

Informational Report 1075

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# Injury Experience in Coal Mining, 1973

By Staff, Division of Mining Information System,  
Health and Safety Analysis Center, Denver, Colo.

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UNITED STATES DEPARTMENT OF THE INTERIOR  
Cecil D. Andrus, Secretary

Mining Enforcement and Safety Administration  
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# INJURY EXPERIENCE IN COAL MINING, 1973

by

Staff, Division of Mining Information Systems  
Health and Safety Analysis Center

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## ABSTRACT

This Mining Enforcement and Safety Administration (MESA) report reviews in detail accident, injury, and illness experience in the anthracite and bituminous coal industries of the United States for 1973. Fifty-seven tables summarize the reported work injuries by work location, principal cause of injury, degree of injury, part of body injured, and nature of injury, and contain correlative information on employment, worktime, and operating activity. Concise historical information is presented in nine tables.

## INTRODUCTION

Under provisions of Section 111, Public Law 91-173, Federal Coal Mine Health and Safety Act of 1969, the Mining Enforcement and Safety Administration collects accident, injury, illness, employment, and production data for anthracite and bituminous coal mines and preparation plants in the United States by a mandatory reporting system. In 1972, the report formats and procedures for reporting and data processing were modified. Consequently, some information previously published is not now available, while other information, such as nondisabling injury data not formerly collected, is available for years after 1971.

For 1972 and subsequent years, only those data reported by operators are incorporated into the data base. No estimates are made of employment, man-hours, injuries, or tons of coal produced for nonrespondent operations except only as necessary to meet statistical processing requirements by providing minimum employment data for reported unmatched injury data in file. Prior to 1972, employment, nonfatal injury data, and coal production were estimated for nonrespondent operations based on Bureau of Mines production statistics.

## SCOPE OF STATISTICS

The statistical data in this report cover the work experience of all coal industry personnel engaged in exploration, development, production,

maintenance and repair, and construction work including contractors on mine property, as well as supervisory and technical personnel. Information concerning onsite officeworkers at coal mines and preparation plants appears in the Salient Statistics table and where specifically mentioned in table title.

The compiled information is based on reports covering 2,854 mines, 736 preparation plants, and 71 independent shops in operation during all or part of 1973.

The terminology used throughout this report is that generally used by the mineral-extractive industries and by MESA. The recording and measuring of work injury experience follow the American National Standard Method.<sup>1</sup>

#### DEFINITION OF TERMS

Key terms used in this publication series are defined or described as follows:

Disabling work injury.--Any injury suffered by a person that arises out of and in the course of his employment that results in death, permanent total disability, permanent partial disability, or temporary total disability.

Fatality.--Any death resulting from a work injury.

Permanent total disability.--Any disabling work injury other than death that permanently and totally incapacitates an employee from following any gainful occupation, or that results in the loss, or the complete loss of use, of both or any two: hands, arms, legs, feet, or eyes.

Permanent partial disability.--Any disabling work injury other than death or permanent total disability that results in the loss, or the complete loss of use, of any member or part of a member of the body, or any permanent impairment of functions of the body or part thereof, regardless of any preexisting disability of the injured member or impaired body function.

Temporary total disability.--Any disabling work injury that does not result in death or permanent impairment, but which renders the injured person unable to perform a regularly established job that is open and available to him, during the entire time interval corresponding to the hours of his regular shift on any one or more days (including Sundays, days off, or plant shutdown) subsequent to the date of injury.

---

<sup>1</sup>American National Standards Institute, Inc., American National Standard Method of Recording and Measuring Work Injury Experience, ANSI Z16.1-1967 (R1973).

Injury-frequency rates.--The number of work injuries per million man-hours of exposure or per million short tons of coal, calculated by multiplying the total number of work injuries by one million and dividing the product by the total man-hours of worktime or the total short tons of coal, respectively.

Days lost.--The number of full calendar days the injured employee was unable to work as the result of a temporary total disability.

Days charged.--All fatalities and permanent total disabilities have a standard time-loss charge of 6,000 days. Injuries resulting in permanent partial disability are assigned a time-loss charge depending upon the particular injury as specified in ANSI Z16.1-1967 (R1973).

Disabling injury-severity rates.--The number of days lost or charged from disabling work injuries per million man-hours of exposure or per million short tons of coal. Rates are calculated by multiplying the total number of days lost or charged by one million and dividing the product by the total man-hours of worktime or total short tons of coal.

Average severity.--The average number of days lost or charged per disabling injury. It is calculated from the total number of days lost or charged divided by the total number of disabling injuries.

Nondisabling work injury.--An injury suffered by a person that arises out of and in the course of his employment and requires medical treatment in excess of first aid but does not result in a permanent disability or cause the person to stay away from work for one or more days.

Average men working daily.--Average number of persons at work during the time period(s) that mines or plants were active for production or development. It is computed for each mine or plant by summing the reported number of persons working during each period of active operation and then dividing by the number of periods for which activity was reported. The figure is not the average number of employees working a full year in the coal mining industry.

Principal cause classification.--The cause classification used in this report has been developed through many years of analyzing descriptions of accidents resulting in injuries at mineral extracting and processing operations. It is designed to meet the need for a coding structure to classify injuries into standard accident categories to be used in comparisons and determination of trends.

The following descriptions of the principal causes provide definitions, particularly in the inclusions or exclusions of accidents, for which the principal cause may be subject to misinterpretation.

Falls of roof.--Falls of rock, coal, or slate from their in-place location in the mine roof. Excludes falls of roof caused by equipment knocking out support and falls from pressure bumps or bursts.

Falls of face, rib, or overburden.--Falls of face, side, rib, or pillar from their in-place location in underground workings and falls of high-walls in strip pits and auger mines. Excludes falls from equipment knocking out support and falls from pressure bumps or bursts.

Pressure bumps or bursts.--Falling or flying roof, face, or rib material caused by pressure bumps or bursts.

Inrush of water or material.--Includes inrushes of water or unconsolidated material caused by mining into or too close to flooded old workings, or unconsolidated sediments such as sand.

Sliding or falling material or objects.--Rollings, shifting, sliding, or falling materials or objects not being handled or disturbed by the injured worker. Includes coal or rock already broken from its in-place position.

Slips or falls of persons.--Slips or falls on the same level and from an elevation are grouped separately. Slips or falls in or from haulage equipment that resulted from an accident on haulage, from the motion of haulage equipment, or while getting on or off haulage equipment are excluded. Slips or falls into moving or operating machinery or into electrical equipment also are excluded.

Handling materials.--Injuries occurring while moving, lifting, carrying, or installing coal, rock, supplies, or materials; and injuries from flying particles from materials being handled or moved.

Handtools.--Accidents from tools in hands of injured worker or tools in hands of fellow worker, except power-driven tools. Includes flying pieces from tools being used or materials being worked on.

Stepping or kneeling on sharp or loose objects.--Stepping or kneeling on sharp or loose objects, slips or falls from stepping on loose objects, and cases resulting in bursitis or "miner's knee" from working on hands and knees.

Striking or bumping against objects.--Cases of walking or bumping into stationary objects. Excludes cases of striking or bumping in the course of servicing equipment, repairing, handling materials, using handtools, or operating machinery or haulage equipment, etc.

Haulage.--Haulage accidents are divided into the following six groups: (1) Mine-gage rail haulage; (2) standard-gage (railroad) haulage; (3) shuttle cars, mobile electric trucks, rubber-tired equipment, and other nonrail equipment; (4) water transportation; (5) automobile, gasoline or diesel trucks, tractors, etc.; and (6) miscellaneous equipment (ropes, animals, cages, belts, etc.). Included in the haulage category are falls of roof, face, or side from haulage equipment knocking out supports; slips or falls of persons in or from haulage equipment that resulted from an accident to the equipment, from the motion of the equipment, or while getting on or off equipment; and flying particles set in motion by haulage equipment or draft therefrom.

Explosions of gas or dust.--Explosions of gas or dust in the mine environment.

Explosives and breaking agents.--Cases in which the cause of injury was the detonation, fumes, flying fragments, or use of the explosive or breaking agent, fuses, caps, or detonators.

Electricity.--Cases resulting from contact with electric current or from arcs or flashes.

Machinery.--Accidents while operating machines are separated from those while moving or tramping a whole machine. Injuries occurring while moving a repair part of a machine are classed under "handling materials." Included in the machinery classification are falls of roof, face, or side from non-haulage machinery knocking out support, setting up or servicing machinery, and flying particles set in motion by machinery. Excluded from the classification are accidents occurring in the course of repairing machines, unless the accident resulted from in-motion machinery.

Suffocation.--Divided into suffocation from: (1) natural mine gases or oxygen-deficient atmosphere; or (2) foreign gases such as fumes from oil or gasoline motors, gases and smoke drawn underground from a surface fire, or from gas wells. Excludes gases from mine fires, explosions, and explosives use.

Fires and suffocation from fires.--Fire accidents are divided into: (1) mine fires in which coal or timber is burning; and (2) other fires in which equipment or material other than coal or timber is burning.

Occupational pneumoconiosis.--A chronic dust disease of the lungs, such as might be caused by prolonged inhalation of pulverized coal or other minerals.

Miscellaneous causes.--Includes flying particles from draft or wind; gas or burns from carbide; gas, burns, or flying materials or flashes from acetylene and electric welding and cutting; irritations and burns from battery fluid or other acids; burns from controlled wood or coal fires, steam, hot grease, oil, etc.; and all other accidents not elsewhere classified.

#### HISTORICAL DATA

Injury experience, employment, and worktime data (excluding office-workers) for the bituminous coal, Pennsylvania anthracite, and total coal mining industries are shown for 1930-73 in tables 49-51. The man-hour data for 1930-44 in these tables have been converted to a portal-to-portal basis, which became the basis of pay in 1945. Hence the injury-frequency and the productivity rates are directly comparable for each year since 1930.<sup>1</sup>

---

<sup>1</sup>Methodology given on pages 4-5, Bureau of Mines Bulletin 509: Injury Experience in Coal Mining, 1948.

Historical information (excluding officeworkers) in the coal mining industry is given in tables 52-57. Figures from 1910 through 1973 represent the entire industry, while those prior to 1910 cover only the States that maintained records of fatal injuries.

#### GENERAL INJURY EXPERIENCE, 1973

During 1973, the disabling injury experience, excluding officeworkers, at 3,661 coal mines, plants, and shops was 132 fatal and 11,220 nonfatal disabling work injuries. These injuries resulted in a combined fatal and nonfatal disabling injury-frequency rate of 40.89 per million man-hours of exposure, consisting of a fatality rate of 0.48 and a nonfatal disabling rate of 40.41. The combined disabling injury-severity rate of 4,813 days lost per million man-hours of exposure consisted of a fatal injury-severity rate of 2,853 days lost and a nonfatal disabling injury-severity rate of 1,960. The average severity of all disabling injuries (excluding officeworkers) was 118 days lost or charged per injury.

This is the second year in which data are available concerning nondisabling injuries, except first aid cases. A total of 14,491 nondisabling injuries (excluding officeworkers) were reported during 1973, resulting in a nondisabling injury-frequency rate of 52.20. Therefore, the "all injury" frequency rate shown in tables 1, 2, and 3 for 1972 and 1973 is higher than for previous years, but only because of the inclusion of nondisabling injuries in the overall frequency rate.

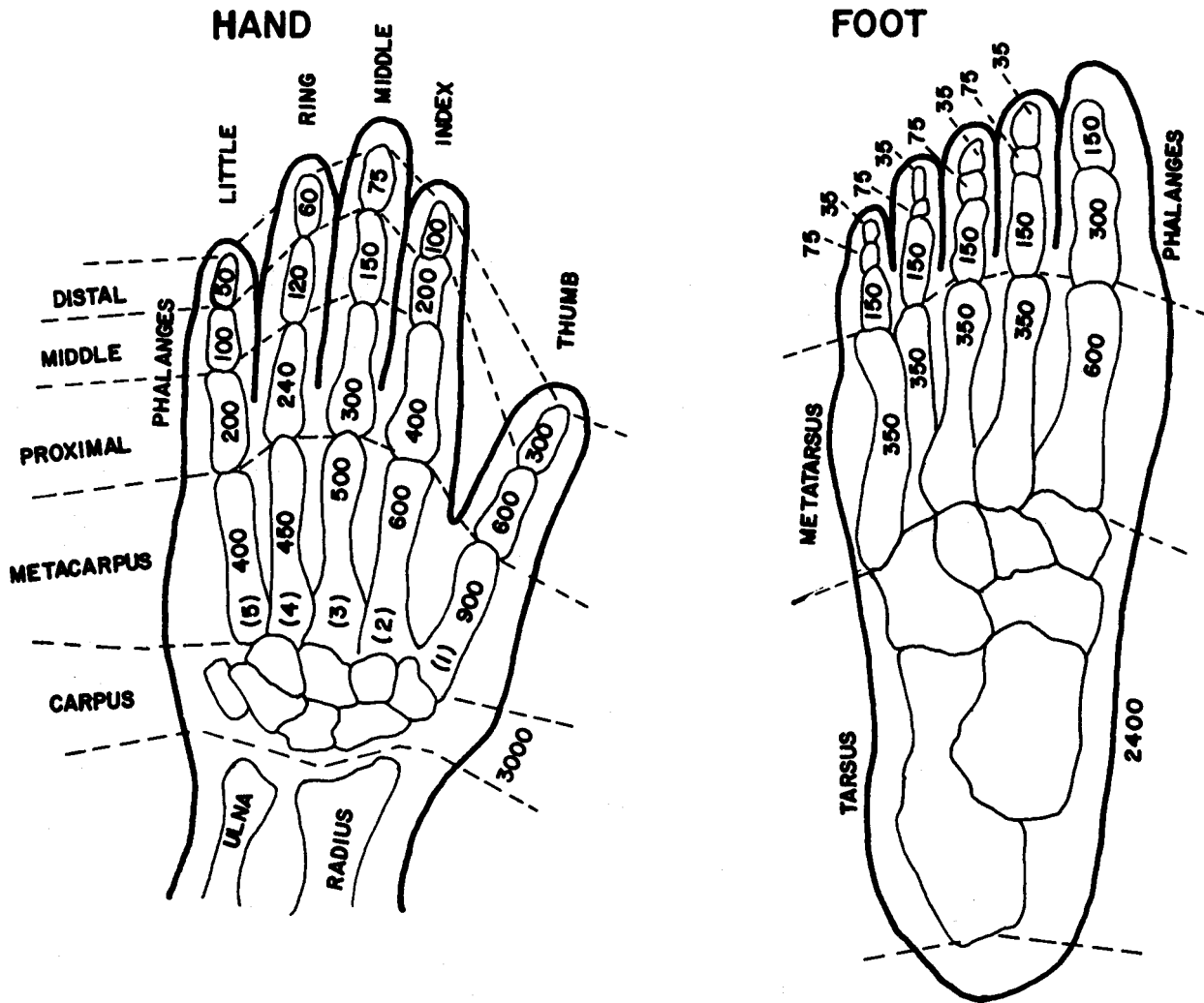
FIGURE A. - Scale of time charges<sup>1/</sup> for weighting deaths, permanent total disabilities, and permanent partial disabilities for computing severity of injuries

Injury	Time charge (days)
Death.....	6,000
Permanent total disability.....	6,000
Dismemberment <u>2/</u> or total loss of use:	
Arm above elbow.....	4,500
Arm at or below elbow and above wrist.....	3,600
Hand at wrist.....	3,000
Thumb.....	(3/)
Finger.....	(3/)
Leg above knee.....	4,500
Leg at or below knee and above ankle.....	3,000
Foot at ankle.....	2,400
Great toe.....	(3/)
Other toes.....	(3/)
Loss of sight:	
One eye (whether or not there is sight in the other eye)....	1,800
Both eyes (in one accident).....	6,000
Complete industrial loss of hearing:	
One ear (whether or not there is hearing in the other ear)..	600
Both ears (in one accident).....	3,000
Unrepaired hernia.....	50

1/ American National Standards Institute, Inc., American National Standard Method of Recording and Measuring Work Injury Experience, ANSI Z16.1-1967 (R1973).

2/ Dismemberment means severance of any part of the bone.

3/ See figure B for scheduled charges for hand and foot.



## NOTE:

NUMBERS SHOWN ON DIAGRAM ARE CHARGES IN DAYS LOST FOR LOSS OF ALL OR PART OF BONE. FOR ADDITIONAL INFORMATION ON USE OF THE CHART SEE 2.3.1.1 THROUGH 2.3.1.5 ANSI. Z.16.1-1967 (R1973) AMERICAN NATIONAL STANDARD METHOD OF RECORDING AND MEASURING WORK INJURY EXPERIENCE

FIGURE B.- Chart of scheduled charges for loss or loss of use involving hand or foot.

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES



EMPLOYMENT AND PRODUCTION REPORT

Bureau of Mines ID Number \_\_\_\_\_ For the month of \_\_\_\_\_ 19\_\_\_\_

Mine Name \_\_\_\_\_

Company Name \_\_\_\_\_

Mailing Address \_\_\_\_\_

1. Classification of Coal Mined: (1)  Anthracite (2)  Bituminous (3)  Subbituminous (4)  Lignite

2. Current Status of Mine: (1)  Active (2)  Temporarily Closed Date: \_\_\_\_\_

(3)  Permanently Abandoned Date: \_\_\_\_\_ (4)  Sold (5)  Leased (6)  Subcontracted Date: \_\_\_\_\_

If any transaction occurred, indicate name and address of the other party: \_\_\_\_\_

3. Employment, Manhours, and Production

Operations Sub-Unit (1)	Code	Number of persons working during pay period including 12th of the month (2)	Total man-hours worked during the month (3)	Production of clean coal (Short tons) (4)
UNDERGROUND MINE				
Underground .....	01			
Surface Shops, Yards, etc .....	02			
SURFACE MINE (including shops and yards)				
Strip .....	03			
Auger .....	04			
Culm Bank .....	05			
Dredge .....	06			
MECHANICAL CLEANING, PREPARATION PLANT OR BREAKER .....	30			
OFFICE (workers at mine and/or preparation facility) .....	00			

4. Other Reportable Data:

Did you have any reportable accidents, injuries, illness, during this report period (1)  Yes (2)  No.

If yes, total number of accidents \_\_\_\_\_ total number of injuries and illness \_\_\_\_\_

Person to be contacted regarding this report:

Name \_\_\_\_\_ Title \_\_\_\_\_

Date report completed \_\_\_\_\_ 19\_\_\_\_

FIGURE C. - Employment and production report form.

Form No. 6-347  
(February 1972)

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF MINES

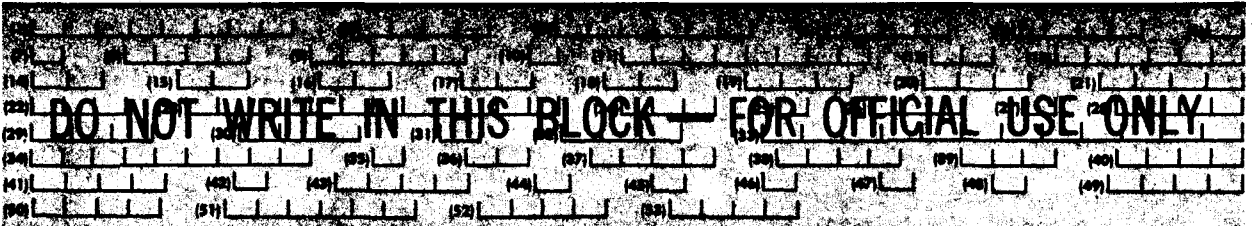
Form Approved  
O.M.B. No. 42-R1640



COAL ACCIDENT, INJURY  
AND ILLNESS REPORT

Date of Accident or Illness \_\_\_\_\_ Time of Accident \_\_\_\_\_ A.M.  P.M.   
A.M.   
Time shift started \_\_\_\_\_ P.M.  (1)  Production (2)  Maintenance

Bureau of Mines ID Number \_\_\_\_\_ Company Name \_\_\_\_\_  
Mine Name \_\_\_\_\_ Mailing Address \_\_\_\_\_



A. LOCATION OF ACCIDENT OR ILLNESS (Circle the applicable code)		B. TYPE OF ACCIDENT (Circle the applicable code)		C. OCCUPATIONAL ILLNESS (Circle the applicable code)
<p>(a) <u>Underground Mine</u></p> <p>On Section (1) <input type="checkbox"/> Section ID Number _____ Operator Section Number _____</p> <p>Off Section (2) <input type="checkbox"/> Operator Location number or name _____</p> <p>(On Section, circle code for applicable method. Off Section, circle code for principal method used.)</p> <p>01 Continuous    02 Conventional    03 Hand    04 Longwall</p> <p>Whether on section or off section, circle location codes describing accident)</p> <p>01 Shaft    02 Slope    03 Drift    04 Entry    05 Room    06 Face Area    07 Intersection</p> <p>(On section, circle applicable status code. Off section, circle principal status code.)</p> <p>01 Development    02 Retreat</p>		<p>14 Electricity</p> <p>13 Explosive &amp; Breaking Agent</p> <p>12 Explosion of Gas or Dust</p> <p>03 Fall of Face, Rib, or Side</p> <p>01 Fall of Roof</p> <p>08 Handtool</p> <p>07 Handling material</p> <p>11 Haulage</p> <p>20 Ignition of Gas or Dust</p> <p>04 Inundation</p> <p>19 Lifting/Pulling</p>		<p>15 Machinery</p> <p>17 Mine Fire</p> <p>02 Pressure Bump or Burst</p> <p>05 Sliding/Falling Material</p> <p>06 Slip or Fall (Person)</p> <p>09 Stepping/Kneeling on object</p> <p>10 Striking or Bumping</p> <p>16 Suffocation</p> <p>1.8 Other: Specify _____</p>
<p>(b) <u>Surface Mine</u></p> <p>03 Strip    04 Auger    05 Culm bank    06 Dredge</p>				<p>21 Occupational skin diseases</p> <p>22 Dust diseases of the lungs</p> <p>23 Respiratory diseases (toxic agents)</p> <p>24 Poisoning (toxic materials)</p> <p>25 Disorders (physical agents)</p> <p>26 Disorders (repeated trauma)</p> <p>29 All other occupational illness</p>
<p>(c) <u>Surface Operation</u></p> <p>01 Tipple    02 Mechanical Cleaning Plant</p> <p>03 Preparation Plant or Breaker    04 Tramline or railroad    05 Central Shops</p> <p>00 Office at mine    06 Other surface operations: Specify _____</p>				

D. ACCIDENT OCCURRENCE DATA: What brought about the accident or illness reported \_\_\_\_\_

What was unsafe physical or mechanical condition(s) contributing to accident \_\_\_\_\_

Name equipment, material, or tool involved \_\_\_\_\_ Model number \_\_\_\_\_

Describe any unsafe act(s) contributing to accident \_\_\_\_\_

Personnel Injured (1)  Yes (2)  No, Number of persons injured \_\_\_\_\_

COMPLETE DATA BELOW FOR EACH PERSON INJURED OR ILL

1. REGARDING INJURY OR ILLNESS

What was the agent, object, or tool inflicting injury \_\_\_\_\_ (1)  Fatal (2)  Nonfatal

Type of injury or illness \_\_\_\_\_ Part of Body Injured \_\_\_\_\_

Amputation (1)  Yes (2)  No. If yes, part of body lost \_\_\_\_\_

2. REGARDING INJURED OR ILL PERSON

Full Name of Injured or ill person \_\_\_\_\_

Social Security Number \_\_\_\_\_ Sex \_\_\_\_\_ Age \_\_\_\_\_ Total years of mining experience \_\_\_\_\_ Total years experience in this mine \_\_\_\_\_

Regular job title \_\_\_\_\_ Years of experience on regular job \_\_\_\_\_ What was employee doing when injured \_\_\_\_\_

Was that activity part of regular job (1)  Yes (2)  No. If no, years of experience at that activity \_\_\_\_\_

Returned to regular job next regular shift (1)  Yes (2)  No. If yes, at full capacity (1)  Yes (2)  No. Returned to another job next regular shift (1)  Yes (2)  No.

Was employee transferred to another job or terminated (1)  Yes (2)  No. If yes (1)  after lost work days (2)  because of injury or illness, but without lost workdays.

Total number of lost work days \_\_\_\_\_ Number lost from regular job \_\_\_\_\_ Date returned to work \_\_\_\_\_

FIGURE D. - Accident, injury and illness report form.

TABLE 1. - Salient statistics on injuries, injury rates, worktime, production, and productivity  
at bituminous coal mines in the United States, 1969-73

	Excluding officeworkers					Including officeworkers				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
<b>Number of injuries:</b>										
Fatal-----	190	255	176	153	131	190	255	176	153	131
Nonfatal disabling-----	9,425	11,049	11,363	12,012	10,880	9,425	11,049	11,365	12,018	10,889
All disabling-----	9,615	11,304	11,539	12,165	11,011	9,615	11,304	11,541	12,171	11,020
Nondisabling-----	NA	NA	NA	15,700	13,999	NA	NA	NA	15,731	14,040
All injuries-----	9,615	11,304	11,539	27,865	25,010	9,615	11,304	11,541	27,902	25,060
<b>Injury rates:</b>										
Frequency per million man-hours:										
Fatal-----	0.84	1.02	0.72	0.59	0.48	0.82	1.00	0.70	0.57	0.47
Nonfatal disabling-----	41.44	44.21	46.41	45.96	40.06	40.57	43.31	45.26	44.71	38.84
All disabling-----	42.28	45.23	47.13	46.55	40.54	41.39	44.31	45.96	45.28	39.31
Nondisabling-----	NA	NA	NA	60.08	51.55	NA	NA	NA	58.52	50.08
All injuries-----	42.28	45.23	47.13	106.62	92.09	41.39	44.31	45.96	103.80	89.38
Frequency per million tons:										
Fatal-----	0.34	0.43	0.32	0.29	0.24	0.34	0.43	0.32	0.29	0.24
Nonfatal disabling-----	16.86	18.42	20.51	22.75	19.73	16.86	18.42	20.51	22.76	19.74
All disabling-----	17.20	18.84	20.83	23.04	19.97	17.20	18.84	20.83	23.05	19.98
Nondisabling-----	NA	NA	NA	29.73	25.38	NA	NA	NA	29.79	25.46
All injuries-----	17.20	18.84	20.83	52.77	45.35	17.20	18.84	20.83	52.84	45.44
<b>Severity per million man-hours:</b>										
Fatal-----	5,013	6,121	4,313	3,513	2,894	4,907	5,997	4,206	3,415	2,803
Nonfatal disabling-----	2,269	2,339	1,157	1,892	1,966	2,221	2,291	1,128	1,840	1,905
All disabling-----	7,282	8,460	5,470	5,405	4,860	7,129	8,288	5,334	5,255	4,709
Severity per million tons:										
Fatal-----	2,040	2,550	1,906	1,738	1,425	2,040	2,550	1,906	1,738	1,425
Nonfatal disabling-----	923	974	511	936	968	923	974	511	937	969
All disabling-----	2,963	3,525	2,417	2,675	2,393	2,963	3,525	2,418	2,675	2,394
<b>Average severity:</b>										
Permanent partial-----	600	756	871	549	695	600	756	871	549	695
Temporary total-----	37	34	12	29	33	37	34	12	29	33
All disabling-----	172	187	116	116	120	172	187	116	116	120
<b>Average man working daily-----</b>	127,375	138,542	137,080	157,285	143,886	129,869	141,088	140,350	162,046	148,422
<b>Man-hours worked-----</b>	227,411,408	249,945,396	244,819,831	261,338,208	271,575,488	232,316,502	255,118,360	251,083,354	268,802,713	280,366,978
<b>Production--short tons-----</b>	558,930,950	599,917,925	553,992,881	528,092,677	551,482,432	558,930,950	599,917,925	553,992,881	528,092,677	551,482,432
<b>Productivity:</b>										
Tons per man-hour-----	2.46	2.40	2.26	2.02	2.03	2.41	2.35	2.21	1.96	1.97
Tons per man-day-----	19.49	19.09	17.96	NA	NA	19.08	18.71	17.52	NA	NA

TABLE 2. - Salient statistics on injuries, injury rates, worktime, production, and productivity  
at Pennsylvania anthracite coal mines in the United States, 1969-73

	Excluding officeworkers					Including officeworkers				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
<b>Number of injuries:</b>										
Fatal-----	13	5	5	3	1	13	5	5	3	1
Nonfatal disabling----	492	503	553	317	340	492	503	553	317	341
All disabling-----	505	508	558	320	341	505	508	558	320	342
Nondisabling-----	NA	NA	NA	390	492	NA	NA	NA	392	493
All injuries-----	505	508	558	710	833	505	508	558	712	835
<b>Injury rates:</b>										
Frequency per million man-hours:										
Fatal-----	1.29	0.49	0.54	0.48	0.17	1.25	0.48	0.52	0.47	0.16
Nonfatal disabling----	48.85	49.20	59.37	51.03	56.24	47.45	48.08	57.66	49.25	54.50
All disabling-----	50.14	49.69	59.90	51.52	56.40	48.70	48.56	58.18	49.71	54.66
Nondisabling-----	NA	NA	NA	62.79	81.38	NA	NA	NA	60.90	78.79
All injuries-----	50.14	49.69	59.90	114.30	137.78	48.70	48.56	58.18	110.61	133.46
Frequency per million tons:										
Fatal-----	1.27	0.51	0.57	0.46	0.15	1.27	0.51	0.57	0.46	0.15
Nonfatal disabling----	47.99	50.88	63.36	48.82	52.57	47.99	50.88	63.36	48.82	52.73
All disabling-----	49.26	51.39	63.94	49.28	52.73	49.26	51.39	63.94	49.28	52.88
Nondisabling-----	NA	NA	NA	60.06	76.08	NA	NA	NA	60.37	76.23
All injuries-----	49.26	51.39	63.94	109.34	128.81	49.26	51.39	63.94	109.65	129.12
<b>Severity per million man-hours:</b>										
Fatal-----	7,744	2,934	3,221	2,898	992	7,523	2,868	3,128	2,796	959
Nonfatal disabling----	1,347	1,663	691	2,709	1,698	1,308	1,626	671	2,614	1,642
All disabling-----	9,090	4,598	3,912	5,606	2,690	8,831	4,493	3,800	5,410	2,601
<b>Severity per million tons:</b>										
Fatal-----	7,609	3,035	3,437	2,772	928	7,609	3,035	3,437	2,772	928
Nonfatal disabling----	1,323	1,720	738	2,591	1,587	1,323	1,720	738	2,591	1,589
All disabling-----	8,932	4,755	4,175	5,363	2,515	8,932	4,755	4,175	5,363	2,516
<b>Average severity:</b>										
Permanent partial----	581	717	63	238	80	581	717	63	238	80
Temporary total-----	23	27	11	33	30	23	27	11	33	30
All disabling-----	181	93	65	109	48	181	93	65	109	48
<b>Average men working daily-----</b>	5,927	5,938	5,028	4,922	3,357	6,073	6,079	5,182	5,087	3,470
<b>Man-hours worked-----</b>	10,072,530	10,223,810	9,315,193	6,211,617	6,046,040	10,368,604	10,461,595	9,590,353	6,437,045	6,256,781
<b>Production--short tons--</b>	10,251,165	9,885,331	8,727,342	6,493,396	6,467,012	10,251,165	9,885,331	8,727,342	6,493,396	6,467,012
<b>Productivity:</b>										
Tons per man-hour-----	1.02	0.97	0.94	1.05	1.07	0.99	0.94	0.91	1.01	1.03
Tons per man-day-----	7.45	7.10	6.93	NA	NA	7.25	6.95	6.74	NA	NA

TABLE 3. - Salient statistics on injuries, injury rates, worktime, production, and productivity  
at all coal mines in the United States, 1969-73

	Excluding officeworkers					Including officeworkers				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
<b>Number of injuries:</b>										
Fatal-----	203	260	181	156	132	203	260	181	156	132
Nonfatal disabling--	9,917	11,552	11,916	12,329	11,220	9,917	11,552	11,918	12,335	11,230
All disabling-----	10,120	11,812	12,097	12,485	11,352	10,120	11,812	12,099	12,491	11,362
Nondisabling-----	NA	NA	NA	16,090	14,491	NA	NA	NA	16,123	14,533
All injuries-----	10,120	11,812	12,097	28,575	25,843	10,120	11,812	12,099	28,614	25,895
<b>Injury rates:</b>										
Frequency per million man-hours:										
Fatal-----	0.85	1.00	0.71	0.58	0.48	0.84	0.98	0.69	0.57	0.46
Nonfatal disabling--	41.76	44.40	46.89	46.08	40.41	40.86	43.50	45.72	44.82	39.18
All disabling-----	42.61	45.40	47.60	46.66	40.89	41.70	44.48	46.41	45.38	39.64
Nondisabling-----	NA	NA	NA	60.14	52.20	NA	NA	NA	58.58	50.70
All injuries-----	42.61	45.40	47.60	106.80	93.09	41.70	44.48	46.41	103.96	90.34
Frequency per million tons:										
Fatal-----	0.36	0.43	0.32	0.29	0.24	0.36	0.43	0.32	0.29	0.24
Nonfatal disabling--	17.42	18.94	21.18	23.06	20.11	17.42	18.94	21.18	23.07	20.13
All disabling-----	17.78	19.37	21.50	23.35	20.35	17.78	19.37	21.50	23.37	20.36
Nondisabling-----	NA	NA	NA	30.10	25.97	NA	NA	NA	30.16	26.05
All injuries-----	17.78	19.37	21.50	53.45	46.32	17.78	19.37	21.50	53.53	46.41
<b>Severity per million man-hours:</b>										
Fatal-----	5,129	5,996	4,273	3,498	2,853	5,019	5,874	4,166	3,401	2,763
Nonfatal disabling--	2,230	2,312	1,140	1,911	1,960	2,182	2,265	1,112	1,858	1,900
All disabling-----	7,359	8,308	5,413	5,409	4,813	7,201	8,139	5,278	5,259	4,663
<b>Severity per million tons:</b>										
Fatal-----	2,140	2,558	1,930	1,751	1,419	2,140	2,558	1,930	1,751	1,419
Nonfatal disabling--	931	986	515	956	975	931	986	515	957	976
All disabling-----	3,070	3,545	2,445	2,707	2,395	3,070	3,545	2,445	2,708	2,395
<b>Average severity:</b>										
Permanent partial---	600	756	862	546	688	600	756	862	546	688
Temporary total-----	36	33	12	29	33	36	33	12	29	33
All disabling-----	173	183	114	116	118	173	183	114	116	118
<b>Average men working</b>										
daily-----	133,302	144,480	142,108	162,207	147,243	135,942	147,167	145,532	167,133	151,892
Man-hours worked-----	237,483,938	260,169,206	254,135,024	267,549,825	277,621,528	242,685,106	265,579,955	260,673,707	275,239,758	286,623,759
Production--short tons-	569,182,115	609,803,256	562,720,223	534,586,073	557,949,444	569,182,115	609,803,256	562,720,223	534,586,073	557,949,444
<b>Productivity:</b>										
Tons per man-hour-----	2.40	2.34	2.21	2.00	2.01	2.35	2.30	2.16	1.94	1.95
Tons per man-day-----	18.94	18.58	17.53	NA	NA	18.54	18.21	17.10	NA	NA

TABLE 4. - Worktime, production, and productivity (short tons per man-hour) data at coal mines in the United States, by kind of coal and general work location, 1973

	Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations
<b>Bituminous coal mines:</b>					
<b>Underground mines:</b>					
Underground-----	90,634	171,029,899	285,211,660	1.67	1,342
Surface-----	9,673	16,662,926	-	-	-
Total or average-----	100,307	187,692,825	285,211,660	1.52	1,342
Strip mines-----	27,754	55,396,261	257,368,953	4.65	1,112
Auger mines-----	1,421	1,732,973	8,884,179	5.13	238
Other surface mining-----	5	9,156	17,640	1.93	1
Total surface mining-----	29,180	57,138,390	266,270,772	4.66	1,351
Total or average, mining---	129,487	244,831,215	551,482,432	2.25	2,693
Independent shops and yards-----	2,519	5,118,858	-	-	65
Mechanical cleaning plants-----	11,880	21,625,415	-	-	669
Grand total or average-----	143,886	271,575,488	551,482,432	2.03	3,427
<b>Pennsylvania anthracite mines:</b>					
<b>Underground mines:</b>					
Underground-----	438	752,549	661,370	.88	52
Surface-----	98	186,864	-	-	-
Total or average-----	536	939,413	661,370	.70	52
Strip mines-----	1,300	2,287,116	3,438,265	1.50	72
Culm banks-----	210	310,376	2,058,595	6.63	36
Dredges-----	18	47,669	308,782	6.48	1
Total surface mining-----	1,528	2,645,161	5,805,642	2.19	109
Total or average, mining---	2,064	3,584,574	6,467,012	1.80	161
Independent shops and yards-----	154	292,258	-	-	6
Mechanical cleaning plants-----	1,139	2,169,208	-	-	67
Grand total or average-----	3,357	6,046,040	6,467,012	1.07	234
<b>All coal mines:</b>					
<b>Underground mines:</b>					
Underground-----	91,072	171,782,448	285,873,030	1.66	1,394
Surface-----	9,771	16,849,790	-	-	-
Total or average-----	100,843	188,632,238	285,873,030	1.52	1,394
Strip mines-----	29,054	57,683,377	260,807,218	4.52	1,184
Auger mines-----	1,421	1,732,973	8,884,179	5.13	238
Culm banks-----	210	310,376	2,058,595	6.63	36
Dredges-----	23	56,825	326,422	5.74	2
Total surface mining-----	30,708	59,783,551	272,076,414	4.55	1,460
Total or average, mining---	131,551	248,415,789	557,949,444	2.25	2,854
Independent shops and yards-----	2,673	5,411,116	-	-	71
Mechanical cleaning plants-----	13,019	23,794,623	-	-	736
Grand total or average-----	147,243	277,621,528	557,949,444	2.01	3,661

TABLE 5. - Injury experience at bituminous coal mines in the United States, by general work location, 1973

	Underground mines			Strip mines	Auger mines	Other surface mining	Total surface mining	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total
	Underground	Surface	Total								
Number of injuries:											
Fatal-----	98	6	104	16	1	-	17	121	2	8	131
Nonfatal disabling:											
Permanent total-----	7	-	7	2	1	-	3	10	-	-	10
Permanent partial-----	128	8	136	31	2	-	33	169	1	9	179
Temporary total-----	8,610	378	8,988	1,058	42	-	1,100	10,088	65	538	10,691
All nonfatal disabling----	8,745	386	9,131	1,091	45	-	1,136	10,267	66	547	10,880
All disabling injuries----	8,843	392	9,235	1,107	46	-	1,153	10,388	68	555	11,011
Nondisabling injuries-----	9,906	723	10,629	1,907	33	-	1,940	12,569	329	1,101	13,999
All injuries-----	18,749	1,115	19,864	3,014	79	-	3,093	22,957	397	1,656	25,010
Days lost:											
Fatal-----	588,000	36,000	624,000	96,000	6,000	-	102,000	726,000	12,000	48,000	786,000
Nonfatal disabling:											
Permanent total-----	42,000	-	42,000	12,000	6,000	-	18,000	60,000	-	-	60,000
Permanent partial-----	86,241	1,815	88,056	24,740	300	-	25,040	113,096	300	10,970	124,366
Temporary total-----	282,785	14,951	297,736	32,110	1,553	-	33,663	331,399	1,581	16,465	349,445
All nonfatal disabling----	411,026	16,766	427,792	68,850	7,853	-	76,703	504,495	1,881	27,435	533,811
All disabling injuries----	999,026	52,766	1,051,792	164,850	13,853	-	178,703	1,230,495	13,881	75,435	1,319,811
Frequency rates:											
Per million man-hours:											
Fatal-----	0.57	0.36	0.55	0.29	0.58	-	0.30	0.49	0.39	0.37	0.48
Nonfatal disabling-----	51.13	23.17	48.65	19.69	25.97	-	19.88	41.94	12.89	25.29	40.06
All disabling injuries----	51.70	23.53	49.20	19.98	26.54	-	20.18	42.43	13.28	25.66	40.54
Nondisabling injuries-----	57.92	43.39	56.63	34.42	19.04	-	33.95	51.34	64.27	50.91	51.55
All injuries-----	109.62	66.92	105.83	54.41	45.59	-	54.13	93.77	77.56	76.58	92.09
Per million tons:											
Fatal-----	.34	-	.36	.06	.11	-	.06	.22	-	-	.24
Nonfatal disabling-----	30.66	-	32.01	4.24	5.07	-	4.27	18.62	-	-	19.73
All disabling injuries----	31.01	-	32.38	4.30	5.18	-	4.33	18.84	-	-	19.97
Nondisabling injuries-----	34.73	-	37.27	7.41	3.71	-	7.29	22.79	-	-	25.38
All injuries-----	65.74	-	69.65	11.71	8.89	-	11.62	41.63	-	-	45.35
Severity rates:											
Per million man-hours:											
Fatal-----	3,438	2,160	3,325	1,733	3,462	-	1,785	2,965	2,344	2,220	2,894
Nonfatal disabling-----	2,403	1,006	2,279	1,243	4,532	-	1,342	2,061	367	1,269	1,966
All disabling injuries----	5,841	3,167	5,604	2,976	7,994	-	3,128	5,026	2,712	3,488	4,860
Per million tons:											
Fatal-----	2,062	-	2,188	373	675	-	383	1,316	-	-	1,425
Nonfatal disabling-----	1,441	-	1,500	268	884	-	288	915	-	-	968
All disabling injuries----	3,503	-	3,688	641	1,559	-	671	2,231	-	-	2,393
Average severity:											
Permanent partial-----	674	227	647	798	150	-	759	669	300	1,219	695
Temporary total-----	33	40	33	30	37	-	31	33	24	31	33
All disabling injuries-----	113	135	114	149	301	-	155	118	204	136	120

TABLE 6. - Injury experience at Pennsylvania anthracite mines, by general work location, 1973

	Underground mines			Strip mines	Culm banks	Dredges	Total surface mining	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total
	Underground	Surface	Total								
Number of injuries:											
Fatal-----	1	-	1	-	-	-	-	1	-	-	1
Nonfatal disabling:											
Permanent total-----	-	-	-	-	-	-	-	-	-	-	-
Permanent partial-----	1	-	1	-	-	-	-	1	-	1	2
Temporary total-----	72	2	74	117	11	-	128	202	14	122	338
All nonfatal disabling----	73	2	75	117	11	-	128	203	14	123	340
All disabling injuries----	74	2	76	117	11	-	128	204	14	123	341
Nondisabling injuries-----	41	4	45	189	10	3	202	247	38	207	492
All injuries-----	115	6	121	306	21	3	330	451	52	330	833
Days lost:											
Fatal-----	6,000	-	6,000	-	-	-	-	6,000	-	-	6,000
Nonfatal disabling:											
Permanent total-----	-	-	-	-	-	-	-	-	-	-	-
Permanent partial-----	110	-	110	-	-	-	-	110	-	51	161
Temporary total-----	2,647	2	2,649	3,282	234	-	3,516	6,165	240	3,700	10,105
All nonfatal disabling----	2,757	2	2,759	3,282	234	-	3,516	6,275	240	3,751	10,266
All disabling-----	8,757	2	8,759	3,282	234	-	3,516	12,275	240	3,751	16,266
Frequency rates:											
Per million man-hours:											
Fatal-----	1.33	-	1.06	-	-	-	-	0.28	-	-	0.17
Nonfatal disabling-----	97.00	10.70	79.84	51.16	35.44	-	48.39	56.63	47.90	56.70	56.24
All disabling injuries-----	98.33	10.70	80.90	51.16	35.44	-	48.39	56.91	47.90	56.70	56.40
Nondisabling injuries-----	54.48	21.41	47.90	82.64	32.22	62.93	76.37	68.91	130.02	95.43	81.38
All injuries-----	152.81	32.11	128.80	133.79	67.66	62.93	124.76	125.82	177.92	152.13	137.78
Per million tons:											
Fatal-----	1.51	-	1.51	-	-	-	-	.15	-	-	.15
Nonfatal disabling-----	110.38	-	113.40	34.03	5.34	-	22.05	31.39	-	-	52.57
All disabling injuries-----	111.89	-	114.91	34.03	5.34	-	22.05	31.54	-	-	52.73
Nondisabling injuries-----	61.99	-	68.04	54.97	4.86	9.72	34.79	38.19	-	-	76.08
All injuries-----	173.88	-	182.95	89.00	10.20	9.72	56.84	69.74	-	-	128.81
Severity rates:											
Per million man-hours:											
Fatal-----	7,973	-	6,387	-	-	-	-	1,674	-	-	992
Nonfatal disabling-----	3,664	11	2,937	1,435	754	-	1,329	1,751	821	1,729	1,698
All disabling injuries-----	11,636	11	9,324	1,435	754	-	1,329	3,424	821	1,729	2,690
Per million tons:											
Fatal-----	9,072	-	9,072	-	-	-	-	928	-	-	928
Nonfatal disabling-----	4,169	-	4,172	955	114	-	606	970	-	-	1,587
All disabling injuries-----	13,241	-	13,244	955	114	-	606	1,898	-	-	2,515
Average severity:											
Permanent partial-----	110	-	110	-	-	-	-	110	-	51	80
Temporary total-----	37	1	36	28	21	-	27	31	17	30	30
All disabling injuries-----	118	1	115	28	21	-	27	60	17	30	48

TABLE 7. - Injury experience at all coal mines in the United States, by general work location, 1973

	Underground mines			Strip mines	Auger mines	Culm banks	Dredges	Total surface mining	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total
	Underground	Surface	Total									
Number of injuries:												
Fatal-----	99	6	105	16	1	-	-	17	122	2	8	132
Nonfatal disabling:												
Permanent total-----	7	-	7	2	1	-	-	3	10	-	-	10
Permanent partial-----	129	8	137	31	2	-	-	33	170	1	10	181
Temporary total-----	8,682	380	9,062	1,175	42	11	-	1,228	10,290	79	660	11,029
All nonfatal disabling----	8,818	388	9,206	1,208	45	11	-	1,264	10,470	80	670	11,220
All disabling injuries----	8,917	394	9,311	1,224	46	11	-	1,281	10,592	82	678	11,352
Nondisabling injuries-----	9,947	727	10,674	2,096	33	10	3	2,142	12,816	367	1,308	14,491
All injuries-----	18,864	1,121	19,985	3,320	79	21	3	3,423	23,408	449	1,986	25,843
Days lost:												
Fatal-----	594,000	36,000	630,000	96,000	6,000	-	-	102,000	732,000	12,000	48,000	792,000
Nonfatal disabling:												
Permanent total-----	42,000	-	42,000	12,000	6,000	-	-	18,000	60,000	-	-	60,000
Permanent partial-----	86,351	1,815	88,166	24,740	300	-	-	25,040	113,206	300	11,021	124,527
Temporary total-----	285,432	14,953	300,385	35,392	1,553	234	-	37,179	337,564	1,821	20,165	359,550
All nonfatal disabling----	413,783	16,768	430,551	72,132	7,853	234	-	80,219	510,770	2,121	31,186	544,077
All disabling-----	1,007,783	52,768	1,060,551	168,132	13,853	234	-	182,219	1,242,770	14,121	79,186	1,336,077
Frequency rates:												
Per million man-hours:												
Fatal-----	0.58	0.36	0.56	0.28	0.58	-	-	0.28	0.49	0.37	0.34	0.48
Nonfatal disabling-----	51.33	23.03	48.80	20.94	25.97	35.44	-	21.14	42.15	14.78	28.16	40.41
All disabling injuries----	51.91	23.38	49.36	21.22	26.54	35.44	-	21.43	42.64	15.15	28.49	40.89
Nondisabling injuries-----	57.90	43.15	56.59	36.34	19.04	32.22	52.79	35.83	51.59	67.82	54.97	52.20
All injuries-----	109.81	66.53	105.95	57.56	45.59	67.66	52.79	57.26	94.23	82.98	83.46	93.09
Per million tons:												
Fatal-----	.35	-	.37	.06	.11	-	-	.06	.22	-	-	.24
Nonfatal disabling-----	30.85	-	32.20	4.63	5.07	5.34	-	4.65	18.77	-	-	20.11
All disabling injuries----	31.19	-	32.57	4.69	5.18	5.34	-	4.71	18.98	-	-	20.35
Nondisabling injuries-----	34.80	-	37.34	8.04	3.71	4.86	9.19	7.87	22.97	-	-	25.97
All injuries-----	65.99	-	69.91	12.73	8.89	10.20	9.19	12.58	41.95	-	-	46.32
Severity rates:												
Per million man-hours:												
Fatal-----	3,458	2,137	3,340	1,664	3,462	-	-	1,706	2,947	2,218	2,017	2,853
Nonfatal disabling-----	2,409	995	2,282	1,250	4,532	754	-	1,342	2,056	392	1,311	1,960
All disabling injuries----	5,867	3,132	5,622	2,915	7,994	754	-	3,048	5,003	2,610	3,328	4,813
Per million tons:												
Fatal-----	2,078	-	2,204	368	675	-	-	375	1,312	-	-	1,419
Nonfatal disabling-----	1,447	-	1,506	277	884	114	-	295	915	-	-	975
All disabling injuries----	3,525	-	3,710	645	1,559	114	-	670	2,227	-	-	2,395
Average severity:												
Permanent partial-----	669	227	644	798	150	-	-	759	666	300	1,102	688
Temporary total-----	33	39	33	30	37	21	-	30	33	23	31	33
All disabling injuries----	113	134	114	137	301	21	-	142	117	172	117	118

TABLE 8. - Number of injuries and frequency and severity rates at coal mines in the United States, by degree of injury, 1973

Degree of injury	Bituminous coal mines			Pennsylvania anthracite mines			All coal mines		
	Number of injuries	Injury rates		Number of injuries	Injury rates		Number of injuries	Injury rates	
		Frequency	Severity		Frequency	Severity		Frequency	Severity
Fatal-----	131	0.48	2,894	1	0.17	992	132	0.48	2,853
Permanent total-----	10	.04	221	-	-	-	10	.04	216
Permanent partial-----	179	.66	458	2	.33	27	181	.65	449
Temporary total-----	10,691	39.37	1,287	338	55.90	1,671	11,029	39.73	1,295
All nonfatal disabling-----	10,880	40.06	1,966	340	56.24	1,698	11,220	40.41	1,960
All disabling-----	11,011	40.54	4,860	341	56.40	2,690	11,352	40.89	4,813
Nondisabling-----	13,999	51.55		492	81.38		14,491	52.20	
All injuries-----	25,010	92.09		833	137.78		25,843	93.09	

TABLE 9. - Comparative injury data at bituminous coal operations (mines and mechanical cleaning plants) with and without fatalities in the United States, 1973

	Operations reporting fatal injuries	Operations reporting no fatal injuries	All bituminous coal operations
Number of operations 1/ -----	119	3,308	3,427
Production-----short tons-----	80,792,189	470,690,243	551,482,432
Proportion of total tonnage-----percent-----	14.7	85.3	100.0
Number of employees-----	21,719	122,167	143,886
Proportion of total employees-----percent-----	15.1	84.9	100.0
Number of employees per operation-----	183	37	42
Man-hours worked-----	43,838,094	227,737,394	271,575,488
Average hours worked per man-----	2,018	1,864	1,887
Production per man-hour-----	1.84	2.07	2.03
Number of fatalities-----	131	-	131
Number of nonfatal disabling injuries-----	2,066	8,814	10,880
Number of nondisabling injuries-----	2,433	11,566	13,999
Fatality rate per million man-hours-----	2.99	-	0.48
Nonfatal disabling injury rate per million man-hours-----	47.13	38.70	40.06
Nondisabling injury rate per million man-hours-----	55.50	50.79	51.55

1/ Includes total of 2,758 mines and 669 mechanical cleaning plants.

TABLE 10. - Comparative injury data at Pennsylvania anthracite operations (mines and mechanical cleaning plants) with and without fatalities in the United States, 1973

	Operations reporting fatal injuries	Operations reporting no fatal injuries	All anthracite coal operations
Number of operations 1/ -----	1	233	234
Production-----short tons-----	164,164	6,302,848	6,467,012
Proportion of total tonnage-----percent-----	2.5	97.5	100.0
Number of employees-----	181	3,176	3,357
Proportion of total employees-----percent-----	5.4	94.6	100.0
Number of employees per operation-----	181	14	14
Man-hours worked-----	344,499	5,701,541	6,046,040
Average hours worked per man-----	1,903	1,795	1,801
Production per man-hour-----	0.48	1.11	1.07
Number of fatalities-----	1	-	1
Number of nonfatal disabling injuries-----	33	307	340
Number of nondisabling injuries-----	31	461	492
Fatality rate per million man-hours-----	2.90	-	0.17
Nonfatal disabling injury rate per million man-hours-----	95.79	53.85	56.24
Nondisabling injury rate per million man-hours-----	89.99	80.86	81.38

1/ Includes total of 167 mines and 67 mechanical cleaning plants.

