# UNITED STATES DEPARTMENT OF LABOR 

Frances Perkins, Secretary
BUREAU OF LABOR STATISTICS
Isador Lubin, Commissioner (on leave)
A. F. Hinrichs, Acting Commissioner

# Industrial Injuries.in the United States During 1942 



Bulletin No. 758
[Reprinted from the Monthly Labor Review November 1943, with additional datal

## Letter of Transmittal

United States Department of Labor,Bureat of Labor Statistics,Washington, D. C., November 15, 1943.
The Secretary of Labor:
I have the honor to transmit herewith a report on industrial injuries in the United States during 1942. This information is based on reports from over 50,000 establishments.
This bulletin, a portion of which appeared in the November 1943 Monthly Labor Review, was prepared in the Bureau's Industrial Hazards Division by Max D. Kossoris and Frank S. MeElroy.
A. F. Hinrichs, Acting Commissioner.

Hon. Frances Perkins, Secretary of Labor.

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## Bulletin No. 758 of the

United States Bureau of Labor Statistics
[Reprinted from the Monthiy Labor Review, November 1943, with additional data]

## Industrial Injuries in the United States During 1942

## Summary

CONTINUING the trend noted for 1941 in manufacturing industries, the number of disabling work injuries during 1942 increased much more markedly than did either employment or total employee-hours worked. In nearly 21,000 identical manufacturing establishments, employment increased by 16 percent, employee-hours by 22 percent, and injuries by 34 percent. Among individual industries, it was not unusual for the increase in injuries to be about twice the increase in employment. The frequency rate, reflecting the average number of disabilities per million employee-hours, increased by 9 percent. The reasons assigned for the upward trend of work injuries during 1941inexperienced workers, rapidly expanding employment, overcrowded plant facilities, and failure of safety activities to keep fully abreast of these changes-hold for 1942 as well. Two further reasons may be noted-the general lengthening of working hours; and the heavy replacement of experienced workers, drawn into the armed forces, by less-experienced or inexperienced help.

Large as was the time loss resulting from work injuries during 1941, that for 1942 was even greater. Taking into account only the time lost during the year, and without any regard for the economic losses caused by deaths and permanent impairments, workers in United States industries lost a total of 53 million days- enough to have provided full-time employment for 177,000 workers for the entire year. If to these actual time losses are added the economic time charges for fatal and crippling injuries, the time loss reaches the staggering total of 263 million days.
According to the estimates of the Bureau of Labor Statistics, work injuries during 1942 resulted in 18,100 fatalities, 1,800 permanent total disabilities which completely disabled workers from any further industrial activity, 100,800 permanent partial impairments, and 2,147,000 temporary total disabilities.

The weighted accident-frequency rate of the entire group of manufacturing industries was 19.9. In 1941 it was 18.1. A total of 27,328 establishments reported more than 15.6 billion employee-hours, worked by about $7,111,000$ employees. Of the nearly 305,000 disabling injuries, about 0.4 percent were fatalities, about 0.04 percent permanent total disabilities, 4.2 percent permanent partial impairments, and about 95.3 percent temporary total disabilities. In comparison with 1941, the increase in injuries was primarily in temporary total disabilities. The relative percentages of fatalities and permanent impairments were lower in 1942 than in 1941.

As was true in earlier years, the logging industry had the highest number of disabling injuries per million employee-hours worked, 89.6. Even so, this frequency rate is lower than that of 96.3 for 1941. Sawmills, however, had a higher rate-61.7-in 1942 than in the previous year-54.5. Other manufacturing industries with high frequency rates are wooden containers, 50.2 ; foundries, 49.7 ; slaughtering and meat packing, 44.8 (an increase of 45 percent over the 1941 rate of 30.9 ) ; forgings, 38.0 (a considerable reduction from the 1941 rate of 44.5 ) ; shipbuilding, 33.1 ( 25 percent above the previous year's rate of 26.4) ; canning and preserving, 33.0 (about 10 percent above the 1941 rate) ; and motor-vehicle parts, 31.9 ( 50 percent higher than the 1941 rate of 21.2).

The ordnance group experienced relatively low frequency rates. For the group as a whole the weighted rate was 14.8. The large-arms ammunitions industry had the highest rate in the group, 17.2. The rate in the production of tanks was 9.3 (against 18.3 in 1941) and tank parts, 7.7. In comparison, the rate for motor vehicles was 11.3, for motor-vehicle parts, 31.9 , and for the aircraft industry, 11.4 injuries per million hours.

## Estimates for Individual Manufacturing Industries

The survey data in a considerable number of manufacturing industries were sufficiently comprehensive to permit estimates of the number of disabling injuries for the individual industries. On chart 1 are shown the estimates of injuries and total time losses for the 9 major industrial groups, each of which had more than 20,000 disabling injuries during the year.

As in 1941, the iron and steel group lead all manufacturing groups in the total of work injuries. The estimate is 93,900 disabilities, accounting for $7,450,000$ days lost. Although the time loss of 1941 was exceeded in this group by only 5.7 percent, the number of injuries was exceeded by about 26 percent. Almost on a level with this number of injuries, but far exceeding the time loss, was the lumber group, for which the total estimates are 93,600 injuries and $8,935,000$ days lost.

Ranking third in 1942, as against sixth in 1941, the transportation industry had 89,200 injuries and $6,304,000$ days lost. In this group, the shipbuilding industry alone is estimated to have had 59,200 injuries and about $4,250,000$ days of lost time.

Fourth was the food products group, with 75,300 injuries and a time loss of over $4,750,000$ days. Next followed the textile group, with 58,900 injuries and nearly $3,000,000$ days lost; the machinery group with 53,200 injuries and $3,461,000$ days lost; the ordnance group with 47,500 injuries and $4,134,000$ days lost; chemical products, with 27,000 injuries and nearly $3,500,000$ days lost; and, finally, the stone, clay, and glass products group with 23,500 injuries and about $2,000,000$ days lost.

Individual industries with time losses in excess of $1,000,000$ days each were iron and steel $(2,634,000)$, iron and steel foundries $(1,808,000)$, general machinery $(1,573,000)$, pulp ( $1,011,000$ ), cotton goods ( $1,156,000$ ), shipbuilding ( $4,252,000$ ), and aircraft and aircraft parts $(1,290,000)$. The foregoing by no means includes all the industries having a time loss of over $1,000,000$ days. In a number of other

industries the reporting group was not deemed large enough to permit an estimate with a fair degree of accuracy.

## Estimates of Disabling Work Injuries During 1942

Estimates of disabling injuries by major industrial groups are given in table 1. As the basic data from which these estimates are made vary widely in adequacy, footnotes have been supplied to permit an evaluation of the reliability of each of the estimates.

The estimate of $2,267,700$ disabling work injuries in 1942 represents an increase of 4 percent over the estimate of $2,180,200$ in 1941. Most of this increase occurred in temporary disabilities. The estimate for fatalities and permanent total disabilities of 19,200 for 1941 is exceeded by the 1942 estimate of 19,900 . The 1942 data, however, show these two types of disabilities separately, with a total of 18,100 fatalities and 1,800 permanent total disabilities.

