

**UNITED STATES DEPARTMENT OF LABOR**

*L. B. Schwollenbach, Secretary*

**BUREAU OF LABOR STATISTICS**

*Isador Lubin, Commissioner (on leave)*

*A. F. Hinrichs, Acting Commissioner*



# Work Injuries in the United States During 1944



*Bulletin No. 849*

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## Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,  
BUREAU OF LABOR STATISTICS,  
Washington, D. C., October 19, 1945.

THE SECRETARY OF LABOR:

I have the honor to transmit herewith a report on work injuries in the United States during 1944. This information is based on reports from over 56,000 establishments.

This bulletin, a portion of which appeared in the October 1945 Monthly Labor Review, was prepared in the Bureau's Division of Industrial Hazards by Max D. Kossoris.

A. F. HINRICHS, *Acting Commissioner.*

HON. L. B. SCHWELLENBACH,  
*Secretary of Labor.*

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*Bulletin No. 849 of the  
United States Bureau of Labor Statistics*

[Reprinted from the MONTHLY LABOR REVIEW, October 1945, with additional data]

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## Work Injuries in the United States During 1944

### *Summary*

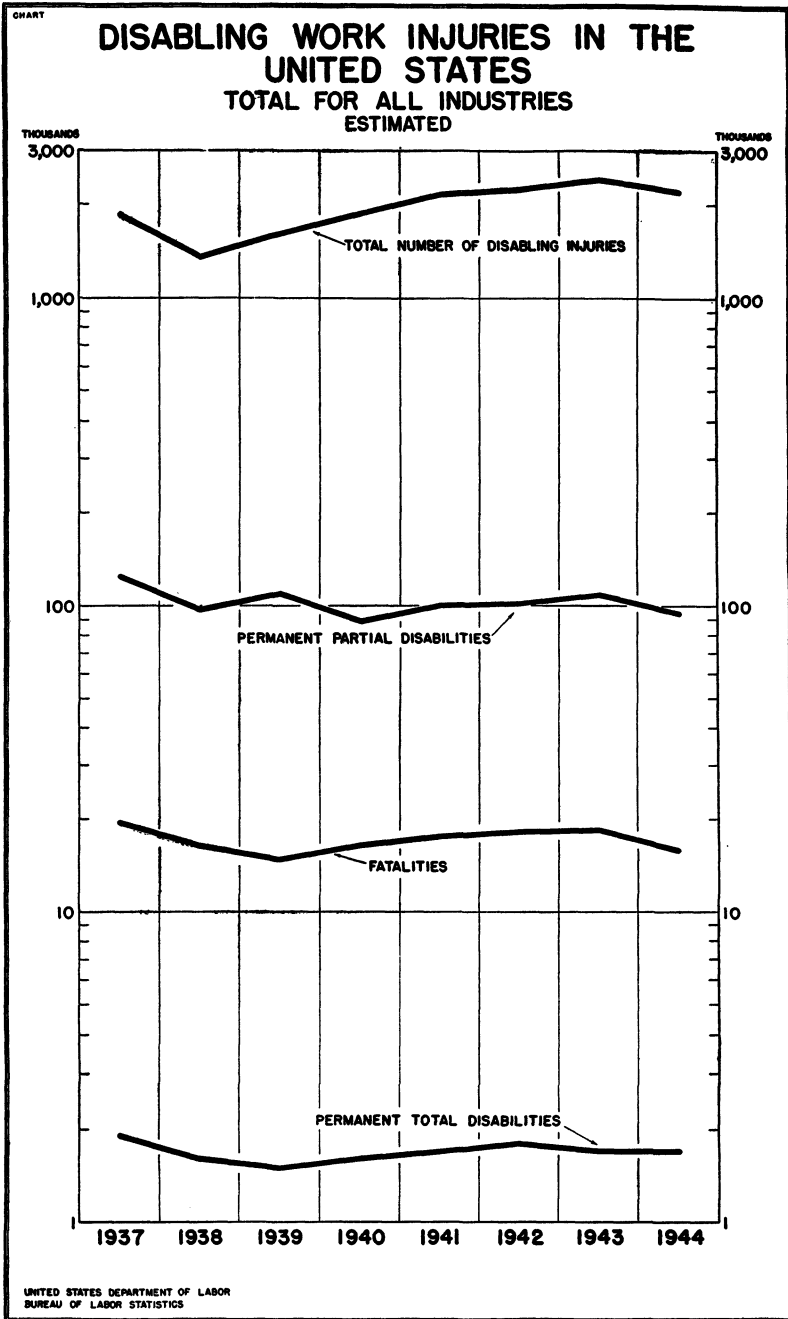
MORE than 2½ million workers were disabled during 1944 because of work injuries which occurred during that year, according to estimates of the Bureau of Labor Statistics. The total of 2,230,400 injuries, however, is 7.7 percent lower than the 1943 total, and marks the reversal of the continuous upward trend in the injury total since 1938 when work injuries numbered 1,375,600. During 1941, the last pre-war year, the injury total was 2,180,200. This figure increased to 2,267,700 in 1942, and reached a peak of 2,414,000 during 1943.

The 7.7-percent decrease in work injuries more than offset a 3-percent decrease in employment from the 1943 level and thus reflects an actual improvement in the work-injury situation.

During a year marked with acute manpower shortages and heavy demands by the armed services, industrial injuries are estimated to have caused an actual time loss of 43,614,400 employee-days. This was equivalent to full annual employment for about 145,000 workers. If standard economic time charges are added for deaths and permanent impairments in order to reflect the ultimate losses occasioned by these injuries, the total time loss caused by disabling injuries mounts to 222,944,000 employee-days, or full-time annual employment for 743,000 persons.

Fatalities decreased more sharply than the other types of disabilities. The estimated total of 15,900 is nearly 14 percent lower than the estimate of 18,400 for 1943. Most of the decrease is attributable to the sharp curtailment of construction during 1944. Permanent total disabilities remained at the 1943 figure of 1,700. Permanent partial impairments, however, are estimated to have dropped from the 1943 level of 108,000 to 94,000. Similarly, temporary total disabilities are estimated to have dropped from 2,285,900 in 1943 to 2,118,400 in 1944, a decrease of about 7 percent.

The injury-frequency rate in manufacturing, as a group, showed a decided improvement. The rate was 18.4 disabling injuries per million employee-hours worked, a decrease of 8 percent from the 1943 level of 20.0. The distribution of injuries by extent of disability remained about the same; 0.5 percent resulted in death or permanent total disability, 4.4 percent in permanent partial impairments, and 95.1 percent in temporary total disabilities. No marked changes occurred in



the average time charges—952 days per permanent partial impairment and 17 days per temporary total disability. By far the largest group of permanent impairments (76 percent of all disabilities) affected hands or fingers, 7 percent affected feet or toes, 5 percent the eyes, and 3 percent legs and arms.

### *Estimates of Disabling Work Injuries*

The more comprehensive data available at this time for estimating purposes indicate no need for revision in the preliminary estimates made some months ago.<sup>2</sup> In the one group in which later data were very much more comprehensive than the data used for the preliminary estimates, the revised injury total equaled the earlier estimate exactly.

The estimate of 2,230,400 work injuries in all industrial activities of the United States is nearly 8 percent below the estimate of 2,414,000 for 1943. Fatalities are estimated to have decreased to 15,900, which is nearly 14 percent less than the estimate of 18,400 for 1943. More than half of this decrease is traceable to the sharp curtailment of construction activities during 1944. There was practically no heavy or highway construction during 1944, and little building construction. The total of all disabling injuries in this industry is estimated to have dropped from 260,100 in 1943 to 99,600 in 1944.

#### *Estimated Number of Disabling Injuries During 1944, by Industry Groups*

[Difference between number of total injuries and injuries to employees represents injuries to self-employed workers]

Industry group	All disabilities		Fatalities		Permanent total disabilities		Permanent partial disabilities		Temporary total disabilities	
	Total	To employees	Total	To employees	Total	To employees	Total	To employees	Total	To employees
All groups .....	2, 230, 400	1, 802, 100	15, 900	11, 200	1, 700	1, 400	94, 400	76, 000	2, 118, 400	1, 713, 500
Agriculture <sup>1</sup> .....	311, 900	75, 400	4, 800	1, 200	400	100	15, 600	3, 700	291, 100	70, 400
Mining and quarrying <sup>2</sup> .....	92, 100	87, 300	1, 700	1, 600	200	200	4, 000	3, 800	86, 200	81, 700
Construction <sup>3</sup> .....	99, 600	60, 000	1, 100	700	100	100	3, 600	2, 200	94, 800	57, 000
Manufacturing <sup>4</sup> .....	786, 900	773, 500	2, 900	2, 800	300	300	35, 400	34, 800	748, 300	735, 600
Public utilities .....	19, 300	19, 300	400	400	( <sup>5</sup> )	( <sup>5</sup> )	500	500	18, 400	18, 400
Trade <sup>5</sup> .....	273, 800	219, 000	700	600	100	100	6, 000	5, 000	267, 000	213, 300
Railroads <sup>6</sup> .....	92, 400	92, 400	1, 200	1, 200	300	300	6, 400	6, 400	84, 500	84, 500
Miscellaneous transportation <sup>3</sup> .....	135, 100	116, 000	900	700	100	100	4, 100	3, 500	130, 000	111, 700
Services, government, and miscellaneous industries <sup>3</sup> .....	419, 300	359, 200	2, 200	2, 000	200	200	18, 800	16, 100	398, 100	340, 900

<sup>1</sup> Based on fragmentary data.

<sup>2</sup> Based largely on Bureau of Mines data.

<sup>3</sup> Based on small sample studies.

<sup>4</sup> Based on comprehensive survey.

<sup>5</sup> Less than 50.