TABLE 11. - Number of injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1973

Principal cause of injury	Bituminous coal mines					Pennsylvania anthracite mines					All coal mines				
	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries
<b>Underground mines:</b>															
<b>Underground:</b>															
Falls of roof or back -----	38	977	1,015	882	1,897	1	1	2	1	3	39	978	1,017	883	1,900
Falls of face or rib -----	6	309	315	216	531	-	6	6	-	6	6	315	321	216	537
Pressure bumps or bursts -----	-	12	12	8	20	-	-	-	-	-	-	12	12	8	20
Inrush of water -----	-	2	2	-	2	-	-	-	-	-	-	2	2	-	2
Sliding or falling material or objects ---	-	275	275	363	638	-	6	6	3	9	-	281	281	366	647
Slips or falls of persons -----	-	534	534	675	1,209	-	12	12	7	19	-	546	546	682	1,228
Handling material -----	-	2,063	2,063	2,514	4,577	-	23	23	15	38	-	2,086	2,086	2,529	4,615
Handtools -----	-	601	601	1,263	1,864	-	11	11	5	16	-	612	612	1,268	1,880
Stepping or kneeling on sharp or loose objects -----	-	190	190	270	460	-	-	-	5	5	-	190	190	275	465
Striking or bumping against objects -----	-	131	131	215	346	-	1	1	2	3	-	132	132	217	349
Haulage -----	30	1,492	1,522	1,319	2,841	-	6	6	-	6	30	1,498	1,528	1,319	2,847
Explosions of gas or dust -----	2	2	4	1	5	-	-	-	-	-	2	2	4	1	5
Explosives -----	1	40	41	26	67	-	-	-	-	-	1	40	41	26	67
Electricity -----	5	315	320	353	673	-	1	1	-	1	5	316	321	353	674
Machinery -----	15	1,510	1,525	1,370	2,895	-	6	6	2	8	15	1,516	1,531	1,372	2,903
Suffocation (no flame or smoldering) -----	1	1	2	1	3	-	-	-	-	-	1	1	2	1	3
Fires or suffocation from fires -----	-	15	15	24	39	-	-	-	-	-	-	15	15	24	39
Miscellaneous causes -----	-	276	276	406	682	-	-	-	1	1	-	276	276	407	683
<b>Total -----</b>	<b>98</b>	<b>8,745</b>	<b>8,843</b>	<b>9,906</b>	<b>18,749</b>	<b>1</b>	<b>73</b>	<b>74</b>	<b>41</b>	<b>115</b>	<b>99</b>	<b>8,818</b>	<b>8,917</b>	<b>9,947</b>	<b>18,864</b>
<b>Surface:</b>															
Sliding or falling material or objects ---	1	11	12	25	37	-	-	-	-	-	1	11	12	25	37
Slips or falls of persons -----	-	65	65	88	153	-	-	-	1	1	-	65	65	89	154
Handling material -----	-	137	137	235	372	-	-	-	1	1	-	137	137	236	373
Handtools -----	-	17	17	104	121	-	1	1	1	2	-	18	18	105	123
Stepping or kneeling on sharp or loose objects -----	-	7	7	13	20	-	-	-	-	-	-	7	7	13	20
Striking or bumping against objects -----	-	3	3	18	21	-	-	-	-	-	-	3	3	18	21
Haulage -----	2	65	67	76	143	-	-	-	-	-	2	65	67	76	143
Explosions of gas or dust -----	-	1	1	1	2	-	-	-	-	-	-	1	1	1	2
Explosives -----	-	-	-	1	1	-	-	-	-	-	-	-	-	1	1
Electricity -----	2	5	7	14	21	-	-	-	-	2	5	7	14	21	
Machinery -----	1	37	38	59	97	-	-	-	-	1	37	38	59	97	
Miscellaneous causes -----	-	38	38	89	127	-	1	1	1	2	-	39	39	90	129
<b>Total -----</b>	<b>6</b>	<b>386</b>	<b>392</b>	<b>723</b>	<b>1,115</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>6</b>	<b>388</b>	<b>394</b>	<b>727</b>	<b>1,121</b>
<b>Total, underground mines -----</b>	<b>104</b>	<b>9,131</b>	<b>9,235</b>	<b>10,629</b>	<b>19,864</b>	<b>1</b>	<b>75</b>	<b>76</b>	<b>45</b>	<b>121</b>	<b>105</b>	<b>9,206</b>	<b>9,311</b>	<b>10,674</b>	<b>19,985</b>

TABLE 11. - Number of injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1973 - Continued

Principal cause of injury	Bituminous coal mines					Pennsylvania anthracite mines					All coal mines				
	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries
Strip mines:															
Falls of face or side -----	-	15	15	14	29	-	1	1	-	1	-	16	16	14	30
Sliding or falling material or objects -----	1	31	32	50	82	-	3	3	4	7	1	34	35	54	89
Slips or falls of persons -----	-	272	272	251	523	-	39	39	26	65	-	311	311	277	588
Handling material -----	-	231	231	454	685	-	21	21	48	69	-	252	252	502	754
Handtools -----	-	91	91	311	402	-	7	7	30	37	-	98	98	341	439
Stepping or kneeling on sharp or loose objects -----	-	22	22	29	51	-	-	-	3	3	-	22	22	32	54
Striking or bumping against objects -----	-	5	5	41	46	-	-	-	1	1	-	5	5	42	47
Haulage -----	4	111	115	142	257	-	18	18	17	35	4	129	133	159	292
Explosions of gas or dust -----	-	1	1	2	3	-	-	-	-	-	-	1	1	2	3
Explosives -----	-	9	9	6	15	-	-	-	1	1	-	9	9	7	16
Electricity -----	1	12	13	8	21	-	-	-	1	1	1	12	13	9	22
Machinery -----	10	165	175	250	425	-	10	10	25	35	10	175	185	275	460
Suffocation (no flame or smoldering) -----	-	1	1	-	1	-	-	-	-	-	-	1	1	-	1
Fires or suffocation from fires -----	-	6	6	5	11	-	-	-	1	1	-	6	6	6	12
Miscellaneous causes -----	-	119	119	344	463	-	18	18	32	50	-	137	137	376	513
Total -----	16	1,091	1,107	1,907	3,014	-	117	117	189	306	16	1,208	1,224	2,096	3,320
Other surface mining: 1/															
Falls of face or side -----	-	4	4	-	4	-	-	-	-	-	-	4	4	-	4
Sliding or falling material or objects -----	-	-	-	2	2	-	-	-	1	1	-	-	-	3	3
Slips or falls of persons -----	-	7	7	5	12	-	3	3	2	5	-	10	10	7	17
Handling material -----	-	10	10	7	17	-	3	3	3	6	-	13	13	10	23
Handtools -----	-	6	6	7	13	-	-	-	2	2	-	6	6	9	15
Stepping or kneeling on sharp or loose objects -----	-	4	4	-	4	-	-	-	-	-	-	4	4	-	4
Haulage -----	-	2	2	1	3	-	1	1	3	4	-	3	3	4	7
Explosions of gas or dust -----	-	1	1	-	1	-	-	-	-	-	-	1	1	-	1
Machinery -----	1	8	9	8	17	-	1	1	2	3	1	9	10	10	20
Miscellaneous causes -----	-	3	3	3	6	-	3	3	-	3	-	6	6	3	9
Total -----	1	45	46	33	79	-	11	11	13	24	1	56	57	46	103
Total, surface -----	17	1,136	1,153	1,940	3,093	-	128	128	202	330	17	1,264	1,281	2,142	3,423
Total, mining -----	121	10,267	10,388	12,569	22,957	1	203	204	247	451	122	10,470	10,592	12,816	23,408

See footnote at end of table.

TABLE 11. - Number of injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1973 - Continued

Principal cause of injury	Bituminous coal mines					Pennsylvania anthracite mines					All coal mines				
	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries	Fatal	Nonfatal disabling	Total disabling	Non-disabling	All injuries
Independent shops and yards:															
Sliding or falling material or objects -----	-	3	3	14	17	-	-	-	1	1	-	3	3	15	18
Slips or falls of persons -----	-	11	11	25	36	-	1	1	4	5	-	12	12	29	41
Handling material -----	-	18	18	86	104	-	7	7	11	18	-	25	25	97	122
Handtools -----	-	9	9	53	62	-	2	2	4	6	-	11	11	57	68
Stepping or kneeling on sharp or loose objects -----	-	1	1	7	8	-	-	-	1	1	-	1	1	8	9
Striking or bumping against objects -----	-	1	1	8	9	-	-	-	2	2	-	1	1	10	11
Haulage -----	1	8	9	14	23	-	-	-	-	-	1	8	9	14	23
Electricity -----	1	2	3	3	6	-	-	-	-	-	1	2	3	3	6
Machinery -----	-	6	6	52	58	-	1	1	3	4	-	7	7	55	62
Miscellaneous causes -----	-	7	7	67	74	-	3	3	12	15	-	10	10	79	89
Total -----	2	66	68	329	397	-	14	14	38	52	2	80	82	367	449
Mechanical cleaning plants:															
Sliding or falling material or objects -----	-	23	23	43	66	-	5	5	2	7	-	28	28	45	73
Slips or falls of persons -----	-	110	110	164	274	-	19	19	28	47	-	129	129	192	321
Handling material -----	-	155	155	333	488	-	46	46	72	118	-	201	201	405	606
Handtools -----	-	46	46	140	186	-	10	10	27	37	-	56	56	167	223
Stepping or kneeling on sharp or loose objects -----	-	14	14	23	37	-	-	-	4	4	-	14	14	27	41
Striking or bumping against objects -----	-	3	3	20	23	-	1	1	6	7	-	4	4	26	30
Haulage -----	4	84	88	116	204	-	22	22	18	40	4	106	110	134	244
Electricity -----	1	11	12	13	25	-	-	-	2	2	1	11	12	15	27
Machinery -----	3	50	53	83	136	-	10	10	19	29 <sup>1/2</sup>	3	60	63	102	165
Suffocation (no flame or smoldering) -----	-	-	-	1	1	-	-	-	-	-	-	-	-	1	1
Fires or suffocation from fires -----	-	2	2	-	2	-	-	-	-	-	-	2	2	-	2
Miscellaneous causes -----	-	49	49	165	214	-	10	10	29	39	-	59	59	194	253
Total -----	8	547	555	1,101	1,656	-	123	123	207	330	8	670	678	1,308	1,986
Grand total -----	131	10,880	11,011	13,999	25,010	1	340	341	492	833	132	11,220	11,352	14,491	25,843

<sup>1/2</sup> Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 12. - Days of disability from injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1973

Principal cause of injury	Bituminous coal mines			Pennsylvania anthracite mines			All coal mines		
	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling
<b>Underground mines:</b>									
<b>Underground:</b>									
Falls of roof or back -----	228,000	61,745	289,745	6,000	3	6,003	234,000	61,748	295,748
Falls of face or rib -----	36,000	16,132	52,132	-	414	414	36,000	16,546	52,546
Pressure bumps or bursts -----	-	371	371	-	-	-	-	371	371
Inrush of water -----	-	20	20	-	-	-	-	20	20
Sliding or falling material or objects -	-	17,806	17,806	-	315	315	-	18,121	18,121
Slips or falls of persons -----	-	23,575	23,575	-	298	298	-	23,873	23,873
Handling material -----	-	52,785	52,785	-	749	749	-	53,534	53,534
Handtools -----	-	12,656	12,656	-	361	361	-	13,017	13,017
Stepping or kneeling on sharp or loose objects -----	-	3,594	3,594	-	-	-	-	3,594	3,594
Striking or bumping against objects ---	-	4,007	4,007	-	8	8	-	4,015	4,015
Haulage -----	180,000	107,240	287,240	-	511	511	180,000	107,751	287,751
Explosions of gas or dust -----	12,000	37	12,037	-	-	-	12,000	37	12,037
Explosives -----	6,000	2,922	8,922	-	-	-	6,000	2,922	8,922
Electricity -----	30,000	5,310	35,310	-	13	13	30,000	5,323	35,323
Machinery -----	90,000	96,578	186,578	-	85	85	90,000	96,663	186,663
Suffocation (no flame or smoldering) ---	6,000	2	6,002	-	-	-	6,000	2	6,002
Fires or suffocation from fires -----	-	196	196	-	-	-	-	196	196
Miscellaneous causes -----	-	6,050	6,050	-	-	-	-	6,050	6,050
<b>Total -----</b>	<b>588,000</b>	<b>411,026</b>	<b>999,026</b>	<b>6,000</b>	<b>2,757</b>	<b>8,757</b>	<b>594,000</b>	<b>413,783</b>	<b>1,007,783</b>
<b>Surface:</b>									
Sliding or falling material or objects -	6,000	856	6,856	-	-	-	6,000	856	6,856
Slips or falls of persons -----	-	2,600	2,600	-	-	-	-	2,600	2,600
Handling material -----	-	6,536	6,536	-	-	-	-	6,536	6,536
Handtools -----	-	368	368	-	1	1	-	369	369
Stepping or kneeling on sharp or loose objects -----	-	67	67	-	-	-	-	67	67
Striking or bumping against objects ---	-	9	9	-	-	-	-	9	9
Haulage -----	12,000	2,803	14,803	-	-	-	12,000	2,803	14,803
Explosions of gas or dust -----	-	379	379	-	-	-	-	379	379
Explosives -----	-	-	-	-	-	-	-	-	-
Electricity -----	12,000	216	12,216	-	-	-	12,000	216	12,216
Machinery -----	6,000	2,450	8,450	-	-	-	6,000	2,450	8,450
Miscellaneous causes -----	-	482	482	-	1	1	-	483	483
<b>Total -----</b>	<b>36,000</b>	<b>16,766</b>	<b>52,766</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>36,000</b>	<b>16,768</b>	<b>52,768</b>
<b>Total, underground mines -----</b>	<b>624,000</b>	<b>427,792</b>	<b>1,051,792</b>	<b>6,000</b>	<b>2,759</b>	<b>8,759</b>	<b>630,000</b>	<b>430,551</b>	<b>1,060,551</b>

TABLE 12. - Days of disability from injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1973 - Continued

Principal cause of injury	Bituminous coal mines			Pennsylvania anthracite mines			All coal mines		
	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling
Strip mines:									
Falls of face or side -----	-	7,040	7,040	-	20	20	-	7,060	7,060
Sliding or falling material or objects ---	6,000	916	6,916	-	6	6	6,000	922	6,922
Slips or falls of persons -----	-	14,368	14,368	-	893	893	-	15,261	15,261
Handling material -----	-	7,829	7,829	-	842	842	-	8,671	8,671
Handtools -----	-	3,911	3,911	-	343	343	-	4,254	4,254
Stepping or kneeling on sharp or loose objects -----	-	440	440	-	-	-	-	440	440
Striking or bumping against objects -----	-	94	94	-	-	-	-	94	94
Haulage -----	24,000	11,075	35,075	-	290	290	24,000	11,365	35,365
Explosions of gas or dust -----	-	50	50	-	-	-	-	50	50
Explosives -----	-	370	370	-	-	-	-	370	370
Electricity -----	6,000	314	6,314	-	-	-	6,000	314	6,314
Machinery -----	60,000	20,674	80,674	-	397	397	60,000	21,071	81,071
Suffocation (no flame or smoldering) -----	-	6	6	-	-	-	-	6	6
Fires or suffocation from fires -----	-	170	170	-	-	-	-	170	170
Miscellaneous causes -----	-	1,593	1,593	-	491	491	-	2,084	2,084
Total -----	96,000	68,850	164,850	-	3,282	3,282	96,000	72,132	168,132
Other surface mining: 1/									
Falls of face or side -----	-	613	613	-	-	-	-	613	613
Sliding or falling material or objects ---	-	-	-	-	-	-	-	-	-
Slips or falls of persons -----	-	303	303	-	160	160	-	463	463
Handling material -----	-	203	203	-	42	42	-	245	245
Handtools -----	-	117	117	-	-	-	-	117	117
Stepping or kneeling on sharp or loose objects -----	-	25	25	-	-	-	-	25	25
Haulage -----	-	24	24	-	1	1	-	25	25
Explosions of gas or dust -----	-	6	6	-	-	-	-	6	6
Machinery -----	6,000	6,493	12,493	-	1	1	6,000	6,494	12,494
Miscellaneous causes -----	-	69	69	-	30	30	-	99	99
Total -----	6,000	7,853	13,853	-	234	234	6,000	8,087	14,087
Total, surface -----	102,000	76,703	178,703	-	3,516	3,516	102,000	80,219	182,219
Total, mining -----	726,000	504,495	1,230,495	6,000	6,275	12,275	732,000	510,770	1,242,770

See footnote at end of table.

TABLE 12. - Days of disability from injuries at coal mines in the United States, by principal cause  
of injury, kind of coal, and general work location, 1973 - Continued

Principal cause of injury	Bituminous coal mines			Pennsylvania anthracite mines			All coal mines		
	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling	Fatal	Nonfatal disabling	Total disabling
Independent shops and yards:									
Sliding or falling material or objects ----	-	54	54	-	-	-	-	54	54
Slips or falls of persons -----	-	471	471	-	23	23	-	494	494
Handling material -----	-	533	533	-	164	164	-	697	697
Handtools -----	-	141	141	-	21	21	-	162	162
Stepping or kneeling on sharp or loose objects -----	-	3	3	-	-	-	-	3	3
Striking or bumping against objects -----	-	14	14	-	-	-	-	14	14
Haulage -----	6,000	285	6,285	-	-	-	6,000	285	6,285
Electricity -----	6,000	40	6,040	-	-	-	6,000	40	6,040
Machinery -----	-	194	194	-	1	1	-	195	195
Miscellaneous causes -----	-	146	146	-	31	31	-	177	177
Total -----	12,000	1,881	13,881	-	240	240	12,000	2,121	14,121
Mechanical cleaning plants:									
Sliding or falling material or objects ----	-	563	563	-	182	182	-	745	745
Slips or falls of persons -----	-	5,788	5,788	-	392	392	-	6,180	6,180
Handling material -----	-	3,996	3,996	-	1,614	1,614	-	5,610	5,610
Handtools -----	-	1,093	1,093	-	197	197	-	1,290	1,290
Stepping or kneeling on sharp or loose objects -----	-	274	274	-	-	-	-	274	274
Striking or bumping against objects -----	-	7	7	-	2	2	-	9	9
Haulage -----	24,000	8,115	32,115	-	806	806	24,000	8,921	32,921
Electricity -----	6,000	308	6,308	-	-	-	6,000	308	6,308
Machinery -----	18,000	6,505	24,505	-	517	517	18,000	7,022	25,022
Fires or suffocation from fires -----	-	23	23	-	-	-	-	23	23
Miscellaneous causes -----	-	763	763	-	41	41	-	804	804
Total -----	48,000	27,435	75,435	-	3,751	3,751	48,000	31,186	79,186
Grand total -----	786,000	533,811	1,319,811	6,000	10,266	16,266	792,000	544,077	1,336,077

1/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 13. - Average severity of all disabling injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1973

Principal cause of injury	Bituminous coal mines	Pennsylvania anthracite mines	All coal mines
<b>Underground mines:</b>			
<b>Underground:</b>			
Falls of roof or back-----	285	3,002	291
Falls of face or rib-----	165	69	164
Pressure bumps or bursts-----	31	-	31
Inrush of water-----	10	-	10
Sliding or falling material or objects-----	65	52	64
Slips or falls of persons-----	44	25	44
Handling material-----	26	33	26
Handtools-----	21	33	21
Stepping or kneeling on sharp or loose objects--	19	-	19
Striking or bumping against objects-----	31	8	30
Haulage-----	189	85	188
Explosions of gas or dust-----	3,009	-	3,009
Explosives-----	218	-	218
Electricity-----	110	13	110
Machinery-----	122	14	122
Suffocation (no flame or smoldering)-----	3,001	-	3,001
Fires or suffocation from fires-----	13	-	13
Miscellaneous causes-----	22	-	22
<b>Total-----</b>	<b>113</b>	<b>118</b>	<b>113</b>
<b>Surface:</b>			
Sliding or falling material or objects-----	571	-	571
Slips or falls of persons-----	40	-	40
Handling material-----	48	-	48
Handtools-----	22	1	20
Stepping or kneeling on sharp or loose objects--	10	-	10
Striking or bumping against objects-----	3	-	3
Haulage-----	221	-	221
Explosions of gas or dust-----	379	-	379
Electricity-----	1,745	-	1,745
Machinery-----	222	-	222
Miscellaneous causes-----	13	1	12
<b>Total-----</b>	<b>135</b>	<b>1</b>	<b>134</b>
<b>Total, underground mines-----</b>	<b>114</b>	<b>115</b>	<b>114</b>
<b>Strip mines:</b>			
Falls of face or side-----	469	20	441
Sliding or falling material or objects-----	216	2	198
Slips or falls of persons-----	53	23	49
Handling material-----	34	40	34
Handtools-----	43	49	43
Stepping or kneeling on sharp or loose objects--	20	-	20
Striking or bumping against objects-----	19	-	19
Haulage-----	305	16	266
Explosions of gas or dust-----	50	-	50
Explosives-----	41	-	41
Electricity-----	486	-	486
Machinery-----	461	40	438
Suffocation (no flame or smoldering)-----	6	-	6
Fires or suffocation from fires-----	28	-	28
Miscellaneous causes-----	13	27	15
<b>Total-----</b>	<b>149</b>	<b>28</b>	<b>137</b>

TABLE 13. - Average severity of all disabling injuries at coal mines in the United States, by principal cause of injury, kind of coal, and general work location, 1973 - Continued

Principal cause of injury	Bituminous coal mines	Pennsylvania anthracite mines	All coal mines
Other surface mining: <sup>1/</sup>			
Falls of face or side-----	153	-	153
Slips or falls of persons-----	43	53	46
Handling material-----	20	14	19
Handtools-----	20	-	20
Stepping or kneeling on sharp or loose objects--	6	-	6
Haulage-----	12	1	8
Explosions of gas or dust-----	6	-	6
Machinery-----	1,388	1	1,249
Miscellaneous causes-----	23	10	16
Total-----	301	21	247
Total, surface-----	155	27	142
Total, mining-----	118	60	117
Independent shops and yards:			
Sliding or falling material or objects-----	18	-	18
Slips or falls of persons-----	43	23	41
Handling material-----	30	23	28
Handtools-----	16	10	15
Stepping or kneeling on sharp or loose objects--	3	-	3
Striking or bumping against objects-----	14	-	14
Haulage-----	698	-	698
Electricity-----	2,013	-	2,013
Machinery-----	32	1	28
Miscellaneous causes-----	21	10	18
Total-----	204	17	172
Mechanical cleaning plants:			
Sliding or falling material or objects-----	24	36	27
Slips or falls of persons-----	53	21	48
Handling material-----	26	35	28
Handtools-----	24	20	23
Stepping or kneeling on sharp or loose objects--	20	-	20
Striking or bumping against objects-----	2	2	2
Haulage-----	365	37	299
Electricity-----	526	-	526
Machinery-----	462	52	397
Fires or suffocation from fires-----	12	-	12
Miscellaneous causes-----	16	4	14
Total-----	136	30	117
Grand total-----	120	48	118

<sup>1/</sup> Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 14. - Number and average severity of injuries at bituminous coal mines, by occupation at the time of injury, general work location, and degree of injury, 1973

Occupation at time of injury and general work location	Number of injuries								Distri- bution of all disabling injuries percent	Average severity		
	Fatal	Nonfatal disabling			All disabling injuries	Non- disabling injuries	All injuries	Permanent partial injuries		Temporary total injuries	All disabling injuries	
		Permanent		Temporary total								All nonfatal disabling
		Total	Partial									
<b>Underground mines:</b>												
Underground:												
Continuous miner operators/helpers-----	6	-	7	640	647	653	705	1,358	7.4	1,196	34	101
Cutting-machine operators/helpers-----	4	-	3	175	178	182	133	315	2.1	350	36	173
Loading machine operators/helpers-----	7	-	4	336	340	347	304	651	3.9	1,262	47	181
Roof bolters/helpers-----	13	1	17	1,313	1,331	1,344	1,487	2,831	15.2	529	36	104
Timbermen and jacksetters-----	3	-	4	364	368	371	251	622	4.2	230	32	82
Belt and boom operators-----	2	1	7	390	398	400	404	804	4.5	280	33	82
Trainmen-----	10	-	12	381	393	403	529	932	4.6	849	31	204
Shuttle/scoop operators-----	12	-	6	892	898	910	932	1,842	10.3	177	31	111
Electricians/helpers-----	-	-	3	227	230	230	302	532	2.6	100	30	31
Laborers-----	9	2	21	1,246	1,269	1,278	1,325	2,603	14.5	975	33	99
Mechanics, oilers and greasers-----	7	-	14	695	709	716	1,124	1,840	8.1	557	30	98
Supervisors and technical-----	10	-	1	176	177	187	376	563	2.1	300	37	357
Other, not elsewhere classified-----	15	3	28	1,775	1,806	1,821	2,031	3,852	20.6	545	30	97
Not stated-----	-	-	1	-	1	1	3	4	(1/)	4,500	-	4,500
<b>Total or average-----</b>	<b>98</b>	<b>7</b>	<b>128</b>	<b>8,610</b>	<b>8,745</b>	<b>8,843</b>	<b>9,906</b>	<b>18,749</b>	<b>-</b>	<b>674</b>	<b>33</b>	<b>113</b>
<b>Surface:</b>												
Bulldozer, grader, mobile equipment operators-----	-	-	-	12	12	12	17	29	3.1	-	35	35
Car droppers-----	-	-	-	21	21	21	27	48	5.4	-	49	49
Electricians/helpers-----	-	-	1	23	24	24	63	87	6.1	100	37	40
Laborers-----	1	-	1	74	75	76	87	163	19.4	100	42	121
Mechanics/helpers-----	-	-	3	64	67	67	216	283	17.1	233	46	55
Motormen and trainmen-----	1	-	-	8	8	9	8	17	2.3	-	56	717
Supervisors and technical-----	4	-	-	19	19	23	63	86	5.9	-	15	1,056
Truck drivers-----	-	-	-	14	14	14	27	41	3.6	-	29	29
Other, not elsewhere classified-----	-	-	3	143	146	146	215	361	37.2	305	38	44
<b>Total or average-----</b>	<b>6</b>	<b>-</b>	<b>8</b>	<b>378</b>	<b>386</b>	<b>392</b>	<b>723</b>	<b>1,115</b>	<b>-</b>	<b>227</b>	<b>40</b>	<b>135</b>
<b>Total or average, underground mines (bituminous)-----</b>	<b>104</b>	<b>7</b>	<b>136</b>	<b>8,988</b>	<b>9,131</b>	<b>9,235</b>	<b>10,629</b>	<b>19,864</b>	<b>-</b>	<b>647</b>	<b>33</b>	<b>114</b>

See footnote at end of table.

TABLE 14. - Number and average severity of injuries at bituminous coal mines, by occupation at the time of injury, general work location, and degree of injury, 1973 - Continued

Occupation at time of injury and general work location	Number of injuries								Distri- bution of all disabling injuries percent	Average severity		
	Fatal	Nonfatal disabling			All disabling injuries	Non- disabling injuries	All injuries	Permanent partial injuries		Temporary total injuries	All disabling injuries	
		Permanent		Temporary total								All nonfatal disabling
		Total	Partial									
Surface mines (includes strip, auger, culm bank, dredge and independent shops and yards):												
Auger operators/helpers-----	1	1	2	33	36	37	19	56	3.0	150	36	364
Bulldozer, grader, mobile equipment operators-----	3	1	5	166	172	175	209	384	14.3	1,168	38	207
Drillers/helpers-----	-	1	-	37	38	38	40	78	3.1	-	33	190
Electricians/helpers-----	1	-	1	38	39	40	108	148	3.3	100	25	176
Laborers-----	2	-	2	174	176	178	264	442	14.6	170	28	97
Mechanics/helpers-----	2	-	6	149	155	157	472	629	12.9	189	27	110
Oilers and greasers-----	1	-	3	105	108	109	158	267	8.9	2,083	19	131
Power shovel and dragline operators-----	1	-	1	84	85	86	140	226	7.0	640	50	126
Supervisors and technical-----	3	-	2	47	49	52	132	184	4.3	100	41	387
Truck drivers-----	1	-	2	81	83	84	114	198	6.9	1,020	46	140
Welders-----	1	-	3	117	120	121	378	499	9.9	145	17	69
Other, not elsewhere classified-----	3	-	7	134	141	144	235	379	11.8	1,151	21	200
Total or average-----	19	3	34	1,165	1,202	1,221	2,269	3,490	-	745	30	158
Mechanical cleaning plants:												
Bulldozer, grader, mobile equipment operators-----	-	-	-	16	16	16	47	63	2.9	-	20	20
Car droppers-----	2	-	1	52	53	55	77	132	9.9	900	37	270
Cleaning equipment operators-----	-	-	-	21	21	21	39	60	3.8	-	18	18
Laborers-----	1	-	1	107	108	109	193	302	19.6	4,500	26	122
Mechanics, oilers and greasers-----	4	-	2	104	106	110	286	396	19.8	230	20	241
Supervisors and technical-----	-	-	1	31	32	32	79	111	5.8	100	32	34
Tipple, scalper-screen operators-----	-	-	-	30	30	30	42	72	5.4	-	31	31
Truck drivers-----	-	-	-	29	29	29	43	72	5.2	-	23	23
Welders-----	1	-	-	26	26	27	80	107	4.9	-	65	285
Other, not elsewhere classified-----	-	-	4	122	126	126	215	341	22.7	1,252	38	77
Total or average-----	8	-	9	538	547	555	1,101	1,656	-	6,219	31	136
Grand total or average (bituminous)-----	131	10	179	10,691	10,880	11,011	13,999	25,010	-	695	33	120

<sup>1/</sup> Less than 0.05.

TABLE 15. - Number and average severity of injuries at Pennsylvania anthracite mines, by occupation at the time of injury, general work location, and degree of injury, 1973

Occupation at time of injury and general work location	Number of injuries								Distri- bution of all disabling injuries percent	Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non- disabling injuries	All injuries		Permanent partial injuries	Temporary total injuries	All disabling injuries
		Permanent		Temporary total	All nonfatal disabling							
		Total	Partial									
<b>Underground mines:</b>												
<b>Underground:</b>												
Continuous miner operators/helpers-----	-	-	-	3	3	3	2	5	4.1	-	36	36
Cutting-machine operators/helpers-----	-	-	-	1	1	1	-	1	1.4	-	2	2
Loading machine operators/helpers-----	-	-	-	-	-	-	1	1	-	-	-	-
Trainmen-----	-	-	-	1	1	1	-	1	1.4	-	59	59
Laborers-----	-	-	1	61	62	62	31	93	83.8	110	38	40
Mechanics, oilers and greasers-----	-	-	-	1	1	1	-	1	1.4	-	36	36
Supervisors and technical-----	-	-	-	2	2	2	2	4	2.7	-	7	7
Other, not elsewhere classified-----	1	-	-	3	3	4	5	9	5.4	-	28	1,521
<b>Total or average-----</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>41</b>	<b>115</b>	<b>-</b>	<b>110</b>	<b>37</b>	<b>118</b>
<b>Surface:</b>												
Bulldozer, grader, mobile equipment operators-----	-	-	-	-	-	-	1	1	-	-	-	-
Other; not elsewhere classified-----	-	-	-	2	2	2	3	5	100.0	-	1	1
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>
<b>Total or average, underground mines-----</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>74</b>	<b>75</b>	<b>76</b>	<b>45</b>	<b>121</b>	<b>-</b>	<b>110</b>	<b>37</b>	<b>118</b>
<b>Surface mines (includes strip, auger, culm bank, dredge, and independent shops and yards):</b>												
Bulldozer, grader, mobile equipment operators-----	-	-	-	13	13	13	17	30	9.2	-	24	24
Drillers/helpers-----	-	-	-	11	11	11	6	17	7.7	-	24	24
Electricians/helpers-----	-	-	-	-	-	-	1	1	-	-	-	-
Laborers-----	-	-	-	16	16	16	27	43	11.3	-	40	40
Mechanics/helpers-----	-	-	-	10	10	10	34	44	7.0	-	32	32
Oilers and greasers-----	-	-	-	25	25	25	28	53	17.6	-	39	39
Power shovel and dragline operators-----	-	-	-	7	7	7	34	41	4.9	-	7	7
Supervisors and technical-----	-	-	-	4	4	4	13	17	2.8	-	12	12
Truck drivers-----	-	-	-	23	23	23	17	40	16.2	-	26	26
Welders-----	-	-	-	23	23	23	45	68	16.2	-	18	18
Other, not elsewhere classified-----	-	-	-	10	10	10	18	28	7.0	-	15	15
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>142</b>	<b>142</b>	<b>142</b>	<b>240</b>	<b>382</b>	<b>-</b>	<b>-</b>	<b>26</b>	<b>26</b>

TABLE 15. - Number and average severity of injuries at Pennsylvania anthracite mines, by occupation at the time of injury, general work location, and degree of injury, 1973 - Continued

Occupation at time of injury and general work location	Number of injuries								Distri- bution of all disabling injuries percent	Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non- disabling injuries	All injuries		Permanent partial injuries	Temporary total injuries	All disabling injuries
		Permanent		Temporary total	All nonfatal disabling							
		Total	Partial									
Mechanical cleaning plants:												
Bulldozer, grader, mobile equipment operators-----	-	-	-	4	4	4	6	10	3.3	-	12	12
Car droppers-----	-	-	-	7	7	7	4	11	5.7	-	22	22
Cleaning equipment operators-----	-	-	-	1	1	1	8	9	.8	-	1	1
Laborers-----	-	-	1	61	62	62	91	153	50.4	51	35	35
Mechanics, oilers and greasers-----	-	-	-	9	9	9	23	32	7.3	-	14	14
Supervisors and technical-----	-	-	-	4	4	4	24	28	3.3	-	37	37
Tipple, scalper-screen operators-----	-	-	-	1	1	1	3	4	.8	-	51	51
Truck drivers-----	-	-	-	11	11	11	12	23	8.9	-	35	35
Welders-----	-	-	-	15	15	15	18	33	12.2	-	19	19
Other, not elsewhere classified-----	-	-	-	9	9	9	18	27	7.3	-	42	42
Total or average-----	-	-	1	122	123	123	207	330	-	51	30	30
Grand total or average-----	1	-	2	338	340	341	492	833	-	80	30	48

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,  
by general work location, 1973

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
<b>Underground:</b>						
<b>First shift <sup>1/</sup></b>						
Hour of shift:						
1st-----	3	242	245	6.5	259	504
2nd-----	3	524	527	14.1	519	1,046
3rd-----	14	585	599	16.0	682	1,281
4th-----	5	492	497	13.3	573	1,070
5th-----	6	320	326	8.7	336	662
6th-----	9	426	435	11.6	507	942
7th-----	9	551	560	15.0	658	1,218
8th-----	3	392	395	10.6	387	782
9th-----	1	105	106	2.8	63	169
10th and over-----	1	50	51	1.4	70	121
<b>Total first shift-----</b>	<b>54</b>	<b>3,687</b>	<b>3,741</b>	<b>-</b>	<b>4,054</b>	<b>7,795</b>
<b>Second shift <sup>2/</sup></b>						
Hour of shift:						
1st-----	-	235	235	7.5	208	443
2nd-----	2	363	365	11.7	375	740
3rd-----	6	463	469	15.0	481	950
4th-----	2	476	478	15.3	567	1,045
5th-----	2	402	404	12.9	442	846
6th-----	9	429	438	14.0	452	890
7th-----	5	385	390	12.5	433	823
8th-----	1	263	264	8.4	256	520
9th-----	-	34	34	1.1	29	63
10th and over-----	-	51	51	1.6	37	88
<b>Total second shift-----</b>	<b>27</b>	<b>3,101</b>	<b>3,128</b>	<b>-</b>	<b>3,280</b>	<b>6,408</b>
<b>Third shift <sup>3/</sup></b>						
Hour of shift:						
1st-----	-	177	177	9.0	220	397
2nd-----	3	273	276	14.0	353	629
3rd-----	6	330	336	17.0	461	797
4th-----	2	259	261	13.2	421	682
5th-----	2	230	232	11.8	321	553
6th-----	1	269	270	13.7	319	589
7th-----	1	235	236	12.0	251	487
8th-----	2	144	146	7.4	170	316
9th-----	-	13	13	.7	23	36
10th and over-----	-	27	27	1.4	33	60
<b>Total third shift-----</b>	<b>17</b>	<b>1,957</b>	<b>1,974</b>	<b>-</b>	<b>2,572</b>	<b>4,546</b>
<b>All shifts</b>						
Hour of shift:						
1st-----	3	654	657	7.4	687	1,344
2nd-----	8	1,160	1,168	13.2	1,247	2,415
3rd-----	26	1,378	1,404	15.9	1,624	3,028
4th-----	9	1,227	1,236	14.0	1,561	2,797
5th-----	10	952	962	10.9	1,099	2,061
6th-----	19	1,124	1,143	12.9	1,278	2,421
7th-----	15	1,171	1,186	13.4	1,342	2,528
8th-----	6	799	805	9.1	813	1,618
9th-----	1	152	153	1.7	115	268
10th and over-----	1	128	129	1.5	140	269
<b>Total all shifts-----</b>	<b>98</b>	<b>8,745</b>	<b>8,843</b>	<b>-</b>	<b>9,906</b>	<b>18,749</b>

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Surface at underground:						
First shift <sup>1/</sup>						
Hour of shift:						
1st-----	-	33	33	14.0	48	81
2nd-----	-	23	23	9.7	54	77
3rd-----	1	32	33	14.0	79	112
4th-----	1	39	40	16.9	76	116
5th-----	-	17	17	7.2	31	48
6th-----	2	22	24	10.2	45	69
7th-----	-	20	20	8.5	54	74
8th-----	-	22	22	9.3	34	56
9th-----	-	10	10	4.2	25	35
10th and over-----	-	14	14	5.9	8	22
Total first shift-----	4	232	236	-	454	690
Second shift <sup>2/</sup>						
Hour of shift:						
1st-----	-	14	14	12.8	28	42
2nd-----	-	15	15	13.8	23	38
3rd-----	-	18	18	16.5	17	35
4th-----	-	8	8	7.3	18	26
5th-----	1	13	14	12.8	19	33
6th-----	1	8	9	8.3	24	33
7th-----	-	13	13	11.9	22	35
8th-----	-	7	7	6.4	6	13
9th-----	-	6	6	5.5	3	9
10th and over-----	-	5	5	4.6	5	10
Total second shift-----	2	107	109	-	165	274
Third shift <sup>3/</sup>						
Hour of shift:						
1st-----	-	7	7	14.9	16	23
2nd-----	-	11	11	23.4	16	27
3rd-----	-	6	6	12.8	12	18
4th-----	-	2	2	4.3	13	15
5th-----	-	3	3	6.4	17	20
6th-----	-	4	4	8.5	13	17
7th-----	-	3	3	6.4	6	9
8th-----	-	4	4	8.5	7	11
9th-----	-	4	4	8.5	2	6
10th and over-----	-	3	3	6.4	2	5
Total third shift-----	-	47	47	-	104	151
All shifts						
Hour of shift:						
1st-----	-	54	54	13.8	92	146
2nd-----	-	49	49	12.5	93	142
3rd-----	1	56	57	14.5	108	165
4th-----	1	49	50	12.8	107	157
5th-----	1	33	34	8.7	67	101
6th-----	3	34	37	9.4	82	119
7th-----	-	36	36	9.2	82	118
8th-----	-	33	33	8.4	47	80
9th-----	-	20	20	5.1	30	50
10th and over-----	-	22	22	5.6	15	37
Total all shifts-----	6	386	392	-	723	1,115

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
<b>Strip:</b>						
First shift <sup>1/</sup>						
Hour of shift:						
1st-----	-	65	65	8.9	83	148
2nd-----	1	82	83	11.4	155	238
3rd-----	1	105	106	14.6	169	275
4th-----	-	96	96	13.2	151	247
5th-----	4	57	61	8.4	117	178
6th-----	-	52	52	7.2	100	152
7th-----	2	78	80	11.0	148	228
8th-----	3	81	84	11.6	120	204
9th-----	-	49	49	6.7	53	102
10th and over-----	1	50	51	7.0	49	100
Total first shift-----	12	715	727	-	1,145	1,872
Second shift <sup>2/</sup>						
Hour of shift:						
1st-----	-	25	25	9.7	50	75
2nd-----	1	36	37	14.3	78	115
3rd-----	-	28	28	10.9	61	89
4th-----	-	34	34	13.2	57	91
5th-----	-	30	30	11.6	68	98
6th-----	-	30	30	11.6	59	89
7th-----	1	34	35	13.6	62	97
8th-----	-	22	22	8.5	34	56
9th-----	-	8	8	3.1	3	11
10th and over-----	-	9	9	3.5	7	16
Total second shift-----	2	256	258	-	479	737
Third shift <sup>3/</sup>						
Hour of shift:						
1st-----	-	15	15	12.3	35	50
2nd-----	-	17	17	13.9	37	54
3rd-----	-	17	17	13.9	54	71
4th-----	-	22	22	18.0	36	58
5th-----	-	4	4	3.3	33	37
6th-----	1	14	15	12.3	28	43
7th-----	-	12	12	9.8	29	41
8th-----	1	11	12	9.8	21	33
9th-----	-	4	4	3.3	5	9
10th and over-----	-	4	4	3.3	5	9
Total third shift-----	2	120	122	-	283	405
All shifts						
Hour of shift:						
1st-----	-	105	105	9.5	168	273
2nd-----	2	135	137	12.4	270	407
3rd-----	1	150	151	13.6	284	435
4th-----	-	152	152	13.7	244	396
5th-----	4	91	95	8.6	218	313
6th-----	1	96	97	8.8	187	284
7th-----	3	124	127	11.5	239	366
8th-----	4	114	118	10.7	175	293
9th-----	-	61	61	5.5	61	122
10th and over-----	1	63	64	5.8	61	125
Total all shifts-----	16	1,091	1,107	-	1,907	3,014

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
<b>Auger:</b>						
First shift <sup>1/</sup>						
Hour of shift:						
1st-----	-	2	2	4.7	-	2
2nd-----	-	3	3	7.0	4	7
3rd-----	-	5	5	11.6	4	9
4th-----	-	7	7	16.3	3	10
5th-----	1	3	4	9.3	4	8
6th-----	-	3	3	7.0	3	6
7th-----	-	4	4	9.3	3	7
8th-----	-	2	2	4.7	4	6
9th-----	-	6	6	14.0	4	10
10th and over-----	-	7	7	16.3	4	11
Total first shift-----	1	42	43	-	33	76
Second shift <sup>2/</sup>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	1	1	33.3	-	1
3rd-----	-	-	-	-	-	-
4th-----	-	1	1	33.3	-	1
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	33.3	-	1
Total second shift-----	-	3	3	-	-	3
Third shift <sup>3/</sup>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift-----	-	-	-	-	-	-
All shifts						
Hour of shift:						
1st-----	-	2	2	4.3	-	2
2nd-----	-	4	4	8.7	4	8
3rd-----	-	5	5	10.9	4	9
4th-----	-	8	8	17.4	3	11
5th-----	1	3	4	8.7	4	8
6th-----	-	3	3	6.5	3	6
7th-----	-	4	4	8.7	3	7
8th-----	-	2	2	4.3	4	6
9th-----	-	6	6	13.0	4	10
10th and over-----	-	8	8	17.4	4	12
Total all shifts-----	1	45	46	-	33	79

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Independent shops and yards:						
First shift <sup>1/</sup>						
Hour of shift:						
1st-----	-	4	4	10.0	28	32
2nd-----	-	4	4	10.0	25	29
3rd-----	-	6	6	15.0	48	54
4th-----	-	6	6	15.0	26	32
5th-----	-	2	2	5.0	13	15
6th-----	-	7	7	17.5	24	31
7th-----	-	7	7	17.5	33	40
8th-----	-	4	4	10.0	16	20
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	2	2
Total first shift----	-	40	40	-	215	255
Second shift <sup>2/</sup>						
Hour of shift:						
1st-----	-	2	2	9.5	8	10
2nd-----	-	2	2	9.5	15	17
3rd-----	-	2	2	9.5	11	13
4th-----	-	1	1	4.8	12	13
5th-----	-	4	4	19.0	8	12
6th-----	-	3	3	14.3	12	15
7th-----	-	2	2	9.5	6	8
8th-----	-	4	4	19.0	4	8
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	4.8	-	1
Total second shift----	-	21	21	-	76	97
Third shift <sup>3/</sup>						
Hour of shift:						
1st-----	-	-	-	-	1	1
2nd-----	-	2	2	28.6	4	6
3rd-----	-	1	1	14.3	10	11
4th-----	-	-	-	-	4	4
5th-----	1	-	1	14.3	11	12
6th-----	-	2	2	28.6	4	6
7th-----	-	-	-	-	1	1
8th-----	1	-	1	14.3	2	3
9th-----	-	-	-	-	1	1
10th and over-----	-	-	-	-	-	-
Total third shift----	2	5	7	-	38	45
All shifts						
Hour of shift:						
1st-----	-	6	6	8.8	37	43
2nd-----	-	8	8	11.8	44	52
3rd-----	-	9	9	13.2	69	78
4th-----	-	7	7	10.3	42	49
5th-----	1	6	7	10.3	32	39
6th-----	-	12	12	17.6	40	52
7th-----	-	9	9	13.2	40	49
8th-----	1	8	9	13.2	22	31
9th-----	-	-	-	-	1	1
10th and over-----	-	1	1	1.5	2	3
Total all shifts----	2	66	68	-	329	397

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
<b>Mechanical cleaning plants:</b>						
<b>First shift <sup>1/</sup></b>						
Hour of shift:						
1st-----	-	30	30	10.2	56	86
2nd-----	-	43	43	14.7	72	115
3rd-----	2	45	47	16.0	113	160
4th-----	1	29	30	10.2	79	109
5th-----	1	27	28	9.6	48	76
6th-----	-	30	30	10.2	65	95
7th-----	-	50	50	17.1	104	154
8th-----	-	22	22	7.5	49	71
9th-----	-	6	6	2.0	18	24
10th and over-----	-	7	7	2.4	22	29
Total first shift-----	4	289	293	-	626	919
<b>Second shift <sup>2/</sup></b>						
Hour of shift						
1st-----	1	19	20	11.2	25	45
2nd-----	-	19	19	10.7	38	57
3rd-----	1	30	31	17.4	33	64
4th-----	-	21	21	11.8	38	59
5th-----	-	22	22	12.4	36	58
6th-----	-	23	23	12.9	37	60
7th-----	1	16	17	9.6	27	44
8th-----	-	16	16	9.0	20	36
9th-----	-	4	4	2.2	7	11
10th and over-----	1	4	5	2.8	7	12
Total second shift-----	4	174	178	-	268	446
<b>Third shift <sup>3/</sup></b>						
Hour of shift:						
1st-----	-	8	8	9.5	26	34
2nd-----	-	11	11	13.1	27	38
3rd-----	-	18	18	21.4	35	53
4th-----	-	11	11	13.1	32	43
5th-----	-	10	10	11.9	27	37
6th-----	-	6	6	7.1	29	35
7th-----	-	12	12	14.3	11	23
8th-----	-	3	3	3.6	9	12
9th-----	-	1	1	1.2	2	3
10th and over-----	-	4	4	4.8	9	13
Total third shift-----	-	84	84	-	207	291
<b>All shifts</b>						
Hour of shift:						
1st-----	1	57	58	10.5	107	165
2nd-----	-	73	73	13.2	137	210
3rd-----	3	93	96	17.3	181	277
4th-----	1	61	62	11.2	149	211
5th-----	1	59	60	10.8	111	171
6th-----	-	59	59	10.6	131	190
7th-----	1	78	79	14.2	142	221
8th-----	-	41	41	7.4	78	119
9th-----	-	11	11	2.0	27	38
10th and over-----	1	15	16	2.9	38	54
Total all shifts-----	8	547	555	-	1,101	1,656

See footnotes at end of table.

TABLE 16. - Hour of shift of injury occurrence at bituminous coal operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
<b>All work locations:</b>						
First shift <sup>1/</sup>						
Hour of shift:						
1st-----	3	376	379	7.5	474	853
2nd-----	4	679	683	13.4	829	1,512
3rd-----	18	778	796	15.7	1,095	1,891
4th-----	7	669	676	13.3	908	1,584
5th-----	12	426	438	8.6	549	987
6th-----	11	540	551	10.8	744	1,295
7th-----	11	710	721	14.2	1,000	1,721
8th-----	6	523	529	10.4	610	1,139
9th-----	1	176	177	3.5	163	340
10th and over-----	2	128	130	2.6	155	285
Total first shift-----	75	5,005	5,080	-	6,527	11,607
Second shift <sup>2/</sup>						
Hour of shift:						
1st-----	1	295	296	8.0	319	615
2nd-----	3	436	439	11.9	529	968
3rd-----	7	541	548	14.8	603	1,151
4th-----	2	541	543	14.7	692	1,235
5th-----	3	471	474	12.8	573	1,047
6th-----	10	493	503	13.6	584	1,087
7th-----	7	450	457	12.4	550	1,007
8th-----	1	312	313	8.5	320	633
9th-----	-	52	52	1.4	42	94
10th and over-----	1	71	72	1.9	56	128
Total second shift-----	35	3,662	3,697	-	4,268	7,965
Third shift <sup>3/</sup>						
Hour of shift:						
1st-----	-	207	207	9.3	298	505
2nd-----	3	314	317	14.2	437	754
3rd-----	6	312	378	16.9	572	950
4th-----	2	294	296	13.2	506	802
5th-----	3	247	250	11.2	409	659
6th-----	2	295	297	13.3	393	690
7th-----	1	262	263	11.8	298	561
8th-----	4	162	166	7.4	209	375
9th-----	-	22	22	1.0	33	55
10th and over-----	-	38	38	1.7	49	87
Total third shift-----	21	2,213	2,234	-	3,204	5,438
All shifts						
Hour of shift:						
1st-----	4	878	882	8.0	1,091	1,973
2nd-----	10	1,429	1,439	13.1	1,795	3,234
3rd-----	31	1,691	1,722	15.6	2,270	3,992
4th-----	11	1,504	1,515	13.8	2,106	3,621
5th-----	18	1,144	1,162	10.6	1,531	2,693
6th-----	23	1,328	1,351	12.3	1,721	3,072
7th-----	19	1,422	1,441	13.1	1,848	3,289
8th-----	11	997	1,008	9.2	1,139	2,147
9th-----	1	250	251	2.3	238	489
10th and over-----	3	237	240	2.2	260	500
Total all shifts-----	131	10,880	11,011	-	13,999	25,010

<sup>1/</sup> Work shift starting anytime between 4:00 A.M. and 11:59 A.M.

<sup>2/</sup> Work shift starting anytime between 12:00 noon and 7:59 P.M.

<sup>3/</sup> Work shift starting anytime between 8:00 P.M. and 3:59 A.M.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,  
by general work location, 1973

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
<b>Underground:</b>						
<b>First shift <sup>1/</sup></b>						
Hour of shift:						
1st-----	-	1	1	1.9	1	2
2nd-----	1	12	13	24.1	4	17
3rd-----	-	4	4	7.4	5	9
4th-----	-	8	8	14.8	7	15
5th-----	-	8	8	14.8	5	13
6th-----	-	5	5	9.3	1	6
7th-----	-	10	10	18.5	4	14
8th-----	-	3	3	5.6	-	3
9th-----	-	1	1	1.9	1	2
10th and over-----	-	1	1	1.9	1	2
Total first shift----	1	53	54	-	29	83
<b>Second shift <sup>2/</sup></b>						
Hour of shift:						
1st-----	-	1	1	7.1	-	1
2nd-----	-	3	3	21.4	2	5
3rd-----	-	1	1	7.1	-	1
4th-----	-	-	-	-	1	1
5th-----	-	2	2	14.3	2	4
6th-----	-	4	4	28.6	-	4
7th-----	-	1	1	7.1	2	3
8th-----	-	2	2	14.3	-	2
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total second shift----	-	14	14	-	7	21
<b>Third shift <sup>3/</sup></b>						
Hour of shift:						
1st-----	-	1	1	16.7	1	2
2nd-----	-	2	2	33.3	1	3
3rd-----	-	-	-	-	1	1
4th-----	-	-	-	-	1	1
5th-----	-	3	3	50.0	1	4
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift----	-	6	6	-	5	11
<b>All shifts</b>						
Hour of shift:						
1st-----	-	3	3	4.1	2	5
2nd-----	1	17	18	24.3	7	25
3rd-----	-	5	5	6.8	6	11
4th-----	-	8	8	10.8	9	17
5th-----	-	13	13	17.6	8	21
6th-----	-	9	9	12.2	1	10
7th-----	-	11	11	14.9	6	17
8th-----	-	5	5	6.8	-	5
9th-----	-	1	1	1.4	1	2
10th and over-----	-	1	1	1.4	1	2
Total all shifts----	1	73	74	-	41	115

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Surface at underground:						
First shift <sup>1/</sup>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	1	1	50.0	-	1
4th-----	-	-	-	-	1	1
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	1	1
8th-----	-	-	-	-	1	1
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	50.0	-	1
Total first shift-----	-	2	2	-	3	5
Second shift <sup>2/</sup>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	1	1
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total second shift-----	-	-	-	-	1	1
Third shift <sup>3/</sup>						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	-	-
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift-----	-	-	-	-	-	-
All shifts						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	1	1	50.0	-	1
4th-----	-	-	-	-	1	1
5th-----	-	-	-	-	1	1
6th-----	-	-	-	-	-	-
7th-----	-	-	-	-	1	1
8th-----	-	-	-	-	1	1
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	50.0	-	1
Total all shifts-----	-	2	2	-	4	6

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
<b>Strip:</b>						
<b>First shift <sup>1/</sup></b>						
Hour of shift:						
1st-----	-	7	7	9.5	10	17
2nd-----	-	8	8	10.8	10	18
3rd-----	-	11	11	14.9	20	31
4th-----	-	13	13	17.6	27	40
5th-----	-	10	10	13.5	25	35
6th-----	-	7	7	9.5	9	16
7th-----	-	11	11	14.9	17	28
8th-----	-	3	3	4.1	10	13
9th-----	-	3	3	4.1	3	6
10th and over-----	-	1	1	1.4	-	1
Total first shift-----	-	74	74	-	131	205
<b>Second shift <sup>2/</sup></b>						
Hour of shift:						
1st-----	-	3	3	8.6	3	6
2nd-----	-	5	5	14.3	7	12
3rd-----	-	3	3	8.6	4	7
4th-----	-	7	7	20.0	9	16
5th-----	-	6	6	17.1	8	14
6th-----	-	7	7	20.0	10	17
7th-----	-	4	4	11.4	4	8
8th-----	-	-	-	-	3	3
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total second shift-----	-	35	35	-	48	83
<b>Third shift <sup>3/</sup></b>						
Hour of shift:						
1st-----	-	1	1	12.5	1	2
2nd-----	-	3	3	37.5	-	3
3rd-----	-	1	1	12.5	2	3
4th-----	-	1	1	12.5	2	3
5th-----	-	1	1	12.5	2	3
6th-----	-	-	-	-	1	1
7th-----	-	-	-	-	-	-
8th-----	-	1	1	12.5	1	2
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	1	1
Total third shift-----	-	8	8	-	10	18
<b>All shifts</b>						
Hour of shift:						
1st-----	-	11	11	9.4	14	25
2nd-----	-	16	16	13.7	17	33
3rd-----	-	15	15	12.8	26	41
4th-----	-	21	21	17.9	38	59
5th-----	-	17	17	14.5	35	52
6th-----	-	14	14	12.0	20	34
7th-----	-	15	15	12.8	21	36
8th-----	-	4	4	3.4	14	18
9th-----	-	3	3	2.6	3	6
10th and over-----	-	1	1	.9	1	2
Total all shifts-----	-	117	117	-	189	306

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Culm banks:						
First shift 1/						
Hour of shift:						
1st-----	-	1	1	12.5	-	1
2nd-----	-	-	-	-	2	2
3rd-----	-	1	1	12.5	3	4
4th-----	-	2	2	25.0	2	4
5th-----	-	-	-	-	-	-
6th-----	-	1	1	12.5	1	2
7th-----	-	1	1	12.5	1	2
8th-----	-	1	1	12.5	-	1
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	12.5	-	1
Total first shift-----	-	8	8	-	9	17
Second shift 2/						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	1	1	50.0	-	1
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	-	-
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	1	1	50.0	-	1
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total second shift-----	-	2	2	-	-	2
Third shift 3/						
Hour of shift:						
1st-----	-	-	-	-	-	-
2nd-----	-	-	-	-	-	-
3rd-----	-	-	-	-	-	-
4th-----	-	-	-	-	1	1
5th-----	-	-	-	-	-	-
6th-----	-	-	-	-	-	-
7th-----	-	1	1	100.0	-	1
8th-----	-	-	-	-	-	-
9th-----	-	-	-	-	-	-
10th and over-----	-	-	-	-	-	-
Total third shift-----	-	1	1	-	1	2
All shifts						
Hour of shift:						
1st-----	-	1	1	9.1	-	1
2nd-----	-	1	1	9.1	2	3
3rd-----	-	1	1	9.1	3	4
4th-----	-	2	2	18.2	3	5
5th-----	-	-	-	-	-	-
6th-----	-	1	1	9.1	1	2
7th-----	-	3	3	27.3	1	4
8th-----	-	1	1	9.1	-	1
9th-----	-	-	-	-	-	-
10th and over-----	-	1	1	9.1	-	1
Total all shifts-----	-	11	11	-	10	21

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Dredges:						
First shift: 1/						
Hour of shift:						
1st -----	-	-	-	-	1	1
2nd -----	-	-	-	-	-	-
3rd -----	-	-	-	-	-	-
4th -----	-	-	-	-	-	-
5th -----	-	-	-	-	-	-
6th -----	-	-	-	-	-	-
7th -----	-	-	-	-	-	-
8th -----	-	-	-	-	-	-
9th -----	-	-	-	-	-	-
10th and over -----	-	-	-	-	-	-
Total first shift --	-	-	-	-	1	1
Second shift: 2/						
Hour of shift:						
1st -----	-	-	-	-	-	-
2nd -----	-	-	-	-	-	-
3rd -----	-	-	-	-	-	-
4th -----	-	-	-	-	-	-
5th -----	-	-	-	-	-	-
6th -----	-	-	-	-	-	-
7th -----	-	-	-	-	-	-
8th -----	-	-	-	-	-	-
9th -----	-	-	-	-	-	-
10th and over -----	-	-	-	-	-	-
Total second shift -	-	-	-	-	-	-
Third shift: 3/						
Hour of shift:						
1st -----	-	-	-	-	-	-
2nd -----	-	-	-	-	-	-
3rd -----	-	-	-	-	-	-
4th -----	-	-	-	-	-	-
5th -----	-	-	-	-	-	-
6th -----	-	-	-	-	1	1
7th -----	-	-	-	-	-	-
8th -----	-	-	-	-	-	-
9th -----	-	-	-	-	-	-
10th and over -----	-	-	-	-	1	1
Total third shift --	-	-	-	-	2	2
All shifts:						
Hour of shift:						
1st -----	-	-	-	-	-	-
2nd -----	-	-	-	-	1	1
3rd -----	-	-	-	-	-	-
4th -----	-	-	-	-	-	-
5th -----	-	-	-	-	-	-
6th -----	-	-	-	-	1	1
7th -----	-	-	-	-	-	-
8th -----	-	-	-	-	-	-
9th -----	-	-	-	-	-	-
10th and over -----	-	-	-	-	1	1
Total all shifts ---	-	-	-	-	3	3

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,  
by general work location, 1973 - Continued

Work location shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
Independent shops and yards:						
First shift: 1/						
Hour of shift:						
1st -----	-	1	1	7.1	-	1
2nd -----	-	2	2	14.3	2	4
3rd -----	-	-	-	-	2	2
4th -----	-	3	3	21.4	6	9
5th -----	-	4	4	28.6	3	7
6th -----	-	2	2	14.3	6	8
7th -----	-	1	1	7.1	4	5
8th -----	-	1	1	7.1	6	7
9th -----	-	-	-	-	-	-
10th and over -----	-	-	-	-	-	-
Total first shift --	-	14	14	-	29	43
Second shift: 2/						
Hour of shift:						
1st -----	-	-	-	-	-	-
2nd -----	-	-	-	-	-	-
3rd -----	-	-	-	-	2	2
4th -----	-	-	-	-	1	1
5th -----	-	-	-	-	1	1
6th -----	-	-	-	-	1	1
7th -----	-	-	-	-	1	1
8th -----	-	-	-	-	2	2
9th -----	-	-	-	-	-	-
10th and over -----	-	-	-	-	8	8
Total second shift -	-	-	-	-	8	8
Third shift: 2/						
Hour of shift:						
1st -----	-	-	-	-	-	-
2nd -----	-	-	-	-	-	-
3rd -----	-	-	-	-	-	-
4th -----	-	-	-	-	-	-
5th -----	-	-	-	-	-	-
6th -----	-	-	-	-	-	-
7th -----	-	-	-	-	-	-
8th -----	-	-	-	-	1	1
9th -----	-	-	-	-	-	-
10th and over -----	-	-	-	-	-	-
Total third shift --	-	-	-	-	1	1
All shifts:						
Hour of shift:						
1st -----	-	1	1	7.1	-	1
2nd -----	-	2	2	14.3	2	4
3rd -----	-	-	-	-	4	4
4th -----	-	3	3	21.4	7	10
5th -----	-	4	4	28.6	4	8
6th -----	-	2	2	14.3	7	9
7th -----	-	1	1	7.1	5	6
8th -----	-	1	1	7.1	9	10
9th -----	-	-	-	-	-	-
10th and over -----	-	-	-	-	-	-
Total all shifts ---	-	14	14	-	38	52

See footnotes at end of table.