Table 1.-Estimated Number of Disabling Injuries During 1942, by Industry Groups

| Industry group | Number of disabling injuries |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Anl disabillties |  | Fatalities |  | $\begin{gathered} \text { Permanent } \\ \text { total dis- } \\ \text { abilities } \end{gathered}$ |  | Permanent partial disabilities |  | Temporary total disabilities |  |
|  | Total | To employees | Total | To em- ploy- ees | Total | To em- ploy- ees | Total | $\begin{aligned} & \text { To } \\ & \text { em- } \\ & \text { ploy- } \\ & \text { ees } \end{aligned}$ | Total | To employees |
| All industry groups. | 2,287, 700 | 1,834,600 | 18, 100 | 13,400 | 1,800 | 1,400 | 100, 800 | 80,800 | 2, 147,000 | 1,739,000 |
| Agriculture ${ }^{1}$ | 283, 700 | 68,600 | 4, 500 | 1,100 | 400 | 100 | 14, 200 | 3, 400 | 264, 600 | 64, 000 |
| Mining and quarrying ${ }^{\text {2-- }}$ | 102, 700 | 97, 900 | 2,000 | 1,900 | 200 | 200 | 4,500 | 4,300 | 96, 000 | 91, 500 |
| Construction ${ }^{8}$ - | 349,500 | 281,000 | 3, 300 | 2,700 | 300 | 200 | 17,100 | 13,700 | 328, 800 | 264, 400 |
| Manufacturing © -....---- | 635, 200 | 623, 800 | 2,500 |  | 300 | 300 | 27,000 | 26, 500 |  | 594, 500 |
| Public utilities | 284, 2000 | 21, 000 | 1500 | 500 | ${ }^{(6)}$ | ${ }^{(5)} 100$ | 500 7,000 | -5000 | 20, 000 | 20,000 |
| Railroads ${ }^{\text {co... }}$ | 60,800 | 60,800 | 1, 100 | 1,100 | 200 | 200 | 4,200 | 5,600 4,200 | 25, 300 | 55, 300 |
| Miscellaneous transportation | 136, 800 | 116, 200 | 1,200 | 1,000 | 100 | 100 | 3,800 | 3,200 | 131, 800 | 111,900 |
| Services, government, and miscellaneous industries: $\qquad$ | 393,700 | 339, 500 | 1,800 | 1,600 | 200 | 200 | 22, 500 | 18, 400 | 368, 200 | 318, 300 |

${ }^{1}$ Based on fragmentary data.
${ }^{2}$ Based largely on Bureau of Mines data
${ }^{2}$ Based on small sample studies.
© Based on comprehensive survey.

- Less than 50 .
- Based on Interstate Commerce Commission data.

Permanent partial disabilities are estimated to have remained at almost the 1941 level, the 1942 figure being 100,800 , compared to 100,600 in 1941. Temporary totals, however, rose from 2,060,400 to 2,147,000. The most significant change in the ranking of the various industries is that the total of disabling injuries in manufacturing exceeded by a large margin that of any other industry group. In 1941, manufacturing, with a total of 452,700 injuries, was outranked by construction, with 495,500 injuries; but the estimate for manufacturing for 1942 is 635,200 injuries, an increase of about 40 percent over 1941. There is no doubt that this is the result of our war effort which depends heavily on manufacturing establishments. Not only
was there a sharp increase in manufacturing employment during 1942, but in addition many experienced workers-drawn into the armed forces-were replaced by less-experienced and very often entirely inexperienced workers.

## Survey Data

Following the precedent established with the presentation of the 1941 data, the 1942 injury rates are based on the total reporting group. A total of 49,900 establishments reported almost 340,000 injuries for nearly $81 / 2$ million employees.

## MANUFACTURING INDUSTRIES

The weighted injury frequency rate for the entire manufacturing group was 19.9. The highest group rate was that of 42.4 for the lumber and lumber products group. Included in this group are three industries with very high frequency rates: Logging, 89.6 ; sawmills, 61.7 ; and wooden containers, 50.2. Among other industries with high rates are foundries, 49.7 ; slaughtering and meat packing, 44.8 ; forgings, 38.0; canning, 33.0 ; shipbuilding, 33.1 ; and motor vehicle parts, 31.9.

## NONMANUFACTURING INDUSTRIES

In sharp contrast with the rates for former years, there was little difference between the frequency rates of the three branches of the construction industry: Building, 36.2; heavy engineering, 37.4; and highway, 38.6. The reason for this obviously is that there was relatively little activity in the last two groups. Apparently the work done was of a less hazardous character than is usually the case.

As usual, the frequency rate for the communication group was low, 2.9. In the transportation group, warehousing and storage was the most hazardous, as indicated by the rate of 38.2. Trucking and hauling was a close second with a rate of 34.8. Streetcar and bus operations averaged 19.8 and 15.3 disabling injuries, respectively, per million employee-hours worked.

In the group of personal services, employees of hotels, restaurants, and similar establishments averaged the largest number of disabling injuries. The rate of 12.9 exceeds that of 10.1 for laundry and dry cleaning.

Within the group of business-service industries, real-estate establishments proved to be as hazardous to employees as were laundries in the personal-services group. Of similar interest is the fact that employees of various types of educational establishments had a rate of 8.0 -which was considerably in excess of that of 6.7 in general retail stores.

Within the trade group, establishments wholesaling and retailing dairy products had the high rate of 24.0 . The retail automobile industry experienced a rate of 15.3; and general wholesale distributors, a rate of 17.2. In comparison, the rate in the manufacture of iron and steel was only 10.4.