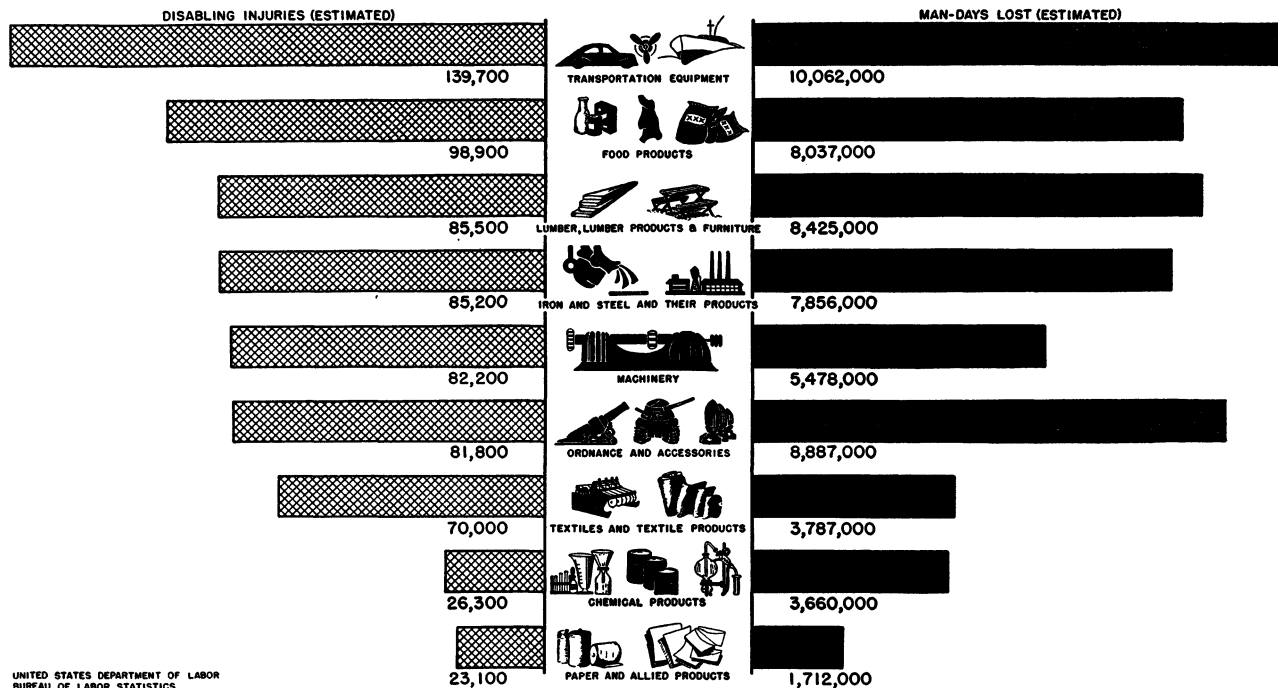
<sup>6</sup> Based on Interstate Commerce Commission data.

Manufacturing heads the list of the individual industry groups, with about 786,900 disabling work injuries, of which 773,500 occurred to employed workers and the remainder to self-employed workers. Of these injuries 2,900 resulted fatally, 300 were permanent total disabilities, 35,400 were permanent partial impairments, and 748,300 were temporary total disabilities.

<sup>2</sup> See *Industrial Injuries in 1944: Preliminary Estimates*, in *Monthly Labor Review*, March 1945.

CHART 2

# MANUFACTURING INDUSTRIES EXPERIENCING MORE THAN 20,000 INDUSTRIAL INJURIES IN 1944



UNITED STATES DEPARTMENT OF LABOR  
BUREAU OF LABOR STATISTICS

The estimates for agriculture are identical with those for 1943. The 4,800 fatalities exceed those of any other major industry group. As the foregoing table indicates, however, the estimates for this industry are based on fragmentary data. Little is known about the work-injury problems in farming, in which available data indicate that nearly 312,000 persons were injured, 4,800 of them fatally, and another 16,000 permanently impaired in a single year.

In mining and quarrying, the total of 92,100 is about 4 percent below the 1943 estimate of 96,400. The total figure for public utilities is slightly below that for 1943, whereas that for trade shows a slight increase. The injury total for railroads, however, indicates an increase from 85,400 disabling injuries in 1943 to 92,400 in 1944, a rise of 8 percent. On the other hand, the injury level for miscellaneous transportation, i. e., transportation other than that covered by railroads, decreased from 146,000 in 1943 to 135,100 in 1944.

In the group with the second largest injury total—services, government, and miscellaneous activities not included in any of the other industry groups—the 1944 injury total remained at about the 1943 level. The 1944 injuries totaled 419,300, of which 2,200 were fatalities, 19,000 permanent impairments (200 of these being permanent total disabilities), and 398,100 temporary disabilities.

### *Injury-Frequency Rates*

The injury-frequency rates shown in this survey are for all establishments from which reports were received for the year 1944. The same procedure was followed in 1943. The rates are considered to be fairly representative of each industry's experience during each year. The plants covered, however, are not identical in successive years. As the number of plants in an industry increases, the size of the reporting group is also increased, in order to maintain a sample group containing about 40 percent or more of the total number of employees in each industry.

A comparison of 1944 rates with those for 1943, therefore, reflects total changes in the injury experience in any one industry.

In 81 of the industries surveyed, rates for 1944 are lower than those for 1943. In 69 industries they are higher, and in 5 there were either no changes at all or changes of less than 0.1 percent.

The 1944 industry survey also includes five industries or services not formerly shown: Synthetic rubber, distilleries, restaurants, and municipal fire and police departments.

### MANUFACTURING

Occupying its customary first place in the list of industries with high frequency rates is logging, with a rate of 85.4. The sawmill industry is in its customary second place, with a rate of 55.6. Similarly high is the wooden-container rate of 47.1.

In the food-industries group, the 1944 rate of 35.9 for slaughtering and meat packing was considerably lower than that of 47.6 for 1943. The 1944 rate, however, reflects the experience of a very much larger group, as a result of a special accident-prevention drive conducted during 1944. A group of 202 identical establishments showed practically no change in the frequency rate.

Breweries showed a sharp rise during 1944, with a rate of 46.2 as against a rate of 35.3 in 1943. Deterioration of equipment and packaging materials appear to be largely responsible for this increase.

No marked changes occurred in the industries in the iron and steel products group. In the iron and steel industry itself, the 1944 rate was 9.9, compared with a rate of 10.0 in 1943. Similarly, a small decrease occurred in the much higher rate for iron and steel foundries, which dropped from 43.4 in 1943 to 43.0 in 1944. The rate for plate fabrication and boiler-shop products increased fractionally, from 44.3 to 44.7.

A marked reduction was recorded for the transportation-equipment group, in which the rate dropped from 20.2 to 16.3. Most of this rate decrease was attributable to the better injury record in the shipbuilding industry and was due largely to the accident-prevention activities of the Maritime Commission. The reduction in shipbuilding was from 31.5 to 23.6. In 1942, the rate was 33.1.

Repeating the demonstration that the most hazardous activities can be made safe by proper precautions, the explosives industry duplicated its 1943 frequency rate of 5.3.

#### NONMANUFACTURING

The data for 2,132 construction firms included in the 1944 survey yielded a frequency rate of 27.7 for the entire group. A slightly larger number of firms had a rate of 26.1 in 1943.

By far the highest frequency rate of any of the nonmanufacturing industries—even exceeding that for logging—was that for stevedoring, 88.1, a slight reduction from the 1943 rate of 91.3. As in 1943, there is reason to believe that even this high rate is an understatement of the actual experience of the industry.

Trucking and hauling, with a rate of 38.3, had the second highest frequency rate in 1944, but showed a slight improvement from the rate of 41.4 for the preceding year. A rather sharp rate increase was experienced in the warehousing and storage industry, with a rise from 32.2 in 1943 to 37.5 in 1944.

#### *Type and Severity of Injuries*

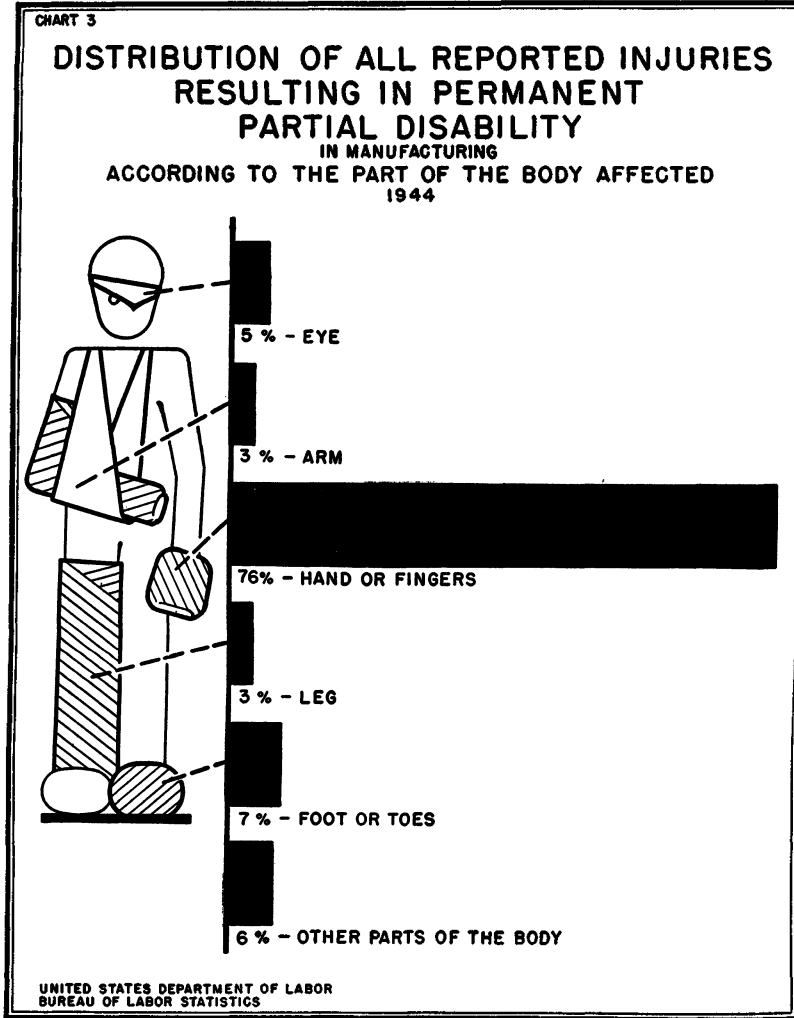
The severity of injuries is not indicated adequately by the severity rate, which shows the average days lost or charged per 1,000 employee-hours worked. Because time charges are geared to exposure hours, industries with large exposure hours may have lower severity rates, even though they experienced a high proportion of very serious injuries, than industries with smaller exposure hours and proportionately less severe injuries. The severity of injuries is reflected more adequately by a percentage distribution of injuries by extent of disability and the measure of the average time charge for each of these.