TABLE 17. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
<b>Mechanical cleaning plants:</b>						
First shift: 1/						
Hour of shift:						
1st -----	-	11	11	12.0	12	23
2nd -----	-	10	10	10.9	16	26
3rd -----	-	7	7	7.6	14	21
4th -----	-	15	15	16.3	33	48
5th -----	-	21	21	22.8	27	48
6th -----	-	7	7	7.6	7	14
7th -----	-	10	10	10.9	22	32
8th -----	-	10	10	10.9	16	26
9th -----	-	-	-	-	8	8
10th and over -----	-	1	1	1.1	4	5
Total first shift --	-	92	92	-	159	251
Second shift: 2/						
Hour of shift:						
1st -----	-	2	2	7.4	2	4
2nd -----	-	2	2	7.4	4	6
3rd -----	-	3	3	11.1	7	10
4th -----	-	3	3	11.1	6	9
5th -----	-	4	4	14.8	12	16
6th -----	-	6	6	22.2	3	9
7th -----	-	4	4	14.8	3	7
8th -----	-	-	-	-	1	1
9th -----	-	1	1	3.7	2	3
10th and over -----	-	2	2	7.4	1	3
Total second shift --	-	27	27	-	41	68
Third shift: 3/						
Hour of shift:						
1st -----	-	-	-	-	1	1
2nd -----	-	-	-	-	-	-
3rd -----	-	1	1	25.0	-	1
4th -----	-	1	1	25.0	2	3
5th -----	-	1	1	25.0	-	1
6th -----	-	1	1	25.0	1	2
7th -----	-	-	-	-	1	1
8th -----	-	-	-	-	1	1
9th -----	-	-	-	-	1	1
10th and over -----	-	-	-	-	-	-
Total third shift --	-	4	4	-	7	11
All shifts:						
Hour of shift:						
1st -----	-	13	13	10.6	15	28
2nd -----	-	12	12	9.8	20	32
3rd -----	-	11	11	8.9	21	32
4th -----	-	19	19	15.4	41	60
5th -----	-	26	26	21.1	39	65
6th -----	-	14	14	11.4	11	25
7th -----	-	14	14	11.4	26	40
8th -----	-	10	10	8.1	18	28
9th -----	-	1	1	.8	11	12
10th and over -----	-	3	3	2.4	5	8
Total all shifts ---	-	123	123	-	207	330

See footnotes at end of table.

TABLE L7. - Hour of shift of injury occurrence at Pennsylvania anthracite operations,  
by general work location, 1973 - Continued

Work location, shift designation, and hour of shift	Disabling injuries			Distribution of all disabling injuries, percent	Nondisabling injuries	All injuries
	Fatal	Nonfatal	All disabling			
All work locations:						
First shift: <sup>1/</sup>						
Hour of shift:						
1st -----	-	21	21	8.6	23	44
2nd -----	1	32	33	13.5	35	68
3rd -----	-	24	24	9.8	44	68
4th -----	-	41	41	16.8	76	117
5th -----	-	43	43	17.6	60	103
6th -----	-	22	22	9.0	24	46
7th -----	-	33	33	13.5	49	82
8th -----	-	18	18	7.4	33	51
9th -----	-	4	4	1.6	12	16
10th and over -----	-	5	5	2.0	5	10
Total first shift --	1	243	244	-	361	605
Second shift: <sup>2/</sup>						
Hour of shift:						
1st -----	-	6	6	7.7	5	11
2nd -----	-	11	11	14.1	13	24
3rd -----	-	7	7	9.0	13	20
4th -----	-	10	10	12.8	17	27
5th -----	-	12	12	15.4	24	36
6th -----	-	17	17	21.8	14	31
7th -----	-	10	10	12.8	10	20
8th -----	-	2	2	2.6	6	8
9th -----	-	1	1	1.3	2	3
10th and over -----	-	2	2	2.6	1	3
Total second shift -	-	78	78	-	105	183
Third shift: <sup>3/</sup>						
Hour of shift:						
1st -----	-	2	2	10.5	3	5
2nd -----	-	5	5	26.3	1	6
3rd -----	-	2	2	10.5	3	5
4th -----	-	2	2	10.5	6	8
5th -----	-	5	5	26.3	3	8
6th -----	-	1	1	5.3	3	4
7th -----	-	1	1	5.3	1	2
8th -----	-	1	1	5.3	3	4
9th -----	-	-	-	-	1	1
10th and over -----	-	-	-	-	2	2
Total third shift --	-	19	19	-	26	45
All shifts:						
Hour of shift:						
1st -----	-	29	29	8.5	31	60
2nd -----	1	48	49	14.4	49	98
3rd -----	-	33	33	9.7	60	93
4th -----	-	53	53	15.5	99	152
5th -----	-	60	60	17.6	87	147
6th -----	-	40	40	11.7	41	81
7th -----	-	44	44	12.9	60	104
8th -----	-	21	21	6.2	42	63
9th -----	-	5	5	1.5	15	20
10th and over -----	-	7	7	2.1	8	15
Total all shifts ---	1	340	341	-	492	833

<sup>1/</sup> Work shift starting anytime between 4:00 A.M. and 11:59 A.M.

<sup>2/</sup> Work shift starting anytime between 12:00 noon and 7:59 P.M.

<sup>3/</sup> Work shift starting anytime between 8:00 P.M. and 3:59 A.M.

TABLE 18. - Number of injuries, injury rates and average severity at bituminous coal mines in the United States, by part of body injured, 1973

General work location and part of body injured	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity				
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries		Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling		
		Permanent		Temporary total	All non-fatal disabling															Severity rates per million man-hours	
		Total	Partial																	Fatal	Non-fatal disabling
Underground mines:																					
Underground:																					
Head, face, neck (excl. eye)-----	21	-	-	622	622	643	1,094	1,737	7.3	0.12	3.64	3.76	6.40	737	83	819	-	23	218		
Eye-----	-	-	1	472	473	473	998	1,471	5.3	-	2.77	2.77	5.84	-	36	36	1,800	9	13		
Trunk-----	17	5	3	2,645	2,653	2,670	2,092	4,762	30.2	.10	15.51	15.61	12.23	596	811	1,408	2,267	39	90		
Arm (above wrist)-----	-	-	4	408	412	412	565	957	4.7	-	2.41	2.41	3.19	-	169	169	2,772	44	70		
Wrist, hand, fingers-----	-	-	99	1,584	1,683	1,683	2,642	4,325	19.0	-	9.84	9.84	15.45	-	361	361	223	23	35		
Leg (above ankle)-----	-	1	6	1,098	1,105	1,105	1,078	2,183	12.5	-	6.46	6.46	6.30	-	415	415	3,150	42	64		
Ankle, foot, toes-----	-	1	10	1,090	1,101	1,101	921	2,022	12.5	-	6.44	6.44	5.39	-	297	297	1,180	30	46		
Multiple-----	43	-	5	618	623	666	451	1,117	7.5	.25	3.64	3.89	2.64	1,509	236	1,745	2,760	43	448		
Unclassified (no data)-----	17	-	-	73	73	90	85	175	1.0	.10	.43	.53	.50	596	16	612	-	37	1,163		
Total or average-----	98	7	128	8,610	8,745	8,843	9,906	18,749	-	.57	51.13	51.70	57.92	3,438	2,403	5,841	674	33	113		
Surface:																					
Head, face, neck (excl. eye)-----	-	-	-	20	20	20	52	72	5.1	-	1.20	1.20	3.12	-	64	64	-	54	54		
Eye-----	-	-	-	28	28	28	106	134	7.1	-	1.68	1.68	6.36	-	12	12	-	7	7		
Trunk-----	1	-	-	131	131	132	125	257	33.7	.06	7.86	7.92	7.50	360	355	715	-	45	90		
Arm (above wrist)-----	-	-	-	17	17	17	41	58	4.3	-	1.02	1.02	2.46	-	78	78	-	77	77		
Wrist, hand, fingers-----	-	-	8	54	62	62	218	280	15.8	-	3.72	3.72	13.08	-	186	186	227	24	50		
Leg (above ankle)-----	-	-	-	54	54	54	73	127	13.8	-	3.24	3.24	4.38	-	129	129	-	40	40		
Ankle, foot, toes-----	-	-	-	48	48	48	78	126	12.2	-	2.88	2.88	4.68	-	98	98	-	34	34		
Multiple-----	2	-	-	22	22	24	24	48	6.1	.12	1.32	1.44	1.44	720	82	803	-	62	557		
Unclassified (no data)-----	3	-	-	4	4	7	6	13	1.8	.18	.24	.42	.36	1,080	3	1,083	-	13	2,579		
Total or average-----	6	-	8	378	386	392	723	1,115	-	.36	23.17	23.53	43.39	2,160	1,006	3,167	227	40	135		
Total or average, underground mines-----	104	7	136	8,988	9,131	9,235	10,629	19,864	-	.55	48.65	49.20	56.63	3,325	2,279	5,604	647	33	114		
Strip mines:																					
Head, face, neck (excl. eye)-----	1	1	1	76	78	79	204	283	7.1	.02	1.41	1.43	3.68	108	170	278	1,800	21	195		
Eye-----	-	-	1	77	78	78	343	421	7.0	-	1.41	1.41	6.19	-	43	43	1,800	7	30		
Trunk-----	3	-	-	355	355	358	337	695	32.3	.05	6.41	6.46	6.08	325	204	529	-	32	82		
Arm (above wrist)-----	-	-	1	46	47	47	123	170	4.2	-	.85	.85	2.22	-	97	97	3,600	39	114		
Wrist, hand, fingers-----	1	-	25	109	134	135	491	626	12.2	.02	2.42	2.44	8.86	108	181	289	322	18	119		
Leg (above ankle)-----	-	-	1	139	140	140	185	325	12.6	-	2.53	2.53	3.34	-	186	186	3,000	52	73		
Ankle, foot, toes-----	-	-	1	137	138	138	133	271	12.5	-	2.49	2.49	2.40	-	128	128	3,490	26	52		
Multiple-----	9	1	1	108	110	119	79	198	10.7	.16	1.99	2.15	1.43	975	231	1,206	3,000	35	561		
Unclassified (no data)-----	2	-	-	11	11	13	12	25	1.2	.04	.20	.23	.22	217	2	219	-	12	933		
Total or average-----	16	2	31	1,058	1,091	1,107	1,907	3,014	-	.29	19.69	19.98	34.42	1,733	1,243	2,976	798	30	149		

TABLE 18. - Number of injuries, injury rates and average severity at bituminous coal mines in the United States, by part of body injured, 1973 - Continued

General work location and part of body injured	Number of injuries							Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity						
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries		All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling			
		Permanent		Temporary total	All non-fatal disabling															Total		Partial
		Total	Partial																			
Auger mines:																						
Head, face, neck (excl. eye)-----	-	-	-	4	4	4	4	8	8.7	-	2.31	2.31	2.31	-	12	12	-	5	5			
Eye-----	-	-	-	1	1	1	1	1	2.2	-	.58	.58	4.62	-	2	2	-	3	3			
Trunk-----	-	-	-	14	14	14	4	18	30.4	-	8.08	8.08	2.31	-	183	183	-	23	23			
Arm (above wrist)-----	-	-	-	2	2	2	-	2	4.3	-	1.15	1.15	-	-	57	57	-	49	49			
Wrist, hand, fingers-----	-	-	2	5	7	7	9	16	15.2	-	4.04	4.04	5.19	-	264	264	150	31	65			
Leg (above ankle)-----	-	-	-	2	2	2	3	5	4.3	-	1.15	1.15	1.73	-	55	55	-	48	48			
Ankle, foot, toes-----	-	-	-	7	7	7	3	10	15.2	-	4.04	4.04	1.73	-	100	100	-	25	25			
Multiple-----	1	1	-	6	7	8	1	9	17.4	0.58	4.04	4.62	.58	3,462	3,843	7,305	-	110	1,582			
Unclassified (no data)----	-	-	-	1	1	1	1	2	2.2	-	.58	.58	.58	-	16	16	-	28	28			
Total or average-----	1	1	2	42	45	46	33	79	-	.58	25.97	26.54	19.04	3,462	4,532	7,994	150	37	301			
Total or average, surface-----	17	3	33	1,100	1,136	1,153	1,940	3,093	-	.30	19.88	20.18	33.95	1,785	1,342	3,128	759	31	155			
Total or average, mining-----	121	10	169	10,088	10,267	10,388	12,569	22,957	-	.49	41.94	42.43	51.34	2,965	2,061	5,026	669	33	118			
Independent shops and yards:																						
Head, face, neck (excl. eye)-----	-	-	-	3	3	3	24	27	4.4	-	.59	.59	4.69	-	9	9	-	15	15			
Eye-----	-	-	-	4	4	4	66	70	5.9	-	.78	.78	12.89	-	12	12	-	16	16			
Trunk-----	-	-	-	20	20	20	43	63	29.4	-	3.91	3.91	8.40	-	64	64	-	16	16			
Arm (above wrist)-----	-	-	-	1	1	1	21	22	1.5	-	.20	.20	4.10	-	7	7	-	34	34			
Wrist, hand, fingers-----	-	-	-	9	9	9	100	109	13.2	-	1.76	1.76	19.54	-	44	44	-	25	25			
Leg (above ankle)-----	-	-	-	11	11	11	32	43	16.2	-	2.15	2.15	6.25	-	84	84	-	39	39			
Ankle, foot, toes-----	-	-	1	11	12	12	32	44	17.6	-	2.34	2.34	6.25	-	106	106	300	22	45			
Multiple-----	2	-	-	5	5	7	6	13	10.3	.39	.98	1.37	1.17	2,344	40	2,385	-	41	1,744			
Unclassified (no data)----	-	-	-	1	1	1	5	6	1.5	-	.20	.20	.98	-	1	1	-	4	4			
Total or average-----	2	-	1	65	66	68	329	397	-	.39	12.89	13.28	64.27	2,344	367	2,712	300	24	204			
Mechanical cleaning plants:																						
Head, face, neck (excl. eye)-----	1	-	-	38	38	39	88	127	7.0	.05	1.76	1.80	4.07	277	33	311	-	19	172			
Eye-----	-	-	-	47	47	47	172	219	8.5	-	2.17	2.17	7.95	-	18	18	-	8	8			
Trunk-----	3	-	-	174	174	177	233	410	31.9	.14	8.05	8.18	10.77	832	297	1,129	-	37	138			
Arm (above wrist)-----	-	-	1	19	20	20	59	79	3.6	-	.92	.92	2.73	-	234	234	4,500	29	253			
Wrist, hand, fingers-----	-	-	6	51	57	57	264	321	10.3	-	2.64	2.64	12.21	-	123	123	178	31	47			
Leg (above ankle)-----	1	-	1	82	83	84	144	224	15.1	.05	3.84	3.88	6.47	277	330	607	4,500	32	156			
Ankle, foot, toes-----	-	-	-	76	76	76	96	172	13.7	-	3.51	3.51	4.44	-	90	90	-	26	26			
Multiple-----	3	-	1	44	45	48	38	86	8.6	.14	2.08	2.22	1.76	832	139	972	900	48	438			
Unclassified (no data)----	-	-	-	7	7	7	11	18	1.3	-	.32	.32	.51	-	4	4	-	13	13			
Total or average-----	8	-	9	538	547	555	1,101	1,656	-	.37	25.29	25.66	50.91	2,220	1,269	3,488	1,219	31	136			
Grand total or average--	131	10	179	10,691	10,880	11,011	13,999	25,010	-	.48	40.06	40.54	51.55	2,894	1,966	4,860	695	33	120			

TABLE 19. - Number of injuries, injury rates and average severity at Pennsylvania anthracite mines,  
by part of body injured, 1973

General work location and part of body injured	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average Severity				
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries		Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling		
		Permanent		Temporary total	All non-fatal disabling															Severity rates per million man-hours	
		Total	Partial																	Fatal	Non-fatal disabling
<b>Underground mines:</b>																					
Underground:																					
Head, face, neck (excl. eye)-----	-	-	-	7	7	7	7	14	9.5	-	9.30	9.30	9.30	-	401	401	-	43	43		
Eye-----	-	-	-	12	12	12	4	16	16.2	-	15.95	15.95	5.32	-	73	73	-	5	5		
Trunk-----	-	-	-	20	20	20	5	25	27.0	-	26.58	26.58	6.64	-	1,168	1,168	-	44	44		
Arm (above wrist)-----	-	-	-	1	1	1	4	5	1.4	-	1.33	1.33	5.32	-	7	7	-	5	5		
Wrist, hand, fingers-----	-	-	1	8	9	9	12	21	12.2	-	11.96	11.96	15.95	-	431	431	110	27	36		
Leg (above ankle)-----	-	-	-	12	12	12	3	15	16.2	-	15.95	15.95	3.99	-	1,216	1,216	-	76	76		
Ankle, foot, toes-----	-	-	-	8	8	8	6	14	10.8	-	10.63	10.63	7.97	-	263	263	-	25	25		
Multiple-----	-	-	-	4	4	4	-	4	5.4	-	5.32	5.32	-	-	105	105	-	20	20		
Unclassified (no data)---	1	-	-	-	-	1	-	1	1.4	1.33	-	1.33	-	-	7,973	-	7,973	-	6,000		
Total or average-----	1	-	1	72	73	74	41	115	-	1.33	97.00	98.33	54.48	7,973	3,664	11,636	110	37	118		
<b>Surface:</b>																					
Head, face, neck (excl. eye)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Eye-----	-	-	-	2	2	2	2	4	100.0	-	10.70	10.70	10.70	-	11	11	-	1	1		
Trunk-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Arm (above wrist)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Wrist, hand, fingers-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Leg (above ankle)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Ankle, foot, toes-----	-	-	-	-	-	-	1	1	-	-	-	-	5.35	-	-	-	-	-	-		
Multiple-----	-	-	-	-	-	-	1	1	-	-	-	-	5.35	-	-	-	-	-	-		
Unclassified (no data)---	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total or average-----	-	-	-	2	2	2	4	6	-	-	10.70	10.70	21.41	-	11	11	-	1	1		
Total or average, underground mines---	1	-	1	74	75	76	45	121	-	1.06	79.84	80.90	47.90	6,387	2,937	9,324	110	36	115		
<b>Strip mines:</b>																					
Head, face, neck (excl. eye)-----	-	-	-	6	6	6	24	30	5.1	-	2.62	2.62	10.49	-	18	18	-	7	7		
Eye-----	-	-	-	11	11	11	37	48	9.4	-	4.81	4.81	16.18	-	12	12	-	3	3		
Trunk-----	-	-	-	47	47	47	27	74	40.2	-	20.55	20.55	11.81	-	579	579	-	28	28		
Arm (above wrist)-----	-	-	-	5	5	5	16	21	4.3	-	2.19	2.19	7.00	-	34	34	-	15	15		
Wrist, hand, fingers-----	-	-	-	17	17	17	47	64	14.5	-	7.43	7.43	20.55	-	149	149	-	20	20		
Leg (above ankle)-----	-	-	-	13	13	13	18	31	11.1	-	5.68	5.68	7.87	-	219	219	-	39	39		
Ankle, foot, toes-----	-	-	-	6	6	6	13	19	5.1	-	2.62	2.62	5.68	-	105	105	-	40	40		
Multiple-----	-	-	-	12	12	12	7	19	10.3	-	5.25	5.25	3.06	-	318	318	-	61	61		
Unclassified (no data)---	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total or average-----	-	-	-	117	117	117	189	306	-	-	51.16	51.16	82.64	-	1,435	1,435	-	28	28		

TABLE 19. - Number of injuries, injury rates and average severity at Pennsylvania anthracite mines, by part of body injured, 1973 - Continued

General work location and part of body injured	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling			All disabling injuries	Non-disabling injuries	All injuries	Fatal		Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling	
		Permanent		Temporary total															All non-fatal disabling
		Total	Partial																
<b>Culm banks:</b>																			
Head, face, neck (excl. eye)-----	-	-	-	1	1	1	-	1	9.1	-	3.22	3.22	-	-	3	3	-	1	1
Eye-----	-	-	-	3	3	3	-	3	27.3	-	9.67	9.67	-	-	16	16	-	2	2
Trunk-----	-	-	-	3	3	3	5	8	27.3	-	9.67	9.67	16.11	-	316	316	-	33	33
Arm (above wrist)-----	-	-	-	-	-	-	1	1	-	-	-	-	3.22	-	-	-	-	-	-
Wrist, hand, fingers-----	-	-	-	1	1	1	4	5	9.1	-	3.22	3.22	12.89	-	10	10	-	3	3
Leg (above ankle)-----	-	-	-	2	2	2	-	2	18.2	-	6.44	6.44	-	-	325	325	-	51	51
Ankle, foot, toes-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multiple-----	-	-	-	1	1	1	-	1	9.1	-	3.22	3.22	-	-	84	84	-	26	26
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	-	11	11	11	10	21	-	-	35.44	35.44	32.22	-	754	754	-	21	21
<b>Dredges:</b>																			
Head, face, neck (excl. eye)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Eye-----	-	-	-	-	-	-	1	1	-	-	-	-	20.98	-	-	-	-	-	-
Trunk-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arm (above wrist)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Wrist, hand, fingers-----	-	-	-	-	-	-	2	2	-	-	-	-	41.96	-	-	-	-	-	-
Leg (above ankle)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ankle, foot, toes-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multiple-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	-	-	-	-	3	3	-	-	-	-	62.93	-	-	-	-	-	-
Total or average, surface-----	-	-	-	128	128	128	202	330	-	-	48.39	48.39	76.37	-	1,329	1,329	-	27	27
Total or average, mining-----	1	-	1	202	203	204	247	451	-	0.28	56.63	56.91	68.91	1,674	1,751	3,424	110	31	60
<b>Independent shops and yards:</b>																			
Head, face, neck (excl. eye)-----	-	-	-	2	2	2	7	9	14.3	-	6.84	6.84	23.95	-	89	89	-	13	13
Eye-----	-	-	-	2	2	2	10	12	14.3	-	6.84	6.84	34.22	-	14	14	-	2	2
Trunk-----	-	-	-	3	3	3	4	7	21.4	-	10.26	10.26	13.69	-	205	205	-	20	20
Arm (above wrist)-----	-	-	-	-	-	-	3	3	-	-	-	-	10.26	-	-	-	-	-	-
Wrist, hand, fingers-----	-	-	-	1	1	1	4	5	7.1	-	3.42	3.42	13.69	-	34	34	-	10	10
Leg (above ankle)-----	-	-	-	3	3	3	5	8	21.4	-	10.26	10.26	17.11	-	233	233	-	23	23
Ankle, foot, toes-----	-	-	-	2	2	2	2	4	14.3	-	6.84	6.84	6.84	-	209	209	-	30	30
Multiple-----	-	-	-	1	1	1	3	4	7.1	-	3.42	3.42	10.26	-	38	38	-	11	11
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	-	14	14	14	38	52	-	-	47.90	47.90	130.02	-	821	821	-	17	17

TABLE 19. - Number of injuries, injury rates and average severity at Pennsylvania anthracite mines, by part of body injured, 1973 - Continued

General work location and part of body injured	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling			All disabling injuries	Non-disabling injuries	All injuries	Fatal		Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling	
		Permanent		Temporary total															All non-fatal disabling
		Total	Partial																
Mechanical cleaning plants:																			
Head, face, neck (excl. eye)-----	-	-	-	7	7	7	31	38	5.7	-	3.23	3.23	14.29	-	222	222	-	69	69
Eye-----	-	-	-	10	10	10	31	41	8.1	-	4.61	4.61	14.29	-	15	15	-	3	3
Trunk-----	-	-	-	46	46	46	41	87	37.4	-	21.21	21.21	18.90	-	538	538	-	25	25
Arm (above wrist)-----	-	-	-	8	8	8	12	20	6.5	-	3.69	3.69	5.53	-	160	160	-	43	43
Wrist, hand, fingers-----	-	-	1	25	26	26	53	79	21.1	-	11.99	11.99	24.43	-	434	434	51	36	36
Leg (above ankle)-----	-	-	-	10	10	10	21	31	8.1	-	4.61	4.61	9.68	-	89	89	-	19	19
Ankle, foot, toes-----	-	-	-	10	10	10	12	22	8.1	-	4.61	4.61	5.53	-	126	126	-	27	27
Multiple-----	-	-	-	6	6	6	5	11	4.9	-	2.77	2.77	2.30	-	147	147	-	53	53
Unclassified (no data)-----	-	-	-	-	-	-	1	1	-	-	-	-	.46	-	-	-	-	-	-
Total or average-----	-	-	1	122	123	123	207	330	-	-	56.70	56.70	95.43	-	1,729	1,729	51	30	30
Grand total or average-----	1	-	2	338	340	341	492	833	-	0.17	56.24	56.40	81.38	992	1,698	2,690	80	30	48

TABLE 20. - Number of injuries and average severity by degree at bituminous coal mines in the United States, by part of body and principal cause of injury, 1973

Part of body and principal cause of injury	Number of injuries							Average severity			
	Fatal	Nonfatal disabling			All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries	
		Permanent		Tem- porary total							
		Total	Partial								
<b>Head, face, neck (excl. eye):</b>											
Falls of roof or back-----	11	-	-	89	89	100	144	244	-	31	688
Falls of face or rib-----	2	1	-	22	23	25	18	43	-	20	738
Pressure bumps or bursts-----	-	-	-	3	3	3	2	5	-	19	19
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	40	40	40	76	116	-	34	34
Slips or falls of persons-----	-	-	-	40	40	40	37	77	-	52	52
Handling material-----	-	-	-	76	76	76	194	270	-	16	16
Handtools-----	-	-	-	79	79	79	307	386	-	15	15
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	1	1	-	-	-
Striking or bumping against objects-----	-	-	-	47	47	47	110	157	-	11	11
Haulage-----	8	-	-	196	196	204	247	451	-	21	256
Explosions of gas or dust-----	-	-	-	1	1	1	1	2	-	6	6
Explosives-----	-	-	-	8	8	8	9	17	-	17	17
Electricity-----	-	-	-	18	18	18	29	47	-	11	11
Machinery-----	2	-	1	114	115	117	182	299	1,800	28	145
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	4	4	4	2	6	-	7	7
Miscellaneous causes-----	-	-	-	26	26	26	107	133	-	7	7
<b>Total or average-----</b>	<b>23</b>	<b>1</b>	<b>1</b>	<b>763</b>	<b>765</b>	<b>788</b>	<b>1,466</b>	<b>2,254</b>	<b>1,800</b>	<b>23</b>	<b>207</b>
<b>Eyes:</b>											
Falls of roof or back-----	-	-	-	21	21	21	29	50	-	6	6
Falls of face or rib-----	-	-	-	3	3	3	11	14	-	3	3
Pressure bumps or bursts-----	-	-	-	1	1	1	2	3	-	2	2
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	16	16	16	57	73	-	11	11
Slips or falls of persons-----	-	-	-	-	-	-	1	1	-	-	-
Handling material-----	-	-	-	94	94	94	311	405	-	6	6
Handtools-----	-	-	1	114	115	115	256	371	1,800	24	39
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	2	2	-	-	-
Striking or bumping against objects-----	-	-	-	9	9	9	17	26	-	4	4
Haulage-----	-	-	-	35	35	35	92	127	-	9	9
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	1	3	4	4	5	9	1,800	23	467
Electricity-----	-	-	-	97	97	97	145	242	-	3	3
Machinery-----	-	-	-	94	94	94	241	335	-	5	5
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	3	3	-	-	-
Miscellaneous causes-----	-	-	-	142	142	142	521	663	-	5	5
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>629</b>	<b>631</b>	<b>631</b>	<b>1,693</b>	<b>2,324</b>	<b>1,800</b>	<b>9</b>	<b>15</b>
<b>Trunk:</b>											
Falls of roof or back-----	4	1	-	219	220	224	151	375	-	70	202
Falls of face or rib-----	2	-	-	90	90	92	60	152	-	46	176
Pressure bumps or bursts-----	-	-	-	4	4	4	2	6	-	12	12
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	1	1	53	55	55	62	117	3,000	17	180
Slips or falls of persons-----	-	-	-	392	392	392	408	800	-	38	38
Handling material-----	-	-	-	1,382	1,382	1,382	1,153	2,535	-	32	32
Handtools-----	-	-	1	148	149	149	171	320	200	27	28
Stepping or kneeling on sharp or loose objects-----	-	-	-	11	11	11	20	31	-	10	10
Striking or bumping against objects-----	-	-	-	27	27	27	34	61	-	47	47
Haulage-----	9	2	-	536	538	547	385	932	-	42	162
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	7	7	7	7	14	-	18	18
Electricity-----	-	-	-	3	3	3	4	7	-	4	4
Machinery-----	9	1	1	350	352	361	262	623	3,600	45	220
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	3	3	3	3	6	-	1	1
Miscellaneous causes-----	-	-	-	114	114	114	112	226	-	26	26
<b>Total or average-----</b>	<b>24</b>	<b>5</b>	<b>3</b>	<b>3,339</b>	<b>3,347</b>	<b>3,371</b>	<b>2,834</b>	<b>6,205</b>	<b>2,267</b>	<b>38</b>	<b>91</b>

TABLE 20. - Number of injuries and average severity by degree at bituminous coal mines in the United States, by part of body and principal cause of injury, 1973 - Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Arm (above wrist):											
Falls of roof or back-----	-	-	1	57	58	58	81	139	4,500	45	121
Falls of face or rib-----	-	-	-	11	11	11	9	20	-	59	59
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	15	15	15	26	41	-	88	88
Slips or falls of persons-----	-	-	-	48	48	48	90	138	-	33	33
Handling material-----	-	-	-	68	68	68	135	203	-	18	18
Handtools-----	-	-	-	26	26	26	103	129	-	31	31
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	6	6	6	30	36	-	34	34
Haulage-----	-	-	2	93	95	95	119	214	1,045	40	62
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	4	4	4	1	5	-	47	47
Electricity-----	-	-	-	15	15	15	20	35	-	21	21
Machinery-----	-	-	3	134	137	137	131	268	4,200	66	157
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	1	1	1	1	2	-	5	5
	-	-	-	15	15	15	43	58	-	13	13
Total or average-----	-	-	6	493	499	499	789	1,288	3,198	44	82
Wrist, hand, fingers:											
Falls of roof or back-----	-	-	7	157	164	164	214	378	224	29	38
Falls of face or rib-----	-	-	-	19	19	19	22	41	-	35	35
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	4	70	74	74	121	195	310	21	36
Slips or falls of persons-----	-	-	1	54	55	55	131	186	50	34	34
Handling material-----	-	-	27	481	508	508	1,271	1,779	169	17	25
Handtools-----	-	-	5	244	249	249	783	1,032	188	15	18
Stepping or kneeling on sharp or loose objects-----	-	-	-	2	2	2	4	6	-	18	18
Striking or bumping against objects-----	-	-	-	6	6	6	28	34	-	2	2
Haulage-----	-	-	32	235	267	267	309	576	201	34	54
Explosions of gas or dust-----	-	-	1	-	1	1	-	1	50	-	50
Explosives-----	-	-	-	-	-	-	4	4	-	-	-
Electricity-----	-	-	-	123	123	123	135	258	-	17	17
Machinery-----	1	-	63	396	459	460	595	1,055	292	27	76
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	25	25	25	104	129	-	12	12
Total or average-----	1	-	140	1,812	1,952	1,953	3,724	5,677	238	23	41
Leg (above ankle):											
Falls of roof or back-----	-	-	-	107	107	107	74	181	-	61	61
Falls of face or rib-----	-	-	-	60	60	60	43	103	-	54	54
Pressure bumps or bursts-----	-	-	-	2	2	2	1	3	-	77	77
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	50	50	50	54	104	-	29	29
Slips or falls of persons-----	-	-	1	216	217	217	316	533	900	34	38
Handling material-----	-	-	-	160	160	160	188	348	-	28	28
Handtools-----	-	-	-	99	99	99	182	281	-	15	15
Stepping or kneeling on sharp or loose objects-----	-	-	-	84	84	84	65	149	-	24	24
Striking or bumping against objects-----	-	-	-	36	36	36	55	91	-	48	48
Haulage-----	1	1	4	237	242	243	237	480	3,750	52	162
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	9	9	9	2	11	-	39	39
Electricity-----	-	-	-	7	7	7	1	8	-	29	29
Machinery-----	-	-	3	248	251	251	213	464	3,500	62	103
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	1	1	1	1	2	-	11	11
	-	-	-	70	70	70	79	149	-	31	31
Total or average-----	.1	1	8	1,386	1,395	1,396	1,511	2,907	3,300	42	70

TABLE 20. - Number of injuries and average severity by degree at bituminous coal mines in the United States, by part of body and principal cause of injury, 1973- Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Temp- orary total	All nonfatal disabling						
		Total	Partial								
Ankle, foot, and toes:											
Falls of roof or back-----	-	-	1	134	135	135	69	204	900	41	47
Falls of face or rib-----	-	-	1	62	63	63	35	98	2,400	48	85
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	58	58
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	69	69	69	79	148	-	35	35
Slips or falls of persons-----	-	1	-	162	163	163	137	300	-	21	57
Handling material-----	-	-	1	253	254	254	308	562	300	22	23
Handtools-----	-	-	-	45	45	45	54	99	-	21	21
Stepping or kneeling on sharp or loose objects-----	-	-	-	135	135	135	247	382	-	17	17
Striking or bumping against objects-----	-	-	-	5	5	5	11	16	-	18	18
Haulage-----	-	-	6	198	204	204	129	333	1,292	35	72
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	4	4	4	-	-	-	63	63
Electricity-----	-	-	-	2	2	2	1	5	-	10	10
Machinery-----	-	-	3	243	246	246	131	377	1,413	38	55
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	56	56	56	61	117	-	20	20
Total or average-----	-	1	12	1,369	1,382	1,382	1,263	2,645	1,299	30	45
Multiple:											
Falls of roof or back-----	18	-	1	174	175	193	113	306	3,000	47	617
Falls of face or rib-----	1	-	-	56	56	57	27	84	-	57	161
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	1	1	1	-	1	-	10	10
Sliding or falling material or objects-----	1	-	-	23	23	24	22	46	-	36	284
Slips or falls of persons-----	-	1	-	77	78	78	74	152	-	39	115
Handling material-----	-	-	-	52	52	52	54	106	-	29	29
Handtools-----	-	-	-	7	7	7	15	22	-	76	76
Stepping or kneeling on sharp or loose objects-----	-	-	-	5	5	5	1	6	-	7	7
Striking or bumping against objects-----	-	-	-	7	7	7	15	22	-	37	37
Haulage-----	22	-	5	174	179	201	140	341	2,760	48	767
Explosions of gas or dust-----	-	-	-	3	3	3	3	6	-	139	139
Explosives-----	1	-	-	12	12	13	4	17	-	30	490
Electricity-----	2	-	-	65	65	67	38	105	-	32	210
Machinery-----	15	1	1	114	116	131	60	191	900	45	779
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	25	25	25	31	56	-	31	31
Total or average-----	60	2	7	803	812	872	599	1,471	2,529	43	487
Unclassified (no data):											
Falls of roof or back-----	5	-	-	8	8	13	8	21	-	45	2,335
Falls of face or rib-----	1	-	-	4	4	5	5	10	-	23	1,219
Pressure bumps or bursts-----	-	-	-	1	1	1	1	2	-	55	55
Inrush of water-----	-	-	-	1	1	1	-	1	-	10	10
Sliding or falling material or objects-----	1	-	-	1	1	2	-	2	-	10	3,005
Slips or falls of persons-----	-	-	-	6	6	6	14	20	-	6	6
Handling material-----	-	-	-	20	20	20	15	35	-	22	22
Handtools-----	-	-	-	1	1	1	7	8	-	23	23
Stepping or kneeling on sharp or loose objects-----	-	-	-	1	1	1	2	3	-	5	5
Striking or bumping against objects-----	-	-	-	-	-	-	2	2	-	-	-
Haulage-----	1	-	-	6	6	7	10	17	-	22	876
Explosions of gas or dust-----	2	-	-	-	-	2	-	2	-	-	6,000
Explosives-----	-	-	-	1	1	1	-	1	-	1	1
Electricity-----	8	-	-	15	15	23	18	41	-	66	2,130
Machinery-----	3	-	-	6	6	9	7	16	-	14	2,009
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	1	-	-	2	2	3	2	5	-	4	2,003
Miscellaneous causes-----	-	-	-	6	6	6	14	20	-	20	20
Total or average-----	22	-	-	97	97	119	120	239	-	31	1,134
Grand total or average-----	131	10	179	10,691	10,880	11,011	13,999	25,010	695	33	120

TABLE 21. - Number of injuries and average severity by degree at Pennsylvania anthracite mines, by part of body and principal cause of injury, 1973

Part of body and principal cause of injury	Number of injuries							Average severity			
	Fatal	Nonfatal disabling			All nonfatal disabling	All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total							
		Total	Partial								
Head, face, neck (excl. eye):											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	
Falls of face or rib-----	-	-	-	1	1	1	-	1	77	77	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	2	2	2	5	7	-	3	
Slips or falls of persons-----	-	-	-	2	2	2	4	6	-	24	
Handling material-----	-	-	-	3	3	3	11	14	-	90	
Handtools-----	-	-	-	6	6	6	21	27	-	52	
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	
Striking or bumping against objects-----	-	-	-	-	-	-	4	4	-	-	
Haulage-----	-	-	-	4	4	4	4	8	-	28	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	-	-	-	-	-	-	-	
Machinery-----	-	-	-	2	2	2	7	9	-	2	
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	3	3	3	13	16	-	10	
Total or average-----	-	-	-	23	23	23	69	92	-	37	
Eye:											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	
Falls of face or rib-----	-	-	-	-	-	-	-	-	-	-	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	2	2	2	2	4	-	4	
Slips or falls of persons-----	-	-	-	-	-	-	1	1	-	-	
Handling material-----	-	-	-	7	7	7	24	31	-	2	
Handtools-----	-	-	-	8	8	8	13	21	-	4	
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	
Striking or bumping against objects-----	-	-	-	1	1	1	-	1	-	2	
Haulage-----	-	-	-	-	-	-	1	1	-	-	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	-	-	-	3	3	-	-	
Machinery-----	-	-	-	4	4	4	5	9	-	7	
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	18	18	18	36	54	-	2	
Total or average-----	-	-	-	40	40	40	85	125	-	3	
Trunk:											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	
Falls of face or rib-----	-	-	-	3	3	3	-	3	-	41	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	1	1	1	-	1	-	29	
Slips or falls of persons-----	-	-	-	37	37	37	30	67	-	22	
Handling material-----	-	-	-	40	40	40	28	68	-	44	
Handtools-----	-	-	-	7	7	7	5	12	-	29	
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	
Striking or bumping against objects-----	-	-	-	-	-	-	1	1	-	-	
Haulage-----	-	-	-	18	18	18	9	27	-	20	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	-	-	-	-	-	-	-	
Machinery-----	-	-	-	6	6	6	3	9	-	27	
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	7	7	7	6	13	-	11	
Total or average-----	-	-	-	119	119	119	82	201	-	30	

TABLE 21. - Number of injuries and average severity by degree at Pennsylvania anthracite mines, by part of body and principal cause of injury, 1973 - Continued

Part of body and principal cause of injury	Number of injuries							Average severity			
	Fatal	Nonfatal disabling			All nonfatal disabling	All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total							
		Total	Partial								
<b>Arm (above wrist):</b>											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	
Falls of face or rib-----	-	-	-	-	-	-	-	-	-	-	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	1	1	1	-	1	-	43	
Slips or falls of persons-----	-	-	-	3	3	3	6	9	-	6	
Handling material-----	-	-	-	3	3	3	9	12	-	48	
Handtools-----	-	-	-	-	-	-	6	6	-	-	
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	
Striking or bumping against objects-----	-	-	-	-	-	-	2	2	-	-	
Haulage-----	-	-	-	3	3	3	2	5	-	32	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	1	1	-	-	
Electricity-----	-	-	-	-	-	-	-	-	-	-	
Machinery-----	-	-	-	4	4	4	6	10	-	31	
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	-	-	-	4	4	-	-	
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>36</b>	<b>50</b>	<b>-</b>	<b>31</b>	
<b>Wrist, hand, and fingers:</b>											
Falls of roof or back-----	-	-	-	-	-	-	1	1	-	-	
Falls of face or rib-----	-	-	1	-	1	-	-	1	110	110	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	1	1	1	3	4	-	21	
Slips or falls of persons-----	-	-	-	6	6	6	5	11	-	16	
Handling material-----	-	-	-	26	26	26	59	85	-	18	
Handtools-----	-	-	-	7	7	7	19	26	-	32	
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	
Striking or bumping against objects-----	-	-	-	-	-	-	2	2	-	-	
Haulage-----	-	-	-	5	5	5	9	14	-	69	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	1	1	1	-	1	-	13	
Machinery-----	-	-	1	5	6	6	18	24	51	55	
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	1	1	1	6	7	-	5	
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>52</b>	<b>54</b>	<b>54</b>	<b>122</b>	<b>176</b>	<b>81</b>	<b>28</b>	
<b>Leg (above ankle):</b>											
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-	
Falls of face or rib-----	-	-	-	1	1	1	-	1	-	121	
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	
Sliding or falling material or objects-----	-	-	-	4	4	4	1	5	-	61	
Slips or falls of persons-----	-	-	-	9	9	9	13	22	-	23	
Handling material-----	-	-	-	10	10	10	9	19	-	43	
Handtools-----	-	-	-	1	1	1	3	4	-	142	
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	3	3	-	-	
Striking or bumping against objects-----	-	-	-	-	-	-	1	1	-	-	
Haulage-----	-	-	-	11	11	11	8	19	-	56	
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	
Explosives-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	-	-	-	-	-	-	-	
Machinery-----	-	-	-	1	1	1	7	8	-	8	
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	3	3	3	1	4	-	2	
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>40</b>	<b>40</b>	<b>40</b>	<b>47</b>	<b>87</b>	<b>-</b>	<b>44</b>	

TABLE 21. - Number of injuries and average severity by degree at Pennsylvania anthracite mines, by part of body and principal cause of injury, 1973 - Continued

Part of body and principal cause of injury	Number of injuries							Average severity		
	Fatal	Nonfatal disabling			All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total						
		Total	Partial							
Ankle, foot, and toes:										
Falls of roof or back-----	-	-	-	-	-	-	-	-	-	-
Falls of face or rib-----	-	-	-	-	-	-	-	-	-	-
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	2	2	-	2	-	42	42
Slips or falls of persons-----	-	-	-	8	8	8	5	13	38	38
Handling material-----	-	-	-	8	8	8	7	15	22	22
Handtools-----	-	-	-	1	1	1	1	2	4	4
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	10	10	-	-
Striking or bumping against objects-----	-	-	-	1	1	1	1	2	8	8
Haulage-----	-	-	-	3	3	3	-	3	21	21
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	-	-	-	-
Machinery-----	-	-	-	3	3	3	2	5	43	43
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	-	-	-	8	8	-	-
Total or average-----	-	-	-	26	26	26	34	60	-	30
Multiple:										
Falls of roof or back-----	-	-	-	1	1	1	-	1	3	3
Falls of face or rib-----	-	-	-	1	1	1	-	1	2	2
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	1	1	1	-	1	69	69
Slips or falls of persons-----	-	-	-	9	9	9	4	13	32	32
Handling material-----	-	-	-	3	3	3	3	6	40	40
Handtools-----	-	-	-	1	1	1	1	2	11	11
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	-	-	-	-	-	-	-
Haulage-----	-	-	-	3	3	3	5	8	6	6
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	-	-	-	-
Machinery-----	-	-	-	2	2	2	2	4	109	109
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	3	3	3	1	4	145	145
Total or average-----	-	-	-	24	24	24	16	40	-	48
Unclassified (no data):										
Falls of roof or back-----	1	-	-	-	-	1	-	1	-	6,000
Falls of face or rib-----	-	-	-	-	-	-	-	-	-	-
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	-	-	-	-	-	-	-
Slips or falls of persons-----	-	-	-	-	-	-	-	-	-	-
Handling material-----	-	-	-	-	-	-	-	-	-	-
Handtools-----	-	-	-	-	-	-	-	-	-	-
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	-	-	-	-	-	-	-
Haulage-----	-	-	-	-	-	-	-	-	-	-
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	-	-	-	-	-	-	-
Electricity-----	-	-	-	-	-	-	-	-	-	-
Machinery-----	-	-	-	-	-	-	1	1	-	-
Suffocation (no flame or smoldering)	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	-	-	-	-	-	-	-
Total or average-----	1	-	-	-	-	1	1	2	-	6,000
Grand total or average-----	1	-	2	338	340	341	492	833	80	30

TABLE 22. - Number of injuries and average severity by degree at all coal mines in the United States, by part of body and principal cause of injury, 1973

Part of body and principal cause of injury	Number of injuries							Average severity			
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
Head, face, neck (excl. eye):											
Falls of roof or back-----	11	-	-	89	89	100	144	244	-	31	688
Falls of face or rib-----	2	1	-	23	24	26	18	44	-	23	713
Pressure bumps or bursts-----	-	-	-	3	3	3	2	5	-	19	19
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	42	42	42	81	123	-	33	33
Slips or falls of persons-----	-	-	-	42	42	42	41	83	-	50	50
Handling material-----	-	-	-	79	79	79	205	284	-	19	19
Handtools-----	-	-	-	85	85	85	328	413	-	18	18
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	1	1	-	-	-
Striking or bumping against objects-----	-	-	-	47	47	47	114	161	-	11	11
Haulage-----	8	-	-	200	200	208	251	459	-	21	251
Explosions of gas or dust-----	-	-	-	1	1	1	1	2	-	6	6
Explosives-----	-	-	-	8	8	8	9	17	-	17	17
Electricity-----	-	-	-	18	18	18	29	47	-	11	11
Machinery-----	2	-	1	116	117	119	189	308	1,800	28	143
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	4	4	4	2	6	-	7	7
Miscellaneous causes-----	-	-	-	29	29	29	120	149	-	7	7
Total or average-----	23	1	1	786	788	811	1,535	2,346	1,800	23	203
Eye:											
Falls of roof or back-----	-	-	-	21	21	21	29	50	-	6	6
Falls of face or rib-----	-	-	-	3	3	3	11	14	-	3	3
Pressure bumps or bursts-----	-	-	-	1	1	1	2	3	-	2	2
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material of objects-----	-	-	-	18	18	18	59	77	-	11	11
Slips or falls of persons-----	-	-	-	-	-	-	2	2	-	-	-
Handling material-----	-	-	-	101	101	101	335	436	-	6	6
Handtools-----	-	-	1	122	123	123	269	392	1,800	23	37
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	2	2	-	-	-
Striking or bumping against objects-----	-	-	-	10	10	10	17	27	-	4	4
Haulage-----	-	-	-	35	35	35	93	128	-	9	9
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	1	3	4	4	5	9	1,800	23	467
Electricity-----	-	-	-	97	97	97	148	245	-	3	3
Machinery-----	-	-	-	98	98	98	246	344	-	5	5
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	3	3	-	-	-
Miscellaneous causes-----	-	-	-	160	160	160	557	717	-	5	5
Total or average-----	-	-	2	669	671	671	1,778	2,449	1,800	9	14
Trunk:											
Falls of roof or back-----	4	1	-	219	220	224	151	375	-	70	202
Falls of face or rib-----	2	-	-	93	93	95	60	155	-	46	171
Pressure bumps or bursts-----	-	-	-	4	4	4	2	6	-	12	12
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	1	1	54	56	56	62	118	3,000	17	178
Slips or falls of persons-----	-	-	-	429	429	429	438	867	-	37	37
Handling material-----	-	-	-	1,422	1,422	1,422	1,181	2,603	-	32	32
Handtools-----	-	-	1	155	156	156	176	332	200	27	28
Stepping or kneeling on sharp or loose objects-----	-	-	-	11	11	11	20	31	-	10	10
Striking or bumping against objects-----	-	-	-	27	27	27	35	62	-	47	47
Haulage-----	9	2	-	554	556	565	394	959	-	42	158
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	7	7	7	7	14	-	18	18
Electricity-----	-	-	-	3	3	3	4	7	-	4	4
Machinery-----	9	1	1	356	358	367	265	632	3,600	45	217
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	3	3	3	3	6	-	1	1
Miscellaneous causes-----	-	-	-	121	121	121	118	239	-	25	25
Total or average-----	24	5	3	3,458	3,466	3,490	2,916	6,406	2,267	38	89

