All Mine Safety and Health	2011	2012	2013	2014	2015	2016	201
Number of Mines	14,178	14,098	13,805	13,623	13,321	13,104	13,01
Number of Miners*	382,368	389,002	374,879	367,074	350,140	319,078	319,46
Fatalities*	36	36	42	46	29	25	2
-atal Injury Rate ^{1*}	.0110	.0110	.0132	.0148	.0099	.0095	.010
All Injury Rate ^{1*}	2.75	2.59	2.50	2.47	2.31	2.19	2.1
Total Mining Area Inspection Hours/Mine ²	62	62	59	58	56	55	5
Citations and Orders Issued ^{3, 4}	156,337	138,921	118,135	121,112	107,733	97,075	105,15
S&S Citations and Orders (%)	29%	27%	25%	25%	24%	22%	22
Dollar Amount Assessed (Millions) ⁴	161.1M	123.2M	94.6M	97.1M	65.2M	51.9M	49.4
All M: 0 () 111 M	0004	2225	2222	2227	2222	2222	
All Mine Safety and Health Number of Mines	2004 14,474	2005 14,665	2006 14,885	2007 14,871	2008 14,907	2009 14,628	20 1
Number of Mines*	335,463	347,406	365,191	379,969	393,933	356,567	362,02
-atalities*	55	58	73	67	53	35	002,02
Fatal Injury Rate ^{1*}	.0184	.0183	.0220	.0199	.0156	.0118	.023
All Injury Rate ^{1*}	3.99	3.91	3.64	3.43	3.26	3.02	2.8
Total Mining Area Inspection Hours/Mine ²	52	46	43	45	57	59	6
Citations and Orders Issued ^{3, 4}	120,584	127,754	140,059	144,068	173,514	173,053	170,05
S&S Citations and Orders (%)	33%	32%	32%	29%	28%	30%	32
Dollar Amount Assessed (Millions) ⁴	24.8M	28.1M	42.8M	129.4M	142.1M	136.7M	162.3
Bollar / Willoam / Noccocca (Williams)							
All Mine Safety and Health	1997	1998	1999	2000	2001	2002	200
Number of Mines	13,682	13,902	14,193	14,413	14,623	14,520	14,39
Number of Miners*	362,344	357,315	353,341	348,548	347,228	329,114	320,42
Fatalities*	91	80	90	85	72	70	5
Fatal Injury Rate ^{1*}	.0274	.0244	.0282	.0272	.0232	.0240	.019
All Injury Rate ^{1*}	5.52	5.51	5.08	5.13	4.75	4.61	4.0
Total Mining Area Inspection Hours/Mine ²	51	50	51	53	52	48	
Citations and Orders Issued ^{3, 4}	116,226	115,807	115,371	120,027	126,333	105,540	109,58
S&S Citations and Orders (%)	36%	38%	36%	36%	35%	33%	32
Dollar Amount Assessed (Millions) ⁴	20.3M	25.7M	27.1M	24.5M	23.3M	21.3M	22.0
All Mine Safety and Health	1990	1991	1992	1993	1994	1995	199
Number of Mines	16,158	15,667	14,997	14,630	14,361	13,859	13,53
Number of Miners*	404,315	388,784	377,695	360,503	369,143	361,647	355,49
Fatalities*	122	114	98	98	85	100	
Fatal Injury Rate ^{1*}	.0329	.0325	.0288	.0303	.0255	.0303	.026
All Injury Rate ^{1*}	8.37	8.17	7.48	7.10	6.96	6.30	5.7
Total Mining Area Inspection Hours/Mine ²	54	54	56	55	57	55	5
Citations and Orders Issued ^{3, 4}	155,958	156,723	146,573	136,731	136,601	123,044	106,87
S&S Citations and Orders (%)	58%	55%	50%	48%	45%	42%	38
Dollar Amount Assessed (Millions) ⁴	1.4M	9.4M	5.4M	15.6M	28.2M	21.6M	17.7
All Mine Safety and Health	1983	1984	1985	1986	1987	1988	198
Number of Mines	16,880	16,994	17,088	16,696	16,532	16,482	16,17
Number of Miners*	414,860	427,887	415,161	394,805	386,312	391,700	399,47
Fatalities*	132	205	125	138	130	102	1′
Fatal Injury Rate ^{1*}	.0361	.0529	.0334	.0385	.0367	.0282	.03
All Injury Rate ^{1*}	5.66	5.68	5.45	6.01	8.19	8.99	9.0

