

**Asbestos: Geometric mean exposures and percent exceeding designated occupational exposure limits by MSHA metal/nonmetal district and state, MSHA samples, 1979-2003 (page 1 of 2)**

MSHA Metal/Nonmetal District	All years			1979-1986			1987-1994			1995-2003		
	No. of Samples	GM (f/cc)	% > PEL	No. of Samples	GM (f/cc)	% > PEL	No. of Samples	GM (f/cc)	% > PEL	No. of Samples	GM (f/cc)	% > PEL
<b>Northeast</b>	<b>438</b>	<b>0.051</b>	<b>6.3</b>	<b>240</b>	<b>0.433</b>	<b>6.3</b>	<b>85.0</b>	<b>7.1</b>	<b>0.009</b>	<b>7.1</b>	<b>0.002</b>	<b>21.4</b>
Connecticut	3	0.002	-	0	-	-	-	-	-	-	0.002	0.0
Delaware	0	-	-	0	-	-	-	-	-	-	-	-
District of Columbia	0	-	-	0	-	-	-	-	-	-	-	-
Maine	0	-	-	0	-	-	-	-	-	-	-	-
Maryland	48	0.018	0.0	26	0.120	0.0	53.8	0.002	0.0	0.0	0.002	0.0
Massachusetts	1	0.002	-	0	-	-	-	0.002	0.0	0.0	-	-
New Hampshire	0	-	-	0	-	-	-	-	-	-	-	-
New Jersey	40	0.008	0.0	14	0.192	0.0	78.6	-	-	-	0.001	0.0
New York	95	0.021	0.0	34	0.441	0.0	91.2	0.002	0.0	0.0	0.004	0.0
Pennsylvania	22	0.001	-	0	-	-	-	0.002	0.0	0.0	0.002	0.0
Rhode Island	0	-	-	0	-	-	-	-	-	-	-	-
Vermont	179	0.511	9.7	154	0.603	9.7	89.6	0.356	22.7	68.2	0.002	0.0
Virginia	47	0.006	0.0	12	0.244	0.0	83.3	0.002	0.0	0.0	0.001	0.0
West Virginia	3	0.002	-	0	-	-	-	0.002	0.0	0.0	-	-
<b>Southeast</b>	<b>168</b>	<b>0.019</b>	<b>5.6</b>	<b>71</b>	<b>0.089</b>	<b>5.6</b>	<b>42.3</b>	<b>0.002</b>	<b>0.0</b>	<b>0.0</b>	<b>0.008</b>	<b>0.0</b>
Alabama	1	0.020	-	0	-	-	-	0.020	0.0	0.0	-	-
Florida	6	0.013	0.0	6	0.013	0.0	33.3	-	-	-	-	-
Georgia	8	0.124	100.0	4	10.332	100.0	100.0	0.002	0.0	0.0	0.002	0.0
Kentucky	0	-	-	0	-	-	-	-	-	-	-	-
Mississippi	0	-	-	0	-	-	-	-	-	-	-	-
North Carolina	16	0.003	-	0	-	-	-	-	-	-	0.003	0.0
Puerto Rico	4	0.023	-	0	-	-	-	-	-	-	0.023	0.0
South Carolina	133	0.021	0.0	61	0.079	0.0	39.3	0.002	0.0	0.0	0.009	0.0
Tennessee	0	-	-	0	-	-	-	-	-	-	-	-
Virgin Islands	0	-	-	0	-	-	-	-	-	-	-	-
<b>North Central</b>	<b>435</b>	<b>0.005</b>	<b>0.8</b>	<b>119</b>	<b>0.075</b>	<b>0.8</b>	<b>45.4</b>	<b>0.002</b>	<b>0.0</b>	<b>1.7</b>	<b>0.002</b>	<b>0.0</b>
Illinois	11	0.038	0.0	9	0.079	0.0	55.6	0.002	0.0	0.0	-	-
Indiana	1	0.010	0.0	1	0.010	0.0	0.0	-	-	-	-	-
Iowa	0	-	-	0	-	-	-	-	-	-	-	-
Michigan	184	0.002	0.0	2	0.002	0.0	0.0	0.002	0.0	0.0	0.002	0.0
Minnesota	214	0.015	0.9	106	0.083	0.9	46.2	0.005	0.0	8.8	0.002	0.0
Ohio	13	0.002	0.0	1	0.010	0.0	0.0	-	-	-	0.002	0.0
Wisconsin	12	0.002	-	0	-	-	-	0.002	0.0	0.0	0.002	0.0

See footnotes at end of table.