The explosives industry, for example, had a 1944 severity rate of 1.6, whereas that for the fertilizer industry was 4.7, and for soap and glycerin 2.6. However, in the explosives industry 2.7 percent of the injuries resulted in death or permanent total disability as against 1.1 percent for the fertilizer and 0.6 percent for the soap and glycerin industry. Similarly, 6.2 percent of the explosives industry's injuries resulted in permanent impairments, as against percentages of 3.3 and



5.3 for the other two industries, respectively. The severity rate does not reflect the severity of injuries, but rather an average time charge per 1,000 hours of exposure.

For the entire manufacturing group, deaths and permanent total disabilities (the latter accounting for about 10 percent of the combined figures) were 0.5 percent of all reported injuries. For individual in-



dustries, however, this percentage varied considerably. In manufacturing, it was highest in the explosives industry—2.7 percent. In the nonmanufacturing group, it was highest for highway construction—2.3 percent.

Permanent partial impairments showed still greater variations for industry comparisons. Industries with 7 percent or more of such

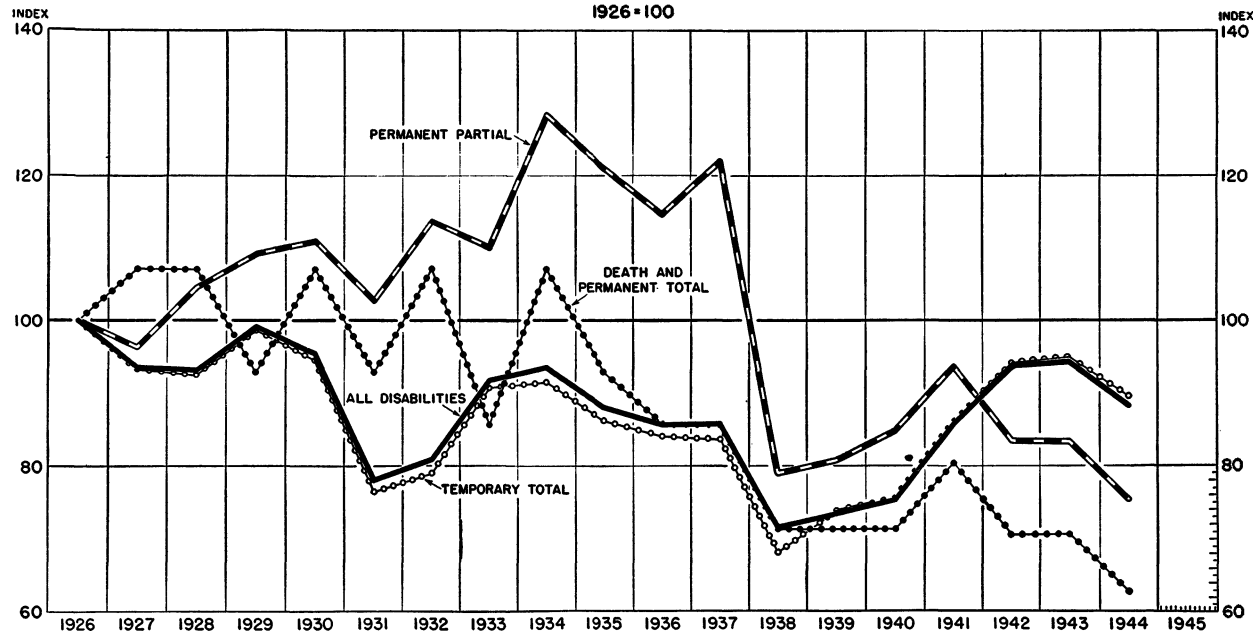
CHART 4

BLS CHART SERIES

# INDUSTRIAL INJURY FREQUENCY RATES IN MANUFACTURING

## BY TYPES OF DISABILITY

1926=100

UNITED STATES DEPARTMENT OF LABOR  
BUREAU OF LABOR STATISTICSNote: FREQUENCY RATE IS THE AVERAGE NUMBER OF DISABLING INDUSTRIAL  
INJURIES FOR EACH MILLION EMPLOYEE-HOURS WORKED.

injuries included wood furniture, 7.0 percent and an average time charge per injury of 793 days; heavy ammunition, 7.4 percent and an average charge of 1,059 days; general machine shops, 10.0 percent and 925 days; radios and phonographs, 10.9 percent and 896 days; engines and turbines, 11.2 percent but only 573 days; and, highest in the list, carpets and rugs, with 12.0 percent and 985 days per injury.

Among industries with lower percentages of permanent impairments but with high average time charges per injury were fertilizers, 1,715 days; flour, feed, and grain mills, 1,641 days; sugar refining, 1,904 days; dairy products, 2,133 days; logging, 1,794 days; men's clothing, 1,840 days (but only 0.9 percent of permanent impairments); highway construction, 1,695 days; stevedoring, 1,810 days; streetcar transportation, 1,783 days (but only 0.8 percent of such injuries); gas utilities, 1,966 days; and laundries, 1,771 days.

On the average, temporary total injuries averaged 17 days per disability in manufacturing industries. Some individual industries, however, had much higher averages: Iron and steel, 41 days; explosives industry, 29 days; and production of military tanks, 59 days. Among nonmanufacturing industries, the amusement industry had the highest average, 25 days, followed closely by stevedoring, with 23 days per injury.

## Appendix Tables

The injury rates—frequency, severity, and disability distribution—are shown in table A. Rates are shown for individual industries as well as for industry groups. The group rates were arrived at by weighting the individual industry rates according to the total employment in each.

Table B shows, for individual industries, changes in employment, employee-hours worked, disabling injuries, and days lost. All time charges for deaths and permanent impairments are those specified in the American Standard.

Over-all injury estimates for individual industries are shown in table C. As in the past, only such industries are shown as had a reporting group sufficiently large to warrant the extension of the reported data to the industry as a whole. Because of the conservative methods of estimating, the list of industries shown falls considerably short of the list in table A.

The percentage distribution of permanent impairments of specified body parts is shown, by industry detail, in table D.

The last table, E, contains the data used for the trend chart on page 8.

TABLE A.—*Injury Rates and Injuries by Extent of Disability, 1944*

[All reporting establishments]

Industry	Number of establishments	Number of employees	Employee-hours worked (thousands)	Number of disabling injuries	Percent of disabling injuries resulting in 1—			Average days lost per disability 1—		Injury rates 2—	
					Death and permanent total disability 3	Permanent partial disability	Temporary total disability	Permanent partial disability	Temporary total disability	Frequency	Severity 1
All industries.....	56,809	11,515,169	26,468,258	472,875	-----	-----	-----	-----	-----	-----	-----
<i>Manufacturing</i>											
Total, manufacturing.....	36,809	9,933,342	23,025,022	421,737	0.5	4.4	95.1	952	17	18.4	1.4
Chemical products.....	2,198	543,268	1,250,928	17,301	1.2	4.0	94.8	1,281	17	14.3	1.7
Drugs, toiletries, and insecticides.....	317	54,136	114,868	2,132	-----	2.9	97.1	808	14	18.6	.5
Explosives.....	109	76,908	176,619	944	2.7	6.2	91.1	1,190	29	5.3	1.6
Fertilizers.....	288	17,066	37,718	1,273	1.1	3.3	95.6	1,715	16	33.7	4.7
Paints and varnishes.....	413	30,498	70,421	1,286	.5	1.5	98.0	1,670	14	18.3	1.2
Petroleum refining 4.....	(9)	125,799	304,401	3,495	2.0	3.8	94.2	(9)	(9)	11.5	(9)
Rayon and allied products.....	30	56,203	117,339	1,055	-----	.5	99.5	1,500	19	9.0	.4
Soap and glycerin.....	86	14,573	33,098	497	.6	5.3	94.1	1,161	18	15.0	2.6
Industrial chemicals.....	654	130,289	306,608	5,273	.4	6.5	93.1	1,282	16	17.2	2.0
Paving and roof materials.....	25	2,218	4,986	85	(7)	(7)	(7)	950	24	17.0	1.1
Vegetable and animal oils.....	25	2,116	5,444	163	(7)	(7)	(7)	1,150	19	29.9	8.4
Synthetic rubber.....	17	4,172	10,323	50	(7)	(7)	(7)	300	9	4.8	.6
Not elsewhere classified.....	234	29,290	66,672	1,048	-----	1.0	99.0	525	16	15.7	.5
Food products.....	4,244	453,793	1,013,692	31,599	.3	4.2	95.5	1,189	14	27.1	1.8
Baking.....	668	48,325	111,742	2,259	.3	2.4	97.3	809	16	20.2	1.1
Canning and preserving.....	387	63,739	118,538	3,426	.3	1.8	97.9	1,357	13	28.9	1.7
Confectionery.....	239	41,423	88,237	1,674	.3	4.4	95.3	838	13	19.0	1.3
Flour, feed, and grain mill products.....	514	39,214	92,001	2,865	.9	2.3	96.8	1,641	15	31.1	3.4
Slaughtering and meat packing.....	1,197	126,113	304,654	10,928	.2	2.6	97.2	554	11	35.9	1.6
Sugar refining.....	96	22,941	49,613	1,569	.2	3.6	96.2	1,904	14	31.6	2.9
Beverages.....	265	6,856	15,106	361	.3	2.8	96.9	900	12	23.9	1.3
Dairy products.....	182	9,339	22,267	660	.4	1.1	98.5	2,133	16	29.6	1.2
Breweries.....	321	54,759	124,305	5,745	.2	8.1	91.7	1,259	15	46.2	5.9
Distilleries.....	118	17,843	36,676	785	.6	3.8	95.6	1,282	16	21.4	2.4
Not elsewhere classified.....	257	23,241	50,546	1,327	.2	1.8	98.0	1,316	14	26.3	1.1
Iron and steel and their products.....	4,829	1,269,857	2,940,320	70,440	.6	4.3	95.1	843	21	24.3	1.8
Iron and steel.....	300	497,688	1,131,813	11,195	1.6	6.0	92.4	896	41	9.9	1.7
Cutlery and edge tools.....	125	17,936	41,636	1,171	.5	6.3	93.2	751	13	28.1	2.4
Enameling and galvanizing.....	72	7,412	15,781	659	-----	2.9	97.1	555	18	41.8	1.3
Fabricated structural steel.....	388	55,539	128,951	4,600	.5	3.6	95.9	899	16	35.7	2.3

