WORK INJURIES in the United States During 1952

A COLLECTION OF
BASIC WORK-INJURY DATA
FOR EACH OF THE MAJOR INDUSTRIES
IN THE UNITED STATES

Bulletin No. 1164
UNITED STATES DEPARTMENT OF LABOR
James P. Mitchell, Secretary
BUREAU OF LABOR STATISTICS
Ewan Clague, Commissioner



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A collection of basic work-injury data for each of the major industries in the United States

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BUREAU OF LABOR STATISTICS Ewan Clague, Commissioner



Letter of Transmittal

UNITED STATES DEPARTMENT OF LABOR,

BUREAU OF LABOR STATISTICS,

Washington, D. C., June 4, 1954.

The Secretary of Labor:

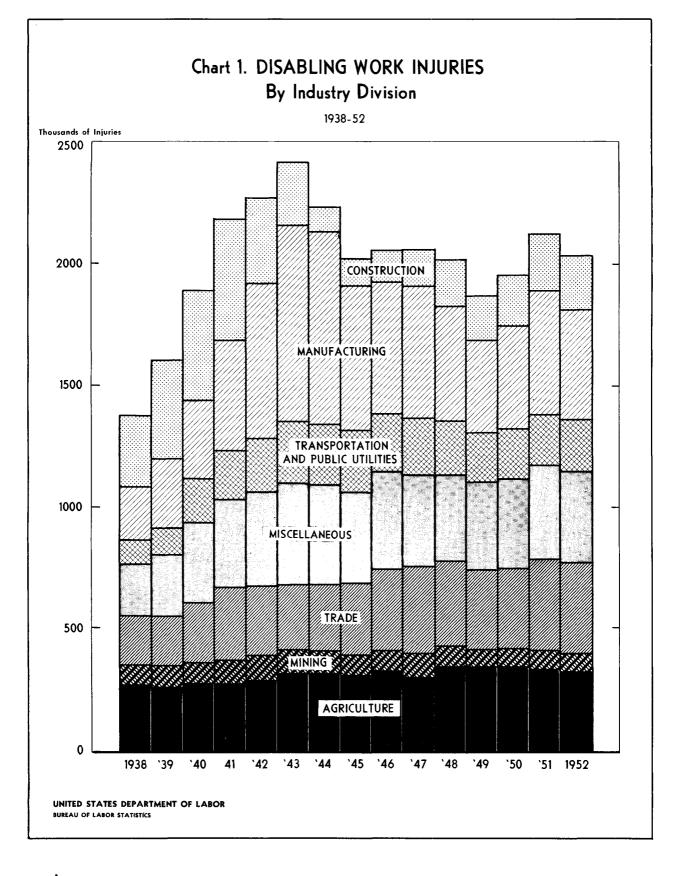
I have the honor to transmit herewith a report on the occurrence of work injuries in the United States during 1952. This bulletin, parts of which have appeared in the March 1953 and January 1954 issues of the Monthly Labor Review, was prepared by Frank S. McElroy and Robert S. Barker, of the Bureau's Branch of Industrial Hazards.

Ewan Clague, Commissioner.

Hon. James P. Mitchell, Secretary of Labor.

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Work Injuries in the United States During 1952

Summary

Although the all-manufacturing injury-frequency rate reached an all-time low in 1952, the estimated total volume of disabling work injuries for all industries showed only a slight decrease from the previous year 1/. The final estimated total of 2,040,000 disabling work injuries for 1952 represented a decrease of only 4 percent from 1951. Approximately 15,000 work injuries resulted in death during 1952, and 84,000 caused some permanent physical impairment. The total production loss accruing from all work injuries occurring in 1952 will ultimately amount to 206 million man-days-equivalent to a year's full-time employment of 687,000 workers.

The average injury-frequency rate for manufacturing was 14.3 in 1952, 8 percent below the 1951 average, and the lowest figure on record. The frequency rates for most nonmanufacturing industries, except mining, were the same or lower than in 1951.

The severity of work injuries changed very little between 1951 and 1952. In manufacturing, the reduction in injury frequency was about balanced by a slight rise in the average number of days lost or charged per case, with the result that the severity rate showed only a fractional decrease. Among non-manufacturing industries there were about as many increases as decreases in the severity of injuries.

Estimates of Disabling Work Injuries

The estimated total of 2,040,000 disabling work injuries in 1952 was 4 percent below the figure for 1951 (see chart 1). Although there was a slight decrease in employment, most of this modest drop in the volume of injuries can be attributed to improved safety in industry.

In manufacturing the chances of any individual experiencing a work injury declined substantially in 1952—the injury-frequency rate was down 8 percent. The injury total also declined, but because more individuals were employed in 1952 than in 1951, the total volume of injuries dropped only 6 percent, from 510,000 to 480,000.

^{1/} See appendix, p. 14, for definitions.

The construction industries as a group also showed considerable improvement in their safety record. The greatest improvement was in heavy construction, but highway and street construction showed a 9-percent drop in injury rates, and general contractors, a decrease of about 4 percent. The special-trade contractors, however, recorded a slightly higher rate in 1952 than in 1951. The estimated volume of injuries for the entire group decreased from 230,000 to 220,000, or about 4 percent.

In wholesale and retail trade, the volume of injuries decreased about 6 percent, despite a slight increase in employment. This improvement in the safety record was reflected in a somewhat lower injury-frequency rate.

Likewise, in the transportation group, and in the finance, service, government, and miscellaneous group of industries, improved safety records offset slight increases in employment. As a result, the volume of injuries for each of these groups was somewhat lower in 1952 than in 1951. Within the transportation group, railways and local transit systems showed a decrease both in injury rates and in the volume of injuries. In the trucking and warehousing industries slightly lower injury rates were offset by an increase in employment. No change was shown in the volume of injuries in the public utilities industry; a slight drop in the injury rates counter-balanced the increase in employment.

In the mining industries, injury experience varied widely. In terms of fatalities the 1952 record of the group was excellent. There were no major mine disasters during the year and the coal mining industry ended the period with the lowest volume of deaths on record, according to the long-term records compiled by the Bureau of Mines. In respect to nonfatal injuries, the mining record was less favorable. The 1952 total for all mining was practically unchanged from that of the preceding year even though employment was some 4.5 percent less than in 1951. In bituminous coal mining, the injury frequency rate rose sharply while employment dropped—and the volume of injuries remained almost the same as in 1951. In most other mining industries the injury-frequency rates held close to 1951 levels and the volume of injuries varied directly with changes in employment. The crude petroleum industry alone had an improved injury-frequency rate, but the improvement in safety was not sufficient to result in a significant change in the volume of injuries.

In agriculture, the decrease of 10,000 injuries—from 330,000 in 1951 to 320,000 in 1952—was about in proportion to the decrease in employment in this field.

Approximately 15,000 of the more than 2 million work injuries which occurred during 1952 resulted in death. An additional 84,000 caused some permanent disability, such as the amputation of a body member or the permanent impairment of a body function. This latter group included approximately 1,500 cases in which the injuries were serious enough to completely incapacitate the persons for any gainful employment for the rest of their lives. The remainder of the total cases (approximately 1,941,000) were temporary injuries which

Estimated number of disabling work injuries during 1952, by industry division (Revised)

Industry division	All disabling injuries	Deaths	Permanent impairments	Temporary- total disabilities
All employed persons: 1/				
All industry divisions	2,040,000	15,000	2/84,000	1,941,000
Agriculture 3/ Mining 5/ Contract construction 6/ Manufacturing 7/ Transportation 8/ Public utilities 6/ Trade 6/ Finance, service, government, and miscellaneous industries 6/ Employees only: 1/	320,000 75,000 220,000 480,000 184,000 21,000 360,000	3,800 1,000 2,400 2,400 1,400 300 1,500 2,200	(14/) (14/) 7,900 23,600 (14/) (14/) 8,000 (14/)	(1/) (1/) 209,700 151,000 (1/) (1/) 350,500
All industry divisions	1,581,000	11,000	66,000	1,504,000
Agriculture 3/ Mining 5/ Contract construction 6/ Manufacturing 7/ Transportation 8/ Public utilities 6/ Trade 6/ Finance, service, government, and miscellaneous industries.	176,000	1,000 900 1,900 2,300 1,300 300 1,200 2,100	(1/) (1/) 6,300 23,100 (1/) (1/) 6,200	(山/) (山/) 167,800 山山,600 (山/) (江/) 272,600

^{1/} Differences between injuries to all employed persons and injuries to employees represent injuries to self-employed and unpaid family workers; neither figure includes workers in domestic service.

^{2/} Includes approximately 1,500 permanent-total disabilities.

^{3/} The total number of work injuries in agriculture is based on cross section surveys of the U.S. Department of Agriculture in 1947, and 1948, with adjustments for changes in employment. These are considered to be minimum figures; injuries experienced in performing chores are excluded; and there are some indications of under-reporting. The estimates of deaths are based on vital statistics figures from those States which provide the necessary detail.

Data not shown separately, but included in grand total.

^{5/} Based largely on data compiled by the Bureau of Mines, U. S. Department of the Interior.

^{6/} Based on small sample surveys.

^{?/} Based on comprehensive survey.

^{8/} Data for railroads are based on Interstate Commerce Commission reports; data for other transportation are based on small sample surveys.

disabled the workers for one full day or more after the day of injury, but from which the injured persons recovered without any permanent ill effects.

As a result of work injuries occurring in 1952, approximately 41 million man-days were lost during the year-equivalent to the loss of 137,000 full-time workers from the labor force for the entire year. When additional allowance is made for the future effects of the deaths and permanent physical impairments, the total economic time-loss amounts to about 206 million man-days-or a year's full-time employment of 687,000 workers.

Injury-Frequency Rates

Manufacturing.--Although the decrease in the all-manufacturing frequency rate between 1951 and 1952 was somewhat smaller than had been indicated by preliminary estimates, the drop to 14.3 more than offset increases which carried the rate from the previous low of 14.5 in 1949 to 14.7 in 1950 and 15.5 in 1951 (see chart 2). The 1952 average was the lowest in the Bureau's 27-year injury-rate series.

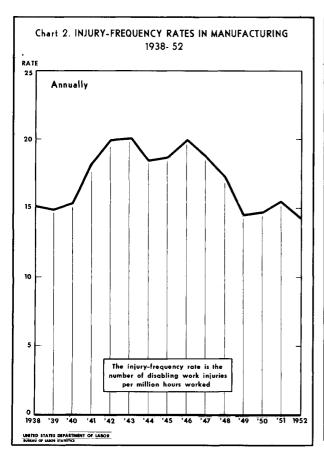
Month-to-month changes in the 1952 average injury-frequency rate for manufacturing, except for minor variations, followed much the same seasonal pattern as in previous years (see chart 3). The summer increase occurred a month earlier than in most previous years, with a 10-percent increase between May and June, compared with the usual slight decrease for this period. The downtrend in the frequency rate began in August, with a drop of 8 percent, whereas in most previous years, August has been the peak month. November showed a somewhat greater drop than in most previous years, but this was offset by a somewhat smaller decrease than usual in December. In several months the frequency rates in 1952 were above those for 1949 or 1950, but, except for the June-July peak, the 1952 rates remained consistently low.

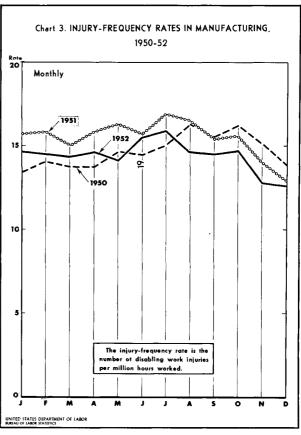
Of the 21 major manufacturing industry groups, 7 had average rates in 1952 that were one full frequency-rate point or more below those of 1951; 9 others showed decreases, but of less than one full point; 1 showed no change; and only 4 reported minor increases (see table A).

The lumber and wood products group, which had the highest injury-frequency rate, also showed the largest decrease-from 52.8 to 49.6. Within this group 5 of the 9 individual industries recorded decreases of one full frequency-rate point or more, and only 1 reported a significant increase.

An encouraging reduction in injuries also occurred in the stone, clay, and glass group of industries; the average frequency rate dropped from 21.8 to 19.3 with the decrease in individual industries amounting to as much as 18 percent.

Frequency rates in almost half (77) of the 159 individual industries for which data were available for both years were lower by one or more points,





Injury-frequency rates in manufacturing 1938-52

Annually		
	Rate	
• • • • • • • • • • • • • • • • • • • •	15.1 14.9	

1943 20.0
1944 18.4
1945 18.6
1946 19.9
1947 18.8
1948 17.2
1949 14.5
1950 14.7
1951 15.5
1952 14.3

Injury-frequency rates in manufacturing 1950-52

Monthly					
Month	1950	1951	1952		
Jan. Feb. Mar. Apr. May June July Aug. Sept. Oct. Nov. Dec.	13.4 14.0 13.7 13.7 14.6 14.4 15.0 16.3 15.5 16.2 15.1	15.7 15.8 15.0 15.8 16.3 15.7 16.9 16.5 15.4 15.6 14.0 12.9	14.6 14.5 14.3 14.6 14.1 15.5 15.9 14.6 14.5 14.7 12.8 12.6		
Annual	14.7	15.5	14.3		

Year

1938 ... 1939 ... and only 16 had significantly higher rates in 1952 than in 1951. Outstanding decreases took place in the following industries:

	Injury-frequency rates			
	1952	1951		
Planing mills	30.5 11.6 32.8 24.7 15.8	48.1 38.8 19.1 40.1 31.5 22.6		
Morticians' goods	92.1	26.2 98.9 21.2		
Gray-iron and malleable foundries		38.3		

Despite the improvement in the safety record of most manufacturing industries, the frequency rates for many remained high. In fact, several of the industries where notable rate decreases occurred were in the latter category—the rate for logging, for example, continued to exceed the rates for all other industries except gold-silver mining. Other manufacturing industries with high-frequency rates included:

	Injury-frequency rates	
	1952	
Sawmills and planing mills integrate Veneer mills	47.2 46.9	
Beet sugar Boatbuilding and repairing Planing mills Structural clay products	40.0 38.4	

In contrast, a number of manufacturing industries recorded unusually low injury-frequency rates. The synthetic fibers industry had a rate of 1.6; miscellaneous communication equipment, 3.2; synthetic rubber, 3.3; explosives, 3.4; aircraft, 3.7; rubber footwear, 3.8; electric lamps (bulbs), 3.9; radio tubes, 4.5; and electrical equipment for vehicles, 4.7.

The simple industry averages, however, tend to obscure significant rate variations which may exist for particular groups of plants within each industry classification. A table based upon size of establishment or size of reporting unit shows many such variations. For example, the average injury-frequency rate for all reporting units manufacturing motor vehicles, bodies,

and trailers was only 5.2; however, the average for small plants (those with 20 to 49 employees) within this industry was 43.4 (see table C) 2/. Similarly, although the average rate for the explosives industry as a whole was only 3.4, units with 50 to 99 employees had a rate of 23.0. The average rate for the plastics industry was 5.4, but units with fewer than 100 employees recorded a rate of 29.8; and blast furnaces and steel mills reported an average rate of 6.5, but those with 250 to 499 employees had a rate of 34.9.

Thus it is evident that the injury-rate experience of segments with industries, as well as average rates for industries as a whole, are significant in determining those areas that can profit from more concentrated safety work. A tabulation of injury rates by size of reporting unit (as presented in table C), is helpful in pointing out particular size groups which need greater safety The larger establishments, which can afford trained safety engineers and which conduct intensive safety programs, generally have the lowest rates. Usually the medium-size plants have the highest rates, and the smallest establishments show rates somewhat below the medium-size plants but above the average for the industry. In 44 (33 percent) of the 132 manufacturing classifications for which size tabulations are presented in table C, the highest rates were found among units with 100 to 249 employees; in an additional 38, (29 percent) of the industries, the highest averages were reported by plants with 50 to 99 employees; and in 24 industries, the highest rates were recorded in small plants (20 to 49 employees). In 15 industries, the highest rates were reported by units with 250 to 499 employees; and in 6 industries, by those with 500 to 999 employees. However, in 3 industries, the highest rates were reported by the smallest plants (less than 20 employees) and in two others, by large units (1,000 to 2,499).

Although there is a general pattern of injury rates by size of plant, this pattern is by no means distinct for all industries. Industries composed predominately of very large establishments usually show a wide variation in injury rates between the small— and medium—size plants and the larger establishments. On the other hand, in many industries composed principally of small— and medium—size plants, the variations in injury—frequency rates by size of establishment were small. For example, in the wooden containers industry, which had an average of 34.4, the highest injury—frequency rate recorded for any size group was 36.3, for plants with 50 to 99 employees; the lowest rate was 29.4, for those with fewer than 20 employees. Likewise, among plywood mills the highest size—group average was 38.4 and the lowest 28.8; in the valves and fittings industry, the highest was 21.8 and the lowest 16.1; and in the dairy products classification, the highest was 19.8 and the lowest, 14.4.

Nonmanufacturing.—Among the 49 individual nonmanufacturing industries (other than mining), for which data for 1951 and 1952 were available, 23 showed decreases of one full frequency-rate point or more, and only 8 recorded significant increases.

^{2/} This tabulation was based on a size-of-reporting-unit classification rather than a size-of-establishment or size-of-company breakdown (see appendix, p. 16).

The construction group showed the greatest improvement, with a 12-percent reduction in injury frequency, although the average rate of 34.6 was among the highest recorded in the 1952 survey. Within this group, the heavy construction industry rate dropped from 42.3 to 26.2, chiefly because many large employers in this field had a greatly improved safety record. Sizable reductions in the frequency of injuries also occurred in masorry, stone setting and other stonework (from 40.7 to 33.1), installation and erection of building equipment (from 29.6 to 22.0), and roofing and sheet-metal work (from 43.7 to 38.0).

The rate for utilities and sanitary services decreased from 13.5 to 12.4, with the principal improvement occurring in the gas utilities and waterworks industries.

The miscellaneous transportation industries for which data were compiled had an average frequency rate of 22.4 in 1952, compared with 24.0 in 1951. Each industry in this group, except integrated local transportation systems and stevedoring, reported lower rates in 1952 than in 1951.

