

Pneumoconiotic agents: Percent of exposures exceeding designated occupational exposure limits by type of mining, MSHA inspector and mine operator samples, 1979–2003

Year	Coal Mining (SIC 11, 12)			Metal/Nonmetal Mining (SIC 10,14)				
	No. of Samples with PEL	% > PEL	No. of Samples with REL	% > REL	No. of Samples with PEL	% > PEL	No. of Samples with REL	% > REL
1979	207,430	17.0	0	-	9,953	11.6	9,411	18.3
1980	254,581	15.4	0	-	6,988	10.8	6,513	19.6
1981	77,764	11.0	0	-	7,474	11.0	6,826	19.0
1982	136,332	11.1	0	-	3,153	10.5	2,741	18.1
1983	136,373	10.4	0	-	7,075	12.1	6,418	16.7
1984	139,050	10.6	0	-	8,008	11.7	7,473	15.1
1985	129,333	9.8	0	-	6,996	12.4	6,406	15.2
1986	119,961	10.6	0	-	7,279	10.9	6,898	16.2
1987	112,131	10.7	0	-	6,761	8.9	6,369	11.2
1988	108,340	9.9	0	-	7,722	17.7	7,333	25.9
1989	102,885	9.4	0	-	8,990	14.9	8,629	21.5
1990	100,728	8.7	0	-	11,304	11.1	10,899	16.4
1991	93,355	12.0	0	-	13,100	9.4	12,791	14.1
1992	89,391	11.4	0	-	12,707	9.0	12,473	14.5
1993	82,689	10.7	0	-	11,038	7.1	10,660	11.1
1994	80,991	10.5	0	-	17,199	5.4	16,526	8.4
1995	76,723	10.6	21,393	-	13,611	5.2	13,034	8.1
1996	71,315	9.3	65,834	-	19,205	5.4	17,253	8.8
1997	78,008	9.2	70,514	-	8,597	6.0	8,125	9.9
1998	87,273	9.1	77,999	-	4,758	6.4	4,599	12.4
1999	96,118	8.6	84,706	-	5,291	7.8	5,016	15.5
2000	88,377	7.7	77,321	-	9,069	5.6	8,786	10.4
2001	96,329	7.2	79,238	-	6,719	6.4	6,378	13.2
2002	83,064	6.3	69,365	-	7,794	5.4	7,602	11.6
2003	69,955	5.5	62,890	-	9,408	6.0	9,136	11.7

- indicates incalculable field. SIC - Standard Industrial Classification PEL - permissible exposure limit REL - recommended exposure limit
 MSHA - Mine Safety and Health Administration
 NOTE: The NIOSH REL for respirable coal mine dust of 1.0 mg/m³ was adopted in September 1995. The MSHA coal mine quartz exposure data cannot be compared to the NIOSH REL because they are based on different sampling criteria. See appendices for source description, methods, and agents.
 SOURCE: MSHA metal/nonmetal mine data and coal mine inspector and mine operator dust and quartz data.