Table 2.-Injury Rates and Injuries by Extent of Disability, 1942

| Industry | Number of establishments | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { employees } \end{aligned}$ | Employeehours worked (thousands) | Number of disabling injuries |  |  |  |  | $\begin{aligned} & \text { Total time } \\ & \text { lost (dsys) } \end{aligned}$ | Injury rates ${ }^{2}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Total | Resulting in- |  |  |  |  |  |  |
|  |  |  |  |  | Death and permanent total disability ${ }^{1}$ |  | $\begin{gathered} \text { Permanent } \\ \text { partial } \\ \text { disability } \end{gathered}$ | Temporary total disability |  | $\begin{aligned} & \text { Fre- } \\ & \text { quency } \end{aligned}$ | Severity |
| All industries | 49,900 | 8, 473, 294 | 18,455, 357 | 339,715 | (138) | 1,629 | 13,964 | 324, 124 | 27, 370,089 |  |  |
| Total, manufacturing Manufacturing | 27,328 | 7,110, 807 | 15, 606, 073 | 304, 778 | (128) 1,330 |  | 12,949 | 290,499 | 23,875,412 | ${ }^{3} 19.9$ | ${ }^{3} 1.5$ |
| Chemical products. Drugs, toiletries, and insecticides | 1,957287753433962172172686290237 | 466,24043,33486,53318,28428,68298,54247,67718,27878,23746,873 | 973,533 8,241 196,712 8,282 <br> 36, 282 <br> 201, 135 <br> 95, 561 <br> 167, 539 |  | (6) $\begin{array}{r}124 \\ \hline\end{array}$ |  | 592 46 | $\begin{array}{r} 11,734 \\ 1,306 \end{array}$ | 1, 608, 983 |  | ${ }_{31.8}^{\text {c }}$ ¢ |
|  |  |  |  | $\begin{aligned} & 1,361 \\ & 1,361 \\ & 1,260 \end{aligned}$ | $\begin{aligned} & (1) \\ & (1) \\ & (1) \end{aligned}$ | 40 | 86 1,134 <br> 34 1,122 <br> 1 1,122 |  | $\begin{array}{r} 1,000,983 \\ 102,878 \\ 323,790 \end{array}$ | $\begin{array}{r} 15.8 \\ 15.4 \\ 6.4 \end{array}$ | $\begin{aligned} & 1.2 \\ & 1.6 \end{aligned}$ |
| Fertilizers |  |  |  | 1,161 |  | $\bullet 5$ |  |  |  | $\begin{array}{r} 323,790 \\ 93,862 \end{array}$ |  | 1.6 <br> 1.6 |
| Paints and varnishes. |  |  |  | 1,042 |  | ${ }^{2}$ | $\begin{array}{r}46 \\ 101 \\ \hline\end{array}$ | 2,022 | 84,549 323,062 | 1.4 |  |
| Petroleurn refining |  |  |  | $\begin{array}{r} 2,147 \\ 806 \\ 380 \end{array}$ | (1) | 24 | 101 | 2, 762 | 323,062 69,475 | 10.7 | 1.6 .7 |
| Soap and glycerin. |  |  |  |  |  | 1 | 32 | 347 | 44,979 | 10.3 | 1.2 |
| Industrial chemicals |  |  |  | $\begin{aligned} & \mathbf{2}, 811 \\ & \mathbf{1}, 482 \end{aligned}$ | (1) 27 |  | 133 | 2, 1,394 | 189,201 | 16.2 | 2. 21 |
| Food products | 3,327 | 385,49458,060 | 782,556119,05710 | 23,329 | (4) 76 |  | 863 | 22, 390 | $1,655,723$171,1481 | ${ }^{2} 27.3$ | ${ }^{8} 1.7$ |
| Baking. | 740 |  |  | 1,923 | (2) $\quad$11 |  | 7861 | 3, ${ }^{1,283}$ |  | 33.0 | 1.6.7 |
| Canning and preserving | ${ }_{213}^{413}$ | ${ }^{61,974}$ | 101, 596 | ${ }^{3,353}$ |  |  | $\begin{array}{r} 159,217 \\ 58,619 \end{array}$ |  |  |  |  |
| Clour feed, and other grain-mill pro | 254 540 | 35, 878 | 80,854 80,599 | 1,226 2,009 | (1) | 599 |  | 53 | 1,174 1,951 |  | 15.2 24.9 | 1.4 |
| Slaughtering and meat packing... | 199 | 86, 127 | 182, 788 | 8 8,183 |  |  | 272 | 7,902 | 396, 454 | 44.8 |  |  |
| Sugar refining - | 114 | 26, 542 | 54, 709 | 1,720 |  | 152 |  | 14 | 1, 652 | 193, 597 | 31.4 19.7 | 3.5 1.0 |
| Beverages-.- | 382 | 15. 728 | 31,063 | 613 |  |  |  | 14 | ${ }_{195}^{597}$ | 31, 614 | 19.7 | 1.0 |
| Dairy products | $\stackrel{145}{265}$ | $\begin{array}{r}\text { 4, } \\ \hline 365 \\ \hline 780\end{array}$ | $\begin{array}{r}\text { 9, } \\ \hline 7743 \\ \hline 74\end{array}$ | 2,958 |  | 18 | 261 | 2,679 | 461, ${ }^{4} \mathbf{4} 22$ | 38.2 | 6.0 |  |
| Not elsewhere classified | 275 | 20,713 | 44,718 | 1,146 |  | 5 | 18 | 1,123 | 64, 671 | 25.6 | 1.4 |  |
| Iron and steel and their products. | $\begin{array}{r} 3,309 \\ 301 \\ 100 \\ 60 \\ 295 \end{array}$ | 1, 106, 205 | $\begin{aligned} & 2,395,117 \\ & 1,200,894 \end{aligned}$ | 54,11012,504 | (1) | 356 | 2,6101,007 | 51, 144 | 4, 958, 002 <br> 2,394, <br> 07 | $\begin{array}{r}3 \\ \\ \\ 10.4 \\ \hline\end{array}$ | ${ }^{2} 2.0$ |  |
| Iron and steel ----- |  | 574,003 |  |  |  | 215 |  |  |  |  | 2.0 |  |
| Cutlery and edge tools --- |  | 11, 225 | $\begin{aligned} & 25,659 \\ & 14,335 \end{aligned}$ | $\begin{array}{r} 395 \\ 2,920 \end{array}$ |  |  | 25 18 |  |  | 24.5 27.6 | 1.72.7 |  |
| Enameling and galvanizing |  | 6,711 32,049 |  |  | (2) $\quad 1 \begin{aligned} & 1 \\ & \end{aligned}$ |  | 18 125 | $\begin{array}{r} 376 \\ 2,786 \end{array}$ | $\begin{array}{r} 23,990 \\ 192,749 \end{array}$ | 27.6 40.7 |  |  |



| 119 | 34,253 |
| :---: | :---: |
| 888 | 167,696 |
| 156 | 28,245 |
| 76 | 4,969 |
| 86 | 30, 702 |
| 244 | 36, 815 |
| 221 | 38, 256 |
| 185 | 26, 639 |
| 88 | 21, 559 |
| 131 | 24, 089 |
| 123 | 24, 802 |
| 226 | 44, 192 |
| 646 | 159,841 |
| 160 | 34, 804 |
| 388 | 116, 752 |
| 98 | 8, 285 |
| 3,626 | 308, 544 |
| 217 | 17,424 |
| 871 | 57, 975 |
| 770 | 61, 422 |
| 965 | 96, 665 |
| 79 | 13, 576 |
| 109 | 7, 466 |
| 42 | 2,775 |
| 314 | 31, 718 |
| 259 | 19, 523 |
| 2,818 | 1, 019, 793 |
| 155 | 61, 390 |
| 239 | 56,785 |
| 321 | 358, 701 |
| 96 | 7, 866 |
| 438 | 152, 772 |
| 120 | 16, 564 |
| 287 | 39, 133 |
| 827 | 293, 460 |
| 88 | 28, 446 |
| 247 | 4,676 |
| 1,333 | 235, 660 |
| 34 | 10, 213 |
| 287 | 76,921 |
| 82 | 53, 309 |
| 121 | 10,990 |
| 346 | 21, 836 |
| 106 | 13,250 |
| 21 | 1,930 |
| 336 | 47,211 |

See footnotes at end of table.

| 3,096 |  | 7 |
| :---: | :---: | :---: |
| 18,169 | (13) | 75 |
| 1,570 | (1) | 3 |
| 339 |  | 1 |
| 1,327 | (2) | 9 |
| 1,695 |  | 4 |
| 3,501 |  | 10 |
| 1,921 | (7) | 10 |
| 908 |  |  |
| 1,397 |  | 3 |
| 1,183 |  | 3 |
| 2,556 |  | 2 |
| 4,630 | (1) | 14 |
| 2, 220 | (1) | 10 |
| 2, 095 |  | 3 |
| 315 |  | 1 |
| 26,427 | (6) | 115 |
| 3,188 | (2) | 42 |
| 4,703 |  | 10 |
| 7,803 | (4) | 34 |
| 4,934 |  | 9 |
| 671 |  | 1 |
| 284 |  | 1 |
| 99 |  |  |
| 3,395 |  | 12 |
| 1,350 |  | 6 |
| 40,159 | (9) | 80 |
| 2,557 | (3) | 7 |
| 3,895 | (3) | 14 |
| 6, 185 |  | 14 |
| -327 |  |  |
| 8,552 | (2) | 13 |
| 721 |  |  |
| 2, 404 | (1) | 5 |
| 14,316 |  | 25 |
| 941 |  |  |
| 261 |  | 2 |
| 12,353 | (6) | 51 |
| 660 |  | 10 |
| 4,486 | (1) | 12 |
| 2,997 | (3) | 22 |
| 491 | (1) | 3 |
| 603 |  |  |
| 849 |  |  |
| 237 |  |  |
| 2,030 | (1) | 4 |