TABLE 22 - Number of injuries and average severity by degree at all coal mines in the United States, by part of body and principal cause of injury, 1973 - Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perman-ent partial	Tempo-rary total	All dis-abling injuries
		Permanent		Tempo-rary total	All nonfatal disabling						
		Total	Partial								
<b>Arm (above wrist):</b>											
Falls of roof or back-----	-	-	1	57	58	58	81	139	4,500	45	121
Falls of face or rib-----	-	-	-	11	11	11	9	20	-	59	59
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	16	16	16	26	42	-	85	85
Slips or falls of persons-----	-	-	-	51	51	51	96	147	-	32	32
Handling material-----	-	-	-	71	71	71	144	215	-	19	19
Handtools-----	-	-	-	26	26	26	109	135	-	31	31
Stepping or kneeling on sharp or loose objects-----	-	-	-	-	-	-	-	-	-	-	-
Striking or bumping against objects-----	-	-	-	6	6	6	32	38	-	34	34
Haulage-----	-	-	2	96	98	98	121	219	1,045	40	61
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	4	4	4	2	6	-	47	47
Electricity-----	-	-	-	15	15	15	20	35	-	21	21
Machinery-----	-	-	3	138	141	141	137	278	4,200	65	153
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	1	1	1	1	2	-	5	5
Miscellaneous causes-----	-	-	-	15	15	15	47	62	-	13	13
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>6</b>	<b>507</b>	<b>513</b>	<b>513</b>	<b>825</b>	<b>1,338</b>	<b>3,198</b>	<b>43</b>	<b>80</b>
<b>Wrist, hand, fingers:</b>											
Falls of roof or back-----	-	-	7	157	164	164	215	379	224	29	38
Falls of face or rib-----	-	-	1	19	20	20	22	42	110	35	39
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	4	71	75	75	124	199	310	21	36
Slips or falls of persons-----	-	-	1	60	61	61	136	197	50	32	32
Handling material-----	-	-	27	507	534	534	1,330	1,864	169	17	25
Handtools-----	-	-	5	251	256	256	802	1,058	188	15	19
Stepping or kneeling on sharp or loose objects-----	-	-	-	2	2	2	4	6	-	18	18
Striking or bumping against objects-----	-	-	-	6	6	6	30	36	-	2	2
Haulage-----	-	-	32	240	272	272	318	590	201	34	54
Explosions of gas or dust-----	-	-	1	-	1	1	-	1	50	-	50
Explosives-----	-	-	-	-	-	-	4	4	-	-	-
Electricity-----	-	-	-	124	124	124	135	259	-	17	17
Machinery-----	1	-	64	401	465	466	613	1,079	289	28	76
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	-	-	-	3	3	-	-	-
Miscellaneous causes-----	-	-	-	26	26	26	110	136	-	12	12
<b>Total or average-----</b>	<b>1</b>	<b>-</b>	<b>142</b>	<b>1,864</b>	<b>2,006</b>	<b>2,007</b>	<b>3,846</b>	<b>5,853</b>	<b>236</b>	<b>23</b>	<b>41</b>
<b>Leg (above ankle):</b>											
Falls of roof or back-----	-	-	-	107	107	107	74	181	-	61	61
Falls of face or rib-----	-	-	-	61	61	61	43	104	-	55	55
Pressure bumps or bursts-----	-	-	-	2	2	2	1	3	-	77	77
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	54	54	54	55	109	-	32	32
Slips or falls of persons-----	-	-	1	225	226	226	329	555	900	33	37
Handling material-----	-	-	-	170	170	170	197	367	-	29	29
Handtools-----	-	-	-	100	100	100	185	285	-	16	16
Stepping or kneeling on sharp or loose objects-----	-	-	-	84	84	84	68	152	-	24	24
Striking or bumping against objects-----	-	-	-	36	36	36	56	92	-	48	48
Haulage-----	1	1	4	248	253	254	245	499	3,750	52	157
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	9	9	9	2	11	-	39	39
Electricity-----	-	-	-	7	7	7	1	8	-	29	29
Machinery-----	-	-	3	249	252	252	220	472	3,500	61	102
Suffocation (no flame or smoldering)-----	-	-	-	-	-	-	-	-	-	-	-
Fires or suffocation from fires-----	-	-	-	1	1	1	2	3	-	11	11
Miscellaneous causes-----	-	-	-	73	73	73	80	153	-	30	30
<b>Total or average-----</b>	<b>1</b>	<b>1</b>	<b>8</b>	<b>1,426</b>	<b>1,435</b>	<b>1,436</b>	<b>1,558</b>	<b>2,994</b>	<b>3,300</b>	<b>42</b>	<b>69</b>

TABLE 22 - Number of injuries and average severity by degree at all coal mines in the United States, by part of body and principal cause of injury, 1973 - Continued

Part of body and principal cause of injury	Number of injuries								Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries	Perma- nent partial	Tem- porary total	All dis- abling injuries
		Permanent		Tem- porary total	All nonfatal disabling						
		Total	Partial								
<b>Ankle, foot, and toes:</b>											
Falls of roof or back-----	-	-	1	134	135	135	69	204	900	41	47
Falls of face or rib-----	-	-	1	62	63	63	35	98	2,400	48	85
Pressure bumps or bursts-----	-	-	-	1	1	1	-	1	-	58	58
Inrush of water-----	-	-	-	-	-	-	-	-	-	-	-
Sliding or falling material or objects-----	-	-	-	71	71	71	79	150	-	35	35
Slips or falls of persons-----	-	1	-	170	171	171	142	313	-	21	56
Handling material-----	-	-	1	261	262	262	315	577	300	22	23
Handtools-----	-	-	-	46	46	46	55	101	-	21	21
Stepping or kneeling on sharp or loose objects-----	-	-	-	135	135	135	257	392	-	17	17
Striking or bumping against objects-----	-	-	-	6	6	6	12	18	-	17	17
Haulage-----	-	-	6	201	207	207	129	336	1,292	35	71
Explosions of gas or dust-----	-	-	-	-	-	-	-	-	-	-	-
Explosives-----	-	-	-	4	4	4	1	5	-	63	63
Electricity-----	-	-	-	2	2	2	1	3	-	10	10
Machinery-----	-	-	3	246	249	249	133	382	1,413	38	54
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	56	56	56	69	125	-	20	20
<b>Total or average-----</b>	<b>-</b>	<b>1</b>	<b>12</b>	<b>1,395</b>	<b>1,408</b>	<b>1,408</b>	<b>1,297</b>	<b>2,705</b>	<b>1,299</b>	<b>30</b>	<b>45</b>
<b>Multiple:</b>											
Falls of roof or back-----	18	-	1	175	176	194	113	307	3,000	46	614
Falls of face or rib-----	1	-	-	57	57	58	27	85	-	56	159
Pressure bumps or bursts-----	-	-	-	-	-	-	-	-	-	-	-
Inrush of water-----	-	-	-	1	1	1	-	1	-	10	10
Sliding or falling material or objects-----	1	-	-	24	24	25	22	47	-	37	276
Slips or falls of persons-----	-	1	-	86	87	87	78	165	-	38	107
Handling material-----	-	-	-	55	55	55	57	112	-	29	29
Handtools-----	-	-	-	8	8	8	16	24	-	68	68
Stepping or kneeling on sharp or loose objects-----	-	-	-	5	5	5	1	6	-	7	7
Striking or bumping against objects-----	-	-	-	7	7	7	15	22	-	37	37
Haulage-----	22	-	5	177	182	204	145	349	2,760	47	755
Explosions of gas or dust-----	-	-	-	3	3	3	3	6	-	139	139
Explosives-----	1	-	-	12	12	13	4	17	-	30	490
Electricity-----	2	-	-	65	65	67	38	105	-	32	210
Machinery-----	15	1	1	116	118	133	62	195	900	46	769
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	-	-	-	-	-	-	-	-	-	-	-
Miscellaneous causes-----	-	-	-	28	28	28	32	60	-	43	43
<b>Total or average-----</b>	<b>60</b>	<b>2</b>	<b>7</b>	<b>827</b>	<b>836</b>	<b>896</b>	<b>615</b>	<b>1,511</b>	<b>2,529</b>	<b>43</b>	<b>475</b>
<b>Unclassified (no data):</b>											
Falls of roof or back-----	6	-	-	8	8	14	8	22	-	45	2,697
Falls of face or rib-----	1	-	-	4	4	5	5	10	-	23	1,219
Pressure bumps or bursts-----	-	-	-	1	1	1	1	2	-	55	55
Inrush of water-----	-	-	-	1	1	1	-	1	-	10	10
Sliding or falling material or objects-----	1	-	-	1	1	2	-	2	-	10	3,005
Slips or falls of persons-----	-	-	-	6	6	6	14	20	-	6	6
Handling material-----	-	-	-	20	20	20	15	35	-	22	22
Handtools-----	-	-	-	1	1	1	7	8	-	23	23
Stepping or kneeling on sharp or loose objects-----	-	-	-	1	1	1	2	3	-	5	5
Striking or bumping against objects-----	-	-	-	-	-	-	2	2	-	-	-
Haulage-----	1	-	-	6	6	7	10	17	-	22	876
Explosions of gas or dust-----	2	-	-	-	-	2	-	2	-	-	6,000
Explosives-----	-	-	-	1	1	1	-	1	-	1	1
Electricity-----	8	-	-	15	15	23	18	41	-	66	2,130
Machinery-----	3	-	-	6	6	9	8	17	-	14	2,009
Suffocation (no flame or smoldering) Fires or suffocation from fires-----	1	-	-	2	2	3	2	5	-	4	2,003
Miscellaneous causes-----	-	-	-	6	6	6	14	20	-	20	20
<b>Total or average-----</b>	<b>23</b>	<b>-</b>	<b>-</b>	<b>97</b>	<b>97</b>	<b>120</b>	<b>121</b>	<b>241</b>	<b>-</b>	<b>31</b>	<b>1,175</b>
<b>Grand total or average-----</b>	<b>132</b>	<b>10</b>	<b>181</b>	<b>11,029</b>	<b>11,220</b>	<b>11,352</b>	<b>14,491</b>	<b>25,843</b>	<b>688</b>	<b>33</b>	<b>118</b>

TABLE 23. - Number of injuries, injury rates, and average severity at bituminous coal mines, by nature of injury, 1973

General work location and nature of injury	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity			
	Fatal	Nonfatal disabling			All non-fatal disabling	All disabling injuries	Non-disabling injuries	All injuries		Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling	
		Permanent		Temporary total																All non-fatal disabling
		Total	Partial																	
Underground mines:																				
Underground:																				
Amputation, enucleation----	-	1	110	1	112	112	2	114	1.3	-	0.65	0.65	0.01	-	416	416	591	44	635	
Asphyxiation-----	3	-	-	13	13	16	19	35	.2	0.02	.08	.09	.11	105	2	107	-	22	1,143	
Burn, scald (except chemical)-----	-	-	-	63	63	63	90	153	.7	-	.37	.37	.53	-	5	5	-	12	12	
Burn, chemical-----	-	-	-	14	14	14	19	33	.2	-	.08	.08	.11	-	1	1	-	13	13	
Concussion-----	1	-	-	15	15	16	2	18	.2	.01	.09	.09	.01	35	1	36	-	14	388	
Crushing, contusion-----	50	2	6	2,756	2,764	2,814	3,746	6,560	31.8	.29	16.16	16.45	21.90	1,754	475	2,229	789	23	135	
Cut, laceration-----	-	-	-	906	910	910	1,753	2,663	10.3	-	5.32	5.32	10.25	-	118	118	715	19	22	
Dermatitis-----	-	-	-	2	2	2	3	5	(1/)	-	.01	.01	.02	-	(2/)	(2/)	-	32	32	
Dislocation-----	-	-	-	54	54	54	15	69	.6	-	.32	.32	.09	-	17	17	-	52	52	
Electric shock-----	4	-	-	21	21	25	17	42	.3	.02	.12	.15	.10	140	6	146	-	48	1,000	
Fracture-----	14	3	6	1,031	1,040	1,054	370	1,424	11.9	.08	6.08	6.16	2.16	491	649	1,140	2,108	78	185	
Hernia-----	-	-	-	63	63	63	26	89	.7	-	.37	.37	.15	-	20	20	-	54	54	
Inflammation-----	-	-	-	13	13	13	4	17	.1	-	.08	.08	.02	-	3	3	-	36	36	
Poisoning-----	-	-	-	-	-	-	3	3	-	-	-	-	.02	-	-	-	-	-	-	
Pneumoconiosis-----	-	-	-	-	-	-	6	6	-	-	-	.04	-	-	-	-	-	-	-	
Radiation-----	-	-	-	88	88	88	80	168	1.0	-	.51	.51	.47	-	5	5	-	11	11	
Scratches-----	-	-	-	50	50	50	122	172	.6	-	.29	.29	.71	-	5	5	-	18	18	
Strain, sprain-----	-	-	-	2,066	2,067	2,067	1,904	3,971	23.4	-	12.09	12.09	11.13	-	393	393	-	30	33	
Multiple injuries-----	14	-	2	440	442	456	347	803	5.2	.08	2.58	2.67	2.03	491	129	621	480	48	233	
Occupational disease-----	-	-	-	1	1	1	1	2	(1/)	-	.01	.01	.01	-	(2/)	(2/)	-	49	49	
Other, not elsewhere classified-----	3	-	-	560	560	563	1,025	1,588	6.4	.02	3.27	3.29	5.99	105	63	168	-	19	51	
Unclassified (no data)----	9	-	-	453	453	462	352	814	5.2	.05	2.65	2.70	2.06	316	95	411	-	36	152	
Total or average-----	98	7	128	8,610	8,745	8,843	9,906	18,749	-	.57	51.13	51.70	57.92	3,438	2,403	5,841	674	33	113	
Surface:																				
Amputation, enucleation----	-	-	8	-	8	8	-	8	2.0	-	.48	.48	-	-	109	109	227	-	227	
Burn, scald (except chemical)-----	-	-	-	8	8	8	27	35	2.0	-	.48	.48	1.62	-	31	31	-	65	65	
Burn, chemical-----	-	-	-	1	1	1	6	7	.3	-	.06	.06	.36	-	1	1	-	10	10	
Crushing, contusion-----	3	-	-	74	74	77	176	253	19.6	.18	4.44	4.62	10.56	1,080	90	1,170	-	20	253	
Cut, laceration-----	-	-	-	43	43	43	170	213	11.0	-	2.58	2.58	10.20	-	51	51	-	20	20	
Dermatitis-----	-	-	-	-	-	-	2	2	-	-	-	-	.12	-	-	-	-	-	-	
Dislocation-----	-	-	-	2	2	2	3	5	.5	-	.12	.12	.18	-	3	3	-	22	22	
Electric shock-----	2	-	-	-	-	-	2	2	.5	.12	.12	.12	.18	-	720	-	720	-	6,000	
Fracture-----	-	-	-	50	50	50	35	85	12.8	-	3.00	3.00	2.10	-	285	285	-	95	95	
Hernia-----	-	-	-	5	5	5	5	10	1.3	-	.30	.30	.30	-	9	9	-	31	31	
Inflammation-----	-	-	-	1	1	1	-	1	.3	-	.06	.06	-	-	2	2	-	27	27	
Poisoning-----	-	-	-	-	-	-	2	2	-	-	-	-	.12	-	-	-	-	-	-	
Pneumoconiosis-----	-	-	-	-	-	-	2	2	-	-	-	-	.12	-	-	-	-	-	-	
Radiation-----	-	-	-	1	1	1	3	4	.3	-	.06	.06	.18	-	(2/)	(2/)	-	1	1	
Scratches-----	-	-	-	3	3	3	9	12	.8	-	.18	.18	.54	-	1	1	-	4	4	
Strain, sprain-----	-	-	-	122	122	122	144	266	31.1	-	7.32	7.32	8.64	-	298	298	-	41	41	
Multiple injuries-----	-	-	-	19	19	19	16	35	4.8	-	1.14	1.14	.96	-	48	48	-	42	42	
Other, not elsewhere classified-----	-	-	-	29	29	29	102	131	7.4	-	1.74	1.74	6.12	-	14	14	-	8	8	
Unclassified (no data)----	1	-	-	20	20	21	21	42	5.4	.06	1.20	1.26	1.26	360	65	425	-	54	337	
Total or average-----	6	-	8	378	386	392	723	1,115	-	.36	23.17	23.53	43.39	2,160	1,006	3,167	227	40	135	
Total or average, underground mines-----	104	7	136	8,988	9,131	9,235	10,629	19,864	-	.55	48.65	49.20	56.63	3,325	2,279	5,604	647	33	114	

See footnotes at end of table.

TABLE 23. - Number of injuries, injury rates, and average severity at bituminous coal mines, by nature of injury, 1973 - Continued

General work location and nature of injury	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity						
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries		Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling				
		Permanent		Temporary total	All non-fatal disabling															Total		Partial	
		Total	Partial																	Total	Partial		
Strip mines:																							
Amputation, enucleation---	-	-	25	-	25	25	-	25	2.3	-	0.45	0.45	-	-	300	300	664	-	664				
Asphyxiation-----	-	-	-	-	-	-	2	2	-	-	-	-	0.04	-	-	-	-	-	-				
Burn, scald (except chemical)-----	-	-	-	43	43	43	86	129	3.9	-	.78	.78	1.55	-	13	13	-	17	17				
Burn, chemical-----	-	-	-	3	3	3	9	12	.3	-	.05	.05	.16	-	(2/)	(2/)	-	4	4				
Concussion-----	-	-	-	4	4	4	3	7	.4	-	.07	.07	.05	-	1	1	-	14	14				
Crushing, contusion-----	8	-	3	183	186	194	439	633	17.5	0.14	3.36	3.50	7.92	866	148	1,014	1,313	23	290				
Cut, laceration-----	1	-	1	92	93	94	408	502	8.5	.02	1.68	1.70	7.37	108	62	170	1,800	18	100				
Dermatitis-----	-	-	-	-	-	-	2	2	-	-	-	-	.04	-	-	-	-	-	-				
Dislocation-----	-	-	-	7	7	7	10	17	.6	-	.13	.13	.18	-	5	5	-	40	40				
Electric shock-----	1	-	-	-	-	1	1	2	.1	.02	-	.02	.02	108	-	108	-	-	6,000				
Fracture-----	2	1	-	150	151	153	65	218	13.8	.04	2.73	2.76	1.17	217	303	520	-	72	188				
Freezing-----	-	-	-	-	-	-	1	1	-	-	-	-	.02	-	-	-	-	-	-				
Hearing loss-----	-	-	-	-	-	-	1	1	-	-	-	-	.02	-	-	-	-	-	-				
Hernia-----	-	-	-	17	17	17	9	26	1.5	-	.31	.31	.16	-	19	19	-	61	61				
Inflammation-----	-	-	-	-	-	-	1	1	-	-	-	-	.02	-	-	-	-	-	-				
Poisoning-----	-	-	-	4	4	4	3	7	.4	-	.07	.07	.05	-	1	1	-	15	15				
Radiation-----	-	-	-	4	4	4	14	18	.4	-	.07	.07	.25	-	(2/)	(2/)	-	2	2				
Scratches-----	-	-	-	8	8	8	35	43	.7	-	.14	.14	.63	-	3	3	-	24	24				
Strain, sprain-----	-	-	-	312	312	312	295	607	28.2	-	5.63	5.63	5.33	-	129	129	-	23	23				
Multiple injuries-----	2	-	2	62	64	66	52	118	6.0	.04	1.16	1.19	.94	217	82	298	1,200	34	250				
Other, not elsewhere classified-----	1	-	-	77	77	78	345	423	7.0	.02	1.39	1.41	6.23	108	17	125	-	12	89				
Unclassified (no data)---	1	1	-	92	93	94	126	220	8.5	.02	1.68	1.70	2.27	108	160	268	-	31	158				
Total or average-----	16	2	31	1,058	1,091	1,107	1,907	3,014	-	.29	19.69	19.98	34.42	1,733	1,243	2,976	798	30	149				
Auger mines:																							
Amputation, enucleation---	-	-	2	-	2	2	-	2	4.3	-	1.15	1.15	-	-	173	173	150	-	150				
Burn, scald (except chemical)-----	-	-	-	1	1	1	-	1	2.2	-	.58	.58	-	-	22	22	-	38	38				
Crushing, contusion-----	-	1	-	3	4	4	8	12	8.7	-	2.31	2.31	4.62	-	3,533	3,533	-	41	1,530				
Cut, laceration-----	-	-	-	6	6	6	5	11	13.0	-	3.46	3.46	2.89	-	43	43	-	12	12				
Dislocation-----	-	-	-	-	-	-	1	1	-	-	-	-	.58	-	-	-	-	-	-				
Fracture-----	-	-	-	6	6	6	1	7	13.0	-	3.46	3.46	.58	-	196	196	-	56	56				
Scratches-----	-	-	-	-	-	-	2	2	-	-	-	-	1.15	-	-	-	-	-	-				
Strain, sprain-----	-	-	-	19	19	19	1	20	41.3	-	10.96	10.96	.58	-	179	179	-	16	16				
Multiple injuries-----	1	-	-	4	4	5	2	7	10.9	.58	2.31	2.89	1.15	3,462	362	3,825	-	157	1,326				
Other, not elsewhere classified-----	-	-	-	1	1	1	8	9	2.2	-	.58	.58	4.62	-	2	2	-	3	3				
Unclassified (no data)---	-	-	-	2	2	2	5	7	4.3	-	1.15	1.15	2.89	-	21	21	-	18	18				
Total or average-----	1	1	2	42	45	46	33	79	-	.58	25.97	26.54	19.04	3,462	4,532	7,994	150	37	301				
Total or average, surface-----	17	3	33	1,100	1,136	1,153	1,940	3,093	-	.30	19.88	20.18	33.95	1,785	1,342	3,128	759	31	155				
Total or average, mining-----	121	10	169	10,088	10,267	10,388	12,569	22,957	-	.49	41.94	42.43	51.34	2,965	2,061	5,026	669	33	118				

See footnotes at end of table.

TABLE 23. - Number of injuries, injury rates, and average severity at bituminous coal mines, by nature of injury, 1973 - Continued

General work location and nature of injury	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity			
	Fatal	Nonfatal disabling			All disabling injuries	Non-disabling injuries	All injuries	Fatal		Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling		
		Permanent		Temporary total															All non-fatal disabling	
		Total	Partial																	
Independent shops and yards:																				
Burn, scald (except chemical)-----	-	-	-	2	2	2	21	23	2.9	-	0.39	0.39	4.10	-	10	10	-	24	24	
Burn, chemical-----	-	-	-	-	-	-	4	4	-	-	-	.78	-	-	-	-	-	-	-	
Crushing, contusion-----	-	-	1	12	13	13	78	91	19.1	-	2.54	2.54	15.24	-	90	90	300	13	35	
Cut, laceration-----	-	-	-	7	7	7	70	77	10.3	-	1.37	1.37	13.67	-	46	46	-	33	33	
Dermatitis-----	-	-	-	1	1	1	1	2	1.5	-	.20	.20	.20	-	1	1	-	4	4	
Dislocation-----	-	-	-	1	1	1	1	2	1.5	-	.20	.20	.39	-	10	10	-	52	52	
Fracture-----	-	-	-	8	8	8	14	22	11.8	-	1.56	1.56	2.73	-	86	86	-	55	55	
Hernia-----	-	-	-	1	1	1	1	1	1.5	-	.20	.20	.20	-	6	6	-	31	31	
Radiation-----	-	-	-	1	1	1	1	2	1.5	-	.20	.20	-	-	2	2	-	8	8	
Scratches-----	-	-	-	2	2	2	7	9	2.9	-	.39	.39	1.37	-	1	1	-	3	3	
Strain, sprain-----	-	-	-	20	20	20	30	50	29.4	-	3.91	3.91	5.86	-	64	64	-	16	16	
Multiple injuries-----	1	-	-	2	2	3	6	9	4.4	0.20	.39	.59	1.17	1,172	29	1,201	-	74	2,050	
Other, not elsewhere classified-----	1	-	-	5	5	6	73	79	8.8	.20	.98	1.17	14.26	1,172	9	1,181	-	9	1,008	
Unclassified (no data)-----	-	-	-	3	3	3	22	25	4.4	-	.59	.59	4.30	-	14	14	-	24	24	
Total or average-----	2	-	1	65	66	68	329	397	-	.39	12.89	13.28	64.27	2,344	367	2,712	300	24	204	
Mechanical cleaning plants:																				
Amputation, enucleation-----	1	-	9	-	9	10	-	10	1.8	.05	.42	.46	-	277	507	785	1,219	-	1,697	
Asphyxiation-----	-	-	-	-	-	-	1	1	-	-	-	-	.05	-	-	-	-	-	-	-
Burn, scald (except chemical)-----	-	-	-	15	15	15	37	52	2.7	-	.69	.69	1.71	-	7	7	-	10	10	
Burn, chemical-----	-	-	-	2	2	2	5	7	.4	-	.09	.09	.23	-	1	1	-	8	8	
Crushing, contusion-----	2	-	-	108	108	110	324	434	19.8	.09	4.99	5.09	14.98	555	94	649	-	19	128	
Cut, laceration-----	-	-	-	52	52	52	184	236	9.4	-	2.40	2.40	8.51	-	51	51	-	21	21	
Dermatitis-----	-	-	-	-	-	-	2	2	-	-	-	-	.09	-	-	-	-	-	-	-
Dislocation-----	-	-	-	3	3	3	1	4	.5	-	.14	.14	.05	-	4	4	-	26	26	
Electric shock-----	1	-	-	1	1	2	-	2	.4	.05	.05	.09	-	277	1	279	-	30	3,015	
Fracture-----	-	-	-	71	71	71	48	119	12.8	-	3.28	3.28	2.22	-	260	260	-	79	79	
Hearing loss-----	-	-	-	-	-	-	1	1	-	-	-	-	.05	-	-	-	-	-	-	-
Hernia-----	-	-	-	9	9	9	3	12	1.6	-	.42	.42	.14	-	24	24	-	57	57	
Inflammation-----	-	-	-	1	1	1	1	2	.2	-	.05	.05	.05	-	(2/)	(2/)	-	6	6	
Poisoning-----	-	-	-	-	-	-	1	1	-	-	-	-	.05	-	-	-	-	-	-	-
Radiation-----	-	-	-	6	6	6	6	12	1.1	-	.28	.28	.28	-	2	2	-	6	6	
Scratches-----	-	-	-	4	4	4	13	17	.7	-	.18	.18	.60	-	1	1	-	5	5	
Strain, sprain-----	1	-	-	162	162	163	216	379	29.4	.05	7.49	7.54	9.99	277	224	502	-	30	67	
Multiple injuries-----	3	-	-	28	28	31	36	67	5.6	.14	1.29	1.43	1.66	832	32	865	-	25	603	
Other, not elsewhere classified-----	-	-	-	48	48	48	183	231	8.6	-	2.22	2.22	8.46	-	35	35	-	16	16	
Unclassified (no data)-----	-	-	-	28	28	28	39	67	5.0	-	1.29	1.29	1.80	-	24	24	-	19	19	
Total or average-----	8	-	9	538	547	555	1,101	1,656	-	.37	25.29	25.66	50.91	2,220	1,269	3,488	1,219	31	136	
Grand total or average----	131	10	179	10,691	10,880	11,011	13,999	25,010	-	.48	40.06	40.54	51.55	2,894	1,966	4,860	695	33	120	

1/ Less than 0.05  
2/ Less than 0.5

TABLE 24. - Number of injuries, injury rates, and average severity at Pennsylvania anthracite mines, by nature of injury, 1973

General work location and nature of injury	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling			All disabling injuries	Non-disabling injuries	All injuries	Fatal		Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Perma-nent partial	Tem-porary total	All dis-abling	
		Permanent		Tem-porary total															All non-fatal dis-abling
		Total	Par-tial																
<b>Underground mines:</b>																			
Underground:																			
Amputation, enucleation---	-	-	1	-	1	1	-	1	1.4	-	1.33	1.33	-	-	146	146	110	-	110
Crushing, contusion---	-	-	-	29	29	29	19	48	39.2	-	38.54	38.54	25.25	-	986	986	-	26	26
Cut, laceration---	-	-	-	8	8	8	14	22	10.8	-	10.63	10.63	18.60	-	68	68	-	6	6
Fracture---	-	-	-	10	10	10	1	11	13.5	-	13.29	13.29	1.33	-	1,285	1,285	-	97	97
Hernia---	-	-	-	1	1	1	-	1	1.4	-	1.33	1.33	-	-	93	93	-	70	70
Radiation---	-	-	-	1	1	1	-	1	1.4	-	1.33	1.33	-	-	17	17	-	13	13
Scratches---	-	-	-	2	2	2	-	2	2.7	-	2.66	2.66	-	-	80	80	-	30	30
Strain, sprain---	-	-	-	14	14	14	3	17	18.9	-	18.60	18.60	3.99	-	765	765	-	41	41
Multiple injuries---	-	-	-	4	4	4	-	4	5.4	-	5.32	5.32	-	-	210	210	-	40	40
Other, not elsewhere classified---	-	-	-	3	3	3	3	6	4.1	-	3.99	3.99	3.99	-	13	13	-	3	3
Unclassified (no data)---	1	-	-	-	-	1	1	2	1.4	1.33	-	1.33	1.33	7,973	-	7,973	-	-	6,000
<b>Total or average-----</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>72</b>	<b>73</b>	<b>74</b>	<b>41</b>	<b>115</b>	<b>-</b>	<b>1.33</b>	<b>97.00</b>	<b>98.33</b>	<b>54.48</b>	<b>7,973</b>	<b>3,664</b>	<b>11,636</b>	<b>110</b>	<b>37</b>	<b>118</b>
<b>Surface:</b>																			
Dermatitis---	-	-	-	-	-	-	1	1	-	-	-	-	5.35	-	-	-	-	-	-
Strain, sprain---	-	-	-	-	-	-	1	1	-	-	-	-	5.35	-	-	-	-	-	-
Other, not elsewhere classified---	-	-	-	2	2	2	2	4	-	-	10.70	10.70	10.70	-	11	11	-	1	1
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>2</b>	<b>2</b>	<b>2</b>	<b>4</b>	<b>6</b>	<b>-</b>	<b>-</b>	<b>10.70</b>	<b>10.70</b>	<b>21.41</b>	<b>-</b>	<b>11</b>	<b>11</b>	<b>-</b>	<b>1</b>	<b>1</b>
<b>Total or average, underground mines-----</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>74</b>	<b>75</b>	<b>76</b>	<b>45</b>	<b>121</b>	<b>-</b>	<b>1.06</b>	<b>79.84</b>	<b>80.90</b>	<b>47.90</b>	<b>6,387</b>	<b>2,937</b>	<b>9,324</b>	<b>110</b>	<b>36</b>	<b>115</b>
<b>Strip mines:</b>																			
Burn, scald (except chemical)---	-	-	-	4	4	4	11	15	3.4	-	1.75	1.75	4.81	-	180	180	-	103	130
Burn, chemical---	-	-	-	-	-	-	1	1	-	-	-	-	.44	-	-	-	-	-	-
Crushing, contusion---	-	-	-	32	32	32	51	83	27.4	-	13.99	13.99	22.30	-	185	185	-	13	13
Cut, laceration---	-	-	-	10	10	10	39	49	8.5	-	4.37	4.37	17.05	-	93	93	-	21	21
Dislocation---	-	-	-	3	3	3	1	4	2.6	-	1.31	1.31	1.44	-	25	25	-	19	19
Fracture---	-	-	-	12	12	12	4	16	10.3	-	5.25	5.25	1.75	-	270	270	-	51	51
Hernia---	-	-	-	1	1	1	-	1	.9	-	.44	.44	-	-	51	51	-	117	117
Inflammation---	-	-	-	1	1	1	-	1	.9	-	.44	.44	-	-	2	2	-	5	5
Poisoning---	-	-	-	-	-	-	1	1	-	-	-	-	.44	-	-	-	-	-	-
Radiation---	-	-	-	1	1	1	-	1	.9	-	.44	.44	-	-	(1/)	(1/)	-	1	1
Scratches---	-	-	-	1	1	1	2	3	.9	-	.44	.44	.87	-	(1/)	(1/)	-	1	1
Strain, sprain---	-	-	-	31	31	31	35	66	26.5	-	13.55	13.55	15.30	-	439	439	-	32	32
Multiple injuries---	-	-	-	7	7	7	7	14	6.0	-	3.06	3.06	3.06	-	57	57	-	19	19
Other, not elsewhere classified---	-	-	-	9	9	9	33	42	7.7	-	3.94	3.94	14.43	-	61	61	-	16	16
Unclassified (no data)---	-	-	-	5	5	5	4	9	4.3	-	2.19	2.19	1.75	-	70	70	-	32	32
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>117</b>	<b>117</b>	<b>117</b>	<b>189</b>	<b>306</b>	<b>-</b>	<b>-</b>	<b>51.16</b>	<b>51.16</b>	<b>82.64</b>	<b>-</b>	<b>1,435</b>	<b>1,435</b>	<b>-</b>	<b>28</b>	<b>28</b>

See footnote at end of table.

TABLE 24. - Number of injuries, injury rates, and average severity at Pennsylvania anthracite mines, by nature of injury, 1973 - Continued

General work location and nature of injury	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries		Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling
		Permanent		Temporary total	All non-fatal disabling														
		Total	Partial																
<b>Culm banks:</b>																			
Burn, scald (except chemical)-----	-	-	-	1	1	1	-	1	9.1	-	3.22	3.22	-	-	84	84	-	26	26
Crushing, contusion-----	-	-	-	1	1	1	4	5	9.1	-	3.22	3.22	12.89	-	3	3	-	1	1
Cut, laceration-----	-	-	-	1	1	1	3	4	9.1	-	3.22	3.22	9.67	-	10	10	-	3	3
Strain, sprain-----	-	-	-	3	3	3	2	5	27.3	-	9.67	9.67	6.44	-	303	303	-	31	31
Other, not elsewhere classified-----	-	-	-	3	3	3	1	4	27.3	-	9.67	9.67	3.22	-	16	16	-	2	2
Unclassified (no data)-----	-	-	-	2	2	2	-	2	18.2	-	6.44	6.44	-	-	338	338	-	52	52
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>11</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>21</b>	<b>-</b>	<b>-</b>	<b>35.44</b>	<b>35.44</b>	<b>32.22</b>	<b>-</b>	<b>754</b>	<b>754</b>	<b>-</b>	<b>21</b>	<b>21</b>
<b>Dredges:</b>																			
Cut, laceration-----	-	-	-	-	-	-	2	2	-	-	-	-	41.96	-	-	-	-	-	-
Other, not elsewhere classified-----	-	-	-	-	-	-	1	1	-	-	-	-	20.98	-	-	-	-	-	-
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>62.93</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>
<b>Total or average, surface-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>128</b>	<b>128</b>	<b>128</b>	<b>202</b>	<b>330</b>	<b>-</b>	<b>-</b>	<b>48.39</b>	<b>48.39</b>	<b>76.37</b>	<b>-</b>	<b>1,329</b>	<b>1,329</b>	<b>-</b>	<b>27</b>	<b>27</b>
<b>Total or average, mining-----</b>	<b>1</b>	<b>-</b>	<b>1</b>	<b>202</b>	<b>203</b>	<b>204</b>	<b>247</b>	<b>451</b>	<b>-</b>	<b>0.28</b>	<b>56.63</b>	<b>56.91</b>	<b>68.91</b>	<b>1,674</b>	<b>1,751</b>	<b>3,424</b>	<b>110</b>	<b>31</b>	<b>60</b>
<b>Independent shops and yards:</b>																			
Burn, scald (except chemical)-----	-	-	-	-	-	-	7	7	-	-	-	-	23.95	-	-	-	-	-	-
Crushing, contusion-----	-	-	-	4	4	4	9	13	28.6	-	13.69	13.69	30.79	-	281	281	-	20	20
Cut, laceration-----	-	-	-	2	2	2	7	9	14.3	-	6.84	6.84	23.95	-	48	48	-	7	7
Fracture-----	-	-	-	-	-	-	1	1	-	-	-	-	3.42	-	-	-	-	-	-
Radiation-----	-	-	-	-	-	-	1	1	-	-	-	-	3.42	-	-	-	-	-	-
Scratches-----	-	-	-	-	-	-	1	1	-	-	-	-	3.42	-	-	-	-	-	-
Strain, sprain-----	-	-	-	4	4	4	4	8	28.6	-	13.69	13.69	13.69	-	383	383	-	28	28
Other, not elsewhere classified-----	-	-	-	4	4	4	8	12	28.6	-	13.69	13.69	27.37	-	109	109	-	8	8
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>14</b>	<b>14</b>	<b>14</b>	<b>38</b>	<b>52</b>	<b>-</b>	<b>-</b>	<b>47.90</b>	<b>47.90</b>	<b>130.02</b>	<b>-</b>	<b>821</b>	<b>821</b>	<b>-</b>	<b>17</b>	<b>17</b>

TABLE 24. - Number of injuries, injury rates, and average severity at Pennsylvania anthracite mines, by nature of injury, 1973 - Continued

General work location and nature of injury	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling				All disabling injuries	Non-disabling injuries	All injuries		Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Permanent partial	Temporary total	All disabling
		Permanent		Temporary total	All non-fatal disabling														
		Total	Partial																
Mechanical cleaning plants:																			
Amputation, enucleation-----	-	-	1	-	1	1	-	1	0.8	-	0.46	0.46	-	-	24	24	51	-	51
Burn, scald (except chemical)-----	-	-	-	2	2	2	12	14	1.6	-	.92	.92	5.53	-	2	2	-	2	2
Burn, chemical-----	-	-	-	1	1	1	-	1	.8	-	.46	.46	-	-	(1/)	(1/)	-	1	1
Crushing, contusion-----	-	-	-	32	32	32	59	91	26.0	-	14.75	14.75	27.20	-	395	395	-	27	27
Cut, laceration-----	-	-	-	19	19	19	50	69	15.4	-	8.76	8.76	23.05	-	457	457	-	52	52
Dislocation-----	-	-	-	2	2	2	-	2	1.6	-	.92	.92	-	-	58	58	-	62	62
Fracture-----	-	-	-	8	8	8	4	12	6.5	-	3.69	3.69	1.84	-	161	161	-	44	44
Hernia-----	-	-	-	1	1	1	-	1	.8	-	.46	.46	-	-	31	31	-	67	67
Inflammation-----	-	-	-	-	-	-	1	1	-	-	-	.46	-	-	-	-	-	-	-
Radiation-----	-	-	-	1	1	1	1	2	.8	-	.46	.46	.46	-	(1/)	(1/)	-	1	1
Scratches-----	-	-	-	1	1	1	1	2	.8	-	.46	.46	.46	-	1	1	-	3	3
Strain, sprain-----	-	-	-	36	36	36	40	76	29.3	-	16.60	16.60	18.44	-	370	370	-	22	22
Multiple injuries-----	-	-	-	7	7	7	3	10	5.7	-	3.23	3.23	1.38	-	169	169	-	52	52
Other, not elsewhere classified-----	-	-	-	9	9	9	31	40	7.3	-	4.15	4.15	14.29	-	19	19	-	5	5
Unclassified (no data)-----	-	-	-	3	3	3	5	8	2.4	-	1.38	1.38	2.30	-	42	42	-	30	30
Total or average-----	-	-	1	122	123	123	207	330	-	-	56.70	56.70	95.43	-	1,729	1,729	51	30	30
Grand total or average----	1	-	2	338	340	341	492	833	-	0.17	56.24	56.40	81.38	992	1,698	2,690	80	30	48

1/ Less than 0.5

TABLE 25. - Number of injuries at bituminous coal mines in the United States, by part of body injured and nature of injury, 1973

Nature of injury	Total			Part of body											
				Head, face, neck (excluding eye)			Eye			Trunk			Arm (above wrist)		
	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling
Amputation, enucleation----	1	156	2	-	-	-	-	-	-	-	1	-	-	5	1
Asphyxiation-----	3	13	22	-	-	-	-	-	-	-	5	5	-	-	-
Burn, scald (except chemical)-----	-	132	261	-	13	54	-	13	30	-	5	8	-	16	34
Burn, chemical-----	-	20	43	-	1	9	-	7	17	-	3	1	-	1	-
Concussion-----	1	19	5	1	19	5	-	-	-	-	-	-	-	-	-
Contagious disease-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crushing, contusion-----	63	3,149	4,771	6	135	304	-	47	80	21	701	820	-	188	398
Cut, laceration-----	1	1,111	2,590	-	244	563	-	72	115	-	25	35	-	53	145
Dermatitis-----	-	3	10	-	-	-	-	-	3	-	-	-	-	-	1
Dislocation-----	-	67	32	-	2	-	-	-	-	-	45	12	-	4	2
Electric shock-----	8	22	18	-	-	1	-	-	-	-	1	-	-	-	-
Fracture-----	16	1,326	533	13	69	82	-	-	-	-	199	49	-	118	24
Freezing-----	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Hearing loss-----	-	-	2	-	-	2	-	-	-	-	-	-	-	-	-
Heat exhaustion-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hernia-----	-	95	44	-	-	-	-	-	-	-	95	44	-	-	-
Inflammation-----	-	15	6	-	-	1	-	-	1	-	2	-	-	1	1
Poisoning-----	-	4	9	-	-	2	-	-	-	-	2	-	-	-	2
Pneumoconiosis-----	-	-	8	-	-	-	-	-	-	-	-	4	-	-	-
Silicosis-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radiation-----	-	100	103	-	11	7	-	49	61	-	-	-	-	1	4
Scratches-----	-	67	188	-	6	36	-	18	44	-	6	11	-	8	14
Strain, sprain-----	1	2,702	2,590	1	110	167	-	-	-	-	1,879	1,573	-	38	73
Heart attack-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cerebral hemorrhage-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multiple injuries-----	21	559	459	-	60	57	-	5	10	3	66	36	-	28	20
Other not elsewhere classified-----	5	721	1,737	-	35	113	-	406	1,292	-	60	43	-	22	40
Unclassified (no data)---	11	599	565	2	60	63	-	14	40	-	252	193	-	16	30
<b>Total-----</b>	<b>131</b>	<b>10,880</b>	<b>13,999</b>	<b>23</b>	<b>765</b>	<b>1,466</b>	<b>-</b>	<b>631</b>	<b>1,693</b>	<b>24</b>	<b>3,347</b>	<b>2,834</b>	<b>-</b>	<b>499</b>	<b>789</b>

TABLE 25. - Number of injuries at bituminous coal mines in the United States, by part of body injured and nature of injury, 1973 - Continued

Nature of injury	Part of body														
	Wrist, hand, fingers			Leg (above ankle)			Ankle, foot, toes			Multiple parts			Unclassified (no data)		
	Fatal	Nonfatal disabling	Non-disabling	Fatal	Nonfatal disabling	Non-disabling	Fatal	Nonfatal disabling	Non-disabling	Fatal	Nonfatal disabling	Non-disabling	Fatal	Nonfatal disabling	Non-disabling
Amputation, enucleation----	-	129	-	1	6	-	-	8	-	-	6	-	-	1	1
Asphyxiation-----	-	-	-	-	-	-	-	-	-	-	-	-	3	8	17
Burn, scald (except chemical)-----	-	35	85	-	8	15	-	8	22	-	34	13	-	-	-
Burn, chemical-----	-	2	8	-	2	4	-	1	-	-	3	4	-	-	-
Concussion-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Contagious disease-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crushing, contusion-----	-	633	1,430	-	641	806	-	513	647	35	280	263	1	11	23
Cut, laceration-----	-	478	1,284	-	105	238	-	103	178	1	29	26	-	2	6
Dermatitis-----	-	1	2	-	-	-	-	-	1	-	-	2	-	2	1
Dislocation-----	-	8	11	-	7	7	-	1	-	-	-	-	-	-	-
Electric shock-----	-	1	-	-	-	-	-	-	-	1	6	2	7	14	15
Fracture-----	1	340	280	-	184	19	-	362	75	2	53	3	-	1	1
Freezing-----	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Hearing loss-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat exhaustion-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hernia-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inflammation-----	-	-	1	-	11	1	-	-	1	-	-	-	-	1	-
Poisoning-----	-	1	2	-	-	-	-	-	-	-	-	2	-	1	1
Pneumoconiosis-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4
Silicosis-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radiation-----	-	24	18	-	3	1	-	-	-	-	12	12	-	-	-
Scratches-----	-	13	42	-	7	27	-	2	1	-	7	13	-	-	-
Strain, sprain-----	-	54	166	-	268	244	-	271	271	-	72	83	-	10	13
Heart attack-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cerebral hemorrhage-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multiple injuries-----	-	84	156	-	52	51	-	31	23	18	233	104	-	-	2
Other not elsewhere classified-----	-	106	156	-	34	34	-	11	12	3	40	40	2	7	7
Unclassified (no data)-----	-	43	82	-	67	64	-	71	32	-	37	32	9	39	29
<b>Total-----</b>	<b>1</b>	<b>1,952</b>	<b>3,724</b>	<b>1</b>	<b>1,395</b>	<b>1,511</b>	<b>-</b>	<b>1,382</b>	<b>1,263</b>	<b>60</b>	<b>812</b>	<b>599</b>	<b>22</b>	<b>97</b>	<b>120</b>

TABLE 26. - Number of injuries at Pennsylvania anthracite mines in the United States, by part of body injured and nature of injury, 1973

Nature of injury	Total			Part of body											
				Head, face, neck (excluding eye)			Eye			Trunk			Arm (above wrist)		
	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling	Fatal	Nonfatal disabling	Non- disabling
Amputation, enucleation----	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Asphyxiation-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burn, scald (except chemical)-----	-	7	30	-	1	7	-	1	2	-	2	1	-	-	3
Burn, chemical-----	-	1	1	-	1	-	-	-	-	-	-	-	-	-	-
Concussion-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crushing, contusion-----	-	98	142	-	4	11	-	6	7	-	28	23	-	9	18
Cut, laceration-----	-	40	115	-	9	30	-	5	6	-	-	2	-	3	4
Dermatitis-----	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Dislocation-----	-	5	1	-	-	-	-	-	-	-	5	1	-	-	-
Electric shock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fracture-----	-	30	10	-	3	4	-	-	-	-	8	2	-	-	-
Freezing-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hearing loss-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat exhaustion-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hernia-----	-	3	-	-	-	-	-	-	-	-	3	-	-	-	-
Inflammation-----	-	1	1	-	-	-	-	-	1	-	-	-	-	-	-
Poisoning-----	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
Pneumoconiosis-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silicosis-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radiation-----	-	3	2	-	-	-	-	2	1	-	-	-	-	-	-
Scratches-----	-	4	4	-	-	-	-	3	2	-	-	-	-	-	-
Strain, sprain-----	-	88	85	-	1	1	-	-	-	-	62	49	-	2	7
Heart attack-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cerebral hemorrhage-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multiple injuries-----	-	18	10	-	3	4	-	-	1	-	3	1	-	-	-
Other, not elsewhere classified-----	-	30	79	-	1	7	-	23	65	-	2	1	-	-	2
Unclassified (no data)----	1	10	10	-	-	5	-	-	-	-	6	2	-	-	1
<b>Total-----</b>	<b>1</b>	<b>340</b>	<b>492</b>	<b>-</b>	<b>23</b>	<b>69</b>	<b>-</b>	<b>40</b>	<b>85</b>	<b>-</b>	<b>119</b>	<b>82</b>	<b>-</b>	<b>14</b>	<b>36</b>

TABLE 26. - Number of injuries at Pennsylvania anthracite mines in the United States, by part of body injured and nature of injury, 1973 - Continued

Nature of injury	Part of body														
	Wrist, hand, fingers			Leg (above ankle)			Ankle foot, toes			Multiple parts			Unclassified (no data)		
	Fatal	Nonfatal disabling	Non-disabling	Fatal	Nonfatal disabling	Non-disabling	Fatal	Nonfatal disabling	Non-disabling	Fatal	Nonfatal disabling	Non-disabling	Fatal	Nonfatal disabling	Non-disabling
Amputation, enucleation---	-	2	-	-	-	-	-	-	-	-	-	-	-	-	-
Asphyxiation-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Burn, scald (except chemical)-----	-	-	7	-	-	1	-	-	8	-	3	1	-	-	-
Burn, chemical-----	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-
Concussion-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Crushing, contusion-----	-	18	45	-	16	23	-	9	9	-	8	6	-	-	-
Cut, laceration-----	-	17	55	-	5	7	-	-	10	-	1	1	-	-	-
Dermatitis-----	-	-	-	-	-	-	-	-	-	-	-	1	-	-	-
Dislocation-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Electric shock-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Fracture-----	-	7	3	-	6	-	-	5	1	-	1	-	-	-	-
Freezing-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hearing loss-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Heat exhaustion-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Hernia-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Inflammation-----	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-
Poisoning-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pneumoconiosis-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Silicosis-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Radiation-----	-	1	-	-	-	1	-	-	-	-	-	-	-	-	-
Scratches-----	-	-	-	-	-	1	-	-	-	-	1	1	-	-	-
Strain, sprain-----	-	5	4	-	7	14	-	11	6	-	-	4	-	-	-
Heart attack-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Cerebral hemorrhage-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Multiple injuries-----	-	2	3	-	1	-	-	1	-	-	8	1	-	-	-
Other, not elsewhere classified-----	-	1	2	-	3	-	-	-	-	-	-	1	-	-	1
Unclassified (no data)---	-	-	2	-	2	-	-	-	-	-	2	-	1	-	-
Total-----	-	54	122	-	40	47	-	26	34	-	24	16	1	-	1

TABLE 27. - Closed cases <sup>1/</sup> of temporary total injuries, for which companies reported days of disability, at coal mines, by days of disability per injury and kind of coal, 1973

Days of disability per injury	Number of closed temporary total injuries			Percent of total
	Bituminous coal	Pennsylvania anthracite	Total	
1-----	1,198	40	1,238	11.9
2-----	535	33	568	5.4
3-----	804	28	832	8.0
4-----	647	22	669	6.4
5-----	567	23	590	5.7
6-----	492	8	500	4.8
7-----	269	8	277	2.7
8-----	206	5	211	2.0
9-----	266	9	275	2.6
10-----	263	7	270	2.6
11-----	178	4	182	1.7
12-----	201	3	204	2.0
13-----	201	1	202	1.9
14-----	119	2	121	1.2
15-----	75	3	78	.7
16-----	90	1	91	.9
17-----	124	1	125	1.2
18-----	121	2	123	1.2
19-----	131	0	131	1.3
20-----	114	4	118	1.1
21-----	80	3	83	.8
22-----	61	0	61	.6
23-----	74	2	76	.7
24-----	115	4	119	1.1
25-----	79	7	86	.8
26-----	86	5	91	.9
27-----	107	0	107	1.0
28-----	75	1	76	.7
29-----	47	3	50	.5
30-----	88	1	89	.9
31-----	77	1	78	.7
32-----	89	4	93	.9
33-----	91	2	93	.9
34-----	67	0	67	.6
35-----	39	1	40	.4
36-----	35	5	40	.4
37-----	70	1	71	.7
38-----	48	2	50	.5
39-----	53	2	55	.5
40-----	59	0	59	.6
41-----	44	2	46	.4
42-----	37	0	37	.4
43-----	29	1	30	.3
44-----	30	0	30	.3
45-----	53	4	57	.5
46-60-----	542	21	563	5.4
61-90-----	552	15	567	5.4
91-120-----	276	13	289	2.8
121-150-----	146	4	150	1.4
151 or more-----	370	10	380	3.6
Total-----	10,120	318	10,438	-----

<sup>1/</sup> In addition to the closed temporary total injuries, there were 571 temporary total injuries for which days of disability were not reported at bituminous coal mines and 20 at Pennsylvania anthracite mines. To obtain total severity data for the industry, these "open cases" were closed by assigning average days of disability by detailed cause classification.

