# Work Injuries in the United States During 1949

A Collection of Basic Work-Injury Data for Each of the Major Industries in the United States

Estimates of Disabling Work Injuries Injury-Frequency Rates Injury-Severity Measures Changes in Injuries and Injury Rates

Bulletin No. 1025
UNITED STATES DEPARTMENT OF LABOR
Maurice J. Tobin, Secretary

BUREAU OF LABOR STATISTICS

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#### **Letter of Transmittal**

UNITED STATES DEPARTMENT OF LABOR,
BUREAU OF LABOR STATISTICS,
Washington, D. C., August 31, 1951.

The SECRETARY OF LABOR:

I have the honor to transmit a report on the occurrence of work injuries in the United States during 1949. Over 56,000 establishments with a total employment of about 10 million workers participated in the survey on which the report is based.

This bulletin, parts of which have appeared in the March and October 1950 issues of the Monthly Labor Review, was prepared by Frank S. McElroy and Robert S. Barker, of the Bureau's Branch of Industrial Hazards.

EWAN CLAGUE, Commissioner.

Hon. Maurice J. Tobin, Secretary of Labor.

#### **Contents**

Nonmanufacturing Injury severity: Manufacturing	2 4 5
Injury-frequency rates:  Manufacturing Nonmanufacturing Injury severity:  Manufacturing Nonmanufacturing	2 4 5
Nonmanufacturing Injury severity:  Manufacturing Nonmanufacturing	<b>4</b> <b>5</b>
Nonmanufacturing Injury severity:  Manufacturing Nonmanufacturing	<b>4</b> <b>5</b>
Injury severity:  Manufacturing  Nonmanufacturing	5
Nonmanufacturing	
Nonmanufacturing	
Appendix	
Table A.—Injury rates and injuries by extent of disability, 1949	9
Table B.—Changes in exposure, disabling injuries, and injury rates for 41,408 identical establishments, 1948–49.	14
Table C.—Distribution of all reported injuries resulting in permanent-partial disability, according to part of body affected, by industry, 1949	18
Table D.—Distribution of temporary-total disabilities, by duration of disability, 1949 2: Table E.—Indexes of injury-frequency rates in manufacturing, 1926-49, by extent of disability	

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## Work Injuries in the United States During 1949

#### ABSTRACT

The annual toll of disabling work injuries declined to the lowest estimate since 1939, owing mainly to improved safety conditions. Greatest reductions in the number of injuries occurred in the railroad, mining, and manufacturing industries. Manufacturing as a whole averaged 15 injuries per million employee-hours worked, registering the greatest improvement in any single year since 1938. There was an increase, however, in the general severity of injury cases reported. The total economic time loss owing to disabling work injuries in 1949 is equivalent to a year's employment of about 680,000 workers.

The annual toll of disabling work injuries <sup>1</sup> declined to a new postwar low in 1949. A 7-percent improvement from the 1948 total brought the 1949 injury volume down to about 1,870,000—the lowest estimate since 1939. A slightly lower level of employment and decreased hours of work accounted for part of this reduction, but the major portion of the gain resulted from improved safety conditions in many industries.

Further evidences of the improvement in work safety during 1949 appeared in the injury-frequency rates <sup>2</sup> for manufacturing and for most nonmanufacturing industries. For the first time, the average rate for all manufacturing returned to the low level of prewar years. The substantial decrease in the frequency of work injuries was offset, in part, by an increase in the general severity of the cases reported, as measured by the average days of disability per case. As a result,

#### **Estimates of Disabling Work Injuries**

The total volume of disabling work injuries in 1949 was estimated by the Bureau of Labor Statistics <sup>4</sup> at 1,870,000—a reduction of about 150,000 from the estimate for 1948.

The number of fatalities resulting from work injuries during 1949 was estimated at 15,000—a reduction of over 6 percent from the final revised figure of 16,000 for 1948. Permanent-total disabilities, which usually incapacitate the injured workers for any future employment, dropped from

severity rates,<sup>3</sup> which reflect both frequency and severity of injuries, declined only moderately in many industries.

<sup>&</sup>lt;sup>1</sup> A disabling work injury is an injury arising out of and experienced in the course of employment, which results in death or in any degree of permanent physical impairment, or renders the injured person unable to work at a regularly established job, which is open and available to him, throughout the hours corresponding to his regular shift on any day after the day of injury. The term "injury" includes occupational diseases.

<sup>&</sup>lt;sup>3</sup> The injury-frequency rate is the average number of disabling work injuries for each million employee-hours worked.

<sup>&</sup>lt;sup>3</sup> The severity rate is the average number of days lost, because of disabling work injuries, per 1,000 employee-hours worked. The computation of days lost includes the use of standard time charges for fatalities and permanent disabilities as given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1945.

<sup>&</sup>lt;sup>4</sup> These estimates of injury volume were prepared cooperatively by the Bureau of Labor Statistics and the National Safety Council. The basic estimates of the two organizations, therefore, are identical. Differences in the published figures represent variations in the rounding applied to the basic figures by the two organizations. These variations reflect primarily the National Safety Council's need for integrating the occupational estimates into totals for all types of accidental injuries, including injuries resulting from home, traffic, and public accidents, for which the Bureau of Labor Statistics does not prepare estimates.

1,800 to 1,600. Permanent-partial disabilities, involving the loss or permanent impairment of some body part or function, were down 8 percent from the revised figure of 86,700 for 1948 to a level of 79,400 in 1949. Most of these latter impairments do not prevent the workers from continuing in industrial employment, but many may necessitate retraining or changes in jobs. Temporary-total disabilities are those resulting in an inability to work for at least a full day after the day of injury but leaving no permanent ill effects. This type of disability constituted the largest group of injuries and dropped to a level of 1,774,000. This represents a 7-percent reduction from the revised final estimate of 1,915,000 for 1948.

Actual time lost during the year because of work injuries occurring in 1949 was estimated at about 39,000,000 man-days, the equivalent of a year's full-time employment for approximately 130,000 This, however, represents only a part of the total production loss accruing from these injuries. If additional allowance were made for the future effects of the deaths and permanent physical impairments included in the 1949 total. the economic time loss chargeable to these injuries would amount to about 204,000,000 man-days. This is equivalent to a year's employment for about 680,000 workers.

The greatest reductions in the number of injuries occurred in the railroad, mining, and manufacturing industries. In each of these industry groups there was some decline in employment and in hours worked, but the drop in injuries was greater than could be accounted for by these factors alone.

Employment in the railroad industry decreased about 18 percent in 1949, but work injuries were reduced nearly 27 percent. Employment in mining declined slightly and reduced operations resulted in a sharp drop in total hours worked. The 20-percent drop in mining injuries, however. exceeded the decline in hours. Injury rates in manufacturing fell sharply during 1949, and coupled with a slight decline in employment, resulted in a 19-percent drop in the volume of injuries.

The trend toward fewer injuries was also apparent in construction, trade, and in the miscellaneous transportation industries. Injuries were down about 1 percent in the public utilities group.

The industry group comprising the services, government, and miscellaneous industries was the only one showing an increase in injuries during 1949. There were in this group about 2 percent more injuries than in 1948.

#### **Injury-Frequency Rates**

Manufacturing.—For manufacturing as a whole there were on the average 15 injuries for each million employee-hours worked-a decrease of 12.8 percent from the 1948 average of 17.2 (see

Estimated number of disabling work injuries during 1949, by industry group

	All disa	All disabilities		Fatalities		Permanent-total disabilities		Permanent-partial disabilities		ary-total ilities
Industry group	Total <sup>1</sup>	To em- ployees	Total <sup>1</sup>	To em- ployees	Total 1	To em- ployees	Total í	To em- ployees	Total <sup>1</sup>	To em- ployees
All groups 2	1, 870, 000	1, 409, 000	15,000	10, 700	1,600	1, 200	79, 400	61, 100	1, 774, 000	1, 336, 000
Agriculture 3 Mining and quarrying 4 Construction 5 Manufacturing 6 Public utilities Trade 5 Railroads 8 Miscellaneous transportation 3 Services, government, and miscellaneous industries 3 5	340, 000 70, 000 183, 000 381, 000 27, 000 329, 000 46, 000 126, 000	60, 000 65, 000 142, 000 374, 000 27, 000 263, 000 46, 000 105, 000	4, 300 1, 000 2, 100 2, 300 400 1, 500 800 2, 100	1, 100 900 1, 700 2, 200 400 1, 200 500 700	400 100 300 200 (') 100 200 100	100 100 200 200 (7) 100 200 100	15, 200 3, 000 7, 300 19, 200 600 7, 900 3, 200 6, 000 17, 000	3, 600 2, 800 5, 700 19, 000 6, 300 3, 200 5, 000	320, 100 65, 900 173, 300 359, 300 26, 000 319, 500 42, 100 119, 100	55, 200 61, 200 134, 400 352, 600 26, 000 255, 400 42, 100 99, 200
Revised data for 1948: All groups 2	2, 019, 900	1, 552, 100	16,000	11, 700	1,800	1,400	86, 700	68, 100	1, 915, 400	1, 470, 900
Agriculture <sup>2</sup> Construction <sup>8</sup>	340, 000 193, 000	60, 000 150, 000	4, 400 2, 100	1, 100 1, 700	400 300	100 200	15, 200 7, 800	3, 600 6, 000	320, 000 182, 800	55, 200 142, 100

<sup>&</sup>lt;sup>1</sup> Differences between total number of injuries and injuries to employees represent injuries to self-employed and unpaid family workers.

<sup>2</sup> Does not include domestic servants.

<sup>3</sup> The total number of injuries in agriculture is based on cross section surveys made by the U. S. Department of Agriculture in 1947 and 1948. These are considered to be minimum figures. Injuries experienced in performing chores are excluded. There are some indications of under-reporting. The break-

down of agricultural injuries by extent of disability is based on other sources.

4 Based largely on data of the U. S. Bureau of Mines.

5 Based on small sample studies.

6 Based on comprehensive survey.

Based largely on data of the Interstate Commerce Commission.

table A, col. 12). This decrease is somewhat less than had been indicated by preliminary reports. Nevertheless, it represents the greatest improvement achieved in any single year since 1938, when the all-manufacturing rate dropped 15.2 percent from the level of the preceding year. The 1949 average compares favorably with prewar rates of 15.1 for 1938; 14.9 for 1939 (the lowest recorded for any year in the Bureau's 24-year injury-rate series); and 15.3 for 1940. This return to prewar levels presents a sharp contrast with the substantially higher injury rates prevailing during the war period.

Only 1 of the 18 major manufacturing groups, ordnance and accessories, recorded a significant increase in injury-frequency rates from 1948 to 1949, rising from 5.1 to 6.6. One industry group showed a decrease of less than 1 full frequency-rate point; the 16 others recorded decreases of from 1.0 to 3.9 points.

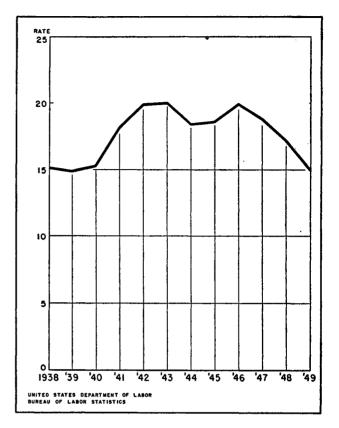
Only 8 of the 149 individual manufacturing classifications where comparable data were available showed significant increases, 28 recorded little change, and 113 reported decreases of 1 or more frequency-rate points. In this latter group, the rates of 22 decreased by 5 or more points.

The iron and steel products group showed the greatest improvement—a drop of 3.9 frequency-rate points from 1948 to 1949. Of the 26 separate industry classifications in this group, 10 dropped 5 points or more, 13 declined 1 to 5 points, and 3 showed less than 1-point change from the preceding year. The rate for iron foundries decreased from 39.7 injuries per million manhours to 29.0; vitreous-enameled products, from 25.1 to 16.6; plate fabrication and boiler-shop products, from 33.4 to 25.1; stamped and pressed metal products, from 21.6 to 14.0; steel foundries, from 30.5 to 23.1; and steel springs, from 20.8 to 13.6.

Marked decreases in injury-frequency rates also occurred in boatbuilding and repairing (from 48.2 to 40.0), textile machinery (from 20.9 to 13.6), breweries (from 35.5 to 28.4), and wooden containers (from 42.6 to 35.6).

Based on percent of change in contrast with change in frequency-rate points, the explosives industry made the best record. Its injury-frequency rate dropped 58 percent (from 4.3 in 1948 to 1.8 in 1949). The millinery industry's rate decreased 49 percent (from 7.5 to 3.8); and

Chart 1.—Injury-Frequency Rates in Manufacturing, 1938-49



the automotive electrical equipment rate dropped 41 percent (from 16.2 to 9.5).

Average injury rates for individual industries reflect changes in composition of the industries as well as in the level of safety prevailing at different times. Hence, achievements in the advancement of safety may best be measured by comparing the records of identical establishments where the same type of operations were continued during successive periods (see table B, col. 7). Considering only those establishments where comparable reports were available for the 2 years, the explosives industry still recorded the greatest percentage decrease in injury-frequency rates (49 percent). In bookbinding, however, reports from identical establishments in the 2 years showed a 43-percent decrease, compared with only a 17percent drop in the industry averages. The rate for identical establishments in the textile machinery industry dropped 42 percent, compared with 35 percent in the industry averages. In the manufacture of plastic materials, the rate in identical establishments declined 37 percent, compared with a decrease of 25 percent for all reporting establishments. These comparisons, based upon reports from the same establishments in each period, give a better indication of the trend of safety in continuing operations; whereas, the injury-frequency rates based upon all reports received in each year give the truest picture available of the current incidence of work injuries in the industry as a whole.