| 2,952 | 174, 842 |
| :---: | :---: |
| 17,637 | 1, 057, 147 |
| 1,469 | 106, 749 |
| 318 | 20,848 |
| 1,256 | 108,607 |
| 1,535 | 147, 309 |
| 3,387 | 181, 230 |
| 1,848 | 132, 161 |
| 839 | 58,280 |
| 1,304 | 114, 120 |
| 1,134 | 59,909 |
| 2,421 | 138,491 |
| 4,477 | 278, 054 |
| 2,158 | 161, 048 |
| 2,019 | 97,841 |
| 300 | 19,165 |
| 24, 913 | 2,416,082 |
| 3,088 | 400, 595 |
| 4,445 | 352, 868 |
| 7,453 | 699, 645 |
| 4,485 | 465, 493 |
| 630 | 43,223 |
| 261 | 27, 893 |
| 98 | 1,870 |
| 3,198 | 291, 897 |
| 1,255 | 132,598 |
| 38,076 | 2,564,571 |
| 2,293 | 272, 065 |
| 3, 779 | 231, 339 |
| 5,728 | 512, 292 |
| 298 | 35, 315 |
| 8, 188 | 426,765 |
| 687 | 34,895 |
| 2,299 | 129, 072 |
| 13,653 | 862, 833 |
| 899 | 42,780 |
| 252 | 17,215 |
| 11,811 | 1,001, 167 |
| 632 | 89, 218 |
| 4,295 | 344, 618 |
| 2,855 | 320,328 |
| 468 | 43, 692 |
| 576 | 27, 425 |
| 829 | 28, 527 |
| 232 | 7,658 |
| 1,924 | 139,701 |


| 38.0 |
| ---: |
| 49.7 |
| 24.3 |
| 30.2 |
| 20.1 |
| 20.6 |
| 39.7 |
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| 30.7 |
| 65.3 |
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1.8
4.0
2.0
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20.3

Table 2.-Injury Rates and Injuries by Extent of Disability, 1942—Continued
[All reporting establishments]

| Industry | Number of establishments | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { employees } \end{aligned}$ | Employeehours worked (thousands) | Number of disabling injuries |  |  |  | Total time lost (days) | Injury rates: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Resulting in- |  |  |  |  |  |
|  |  |  |  | Total | Death and permanent total disability ${ }^{1}$ | $\begin{array}{\|c\|} \text { Permanent } \\ \text { partial } \\ \text { disability } \end{array}$ | Temporary total disability |  | Frequency | Severity |
| Manufacturing-Continued |  |  |  |  |  |  |  |  |  |  |
| Printing and publishing | 2,637 | 156,960 | 315,469 | 3,000 | (3) 7 | 129 | 2,864 | 229,995 | 29.4 | 30.8 |
| Book and job....... | 1.746 | 79, 527 | 163, 367 | 1,713 | (2) 3 | 74 | 1,636 | 127,899 | 10.5 | . 8 |
| News and periodical | - 852 | 76, 293 | 149, 783 | 1, 267 | (1) 4 | 53 | 1,210 | 99, 277 | 8.5 | . 7 |
| Bookbinding...---- | 39 | 1,140 | 2,318 | - 20 | (1) | 2 | 18 | 2,819 | 8.6 | 1.2 |
| Rubber and its products | 196 | 104, 172 | 221,001 | 2, 871 | (2) 8 | 129 | 2, 734 | 236,214 | ${ }^{1} 13.3$ | ${ }^{8} 1.1$ |
| Rubber tires | 38 | 52, 218 | 109,996 | 1,312 | (2) 6 | - 55 | 1,251 | 130, 950 | 11.9 | 1.2 |
| Rubber boots and shoes Not clsewhere classified | 20 138 | 18,257 33,697 | 39,423 71,582 | 338 1,221 | -------- | 17 57 | 1,321 1,162 | 24,769 80,495 | 8.6 17.1 | 1.6 |
| Stone, clay, and glass products. | 1,389 | 205, 534 | 414, 595 | 10,588 | (29) 77 | 260 | 10, 251 | 870, 605 | 326.4 | 22.3 |
| Brick, tile, and terra cotta | 486 | 43, 683 | 84, 330 | 3,969 | (9) 25 | 67 | 3,877 | 268, 219 | 47.1 | 3.2 |
| Cement | 142 | 27, 573 | 55, 270 | . 404 | (1) 14 | 83 | , 357 | 130, 127 | 7.3 | 2.4 |
| Glass. | 192 | 74, 289 | 149,076 | 3,060 | (1) 4 | 85 | 2,971 | 138, 650 | 20.5 | . 9 |
| Pottery- | 93 | 24,676 | 48,689 | 755 | (11) 12 | 9 | , 734 | 91, 269 | 15.5 | 1.9 |
| Concrete, gypsum, and plaster products. | 226 | 10,087 | 22,251 | 1,077 | (1) 6 | 24 | 1,047 | 82, 293 | 48.4 | 3.7 |
| Cut stone and cut-stone products. | 137 | 4,024 | 8,142 | , 272 | (7) 10 | 4 | , 2.58 | 69,297 | 33.4 | 8.5 |
| Not elsewhere classified........... | 113 | 21,202 | 46,838 | 1,051 | 6 | 38 | 1,007 | 90, 750 | 22.4 | 1.9 |
| Textiles and textile-mill products. | 3,475 | 870, 612 | 1, 771,790 | 24,497 | (10) 65 | 744 | 23, 698 | 1,358, 383 | 811.9 | ${ }^{8} .6$ |
| Carpets and rugs.-------- | 74 | 28,529 | 55,053 | 778 | (1) 2 | 66 | 710 | 106, 944 | 14.1 | 1.9 |
| Clothing, men's. | 584 | 99, 813 | 186, 934 | 1,431 | (1) 2 | 17 | 1,412 | 49, 240 | 7.7 | . 3 |
| Clothing, women's | 531 | 50, 918 | 97,038 | 1,451 |  | 8 | , 443 | 8,007 | 4.6 | . 1 |
| Cotton goods.- | 496 | 304, 304 | 644,037 | 10,499 | (4) 27 | 325 | 10,147 | 611, 748 | 16.3 | . 9 |
| Dyeing and finishing | 192 | 33, 124 | 72,097 | 1,786 | (2) 7 | 42 | 1,737 | 124,697 | 24.8 | 1.7 |
| Knit goods....--.-. | 638 | 122,600 | 239,163 | 1,852 | (2) 2 | 35 | 1,815 | 59, 694 | 7.7 | . 2 |
| Silk and rayon products, not elsewhere cl | 192 | 48,997 | 102,014 | 1,177 | 1 | 14 | 1,162 | 29,995 | 11.5 | . 3 |
| Wonlen goods --.--- | 352 | 121, 083 | 249, 444 | 4,475 | (2) 10 | 162 | 4,303 | 264, 090 | 17.9 | 1.1 |
| Not elsewhere classified. | 416 | 61, 244 | 126,011 | 2,048 | (1) 4 | 75 | 1,969 | 103,968 | 16.3 | . 8 |
| Transportation equipment. | 748 | 1, 455, 055 | 3,337,118 | 69,727 | (14) 289 | 2, 264 | 67, 174 | 4,906,950 | ${ }^{2} 21.3$ | ${ }^{2} 1.5$ |
| Motor vehicles......-- | 98 | -193, 773 | 424, 973 | 4,805 | (10) 22 | 311 | 4,472 | , 408, 427 | 11.3 | 1.0 |
| Shipbuilding ...--- | 257 | 593, 611 | 1,336, 605 | 44,197 | (10) 230 | 953 | 43, 014 | 3, 151, 123 | 33. 1 | 2.4 |
| Railroad equipment | 40 | 66, 361 | 154, 712 | 2,691 | (3) 14 | 137 | 2,540 | 237, 437 | 17.4 | 1.5 |

Aircraft .
Motor-vehicle parts.BoatbuildingAireraft partsNot elsewhere classifiedMiscellaneous manufacturing.Tobacco products
Radios and phonographs
Smelting and refining (nonferrous)
Nonferrous metal products
Brushes
Brooms
Coke ovens
Not elsewhere classified
Ordnance and accessoriesGuns and related equipment
Ammunition, except for small arms.
Tanks, military
Sighting and fire-control equipment
Small arms
Tank parts, military
Not elsewhere classified
Nonmanufacturng
ConstructionBuildingHeavy engineering
HighwayNot elsewhere classiffed.
Communication
Telephone (wire and radio)Radio broadcasting and television
Transportation
Streetcar
Bus
Both streetcar and bus
Trucking and hauling
s.Warehousing and storage
Pipe lines, except natural gas
Not elsewhere classified
Heat, light, and power
Electric light and power
Gas
Waterworks
n.

