.0%	SMR	3	France, cement production plants	cement
11 Danielsen 1996	1996	1.03	0.21	3.03	0.0%	SIR	3	Norway, National Registry of Boiler Welders	Cr welding
12 Davies et al	1991	2.08	0.76	4.53	0.0%	SMR	6	UK (Bolton), chromate producing factory	chromate production
13 Davies et al	1991	0.39	0.10	0.99	0.0%	SMR	4	UK (Eaglescliff), chromate producing factory	chromate production
14 Davies et al	1991	0.70	0.32	1.32	0.0%	SMR	9	UK (Rutherglen), chromate producing factory	chromate production
15 Deschamps et al	1995	1.52	0.18	5.50	0.0%	SMR	2	France, chromate producing factory	chromate production
16 Edling et al	1986	1.60	0.60	4.00	0.0%	SMR	6	Sweden, one leather tannery	leather tanning
17 Franchini et al	1983	3.33	0.04	18.55	0.00%	SMR	1	Italy, chrome plating plants	chrome plating
18 Garabrant and Wegman	1984	2.80	0.31	10.11	0.0%	PMR	2	US (Massachusetts), female leather workers	leather (some tanning)
19 Garabrant and Wegman	1984	1.69	0.97	2.74	0.0%	PMR	16	US (Massachusetts), male leather workers	leather (some tanning)
20 Gonzalez et al	1991	1.80	0.90	3.59	0.0%	OR	49	Spain (Catalonia), bricklayers	cement
21 Gonzalez et al	1989	1.82	0.40	8.25	0.0%	OR	5	Spain (Catalonia), leather workers	leather
22 Hara et al	2010	0.67	0.37	1.06	0.0%	SMR	14	Japan (Tokyo) chromium plating plants	chrome plating
23 Hayes et al	1989	2.14	0.24	7.73	0.0%	SMR	2	US (New Jersey), chromium pigment workers	chromate production
24 Horiguchi et al	1990	1.43	0.02	7.50	0.0%	SMR	3	Japan (Osaka), chrome platers	chrome plating
25 Jakobsson et al	1993	1.14	0.61	1.94	0.0%	SIR	13	Sweden, 2 cement factories	cement
26 Jakobsson et al	1997	0.80	0.3	1.7	0.0%	SIR	8	Sweden, 2 stainless steel manufacturing plants	stainless steel
27 Jarvholm et al	1982	9.76	2.62	24.98	0.0%	SMR	4	Sweden, bearing ring factory, steel polishing	stainless steel
28 Kano et al	1993	1.20	0.520	2.370	0.0%	SMR	8	Japan: chromate pigment plants	chromate production
29 Kneller et al	1990	1.50	1.13	1.95	0.0%	SIR	55	China, urban Shanghai, leather products workers	leather

Author	Year	RR	CI-L	CI-U	%W	RR type	Cases	Location and occupation or data source	Exposure type
30 Kneller et al	1990	0.94	0.30	2.19	0.0%	SIR	5	China, urban Shanghai, tanners, feltmongers, pelt dressers	leather tanning
31 Korallus et al	1993	0.63	0.17	1.60	0.0%	SIR	4	Germany (Leverkusen), chromate producing plants	chromate production
32 Korallus et al	1993	1.92	1.04	3.24	0.0%	SIR	12	Germany (Ürdingen), chromate producing plants	chromate production
33 Krstev et al	2005	3.10	0.7	14.9	0.0%	OR	4	Poland (Warsaw), population based study, leather goods production, women	leather
34 Krstev et al	2005	5.10	1.0	25.0	0.0%	OR	8	Poland (Warsaw), population based study, leather goods production, men	leather
35 Langård et al	1990	1.45	0.58	2.99	0.0%	SIR	7	Norway, ferrochromium production	ferrochromium
36 Mallin et al	1989	4.3	1.18	15.60	0.0%	OR	9	US (Illinois), population based study, bricklayers and stone masons	cement
37 McDowall	1984	3.21	0.86	8.22	0.0%	SMR	4	UK (north Kent), cement production, packing	cement
38 McDowall	1984	1.48	0.67	2.81	0.0%	SMR	9	UK (north Kent), cement production, laborers	cement
39 McDowall	1984	2.11	0.91	4.16	0.0%	SMR	8	UK (north Kent), cement production, maintenance	cement
40 Mikoczy and Hagmar Minder and Beer-Porizek	2005	0.98	0.52	1.68	0.0%	SIR	13	Sweden, leather tanneries, 1958-1999	leather tanning