In some industries, although the injury-frequency rates based upon all reports received increased from 1948 to 1949, a comparison of rates based upon reports from identical establishments each year showed a decrease. Listed below are the more important instances:

	Percent chan frequency ra	ge in injur <b>y</b> te <b>s,</b> 1948–49
	All estab- lishments surveyed	ldentical establish- ments
Industry:		
Compressed and liquefied gases.	+52	-4
Paving and roofing materials_	+29	26
Hats, except cloth and milli-		
nery	+32	-1

A comparison of injury-frequency rates over the past 4 years gives a better indication of the progress individual industries have made in safety work since the 1946 postwar peak. During this period, the explosives industry recorded a decrease of 68 percent (from 5.7 in 1946 to 1.8 in 1949); rubber tires and tubes, 54 percent (from 12.9 to 5.9); plastic materials, except rubber, 52 percent (from 9.9 to 4.8); and aluminum and magnesium products, 50 percent (from 24.8 to 12.5). Iron foundries showed the greatest decrease in terms of frequency-rate points, dropping 18.3 points, or 39 percent (from 47.3 in 1946 to 29.0 in 1949). Breweries reduced their average injury-frequency rate by 16.9 points (from 45.3 to 28.4, or 37 percent); mattresses and bed springs, by 16.1 points (from 34.6 to 18.5, or 47 percent).

A number of manufacturing industries had relatively high injury-frequency rates, despite a general improvement in the record of most of them. Logging had a rate of 92.2 injuries per million man-hours—the highest in manufacturing. The only other comparable rates were found in mining, and only one of the mining rates—that for gold-silver (93.8)—was higher than the logging rate. Other manufacturing industries with high

injury-frequency rates in 1949 were sawmills, 55.6; integrated saw and planing mills, 47.6; planing mills operated separately from sawmills, 38.1; structural clay products, 36.8; cut stone and cut-stone products, 36.6; and wooden containers, 35.6.

Manufacturing industries with the best safety records in 1949 were explosives, with an injury-frequency rate of 1.8; synthetic rubber, 2.3; synthetic textile fibers, 3.6; electric lamps (bulbs), 3.7; millinery, 3.8; women's and children's clothing, 4.1; radios and phonographs, 4.4; communication equipment other than radio, 4.7; and plastic materials other than rubber, 4.8.

Nonmanufacturing. The injury-frequency record for nonmanufacturing industries showed less improvement between 1948 and 1949 than that for manufacturing. Of the 54 nonmanufacturing classifications (exclusive of mining) for which comparable data were available, 25 recorded significant decreases and 15 showed little change. Fourteen reported significant increases (see table A, col. 12).

The principal construction industries—general building contracting, highway and street construction, and other heavy construction-recorded moderate increases in injury-frequency rates from 1948 to 1949. Among the special contracting trades, rates fluctuated widely. Four showed increases of over 5 frequency-rate points, and four recorded decreases of 5 points or more. Structuralsteel erection and ornamental ironwork had the highest injury-frequency rate (48.6) among the construction industries where data were available. (Although wrecking and demolition work ranked highest in 1948, it was not sufficiently represented in the 1949 study to warrant presentation of the rate.) Highway and street construction had a rate of 45.5; plastering and lathing, 42.7; heavy construction, other than highway and street, 41.8; and general contracting, 40.8 injuries per million man-hours. The lowest rate reported among the construction industries was 17.8 for painting, paperhanging, and decorating. The next lowest rate was 27.1 for terrazzo, tile, marble, and mosaic work. For electrical work the rate was 28.3; for carpentering, 29.3; and for masonry, stone setting, and other stone work, 29.4.

Of the other 39 nonmanufacturing classifications, 14 showed little change, 6 reported increases, and 19 showed decreases from 1948 to 1949.

Decreases of more than 5 frequency-rate points were recorded for streetcar operations (from 20.7 to 14.3), miscellaneous repair services (from 31.1 to 25.7), and filling stations (from 10.0 to 4.8). Other industries showing large percentage drops in injury rates were transportation not elsewhere classified (43 percent, from 9.1 to 5.2), eating and drinking places (28 percent, from 14.9 to 10.7), and medical and other professional services (25 percent, from 5.3 to 4.0). Stevedoring was the only industry in which the increase amounted to as much as 5 frequency-rate points. However, amusements and related services had an increase of 26 percent (from 8.4 to 10.6).

As in previous years, stevedoring had the highest injury-frequency rate among the non-manufacturing industries—67.4. This was a slight increase over the rate of 62.3 reported for 1948. Outstandingly low injury-frequency rates were reported for radio broadcasting and television (1.7), insurance (2.1), telephone (2.3), banks and other financial agencies (2.4), medical and other professional services (4.0), retail apparel and accessories (4.4), filling stations (4.8), and dry cleaning (4.9).

Preliminary reports of the United States Bureau of Mines indicate continuation of the improvement in safety records of most mining industries noted in the 1948 report. The important coal-mining group showed a drop of 1.6 frequency-rate points from the revised 1948 to the preliminary 1949 figures.<sup>5</sup> The injury-frequency rate for bituminous-coal mines decreased from 57.4 to 55.6, but that for anthracite mines changed only slightly, from 76.6 to 76.0. Other decreases were recorded by gold-silver ore-dressing mills (from 51.8 to 30.4), copper mines (from 40.4 to 33.1), and granite quarries (from 47.8 to 42.1). Major increases in injury-frequency rates were confined for the most part to the relatively small mining industries. Miscellaneous ore-dressing mills showed an increase from 39.7 in 1948 to 52.5 in 1949; miscellaneous metal mines, from 61.7 to 71.8; slate quarries, from 42.3 to 51.1; and gold-silver mines, from 88.2 to 93.8.

An outstanding 3-year record was established by copper ore-dressing mills. Their injury-

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frequency rate was reduced from 26.0 in 1946 to 13.9 in 1949, or 47 percent. In the same period, copper mines reduced their rate 36 percent (from 51.7 to 33.1); and gold-silver ore-dressing mills, 30 percent (from 43.3 to 30.4).

The injury-frequency rates of most mining industries were still relatively high compared with those for manufacturing industries.<sup>6</sup> Gold-silver mining had the highest rate of any industry recorded for 1949—93.8 injuries per million manhours—followed by lead-zinc mines with a rate of 88.5.

Iron ore-dressing mills reported the lowest injury-frequency rate (13.3) in the mining group. Cement quarries had a rate of 13.6; copper ore-dressing mills, 13.9; and iron mines, 21.3.

#### **Injury Severity**

Manufacturing. The injury-severity rate for all manufacturing decreased slightly, from 1.5 in 1948 to 1.4 in 1949 (see table A, col. 13). This was due entirely to the relatively large decrease in the injury-frequency rate, which counteracted a 12percent increase in the average days lost per case. The proportion of deaths and permanent-total disabilities 7 (0.4 percent) remained about the same as in 1948, but the proportion of permanentpartial disabilities 7 increased from 4.7 percent in 1948 to 5.4 in 1949. The proportion of temporarytotal disabilities decreased conversely (see table A, cols. 6, 7, and 8). The average number of days lost for each temporary disability case increased from 16 to 17. The average days charged for each permanent-partial disability increased from 925 days per case to 943. These factors all combined to increase the severity average 8 from 83 to 93 days per case (see table A, cols. 9, 10, and 11).

Although there was a steady decrease in the injury-frequency rate during the past 3 years the

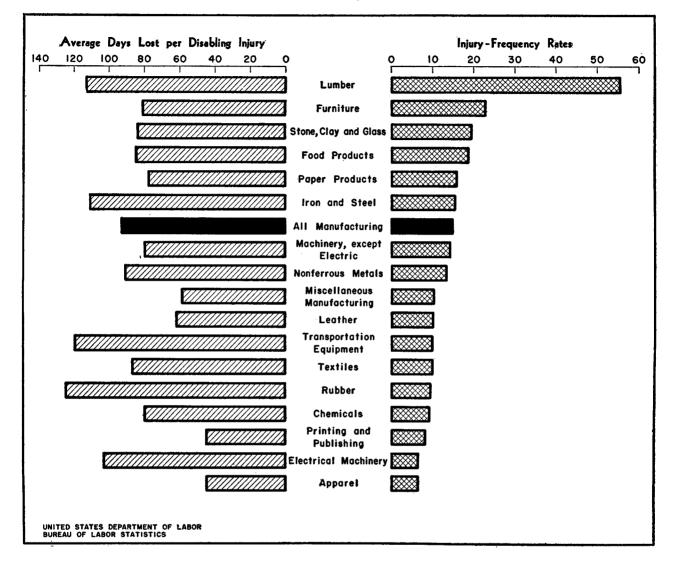
<sup>&</sup>lt;sup>4</sup> See U. S. Bureau of Mines, Mineral Industry Surveys, Health and Safety Statistics, No. H8S392, Employment and Injuries in the Mineral Industries, 1949, Washington, August 29, 1950, for revised injury statistics for 1945 to 1948 and preliminary data for 1949.

<sup>&</sup>lt;sup>6</sup> In making comparisons of injury rates between mining and other industries, one should bear in mind that the rates for mining are based upon the experience of only those employees engaged in the mining operations, and exclude office workers, whereas the rates for other industries include the manhours and injury experience of office workers and others not exposed to actual operating hazards of the industry concerned.

<sup>&</sup>lt;sup>7</sup> A permanent-total disability is an injury, other than death, which permanently and totally incapacitates an employee from following any gainful occupation. A permanent-partial disability consists of the complete loss in one accident of any member or part of a member of the body, or any permanent impairment of functions of the body or part thereof to any degree less than permanent-total disability.

<sup>8</sup> The severity average is the average number of days lost per case, including the actual time lost because of temporary-total disabilities and the standard time charges for deaths and permanent impairments.

Chart 2.—Injury-Frequency Rates and Severity Averages, Major Manufacturing Groups, 1949



average days lost or charged per case increased. The average number of days lost per case rose from 82 in 1946 to 93 in 1949, with a low of 73 in 1947. It is evident from comparison of the trends in injury frequency and in average days lost per case that the injuries which occurred during 1949 were of slightly more serious nature and caused somewhat longer periods of disability. Much of the decrease in the frequency of injuries occurred among the less serious cases.

Of the 105 industries for which severity data were available, 71 showed decreases in the proportion of temporary disabilities and a corresponding increase in the proportion of deaths and/or permanent disabilities. An increase between 1948 and 1949 in average days lost or charged per case was noted in 62 separate industry classifications.

Fatalities and permanent-partial disabilities accounted for only 0.4 percent of the reported injuries in all manufacturing. Certain individual industries, however, reported relatively large proportions of such cases. In the iron and steel industry 2.0 percent of the reported cases resulted in death or permanent-total disability; in logging, 1.5; in ordnance and accessories, 1.5; in engines and turbines, 1.4. In cement mills, excluding quarries, 2.5 percent of the cases were fatalities; in copper smelting, 1.5; petroleum refining, 1.4.

The number of permanent-total disabilities was not reported for these latter industries. The proportion of permanent-partial disabilities was high in electrical appliances (14.0 percent), motor-vehicle parts (13.9), stamped and pressed metal products (13.2), carpets, rugs, and other floor coverings (11.9), and aircraft manufacturing (11.3).

The iron and steel industry recorded the highest injury-severity average of any manufacturing industry (269 days per case). In this industry 10.0 percent of the injuries reported were permanent-partial disabilities, and 2.0 percent were fatalities or permanent-total disabilities. The temporary cases averaged 53 days disability per case. Other manufacturing industries with high severity averages were ordnance and accessories (215 days lost or charged per case); aircraft manufacturing (205); breweries (190); logging (190); morticians' supplies (181); stone, clay, and glass products not elsewhere classified (179); batteries (169); carpets, rugs, and other floor coverings (163); and electrical appliances (161).

The highest severity rate among the manufacturing industries (18.0) was found in logging. this industry there was not only a high frequency of injuries but also a tendency toward more serious cases than in most other industries. Of all injuries reported in logging, 1.5 percent resulted in death or permanent-total disability. This may be compared with the rate of 0.4 percent for all manufacturing. An average of 2,346 days was charged for each permanent-partial disability case in the logging industry, whereas the average for all manufacturing was 943 days. Temporary cases in logging were disabled for an average of 23 days, compared with 17 days for all manufacturing combined. The resulting average of days lost or charged for all disabling injury cases in logging was 190, more than twice as great as the average of 93 for manufacturing industries in general.

Most high severity rates in other industries can be accounted for by either a high frequency rate, or high severity average, or both. Integrated saw and planing mills had a severity rate of 6.3, a frequency rate of 47.6, and an average of 126 days lost per case. Breweries had a severity rate of 5.5, a frequency rate of 28.4, and an average of 190 days per case. Sawmills operated separately from planing mills had a severity rate of 3.7 and

a frequency rate of 55.6, with an average of 69 days per case. Other manufacturing industries with high severity rates were veneer mills (6.4) and cut stone and cut-stone products (4.0).