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$\qquad$
on.
$\qquad$

| 44 | 306,415 |
| ---: | ---: |
| 62 | 54,540 |
| 17 | 11,705 |
| 114 | 221,403 |
| 116 | 7,247 |

708, 443
127, 756
25, 544
541,809

$$
17,276
$$

670, 638
306, 176
50,313
58,599
46, 888
70, 650
3, 109
1,794
6, 219
68, 604
330, 521 81, 135
119, 374
30, 162
17, 368
38, 790
18,757
22, 867

135, 214
80, 882
31, 489
15, 051
7, 792
339,916
339, 026
890
167,180
21, 398
26, 167
62, 838
13, 874
2,830
1, 398
38,575
217, 995
181,061
36, 934
2,884

99,266
129, 973
104, 070
160, 650
6, 521
3,786
12, 797
153, 575
766, 250
198, 890
257, 836
71, 769
43, 110
96, $0=6$
43, 112
51,421

226, 591
129, 293
58, 020
25, 999
13, 279
655, 158
653, 394
1, 763
382, 492
50,280
64, 510
148, 733
31, 626
5, 607
2, 957
78, 779
519, 506
442, 768
76, 738
8, 538

See footnotes at end of table.


## Digitized for FRASER

[All reporting establishments]

| Industry | Number of establishments | $\begin{aligned} & \text { Number } \\ & \text { of } \\ & \text { employees } \end{aligned}$ | $\begin{gathered} \text { Employee- } \\ \text { hours } \\ \text { worked } \\ \text { (thousands) } \end{gathered}$ | Number of disabling injuries |  |  |  | Total time lost (days) | Injury rates ? |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Resulting in- |  |  |  |  |  |
|  |  |  |  | Total | Death and permanent total disability ${ }^{1}$ | Permanent partial disability | Temporary total disability |  | quency | Severity |
| Nonmanufacturing-Continued |  |  |  |  |  |  |  |  |  |  |
| Personal services. | 4,397 | 146, 676 | 318, 285 | 2,919 | (1) 12 | 55 | 2,852 | 175,686 | 9.2 | 0.6 |
| Dry cleaning. | 702 | 17, 795 | 38,956 | 200 | 2 2 2 | ${ }_{2}^{2}$ | 196 | 15,808 <br> 44 <br> 1545 | 5.2 | . 4 |
| Laundries and dry cleaning combined | 822 | 42, 107 37,550 | 93, 691 | 836 883 | (1) $\begin{array}{r}2 \\ 4\end{array}$ | 23 | 811 858 | 44,545 66,730 | 8.9 10.1 | . 8 |
| Amusements and related services.... | 523 | 9, 444 | 14,551 | 101 | (1) 1 |  | 100 | 8, 006 | 6.9 | . 6 |
| Hotels, and eating and drinking places | 1,249 | 28,331 | 59,488 | 770 | 3 | 7 | 760 | 34,343 | 12.9 | . 6 |
| Medical and other professional services | 332 | 7,888 | 17,251 | 103 |  | 1 | 102 | 5,351 | 6.0 | . 3 |
| Miscellaneous personal services. | 287 | 3,561 | 7,002 | 26 |  | 1 | 25 | 903 | 3.7 | . 1 |
| Business services | 2,494 | 94, 453 | 186,343 | 950 | 7 | 10 | 933 | 68, 731 | 5.1 | . 4 |
| Banks and other financial agencies | 1,036 | 47,599 | 93, 099 | 326 |  | 3 | 323 | 8,346 | 3. 5 | . 1 |
| Insuranco...- | 387 | 25, 287 | 49,808 | 108 | 3 |  | 105 | 20,017 | .2.2 | . 4 |
| Real estate.-.-.-.-......-.....- | 529 542 | 10,067 11,500 | 20, 20.683 | 221 | 4 | 2 5 | 219 286 | $\begin{array}{r}\text { 4, } \\ \text { 35,649 } \\ \hline\end{array}$ | 10.6 | 1.6 |
| Educational services. | 76 | 8,976 | 10,185 | 81 |  |  | 81 | 684 | 8.0 | . 1 |
| Trade. | 11, 613 | 249, 193 | 542, 186 | 7, 324 | (1) 22 | 132 | 7,170 | 351,708 | 813.7 | 3.7 |
| Wholesale distributors. | 2, 899 | 62, 015 | 131, 221 | 2, 263 | (1) 8 | 41 | 2,214 | 114, 283 | 17.2 | . 9 |
| Retail, general merchandise | 489 | 62, 508 | 131,220 | 876 | (1) 1 | 10 | 265 | 30,309 | 6.7 | . 2 |
| Retail, food. | 3,489 | 20, 534 | 70, 055 | 940 | 1 | 19 | 920 | 35, 759 | 13.4 | . 5 |
| Wholesale and retail dairy products | 202 | 9,526 | 22, 232 | 534 | 2 | 7 | 525 | 28.018 | 24.0 | 1.3 |
| Retail, automobiles...-............. | 869 | 11, 590 | 27, 595 | 423 |  | 7 | 416 | 11, 102 | 15.3 | . 4 |
| Filling stations. | 363 | 4,913 | 11,537 | 149 |  | 3 | 146 | 5,343 | 12.9 | . 5 |
| Retail, apparel and accessories. | 735 | 19,769 | 40,613 | 219 |  | 3 | 216 | 6,245 | 5.4 | . 2 |
| Miscellaneous retail stores.... | 1,972 | 33, 179 | 71, 344 | 1,130 | 7 | 32 | 1,091 | 85, 676 | 15.8 | 1.2 |
| Wholesale and retail trade combined | 595 | 16, 159 | 36,368 | -790 | 3 | 10 | 777 | 34,973 | 21.7 | 1.0 |

[^0]
## Changes in Exposure, Injuries, and Injury Rates

As was true in 1941, the increase in the number of disabling injuries far outstripped the increases in employment and exposure hours. For the manufacturing group, injuries increased by 34 percentmore than twice the increase in employment ( 16 percent) and half again as much as the increase in employee-hours ( 22 percent). The industries in which the number of injuries increased by a smaller percentage than exposure, or decreased by a larger percentage than did employment, were relatively few.

In most industries, the increase in the number of disabling injuries far exceeded the increases in either employment or hours. This is particularly noticeable in industries which experienced sharp increases in employment because of war activities. In jron and steel forging, for instance, employment increased by 28 percent, hours by 32 percent, and injuries by 34 percent. In iron and steel foundries, employment rose by 14 percent, hours by 22 percent, and injuries by 27 percent. In the manufacture of metalworking machines, the increases for employment, hours, and injuries were 35,44 , and 58 percent, respectively. In the large group of iron and steel, the respective increases were 8,9 , and 13 percent.

In shipbuilding, injuries increased half again as much as employment and hours, and in the aircraft industry, by about 25 percent.

In a number of other industries the increases in injuries coincided fairly well with increases in hours, but both exceeded the increase in employment. In a few cases, such as in the production of explosives, injuries increased by a smaller percentage than hours, but were considerably in excess of the increase in employment.