Each industry in the trade group, except general merchandise stores and eating and drinking places, showed slight decreases in injury-frequency rates. For the group as a whole the average was 12.4 in 1952 compared with 12.9 in 1951.

The rate for police departments decreased from 36.5 to 33.2, but that for fire departments increased from 30.4 to 34.7. Communications, personal services, business services, and educational services showed little change in injury rates between 1951 and 1952.

The individual nonmanufacturing industries that reported high injury-frequency rates in 1952 (see listing below) were generally the same as those that showed high rates in previous years:

	Injury-frequency
	rate
Structural-steel erection and ornamental	
iron work	. ·
Highway and street construction	
Roofing and sheet-metal work	. 38.0
Plastering and lathing	
Warehousing and storage Trucking and hauling	
Miscellaneous special-trade contractors.	

Outstandingly low rates among individual nonmanufacturing industries were 1.6 for telephone communications; 1.9 for insurance; 2.0 for banks and other financial agencies; 3.8 for retail apparel and accessories; 4.0 for radio broadcasting.

Mining and Quarrying 3/.—The injury-frequency rate for the bituminous coal mining industry increased sharply from 51.8 in 1951 to 59.5 in 1952; that for anthracite mining remained about the same, at 67.4. The average for metal mines 43.8 also showed little change; however, iron, copper, and lead-zinc mining showed slight decreases in injury rates. The rate for gold-silver mining remained unchanged at 101.8—the highest rate among all industries included in this study. Gold-placer mining and miscellaneous metal mining recorded substantial increases, reaching rates of 40.8 and 86.2, respectively. The average for quarries, 36.0, and that for ore dressing mills, 22.1, showed little change from 1951, although frequency rates for individual industries within these groups showed some wide variations. The rate for nonmetal mines (other than quarries) dropped from 46.4 injuries per million man-hours in 1951 to 32.1 in 1952.

Rate Changes for Identical Reporting Units.—The injury rates presented in this report represent the average experience of all plants reporting in the respective years. Year-to-year changes in these rates, however, reflect not only changes in safety accomplishments, but also changes in the composition of the reporting groups. Progress in accident prevention may perhaps be measured more accurately by comparing the injury experience of identical establishments reporting in successive years. On this basis, the improvement in the safety record between 1951 and 1952 appears to have been even greater than indicated by comparisons of rates derived from all reports received (see table E).

For all manufacturing injury-frequency rates based on data from over 29,000 identical units reporting in both years showed a decrease of 10 percent, compared with a decrease of 8 percent for all reporting units. Similarly, in the stevedoring industry, the average rate for units reporting in both years increased only 2 percent, whereas the rate for all reporting units rose 15 percent. In 70 percent of the manufacturing industries for which such comparisons could be made, there was a decrease of 5 percent or more in the average frequency rate for those units which reported in both 1951 and 1952. Seven of these industries showed decreases of 25 percent or more, as shown below:

Percent decrease in injury-frequency rates for identical reporting units, 1951 to 1952

Envelopes	35
Fur goods and miscellaneous apparel	34
Ophthalmic goods	34
Cold-finished steel	33
Rubber footwear	33
Morticians' goods	31
Miscellaneous communication equipment.	29

^{3/} Based on preliminary tabulations prepared by the Bureau of Mines, U. S. Department of the Interior.

In nonmanufacturing, the comparison was not as conclusive, However, 27 (55 percent) of the industries for which comparison could be made, showed decreases of 5 percent or more in the average injury-frequency rate for units reporting both in 1951 and 1952. Only 9 industries recorded increases of as much as 5 percent, and the remaining 13 showed changes, plus and minus, of less than 5 percent.

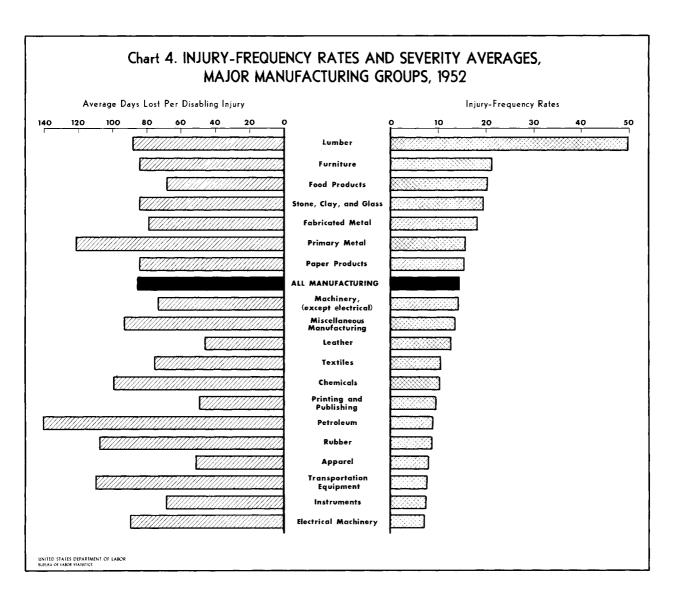
Injury Severity

The severity of work injuries is best measured by the actual number of days of disability in the case of temporary disabilities or the standard time charge assigned for permanent disabilities or fatalities. The standard severity rate is, in effect, a composite index of the frequency rate and the average time-loss per case, since it is a ratio of total time lost to total hours worked. Therefore, the combination of a high frequency rate and a low average time-loss could result in the same severity rate as would high average time-loss and low frequency. Similarly, a change in the severity rate may reflect changes in the average days lost, the frequency rate, or both.

Manufacturing.—The average number of days lost or charged per case for injuries occurring in manufacturing during 1952 was 85, compared with 82 in 1951 (see table A). This slight increase was offset by the decrease in injury-frequency rate in 1952. As a result, the severity rate of 1.3 days lost for each thousand hours worked was the same as for 1951.

Individual cases varied from those involving only 1 day of disability to those resulting in death or permanent-total disability. The great majority of injuries (94.3 percent) caused only temporary disability and the injured workers suffered no permanent ill effects. Many of these cases, however, were of long duration: the average time lost for temporary disabilities was 17 days. In 5.4 percent of injuries to manufacturing workers, some permanent physical impairment resulted, ranging from the partial loss of use of a finger or toe to complete loss of an arm or leg (see table D). These "permanentpartial" disabilities, although not completely incapacitating the workers for future employment, nevertheless permanently reduced their working efficiency. The estimated lost efficiency amounted to an average of 909 days per case. Deaths and permanent-total disabilities resulted from only 0.3 percent of the injuries; however, each of these cases is assigned a standard time charge of 6,000 days, representing the average work-life expectancy of 20 years for the entire working population. Although the proportion of the more serious cases was small, the heavy time charges assigned to them were an important factor in raising the average charge per case to 85 days.

The average time-loss varied widely not only among individual manufacturing industries, but also from year to year for the same industry. These variations, in large part, reflected changes in the number or proportion of deaths and permanent impairments. In the women's and children's clothing industry, for example, the average number of days lost was four times greater in 1952 than 1951 (63 days compared with 16), because two injuries reported by establishments participating in the 1952 survey resulted in death, whereas no deaths



were reported in 1951, and the proportion of injuries resulting in permanentpartial disabilities rose from 1.5 to 3.3 percent.

Changes in the average days lost or charged per case were reflected, in turn, in changes in the standard severity rate. In the women's and children's clothing industry, cited above, the severity rate rose from 0.1 in 1951 to 0.4

in 1952. Similar relationships between changes in average time lost and those in severity rates were also observed in other industries, as shown below:

	Average days lost or charged per case		Injury-severit	
	1952	1951	1952	1951
Vegetable and animal oils and fat Nonferrous rolling, drawing, and	s 196	50	4.5	1.3
alloying	• 144	49	2.2	. 8
Batteries	. 177	62	2.3	1.0
Partitions and fixtures	. 115	45	2.2	•9
Concrete, gypsum, and mineral woo	1 139	56	3 . 6	1.4
Metal household furniture	. 122	56	2.3	1.2
Food products machinery	• 44	126	1.1	2.4
Plywood mills		1148	2.1	4.3
Aircraft parts		125	•4	•9

Although changes in the severity rate usually paralleled the changes in the average days lost per case, the relative level of the severity rate was more often related to the frequency of injuries than to the duration of the cases. Industries with the most serious cases, as measured by the average time-loss, often had moderately low injury-severity rates, merely because the volume of injuries was low. Blast furnaces and steel mills, for example, reported the highest average days lost per case-215 days. In this industry, 1.6 percent of the cases were fatalities or permanent-total disabilities, and 9.0 percent were permanent-partial disabilities; the temporary cases averaged 35 days recovery time. However, the low frequency rate of 6.5 kept the severity rate down to 1.4. The railroad equipment industry reported an average of 181 days lost per case, a frequency rate of 9.1, and a severity rate of 1.5.

High severity rates were as often associated with a high frequency of injuries as with a long duration of cases. This is shown by the following figures on the high-severity-rate industries:

S	Severity	Frequency rate	days lost
-	rate		per case
Logging Vegetable and animal oils and fats Sawmills and planing mills, integrated Sawmills Concrete, gypsum, and mineral wool Fertilizers Malt and malt liquors	4.5 4.4 4.3 3.6 3.2	92.1 22.5 47.2 55.3 25.4 19.8 21.9	123 196 92 77 139 151

Nonmanufacturing.—In nonmanufacturing, the construction group reported the highest injury-severity rate—3.7. This was almost three times the 1.3 severity rate for all-manufacturing, but each injury in construction was not three times as serious. In fact, the average days lost or charged per injury in construction was 105, or only 24 percent greater than the rate in manufacturing. The disparity in severity rates for construction and all manufacturing largely rejected the fact that the frequency rate for construction was nearly two-and-one-half times that for manufacturing.

In particular industries within the construction group, however, injuries on the average were more serious than in most other industries. For example, in structural steel erection and ornamental iron work an average of 295 days was lost or charged per case. This high average was due primarily to the fact that 2.3 percent of the injuries resulted in death or permanent-total disability. In addition, 6.7 percent of the cases were permanent-partial impairments, for which the average time-charge was 1,998 days, compared with 909 for manufacturing. Injuries involving the loss or loss of use of an arm or leg accounted for 37 percent of the permanent-partial cases in structural-steel erection, but for only 6 percent in manufacturing (see table D). (These two types of impairments carry the heaviest time-charge among the permanent-partial disabilities.) The large number of days lost per case, coupled with a high frequency rate (46.9), resulted in the highest industry severity rate (13.8) in the 1952 survey. Injuries in the painting, paperhanging, and decorating industry averaged 183 days per case, largely because 2.8 percent of the cases resulted in death or permanent-total disability. The frequency rate was 23.6 and the severity rate, 4.3. Heavy construction, except highway and street, reported an average of 174 days per case and a severity rate of 1,5; 1.7 percent of the cases reported were fatalities or permanent-total disabilities, and 4.8 percent were permanent-partial impairments.

The stevedoring industry reported the second highest severity rate (9.5) among the nonmanufacturing industries. This high rate, however, was due more to the high frequency than to the severity of injuries. An average of 128 days was lost per case; and the distribution of cases—0.3 percent fatalities or permanent—total disabilities and 5.9 percent permanent—partial impairments—did not differ markedly from the all—manufacturing figures. In contrast, injuries in the electric light and power industry averaged 170 days per case, but because of a relatively low frequency rate (10.7), the severity rate was only 1.8. Deaths and permanent—total disabilities accounted for 1.7 percent of the cases reported in this industry. In laundries, a frequency rate of 10.6 and an average of 121 days per case resulted in a severity rate of only 1.3; whereas in the waterworks industry, an average of 115 days lost or charged per case, coupled with a moderately high frequency rate (21.4), produced a severity rate of 2.5.

APPENDIX

Technical Notes

All injury-rate data presented in this report were compiled according to the provisions of the American Standard Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1945.

Definitions.—The <u>injury-frequency rate</u> is the average number of disabling work injuries for each million employee—hours worked.

A disabling work injury is any injury occurring in the course of and arising out of employment, which (a) results in death or any degree of permanent physical impairment, or (b) makes the injured worker unable to perform the duties of any regularly established job, which is open and available to him, throughout the hours corresponding to his regular shift on any one or more days after the day of injury (including Sundays, days off, or plant shutdowns). The term "injury" includes occupational disease.

The <u>severity rate</u> is the average number of days lost, because of disabling work injuries, per1,000 employee-hours worked. The computation of days lost includes the use of standard time charges for fatalities and permanent disabilities. Each death or permanent-total disability was charged with a time loss of 6,000 days.

Survey Methods.—Data were obtained by mail questionnaires sent to a representative list of employers in manufacturing and most nonmanufacturing industries. Data for mining industries and for petroleum refining, coke, cement, lime, and nonferrous metal primary smelting and refining industries were collected by the Bureau of Mines, U. S. Department of the Interior. Not included in the survey were agriculture, forestry, and fisheries; railroads, interstate bus, water, air, and pipeline transportation; telegraph and miscellaneous communication; domestic service; and government (except education, fire, and police services). Data on the volume of injuries in these latter industries were obtained from all available sources, particularly the Interstate Commerce Commission, the Department of Agriculture, and the U. S. Bureau of Employees' Compensation. Estimates were prepared from these for inclusion in the compilation of the volume of disabiling work injuries in all industry divisions (domestic service excluded).

The survey samples for each industry were selected to give adequate representation in each State and in each size-of-establishment group. Because of their greater overall importance in the total employment of any given industry, large and medium size establishments were more fully represented than were the smaller plants.

In manufacturing, in 1952, data were received from 41,997 reporting units, employing approximately 9,720,000 workers, or about 60 percent of all employees engaged in manufacturing. In the nonmanufacturing industries, 31,019 reports, covering a total of 2,500,000 employees, were received. The mining industries which reported data to the Bureau of Mines employed 573,000 workers. The number of reporting units and employees included in the sample for each industry are shown in table A.

Weighting. -- Since each industry was not represented by the same proportionate sample, the injury-frequency and severity rates for manufacturing, mining, and trade were weighted to secure the group averages. The rates for individual industries were assigned weights based upon the estimated total employment in each industry. Average days lost or charged per case and the distribution of cases by extent of disability for industry groups were unweighted, being based on the simple totals from reports which furnished details regarding the nature and length of disability.

Workers Covered. --Injury rates compiled by the Bureau of Labor Statistics included the experience of all classes of employees in each reporting unit. Proprietors, self-employed persons, domestic workers, unpaid family workers, and members of the Armed Forces were excluded from injury-rate computations. Proprietors, self-employed persons, and unpaid family workers, however, were included in estimates of the volume of injuries. Rates designated as having been compiled by the Bureau of Mines, U. S. Department of the Interior, included the experience of workers 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 afiliated operations not directly connected with mining or refining operations. Working proprietors were included. Mining data include Alaska as well as the States.

Industry Classifications.—The manufacturing classifications used in this report conform to the definitions provided in the 1945 edition of the Standard Industrial Classification Manual (Vol. I), prepared by the Division of Statistical Standards of the United States Bureau of the Budget.

Nonmanufacturing classifications, except those used for construction operations, are based upon the 1942 edition of the manual (Vol. II). The Construction classifications follow the definitions of the 1949 edition of Volume II.

Tables

Table A: Injury-frequency and severity rates, average time charges per case, and the disability distribution for individual industries and for industry groups for 1952 are shown in this table. Injury-frequency rates for 1951 are also shown for purposes of comparison.

Table B: Injury-frequency rates for selected manufacturing industries for 1952 by month are presented in this table. These rates were based upon quarterly reports received from approximately 12,600 reporting units, which employed about a third of all workers engaged in manufacturing. In those industries for which the 12-month average derived from the quarterly reports differed from the final annual average based on more comprehensive coverage, the monthly rates were adjusted to the level of the final annual rate. The month-to-month or seasonal fluctuations and the trend of injury-frequency rates during the year for each of the selected industries and for all-manufacturing combined are shown in the table.

Table C: Variations in injury-frequency rate by size of reporting unit for selected manufacturing industries in 1952 are presented in this table. Because of the nature of the tabulated data, the "size of reporting unit" rather than "size of establishment" or "size of company" was used as the basis of classification. Thus, each separately reported establishment of a multiunit concern was classified on the basis of its respective employment; reports in which data for several separate establishments were consolidated came within a larger size group than if each plant were reported separately. There may be some question as to whether size of establishment or overall size of company is the more important factor influencing injury-frequency rates. It is generally assumed that the larger organizations are better equipped to promote safety programs and to reduce work injuries; therefore, lower injury rates are expected to prevail among the larger concerns. The advantages of large-scale operations may not accrue as directly to small establishments of large multiunit companies as to large single plants or to large plants of multiunit concerns. Therefore, somewhat higher injury rates may be expected among small plants generally (even though they may be units of large concerns) than among large plants. The present tabulation, based on size-of-reportingunit rather than on size-of-establishment, provides the best measure of size differentials in injury rates available from current data.

Table D: The percentage distributions of permanent-partial disabilities according to the part of body affected are shown in industry detail in this table. This tabulation serves, in part, to explain the variations in average days charged per case among the various industries. In interpreting the table, it should be borne in mind that the time charges for permanent injuries to the different parts of the body bear approximately the following relationship to each other:

1	finger (not thumb)	300	days
1	thumb	600	days
1	toe (not great toe)	150	days
1	great toe	300	days
1	hand	3,000	days
1	foot	2,400	days
1	arm, above elbow	4,500	days
1	arm, below elbow	3,600	days
1	leg, above knee	4,500	days
1	leg, below knee	3,000	days
	eye	1,800	days

Table E: Changes in employment, hours worked, disabling injuries, and days lost for establishments which reported for both 1951 and 1952 are shown in this table. This table is designed to measure the safety accomplishments of establishments performing substantially identical operations over the 2-year period, by eliminating the effect of changes in the composition of each industry. It does not indicate the general injury experience of particular industries, which may be affected by the prevailing hazards and by changes in the composition of the industry.