All Mine Safety and Health	1983	1984	1985	1986	1987	1988	1989
Number of Mines	16,880	16,994	17,088	16,696	16,532	16,482	16,179
Number of Miners*	414,860	427,887	415,161	394,805	386,312	391,700	399,478
Fatalities*	132	205	125	138	130	102	116
Fatal Injury Rate ^{1*}	.0361	.0529	.0334	.0385	.0367	.0282	.0317
All Injury Rate ^{1*}	5.66	5.68	5.45	6.01	8.19	8.99	9.08
Total Mining Area Inspection Hours/Mine ²	26	57	57	56	57	56	54
Citations and Orders Issued ^{3, 4}	107,996	131,745	134,171	132,971	153,465	161,363	160,998
S&S Citations and Orders (%)	31%	47%	58%	61%	60%	60%	59%
Dollar Amount Assessed (Millions) ⁴	N/A						

All Mine Safety and Health	1978	1979	1980	1981	1982
Number of Mines	20,085	20,475	20,432	20,325	17,745
Number of Miners*	544,165	568,514	554,642	546,586	471,479
Fatalities*	242	267	236	237	173
Fatal Injury Rate ^{1*}	.0515	.0521	.0475	.0502	.0479
All Injury Rate ^{1*}	8.85	8.79	8.09	7.16	6.78
Total Mining Area Inspection Hours/Mine ²	N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued ^{3, 4}	N/A	N/A	N/A	N/A	N/A
S&S Citations and Orders (%)	N/A	N/A	N/A	N/A	N/A
Dollar Amount Assessed (Millions) ⁴	N/A	N/A	N/A	N/A	N/A

NOTE: 1978-1982 data not available in the MSIS

Data source (for 1978-1982):

All Coal: http://arlweb.msha.gov/ACCINJ/BOTHCL.HTM All MNM: http://arlweb.msha.gov/ACCINJ/ALLMETAL.HTM

*Values are all inclusive of operator and contractor employees.

1-Reported injuries per 200,000 hours worked.

2-Total Mining Area Time includes: On-site Inspection Time (M/NM), MMU Pit Time (Coal), Outby Area Time (Coal), Surface Area Time (Coal), Citation/Order writing On-Site. On-site inspection hours represent hours entered by Authorized Representatives of the Secretary (AR) for certain inspection activities and task codes.

3-Citations and orders are those not vacated.

4-Citations and Orders issued, and Dollar Amount Assessed, are based on issue date. Therefore, citation counts and dollars assessed can fluctuate, upwards or downwards, depending on the date information was pulled. For example, numbers tend to fluctuate downwards when an issued citation is either conferenced or contested and is subsequently vacated. Dollars assessed can fluctuate upwards when there is a lag time between the issuance date and the assessed date.

Coal Mine Safety and Health	2011	2012	2013	2014	2015	2016	2017
Number of Coal Mines	1,972	1,871	1,704	1,633	1,459	1,289	1,208
Number of Miners*	143,940	138,338	123,446	116,318	102,871	81,875	82,843
Fatalities*	20	20	20	16	12	8	15
Fatal Injury Rate ^{1*}	.0148	.0159	.0176	.0149	.0131	.0115	.0202
All Injury Rate ^{1*}	3.43	3.21	3.15	3.15	2.93	2.91	3.16
States with Coal Mining	26	26	26	26	26	26	25
Coal Production (Millions of Tons)	1,095	1,018	984	1,000	897	728	774
Total Mining Area Inspection Hours/Mine ²	258	250	249	252	245	246	252
CY Inspection Completion Rate (%)	100	100	100	100	100	100	100
Citations and Orders Issued ^{3, 4}	93,057	78,848	63,182	62,483	49,338	40,541	46,896
S&S Citations and Orders (%)	32%	28%	26%	25%	23%	21%	22%
Dollar Amount Assessed (Millions) ⁴	119.9M	89.6M	65.1M	63M	37.1M	25.8M	24M

Coal Mine Safety and Health	2004	2005	2006	2007	2008	2009	2010
Number of Coal Mines	2,007	2,060	2,110	2,028	2,128	2,074	1,943
Number of Miners*	109,426	117,133	123,609	123,547	134,525	134,309	136,085
Fatalities*	28	23	47	34	30	18	48
Fatal Injury Rate ^{1*}	.0273	.0205	.0399	.0293	.0237	.0148	.0384
All Injury Rate ^{1*}	4.93	4.61	4.47	4.21	3.9	3.71	3.47
States with Coal Mining	26	26	26	26	26	26	26
Coal Production (Millions of Tons)	1,111	1,133	1,163	1,146	1,172	1,075	1,086
Total Mining Area Inspection Hours/Mine ²	174	163	162	174	230	240	260
CY Inspection Completion Rate (%)	98.9	98.1	94.1	83.8	100	100	100
Citations and Orders Issued3, 4	64,348	69,012	77,631	84,138	106,787	101,900	96,347
S&S Citations and Orders (%)	42%	39%	39%	35%	32%	30%	32%
Dollar Amount Assessed (Millions) ⁴	15.5M	17.4M	29.9M	98.9M	110.3M	96.3M	110.2M