41 Montanaro et al	1997	0.79	0.38	1.46	0.0%	SMR	10	Italy (Genoa) chrome tanneries	leather tanning
42 Moulin et al	1990	2.75	0.75	7.01	0.0%	SMR	4	France, ferrochromium and stainless steel plant, 1952-82	ferrochromium and stainless steel
43 Moulin et al	1993	2.09	0.77	4.55	0.0%	SMR	6	France, chromium and nickel welders	stainless steel welding
44 Moulin et al	1993b	0.92	0.37	1.90	0.0%	SMR	7	France, ferrochromium and stainless steel plant, 1904-65	ferrochromium and stainless steel
45 Moulin et al	1995	1.04	0.68	1.52	0.0%	SMR	26	France, stainless steel production, usine 1	stainless steel
46 Moulin et al	1995	0.84	0.47	1.38	0.0%	SMR	15	France, stainless steel production, usine 2	stainless steel
47 Parent et al	1998	1.00	0.50	1.90	0.0%	OR	11	Canada, (Montreal), leather workers	leather
48 Pippard et al Rafnsson and Jóhannesdóttir	1985	0.52	0.06	1.87	0.0%	SMR	2	UK, leather tanneries	leather tanning
49 Salg 2005 - nonwhite	1997	1.27	0.71	2.09	0.0%	SIR	15	Iceland, masons	cement
50 Robinson 1995	1995	2.08	1.42	2.93	0.0%	PMR	32	US (19 states), brickmasons	cement
52 Rosenman 1996	1996	1.87	0.21	6.76	0.0%	PMR	2	US (New Jersey), chromium smelters	Cr smelting
53 Salg 2005 - white	2005	1.17	0.50	2.31	0.0%	PMR	8	US, International Union of Bricklayers	cement
54 Salg 2005 - white	2005	1.31	1.06	1.60	0.0%	PMR	94	US, International Union of Bricklayers	cement

<b>Author</b>	<b>Year</b>	<b>RR</b>	<b>CI-L</b>	<b>CI-U</b>	<b>%W</b>	<b>RR type</b>	<b>Cases</b>	<b>Location and occupation or data source</b>	<b>Exposure type</b>
55 Santibañez 2012 - bricklayers	2012	1.20	0.65	2.22	0.0%	OR	29	Spain (Alicante), bricklayers and masons	cement
56 Santibañez 2012 - leather	2012	1.37	0.40	4.66	0.0%	OR	7	Spain (Alicante), pelt, leather and shoe making	leather
57 Satoh 1981	1981	0.95	0.47	1.70	0.0%	SMR	11	Japan (Tokyo), one chromate plant	chromate production
58 Silverstein 1981 (males)	1981	2.54	0.68	2.54	0.0%	PMR	4	US (Michigan), die casting and electroplating, males	chrome plating and other
59 Simonato 1991	1991	0.85	0.50	1.34	0.0%	SIR	18	Europe (9 countries), 135 companies, stainless steel welders	stainless steel
60 Sjödahl 2007	2007	1.50	1.10	2.10	0.0%	IRR	37	Sweden, construction workers, 1971-93	cement
61 Smailytė 2004	2004	1.50	0.60	3.00	0.0%	SIR	6	Lithuania, one Portland cement factory	cement
62 Sorahan 1987 (females)	1987	0.32	0.01	1.78	0.0%	SMR	1	UK, one chrome plating factory	chrome plating
63 Sorahan 1987 (males)	1987	2.06	1.10	3.52	0.0%	SMR	13	UK, one chrome plating factory	chrome plating
64 Sorahan 2000	2000	1.68	0.87	2.94	0.0%	SMR	12	UK (West Riding, Yorkshire), 54 plating plants	chrome plating
65 Stern 2001	2001	1.64	1.35	1.98	0.0%	PMR	110	US, Plasters and Cement Workers Union	cement
66 Sweeney 1985	1985	1.37	0.15	4.95	0.0%	SMR	2	US (New York), fur dressers (tanners)	leather tanning
67 Walrath 1987 (females)	1987	1.28	0.70	2.15	0.0%	PMR	14	US (New York), shoe manufacturing plant, leather workers	leather
68 Walrath 1987 (males)	1987	1.83	1.43	2.31	0.0%	PMR	71	US (New York), shoe manufacturing plant, leather workers	leather
69 Weiderpass 2003	2003	0.50	0.23	1.12	0.0%	RR	--	Finland, national occupational database	Cr exposure
70 Xu 1996 - cement	1996	1.20	0.30	4.30	0.0%	OR	4	China (Anshan), iron and steel complex	cement
71 Xu 1996 - plating	1996	2.10	0.70	6.30	0.0%	OR	6	China (Anshan), iron and steel complex	chrome plating and other