Table A.--Injury rates by industry, 1952 (with comparable injury-frequency rates for 1951) 1/

	Number of	Number of		frequency tes	Injury-		rage days lo arged per ca			f disabling ulting in	
I ndus try	reporting units	employees reported	Current year (1952)	Previous year (1951)	severity rates 2/	All cases	partial	Temporary- total disability	Death and permanent- total disability	Permanent- partial disability	1
MANUF AC TURI NG											
All manufacturing	41,997	9,719,562	3/14.3	<u>3</u> /15.5	3/ 1.3	85	909	17	0.3	5•4	94•3
Food and kindred products	6,218	664,623	<u>3</u> /20•2	<u>3</u> /20.7	<u>3</u> / 1.5	68	1,081	1 5	•3	4•7	95•0
Meat products	745 517	141,970 30,119	21.2 17.0	21.8 19.1	1.7	45 47	983 681	12 15	•1 •3	2.8 2.4	97•1 97•3
Canning and preserving	1,750	129,967	25.4	25.6	1.3	56	967	15	•2	3.1	96.7
Grain-mill products	654	58,226	19.1	19.2	1.6	70	1,103	14	•5	2.5	97.0
Bakery products	813	86,365	16.0	15.7	1.3	79	1,117	17	•ź	4.4	95•4
Sugar	103	26,493	26.7	26.9	2.6	89	1,043	17	•5	3.9	95.6
Cane sugar	27	16,481	19.4	19.3	2.6	12/1	1,149	23	•3	7.1	92.6
Beet sugar	76	10,012	40.7	40.2	2.5	62	610	13	•7	1.3	98.0
Confectionery and related products	281	46,436	13.5	14.3	•8	61	728	17	•2	4.4	95.4
Beverages	914	106,362	24.6	26.4	2.0	109	1,313	16	•3	5.7	94.0
Bottled soft drinks	470	15,013	30.0	32.9	1.4	بلبا	1,277	9	•2	2.0	97.8
Malt and malt liquors	236	69,536	21.9	24.5	3.1	133	1,354	18	•4	6.9	92.7
Wines	97	3,684	25.1	26.1		(4/)	(4/)	(4/)	(4/)	(4/)	(4/)
Distilled liquors	111	18,129	8.5	8,2	(4/)	(4/)	(4/)	(4/)	(4/)	(4/)	(4/)
Miscellaneous food products	1441	38 , 685	15.8	17.8	T.1	53	1,500	_n [†]	-3	T•4	98.3
Tobacco manufactures	146	41,620	7•3	6.6	•5	72	836	13	•5	3.6	95•9
Textile-mill products	2,615	684,452	<u>3</u> /10.3	3/11.2	<u>3</u> / •8	75	946	19	•2	4•7	95•1
Cotton yarn and textiles	547	258,739	8.9	9•9	•7	71	954	19	•2	4.6	95•2
Rayon, other synthetic, and silk textiles	277	71,778	8.2	9•0	•6	66	1,155	20	•1	3•5	96•4
Woolen and worsted textiles	328	86,804	16.9	16.9	1.2	57	801	20	•2	2.9	96.9
Knit goods	786	123,279	5•8	5•9	.1	25	722	13		1.7	98•3
Dyeing and finishing textiles	284	54,083	15.0	16.4	1.6	102	1,031	21	•3	6.0	93•7
Carpets, rugs, and other floor coverings	90	47,230	12.7	12.7	1.7	134	860	19	•4	10.5	89•1
Hats (except cloth and millinery)	68	9,515	16.4	20.3	•5	33	1,325	13		1.5	98•5
Cordage and twine	57	7,245	19•7	21.5	•8	41	518	15		5.1	94•9
Miscellaneous textile goods	178	25,779	17.3	17.3	2.1	105	1,384	20	•/4	4.6	95•0
Apparel and other finished textile products	3,889	340.046	<u>3</u> / 7•8	<u>3</u> /6.9	<u>3</u> / •4	51	1,142	13	•1	2•7	97•2
Clothing, men's and boys!	968	501, بِلْبِلا	7.8	6.9	•3	38	1,112	14	.1	1.4	98•5
Clothing, women's and children's	1,969	136,772	6.4	4.9	•4	63	1,297	13	.1	3∙3	96•6
Millinery	95	4,580	11.0	(4/)	(4/)	(<u>L</u> L)	(4/) 858	(4/)	(4/)	(4/)	(<u>4</u> /)
Fur goods and miscellaneous apparel	282	18,214	8.0	8.6	-•5	⁻ 57		- 16		ޕ8	9 5 •2
Miscellaneous fabricated textile products	575	35,979	13.6	12.1	•6	45	1,022	12		3•3	96•7
Lumber and wood products (except furniture)	3,080	223,301	<u>3</u> /49 . 6	<u>3</u> /52.8	<u>3</u> / 4.6	88	1,004	16	•5	4.3	95•2
Logging	306	23,142	92.1	98.9	11.7	123	1,313	20	1.0	3∙5	95•5
Sawmills and planing mills 5/	1,285	88, 164	48.9	52.1	4.1	8/1	1,122	16	•5	3.6	95.9
Planing mills	175	10,708	38.4	48.1	2.5	68	773	17	.ź	5•4	94.4
Sawmills	721	29,630	55•3	60.2	4.3	77	1,200	17	•4	3.1	96.5
Sawmills and planing mills, integrated	306 52	42,717	47.3	48.1 42.3	(<u>t</u>)	(<u>4</u> 92)	1,150	475	(4/5)	(4/3)	95.4
Veneer mills	50	2 1 2 1	1.6.0	1,9.2	0.71	(1.7)	1 71.71	O(7)	(1,7)	$U_1/1$	(1.7)

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				frequency tes			erage days lo			of disabling sulting in	
Industry	Number of reporting units	Number of employees reported	Current year (1952)	Previous year (1951)	Injury- severity rates 2/	All Cases	Permanent- partial disability	total	Death and permanent- total disability	Permanent- partial disability	Temporary- total disability
MANUFACTURI NGContinued						1					
Lumber and wood products (except furniture)-Con-											
Millwork and related products	628 535 93 428 433	52,373 32,937 19,436 32,467 27,155	27•3 25•8 31•3 34•4 34•1	29.0 28.0 31.2 38.4 33.2	2.0 2.0 2.1 2.5 2.4	69 70 67 74 62	708 603 1,066 716 891	13 13 15 14 16	0.2 .2 .2 .2	6•7 7•4 5•0 7•0 4•6	93•1 92•4 95•0 92•8 95•3
Furniture and fixtures 5/	1,466	170,108	<u>3</u> /21 . 2	<u>3</u> /22•0	<u>3</u> /1.7	84	834	1/t	•2	7.1	92.7
Household furniture	1,075 766 54 255 60 19 46 182 96	118,432 82,057 13,635 22,740 17,561 2,340 15,221 8,885 16,335 8,579	20.6 20.6 22.2 19.6 18.9 27.6 15.2 22.9 20.2 23.7	22.3 22.3 24.9 19.9 21.4 28.6 19.0 19.5 22.8 15.1	1.8 1.9 2.3 1.0 1.5 (4/) 1.4 .9 2.2 (4/)	88 91 122 141 80 (4/) 87 39 115 (4/)	842 871 768 705 707 (L/) 684 479 1,045	13 13 14 13 16 (<u>4</u>) 15 15 15 (<u>4</u>)	•2 •2 •5 •2 (<u>u</u> /) •3 (<u>u</u> /)	7•2 7•3 10•5 4•1 7•5 (<u>h</u> /) 8•4 5•6 9•7 (<u>h</u> /)	92.6 92.5 89.0 95.9 92.3 (4/) 91.3 94.4 90.3 (4/)
Paper and allied products	1,652	345,732	<u>3</u> /15•3	<u>3</u> /16.0	<u>3</u> /1.7	8L ₁	1,028	18	•2	5•2	94.6
Pulp, paper, and paperboard mills Envelopes Paperboard containers and boxes Miscellaneous paper and allied products	479 75 782 316	209,497 7,490 80,506 48,239	14.4 12.6 17.0 14.8	15.8 16.3 18.1 13.7	2.2 (<u>h</u> /) 1.0 1.5	122 (4/) 54 83	1,258 (¼/) 701 1,164	22 (<u>4</u> /) 15 15	(<u>4</u> /) •1 •1	5•9 (4/) 4•3 5•5	93•7 (<u>4</u> /) 95•6 94•4
Printing, publishing, and allied industries	3,192	314,322	3/9.4	<u>3</u> /9•1	<u>3</u> /•5	49	785	15	•1	3•4	96.5
Newspapers and periodicals Bookbinding and related products Miscelleneous printing and publishing	1,022 155 2,015	153,084 13,432 147,806	9.2 12.8 9.1	9.1 10.0 9.1	•4 •5 •5	45 37 55	784 473 827	15 14 14	•2 •- •1	2•3 5•1 4•4	97•5 94•9 95•5
Chemicals and allied products	2,229	885,644	. <u>3</u> /10•1	<u>3</u> /11.5	3/1.1	99	1,063	17	•8	3•5	95•7
Industrial inorganic chemicals	152 293 55 20 21 42 155 250 219 365 396 187 65 302	62, 84,2 166, 975 34, 718 9,250 146, 154 20, 215 56, 638 74, 578 28, 879 43, 399 24, 4,431 13, 455 7, 853 21, 473	8.0 4.7 55.4 3.3 1.6 3.4 7.0 8.7 9.4 11.7 19.8 22.5 11.8	9.5 5.1 6.6 2.3 1.7 3.4 7.7 9.2 8.3 12.5 22.4 23.8 14.0 20.7	1.1 .6 (1/) (1/) (1/) .6 .4 .8 1.1 .7 .2 .4.5 (1/)	95 130 (4/) (4/) (4/) 63 50 63 72 151 54	1.530 1,014 (4/) (4/) (5% 1,143 78% 1,094 84,1 1,680 (4/) 1,190	19 21 (L/) (L/) 19 13 21 21 19 11	.6 1.0 (L/) (L/) (L/) .3 .3 1.7 2.0 (L/)	2.8 5.1 (L/) (L/) 4.4 3.0 6.5 3.4 3.4 (L/) 1.7	%・6 93・9 (山//) (山//) 95・3 93・9 91・9 91・9 98・9

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Table A.--Injury rates by industry, 1952 (with comparable injury-frequency rates for 1951) $\underline{1}$ /--Continued

	W 1 5	N	Injury-f		In iu		rage days lo: arged per ca:			of disabling sulting in	
Industry	Number of reporting units	Number of employees reported	Current year (1952)	Previous year (1951)	Injury- severity rates <u>2</u> /	All cases	Permanent- partial disability	total	Death and permanent- total disability	Permanent- partial disability	Temporary- total disability
MANUFAC TURI NGC ontinued											
Products of petroleum and coal	(<u>14</u> /)	225 , 776	<u>3</u> /8•7	<u>3</u> /8•7	<u>3</u> /1.2	л¹о	656	24	1.5	3•9	94.6
Petroleum refining 6/ Coke ovens 6/ Beehive Byproduct Paving and roofing materials Miscellaneous products of petroleum and coal.	 86 56	159,660 25,241 3,322 21,919 13,433 2,141	7.9 8.8 30.5 7.3 13.1 18.3	7.4 11.1 38.8 8.5 14.0 (4/)	1.1 (4/) (4/) (4/) 2.5 (4/)	3 3 3 3 3 3 3	534 (L/) (L/) 1,090 (L/)	25 (4/) (4/) 13 (4/)	1.7 7/1.4 7/.6 7/1.6 .9 (4/)	3•4 (4/) (4/) (4/) 7•6 (4/)	94•9 (4/) (4/) (4/) 91•5 (4/)
Rubber products	301	169,495	<u>3</u> /8.6	<u>3</u> / 9•7	<u>3</u> /1•1	107	978	17	•6	6.0	93•4
Tires and inner tubes	36 15 250	65,994 25,869 77,632	5.6 3.8 12.8	6.1 4.9 14.1	.9 (4/) 1.5	105 (4/) 1 02	1,150 (<u>4</u> /) 858	лі (π\) ss	(<u>L</u> /)	7•3 (<u>14</u> /) 5•1	92•7 (4/) 94•1
Leather and leather products	1,039	199,656	<u>3</u> /12.6	<u>3</u> /12.8	<u>3</u> /•5	46	743	13	•5	3•2	96∙6
Leather tanning and finishing Boot and shoe cut stock and findings Footwear (except rubber) Miscellaneous leather products	152 91 477 319	25,010 4,635 144,156 25,855	26.0 23.1 9.3 12.7	25.4 21.7 9.5 12.7	1.6 (<u>4/)</u> .2 .7	61 (<u>4</u> /) 26 58	1,159 (4/) 1448 722	15 (<u>l.</u> /) 13 11	(<u>l</u> <u>l</u> /)	2.4 (4/) 2.9 5.0	97•3 (4/) 97•1 94•8
Stone, clay, and glass products	1,651	281,294	<u>3</u> /19•3	<u>3</u> /21.8	<u>3</u> /1.9	84	1,133	17	•4	3∙8	95•8
Class and glass products	255 540 141 379 121 215	104,314 24,325 56,856 32,932 16,700 6,395 5,790 33,982	11.0 6.0 35.3 15.7 25.4 24.0 32.8 17.1	13.1 6.4 39.8 17.0 27.0 24.7 40.1 20.2	1.2 (h/) 2.3 1.1 3.6 (h/) 2.h 1.3	121 (<u>l</u> 1/) 62 68 139 (<u>l</u> 1/) 75 73	1,345 (4/) 1,092 396 1,619 (4/) 759	20 (4/) 15 14 23 (4/) 15 16	7/4.4 -5 -8 -6 7/-3 -6 -4	7.1 (4/) 1.9 2.2 4.9 (4/) 3.3 5.5	92.8 (4/) 97.6 97.0 94.5 (4/) 96.1 94.1
Primary metal industries 5/	1,958	943,066	<u>3</u> /15.5	<u>3</u> /16.9	<u>3</u> /1.8	121	949	22	•8	5•8	93•4
Blast furnaces and steel mills	211 819 682 137 31 88 432 377 156 45 46	557,159 190,510 123,879 66,631 3,080 48,173 43,980 100,164 44,977 19,670 16,035 13,552	6.5 30.5 33.0 21.7 32.9 13.7 23.5 16.8 21.8 11.7 11.6	6.4 36.8 38.3 31.5 (4/) 15.0 21.0 18.3 25.1 19.1 34.8	1.44 2.53 (4/) 2.88 1.88 2.44 1.44 2.0	215 74 66 98 (11/4 78 69 11/4 80 (1)	995 939 964 868 (14/) 999 875 837 764 1,479 662 (14/)	35 16 13 25 (1//) 21 13 16 16 14 11//)	1.6 .5 .8 .4 .4 .2 .4 .4 .4 .4 .4 .4 .4 .4 .4 .4	9.0 8 8 7 7 2) 8 8 3 3 4 4 6 2 9) 6.5 5 4 6 2 9) 6.5	89.4 96.7 96.0 (4/) 89.4 94.7 95.2 (4/) 93.5

	Number of	Number of	Injury-i	requency es	Injury-		age days los rged per case			f disabling ulting in	
Industry	reporting units	employees reported	Current year (1952)	Previous year (1951)	severity rates 2/	All cases	partial	Temporary- total disability	Death and permanent- total disability	partial	Temporary- total disability
MANUFAC TURI NGC ontinued									,		
Fabricated metal products	3,826	688,434	<u>3</u> /18.1	<u>3</u> /19•5	<u>3</u> /1.4	79	848	15	0.2	6.1	93•7
Tin cans and other tinware	88	45,606	11.2	12.0	•7	57	619	19		6.4	93.6
Cutlery, handtools, and hardware	502	109,366	13.9	15•7	1.0	72	643	16	•1	7 • 4	92.5
Cutlery and edge tools	141	21,314	15.6	21.2	•9	53 67	662	17		5.7	94•3
Handtools, files, and saws	178	26,812	18.4	20.1	1.3		776	<u>π</u>	•2	5.8	94.0
Hardware	183	61,240	10.8	11.6	.8	87	577	18	•2	9.8	90.0
Heating and plumbing equipment	406 123	112,062 42,139	19•3 14•8	21.6 19.0	2.1	97 75	1,068	15 17	•4	5•7 4•1	93•9
Sanitary ware and plumbers' supplies Oil burners, heating and cooking apparatus	283		21.0	22.7	2.3	107	1,086	1/	•3	6.3	95.6
Fabricated structural metal products	1.110	69,923 141,982	25.6	26.3	1.9	73	959	14	•4	4.1	93•3 95•6
Structural steel and ornamental metalwork:	520	69,186	23.6	24.1	2.1	89	1,124	15	•5	4.2	95•3
Metal doors, sash, frame, and trim	103	12,838	23.8	27.8	1.8	67	731	12		7.5	92.5
Boiler-shop products	268	42.534	27.2	26.6	1.8	63	848	15	•4	3.2	96.4
Sheet-metal work	219	17.424	27.6	29.1	1.8	52	915	īó	.2	3.6	96.2
Metal stamping, coating, and engraving 5/	765	118,328	17.1	19.0	1.3	85	775	15	•1	8.4	91.5
Vitreous-enameled products	28	4,834	15.8	22.6	(<u>4</u> /) 1•3	(<u>4</u> /)	(4/)	(4/)	(4/)	(4/)	(4/)
Stamped and pressed metal products	510	101,657	13.8	16.6	1.3	39	757	16	,í	10.7 °	89.2
Metal coating and engraving	219	11,407	29•5	27•5	1.2	37	908	12		2.8	97.2
Fabricated wire products	251	39•734	17.1	18.4	•9	57	973	15		4.4	95.6
Miscellaneous fabricated metal products	70L	121,356	14.0	14.9	1.3	57 85 56 76	832	1件	•1	7•7	92.2
Metal barrels, drums, kegs, and pails	37	10,085	13.9	15.1	1.2	56	738	10		6.3	93•7
Steel springs	29	8,618	20.8	23.3	1.6		1,125	15		5•4	94.6
Bolts, nuts, washers, and rivets	107	26,176	14.5	15.6	. •9	67	639	15	, •3	5.4	94.3
Screw-machine products	280	29,615	15.2	15•9	(<u>4</u> √)	(<u>1</u> 4/)	(4/)	(4/)	(ĪĪ)	(4/)	(4/)
Fabricated metal products, not elsewhere classified	251	46,862	12.0	13.0		71	717	15		4 5	07.7
					•9	74	713	,	•2	6.5	93•3
Machinery (except electrical)	4,016	1,223,018	3/14.2	3/15.4	<u>3</u> /1.1	73	81/1	15	•2	5•8	94.0
Engines and turbines	66	71,444	10.0	11.3	1.0	99	938	17	•3	6.9	92.8
Agricultural machinery and tractors	221	154,701	12.8	15.2	1.5	82	847	13	•2	6.6	93•2
Construction and mining machinery	296	105,941	22.0	23.8	2.0	74	899	12	•2	5•8	94.0
Metalworking machinery	1,002 682	198,432 126,012	13.8 17.1	14.0 18.0	1.0 1.2	71 60	705	15	•#	4.6	95.0
Food-products machinery	154	21,51,6	17.9	17.6	1.1	44	757 626	15 13	•1	5•2 5•0	94•7 95•0
Textile machinery	131	34,481	13.0.	13.3	•8	44 47	943	18		3.1	95.0
Miscellaneous special-industry machinery	397	69.985	18.6	20.5	1.4	47 69	745	<u>η</u> . :	•2	6.1	93•7
General industrial machinery	636	170,701	16.0	18.0	1.5	91	1.013	15	•2	6.3	93.5
Pumps and compressors	130	42.478	17.6	18.4	2.7	129	1.241	12	•2	8.5	91.3
Elevators, escalators, and conveyors	87	23, 199	16.3	19.3	1.1	57	835	12	•4	2.6	97.0
Mechanical power-transmission equipment	·	''	1			٠.					''••
(except ball and roller bearings)	119	38,986	13.2	16.0	•6	47	600	18		5•0	95•0
Miscellaneous general industrial machinery	300	66,038	16.8	18.5	1.6	89	903	17	•2	6.5	93•3
Commercial and household machinery	348	246,491	8.6	9•3	•7	81↓	696	18	•1	8.8	91.1
Miscellaneous machinery parts	765	149,296	15.8	16.9	.•9	48	650	1/4	•2	3.6	96.2
Valves and fittings	110	32,141	17.2	19•2	1.0	54	758	15	•2	3.7	96.1
Fabricated pipe and fittings	47	6,640	19.5	15.8	1.6	72	919	11	•5	3•7	95•8
										1 2 .	//
Ball and roller bearings	66 542	64,455 46,060	11.8 17.0	12.2 18.5	1.0	36 53	55 2 639	15 12	•14	3.9	96.1

See footnotes, p, 25.