TABLE 28. - Number of injuries, frequency rates per million man-hours, employment, worktime, and production data at bituminous coal mines in the United States, by general work location and employment size group, 1973

General work location and employment size group	Number of injuries					Frequency rates per million man-hours					Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations	
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries						
<b>Underground mines (includes surface works):</b>																
1 to 4-----	2	9	11	3	14	6.73	30.28	37.01	10.09	47.11	331	297,180	407,938	1.37	114	
5 to 9-----	6	46	52	13	65	3.45	26.42	29.87	7.47	37.33	1,630	1,741,068	3,207,729	1.84	210	
10 to 19-----	8	191	199	111	310	1.33	31.70	33.03	18.42	51.45	4,229	6,025,594	10,557,239	1.75	285	
20 to 34-----	6	365	371	278	649	.84	50.82	51.66	38.71	90.37	4,575	7,181,737	12,127,502	1.69	174	
35 to 49-----	5	337	342	275	617	.76	51.45	52.21	41.98	94.19	3,782	6,550,664	11,264,454	1.72	92	
50 to 99-----	13	1,067	1,080	1,089	2,169	.69	56.86	57.55	58.03	115.59	11,020	18,764,676	27,850,154	1.48	157	
100 to 149-----	9	1,262	1,271	1,205	2,476	.42	59.28	59.70	56.60	116.30	11,727	21,289,711	29,492,834	1.39	95	
150 to 249-----	17	2,139	2,156	2,127	4,283	.47	59.17	59.64	58.84	118.48	18,495	36,148,188	54,125,775	1.50	94	
250 or more-----	38	3,715	3,753	5,528	9,281	.42	41.42	41.84	61.63	103.47	44,518	89,694,007	136,178,035	1.52	121	
<b>Total or average----</b>	<b>104</b>	<b>9,131</b>	<b>9,235</b>	<b>10,629</b>	<b>19,864</b>	<b>.55</b>	<b>48.65</b>	<b>49.20</b>	<b>56.63</b>	<b>105.83</b>	<b>100,307</b>	<b>187,692,825</b>	<b>285,211,660</b>	<b>1.52</b>	<b>1,342</b>	
<b>Strip mines:</b>																
1 to 4-----	1	10	11	10	21	.94	9.36	10.30	9.36	19.66	705	1,068,046	4,550,263	4.26	253	
5 to 9-----	-	42	42	25	67	-	15.40	15.40	9.17	24.57	1,567	2,726,854	9,587,516	3.52	217	
10 to 19-----	5	128	133	132	265	.71	18.17	18.88	18.74	37.62	3,904	7,044,021	25,274,292	3.59	279	
20 to 34-----	1	137	138	166	304	.12	16.49	16.61	19.98	36.59	4,466	8,308,611	32,124,707	3.87	174	
35 to 49-----	1	66	67	111	178	.23	14.89	15.12	25.04	40.16	2,197	4,432,121	19,914,083	4.49	53	
50 to 99-----	2	265	267	536	803	.19	24.76	24.94	50.07	75.01	5,639	10,704,678	50,604,515	4.73	79	
100 to 149-----	1	198	199	332	531	.10	20.76	20.87	34.81	55.68	4,310	9,537,328	56,222,178	5.89	36	
150 to 249-----	1	118	119	254	373	.18	20.83	21.01	44.84	65.84	2,314	5,665,038	25,792,562	4.55	12	
250 or more-----	4	127	131	341	472	.68	21.49	22.17	57.70	79.87	2,652	5,909,564	33,298,837	5.63	9	
<b>Total or average----</b>	<b>16</b>	<b>1,091</b>	<b>1,107</b>	<b>1,907</b>	<b>3,014</b>	<b>.29</b>	<b>19.69</b>	<b>19.98</b>	<b>34.42</b>	<b>54.41</b>	<b>27,754</b>	<b>55,396,261</b>	<b>257,368,953</b>	<b>4.65</b>	<b>1,112</b>	
<b>Auger mines:</b>																
1 to 4-----	1	14	15	9	24	2.08	29.13	31.22	18.73	49.94	433	480,535	3,136,973	6.53	139	
5 to 9-----	-	16	16	17	33	-	35.42	35.42	37.64	73.06	406	451,694	2,649,578	5.87	63	
10 to 19-----	-	10	10	6	16	-	18.90	18.90	11.34	30.23	374	529,213	2,094,900	3.96	29	
20 to 34-----	-	2	2	1	3	-	9.59	9.59	4.80	14.39	130	208,490	786,106	3.77	5	
35 to 49-----	-	3	3	-	3	-	47.59	47.59	-	47.59	78	63,041	216,622	3.44	2	
50 to 99-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total or average----</b>	<b>1</b>	<b>45</b>	<b>46</b>	<b>33</b>	<b>79</b>	<b>.58</b>	<b>25.97</b>	<b>26.54</b>	<b>19.04</b>	<b>45.59</b>	<b>1,421</b>	<b>1,732,973</b>	<b>8,884,179</b>	<b>5.13</b>	<b>238</b>	

TABLE 28. - Number of injuries, frequency rates per million man-hours, employment, worktime, and production data at bituminous coal mines in the United States, by general work location and employment size group, 1973 - Continued

General work location and employment size group	Number of injuries					Frequency rates per million man-hours					Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations	
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries						
Other surface mining:																
1 to 4-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 to 9-----	-	-	-	-	-	-	-	-	-	-	5	9,156	17,640	1.93	1	
10 to 19-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
20 to 34-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
35 to 49-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
50 to 99-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total or average----	-	-	-	-	-	-	-	-	-	-	5	9,156	17,640	1.93	1	
Total or average, surface-----	17	1,136	1,153	1,940	3,093	0.30	19.88	20.18	33.95	54.13	29,180	57,138,390	266,270,772	4.66	1,351	
Total or average, mining-----	121	10,267	10,388	12,569	22,957	.49	41.94	42.43	51.34	93.77	129,487	244,831,215	551,482,432	2.25	2,693	
Independent shops and yards:																
1 to 4-----	-	3	3	2	5	-	65.29	65.29	43.53	108.82	29	45,949	-	-	12	
5 to 9-----	-	-	-	1	1	-	-	-	26.54	26.54	28	37,675	-	-	4	
10 to 19-----	-	10	10	15	25	-	50.90	50.90	76.35	127.25	122	196,460	-	-	8	
20 to 34-----	-	16	16	29	45	-	20.31	20.31	36.81	57.13	410	787,736	-	-	15	
35 to 49-----	1	11	12	62	74	1.19	13.10	14.29	73.81	88.10	412	839,941	-	-	10	
50 to 99-----	1	21	22	112	134	.64	13.42	14.06	71.56	85.61	753	1,565,195	-	-	11	
100 to 149-----	-	2	2	3	5	-	4.85	4.85	7.27	12.11	213	412,735	-	-	2	
150 to 249-----	-	3	3	105	108	-	2.43	2.43	85.15	87.58	552	1,233,167	-	-	3	
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total or average----	2	66	68	329	397	.39	12.89	13.28	64.27	77.56	2,519	5,118,858	-	-	65	
Mechanical cleaning plants:																
1 to 4-----	-	26	26	38	64	-	35.13	35.13	51.34	86.47	486	740,136	-	-	180	
5 to 9-----	-	39	39	60	99	-	25.65	25.65	39.46	65.10	935	1,520,682	-	-	132	
10 to 19-----	5	95	100	177	277	1.38	26.29	27.67	48.98	76.66	1,880	3,613,548	-	-	132	
20 to 34-----	3	180	183	339	522	.44	26.29	26.73	49.51	76.23	3,696	6,847,439	-	-	139	
35 to 49-----	-	65	65	198	263	-	22.40	22.40	68.23	90.63	1,687	2,902,005	-	-	41	
50 to 99-----	-	114	114	235	349	-	25.18	25.18	51.90	77.08	2,384	4,528,044	-	-	39	
100 to 149-----	-	23	23	54	77	-	28.34	28.34	66.53	94.87	463	811,613	-	-	4	
150 to 249-----	-	5	5	-	5	-	7.55	7.55	-	7.55	349	661,948	-	-	2	
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Total or average----	8	547	555	1,101	1,656	.37	25.29	25.66	50.91	76.58	11,880	21,625,415	-	-	669	
Grand total or average-----	131	10,880	11,011	13,999	25,010	.48	40.06	40.54	51.55	92.09	143,886	271,575,488	551,482,432	2.03	3,427	

TABLE 29. - Number of injuries, frequency rates per million man-hours, employment, worktime, and production data at Pennsylvania anthracite mines in the United States, by general work location and employment size group, 1973

General work location and employment size group	Number of injuries					Frequency rates per million man-hours					Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations	
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries						
<b>Underground mines (includes surface works):</b>																
1 to 4-----	-	2	2	1	3	-	21.14	21.14	10.57	31.71	78	94,595	64,298	0.68	25	
5 to 9-----	-	12	12	4	16	-	61.53	61.53	20.51	82.04	101	195,019	139,245	.71	16	
10 to 19-----	-	8	8	8	16	-	47.56	47.56	47.56	95.13	109	168,193	171,164	1.02	9	
20 to 34-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
35 to 49-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
50 to 99-----	-	20	20	1	21	-	145.87	145.87	7.29	153.17	67	137,107	122,499	.89	1	
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
150 to 249-----	1	33	34	31	65	2.90	95.79	98.69	89.99	188.68	181	344,499	164,164	.48	1	
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total or average---</b>	<b>1</b>	<b>75</b>	<b>76</b>	<b>45</b>	<b>121</b>	<b>1.06</b>	<b>79.84</b>	<b>80.90</b>	<b>47.90</b>	<b>128.80</b>	<b>536</b>	<b>939,413</b>	<b>661,370</b>	<b>.70</b>	<b>52</b>	
<b>Strip mines:</b>																
1 to 4-----	-	-	-	2	2	-	-	-	32.65	32.65	47	61,256	55,974	.91	22	
5 to 9-----	-	9	9	14	23	-	50.25	50.25	78.16	128.41	113	179,117	276,561	1.54	16	
10 to 19-----	-	21	21	21	42	-	51.60	51.60	51.60	103.20	209	406,967	718,602	1.77	15	
20 to 34-----	-	12	12	25	37	-	24.32	24.32	50.66	74.98	287	493,478	666,604	1.35	11	
35 to 49-----	-	16	16	18	34	-	84.92	84.92	95.53	180.45	90	188,414	318,175	1.69	2	
50 to 99-----	-	38	38	68	106	-	89.15	89.15	159.53	248.68	276	426,254	764,551	1.79	4	
100 to 149-----	-	9	9	21	30	-	45.19	45.19	105.45	150.65	119	199,139	237,079	1.19	1	
150 to 249-----	-	12	12	20	32	-	36.09	36.09	60.15	96.24	159	332,491	400,719	1.21	1	
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total or average---</b>	<b>-</b>	<b>117</b>	<b>117</b>	<b>189</b>	<b>306</b>	<b>-</b>	<b>51.16</b>	<b>51.16</b>	<b>82.64</b>	<b>133.79</b>	<b>1,300</b>	<b>2,287,116</b>	<b>3,438,265</b>	<b>1.50</b>	<b>72</b>	
<b>Culm banks:</b>																
1 to 4-----	-	-	-	1	1	-	-	-	22.25	22.25	33	44,945	361,924	8.05	14	
5 to 9-----	-	2	2	3	5	-	19.51	19.51	29.27	48.78	91	102,511	1,059,871	10.34	16	
10 to 19-----	-	8	8	4	12	-	69.38	69.38	34.69	104.07	64	115,311	576,955	5.00	5	
20 to 34-----	-	1	1	2	3	-	21.00	21.00	42.01	63.01	22	47,609	59,845	1.26	1	
35 to 49-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
50 to 99-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
<b>Total or average---</b>	<b>-</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>21</b>	<b>-</b>	<b>35.44</b>	<b>35.44</b>	<b>32.22</b>	<b>67.66</b>	<b>210</b>	<b>310,376</b>	<b>2,058,595</b>	<b>6.63</b>	<b>36</b>	

TABLE 29. - Number of injuries, frequency rates per million man-hours, employment, worktime, and production data at Pennsylvania anthracite mines in the United States, by general work location and employment size group, 1973 - Continued

General work location and employment size group	Number of injuries					Frequency rates per million man-hours					Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of operations	
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries						
<b>Dredges:</b>																
1 to 4-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 to 9-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10 to 19-----	-	-	-	3	3	-	-	-	62.93	62.93	18	47,669	308,782	6.48	1	-
20 to 34-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
35 to 49-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total or average---</b>	-	-	-	3	3	-	-	-	62.93	62.93	18	47,669	308,782	6.48	1	-
<b>Total or average, surface-----</b>	-	128	128	202	330	-	48.39	48.39	76.37	124.76	1,528	2,645,161	5,805,642	2.19	109	-
<b>Total or average, mining-----</b>	1	203	204	247	451	0.28	56.63	56.91	68.91	125.82	2,064	3,584,574	6,467,012	1.80	161	-
<b>Independent shops and yards:</b>																
1 to 4-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5 to 9-----	-	-	-	-	-	-	-	-	-	-	13	27,471	-	-	-	2
10 to 19-----	-	3	3	3	6	-	99.31	99.31	99.31	198.62	15	30,208	-	-	-	1
20 to 34-----	-	5	5	17	22	-	42.07	42.07	143.02	185.09	58	118,861	-	-	-	2
35 to 49-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	6	6	18	24	-	51.85	51.85	155.55	207.40	68	115,718	-	-	-	1
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total or average---</b>	-	14	14	38	52	-	47.90	47.90	130.02	177.92	154	292,258	-	-	-	6
<b>Mechanical cleaning plants:</b>																
1 to 4-----	-	4	4	6	10	-	33.82	33.82	50.73	84.55	60	118,274	-	-	-	22
5 to 9-----	-	8	8	11	19	-	41.60	41.60	57.20	98.79	114	192,321	-	-	-	15
10 to 19-----	-	12	12	17	29	-	52.26	52.26	74.04	126.30	126	229,618	-	-	-	9
20 to 34-----	-	51	51	89	140	-	64.45	64.45	112.48	176.94	409	791,250	-	-	-	15
35 to 49-----	-	8	8	21	29	-	38.27	38.27	100.46	138.72	122	209,047	-	-	-	3
50 to 99-----	-	23	23	37	60	-	80.42	80.42	129.37	209.79	143	285,996	-	-	-	2
100 to 149-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	17	17	26	43	-	49.61	49.61	75.87	125.47	165	342,702	-	-	-	1
250 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total or average---</b>	-	123	123	207	330	-	56.70	56.70	95.43	152.13	1,139	2,169,208	-	-	-	67
<b>Grand total or average-----</b>	1	340	341	492	833	.17	56.24	56.40	81.38	137.78	3,357	6,046,040	6,467,012	1.07	234	-

TABLE 30. - Number of injuries and frequency rates per million tons at bituminous coal mines in the United States,  
by general work location and employment size group, 1973

General work location and employment size group	Number of injuries					Frequency rates per million tons				
	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries
<b>Underground mines (includes surface works):</b>										
1 to 4-----	2	9	11	3	14	4.90	22.06	26.96	7.35	34.32
5 to 9-----	6	46	52	13	65	1.87	14.34	16.21	4.05	20.26
10 to 19-----	8	191	199	111	310	.76	18.09	18.85	10.51	29.36
20 to 34-----	6	365	371	278	649	.49	30.10	30.59	22.92	53.51
35 to 49-----	5	337	342	275	617	.44	29.92	30.36	24.41	54.77
50 to 99-----	13	1,067	1,080	1,089	2,169	.47	38.31	38.78	39.10	77.88
100 to 149-----	9	1,262	1,271	1,205	2,476	.31	42.79	43.10	40.86	83.95
150 to 249-----	17	2,139	2,156	2,127	4,283	.31	39.52	39.83	39.30	79.13
250 or more-----	38	3,715	3,753	5,528	9,281	.28	27.28	27.56	40.59	68.15
<b>Total or average-----</b>	<b>104</b>	<b>9,131</b>	<b>9,235</b>	<b>10,629</b>	<b>19,864</b>	<b>.36</b>	<b>32.01</b>	<b>32.38</b>	<b>37.27</b>	<b>69.65</b>
<b>Strip mines:</b>										
1 to 4-----	1	10	11	10	21	.22	2.20	2.42	2.20	4.62
5 to 9-----	-	42	42	25	67	-	4.38	4.38	2.61	6.99
10 to 19-----	5	128	133	132	265	.20	5.06	5.26	5.22	10.48
20 to 34-----	1	137	138	166	304	.03	4.26	4.30	5.17	9.46
35 to 49-----	1	66	67	111	178	.05	3.31	3.36	5.57	8.94
50 to 99-----	2	265	267	536	803	.04	5.24	5.28	10.59	15.87
100 to 149-----	1	198	199	332	531	.02	3.52	3.54	5.91	9.44
150 to 249-----	1	118	119	254	373	.04	4.57	4.61	9.85	14.46
250 or more-----	4	127	131	341	472	.12	3.81	3.93	10.24	14.17
<b>Total or average-----</b>	<b>16</b>	<b>1,091</b>	<b>1,107</b>	<b>1,907</b>	<b>3,014</b>	<b>.06</b>	<b>4.24</b>	<b>4.30</b>	<b>7.41</b>	<b>11.71</b>
<b>Auger mines:</b>										
1 to 4-----	1	14	15	9	24	.32	4.46	4.78	2.87	7.65
5 to 9-----	-	16	16	17	33	-	6.04	6.04	6.42	12.45
10 to 19-----	-	10	10	6	16	-	4.77	4.77	2.86	7.64
20 to 34-----	-	2	2	1	3	-	2.54	2.54	1.27	3.82
35 to 49-----	-	3	3	-	3	-	13.85	13.85	-	13.85
50 to 99-----	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
<b>Total or average-----</b>	<b>1</b>	<b>45</b>	<b>46</b>	<b>33</b>	<b>79</b>	<b>.11</b>	<b>5.07</b>	<b>5.18</b>	<b>3.71</b>	<b>8.89</b>

TABLE 30. - Number of injuries and frequency rates per million tons at bituminous coal mines in the United States, by general work location and employment size group, 1973 - Continued

General work location and employment size group	Number of injuries					Frequency rates per million tons				
	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries
<b>Other surface mining:</b>										
1 to 4-----	-	-	-	-	-	-	-	-	-	-
5 to 9-----	-	-	-	-	-	-	-	-	-	-
10 to 19-----	-	-	-	-	-	-	-	-	-	-
20 to 34-----	-	-	-	-	-	-	-	-	-	-
35 to 49-----	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
Total or average-----	-	-	-	-	-	-	-	-	-	-
Total or average, surface---	17	1,136	1,153	1,940	3,093	0.06	4.27	4.33	7.29	11.62
Total or average, mining----	121	10,267	10,388	12,569	22,957	.22	18.62	18.84	22.79	41.63
<b>Independent shops and yards:</b>										
1 to 4-----	-	3	3	2	5	-	-	-	-	-
5 to 9-----	-	-	-	1	1	-	-	-	-	-
10 to 19-----	-	10	10	15	25	-	-	-	-	-
20 to 34-----	-	16	16	29	45	-	-	-	-	-
35 to 49-----	1	11	12	62	74	-	-	-	-	-
50 to 99-----	1	21	22	112	134	-	-	-	-	-
100 to 149-----	-	2	2	3	5	-	-	-	-	-
150 to 249-----	-	3	3	105	108	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
Total or average-----	2	66	68	329	397	-	-	-	-	-
<b>Mechanical cleaning plants:</b>										
1 to 4-----	-	26	26	38	64	-	-	-	-	-
5 to 9-----	-	39	39	60	99	-	-	-	-	-
10 to 19-----	5	95	100	177	277	-	-	-	-	-
20 to 34-----	3	180	183	339	522	-	-	-	-	-
35 to 49-----	-	65	65	198	263	-	-	-	-	-
50 to 99-----	-	114	114	235	349	-	-	-	-	-
100 to 149-----	-	23	23	54	77	-	-	-	-	-
150 to 249-----	-	5	5	-	5	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
Total or average-----	8	547	555	1,101	1,656	-	-	-	-	-
Grand total or average-----	131	10,880	11,011	13,999	25,010	.24	19.73	19.97	25.38	45.35

TABLE 31. - Number of injuries and frequency rates per million tons at Pennsylvania anthracite mines in the United States, by general work location and employment size group, 1973

General work location and employment size group	Number of injuries					Frequency rates per million tons				
	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries
<b>Underground mines (includes surface works):</b>										
1 to 4-----	-	2	2	1	3	-	31.11	31.11	15.55	46.66
5 to 9-----	-	12	12	4	16	-	86.18	86.18	28.73	114.91
10 to 19-----	-	8	8	8	16	-	46.74	46.74	46.74	93.48
20 to 34-----	-	-	-	-	-	-	-	-	-	-
35 to 49-----	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	20	20	1	21	-	163.27	163.27	8.16	171.43
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	1	33	34	31	65	6.09	201.02	207.11	188.84	395.95
250 or more-----	-	-	-	-	-	-	-	-	-	-
<b>Total or average-----</b>	<b>1</b>	<b>75</b>	<b>76</b>	<b>45</b>	<b>121</b>	<b>1.51</b>	<b>113.40</b>	<b>114.91</b>	<b>68.04</b>	<b>182.95</b>
<b>Strip mines:</b>										
1 to 4-----	-	-	-	2	2	-	-	-	35.73	35.73
5 to 9-----	-	9	9	14	23	-	32.54	32.54	50.62	83.16
10 to 19-----	-	21	21	21	42	-	29.22	29.22	29.22	58.45
20 to 34-----	-	12	12	25	37	-	18.00	18.00	37.50	55.51
35 to 49-----	-	16	16	18	34	-	50.29	50.29	56.57	106.86
50 to 99-----	-	38	38	68	106	-	49.70	49.70	88.94	138.64
100 to 149-----	-	9	9	21	30	-	37.96	37.96	88.58	126.54
150 to 249-----	-	12	12	20	32	-	29.95	29.95	49.91	79.86
250 or more-----	-	-	-	-	-	-	-	-	-	-
<b>Total or average-----</b>	<b>-</b>	<b>117</b>	<b>117</b>	<b>189</b>	<b>306</b>	<b>-</b>	<b>34.03</b>	<b>34.03</b>	<b>54.97</b>	<b>89.00</b>
<b>Culm banks:</b>										
1 to 4-----	-	-	-	1	1	-	-	-	2.76	2.76
5 to 9-----	-	2	2	3	5	-	1.89	1.89	2.83	4.72
10 to 19-----	-	8	8	4	12	-	13.87	13.87	6.93	20.80
20 to 34-----	-	1	1	2	3	-	16.71	16.71	33.42	50.13
35 to 49-----	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
<b>Total or average-----</b>	<b>-</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>21</b>	<b>-</b>	<b>5.34</b>	<b>5.34</b>	<b>4.86</b>	<b>10.20</b>

TABLE 31. - Number of injuries and frequency rates per million tons at Pennsylvania anthracite mines in the United States, by general work location and employment size group, 1973 - Continued

General work location and employment size group	Number of injuries					Frequency rates per million tons				
	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries	Fatal	Nonfatal disabling	All disabling	Nondisabling	All injuries
<b>Dredges:</b>										
1 to 4-----	-	-	-	-	-	-	-	-	-	-
5 to 9-----	-	-	-	-	-	-	-	-	-	-
10 to 19-----	-	-	-	3	3	-	-	-	9.72	9.72
20 to 34-----	-	-	-	-	-	-	-	-	-	-
35 to 49-----	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	-	-	-	-	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
<b>Total or average-----</b>	-	-	-	3	3	-	-	-	9.72	9.72
<b>Total or average, surface----</b>	-	128	128	202	330	-	22.05	22.05	34.79	56.84
<b>Total or average, mining----</b>	1	203	204	247	451	0.15	31.39	31.54	38.19	69.74
<b>Independent shops and yards:</b>										
1 to 4-----	-	-	-	-	-	-	-	-	-	-
5 to 9-----	-	-	-	-	-	-	-	-	-	-
10 to 19-----	-	3	3	3	6	-	-	-	-	-
20 to 34-----	-	5	5	17	22	-	-	-	-	-
35 to 49-----	-	-	-	-	-	-	-	-	-	-
50 to 99-----	-	6	6	18	24	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	-	-	-	-	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
<b>Total or average-----</b>	-	14	14	38	52	-	-	-	-	-
<b>Mechanical cleaning plants:</b>										
1 to 4-----	-	4	4	6	10	-	-	-	-	-
5 to 9-----	-	8	8	11	19	-	-	-	-	-
10 to 19-----	-	12	12	17	29	-	-	-	-	-
20 to 34-----	-	51	51	89	140	-	-	-	-	-
35 to 49-----	-	8	8	21	29	-	-	-	-	-
50 to 99-----	-	23	23	37	60	-	-	-	-	-
100 to 149-----	-	-	-	-	-	-	-	-	-	-
150 to 249-----	-	17	17	26	43	-	-	-	-	-
250 or more-----	-	-	-	-	-	-	-	-	-	-
<b>Total or average-----</b>	-	123	123	207	330	-	-	-	-	-
<b>Grand total or average-----</b>	1	340	341	492	833	.15	52.57	52.73	76.08	128.81

TABLE 32. - Injury experience, worktime, and production data at bituminous coal mines in the United States, by production size group, 1973

General work location and production size group	Number of injuries					Frequency rates										Average men working daily	Man-hours worked	Production, short tons	Tons per man- hour	Number of mines
						Per million man-hours					Per million tons									
	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	All in- juries	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	All in- juries	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	All in- juries					
<b>Underground mines (includes surface works):</b>																				
Less than 25,000-----	20	574	594	817	1,411	0.95	27.36	28.31	38.94	67.26	4.83	138.49	143.32	197.12	340.44	15,432	20,978,337	4,144,627	0.20	481
25,000 to 49,999-----	3	169	172	95	267	.78	43.79	44.57	24.62	69.19	.48	27.05	27.53	15.21	42.73	2,650	3,859,070	6,247,819	1.62	171
50,000 to 99,999-----	6	447	453	323	776	.80	59.84	60.64	43.24	103.88	.50	37.03	37.52	26.76	64.28	4,236	7,470,297	12,072,280	1.62	170
100,000 to 149,999-----	2	522	524	441	965	.27	69.64	69.91	58.83	128.74	.17	44.35	44.52	37.47	82.00	3,835	7,495,656	11,768,792	1.57	95
150,000 to 249,999-----	7	831	838	875	1,713	.54	63.61	64.15	66.98	131.13	.34	40.59	40.93	42.74	83.67	6,677	13,063,552	20,472,412	1.57	104
250,000 to 499,999-----	24	2,309	2,333	1,786	4,119	.65	62.72	63.37	48.52	111.89	.45	43.73	44.19	33.83	78.02	18,731	36,812,761	52,795,533	1.43	150
500,000 to 749,999-----	8	1,364	1,372	1,786	3,158	.27	46.65	46.92	61.08	108.01	.19	32.50	32.69	42.55	75.24	14,963	29,238,844	41,971,420	1.44	68
750,000 to 999,999-----	10	950	960	1,517	2,477	.51	48.70	49.21	77.76	126.97	.33	30.90	31.23	49.34	80.57	9,787	19,508,023	30,744,562	1.58	35
1,000,000 or more-----	24	1,965	1,989	2,989	4,978	.49	39.89	40.37	60.67	101.04	.23	18.72	18.94	28.47	47.41	23,996	49,266,285	104,994,215	2.13	68
Total or average-----	104	9,131	9,235	10,629	19,864	.55	48.65	49.20	56.63	105.83	.36	32.01	32.38	37.27	69.65	100,307	187,692,825	285,211,660	1.52	1,342
<b>Strip mines:</b>																				
Less than 25,000-----	3	42	45	57	102	.91	12.77	13.68	17.32	31.00	.96	13.39	14.35	18.17	32.52	3,487	3,290,165	3,136,583	.95	354
25,000 to 49,999-----	1	39	40	31	71	.51	19.74	20.25	15.69	35.94	.19	7.28	7.47	5.79	13.26	1,438	1,975,696	5,356,250	2.71	141
50,000 to 99,999-----	3	105	108	101	209	.54	19.06	19.61	18.34	37.95	.19	6.55	6.74	6.30	13.05	2,896	5,507,506	16,021,187	2.91	218
100,000 to 149,999-----	2	52	54	57	111	.49	12.75	13.24	13.98	27.22	.15	3.88	4.03	4.25	8.28	1,995	4,078,438	13,406,232	3.29	110
150,000 to 249,999-----	1	89	90	116	206	.17	15.38	15.55	20.04	35.59	.05	4.53	4.58	5.90	10.48	2,757	5,787,899	19,654,656	3.40	102
250,000 to 499,999-----	-	136	136	285	421	-	21.81	21.81	45.69	67.50	-	5.11	5.11	10.71	15.83	2,945	6,237,054	26,600,288	4.26	76
500,000 to 749,999-----	1	105	106	134	240	.21	21.82	22.03	27.85	49.88	.05	5.33	5.38	6.80	12.18	2,138	4,811,768	19,701,800	4.09	32
750,000 to 999,999-----	1	138	139	203	342	.20	28.14	28.35	41.40	69.74	.05	6.91	6.96	10.17	17.13	2,060	4,903,663	19,968,608	4.07	23
1,000,000 or more-----	4	385	389	923	1,312	.21	20.47	20.69	49.09	69.77	.03	2.88	2.91	6.91	9.83	8,038	18,804,072	133,523,349	7.10	56
Total or average-----	16	1,091	1,107	1,907	3,014	.29	19.69	19.98	34.42	54.41	.06	4.24	4.30	7.41	11.71	27,754	55,396,261	257,368,953	4.65	1,112
<b>Auger mines:</b>																				
Less than 25,000-----	1	11	12	10	22	2.58	28.43	31.02	25.85	56.86	.71	7.76	8.47	7.06	15.53	701	386,886	1,416,757	3.66	142
25,000 to 49,999-----	-	9	9	10	19	-	36.57	36.57	40.63	77.20	-	6.72	6.72	7.47	14.19	165	246,126	1,339,128	5.44	36
50,000 to 99,999-----	-	8	8	3	11	-	16.30	16.30	6.11	22.42	-	3.16	3.16	1.19	4.35	257	490,670	2,529,592	5.16	37
100,000 to 149,999-----	-	7	7	3	10	-	26.95	26.95	11.55	38.50	-	4.14	4.14	1.77	5.92	129	259,743	1,690,503	6.51	14
150,000 to 249,999-----	-	10	10	7	17	-	34.04	34.04	23.83	57.87	-	6.37	6.37	4.46	10.84	141	293,758	1,568,848	5.34	8
250,000 to 499,999-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	28	55,790	339,351	6.08	1
500,000 to 749,999-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
750,000 to 999,999-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,000,000 or more-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average-----	1	45	46	33	79	.58	25.97	26.54	19.04	45.59	.11	5.07	5.18	3.71	8.89	1,421	1,732,973	8,884,179	5.13	238
<b>Other surface mining:</b>																				
Total or average, surface-----	17	1,136	1,153	1,940	3,093	.30	19.88	20.18	33.95	54.13	.06	4.27	4.33	7.29	11.62	29,180	57,138,390	266,270,772	4.66	1,351
Total or average, mining-----	121	10,267	10,388	12,569	22,957	.49	41.94	42.43	51.34	93.77	.22	18.62	18.84	22.79	41.63	129,487	244,831,215	551,482,432	2.25	2,693
Independent shops and yards:	2	66	68	329	397	.39	12.89	13.28	64.27	77.56	-	-	-	-	-	2,519	5,118,858	-	-	65
Mechanical cleaning plants:	8	547	555	1,101	1,656	.37	25.29	25.66	50.91	76.58	-	-	-	-	-	11,880	21,625,415	-	-	669
Grand total or average-----	131	10,880	11,011	13,999	25,010	.48	40.06	40.54	51.55	92.09	.24	19.73	19.97	25.38	45.35	143,886	271,575,488	551,482,432	2.03	3,427

TABLE 33. - Injury experience, worktime, and production data at Pennsylvania anthracite mines in the United States, by production size group, 1973

General work location and production size group	Number of injuries					Frequency rates										Average men working daily	Man-hours worked	Production, short tons	Tons per man-hour	Number of mines
						Per million man-hours					Per million tons									
	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries	Fatal	Non-fatal disabling	All disabling	Non-disabling	All injuries					
<b>Underground mines (includes surface works):</b>																				
Less than 25,000-----	-	20	20	13	33	-	40.10	40.10	26.07	66.17	-	70.08	70.08	45.55	115.63	302	498,744	285,388	0.57	47
25,000 to 49,999-----	-	4	4	2	6	-	63.51	63.51	31.76	95.27	-	44.78	44.78	22.39	67.17	32	62,979	89,319	1.42	3
50,000 to 99,999-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100,000 to 149,999-----	-	20	20	1	21	-	190.81	190.81	9.54	200.35	-	163.27	163.27	8.16	171.43	54	104,817	122,499	1.17	1
150,000 to 249,999-----	1	31	32	29	61	3.66	113.61	117.27	106.28	223.55	6.09	188.84	194.93	176.65	371.58	148	272,873	164,164	.60	1
<b>Total or average-----</b>	<b>1</b>	<b>75</b>	<b>76</b>	<b>45</b>	<b>121</b>	<b>1.06</b>	<b>79.84</b>	<b>80.90</b>	<b>47.90</b>	<b>128.80</b>	<b>1.51</b>	<b>113.40</b>	<b>114.91</b>	<b>68.04</b>	<b>182.95</b>	<b>536</b>	<b>939,413</b>	<b>661,370</b>	<b>.70</b>	<b>52</b>
<b>Strip mines:</b>																				
Less than 25,000-----	-	16	16	20	36	-	43.80	43.80	54.75	98.54	-	61.62	61.62	77.03	138.65	274	365,318	259,648	.71	42
25,000 to 49,999-----	-	15	15	25	40	-	42.66	42.66	71.09	113.75	-	35.02	35.02	58.36	93.38	188	351,655	428,358	1.22	12
50,000 to 99,999-----	-	18	18	21	39	-	36.66	36.66	42.77	79.43	-	24.45	24.45	28.52	52.97	226	491,010	736,266	1.50	9
100,000 to 149,999-----	-	3	3	4	7	-	39.14	39.14	52.19	91.34	-	12.35	12.35	16.46	28.81	46	76,640	243,012	3.17	2
150,000 to 249,999-----	-	42	42	83	125	-	72.94	72.94	144.14	217.08	-	40.46	40.46	79.96	120.43	343	575,812	1,037,972	1.80	5
250,000 to 499,999-----	-	23	23	36	59	-	53.90	53.90	84.37	138.28	-	31.38	31.38	49.11	80.49	223	426,681	733,009	1.72	2
<b>Total or average-----</b>	<b>-</b>	<b>117</b>	<b>117</b>	<b>189</b>	<b>306</b>	<b>-</b>	<b>51.16</b>	<b>51.16</b>	<b>82.64</b>	<b>133.79</b>	<b>-</b>	<b>34.03</b>	<b>34.03</b>	<b>54.97</b>	<b>89.00</b>	<b>1,300</b>	<b>2,287,116</b>	<b>3,438,265</b>	<b>1.50</b>	<b>72</b>
<b>Culm banks:</b>																				
Less than 25,000-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	66	41,992	199,446	4.75	17
25,000 to 49,999-----	-	-	-	1	1	-	-	-	45.84	45.84	-	-	-	6.75	6.75	15	21,817	148,131	6.79	4
50,000 to 99,999-----	-	8	8	8	16	-	50.64	50.64	50.64	101.27	-	13.54	13.54	13.54	27.07	81	157,992	591,019	3.74	9
100,000 to 149,999-----	-	1	1	1	2	-	45.17	45.17	45.17	90.33	-	4.49	4.49	4.49	8.98	14	22,140	222,827	10.06	2
150,000 to 249,999-----	-	1	1	-	1	-	17.89	17.89	-	17.89	-	1.56	1.56	-	1.56	28	55,904	639,907	11.45	3
250,000 to 499,999-----	-	1	1	-	1	-	94.96	94.96	-	94.96	-	3.89	3.89	-	3.89	6	10,531	257,265	24.43	1
<b>Total or average-----</b>	<b>-</b>	<b>11</b>	<b>11</b>	<b>10</b>	<b>21</b>	<b>-</b>	<b>35.44</b>	<b>35.44</b>	<b>32.22</b>	<b>67.66</b>	<b>-</b>	<b>5.34</b>	<b>5.34</b>	<b>4.86</b>	<b>10.20</b>	<b>210</b>	<b>310,376</b>	<b>2,058,595</b>	<b>6.63</b>	<b>36</b>
<b>Dredges:</b>																				
Less than 25,000-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
25,000 to 49,999-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
50,000 to 99,999-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
100,000 to 149,999-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
150,000 to 249,999-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
250,000 to 499,999-----	-	-	-	3	3	-	-	-	62.93	62.93	-	-	-	9.72	9.72	18	47,669	308,782	6.48	1
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>3</b>	<b>3</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>62.93</b>	<b>62.93</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>9.72</b>	<b>9.72</b>	<b>18</b>	<b>47,669</b>	<b>308,782</b>	<b>6.48</b>	<b>1</b>
<b>Total or average, surface-----</b>	<b>-</b>	<b>128</b>	<b>128</b>	<b>202</b>	<b>330</b>	<b>-</b>	<b>48.39</b>	<b>48.39</b>	<b>76.37</b>	<b>124.76</b>	<b>-</b>	<b>22.05</b>	<b>22.05</b>	<b>34.79</b>	<b>56.84</b>	<b>1,528</b>	<b>2,645,161</b>	<b>5,805,642</b>	<b>2.19</b>	<b>109</b>
<b>Total or average, mining-----</b>	<b>1</b>	<b>203</b>	<b>204</b>	<b>247</b>	<b>451</b>	<b>.28</b>	<b>56.63</b>	<b>56.91</b>	<b>68.91</b>	<b>125.82</b>	<b>.15</b>	<b>31.39</b>	<b>31.54</b>	<b>38.19</b>	<b>69.74</b>	<b>2,064</b>	<b>3,584,574</b>	<b>6,467,012</b>	<b>1.80</b>	<b>161</b>
<b>Independent shops and yards:</b>	<b>-</b>	<b>14</b>	<b>14</b>	<b>38</b>	<b>52</b>	<b>-</b>	<b>47.90</b>	<b>47.90</b>	<b>130.02</b>	<b>177.92</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>154</b>	<b>292,258</b>	<b>-</b>	<b>-</b>	<b>6</b>
<b>Mechanical cleaning plants:</b>	<b>-</b>	<b>123</b>	<b>123</b>	<b>207</b>	<b>330</b>	<b>-</b>	<b>56.70</b>	<b>56.70</b>	<b>95.43</b>	<b>152.13</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1,139</b>	<b>2,169,208</b>	<b>-</b>	<b>-</b>	<b>67</b>
<b>Grand total or average-----</b>	<b>1</b>	<b>340</b>	<b>341</b>	<b>492</b>	<b>833</b>	<b>.17</b>	<b>56.24</b>	<b>56.40</b>	<b>81.38</b>	<b>137.78</b>	<b>.15</b>	<b>52.57</b>	<b>52.73</b>	<b>76.08</b>	<b>128.81</b>	<b>3,357</b>	<b>6,046,040</b>	<b>6,467,012</b>	<b>1.07</b>	<b>234</b>

TABLE 34. - Relative standing of States according to fatal, nonfatal, all disabling, and nondisabling injury rates per million man-hours of exposure, 1973

State	Fatality rate	State	Nonfatal disabling injury rate	State	All disabling injury rate	State	Non-disabling injury rate
Alaska-----	-	Arizona-----	8.95	Arizona-----	8.95	Iowa-----	4.15
Arizona-----	-	Arkansas-----	10.29	Arkansas-----	10.29	Arizona-----	6.71
Arkansas-----	-	Montana-----	11.32	Montana-----	11.32	Tennessee-----	8.90
Iowa-----	-	Texas-----	12.76	Texas-----	12.76	Maryland-----	10.26
Kansas-----	-	Kansas-----	14.28	Kansas-----	14.28	Oklahoma-----	18.67
Maryland-----	-	Maryland-----	18.47	Maryland-----	18.47	Colorado-----	22.31
Missouri-----	-	Indiana-----	18.99	Indiana-----	19.33	Missouri-----	23.18
Montana-----	-	North Dakota-----	22.70	North Dakota-----	22.70	Wyoming-----	24.46
North Dakota-----	-	Alabama-----	23.24	Alabama-----	23.43	Arkansas-----	27.44
Oklahoma-----	-	Alaska-----	23.74	Alaska-----	23.74	New Mexico-----	30.07
Texas-----	-	Oklahoma-----	24.50	Oklahoma-----	24.50	Virginia-----	31.36
Wyoming-----	-	Wyoming-----	27.01	Wyoming-----	27.01	Alabama-----	32.76
Pennsylvania (anthracite)--	0.17	Pennsylvania (bituminous)--	28.43	Pennsylvania (bituminous)--	28.79	Montana-----	35.20
Alabama-----	.19	Iowa-----	29.05	Iowa-----	29.05	Kentucky-----	40.86
Ohio-----	.19	New Mexico-----	29.34	Ohio-----	31.39	Pennsylvania (bituminous)--	41.56
Illinois-----	.26	Ohio-----	31.20	New Mexico-----	31.54	Ohio-----	41.96
Tennessee-----	.33	Tennessee-----	31.96	Tennessee-----	32.29	Kansas-----	44.87
Indiana-----	.35	Illinois-----	32.63	Illinois-----	32.89	Utah-----	46.45
Pennsylvania (bituminous)--	.35	Missouri-----	34.05	Missouri-----	34.05	U. S. Average (bituminous)-	51.55
U. S. Average (bituminous)-	.48	Kentucky-----	34.33	Kentucky-----	35.00	Indiana-----	51.79
U. S. Average (all coal)---	.48	U. S. Average (bituminous)-	40.06	U. S. Average (bituminous)-	40.54	U. S. Average (all coal)---	52.20
West Virginia-----	.52	U. S. Average (all coal)---	40.41	U. S. Average (all coal)---	40.89	Texas-----	60.16
Kentucky-----	.67	Virginia-----	50.76	Virginia-----	51.66	North Dakota-----	64.31
Virginia-----	.90	Colorado-----	54.49	Colorado-----	55.58	Illinois-----	64.79
Utah-----	.93	West Virginia-----	56.02	Pennsylvania (anthracite)--	56.40	West Virginia-----	74.48
Colorado-----	1.10	Pennsylvania (anthracite)--	56.24	West Virginia-----	56.54	Washington-----	78.52
Washington-----	1.48	Utah-----	68.75	Utah-----	69.68	Pennsylvania (anthracite)--	81.38
New Mexico-----	2.20	Washington-----	74.07	Washington-----	75.55	Alaska-----	142.45

TABLE 35. - Worktime and production data at coal mines in the United States, by State and general work location, 1973

State	Number of operations								Average men working daily									
	Under-ground	Strip	Other surface mining <sup>1</sup>	Total surface	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total	Underground mines			Strip mines	Other surface mining <sup>1</sup>	Total surface	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total
									Under-ground	Surface	Total							
Alabama-----	18	66	1	67	85	-	21	106	2,997	560	3,557	1,613	4	1,617	5,174	-	358	5,532
Alaska-----	-	1	-	1	1	-	1	2	-	-	-	74	-	74	74	-	4	78
Arizona-----	-	2	-	2	2	-	2	4	-	-	-	170	-	170	170	-	50	220
Arkansas-----	-	9	-	9	9	-	1	10	-	-	-	186	-	186	186	-	4	190
Colorado-----	23	6	1	7	30	-	7	37	1,045	151	1,196	154	11	165	1,361	-	30	1,391
Illinois-----	25	31	-	31	56	10	39	105	6,232	747	6,979	2,678	-	2,678	9,657	327	1,105	11,089
Indiana-----	3	27	-	27	30	3	13	46	202	32	234	2,102	-	2,102	2,336	147	253	2,736
Iowa-----	2	9	-	9	11	-	2	13	39	10	49	59	-	59	108	-	3	111
Kansas-----	-	4	-	4	4	-	2	6	-	-	-	195	-	195	195	-	30	225
Kentucky-----	366	157	70	227	593	1	125	719	14,654	1,414	16,068	5,156	503	5,659	21,727	105	1,760	23,592
Maryland-----	2	19	-	21	23	-	2	25	15	-	15	213	9	222	237	-	4	241
Missouri-----	-	8	-	8	8	1	4	13	-	-	-	544	-	544	544	40	36	620
Montana-----	1	8	1	9	10	-	-	10	21	4	25	448	31	479	504	-	-	504
New Mexico-----	1	3	-	3	4	-	2	6	191	33	224	418	-	418	642	-	43	685
North Dakota-----	-	11	-	11	11	-	3	14	-	-	-	254	-	254	254	-	5	259
Ohio-----	30	131	24	155	185	5	35	225	5,475	930	6,405	3,420	121	3,541	9,946	507	989	11,442
Oklahoma-----	-	9	-	9	9	-	4	13	-	-	-	353	-	353	353	-	17	370
Pennsylvania (bituminous)--	141	328	29	357	498	9	108	615	15,960	1,745	17,705	4,026	103	4,129	21,834	297	1,929	24,060
Tennessee-----	34	40	8	48	82	-	25	107	942	72	1,014	617	35	652	1,666	-	106	1,772
Texas-----	-	3	-	3	3	-	-	3	-	-	-	236	-	236	236	-	-	236
Utah-----	15	-	-	-	15	-	12	27	1,140	279	1,419	-	-	-	1,419	-	274	1,693
Virginia-----	208	71	36	107	315	14	52	381	8,520	528	9,048	938	152	1,090	10,138	287	663	11,088
Washington-----	2	2	-	2	4	-	2	6	10	3	13	278	-	278	291	-	26	317
West Virginia--	466	155	67	222	688	22	205	915	33,075	3,088	36,163	2,820	457	3,277	39,440	809	4,172	44,421
Wyoming-----	5	12	-	12	17	-	2	19	116	77	193	802	-	802	995	-	19	1,014
Total or average, bituminous--	1,342	1,112	239	1,351	2,693	65	669	3,427	90,634	9,673	100,307	27,754	1,426	29,180	129,487	2,519	11,880	143,886
Pennsylvania (anthracite)--	52	72	37	109	161	6	67	234	438	98	536	1,300	228	1,528	2,064	154	1,139	3,357
Grand total or average--	1,394	1,184	276	1,460	2,854	71	736	3,661	91,072	9,771	100,843	29,054	1,654	30,708	131,551	2,673	13,019	147,243

See footnote at end of table.

TABLE 35. - Worktime and production data at coal mines in the United States, by State and general work location, 1973 - Continued

State	Man-hours of work									
	Underground mines			Strip mines	Other surface mining <sup>1/</sup>	Total surface	Total mining	Independent shops and yards	Mechanical cleaning plants	Grand total
	Underground	Surface	Total							
Alabama-----	5,689,815	945,942	6,635,757	3,233,207	11,666	3,244,873	9,880,630	-	619,693	10,500,323
Alaska-----	-	-	-	157,986	-	157,986	157,986	-	10,489	168,475
Arizona-----	-	-	-	363,541	-	363,541	363,541	-	83,280	446,821
Arkansas-----	-	-	-	282,063	-	282,063	282,063	-	9,482	291,545
Colorado-----	2,113,208	278,176	2,391,384	296,158	24,726	320,884	2,712,268	-	22,341	2,734,609
Illinois-----	12,688,490	1,527,211	14,215,701	6,230,308	-	6,230,308	20,446,009	629,673	2,182,779	23,258,461
Indiana-----	359,724	60,830	420,554	4,488,648	-	4,488,648	4,909,202	325,812	557,936	5,792,950
Iowa-----	95,896	27,183	123,079	116,132	-	116,132	239,211	-	1,731	240,942
Kansas-----	-	-	-	427,571	-	427,571	427,571	-	62,782	490,353
Kentucky-----	26,100,675	2,437,261	28,537,936	9,995,405	774,448	10,769,853	39,307,789	203,965	3,488,298	43,000,052
Maryland-----	23,068	-	23,068	442,866	15,339	458,205	481,273	-	5,990	487,263
Missouri-----	-	-	-	1,225,406	-	1,225,406	1,225,406	-	72,263	1,380,407
Montana-----	10,241	384	10,625	780,340	4,408	784,748	795,373	82,738	-	795,373
New Mexico-----	371,297	61,680	432,977	842,317	-	842,317	1,275,294	-	88,099	1,363,393
North Dakota-----	-	-	-	522,550	-	522,550	522,550	-	6,108	528,658
Ohio-----	9,765,360	1,486,625	11,251,985	6,982,235	114,661	7,096,896	18,348,881	1,087,792	1,748,977	21,185,650
Oklahoma-----	-	-	-	817,085	-	817,085	817,085	-	39,975	857,060
Pennsylvania (bituminous)-----	32,149,703	3,355,906	35,505,609	8,388,887	59,440	8,448,327	43,953,936	532,006	3,730,049	48,215,991
Tennessee-----	1,672,042	107,227	1,779,269	989,712	67,800	1,057,512	2,836,781	-	197,964	3,034,745
Texas-----	-	-	-	548,537	-	548,537	548,537	-	-	548,537
Utah-----	2,350,048	428,338	2,778,386	-	-	-	2,778,386	-	450,860	3,229,246
Virginia-----	15,630,540	749,541	16,380,081	1,618,342	187,894	1,806,236	18,186,317	683,817	1,185,956	20,056,090
Washington-----	15,968	6,076	22,044	599,118	-	599,118	621,162	-	53,845	675,007
West Virginia-----	61,818,277	5,057,745	66,876,022	4,412,235	481,747	4,893,982	71,770,004	1,573,055	6,988,013	80,331,072
Wyoming-----	175,547	132,801	308,348	1,635,612	-	1,635,612	1,943,960	-	18,505	1,962,465
Total or average, bituminous-----	171,029,899	16,662,926	187,692,825	55,396,261	1,742,129	57,138,390	244,831,215	5,118,858	21,625,415	271,575,488
Pennsylvania (anthracite)-----	752,549	186,864	939,413	2,287,116	358,045	2,645,161	3,584,574	292,258	2,169,208	6,046,040
Grand total or average-----	171,782,448	16,849,790	188,632,238	57,683,377	2,100,174	59,783,551	248,415,789	5,411,116	23,794,623	277,621,528

See footnote at end of table.

TABLE 35. - Worktime and production data at coal mines in the United States, by State and general work location, 1973<sup>1/</sup> - Continued

State	Production short tons					Tons per man-hour				
	Underground mines	Strip mines	Other surface mining <sup>1/</sup>	Total surface	Grand total	Underground mines	Strip mines	Other surface mining <sup>1/</sup>	Total surface	Grand total
Alabama-----	7,468,072	10,880,482	61,789	10,942,271	18,410,343	1.13	3.37	5.30	3.37	1.75
Alaska-----	-	737,905	-	737,905	737,905	-	4.67	-	4.67	4.38
Arizona-----	-	3,412,324	-	3,412,324	3,412,324	-	9.39	-	9.39	7.64
Arkansas-----	-	426,450	-	426,450	426,450	-	1.51	-	1.51	1.46
Colorado-----	3,262,991	2,616,012	145,839	2,761,851	6,024,842	1.36	8.83	5.90	8.61	2.20
Illinois-----	32,540,604	28,676,269	-	28,676,269	61,216,873	2.29	4.60	-	4.60	2.63
Indiana-----	806,881	24,174,771	-	24,174,771	24,981,652	1.92	5.39	-	5.39	4.31
Iowa-----	355,761	214,543	-	214,543	570,304	2.89	1.85	-	1.85	2.37
Kansas-----	-	995,412	-	995,412	995,412	-	2.33	-	2.33	2.03
Kentucky-----	55,437,052	49,364,397	4,004,886	53,369,283	108,806,335	1.94	4.94	5.17	4.96	2.53
Maryland-----	62,807	1,212,269	46,233	1,258,502	1,321,309	2.72	2.74	3.01	2.75	2.71
Missouri-----	-	4,745,040	-	4,745,040	4,745,040	-	3.87	-	3.87	3.44
Montana-----	584	10,369,942	-	10,369,942	10,370,526	.05	13.29	-	13.21	13.04
New Mexico-----	732,802	8,044,542	-	8,044,542	8,777,344	1.69	9.55	-	9.55	6.44
North Dakota-----	-	6,702,285	-	6,702,285	6,702,285	-	12.83	-	12.83	12.68
Ohio-----	15,782,128	27,843,920	994,660	28,838,580	44,620,708	1.40	3.99	8.67	4.06	2.11
Oklahoma-----	-	2,110,563	-	2,110,563	2,110,563	-	2.58	-	2.58	2.46
Pennsylvania (bituminous)-----	46,331,083	26,146,676	256,629	26,403,305	72,734,388	1.30	3.12	4.32	3.13	1.51
Tennessee-----	3,018,966	3,292,063	324,838	3,616,901	6,635,867	1.70	3.33	4.79	3.42	2.19
Texas-----	-	7,143,280	-	7,143,280	7,143,280	-	13.02	-	13.02	13.02
Utah-----	4,866,095	-	-	-	4,866,095	1.75	-	-	-	1.51
Virginia-----	20,439,289	5,759,356	1,111,800	6,871,156	27,310,445	1.25	3.56	5.92	3.80	1.36
Washington-----	16,665	3,247,759	-	3,247,759	3,264,424	.76	5.42	-	5.42	4.84
West Virginia-----	93,651,913	15,400,637	1,955,145	17,355,782	111,007,695	1.40	3.49	4.06	3.55	1.38
Wyoming-----	437,967	13,852,056	-	13,852,056	14,290,023	1.42	8.47	-	8.47	7.28
Total or average, bituminous-----	285,211,660	257,368,953	8,901,819	266,270,772	551,482,432	1.52	4.65	5.11	4.66	2.03
Pennsylvania (anthracite)-----	661,370	3,438,265	2,367,377	5,805,642	6,467,012	.70	1.50	6.61	2.19	1.07
Grand total or average-----	285,873,030	260,807,218	11,269,196	272,076,414	557,949,444	1.52	4.52	5.37	4.55	2.01

<sup>1/</sup> Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 36. - Number of fatal injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973

State	Underground mines														Strip mines				Other surface mining 1/		Independent shops and yards		Mechanical cleaning plants			Grand total								
	Underground								Surface						Sliding or falling material or objects	Haulage	Electricity	Machinery	Total, strip mines	Machinery	Total, other surface mining	Total, surface mines	Total, mining	Haulage	Electricity		Total, independent shops and yards	Haulage	Electricity	Machinery	Total, mechanical cleaning plants			
	Falls of roof or back	Falls of face or rib	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Total, underground	Sliding or falling material or objects	Haulage	Electricity	Machinery	Total, surface																		Total, underground mines		
Alabama			1				1	2						2					2															2
Alaska																																		
Arizona																																		
Arkansas																																		
California																																		
Colorado			1																															
Illinois	1		1				1	3					2	3																				3
Indiana																																		
Iowa																																		
Kansas																																		
Kentucky	10		6		1		5	23					1	24																				29
Maryland																																		
Missouri																																		
Montana																																		
New Mexico																																		
North Dakota																																		
Ohio	1		1					2						2																				
Oklahoma																																		
Pennsylvania (bituminous)	3	2	6				1	12						12																				17
Tennessee	1							1						1																				
Texas																																		
Utah	1						2	3						3																				
Virginia	6		6		2		1	17					1	18																				
Washington																																		
West Virginia	15	4	8				3	34					2	36																				
Wyoming																																		
Total bituminous	38	6	30	2	1	5	15	98	1	2	2	1	6	104	1	4	1	10	16	1	1	17	221	1	1	2	4	1	3	8	131			
Pennsylvania (anthracite)	1							1						1									1											1
All coal	39	6	30	2	1	5	15	99	1	2	2	1	6	105	1	4	1	10	16	1	1	17	222	1	1	2	4	1	3	8	132			

1/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973

State	Underground																		
	Falls of roof or back	Falls of face or rib	Pressure bumps or bursts	Inrush of water	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Total, underground
Alabama-----	12	12	-	-	9	13	21	8	4	2	27	-	2	2	26	-	-	6	144
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	22	6	1	-	4	10	30	7	2	-	24	-	-	3	23	-	4	138	
Illinois-----	89	36	-	1	21	24	90	18	15	7	80	-	5	17	89	-	2	17	511
Indiana-----	6	-	-	-	1	-	3	-	-	-	5	-	-	1	7	-	-	1	24
Iowa-----	1	-	-	-	1	-	-	-	-	-	2	-	-	-	1	-	-	-	5
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	116	40	-	-	26	56	213	72	14	12	178	-	14	59	231	1	-	32	1,064
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1
Montana-----	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	1
New Mexico-----	4	2	-	-	-	1	11	1	-	-	1	-	-	2	11	-	-	1	34
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	67	10	-	-	13	41	101	45	19	13	87	-	2	15	102	-	4	11	530
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)--	106	23	-	-	49	97	325	81	21	16	201	-	-	22	170	-	-	44	1,155
Tennessee-----	13	2	-	-	1	2	9	5	1	2	20	-	-	4	14	-	-	4	77
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	30	6	3	-	9	17	49	14	1	1	24	-	-	1	35	-	-	9	199
Virginia-----	113	38	2	-	22	36	184	66	19	14	162	2	2	32	179	-	1	22	894
Washington-----	-	-	-	-	-	-	2	-	-	-	-	-	-	-	1	-	-	-	3
West Virginia-----	397	133	5	1	117	233	1,019	283	94	64	677	-	14	154	614	-	8	124	3,937
Wyoming-----	1	1	1	-	2	4	5	1	-	-	4	-	1	1	7	-	-	-	28
Total bituminous-----	977	309	12	2	275	534	2,063	601	190	131	1,492	2	40	315	1,510	1	15	276	8,745
Pennsylvania (anthracite)--	1	6	-	-	6	12	23	11	-	1	6	-	-	1	6	-	-	-	73
All coal-----	978	315	12	2	281	546	2,086	612	190	132	1,498	2	40	316	1,516	1	15	276	8,818

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Surface at underground											Total, underground mines	
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Electricity	Machinery	Miscellaneous causes		Total, surface at underground
Alabama-----	-	2	3	-	-	-	5	-	3	1	1	15	159
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	1	-	-	-	1	-	-	1	3	3	141
Illinois-----	1	2	5	1	1	-	4	-	-	3	2	19	530
Indiana-----	-	1	-	-	-	-	1	-	-	1	1	4	28
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	5
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	-	10	26	3	1	-	14	1	-	6	6	67	1,131
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	1
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	1
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	34
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	2	2	4	2	-	-	3	-	-	2	2	17	547
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	-	12	16	-	1	-	4	-	-	3	5	41	1,196
Tennessee-----	-	1	-	-	-	-	-	-	-	-	-	1	78
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	1	2	4	2	1	-	-	-	-	3	-	13	212
Virginia-----	1	7	19	3	1	-	2	-	-	2	7	42	936
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	3
West Virginia-----	6	25	59	6	2	3	31	-	2	15	13	162	4,099
Wyoming-----	-	1	-	-	-	-	-	-	-	-	1	2	30
Total bituminous-----	11	65	137	17	7	3	65	1	5	37	38	386	9,131
Pennsylvania (anthracite)-	-	-	-	1	-	-	-	-	-	-	1	2	75
All coal-----	11	65	137	18	7	3	65	1	5	37	39	388	9,206

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Strip															
	Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Total, strip
Alabama-----	1	3	17	13	7	2	-	8	-	-	-	16	-	-	8	75
Alaska-----	-	-	-	-	-	-	-	1	-	-	-	2	-	-	1	4
Arizona-----	-	1	1	1	2	-	-	-	-	-	-	1	-	-	-	4
Arkansas-----	-	-	6	-	-	-	-	-	-	-	-	-	-	-	-	6
Colorado-----	-	1	1	1	-	-	-	-	-	-	-	-	-	-	-	3
Illinois-----	3	6	41	30	12	3	3	18	-	2	6	20	-	-	29	173
Indiana-----	2	2	13	14	3	-	1	6	-	-	1	16	-	-	7	65
Iowa-----	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	2
Kansas-----	-	-	-	-	-	-	-	4	-	-	-	2	-	-	-	6
Kentucky-----	4	5	50	63	30	5	-	25	-	3	2	31	-	3	20	241
Maryland-----	-	1	2	4	-	-	-	1	-	-	-	-	-	-	-	8
Missouri-----	-	-	13	15	7	1	-	2	-	-	1	1	-	-	6	46
Montana-----	-	-	-	4	-	-	-	1	-	-	1	2	-	-	-	8
New Mexico-----	-	-	2	2	-	-	-	-	-	-	-	2	-	-	-	6
North Dakota-----	-	-	3	2	1	-	-	2	-	-	-	3	-	-	-	11
Ohio-----	3	3	22	11	7	1	-	7	-	2	1	10	-	-	4	71
Oklahoma-----	-	-	6	5	-	1	-	-	-	-	-	2	1	-	6	21
Pennsylvania (bituminous)--	1	4	43	20	7	5	1	14	-	2	-	20	-	2	7	126
Tennessee-----	-	1	2	3	2	-	-	1	1	-	-	2	-	-	3	15
Texas-----	-	-	1	3	-	-	-	2	-	-	-	-	-	-	1	7
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	7	7	5	-	-	4	-	-	-	4	-	-	2	29
Washington-----	-	1	7	10	2	1	-	5	-	-	-	6	-	-	8	40
West Virginia-----	1	3	31	20	5	3	-	5	-	-	-	18	-	1	15	102
Wyoming-----	-	1	4	2	1	-	-	5	-	-	-	7	-	-	2	22
Total bituminous-----	15	31	272	231	91	22	5	111	1	9	12	165	1	6	119	1,091
Pennsylvania (anthracite)--	1	3	39	21	7	-	-	18	-	-	-	10	-	-	18	117
All coal-----	16	34	311	252	98	22	5	129	1	9	12	175	1	6	137	1,208

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Other surface mining <sup>1/</sup>										Total, surface	Total, mining
	Falls of face or side	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Haulage	Explosions of gas or dust	Machinery	Miscellaneous causes	Total, other surface mining		
Alabama-----	-	-	-	-	-	-	-	-	-	-	75	234
Alaska-----	-	-	-	-	-	-	-	-	-	-	4	4
Arizona-----	-	-	-	-	-	-	-	-	-	-	4	4
Arkansas-----	-	-	-	-	-	-	-	-	-	-	3	3
Colorado-----	-	-	-	-	-	-	-	-	-	-	6	147
Illinois-----	-	-	-	-	-	-	-	-	-	-	173	703
Indiana-----	-	-	-	-	-	-	-	-	-	-	65	93
Iowa-----	-	-	-	-	-	-	-	-	-	-	2	7
Kansas-----	-	-	-	-	-	-	-	-	-	-	6	6
Kentucky-----	2	2	6	2	2	1	-	1	3	19	260	1,391
Maryland-----	-	-	-	-	-	-	-	-	-	-	8	9
Missouri-----	-	-	-	-	-	-	-	-	-	-	46	46
Montana-----	-	-	-	-	-	-	-	-	-	-	8	9
New Mexico-----	-	-	-	-	-	-	-	-	-	-	6	40
North Dakota-----	-	-	-	-	-	-	-	-	-	-	11	11
Ohio-----	-	-	-	1	-	-	1	2	-	4	75	622
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	21	21
Pennsylvania (bituminous)--	-	-	-	-	-	-	-	-	-	-	126	1,322
Tennessee-----	1	-	-	1	-	-	-	-	-	2	17	95
Texas-----	-	-	-	-	-	-	-	-	-	-	7	7
Utah-----	-	-	-	-	-	-	-	-	-	-	-	212
Virginia-----	1	1	1	1	-	-	-	-	-	4	33	969
Washington-----	-	-	-	-	-	-	-	-	-	-	40	43
West Virginia-----	-	4	3	1	2	1	-	5	-	16	118	4,217
Wyoming-----	-	-	-	-	-	-	-	-	-	-	22	52
Total bituminous-----	4	7	10	6	4	2	1	8	3	45	1,136	10,267
Pennsylvania (anthracite)--	-	3	3	-	-	1	-	1	3	11	128	203
All coal-----	4	10	13	6	4	3	1	9	6	56	1,264	10,470

See footnote at end of table.