Nonmanufacturing. For all construction, the average severity rate was 3.9, in comparison with 1.4 for all manufacturing (see table A, col. 13). This, however, represents a substantial improvement over the rate of 5.0 recorded in 1948. Most of this improvement was due to a decrease in the proportion of fatalities and permanent-total disabilities from 1.2 percent to 0.8, and of permanentpartial disabilities from 4.0 to 3.2 percent of the cases reported (see table A, cols. 6 and 7). Average days lost or charged per case dropped from 135 in 1948 to 100 in 1949 (see table A, col. 9). Structural-steel erection had the highest injuryseverity rate in the construction group (13.6), as well as the highest injury-frequency rate (48.6). In this industry 1.5 percent of the reported cases were fatalities or permanent-total disabilities and 8.5 percent were permanent-partial disabilities. An average of 279 days were lost or charged per case. Other construction industries with high severity rates were terrazzo, tile, marble, and mosaic work (8.3); painting, paperhanging, and decorating (7.6); heavy construction other than highway and street construction (5.5); and highway and street construction (4.7).

Stevedoring was the only other nonmanufacturing industry with a high injury-severity rate (13.5). In this industry 10.1 percent of the cases reported were permanent-partial disabilities, with an average time charge of 1,360 days per case. Temporary cases averaged 32 days disability per case. The severity average was 201 days per case, which, coupled with a high frequency rate, resulted in the high severity rate. The electric-light and power industry had a severity average of 189 days per case, but a low frequency rate brought the severity rate down to 2.6.

The proportion of fatalities in mining was relatively high. In coal mining, 1.5 percent of the cases reported were fatalities; in metal mining, 1.1 percent; in nonmetal mining, 0.9; in quarrying, 1.3; and in ore-dressing mills, 0.9. Some individual industries within these groups indicated even higher percentages of fatalities. Of all cases reported, 3.9 percent in cement quarries and 3.6 percent in iron ore-dressing mills resulted in death.

Injury-frequency and severity rates, severity averages, and the disability distribution for individual industries and for industrial groups are shown in table A. The group rates were computed by weighting the individual industry rates according to the total employment in each industry.

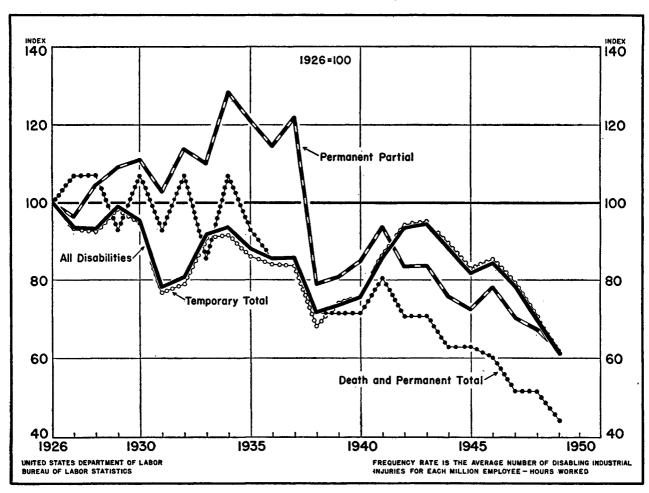
Table B shows changes in employment, employee-hours worked, disabling injuries, and days lost for establishments which reported for both 1948 and 1949.

The percentage distribution of permanent impairments according to the part of the body affected is shown in industry detail in table C.

Table D shows the proportion of temporary-total disabilities which involved less than 4 days of lost time per case. Because many reporting establishments did not supply this detail, the coverage for some industries was insufficient for inclusion in this breakdown.

Table E shows the general trend of industrial safety in terms of indexes of injury-frequency

Chart 3.—Industrial Injury-Frequency Rates in Manufacturing, by Types of Disability



rates. These yearly indexes are based upon the percent change in the rates of establishments which reported in both the current and preceding years. As they do not reflect the effect of expansion or contraction in the number of operating

plants, they should not be considered as indicating the general frequency rate level at any given time. They do indicate the safety trend in the plants having continuing operations.

Table A.—Injury rates and injuries by extent of disability, 1949

[All reporting establishments]

Industry (1)	Number of establishments reporting  (2)	Average number of employees <sup>1</sup>	Employee- hours worked (thousands)	Number of disabling injuries	Death and permanent-total	t of disab resulting Perma- nent- partial	in 2— Tempo-rary-	Avera char	ge days ged per d Perma- nent-	Tempo-	Injury	rates 4
·	of estab- lishments reporting	number of employees	hours worked (thousands)	of disabling	and perma- nent- total	nent-	rary-	All dis-	Perma-	Тетро-		
(1)		(3)	(4)		disa- bility	disa- bility	total disa- bility	abili- ties <sup>3</sup>	partial disa- bility	rary- total disa- bility	Fre- quency	Sever- ity *
(1)	24 026		\ \ \	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Manufacturing	24 026											
Total, manufacturing	34,020	7, 945, 193	15, 570, 505	205, 001	0.4	5.4	94.2	93	943	17	<sup>5</sup> 15. 0	8 1. 4
Apparel and other finished textile product Clothing, men's and boys' Clothing, women's and children's Millinery Apparel and accessories, not elsewher	742 872 55	233, 507 117, 559 73, 202 2, 081	419, 936 209, 458 131, 277 3, 700	2, 702 1, 256 543 14	.3 .2 .3 (6)	1.7 1.3 1.2 (6)	98. 0 98. 5 98. 5 (*)	45 35 40 (6)	898 1, 156 900 (6)	11 10 11 (6)	\$ 6.5 6.0 4.1 3.8	*.3 .2 .1 (7)
classified Trimmings and fabricated textile products, not elsewhere classified	90	7, 336 33, 329	12, 569 62, 930	87 802	(6) .5	(6) 2, 5	( <sup>6</sup> ) 97. 0	( <sup>6</sup> ) 61	(f) 800	(6) 13	6. 9 12. 7	.8
Chemicals and allied products  Compressed and liquefled gases Drugs, tolietries, and insecticides Explosives Fertilizers. Industrial chemicals. Paints, varnishes, and colors. Paving and roofing materials Petroleum refining s. Plastic materials, except rubber Soap and glycerin. Synthetic rubber Synthetic rubber Synthetic textile fibers Vegetable and animal oils. Chemical products, not elsewher classified.  Electrical machinery, equipment, an supplies Automotive electrical equipment Batteries Communication and signaling equipment, except radio. Electrical appliances. Electrical equipment for industrial use electrical equipment for industrial use electrical equipment, not elsewher classified Radios and phonographs. Electrical equipment, not elsewher classified.	2, 055 72 285 406 375 382 30 (9) 31 125	540, 457 3, 783 56, 905 10, 532 25, 101 121, 412 41, 551 2, 862 148, 600 20, 084 21, 874 5, 416 56, 887 4, 288 21, 162 570, 695 25, 551 14, 299 67, 930 31, 983 269, 910 18, 766 13, 011 115, 331	1, 102, 706 7, 934 112, 263 20, 575 50, 190 246, 964 84, 620 5, 622 48, 104 43, 955 10, 817 110, 413 8, 920 42, 600  1, 121, 511 48, 386 28, 034 128, 239 61, 202 539, 707 36, 457 25, 651 2277, 530 26, 301	10, 034 111 1, 077 38 1, 082 2, 147 958 110 2, 952 231 310 25 397 157 439 7, 327 461 420 597 547 3, 719 134 295 1,005	(°) (°) (°) (°) (°) (°) (°) (°) (°) (°)	3.9 (9) 4.4 (9) 2.8 4.7 (10) (6) (6) (6) (6) (7) 8.2 (9) 14.0 (8.1 (6) (7.7 (6)	95. 6 (e) 95. 6 (f) 96. 1 94. 9 95. 3 (f) (f) (f) (f) (f) (f) (f) (f) (f) (f)	80 (9) 46 (9) 114 (92 57 (9) (6) (6) (6) (7) 103 (9) 169 (9) 169 (9) 169 (9) 169 177 (9) (9) (9) (9) (9) (9) (9) (9) (9) (9)	942 (°) 753 (°) 1, 144 1, 074 1, 074 (°) (°) (°) (°) (°) 375 843 (°) 1, 248 (°) 1, 763 (°) 946 (°)	16 (e) 14 (e) 15 20 12 (e) (f) (f) (f) (f) 16 (f) 12 (e) 16 (f) 12 (f) (f) 17 (f) 18 (f) 19 (	\$ 9.4 14.0 9.6 1.8 21.6 8.7 11.3 19.5 4.8 7.1 2.3 3.6 17.6 10.3 4.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9.5 9	\$ .9 1.3 .4 .4 .9 .2 .4 .1.00 .9 .1.9 .1.9 .1.3 .2 .2 .3 .2.9 .3 .3 .3 .6 .10 .6 .3 .5 .3 .3
Food products.  Baking. Bottling, soft drinks Breweries. Canning and preserving. Confectionery. Dairy products. Distilleries. Flour, feed, and grain-mill products. Slaughtering and meat packing. Sugar, beet. Sugar, cane. Wineries. Food products, not elsewhere classifies.	4, 358 	569, 102 73, 826 10, 593 69, 185 67, 394 41, 722 22, 909 21, 832 52, 988 140, 211 9, 542 18, 511 3, 582 36, 807 217, 401 28, 865	1, 164, 451 156, 282 23, 317 139, 693 117, 565 81, 384 52, 446 43, 339 112, 307 295, 009 20, 371 39, 591 6, 843 76, 297 428, 176 57, 983 167, 368	23, 719 2, 307 670 3, 961 2, 451 1, 042 371 2, 030 6, 845 685 926 178 1, 299 9, 891 881	(e) .3 .2 .2 .2 .2	3.8 4.6 7.4 2.6 4.1 9 (5) 5.1 1.6 2.7 4.4 (0) 5.2	95. 8 95. 0 99. 2 91. 6 97. 3 95. 9 99. 1 (e) 94. 4 98. 2 96. 1 95. 6 (e) 99. 2	85 83 35 190 39 48 30 (e) 119 98 49 49 49 40 81 49	1, 214 936 300 1, 523 766 873 1, 825 (e) 1, 431 1, 013 556 700 (f) 900	14 15 10 16 14 13 14 (6) 14 11 12 19 (6) 14 13 13 13	33.6	1.4 1.2 1.0 5.5 .9 .7 .5 1.0 2.3 1.6 3.2 1.2 1.4 .8
Furniture, metal. Furniture, except metal. Mattresses and bedsprings. Morticians' supplies. Office, store, and restaurant fixtures. Wooden containers. Miscellaneous wood products, not else where classified.	153 435	85, 436 21, 312 6, 458 14, 280 32, 322	57, 983 167, 368 41, 297 12, 620 28, 346 63, 797 56, 763	3,777 765 211 484 2,272 1,501	.9	7. 8 4. 8 8. 5 9. 8 6. 3	94. 6 92. 0 95. 2 90. 6 90. 2 93. 4	86 51 181 84 80 71	755 834 837 1, 311 727 810 821	13 12 11 14 14 13	22. 6 18. 5 16. 7 17. 1 35. 6	1.9 1.1 3.0 1.3 2.7

See footnotes at end of table.

### Table A.—Injury rates and injuries by extent of disability, 1949—Continued

[All reporting establishments]