Forgings, iron and steel.....	211	58,806	139,383
Foundries, iron and steel.....	1,069	187,417	441,509
Hardware.....	154	23,748	53,592
Ornamental metalwork.....	67	5,202	12,268
Plumbers' supplies.....	78	18,314	42,772
Stamped and pressed metal products.....	388	61,689	141,101
Steam fittings and apparatus.....	207	35,769	84,335
Heating equipment, not elsewhere classified.....	216	24,742	53,297
Tin cans and other tinware.....	75	16,211	37,037
Tools, except edge tools.....	195	27,632	66,100
Wire and wire products.....	232	47,977	111,249
Plate fabrication and boiler-shop products.....	185	31,399	76,039
Screws and screw-machine products.....	132	16,073	39,498
Bolts, nuts, washers, and rivets.....	56	11,081	25,852
Sheet-metal work.....	91	7,959	18,796
Not elsewhere classified.....	588	117,263	279,302
<b>Leather and its products.....</b>	<b>748</b>	<b>148,428</b>	<b>320,149</b>
Leather.....	168	29,130	65,779
Boots and shoes (other than rubber).....	452	107,115	227,885
Not elsewhere classified.....	128	12,183	26,483
<b>Lumber, lumber products, and furniture.....</b>	<b>4,026</b>	<b>290,711</b>	<b>636,047</b>
Logging.....	442	19,744	39,993
Planing mills.....	660	42,008	93,930
Sawmills.....	884	68,205	144,724
Furniture, except metal.....	974	78,993	171,828
Furniture, metal.....	65	6,389	15,191
Office, store, and restaurant fixtures.....	93	4,377	9,798
Morticians' supplies.....	43	2,484	5,513
Wooden containers.....	536	42,347	96,630
Not elsewhere classified.....	329	26,164	58,936
<b>Machinery (not transportation).....</b>	<b>4,896</b>	<b>1,413,759</b>	<b>3,632,440</b>
Agricultural machinery and tractors.....	192	70,200	165,326
Construction and mining machinery.....	206	75,831	180,624
Electrical equipment and supplies.....	929	558,063	1,321,445
Food-products machinery.....	103	9,243	22,428
Metalworking machinery.....	1,105	205,063	508,014
Textile machinery.....	113	15,859	40,031
Special industry machinery, not elsewhere classified.....	318	46,522	111,136
General industrial machinery.....	1,163	233,927	794,282
Commercial and household machines.....	120	35,913	90,102
General machine shops.....	459	50,392	129,584
Engines and turbines.....	98	112,656	269,463
<b>Paper and allied products.....</b>	<b>1,765</b>	<b>245,348</b>	<b>688,950</b>
Pulp.....	36	6,740	14,958
Paper.....	394	68,930	162,031
Paper and pulp (integrated).....	147	72,401	176,270
Paper boxes and containers.....	889	59,475	123,673
Envelopes.....	68	6,449	14,119
Not elsewhere classified.....	231	31,353	70,896

See footnotes at end of table.

5,253	.3	5.4	94.3	702	21	37.7	2.7
18,982	.4	1.5	98.1	1,200	15	43.0	2.3
1,073		8.6	91.4	497	18	20.0	1.4
397	(?)	(?)	(?)	1,200	17	32.4	2.4
889		2.8	97.2	300	14	20.8	.6
3,870	.2	6.9	92.9	472	13	27.4	1.1
1,972	.4	5.8	93.8	793	18	23.4	2.1
2,283	.4	2.9	96.7	1,135	14	42.8	3.1
729	(?)	(?)	(?)	510	11	19.7	1.2
1,686		6.8	93.2	819	11	25.5	1.6
2,582	.5	5.4	94.1	854	14	23.2	1.9
3,401	.5	1.8	97.7	923	14	44.7	1.8
743		6.8	93.2	800	12	18.8	.8
593		3.5	96.5	300	17	22.9	.5
736	(?)	(?)	(?)	461	10	39.2	1.6
7,626	.1	5.0	94.9	901	14	27.3	1.8
5,196	.2	2.5	97.3	979	14	15.8	.5
1,922	.2	2.7	97.1	1,169	16	29.2	1.7
2,813		2.0	98.0	387	10	12.3	.1
461	(?)	(?)	(?)	1,014	10	17.4	.7
26,811	.6	4.5	94.9	1,031	17	40.4	3.9
3,414	1.5	2.6	95.9	1,794	22	85.4	13.6
3,629	.3	4.6	95.1	1,199	15	38.6	3.4
8,040	.6	3.4	96.0	1,157	19	55.6	5.0
4,490	.1	7.0	92.9	793	15	26.2	2.0
459		6.0	94.0	1,283	13	30.2	2.4
206	(?)	(?)	(?)	600	15	21.0	1.0
98	(?)	(?)	(?)	300	12	17.8	1.4
4,552	.4	5.4	94.2	819	15	47.1	3.7
1,923	.6	4.8	94.6	784	16	32.6	2.7
59,091	.2	4.9	94.9	787	17	16.7	1.0
3,964	.3	5.8	93.9	655	11	24.0	2.0
5,121	.2	2.6	97.2	1,105	12	28.4	1.8
13,908	.2	6.8	93.0	723	19	10.5	.8
613	(?)	(?)	(?)	1,091	13	27.3	1.1
8,573	.4	3.7	95.9	1,015	19	16.9	1.1
692	.6	4.4	95.0	439	15	17.3	1.1
2,509	.1	2.2	97.7	875	14	22.6	.8
16,724	.2	4.4	95.4	770	18	21.1	1.1
1,628		2.0	98.0	500	16	18.1	.4
2,628		10.0	90.0	925	10	20.3	1.8
2,731	.5	11.2	88.3	573	32	10.1	.5
14,901	.5	3.1	96.4	930	16	25.3	1.8
586	(?)	(?)	(?)	1,420	13	39.2	.8
5,024	.9	2.1	97.0	1,534	19	31.0	2.5
4,692	.8	1.2	98.0	767	18	26.6	2.5
2,879	.5	5.1	94.4	600	14	23.3	1.4
199	(?)	(?)	(?)	802	12	14.1	.5
1,521		4.4	95.6		15	21.5	1.0

TABLE A.—*Injury Rates and Injuries by Extent of Disability, 1944—Continued*

Industry	Number of establishments	Number of employees	Employee-hours worked (thousands)	Number of disabling injuries	Percent of disabling injuries resulting in—			Average days lost per disability 1—		Injury rates 1—	
					Death and permanent total disability 2	Permanent partial disability	Temporary total disability	Permanent partial disability	Temporary total disability	Frequency	Severity 1
Printing and publishing.....	2,687	175,803	367,912	3,144	0.3	4.7	95.0	1,231	15	49.0	40.9
Book and job.....	1,748	82,358	176,227	1,590	.3	6.9	92.8	1,302	17	9.0	1.1
News and periodical.....	893	91,071	186,422	1,487	.3	2.8	96.9	1,140	14	8.0	.5
Bookbinding.....	46	2,464	5,262	67	(?)	(?)	(?)	862	15	12.7	1.5
Rubber and its products.....	296	188,345	427,310	7,012	.2	10.2	89.6	1,023	15	16.6	12.7
Rubber tires.....	54	87,947	207,207	3,214	.4	3.3	96.3	900	14	15.5	1.9
Rubber boots and shoes.....	32	23,954	54,402	677	(?)	(?)	(?)	1,371	12	12.4	1.7
Not elsewhere classified.....	210	76,444	165,700	3,121	-----	16.2	83.8	1,026	18	18.8	3.7
Stone, clay, and glass products.....	1,288	210,998	457,758	9,546	.7	2.6	96.7	1,083	16	22.4	2.4
Brick, tile, and terra cotta.....	415	27,838	57,675	2,532	.9	2.0	97.1	972	16	43.9	3.9
Cement 3.....	(?)	17,057	38,434	519	2.3	4.8	92.9	(?)	(?)	13.5	(?)
Glass.....	223	89,621	190,049	3,415	.3	2.9	96.8	1,208	17	18.0	1.3
Pottery.....	138	27,959	57,687	1,030	-----	2.0	98.0	1,020	13	17.9	.6
Concrete, gypsum, and plaster products.....	212	7,836	18,448	530	1.2	1.6	97.2	1,525	17	28.7	3.4
Cut stone and cut-stone products.....	110	2,658	5,190	171	(?)	(?)	(?)	750	13	32.9	3.6
Not elsewhere classified.....	190	38,031	90,273	1,649	.6	3.4	96.0	935	20	18.3	2.1
Textile and textile-mill products.....	4,373	837,176	1,854,107	26,807	.1	3.1	96.8	1,056	16	13.4	4.7
Carpets and rugs.....	61	14,164	30,081	330	-----	12.0	88.0	985	19	11.0	1.5
Clothing, men's.....	842	121,212	243,098	2,248	-----	.9	99.1	1,840	12	9.2	.2
Clothing, women's.....	800	59,813	116,270	554	.4	.9	98.7	500	12	4.8	.1
Cotton goods.....	611	238,906	612,603	10,113	.1	3.2	96.7	1,052	16	16.5	1.1
Dyeing and finishing.....	211	37,514	83,904	2,057	.2	1.7	98.1	1,663	15	24.5	1.7
Knit goods.....	664	108,431	217,552	1,771	-----	1.3	98.7	890	12	8.1	.2
Silk and rayon products, not elsewhere classified.....	197	50,321	109,531	1,461	-----	1.8	98.2	646	15	13.3	.3
Woolen goods.....	424	128,156	273,885	5,515	.3	4.2	95.5	1,032	20	20.2	1.7
Not elsewhere classified.....	563	78,659	167,179	2,728	.1	3.5	96.4	1,105	16	16.3	.8
Transportation equipment.....	1,648	2,699,833	6,563,997	104,362	.4	4.2	95.4	796	18	16.3	1.3
Motor vehicles.....	207	154,362	379,952	5,483	.1	4.2	95.7	700	18	14.4	.7
Shipbuilding.....	440	992,848	2,437,292	57,596	.5	3.5	96.0	1,126	15	23.6	2.3
Railroad equipment.....	86	84,360	207,408	4,409	.5	4.0	95.5	632	28	21.3	1.3
Aircraft.....	113	642,221	1,540,712	13,564	.2	3.6	96.2	991	16	8.8	.6
Motor-vehicle parts.....	126	71,612	172,875	4,458	-----	4.3	95.7	666	9	25.8	1.0
Boat building.....	34	3,627	8,018	395	(?)	(?)	(?)	(?)	12	49.3	.6
Aircraft parts.....	616	746,252	1,801,578	18,258	.2	5.5	94.3	656	19	10.1	.6
Not elsewhere classified.....	26	4,551	10,374	199	(?)	(?)	(?)	(?)	24	19.2	.3