The decreased frequency rates in the construction industries were due to the fact that injuries increased by much smaller percentages than did employment and employee-hours. In building construction, for instance, injuries increased by only 3 percent for 1,319 identical establishments, whereas employment increased by 24 percent and employee-hours by 29 percent. In 142 highway-construction companies, an employment increase of 32 percent and an hours increase of 50 percent were accompanied by an actual injury decrease of 3 percent. As a consequence, the frequency rate for this identical group dropped 35 percent below that for 1941.

The transportation group again illustrates the 2 to 1 relationship between increases in the number of injuries and in the number of employees. The latter increased 9 percent, as did also hours, whereas injuries rose 16 percent. These relationships were particularly apparent for the street-car and bus industries.

The personal-service industries, as a group, also illustrated this trend. Employment and hours in 3,198 identical establishments both rose by 5 percent-but injuries went up 18 percent. In laundries, the increase in injuries was nearly 4 times the increase in employees and nearly 3 times the increase in hours. Still more marked was the situation in establishments with combined laundry and dry-cleaning activities; employment rose only 2 percent, hours fell 6 percent, and injuries increased 76 percent.

Table 3.-Changes in Exposure, Disabling Injuries, and Injury Rates, for 34,942 Identical Establishments, 1941 to 1942


See footnotes at end of table.

Table 3.-Changes in Exposure, Disabling Injuries, and Injury Rates, for 34,942 Identical Establishments, 1941 to 1942-Continued


Communication: Telephone
575
See footnotes at end of table.

Table 3.-Changes in Exposure, Disabling Injuries, and Injury Rates, for 34,942 Identical Establishments, 1941 to 1942—Continued

| Industry | Number of estab-lishments | Percent of change in- |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\underset{\substack{\text { Em- } \\ \text { ploy- }}}{ }$ | Embours worked | Disabling injuries | Total timo lost | Fre-quencyrate | Severity rate |
| Nonmanufacturing-Continued |  |  |  |  |  |  |  |
| Transportation ${ }^{3}$ - | ${ }^{4} 587$ | +9 | +9 | $+16$ | +18 | +6 | $+7$ |
| Streetcar- | ${ }^{4} 17$ |  |  |  |  | $+13$ | +18 |
| Bus. | ${ }^{4} 128$ | +9 | +14 | +32 | +47 | $+16$ | +27 |
| Both streetcar and bus | 440 | +11 | $+10$ | +21 | +20 | +11 | $+8$ |
| Trucking and hauling.-. | 4325 4 4 4 | +1 +16 | $+$ | -16 | -17 -39 | $-11$ | -20 -43 |
| Warehousing and storage-... | 439 410 4 | +16 +3 -3 | ${ }_{-3}^{+16}$ | -16 +47 |  |  | -43 +500 |
| Pipe lines, except natural gas Not elsewhere classified. | ${ }_{4}^{4} 10$ | -3 +13 | +15 | +47 +3 | +313 +1 | ${ }_{-10}^{+51}$ | +500 +25 |
| Heat, light, and power. | 5 268 | -7 | +13 | -5 | +5 | -16 | -6 |
| Electric light and power | ${ }^{5} 192$ | -6 | +15 | -3 | +11 | -16 | -6 |
| Gas. | ${ }^{5} 67$ | -7 | -4 | -16 | -33 | -12 | -29 |
| Steam heat and power | ${ }^{5} 9$ | -4 | , | -60 | -91 | $-60$ | -83 |
| Waterworks. | ${ }^{5} 125$ | -8 | +48 | -24 | -23 | -49 | -33 |
| Personal services | 3, 198 | +5 | +5 | +18 | -16 | +13 | -17 |
| Dry cleaning | 589 | +7 | +88 | $+3$ | + | -6 | 0 |
| Laundries | 707 | +12 | +16 | +44 | -43 | +25 | -56 |
| Laundry and dry cleaning combined | 363 | +2 | -6 | +76 | +54 | +88 | +60 |
| Amusements and related services | 361 | -8 | -3 | -24 | -81 | -21 | -86 |
| Hotels, and eating and drinking places | 771 | +3 | +8 | -18 | -48 | -25 | -50 |
| Medical and other professional services | 230 | $+1$ | +2 | $-33$ | +188 | $-35$ | $+100$ |
| Miscellaneous personal services........ | 177 | $-3$ | $-1$ | +23 | +47 | +23 | 0 |
| Business services. | 1,746 | -2 | -2 | -4 | +27 | -2 | 0 |
| Banks and other fnancial agencies. | 665 | +1 | 0 | +37 | ${ }^{-61}$ | +37 | -67 |
| Insurance.... | 282 | -1 | -1 | -26 | +161 | -26 | $+100$ |
| Real estate. | 390 | -1 | -8 | -2 | -20 | +8 | -33 |
| Miscellaneous business services | 409 | -15 | -11 | -27 | +168 | -18 | +225 |
| Educational services. | 58 | -1 | +10 | -7 | -59 | -15 | -50 |
| Trade | 6,300 | -5 | -3 | -6 | -28 | 1-3 | 1-33 |
| Wholesale distributors | 1,833 | -7 | -6 | -7 | -47 | -1 | -44 |
| Retail, general merchandis | 391 | 0 | +3 | -9 | -43 | -12 | -50 |
| Retail, food...... | 661 | -1 | 0 | +12 | +54 | +11 | +67 |
| Wholesale and retail dairy products | 157 | +9 | +8 | +7 | +39 | -1 | +25 |
| Retail, automobiles....... | 700 | -35 | -34 | -40 | -79 | -9 | -70 |
| Filling stations...- |  | -11 | -9 | -28 | -69 | -21 | -67 |
| Retail, apparel and accessor | 506 | -6 | +5 | +5 | +122 | 0 | +100 |
| Miscellaneous retail stores-..-- ${ }^{\text {Wholesale and retail trade }}$ | 1,394 | $\stackrel{3}{0}$ | $-1$ | -2 | +28 +13 | -11 | +22 -8 |
| Wholesale and retail trade combined | 429 | 0 | -2 | +8 | -13 | +11 | -8 |

[^1]
## Disability Estimates for Manufacturing Industries

In table 4 are shown estimates of work injuries for a number of manufacturing industries. No estimates were made when the number of employees covered in the Bureau's survey composed less than 40 percent of an industry's total employment. The estimates were made by increasing the reported injuries by the ratio which the employment surveyed bore to the total industry employment. The estimates are believed to be conservative. The important phases of table 4 have been covered in the summary.