Coal Mine Safety and Health	1997	1998	1999	2000	2001	2002	2003
Number of Coal Mines	2,607	2,491	2,304	2,121	2,142	2,063	1,970
Number of Miners*	126,421	122,072	114,476	108,077	114,444	110,955	104,818
Fatalities*	30	29	35	38	42	28	30
Fatal Injury Rate1*	.0262	.0261	.0340	.0393	.0402	.0280	.0312
All Injury Rate1*	6.97	7.15	6.44	6.65	6.04	6.03	5.07
States with Coal Mining	26	26	27	26	26	26	26
Coal Production (Millions of Tons)	1,091	1,119	1,098	1,078	1,128	1,094	1,070
Total Mining Area Inspection Hours/Mine ²	159	154	160	170	176	173	170
CY Inspection Completion Rate (%)	N/A	N/A	N/A	99.1	98.1	98.9	98.8
Citations and Orders Issued3, 4	66,752	62,597	57,501	58,292	68,142	57,192	56,674
S&S Citations and Orders (%)	39%	42%	42%	42%	41%	39%	39%
Dollar Amount Assessed (Millions) ⁴	10.9M	13.3M	13.4M	11.7M	13.7M	13.1M	13.4M

Coal Mine Safety and Health	1990	1991	1992	1993	1994	1995	1996
Number of Coal Mines	4,318	4,023	3,701	3,428	3,266	2,943	2,687
Number of Miners*	168,611	158,669	153,120	141,176	143,636	132,101	126,443
Fatalities*	66	61	55	47	45	47	39
Fatal Injury Rate ^{1*}	.0425	.0423	.0399	.0382	.0354	.0398	.0340
All Injury Rate1*	10.18	10.18	9.47	8.95	8.95	8.22	7.24
States with Coal Mining	29	28	27	27	27	26	26
Coal Production (Millions of Tons)	1,018	986	987	940	1,029	1,029	1,063
Total Mining Area Inspection Hours/Mine ²	128	131	142	147	156	153	158
CY Inspection Completion Rate (%)	97.8	N/A	N/A	N/A	N/A	95.6	N/A
Citations and Orders Issued ^{3, 4}	107,508	109,196	93,306	90,401	89,780	82,130	71,396
S&S Citations and Orders (%)	69%	63%	60%	58%	54%	48%	42%
Dollar Amount Assessed (Millions) ⁴	1.2M	9.1M	4.6M	13.4M	20.4M	16.0M	12.5M

Coal Mine Safety and Health	1983	1984	1985	1986	1987	1988	1989
Number of Coal Mines	5,496	5,538	5,256	5,116	4,917	4,673	4,413
Number of Miners*	200,188	208,144	197,036	185,155	172,762	166,266	164,920
Fatalities*	70	125	68	89	63	53	68
Fatal Injury Rate ^{1*}	.0400	.0664	.0379	.0529	.0400	.0349	.0450
All Injury Rate1*	6.95	6.87	6.50	7.29	10.53	10.94	10.65
States with Coal Mining	27	27	26	26	28	27	28
Coal Production (Millions of Tons)	759	878	857	871	898	939	968
Total Mining Area Inspection Hours/Mine ²	42	114	121	129	128	131	126
CY Inspection Completion Rate (%)	N/A						
Citations and Orders Issued ^{3, 4}	92,704	110,901	108,916	103,156	115,045	113,902	110,245
S&S Citations and Orders (%)	33%	50%	62%	68%	68%	71%	71%
Dollar Amount Assessed (Millions) ⁴	N/A						

Coal Mine Safety and Health		1978	1979	1980	1981	1982
Number of Coal Mines		7,162	6,743	6,866	7,182	6,861
Number of Miners*		255,588	260,429	253,007	249,738	241,454
Fatalities*		106	144	133	153	122
Fatal Injury Rate ^{1*}		.0527	.0627	.0587	.0725	.0582
All Injury Rate1*		10.05	10.31	10.03	8.92	8.35
States with Coal Mining		26	26	26	26	26
Coal Production (Millions of Tons)		632	742	798	788	812
Total Mining Area Inspection Hours/Mine ²		N/A	N/A	N/A	N/A	N/A
CY Inspection Completion Rate (%)		N/A	N/A	N/A	N/A	N/A
Citations and Orders Issued3, 4		N/A	N/A	N/A	N/A	N/A
S&S Citations and Orders (%)		N/A	N/A	N/A	N/A	N/A
Dollar Amount Assessed (Millions) ⁴		N/A	N/A	N/A	N/A	N/A

NOTE: 1978-1982 data not available in the MSIS

Data source (for 1978-1982):

All Coal: http://arlweb.msha.gov/ACCINJ/BOTHCL.HTM

*Values are all inclusive of operator and contractor employees.

1-Reported injuries per 200,000 hours worked.