Miscellaneous manufacturing.....	2, 585	659, 237	1, 504, 399
Tobacco products.....	201	42, 575	91, 609
Radios and phonographs.....	344	163, 807	393, 274
Smelting and refining (nonferrous) <sup>5</sup> .....	109	41, 205	113, 610
Nonferrous metal products.....	955	158, 130	392, 927
Brushes.....	49	5, 809	13, 097
Brooms.....	34	1, 763	3, 845
Coke ovens; <sup>5</sup> .....			
Bee hive.....	( <sup>9</sup> )	3, 180	6, 742
Byproducts.....	( <sup>9</sup> )	21, 586	62, 848
Miscellaneous manufacturing.....	893	221, 182	516, 445
Ordinance and accessories.....	1, 249	796, 696	1, 853, 530
Guns and related equipment.....	220	125, 393	293, 875
Ammunition, except for small arms.....	599	390, 125	885, 337
Tanks, military.....	33	43, 019	103, 837
Sighting and fire-control equipment.....	61	45, 446	113, 483
Small arms.....	99	81, 670	187, 385
Ammunition, small arms.....	44	24, 260	60, 943
Tank parts, military.....	102	49, 082	115, 891
Not elsewhere classified.....	91	37, 701	92, 775
<i>Nonmanufacturing</i>			
Construction <sup>9</sup> .....	2, 132	94, 913	197, 510
Building construction.....	1, 592	46, 070	89, 030
Heavy engineering.....	165	32, 975	79, 180
Highway.....	258	12, 321	23, 114
Not elsewhere classified.....	117	3, 547	6, 185
Communication <sup>9</sup> .....	515	372, 035	734, 699
Telephone (wire and radio).....	120	360, 027	710, 701
Radio broadcasting and television.....	395	12, 008	23, 997
Transportation <sup>9</sup> .....	1, 290	244, 660	568, 952
Stevedoring.....	111	40, 431	62, 936
Streetcar.....	33	15, 752	41, 034
Bus.....	292	39, 213	98, 434
Both streetcar and bus.....	46	82, 163	210, 467
Trucking and hauling.....	557	15, 020	32, 919
Warehousing and storage.....	197	14, 732	33, 162
Not elsewhere classified.....	52	1, 487	3, 922
Heat, light, and power <sup>9</sup> .....	646	247, 348	534, 004
Electric light and power.....	430	198, 229	427, 933
Gas.....	199	48, 702	105, 100
Waterworks <sup>9</sup> .....	173	10, 335	21, 291
Personal services.....	4, 440	173, 180	385, 849
Dry cleaning.....	663	20, 147	47, 138
Laundries.....	724	36, 486	81, 729
Laundry and dry cleaning combined.....	451	35, 572	81, 165
Amusements and related services.....	432	11, 614	20, 816
Hotels.....	430	38, 603	89, 916
Eating and drinking places.....	1, 026	17, 328	36, 858
Medical and other professional services.....	303	8, 312	18, 343
Miscellaneous personal services.....	411	5, 118	9, 881

See footnotes at end of table.



24,992	.3	5.6	94.1	914	14	4 14.1	4.8
1,124	.2	4.2	95.6	532	9	12.3	.5
3,630	.2	10.9	88.9	896	12	9.2	1.3
2,092	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	23.7	( <sup>e</sup> )
9,619	.1	6.6	93.3	1,158	15	24.5	2.3
233	-----	4.3	95.7	435	13	17.8	.6
165	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	7	42.9	.6
239	1.3	1.3	97.4	( <sup>e</sup> )	( <sup>e</sup> )	35.4	( <sup>e</sup> )
764	1.6	4.2	94.2	( <sup>e</sup> )	( <sup>e</sup> )	12.2	( <sup>e</sup> )
6,526	.1	3.4	96.5	764	16	12.6	.4
27,078	.4	6.8	92.8	959	21	13.3	4.9
4,422	-----	4.6	95.4	650	16	15.0	.4
14,278	.7	7.4	91.9	1,059	21	16.1	1.2
1,270	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	750	59	12.2	.9
901	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	7	7.9	.2
2,231	-----	10.5	89.5	443	36	11.9	.6
441	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	1,786	13	7.2	1.5
1,790	-----	9.3	90.7	952	13	15.4	1.0
1,745	-----	3.3	96.7	778	14	18.8	.7
5,469	1.6	3.0	95.4	1,383	18	27.7	4.2
2,726	1.3	2.7	96.0	1,352	17	30.6	4.0
1,704	1.8	3.3	94.9	1,294	21	21.5	3.6
832	2.3	3.6	94.1	1,695	17	36.0	7.7
207	1.0	1.9	97.1	875	19	33.5	3.1
2,451	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	15	3.3	.1
2,423	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	15	3.4	.1
28	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	18	1.2	( <sup>e</sup> )
18,894	.6	3.9	95.5	1,367	18	33.2	3.5
5,545	.5	3.9	95.6	1,810	23	88.1	10.6
1,095	.4	.8	98.8	1,783	14	26.7	1.4
2,011	.1	2.6	97.3	1,339	13	20.4	1.1
4,692	.8	1.4	97.8	1,980	15	22.3	2.1
1,260	.7	.5	98.8	925	13	38.3	2.3
1,245	.4	2.2	97.4	998	16	37.5	2.3
83	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	20	21.2	3.0
6,867	1.7	3.3	95.0	1,771	19	12.9	2.3
5,156	1.8	3.7	94.5	1,735	19	12.0	2.3
1,688	1.2	2.1	96.7	1,966	18	16.1	2.1
453	.3	1.4	98.3	( <sup>e</sup> )	15	21.3	.7
3,623	.4	2.4	97.2	1,457	13	9.4	.7
273	1.1	2.2	96.7	1,566	14	5.8	.7
680	.1	4.1	95.8	1,771	14	8.3	.8
714	.7	4.8	94.5	1,536	14	8.8	1.1
174	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	25	8.4	1.2
1,131	.4	1.1	98.5	623	11	12.6	.5
526	-----	-----	100.0	-----	10	14.3	.1
88	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	18	4.8	.2
37	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	( <sup>e</sup> )	22	3.7	.2

TABLE A.—*Injury Rates and Injuries by Extent of Disability, 1944—Continued*

Industry	Number of establishments	Number of employees	Employee-hours worked (thousands)	Number of disabling injuries	Percent of disabling injuries resulting in <sup>1</sup> —			Average days lost per disability <sup>1</sup> —		Injury rates <sup>2</sup> —	
					Death and permanent total disability <sup>3</sup>	Permanent partial disability	Temporary total disability	Permanent partial disability	Temporary total disability	Frequency	Severity <sup>1</sup>
Business services.....	2, 734	122, 524	273, 401	2, 429	0.4	1.4	98.2	1, 001	17	8.9	0.5
Banks and other financial agencies.....	912	44, 303	88, 449	316	( )	( )	( )	( )	15	3.6	.2
Insurance.....	302	20, 813	40, 932	65	( )	( )	( )	( )	17	1.6	( )
Real estate.....	370	6, 306	13, 702	92	( )	( )	( )	( )	17	6.7	.6
Miscellaneous business services.....	382	19, 055	46, 063	615	( )	( )	( )	( )	11	13.4	.8
Automobile-repair services and garages.....	476	4, 628	11, 052	145	( )	( )	( )	( )	17	13.1	.5
Miscellaneous repair services.....	284	3, 776	8, 669	236	.4	5.1	94.5	775	15	27.2	2.1
Airplane modification.....	7	20, 064	54, 787	827	.4	1.2	98.4	1, 255	15	15.1	.8
Educational services.....	194	66, 835	127, 755	1, 333	.5	2.2	97.3	1, 482	14	10.4	.8
Fire departments.....	234	26, 084	100, 852	2, 319	1.1	.5	98.4	2, 209	15	23.0	2.1
Police departments.....	177	25, 649	63, 222	1, 326	.7	1.1	98.2	1, 539	21	21.0	1.6
Trade.....	7, 458	197, 705	435, 106	5, 967	.2	1.8	98.0	1, 552	15	13.7	4.8
Wholesale distributors.....	2, 264	49, 860	110, 368	1, 930	.2	2.3	97.5	1, 214	15	17.5	1.0
Retail, general merchandise.....	285	45, 255	95, 790	766	( )	( )	( )	( )	13	8.0	.1
Retail, food.....	750	22, 035	51, 343	760	( )	( )	( )	( )	14	14.8	.4
Wholesale and retail dairy products.....	323	14, 023	35, 142	730	.4	4.1	95.5	2, 770	14	22.0	3.3
Retail, automobiles.....	539	7, 228	17, 363	303	( )	( )	( )	( )	14	17.5	.5
Filling stations.....	230	1, 948	4, 709	34	( )	( )	( )	( )	13	7.2	1.0
Retail, apparel and accessories.....	707	17, 624	35, 648	89	( )	( )	( )	( )	13	2.5	.2
Miscellaneous retail stores.....	2, 000	30, 968	68, 304	1, 042	.5	2.1	97.4	877	16	15.3	1.0
Wholesale and retail trade combined.....	350	8, 764	18, 435	313	( )	( )	( )	( )	14	17.0	.6

<sup>1</sup> Based on reports which furnished details regarding the resulting disabilities, constituting approximately 50 percent of the total sample.