			in reporting		Percen	t of disab	oling in-		ge days		Tojave	rates 4
Industry	Number of estab- lishments reporting	Average number of employees <sup>1</sup>	Employee- hours worked (thousands)	Number of disabling injuries	Death and permanent-total disability	Perma- nent- partial disa- bility	Tempo- rary- total disa- bility	All disabilities 3	Permanent- partial disability	Tempo- rary- total disa- bility		Sever-
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Manufacturing—Continued												
Iron and steel and their products	168 777 132	1, 355, 424 21, 339 11, 718 20, 184 55, 063 48, 559 126, 526 45, 337 53, 372	2, 604, 673 41, 089 22, 578 39, 327 111, 729 94, 806 232, 849 84, 496 103, 631	37, 793 571 323 551 2, 481 1, 733 6, 742 1, 955 1, 176	0.6 (*) .3 .7 .2 .5 1.1	6.3 5.2 (e) 3.9 4.4 4.7 3.2 2.6 9.0	93. 1 94. 8 (e) 95. 8 94. 9 95. 1 96. 3 96. 3	111 43 (e) 54 97 61 72 108 96	849 532 (e) 577 962 661 826 863 689	22 17 (e) 14 16 19 16 21	\$ 15. 6 13. 9 14. 3 14. 0 22. 2 18. 3 29. 0 23. 1 11. 3	\$ 1. 6 . 9 . 9 2. 1 1. 3 2. 1 2. 1
Heating equipment, not elsewhere classified Iron and steel Metal coating and engraving Ornamental metal work Plate fabrication and boller-shop	260 211 126 124	47, 673 507, 585 10, 227 12, 947	91, 509 970, 218 19, 937 26, 874	1, 966 6, 587 478 571	2.0	5.7 10.0 4.0 2.7	94. 3 88. 0 96. 0 96. 6	66 269 30 72	929 1, 036 483 638	14 53 11 15	21. 5 6. 8 24. 0 21. 2	1.6 1.8 .9 1.5
products. Plumbers' supplies. Screw-machine products. Sheet-metal work. Stamped and pressed metal products. Steam fittings and apparatus. Steel barrels, kegs, drums, and pack-	223 109 173 140 419 172	36, 162 38, 650 18, 177 11, 632 94, 050 31, 184	71, 818 72, 565 36, 060 23, 606 180, 247 60, 298	1, 803 1, 172 561 517 2, 525 1, 150	.8	3.8 4.8 8.8 3.4 13.2 5.6	95. 4 94. 8 91. 2 96. 6 86. 6 94. 4	95 71 78 35 118 67	895 563 771 633 720 912	13 22 11 14 15 17	25. 1 16. 2 15. 6 21. 9 14. 0 19. 1	2.9 1.4 1.6 .9 1.5 1.7
ages. Steel springs. Tin cans and other tinware. Tools, except edge tools. Vitreous-enameled products. Wire and wire products. Wrought pipes, welded and heavy-riveted. Iron and steel products, not elsewhere elsewided.	32 35 117 179 22 221	6, 558 13, 534 43, 348 22, 822 4, 152 49, 223	13, 158 26, 407 87, 966 43, 011 7, 423 93, 295	177 359 1,071 727 123 1,603	.3	(6) 4.1 9.6 7.1 (6) 5.5	95. 9 95. 9 90. 4 92. 6 (6) 94. 5	(6) 60 55 80 (6) 56	(6) 1,006 418 738 (6) 726	(6) 20 16 14 (6) 17	13. 5 13. 6 12. 2 16. 9 16. 6 17. 2	3.0 .8 .5 1.5 1.0
riveted	21 158	8, 463	16, 702	266 605	(6)	(6)	(6)	(6)	(6)	(6)	15.9	.6
Leather and leather products	1 !	16, 939 167, 198 127, 904 28, 704 10, 590	33, 061 310, 552 234, 745 56, 241 19, 564	3, 367 1, 840 1, 338	.2 .1 .2	5.7 4.5 4.2 4.4	94.3 95.3 95.7 95.4	72 62 41 77 (6)	1, 025 885 512 1, 191 (6)	14 13 11 14 (6)	18.3 10.2 7.8 23.8 9.7	1. 4 5. 6 . 3 1. 9
Lumber and timber basic products	1, 916 305 466 237	155, 042 23, 264 30, 627 12, 726 16, 187 32, 890 34, 986 4, 362	310, 141 43, 703 63, 419 25, 527 33, 382 64, 306 71, 198 8, 602	14, 978 4, 030 1, 663 972 1, 063 3, 576 3, 387 287	.6 1.5 .1 .1 .1	4.1 3.4 6.8 4.4 5.4 3.0 5.9	95. 3 95. 1 93. 1 95. 5 94. 6 96. 6 93. 7	113 190 62 61 88 69 126	1, 368 2, 346 591 906 1, 332 926 1, 494	19 23 16 13 16 18 18	55. 5 92. 2 26. 2 38. 1 31. 8 55. 6 47. 6 33. 4	\$ 7.0 18.0 1.8 2.3 3.0 3.7 6.3
Machinery, except electric Agricultural machinery and tractors Bearings, ball and roller Commercial and household machin-	3, 567 227 53	950, 283 139, 139 36, 071	1, 861, 865 271, 956 71, 482	25, 495 4, 654 780	.1	5. 9 6. 8 4. 5	93. 9 93. 1 95. 5	80 88 52	889 973 796	17 14 17	5 14. 2 17. 1 10. 9	\$ 1. 2 2. 0 . 5
ery.  Construction and mining machinery. Elevators, escalators, and conveyors. Engines and turbines. Fabricated pipe and fittings. Food-products machinery. General industrial machinery and equipment, not elsewhere classified. General machine shops (jobbing and	253 301 62 65 9 148	169, 004 77, 331 15, 654 49, 074 1, 225 22, 461 102, 676	329, 271 152, 873 31, 590 97, 650 2, 450 44, 144 200, 088	2, 521 2, 998 632 1, 109 46 660 3, 052	.5 .1 .3 1.4 (6)	7.9 4.8 4.5 5.5 (°) 4.5	91. 6 95. 1 95. 2 93. 1 (6) 95. 5	106 58 72 134 (6) 42	735 764 957 666 (6) 669	21 18 10 17 (6) 13	7.7 19.6 20.0 11.4 18.8 15.0	.8 1.4 2.1 1.4 .8 .8
repair)	339	18, 297	34, 595	587	.3	7.8	91.9	77	560	16	17.0	1.2
Mechanical measuring and controlling instruments.  Mechanical power-transmission equipment, except ball and roller bearings.  Metalworking machinery.  Pumps and compressors.	99 88 831	34, 380 24, 860 130, 388	66, 838 47, 841 252, 835	645 809 2,881	.2	2. 6 4. 9 6. 3	97. 4 95. 1 93. 5	24 44 76	375 600 778	15 15	9. 7 16. 9 11. 4	.6
Pumps and compressors Special-industry machinery, not elsewhere classified Textile machinery	382 126	34, 954 62, 903	71, 164 124, 006	1, 079 2, 185	.7	2.0 7.5	97. 3 92. 3	71 112	750 1,094	16 21	15. 2 17. 6	2.0
Nonferrous metals and their products Aluminum and magnesium products Foundries, nonferrous Nonferrous basic shapes and forms	50	31, 866 182, 935 10, 962 25, 023 28, 232	63, 074 372, 285 21, 798 47, 748 54, 248	5, 314 272 1, 075 640	(°).5	3. 2 6. 8 ( <sup>6</sup> ) 7. 0 ( <sup>6</sup> )	96. 8 92. 9 (6) 92. 5 (6)	91 (6) 95 (6)	708 853 (6) 719 (6)	15 (°) 14 (°)	13.6 5 13.3 12.5 22.5 11.8	5. 9 1. 1 2. 0

See footnotes at end of table.

Table A.—Injury rates and injuries by extent of disability, 1949—Continued
[All reporting establishments]

[All reporting establishments]													
					Percen juries	t of disat resulting	oling in-	Avera char	ge days ged per c	lost or case <sup>2</sup>	Injury	rates 4	
Industry	Number of estab- lishments reporting	Average number of employees <sup>1</sup>	Employee- hours worked (thousands)	Number of disabling injuries	Death and perma- nent- total disa- bility	Perma- nent- partial disa- bility	Tempo- rary- total disa- bility	All dis- abili- ties <sup>3</sup>	Perma- nent- partial disa- bility	Tempo- rary- total disa- bility	Fre- quency	Sever- ity 2	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
Manufacturing—Continued  Nonferrous metals and their products— Continued Primary smelting and refining s Copper Lead-silver Zinc Miscellaneous Watches, clocks, jewelry, and silverware Nonferrous metal products, not else-	(8) (8) (8) (8) 138	31, 100 11, 900 4, 100 9, 600 5, 500 41, 772	76, 750 28, 630 10, 100 24, 120 13, 900 81, 224	1, 766 518 172 795 281 482	9.9 91.5 91.2 9.6 9.4	(10) (10) (10, (10) (10) (10)	(10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10)	23. 0 18. 1 17. 0 33. 0 20. 2	(10) (10) (10) (10) (10) (10)	
where classified. Ordnance and accessories.	219 24	45, 846 31, 148	90, 515 61, 683	1,079 4,061	.4 1.5	7. 5 8. 9	92. 1 89. 6	103 215	868 1, 192	15 22	11.9 6.6	1.1 1.8	
Paper and allied products	1, 379 81	299, 881 8, 560 49, 160 202, 998 39, 163	624, 380 16, 784 98, 626 429, 540 79, 428	10, 048 222 1, 632 7, 035 1, 159	.4 .5 .1 .5	5. 4 3. 6 4. 5 7. 1 4. 0	94. 2 95. 9 95. 4 92. 4	78 60 58 105	732 506 856 782 488	16 16 13 19	\$ 16.0 13.2 16.5 16.4 14.6	5 1. 4 .8 1. 0 1. 8	
Printing and publishing.  Book and job printing.  Bookbinding.  News and periodical.	2, 714 1, 728 84 902	246, 683 119, 706 6, 718 120, 259	484, 972 234, 569 13, 288 237, 114	4, 004 1, 763 148 2, 093	.1 (6) .2	3. 2 3. 8 (6) 2. 5	96. 7 96. 2 (6) 97. 3	45 47 (6) 42	799 841 (6) 774	14 15 (6) 14	\$ 8. 2 7. 5 11. 1 8. 8	1.4 .3 .7 .4	
Rubber products	280 30 42 208	184, 132 25, 408 89, 754 68, 970	341, 531 48, 952 157, 580 134, 998	3, 255 350 924 1, 981	(6) (6) (6)	7. 5 (6) (6) 8. 2	92. 0 (6) (6) 91. 2	125 (6) (6) (7)	1,069 (6) (6) 1,159	16 (6) (6)	8 9. 7 7. 1 5. 9 14. 7	\$ 1.3 .8 .6	
Stone, clay, and glass products	1, 555 (*) 573	243, 457 24, 939 53, 823	490, 011 65, 113 106, 163	9, 354 521 3, 911	2.5 2.5	3. 4 (10) 2. 3	96. 1 ( <sup>10</sup> ) 97. 2	<b>■</b> (10) 74	1, 077 ( <sup>10</sup> ) 1, 187	16 (10) 15	<sup>5</sup> 19. 6 8. 0 36. 8	\$ 2. 2 (10) 2. 8	
ucts. Cut stone and cut-stone products Glass. Pottery and related products. Stone, clay, and glass products, not elsewhere classified.	338 76 252 132	13, 357 2, 435 92, 617 31, 486 24, 800	28, 857 4, 782 178, 694 56, 938 49, 460	737 175 2, 301 900 809	(0).6 .2 .8 1.1	6.3 (6) 3.6 1.0	93. 1 (6) 96. 2 98. 2 88. 1	134 (6) 63 73	1, 306 (6) 975 917	(6) 18 15 17	25. 5 36. 6 12. 9 15. 8	3.3 4.0 .8 1.1	
Textiles and textile-mill products	2, 437	688, 372	1, 292, 903	13, 471	. 2	5. 2	94. 6	87	1, 164	17	<sup>5</sup> 10.1	5.8	
Carpets, rugs, and other floor coverings Cordage and twine. Cotton yarn and textiles Dyeing and finishing textiles. Hats, except cloth and millinery Knit goods. Rayon, other synthetic, and silk textiles.	84 50 577 338 28 698	44, 207 7, 917 263, 112 62, 935 5, 778 113, 683	86, 099 14, 714 486, 094 124, 307 10, 345 206, 344	1, 270 219 4, 753 1, 834 166 1, 150	.2 .4 (6)	11.9 7.8 4.9 5.4 (6) 1.8	88. 1 92. 2 94. 9 94. 2 (6) 98. 1	163 63 79 125 (6) 38	1, 234 635 1, 000 1, 592 (6) 1, 113	18 15 18 18 (6)	14. 8 14. 9 9. 8 14. 8 16. 0 5. 6	2.4 .9 .9 2.1 .6 .2	
tiles	223 370	67, 739 112, 553	129, 623 215, 967	893 2, 867	2	2. 1 3. 0	97. 9 96. 8	33 60	888 921	15 19	6. 9 13. 3	1.0	
where classified	69	10, 448	19, 407	319	(6)	(6)	(6)	(6)	(6)	(6)	16.4	.7	
Transportation equipment.  Aircraft Aircraft parts Boatbuilding and repairing. Motor vehicles. Motor-vehicle parts Railroad equipment Shipbuilding and repairing. Transportation equipment, not elsewhere classified	900 27 76 91 244 189 95 157	1, 023, 149 163, 920 83, 633 2, 980 438, 274 183, 412 78, 462 65, 975 6, 493	2, 011, 914 328, 643 167, 119 5, 850 858, 957 355, 079 157, 904 125, 836	18, 293 1, 444 1, 449 234 5, 767 3, 835 2, 112 3, 286	.6 .8 .5 .5 .2 1.0 1.0	8.0 11.3 3.6 (6) 8.9 13.9 6.6 3.0	91. 4 87. 9 95. 9 (6) 90. 6 85. 9 92. 4 96. 0	120 205 77 (e) 115 113 150 124	796 1, 238 726 (e) 755 604 879 1, 321	23 22 23 (6) 21 17 35 27	8 10.1 4.4 8.7 40.0 6.7 10.8 13.4 26.1	51.1 1.0 1.0 3.5 .7 .9 1.5 3.4	
Miscellaneous manufacturing	1, 227	286, 198 7, 613	566, 774 14, 883	5, 573 214	.1	5. 3 4. 7	94. 6 94. 8	59 85	759 945	12 13	\$ 10.3 14.4	5.8 1.2	
Coke ovens: \$ Beehive	(8) (8) 144 40	3, 330 21, 141 21, 670 17, 169 44, 796 31, 236	3, 623 58, 822 42, 730 33, 054 84, 337 62, 436	132 588 569 186 444	*1.2 (6) (6)	(10) (10) 6. 2 (6) (6) (8)	(10) (10) 93. 6 (6) (6)	(10) (10) 77 (6) (6)	(10) (10) 831 (6) (6) (6)	(10) (10) 12 (6) (6)	36. 4 10. 0 13. 3 5. 6 5. 3	(10) (10) 1.3 .1 .2	
Tobacco products  Miscellaneous manufacturing, not elsewhere classified	176	47, 414	87, 794 179, 090	655 1,973	.1	5. 5 7. 3	97. 5 94. 5 92. 6	46 73	615 744	13 14	7.5	.9	
See footnotes at end of table.		-	•										