2-Total Mining Area Time includes:MMU Pit Time (Coal), Outby Area Time (Coal), Surface Area Time (Coal), Citation/Order writing On-Site. On-site inspection hours represent hours entered by Authorized Representatives of the Secretary (AR) for certain inspection activities and task codes.

3-Citations and orders are those not vacated.

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Metal and Nonmetal Mine Safety and Health	2011	2012	2013	2014	2015	2016	2017
Number of Metal/Nonmetal Mines	12,206	12,227	12,101	11,990	11,862	11,815	11,807
Number of Miners*	238,428	250,664	251,433	250,576	247,269	237,203	236,622
Fatalities*	16	16	22	30	17	17	13
Fatal Injury Rate ^{1*}	.0083	.0079	.0108	.0147	.0084	.0088	.0067
All Injury Rate ^{1*}	2.28	2.2	2.14	2.11	2.03	1.94	1.76
States with M/NM Mining	50	50	50	50	50	50	50
Total Mining Area Inspection Hours/Mine ²	23	23	22	23	24	23	24
CY Inspection Completion Rate (%)	100	100	100	100	100	100**	100**
Citations and Orders Issued ^{3, 4}	63,280	60,073	54,953	58,629	58,395	56,534	58,255
S&S Citations and Orders (%)	26%	25%	24%	24%	25%	23%	23%
Dollar Amount Assessed (Millions) ⁴	41.2M	33.6M	29.5M	33.8M	28.1M	26.1M	25.4M
Matal and Name at al Mine Cofety and Health	0004	2005	2000	0007	2000	2000	2040
Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines	2004	2005	2006	2007	2008	2009	2010
	12,467	12,605	12,775	12,843	12,779	12,554	12,340
Number of Miners*	226,037 27	230,273 35	241,582 26	256,422 33	259,408 23	222,258 17	225,942 24
Fatalities*	1 1					1	
Fatal Injury Rate ^{1*}	.0137	.0170	.0121	.0149	.0107	.0098	.0134
All Injury Rate ^{1*}	3.49	3.53	3.18	3.02	2.88	2.54	2.38
States with M/NM Mining	50	50	50	50	50	50	50
Total Mining Area Inspection Hours/Mine ²	26	21	19	19	22	22	24
CY Inspection Completion Rate (%)	90.2	87.7	93.5	87.5	100	100	100
Citations and Orders Issued ^{3, 4}	56,236	58,742	62,428	59,930	66,727	71,153	73,710
S&S Citations and Orders (%)	24%	23%	23%	22%	21%	29%	32%
Dollar Amount Assessed (Millions) ⁴	9.3M	10.7M	12.9M	30.5M	31.7M	40.4M	52.1M
Metal and Nonmetal Mine Safety and Health	1997	1998	1999	2000	2001	2002	2003
Number of Metal/Nonmetal Mines	11,075	11,411	11,889	12,292	12,481	12,457	12,420
Number of Miners*	235,923	235,243	238,865	240,471	232,784	218,159	215,603
Fatalities*	61	51	55	47	30	42	26
Fatal Injury Rate ^{1*}	.0281	.0235	.0254	.0218	.0146	.0220	.0138
All Injury Rate ^{1*}	4.75	4.67	4.44	4.45	4.10	3.86	3.49
States with M/NM Mining	50	50	50	50	50	50	50
Total Mining Area Inspection Hours/Mine ²	21	23	25	25	24	21	25
CY Inspection Completion Rate (%)	N/A	N/A	N/A	73.7	75.3	87.6	87.4
Citations and Orders Issued ^{3, 4}	49,474	53,210	57,870	61,735	58,191	48,348	52,915
S&S Citations and Orders (%)	32%	33%	31%	31%	28%	26%	24%
Dollar Amount Assessed (Millions) ⁴	9.4M	12.4M	13.7M	12.9M	9.6M	8.3M	8.7M
		•		•	•		
Metal and Nonmetal Mine Safety and Health	1990	1991	1992	1993	1994	1995	1996
Number of Metal/Nonmetal Mines	11,840	11,644	11,296	11,202	11,095	10,916	10,845
Number of Miners*	235,704	230,115	224,575	219,327	225,507	229,546	229,053
Fatalities*	56	53	43	51	40	53	47
Fatal Injury Rate ^{1*}	.0261	.0256	.0213	.0255	.0194	.0250	.0218
All Injury Rate ^{1*}	7.05	6.76	6.13	5.96	5.73	5.24	4.92
States with M/NM Mining	50	50	50	50	50	50	50
Total Mining Area Inspection Hours/Mine ²	24	25	25	24	24	24	23
CY Inspection Completion Rate (%)	98.8	N/A	N/A	N/A	N/A	97.6	N/A
Citations and Orders Issued3, 4	48,450	47,527	53,267	46,330	46,821	40,914	35,475
S&S Citations and Orders (%)	35%	36%	32%	30%	29%	28%	29%
Dollar Amount Assessed (Millions) ⁴	136K	350K	780K	2.2M	7.8M	5.5M	5.1M
			1005	1000	100=	1000	
Metal and Nonmetal Mine Safety and Health	1983	1984	1985	1986	1987	1988	1989
Number of Metal/Nonmetal Mines	11,384	11,456	11,832	11,580	11,615	11,809	11,766
Number of Metal/Nonmetal Mines Number of Miners*	11,384 214,672	11,456 219,743	11,832 218,125	11,580 209,650	11,615 213,550	11,809 225,434	11,766 234,558
Number of Metal/Nonmetal Mines Number of Miners* Fatalities*	11,384 214,672 62	11,456 219,743 80	11,832 218,125 57	11,580 209,650 49	11,615 213,550 67	11,809 225,434 49	11,766 234,558 48