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Independent shops and yards										
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Miscellaneous causes	Total, independent shops and yards
Illinois-----	-	1	3	2	-	-	2	-	-	5	13
Indiana-----	1	1	2	-	-	-	2	-	-	1	9
Ohio-----	-	-	2	-	-	-	1	-	2	-	5
Pennsylvania (bituminous)--	-	-	2	1	-	-	-	-	-	-	3
Virginia-----	1	2	2	2	-	1	2	1	2	1	14
West Virginia-----	1	7	7	4	1	-	1	1	-	-	22
Total bituminous-----	3	11	18	9	1	1	8	2	6	7	66
Pennsylvania (anthracite)--	-	1	7	2	-	-	-	-	1	3	14
All coal-----	3	12	25	11	1	1	8	2	7	10	80

TABLE 37. - Number of nonfatal disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Mechanical cleaning plants											Grand total	
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Fires or suffocation from fires	Miscellaneous causes		Total, mechanical cleaning plants
Alabama-----	-	4	1	-	-	1	1	-	3	-	-	10	244
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	4
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	4
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	3
Colorado-----	-	-	-	-	-	-	2	-	-	-	2	2	149
Illinois-----	1	13	15	-	2	-	4	1	3	-	4	43	759
Indiana-----	-	3	1	1	-	-	-	1	1	-	1	8	110
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	7
Kansas-----	-	-	-	1	-	-	-	-	-	-	-	1	7
Kentucky-----	3	17	27	7	3	1	13	3	7	1	3	85	1,476
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	9
Missouri-----	-	-	-	-	-	-	1	-	-	-	-	1	47
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	9
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	-	40
North Dakota-----	-	-	-	-	-	-	1	-	-	-	-	1	12
Ohio-----	1	13	10	1	-	-	5	-	3	-	1	34	661
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	21
Pennsylvania (bituminous)---	4	17	13	1	-	-	3	-	5	-	3	46	1,371
Tennessee-----	-	1	-	-	-	-	1	-	-	-	-	2	97
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	7
Utah-----	-	2	3	-	1	-	2	1	1	-	-	10	222
Virginia-----	3	1	15	4	-	-	4	-	2	-	6	35	1,018
Washington-----	-	1	1	1	1	-	1	-	2	-	-	7	50
West Virginia-----	11	37	69	30	7	1	46	5	23	1	31	261	4,500
Wyoming-----	-	1	-	-	-	-	-	-	-	-	-	1	53
Total bituminous-----	23	110	155	46	14	3	84	11	50	2	49	547	10,880
Pennsylvania (anthracite)---	5	19	46	10	-	1	22	-	10	-	10	123	340
All coal-----	28	129	201	56	14	4	106	11	60	2	59	670	11,220

1/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 38. - Number of nondisabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973

State	Underground																	
	Falls of roof or back	Falls of face or rib	Pressure bumps or bursts	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Suffocation (no flame or smoldering)	Fires or suffocation from fires	Miscellaneous causes	Total, underground
Alabama-----	19	6	1	10	7	36	29	7	3	34	-	-	12	27	-	-	7	198
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	5	2	1	-	4	14	3	-	-	5	-	-	-	3	-	-	1	38
Illinois-----	117	16	-	34	56	159	84	24	24	94	-	12	14	118	-	3	49	804
Indiana-----	5	5	-	1	8	19	8	2	-	16	-	-	5	4	-	-	1	72
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	109	17	-	35	75	276	164	22	30	120	-	3	54	164	1	5	46	1,121
Maryland-----	-	-	-	-	-	1	-	-	-	1	-	-	-	-	-	-	-	2
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	4	-	-	-	-	3	1	-	-	2	-	-	-	6	-	-	1	17
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	36	5	-	18	29	103	70	12	17	53	-	4	5	83	-	-	17	452
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)--	116	24	-	63	132	449	176	62	27	247	-	-	38	218	-	5	84	1,641
Tennessee-----	2	-	-	-	1	2	1	-	2	5	-	-	4	-	-	-	1	18
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	7	7	1	4	14	22	13	9	4	14	-	-	8	13	-	-	3	119
Virginia-----	42	12	1	20	18	114	81	9	10	56	1	-	18	74	-	-	24	480
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia-----	417	124	4	178	329	1,315	633	123	98	671	-	7	195	657	-	11	172	4,934
Wyoming-----	3	-	-	-	2	1	-	-	-	1	-	-	-	3	-	-	-	10
Total bituminous-----	882	216	8	363	675	2,514	1,263	270	215	1,319	1	26	353	1,370	1	24	406	9,906
Pennsylvania (anthracite)--	1	-	-	3	7	15	5	5	2	-	-	-	-	2	-	-	1	41
All coal-----	883	216	8	366	682	2,529	1,268	275	217	1,319	1	26	353	1,372	1	24	407	9,947

TABLE 38. - Number of nondisabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Surface at underground												Total, underground mines	
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Miscellaneous causes		Total, surface at underground
Alabama-----	-	2	5	5	-	1	2	-	-	-	3	3	21	219
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	1	4	5	1	-	-	1	-	-	-	-	-	12	50
Illinois-----	2	4	16	8	1	3	5	-	2	6	12	59	863	
Indiana-----	1	-	1	-	-	-	3	-	-	-	-	-	5	77
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	4	14	23	26	3	4	12	-	2	8	9	105	1,226	
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	2
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	1	-	3	-	-	-	-	-	-	-	1	-	5	22
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	1	1	2	2	-	2	4	-	-	1	3	16	468	
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)---	2	21	39	15	3	5	8	-	1	7	10	111	1,752	
Tennessee-----	-	-	-	-	-	-	-	-	1	-	-	1	19	
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	4	8	1	-	1	-	-	-	1	-	15	134	
Virginia-----	2	3	14	4	1	-	7	-	1	1	5	38	518	
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia-----	11	34	116	41	5	2	34	1	-	7	31	47	330	5,264
Wyoming-----	-	1	3	1	-	-	-	-	-	-	-	-	5	15
Total bituminous-----	25	88	235	104	13	18	76	1	1	14	59	89	723	10,629
Pennsylvania (anthracite)---	-	1	1	1	-	-	-	-	-	-	-	1	4	45
All coal-----	25	89	236	105	13	18	76	1	1	14	59	90	727	10,674

TABLE 38. - Number of non disabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Strip														
	Falls of face or side	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Explosions of gas or dust	Explosives	Electricity	Machinery	Fires or suffocation from fires	Miscellaneous causes	Total, strip
Alabama-----	-	4	12	18	28	1	1	8	-	-	-	16	-	20	108
Alaska-----	-	2	-	4	7	1	-	1	-	-	-	1	-	3	19
Arizona-----	-	-	-	1	-	-	-	-	-	-	-	-	-	1	2
Arkansas-----	-	1	-	3	-	-	-	-	-	-	-	1	-	-	6
Colorado-----	-	-	-	1	2	-	-	-	-	-	-	2	1	1	9
Illinois-----	10	11	71	102	62	8	8	29	-	2	1	65	1	76	446
Indiana-----	1	3	14	39	26	3	4	10	-	-	1	21	1	41	164
Iowa-----	-	-	-	-	1	-	-	-	-	-	-	-	-	-	1
Kansas-----	1	1	1	4	5	-	-	-	-	-	-	3	-	1	16
Kentucky-----	-	10	46	94	62	6	9	37	1	4	3	44	1	72	389
Maryland-----	-	-	-	1	-	-	-	-	-	-	-	2	-	-	3
Missouri-----	-	3	2	6	4	-	1	3	-	-	1	3	-	5	28
Montana-----	-	-	3	7	2	-	1	2	-	-	-	3	-	10	28
New Mexico-----	-	-	1	4	2	-	1	3	-	-	-	2	-	2	15
North Dakota-----	-	1	3	10	7	-	-	2	-	-	-	4	-	3	30
Ohio-----	2	6	48	64	41	4	6	23	-	-	2	27	-	35	258
Oklahoma-----	-	-	1	2	5	-	-	1	-	-	-	3	-	4	16
Pennsylvania (bituminous)---	-	-	21	31	16	-	1	1	1	-	-	11	-	22	104
Tennessee-----	-	-	1	3	-	-	1	-	-	-	-	1	-	-	6
Texas-----	-	1	4	7	2	1	1	1	-	-	-	6	-	10	33
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	-	4	6	-	1	1	-	-	-	4	-	4	20
Washington-----	-	1	3	11	4	-	-	-	-	-	-	6	-	17	42
West Virginia-----	-	5	15	31	26	4	2	15	-	-	-	18	1	16	133
Wyoming-----	-	1	5	7	2	-	4	4	-	-	-	7	-	1	31
Total bituminous-----	14	50	251	454	311	29	41	142	2	6	8	250	5	344	1,907
Pennsylvania (anthracite)---	-	4	26	48	30	3	1	17	-	1	1	25	1	32	189
All coal-----	14	54	277	502	341	32	42	159	2	7	9	275	6	376	2,096

TABLE 38. - Number of nondisabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Other surface mining <sup>1/</sup>							Total, surface	Total, mining
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Haulage	Machinery	Miscellaneous causes		
Alabama-----	-	-	-	-	-	-	-	108	327
Alaska-----	-	-	-	-	-	-	-	19	19
Arizona-----	-	-	-	-	-	-	-	2	2
Arkansas-----	-	-	-	-	-	-	-	6	6
Colorado-----	-	-	-	-	-	-	-	9	59
Illinois-----	-	-	-	-	-	-	-	446	1,309
Indiana-----	-	-	-	-	-	-	-	164	241
Iowa-----	-	-	-	-	-	-	-	1	1
Kansas-----	-	-	-	-	-	-	-	16	16
Kentucky-----	1	2	3	5	-	4	1	16	1,631
Maryland-----	-	-	-	-	-	-	-	405	5
Missouri-----	-	-	-	-	-	-	-	3	28
Montana-----	-	-	-	-	-	-	-	28	28
New Mexico-----	-	-	-	-	-	-	-	15	37
North Dakota-----	-	-	-	-	-	-	-	30	30
Ohio-----	-	-	-	-	-	-	-	258	726
Oklahoma-----	-	-	-	-	-	-	-	16	16
Pennsylvania (bituminous)-----	-	-	-	-	-	-	-	104	1,856
Tennessee-----	-	-	-	-	-	1	-	7	26
Texas-----	-	-	-	-	-	-	-	33	33
Utah-----	-	-	-	-	-	-	-	-	134
Virginia-----	1	-	1	-	-	-	-	22	540
Washington-----	-	-	-	-	-	-	-	42	42
West Virginia-----	-	3	3	2	1	3	2	147	5,411
Wyoming-----	-	-	-	-	-	-	-	31	46
Total bituminous-----	2	5	7	7	1	8	3	33	1,940
Pennsylvania (anthracite)-----	1	2	3	2	3	2	-	13	247
All coal	3	7	10	9	4	10	3	46	2,142
									12,816

See footnote at end of table.

TABLE 38. - Number of nondisabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Independent shops and yards										
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Miscellaneous causes	Total, independent shops and yards
Illinois-----	3	5	24	15	4	1	3	-	14	25	94
Indiana-----	2	1	2	5	-	1	2	2	4	8	27
Kentucky-----	-	-	1	-	-	-	1	-	1	-	3
Missouri-----	-	-	2	2	-	-	-	-	-	-	4
Ohio-----	6	10	23	11	1	3	3	-	15	18	90
Pennsylvania (bituminous)---	1	1	4	2	1	-	-	-	2	2	12
Virginia-----	-	4	9	9	1	2	2	1	5	3	36
West Virginia-----	3	4	21	9	-	1	3	-	11	11	63
Total bituminous-----	14	25	86	53	7	8	14	3	52	67	329
Pennsylvania (anthracite)---	1	4	11	4	1	2	-	-	3	12	38
All coal-----	15	29	97	57	8	10	14	3	55	79	367

TABLE 38. - Number of nondisabling injuries at coal mines in the United States, by State, general work location, and principal cause of injury, 1973 - Continued

State	Mechanical cleaning plants											Grand total	
	Sliding or falling material or objects	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Suffocation (no flame or smoldering)	Miscellaneous causes		Total, mechanical cleaning plants
Alabama-----	-	2	4	6	-	-	1	-	1	-	3	17	344
Alaska-----	-	4	-	-	-	-	-	-	1	-	-	5	24
Arizona-----	-	-	1	-	-	-	-	-	-	-	-	1	3
Arkansas-----	-	-	2	-	-	-	-	-	-	-	-	2	8
Colorado-----	-	-	1	-	-	-	-	-	-	-	1	2	61
Illinois-----	4	17	24	14	3	2	8	-	7	-	25	104	1,507
Indiana-----	3	2	9	7	-	-	1	-	1	-	8	32	300
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	1
Kansas-----	-	-	2	1	-	-	-	-	1	-	2	6	22
Kentucky-----	6	20	37	15	-	3	17	-	9	-	16	123	1,757
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	5
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	32
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	28
New Mexico-----	-	-	3	-	-	-	1	-	-	-	-	4	41
North Dakota-----	-	1	-	3	-	-	-	-	-	-	-	4	34
Ohio-----	2	9	21	7	1	2	8	1	7	1	14	73	889
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	16
Pennsylvania (bituminous)---	3	21	40	8	10	3	12	2	12	-	25	136	2,004
Tennessee-----	-	-	-	1	-	-	-	-	-	-	-	1	27
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	33
Utah-----	-	2	3	3	1	-	3	-	-	-	4	16	150
Virginia-----	4	6	20	7	1	1	6	1	3	-	4	53	629
Washington-----	-	-	4	-	1	-	-	-	2	-	-	11	53
West Virginia-----	21	79	162	64	6	9	59	8	39	-	62	509	5,983
Wyoming-----	-	1	-	-	-	-	-	-	-	-	1	2	48
Total bituminous-----	43	164	333	140	23	20	116	13	83	1	165	1,101	13,999
Pennsylvania (anthracite)---	2	28	72	27	4	6	18	2	19	-	29	207	492
All coal-----	45	192	405	167	27	26	134	15	102	1	194	1,308	14,491

1/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973

State	Number of injuries								Distri- bution of all disabling injuries, percent	Frequency rates							
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries	All inju- ries	Per million man-hours				Per million tons					
		Permanent		Tempo- rary total				Total non- fatal dis- abling		Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling
		Total	Par- tial														
Underground mines:																	
Underground:																	
Alabama-----	2	-	6	138	144	146	198	344	1.7	0.35	25.31	25.66	34.80	0.27	19.28	19.55	26.51
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	1	-	4	134	138	139	38	177	1.6	.47	65.30	65.78	17.98	.31	42.29	42.60	11.65
Illinois-----	3	1	5	505	511	514	804	1,318	5.8	.24	40.27	40.51	63.36	.09	15.70	15.80	24.71
Indiana-----	-	-	-	24	24	24	72	96	.3	-	66.72	66.72	200.15	-	29.74	29.74	89.23
Iowa-----	-	-	-	5	5	5	5	5	.1	-	52.14	52.14	-	-	14.05	14.05	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	23	2	19	1,043	1,064	1,087	1,121	2,208	12.3	.88	40.77	41.65	42.95	.41	19.19	19.61	20.22
Maryland-----	-	-	-	1	1	1	2	3	(1/)	-	43.35	43.35	86.70	-	15.92	15.92	31.84
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	1	1	1	1	1	(1/)	-	97.65	97.65	-	-	1,712.33	1,712.33	-
New Mexico-----	-	-	1	33	34	34	17	51	.4	-	91.57	91.57	45.79	-	46.40	46.40	23.20
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	2	-	4	526	530	532	452	984	6.0	.20	54.27	54.48	46.29	.13	33.58	33.71	28.64
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	12	2	20	1,133	1,155	1,167	1,641	2,808	13.2	.37	35.93	36.30	51.04	.26	24.93	25.19	35.42
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	1	-	1	76	77	78	18	96	.9	.60	46.05	46.65	10.77	.33	25.51	25.84	5.96
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	3	-	2	197	199	202	119	321	2.3	1.28	84.68	85.96	50.64	.62	40.90	41.51	24.45
Virginia-----	17	-	9	885	894	911	480	1,391	10.3	1.09	57.20	58.28	30.71	.83	43.74	44.57	23.48
Washington-----	-	-	-	3	3	3	3	3	(1/)	-	187.88	187.88	-	-	180.02	180.02	-
West Virginia-----	34	2	57	3,878	3,937	3,971	4,934	8,905	44.9	.55	63.69	64.24	79.81	.36	42.04	42.40	52.68
Wyoming-----	-	-	-	28	28	28	10	38	.3	-	160.00	160.00	56.96	-	63.93	63.93	22.83
Total or average, bituminous-	98	7	128	8,610	8,745	8,843	9,906	18,749	-	.57	51.13	51.70	57.92	.34	30.66	31.01	34.73
Pennsylvania (anthracite)-	1	-	1	72	73	74	41	115	-	1.33	97.00	98.33	54.48	1.51	110.38	111.89	61.99
Total or average, underground	99	7	129	8,682	8,818	8,917	9,947	18,864	-	.58	51.33	51.91	57.90	.35	30.85	31.19	34.80

See footnotes at end of table.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries							Distri- bution of all disabling injuries, percent	Frequency rates									
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries	All inju- ries		Per million man-hours				Per million tons					
		Permanent		Tempo- rary total					Total non- fatal dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	
		Total	Par- tial															
Underground mines:																		
Surface:																		
Alabama-----	-	-	-	15	15	15	21	36	3.8	-	15.86	15.86	22.20	-	-	-	-	-
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	2	-	1	2	3	5	12	17	1.3	7.19	10.78	17.97	43.14	-	-	-	-	-
Illinois-----	-	-	1	18	19	19	59	78	4.8	-	12.44	12.44	38.63	-	-	-	-	-
Indiana-----	-	-	-	4	4	4	5	9	1.0	-	65.76	65.76	82.20	-	-	-	-	-
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	1	-	1	66	67	68	105	173	17.3	.41	27.49	27.90	43.08	-	-	-	-	-
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	-	-	-	-	5	5	-	-	-	-	81.06	-	-	-	-	-
North Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	1	16	17	17	16	33	4.3	-	11.44	11.44	10.76	-	-	-	-	-
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	-	-	1	40	41	41	111	152	10.5	-	12.22	12.22	33.08	-	-	-	-	-
South Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	-	1	1	1	1	2	.3	-	9.33	9.33	9.33	-	-	-	-	-
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	-	13	13	13	15	28	3.3	-	30.35	30.35	35.02	-	-	-	-	-
Virginia-----	1	-	1	41	42	43	38	81	11.0	1.33	56.03	57.37	50.70	-	-	-	-	-
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia--	2	-	2	160	162	164	330	494	41.8	.40	32.03	32.43	65.25	-	-	-	-	-
Wyoming-----	-	-	-	2	2	2	5	7	.5	-	15.06	15.06	37.65	-	-	-	-	-
Total or average, bituminous-	6	-	8	378	386	392	723	1,115	-	.36	23.17	23.53	43.39	-	-	-	-	-
Pennsylvania (anthracite)-	-	-	-	2	2	2	4	6	-	-	10.70	10.70	21.41	-	-	-	-	-
Total or average, surface----	6	-	8	380	388	394	727	1,121	-	.36	23.03	23.38	43.15	-	-	-	-	-

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries							Distribution of all disabling injuries, percent	Frequency rates								
	Fatal	Nonfatal			All disabling injuries	Non-disabling injuries	All injuries		Per million man-hours				Per million tons				
		Permanent		Temporary total					Total non-fatal disabling	Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Non-disabling
		Total	Partial														
Underground mines:																	
Deep mines:																	
Alabama-----	2	-	6	153	159	161	219	380	1.7	0.30	23.96	24.26	33.00	0.27	21.29	21.56	29.32
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	3	-	5	136	141	144	50	194	1.6	1.25	58.96	60.22	20.91	.92	43.21	44.13	15.32
Illinois-----	3	1	6	523	530	533	863	1,396	5.8	.21	37.28	37.49	60.71	.09	16.29	16.38	26.52
Indiana-----	-	-	-	28	28	28	77	105	.3	-	66.58	66.58	183.09	-	34.70	34.70	95.43
Iowa-----	-	-	-	5	5	5	5	5	.1	-	40.62	40.62	-	-	14.05	14.05	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	24	2	20	1,109	1,131	1,155	1,226	2,381	12.5	.84	39.63	40.47	42.96	.43	20.40	20.83	22.12
Maryland-----	-	-	-	1	1	1	2	3	(1/)	-	43.35	43.35	86.70	-	15.92	15.92	31.84
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	1	1	1	-	1	(1/)	-	94.12	94.12	-	-	1,712.33	1,712.33	-
New Mexico-----	-	-	1	33	34	34	22	56	.4	-	78.53	78.53	50.81	-	46.40	46.40	30.02
North Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	2	-	5	542	547	549	468	1,017	5.9	.18	48.61	48.79	41.59	.13	34.66	34.79	29.65
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	12	2	21	1,173	1,196	1,208	1,752	2,960	13.1	.34	33.68	34.02	49.34	.26	25.81	26.07	37.81
South Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	1	-	1	77	78	79	19	98	.9	.56	43.84	44.40	10.68	.33	25.84	26.17	6.29
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	3	-	2	210	212	215	134	349	2.3	1.08	76.30	77.38	48.23	.62	43.57	44.18	27.54
Virginia-----	18	-	10	926	936	954	518	1,472	10.3	1.10	57.14	58.24	31.62	.88	45.79	46.67	25.34
Washington----	-	-	-	3	3	3	-	3	(1/)	-	136.09	136.09	-	-	180.02	180.02	-
West Virginia--	36	2	59	4,038	4,099	4,135	5,264	9,399	44.8	.54	61.29	61.83	78.71	.38	43.77	44.15	56.21
Wyoming-----	-	-	-	30	30	30	15	45	.3	-	97.29	97.29	48.65	-	68.50	68.50	34.25
Total or average, bituminous-Pennsylvania (anthracite)-	104	7	136	8,988	9,131	9,235	10,629	19,864	-	.55	48.65	49.20	56.63	.36	32.01	32.38	37.27
Total or average, deep mines-	1	-	1	74	75	76	45	121	-	1.06	79.84	80.90	47.90	1.51	113.40	114.91	68.04
Total or average, deep mines-	105	7	137	9,062	9,206	9,311	10,674	19,985	-	.56	48.80	49.36	56.59	.37	32.20	32.57	37.34

See footnotes at end of table.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Distri- bution of all disabling injuries, percent	Frequency rates									
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries	All inju- ries	Per million man-hours				Per million tons							
		Permanent	Tempo- rary total	Total non- fatal dis- abling				Fatal		Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling			
																	Total	Par- tial	
Strip mines:																			
Alabama-----	-	-	2	73	75	75	108	183	6.8	-	23.20	23.20	33.40	-	6.89	6.89	9.93		
Alaska-----	-	-	-	4	4	4	19	23	.4	-	25.32	25.32	120.26	-	5.42	5.42	25.75		
Arizona-----	-	-	-	4	4	4	2	6	.4	-	11.00	11.00	5.50	-	1.17	1.17	.59		
Arkansas-----	-	-	-	3	3	3	6	9	.3	-	10.64	10.64	21.27	-	7.03	7.03	14.07		
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Colorado-----	-	-	-	6	6	6	6	9	.5	-	20.26	20.26	30.39	-	2.29	2.29	3.44		
Illinois-----	3	-	2	171	173	176	446	622	15.9	0.48	27.77	28.25	71.59	0.10	6.03	6.14	15.55		
Indiana-----	1	-	6	59	65	66	164	230	6.0	.22	14.48	14.70	36.54	.04	2.69	2.73	6.78		
Iowa-----	-	-	-	2	2	2	1	3	.2	-	17.22	17.22	8.61	-	9.32	9.32	4.66		
Kansas-----	-	-	1	5	6	6	16	22	.5	-	14.03	14.03	37.42	-	6.03	6.03	16.07		
Kentucky-----	3	1	8	232	241	244	389	633	22.0	.30	24.11	24.41	38.92	.06	4.88	4.94	7.88		
Maryland-----	-	-	-	8	8	8	3	11	.7	-	18.06	18.06	6.77	-	6.60	6.60	2.47		
Missouri-----	-	-	-	46	46	46	28	74	4.2	-	37.54	37.54	22.85	-	9.69	9.69	5.90		
Montana-----	-	-	-	8	8	8	28	36	.7	-	10.25	10.25	35.88	-	.77	.77	2.70		
New Mexico-----	1	-	1	5	6	7	15	22	.6	1.19	7.12	8.31	17.81	.12	.75	.87	1.86		
North Dakota-----	-	-	-	11	11	11	30	41	1.0	-	21.05	21.05	57.41	-	1.64	1.64	4.48		
Ohio-----	2	1	1	69	71	73	258	331	6.6	.29	10.17	10.46	36.95	.07	2.55	2.62	9.27		
Oklahoma-----	-	-	-	21	21	21	16	37	1.9	-	25.70	25.70	19.58	-	9.95	9.95	7.58		
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Pennsylvania (bituminous)	3	-	2	124	126	129	104	233	11.7	.36	15.02	15.38	12.40	.11	4.82	4.93	3.98		
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Tennessee-----	-	-	1	14	15	15	6	21	1.4	-	15.16	15.16	6.06	-	4.56	4.56	1.82		
Texas-----	-	-	-	7	7	7	33	40	.6	-	12.76	12.76	60.16	-	.98	.98	4.62		
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Virginia-----	-	-	2	27	29	29	20	49	2.6	-	17.92	17.92	12.36	-	5.04	5.04	3.47		
Washington-----	-	-	-	40	40	40	42	82	3.6	-	66.76	66.76	70.10	-	12.32	12.32	12.93		
West Virginia-----	3	-	4	98	102	105	133	238	9.5	.68	23.12	23.80	30.14	.19	6.62	6.82	8.64		
Wyoming-----	-	-	1	21	22	22	31	53	2.0	-	13.45	13.45	18.95	-	1.59	1.59	2.24		
Total or average, bituminous- Pennsylvania (anthracite)	16	2	31	1,058	1,091	1,107	1,907	3,014	-	.29	19.69	19.98	34.42	.06	4.24	4.30	7.41		
	-	-	-	117	117	117	189	306	-	-	51.16	51.16	82.64	-	34.03	34.03	54.97		
Total or average, strip mines	16	2	31	1,175	1,208	1,224	2,096	3,320	-	.28	20.94	21.22	36.34	.06	4.63	4.69	8.04		

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries							Distri- bution of all disabling injuries, percent	Frequency rates								
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries	All inju- ries		Per million man-hours				Per million tons				
		Permanent		Tempo- rary total					Total non- fatal dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling
		Total	Par- tial														
Other surface mining: 2/	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	1	-	-	19	19	20	16	36	43.5	1.29	24.53	25.82	20.66	0.25	4.74	4.99	4.00
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	4	4	4	-	4	8.7	-	34.89	34.89	-	-	4.02	4.02	-
Pennsylvania (bituminous)-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	-	2	2	2	1	3	4.3	-	29.50	29.50	14.75	-	6.16	6.16	3.08
Virginia-----	-	-	-	4	4	4	2	6	8.7	-	21.29	21.29	10.64	-	3.60	3.60	1.80
West Virginia-	-	1	2	13	16	16	14	30	34.8	-	33.21	33.21	29.06	-	8.18	8.18	7.16
Total or average, bituminous-	1	1	2	42	45	46	33	79	-	.57	25.83	26.40	18.94	.11	5.06	5.17	3.71
Pennsylvania (anthracite)-	-	-	-	11	11	11	13	24	-	-	30.72	30.72	36.31	-	4.65	4.65	5.49
Total or average, other surface mining-----	1	1	2	53	56	57	46	103	-	.48	26.66	27.14	21.90	.09	4.97	5.06	4.08

See footnotes at end of table.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates							
	Fatal	Nonfatal			All disabling injuries	Non-disabling injuries	All injuries	Per million man-hours				Per million tons					
		Permanent		Temporary total				Total non-fatal disabling		Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Non-disabling
		Total	Partial														
Total surface:	-	-	2	73	75	75	108	183	6.5	-	23.11	23.11	33.28	-	6.85	6.85	9.87
Alabama-----	-	-	-	4	4	4	19	23	.3	-	25.32	25.32	120.26	-	5.42	5.42	25.75
Arizona-----	-	-	-	4	4	4	2	6	.3	-	11.00	11.00	5.50	-	1.17	1.17	.59
Arkansas-----	-	-	-	3	3	3	6	9	.3	-	10.64	10.64	21.27	-	7.03	7.03	14.07
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	6	6	6	9	15	.5	-	18.70	18.70	28.05	-	2.17	2.17	3.26
Illinois-----	3	-	2	171	173	176	446	622	15.3	0.48	27.77	28.25	71.59	0.10	6.03	6.14	15.55
Indiana-----	1	-	6	59	65	66	164	230	5.7	.22	14.48	14.70	36.54	.04	2.69	2.73	6.78
Iowa-----	-	-	-	2	2	2	1	3	.2	-	17.22	17.22	8.61	-	9.32	9.32	4.66
Kansas-----	-	-	1	5	6	6	16	22	.5	-	14.03	14.03	37.42	-	6.03	6.03	16.07
Kentucky-----	4	1	8	251	260	264	405	669	22.9	.37	24.14	24.51	37.60	.07	4.87	4.95	7.59
Maryland-----	-	-	-	8	8	8	3	11	.7	-	17.46	17.46	6.55	-	6.36	6.36	2.38
Missouri-----	-	-	-	46	46	46	28	74	4.0	-	37.54	37.54	22.85	-	9.69	9.69	5.90
Montana-----	-	-	-	8	8	8	28	36	.7	-	10.19	10.19	35.68	-	.77	.77	2.70
New Mexico-----	1	-	1	5	6	7	15	22	.6	1.19	7.12	8.31	17.81	.12	.75	.87	1.86
North Dakota-----	-	-	-	11	11	11	30	41	1.0	-	21.05	21.05	57.41	-	1.64	1.64	4.48
Ohio-----	2	1	1	73	75	77	258	335	6.7	.28	10.57	10.85	36.35	.07	2.60	2.67	8.95
Oklahoma-----	-	-	-	21	21	21	16	37	1.8	-	25.70	25.70	19.58	-	9.95	9.95	7.58
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	3	-	2	124	126	129	104	233	11.2	.36	14.91	15.27	12.31	.11	4.77	4.89	3.94
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	1	16	17	17	7	24	1.5	-	16.08	16.08	6.62	-	4.70	4.70	1.94
Texas-----	-	-	-	7	7	7	33	40	.6	-	12.76	12.76	60.16	-	.98	.98	4.62
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	2	31	33	33	22	55	2.9	-	18.27	18.27	12.18	-	4.80	4.80	3.20
Washington-----	-	-	-	40	40	40	42	82	3.5	-	66.76	66.76	70.10	-	12.32	12.32	12.93
West Virginia-----	3	1	6	11	118	121	147	268	10.5	.61	24.11	24.72	30.04	.17	6.80	6.97	8.47
Wyoming-----	-	-	1	21	22	22	31	53	1.9	-	13.45	13.45	18.95	-	1.59	1.59	2.24
Total or average, bituminous-Pennsylvania (anthracite)-	17	3	33	1,100	1,136	1,153	1,940	3,093	-	.30	19.88	20.18	33.95	.06	4.27	4.33	7.29
Total or average, surface-----	-	-	-	128	128	128	202	330	-	-	48.39	48.39	76.37	-	22.05	22.05	34.79
Total or average, surface-----	17	3	33	1,228	1,264	1,281	2,142	3,423	-	.28	21.14	21.43	35.83	.06	4.65	4.71	7.87

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates							
	Fatal	Nonfatal			All disabling injuries	Non-disabling injuries	All injuries	Per million man-hours				Per million tons					
		Permanent		Temporary total				Total non-fatal disabling		Fatal	Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Non-disabling
		Total	Partial														
Total mining:	2	-	8	226	234	236	327	563	2.3	0.20	23.68	23.89	33.10	0.11	12.71	12.82	17.76
Alabama-----	-	-	-	4	4	4	19	23	(1/)	-	25.32	25.32	120.26	-	5.42	5.42	25.75
Alaska-----	-	-	-	4	4	4	2	6	(1/)	-	11.00	11.00	5.50	-	1.17	1.17	.59
Arizona-----	-	-	-	3	3	3	6	9	(1/)	-	10.64	10.64	21.27	-	7.03	7.03	14.07
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	3	-	5	142	147	150	59	209	1.4	1.11	54.20	55.30	21.75	.50	24.40	24.90	9.79
Colorado-----	6	1	8	694	703	709	1,309	2,018	6.8	.29	34.38	34.68	64.02	.10	11.48	11.58	21.38
Illinois-----	1	-	6	87	93	94	241	335	.9	.20	18.94	19.15	49.09	.04	3.72	3.76	9.65
Indiana-----	-	-	-	7	7	7	1	8	.1	-	29.26	29.26	4.18	-	12.27	12.27	1.75
Iowa-----	-	-	1	5	6	6	16	22	.1	-	14.03	14.03	37.42	-	6.03	6.03	16.07
Kansas-----	28	3	28	1,360	1,391	1,419	1,631	3,050	13.7	.71	35.39	36.10	41.49	.26	12.78	13.04	14.99
Kentucky-----	-	-	-	9	9	9	5	14	.1	-	18.70	18.70	10.39	-	6.81	6.81	3.78
Maryland-----	-	-	-	46	46	46	28	74	.4	-	37.54	37.54	22.85	-	9.69	9.69	5.90
Missouri-----	-	-	-	9	9	9	28	37	.1	-	11.32	11.32	35.20	-	.87	.87	2.70
Montana-----	1	-	2	38	40	41	37	78	.4	.78	31.37	32.15	29.01	.11	4.56	4.67	4.22
New Mexico-----	-	-	-	11	11	11	30	41	.1	-	21.05	21.05	57.41	-	1.64	1.64	4.48
North Dakota-----	4	1	6	615	622	626	726	1,352	6.0	.22	33.90	34.12	39.57	.09	13.94	14.03	16.27
Ohio-----	-	-	-	21	21	21	16	37	.2	-	25.70	25.70	19.58	-	9.95	9.95	7.58
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania	15	2	23	1,297	1,322	1,337	1,856	3,193	12.9	.34	30.08	30.42	42.23	.21	18.18	18.38	25.52
(bituminous)-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
South Dakota-----	1	-	2	93	95	96	26	122	.9	.35	33.49	33.84	9.17	.15	14.32	14.47	3.92
Tennessee-----	-	-	-	7	7	7	33	40	.1	-	12.76	12.76	60.16	-	.98	.98	4.62
Texas-----	3	-	2	210	212	215	134	349	2.1	1.08	76.30	77.38	48.23	.62	43.57	44.18	27.54
Utah-----	18	-	12	957	969	987	540	1,527	9.5	.99	53.28	54.27	29.69	.66	35.48	36.14	19.77
Virginia-----	-	-	-	43	43	43	42	85	.4	-	69.23	69.23	67.62	-	13.17	13.17	12.87
Washington-----	39	3	65	4,149	4,217	4,256	5,411	9,667	41.0	.54	58.76	59.30	75.39	.35	37.99	3.34	48.74
West Virginia-----	-	-	1	51	52	52	46	98	.5	-	26.75	26.75	23.66	-	3.64	3.64	3.22
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total or average, bituminous-Pennsylvania (anthracite)-	121	10	169	10,088	10,267	10,388	12,569	22,957	-	.49	41.94	42.43	51.34	.22	18.62	18.84	22.79
Total or average, mining-----	1	-	1	202	203	204	247	451	-	.28	56.63	56.91	68.91	.15	31.39	31.54	38.19
Total or average, mining-----	122	10	170	10,290	10,470	10,592	12,816	23,408	-	.49	42.15	42.64	51.59	.22	18.77	18.98	22.97

See footnotes at end of table.

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Distri- bution of all disabling injuries, percent	Frequency rates								
	Fatal	Nonfatal				All dis- abling inju- ries	Non- dis- abling inju- ries	All inju- ries		Per million man-hours				Per million tons				
		Permanent		Tempo- rary total	Total non- fatal dis- abling					Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	
		Total	Par- tial															
Independent shops and yards:																		
Illinois-----	-	-	-	13	13	13	94	107	19.1	-	20.65	20.65	149.28	-	-	-	-	-
Indiana-----	1	-	-	9	9	10	27	37	14.7	3.07	27.62	30.69	82.87	-	-	-	-	-
Kentucky-----	-	-	-	-	-	-	3	3	-	-	-	-	14.71	-	-	-	-	-
Missouri-----	-	-	-	-	-	-	4	4	-	-	-	-	48.35	-	-	-	-	-
Ohio-----	-	-	-	5	5	5	90	95	7.4	-	4.60	4.60	82.74	-	-	-	-	-
Pennsylvania (bituminous)-	-	-	1	2	3	3	12	15	4.4	-	5.64	5.64	22.56	-	-	-	-	-
Virginia-----	-	-	-	14	14	14	36	50	20.6	-	20.47	20.47	52.65	-	-	-	-	-
West Virginia-	1	-	-	22	22	23	63	86	33.8	.64	13.99	14.62	40.05	-	-	-	-	-
Total or average, bituminous-	2	-	1	65	66	68	329	397	-	.39	12.89	13.28	64.27	-	-	-	-	-
Pennsylvania (anthracite)-	-	-	-	14	14	14	38	52	-	-	47.90	47.90	130.02	-	-	-	-	-
Total or average, independent shops and yards-----	2	-	1	79	80	82	367	449	-	.37	14.78	15.15	67.82	-	-	-	-	-

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries							Distribu- tion of all disabling injuries, percent	Frequency rates											
	Fatal	Nonfatal			All dis- abling inju- ries	Non- dis- abling inju- ries	All in- ju- ries		Per million man-hours				Per million tons							
		Permanent		Tempo- rary total					Total non- fatal dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling			
		Total	Par- tial																	
Mechanical cleaning plants:																				
Alabama-----	-	-	1	9	10	10	17	27	1.8	-	16.14	16.14	27.43	-	-	-	-	-	-	-
Alaska-----	-	-	-	-	-	-	5	5	-	-	-	-	476.69	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	1	1	-	-	-	-	12.01	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	2	2	-	-	-	-	210.93	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	2	2	2	2	4	.4	-	89.52	89.52	89.52	-	-	-	-	-	-	-
Illinois-----	-	-	-	43	43	43	104	147	7.7	-	19.70	19.70	47.65	-	-	-	-	-	-	-
Indiana-----	-	-	-	8	8	8	32	40	1.4	-	14.34	14.34	57.35	-	-	-	-	-	-	-
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	1	1	1	6	7	.2	-	15.93	15.93	95.57	-	-	-	-	-	-	-
Kentucky-----	1	-	1	84	85	86	123	209	15.5	0.29	24.37	24.65	35.26	-	-	-	-	-	-	-
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	1	1	1	-	1	.2	-	13.84	13.84	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	2	-	-	-	-	2	4	6	.4	22.70	-	22.70	45.40	-	-	-	-	-	-	-
North Dakota--	-	-	-	1	1	1	4	5	.2	-	163.72	163.72	654.88	-	-	-	-	-	-	-
Ohio-----	-	-	-	34	34	34	73	107	6.1	-	19.44	19.44	41.74	-	-	-	-	-	-	-
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	2	-	1	45	46	48	136	184	8.6	.54	12.33	12.87	36.46	-	-	-	-	-	-	-
South Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	-	2	2	2	1	3	.4	-	10.10	10.10	5.05	-	-	-	-	-	-	-
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	-	10	10	10	16	26	1.8	-	22.18	22.18	35.49	-	-	-	-	-	-	-
Virginia-----	-	-	1	34	35	35	53	88	6.3	-	29.51	29.51	44.69	-	-	-	-	-	-	-
Washington-----	1	-	-	7	7	8	11	19	1.4	18.57	130.00	148.57	204.29	-	-	-	-	-	-	-
West Virginia--	2	-	5	256	261	263	509	772	47.4	.29	37.35	37.64	72.84	-	-	-	-	-	-	-
Wyoming-----	-	-	-	1	1	1	2	3	.2	-	54.04	54.04	108.08	-	-	-	-	-	-	-
Total or average, bituminous-	8	-	9	538	547	555	1,101	1,656	-	.37	25.29	25.66	50.91	-	-	-	-	-	-	-
Pennsylvania (anthracite)-	-	-	1	122	123	123	207	330	-	-	56.70	56.70	95.43	-	-	-	-	-	-	-
Total or average, mechanical cleaning plants-----	8	-	10	660	670	678	1,308	1,986	-	.34	28.16	28.49	54.97	-	-	-	-	-	-	-

TABLE 39. - Number of injuries by degree, percentage distribution, and injury-frequency rates at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Distribution of all disabling injuries, percent	Frequency rates							
	Fatal	Nonfatal			All disabling injuries	Non-disabling injuries	All injuries	Per million man-hours				Per million tons					
		Permanent	Temporary total	Total non-fatal disabling				Fatal		Non-fatal disabling	All disabling	Non-disabling	Fatal	Non-fatal disabling	All disabling	Non-disabling	
																	Total
Grand total:	2	-	9	235	244	246	344	590	2.2	0.19	23.24	23.43	32.76	0.11	13.25	13.36	18.69
Alabama-----	-	-	-	4	4	4	24	28	(1/)	-	23.74	23.74	142.45	-	5.42	5.42	32.52
Arizona-----	-	-	-	4	4	4	3	7	(1/)	-	8.95	8.95	6.71	-	1.17	1.17	.88
Arkansas-----	-	-	-	3	3	3	8	11	(1/)	-	10.29	10.29	27.44	-	7.03	7.03	18.76
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	3	-	5	144	149	152	61	213	1.4	1.10	54.49	55.58	22.31	.50	24.73	25.23	10.12
Illinois-----	6	1	8	750	759	765	1,507	2,272	6.9	.26	32.63	32.89	64.79	.10	12.40	12.50	24.62
Indiana-----	2	-	6	104	110	112	300	412	1.0	.35	18.99	19.33	51.79	.08	4.40	4.48	12.01
Iowa-----	-	-	-	7	7	7	1	8	.1	-	29.05	29.05	4.15	-	12.27	12.27	1.75
Kansas-----	-	-	1	6	7	7	22	29	.1	-	14.28	14.28	44.87	-	7.03	7.03	22.10
Kentucky-----	29	3	29	1,444	1,476	1,505	1,757	3,262	13.7	.67	34.33	35.00	40.86	.27	13.57	13.83	16.15
Maryland-----	-	-	-	9	9	9	5	14	.1	-	18.47	18.47	10.26	-	6.81	6.81	3.78
Missouri-----	-	-	-	47	47	47	32	79	.4	-	34.05	34.05	23.18	-	9.91	9.91	6.74
Montana-----	-	-	-	9	9	9	28	37	.1	-	11.32	11.32	35.20	-	.87	.87	2.70
New Mexico-----	3	-	2	38	40	43	41	84	.4	2.20	29.34	31.54	30.07	.34	4.56	4.90	4.67
North Dakota-----	-	-	-	12	12	12	34	46	.1	-	22.70	22.70	64.31	-	1.79	1.79	5.07
Ohio-----	4	1	6	654	661	665	889	1,554	6.0	.19	31.20	31.39	41.96	.09	14.81	14.90	19.92
Oklahoma-----	-	-	-	21	21	21	16	37	.2	-	24.50	24.50	18.67	-	9.95	9.95	7.58
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	17	2	25	1,344	1,371	1,388	2,004	3,392	12.6	.35	28.43	28.79	41.56	.23	18.85	19.08	27.55
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	1	-	2	95	97	98	27	125	.9	.33	31.96	32.29	8.90	.15	14.62	14.77	4.07
Texas-----	-	-	-	7	7	7	33	40	.1	-	12.76	12.76	60.16	-	.98	.98	4.62
Utah-----	3	-	2	220	222	225	150	375	2.0	.93	68.75	69.68	46.45	.62	45.62	46.24	30.83
Virginia-----	18	-	13	1,005	1,018	1,036	629	1,665	9.4	.90	50.76	51.66	31.36	.66	37.28	37.93	23.03
Washington-----	1	-	-	50	50	51	53	104	.5	1.48	74.07	75.55	78.52	.31	15.32	15.62	16.24
West Virginia-----	42	3	70	4,427	4,500	4,542	5,983	10,525	41.2	.52	56.02	56.54	74.48	.38	40.54	40.92	53.90
Wyoming-----	-	-	1	52	53	53	48	101	.5	-	27.01	27.01	24.46	-	3.71	3.71	3.36
Total or average, bituminous-Pennsylvania (anthracite)-	131	10	179	10,691	10,880	11,011	13,999	25,010	-	.48	40.06	40.54	51.55	.24	19.73	19.97	25.38
Total or average----	1	-	2	338	340	341	492	833	-	.17	56.24	56.40	81.38	.15	52.57	52.73	76.08
Total or average----	132	10	181	11,029	11,220	11,352	14,491	25,843	-	.48	40.41	40.89	52.20	.24	20.11	20.35	25.97

1/ Less than 0.05.