**Asbestos: Geometric mean exposures and percent exceeding designated occupational exposure limits by MSHA metal/nonmetal district and state, MSHA samples, 1979-2003 (page 2 of 2)**

MSHA Metal/Nonmetal District	All-years			1979-1986			1987-1994			1995-2003		
	No. of Samples	GM (f/cc)	% > REL	No. of Samples	GM (f/cc)	% > REL	No. of Samples	GM (f/cc)	% > REL	No. of Samples	GM (f/cc)	% > REL
<b>South Central</b>	<b>320</b>	<b>0.015</b>	<b>39.0</b>	<b>231</b>	<b>0.035</b>	<b>1.3</b>	<b>47</b>	<b>0.002</b>	<b>0.0</b>	<b>42</b>	<b>0.001</b>	<b>0.0</b>
Arkansas	0	-	-	0	-	-	0	-	-	0	-	-
Louisiana	45	0.002	-	0	-	-	45	0.002	0.0	0	-	-
Missouri	4	0.002	-	0	-	-	0	-	-	4	0.002	0.0
New Mexico	124	0.031	42.9	112	0.043	1.8	0	-	-	12	0.002	0.0
Oklahoma	27	0.033	40.7	27	0.033	0.0	0	-	-	0	-	-
Texas	120	0.014	33.7	92	0.028	1.1	2	0.002	0.0	26	0.001	0.0
<b>Rocky Mountain</b>	<b>269</b>	<b>0.204</b>	<b>87.1</b>	<b>225</b>	<b>0.327</b>	<b>4.9</b>	<b>29</b>	<b>0.008</b>	<b>0.0</b>	<b>15</b>	<b>0.102</b>	<b>0.0</b>
Arizona	89	0.527	92.1	89	0.527	11.2	0	-	-	0	-	-
Colorado	35	0.057	64.5	31	0.091	0.0	4	0.002	0.0	0	-	-
Kansas	0	-	-	0	-	-	0	-	-	0	-	-
Montana	74	0.279	91.9	62	0.378	1.6	12	0.058	0.0	0	-	-
Nebraska	0	-	-	0	-	-	0	-	-	0	-	-
Nevada	6	0.002	-	0	-	-	6	0.002	0.0	0	-	-
North Dakota	0	-	-	0	-	-	0	-	-	0	-	-
South Dakota	50	0.120	90.2	41	0.289	0.0	6	0.003	0.0	3	0.002	0.0
Utah	15	0.131	0.0	2	0.010	0.0	1	0.002	0.0	12	0.293	0.0
Wyoming	0	-	-	0	-	-	0	-	-	0	-	-
<b>Western</b>	<b>221</b>	<b>0.122</b>	<b>83.0</b>	<b>135</b>	<b>0.392</b>	<b>14.8</b>	<b>45</b>	<b>0.025</b>	<b>0.0</b>	<b>41</b>	<b>0.014</b>	<b>0.0</b>
Alaska	0	-	-	0	-	-	0	-	-	0	-	-
California	212	0.144	87.5	128	0.519	15.6	43	0.029	0.0	41	0.014	0.0
Hawaii	1	0.002	-	0	-	-	1	0.002	0.0	0	-	-
Idaho	1	0.002	-	0	-	-	1	0.002	0.0	0	-	-
Oregon	0	-	-	0	-	-	0	-	-	0	-	-
Washington	7	0.002	0.0	7	0.002	0.0	0	-	-	0	-	-
<b>TOTAL</b>	<b>1,851</b>	<b>0.030</b>	<b>67.2</b>	<b>1,021</b>	<b>0.166</b>	<b>5.3</b>	<b>377</b>	<b>0.004</b>	<b>1.3</b>	<b>453</b>	<b>0.003</b>	<b>0.0</b>

- indicates incalculable field. PEL - permissible exposure limit REL - recommended exposure limit GM - geometric mean f/cc - fibers per cubic centimeter  
 MSHA - Mine Safety and Health Administration  
 NOTE: The MSHA PEL is 2 f/cc. The NIOSH REL is 0.1 f/cc. See appendices for source description and methods.  
 SOURCE: MSHA metal/nonmetal mine data.