Number of Metal/Nonmetal Mines Number of Miners* Fatalities* Fatal Injury Rate ¹	11,384 214,672 62 .0326	11,456 219,743 80 .0401	11,832 218,125 57 .0293	11,580 209,650 49 .0257	11,615 213,550 67 .0340	11,809 225,434 49 .0234	11,766 234,558 48 .0223
Number of Metal/Nonmetal Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*}	11,384 214,672 62 .0326 4.48	11,456 219,743 80 .0401 4.56	11,832 218,125 57 .0293 4.48	11,580 209,650 49 .0257 4.89	11,615 213,550 67 .0340 6.31	11,809 225,434 49 .0234 7.57	11,766 234,558 48 .0223 7.98
Number of Metal/Nonmetal Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining	11,384 214,672 62 .0326 4.48 50	11,456 219,743 80 .0401 4.56 50	11,832 218,125 57 .0293 4.48 50	11,580 209,650 49 .0257 4.89 50	11,615 213,550 67 .0340 6.31 50	11,809 225,434 49 .0234 7.57 50	11,766 234,558 48 .0223 7.98 50
Number of Metal/Nonmetal Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ²	11,384 214,672 62 .0326 4.48 50	11,456 219,743 80 .0401 4.56 50	11,832 218,125 57 .0293 4.48 50	11,580 209,650 49 .0257 4.89 50	11,615 213,550 67 .0340 6.31 50 22	11,809 225,434 49 .0234 7.57 50 23	11,766 234,558 48 .0223 7.98 50 23
Number of Metal/Nonmetal Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ² CY Inspection Completion Rate (%)	11,384 214,672 62 .0326 4.48 50	11,456 219,743 80 .0401 4.56 50	11,832 218,125 57 .0293 4.48 50	11,580 209,650 49 .0257 4.89 50	11,615 213,550 67 .0340 6.31 50	11,809 225,434 49 .0234 7.57 50	11,766 234,558 48 .0223 7.98 50
Number of Metal/Nonmetal Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ² CY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4}	11,384 214,672 62 .0326 4.48 50	11,456 219,743 80 .0401 4.56 50	11,832 218,125 57 .0293 4.48 50	11,580 209,650 49 .0257 4.89 50	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753
Number of Metal/Nonmetal Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ² CY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%)	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19	11,832 218,125 57 .0293 4.48 50 19 N/A	11,580 209,650 49 .0257 4.89 50 20 N/A	11,615 213,550 67 .0340 6.31 50 22 N/A	11,809 225,434 49 .0234 7.57 50 23 N/A	11,766 234,558 48 .0223 7.98 50 23 N/A
Number of Metal/Nonmetal Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ² CY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4}	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3, 4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A
Number of Metal/Nonmetal Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ² CY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A
Number of Metal/Nonmetal Mines Number of Miners* Fatalities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ² CY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners*	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 1979 13,732 308,085	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 13,566 301,635	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025
Number of Metal/Nonmetal Mines Number of Miners* Fatalities* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3, 4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatalities*	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 1979 13,732 308,085 123	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 1980 13,566 301,635	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 10,884 230,025
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1*	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 13,566 301,635 103 .0381	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51
Number of Metal/Nonmetal Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ² CY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*}	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 13,566 301,635 103 .0381 6.46	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321 5.75	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 10,884 230,025 51 .0336 4.62
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 13,566 301,635 103 .0381	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51