Table A.—Injury rates and injuries by extent of disability, 1949—Continued

[All reporting establishments]

			TI TOPOT MILE (	Door	, III O							
					Percen juries	t of disab resulting	oling in-	A vers	ge days i	lost or	Injury	rates 4
Industry	Number of estab- lishments reporting	Average number of employees <sup>1</sup>	Employee- hours worked (thousands)	Number of disabling injuries	Death and perma- nent- total disa- bility	Perma- nent- partial disa- bility	Tempo- rary- total disa- bility	All dis- abili- ties <sup>3</sup>	Perma- nent- partial disa- bility	Tempo- rary- total disa- bility	Fre- quency	Sever- ity 3
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Nonmanufacturing												
Construction <sup>11</sup>	4, 443	(16)	430, 375	17, 116	.8	3.2	96.0	100	1, 386	14	39.8	3.9
General building contractors Heavy construction, except high-	1, 675	(10)	160, 803	6, 565	.5	2.8	96.7	77	1, 210	12	40.8	3. 1
way and street  Highway and street construction  Special-trade contractors: Plumbing, heating, and air condi-	334 516	(10) (10)	87, 848 63, 455	3, 671 2, 889	1.3 1.0	2.8 2.6	95. 9 96. 4	132 104	1, 445 1, 200	18 13	41.8 45.5	5. 5 4. 7
tioning. Painting, paperhanging, and deco-	432	(10)	23, 494	730	 	2.3	97.7	38	1,176	11	31.1	1.2
rating, pot manging, and decorating rating.  Electrical work  Masonry, stone setting, and other	257 282	(10) (10)	7, 256 16, 936	129 479	(6) .8	( <sup>6</sup> ) . 6	(6) 98.6	(6) 66	(6) 500	( <sup>6</sup> )	17.8 28.3	7. 6 1. 9
Plastering and lathing Terrazzo, tile, marble, and mosaic	126 81	(10) (10)	5, 671 6, 048	167 258	(6)	( <sup>6</sup> ).4	(6) 99. 6	(6) 26	(6) 4,000	(6) 10	29. 4 42. 7	.5 1.1
work Carpentering Roofing and sheet-metal work Concrete work Structural-steel erection and orna-	63 81 204 56	(10) (10) (10)	3, 508 3, 343 9, 934 2, 876	95 98 324 98	(6) (6) (6)	(6) (6) 2. 5 (6)	(6) (6) 97. 2 (6)	(6) (6) 77	(6) (6) 1,819 (6)	(6) (6) 14 (6)	27. 1 29. 3 32. 6 34. 1	8.3 .7 2.5
mental iron work.  Excavating and foundation work.  Installation or erection of building equipment, not elsewhere classi-	44 46	(10) (10)	9, 727 2, 447	473 89	1,5	8. 5 (6)	90. 0 (6)	279 (*)	2, 065 (6)	(6)	48. 6 36. 4	13.6 1.2
fiedSpecial-trade contractors, other 12	18 228	(10) (10)	11, 429 15, 591	431 620	1.4 1.1	22.0 1.5	76. 6 97. 4	65 101	1,350 1,383	17 13	37.7 39.8	2. 5 4. 0
Communication: 11 Telephone (wire and radio) Radio broadcasting and television	123 407	558, 707 15, 873	1, 027, 654 31, 490	2, 320 52	(6).7	(6).3	99. 0 ( <sup>6</sup> )	68 (°)	2, 283 (6)	18 (6)	2.3 1.7	(7)
Transportation <sup>11 12</sup> Stevedoring Streetear Bus (local) Local transportation systems, inte-	1,300 57 17 282	214, 236 (10) 9, 702 36, 265	505, 736 31, 232 21, 405 82, 721	10, 634 2, 106 307 1, 143	.4	3.1 10.1 .3 1.9	96. 5 89. 3 99. 7 97. 8	85 201 26 53	1, 445 1, 360 2, 400 1, 227	19 32 18 14	21. 0 67. 4 14. 3 13. 8	1.8 13.5 .4
Trucking and hauling (local)  Warehousing and storage  Transportation, not elsewhere classi-	574 255	139, 885 13, 789 13, 279	310, 116 30, 081 27, 111	5, 379 838 845	.4	1.1 .1 3.6	98, 5 99, 4 96, 4	58 42 73	1, 692 500 1, 717	16 13 13	17. 3 27. 9 31. 2	1.0 1.2 2.3
ned	- 73	1,325	3, 067	16	(6)	(6)	(6)	(6)	(6)	(6)	5, 2	.1
Heat, light, and power 11 15 Electric light and power	604 376 213	366, 979 273, 089 93, 406	758, 351 565, 998 191, 308	12,007 7,771 4,228	1.5 2.1 .5	2.8 3.1 2.2	95. 7 94. 8 97. 3	147 189 69	1,427 1,525 1,169	15 17 12	15.8 13.7 22.1	2.3 2.6 1.5
Waterworks 11	4	8, 442	17, 565	479	.2	1.3	98. 5	41	1,192	14	27.3	1.1
Personal services.  Dry cleaning. Laundries. Laundries. Laundry with dry cleaning. Amusements and related services. Hotels. Eating and drinking places. Medical and other professional services. Miscellaneous personal services.	634 565 470 117 391 538 140	151, 969 18, 516 27, 118 35, 693 5, 983 43, 554 10, 539 8, 266 2, 294	322, 485 37, 480 55, 829 75, 468 11, 245 98, 625 21, 766 17, 577 4, 492	2,893 184 376 558 119 1,329 233 71 23	(6) .5 .4 (7) .3 (8)	1. 4 (6) 1. 6 3. 4 (6) . 6	98. 3 (6) 97. 9 96. 2 (6) 99. 1 100. 0 (6)	(%) 59 97 (%) 39 13 (%)	1, 508 (6) 800 1, 795 (6) 1, 625 (6) (6)	13 (6) 14 15 (6) (12 13 (6) (6)	9. 0 4. 9 6. 7 7. 4 10. 6 13. 5 10. 7 4. 0 5. 1	.5 .2 .4 .7 .5 .5 .1
Business services  Banks and other financial agencies. Insurance. Real estate. Miscellaneous business services. Automobile repair shops and garages. Miscellaneous repair services.	2, 667 917 425 232 382 432 279	182, 433 54, 400 99, 732 4, 369 14, 445 5, 129 4, 358	356, 089 105, 909 192, 175 8, 785 28, 841 11, 550 8, 827	1, 452 249 396 52 371 157 227	.5 (6)	1.8 1.6 1.5 (6) 1.3 (6) 2.6	97. 7 98. 4 97. 7 ( <sup>6</sup> ) 98. 7 ( <sup>6</sup> ) 97. 0	66 48 85 (*) 34 (*) 66	1, 288 1, 975	14 16 15 (6) 12 (6)	4. 1 2. 4 2. 1 5. 9 12. 9 13. 6 25. 7	.3 .1 .2 .1 .4 1.8 1.7
Educational services	195	134, 096	226, 358	1,725	.3	1.7	98.0	58	1,624	13	7.6	.4
Fire departments	209	30, 872	101,071	3, 249	.9	.4	98.7	76	1,800	15	32.1	2, 5
Police departments	151	20, 145	48, 307	1,330	.8	.7	98.5	86	2, 911	16	27.5	2,4

See footnotes at end of table.

#### Table A.—Injury rates and injuries by extent of disability, 1949—Continued

[All reporting establishments]

					1							
					Percen juries	t of disat resulting	oling in- g in 2—	A vers	age days ged per o	lost or case 2	Injury	rates 4
Industry	Number of estab- lishments reporting	Average number of employees <sup>1</sup>	Employee- hours worked (thousands)	Number of disabling injuries	Death and perma- nent- total disa- bility	Perma- nent- partial disa- bility	Tempo- rary- total disa- bility	All dis- abili- ties <sup>8</sup>	Perma- nent- partial disa- bility	Tempo- rary- total disa- bility	Fre- quency	Sever- ity 3
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
Nonmanufacturing—Continued												
Wholesale distributors	457 810 389 941	358, 530 91, 459 87, 285 33, 474 28, 052 21, 172 3, 235 26, 902 35, 423 21, 418	740, 419 190, 545 160, 432 74, 033 65, 196 48, 026 7, 351 52, 769 74, 502 46, 002	9, 036 2, 544 821 876 1, 497 685 35 233 726 1, 265	.3 .4 .2 .1 (6)	1.8 1.8 .5 .9 1.8 1.0 (6) 2.1 1.4 3.9	97. 9 97. 8 99. 3 99. 1 98. 0 98. 9 (°) 97. 9 98. 3 95. 7	49 54 32 22 61 25 (°) 39 51 68	1,110 1,057 638 1,063 1,883 543 (f) 1,170 1,450 847	13 11 15 12 15 10 (°) 14 15 12	5 12.9 13.4 5.1 11.8 23.0 14.3 4.8 4.4 9.7 27.5	5.6 .7 .2 .3 1.4 .3 .2 .2 .5 1.9
Mining and quarrying: 8		,	,									
Coal mines  Bituminous  Anthracite	(8) (8) (8)	482, 800 404, 800 78, 000	650, 030 541, 230 108, 800	38, 358 30, 085 8, 273	91.5 91.7 91.1	(10) (10) (10)	(10) (10) (10)	(10) (10) (10)	(10) (10) (10)	(10) (10) (10)	59. 0 55. 6 76. 0	(10) (10) (10)
Metal mines Iron Copper Lead-zinc Gold-silver Gold placer Miscellaneous metal	(8) (8) (8) (8) (8)	68, 300 27, 500 13, 800 15, 900 4, 800 3, 500 2, 800	143, 770 54, 380 34, 490 31, 950 10, 400 6, 670 5, 880	6, 714 1, 157 1, 142 2, 828 975 190 422	91.1 91.9 91.1 91.0 91.0	(10) (10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10) (10) (10)	46. 7 21. 3 33. 1 88. 5 93. 8 28. 5 71. 8	(10) (10) (10) (10) (10) (10) (10)
Nonmetal mines	(8)	12, 300	27, 380	1, 150	9.9	(10)	(10)	(10)	(10)	(10)	42.0	(16)
Quarries Cement (excluding mills) Limestone Lime Marble Granite Traprock Slate Sandstone	(8) (8) (8) (8) (8) (8) (8)	54, 961 4, 161 23, 800 9, 300 3, 300 6, 000 2, 500 1, 800 4, 100	111, 686 9, 336 44, 200 22, 070 6, 810 12, 770 4, 780 3, 970 7, 750	4, 134 127 1, 650 825 220 538 234 203 337	91.3 93.9 91.5 91.2 9.6 91.7 91.5 9.6	(10) (10) (10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10) (10) (10)	37. 0 13. 6 37. 3 37. 4 32. 3 42. 1 49. 0 51. 1 43. 5	(18) (10) (10) (10) (10) (10) (10) (10)
Ore dressing (mills and auxiliaries) Copper	(8)	16, 600 6, 400 3, 600 900 4, 100 1, 600	35, 290 15, 290 6, 220 2, 140 8, 210 3, 430	777 213 83 65 236 180	9.9 91.4 93.6	(10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10)	(10) (10) (10) (10) (10) (10)	22. 0 13. 9 13. 3 30. 4 28. 8 52. 5	(10) (10) (10) (10) (10) (10)

<sup>&</sup>lt;sup>1</sup> Reports in this survey secured by the Bureau of Labor Statistics include all employees—production and related workers; force-account construction workers; administrative, supervisory, sales, technical, service, and office personnel. Reports compiled by the Bureau of Mines, U. S. Department of the Interior (see footnote 8) include men engaged in production, development, maintenance, and repair work, and supervisory and technical personnel at the operation; but exclude office personnel and employees in stores or affiliated operations not directly connected with mining or refining.

\* Based on reports which furnished details regarding the resulting disabilities, constituting approximately 60 percent of the total sample.

\* Each death or permanent-total disability is charged with a time loss of 6,000 days.

Jeff Weighted according to estimates of total employment in each industry.

Disability distribution and average time charges not given because of small number of injuries for which details were reported.

Less than 0.05.

Compiled by the Bureau of Mines, U. S. Department of the Interior; data represent preliminary estimated industry totals, based on an average of 80 percent coverage of all mining industries.

Fatalities only.

Not available.

insufficient coverage.

11 Primarily reported by company instead of by establishment.
12 Includes "Wrecking and demolition work," shown separately for 1948.
13 Does not include railroads and other interstate transportation.
14 Includes integrated local transportation systems operating streetcars, busses, and/or elevated and subway lines.
15 Totals include figures for industries not shown separately because of intermediate controls.

<sup>&</sup>lt;sup>3</sup> Each death or permanent-total disability is charged with a time loss of 6,000 days.
<sup>4</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 or charged 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 Standards Association, 1945.