<sup>2</sup> The frequency rate is the average number of disabling injuries for each million employee-hours worked. The severity rate is the average number of days lost for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standard Association 1937.

<sup>3</sup> Each death or permanent total disability is charged with a time loss of 6,000 days in the computation of severity rates.

<sup>4</sup> Weighted according to estimates of total current employment in each industry.

<sup>5</sup> Preliminary data compiled by the Bureau of Mines, U. S. Department of Interior.

<sup>6</sup> Not available.

<sup>7</sup> Disability distribution and average time charges not given because of small number of injuries for which details were reported.

<sup>8</sup> Less than 0.05.

<sup>9</sup> Primarily reported by company instead of by establishment.

TABLE B.—Changes in Exposure, Disabling Injuries, and Injury Rates, for 29,311  
Identical Establishments, 1943 to 1944

Industry	Num- ber of estab- lish- ments	Percent of change in—					
		Em- ploy- ees	Em- ployee- hours worked	Dis- abling in- juries	Total time lost	Fre- quen- cy rate	Severi- ty rate
<i>Manufacturing</i>							
Total, manufacturing	17,121	-3	-2	-13	-7	1-6	1-7
Chemical products <sup>2</sup>	1,139	+1	+2	+3	-24	1-2	1-28
Drugs, toiletries, and insecticides	199	+6	+8	+34	-14	+24	-14
Explosives	56	+3	+1	-8	-36	-7	-38
Fertilizers	241	-2	+2	+3	+41	+1	+36
Paints and varnishes	301	+1	+5	(3)	-63	-4	-63
Rayon and allied products	4	+2	-2	+10	-1	+13	0
Soap and glycerin	61	+8	+4	+50	+52	+45	+44
Industrial chemicals	158	-2	+1	-1	-37	-3	-37
Not elsewhere classified	99	-2	+1	-13	-76	-14	-76
Food products	2,455	+2	+4	+4	+13	1-1	1-6
Baking	567	(3)	+4	+1	-12	-2	-15
Canning and preserving	271	+11	+22	+16	+26	-4	+6
Confectionery	196	-3	-2	-13	-31	-11	-26
Flour, feed and grain mill products	452	-3	-4	+2	+53	+8	+59
Slaughtering and meat packing	202	+8	+12	+9	+61	-2	+46
Sugar refining	85	+6	+5	+11	+25	+7	+20
Beverages	214	-2	-1	-26	-27	-25	-30
Dairy products	125	+1	+6	-12	+79	-16	+100
Breweries	168	-15	-11	+5	+6	+18	+20
Distilleries	36	+42	+13	+159	-11	+93	-33
Not elsewhere classified	139	-1	(3)	-15	+5	-15	+9
Iron and steel and their products	1,857	-4	-2	-8	-1	1-1	0
Iron and steel	98	-4	(3)	-7	+1	-7	0
Cutlery and edge tools	73	+11	+9	+2	+16	-6	+8
Enameling and galvanizing	38	-1	+1	-7	-41	-8	-42
Fabricated structural steel	206	+2	+4	+11	-15	+7	-18
Forgings, iron and steel	59	-6	-8	-19	-16	-12	0
Foundries, iron and steel	533	-8	-6	-8	+8	-2	+8
Hardware	84	(2)	-2	-7	-4	-5	0
Ornamental metalwork	40	+2	+12	+13	-57	+18	-62
Plumbers' supplies	39	-7	-2	-40	-20	-38	-25
Stamped and pressed metal products	118	-5	-6	-2	-48	+5	-44
Steam fittings and apparatus	111	-8	-11	-31	-32	-23	-27
Heating equipment, not elsewhere classified	98	-2	(3)	-6	+113	-6	+112
Tin cans and other tinware	33	+10	+10	+61	-11	+46	-15
Tools, except edge tools	85	-16	-12	-14	+8	-2	+21
Wire and wire products	67	-3	-1	-5	+21	-4	+100
Plate fabrication and boiler-shop products	29	-6	-4	-13	+15	-10	+16
Screws and screw-machine products	29	-7	-13	+2	-89	+17	-89
Bolts, nuts, washers, and rivets	8	-57	-56	-46	-81	+21	-67
Sheet-metal work	19	-3	-4	+14	+39	+49	+43
Not elsewhere classified	90	-3	-4	-5	-39	-1	-40
Leather and leather products	425	-5	-3	-12	-9	1-17	1-50
Leather	119	-7	-1	-9	+16	-8	+19
Boots and shoes (other than rubber)	241	-5	-2	-12	-44	-9	-33
Not elsewhere classified	65	-9	-11	-46	-83	-38	-82
Lumber, lumber products, and furniture	2,471	-6	-7	-11	-2	1-5	1-8
Logging	109	-18	-20	-9	+6	+18	+33
Planing mills	507	-8	-15	-24	-9	-11	+7
Sawmills	547	+1	-2	-2	+4	(3)	+6
Furniture, except metal	750	-8	-10	-16	-15	-7	-5
Furniture, metal	33	+3	+11	+2	+30	-8	+18
Office, store, and restaurant fixtures	76	-6	-3	-22	-47	-20	-47
Morticians' supplies	37	-3	(3)	-7	-27	-6	-27
Wooden containers	226	-5	(3)	-6	-1	-5	0
Not elsewhere classified	186	-5	(3)	-14	+7	-11	+8
Machinery (not transportation)	1,313	-4	-4	-13	-12	1-9	1-10
Agricultural machinery and tractors	103	+5	+7	+9	-16	+2	-19
Construction and mining machinery	131	-4	-5	-5	-28	+1	-26
Electrical equipment and supplies	173	-5	-4	-7	+6	-4	0
Food-products machinery	61	+1	+6	-29	-75	-33	-79
Metalworking machinery	188	-18	-21	-30	+11	-12	+14
Textile machinery	87	-7	+3	+29	+15	+25	+22
Special industry machinery, not elsewhere classified	160	-9	-11	-13	-46	-3	-36
General industrial machinery	280	-1	-1	-18	+3	-17	0
Commercial and household machinery	31	+31	+64	+42	-68	-8	-71
General machine shops	95	-3	-3	-38	-26	-37	-22
Engines and turbines	4	+7	+1	-36	-16	-36	-20

See footnotes at end of table.

TABLE B.—Changes in Exposure, Disabling Injuries, and Injury Rates, for 29,311  
Identical Establishments, 1943 to 1944—Continued

Industry	Number of establishments	Percent of change in—					
		Employees	Employee-hours worked	Disabling injuries	Total time lost	Frequency rate	Severity rate
<i>Manufacturing—Continued</i>							
Paper and allied products.....	580	+1	+2	-2	-15	1-6	1-7
Paper.....	111	-1	+2	+2	+129	-1	+109
Paper and pulp (integrated).....	46	-3	(9)	+8	-61	+7	-59
Paper boxes and containers.....	230	+22	+20	-1	+48	-17	0
Envelopes.....	58	-5	-4	-8	-46	-4	-40
Not elsewhere classified.....	135	-5	-5	-21	-37	-17	-31
Printing and publishing <sup>2</sup> .....	2,241	-1	+2	-3	-5	1-4	1+11
Book and job.....	1,487	-8	+2	-12	+5	-14	0
News and periodical.....	725	(9)	+2	+9	-21	+7	-25
Rubber and its products.....	94	+14	+19	+24	-4	1+2	1-23
Rubber tires.....	14	+37	+43	+39	+12	-3	-32
Rubber boots and shoes.....	12	+4	+8	+35	-51	+25	-55
Not elsewhere classified.....	68	+7	+10	+13	+19	+3	+31
Stone, clay, and glass products.....	823	-3	-1	-9	-2	1-5	1+5
Brick, tile, and terra cotta.....	361	-13	-12	-15	+17	-3	+33
Glass.....	153	+2	+6	+1	+2	-4	-7
Pottery.....	73	-3	-1	-11	-71	-10	-72
Concrete, gypsum, and plaster products.....	85	-13	-8	-19	+26	-12	+36
Cut stone and cut-stone products.....	94	-8	-11	-1	-70	+11	-67
Not elsewhere classified.....	57	-4	-4	-9	+17	-6	+17
Textile and textile mill products.....	2,410	-5	-7	-4	-10	1+1	1 0
Carpets and rugs.....	38	-4	-7	-20	-25	-14	-20
Clothing, men's.....	410	-4	-3	+8	+1	+11	0
Clothing, women's.....	460	-5	-18	+3	+77	+26	+100
Cotton goods.....	304	-4	-7	-1	(9)	+7	+10
Dyeing and finishing.....	117	-8	-6	+25	-61	+34	-57
Knit goods.....	476	-8	-10	-8	-56	+1	-33
Silk and rayon products, not elsewhere classified.....	128	-2	+3	-7	+28	-10	+33
Woolen goods.....	217	-7	-6	-12	-1	-6	+6
Not elsewhere classified.....	260	-7	-2	-14	-8	-12	0
Transportation equipment <sup>2</sup> .....	464	-2	-1	-22	-14	1-18	1 0
Motor vehicles.....	45	+3	+11	-10	-30	-19	-42
Shipbuilding.....	172	-3	-5	-29	+8	-25	+18
Railroad equipment.....	28	+10	+15	-2	-47	-15	-55
Aircraft.....	36	-1	+2	-4	-28	-6	-33
Motor vehicle parts.....	24	+18	+17	-8	+24	-22	0
Aircraft parts.....	151	(9)	+4	+2	-1	-3	-14
Miscellaneous manufacturing.....	697	-1	+1	-6	+55	1-10	1+33
Tobacco products.....	157	-9	-4	+5	+15	+11	+25
Radios and phonographs.....	40	+9	+18	+20	+193	+2	+129
Nonferrous metal products.....	151	(9)	-3	-11	+79	-8	+100
Brushes.....	35	+5	+3	-13	-46	-16	-50
Brooms.....	30	+1	-1	+10	-81	+11	-81
Not elsewhere classified.....	284	-2	-3	-21	-3	-18	0
Ordinance and accessories.....	152	-12	-13	-16	-32	1-7	1 0
Guns and related equipment.....	16	+1	(9)	-1	-46	-1	-40
Ammunition, except for small arms.....	78	-8	-7	-23	-38	-18	-31
Tanks, military.....	4	-4	-9	+19	+201	+30	+33
Sighting and fire-control equipment.....	4	-8	-9	-16	-79	-8	-77
Small arms.....	13	-23	-31	-31	-26	0	+20
Ammunition, small arms.....	6	-47	-43	-47	+162	-8	+400
Tank parts, military.....	10	+2	+1	-2	-20	-2	-20
Not elsewhere classified.....	21	-23	-26	+13	-58	+52	-44
<i>Nonmanufacturing</i>							
Construction <sup>2 4</sup> .....	1,529	-47	-39	-35	-25	+8	+26
Building.....	1,105	-43	-40	-31	-24	+16	+29
Heavy engineering.....	121	-55	-40	-43	-28	-6	+23
Highway.....	220	-40	-36	-26	-18	+17	+28
Not elsewhere classified.....	80	-21	-31	-42	-69	-16	-56
Communication <sup>4</sup> .....	455	+2	+2	+8	-38	+6	-50
Telephone (wire and radio).....	94	+1	+2	+8	-35	+6	-50
Radio broadcasting and television.....	361	+11	+8	+13	-92	+9	-93

See footnotes at end of table.