Table A.--Injury rates by industry, 1952 (with comparable injury-frequency rates for 1951) 1/--Continued

		W 1 -	Injury-fi		Tm 511		ge days lost ged per case			of disabling sulting in-	
Industry	Number of reporting units	Number of employees reported	Current year (1952)	Previous year (1951)	Injury- severity rates 2/	All cases	partial	Temporary- total disability	Death and permanent- total disability	Permanent- partial disability	Temporary- total disability
MANUFACTURINGContinued											
Electrical machinery	1,249	761,349	<u>3</u> /7•0	<u>3</u> /7•5	3/0. 6	89	910	16	0.1	7•2	92•7
Electrical industrial apparatus Electrical appliances	555 83 54 55 32 355 270 26 59 115 60 55	283,804 39,286 18,460 52,684 20,332 311,815 192,076 38,460 81,279 34,968 23,817 11,151	8.1 7.3 16.2 4.7 3.9 5.6 6.5 4.5 3.2 10.9 12.0 8.4	8-4 7-5 16-3 7-0 4-1 5-9 6-5 4-1 4-2 11-7 14-2 6-8	.9 .6 1.0 .3 (LL/) .6 (LL/) .2 1.7 2.3 (LL/)	98 75 50 76 (4/) 67 75 (4/) 141 177 (4/)	912 698 844 574 (4/) 793 (14/) 828 1,534 1,599 (4/)	17 16 17 21 (L/) 13 12 (L/) 17 17 18- 21 (L/)	.2 .2 .1 .1 (1/)	7.7 8.6 2.2 10.0 (L/) 6.5 7.4 (L/) 3.6 7.4 9.0 (L/)	92.1 91.4 97.6 90.0 (U/) 93.4 92.5 (U/) 92.4 92.4 90.8 (<u>H</u> /)
Transportation equipment	1,095	1,494,785	<u>3</u> /7•5	<u>3</u> /8.4	<u>3</u> /•7	109	762	22	•4	8•2	91.4
Motor vehicles and equipment Motor-vehicles, bodies, and trailers Motor-vehicle parts and accessories Aircraft and perts Aircraft parts Ship and boat building and repairing Ship building and repairing Boat building and repairing Railroad equipment Miscellaneous transportation equipment	512 258 254 176 31 145 303 156 147 81 23	729,391 436,506 292,885 558,500 351,025 207,475 116,192 108,634 7,558 81,376 9,326	6.4 5.2 8.4 4.8 3.7 6.7 6.3.8 21.4 40.0 9.1 16.5	7-4 6-3 9-2 5-3 4-5 7-1 24-6 22-5 39-2 12-0 18-2	55 55 43 47 2.7 2.7 2.5 1.1	104 104 103 76 125 59 125 135 60 181	639 686 588 726 689 751 980 1,055 600 1,113	22 24 18 17 22 16 25 28 11 24	•3 •4 •1 •8 •2 •9 1•0 •3 •3	10.5 8.6 13.9 5.2 8.2 4.2 4.7 4.5 5.7 12.8	89.2 91.0 86.0 94.4 91.5 94.5 94.0 86.9 92.8
Instruments and related products	588	226,990	<u>3</u> /7•3	<u>3</u> / 7•4	<u>3</u> / •5	68	940	20		5•9	94•1
Scientific instruments Mechanical measuring and controlling instruments	60 121	35 , 833	5•2 7•3	6•1 8•4	•3	54 34	755 582	15 16		5•2 3•3	94•8 96•7
Optical instruments and lenses	32 154 91 75 55	11,830 29,313 10,810 53,994 30,436	8.0 10.0 6.0 7.7 7.5	6.4 10.8 4.7 6.1 7.0	•2 (7/) (7/) (7/)	34 (<u>4</u> /) 43 (<u>4</u> /) 128 63	(4/) 600 (4/) 1,056 700	(4/) 33 16) 기년 -	(4/) 4.9 (4/) 9.2 6.8	(4/) 95•1 (4/) 90•8 93•2
Miscellaneous manufacturing industries	1,567	179,876	<u>3</u> /13•4	<u>3</u> /13.8	<u>3</u> /1.3	93	1,000	1/4	•2	6.5	93•3
Jewelry, silverware, and plated ware Fabricated plastics products Brooms and brushes Morticians' goods Miscellaneous manufacturing	160 225 92 109 981	21,533 31,154 8,892 8,287 110,010	6.9 16.1 16.0 19.4 13.3	8.6 16.4 17.3 26.2 12.9	•8 1•7 1•6 1•4 1•3	102 92 93 74 95	813 1,010 1,117 1,433 998	과 15 16 16	•4 •7 •3 •1	10.8 5.4 3.3 2.8 7.3	89.2 94.2 96.0 96.9 92.6
Ordnance and accessories	76	94,734	6.4	6.0	•6	131	831	13	• ₇	9•7	89•6

	Number of	Number of	Injury-	requency tes	Injury-		rage days loarged per ca			of disabling sulting in-	
Industry	reporting units	employees reported	Current year (1952)	Previous year (1951)	severity rates 2/	All cases	Permanent- partial disability	Temporary- total disability	Death and permanent- total disability	Permanent- partial disability	Temporary- total disability
NONMANUFAC TURI NG									1		
Construction	5,174	238,007	34.6	39•3	3•7	105	1,263	15	0•9	2•7	96•4
General contractors General building contractors Heavy construction, except highway and	2,519 1,705	165,263 75,200	35•4 38•1	42.9 39.6	3•8 2•7	109 71	1,164 1,213	16 15	1.0 .5	2.9 2.2	%•1 97•3
street	274 540 2,655 683 356 359	57,198 32,865 72,744 15,525 5,199 11,213	26.2 46.0 32.7 31.3 23.6 30.6	42.3 50.8 31.5 26.8 23.5 25.7	4.5 5.1 3.2 .8 4,3 1.7	174 112 95 26 183 55	1,106 1,199 1,620 1,088 300 514	18 15 1) ₄ 10 17	1.7 1.2 .8 .1 2.8	4.8 2.4 2.1 .8 .5 1.6	93.5 %.4 97.1 99.1 96.7 97.8
work	199 87 71 254	3,544 2,513 1,740 6,181	33.1 36.8 22.4 38.0	40•7 38•2 23•9 43•7	2•5 (4/) (4/) 2•1	74 (4/) (<u>4</u> /) 55	2,033 (4/) (4/) 1,275	15 (4/) (4/) 17	•5 (4/) (4/) •2	1•5 (4/) (4/) 1•9	98•0 (4/) (4/) 97•9
iron work Installation or erection of building equipment, not elsewhere classified	60 31	7,309 6,665	46.9 22.0	48•2 29•6	13•8 (4/) 2•5	295 (<u>4</u> /) 69	1,998 (4/) 1,800	24 (4/) 13	2•3 (4/)	6•7 (<u>L</u> /) 1•7	91•0 (4/) 97•9
Miscellaneous special-trade contractors 8/ Communication: 9/	555	12,855	35•9	39•0	2.5	69	1,800	13	•4	1.7	97.9
Telephone (wire and radio)	126 407	593,524 16,946	1.6 4.0	1.8 4.1	•1 (<u>l</u> 4/)	(<u>4</u> /)	883 (<u>山</u> /)	21 (<u>4</u> /)	•7 (<u>4</u> /)	([1 \/) • †	98•9 (<u>4</u> /)
Transportati n n: 9/											
Stevedoring Bus (local) Local transportation systems, integrated Trucking and hauling Warehousing and storage	61 275 32 985 736	10,922 38,188 100,438 28,156 19,699	87.9 11.7 15.9 36.0 36.4	76.5 12.3 15.9 38.5 37.4	9•5 •8 1•0 1•6 1•8	128 71 64 46 50	1,321 1,575 584 593 858	31 21 18 11 12	•3 •2 •7 •4 •4	5.9 2.4 .7 .9 1.7	93•8 97•4 98•6 98•7 97•9
Utilities and sanitary services 5/	734	395,832	12.4	13•5	1.7	137	1,412	17	1.3	3•1	95•6
Electric light and power Gas	348 197 167	283,586 99,854 11,484	10.7 16.0 21.4	11.5 18.4 23.5	1.8 1.2 2.5	170 74 115	1,432 1,376 675	18 1√ 13	1.7 .4 1.6	3.6 2.5 .8	94•7 97•1 97•6
Personal services	3,299	156,057	10.1	9•9	•6	57	1,695	15	•2	1.7	98•1
Dry cleaning Laundries Laundry with dry cleaning Amusements and related services Hotels Medical and other professional services Miscellaneous personal services See footnotes. p.25.	771 6 61 478 313 385 365 326	20,524 30,695 41,465 7,808 36,368 14.826 4,371	6.6 10.6 9.1 9.9 14.4 6.1 7.1	4.6 7.9 9.6 10.0 14.6 4.3 8.8	1.3 1.3 (4/) (4/) (4/)	39 121 52 (4/) 20 (4/) (4/)	1,083 2,309 1,177 (4/) 1,650 (4/)	(元/) (元/) (五/) (五/) (五/)	·4 ·3 (4/) (4/) (4/)	2.1 3.3 1.9 (<u>h</u> /) .5 (<u>h</u> /)	97•9 96•3 97•8 (4/) 99•5 (4/)

See footnotes, p.25.

Table A.--Injury rates by industry, 1952 (with comparable injury-frequency rates for 1951) 1/--Continued

				requency tes			ge days lost ged per case			f disabling ulting in	
Industry	Number of reporting units	Number of employees reported	Current year (1952)	Previous year (1951)	Injury- severity rates 2/	All cases	Permanent- partial disability	total	Death and permanent- total disability	Permanent- partial disability	total
NONMANUFACTURINGContinued								•			
Business services	3,316	203,012	4•3	74•71	0.3	71	1,203	15	0•5	2•4	97•1
Banks and other financial agencies Insurance Real estate Miscellaneous business services Automobile repair shops and garages	1,108 448 327 400 602	61,587 106,682 5,075 15,530 7,358	2.0 1.9 7.0 11.6 17.5	2.8 2.0 6.3 13.7	.1 .2 (4/) 1.1	30 87 (4/) 94 47	1,150 1,250 (4/) 1,300 1,414	15 17 (4/) 1/ ₄ 13	 -8 (4/) -6 -6	1.3 1.8 (4/) 3.6 2.5	98•7 97•4 (4/) 95•8 97•5
Miscellaneous repair services Educational services	431 253	6,780 137,535	25•7 8•5	28•2 8•2	1.8	70 47	910	12 13	•0	2.8	96.6 98.5
Fire departments	215	32,061	34•7	30 . 4	1.8	49	1,108	13	•5	•3	99•2
Police departments	154	22,617	33•2	36• 5	1.8	55	1,800	1/1	•6	•3	99•1
Trade 5/	15,100	482,760	<u>3</u> /12.4	<u>3</u> /12•9	<u>3</u> /•5	54	1,034	$\mathfrak{U}_{\downarrow}$	•3	2•4	97•3
Wholesale distributors	3,159 564 956 946 3,565 1,120 1,150 2,226 751	117,287 100,697 23,993 29,354 101,105 15,266 24,890 37,133 20,753	14.4 6.6 3.8 14.7 23.1 10.2 14.7 13.2 26.8	15.6 5.7 4.1 16.3 27.3 9.4 15.5 13.4 28.9	9 2 (4/) 1.6 2 1.5 1.6	60 27 (4/) 28 70 20 28 35 61	1,332 900 (4/) 533 965 600 1,013 1,130 935	13 14 (4/) 12 15 14 11 13	•3 •2 (4/) •3 •1 •2 •2	2.1 .4 (4/) .7 3.6 .9 1.0 1.0 4.0	97.6 99.4 (4/) 97.1 96.1 99.1 98.9 98.8 95.8
elsewhere classified	346	8,288	12.3	15 -1	•7	56	800	19	•4	1.3	98•3
mining and quarrying <u>6</u> /											
Coal mines		418,110	59•5	51.8	(1 1 /)	(11 \)	(4/)	(4/)	<u>7</u> /•9	(<u>1</u> 4/)	(4/)
Bituminous Anthracite		355,500 62,610	58 •1 67 • 4	49•1 67•5	(T)	(4/)		(1 /)	7/•8 <u>7</u> /1•0	(1 1/)	#/
Metal mines		73,400	43.8	43•4	(14/)	(<u>14</u> /)	(14/)	(<u>4</u> /)	<u>7</u> /•7	(<u>/</u> 1/)	(14/)
Iron Copper	 	31,700 14,800 16,500 3,900 2,100 4,400	16.8 31.6 81.6 101.8 40.8 86.2	19.4 33.8 83.1 101.8 31.4 79.2	FFFFFF	HAFFAFF	FFFFFFF ()	निम्मिनि	7/•5 7/•7 1/1•0 7/•9 7/•3 7/1•2	EFFEFFF SSSSSSSSSSSSSSSSSSSSSSSSSSSSSSS	

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	Number of	Number of		frequency tes	T		ge days los ged per cas			of disabling sulting in-	
Industry	reporting units	employees reported	Current year (1952)	Previous year (1951)	Injury- severity rates 2/	All cases	Permanent- partial disability	Temporary- total disability	permanent-	disability	total
MINING AND QUARRYING 6/Continued											
Normetal mines		12,800	32.1	46.4	(4/)	(<u>I</u> L/)	(4/)	(<u>L</u> L/)	<u>7</u> /0.6	(4/)	(4/)
Quarries		51,458	36.0	36 •4	(44/)	(<u>1</u> 4/)	(4/)	<u>(</u> 4/)	7/ •5	(4/)	(4/)
Cement (excluding mills)		4,183 29,829	11.1 34.7	11.3 36.0	43	(4/)	(4/)	(4/) (1/)	7/ •6 7/ •5	(4/)	(4/)
MarbleGranite		2,376 6,646	39•2 42•5	31•3 38•2				E /)	7/ •6 7/ •5 7/ •2 7/ •9 7/ •7		
Traprock		2,918 1,616 3,890	42.1 61.2 47.4	64.0 43.8 43.3	मनमन्तर	स्त्रम्ब्रह्म् इत्त्रम्बर्ग		FARFARE.	7/•7 1/•8	FFFFFFF	FEFFEFF
Ore dressing (mills and auxiliaries)		17,100	22.1	22.6	(4/)	(<u>4</u> /)	(4/)	(<u>L</u> /)	<u></u>	(4/)	(4/)
Copper	 	6,200 3,700 600 3,600 3,000	20.1 9.1 24.0 28.5 31.0	15•1 9•3 30•9 38•9 41•5	मिन्सिन्हें।	मिस्सिस् ।	FIRE CONTROLL OF THE CONTROL OF THE	FEFFE (7/.1	मिस्सिस् (

^{1/}See Technical Notes p 14 for definitions of terms.

 $\underline{6}/\mathrm{Compiled}$ by the Bureau of Mines, U. S. Department of the Interior; data represent preliminary estimates based on an average of 80 percent of coverage of all mining industries.

7/Fatalities only.

^{2/}Based on reports which furnished details regarding the resulting disabilities. (Constituting 60 percent of the sample for manufacturing and virtually the entire sample for normanufacturing).

^{3/}Weighted averages -- (See Technical Notes, p. 14).

^{4/}Not available or data insufficient to warrent presentation of rate.

^{5/}Includes data for industries not shown separately.

^{8/}Includes carpentering, concrete work, excavating and foundation work, wrecking and demolition work, and other special trade contractors not elsewhere classified.

^{9/}Data not available for all industries in group.