Table 4.-Estimates of Disabilities, by Eatent, for Manufacturing Industries, 1942

| Industry | All reporting establishments |  |  |  |  | Estimates for entire industry |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of estab-lishments | Num- ber of em-ploy-(thousands) | Emee hours worked (millions) | Number of disabling injuries | Total days lost (thousands) | All disabling injuries | Death and per-manent total disability | Per-manent partial dis-ability | $\begin{gathered} \text { Tem- } \\ \text { po- } \\ \text { rary } \\ \text { total } \\ \text { dis- } \\ \text { abil- } \\ \text { ity } \end{gathered}$ | Total days lost (thousands) |
| Chemical produc | 1,057 | 466 | 974 | 12,450 | 1,609 | 27,000 | 270 | 1,290 | 25, 440 | 3,478 |
| Drugs, toiletries, and insecticides |  | 43 | 88 | 1,361 | 103 | $1,900$ | 10 | 60 | 1,830 | 140 |
| Explosives. | 75 | 87 | 197 | 1,260 | 324 | 2, 100 | 65 | 140 | 1,895 | 528 |
| Fertilizers | 343 | 18 | 36 | 1,161 | 94 | 2, 100 | 10 | 60 | 2,030 | 172 |
| Paints and varnishe | 396 | 29 | 60 | 1,042 | 85 | 1,700 | 5 | 80 | 1,615 | 140 |
| Petroleum refining. | 217 | 99 | 201 | 2,147 | 323 | 2,700 | 30 | 130 | 2,540 | 404 |
| Rayon and allied products | 26 | 48 | 96 | 806 | 69 | 1,400 |  | 70 | 1,330 | 117 |
| Soap and glycerin --....-. | 86 | 18 | 37 | $\begin{array}{r}380 \\ \hline\end{array}$ | 45 | - 500 |  | 40 | 1, 460 | 54 |
| Industrial chemicals | 290 | 78 | 168 | 2,811 | 377 | 6,200 | 60 | 290 | 5,850 | 830 |
| Food products ${ }^{1}$ | 3,327 | 385 | 783 | 23,329 | 1,656 | 75,300 | 240 | 2,340 | 72, 720 | 4,764 |
| Confectionery | 254 | 40 | 81 | 1,226 | 59 | 2,300 | 5 | 100 | 2,195 | 111 |
| Flour, feed, and other grainmill products | 540 | 36 | 81 | 2,009 | 114 | 4,000 | 10 | 110 | 3,880 | 228 |
| Sugar refining | 114 | 27 | 55 | 1,720 | 194 | 2,000 | 20 | 60 | 1,920 | 230 |
| Beverages. | 382 | 16 | 31 | 613 | 32 | 1,300 | 5 | 30 | 1,265 | 65 |
| Breweries. | 265 | 36 | 77 | 2,958 | 462 | 4,500 | 30 | 400 | 4,070 | 707 |
| Iron and steel 'and their products ${ }^{1}$ - | 3, 309 | 1, 106 | 2,395 | 54, 110 | 4,958 | 93,900 | 470 | 4, 410 | 89,020 | 7,450 |
| Iron and steel | 301 | 574 | 1,201 | 12, 504 | 2, 394 | 13, 800 | 235 | 1, 110 | 12, 455 | 2,634 |
| Cutlery and edge tools......-- | 100 | 11 | 26 | 629 | 52 | 700 | 5 | 30 | 665 | 57 |
| Stampings and enameled ware_ | 304 | 44 | 97 | 2,090 | 171 | 4, 300 | 10 | 360 | 3,930 | 349 |
| Fabricated structural steel.--- | 295 | 32 | 72 | 2,920 | 193 | 6,600 | 20 | 280 | 6,300 | 434 |
| Forgings | 119 | 34 | 82 | 3,096 | 175 | 3,700 | 10 | 160 | 3,530 | 210 |
| Foundries. | 898 | 168 | 366 | 18,169 | 1,057 | 31, 100 | 130 | 780 | 30,190 | 1,808 |
| Hardware. | 156 | 28 | 65 | 1, 570 | 107 | 2, 700 | 5 | 170 | 2,525 | 1, 180 |
| Plumbers' supplies. | 86 | 31 | 66 | 1,327 | 109 | 1,300 | 10 | 60 | 1,230 | 109 |
| Steam fittings and apparatus.- | 221 | 38 | 88 | 3,501 | 181 | 3,500 | 10 | 100 | 3,390 | 181 |
| Stoves and furnaces, not electric. | 185 | 27 | 57 | 1,921 | 132 | 2,000 | 10 | 70 | 1,920 | 140 |
| Tin cans and other tinware | 88 | 22 | 45 | 908 | 58 | 1,800 |  | 130 | 1,670 | 113 |
| Tools, except edge tools. | 131 | 24 | 57 | 1,397 | 114 | 1,800 | 5 | 120 | 1,675 | 149 |
| Leather and its products ${ }^{1}$ | 646 | 160 | 323 | 4,630 | 278 | 12,000 | 35 | 410 | 11,555 | 705 |
| Leather. | 160 | 35 | 73 | 2,220 | 161 | 3,600 | 15 | 80 | 3,505 | 258 |
| Boots and shoes | 388 | 117 | 232 | 2,095 | 98 | 4,500 | 5 | 160 | 4,335 | 212 |
| Lumber, lumber products, and furniture 1 | 3, 628 | 309 | 658 | 26, 427 | 2, 416 | 93, 600 | 480 | 4,700 | 88, 420 | 8,935 |
| Planing mills. | 871 | 58 | 125 | 4,703 | 353 | 7,900 | 15 | 420 | 7, 465 | 598 |
| Furniture, except metal | 1,153 | 118 | 253 | 5,889 | 537 | 11, 000 | 20 | 930 | 10,050 | 998 |
| Wooden containers----- | ${ }^{1} 314$ | 32 | 68 | 3,395 | 292 | 3,800 | 15 | 210 | 3, 575 | 330 |
| Machinery (not transportation) ${ }^{1}$-- | 2,818 | 1,020 | 2,467 | 40,159 | 2,565 | 53,200 | 110 | 2, 710 | 50,380 | 3, 461 |
| Agricultural machinery and tractors. | 155 | 61 | 139 | 2,557 | 272 | 4,700 | 15 | 470 | 4,215 | 495 |
| General and special industry machinery ${ }^{2}$ | 1,449 | 397 | 976 | 20,942 | 1,259 | 26, 200 | 55 | 1,090 | 25, 055 | 1,573 |

[^2]Table 4.—Estimates of Disabilities, by Extent, for Manufacturing Industries, 1942-Con.