Number of Metal/Nonmetal Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ² CY Inspection Completion Rate (%) Citations and Orders Issued ^{3, 4} S&S Citations and Orders (%) Dollar Amount Assessed (Millions) ⁴ Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatallities* Fatal Injury Rate ^{1*} All Injury Rate ^{1*} States with M/NM Mining Total Mining Area Inspection Hours/Mine ²	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95 50 N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57 50 N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 1980 13,566 301,635 103 .0381 6.46 50 N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321 5.75 50 N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51 .0336 4.62 50
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%)	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 1980 13,566 301,635 103 .0381 6.46 50	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 1981 13,143 296,848 84 .0321 5.75	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 10,884 230,025 51 .0336 4.62
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95 50 N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57 50 N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 1980 13,566 301,635 103 .0381 6.46 50 N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321 5.75 50 N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51 .0336 4.62 50
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%)	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95 50 N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57 50 N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 1980 13,566 301,635 103 .0381 6.46 50 N/A N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 1981 13,143 296,848 84 .0321 5.75 50 N/A N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51 .0336 4.62 50 N/A
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95 50 N/A N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57 50 N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 13,566 301,635 103 .0381 6.46 50 N/A N/A N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321 5.75 50 N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51 .0336 4.62 50 N/A
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%)	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95 50 N/A N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57 50 N/A N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 1980 13,566 301,635 103 .0381 6.46 50 N/A N/A N/A N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321 5.75 50 N/A N/A N/A N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51 .0336 4.62 50 N/A N/A
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95 50 N/A N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57 50 N/A N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 1980 13,566 301,635 103 .0381 6.46 50 N/A N/A N/A N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321 5.75 50 N/A N/A N/A N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51 .0336 4.62 50 N/A N/A
Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 Metal and Nonmetal Mine Safety and Health Number of Metal/Nonmetal Mines Number of Miners* Fatal Injury Rate1* All Injury Rate1* States with M/NM Mining Total Mining Area Inspection Hours/Mine2 CY Inspection Completion Rate (%) Citations and Orders Issued3,4 S&S Citations and Orders (%) Dollar Amount Assessed (Millions)4 NOTE: 1978-1982 data not available in the MSIS	11,384 214,672 62 .0326 4.48 50 18 N/A 15,292 20%	11,456 219,743 80 .0401 4.56 50 19 N/A 20,844 30%	11,832 218,125 57 .0293 4.48 50 19 N/A 25,255 37% N/A 12,923 288,577 136 .0505 7.95 50 N/A N/A	11,580 209,650 49 .0257 4.89 50 20 N/A 29,815 39% N/A 13,732 308,085 123 .0435 7.57 50 N/A N/A	11,615 213,550 67 .0340 6.31 50 22 N/A 38,420 36% N/A 1980 13,566 301,635 103 .0381 6.46 50 N/A N/A N/A N/A	11,809 225,434 49 .0234 7.57 50 23 N/A 47,461 36% N/A 13,143 296,848 84 .0321 5.75 50 N/A N/A N/A N/A	11,766 234,558 48 .0223 7.98 50 23 N/A 50,753 34% N/A 1982 10,884 230,025 51 .0336 4.62 50 N/A N/A