Industry	Annual average		Second quarter	Third quarter	Fourth quarter	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	De
verage, all mamufacturing	14.3	И₁•5	Ц.7	14.9	13.4	14.6	14.5	14.3	Щ.6	14.1	15.5	15•9	14.6	4.5	14.7	12.8	12
ood and kindred products:																	
Meat products	21.2	20.1	20.9	23.1	20.8	20.8	21.0	18.3	18.4	19.4	25.0	25.3	20.0	24.4	22.6	18.6	21
Dairy products	17.0	13.5	19.0	18.2	16.7	(1/) (1/) 18•7•	(1/) (1/) 15.8	(1/)	(1/)			(1/)				(1/)	(i
Canning and preserving	25.4	16.9	24.9	32 . 6	21.5	(<u>\(\)</u>	(I/)	(1/) 16.1	(<u>T</u> /)	(1/)	(1/)	(1/) (1/) 15•7	(3)		(1/)	(1/) (1/) 22.1	(1 (1 21
Grain-mill products	19.1	16.9	18.0	18.6	22.7	18.7+	15.8	16.1	18.9	15.8	19.2	15.7	2 1. ó	18.9	21.í	22.1	27
Bakery products	16.0	14.1	15.1	17.8	16.7	16.2	14.3	12.1	15.2	15.9	1/1.1	18.4	16.3	19.0	20-4	12.3	17
Cane sugar	19.4	16.0	21.2	22.7	17.3	14.3	14.6	19.0	18.7	17.6	26.4	22.9	23.1	22.1	16.7	16.9	18
Confectionery and related products	13.5	15.8	12.8	11.6	13.7	16.7	14.3	16.3	13.4	13.6	11.4	9.9	11.5	12.8		12.3	11
Bottled soft drinks	30 . 0	27.1	30.8	35•3	25.2	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)		(1/)	(1/)		(1/)	()
Malt and malt liquors	21.9	19.9	25.5	23.4	18.4	(1/) 21.5	18.2	19.8	22.3	25.9	28.0	24.0	17.8	29.0	(1/) 22.2	15.6	ì
Distilled liquors	8•5	9•3	9.1	8•4	7•3	12.6	8.1	7.2	11.4	8.3	7.8	6.9	4.9	13.6	7.8	7.0	1 7
Miscellaneous food products	15.8	14.7	15.6	16.8	16.0	16.0	12.1	16.0	9.8	23.2	14.3	14.3	20.2	15.9		13.3	13
extile-mill products:																	
Cotton yarn and textiles	8.9	9•5	8.0	8.8	9.0	11.3	8.9	8.2	8.1	7.0	8•9	9.2	8.6	8•7	9.1	9•4	
Rayon, other synthetic, and silk textiles	8.2	7.0	7.9	8.8	9.0	7.1	7.6	6.2	9.2	7.9	6.7	5.9	9•5	10.6	10.6	6.7	
Woolen and worsted textiles	16.9	16.6	17.2	19.6	14.7	15.8	18.1		17.9	15.6	18.1	20.9	18.9	18.9		12.6	ĺй
Knit goods	5•8	5•3	6.1	6.1	5•7	6.2	5•7	4.0	6.6	7.1	5.3	7.3	5.1	6.2		4.5	"
Dyeing and finishing textiles	15.0	15.8	12.8	17.0	14.4		15.2		12.3	12.8	13.5	13.8	21.1	15.8		12.7	19
Miscellaneous textile goods	17.3	18.4	熕0	19.1	17.3		21.0		154	11.6	15.1	14.7	21.5	20.4		12.0	10
mparel and other finished textile products:											!						
Clothing, men's and boys'	7.8	7.6	7.8	8.5	6.8	7.0	8-4	7.7	امما	a -							١,
Clothing, women's and children's	6.4	7.6	5.0	6.8	6.1	8.2		7.3	9.2	7•5	6.8	9.7	8.2	8.0	7.2	7.2	6
Miscellaneous fabricated textile products	13.6	14.2	18.6	11.9			84	6.2	5.4	4.5	5.0	8.2	6.7	5.6	5.2	9.0	1
	1,00	Tries	10.0	11.99	9.9	(1/)	(1/)	(1/)	(1/)	(<u>1</u> /)	(<u>1</u> /)	(1/)	(1/)	(1/)	(<u>1</u> /)	(1/)	'
mber and wood products (except furniture):														1			
Logging	92.1	99.1	80.3	97-4	88.7	109.4	96.6	90.9	69.2	72.9	92.9	110.1	83.9	99.1	95.6	78.9	۱ ،
Sewmills	55•3	56•7	59•2	51.9	54.0	(1/)	14/	(1/)	[(1/) [(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	1
Sammills and planing mills, integrated	47.2	45.9	47.4	51.9	43.5	48.0	44.4	45.1	38.2	51.1	52.9	50.8		49.4	45.6	43.7	lι
Millwork and structural wood products	25.8	23.7	26.6	25.6	27.2	28.1	19.6	23.2	22.0	29.2	28.5	23.7	25.1	27.7	31.9	26.1	1 2
Plywood mills	31.3	27.9	32.8	32.9	91.8	26.6	28.1	28.8	33.4	36.1	29.3	37.2		33.5	284	26.7	ΙĪ
Wooden containers	344	35.3	37 • 7	34.0	30.5	33.6	32.0	40.4	45-4	29.2	38.7	36.1		34.0	37.9	26.6	1 2
Miscellaneous wood products	列•1	34.2	35•1	35•5	31.7	38.6	39•3	34.04	41.i	29,2	35.0	40.5	33-4	32.5	32.0	31.3	3
rniture and fixtures:							[
Household furniture, nonmetal	20.6	17•7	24.0	22.9	18.3	19.2	15.6	18.2	20.5	27.1	24.5	23.6	97 t.	21.9	17.7	16.0	1 2
etal household furniture	22.2	27.1	23.9	21.9	16.6		(1/)		17771	5/3/	77.7	(1/)	234		17.7	16.8	
Mattresses and bedsprings	19.6	17.0	22.8	17.7	21.0	(1/) 16.0	19.0	(1/) 16•2	(1/) 22.3	(1/) 23•4	(1/) 22.8	18.3	(1/) 11 _{4•2}	(1/) 20.5	(1/) 20.4	26.0	1
Office furniture	18.9	والمالة	19.6	16.9	14.5	21.9	28.2	23.3	21.2	18.1	19.5	70.0	16.5			164	
Public-building and professional furniture	22.9	19.2	24.4	29.6	18.9	77	177	177	17:5	(1/)	73.7	23.5 (1/) 25.5		끍	13.6		1 7
Partitions and fixtures	20.2	16.9	23.5	21.4	19.6	18.1	(1/) 17.4	(1/) 14.2	(1/)	(1/) 22.9	(1/) 25•3	\#/ ;	(1/) 18.9	(1/) 20•1	(1/) 23.5	18.5	(
Screens, shades, and blinds	23.7	/	21.1		-/	-/	: 944			ا لاهڪت	E7#7	E707	TOPA	CUal	E707	1 10-7	1.

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Industry	Annual average	First quarter	Second quarter		Fourth quarter	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Paper and allied products:								į	}								
Pulp, paper, and paperboard mills Paperboard containers and boxes Miscellaneous paper and allied products	14.4 17.0 14.8	15.3 15.1 16.0	13.9 16.7 13.3	15.2 18.7 17.2	13.2 17.4 13.0	16.2 14.2 17.0	14.8 15.5 16.8	14.7 15.6 14.0	13.6 18.2 14.9	13.7 14.8 10.0	14.2 17.0 15.1	15.7 17.8 18.7	15.2 16.7 16.9	14.8 21.4 16.0	14.6 18.5 12.1	12.2 14.8 13.5	12.7 18.8 13.5
Printing, publishing, and allied industries:																	
Newspapers and periodicals	9•2 9•1	8•6 7•3	8•2 9•3	8.8 8.8	11.3 10.7	(1/) 9•0	(1/) 6.1	(1/) 6.7	(1/) 9•3	(1/) 8.8	(<u>1</u> /) 9•8	(1/) 9•0	(1/) 8.5	(1/) 8.8	(1/) 12.6	(1/) 9•5	(<u>1</u> /) 10•1
Chemicals and allied products:																	
Industrial inorganic chemicals	5-4 3-3 1-6 3-4 7-0 8-7 9-4 11-7 19-8 22-5 11-8	7.8 5.3 4.1 1.2 3.5 7.4 8.9 6.4 11.2 20.1 19.5 12.6 18.0	8.8 4.7 4.4 1.9 3.4 7.3 8.7 10.9 9.9 23.1 21.4 15.1	8.1 4.4 1.7 1.8 2.7 6.6 9.3 11.8 18.1 21.5 6.5 19.3	7.3 6.9 2.8 1.4 4.1 6.8 7.5 10.9 13.7 17.3 26.9 12.9	8.5 5.9 (1/) (1/) 7.2 8.9 6.7 11.4 (1/) 18.7 (1/)	7.8 5.9 (1/) (1/) 7.4 10.5 7.9 11.3 (1/) 20.1 (1/)	6.9 4.5 (1/) 7.7 7.5 4.6 11.0 (1/) 19.7 (1/)	7.8 3.4 (1/) 1.7 (1/) 7.3 9.1 8.9 9.5 (1/) 20.1 (1/)	8.6 4.0 (1/) 2.3 (1/) 6.8 8.2 10.5 9.4 (1/) 17.7 (1/)	10.0 6.6 (1/) 1.7 (1/) 8.0 8.7 13.5 10.9 (1/) (1/)	7.6 4.6 (1/) 3.0 (1/) 6.6 10.3 9.0 11.4 (1/)	7.6 3.7 (1/) 1.3 (1/) 7.6 9.7 11.7 (1/) 23.9 (1/)	9.2 5.1 (1/) T.1 (I/) 5.6 8.8 7.4 14.2 (1/) (25.1 (1/)	8.5 5.4 (1/) 1.2 (1/) 8.9 9.7 (1/) 34.7 (1/)	6.8 5.0 (1/) 1.4 (1/) 8.1 7.6 10.5 13.8 (1/) 22.1 (1/)	6-4 10-4 (1/) 1-5 (1/) 14-2 5-9 12-5 10-7 (1/) 23-5 (1/)
Products of petroleum and coal:													!				
Paving and roofing materials	13.1	7.6	14.6	19.1	10.0	(1/)	(1/)	(<u>1</u> /)	(<u>1</u> /)	(<u>1</u> /)	(<u>1</u> /)	(1/)	(<u>1</u> /)	(1/)	(1/)	(1/)	(<u>1</u> /)
Rubber products:				ļ													
Tires and inner tubes	5.6 3.8 12.8	6.4 4.2 13.4	5.8 3.0 11.7	6.1 3.9 13.7	4.3 3.9 12.7	5•7 3•1 12•5	6.3 4.8 13.0	7.1 4.8 14.9	6.5 2.3 12.8	4.7 3.1 11.3	6.3 3.5 11.1	5•9 5•9 12•2	5•7 3•5 15•2	6.7 3.1 13.5	5•3 3•3 12•2	3.8 4.8 14.0	3.7 3.6 12.0
Leather and leather products:																	
Leather tenning and finishing Footwear (except rubber) Miscellaneous leather products	26.0 9.3 12.7	24.1 9.3 14.8	29•5 9•8 9•6	25.4 10.0 14.1	25•3 8•0 12•0	24.4 9.7 (1/)	24.7 9.3 (<u>1</u> /)	23•2 8•9 (<u>1</u> /)	원4·8 9·5 (1/)	27.8 9.1 (<u>1</u> /)	36.0 10.8 (<u>1</u> /)	37.4 10.3 (1/)	25•7 9•5 (<u>1</u> /)	14.7 10.4 (1/)	29.8 8.3 (1/)	23•7 8•2 (<u>1</u> /)	22.2 7.3 (1/)
Stone, clay, and glass products:								-			-	_	_	_	_	_	: -
Glass and glass products Structural clay products Pottery and related products Concrete, gypsum, and mineral wool Miscellaneous nonmetallic mineral products	35•3 15•7 25•4	10.4 28.9 11.4 22.5 16.5	11.3 38.4 18.3 26.3 15.7	11.3 41.5 17.5 26.3 17.8	11.1 32.4 15.7 26.6 18.3	10.3 33.2 11.9 (1/) 15.8	10.9 27.2 12.5 (1/) 17.2	10.1 26.0 9.7 (1/) 16.7	13.6 41.6 17.9 (1/) 16.7	9•5 36•5 22•3 (1/) 15•3	10.8 37.0 14.6 (1/) 15.2	12.3 49.6 18.5 (1/) 21.0	10.7 39.9 21.0 (1/) 15.4	10.9 35.1 13.3 (1/) 17.8	11.5 29.8 18.3 (1/) 22.3	9•7 32•2 10•2 (1/) 15•2	12.2 35.6 18.4 (<u>1</u> /) 17.2
See footnotes, p.29.	ı		l	ı	1		1	1			i (l	1		

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Table B. -- Injury-frequency rates for selected manufacturing industries, by month and quarter, 1952-- Continued

	average	quarter	quarter	quarter	quarter	Jan.	Feb.	March	April	May	June	July	Aug.	Sept.	Oct.	Nov.	De
Primary metal industries:		_															
Blast furnaces and steel mills	6.5	6.8	6.8	6.5	6.1	6.9	6.6	7.1	6.7	6.1	9.5	8.3	6.2	6.0	6.4		
Gray-iron and malleable foundries	33.0	34.2	33.5	32.9	31.2	34.1	31.9	36.6	31.8	32.6	36.5	34.9	30.9	33.3	34.8	28.6	
Steel foundries	24.7	27.0	25.8	26.0	20.2	27.2	28.4	25.4	26.6	26.1	24.7	26.3	27.2	24.4	22.6		
Nonferrous rolling, drawing, and alloying	13.7	12.8	14.8	14.9	12.5	12.5	13.6	12.4	17.1	14.0	12.9	13.0	17.8	13.4	14.7	12.1	
Nonferrous foundries	23.5	22.0	20-4	26.0	25.6	20.9	22.4	22.9	20.3	22.7	18.0	26.6	27.2	24.3	31.1		
Iron and steel forgings	24.8	26.6	21.2	25.3	23.0	27.6	28.3	23.8	21.6	26.1	25.0	25.2	23.2	27.2	22.4		
Wire drawing	11.7	11.4	16.7	10.9	8.8	14.3	12.1	7.6	13.8	11.2	35.0	13.8	11.0	9-4	11.1		
Welded and heavy riveted pipe	14.1 11.6	17.6	14.5	13.8 10.5	10.9	18.3 12.0	16.5	18.0 10.0	12.3 11.8	15•4 7•5	16.5	13.2 9.0	12.3 7.1	15•4 14•6	12.9 8.8		
Fabricated metal products:			ł														
Tin cans and other tinware	11.2	11.6	11.1	12.2	10.0	15.2	10.9	8.8	12.2	12.8	8.3	11.3	15.6	9.3	11.0	7.8	3 1
Cutlery and edge tools	15.6	15.1	12.9	15.1	19.4	11.4	16.5	17.2	12.4	13.4	12.7	20.8	14.1	12.1	22.1		
Handtools, files, and saws	18.4	18.9	14.4	20.3	20.1	17.7	19.9	19.1	16.8	14.8	11.7	St*-11	19.4	17.8	21.3	18.8	
Hardware	10.8	11.3	10.2	10.1	11.4	10.5	9.2	14.2	9•5	12.1	9•3	8.8	11.5	9•8	10.2		
Sanitary ware and plumbers' supplies	14.8	15.1	12.5	15.1	16.6	16.8	14.2	14.1	11.4	12.7	13.5	14.7	14.9	15.7	20.2		
Oil burners, heating and cooking apparatus.	21.0	20.7	20.9	22.2	20.3	20.0	20.6	21.6	23.1	16.4	23.2	27.9	19.1	20.6	23.3	20.7	
Structural steel and ornamental metalwork .	23.6	23.7	25.9	23.7	21.3	23.4	25.5	22.2	25.7	21.9	31.9	29.4	22.3	21.2	22.4		
Boiler-shop products	27.2	27.1	25.2	314	25.8	26.5	30 elt	24.5	25.3	23.5	26.9	36.1	31.3	27.0	29.4		
Sheet-metal work	27.6	27.1	27.7	28.7	27.1	27.8	27.9	25.7	27.0	26.1	30.5	26.4	32.5	27.2	24.2		
Stamped and pressed metal products	13.8	13.7	13.7	13.4	14.5	13.6	14.2	13.3	14.4	12.5	14.3	13.4	13.4	13.3	15.2		
Motal coating and engraving	29•5	30.6	28.4	29.3	29.5	(1/) 17•4	(1/) 18.3	(1/) 15.9	(1/) 14.5	(1/) 15.1	(1/) 20•7	(1/)	(1/) 17.2	(1/)	(1/)	12.8	3
Fabricated wire products	17.1	17.2	16.6	18.6	16.2	17.4	18.3	15.9	14.5	15.1	20.7	18.8	17.2	19.9	18.5		41
Metal barrels, drums, Regs, and pails	13.9	12.5	14.8	14.8	13.7	(1/) 16.6	(1/)	(1/) 17.5	(<u>1</u> /) 23.3	(1/)	(<u>1</u> /) 25.8	(1/)	(1/)	(1/) 22.8	(1/)	(1/)	3
Steel springs	20.8	18.9	23.1	20.3	21.1				23.3		25.8	20.5	17.5	22.8	24.0	23.8	
Bolts, nuts, washers, and rivets	14.5	15.5	17.5	12.8	12.2	14.1	13.7	18.7	16.7	18.2	17.6	15.9	10.9	12.0	13.2		
Screw-machine products	15.2	13.2	16.2	15.9	15.8	12.9	14.3	12.4	16.6	15.0	17.0	16.2	15.4	16.0	17.3	19.6	1
Fabricated metal products, not elsewhere					1												. 1
classified	12.0	10.5	12.4	14.1	11.3	9•5	8.1	13.8	14.2	9•3	13.6	17.0	13.1	12.7	8.9	13.2	2
Machinery (except electrical):													:			•	
Engines and turbines	10.0	10.0	10.4	10.2	9.6	9.4	10.3	10.5	11.6	9.7	9•7	11.4	7.7	11.3	10.6	8.8	
Agricultural machinery and tractors	12.8	14.3	13.6	11.7	10.7	13.0	14.0 26.4	15.8	13.4 22.9	22.6	13.1 26.6	12.4	12.7	19.9	21.1	18.4	
Construction and mining machinery	22.0	24.7	23.9	20.8	18.4	25.5		22.4					13.6	13.3	13.6	10.8	
Metalworking machinery,,,	13.8	14.5	14.7	14.0	12.1	13.8	13.6	16.1	15•7 16•1	13.9	14.4	15.1	23.3	18.4	21.3	11.9	
Food-products machinery	17.9	17.8	17.3	20.2	16.5	20.9	15.3	17.1	11.1		17.6 11.2	19.2	12.0	12.8	16.0	1	
Textile machinery	13.0	11.9	20.6	11.6	16.7 17.2	11.9 16.3	16.7	11.7 21.2	22.1	13.1	16.5	9.9 19.1	18.0	18.8	19.7		
Miscellaneous special-industry machinery	18.6	18.1	18.5	17.0	17.5	18.6	17.5	17.6	20.7	18.7	15.9	16.4	17.2	17.3	17.9		
Pumps and compressors	17.6	17.9	14.1	15.1	16.8	24.8	14.6	17.2	15.2	13.0	13.9	16.4	16.3	12.7	15.9		
Elevators, escalators, and conveyors	16.3	18.8	14.1	15.1	10.0	511.0	114.0	1/•2	17.2	19.0	1209	10.44	10.5	1501	¥7•7	15.5	1
Mechanical power-transmission equipment	13.2	17 1.	11. 2	12-4	11.8	12.0	14.2	14.1	13.9	13.9	15.2	11.6	13.9	11.8	12.3	12.6	5
(except ball and roller bearings)	16.8	13.4	14.3	15.7	16.7	17.7	18.0	14.9	18.4	17.5	17.1	15.9	15.5	15.7	21.3	15.3	
Miscellaneous general industrial machinery. Commercial and household machinery	8.6	8.0	9.0	9.6	8.1	8.1	7.8	8.2	9.7	8.1	9.2	9.0	9.3	10.5	9.0	7.3	
	17.2	17.0	17.3	19.6	15.3	16.1	20.2	14.8	17.4	16.7	17.8	20.2	18.5	20.1	14.3	16.4	
Valves and fittings	11.8	11.9	12.5	12.4	10.5	11.5	10.8	13.2	10.8	17.4	9.4	13.8	13.3	10.5	7.9		
Ball and roller bearings	17.0	17.6	19.8	16.1	14.6	16.8	18.3	17.9	23.3	14.9	21.2	15.0	15.6	17.7	14.6		
" wentine suchs' Keneintersessessessessesses	+1.00	1 7100	1700	10.01	1 44	1000	1 2000	1 -1-7	ニノモノ	1407		2,00	1 2/00	+1-1	1	1 -7+1	ļ