2/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973

State	Number of injuries								Severity rates						Average severity		
	Fatal	Nonfatal			All non-fatal disabling	All disabling injuries	Non-disabling injuries	All injuries	Per million man-hours			Per million tons			Permanent partial	Temporary total	All disabling
		Permanent		Temporary total					Fatal	Non-fatal disabling	All disabling	Fatal	Non-fatal disabling	All disabling			
		Total	Partial														
Underground mines:																	
Underground:																	
Alabama-----	2	-	6	138	144	146	198	344	2,109	1,439	3,548	1,607	1,096	2,703	625	32	138
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	1	-	4	134	138	139	38	177	2,839	4,724	7,563	1,839	3,059	4,898	944	46	115
Illinois-----	3	1	5	505	511	514	804	1,318	1,419	2,224	3,642	553	867	1,420	202	42	90
Indiana-----	-	-	-	24	24	24	72	96	-	2,380	2,380	-	1,061	1,061	-	36	36
Iowa-----	-	-	-	5	5	5	-	5	-	2,117	2,117	-	571	571	-	41	41
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	23	2	19	1,043	1,064	1,087	1,121	2,208	5,287	2,350	7,637	2,489	1,107	3,596	621	36	183
Maryland-----	-	-	-	1	1	1	2	3	-	390	390	-	143	143	-	9	9
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	1	1	1	1	1	-	8,202	8,202	-	143,836	143,836	-	84	84
New Mexico-----	-	-	1	33	34	34	17	51	-	1,829	1,829	-	927	927	60	19	20
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	2	-	4	526	530	532	452	984	1,229	1,771	3,000	760	1,096	1,856	1,435	22	55
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania																	
(bituminous)-	12	2	20	1,133	1,155	1,167	1,641	2,808	2,240	2,114	4,353	1,554	1,467	3,021	598	39	120
South Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	1	-	1	76	77	78	18	96	3,588	2,820	6,408	1,987	1,562	3,549	270	58	137
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	3	-	2	197	199	202	119	321	7,659	1,860	9,520	3,699	898	4,598	55	22	111
Virginia-----	17	-	9	885	894	911	480	1,391	6,526	2,004	8,530	4,990	1,533	6,523	696	28	146
Washington-----	-	-	-	3	3	3	-	3	-	5,448	5,448	-	5,221	5,221	-	29	29
West Virginia--	34	2	57	3,878	3,937	3,971	4,934	8,905	3,300	2,827	6,127	2,178	1,866	4,045	728	31	95
Wyoming-----	-	-	-	28	28	28	10	38	-	5,298	5,298	-	2,123	2,123	-	33	33
Total or average, bituminous-Pennsylvania (anthracite)-	98	7	128	8,610	8,745	8,843	9,906	18,749	3,438	2,403	5,841	2,062	1,441	3,503	674	33	113
Total or average, underground	1	-	1	72	73	74	41	115	7,973	3,664	11,636	9,072	4,169	13,241	110	37	118
Total or average, underground	99	7	129	8,682	8,818	8,917	9,947	18,864	3,458	2,409	5,867	2,078	1,447	3,525	669	33	113

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries							Severity rates						Average severity			
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma-nent par-tial	Tempo-rary total	All dis-abling	
		Permanent		Tempo-rary total				Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling	All dis-abling				
		Total	Par-tial														
Underground mines:																	
Surface:																	
Alabama-----	-	-	-	15	15	15	21	36	-	841	841	-	-	-	-	53	53
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	2	-	1	2	3	5	12	17	43,138	514	43,652	-	-	-	100	22	2,429
Illinois-----	-	-	1	18	19	19	59	78	-	777	777	-	-	-	100	60	62
Indiana-----	-	-	-	4	4	4	5	9	-	3,732	3,732	-	-	-	-	57	57
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	1	-	1	66	67	68	105	173	2,462	1,045	3,507	-	-	-	300	34	126
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	-	-	-	-	-	-	5	5	-	-	-	-	-	-	-	-	-
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	1	16	17	17	16	33	-	457	457	-	-	-	75	38	40
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	-	-	1	40	41	41	111	152	-	599	599	-	-	-	100	48	49
South Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	-	1	1	1	1	2	-	56	56	-	-	-	-	6	6
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	-	13	13	13	15	28	-	2,442	2,442	-	-	-	-	80	80
Virginia-----	1	-	1	41	42	43	38	81	8,005	2,353	10,358	-	-	-	300	36	181
Washington-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
West Virginia--	2	-	2	160	162	164	330	494	2,373	1,256	3,629	-	-	-	420	34	112
Wyoming-----	-	-	-	2	2	2	5	7	-	45	45	-	-	-	-	3	3
Total or average, bituminous- Pennsylvania (anthracite)-	6	-	8	378	386	392	723	1,115	2,160	1,006	3,167	-	-	-	227	40	135
Total or average, surface----	6	-	8	380	388	394	727	1,121	2,137	995	3,132	-	-	-	227	39	134

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Severity rates						Average severity		
	Fatal	Nonfatal			All non-fatal dis-abling	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma- nent par- tial	Tempo- rary total	All dis- abling	
		Permanent		Tempo- rary total				Fatal	Non- fatal dis- abling	All dis- abling	Fatal	Non- fatal dis- abling	All dis- abling				
		Total	Par- tial														
Underground mines:																	
Deep mines:																	
Alabama-----	2	-	6	153	159	161	219	380	1,808	1,353	3,162	1,607	1,203	2,809	625	34	130
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	3	-	5	136	141	144	50	194	7,527	4,234	11,761	5,516	3,103	8,619	775	46	195
Illinois-----	3	1	6	523	530	533	863	1,396	1,266	2,068	3,334	553	904	1,457	185	43	89
Indiana-----	-	-	-	28	28	28	77	105	-	2,575	2,575	-	1,342	1,342	-	39	39
Iowa-----	-	-	-	5	5	5	-	5	-	1,649	1,649	-	571	571	-	41	41
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	24	2	20	1,109	1,131	1,155	1,226	2,381	5,046	2,239	7,285	2,598	1,152	3,750	605	36	180
Maryland-----	-	-	-	1	1	1	2	3	-	390	390	-	143	143	-	9	9
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	1	1	1	-	1	-	7,906	7,906	-	143,836	143,836	-	84	84
New Mexico-----	-	-	1	33	34	34	22	56	-	1,568	1,568	-	927	927	60	19	20
North Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	2	-	5	542	547	549	468	1,017	1,066	1,598	2,664	760	1,139	1,899	1,163	22	55
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	12	2	21	1,173	1,196	1,208	1,752	2,960	2,028	1,971	3,998	1,554	1,510	3,064	575	39	118
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	1	-	1	77	78	79	19	98	3,372	2,653	6,026	1,987	1,564	3,551	270	58	136
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	3	-	2	210	212	215	134	349	6,479	1,950	8,429	3,699	1,113	4,812	55	25	109
Virginia-----	18	-	10	926	936	954	518	1,472	6,593	2,020	8,613	5,284	1,619	6,903	657	29	148
Washington-----	-	-	-	3	3	3	-	3	-	3,947	3,947	-	5,221	5,221	-	29	29
West Virginia-----	36	2	59	4,038	4,099	4,135	5,264	9,399	3,230	2,709	5,938	2,306	1,934	4,241	717	31	96
Wyoming-----	-	-	-	30	30	30	15	45	-	3,036	3,036	-	2,137	2,137	-	31	31
Total or average, bituminous-Pennsylvania (anthracite)-	104	7	136	8,988	9,131	9,235	10,629	19,864	3,325	2,279	5,604	2,188	1,500	3,688	647	33	114
Total or average, deep mines-	1	-	1	74	75	76	45	121	6,387	2,937	9,324	9,072	4,172	13,244	110	36	115
Total or average, deep mines-	105	7	137	9,062	9,206	9,311	10,674	19,985	3,340	2,282	5,622	2,204	1,506	3,710	644	33	114

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Severity rates						Average severity		
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma-nent par-tial	Tempo-rary total	All dis-abling	
		Permanent		Tempo-rary total				Total non-fatal dis-abling	Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling				All dis-abling
		Total	Par-tial														
Strip mines:																	
Alabama-----	-	-	2	73	75	75	108	183	-	2,063	2,063	-	613	613	1,875	40	89
Alaska-----	-	-	-	4	4	4	19	23	-	57	57	-	12	12	-	2	2
Arizona-----	-	-	-	4	4	4	2	6	-	107	107	-	11	11	-	10	10
Arkansas-----	-	-	-	3	3	3	6	9	-	454	454	-	300	300	-	43	43
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	6	6	6	9	15	-	712	712	-	81	81	-	35	35
Illinois-----	3	-	2	171	173	176	446	622	2,889	487	3,376	628	106	733	148	16	120
Indiana-----	1	-	6	59	65	66	164	230	1,337	1,104	2,441	248	205	453	473	36	166
Iowa-----	-	-	-	2	2	2	1	3	-	482	482	-	261	261	-	28	28
Kansas-----	-	-	1	5	6	6	16	22	-	8,579	8,579	-	3,685	3,685	3,600	14	611
Kentucky-----	3	1	8	232	241	244	389	633	1,801	2,134	3,935	365	432	797	842	37	161
Maryland-----	-	-	-	8	8	8	3	11	-	452	452	-	165	165	-	25	25
Missouri-----	-	-	-	46	46	46	28	74	-	1,119	1,119	-	289	289	-	30	30
Montana-----	-	-	-	8	8	8	28	36	-	210	210	-	16	16	-	20	20
New Mexico-----	1	-	1	5	6	7	15	22	7,123	831	7,954	746	87	833	600	20	957
North Dakota---	-	-	-	11	11	11	30	41	-	218	218	-	17	17	-	10	10
Ohio-----	2	1	1	69	71	73	258	331	1,719	1,300	3,019	431	326	757	300	40	289
Oklahoma-----	-	-	-	21	21	21	16	37	-	804	804	-	311	311	-	31	31
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)---	3	-	2	124	126	129	104	233	2,146	671	2,817	688	215	904	400	39	183
South Dakota---	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	1	14	15	15	6	21	-	291	291	-	87	87	50	17	19
Texas-----	-	-	-	7	7	7	33	40	-	242	242	-	19	19	-	19	19
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	2	27	29	29	20	49	-	474	474	-	133	133	220	12	26
Washington-----	-	-	-	40	40	40	42	82	-	741	741	-	137	137	-	11	11
West Virginia---	3	-	4	98	102	105	133	238	4,080	1,145	5,224	1,169	328	1,497	460	33	220
Wyoming-----	-	-	1	21	22	22	31	53	-	2,537	2,537	-	300	300	3,490	31	189
Total or average, bituminous--	16	2	31	1,058	1,091	1,107	1,907	3,014	1,733	1,243	2,976	373	268	641	798	30	149
Pennsylvania (anthracite)---	-	-	-	117	117	117	189	306	-	1,435	1,435	-	955	955	-	28	28
Total or average, strip mines-	16	2	31	1,175	1,208	1,224	2,096	3,320	1,664	1,250	2,915	368	277	645	798	30	137

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries							Severity rates						Average severity			
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma-nent par-tial	Tempo-rary total	All dis-abling	
		Permanent		Tempo-rary total				Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling	All dis-abling				
		Total	Par-tial														
Other surface mining: 1/																	
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kentucky-----	1	-	-	19	19	20	16	36	7,747	1,453	9,200	1,498	281	1,779	-	59	356
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	4	4	4	-	4	-	541	541	-	62	62	-	16	16
Pennsylvania (bituminous)-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	-	2	2	2	1	3	-	103	103	-	22	22	-	4	4
Virginia-----	-	-	-	4	4	4	2	6	-	213	213	-	36	36	-	10	10
West Virginia-	-	1	2	13	16	16	14	30	-	13,740	13,740	-	3,385	3,385	150	25	414
Total or average, bituminous-Pennsylvania (anthracite)-	1	1	2	42	45	46	33	79	3,444	4,508	7,952	674	882	1,556	150	37	301
Total or average, other surface mining-----	1	1	2	53	56	57	46	103	2,857	3,851	6,708	532	718	1,250	150	34	247

See footnote at end of table.

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries							Severity rates						Average severity			
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma-nent par-tial	Tempo-rary total	All dis-abling	
		Permanent		Tempo-rary total				Total non-fatal dis-abling	Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling				All dis-abling
		Total	Par-tial														
Total surface:																	
Alabama-----	-	-	2	73	75	75	108	183	-	2,056	2,056	-	610	610	1,875	40	89
Alaska-----	-	-	-	4	4	4	19	23	-	57	57	-	12	12	-	2	2
Arizona-----	-	-	-	4	4	4	2	6	-	107	107	-	11	11	-	10	10
Arkansas-----	-	-	-	3	3	3	6	9	-	454	454	-	300	300	-	43	43
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	6	6	6	9	15	-	658	658	-	76	76	-	35	35
Illinois-----	3	-	2	171	173	176	446	622	2,889	487	3,376	628	106	733	148	16	120
Indiana-----	1	-	6	59	65	66	164	230	1,337	1,104	2,441	248	205	453	473	36	166
Iowa-----	-	-	-	2	2	2	1	3	-	482	482	-	261	261	-	28	28
Kansas-----	-	-	1	5	6	6	16	22	-	8,579	8,579	-	3,685	3,685	3,600	14	611
Kentucky-----	4	1	8	251	260	264	405	669	2,228	2,085	4,313	450	421	870	842	39	176
Maryland-----	-	-	-	8	8	8	3	11	-	436	436	-	159	159	-	25	25
Missouri-----	-	-	-	46	46	46	28	74	-	1,119	1,119	-	289	289	-	30	30
Montana-----	-	-	-	8	8	8	28	36	-	209	209	-	16	16	-	20	20
New Mexico-----	1	-	1	5	6	7	15	22	7,123	831	7,954	746	87	833	600	20	957
North Dakota--	-	-	-	11	11	11	30	41	-	218	218	-	17	17	-	10	10
Ohio-----	2	1	1	73	75	77	258	335	1,691	1,288	2,979	416	317	733	300	39	275
Oklahoma-----	-	-	-	21	21	1	16	37	-	804	804	-	311	311	-	31	31
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	3	-	2	124	126	129	104	233	2,131	667	2,797	682	213	895	400	39	183
South Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	1	16	17	17	7	24	-	279	279	-	82	82	50	15	17
Texas-----	-	-	-	7	7	7	33	40	-	242	242	-	19	19	-	19	19
Utah-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Virginia-----	-	-	2	31	33	33	22	55	-	447	447	-	117	117	220	12	24
Washington-----	-	-	-	40	40	40	42	82	-	741	741	-	137	137	-	11	11
West Virginia--	3	1	6	111	118	121	147	268	3,678	2,384	6,062	1,037	672	1,709	357	32	245
Wyoming-----	-	-	1	21	22	22	31	53	-	2,537	2,537	-	300	300	3,490	31	189
Total or average, bituminous-Pennsylvania (anthracite)-	17	3	33	1,100	1,136	1,153	1,940	3,093	1,785	1,342	3,128	383	288	671	759	31	155
	-	-	-	128	128	128	202	330	-	1,329	1,329	-	606	606	-	27	27
Total or average, surface----	17	3	33	1,228	1,264	1,281	2,142	3,423	1,706	1,342	3,048	375	295	670	759	30	142

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries							Severity rates						Average severity			
	Fatal	Nonfatal			All dis-abling injuries	Non-dis-abling injuries	All inju-ries	Per million man-hours			Per million tons			Perman-ent par-tial	Tempo-rary total	All dis-abling	
		Permanent	Tempo-rary total	Total non-fatal dis-abling				Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling	All dis-abling				
																	Total
Total mining:																	
Alabama-----	2	-	8	226	234	236	327	563	1,214	1,584	2,799	652	850	1,502	938	36	117
Alaska-----	-	-	-	4	4	4	19	23	-	-	57	-	12	12	-	2	2
Arizona-----	-	-	-	4	4	4	2	6	-	107	107	-	11	11	-	10	10
Arkansas-----	-	-	-	3	3	3	6	9	-	454	454	-	300	300	-	43	43
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	3	-	5	142	147	150	59	209	6,637	3,811	10,447	2,988	1,716	4,703	775	46	189
Illinois-----	6	1	8	694	703	709	1,309	2,018	1,761	1,586	3,347	588	530	1,118	176	36	97
Indiana-----	1	-	6	87	93	94	241	335	1,222	1,230	2,452	240	242	482	473	37	128
Iowa-----	-	-	-	7	7	7	1	8	-	1,083	1,083	-	454	454	-	37	37
Kansas-----	-	-	1	5	6	6	16	22	-	8,579	8,579	-	3,685	3,685	3,600	14	611
Kentucky-----	28	3	28	1,360	1,391	1,419	1,631	3,050	4,274	2,197	6,471	1,544	794	2,338	673	36	179
Maryland-----	-	-	-	9	9	9	5	14	-	434	434	-	158	158	-	23	23
Missouri-----	-	-	-	46	46	46	28	74	-	1,119	1,119	-	289	289	-	30	30
Montana-----	-	-	-	9	9	9	28	37	-	312	312	-	24	24	-	28	28
New Mexico-----	1	-	2	38	40	41	37	78	4,705	1,081	5,786	684	157	841	330	19	180
North Dakota-----	-	-	-	11	11	11	30	41	-	218	218	-	17	17	-	10	10
Ohio-----	4	1	6	615	622	626	726	1,352	1,308	1,478	2,786	538	608	1,146	1,019	24	82
Oklahoma-----	-	-	-	21	21	21	16	37	-	804	804	-	311	311	-	31	31
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	15	2	23	1,297	1,322	1,337	1,856	3,193	2,048	1,720	3,768	1,237	1,039	2,277	559	39	124
South Dakota-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	1	-	2	93	95	96	26	122	2,115	1,768	3,883	904	756	1,660	160	50	115
Texas-----	-	-	-	7	7	7	33	40	-	242	242	-	19	19	-	19	19
Utah-----	3	-	2	210	212	215	134	349	6,479	1,950	8,429	3,699	1,113	4,812	55	25	109
Virginia-----	18	-	12	957	969	987	540	1,527	5,939	1,864	7,802	3,955	1,241	5,196	584	28	144
Washington-----	-	-	-	43	43	43	42	85	-	855	855	-	163	163	-	12	12
West Virginia-----	39	3	65	4,149	4,217	4,256	5,411	9,667	3,260	2,687	5,947	2,108	1,737	3,845	684	31	100
Wyoming-----	-	-	1	51	52	52	46	98	-	2,616	2,616	-	356	356	3,490	31	98
Total or average, bituminous-Pennsylvania (anthracite)-	121	10	169	10,088	10,267	10,388	12,569	22,957	2,965	2,061	5,026	1,316	915	2,231	669	33	118
Total or average, mining-----	1	-	1	202	203	204	247	451	1,674	1,751	3,424	928	970	1,898	110	31	60
Total or average, mining-----	122	10	170	10,290	10,470	10,592	12,816	23,408	2,947	2,056	5,003	1,312	915	2,227	666	33	117

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Severity rates						Average severity		
	Fatal	Nonfatal				All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma-nent par-tial	Tempo-rary total	All dis-abling
		Permanent		Tempo-rary total	Total non-fatal dis-abling				Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling	All dis-abling			
		Total	Par-tial														
Independent shops and yards:																	
Illinois-----	-	-	-	13	13	13	94	107	-	400	400	-	-	-	-	19	19
Indiana-----	1	-	-	9	9	10	27	37	18,416	586	19,002	-	-	-	-	21	619
Kentucky-----	-	-	-	-	-	-	3	3	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	-	-	-	4	4	-	-	-	-	-	-	-	-	-
Ohio-----	-	-	-	5	5	5	90	95	-	145	145	-	-	-	-	32	32
Pennsylvania (bituminous)-	-	-	1	2	3	3	12	15	-	645	645	-	-	-	300	22	114
Virginia-----	-	-	-	14	14	14	36	50	-	605	605	-	-	-	-	30	30
West Virginia-	1	-	-	22	22	23	63	86	3,814	332	4,147	-	-	-	-	24	284
Total or average, bituminous-	2	-	1	65	66	68	329	397	2,344	367	2,712	-	-	-	300	24	204
Pennsylvania (anthracite)-	-	-	-	14	14	14	38	52	-	821	821	-	-	-	-	17	17
Total or average, independent shops and yards-----	2	-	1	79	80	82	367	449	2,218	392	2,610	-	-	-	300	23	172

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Severity rates						Average severity		
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma-nent par-tial	Tempo-rary total	All dis-abling	
		Permanent	Tempo-rary total	Total non-fatal dis-abling				Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling	All dis-abling				
																	Total
Mechanical cleaning plants:																	
Alabama-----	-	-	1	9	10	10	17	27	-	7,362	7,362	-	-	-	4,500	7	456
Alaska-----	-	-	-	-	-	-	5	5	-	-	-	-	-	-	-	-	-
Arizona-----	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-
Arkansas-----	-	-	-	-	-	-	2	2	-	-	-	-	-	-	-	-	-
California-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Colorado-----	-	-	-	2	2	2	2	4	-	716	716	-	-	-	-	8	8
Illinois-----	-	-	-	43	43	43	104	147	-	623	623	-	-	-	-	32	32
Indiana-----	-	-	-	8	8	8	32	40	-	206	206	-	-	-	-	14	14
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Kansas-----	-	-	-	1	1	1	6	7	-	414	414	-	-	-	-	26	26
Kentucky-----	1	-	1	84	85	86	123	209	1,720	728	2,448	-	-	-	300	27	99
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Missouri-----	-	-	-	1	1	1	-	1	-	194	194	-	-	-	-	14	14
Montana-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
New Mexico-----	2	-	-	-	-	2	4	6	136,210	-	136,210	-	-	-	-	-	6,000
North Dakota--	-	-	-	1	1	1	4	5	-	1,637	1,637	-	-	-	-	10	10
Ohio-----	-	-	-	34	34	34	73	107	-	445	445	-	-	-	-	23	23
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	2	-	1	45	46	48	136	184	3,217	624	3,841	-	-	-	60	50	298
South Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	-	-	-	2	2	2	1	3	-	101	101	-	-	-	-	10	10
Texas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Utah-----	-	-	-	10	10	10	16	26	-	366	366	-	-	-	-	16	16
Virginia-----	-	-	1	34	35	35	53	88	-	763	763	-	-	-	100	24	26
Washington-----	1	-	-	7	7	8	11	19	111,431	966	112,397	-	-	-	-	7	756
West Virginia--	2	-	5	256	261	263	509	772	1,717	1,913	3,630	-	-	-	1,202	29	96
Wyoming-----	-	-	-	1	1	1	2	3	-	63,604	63,604	-	-	-	-	1,177	1,177
Total or average, bituminous-Pennsylvania (anthracite)-	8	-	9	538	547	555	1,101	1,656	2,220	1,269	3,488	-	-	-	1,219	31	136
Total or average, mechanical cleaning plants-----	8	-	10	660	670	678	1,308	1,986	2,017	1,311	3,328	-	-	-	1,102	31	117

TABLE 40. - Number of injuries by degree, injury-severity rates and average severity at coal mines in the United States, by general work location and State, 1973 - Continued

State	Number of injuries								Severity rates						Average severity		
	Fatal	Nonfatal			All dis-abling inju-ries	Non-dis-abling inju-ries	All inju-ries	Per million man-hours			Per million tons			Perma-nent par-tial	Tempo-rary total	All dis-abling	
		Total	Perma-nent Par-tial	Tempo-rary total				Fatal	Non-fatal dis-abling	All dis-abling	Fatal	Non-fatal dis-abling	All dis-abling				
																	Total
Grand total:	2	-	9	235	244	246	344	590	1,143	1,925	3,068	652	1,098	1,750	1,333	35	131
Alabama-----	-	-	-	4	4	4	4	28	-	53	53	-	12	12	-	2	2
Alaska-----	-	-	-	4	4	4	4	3	-	87	87	-	11	11	-	10	10
Arizona-----	-	-	-	3	3	3	8	11	-	439	439	-	300	300	-	43	43
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
California-----	3	-	5	144	149	152	61	213	6,582	3,786	10,368	2,988	1,718	4,706	775	45	187
Colorado-----	6	1	8	750	759	765	1,507	2,272	1,548	1,464	3,012	588	556	1,144	176	36	92
Illinois-----	2	-	6	104	110	112	300	412	2,071	1,095	3,167	480	254	734	473	34	164
Indiana-----	-	-	-	7	7	7	1	8	-	1,075	1,075	-	454	454	-	37	37
Iowa-----	-	-	1	6	7	7	22	29	-	7,533	7,533	-	3,711	3,711	3,600	16	528
Kansas-----	29	3	29	1,444	1,476	1,505	1,757	3,262	4,047	2,067	6,114	1,599	817	2,416	660	36	175
Kentucky-----	-	-	-	9	9	9	5	14	-	429	429	-	158	158	-	23	23
Maryland-----	-	-	-	47	47	47	32	79	-	1,003	1,003	-	292	292	-	29	29
Missouri-----	-	-	-	9	9	9	28	37	-	312	312	-	24	24	-	28	28
Montana-----	-	-	-	38	40	43	41	84	13,202	1,011	14,214	2,051	157	2,208	330	19	451
New Mexico-----	3	-	2	12	12	12	34	46	-	235	235	-	19	19	-	10	10
North Dakota--	4	1	6	654	661	665	889	1,554	1,133	1,324	2,457	538	629	1,167	1,019	24	78
Ohio-----	-	-	-	21	21	21	16	37	-	767	767	-	311	311	-	31	31
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Oregon-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Pennsylvania (bituminous)-	17	2	25	1,344	1,371	1,388	2,004	3,392	2,115	1,623	3,739	1,402	1,076	2,478	529	39	130
South Dakota--	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Tennessee-----	1	-	2	95	97	98	27	125	1,977	1,659	3,637	904	759	1,663	160	50	113
Texas-----	-	-	-	7	7	7	33	40	-	242	242	-	19	19	-	19	19
Utah-----	3	-	2	220	222	225	150	375	5,574	1,729	7,303	3,699	1,147	4,846	55	25	105
Virginia-----	18	-	13	1,005	1,018	1,036	629	1,665	5,385	1,756	7,141	3,955	1,289	5,244	547	28	138
Washington-----	1	-	-	50	50	51	53	104	8,889	864	9,752	1,838	179	2,017	-	12	129
West Virginia--	42	3	70	4,427	4,500	4,542	5,983	10,525	3,137	2,573	5,710	2,270	1,862	4,132	721	31	101
Wyoming-----	-	-	1	52	53	53	48	101	-	3,191	3,191	-	438	438	3,490	53	118
Total or average, bituminous-	131	10	179	10,691	10,880	11,011	13,999	25,010	2,894	1,966	4,860	1,425	968	2,393	695	33	120
Pennsylvania (anthracite)-	1	-	2	338	340	341	492	833	992	1,698	2,690	928	1,587	2,515	80	30	48
Total or average----	132	10	181	11,029	11,220	11,352	14,491	25,843	2,853	1,960	4,813	1,419	975	2,395	688	33	118

1/ Includes bituminous coal auger mines and anthracite culm banks and dredges.

TABLE 41. - Single accidents in which five or more fatalities occurred at coal mines in the United States, 1964-73

Date	Mine	Location of mine	Cause	Number killed
1964: No occurrence	-----	-----	-----	-
1965: May 24-----	No. 2A-----	Robbins, Tenn.-----	Explosion-----	5
Oct. 16-----	Mars No. 2-----	Wilsonburg, W. Va.-----	Mine fire-----	7
Dec. 28-----	Dutch Creek-----	Redstone, Colo.-----	Explosion-----	9
1966: June 1-----	Dora No. 2-----	Dora, Pa.-----	Suffocation-----	5
July 23-----	Siltex-----	Mt. Hope, W. Va.-----	Explosion-----	7
1967: No occurrence	-----	-----	-----	-
1968: Aug. 7-----	River Queen No. 1-----	Greenville, Ky.-----	Explosion-----	9
Nov. 20-----	Consol. No. 9-----	Farmington, W. Va.-----	-----do-----	78
1969: No occurrence	-----	-----	-----	-
1970: Dec. 30-----	Nos. 15 and 16-----	Hyden, Ky.-----	Explosion-----	38
1971: No occurrence	-----	-----	-----	-
1972: July 22-----	Blacksville No. 1-----	Blacksville, W. Va.-----	Mine fire-----	9
Dec. 16-----	Itmann No. 3-----	Itmann, W. Va.-----	Explosion-----	5
1973: No occurrence	-----	-----	-----	-

TABLE 42. - Injury experience and worktime data on officeworkers at coal mines in the United States, by State, 1973

State	Injuries				Frequency rates per million man-hours				Severity rates per million man-hours			Average men working daily	Man-hours worked
	Fatal	Nonfatal disabling	All disabling	Non-disabling	Fatal	Nonfatal disabling	All disabling	Non-disabling	Fatal	Nonfatal disabling	All disabling		
Alabama-----	-	-	-	-	-	-	-	-	-	-	-	153	300,705
Alaska-----	-	-	-	-	-	-	-	-	-	-	-	6	10,529
Arizona-----	-	-	-	-	-	-	-	-	-	-	-	18	34,111
Arkansas-----	-	-	-	-	-	-	-	-	-	-	-	7	12,365
Colorado-----	-	-	-	-	-	-	-	-	-	-	-	69	145,193
Illinois-----	-	1	1	6	-	1.07	1.07	6.44	-	5	5	398	931,414
Indiana-----	-	-	-	-	-	-	-	-	-	-	-	189	401,073
Iowa-----	-	-	-	-	-	-	-	-	-	-	-	6	10,703
Kansas-----	-	-	-	-	-	-	-	-	-	-	-	2	4,992
Kentucky-----	-	2	2	7	-	1.34	1.34	4.69	-	77	77	794	1,492,728
Maryland-----	-	-	-	-	-	-	-	-	-	-	-	9	12,341
Missouri-----	-	-	-	-	-	-	-	-	-	-	-	60	149,143
Montana-----	-	-	-	-	-	-	-	-	-	-	-	50	105,013
New Mexico-----	-	-	-	-	-	-	-	-	-	-	-	63	129,776
North Dakota-----	-	-	-	3	-	-	-	49.31	-	-	-	28	60,844
Ohio-----	-	1	1	1	-	.86	.86	.86	-	8	8	592	1,167,000
Oklahoma-----	-	-	-	-	-	-	-	-	-	-	-	12	31,080
Pennsylvania (bituminous)-----	-	1	1	4	-	.89	.89	3.57	-	27	27	601	1,119,837
Tennessee-----	-	-	-	-	-	-	-	-	-	-	-	52	84,211
Texas-----	-	-	-	-	-	-	-	-	-	-	-	25	59,255
Utah-----	-	-	-	2	-	-	-	13.83	-	-	-	66	144,607
Virginia-----	-	-	-	1	-	-	-	5.95	-	-	-	146	168,177
Washington-----	-	-	-	-	-	-	-	-	-	-	-	75	136,753
West Virginia-----	-	4	4	17	-	1.96	1.96	8.32	-	100	100	1,090	2,043,959
Wyoming-----	-	-	-	-	-	-	-	-	-	-	-	25	35,681
Total or average bituminous-	-	9	9	41	-	1.02	1.02	4.66	-	41	41	4,536	8,791,490
Pennsylvania (anthracite)-----	-	1	1	1	-	4.75	4.75	4.75	-	38	38	113	210,741
Total or average, all mines-	-	10	10	42	-	1.11	1.11	4.67	-	41	41	4,649	9,002,231

TABLE 43. - Injuries, distribution, average severity by degree, and injury rates for officeworkers at bituminous coal mines in the United States, by part of body injured and nature of injury, 1973

Part of body injured	Number of injuries								Dis-tribution of all dis-abling in-juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity		
	Fatal	Nonfatal disabling				All dis-abling in-juries	Non-dis-abling in-juries	All in-juries		Fatal	Non-fatal dis-abling	All dis-abling	Non-dis-abling	Fatal	Non-fatal dis-abling	All dis-abling	Perma-nent partial	Tem-porary total	All dis-abling
		Permanent		Tem-porary total	All non-fatal dis-abling														
		Total	Par-tial																
Head, face, neck (excl. eye)--	-	-	-	-	-	2	2	-	-	-	0.23	-	-	-	-	-	-		
Eye-----	-	-	-	-	-	9	9	-	-	-	1.02	-	-	-	-	-	-		
Trunk-----	-	-	5	5	5	7	12	55.6	-	0.57	0.57	.80	-	28	28	-	48	48	
Arm (above wrist)-----	-	-	-	-	-	1	1	-	-	-	.11	-	-	-	-	-	-		
Wrist, hand, fingers-----	-	-	1	1	1	11	12	11.1	-	.11	.11	1.25	-	(1/)	(1/)	-	2	2	
Leg (above ankle)-----	-	-	1	1	1	4	5	11.1	-	.11	.11	.45	-	1	1	-	5	5	
Ankle, foot, toes-----	-	-	2	2	2	4	6	22.2	-	.23	.23	.45	-	13	13	-	58	58	
Multiple-----	-	-	-	-	-	3	3	-	-	-	.34	-	-	-	-	-	-		
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
Total or average, office-----	-	-	9	9	9	41	50	-	-	1.02	1.02	4.66	-	41	41	-	40	40	
Nature of injury																			
Burn, scald (except chemical)-	-	-	-	-	-	2	2	-	-	-	.23	-	-	-	-	-	-		
Burn, chemical-----	-	-	-	-	-	1	1	-	-	-	.11	-	-	-	-	-	-		
Crushing, contusion-----	-	-	-	-	-	7	7	-	-	-	.80	-	-	-	-	-	-		
Cut, laceration-----	-	-	1	1	1	11	12	11.1	-	.11	.11	1.25	-	(1/)	(1/)	-	2	2	
Fracture-----	-	-	1	1	1	1	2	11.1	-	.11	.11	.11	-	13	13	-	113	113	
Radiation, radiating substance-----	-	-	-	-	-	2	2	-	-	-	.23	-	-	-	-	-	-		
Scratches-----	-	-	-	-	-	1	1	-	-	-	.11	-	-	-	-	-	-		
Strain, sprain-----	-	-	6	6	6	8	14	66.7	-	.68	.68	.91	-	28	28	-	41	41	
Other, not elsewhere classified-----	-	-	-	-	-	7	7	-	-	-	.80	-	-	-	-	-	-		
Unclassified (no data)-----	-	-	1	1	1	1	2	11.1	-	.11	.11	.11	-	1	1	-	5	5	
Total or average, office-----	-	-	9	9	9	41	50	-	-	1.02	1.02	4.66	-	41	41	-	40	40	

1/ Less than 0.5.

TABLE 44. - Injuries, distribution, average severity by degree, and injury rates for officeworkers at Pennsylvania anthracite mines in the United States, by part of body injured and nature of injury, 1973

Part of body injured	Number of injuries								Distri- bution of all dis- abling in- juries, percent	Frequency rates per million man-hours				Severity rates per million man-hours			Average severity						
	Fatal	Nonfatal disabling				All dis- abling in- juries	Non- dis- abling in- juries	All in- juries		Fatal	Non- fatal dis- abling	All dis- abling	Non- dis- abling	Fatal	Non- fatal dis- abling	All dis- abling	Perma- nent partisl	Tem- porary total	All dis- abling				
		Permanent		Tem- porary total	All non- fatal dis- abling															Frequency rates per million man-hours		Severity rates per million man-hours	
		Total	Par- tial																	Fatal	Non- fatal dis- abling	Fatal	Non- fatal dis- abling
Head, face, neck (excl. eye)--	-	-	-	-	-	-	1	1	-	-	-	-	4.75	-	-	-	-	-	-				
Eye-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Trunk-----	-	-	-	1	1	1	-	1	100.0	-	4.75	4.75	-	-	38	38	-	8	8				
Arm (above wrist)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Wrist, hand, fingers-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Leg (above ankle)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Ankle, foot, toes-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Multiple-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Unclassified (no data)-----	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-				
Total or average, office-----	-	-	-	1	1	1	1	2	-	-	4.75	4.75	4.75	-	38	38	-	8	8				
Nature of injury																							
Crushing, contusion-----	-	-	-	-	-	-	1	1	-	-	-	-	4.75	-	-	-	-	-	-				
Strain, sprain-----	-	-	-	1	1	1	-	1	100.0	-	4.75	4.75	-	-	38	38	-	8	8				
Total or average, office-----	-	-	-	1	1	1	1	2	-	-	4.75	4.75	4.75	-	38	38	-	8	8				

TABLE 45. - Injuries by principal cause for officeworkers at coal mines in the United States, by State, 1973

State	Nonfatal disabling									Nondisabling									Total	Grand total	
	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery	Miscellaneous causes	Total	Slips or falls of persons	Handling material	Handtools	Stepping or kneeling on sharp or loose objects	Striking or bumping against objects	Haulage	Electricity	Machinery			Miscellaneous causes
Illinois-----	-	1	-	-	-	-	-	-	1	1	4	-	-	-	-	-	-	-	1	6	7
Kentucky-----	1	-	-	-	-	-	-	1	2	1	5	-	-	-	-	-	-	-	1	7	9
North Dakota-----	-	-	-	-	-	-	-	-	-	-	1	-	-	2	-	-	-	-	1	3	3
Ohio-----	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	-	1	1	2
Pennsylvania (bituminous)-----	-	1	-	-	-	-	-	-	1	1	1	-	1	1	1	-	-	-	-	4	5
Utah-----	-	-	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	2	2
Virginia-----	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-	-	-	-	-	1	1
West Virginia-----	1	1	-	1	-	1	-	-	4	3	2	1	1	2	2	2	-	-	4	17	21
Total bituminous-----	2	3	-	1	-	1	-	1	9	6	15	1	2	5	3	2	-	-	7	41	50
Pennsylvania (anthracite)-----	-	1	-	-	-	-	-	-	1	-	-	1	-	-	-	-	-	-	-	1	2
Total-----	2	4	-	1	-	1	-	1	10	6	15	2	2	5	3	2	-	-	7	42	52

TABLE 46. - Number and average severity of injuries by degree for officeworkers at bituminous coal mines in the United States, by principal cause of injury, 1973

Officeworkers only, principal cause of injury	Injuries							Average severity			
	Fatal	Nonfatal disabling			All disabling	Non- disabling	All injuries	Permanent partial	Temporary total	All disabling	
		Permanent		Temporary total							
		Total	Partial								
Slips or falls of persons-----	-	-	-	2	2	2	6	8	-	59	59
Handling material-----	-	-	-	3	3	3	15	18	-	13	13
Handtools-----	-	-	-	-	-	-	1	1	-	-	-
Stepping or kneeling on sharp or loose objects--	-	-	-	1	1	1	2	3	-	2	2
Striking or bumping against objects-----	-	-	-	-	-	-	5	5	-	-	-
Haulage-----	-	-	-	1	1	1	3	4	-	195	195
Electricity-----	-	-	-	-	-	-	2	2	-	-	-
Machinery-----	-	-	-	1	1	1	-	1	-	2	2
Miscellaneous causes-----	-	-	-	1	1	1	7	8	-	9	9
Total or average-----	-	-	-	9	9	9	41	50	-	40	40

TABLE A-1. Injury and average severity of injuries by degree for officeworkers at Pennsylvania anthracite mines in the United States, by principal cause of injury, 1973

Officeworkers only, principal cause of injury	Injuries							Average severity			
	Fatal	Nonfatal disabling			All disabling	Non- disabling	All injuries	Permanent partial	Temporary total	All disabling	
		Permanent		Temporary total							All nonfatal disabling
		Total	Partial								
Slips or falls of persons-----	-	-	-	-	-	-	-	-	-	-	
Handling material-----	-	-	-	1	1	1	-	1	-	8	
Handtools-----	-	-	-	-	-	-	1	-	-	-	
Stepping or kneeling on sharp or loose objects--	-	-	-	-	-	-	-	-	-	-	
Striking or bumping against objects-----	-	-	-	-	-	-	-	-	-	-	
Haulage-----	-	-	-	-	-	-	-	-	-	-	
Electricity-----	-	-	-	-	-	-	-	-	-	-	
Machinery-----	-	-	-	-	-	-	-	-	-	-	
Miscellaneous causes-----	-	-	-	-	-	-	-	-	-	-	
<b>Total or average-----</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>1</b>	<b>2</b>	<b>-</b>	<b>8</b>	<b>8</b>

TABLE 48. - Injury experience and worktime data for all work locations combined (includes officeworkers) at coal mines in the United States, by State, 1973

State	Injuries				Frequency rates per million man-hours				Severity rates per million man-hours			Average men working daily	Man-hours worked
	Fatal	Nonfatal disabling	All disabling	Non-disabling	Fatal	Nonfatal disabling	All disabling	Non-disabling	Fatal	Nonfatal disabling	All disabling		
Alabama-----	2	244	246	344	0.19	22.59	22.78	31.85	1,111	1,871	2,982	5,685	10,801,028
Alaska-----	-	4	4	24	-	22.35	22.35	134.08	-	50	50	84	179,004
Arizona-----	-	4	4	3	-	8.32	8.32	6.24	-	81	81	238	480,932
Arkansas-----	-	3	3	8	-	9.87	9.87	26.32	-	421	421	197	303,910
Colorado-----	3	149	152	61	1.04	51.74	52.78	21.18	6,250	3,595	9,845	1,460	2,879,802
Illinois-----	6	760	766	1,513	.25	31.42	31.67	62.55	1,488	1,408	2,896	11,487	24,189,875
Indiana-----	2	110	112	300	.32	17.76	18.08	48.43	1,937	1,024	2,962	2,925	6,194,023
Iowa-----	-	7	7	1	-	27.82	27.82	3.97	-	1,029	1,029	117	251,645
Kansas-----	-	7	7	22	-	14.13	14.13	44.41	-	7,457	7,457	227	495,345
Kentucky-----	29	1,478	1,507	1,764	.65	33.22	33.87	39.65	3,911	2,000	5,911	24,386	44,492,780
Maryland-----	-	9	9	5	-	20.02	20.02	11.12	-	465	465	250	449,604
Missouri-----	-	47	47	32	-	30.73	30.73	20.92	-	905	905	680	1,529,550
Montana-----	-	9	9	28	-	10.00	10.00	31.10	-	275	275	554	900,386
New Mexico-----	3	40	43	41	2.01	26.79	28.80	27.46	12,055	924	12,978	748	1,493,169
North Dakota-----	-	12	12	37	-	20.36	20.36	62.76	-	210	210	287	589,502
Ohio-----	4	662	666	890	.18	29.62	29.80	39.82	1,074	1,256	2,329	12,034	22,352,650
Oklahoma-----	-	21	21	16	-	23.64	23.64	18.02	-	740	740	382	888,140
Pennsylvania (bituminous)-----	17	1,372	1,389	2,008	.34	27.81	28.15	40.70	2,067	1,587	3,655	24,661	49,335,828
Tennessee-----	1	97	98	27	.32	31.10	31.42	8.66	1,924	1,615	3,538	1,824	3,118,956
Texas-----	-	7	7	33	-	11.52	11.52	54.29	-	219	219	261	607,792
Utah-----	3	222	225	152	.89	65.80	66.69	45.05	5,335	1,655	6,990	1,759	3,373,853
Virginia-----	18	1,018	1,036	630	.89	50.34	51.23	31.15	5,340	1,741	7,081	11,234	20,224,267
Washington-----	1	50	51	53	1.23	61.59	62.83	65.29	7,391	718	8,110	392	811,760
West Virginia-----	42	4,504	4,546	6,000	.51	54.68	55.19	72.84	3,059	2,512	5,571	45,511	82,375,031
Wyoming-----	-	53	53	48	-	26.52	26.52	24.02	-	3,134	3,134	1,039	1,998,146
Total or average, bituminous-----	131	10,889	11,020	14,040	.47	38.84	39.31	50.08	2,803	1,905	4,709	148,422	280,366,978
Pennsylvania (anthracite)-----	1	341	342	493	.16	54.50	54.66	78.79	959	1,642	2,601	3,470	6,256,781
Grand total-----	132	11,230	11,362	14,533	.46	39.18	39.64	50.70	2,763	1,900	4,663	151,892	286,623,759

TABLE 49. - Injury, worktime, production, and productivity data at bituminous coal mines in the United States, 1930-73

Year	Number of injuries			Frequency rates						Severity rates per million man-hours		Average severity, all disabling injuries	Average men working daily	Average days active	Man-days worked (thousands)	Man-hours worked (thousands) 1/	Production, short tons (thousands)
				Per million man-hours			Per million tons										
	Fatal	Non-fatal disabling	Non-disabling	Fatal	Non-fatal disabling	Non-disabling	Fatal	Non-fatal disabling	Non-disabling	Fatal	Non-fatal disabling						
1930-----	1,619	71,217	NA	1.90	83.75	NA	3.46	152.33	NA	NA	NA	493,202	187	92,326	850,359	467,526	
1931-----	1,080	53,975	NA	1.60	79.98	NA	2.83	141.26	NA	NA	NA	450,274	163	73,349	674,871	382,105	
1932-----	958	39,352	NA	1.77	72.58	NA	3.09	127.06	NA	NA	NA	406,380	146	59,260	542,181	309,710	
1933-----	833	43,946	NA	1.31	68.87	NA	2.50	131.72	NA	NA	NA	418,752	167	69,882	638,124	333,631	
1934-----	958	46,982	NA	1.41	69.39	NA	2.67	130.74	NA	NA	NA	458,044	178	81,648	677,115	359,368	
1935-----	968	47,529	NA	1.46	71.47	NA	2.60	127.64	NA	NA	NA	462,354	178	82,292	665,047	372,369	
1936-----	1,098	50,514	NA	1.43	65.62	NA	2.52	115.73	NA	NA	NA	482,500	197	95,262	769,819	436,468	
1937-----	1,198	52,847	NA	1.54	68.05	NA	2.68	118.21	NA	NA	NA	490,771	196	96,130	776,581	447,047	
1938-----	880	36,794	NA	1.52	63.47	NA	2.52	105.26	NA	NA	NA	445,246	161	71,747	579,747	349,548	
1939-----	867	38,544	NA	1.36	60.52	NA	2.19	97.18	NA	NA	NA	445,044	177	78,966	636,828	396,631	
1940-----	1,204	43,994	NA	1.68	61.28	NA	2.61	95.37	NA	NA	NA	440,847	201	88,771	717,969	461,319	
1941-----	1,072	46,637	NA	1.35	58.93	NA	2.08	90.42	NA	NA	NA	457,744	214	98,000	791,429	515,769	
1942-----	1,245	53,193	NA	1.41	60.21	NA	2.14	91.44	NA	NA	NA	448,797	244	109,491	883,518	581,705	
1943-----	1,225	51,067	NA	1.39	57.79	NA	2.06	86.05	NA	NA	NA	407,135	263	106,912	883,709	593,471	
1944-----	1,124	51,253	NA	1.23	56.02	NA	1.81	82.49	NA	7,371	2,198	376,203	278	104,695	914,925	621,358	
1945-----	925	46,194	NA	1.13	56.52	NA	1.60	80.12	NA	6,791	2,497	364,997	257	93,854	817,316	576,525	
1946-----	795	42,817	NA	1.09	58.81	NA	1.49	80.25	NA	6,552	2,552	385,142	215	82,850	727,995	553,520	
1947-----	985	46,025	NA	1.23	57.32	NA	1.57	73.28	NA	7,360	2,689	411,845	236	97,105	803,016	628,034	
1948-----	862	42,078	NA	1.15	56.28	NA	1.45	70.97	NA	6,917	2,687	429,378	220	94,575	747,686	592,923	
1949-----	494	27,548	NA	.93	51.67	NA	1.13	63.22	NA	5,559	3,231	409,431	165	67,552	533,166	435,719	
1950-----	550	28,390	NA	.92	47.73	NA	1.06	54.82	NA	5,548	2,876	408,623	185	75,510	594,836	517,879	
1951-----	684	28,081	NA	1.16	47.56	NA	1.28	52.67	NA	6,951	3,097	372,138	201	74,898	590,406	533,132	
1952-----	449	23,719	NA	.90	47.64	NA	.96	50.53	NA	5,411	2,998	338,719	186	63,028	497,914	469,373	
1953-----	397	20,112	NA	.89	45.26	NA	.87	44.12	NA	5,361	2,681	295,425	191	56,294	444,319	455,885	
1954-----	334	14,746	NA	.99	43.66	NA	.85	37.62	NA	5,934	2,566	241,919	177	42,765	337,727	391,952	
1955-----	360	15,966	NA	.96	42.76	NA	.78	34.52	NA	5,785	2,398	225,539	210	47,306	373,384	462,519	
1956-----	392	16,486	NA	1.02	42.99	NA	.79	33.22	NA	6,134	2,196	227,778	212	48,392	383,442	496,231	
1957-----	427	15,915	NA	1.17	43.74	NA	.87	32.53	NA	7,040	2,197	223,900	206	46,020	363,896	489,175	
1958-----	326	12,036	NA	1.14	41.97	NA	.79	29.29	NA	6,821	2,825	198,350	183	36,260	286,758	410,936	
1959-----	246	10,440	NA	.92	39.15	NA	.60	25.33	NA	5,535	2,446	180,303	187	33,738	266,660	412,078	
1960-----	290	10,501	NA	1.13	40.85	NA	.70	25.24	NA	6,768	2,502	170,628	190	32,417	257,075	416,098	
1961-----	275	9,902	NA	1.18	42.52	NA	.68	24.56	NA	7,085	2,692	151,776	194	29,453	232,871	403,222	
1962-----	263	9,783	NA	1.15	42.86	NA	.62	23.14	NA	6,913	2,799	147,276	196	28,863	228,267	422,838	
1963-----	252	9,838	NA	1.09	42.38	NA	.55	21.37	NA	6,513	2,321	143,628	204	29,289	232,136	460,285	
1964-----	218	9,728	NA	.94	41.92	NA	.45	19.93	NA	5,637	2,675	137,617	194	29,200	232,037	488,086	
1965-----	251	10,071	NA	1.08	43.30	NA	.49	19.63	NA	6,474	2,769	137,602	213	29,242	232,613	513,083	
1966-----	227	9,617	NA	.99	41.80	NA	.43	18.06	NA	5,919	1,981	135,952	213	28,928	230,087	532,559	
1967-----	213	9,506	NA	.93	41.44	NA	.39	17.33	NA	5,571	2,247	131,562	220	28,910	229,415	548,503	
1968-----	307	9,135	NA	1.37	40.89	NA	.57	16.86	NA	8,245	2,580	127,535	221	28,144	223,406	541,849	
1969-----	190	9,425	NA	.84	41.44	NA	.34	16.86	NA	5,013	2,269	127,375	225	28,677	227,411	558,931	
1970-----	255	11,049	NA	1.02	44.21	NA	.43	18.42	NA	6,121	2,339	138,542	227	31,423	249,945	599,918	
1971-----	176	11,363	NA	.72	46.41	NA	.32	20.51	NA	4,313	1,157	137,080	225	30,839	244,820	553,993	
1972-----	153	12,012	15,700	.59	45.96	60.08	.29	22.75	29.73	3,513	1,892	157,285	NA	NA	261,338	528,093	
1973-----	131	10,880	13,999	.48	40.06	51.55	.24	19.73	25.38	2,894	1,966	143,886	NA	NA	271,575	551,482	

1/ Man-hours of exposure were reported by coal producers for the first time in 1930; from 1930 through 1944, these hours represented worktime or face-time only for underground employees. Since portal-to-portal hours were reported from 1945 on, the face-time hours reported from 1930 through 1944 were converted to portal-to-portal hours--See Bulletin 509, "Injury Experience in Coal Mining, 1948," page 5, for method used. NA Not available.

TABLE 50. - Injury, worktime, production, and productivity data at Pennsylvania anthracite mines, 1930-73

Year	Number of injuries			Frequency rates						Severity rates per million man-hours		Average severity, all disabling injuries	Average men working daily	Average days active	Man-days worked (thousands)	Man-hours worked (thousands)	Production, short tons (thousands)
				Per million man-hours			Per million tons			Fatal	Non-fatal disabling						
	Fatal	Non-fatal disabling	Non-disabling	Fatal	Non-fatal disabling	Non-disabling	Fatal	Non-fatal disabling									
1930-----	444	28,764	NA	1.76	113.90	NA	6.40	414.56	NA	NA	NA	150,804	209	31,568	252,543	69,385	
1931-----	383	23,983	NA	1.84	115.07	NA	6.42	402.09	NA	NA	NA	139,431	186	25,915	208,415	59,646	
1932-----	249	16,931	NA	1.59	107.88	NA	4.99	339.60	NA	NA	NA	121,243	161	19,486	156,944	49,855	
1933-----	231	15,183	NA	1.49	98.13	NA	4.66	306.47	NA	NA	NA	104,430	185	19,344	154,723	49,541	
1934-----	268	18,577	NA	1.50	104.15	NA	4.69	324.95	NA	NA	NA	108,382	206	22,292	178,372	57,168	
1935-----	274	15,897	NA	1.78	103.16	NA	5.24	304.17	NA	NA	NA	102,848	187	19,280	154,096	52,263	
1936-----	244	17,026	NA	1.56	108.80	NA	4.46	311.43	NA	NA	NA	102,082	192	19,630	156,486	54,670	
1937-----	215	13,412	NA	1.58	98.72	NA	4.15	259.19	NA	NA	NA	99,085	189	18,741	135,854	51,745	
1938-----	225	12,842	NA	1.94	110.85	NA	4.88	278.27	NA	NA	NA	96,282	172	16,528	115,852	46,149	
1939-----	211	13,229	NA	1.71	107.37	NA	4.11	257.65	NA	NA	NA	94,331	186	17,524	123,211	51,346	
1940-----	184	13,782	NA	1.50	112.55	NA	3.57	267.67	NA	NA	NA	92,420	189	17,468	122,447	51,489	
1941-----	194	14,420	NA	1.49	110.83	NA	3.58	266.47	NA	NA	NA	88,948	207	18,444	130,107	54,115	
1942-----	226	13,581	NA	1.64	98.73	NA	3.88	232.89	NA	NA	NA	82,064	239	19,644	137,560	58,316	
1943-----	226	13,527	NA	1.50	89.68	NA	3.80	227.32	NA	NA	NA	79,381	269	21,385	150,832	59,506	
1944-----	174	12,438	NA	1.06	76.05	NA	2.74	195.59	NA	6,383	1,776	77,734	293	22,805	163,549	63,592	
1945-----	143	10,923	NA	1.01	77.32	NA	2.60	198.60	NA	6,073	1,990	72,924	268	19,569	141,275	54,999	
1946-----	173	12,533	NA	1.14	82.65	NA	2.86	207.31	NA	6,845	2,171	108	269	20,997	151,633	60,456	
1947-----	173	11,635	NA	1.18	79.41	NA	3.03	203.67	NA	7,084	2,132	114	257	20,207	146,523	57,128	
1948-----	137	11,394	NA	.91	75.69	NA	2.40	199.62	NA	5,460	2,685	106	263	20,508	150,545	57,080	
1949-----	91	7,857	NA	.83	71.88	NA	2.11	181.87	NA	4,995	2,388	102	196	14,885	109,310	43,201	
1950-----	93	8,874	NA	.80	76.14	NA	2.09	199.75	NA	4,787	2,495	95	211	15,721	116,554	44,426	
1951-----	101	7,472	NA	.95	69.94	NA	2.41	178.64	NA	5,672	2,787	119	207	14,467	106,841	41,828	
1952-----	99	6,355	NA	1.03	66.35	NA	2.44	156.55	NA	6,201	2,369	127	207	12,975	95,784	40,595	
1953-----	64	4,146	NA	.92	59.85	NA	2.10	135.85	NA	5,543	2,064	125	169	9,275	69,275	30,518	
1954-----	62	2,972	NA	1.23	59.18	NA	2.14	102.72	NA	7,407	2,664	167	164	6,832	50,223	28,933	
1955-----	60	2,919	NA	1.30	63.46	NA	2.07	100.84	NA	7,827	2,423	158	182	6,285	45,995	28,948	
1956-----	56	3,330	NA	1.12	66.31	NA	1.74	103.36	NA	6,691	2,818	141	212	6,893	50,220	32,216	
1957-----	51	2,877	NA	1.15	64.93	NA	2.00	112.69	NA	6,906	2,420	141	196	6,057	44,311	25,530	
1958-----	32	2,124	NA	.90	59.88	NA	1.51	99.90	NA	5,413	2,303	127	183	4,861	35,471	21,260	
1959-----	47	1,723	NA	1.60	58.66	NA	2.29	84.07	NA	9,601	2,081	194	173	4,036	29,371	20,496	
1960-----	35	1,401	NA	1.43	57.30	NA	1.85	73.98	NA	8,588	1,897	179	196	3,360	24,452	18,938	
1961-----	19	1,295	NA	.85	57.75	NA	1.09	73.97	NA	5,084	2,618	131	196	3,098	22,424	17,507	
1962-----	26	1,161	NA	1.26	56.14	NA	1.52	67.76	NA	7,544	1,877	164	204	2,853	20,680	17,133	
1963-----	32	1,295	NA	1.52	61.53	NA	1.74	70.60	NA	9,122	3,245	196	216	2,912	21,048	18,344	
1964-----	24	1,342	NA	1.18	65.89	NA	1.37	76.74	NA	7,070	3,245	144	214	2,812	20,368	17,487	
1965-----	8	1,067	NA	.49	65.16	NA	.54	71.57	NA	2,931	2,004	75	204	2,271	16,375	14,909	
1966-----	6	829	NA	.44	60.64	NA	.46	64.24	NA	2,633	1,844	73	203	1,683	13,672	12,905	
1967-----	9	609	NA	.73	49.27	NA	.73	49.67	NA	4,369	1,142	110	219	1,701	12,359	12,262	
1968-----	4	504	NA	.36	45.77	NA	.35	43.86	NA	2,180	2,002	91	217	1,508	11,811	11,492	
1969-----	13	492	NA	1.29	48.85	NA	1.27	47.99	NA	7,744	1,347	181	232	1,377	10,073	10,231	
1970-----	5	503	NA	.49	49.20	NA	.51	50.88	NA	7,934	1,663	93	234	1,392	10,224	9,885	
1971-----	5	553	NA	.54	59.37	NA	.57	63.36	NA	3,221	691	65	250	1,259	9,315	8,727	
1972-----	3	317	390	.48	51.03	62.79	.46	48.82	60.06	2,898	2,709	109	NA	NA	6,212	6,493	
1973-----	1	340	492	.17	56.24	81.38	.15	52.57	76.08	992	1,698	48	NA	NA	6,046	6,467	

NA Not available.