Table B.—Changes in exposure, disabling injuries, and injury rates for 41,408 identical establishments, 1948–49

	Number			Percent of	change in—		
Industry	of estab- lishments reporting	Employees	Employee- hours worked	Disabling injuries	Total time lost <sup>1</sup>	Frequency rate	Severity rate 1
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Manufacturing Total, manufacturing	26, 321	-9	-11	-26	15	2-12	3-6
Apparel and other finished textile products	511	-1 -3	-3 -6	-10 -19	+11 +56	2-4 -14	*+12 +64 +90
Clothing, women's and children's. Millinery. Apparel and accessories, not elsewhere classified. Trimmings and fabricated textile products, not elsewhere classified.	529 51 59 260	+2 -4 -9	(8) +13 -14	-14 +8 -15	+89 -20 +122	-14 -2 -2	-40 +140
Chemicals and allied products 4  Compressed and liquefied gases.  Drugs, toiletries, and insecticides.  Explosives.  Fertilizers.  Industrial chemicals	1,708 64 254 44 306 324	+1 -7 -4 +1 +6 -2 -9	+3 -7 -7 (5) +3 -3 -12	+18 -24 -10 -11 -47 -20 -30	-27 -40 +325 -50 -27 -9 -57	+15 2-19 -4 -10 -49 -18 -21	-30 2-43 +370 -48 -43 -7 -7
Paints, varnishes, and colors Paving and roofing materials Plastic materials, except rubber Soap and glycerin Synthetic textile fibers Vegetable and animal oils Chemical products, not elsewhere classified	104	-8 +54 -7 (*) -14 -4 -3	-9 +44 +10 -1 -14 -5 -7	-29 +6 -31 -7 -30 -1 -24	+3 +35 -42 -28 -44 -56 -91	-22 -26 -37 -7 -17 +4 -18	+13 6 29 26 38 54 90
Electrical machinery, equipment, and supplies.  Automotive electrical equipment Batteries.  Communication and signaling equipment, except radio.  Electrical appliances. Electrical equipment for industrial use. Electrical lamps (bulbs) Insulated wire and cable. Radios and phonographs.  Electrical equipment, not elsewhere classified.	34 40 36 63 447 27	-13 -10 -16 -21 -22 -14 -15 -16	-15 -12 -21 -25 -24 -15 -16 -18 (3)	-30 -28 -41 -32 -40 -31 -5 -40 -19 +36	-18 -42 +113 -54 -51 -22 (*) -70 +118	2-18 -18 -25 -8 -21 -19 +13 -26 -20 +36	2-8 -39 +166 -49 -35 -7 (*) -64 +105
Food products.  Baking. Bottling, soft drinks. Breweries. Canning and preserving. Confectionery Dairy products. Distilleries. Flour, feed, and grain-mill products. Slaughtering and meat packing. Sugar, beet. Food products, not elsewhere classified.	3, 194 561 147 226 338 204 265 87	-1 (*) -4 -6 -7 -1 -9 -1 +4 -3	-2 (*) -5 -4 -7 -3 -12 -2 +3 -2 -3	-14 -11 -20 -23 -11 -21 -14 -14 -14 -9 -19	(3) +4 +194 -166 -34 +5 -33 +386 +82 +46 +95 -62	2-11 -16 -18 -7 -15 -12 -2 -12 -11 -17	(2 3) +206 -11 -32 +15 -31 +479 +86 +39 +98
Furniture and finished lumber products. Furniture, metal. Furniture, except metal. Mattresses and bedsprings. Morticians' supplies. Office, store, and restaurant fixtures. Wooden containers. Miscellaneous wood products, not elsewhere classified.	189 88 85 352	-8 -7 -7 -7 -4 -11 -11 -12	-12 -8 -13 -9 -10 -14 -15	-23 -9 -23 -24 -25 +4 -24 -33	-13 -39 -12 -69 +370 +19 -18 -16	2-14 -2 -11 -17 -17 +21 -11 -21	3-1 -34 +1 -66 +425 +37 -4 +2
Iron and steel and their products.  Bolts, nuts, washers, and rivets. Cold-finished steel. Cutlery and edge tools. Fabricated structural steel. Forgings, iron and steel. Foundries, iron. Foundries, steel. Hardware. Heating equipment, not elsewhere classified Iron and steel. Metal coating and engraving. Ornamental metal work. Plate fabrication and boiler-shop products. Plumbers' supplies. Screw-machine products. Sheet-metal work. Stamped and pressed metal products. Steen fittings and apparatus. Steel barrels, kegs, drums, and packages. Steel springs. Tin cans and other tinware. Tools, except edge tools. Vitreous-enameled products. Wrought pipes, welded and heavy-riveted. Iron and steel products, not elsewhere classified	41 107 344 141 657 111 144 213 174 95 92 178 97 151 83 337 153 24	-11 -17 -9 -8 -3 -14 -19 -22 -3 -19 -18 -13 -16 -16 -15 -8 -8 -8 -8 -14 -20 -11 -11 -11	-15 -22 -14 -13 -7 -17 -26 -28 -28 -7 -21 -13 -18 -12 -14 -20 -20 -20 -20 -20 -15 -8 -19 -10 -8 -18 -12 -14 -14 -14 -14 -14	-32 -29 -32 -41 -15 -34 -39 -24 -15 -16 -38 -34 -28 -30 -34 -28 -30 -27 -19 -29 -29 -30 -34 -34 -36 -36 -36 -36 -37 -37 -37 -37 -37 -37 -37 -37 -37 -37	-27 -36 -72 -49 -21 -45 -14 -20 -11 -44 -21 -62 -12 -16 -48 +118 -71 -34 +509 +122 -159 +66 +27	2-18 -9 -21 -33 -9 -21 -18 -22 -16 -22 -12 +2 -5 -28 -17 -8 -18 -28 -11 -22 -20 -16 -13 -33 -16 -33 -25	*-15 -20 -66 -43 -17 -31 +13 +13 +15 -31 -7 -53 +11 -1 -39 +182 -65 -36 -49 +493 +25 -88 -35 -35 +31 +49 +49 +49 +49 +49 +49 +49 +49 +49 +49

Table B.—Changes in exposure, disabling injuries, and injury rates for 41,408 identical establishments, 1948-49—Continued

	Number			Percent of	change in—		
Industry	of estab- lishments reporting	Employees	Employee- hours worked	Disabling injuries	Total time	Frequency rate	Severity rate 1
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Manufacturing—Continued					•		
Leather and leather products.  Boots and shoes. not rubber.  Leather  Leather products, not elsewhere classified.	611 367 154 90	-5 -4 -7 -5	-6 -6 -8 -11	-14 -10 -20 +1	-8 -5 -11 +30	2 -4 -5 -13 +14	(3) $-4$ $+49$
Lumber and timber basic products.  Logging Millwork (structural) Planing mills Plywood mills Saw mills Saw and planing mills, integrated. Veneer mills.	155 332 167 56 350 86	-9 -17 -6 -8 -11 -6 -6 -23	-12 -23 -10 -6 -16 -11 -6 -30	-16 -14 -17 -16 -23 -12 -16 -48	-21 -4 -14 -14 -55 -39 -11	2 -2 +11 -8 -11 -8 -1 -10 -26	2 -7 +24 -4 -10 -45 -30 -5 -5
Machinery, except electrical Agricultural machinery and tractors Bearings, ball and roller Commercial and household machinery Construction and mining machinery Elevators, escalators, and conveyors Engines and turbines Fabricated pipe and fittings Food-products machinery	198 49 207 256 51	-14 -8 -20 -18 -18 -11 -14 -1 -16	-17 -10 -19 -20 -22 -15 -15 -5 -20	-34 -30 -36 -37 -39 -19 -30 -5 -39	-16 -4 -12 -12 -43 -5 +6 +104 -2	2 -20 -22 -21 -22 -21 -5 -18 (3) -23	2 +5 +14 +13 +11 -28 +9 +29 +122 +15
General industrial machinery and equipment, not elsewhere classified General machine shops (jobbing and repair) Mechanical measuring and controlling instruments.	376 265 77	-12 -14 -3	-15 -19 -7	-34 -39 -26	-2 -47 -83	-22 -25 -21	+16 -34 -79
Mechanical power-transmission equipment, except ball and roller bearings  Metalworking machinery.  Pumps and compressors. Special-industry machinery, not elsewhere classified.  Textile machinery.	338	-20 -15 -10 -17 -17	-23 -19 -13 -19 -22	-32 -31 -22 -31 -55	-60 -37 -1 +36 -33	-12 -14 -11 -14 -42	-53 -23 +20 +62 -17
Nonferrous metals and their products.  Aluminum and magnesium products. Foundries, nonferrous.  Nonferrous basic shapes and forms. Watches, clocks, jewelry, and silverware. Nonferrous metal products, not elsewhere classified.	38 301 34 117	-15 -25 -16 -16 -14 -13	-18 -25 -20 -21 -16 -14	-28 -42 -28 -28 -27 -25	-7 -56 +61 -60 -37 +1	2 -13 -23 -9 -9 -13 -13	2 -5 -42 +98 -53 -25 +10
Ordnance and accessories	1	-15	-19	-4	+18	+19	+52
Paper and allied products Envelopes. Paper boxes and containers. Paper and pulp. Paper products, not elsewhere classified.	875 76 480 130 189	-4 -3 -5 (8) -6	-6 -6 -5 -5 -7	-20 +12 -20 -24 -21	-23 -37 -52 -17 +35	2 -17 +19 -16 -20 -14	2 —19 —32 —50 —13 +46
Printing and publishing Book and job printing Bookbinding News and periodical	2, 230 1, 423 49 758	(3) -2 -4 +2	$\begin{pmatrix} -1 \\ -4 \\ +2 \end{pmatrix}$	-8 -16 -43 +2	-34 -48 -60 -13	* -12 -11 -43 (3)	2 -42 -46 -61 -14
Rubber products. Rubber boots and shoes. Rubber tires and tubes. Rubber products, not elsewhere classified.	27 34	-10 -12 -11 -10	-14 -15 -17 -10	-27 -11 -43 -20	+7 -38 -31 +24	2 -17 +4 -32 -11	2 +14 -31 -14 +33
Stone, clay, and glass products.  Clay products (structural).  Concrete, gypsum, and plaster products.  Cut stone and cut-stone products.  Glass.  Pottery and related products.  Stone, clay, and glass products, not elsewhere classified.	208 55 206	-7 -2 -1 -5 -6 -10 -15	-10 -4 -5 -6 -9 -17 -15	-18 -11 -8 -17 -20 -27 -27	-5 -4 +8 -16 -36 -30 +175	2 -10 -7 -3 -12 -12 -13 -14	2 +29 (3) +13 -11 -28 -14 +213
Textiles and textile-mill products Carpets, rugs, and other floor coverings Cordage and twine Cotton yarn and textiles Dyeing and finishing textiles Hats, except cloth and millinery. Knit goods Rayon, other synthetic, and silk textiles Woolen and worsted textiles Miscellaneous textile goods, not elsewhere classified See footnotes et and of table.	2, 055 72 50 515 298 23 547 185	-10 -12 -15 -9 -3 -4 -8 -9 -19	-15 -15 -18 -17 -5 -11 -14 -21 -10	-25 -19 -36 -25 -12 -6 -29 -35 -28 -35	-15 -15 -30 -21 +48 +3 -29 -51 -37 -54	2 -14 -6 -22 -10 -8 -1 -21 -24 -10 -28	3 -7 (3) -15 -3 +56 +9 -24 -43 -26 -48

Table B.—Changes in exposure, disabling injuries, and injury rates for 41,408 identical establishments, 1948-49—Continued