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Table B .-- Injury-frequency rates for selected manufacturing industries, by month and quarter, 1952 -- Continued

Industry	Annual average	First quarter	Second quarter	Third quarter	Fourth quarter	Jan.	Feb.	March	April	Иау	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Blectrical machinery:																	
Electrical industrial apparatus		8.8	8.3	7•5	7.8	8.6	9.5	8.1	8•4	8.3	8.2	7.6	7.7	7•3 6•5	8.1	7.7	7.6 8.8
Electrical appliances		8.4	5.0	7.6	7.9	8.5	9•5	7.1	3.9	4.9	6.2	10.5	6.5	19.7	5•0 19•3	15.5	12.5
Insulated wire and cable	16.2	14.3	17-1	17.7	15.8	17.9	13.7	11.1		19eli	15.1		15.9	3.4	4.7	4.7	4.6
Electrical equipment for vehicles		5•3	404	4.5	4.7	4.7	4.1	7.0	5•5	4-4	3.3	7.2	3.9	3.4	8.5	4.1	3.3
Electric lamps (bulbs)		3.5	3.6	3.0	5•2	3.5	3.1	3.9	2.6	4.2	4.0	3.1 6.0	2.6	6.7	7.6	5.0	6.8
Radios and related products		7.2	6.5	6.2	6 -1 t	7.6	6.9	7.0	7.6	6.1	5.7	5.2	4.5	5.2	5.9	3.5	3.7
Radio tubes	4.5	4.0	4.9	4.9	74.77	5.1	4.1	3-1	4.3	3.6	6.8	3.8	3.0	3.7	2.8	2.1	2.7
Miscellaneous communication equipment	3.2	3.2	3.8	3.5	2.5	2.2	3.2	4.2	रिन्त	3.0			14.4	18.6	14.2	8.3	13.6
Batteries	12.0	9•3	9-4	16.7	12.1	11.7	9.0	7•3	9.7	9.9	8.5	17-1	1404	10.0	14.5	0.2	12.00
Electrical products, not elsewhere	l					(3 A	1.0	(2.4)	100	(20)	100	(3/)	100	100	12/	100	120
classified	8.4	6.4	10.0	7.6	9•5	(<u>1</u> /)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)
ransportation equipments																	
Motor vehicles, bodies, and trailers	5.2	5.1	5.6	4.8	4.7	5.1	4.9	5.2	5.6	5.9	5-4	5.1	405	4.9	5.0	4.9	4-4
Motor-vehicle parts and accessories		8.9	8.7	7.9	8.0 ∫	8.7	9.2	8.9	9.1	9.0	8.1	8.9	7.4	7.6	8.2	8.1	7.7
Aircraft		4.0	3.7	3.6	3.5	3.8	4.3	3.8	4.0	3.8	3-4	3.2	3.9	3.7	3.9	3.2	3•3
Aircraft parts		6.3	6.1	7.2	7.2	5•5	6.1	7.3	5.8	6.7	5.9	7-4	7-9	6.4	7-4	7.8	6.5
Ship building and repairing		19.7	21.3	23.9	20.4	21.1	18.9	19.2	19.8	21.8	22.3	24.9	24.5	22-4	22.3	20.3	18.5
Railroad equipment	9.1	9.1	9.6	9.2	8.3	8.3	10.1	9.2	9.9	10.0	9.0	9.4	9•4	8.8	8.7	7.2	8.8
instruments and related products:																	
Scientific instruments	5•2	3.0	7.1	5.2	5•6	3.5	3.2	2.4	5.9	5.9	9.6	2.9	6.2	6.4	4.4	5-4	7.0
Mechanical measuring and controlling	1	,,,,	,,,-	/	,,,,,	,-,	,		1	, ,	1	•	ł	}	1		
instruments	7.3	9.0	7.6	6.7	5.8	9.5	10.1	7•5	7.0	6.5	9-4	7.0	5.8	7.5	7.9	44	4.9
Optical instruments and lenses		9.5	8.5	9.4	5.0	10.8	12.2	5.9	9.1	6.9	9.6	(<u>i</u> /)	(1/)	(1/)	(1/) 12.6	(1/) 11.2	(1/) 10.7
Medical instruments and supplies	1	9.2	8.5	10.9	11.5	10.2	9.0	8.4	6.5	7.6	11.5	10.3	1 T .9	10-4	12.6	11.2	10.7
Photographic equipment and supplies		8.8	8.6	7.9	5•7	9.8	8.4	8.2	7.2	10.2	8.5	7.2	7.6	8.8	6.0	5.2	5.8
Watches and clocks		8.5	8.9	6.7	6.0	10.8	9.5	5-4	9.1	6.1	12-6	11.8	6.6	3.8	5.9	6.7	5.5
wateries and clocks.	1.0		•			2000	1	1	/				-				
iscellaneous manufacturing industries:													1		1		
Jewelry, silverware, and plated ware	6.9	7.8	6.8	8.5	4.9	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)	(1/)
Fabricated plastics products		17.0	16.7	15.8	15.1	(1/) 23•1	(1/) 16•5	11.6	(1/) 16•5	(1/) 15.1	(1/) 18-4	(1/) 11.8	(1/) 17.5	(1/) 17.9	(1/) 16•5	15.0	
Miscellaneous manufacturing		13.5	13.2	14.3	12.6	11.6	14.1	14.7	13.1	12.2	14.3	16.6	13.9	13.1	12.1	12.4	
were a remarked on the transfer of the second of the secon	1	-/-/					•	1			1		-	1		l	1
rdnance and accessories	اساء	7.0	6.5	5.6	6.5	6.5	6.6	7.8	6.5	6.3	6.6	5.1	6.2	5.7	8.7	6.5	4.2

^{1/} Data insufficient to warrant presentation of average.

Table C .-- Injury-frequency rates for selected manufacturing industries, by size of reporting unit, 1952

	All			lverage inju	ry-frequenc	y rates for	units with	2/		Combined	size groups
Industry	reporting units <u>1</u> /	less than 20 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 or more employees	Small establish- ments	Large establish- ments
Food and kindred products:											
Meat products	21.2	25.2	35.1	39•4	37•9	32.8	19•1	15.6	10.6		
Dairy products	17.0	19.8	17.7	17.1	16.9	1/4.0/4	17.2	i			
Grain-mill products	19•1	24.4	32.1	27•7	23•2	19•7	3•3	4.4	4		<u>c</u> /3•5
Bakery products	16.0	10.5	15.3	18•7	20.8	18•3	13•4	9.8	[<u>年</u> /)		c/9.6
Confectionery and related products	13•5	8.8	23•3	15•5	19•2	17.5	13.8	8.8	(4/)		c/7•1
Bottled soft drinks	30∙0	20 4	32•2	23.2	31.7	45.2	(∐/) 20•2			/25.0	(4/)
Malt and malt liquors	21.9	(4/)	38•2	31.2	31.9	20•9		18.2	18.4	<u>a</u> /35•9	1 .7 .
Distilled liquors	8•5	(4/) 23•2	13.5	8•4	11.4	14.4	_4•5	(4/)		a/10.3	<u>d</u> /4•9
Miscellaneous food products	15•8	23•2	20 औ	55.11	25•1	10•5	16.5	ਰ•0			
Iobacco manufactures	7•3	(14√)	5•0	8.7	1/1*0	8•2	4.5	7•2	(<u>\ī</u> √)	<u>a</u> /4•7	<u>c</u> /6•7
Textile-mill products:											
Cotton yarn and textiles	8.9	0.4	11.6	9•5	14•9	13•5	8•3	6.8	6.0	a/11.1	
Rayon, other synthetic, and silk textiles	8.2	l <i>滞</i> る	13.2	12.5	14.6	11.3	5•7	4.8	(4/)	a/13.5	c/4•8
Woolen and worsted textiles	16.9		12.3	25.4	22.6	18.8	15.8	15.1	8.6	a/14.7	i
Knit goods	5.8	4.6	4.9	4.3	7.3	6.9	6.0	5.1			c/4.1
Dyeing and finishing textiles	15.0	17.1	16.4	23.3	24.4	16.1	10.3	9.3	(4/) (4/)		€/8.6
Carpets, rugs, and other floor coverings	12.7	0.5	21.5	8.6	22.3	20.9	16.2	12.1	8.2	a/18.1	
Miscellaneous textile goods	17.3	元•7t (万人)	18.1	24.0	28.2	17.4	9.0	(4/)	(4/)		c/14.3
Apparel and other finished textile products:											
Clothing, men's and boys'	7.8	2.2	7.6	6.1	8•1	7.8	6.3	11.4	(4/)		c/9.8
Clothing, women's and children's	6.4	8.1	6.0	5•4	6.6	9.0	5•5		\ <u>``</u>		a/5.8
Fur goods and miscellaneous apparel	8.0	6.2	7.9	9.5	6.7	9.8		(4/)			
Miscellaneous fabricated textile products	13.6	6.8	12.6	15.6	13.7	17.6	7.1				
amber and wood products (except furniture):											
Logging	92.1	93•7	97•1	102.0	108.7	100.9	80.6	(4/)	(4/)		<u>c</u> /65•9
Planing mills	38•4	25•4	37•0	35•5	46.5	33.6		~=		~-	
Sawmills	55•3	51.2	71.6	59.8	66.3	50.9	31.5	10.4	()		/21 /
Sawmills and planing mills, integrated	47.2	52.9	56.0	59•8	57.8	54•7	34•3	40.6	(<u>4</u> /)	~-	<u>c</u> /31.6
Millwork and structural wood products	25.8	26.8	26.7	29.1	26.9	25•0	19.7			1/7/0	
Plywood mills	31.3	(4/) 29•4	(4/) 34•0	38•4	34.1	30.1	28.8	(<u>b</u> /36.2	
Wooden containers	34.4			36•3	31.7	30 . 6	35•3 (<u>4</u> /)	(4√)			₫/48•8
Miscellaneous wood products	34.1	23.1	39•9	35•4	40.5	22.0	(<u>4</u> /)				(<u>4</u> /)
urniture and fixtures:											
Household furniture, normetal	20.6	17.2	17.6	23.0	21.9	19•4	23.9	10.6		, 	
Metal household furniture	22.2	(<u>4</u> /)	(4/)	17.1	19•8	33•4	33 •7	4.9		<u>b</u> /19•7	,
Mattresses and bedsprings	19.6	15.1	(4/) 19•7	25.1	18.9	31.8	14.0	(4/)	(4/)		c/16.0
Metal office furniture	15.2	(<u>4</u> ∕) 20•9	(4/)	28.1	19•4	35•5	13.7	(4/)	(4/)	ъ/25.6	c/10.3
Partitions and fixtures	20.2	20.9	(j1/)	26.9	24.2	18.9	(4/) 42.0	(4/) (4/) 9•5	=-		d/14.1
Screens, shades, and blinds	23.7	14.6	20.8	14.1	17.5	19.5	12.0	(4/)			a/34.3

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Table C.--Injury-frequency rates for selected manufacturing industries, by size of reporting unit, 1952--Continued

	All		Ave	rage injury	-frequency	rates for u	nits with 2	/		Combined si	.ze groups <u>3</u> /
Industry	reporting units 1/	Less than 20 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 or more employees	Small establish- ments	Large establish- ments
Paper and allied products:)						
Pulp, paper, and paperboard mills Envelopes	14.4 12.6 17.0 14.8	(4/) (4/) 44•5 21•2	38.0 15.5 16.0 19.8	31.0 8.2 22.2 23.1	28.8 18.2 19.5 16.6	17.8 5.5 17.4 15.6	13•0 (4/) 10•5 9•5	10.2 13.1 8.8	8.0 (<u>L</u> _/)	a/37.2 a/13.5	(l ₁ /) c/10.2
Printing, publishing, and allied industries:											
Newspapers and periodicals Bookbinding and related products Miscellaneous printing and publishing	9•2 12•8 9•1	4•3 5•6 6•4	5•5 9•8 7•3	4•7 16•8 8•1	7•9 10•7 10•1	6.4 13.6 13.2	11.5 14.9 10.8	12.6 7.0	10•2 (<u>4</u> /)		<u></u> <u>c</u> / 7•1
Chemicals and allied products:											
Industrial inorganic chemicals	8.0 5.4 3.4 7.0 8.7 9.4 11.7 19.8 22.5 17.9	(4/) (4/) (4/) 8•7 17•2 19•1 25•6 17•5 11•3	24.5 (4/) 29.2 22.1 13.9 28.4 49.2 15.4	31.2 27.1 23.0 22.0 13.7 20.2 18.6 25.3 18.1 28.9	19.2 15.2 4.2 18.9 12.1 12.0 14.3 20.9 18.5 18.6	9.9 10.4 6.4 11.0 10.5 9.5 8.8 10.4 10.6 13.9	6.8 5.9 (4/) 4.4 7.5 7.4 9.8 16.7 (4/)	7•4 3•3 •9 5•4 9•8 6•1 (4/) (4/)	2.6 (4/) (1/) 2.3 6.9 (4/) 	a/25.2 b/29.8 b/20.7 a/27.2 	o/ 3.2 a/ 1.6 e/ 7.0 a/ 9.0 a/17.8
Rubber products:											
Tires and inner tubes	5•6 12•8	(4/)	28.6	21.5	(4/) 17•8	18.3 17.0	14.9 13.5	7•4 8•6	3•3 8•2	<u>a</u> /28.1	
Leather and leather products:							l .				
Leather tanning and finishing Footwear (except rubber) Miscellaneous leather products	26.0 9.3 12.7	(4/) (4/) 4•4	23.0 6.1 12.0	30•1 12•1 13•0	36.0 11.4 15.0	24.8 9.9 13.1	19•4 7•6 10•4	11.6 (<u>1</u> ,/)	6.7	a/24.3 a/6.3	<u>d</u> /11.0
Stone, clay, and glass products:	i						l				
Glass and glass products	11.0 35.3 15.7 25.4 32.8 17.1	(4/) 50.4 (4/) 23.3 26.9	19.8 41.3 12.4 44.8 28.3 30.2	23.4 43.4 13.6 38.4 33.0 35.4	17.4 39.2 20.5 22.3 45.1 28.8	17.0 36.4 15.8 8.9 25.7 13.9	16.2 28.0 14.6 17.2 (4/) 15.3	6.2 7.3 11.1. (1/) 11.0	6.1 (4/) (4/)	<u>a</u> /15.8 <u>a</u> /11.4 	c/20.3 c/14.6 d/10.3 c/10.3
Primary metal industries:											
Blast furnaces and steel mills	33.0 24.7	(4/) 45•5 (4/) (4/)	(4/) 56.6 (4/)	(4/) 56•1 72•6 20•1	30•2 54•1 47•7 32•2	34.9 35.7 25.7 19.6	20.0 21.6 21.8 10.5	11.7 14.1 19.2 13.8	3.9 9.0 14.7 8.8	(4/) <u>b</u> /65.7 <u>b</u> /24.9	

See footnotes at end of table.