*Values are all inclusive of operator and contractor employees.

**MNM completed 16,602 regular inspections in 2015. Primarily because of the number of intermittent operations in MNM, its inspectors attempted but could not conduct another 703 regular inspections. MNM conducted 100% of mandatory inspections at mines available for inspection in 2015.

1-Reported injuries per 200,000 hours worked.

2-Total Mining Area Time includes: On-site Inspection Time (M/NM), Citation/Order writing On-Site. On-site inspection hours represent hours entered by Authorized Representatives of the Secretary (AR) for certain inspection activities and task codes.

3-Citations and orders are those not vacated.

4-Citations and Orders issued, and Dollar Amount Assessed, are based on issue date. Therefore, citation counts and dollars assessed can fluctuate, upwards or downwards, depending on the date information was pulled. For example, numbers tend to fluctuate downwards when an issued citation is either conferenced or contested and is subsequently vacated. Dollars assessed can fluctuate upwards when there is a lag time between the issuance date and the assessed date.

CONTRACTORS (At A Glance Data CY 1978-2017)

Mine Contractors	2011	2012	2013	2014	2015	2016	2017
Coal Fatalities ²	6	2012	2013	3	2013	0	1
MNM Fatalities ²	4	3	2	9	6	5	1
Total Fatalities ²	10	5	4	12	8	5	2
Coal Fatal Injury Rate ¹	.0093	.0029	.0030		.0036	.0000	.0021
MNM Fatal Injury Rate ¹	.0062	.0044	.0030		.0107	.0106	.0021
Total Fatal Injury Rate ¹	.0155	.0073	.0061	.0194	.0142	.0106	.0043
Total Fatal Injury Nate	.0100	.0070	.0001	.010+	.0142	.0100	.0040
Mine Contractors	2004	2005	2006	2007	2008	2009	2010
Coal Fatalities ²	5	6	5	6	12	8	4
MNM Fatalities ²	8	2	7	12	6	6	10
Total Fatalities ²	13	8	12	18	18	14	14
Coal Fatal Injury Rate ¹	.0116	.0123	.0091	.0098	.0180	.0152	.0071
MNM Fatal Injury Rate ¹	.0186	.0041	.0128	.0196	.0090	.0114	.0178
Total Fatal Injury Rate ¹	.0302	.0164	.0219	.0294	.0270	.0265	.0249
	4007	1000	1000	2222	0004	2222	2222
Mine Contractors Coal Fatalities ²	1997	1998	1999	2000	2001	2002	2003
MNM Fatalities ²	22	16	18	12	10	7	4
Total Fatalities ²	28	20	24	22	16	14	12
Coal Fatal Injury Rate ¹	.0153	.0100	.0144	.0221	.0133	.0185	.0213
MNM Fatal Injury Rate ¹	.0561	.0401	.0433		.0222	.0185	.0107
Total Fatal Injury Rate ¹	.0714	.0502	.0577	.0487	.0355	.0370	.0320
Total Fatal Injury Nate	.07 14	.0002	.0011	.0407	.0000	.0370	.0020
Mine Contractors	1990	1991	1992	1993	1994	1995	1996
Mine Contractors Coal Fatalities ²	7	7	12	11	10	9	3
Coal Fatalities ² MNM Fatalities ²	7 12	7 12	12 12	11 11	10 6	9 15	3 11
Coal Fatalities ² MNM Fatalities ² Total Fatalities ²	7 12 19	7 12 19	12 12 24	11 11 22	10 6 16	9 15 24	3 11 14
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹	7 12 19 .0269	7 12 19 .0244	12 12 24 .0411	11 11 22 .0370	10 6 16 .0301	9 15 24 .0254	3 11 14 .0082
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹	7 12 19 .0269 .0461	7 12 19 .0244 .0419	12 12 24 .0411 .0411	11 11 22 .0370 .0370	10 6 16 .0301 .0180	9 15 24 .0254 .0423	3 11 14 .0082 .0302
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹	7 12 19 .0269	7 12 19 .0244	12 12 24 .0411	11 11 22 .0370 .0370	10 6 16 .0301 .0180	9 15 24 .0254	3 11 14 .0082 .0302
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹	7 12 19 .0269 .0461 .0730	7 12 19 .0244 .0419 .0664	12 24 .0411 .0411 .0823	11 11 22 .0370 .0370 .0739	10 6 16 .0301 .0180 .0481	9 15 24 .0254 .0423 .0676	3 11 14 .0082 .0302 .0385
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors	7 12 19 .0269 .0461 .0730	7 12 19 .0244 .0419 .0664	12 24 .0411 .0411 .0823	11 11 22 .0370 .0370 .0739	10 6 16 .0301 .0180 .0481	9 15 24 .0254 .0423 .0676	3 11 14 .0082 .0302 .0385
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ²	7 12 19 .0269 .0461 .0730 1983 3	7 12 19 .0244 .0419 .0664 1984 8	12 24 .0411 .0411 .0823	11 11 22 .0370 .0370 .0739 1986 4	10 6 16 .0301 .0180 .0481	9 15 24 .0254 .0423 .0676 1988 9	3 11 14 .0082 .0302 .0385 1989 5
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ²	7 12 19 .0269 .0461 .0730 1983 3	7 12 19 .0244 .0419 .0664 1984 8	12 24 .0411 .0411 .0823 1985 4	11 11 22 .0370 .0370 .0739 1986 4	10 6 16 .0301 .0180 .0481 1987 5 12	9 15 24 .0254 .0423 .0676 1988 9 14	3 11 14 .0082 .0302 .0385 1989 5 11
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ²	7 12 19 .0269 .0461 .0730 1983 3 9 12	7 12 19 .0244 .0419 .0664 1984 8 10 18	12 24 .0411 .0411 .0823 1985 4 13	11 11 22 .0370 .0370 .0739 1986 4 6 10	10 6 16 .0301 .0180 .0481 1987 5 12 17	9 15 24 .0254 .0423 .0676 1988 9 14 23	3 11 14 .0082 .0302 .0385 1989 5 11
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹	7 12 19 .0269 .0461 .0730 1983 3	7 12 19 .0244 .0419 .0664 1984 8 10 18	12 24 .0411 .0411 .0823 1985 4	11 22 .0370 .0370 .0739 1986 4 6 10 .0251	10 6 16 .0301 .0180 .0481 1987 5 12	9 15 24 .0254 .0423 .0676 1988 9 14	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatalities ² MNM Fatal Injury Rate ¹	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235	7 12 19 .0244 .0419 .0664 1984 8 10 18	12 24 .0411 .0411 .0823 1985 4 13 17 .0247	11 11 22 .0370 .0370 .0739 1986 4 6 10 .0251 .0376	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194 .0427