TABLE B.—*Changes in Exposure, Disabling Injuries, and Injury Rates, for 29,311 Identical Establishments, 1943 to 1944—Continued*

Industry	Number of establishments	Percent of change in—					
		Em- ploy- ees	Em- ployee- hours worked	Dis- abling in- juries	Total time lost	Fre- quen- cy rate	Severi- ty rate
<i>Nonmanufacturing—Continued</i>							
Transportation <sup>1 4</sup>	750	( <sup>2</sup> )	( <sup>2</sup> )	+21	+26	+20	+25
Stevedoring	62	-4	+8	+30	+30	+20	+21
Streetcar	30	+1	+3	+19	-2	+15	0
Bus	233	+2	+2	+16	+5	+14	+9
Both streetcar and bus	41	-1	-2	+19	+29	+22	+31
Trucking and hauling	299	+5	+7	+19	+9	+12	+3
Warehousing and storage	61	-9	-17	-12	-15	+6	0
Heat, light, and power <sup>1 4</sup>	394	+1	+3	+4	+8	+1	-5
Electric light and power	261	+1	+4	+5	+2	+2	-5
Gas	119	-2	+1	( <sup>2</sup> )	+45	0	+50
Waterworks <sup>4</sup>	110	-2	-3	+19	+391	+23	+350
Personal services	2,674	+2	+4	+11	+11	+7	0
Dry cleaning	520	+15	+22	+23	+31	0	+25
Laundries	618	+1	+3	-2	-22	-4	-22
Laundry and dry cleaning combined	378	-3	-3	-8	+24	-4	+20
Amusements and related services	262	+7	+9	+60	+471	+47	+333
Hotels	159	+3	+2	+6	-7	+3	0
Eating and drinking places	435	( <sup>2</sup> )	-1	+62	-16	+62	0
Medical and other professional services	180	+7	+5	+22	-66	+17	-67
Miscellaneous personal services	122	+3	+6	+27	+152	+18	+100
Business services	1,730	+3	+8	-10	-35	-16	-37
Banks and other financial agencies	684	( <sup>2</sup> )	-1	+28	-52	+32	-50
Insurance	211	-1	-2	-44	-86	-43	-96
Real estate	196	-4	+1	-30	-88	-30	-89
Miscellaneous business services	187	+16	+21	+58	+66	+30	+43
Automobile-repair services and garages	250	-1	( <sup>2</sup> )	+2	+43	+3	+40
Miscellaneous repair services	196	-4	( <sup>2</sup> )	+1	+60	+11	+56
Airplane modification	6	+16	+34	-27	-42	-45	-56
Educational services	45	-4	+3	-44	-98	-46	-98
Trade	4,503	-3	-3	+3	-16	+3	+12
Wholesale distributors	1,422	-2	-1	-3	-31	-2	-31
Retail, general merchandise	161	-7	-7	+8	-21	+16	0
Retail, food	310	-1	-4	+5	+9	+9	+25
Wholesale and retail dairy products	211	+2	-3	+6	-5	+10	-8
Retail, automobiles	402	+2	+4	+32	-25	+27	-29
Filling stations	140	+3	+2	-34	+492	-36	+550
Retail, apparel and accessories	386	-8	-8	-2	+320	+4	+100
Miscellaneous retail stores	1,186	( <sup>2</sup> )	+2	+4	-3	+2	0
Wholesale and retail trade combined	285	+3	+4	-7	-47	-10	-50

<sup>1</sup> Weighted according to estimates of total current employment in each industry.

<sup>2</sup> Totals include figures for industries not shown separately.

<sup>3</sup> Less than half of 1 percent.

<sup>4</sup> Primarily reported by company instead of by establishment.

TABLE C.—*Estimates of Disabilities, by Extent, for Manufacturing Industries, 1944*  
[Excluding self-employed]

Industry	All reporting establishments				Estimates for entire industry				
	Number of establishments	Number of employees (thousands)	Employee-hours worked (thousands)	Number of disabling injuries	All disabling injuries	Death and permanent total disability	Permanent partial disability	Temporary total disability	Total days lost (thousands)
Chemical products <sup>1</sup>	2, 198	543	1, 250, 928	17, 301	26, 300	315	1, 050	24, 935	3, 660
Drugs, toiletries, and insecticides	317	54	117, 295	2, 132	3, 000	90	2, 910	111	
Explosives	109	76	176, 619	944	1, 600	45	1, 455	426	
Fertilizers	288	17	37, 718	1, 273	2, 000	20	70	1, 910	268
Paints and varnishes	413	30	70, 421	1, 286	1, 500	5	20	1, 475	101
Petroleum refining <sup>2</sup>	( <sup>3</sup> )	125	304, 401	3, 495	3, 500	70	130	3, 300	( <sup>3</sup> )
Rayon and allied products	30	56	117, 339	1, 055	1, 200	60	1, 140	112	
Soap and glycerin	86	14	33, 098	497	600	5	30	565	62
Industrial chemicals	930	165	389, 048	6, 534	12, 900	65	740	12, 095	1, 345
Food products <sup>1</sup>	4, 244	453	1, 013, 692	31, 599	98, 900	295	4, 150	94, 455	8, 037
Confectionery	239	41	88, 237	1, 674	3, 100	10	140	2, 950	207
Flour, feed, and grain mill products	514	39	92, 001	2, 865	5, 700	50	130	5, 520	601
Slaughtering and meat packing	1, 197	126	304, 654	10, 928	18, 300	35	470	17, 795	673
Sugar refining	96	22	49, 613	1, 569	2, 100	5	70	2, 025	190
Breweries	321	54	124	5, 745	8, 100	15	660	7, 425	1, 032
Iron and steel and their products <sup>1</sup>	4, 829	1, 269	2, 940, 320	70, 440	85, 200	510	3, 660	81, 030	7, 856
Iron and steel	300	497	1, 131, 813	11, 195	12, 700	200	760	11, 740	2, 371
Fabricated structural steel	358	55	128, 951	4, 600	7, 200	35	260	6, 905	552
Foundries	1, 069	187	441, 509	18, 982	22, 400	90	340	21, 970	1, 265
Heating equipment, not elsewhere classified	216	24	53, 297	2, 283	3, 400	15	100	3, 285	233
Tools, except edge tools	195	27	66, 100	1, 686	2, 000	130	1, 870	128	
Wire and wire products	232	47	111, 249	2, 882	4, 300	20	230	4, 050	378
Screw and screw-machine products	132	16	39, 498	743	1, 500	100	1, 400	95	
Bolts, nuts, washers and rivets	56	11	25, 852	593	1, 200	40	1, 160	33	
Leather and its products <sup>1</sup>	748	148	320, 149	5, 196	12, 200	25	310	11, 865	608
Leather	108	29	65, 779	1, 922	3, 000	5	80	2, 915	168
Boots and shoes	452	107	227, 885	2, 813	5, 600	110	5, 490	97	
Lumber, lumber products, and furniture <sup>1</sup>	4, 026	290	636, 047	26, 811	85, 500	515	3, 850	81, 135	8, 425
Furniture, metal and wood	1, 132	89	196, 319	5, 155	11, 400	10	790	10, 600	862
Planing mills	660	42	93, 930	3, 629	7, 100	20	330	6, 750	616
Machinery (not transportation) <sup>1</sup>	4, 896	1, 413	3, 632, 440	59, 091	82, 200	165	4, 030	78, 006	5, 478
Agricultural machinery and tractors	192	70	165, 326	3, 964	5, 600	15	320	5, 265	363
General and special industry machinery <sup>1</sup>	2, 339	415	1, 238, 056	27, 595	38, 600	75	1, 620	36, 905	2, 420
Electrical equipment and supplies	929	558	1, 321, 445	13, 908	19, 500	40	1, 320	18, 140	1, 529
Metalworking machinery	1, 105	205	508, 014	8, 573	12, 000	50	440	11, 510	957
Textile machinery	113	15	40, 031	692	1, 000	5	40	955	62
Commercial and household machines	120	35	90, 102	1, 628	1, 700	30	1, 670	44	
Engines and turbines	98	112	269, 463	2, 731	3, 800	20	430	3, 350	467
Paper and allied products <sup>1</sup>	1, 765	245	688, 950	14, 901	23, 100	115	720	22, 265	1, 712
Pulp and paper	577	148	353, 260	10, 302	12, 400	100	190	12, 110	1, 086
Paper boxes and containers	889	59	123, 673	2, 879	4, 700	25	240	4, 435	384
Printing and publishing <sup>1</sup>	2, 687	175	367, 912	3, 144	10, 100	30	470	9, 600	905
News and periodical	893	91	186, 422	1, 487	3, 000	10	80	2, 910	190
Rubber and its products <sup>1</sup>	296	188	427, 310	7, 012	8, 800	15	900	7, 885	1, 142
Rubber tires	54	87	207, 207	3, 214	4, 100	15	130	3, 965	271
Stone, clay, and glass products <sup>1</sup>	1, 288	210	457, 758	9, 846	18, 700	130	490	18, 080	1, 595
Brick, tile, and terra cotta	415	27	57, 675	2, 532	4, 700	40	90	4, 570	408
Cement <sup>2</sup>	( <sup>3</sup> )	17	38, 434	519	600	15	30	555	( <sup>3</sup> )
Glass	223	89	190, 049	3, 415	4, 600	15	130	4, 455	312
Potttery	138	27	57, 687	1, 030	1, 800	40	1, 760	59	

See footnotes at end of table.