	Number			Percent of	change in—		
Industry	of estab- lishments reporting	Employees	Employee- hours worked	Disabling injuries	Total time	Frequency rate	Severity rate 1
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Manufacturing—Continued							
Transportation equipment. Aircraft Aircraft parts Boatbuilding and repairing. Motor vehicles Motor-vehicle parts Railroad equipment. Shipbuilding and repairing Transportation equipment, not elsewhere classified.	56 70 188 148 71	-2 +9 +6 -25 +7 -10 -22 -21 -39	-3 +6 +5 -26 +6 -10 -24 -25 -41	-26 -8 -3 -29 -25 -32 -37 -24 -62	+7 -10 +26 -13 +16 +13 -11 +1 -45	2 -21 -14 -8 -4 -30 -24 -17 +2 -35	$egin{array}{cccccccccccccccccccccccccccccccccccc$
Miscellaneous manufacturing  Brooms and brushes  Fabricated plastic products  Optical and ophthalmic goods.  Photographic apparatus and materials.  Professional and scientific instruments and supplies  Tobacco products  Miscellaneous manufacturing, not elsewhere classified.	68 106 42 36 106 153	-7 -12 -11 -6 -9 -2 -4 -8	-10 -15 -13 -7 -13 -4 -6 -11	-20 -25 -7 -14 -24 -16 -14 -14	-4 -1 -10 -24 -40 +64 -27 -1	2 -11 -11 +8 -7 -14 -12 -10 -15	2+7 +18 (3) -18 -29 +89 -22 +10
Nonmanufacturing  Construction 4 6 General building contractors Heavy construction, except highway and street. Highway and street construction. Plumbing, heating, and air conditioning Painting, paperhanging, and decorating. Electrical work Masonry, stone setting, and other stonework Plastering and lathing Carpentering. Roofing and sheet-metal work Structural-steel erection and ornamental iron work Special trade contractors, other	342 189 99 177 45 53 35 91	0000000000000	-1 -10 +6 +8 -4 -5 -11 +9 +15 +3 +40 +1	+8 +8 +9 +4 +8 -22 +36 -20 +40 -24 +8 -2 +34	-6 -2 -21 -10 -32 +114 -50 -87 +153 +17 +145 +10 -31	+9 +9 +20 -1 (a) -19 +44 -9 +29 -34 +5 -30 +33	-5 -1 -13 -15 -37 +123 -47 -86 +133 +2 +137 -21 -32
Communication: 6 Telephone (wire and radio)	105 383	-1 -2	(3) -3	-17 -5	-25 -87	-15 -6	25 88
Transportation 4 6. Stevedoring	53 15 233 37	-1 (*) -4 -6 +2 (*) -7	-5 -4 -8 -7 -4 +2 -10	-16 (3) -37 -9 -20 -13 -23	-18 -8 -77 -60 -3 +20 -45	-12 +4 -31 -2 -17 -14 -14	14 5 75 57 11 +-17 40
Heat, light, and power <sup>4 6</sup>	567 358 195	+3 +3 +3	+1 +1 +2	-7 -11	+12 +21 -19	-8 -12 -2	+10 +20 -20
Waterworks 6	135	+2	+2	+7	-22	+5	-23
Personal services.  Dry cleaning.  Laundries.  Laundry with dry cleaning  Amusements and related services  Hotels  Eating and drinking places  Medical and other professional services.  Miscellaneous personal services.	511 481 427 104 317 319 121	-6 -6 -8 -5 -1 -7 -4 +1 -2	-7 -9 -10 -7 -5 -8 -3 -1 -2	-18 -37 -25 -16 +46 -10 -42 -28 -34	-19 -63 +25 -22 +87 +4 -77 -78 -42	-12 -31 -17 -10 +54 -3 -40 -28 -33	-14 60 +39 -17 +92 +11 -77 -78 -38
Business services.  Banks and other financial agencies. Insurance. Real estate. Miscellaneous business services. Automobile repair shops and garages. Miscellaneous repair services.	377 160 242 258	+1 +1 +2 -2 -6 -2 -7	+1 +2 +2 -3 -7 -2 -10	-5 +11 -2 -11 -5 -4 -25	-34 +166 -16 -82 -85 -9 -48	-5 +9 -5 -9 +2 -2 -17	-35 +140 -18 -82 -83 -6 -42
Educational services		+5	(8)	-2	-9	-3	10
Fire departments	1	+3	+5	+6	+58	+1	+50
Police departments	135	l +4	+4	-3	-7	-7	-11

Table B.—Changes in exposure, disabling injuries, and injury rates for 41,408 identical establishments, 1948-49-Continued

	Number	Percent of change in—							
Industry	of estab- lishments reporting	Employees	Employee- hours worked	Disabling injuries	Total time	Frequency rate	Severity rate 1		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
Nonmanufacturing—Continued  Wholesale distributors. Retail, general merchandise. Retail food. Wholesale and retail dairy products. Retail automobiles and accessories. Filling stations. Retail apparel and accessories Miscellaneous retail stores. Wholesale and retail building supplies. Wholesale and retail trade, not elsewhere classified.	348 462 286 560 127 473 1,025	(*) -2 +2 (*) +4 +1 -2 -1 -2 -4	-1 -1 -2 +3 -1 +6 -1 -1 (3)	-14 -19 -6 -22 -7 -3 -38 +3 -7 -14	-22 +7 +29 -17 -21 -76 +118 +350 -18 -37 -62	<sup>2</sup> -16 -18 -4 -24 -6 -8 -37 +4 -4 -12 -21	2-33 +9 +31 -18 -20 -77 +111 +400 -16 -36 -61		

<sup>&</sup>lt;sup>1</sup> Based on reports which furnished details on the resulting disabilities, constituting approximately 60 percent of the total sample. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compilling Industrial Injury Rates, approved by the American Standards Association, 1945.

<sup>2</sup> Weighted according to estimates of total employment in each industry.

Change was less than 0.5 percent.
 Totals include figures for industries not shown separately, because of insufficient coverage.
 Not available.
 Primarily reported by company instead of by establishments.

Table C.—Distribution of all reported injuries resulting in permanent-partial disability, according to part of body affected, by industry, 1949

	,	Percent of permanent-partial disability cases involving the loss, or loss of use of—							
Industry	Total	An arm	A hand or fingers	A leg	A foot or toes	An eye	One or both ears (hearing)		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
Manufacturing									
Total, manufacturing 1	100	3	77	3	9	4	(2)	4	
Chemicals and allied products 1	100	2	75	1	8	6	1	7	
Electrical machinery, equipment, and supplies 1	100	3	79	1	12	2	(2)	3	
Food products <sup>1</sup> Baking Breweries Breweries Canning and preserving Flour, feed, and grain-mill products Slaughtering and meat packing	100 100 100 100 100 100	6 1 10 2 7 7	68 84 55 79 65	5 5 2 7 5	15 10 21 9 13	3 1 5 6 4 2	0 0 0 0 0	3 1 4 2 4 0	
Furniture, except metal Wooden containers. Miscellaneous wood products, not elsewhere classified.	100 100 100 100	1 2 0 0	87 87 84 87	2 2 0 7	3 3 5 0	4 3 8 4	0 0 0 0	3 3 3 2	
Iron and steel and their products <sup>1</sup> Fabricated structural steel Forgings, iron and steel Foundries, iron Hardware Heating equipment, not elsewhere classified Iron and steel Stamped and pressed metal products	100 100 100 100 100 100 100	2 2 0 2 0 1 3 1	78 63 84 72 94 78 69 93	3 5 0 2 · 2 3 5	10 22 10 17 0 3 14 3	4 5 6 3 0 6 7 1	(2) 0 0 0 0 0 0 0 (2)	3 3 0 4 4 9 2 2	
Leather and leather products 1 Leather	100 100	2 4	92 90	1 0	1 2	2 4	0	2 0	
Lumber and timber basic products <sup>1</sup> Logging Sawmills Saw and planing mills, integrated Millwork (structural)	100 100 100 100 100	5 7 4 11 0	61 23 69 60 94	14 35 6 10 0	6 11 11 2 0	6 8 2 11 2	(2) 2 1 0 0	8 14 7 6 4	
Machinery, except electrical <sup>1</sup> Agricultural machinery and tractors. Commercial and household machinery. Construction and mining machinery General industrial machinery and equipment, not elsewhere classified	100 100 100 100	2 2 0 4	77 77 90 70 69	3 4 3 1	11 7 6 19 21	4 4 1 1	(2) 0 0 0	3 6 0 5	
Metalworking machinery Special-industry machinery, not elsewhere classified.	100 100 100	0	79 75	3 4	6 14	6 3	0	60	
Nonferrous metals and their products 1	100	1	92	1	4	2	0	0	
Paper and allied products <sup>1</sup>	100 100 100	2 5 2	87 76 86	2 5 1	5 12 5	2 0 4	1 0 1	1 2 1	
Printing and publishing <sup>1</sup> Book and job printing News and periodical	100 100 100	1 0 2	82 77 85	3 4 2	10 17 4	0 0 0	0 0 0	4 2 7	
Rubber products 1	100	7	76	1	9	3	0	4	
Stone, clay, and glass products <sup>1</sup> Clay products (structural) Glass Stone, clay, and glass products, not elsewhere	100 100 100	6 7 7	71 66 71	3 6 0	13 13 10	4 4 7	0 0 0	3 4 5	
ciassined	100	2	80	2	12	4	0	0	
Textiles and textile-mill products 1 Carpets, rugs, and other floor coverings. Cotton yarn and textiles. Dyeing and finishing textiles. Woolen and worsted textiles.	100 100 100 100 100	6 10 3 4 5	77 63 92 65 86	3 5 1 7 0	11 21 2 18 2	2 0 1 6 2	0 0 0 0	1 1 1 0 5	
Transportation equipment <sup>1</sup> Aircraft Motor vehicles Motor-vehicle parts Railroad equipment Shipbuilding and repairing	100 100 100 100 100 100	3 7 2 1 1 9	77 60 82 85 72 42	2 7 1 0 4 8	5 8 3 5 13 12	4 3 4 4 1 5	(2) 0 0 0 0 3	9 15 8 5 9 21	
Miscellaneous manufacturing 1	100	1	88	2	2	2	0	J 5	

Table C.—Distribution of all reported injuries resulting in permanent-partial disability, according to part of body affected, by industry, 1949—Continued

	Percent of permanent-partial disability cases involving the loss,							
Industry	Total	An arm	A hand or fingers	A leg	A foot or toes	Ап еуе	One or both ears (hearing)	Other and unclassified
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Nonmanufacturing								
Construction <sup>1</sup> General building contractors Heavy construction, except highway and street Highway and street construction Structural-steel erection and ornamental iron work	100 100 100 100 100	7 5 8 7 10	53 55 54 65 31	9 7 9 4 25	14 13 17 9 18	7 7 8 7 3	2 2 0 3 3	8 11 4 5 10
Transportation 1	100 100 100	6 7 11	43 38 47	10 7 13	26 32 11	2 1 7	(2) (2) 0	13 15 11
Heat, light, and power ¹	100 100 100	7 9 3	56 55 55	8 8 9	18 16 22	4 3 6	(2) 0 1	7 9 4
Personal services 1	100	5	61	8	18	3	0	5
Trade <sup>1</sup> Wholesale distributors Wholesale and retail building supplies	100 100 100	6 2 0	66 67 80	6 4 4	9 11 12	4 9 0	0 0 0	9 7 4

 $<sup>^{\</sup>rm 1}$  Totals include data for industries not shown separately.  $^{\rm 2}$  Less than 0.5 percent.

Table D.—Distribution of temporary-total disabilities, by duration of disability, 1949  $^{\scriptscriptstyle 1}$ 

Industry	Number of	Percent of case	s resulting in—	Total days	Percent of total days lost accruing from—		
and the same of th	cases 2	1, 2, or 3 days of disability	4 or more days of disability	lost 3	1-, 2-, or 3-day cases	4-or-more-day cases	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Manufacturing Total, manufacturing	88, 472	34.0	66, 0	1, 436, 194	4.0	96. 0	
Apparel and other finished textile products:	****						
Apparel and other finished textile products: Clothing, men's and boys' Clothing, women's and children's. Trimmings and fabricated textile products, not elsewhere classified	533 311	42.6 47.9	57. 4 52. 1	5, 096 3, 147	8.1 7.9	91. 9 92. 1	
	539	28. 6	71.4	7, 112	4.0	96.0	
Chemicals and allied products: Drugs, toiletries, and insecticides Fertilizers Industrial chemicals Paints, varnishes, and colors Chemical products, not elsewhere classified.	416	42.5	57.5	5, 602	5.5	94. 5	
Industrial chemicals.	782 709	30.3 26.7	69. 7 73. 3	11, 633 14, <b>0</b> 60	4. 1 2. 4	95. <b>9</b> 97. 6	
Paints, varnishes, and colors	628 236	44. 1 28. 4	55. 9 71. 6	7, 346 3, 255	7. 1 3. 8	92. 9 96. 2	
Electrical machinery againment and cumplices				·			
Batteries Electrical appliances Electrical equipment for industrial use	233 261	41. 6 33. 3	58. 4 66. 7	2, 457 3, 621	8.3 5.2	91. 7 94. 8	
Electrical equipment for industrial use	1, 452 299	32.3 42.5	67. 7 57. 5	23, 527 3, 560	3. 7 7. 2	96. 3 92. 8	
Food products: Baking Bottling, soft drinks	1, 674						
Bottling, soft drinks	255	34. 5 50. 6	65.5 49.4	24, 509 2, 574	4.7 10.2	95. 3 89. 8	
Botting, soft drings Breweries. Canning and preserving. Confectionery Dairy products. Flour, feed, and grain-mill products. Slaughtering and meat packing. Sugar, beet.	2, 585 1, 837	30. 0 33. 4	70. 0 66. 6	42, 353 25, 152	3. 5	96. 5	
Confectionery	778	36.8	63.2	9, 709	4.9 5.9	95. 1 94. 1	
Flour, feed, and grain-mill products.	423 1, 396	34. 6 32. 7	65. 4 67. 3	5, 937 19, 961	5.3 4.6	94. 7 95. 4	
Slaughtering and mest packing	3, 329 496	40. 4 35. 7	59.6	35, 952	7.9	92, 1	
Sugar, cane Food products, not elsewhere classified	444 741	20. 5 32. 9	64.3 79.5	5, 362 7, 985	6. 0 2. 3	94. 0 97. 7	
Furniture and finished lumber products		32. 9	67.1	10, 401	4.3	95.7	
Furniture, metal. Furniture, except metal. Mattresses and bedsprings. Office, store, and restaurant fixtures.	579 2, 537	36.4	63.6	7, 571	5, 3	94. 7	
Mattresses and bedsprings	373	38. 3 43. 4	61. 7 56. 6	31, 763 4, 719	5. 9 6. 4	94, 1 93, 6	
Wooden containers	253 855	37. 2 37. 0	62. 8 63. 0	3, 569	5.0	95.0	
Wooden containers.  Miscellaneous wood products, not elsewhere classified.	840	33.1	66.9	11, 348 12, 040	5.8	94. 2 95. 8	
	_	30.2		12,010	1.2	80.0	
Iron and steel and their products:  Cutlery and edge tools. Fabricated structural steel. Forgings, iron and steel. Foundries, iron. Foundries, steel. Hardware. Heating equipment, not elsewhere classified. Iron and steel. Ornamental metal work. Plate fabrication and boiler-shop products. Plumbers' supplies. Sheet-metal work.	312 1, 188	35.9	64. 1 55. 6	4, 380 15, 430	6. <u>4</u> 5. 7	93, 6 94, 3	
Forgings, iron and steel	663	44. 4 28. 1 34. 2	71.9	12, 917	2.7	97. 3	
Foundries, steel	2, 918 367	1 22.9	65. 8 77. 1	43, 147 7, 164	4. 4 2. 2	95. 6 97. 8	
Hardware Heating equipment, not elsewhere classified	523 1, 074	33. 5 35. 5	66. 5 64. 5	7, 227	4.1	95.9	
Iron and steel	2, 474	21. 2	78.8	15, 479 117, 695	4.6	95. 4 99. 1	
Plate fabrication and boiler-shop products	280 600	39. 3 37. 0	60.7 63.0	4, 268 7, 949	4.9 5.7	95. 1 94. 3	
Plumbers' supplies Sheet-metal work	416 251	27.6	72.4	9, 745	1.9	98, 1	
Stamped and pressed metal products	736	47. 4 28. 9	52.6 71.1	3, 540 11, 630	6.8	93. 2 96. 2	
Tin cans and other thware	621 263	32, 5 33, 5	67. 5 66. 5	10, 506 3, 794	3.5	96. 5	
Tools, except edge tools	353	34. 8	65, 2	4, 916	4.7	95. 3 95. 7	
Iron and steel products, not elsewhere classified	567 468	28. 0 36. 1	72. 0 63. 9	9, 516 6, 806	3, 2 5, 1	96, 8 94, 9	
Leather and leather products: Boots and shoes, not rubber	٥٠٠	90.0	A	<b>.</b>			
Leather	611 949	32.9 29.3	67. 1 70. 7	7, 107 13, 443	5. 2 4. 1	94, 8 95, 9	
Lumber and timber basic products: Logging	2, 105	23.9	72 1	47 400		ar a	
Sawmills	2, 396	27.3	76. 1 72. 7	47, 460 43, 762	2.1 3.0	97. 9 97. 0	
Logging Sawmills Saw and planing mills, integrated Planing mills Plywood mills Millwork (structural)	896 557	30.7 41.8	69. 3 58. 2	43, 762 14, 821 7, 620	3.7	96. 3	
Plywood mills.	240	36.3	63,7	3, 341	5.8 5.8	94. 2 94. 2	
Millwork (structural)	716	34. 1	65.9	11, 262	4.0	96.	