Table C.--Injury-frequency rates for selected menufacturing industries, by size of reporting unit, 1952--Continued

	A11		A	verage inju	ry-frequenc	y rates for	units with	2/		Combined si	ze groups
Industry	reporting units	Less than 20 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 or more employees	Small establish- ments	Large establish ments
rimary metal industriesContinued											
Nonferrous foundries	23.5	19.2	28•1	33∙7	35∙5	28•2	29•3	12.7	(14/)		c/12.3
Iron and steel forgings	24.8	(1/2)	68.5	48.8	Lí.é	27.5	28.5	14.2	(H/)	a/64.3	c/12.7
Wire drawing	11.7	(<u>4</u> /)	(4/)	(14/)	43.7	14.9	7.6	1.9	77	b/15•5	
Welded and heavy-riveted pipe	14.1	<u> </u>	1995 1995	(14/) (14/) 147•5	19.0	16.8	15.0	8.3		b/15.5	
Cold-finished steel	11.6		定分	<u>1.7</u> •5	15.0	13.8	6.8	(4/)		Б /38.6	d/5•7
Primary metal industries, not elsewhere			'=' '	712	-,+-	-200		<u> </u>		3,	
classified	30•7	(<u>4</u> /)	39•6	34.6	28.2	28•3				<u>a</u> /36.8	- -
abricated metal products:					ĺ						
Tin cans and other tinware	11.2	(4/) (4/) 18•5	21.5	24.9	21.5	11.2	10.8	8•4	(4/)	a/21.1	c/ 9•2
Cutlery and edge tools	15.6	(4/)	22.2	16.7	18.2	21,.8	14.7	(4/)	(<u>T</u> /)	<u>a</u> /20.9	c/ 9.2 c/ 6.0
Handtools, files, and saws	18.և	18.5	25.7	22.2	27.1	17.2	13.7	11.2			
Hardware	10.8	0.7	19.7	24.5	17.6	20.5	19.6	10.5	3.6	a/19.9	
Sanitary ware and plumbers' supplies	14.8	(4/) (4/) 22•3	32.8	16.9	23.8	19.0	19.0	20.1	7.1	a/28.0	
Cil burners, heating and cooking apparatus	21.0	22.3	24.4	24.1	33.4	23.8	15.3	16.9			
Structural steel and ornemental metalwork	23.6	31.2	40.2	40.7	33.7	29•7	12.7	7.1	(4/)		c/6.6
Metal doors, sash, frame, and trim	23.8		29.3	21.6	21.2	29.0	22.8	0.75	4	a/29.6	₫/21.2
Boiler-shop products	27.2	(<u>4</u> /) 43•6	48.3	52 •7	42.1	27.1	15.4	(4/) 12.5	(4/)	<u> </u>	c/11.2
Sheet-metal work		32 • 7	36 • 7	27.6	34.6	22.0		1 7.7	4/		d/18.1
Stamped and pressed metal products	13.8	17.9	24.9	24.3	22.3	22.6	(4/) 11•3	(4/) 7.1	2.2		<u> </u>
Metal coating and engraving	29.5	30•1	33•5	26.5	35.6	10.9	77.77	1			(4/)
Fabricated wire products	17.1	16.8	18.6	20.J	22.4	16.0	(4/) 16•2	5•7	(4/)		c/10.4
	20.8	(), ()	(4/)		33.1	14.8	25.0	1 7.7	4/	b/24.0	d/20.0
Steel springs		(4∕) H•2	19.0	(¼∕) 17•0				(<u>ú</u> /) 10•7		0/24.0	4/20.0
Bolts, nuts, washers, and rivets	14.5	\ ` #∕`\			23.0	14.0	12.4	10.7	i	a/17.8	
Screw-machine products	15•2	14.2	14.6	20.8	14.0	18.1	16.7	12.1			
Fabricated metal products, not elsewhere classified	12.0	22.1	19.0	17.0	16.4	15•7	10.8	7•2	8.6		
achinery (except electrical):			.,,,,	-,		-517		,			
Engines and turbines	10.0	(L/)	0.4	22.3	15•6	14.3	14.7	11.7	6.6	ъ/20•5	
Agricultural machinery and tractors	12.8	洋 //	(LL/) 26.6	28.8	23.5	24.9	10.0	12.4	10.6	a/24.0	
Construction and mining machinery	22.0	(4/) (4/) 11•8	35.2	28.8	35.6	27.4	29.2	16.8	12.0	a/21.0 a/31.8	
Metalworking machinery	13.8	14/	12.8		16.2	18.5	14.1	14.3	9.5	B/21.00	
		(1./)	24.6	13.6	26.1	12.6			9.5	a/23.1	d/10.9
Food-products machinery	17•9 13•0	<i>\</i> #∕./	16.2	32•5			(4/) 17•3	10.3	9.1	a/15.2	4/10.9
Textile machinery Miscellaneous special-industry machinery	18.6	(4/) (4/) 21•3	22.2	16.7	15.6	20.1		12.5	(4/)	8/15.2	c/15.1
		(1. ()		25.9	19•3	19.7	18.9	17.0	1 14/2		C/15.1
Pumps and compressors	17.6	(4/) (<u>4</u> /)	11.8	19.2	17.4	21.6	15.9	17.7	16.5	a/15.6	/ 0. 7
Elevators, escalators, and conveyors Mechanical power-transmission equipment	16.3		41.8	16.3	24.8	20.6	12.2	11.9	(4/)	<u>a</u> /38•9	<u>c</u> / 9•8
(except ball and roller bearings)	13.2	(4/)	18•7	22.5	18.5	20.0	11.4	8.2	(4/)	a/19.0	c/ 9.6
Miscellaneous general industrial machinery	16.8	20.7	22.1	19.5	23.8	21.1	12.5	15.1	(4/)]	c/13.6
Commercial and household machinery	8.6	8.4	24.2	18.1	15.0	18.6	13.1	7.3	5.9		
Valves and fittings	17.2	(4/) (4/) 17•8	18.8	18.0	21.8	16.5	18.1	16.1		a/17.2	
		げバ	(4/)	(4/)	23.6	17.6	13.5	11.9	9•7	<u>Б</u> /38.6	
Ball and roller bearings	11.8	(4)									c/10.8

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	All			Average i	njury-frequ	ency rates	for units w	ith <u>2</u> /		Combined si	ze groups 3/
Industry		Less than 20 employees	20 to 49 employees	50 to 99 employees	100 to 249 employees	250 to 499 employees	500 to 999 employees	1,000 to 2,499 employees	2,500 or more employees	Small establish- ments	Large establish- ments
Electrical machinery:											
Electrical industrial apparatus Electrical appliances	8.1 7.3 16.2 4.7 6.5 4.5 3.2 12.0	F FF FF FF F F F F F F F F F F F F F F	近,4 8.9 (近/) (近/) (近/) (近/)	11.6 22.7 (L/) (L/) 6.8 (L/) 11.1 21.2	15.0 16.3 21.7 14.1 10.2 (4/) 13.7 16.9	15.8 16.3 21.0 9.0 9.8 2.4 7.4 18.8	13.0 10.5 16.9 11.9 7.3 18.1 4.5 7.0	7.4 5.2 5.8 3.5 6.2 3.5 7.8 (4/)	4.6 3.0 3.3 5.3 3.3 2.2 11.1	a/10.2 (14/) b/7.2 a/12.6 (14/) a/16.2 b/21.9	 -/ 9.9
Transportation equipment:		, ,		,.,	-3-3			(3)		<u>u</u> y 1)•0	<u>u</u> y 0•1
Motor vehicles, bodies, and trailers Motor-vehicle parts and accessories Aircraft parts	5.2 8.4 6.7 21.4 40.0 9.1	\$	43.4 11.8 10.0 62.0 71.1 11.3	28.7 29.4 8.1 42.8 54.3 26.7	24.6 18.1 13.1 50.9 42.5 - 21.5	18.7 12.9 14.0 43.9 48.9 21.0	13.6 12.5 14.9 36.7 12.5 10.0	2.5 8.6 12.3 27.8 	4.4 6.6 4.8 11.9 5.8	a/11.1 a/10.7 a/12.2 a/58.9 a/11.9	
Instruments and related products:		_								_	
Scientific instruments Mechanical measuring and controlling instruments Medical instruments and supplies Ophthalmic goods Photographic equipment and supplies Watches and clocks	5•2 7•3 10•0 6•0 7•7 7•5	(H/) (H/) 3•7 (H/)	(4/) 8•1 10•1 8•5 (4/) (4/)	5.0 17.8 10.1 7.3 12.4 (4/)	21.7 10.7 12.9 21.5 12.1 21.2	12.8 10.8 10.0 8.0 14.6 17.3	4.0 10.8 7.1 4.8 6.7 6.0	(4/) 6.5 10.6 3.9 7.5	3•5 (4/) (4/) (4/) 3•5	b/6.1 a/8.8 a/9.2 a/20.9 b/17.1	c/ 3.5 c/ 4.6 d/ 2.3 e/ 6.8
Miscellaneous manufacturing industries:			_	_							
Jewelry, silverware, and plated ware Fabricated plastics products Brooms and brushes Morticians' goods Miscellaneous manufacturing	6.9 16.1 16.0 19.4 13.3	5.1 11.6 (4/) (4/) 12.1	10.3 20.1 13.0 12.7 14.7	5.0 26.4 10.4 21.0 14.4	12.0 24.8 20.8 25.7 17.5	9.1 14.1 16.3 19.3 15.2	8•3 9•9 (4/) (<u>4</u> /) 1 <u>3</u> •8	(<u>l</u> 1/) (<u>l</u> 1/) (<u>l</u> 1/)	(<u>lu</u> /)	a/11.3 a/12.4	c/ 4.4 d/ 9.1 d/15.0 (14/)
Ordnance and accessories	6.4	(4/)	(<u>4</u> /)	19.2	14.1	20.2	21.4	4.8	3.1	<u>b</u> /16.8	

^{1/} The averages for all reporting units include data for a few establishments which did not report for the entire year, and which were not included in the size breakdown.

^{2/} The size of each reporting unit, rather than the size of establishment or size of company, was used as the basis of classification. Thus each separately reported establishment of a multiunit concern was classified on the basis of its respective employment; reports consolidating data for several separate establishments would fall in a larger size group than if each plant were reported separately.

^{3/} For industries for which data were insufficient to warrant presentation of average for one or more size groups adjacent size groups were combined. The symbol "a" refers to reporting units with less than 50 employees; "b" less than 100 employees; "c" 1,000 or more employees; and "d," 500 or more employees. For industries represented by fewer than 3 units with 500 or more employees each, no combined rate for "large" establishments was computed.

Insufficient data to warrant presentation of average.

Table D.--Distribution of all reported injuries resulting in permanent-partial disability, by part of body affected, and by industry, 1952

					nt-partia ss, or lo		lity cases e of	
Industry	Total	An arm	A hand or fingers	A leg	A foot or toes	An eye	One or both ears (hearing)	Other and unclassi- fied
MANUFACTURING							j	
Average, all manufacturing 1/	100	3	77	. 3	9	3_	(2/)	55
Food and kindred products 1/	100	5	69	3	13	3	(2/)	7
Meat products. Canning and preserving. Grain-mill products. Bakery products. Sugar. Confectionery and related products. Beverages.	100 100 100 100 100 100	3449246	77 80 69 77 61 75 58	4 2 1 4 5	3 6 9 27 7 21	4 4 - 2 5 4	2 1 	9 10 15 3 4 9
Textile-mill products 1/	100	5	79	2	8	1	(2/)	5
Cotton yarn and textiles Dyeing and finishing textiles Carpets, rugs, and other floor coverings	100 100 100	8 4 4	87 66 74	2 1 1	18 16	1 3 2	1	2 7 3
Apparel and other finished textile products $\underline{1}/$	100	5	70	7	6	3	-	9
Clothing, women's and children's	100	6	7 0	9	2	2		11
Number and wood products (except furniture) 1/	100	4	66	5	9	6	(2/)	10
Logging. Sawmills and planing mills. Sawmills. Sawmills and planing mills, integrated Milwork and related products. Wooden containers. Miscellaneous wood products.	100 100 100 100 100 100	8 6 3 1 4	39 63 60 60 83 87 80	11 6 7 7 1	12 9 13 8 7 5 8	7648556	1	22 12 10 14 4 1 2
Furniture and fixtures 1/	100	3	89	1	2	2	1	2
Household furniture	100 100 100	կ կ 2	87 89 91	1	3 2 —	2 2 2	(2/) (<u>2</u> /)	3 2 5
Paper and allied products 1/	100	3	79	4	7	3	(<u>2</u> /)	4
Pulp, paper, and paperboard mills	100 100 100	6 5	70 90 72	7 1 3	7 l ₄ 13	7 1 	 2	3 4 5
Printing, publishing, allied industries $1/\cdots$	100	14	80	14	Ц	2		6
Newspapers and periodicals	100 100	3 4	80 83	3 4	5 4	2 2		7 3
Chemicals and allied products	100	14	68	4	12	6		6
Rubber products	100	2	76	6	9	1		6
Leather and leather products	100	3	92		1		~	4
Stone, clay, and glass products 1/	100	3	67	4	12	5	(<u>2</u> /)	9
Class and glass products Structural clay products Miscellaneous nonmetallic mineral products	100 100 100	3	72 64 70	7 5 	9 2 2l4	2 11 2		7 15 4
Primary metal industries 1/	100	3	70	6	13	14	(2/)	Įţ
Elast furnaces and steel mills	100 100 100 100 100	2 14 14 -3	69 60 814 68 77 89	10 3 2 4 3	12 21 11 14 5	451652	2 3	3 7 10 4 3

Table D.--Distribution of all reported injuries resulting in permanent-partial disability, by part of body affected, and by industry, 1952 —Continued

				of permanding the			bility case use of—	s
Industry	Total	An arm	A hand or fingers	A leg	A foot or toes	An eye	One or both ears (hearing)	Other and unclassi- fied
MANUFACTURING —Continued					ļ			
Pabricated metal products 1/	100	2	78	3	10	2	(2/)	5
Cutlery, handtools, and hardware	100 100	1	88 92	1	<u>ц</u>	1		5 6
Heating and plumbing equipment	100	2	66	7	17	4	ī	3
Oil burners, heating and cooking apparatus	100	3	61	7 5	18	5	2	
Fabricated structural metal products Structural steel and ornamental metalwork	100 100	14 5	62 58	10	17 15	2 3		10 9
Boiler-shop products	100	7	63		23			7
Metal stamping, coating, and engraving	100	1	86	2	6	2		3
Stamped and pressed metal products Miscellaneous fabricated metal products	100 100	3	89 80	1. 3	5 5	2		3 7
achinery (except electrical) 1/	100	2	74	3	14	<u>1</u>	(2/)	3
Engines and turbines	1.00	2	70		21	5		2
Agricultural machinery and tractors	100		85	14	5	5		1
Construction and mining machinery	100	2	66	4	22	2		4
Metalworking machinery	100 100	3 2	80 66	1	10 22	2 14	1	4 4
General industrial machinery	100]	65	5	20	14		2
Pumps and compressors	100	7	59		28			
Commercial and household machinery Miscellaneous machinery parts	100 100	2	82 85	2	6 9	5	1	4 1
Ball and roller bearings	100		93		ź	3 5 5		
lectrical machinery 1/	100	1,	77	2	7	3	(<u>2</u> /)	7
Electrical industrial apparatus	100	3	76	2	7	3	(2/)	9
Communication equipment	100 100	14 16	79 66	2 9	7	2 2		6
ransportation equipment 1/	100	2	82	2	4	5	1	14
Motor vehicles and equipment	100	1	88	1	3	4	(<u>2/</u>)	3
Motor vehicles, bodies, and trailers	100	2	86	1	3	4	=-,	4
Motor-vehicle parts and accessories	100 100	1	91 85	1	3 2	3 7		보
Aircraft	100		90			8	(2/)	1 5 2
Aircraft parts	100		82	ļ	3	6		8
Ship and boat building and repairing	100 100	1 ₄	70 70	4 6	9 10	6 6	2 2	5 3
Railroad equipment	100	6	66	3	ii	6	2	6
nstruments and related products 1/	100	3	86	2	2	3		4
Photographic equipment and supplies	100	6	84	5	2	3		
iscellaneous manufacturing industries 1/	100	4	80	3	5	3		5
Fabricated plastics products	100	3	73		3	8		13
rdnance and accessories	100	2	77.		8	5		8
NON-LANUFACTURI NG								
onstruction 1/	100	8	53	8	1.14	6	(<u>2</u> /)	11
General contractors	100 100	6 8	56 54	7 8	15 11	5 8	1 2	10 9
street	100	6	64	.3	14	3	[10
Highway and street construction	100 100	11:	46 3 8	12 11	22 12	14 10		11 15
Structural-steel erection and ornamental	200	14	رر		12	10		7.0
iron-work	100	23	29	14	16	2		16
tilities and sanitary services 1/	100	7	49	8	13	4	1	18
Electric light and power	100	7	49	8	12	4	1	19
Gas	100	7	51	7	16	4 1	1	15

Table D.—Distribution of all reported injuries resulting in permanent-partial disability, by part of body affected, and by industry, 1952 —Continued

		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)	Other and unclassi-fied						
NONHANUFACTURING —Continued														
Personal services	100	12	66	5	5	7		5						
Business services	100	5	149	5	10	5	3	23						
Trade 1/	100	4	60	9	9	5	1	12						
Wholesale distributors	100 100 100	5 2 4	58 48 73	7 18 2	16 6 6	5 4	2 2	9 20 13						

 $[\]frac{1}{2}$ Totals include data for industries not shown separately.

^{2/} Less than 0.5 percent.