TABLE C.—*Estimates of Disabilities, by Extent, for Manufacturing Industries, 1944—Con.*  
[Excluding self-employed]

Industry	All reporting establishments				Estimates for entire industry				
	Number of establishments	Number of employees (thousands)	Employee-hours worked (thousands)	Number of disabling injuries	All disabling injuries	Death and permanent total disability	Permanent partial disability	Temporary total disability	Total days lost (thousands)
Textile and textile-mill products <sup>1</sup> .....	4, 373	837	1, 854, 107	26, 807	70, 060	70	2, 170	67, 780	3, 787
Carpets and rugs.....	61	14	30, 081	330	500	—	60	440	69
Cotton goods.....	611	238	612, 603	10, 113	20, 800	20	670	20, 110	1, 142
Dyeing and finishing.....	211	37	83, 904	2, 057	3, 700	5	60	3, 635	198
Knit goods.....	664	108	217, 552	1, 771	3, 200	—	40	3, 160	74
Silk and rayon products, not elsewhere classified.....	197	50	109, 531	1, 461	2, 800	—	50	2, 750	74
Woolen goods.....	424	128	273, 385	5, 545	7, 100	20	300	6, 780	569
Transportation equipment <sup>1</sup> .....	1, 648	2, 699	6, 563, 997	104, 362	139, 700	495	5, 895	133, 310	10, 062
Shipbuilding and boatbuilding <sup>2</sup> .....	474	996	2, 445, 311	57, 991	75, 000	375	2, 625	7, 200	6, 288
Aircraft and parts.....	729	1, 388	3, 342, 291	31, 882	36, 900	75	1, 810	35, 015	2, 413
Miscellaneous manufacturing <sup>1</sup> .....	2, 585	659	1, 594, 399	24, 992	31, 000	95	1, 740	29, 165	2, 552
Tobacco products.....	201	42	91, 609	1, 124	2, 500	5	110	2, 385	108
Coke ovens <sup>2</sup> .....	( <sup>3</sup> )	24	69, 590	1, 003	1, 300	20	50	1, 230	( <sup>3</sup> )
Ordinance and accessories <sup>1</sup> .....	1, 249	796	1, 853, 530	27, 078	81, 800	325	5, 560	75, 915	8, 887
Ammunition, except for small arms.....	599	390	885, 337	14, 278	30, 400	210	2, 250	27, 940	4, 241

<sup>1</sup> Includes data for industries not shown separately because of insufficient coverage upon which to base industry estimates.

<sup>2</sup> Based on preliminary data furnished by the Bureau of Mines, U. S. Department of the Interior.

<sup>3</sup> Not available.

<sup>4</sup> This classification includes construction, mining, and food-products machinery.

<sup>5</sup> Does not include United States navy yards.

TABLE D.—*Distribution of All Reported Injuries Resulting in Permanent Partial Disability, According to Part of Body Affected, by Industry, 1944*

Industry	Total	Percent of permanent partial disability cases involving the loss, or loss of use of—						
		An arm	A hand or fingers	A leg	A foot or toes	An eye	One or both ears (hearing)	Other
<i>Manufacturing</i>								
Total, manufacturing.....	100	3	76	3	7	5	(1)	6
Chemical products.....	100	6	69	6	11	6	0	2
Explosives.....	100	4	78	6	6	4	0	2
Fertilizers.....	100	14	55	10	14	5	0	2
Industrial chemicals.....	100	4	69	6	15	4	0	2
Food products.....	100	7	67	6	8	5	0	7
Baking.....	100	0	92	0	4	0	0	4
Canning and preserving.....	100	4	77	15	4	0	0	0
Confectionery.....	100	5	63	3	6	0	0	23
Flour, feed, and grain mill products.....	100	9	71	10	5	3	0	2
Slaughtering and meat packing.....	100	2	92	0	2	4	0	0
Sugar refining.....	100	17	54	8	15	2	0	4
Breweries.....	100	6	47	6	16	14	0	11
Iron and steel and their products.....	100	2	78	3	8	5	(1)	4
Iron and steel.....	100	2	75	3	10	6	1	3
Fabricated structural steel.....	100	1	74	3	8	7	0	7
Forgings, iron and steel.....	100	0	87	0	9	1	0	3
Foundries, iron and steel.....	100	3	56	9	8	15	1	8
Hardware.....	100	0	90	0	5	5	0	0
Stamped and pressed metal products.....	100	0	97	0	0	3	0	0
Steam fittings and apparatus.....	100	2	72	2	17	2	0	5
Not elsewhere classified.....	100	1	75	4	8	4	0	8

<sup>1</sup> Less than half of 1 percent.

TABLE D.—Distribution of All Reported Injuries Resulting in Permanent Partial Disability, According to Part of Body Affected, by Industry, 1944—Continued

Industry	Total	Percent of permanent partial disability cases involving the loss, or loss of use of—						Other
		An arm	A hand or fingers	A leg	A foot or toes	An eye	One or both ears (hearing)	
Leather and its products.....	100	2	94	2	0	2	0	0
Lumber, lumber products, and furniture.....	100	4	80	4	4	5	(1)	3
Logging.....	100	8	45	17	8	12	3	7
Planing mills.....	100	5	81	5	3	3	0	3
Sawmills.....	100	3	75	5	6	8	(1)	3
Furniture, except metal.....	100	3	89	(1)	3	4	(1)	1
Wooden containers.....	100	2	90	2	2	3	0	1
Not elsewhere classified.....	100	2	83	2	3	5	0	5
Machinery (not transportation).....	100	2	76	2	7	4	0	9
Construction and mining machinery.....	100	5	77	5	8	5	0	0
Electrical equipment and supplies.....	100	0	77	1	9	4	0	9
General industrial machinery.....	100	3	68	3	8	3	0	15
General machine shops.....	100	2	76	3	3	2	0	14
Paper and allied products.....	100	0	86	2	0	7	0	5
Printing and publishing.....	100	6	73	6	8	2	0	5
Book and job.....	100	4	72	7	10	2	0	5
News and periodical.....	100	10	73	5	5	2	0	5
Rubber and its products.....	100	4	78	2	10	1	0	5
Stone, clay, and glass products.....	100	4	72	5	6	7	0	6
Brick, tile, and terra cotta.....	100	0	73	4	9	7	0	7
Glass.....	100	7	64	6	4	10	0	9
Textiles and textile-mill products.....	100	5	81	3	5	3	0	3
Cotton goods.....	100	4	86	1	1	6	0	2
Woolen goods.....	100	6	71	4	13	2	0	4
Transportation equipment.....	100	2	75	2	5	5	(1)	11
Motor vehicles.....	100	0	75	2	4	6	0	13
Shipbuilding.....	100	4	62	6	16	9	1	2
Railroad equipment.....	100	2	92	0	3	3	0	0
Aircraft.....	100	5	78	2	3	8	(1)	4
Aircraft parts.....	100	1	74	1	2	4	(1)	18
Miscellaneous manufacturing.....	100	2	70	2	10	3	0	13
Tobacco products.....	100	2	94	0	2	0	0	2
Radios and phonographs.....	100	1	56	3	14	3	0	23
Nonferrous-metal products.....	100	3	62	2	14	5	0	14
Not elsewhere classified.....	100	3	87	3	5	0	0	2
Ordnance and accessories.....	100	4	76	2	7	5	1	5
Ammunition, except small arms.....	100	5	75	2	9	5	1	3
Small arms.....	100	0	87	0	0	2	2	9
<i>Nonmanufacturing</i>								
Construction.....	100	5	55	9	7	13	1	10
Building.....	100	4	51	10	5	15	1	14
Heavy engineering.....	100	2	61	9	7	16	0	5
Transportation.....	100	5	41	10	23	2	0	19
Stevedoring.....	100	7	40	15	33	2	0	3
Bus.....	100	2	54	10	19	2	0	13
Both streetcar and bus.....	100	3	42	29	6	9	0	11
Heat, light, and power.....	100	12	43	9	16	5	0	15
Electric light and power.....	100	10	44	8	16	4	0	18
Personal services.....	100	2	78	6	9	0	1	4
Trade.....	100	4	73	4	10	5	0	4
Retail.....	100	3	82	3	6	3	0	4
Wholesale distributors.....	100	4	63	4	16	9	0	4

<sup>1</sup> Less than half of 1 percent.



TABLE E.—*Indexes of Injury-Frequency Rates in Manufacturing, 1926-44, by Extent of Disability*<sup>1</sup>

[1926=100]

Year	All injuries	Death and permanent total	Permanent partial	Temporary total
1926.....	100.0	100.0	100.0	100.0
1927.....	93.6	107.1	96.3	93.3
1928.....	93.2	107.1	104.6	92.5
1929.....	99.2	92.9	109.2	98.7
1930.....	95.5	107.1	111.0	94.6
1931.....	78.0	92.9	102.8	76.5
1932.....	80.9	107.1	113.8	78.9
1933.....	91.8	85.7	110.1	90.8
1934.....	93.6	107.1	128.4	91.6
1935.....	88.1	92.9	121.1	86.2
1936.....	85.7	85.7	114.7	84.1
1937.....	85.8	85.7	122.0	83.7
1938.....	71.7	71.4	78.9	68.1
1939.....	73.4	71.4	80.7	73.9
1940.....	75.3	71.4	84.8	75.6
1941.....	85.8	80.3	93.7	86.3
1942.....	93.5	70.7	83.4	94.1
1943.....	94.4	70.7	83.4	95.0
1944.....	88.3	62.8	75.4	89.7

<sup>1</sup> Beginning with 1937, the indexes are based on the percent of change of the frequency rates of identical establishments in each pair of successive years.