TABLE 51. - Injury, worktime, production, and productivity data at all coal mines in the United States, 1930-73

Year	Number of injuries			Frequency rates						Severity rates per million man-hours		Average severity, all disabling injuries	Average men working daily	Average days active	Man-days worked (thousands)	Man-hours worked (thousands) <sup>1/</sup>	Production, short tons (thousands)
				Per million man-hours			Per million tons										
	Fatal	Non-fatal disabling	Non-disabling	Fatal	Non-fatal disabling	Non-disabling	Fatal	Non-fatal disabling	Non-disabling	Fatal	Non-fatal disabling						
1930-----	2,063	99,981	NA	1.87	90.65	NA	3.84	186.22	NA	NA	NA	644,066	192	123,894	1,102,902	536,911	
1931-----	1,463	77,958	NA	1.66	88.26	NA	3.31	176.47	NA	NA	NA	589,705	168	99,264	883,286	441,751	
1932-----	1,207	56,283	NA	1.73	80.50	NA	3.36	156.53	NA	NA	NA	527,523	169	78,745	699,125	359,565	
1933-----	1,064	59,129	NA	1.34	74.58	NA	2.78	154.31	NA	NA	NA	523,182	171	89,226	792,847	383,172	
1934-----	1,226	65,559	NA	1.43	76.63	NA	2.94	157.39	NA	NA	NA	566,426	184	103,960	855,487	416,536	
1935-----	1,242	63,426	NA	1.52	77.43	NA	2.92	149.37	NA	NA	NA	565,202	180	101,572	819,143	424,632	
1936-----	1,342	67,540	NA	1.45	72.91	NA	2.73	137.52	NA	NA	NA	584,582	197	114,891	926,305	491,139	
1937-----	1,413	66,259	NA	1.55	72.62	NA	2.83	132.84	NA	NA	NA	589,856	195	114,871	912,435	498,793	
1938-----	1,105	49,636	NA	1.59	71.36	NA	2.79	125.44	NA	NA	NA	541,528	163	88,276	695,599	395,697	
1939-----	1,078	51,773	NA	1.42	68.12	NA	2.41	115.57	NA	NA	NA	539,375	179	96,490	760,039	447,977	
1940-----	1,388	57,776	NA	1.65	68.75	NA	2.71	112.67	NA	NA	NA	533,267	199	106,239	840,416	512,808	
1941-----	1,266	61,057	NA	1.37	66.26	NA	2.22	107.14	NA	NA	NA	546,692	213	116,444	921,536	569,884	
1942-----	1,471	66,774	NA	1.44	65.40	NA	2.30	104.33	NA	NA	NA	530,861	243	129,136	1,021,078	640,021	
1943-----	1,451	64,594	NA	1.40	62.44	NA	2.22	98.92	NA	NA	NA	486,516	264	128,297	1,034,541	652,977	
1944-----	1,298	63,691	NA	1.20	59.06	NA	1.90	92.99	NA	7,221	2,134	453,937	281	127,500	1,078,474	684,950	
1945-----	1,068	57,117	NA	1.11	59.58	NA	1.69	90.44	NA	6,685	2,422	437,921	259	113,424	958,591	631,523	
1946-----	968	55,350	NA	1.10	62.92	NA	1.63	93.19	NA	6,603	2,486	463,079	224	103,847	879,628	593,976	
1947-----	1,158	57,660	NA	1.22	60.72	NA	1.69	84.16	NA	7,317	2,603	490,356	239	117,312	949,539	685,162	
1948-----	999	53,472	NA	1.11	59.53	NA	1.54	82.26	NA	6,673	2,686	507,333	227	115,083	898,231	650,003	
1949-----	585	35,405	NA	.91	55.11	NA	1.22	73.93	NA	5,463	3,087	485,306	170	82,437	642,476	478,920	
1950-----	643	37,264	NA	.90	52.38	NA	1.14	66.27	NA	5,423	2,814	483,239	189	91,231	711,390	562,305	
1951-----	785	35,553	NA	1.13	50.99	NA	1.37	61.84	NA	6,755	3,049	441,905	202	89,365	697,247	574,960	
1952-----	548	30,074	NA	.92	50.66	NA	1.07	58.97	NA	5,538	2,896	401,329	189	76,003	593,698	509,967	
1953-----	461	24,258	NA	.90	47.23	NA	.95	49.87	NA	5,386	2,598	351,126	187	65,688	513,594	486,404	
1954-----	396	17,718	NA	1.02	45.67	NA	.94	42.10	NA	6,124	2,578	283,705	175	49,598	387,950	420,885	
1955-----	420	18,885	NA	1.00	45.03	NA	.85	38.43	NA	6,009	2,401	260,089	206	53,591	419,379	491,468	
1956-----	448	19,816	NA	1.03	45.69	NA	.85	37.50	NA	6,198	2,268	260,285	212	55,286	433,662	528,447	
1957-----	478	18,792	NA	1.17	46.04	NA	.93	36.51	NA	7,026	2,221	254,725	204	52,077	408,207	514,706	
1958-----	358	14,160	NA	1.11	43.94	NA	.83	32.76	NA	6,666	2,768	224,890	209	41,121	322,229	432,196	
1959-----	293	12,163	NA	.99	41.09	NA	.68	28.12	NA	5,939	2,409	203,597	186	37,773	296,031	432,574	
1960-----	325	11,902	NA	1.15	42.28	NA	.75	27.36	NA	6,926	2,449	189,679	216	35,778	281,528	435,036	
1961-----	294	11,197	NA	1.15	43.86	NA	.70	26.61	NA	6,910	2,686	167,568	213	32,551	255,296	420,729	
1962-----	289	10,944	NA	1.16	43.96	NA	.66	24.87	NA	6,965	2,722	161,286	197	31,716	248,946	439,972	
1963-----	284	11,133	NA	1.12	43.97	NA	.59	23.26	NA	6,730	2,398	157,126	205	32,200	253,185	478,629	
1964-----	242	11,070	NA	.96	43.86	NA	.48	21.90	NA	5,753	2,668	150,761	212	32,012	252,405	505,573	
1965-----	259	11,138	NA	1.04	44.73	NA	.49	21.09	NA	6,241	2,718	148,734	196	31,513	248,988	527,993	
1966-----	233	10,446	NA	.96	42.85	NA	.43	19.15	NA	5,735	1,973	145,244	176	30,811	243,759	545,464	
1967-----	222	10,115	NA	.92	41.84	NA	.40	18.04	NA	5,509	2,190	139,312	210	30,611	241,774	560,764	
1968-----	311	9,639	NA	1.33	41.12	NA	.56	17.42	NA	7,960	2,553	134,467	221	29,651	234,417	553,340	
1969-----	203	9,917	NA	.85	41.76	NA	.36	17.42	NA	5,129	2,230	133,302	225	30,053	237,484	569,182	
1970-----	260	11,552	NA	1.00	44.40	NA	.43	18.94	NA	5,996	2,312	144,480	227	32,814	260,169	609,803	
1971-----	181	11,916	NA	.71	46.89	NA	.32	21.18	NA	4,273	1,140	142,108	226	32,099	254,135	562,720	
1972-----	156	12,329	16,090	.58	46.08	60.14	.29	23.06	30.10	3,498	1,911	162,207	NA	NA	267,550	534,586	
1973-----	132	11,220	14,491	.48	40.41	52.20	.24	20.11	25.97	2,853	1,960	147,243	NA	NA	277,622	557,949	

<sup>1/</sup> All man-hours are shown on a portal-to-portal basis.  
 NA Not available.

TABLE 51. - Coal mine fatality rates for the United States, 1870-1973 <sup>1/</sup>  
(Includes underground and surface injuries)

Year	Bituminous coal mines			Anthracite mines			Total		
	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined
1870	-	-	-	5.93	-	13.47	5.93	-	13.47
1871	-	-	-	5.60	-	10.86	5.60	-	10.86
1872	-	-	-	4.98	-	9.20	4.98	-	9.20
1873	-	-	-	5.46	-	10.06	5.46	-	10.06
1874	2.11	-	8.88	4.33	-	9.31	3.87	-	9.26
1875	1.60	-	4.93	3.37	-	10.50	3.06	-	9.51
Average	-	-	-	4.58	-	9.94	4.30	-	9.72
1876	1.00	-	4.29	3.22	-	9.96	2.83	-	9.20
1877	2.17	-	5.90	2.90	-	7.56	2.77	-	7.28
1878	1.86	-	3.17	2.92	-	8.62	2.62	-	6.38
1879	2.02	-	3.39	3.81	-	8.67	3.30	-	6.82
1880	1.43	-	2.95	2.75	-	7.05	2.21	-	5.16
Average	1.66	-	3.42	3.12	-	8.31	2.72	-	6.68
1881	1.67	-	2.75	3.59	4.87	8.55	2.93	-	6.04
1882	1.95	-	3.63	3.54	4.87	8.29	2.75	-	5.72
1883	3.09	-	4.99	3.53	4.56	8.40	3.34	-	6.58
1884	2.26	-	4.11	3.28	5.12	8.94	2.80	-	6.17
1885	1.68	-	3.48	3.58	5.26	9.36	2.58	-	5.91
Average	2.12	-	3.88	3.50	4.94	8.72	2.85	-	6.09
1886	1.85	-	3.89	2.70	4.13	7.12	2.25	-	5.23
1887	1.55	-	3.08	2.95	4.25	7.46	2.20	-	4.86
1888	2.23	-	4.38	2.98	4.10	7.81	2.55	-	5.61
1889	1.77	-	3.44	3.11	4.81	8.45	2.36	-	5.22
1890	2.15	2.85	3.56	3.00	4.50	8.13	2.52	3.50	5.01
Average	1.94	-	3.68	2.96	4.36	7.82	2.39	-	5.19
1891	2.86	3.85	4.94	3.39	5.01	8.45	3.08	4.30	6.06
1892	3.05	4.17	5.06	3.24	4.91	7.97	3.12	4.42	5.98
1893	2.26	3.32	4.07	3.42	5.21	8.43	2.70	4.03	5.39
1894	2.26	3.96	4.65	3.38	5.34	8.57	2.67	4.50	5.91
1895	3.09	4.78	5.46	2.95	4.51	7.26	3.04	4.68	6.00
Average	2.69	4.02	4.84	3.27	4.99	8.12	2.91	4.38	5.87
1896	2.51	3.92	4.45	3.36	5.79	9.22	2.85	4.62	5.85
1897	2.38	3.64	3.99	2.82	5.64	8.04	2.55	4.27	5.08
1898	2.64	3.75	4.06	2.82	5.57	7.70	2.71	4.28	4.97
1899	3.05	3.91	4.25	3.30	5.72	7.63	3.14	4.40	5.08
1900	3.74	4.79	5.32	2.85	5.15	7.16	3.44	4.87	5.72
Average	2.90	4.06	4.46	3.03	5.58	7.94	2.95	4.50	5.34
1901	3.16	4.21	4.74	3.53	5.40	7.60	3.27	4.54	5.40
1902	3.93	5.13	5.58	2.03	5.25	7.25	3.38	5.15	5.81
1903	3.47	4.63	5.07	3.44	5.01	6.94	3.46	4.72	5.47
1904	3.35	4.98	5.26	3.82	5.73	8.13	3.48	5.17	5.88
1905	3.53	5.02	5.14	3.89	5.43	8.29	3.63	5.14	5.78
Average	3.49	4.81	5.17	3.36	5.38	7.69	3.45	4.95	5.67
1906	3.38	4.76	4.72	3.43	5.28	7.81	3.39	4.87	5.27
1907	4.99	6.40	6.46	4.23	5.77	8.27	4.81	6.25	6.78
1908	3.50	5.44	5.42	3.89	5.84	8.14	3.60	5.54	5.97
1909	4.15	5.58	5.46	3.40	4.79	6.99	3.96	5.35	5.73
1910	4.00	5.53	5.32	3.55	4.65	7.11	3.89	5.30	5.62
Average	4.01	5.57	5.50	3.70	5.25	7.67	3.94	5.48	5.89
1911	3.53	5.02	4.82	4.02	4.90	7.73	3.65	4.97	5.35
1912	3.31	4.46	4.04	3.45	4.48	7.12	3.35	4.46	4.53
1913	3.79	4.90	4.53	3.52	4.10	6.75	3.73	4.70	4.89
1914	3.19	4.90	4.40	3.31	4.05	6.55	3.22	4.66	4.78
1915	3.02	4.47	3.80	3.32	4.33	6.58	3.09	4.44	4.27
Average	3.27	4.75	4.31	3.52	4.37	6.95	3.40	4.65	4.76
1916	2.98	3.88	3.33	3.47	4.11	6.34	3.09	3.93	3.77
1917	3.50	4.33	3.83	3.77	3.98	5.84	3.56	4.25	4.14
1918	3.30	3.97	3.50	3.75	3.83	5.58	3.38	3.94	3.80
1919	2.71	4.16	3.62	4.11	4.64	7.21	2.99	4.28	4.19
1920	2.78	3.79	3.13	3.38	3.74	5.48	2.90	3.78	3.45
Average	3.05	4.03	3.48	3.70	4.06	6.07	3.18	4.03	3.86
1921	2.18	4.38	3.48	3.43	3.80	6.05	2.42	4.20	3.94
1922	2.45	5.16	3.99	1.91	3.81	5.49	2.35	4.90	4.16
1923	2.77	4.65	3.46	3.23	3.62	5.45	2.85	4.39	3.74
1924	3.08	5.39	3.94	3.10	3.39	5.64	3.08	4.80	4.20
1925	3.12	4.79	3.53	2.50	4.12	6.47	2.98	4.65	3.84
Average	2.70	4.87	3.67	2.83	3.71	5.80	2.73	4.58	3.96

See footnote at end of table.

TABLE 52. - Coal mine fatality rates for the United States, 1870-1973 <sup>1/</sup> - Continued  
(Includes underground and surface injuries)

Year	Bituminous coal mines			Anthracite mines			Total		
	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined	Per thousand employed	Per thousand 300-day workers	Per million tons mined
1926-----	3.48	4.86	3.60	2.74	3.37	5.36	3.32	4.50	3.83
1927-----	2.93	4.60	3.36	2.96	3.94	6.11	2.94	4.43	3.73
1928-----	3.31	4.90	3.45	2.78	3.85	5.93	3.19	4.64	3.78
1929-----	3.39	4.63	3.19	3.18	4.24	6.53	3.34	4.54	3.59
1930-----	3.28	5.26	3.46	2.94	4.22	6.40	3.20	5.00	3.84
Average-----	3.27	4.84	3.42	2.92	3.90	6.04	3.19	4.61	3.75
1931-----	2.40	4.42	2.83	2.75	4.43	6.42	2.48	4.42	3.31
1932-----	2.36	4.85	3.09	2.05	3.83	4.99	2.29	4.60	3.36
1933-----	1.99	3.58	2.50	2.21	3.58	4.66	2.03	3.58	2.78
1934-----	2.09	3.52	2.67	2.47	3.61	4.69	2.16	3.54	2.94
1935-----	2.09	3.53	2.60	2.66	4.26	5.24	2.20	3.67	2.92
Average-----	2.18	3.93	2.73	2.44	3.96	5.23	2.24	3.93	3.06
1936-----	2.28	3.46	2.52	2.39	3.73	4.46	2.30	3.50	2.73
1937-----	2.44	3.74	2.68	2.17	3.44	4.15	2.40	3.69	2.83
1938-----	1.98	3.68	2.52	2.34	4.08	4.88	2.04	3.76	2.79
1939-----	1.95	3.29	2.19	2.24	3.61	4.11	2.00	3.35	2.41
1940-----	2.73	4.07	2.61	1.99	3.16	3.57	2.60	3.92	2.71
Average-----	2.28	3.65	2.51	2.23	3.60	4.23	2.27	3.64	2.70
1941-----	2.34	3.28	2.08	2.18	3.16	3.58	2.32	3.26	2.22
1942-----	2.77	3.41	2.14	2.75	3.45	3.88	2.77	3.42	2.30
1943-----	3.01	3.44	2.06	2.85	3.17	3.80	2.98	3.39	2.22
1944-----	2.99	3.22	2.86	2.24	2.29	2.74	2.86	3.05	1.90
1945-----	2.53	2.96	1.60	1.96	2.19	2.60	2.44	2.82	1.69
Average-----	2.72	3.27	1.94	2.41	2.84	3.32	2.67	3.20	2.06
1946-----	2.06	2.88	1.49	2.22	2.47	2.86	2.09	2.80	1.63
1947-----	2.39	3.02	1.57	2.20	2.57	3.02	2.36	2.96	1.69
1948-----	2.01	2.73	1.45	1.76	2.00	2.40	1.97	2.60	1.54
1949-----	1.21	2.19	1.21	1.20	1.83	2.11	1.21	1.13	1.22
1950-----	1.35	2.19	1.06	1.25	1.77	2.09	1.33	2.11	1.14
Average-----	1.80	2.65	1.36	1.73	2.16	2.54	1.79	2.56	1.47
1951-----	1.84	2.74	1.28	1.45	2.09	2.41	1.78	2.64	1.37
1952-----	1.33	2.14	.96	1.58	2.29	2.44	1.37	2.16	1.07
1953-----	1.34	2.12	.87	1.15	2.04	2.10	1.31	2.11	.95
1954-----	1.38	2.34	.85	1.48	2.72	2.14	1.40	2.40	.94
1955-----	1.60	2.28	.78	1.74	2.86	2.07	1.61	2.35	.85
Average-----	1.51	2.35	.96	1.46	2.32	2.26	1.50	2.34	1.05
1956-----	1.72	2.43	.79	1.72	2.44	1.74	1.72	2.43	.85
1957-----	1.91	2.78	.87	1.65	2.53	2.00	1.88	2.75	.93
1958-----	1.64	2.70	.79	1.21	1.97	1.51	1.59	2.61	.83
1959-----	1.36	2.19	.60	2.02	3.49	2.29	1.44	2.33	.68
1960-----	1.70	2.68	.70	1.84	3.12	1.85	1.71	2.73	.75
Average-----	1.68	2.56	.76	1.67	2.63	1.87	1.68	2.57	.81
1961-----	1.81	2.80	.68	1.20	1.84	1.09	1.75	2.71	.70
1962-----	1.79	2.73	.62	1.86	2.73	1.52	1.79	2.73	.66
1963-----	1.75	2.58	.55	2.37	3.30	1.74	1.81	2.65	.59
1964-----	1.58	2.24	.45	1.83	2.56	1.37	1.61	2.27	.48
1965-----	1.82	2.58	.49	.72	1.06	.54	1.74	2.47	.49
Average-----	1.75	2.59	.55	1.61	2.34	1.28	1.74	2.57	.58
1966-----	1.67	2.35	.43	.65	.96	.46	1.60	2.27	.43
1967-----	1.62	2.21	.39	1.16	1.59	.73	1.59	2.18	.40
1968-----	2.41	3.27	.57	.58	.80	.35	2.31	3.15	.56
1969-----	1.49	1.99	.34	2.19	2.83	1.27	1.52	2.03	.36
1970-----	1.84	2.43	.43	.84	1.08	.51	1.80	2.38	.43
Average-----	1.80	2.45	.43	1.03	1.41	.65	1.76	2.40	.43
1971-----	1.28	1.71	.32	.99	1.19	.57	1.27	1.69	.32
1972-----	.97	NA	.29	.61	NA	.46	.96	NA	.29
1973-----	.91	NA	.24	.30	NA	.15	.90	NA	.24

NA Not available.

<sup>1/</sup> Before 1910 certain States did not maintain records of injuries. The above rates are based exclusively on tonnage and men employed in States for which injury records are available.

TABLE 53. - Bituminous coal mines: Fatalities, by principal cause of injury, 1906-73 <sup>1/</sup>

Year	Underground workings									Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	All other underground	Total underground	Shaft and slope	Total		
1906	826	192	219	115	52	27	1,431	73	1,504	77	1,581
1907	911	260	911	134	49	99	2,364	59	2,423	111	2,534
1908	829	229	320	109	53	97	1,637	53	1,690	77	1,767
1909	975	240	264	122	52	312	1,965	37	2,002	73	2,075
1910	1,061	295	477	113	76	46	2,068	60	2,128	92	2,220
Average	921	243	438	119	56	116	1,893	56	1,949	86	2,035
1911	1,007	294	331	72	92	44	1,840	31	1,871	86	1,957
1912	943	296	255	70	75	44	1,683	39	1,722	96	1,818
1913	1,007	344	464	63	79	82	2,039	32	2,071	96	2,167
1914	903	309	305	56	86	55	1,714	41	1,755	104	1,859
1915	818	269	270	76	85	35	1,553	30	1,583	100	1,683
Average	936	303	325	67	83	52	1,766	35	1,801	96	1,897
1916	850	330	183	60	81	49	1,553	34	1,587	84	1,671
1917	965	433	319	55	76	60	1,908	44	1,952	162	2,114
1918	1,052	446	103	85	77	76	1,839	41	1,880	149	2,029
1919	878	310	149	57	64	79	1,537	39	1,576	112	1,688
1920	937	342	124	82	70	72	1,627	34	1,661	120	1,781
Average	936	372	176	68	74	67	1,693	38	1,731	126	1,857
1921	782	275	62	74	76	71	1,340	25	1,365	83	1,448
1922	780	286	298	55	71	56	1,546	36	1,582	102	1,684
1923	948	347	330	66	70	64	1,825	31	1,856	97	1,953
1924	846	299	486	46	72	56	1,805	17	1,822	84	1,906
1925	910	310	302	49	80	76	1,727	30	1,757	77	1,834
Average	853	303	296	58	74	65	1,649	27	1,676	89	1,765
1926	994	384	373	46	94	62	1,953	27	1,980	85	2,065
1927	924	309	187	48	94	70	1,632	22	1,654	88	1,742
1928	825	313	347	41	82	54	1,662	13	1,675	54	1,729
1929	922	349	168	45	75	56	1,615	17	1,632	73	1,705
1930	856	285	234	31	63	68	1,537	9	1,546	73	1,619
Average	904	328	262	42	82	62	1,680	17	1,697	75	1,772
1931	624	194	68	15	62	44	1,007	19	1,026	54	1,080
1932	466	146	162	21	42	45	882	13	895	63	958
1933	458	162	27	24	46	45	762	10	772	61	833
1934	539	168	40	21	53	64	885	9	894	64	958
1935	524	198	26	31	43	70	892	13	905	63	968
Average	522	174	65	22	49	54	886	12	898	61	959
1936	624	202	41	31	44	81	1,023	11	1,034	64	1,098
1937	606	244	116	31	52	64	1,113	15	1,128	70	1,198
1938	474	142	84	23	38	53	814	9	823	57	880
1939	500	155	43	15	49	56	818	5	823	44	867
1940	520	192	292	28	30	62	1,124	12	1,136	68	1,204
Average	545	187	115	26	42	63	978	11	989	60	1,049

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1941	552	206	89	24	42	39	42	994	78	1,072
1942	579	253	148	16	51	49	47	1,143	102	1,245
1943	561	253	166	27	33	31	59	1,130	95	1,225
1944	551	239	32	21	27	49	96	1,015	109	1,124
1945	429	216	72	23	20	40	31	831	94	925
Average	534	233	102	22	35	42	55	1,023	95	1,118

See footnotes at end of table.

TABLE 53. - Bituminous coal mines: Fatalities, by principal cause of injury, 1906-73 <sup>1/</sup> - Continued

Year	Underground workings								Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1946-----	420	172	27	12	17	34	29	711	84	795
1947-----	434	213	154	23	20	23	27	894	91	985
1948-----	430	182	44	22	19	22	42	761	101	862
1949-----	259	108	3	14	10	21	10	425	69	494
1950-----	296	121	3	10	11	19	9	469	81	550
Average-----	368	159	46	16	15	24	24	652	85	737
1951-----	284	112	153	7	18	27	17	618	66	684
1952-----	228	109	11	5	10	15	11	389	60	449
1953-----	221	81	9	4	12	14	8	349	48	397
1954-----	168	69	17	5	11	16	5	291	43	334
1955-----	186	69	2	10	15	16	5	303	57	360
Average-----	217	88	39	6	13	18	9	390	55	445
1956-----	208	73	5	8	14	18	16	342	50	392
1957-----	198	56	63	7	11	18	22	375	52	427
1958-----	157	46	41	7	14	12	12	289	<sup>3/</sup> 37	326
1959-----	135	37	10	4	7	13	4	210	36	246
1960-----	145	38	3	3	18	14	25	246	44	290
Average-----	169	50	24	6	13	15	16	293	43	336
1961-----	135	41	26	4	12	12	12	242	33	275
1962-----	105	43	52	4	6	16	-	226	37	263
1963-----	123	37	31	2	5	14	6	218	34	252
1964-----	114	42	3	1	5	17	6	188	30	218
1965-----	126	34	19	1	4	14	17	215	36	251
Average-----	121	40	26	2	6	15	8	218	34	252
1966-----	110	40	10	3	2	12	12	189	38	227
1967-----	94	29	12	2	10	14	5	166	47	213
1968-----	98	31	88	2	17	15	16	267	40	307
1969-----	77	32	-	1	7	18	7	142	48	190
1970-----	84	37	41	2	11	26	4	205	50	255
Average-----	93	34	30	2	9	17	9	194	45	239
1971-----	60	35	2	2	13	21	7	140	36	176
1972-----	49	37	5	2	2	14	12	121	32	153
1973-----	44	30	2	1	5	15	1	98	33	131

<sup>1/</sup> Figures for 1906-09 cover only those States that maintained complete records of fatal injuries. These represented 98 to 99 percent of the total production of coal in the United States. Figures for 1910 to date represent the entire bituminous coal industry.

<sup>2/</sup> Includes fatalities that occurred at all other work locations, including the associated surface works of underground mines, strip mines, and mechanical-cleaning plants; beginning with 1955, includes fatalities in auger mines.

<sup>3/</sup> Includes one surface fatality resulting from a fall of roof underground in Kentucky, 1958.

TABLE 54. - Pennsylvania anthracite mines: Fatalities, by principal cause of injury, 1906-73

Year	Underground workings									Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	All other under- ground	Total under- ground	Shaft and slope	Total		
1906	214	67	46	82	1	27	437	19	456	101	557
1907	294	88	45	87	3	57	574	27	601	107	708
1908	299	90	55	94	1	33	572	24	596	82	678
1909	254	71	31	69	6	49	480	10	490	77	567
1910	253	93	20	82	3	38	489	20	509	92	601
Average	262	82	39	83	3	41	510	20	530	92	622
1911	252	92	34	88	2	126	594	21	615	84	699
1912	243	79	35	77	5	37	476	22	498	103	601
1913	257	85	50	75	1	55	523	30	553	65	618
1914	228	76	44	90	3	45	486	47	533	62	595
1915	261	80	34	79	4	58	516	10	526	60	586
Average	248	83	39	82	3	64	519	26	545	75	620
1916	215	64	43	86	9	57	474	15	489	66	555
1917	265	64	41	55	3	39	467	16	483	99	582
1918	242	66	26	50	11	47	442	11	453	98	551
1919	229	73	42	149	4	49	546	13	559	76	635
1920	197	66	36	49	6	40	394	22	416	75	491
Average	229	67	38	78	7	46	465	15	480	83	563
1921	243	70	64	68	4	50	499	11	510	37	547
1922	128	58	13	38	3	19	259	5	264	36	300
1923	219	73	42	49	5	45	433	15	448	61	509
1924	216	58	50	53	8	45	430	12	442	54	496
1925	170	56	43	53	4	20	346	4	350	50	400
Average	195	63	42	52	5	36	393	10	403	47	450
1926	220	52	49	50	2	39	412	8	420	33	453
1927	225	52	60	62	6	43	448	7	455	34	489
1928	243	52	29	33	6	42	405	12	417	30	447
1929	260	65	27	43	6	31	432	12	444	38	482
1930	243	40	30	47	8	34	402	2	404	40	444
Average	238	52	39	47	6	38	420	8	428	35	463
1931	234	43	20	25	3	23	348	4	352	31	383
1932	161	33	7	15	5	12	233	2	235	14	249
1933	119	32	13	10	7	17	198	6	204	27	231
1934	150	29	12	15	3	25	234	4	238	30	268
1935	140	30	23	19	2	15	229	10	239	35	274
Average	161	33	15	17	4	18	248	5	253	28	281
1936	120	26	16	20	8	26	216	6	222	22	244
1937	120	31	-	14	4	16	185	5	190	25	215
1938	128	23	20	11	2	17	201	3	204	21	225
1939	121	27	3	17	2	15	185	6	191	20	211
1940	105	36	5	8	7	8	169	3	172	12	184
Average	118	29	9	14	5	16	191	5	196	20	216

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1941	91	27	8	12	5	-	29	172	22	194
1942	123	38	9	13	6	1	20	210	16	226
1943	104	36	15	9	2	3	28	197	29	226
1944	68	24	4	16	3	-	36	151	23	174
1945	62	25	4	11	1	1	25	129	14	143
Average	90	30	8	12	3	1	28	172	21	193

See footnote at end of table.

TABLE 54. - Pennsylvania anthracite mines: Fatalities, by principal cause of injury, 1906-73 - Continued

Year	Underground workings								Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust ex- plosions	Explo- sives	Elec- tricity	Machinery	All other under- ground	Total		
1946	93	23	2	8	3	1	22	152	21	173
1947	76	17	35	7	4	-	14	153	20	173
1948	78	14	2	7	1	1	16	119	18	137
1949	52	14	5	3	-	-	9	83	8	91
1950	52	7	5	5	1	-	8	78	15	93
Average	70	15	10	6	2	(2/)	14	117	16	133
1951	43	17	9	5	1	1	13	89	12	101
1952	36	19	4	4	-	2	20	85	14	99
1953	42	2	5	1	2	-	8	60	4	64
1954	36	8	1	-	1	-	5	51	11	62
1955	31	8	2	2	-	-	6	49	11	60
Average	38	11	4	2	1	1	10	67	10	77
1956	31	6	4	1	2	-	4	48	8	56
1957	30	5	3	4	1	-	6	49	2	51
1958	19	-	1	1	-	1	4	26	6	32
1959	18	8	-	2	-	-	13	41	6	47
1960	18	4	-	1	-	-	5	28	7	35
Average	23	5	1	2	1	(2/)	6	38	6	44
1961	9	3	-	1	-	1	-	14	5	19
1962	8	2	-	-	-	-	8	18	8	26
1963	13	2	5	3	-	-	4	27	5	32
1964	9	5	3	3	-	-	2	22	2	24
1965	5	1	-	-	-	-	2	8	-	8
Average	9	3	2	1	-	(2/)	3	18	4	22
1966	5	-	-	-	-	-	-	5	1	6
1967	7	-	-	-	-	1	-	8	1	9
1968	1	-	-	-	-	-	-	1	3	4
1969	1	1	1	-	-	-	4	7	6	13
1970	-	-	-	1	-	-	-	1	4	5
Average	3	(2/)	(2/)	(2/)	-	(2/)	1	4	3	7
1971	1	-	-	-	-	-	-	1	4	5
1972	1	-	-	-	-	-	-	1	2	3
1973	1	-	-	-	-	-	-	1	-	1

1/ Includes strip mines, culm banks, dredges, and mechanical-cleaning plants.

2/ Less than 0.5.

TABLE 55. - All coal mines: Fatalities, by principal cause of injury, 1906-73 <sup>1/</sup>

Year	Underground workings									Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	All other underground	Total underground	Shaft and slope	Total		
1906-----	1,040	259	265	197	53	54	1,868	92	1,960	178	2,138
1907-----	1,205	348	956	221	52	156	2,938	86	3,024	218	3,242
1908-----	1,128	319	375	203	54	130	2,209	77	2,286	159	2,445
1909-----	1,229	311	295	191	58	361	2,445	47	2,492	150	2,642
1910-----	1,314	388	497	195	79	84	2,557	80	2,637	184	2,821
Average-----	1,183	325	477	202	59	157	2,403	76	2,479	178	2,657
1911-----	1,259	386	365	160	94	170	2,434	52	2,486	170	2,656
1912-----	1,186	375	290	147	80	81	2,159	61	2,220	199	2,419
1913-----	1,264	429	514	138	80	137	2,562	62	2,624	161	2,785
1914-----	1,131	385	349	146	89	100	2,200	88	2,288	166	2,454
1915-----	1,079	349	304	155	89	93	2,069	40	2,109	160	2,269
Average-----	1,184	386	364	149	86	116	2,285	61	2,346	171	2,517
1916-----	1,065	394	226	146	90	106	2,027	49	2,076	150	2,226
1917-----	1,230	497	360	110	79	99	2,375	60	2,435	261	2,696
1918-----	1,294	512	129	135	88	123	2,281	52	2,333	247	2,580
1919-----	1,107	383	191	206	68	128	2,083	52	2,135	188	2,323
1920-----	1,134	408	160	131	76	112	2,021	56	2,077	195	2,272
Average-----	1,165	439	214	146	81	113	2,158	53	2,211	209	2,420
1921-----	1,025	345	126	142	80	121	1,839	36	1,875	120	1,995
1922-----	908	344	311	93	74	75	1,805	41	1,846	138	1,984
1923-----	1,167	420	372	115	75	109	2,258	46	2,304	158	2,462
1924-----	1,062	357	536	99	80	101	2,235	29	2,264	138	2,402
1925-----	1,080	366	345	102	84	96	2,073	34	2,107	127	2,234
Average-----	1,048	366	338	110	79	101	2,042	37	2,079	136	2,215
1926-----	1,214	436	422	96	96	101	2,365	35	2,400	118	2,518
1927-----	1,149	361	247	110	100	113	2,080	29	2,109	122	2,231
1928-----	1,068	365	376	74	88	96	2,067	25	2,092	84	2,176
1929-----	1,182	414	195	88	81	87	2,047	29	2,076	111	2,187
1930-----	1,099	325	264	78	71	102	1,939	11	1,950	113	2,063
Average-----	1,142	380	301	89	88	100	2,100	25	2,125	110	2,235
1931-----	858	237	88	40	65	67	1,355	23	1,378	85	1,463
1932-----	627	179	169	36	47	57	1,115	15	1,130	77	1,207
1933-----	577	194	40	34	53	62	960	16	976	88	1,064
1934-----	689	197	52	36	56	89	1,119	13	1,132	94	1,226
1935-----	664	228	49	50	45	85	1,121	23	1,144	98	1,242
Average-----	683	207	80	39	53	72	1,134	17	1,151	89	1,240
1936-----	744	228	57	51	52	107	1,239	17	1,256	86	1,342
1937-----	726	275	116	45	56	80	1,298	20	1,318	95	1,413
1938-----	602	165	104	34	40	70	1,015	12	1,027	78	1,105
1939-----	621	182	46	32	51	71	1,003	11	1,014	64	1,078
1940-----	625	228	297	36	37	70	1,293	15	1,308	80	1,388
Average-----	663	216	124	40	47	79	1,169	16	1,185	80	1,265

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1941-----	643	233	97	36	47	39	71	1,166	100	1,266
1942-----	702	291	157	29	57	50	67	1,353	118	1,471
1943-----	665	289	181	36	35	34	87	1,327	124	1,451
1944-----	619	263	36	37	30	49	132	1,166	132	1,298
1945-----	491	241	76	34	21	41	56	960	108	1,068
Average-----	624	263	110	34	38	43	83	1,195	116	1,311

See footnotes at end of table.

TABLE 55. - All coal mines: Fatalities, by principal cause of injury, 1906-73 <sup>1/</sup> - Continued

Year	Underground workings								Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1946-----	513	195	29	20	20	35	51	863	105	968
1947-----	510	230	189	30	24	23	41	1,047	111	1,158
1948-----	508	196	46	29	20	23	58	880	119	999
1949-----	311	122	8	17	10	21	19	508	77	585
1950-----	348	128	8	15	12	19	17	547	96	643
Average-----	438	174	56	22	17	24	38	769	101	870
1951-----	327	129	162	12	19	28	30	707	78	785
1952-----	264	128	15	9	10	17	31	474	74	548
1953-----	263	83	14	5	14	14	16	409	52	461
1954-----	204	77	18	5	12	16	10	342	54	396
1955-----	217	77	4	12	15	16	11	352	68	420
Average-----	255	99	43	8	14	19	19	457	65	522
1956-----	239	79	9	9	16	18	20	390	58	448
1957-----	228	61	66	11	12	18	28	424	54	478
1958-----	176	46	42	8	14	13	16	315	<sup>3/</sup> 43	358
1959-----	153	45	10	6	7	13	17	251	42	293
1960-----	163	42	3	4	18	14	30	274	51	325
Average-----	192	55	25	8	14	15	22	331	49	380
1961-----	144	44	26	5	12	13	12	256	38	294
1962-----	113	45	52	4	6	16	8	244	45	289
1963-----	136	39	36	5	5	14	10	245	39	284
1964-----	123	47	6	4	5	17	8	210	32	242
1965-----	131	35	19	1	4	14	19	223	36	259
Average-----	130	43	28	3	6	15	11	236	38	274
1966-----	115	40	10	3	2	12	12	194	39	233
1967-----	101	29	12	2	10	15	5	174	48	222
1968-----	99	31	88	2	17	15	16	268	43	311
1969-----	78	33	1	1	7	18	11	149	54	203
1970-----	84	37	41	3	11	26	4	206	54	260
Average-----	96	34	30	2	9	17	10	198	48	246
1971-----	61	35	2	2	13	21	7	141	40	181
1972-----	50	37	5	2	2	14	12	122	34	156
1973-----	45	30	2	1	5	15	1	99	33	132

<sup>1/</sup> Figures for 1906-09 cover only those States that maintained complete records of fatal injuries. These represented 98 to 99 percent of the total production of coal in the United States. Figures for 1910 to date represent the entire coal industry.

<sup>2/</sup> Includes fatalities that occurred at all other work locations, including the associated surface works of underground mines, strip mines, culm banks, dredges, and mechanical-cleaning plants; beginning with 1955, includes fatalities in sugar mines.

<sup>3/</sup> Includes one surface fatality resulting from a fall of roof underground in a bituminous coal mine in Kentucky, 1958.

TABLE 56. - Bituminous coal mines: Percentage distribution of fatalities,  
by principal cause of injury, 1906-73 <sup>1/</sup>

Year	Underground workings									Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	All other underground	Total underground	Shaft and slope	Total		
1906	52.2	12.1	13.9	7.3	3.3	1.7	90.5	4.6	95.1	4.9	100.0
1907	36.0	10.3	36.0	5.2	1.9	3.9	93.3	2.3	95.6	4.4	100.0
1908	46.9	13.0	18.1	6.1	3.0	5.5	92.6	3.0	95.6	4.4	100.0
1909	47.0	11.6	12.7	5.9	2.5	15.0	94.7	1.8	96.5	3.5	100.0
1910	47.8	13.3	21.5	5.1	3.4	2.1	93.2	2.7	95.9	4.1	100.0
Average	45.3	11.9	21.5	5.8	2.8	5.7	93.0	2.8	95.8	4.2	100.0
1911	51.5	15.0	16.9	3.7	4.7	2.2	94.0	1.6	95.6	4.4	100.0
1912	51.9	16.3	14.0	3.9	4.1	2.4	92.6	2.1	94.7	5.3	100.0
1913	46.5	15.9	21.4	2.9	3.6	3.8	94.1	1.5	95.6	4.4	100.0
1914	48.6	16.6	16.4	3.0	4.6	3.0	92.2	2.2	94.4	5.6	100.0
1915	48.6	16.0	16.0	4.5	5.1	2.1	92.3	1.8	94.1	5.9	100.0
Average	49.3	16.0	17.1	3.5	4.4	2.8	93.1	1.8	94.9	5.1	100.0
1916	50.9	19.7	11.0	3.6	4.8	2.9	92.9	2.1	95.0	5.0	100.0
1917	45.7	20.5	15.1	2.6	3.6	2.8	90.3	2.0	92.3	7.7	100.0
1918	51.8	22.0	5.1	4.2	3.8	3.7	90.6	2.1	92.7	7.3	100.0
1919	52.0	18.4	8.8	3.4	3.8	4.7	91.1	2.3	93.4	6.6	100.0
1920	52.6	19.2	7.0	4.6	3.9	4.1	91.4	1.9	93.3	6.7	100.0
Average	50.4	20.0	9.5	3.7	4.0	3.6	91.2	2.0	93.2	6.8	100.0
1921	54.0	19.0	4.3	5.1	5.2	4.9	92.5	1.8	94.3	5.7	100.0
1922	46.3	17.0	17.7	3.3	4.2	3.3	91.8	2.1	93.9	6.1	100.0
1923	48.5	17.8	16.9	3.3	3.6	3.3	93.4	1.6	95.0	5.0	100.0
1924	44.4	15.7	25.5	2.4	3.8	2.9	94.7	.9	95.6	4.4	100.0
1925	49.6	16.9	16.5	2.7	4.4	4.1	94.2	1.6	95.8	4.2	100.0
Average	48.3	17.1	16.8	3.3	4.2	3.7	93.4	1.6	95.0	5.0	100.0
1926	48.1	18.6	18.1	2.2	4.6	3.0	94.6	1.3	95.9	4.1	100.0
1927	53.1	17.7	10.7	2.8	5.4	4.0	93.7	1.2	94.9	5.1	100.0
1928	47.7	18.1	20.1	2.4	4.7	3.1	96.1	.8	96.9	3.1	100.0
1929	54.1	20.5	9.9	2.6	4.4	3.2	94.7	1.0	95.7	4.3	100.0
1930	52.9	17.6	14.4	1.9	3.9	4.2	94.9	.6	95.5	4.5	100.0
Average	51.0	18.5	14.8	2.4	4.6	3.5	94.8	1.0	95.8	4.2	100.0
1931	57.8	18.0	6.3	1.4	5.7	4.0	93.2	1.8	95.0	5.0	100.0
1932	48.7	15.2	16.9	2.2	4.4	4.7	92.1	1.3	93.4	6.6	100.0
1933	55.0	19.4	3.3	2.9	5.5	5.4	91.5	1.2	92.7	7.3	100.0
1934	56.3	17.5	4.2	2.2	5.5	6.7	92.4	.9	93.3	6.7	100.0
1935	54.1	20.5	2.7	3.2	4.4	7.2	92.1	1.4	93.5	6.5	100.0
Average	54.4	18.2	6.8	2.3	5.1	5.6	92.4	1.2	93.6	6.4	100.0
1936	56.8	18.4	3.8	2.8	4.0	7.4	93.2	1.0	94.2	5.8	100.0
1937	50.6	20.4	9.7	2.6	4.3	5.3	92.9	1.3	94.2	5.8	100.0
1938	53.9	16.1	9.6	2.6	4.3	6.0	92.5	1.0	93.5	6.5	100.0
1939	57.7	17.9	4.9	1.7	5.7	6.4	94.3	.6	94.9	5.1	100.0
1940	43.2	15.9	24.3	2.3	2.5	5.2	93.4	1.0	94.4	5.6	100.0
Average	51.9	17.8	11.0	2.5	4.0	6.0	93.2	1.1	94.3	5.7	100.0

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1941	51.5	19.2	8.3	2.2	3.9	3.7	3.9	92.7	7.3	100.0
1942	46.5	20.3	11.9	1.3	4.1	3.9	3.8	91.8	8.2	100.0
1943	45.8	20.6	13.6	2.2	2.7	2.5	4.8	92.2	7.8	100.0
1944	49.0	21.3	2.8	1.9	2.4	4.4	8.5	90.3	9.7	100.0
1945	46.4	23.3	7.8	2.5	2.2	4.3	3.3	89.8	10.2	100.0
Average	47.8	20.8	9.1	2.0	3.1	3.8	4.9	91.5	8.5	100.0

See footnotes at end of table.

TABLE 56. - Bituminous coal mines: Percentage distribution of fatalities,  
by principal cause of injury, 1906-73 <sup>1/</sup> - Continued

Year	Underground workings								Surface <sup>2/</sup>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1946-----	52.8	21.6	3.4	1.5	2.1	4.3	3.7	89.4	10.6	100.0
1947-----	44.1	21.6	15.6	2.3	2.0	2.4	2.8	90.8	9.2	100.0
1948-----	49.9	21.1	5.1	2.6	2.2	2.5	4.9	88.3	11.7	100.0
1949-----	52.4	21.9	.6	2.8	2.0	4.3	2.0	86.0	14.0	100.0
1950-----	53.8	22.0	.6	1.8	2.0	3.5	1.6	85.3	14.7	100.0
Average-----	49.9	21.6	6.2	2.2	2.0	3.3	3.3	88.5	11.5	100.0
1951-----	41.5	16.4	22.4	1.0	2.6	4.0	2.5	90.4	9.6	100.0
1952-----	50.8	24.2	2.5	1.1	2.2	3.3	2.5	86.6	13.4	100.0
1953-----	55.7	20.4	2.3	1.0	3.0	3.5	2.0	87.9	12.1	100.0
1954-----	50.3	20.6	5.1	1.5	3.3	4.8	1.5	87.1	12.9	100.0
1955-----	51.6	19.2	.6	2.8	4.2	4.4	1.4	84.2	15.8	100.0
Average-----	48.8	19.8	8.8	1.4	2.9	4.0	2.0	87.7	12.3	100.0
1956-----	53.0	18.6	1.3	2.0	3.6	4.6	4.1	87.2	12.8	100.0
1957-----	46.4	13.1	14.8	1.6	2.6	4.2	5.1	87.8	12.2	100.0
1958-----	48.1	14.1	12.6	2.1	4.3	3.7	3.7	88.6	11.4	100.0
1959-----	54.9	15.0	4.1	1.6	2.9	5.3	1.6	85.4	14.6	100.0
1960-----	50.0	13.1	1.0	1.0	6.2	4.9	8.6	84.8	15.2	100.0
Average-----	50.3	14.9	7.1	1.8	3.9	4.5	4.7	87.2	12.8	100.0
1961-----	49.0	14.9	9.5	1.4	4.4	4.4	4.4	88.0	12.0	100.0
1962-----	39.9	16.3	19.8	1.5	2.3	6.1	-	85.9	14.1	100.0
1963-----	48.8	14.7	12.3	.8	2.0	5.5	2.4	86.5	13.5	100.0
1964-----	52.2	19.3	1.4	.5	2.3	7.8	2.7	86.2	13.8	100.0
1965-----	50.2	13.5	7.6	.4	1.6	5.6	6.8	85.7	14.3	100.0
Average-----	48.0	15.9	10.3	.8	2.4	5.9	3.2	86.5	13.5	100.0
1966-----	48.5	17.6	4.4	1.3	.9	5.3	5.3	83.3	16.7	100.0
1967-----	44.1	13.6	5.6	.9	4.7	6.6	2.4	77.9	22.1	100.0
1968-----	31.9	10.1	28.7	.7	5.5	4.9	5.2	87.0	13.0	100.0
1969-----	40.5	16.8	-	.5	3.7	9.5	3.7	74.7	25.3	100.0
1970-----	32.9	14.5	16.1	.8	4.3	10.2	1.6	80.4	19.6	100.0
Average-----	38.9	14.2	12.6	.8	3.8	7.1	3.8	81.2	18.8	100.0
1971-----	34.1	19.9	1.1	1.1	7.4	11.9	4.0	79.5	20.5	100.0
1972-----	32.0	24.2	3.3	1.3	1.3	9.2	7.8	79.1	20.9	100.0
1973-----	33.5	22.9	1.5	.8	3.8	11.5	.8	74.8	25.2	100.0

<sup>1/</sup> Figures for 1906-09 cover only those States that maintained complete records of fatal injuries. These represented 98 to 99 percent of the total production of coal in the United States. Figures for 1910 to date represent the entire bituminous coal industry.

<sup>2/</sup> Includes fatalities that occurred at all other work locations, including the associated surface works of underground mines, strip mines, and mechanical-cleaning plants; beginning with 1955, includes fatalities in auger mines.

TABLE 57. - Pennsylvania anthracite mines: Percentage distribution of fatalities, by principal cause of injury, 1906-73

Year	Underground workings									Surface <u>1/</u>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	All other underground	Total underground	Shaft and slope	Total		
1906	38.4	12.0	8.3	14.7	0.2	4.9	78.5	3.4	81.9	18.1	100.0
1907	41.5	12.4	6.4	12.3	.4	8.1	81.1	3.8	84.9	15.1	100.0
1908	44.1	13.3	8.1	13.9	.1	4.9	84.4	3.5	87.9	12.1	100.0
1909	44.8	12.5	5.5	12.2	1.1	8.6	86.7	1.7	86.4	13.6	100.0
1910	42.1	15.5	3.3	13.7	.5	6.3	81.4	3.3	84.7	15.3	100.0
Average	42.1	13.2	6.3	13.3	.5	6.6	82.0	3.2	85.2	14.8	100.0
1911	36.1	13.2	4.9	12.6	.2	18.0	85.0	3.0	88.0	12.0	100.0
1912	40.4	13.2	5.8	12.8	.8	6.2	79.2	3.7	82.9	17.1	100.0
1913	41.6	13.8	8.1	12.1	.1	8.9	84.6	4.9	89.5	10.5	100.0
1914	38.3	12.8	7.4	15.1	.5	7.6	81.7	7.9	89.6	10.4	100.0
1915	44.5	13.7	5.8	13.5	.7	9.9	88.1	1.7	89.8	10.2	100.0
Average	40.0	13.4	6.3	13.2	.5	10.3	83.7	4.2	87.9	12.1	100.0
1916	38.7	11.5	7.8	15.5	1.6	10.3	85.4	2.7	88.1	11.9	100.0
1917	45.5	11.0	7.0	9.5	.5	6.7	80.2	2.8	83.0	17.0	100.0
1918	43.9	12.0	4.7	9.1	2.0	8.5	80.2	2.0	82.2	17.8	100.0
1919	36.1	11.5	6.6	23.5	.6	7.7	86.0	2.0	88.0	12.0	100.0
1920	40.1	13.5	7.3	10.0	1.2	8.1	80.2	4.5	84.7	15.3	100.0
Average	40.7	11.9	6.7	14.0	1.1	8.2	82.6	2.7	85.3	14.7	100.0
1921	44.4	12.8	11.7	12.4	.7	9.2	91.2	2.0	93.2	6.8	100.0
1922	42.7	19.3	4.3	12.7	1.0	6.3	86.3	1.7	88.0	12.0	100.0
1923	43.0	14.3	8.3	9.6	1.0	8.9	85.1	2.9	88.0	12.0	100.0
1924	43.5	11.7	10.1	10.7	1.6	9.1	86.7	2.4	89.1	10.9	100.0
1925	42.5	14.0	10.8	13.2	1.0	5.0	86.5	1.0	87.5	12.5	100.0
Average	43.3	14.0	9.3	11.6	1.1	8.0	87.3	2.3	89.6	10.4	100.0
1926	48.6	11.5	10.8	11.0	.4	8.6	90.9	1.8	92.7	7.3	100.0
1927	46.0	10.6	12.3	12.7	1.2	8.8	91.6	1.4	93.0	7.0	100.0
1928	54.4	11.6	6.5	7.4	1.3	9.4	90.6	2.7	93.3	6.7	100.0
1929	53.9	13.5	5.6	8.9	1.2	6.5	89.6	2.5	92.1	7.9	100.0
1930	54.7	9.0	6.8	10.6	1.8	7.6	90.5	.5	91.0	9.0	100.0
Average	51.4	11.2	8.4	10.2	1.3	8.2	90.7	1.7	92.4	7.6	100.0
1931	61.1	11.2	5.2	6.6	.8	6.0	90.9	1.0	91.9	8.1	100.0
1932	64.7	13.3	2.8	6.0	2.0	4.8	93.6	.8	94.4	5.6	100.0
1933	51.5	13.9	5.6	4.3	3.0	7.4	85.7	2.6	88.3	11.7	100.0
1934	56.0	10.8	4.5	5.6	1.1	9.3	87.3	1.5	88.8	11.2	100.0
1935	51.1	11.0	8.4	6.9	.7	5.5	83.6	3.6	87.2	12.8	100.0
Average	57.3	11.8	5.3	6.1	1.4	6.4	88.3	1.7	90.0	10.0	100.0
1936	49.2	10.7	6.6	8.2	3.2	10.6	88.5	2.5	91.0	9.0	100.0
1937	55.8	14.4	-	6.5	1.9	7.4	86.0	2.4	88.4	11.6	100.0
1938	56.9	10.2	8.9	4.9	.9	7.5	89.3	1.4	90.7	9.3	100.0
1939	57.3	12.8	1.4	8.1	1.0	7.1	87.7	2.8	90.5	9.5	100.0
1940	57.1	19.6	2.7	4.3	3.8	4.3	91.8	1.7	93.5	6.5	100.0
Average	54.6	13.4	4.2	6.5	2.3	7.4	88.4	2.3	90.7	9.3	100.0

NOTE: Beginning with 1941, the cause classification in this historical series is changed as follows: (1) Fatalities in shafts and slopes have been included in "Underground workings" and are distributed according to the specified causes; prior to 1941 these deaths were grouped and shown as "Shaft and slope." (2) Fatalities from underground machinery accidents are grouped and shown separately; prior to 1941 such deaths were included in "All other underground." (3) Fatalities from roof or face falls caused by haulage equipment or machinery knocking out roof-support have been included in the respective haulage or machinery classifications; prior to 1941 such deaths were included in "Falls of roof and face." (4) Fatalities from pressure bumps and bursts and from inrush of water or material are included in "All other underground;" prior to 1941 such deaths were included in "Falls of roof and face."

Year	Underground workings								Surface <u>1/</u>	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1941	46.9	13.9	4.1	6.2	2.6	-	15.0	88.7	11.3	100.0
1942	54.4	16.8	4.0	5.8	2.7	0.4	8.8	92.9	7.1	100.0
1943	46.0	15.9	6.6	4.0	.9	1.4	12.4	87.2	12.8	100.0
1944	39.1	13.8	2.3	9.2	1.7	-	20.7	86.8	13.2	100.0
1945	43.3	17.5	2.8	7.7	.7	.7	17.5	90.2	9.8	100.0
Average	46.6	15.6	4.1	6.2	1.6	.5	14.5	89.1	10.9	100.0

See footnote at end of table.

TABLE 57. - Pennsylvania anthracite mines: Percentage distribution of fatalities, by principal cause of injury, 1906-73 - Continued

Year	Underground workings								Surface 1/	Grand total
	Falls of roof and face	Haulage	Gas or dust explosions	Explosives	Electricity	Machinery	All other underground	Total		
1946	53.8	13.3	1.2	4.6	1.7	0.6	12.7	87.9	12.1	100.0
1947	43.9	9.8	20.2	4.1	2.3	-	8.1	88.4	11.6	100.0
1948	57.0	10.2	1.5	5.1	.7	.7	11.7	86.9	13.1	100.0
1949	57.1	15.4	5.5	3.3	-	-	9.9	91.2	8.8	100.0
1950	55.9	7.5	5.4	5.4	1.1	-	8.6	83.9	16.1	100.0
Average	52.7	11.3	7.5	4.5	1.5	(2/)	10.5	88.0	12.0	100.0
1951	42.6	16.8	8.9	5.0	1.0	1.0	12.8	88.1	11.9	100.0
1952	36.3	19.2	4.1	4.1	-	2.0	20.2	85.9	14.1	100.0
1953	65.7	3.1	7.8	1.6	3.1	-	12.5	93.8	6.2	100.0
1954	58.1	12.9	1.6	-	1.6	-	8.1	82.3	17.7	100.0
1955	51.7	13.4	3.3	3.3	-	-	10.0	81.7	18.3	100.0
Average	49.3	14.3	5.2	2.6	1.3	1.3	13.0	87.0	13.0	100.0
1956	55.4	10.7	7.1	1.8	3.6	-	7.1	85.7	14.3	100.0
1957	58.8	9.8	5.9	7.8	2.0	-	11.8	96.1	3.9	100.0
1958	59.4	-	3.1	3.1	-	3.1	12.5	81.2	18.8	100.0
1959	38.3	17.0	-	4.3	-	-	27.6	87.2	12.8	100.0
1960	51.4	11.5	-	2.8	-	-	14.3	80.0	20.0	100.0
Average	52.3	11.4	4.5	4.5	(2/)	(2/)	13.7	86.4	13.6	100.0
1961	47.3	15.8	-	5.3	-	5.3	-	73.7	26.3	100.0
1962	30.8	7.6	-	-	-	-	30.8	69.2	30.8	100.0
1963	40.6	6.3	15.6	9.4	-	-	12.5	84.4	15.6	100.0
1964	37.5	20.9	12.5	12.5	-	-	8.3	91.7	8.3	100.0
1965	62.5	12.5	-	-	-	-	25.0	100.0	-	100.0
Average	40.9	13.6	9.1	4.6	-	(2/)	13.6	81.8	18.2	100.0
1966	83.3	-	-	-	-	-	-	83.3	16.7	100.0
1967	77.8	-	-	-	-	11.1	-	88.9	11.1	100.0
1968	25.0	-	-	-	-	-	-	25.0	75.0	100.0
1969	7.7	7.7	-	-	-	-	30.7	53.8	46.2	100.0
1970	-	-	-	20.0	-	-	-	20.0	80.0	100.0
Average	42.8	(2/)	(2/)	(2/)	-	(2/)	14.4	57.2	42.8	100.0
1971	20.0	-	-	-	-	-	-	20.0	80.0	100.0
1972	33.3	-	-	-	-	-	-	33.3	66.7	100.0
1973	100.0	-	-	-	-	-	-	100.0	-	100.0

1/ Includes strip mines, culm banks, dredges, and mechanical-cleaning plants.

2/ Less than 0.05.