Table E.--Changes in exposure, disabling injuries, and injury rates for 51,106 identical reporting units, 1951-52

	Number of			Percent of	change in-	-	·
Industry	reporting units	Employees	Employee- hours worked	Disabling injuries	Total time lost 1/	Injury- frequency rate	Severity rate 1/
MANUFACTURING							
Average, all manufacturing	29,480	(2/)	(<u>2</u> /)	-10	-6	<u>3</u> / - 10	<u>3</u> / -7
Food and kindred products	3,713	-1	-1	- 7	- 5	<u>3</u> / -8	<u>3</u> / -3
Meat products. Dairy products. Canning and preserving Grain-mill products. Bakery products. Sugar. Cane sugar. Eeet sugar. Confectionery and related products. Beverages Bottled soft drinks. Malt and malt liquors. Wines. Distilled liquors. Miscellaneous food products.	599 331 379 530 587 101 27 74 183 696 303 215 85	+1 (2/) 6 +4 +2 -1 +3 -5 -3 -5 -1 (2/) -20 -1	+1 (2/) -4 +3 +1 (2/) +2 -3 -1 -1 -4 (2/) -7 -7 -19 -2	-1 -2 -20 +1 -8 +2 +6 -1 -6 -12 -11 -15 -26 -12	+71 -58 -32 +45 -24 -11 +26 -32 -12 -5 +54 -8 (4/)	-1 -2 -17 -2 -9 +1 +3 +2 -5 -12 -14 -12 -9 -8	+68 -59 -27 +41 -6 +24 -52 -11 +12 +50 (4//) (L/)
Tobacco manufactures	119	+2	+14	+6	+24;	+1	+20
Textile-mill products	2,008	-6	-6	-13	-13	<u>3</u> / -7	<u>3</u> / -8
Cotton yarn and textiles Rayon, other synthetic, and silk textiles Woolen and worsted textiles Knit goods Dyeing and finishing textiles. Carpets, rugs, and other floor coverings. Hats (except cloth and millinery). Cordage and twine. Miscellaneous textile goods.	489 198 291 495 228 71, 56 49	-7 -6 -13 -2 -1 -6 -7 -7 -7	-9 -11 +3 +3 -5 -1 -11	-15 -13 -14 -5 -5 -11 -19 -10 -16	-13 -38 -24 -40 -41 -19 -43 -9 +82	-7 -8 -4; -9 -8 -7 -18 +1	-5 -34 -23 -43 +9 -14 -42 +88
Apparel and other finished textile products $5/.$	1,591	-2	+1	(2/)	+5	<u>3</u> / -2	<u>3</u> / +9
Clothing, men's and boys'	564 630 104 257	-1 -2 -6 (<u>2</u> /)	+2 +1 -5 +1	+1 -1 -37 +9	.+32 +9 (4/) -53	(2/) (<u>2</u> /) -34 +9	+35 (2/) (<u>1</u> /) =54
Lumber and wood products (except furniture)	2 , 272	-4	- 5	-13	-16	<u>3</u> / - 10	<u>3</u> / -1 5
Logging. Sawmills and planing mills 5/. Planing mills. Sawmills and planing mills, integrated. Veneer mills. Millwork and related products. Millwork and structural wood products. Plywood mills. Wooden containers. Miscellaneous wood products.	219 863 132 436 236 40 535 451 84 334 321	-92 -2/) -95 -95 -38 -56	-10 -3 -8 -1 -9 -5 -2 -1 -9 -5 -2 -5 -6	-19 -13 -25 -15 -7 -20 -13 -14 -11 -11	+14 -28 -10 -32 -20 (L/) -22 -12 -17 -1 -17	-10 -13 -18 -13 -6 -12 -9 -12 -2 -6 +1	+9 -26 -36 -32 -19 (4/) -19 -11 -14 +5 -10
Furniture and fixtures 5/	1,113	(<u>2</u> /)	(5/)	-4	+5	3/-3	<u>3</u> /-1
Household furniture. Household furniture, nonmetal. Metal household furniture. Mattresses and bedsprings. Office furniture. Wood office furniture. Metal office furniture. Public-building and professional furniture. Partitions and fixtures. Screens, shades, and blinds.	838 595 43 200 50 17 33 36 126	+1 +2 (2/) -2 +9 -1 +11 -8 -8 +3	+1 +3 -1 -1 +5 -7 +7 -9 -10 +6	-4 +8 (2/) -10 -12 -3 -21 +58	+1 +12l ₄ +12l ₄ -1 ₄ 7 +22 (l ₁ /) +26 (l ₂ /) +6l ₄ (l ₂ /)	-6 -9 +9 +2 -12 +4 -18 +7 -11 +49	-5 -8 +127 -48 +12 (4/) +13 (4/) +85 (4/)

Table E.--Changes in exposure, disabling injuries, and injury rates for 51,106 identical reporting units, 1951-52--Continued

	Number of			Percent of	hange in-		
Industry	reporting units	Employees	Employes- hours worked	Disabling injuries	Total time lost 1/	Injury- frequency rate	Severity rate 1/
MANUFACTURINGContinued							Ļ
Paper and allied products	1,304	-2	-4	-11	-26	<u>3/</u> -7	<u>3</u> / - 25
Pulp, paper, and paperboard mills	417 56	-1 (2/)	-3 +3	-13 -34	-31 (4/)	-10 -35	-29 (4/)
Paperboard containers and boxes	620 211	-3 -6	-3 -7	-4	-25	-5 +4	-18
Printing, publishing, and allied industries	2,227	+1	+1	-1	-3	<u>3</u> / - 2	(2/)(3/)
Newspapers and periodicals Bookbinding and related products Miscellaneous printing and publishing	741 92 1,394	+2 +9 (<u>2</u> /)	+2 +5 +1	+2 +8 -4	-22 (<u>4</u> /) +23	+5 (5/)	-25 (4/) +22
Chemicals and allied products	1,721	+1	+1	-10	+7	3/ -11	<u>3</u> / +8
Industrial inorganic chemicals	133 249 46 20 19 34 130 202 164	-1 +2 +5 -6 +45 -1 +4	(2/) +1 +6 -2 -7 +41 -3 +4 -8	-21 -6 -7 +39 -8 +22 -10 -4	14 (5) (5) (84 9	-21 -6 -12 +43 (2/) -14 -7 -8 +4	-28 (4/) (4/) (4/) (5/) (5/) (5/) (5/) (5/) (5/) (5/) (5
Paints, pigments, and related products Fertilizers	327 354 73 39 180	-2 +2 -5 +4 +2	-3 +4 -8 -2 +5 +5 +5 +5 +5 +5 +5 +5 +5 +5 +5 +5 +5	-11 -5 -19 -15 -11	+46 +16 (4/) (4/) -T3	-8 -10 -15 -18 -13	+13 (4/) (4/)
Paving and roofing materials	35	-3	-3	+3	(<u>4</u> /)	+6	(4/)
Rubber products	253	- 5	-5	-19	+4	3/ -3/4	3/+3
Tires and inner tubes Rubber footwear Miscellaneous rubber products	35 14 204	-6 -1 -5	-5 (<u>2</u> /) -6	-11 -34 -19	(<u>u</u> /) +8	-7 -33 -14	-13 (4/) +13
Leather and leather products	699	+5	+9	+5	6	3/-4	3/-24
Leather tanning and finishing Boot and shoe cut stock and findings Footwear (except rubber) Miscellaneous leather products	126 61 373 139	-2 +3 +7 -3	(<u>2</u> /) +7 +12 -2	+2 (2/) +10 -15	-13 (4/) -18 +97	+2 -7 -2 -13	-12 (<u>4</u> /) -32 +100
Stone, clay, and glass products	1,254	-3	6	-19	-10	3/ -14	<u>3</u> / +2
Class and glass products Structural clay products Pottery and related products Concrete, gypsum, and mineral wool Cut-stone and stone products Miscellaneous normetallic mineral products	204 467 1 9 8 262 70 143	-2 -3 -7 -5 -4	-5 -7 -6 -2 -9	-17 -19 -15 -15 -15 -28	-15 +12 -57 +79 (山/) -37	-13 -13 -9 -13 -6 -20	-12 +20 -54 +89 (4/) -25
Primary metal industries	1,660	- 5	 9	-18	- 3	3/ -13	3/+9
Blast furnaces and steel mills. Iron and steel foundries. Gray-iron and malleable foundries. Steel foundries. Nonferrous rolling, drawing, and alloying. Nonferrous foundries. Miscellaneous primary metal industries. Iron and steel forgings. Wire drawing. Welded and heavy-riveted pipe. Cold-finished steel.	188 717 591 126 63 348 329 142 37 39	77-48 +4-12 (2/5) +59-1-1	-13 -7 -12 +1 -1 +2 -3 +4 -13 -5 -6	-15 -24 -26 -19 -8 (2/) -12 -6 -2 -17 -37	-10 -18 +14 +89 +66 +12 (4/)	-3 -18 -16 -20 -8 -2 -8 -10 +12 -13	+4 -2 -7 +9 +107 +64 +38 +5 (4/)
Primary metal industries, not elsewhere classified	68	-4	-3	-18	(4/)	-16	(<u>4</u> /)

See footnotes, page 41.

Table E.—Changes in exposure, disabling injuries, and injury rates for 51,106 identical reporting units, 1951-52—Continued

	Number of			Percent of	change in	,	
Industry	reporting units	Employees	Employee- hours worked	Disabling injuries	Total time lost 1/	Injury- frequency rate	Severity rate 1/
MANUFACTURINGContinued					7		
Fabricated metal products	2,999	-2	-4	-12	-8	<u>3</u> / -8	3/ -10
Tin cans and other tinware. Cutlery, handtools, and hardware	58 414 116 149 149 359 112 247 860 124 68 2156 577 25 408 139 200 531 28 94 225	599752943529532345746524	-6 -11 -12 -13 -7 -2 -11 +2 -2 (2/11 -2 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7 -7	-18 -20 -28 -22 -13 -15 -3 -8 -12 +15 -17 -17 -17 -12 -20 -22 -15 -12 -17 -8	-31 20 8 21 1 4/ 21 35 5 1/ 20 8 2 3 26/ 31 55 5 1/ 20 8 2 3 26/ 31 55/	-13 -10 -18 -5 -7 -12 -23 -9 -6 -13 -10 -16 -110 -110 -110 -110 -111 -9 -2 -13 -12 -13	26 +97 +31 +2/ +18 +51 +15/ +11 +11 +11 +11 +11 +11 +11 +11 +11 +1
Fabricated metal products, not elsewhere classified	154	-4:	- 6	-12	-25	-6	-21
Machinery (except electrical)	3,295	+2	+1	-8	-3	3/-10	3/ -7
Engines and turbines	57 189 266 820 571 125 124 322 541 115 78	+7 6 +-6 +-8 3 3 11 +3 +4 +5 +7	+6 -6 +5 +8 -4 -5 -14 +2 +3 +8	-3 -22 -7 +2 -11 -9 -17 -9 -6 +4	+12 -17 +31 -8 -45 -38 +17 +44 (2/)	-9 -17 -11 -8 -14 -12 -19 +2 -12	+7 -5 -18 +22 -3 -38 -29 +18 -1 -1
Mechanical power-transmission equipment (except ball and roller bearings) Miscellaneous general industrial machinery. Commercial and household machinery Miscellaneous machinery parts Valves and fittings Fabricated pipe and fittings Ball and roller bearings Machine shops, general	108 240 286 565 94 35 56 380	(2/) +5 +2 +1 -3 +8 +3 +2	-2 +4 +2 -4 -2 +7 -10 (2/)	-21 -4 -7 -12 -11 +36 -20 -10	-45 +42 +12 -35 -59 (4/) -34	-19 -8 -10 -8 -10 +27 -11	-144 +37 +12 -61 (4/) -34 -34
Electrical machinery	935	+5	+5	6	+8	<u>3</u> / - 9	<u>3</u> / +3
Electrical industrial apparatus Electrical appliances Insulated wire and cable Electrical equipment for vehicles Electric lamps (bulbs) Communication equipment Radios and related products Miscellaneous communication equipment Miscellaneous electrical products Eatteries Electrical products, not elsewhere classified	439 62 47 41 30 232 176 17 39 84 46	+14 +10 -30 -20 +11 +13 +6 +12 +1 +7	+3 -5 +11 -4 -21 +11 +12 -2 +16 +2 +9	-7 -9 +17 -25 -28 -3 (2/) +10 -17 -2 +1	+55 +2 (4(1)) +48 (4(1)) +148	-10 -14 +5 -22 -7 -12 -10 +10 -29 -5 -8	(2/) -8 (4/) (4/) +12 (4/) +107 +111 (4/)

See footnotes, page 山.

Table E.--Changes in exposure, disabling injuries, and injury rates for 51,106 identical reporting units, 1951-52--Continued

10r 51,100 1	dentical rep	rung unit	s, 1771-72-				
.	Number of reporting			Percent of	change in-	-	
Industry	units	Employees	Employee- hours worked	Disabling injuries	Total time lost <u>l</u> /	Injury- frequency rate	Severity rate 1/
		<u>.</u>					
MANUFACTURING——Continued		ļ					
Transportation equipment	917	+7	+7	 6	-1 0	<u>3</u> / - 12	<u>3</u> / - 11
Motor vehicles and equipment. Motor vehicles, bodies, and trailers. Motor-vehicle parts and accessories. Aircraft and parts. Aircraft parts. Ship and boat building and repairing. Ship building and repairing. Boat building and repairing. Railroad equipment. Miscellaneous transportation equipment.	445 225 220 133 25 108 246 129 117 75	-5 -7 -1 +26 +24 +28 +32 +32 +35 -6 -2	-1; -5 -1 +23 +20 +28 +32 +32 +36 -4	-19 -23 -15 +6 -1 +14 +23 +21 +16 -26	-20 -21 -16 -39 -37 -40 +57 +54 +133 -2 +54	-18 -20 -14 -13 -18 -10 -4 -8 +7 -21	-17 -16 -16 -19 -45 -56 -1 +27 +72 +5 +47
Instruments and related products	396	+5	+5	+3	-1	3/-li	2/(3/)
Scientific instruments	39	+32	+27	+11	(<u>4</u> /)	-13	(4/)
Mechanical measuring and controlling instruments. Optical instruments and lenses Medical instruments and supplies Ophthalmic goods Photographic equipment and supplies Watches and clocks	103 23 105 39 52 35	+6 +3 (2/) -4 +5 -2	+7 -2 (<u>2</u> /) -6 +5 -1	-8 +3 -9 -37 +31 +13	14 (14 (14 (14 (14 (14 (14 (14 (14 (14 (-14 +5 -10 -34 +24 +15	ユ (山/) +35 (山/) (山/) (山/)
Miscellaneous manufacturing industries	896	- 5	-5	-14	+1	<u>3</u> / - 8	<u>3</u> / -1
Jewelry, silverware, and plated ware Fabricated plastics products Brooms and brushes Morticians' goods Miscellaneous manufacturing	86 142 73 86 509	-10 -3 -4 -7 -4	-9 -2 -7 -7 -4	-15 -12 -11 -35 -10	(<u>4</u> /) +59 +59 -8 -32	-7 -10 -4 -31 -6	(4/) +61 +69 -2 -26
Ordnance and accessories	37	+35	+36	+51+	(4/)	-9	(<u>4</u> /)
NONMANUFACTURING		}					
Construction	3,822	-1	-1	-10	-18	-9	-17
General contractors	1,918 1,257	-12	-2 -10	-14 -11	-24 -18	-12 1	-22 -9
street	221 1,904 1,904 254 275 136 69 55 181	+20 -1 +2 -5 -5 +22 -10 -17 +1 +11	+14, -1 (2/) -6 -8 +17 -13, -24, -1	-17 -15 -1 +13 -18 +45 -33 -23 +3 -21	+19 -146 +1 -13 +5 +12 -142 -52 (4/)	-27 -9 -2 +19 -11 +24 -24 +1 +4 -22	+1, -1,6 (2/) -8 +15, -3,1 -37 (1,/) -58
iron work	38	+2	+1	+2	+ 23	-fl	€22
Installation or erection of building equip- ment, not elsewhere classified Miscellaneous special-trade contractors	25 381	+2	+2	-25 +2	(<u>Ir</u> /) ~2 9	-26	(<u>4</u> √) -33
Communication:	,,,,						
Telephone (wire and radio)	101 374	+5 +2	+4	-13 -1	(<u>4</u> /)	-17 -5	(〒/) -9
Transportation:							
Stevedoring Bus (local) Local transportation systems, integrated Trucking and hauling Warehousing and storage	58 228 32 729 669	-26 -2 -2 +4 -4	-21 -3 -5 +5 -2	-19 -8 +5 -2 -4	-17 +14 -6 -31 -43	+2 +4 +12 -7 -2	+5 +18 -1 -34 -42
See footnote, page 41.							

Table E .-- Changes in exposure, disabling injuries, and injury rates for 51,106 identical reporting units, 1951-52--Continued

Industry	Number of reporting units	Fercent of change in					
		Employees	Employee- hours worked	Disabling injuries	Total time lost <u>1</u> /	Injury- frequency rate	Severity rate 1/
NONMANUFACTURINGContinued	- "						
Utilities and sanitary services 5/	674	+2	+1	- -7	-12	-7	-13
Electric light and powerGas	339 172 145	+2 +3 +2	(<u>2</u> /)	-5 -10 -11	-17 -3 +87	-5 -12 -11	-18 -5 +87
Personal services	2,406	(<u>2</u> /)	+1	(<u>2</u> /)	+12	-1	+11
Dry cleaning Laundries Laundry with dry cleaning Amusements and related services Hotels Medical and other professional services Miscellaneous personal services	492 429 399 281 335 239 231	+8 +2 -1 -8 -3 +3 -7	+9 +2 (2/) -1 -2 +2 -8	+28 +26 +5 -6 -10 -13 -27	(T/) +189 (2/) (L/) (L/)	+17 +24 +6 -5 -8 -13 -21	(百/) (百/) (百/) (五/) (五/) (五/)
Eusiness services	2,375	+4	+4+	-12	+6	-15	+5
Banks and other financial agencies Insurance	870 400 263 317 290 235	+14 +3 +6 +9 -2 -3	+l4 +3 +5 +9 -1 -1	-17 -13 +6 -5 -22 -13	-66 +158 (4/) +4 (4/) (4/)	-20 -11 ₄ +2 -13 -21 -12	-70 +1/43 (4/) (4/) (4/)
Educational services	226	+1	+2	+5	-38	+4	-38
Fire departments	മാ	+3	(<u>2</u> /)	+13	-14	+13	-13
Police departments	1740	+2	+3	-13	+3	-16	(<u>2</u> /)
Trade <u>5</u> /	9,491	(<u>2</u> /)	+7	-6	-18	<u>3</u> / -7	<u>3</u> / -34
Wholesale distributors	2,530 492 783 701 331 905 874 1,766 610	+6 -1 +3 -1 -13 -3 -2 +1 (2/)	+7 +4 +1 -11 -1 -1 +1 +2 -6	-8 +14 -5 -13 -13 +4 -1 -3 -5	-20 +28 (1/) -50 +21 -46 -35 -56 -27 +33	-14 +18 -11 -14 -2 +5 (2/) -7 -7	-24 +36 (4/) -50 +37 -44 -57 -28 +39

^{1/}Based on reports which furnished details regarding the resulting disabilities (constituting approximately 50 percent of the sample for manufacturing and virtually the entire sample for nonmanufacturing). 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.

2/ Change was less than 0.5 percent.

3/ Weighted according to estimates of total employment in each industry.

1/ Not available, or data insufficient to warrant presentation of rate.

5/ Totals include data for industries not shown separately, because of insufficient coverage.