See footnotes at end of table.

Table D.—Distribution of temporary-total disabilities, by duration of disability, 1949 <sup>1</sup>—Continued

Industry	Number of	Percent of case	s resulting in—	Total days		otal days lost g from
industry .	cases 2	1, 2, or 3 days of disability	4 or more days of disability	lost 2	1-, 2-, or 3-day cases	4-or-more-day
(1)	(2)	(3)	(4)	(5)	(6)	(7)
Manufacturing—Continued				-		
Machinery, except electric: Agricultural machinery and tractors. Bearings, ball and roller. Commercial and household machinery. Construction and mining machinery. Elevators, escalators, and conveyors. Engines and turbines. Food-products machinery. General industrial machinery and equipment, not elsewhere classified. General machine shops (jobbing and repair). Mechanical measuring and controlling instruments. Metalworking machinery.	1, 228 434 548 1, 384 277 251 253	42. 2 32. 0 31. 8 38. 4 46. 6 30. 3 34. 4	57. 8 68. 9 68. 2 61. 6 53. 4 69. 7 65. 6	13, 809 6, 141 10, 260 24, 369 2, 778 3, 513 3, 373	7. 1 4. 8 3. 5 4. 0 7. 6 3. 8 4. 4	92. 9 95. 2 96. 5 96. 6 92. 4 96. 2
elsewhere classified. General machine shops (jobbing and repair) Mechanical measuring and controlling instruments. Metalworking machinery. Pumps and compressors. Special-industry machinery, not elsewhere classified. Textile machinery.	1, 291 252 217 852 286 932 523	31. 4 34. 9 29. 5 36. 2 24. 5 43. 5 39. 2	68. 6 65. 1 70. 5 63. 8 75. 5 56. 5 60. 8	20, 484 3, 874 3, 044 12, 706 4, 633 13, 175 7, 545	3.9 4.2 4.0 4.6 2.5 5.8 4.9	96. 1 95. 8 96. 0 95. 4 97. 8 94. 2 95. 1
Nonferrous metals and their products: Foundries, nonferrous	324 211 428	37. 0 40. 3 37. 4	63. 0 59. 7 62. 6	4, 219 3, 459 6, 175	5. 7 4. 4 5. 7	94, 3 95. 6 94. 3
Paper and allied products: Paper boxes and containers. Paper and pulp. Paper products, not elsewhere classified.	806 1, 171 804	38. 3 26. 8 38. 2	61. 7 73. 2 61. 8	10, 593 21, 828 10, 463	5. 5 2. 8 5. 6	94. 8 97. 2 94. 4
Printing and publishing:  Book and job printing  News and periodical	1, 079 1, 578	36. 4 35. 9	63. 6 64. 1	15, 819 21, 086	4. 6 5. 0	95. 4 95. 0
Rubber products 3	i .	35. 4	64. 6	14, 900	4.1	95. 9
Stone, clay, and glass products:  Clay products (structural) Concrete, gypsum, and plaster products Glass Pottery and related products Stone, clay, and glass products, not elsewhere classified	2, 542 445 1, 428 534 396	34. 9 36. 6 33. 2 37. 5 34. 3	65. 1 63. 4 66. 8 62. 5 65. 7	36. 119 6, 459 23, 307 7, 457 6, 542	4. 9 4. 6 3. 8 5. 4 3. 9	95. 1 95. 4 96. 2 94. 6 96. 1
Textiles and textile-mill products:  Carpets, rugs, and other floor coverings.  Cotton yarn and textiles.  Dyeing and finishing textiles.  Knit goods.  Rayon, other synthetic, and silk textiles.  Woolen and worsted textiles.	2, 355 1, 141 807 546	27. 7 27. 3 28. 4 34. 7 30. 2 25. 2	72. 3 72. 7 71. 6 65. 3 69. 8 74. 8	20, 364 42, 395 19, 691 9, 526 8, 043 23, 983	2.9 2.9 3.2 5.3 4.0 2.4	97. 1 97. 1 96. 8 94. 2 96. 6
Transportation equipment: Aircraft Aircraft Aircraft parts Motor vehicles Motor-vehicle parts Railroad equipment Shipbuilding and repairing	341 767 277 733 896 1,017	20. 5 36. 8 34. 3 32. 5 35. 2 49. 0	79. 5 63. 2 65. 7 67. 5 64. 8 51. 0	8, 652 16, 937 3, 827 14, 334 29, 912 12, 895	1. 5 3. 2 4. 7 3. 0 1. 9 8. 6	98. 8 96. 8 95. 3 97. 0 98. 1
Miscellaneous manufacturing: Fabricated plastics products Professional and scientific instruments and supplies Tobacco products Miscellaneous manufacturing, not elsewhere classified	370 603 596 920	43. 0 66. 3 36. 7 39. 3	57. 0 33. 7 63. 3 60. 7	4, 321 4, 090 7, 850 11, 623	7. 1 21. 7 4. 9 5. 6	92. 9 78. 3 95. 1 94. 4
Nonmanufacturing  Construction: General building contractors. Heavy construction, except highway and street. Highway and street construction. Plumbing, heating, and air conditioning. Electrical work. Plastering and lathing. Roofing and sheet-metal work. Structural-steel erection and ornamental iron work. Special-trade contractors, other. See footnotes at end of table.	2, 832 2, 200	45. 7 36. 0 47. 1 50. 6 45. 2 44. 3 37. 4 38. 3 45. 4	54. 3 64. 0 52. 9 49. 4 54. 8 55. 7 62. 6 61. 7 54. 6	64, 581 50, 429 25, 915 6, 554 5, 849 2, 476 3, 527 6, 739 4, 295	7. 5 4. 2 7. 8 7. 9 7. 0 7. 9 5. 5 4. 2 8. 1	92. 8 95. 8 92. 2 92. 1 93. ( 94. 1 95. 8

Table D.—Distribution of temporary-total disabilities, by duration of disability, 1949 1—Continued

Industry	Number of cases sesulting in—  1, 2, or 3 days of disability of disability		s resulting in—	Total days	Percent of total days lost accruing from—		
moustry			lost *	1-, 2-, or 3-day cases	4-or-more-day cases		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	
Nonmanufacturing—Continued					•		
Transportation: Stevedoring Streetcar Bus (local) Local transportation systems, integrated Trucking and hauling (local) Warehousing and storage	300 941	23. 2 38. 7 32. 6 31. 8 40. 1 38. 4	76. 8 61. 3 67. 4 68. 2 59. 9 61. 6	51, 821 5, 498 13, 915 52, 613 10, 141 9, 575	1.5 3.9 4.1 3.9 5.6 5.9	98. 5 96. 1 95. 9 96. 1 94. 4 94. 1	
Heat, light, and power: Electric light and power- Gas	4, 002	35. 8 37. 1	64. 2 62. 9	108, 416 48, 034	3. 9 5. 7	96. 1 94. 3	
Waterworks	402	40.3	59.7	4, 733	6.6	93. 4	
Personal services: Laundries: Laundries Jaundry with dry cleaning Hotels Eating and drinking places	332 476 1,080 217	36. 7 36. 1 34. 8 33. 6	63. 3 63. 9 65. 2 66. 4	4, 579 6, 918 12, 186 2, 772	5. 2 5. 1 6. 1 5. 4	94. 8 94. 9 93. 9 94. 6	
Business services: Banks and other financial agencles. Insurance. Miscellaneous business services. Miscellaneous repair services.	204 352 355 213	37. 3 36. 1 41. 7 40. 4	62. 7 63. 9 58. 3 59. 6	3, 408 4, 929 3, 957 2, 767	4. 4 4. 5 6. 0 5. 9	95. 6 95. 5 94. 0 94. 1	
Educational services	1, 488	41.1	58.9	20, 382	5. 6	94. 4	
Fire departments	1, 690	38. 2	61.8	24, 400	5.8	94. 2	
Police departments	996	30.0	70.0	16, 994	3.4	96. 6	
Trade:  Wholesale distributors. Retail, general merchandise. Retail food. Wholesale and retail dairy products. Retail automobiles and accessories. Retail apparel and accessories. Miscellaneous retail stores. Wholesale and retail building supplies. Wholesale and retail trade combined, not elsewhere classified.	722 816 1, 368 639 208	49. 2 39. 2 41. 4 23. 8 51. 0 43. 8 38. 0 40. 8	50. 8 60. 8 58. 6 76. 2 49. 0 56. 2 62. 0 59. 2	25, 404 10, 271 9, 691 19, 715 6, 136 2, 696 9, 329 12, 730	8.8 4.9 7.3.5 9.5 8.2 7.0	91. 2 95. 1 92. 8 96. 5 90. 5 93. 8 94. 8 93. 0	

<sup>&</sup>lt;sup>1</sup> A temporary-total disability is defined as any injury which does not result in death or permanent impairment but which renders the injured person unable to perform a regularly established job throughout the hours corresponding to his regular shift on any day after the day of injury.

Based on reports from those establishments which were able to supply the requested breakdown.
 Total includes data for industries not shown separately.

Table E.—Indexes of injury-frequency rates in manufacturing, 1926–49, by extent of disability <sup>1</sup> [1926=100]

Year	All injuries	Death and perma- nent- total	Perma- nent- partial	Temporary- total	Year	All injuries	Death and permanent-total	Perma- nent- partial	Temporary- total
(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)
1926. 1927. 1928. 1929. 1930. 1931. 1932. 1933. 1934. 1935. 1936. 1937.	100. 0 93. 6 93. 2 99. 2 95. 5 78. 0 80. 9 91. 8 93. 6 88. 1 85. 7 85. 8	100. 0 107. 1 107. 1 92. 9 107. 1 92. 9 107. 1 85. 7 107. 1 92. 9 85. 7 85. 7	100. 0 96. 3 104. 6 109. 2 111. 0 102. 8 113. 8 110. 1 128. 4 121. 1 114. 7 122. 0	100. 0 93. 3 92. 5 98. 6 76. 5 78. 9 90. 8 91. 6 86. 2 84. 1 83. 7	1938. 1939. 1940. 1941. 1942. 1943. 1944. 1945. 1946. 1947. 1948. 1949.	71. 7 73. 4 75. 3 85. 8 93. 5 94. 4 88. 3 81. 9 84. 3 78. 4 69. 8 61. 2	71. 4 71. 4 80. 3 70. 7 70. 7 62. 8 62. 8 60. 1 51. 7 51. 7 44. 3	78. 9 80. 7 84. 8 93. 7 83. 4 83. 4 75. 4 72. 3 77. 9 67. 3 61. 9	68. 1 73. 9 75. 6 86. 2 94. 1 95. 0 89. 7 83. 0 85. 3 70. 6 61. 6

<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.