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235 .0704	7 12 19 .0244 .0419 .0664 1984 8 10 18 .0551 .0689	12 24 .0411 .0411 .0823 1985 4 13 17 .0247 .0802	11 11 22 .0370 .0370 .0739 1986 4 6 10 .0251 .0376	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405 .0630	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235 .0704	7 12 19 .0244 .0419 .0664 1984 8 10 18 .0551 .0689	12 24 .0411 .0411 .0823 1985 4 13 17 .0247 .0802 .1048	11 11 22 .0370 .0370 .0739 1986 4 6 10 .0251 .0376 .0626	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682 .0966	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405 .0630 .1036	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194 .0427 .0621
Coal Fatalities ² MNM Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Coal Fatal Injury Rate ¹	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235 .0704	7 12 19 .0244 .0419 .0664 1984 8 10 18 .0551 .0689	12 24 .0411 .0411 .0823 1985 4 13 17 .0247 .0802 .1048 1978 N/A	11 11 22 .0370 .0370 .0739 1986 4 6 10 .0251 .0376 .0626	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682 .0966 1980 N/A	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405 .0630 .1036 1981 N/A	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194 .0427 .0621
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Total Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² Mine Contractors Coal Fatalities ² MNM Fatalities ²	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235 .0704	7 12 19 .0244 .0419 .0664 1984 8 10 18 .0551 .0689	12 24 .0411 .0411 .0823 1985 4 13 17 .0247 .0802 .1048 N/A N/A	11 11 22 .0370 .0370 .0739 1986 4 6 10 .0251 .0376 .0626 1979 N/A N/A	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682 .0966 1980 N/A N/A	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405 .0630 .1036 1981 N/A N/A	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194 .0427 .0621 N/A N/A
Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ²	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235 .0704	7 12 19 .0244 .0419 .0664 1984 8 10 18 .0551 .0689	12 24 .0411 .0411 .0823 1985 4 13 17 .0247 .0802 .1048 N/A N/A	11 11 22 .0370 .0370 .0739 1986 4 6 10 .0251 .0376 .0626 1979 N/A N/A	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682 .0966 N/A N/A N/A	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405 .0630 .1036 1981 N/A N/A	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194 .0427 .0621 N/A N/A
Coal Fatalities ² MNM Fatalities ² Total Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Total Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² Total Fatalities ² Total Fatalities ² Total Fatalities ² Coal Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235 .0704	7 12 19 .0244 .0419 .0664 1984 8 10 18 .0551 .0689	12 24 .0411 .0411 .0823 1985 4 13 17 .0247 .0802 .1048 N/A N/A N/A	11 11 22 .0370 .0370 .0739 1986 4 6 10 .0251 .0376 .0626 1979 N/A N/A N/A N/A	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682 .0966 1980 N/A N/A N/A	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405 .0630 .1036 1981 N/A N/A N/A	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194 .0427 .0621 N/A N/A N/A
Coal Fatalities ² MNM Fatalities ² Total Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Total Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Coal Fatalities ² Total Fatalities ²	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235 .0704	7 12 19 .0244 .0419 .0664 1984 8 10 18 .0551 .0689	12 24 .0411 .0411 .0823 1985 4 13 17 .0247 .0802 .1048 N/A N/A N/A N/A	11 11 22 .0370 .0370 .0370 .0739 1986 4 6 10 .0251 .0376 .0626 1979 N/A N/A N/A N/A N/A	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682 .0966 1980 N/A N/A N/A N/A	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405 .0630 .1036 1981 N/A N/A N/A N/A	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194 .0427 .0621 N/A N/A N/A N/A
Coal Fatalities ² MNM Fatalities ² Total Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² MNM Fatalities ² Total Fatalities ² Total Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ MNM Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Total Fatal Injury Rate ¹ Mine Contractors Coal Fatalities ² Total Fatalities ² Total Fatalities ² Total Fatalities ² Coal Fatalities ² Total Fatalities ² Coal Fatal Injury Rate ¹	7 12 19 .0269 .0461 .0730 1983 3 9 12 .0235 .0704	7 12 19 .0244 .0419 .0664 1984 8 10 18 .0551 .0689	12 24 .0411 .0411 .0823 1985 4 13 17 .0247 .0802 .1048 N/A N/A N/A	11 11 22 .0370 .0370 .0739 1986 4 6 10 .0251 .0376 .0626 1979 N/A N/A N/A N/A	10 6 16 .0301 .0180 .0481 1987 5 12 17 .0284 .0682 .0966 1980 N/A N/A N/A	9 15 24 .0254 .0423 .0676 1988 9 14 23 .0405 .0630 .1036 1981 N/A N/A N/A	3 11 14 .0082 .0302 .0385 1989 5 11 16 .0194 .0427 .0621 1982 N/A N/A N/A

¹⁻Reported injuries per 200,000 hours worked.

²⁻Contractor fatalities are not exclusive to those reported in the All Mine Safety and Health; Coal Mine Safety and Health; and, Metal and Nonmetal Mine Safety and Health sections of this report.