

Pneumoconiotic agents: Number of samples and percent of exposures exceeding designated occupational exposure limits by industry, MSHA inspector and mine operator and OSHA samples, 1993–2003 (page 1 of 3)

CIC	Industry	No. of Samples	No. of Samples with PEL	% > PEL	No. of Samples with REL	% > REL
150	Miscellaneous textile mill products	43	43	23.3	41	53.7
262	Miscellaneous nonmetallic mineral and stone products	860	851	22.1	791	37.0
252	Structural clay products	339	335	21.8	329	33.7
271	Iron and steel foundries	3,295	3,186	18.7	2,487	33.1
261	Pottery and related products	241	240	17.9	226	32.7
041	Coal mining	910,843	910,843	8.6	609,261	24.6*
530	Machinery, equipment, and supplies	123	105	11.4	82	23.2
251	Cement, concrete, gypsum, and plaster products	740	706	14.2	664	22.4
742	Business services, n.e.c.	28	25	8.0	23	21.7
060	Construction	3,863	3,751	14.8	2,783	21.3
892	Miscellaneous professional and related services	35	34	17.6	29	20.7
142	Yarn, thread, and fabric mills	280	279	13.3	277	19.5
042	Oil and gas extraction	52	52	11.5	33	18.2
502	Lumber and construction materials	118	111	7.2	77	18.2
201	Miscellaneous petroleum and coal products	83	83	10.8	81	14.8
191	Agricultural chemicals	53	47	6.4	41	14.6
722	Services to dwellings and other buildings	35	34	11.8	28	14.3
040	Metal mining	11,435	11,435	6.9	8,399	13.6
990	Industry not reported	141	138	7.2	104	13.5
891	Research, development and testing services	47	43	11.6	32	12.5
211	Other rubber products, and plastics footwear and belting	223	206	8.7	187	12.3
050	Nonmetallic mining and quarrying, except fuel	101,224	101,224	5.8	98,685	10.0
180	Plastics, synthetics, and resins	53	52	3.8	42	9.5
752	Electrical repair shops	30	28	3.6	21	9.5
250	Glass and glass products	310	295	4.4	243	8.6
140	Dyeing and finishing textiles, except wool and knit goods	59	59	8.5	59	8.5
551	Farm-product raw materials	12	12	0.0	12	8.3
682	Miscellaneous retail stores	44	41	4.9	36	8.3
212	Miscellaneous plastics products	330	317	4.4	266	8.3
272	Primary aluminum industries	727	673	4.2	523	8.0
331	Machinery, except electrical, n.e.c.	2,328	1,958	4.1	1,222	8.0
190	Paints, varnishes, and related products	106	101	5.0	75	8.0
360	Ship and boat building and repairing	325	277	10.5	164	7.9
372	Medical, dental, optical instruments and supplies	121	104	3.8	97	7.2
380	Photographic equipment and supplies	19	17	5.9	14	7.1
731	Personnel supply services	25	21	4.8	15	6.7
471	Sanitary services	165	158	3.8	107	6.5
241	Miscellaneous wood products	124	108	1.9	93	6.5
320	Metalworking machinery	995	870	2.5	627	6.4
192	Industrial and miscellaneous chemicals	425	417	3.4	336	6.3

See footnotes at end of table.

Pneumoconiotic agents: Number of samples and percent of exposures exceeding designated occupational exposure limits by industry, MSHA inspector and mine operator and OSHA samples, 1993–2003 (page 2 of 3)

CIC	Industry	No. of Samples	No. of Samples with PEL	% > PEL	No. of Samples with REL	% > REL
280	Other primary metal industries	2,354	2,282	3.5	1,443	5.8
580	Lumber and building material retailing	19	18	0.0	18	5.6
210	Tires and inner tubes	66	66	3.0	55	5.5
932	National security and international affairs	80	80	5.0	75	5.3
300	Miscellaneous fabricated metal products	3,537	3,064	3.3	1,932	5.2
311	Farm machinery and equipment	897	822	2.4	406	5.2
760	Miscellaneous repair services	625	500	3.4	290	4.5
411	Warehousing and storage	58	49	4.1	46	4.3
110	Grain mill products	25	25	4.0	24	4.2
901	General government, n.e.c.	92	88	2.3	72	4.2
152	Miscellaneous fabricated textile products	40	25	4.0	25	4.0
391	Miscellaneous manufacturing industries	686	567	2.1	462	3.9
351	Motor vehicles and motor vehicle equipment	2,896	2,351	2.1	1,236	3.9
930	Administration of environmental quality and housing programs	38	36	0.0	27	3.7
231	Sawmills, planing mills, and millwork	206	181	2.8	165	3.6
420	Water transportation	93	93	3.2	58	3.4
282	Fabricated structural metal products	4,423	3,579	2.4	2,021	3.3
160	Pulp, paper, and paperboard mills	49	39	2.6	31	3.2
900	Executive and legislative offices	37	36	2.8	35	2.9
840	Health services, n.e.c.	89	89	2.2	71	2.8
312	Construction and material handling machines	1,279	1,089	1.8	630	2.5
310	Engines and turbines	75	72	1.4	40	2.5
232	Wood buildings and mobile homes	165	123	5.7	83	2.4
390	Toys, amusement, and sporting goods	200	189	2.1	129	2.3
531	Scrap and waste materials	689	622	1.6	358	2.2
371	Scientific and controlling instruments	242	211	1.4	183	2.2
910	Justice, public order, and safety	167	160	1.3	146	2.1
751	Automotive repair and related services	764	710	1.4	536	2.1
410	Trucking service	68	66	0.0	52	1.9
340	Household appliances	122	94	0.0	53	1.9
370	Cycles and miscellaneous transportation equipment	310	228	0.0	116	1.7
291	Metal forgings and stampings	905	701	1.1	351	1.7
290	Screw machine products	86	84	1.2	59	1.7
352	Aircraft and parts	237	225	1.3	179	1.7

See footnotes at end of table.

Pneumoconiotic agents: Number of samples and percent of exposures exceeding designated occupational exposure limits by industry, MSHA inspector and mine operator and OSHA samples, 1993–2003 (page 3 of 3)

CIC	Industry	No. of Samples	No. of Samples with PEL	% > PEL	No. of Samples with REL	% > REL
270	Blast furnaces, steelworks, rolling and finishing mill	677	619	1.1	356	1.4
281	Cutlery, handtools, and general hardware	343	277	0.7	210	1.0
341	Radio, T.V. and communication equipment	123	102	1.0	106	0.9
342	Electrical machinery, equipment, and supplies, n.e.c.	1,649	1,459	0.8	1,278	0.9
242	Furniture and fixtures	640	513	0.4	325	0.6
	All other industries*	2,478	2,307	0.5	1,884	0.6
	TOTAL	1,067,828	1,063,120	8.2	744,178	22.0

CIC - Census Industry Code n.e.c. - not elsewhere classified PEL - permissible exposure limit REL - recommended exposure limit

MSHA - Mine Safety and Health Administration OSHA - Occupational Safety and Health Administration

* includes all industries with no samples exceeding the REL or industries with less than 10 samples.

† The % of samples exceeding the NIOSH REL for respirable quartz cannot be calculated using MSHA respirable coal mine quartz dust data.

NOTE: See appendices for source description, methods and agents.

SOURCE: MSHA coal mine inspector and mine operator dust and quartz data and metal/nonmetal data. OSHA Integrated Management Information System.