| Industry | All reporting establishments |  |  |  |  | Estimates for entire industry |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of estab-lishments | Numem: ployees (thousands) | Em- <br> ployee hours worked (millions) | Number of disabling injuries | Total days lost (thousands) | All disabling injuries | Death and per-manent total disability | Per- <br> ma- <br> nent <br> partial dis-ability | Tem. porary total dis-ability | Total days lost (thousands) |
| Machinery-Continued. <br> Electrical equipment and supplies. <br> Metalworking machinery | 321 438 | 359 153 | 842 392 | 6,185 8,552 | 512 427 | 7,700 11,200 | 20 | 550 460 | 7, 130 | 640 550 |
| Repair shops.................----- | 247 | 5 | 11 | 261 | 17 | 600 | 5 | 20 | 575 | 40 |
| Paper and allied products ${ }^{\text {I }}$....-...- | 1, 333 | 236 | 510 | 12,353 | 1,001 | 19, 100 | 75 | 770 | 18, 255 | 1,494 |
| Pulp | 403 | 140 | 309 | 8, 143 | 754 | 10, 900 | 60 | 430 | 10, 410 | 1,011 |
| Paper boxes | 594 | 48 | 101 | 2,180 | 107 | 4,100 | 5 | 140 | 3,955 | 204 |
| Printing and publishing ${ }^{1 .}$ | 2,637 | 157 | 315 | 3,000 | 230 | 9, 000 | 20 | 390 | 8,590 | 694 |
| Rubber and its products ${ }^{1}$ | 196 | 104 | 221 | 2,871 | 236 | 4,700 | 15 | 210 | 4,475 | 383 |
| Rubber tires. | 38 | 52 | 110 | 1,312 | 131 | 2, 100 | 10 | 90 | 2,000 | 206 |
| Rubber boots and shoes | 20 | 18 | 39 | 338 | 25 | 400 |  | 20 | 380 | 33 |
| Stone, clay, and glass products ${ }^{\text {I }}$ | 1, 389 | 206 | 415 | 10,588 | 871 | 23, 500 | 180 | 600 | 22, 720 | 2,036 |
| Brick, tile, and terra cotta | 486 | 44 | 84 | 3,969 | 268 | 6, 900 | 45 | 120 | 6,735 | 464 |
| Cement. | 142 | 28 | 55 | 404 | 130 | 500 | 15 | 40 | 445 | 160 |
| Glass. | 192 | 74 | 149 | 3,060 | 139 | 4,700 | 5 | 130 | 4,565 | 211 |
| Pottery | 93 | 25 | 49 | 755 | 91 | 1,600 | 25 | 20 | 1,555 | 194 |
| Textiles and textile-mill products 1 | 3,475 | 871 | 1,772 | 24,497 | 1,358 | 58, 900 | 120 | 1,680 | 57, 100 | 2,980 |
| Carpets and rugs | 74 | 29 | 55 | 778 | 107 | 800 |  | 70 | 730 | 107 |
| Cotton goods. | 496 | 304 | 644 | 10,499 | 612 | 19, 800 | 50 | 610 | 19,140 | 1,156 |
| Dyeing and finishing | 192 | 33 | 72 | 1,786 | 125 | 4, 200 | 15 | $10)$ | 4,085 | 292 |
|  | 638 | 123 | 239 | 1,852 | 60 | 3, 600 | 5 | 70 | 3,525 | 116 |
| Silk and rayon products, not elsewhere classified | 192 | 49 | 102 | 1,177 | 30 | 2, 700 |  | 30 | 2,670 | 69 |
| Woolen goods_ | 352 | 121 | 249 | 4,475 | 264 | 7, 300 | 15 | 270 | 7,015 | 433 |
| Transportation equipment t-...--- | 748 | 1,455 | 3,337 | 69, 727 | 4,907 | 89,200 | 370 | 2,850 | 85,980 | 6,304 |
| Motor vehicles and parts...-- | 160 | 248 | 553 | 8,875 | 503 | 8,900 | 25 | 390 | 8,485 | 508 |
| Shipbuilding and boatbuilding. | 274 | 605 | 1,362 | 44,480 | 3,197 | 59, 200 | 305 | 1,330 | 57, 535 | 4,252 |
| Railroad equipment | 40 | 66 | 155 | 2,691 | 237 | 2,700 | 15 | 140 | 2,545 | 237 |
| Aircraft and parts.---....-.-.-- | 158 | 528 | 1,250 | 13, 214 | 948 | 18,000 | 25 | 980 | 16,995 | 1,290 |
| Miscellaneous manufacturing 1-.-- | 1, 591 | 306 | 671 | 10, 484 | 863 | 34,900 | 110 | 1,960 | 32, 830 | 2,882 |
| Tobacco products ....-....-. -- | 208 | 50 | 99 | 646 | 32 | 1,400 |  | 60 | 1,340 | 69 |
| Radios and phonographs.....-- | 61 | 59 | 130 | 761 | 58 | 1,100 | 5 | 70 | 1,025 | 85 |
| Ordnance and accessories 1....-...- | 276 | 331 | 766 | 10, 153 | 928 | 47, 500 | 170 | 3,560 | 43, 770 | 4,134 |

${ }^{1}$ Includes data for industries not shown separately because of insufficient coverage upon which to base industry estimates.

## Disability Distribution

In table 5 is shown the disability distribution for the injuries reported by all establishments surveyed. In comparison with 1941, the weighted percentage of deaths and a small number of permanent total disabilities during 1942 in the entire manufacturing group was slightly lower, 0.4 of 1 percent as against 0.5 of 1 percent. The percentage of permanent partial impairments was considerably lower, 4.7 as against 5.7. Conversely, the percentage of temporary total disabilities increased from 93.8 to 94.9 .

The shift toward disabilities of a lower degree is also emphasized by the average time losses per injury. There was, of course, no change in the average time charges for deaths and permanent total disabilities, which remain at 6,000 days. The average time charge per permanent
partial impairment, however, was reduced from 950 days per case in 1941 to 874 days in 1942. Similarly, the average time lost per case of temporary total disability dropped from 16 to 15 days.

The number of manufacturing industries in which deaths amounted to 1.0 percent or more of the total reported injuries was relatively small. Outstanding were the cement and cut-stone industries, each with 3.7 percent. The explosives industry followed with 3.1 percent. Lagging considerably was the iron and steel industry with 1.6 percent, matched by the pottery industry. The percentage in pulp manufacturing was 1.5 ; coke ovens, 1.4 ; logging, 1.3 ; small arms, 1.3 ; petroleum refining, 1.2; machine repair shops, 1.1; and industrial chemicals, 1.0 . In comparison with 1941, fatalities formed a considerably higher proportion of disabling injuries in the pulp and cut-stone industries, and to a lesser degree in explosives manufacturing. A notable reduction was experienced in petroleum refining. In the other industries, there was relatively little change.

Comparison with the 1941 data reveals that the number of industries in which permanent impairments accounted for 10 percent or more of all injuries was very much smaller in 1942, illustrating again the trend toward less serious injuries. One of the highest percentages in 1942 is found in the small-arms industry, 15.9 percent. Another war industry in this group is that manufacturing sighting and fire-control equipment, with a percentage of 13.1. In comparison, the figure for explosives is 6.9 ; for iron and steel, 7.7 ; forgings, 4.4 ; foundries, 2.4; shipbuilding, 2.2; and aircraft, 3.9.

The sighting and fire-control equipment industry also had one of the highest average time charges per permanent impairment, 1,327 days. This average was exceeded by only 5 industries-fertilizers, 1,406 days; petroleum refining, 1,387 days; sugar refining, 1,444 days; logging, 1,400 days; and dyeing and finishing, 1,370 days.

By far the largest number of manufacturing industries had an average of less than 20 days of time lost per temporary total disability. Outstanding for high averages were iron and steel, 25 days; logging, 22 days; rubber tires, 32 days; and railroad equipment, 24 days.
Among the nonmanufacturing industries, the electric light and power industry had the highest percentage of fatalities, 2.2. In heavy engineering construction, highway construction, streetcar and bus operation, and in dry cleaning, the percentage of fatalities was as high as 1.0 percent or more.

The percentages of permanent impairments generally fall far below those noted in many of the manufacturing industries. The highest percentage, 4.2, is found in bus transportation, followed by 3.1 in heavy engineering construction. In all other industries the percentage was below 3.0. The average for the entire manufacturing group, it will be recalled, was 4.7 percent.

In sharp contrast with this distribution, however, are the average time charges per permanent impairment in a number of these industries. For combined streetcar and bus operations, this average is 1,587 days; for electric light and power, 1,554 days; building construction, 1,499 days; gas, 1,328 days; and laundry and dry cleaning, 1,438 days.

Only in the electric light and power industry did the average duration per temporary total disability exceed 20 days.

Table 5.—Disability Distribution and Average Days Lost per Disability, by Industry,

| Industry | Percent of injuries resulting |  |  | Average days lost per disability |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Death and permanent total disability ${ }^{1}$ | $\left\|\begin{array}{c} \text { Perma- } \\ \text { nent } \\ \text { partial } \\ \text { disability } \end{array}\right\|$ | Temporary total disability | $\begin{gathered} \text { Perma- } \\ \text { nent } \\ \text { pistial } \\ \text { disability } \end{gathered}$ | $\begin{gathered} \text { Tem- } \\ \text { porary } \\ \text { total } \\ \text { disability } \end{gathered}$ |
| Manufacturing |  |  |  |  |  |
| Total, manufacturing ${ }^{2}$ | 0.4 | 4.7 | 94.9 | 874 | 15 |
| Chemical products ${ }^{2}$ | 1.2 | 5.1 | 93.7 | 1, 108 | 16 |
| Drugs, toiletries, and insecticides | . 7 | 3.3 | 96.0 | 782 | 10 |
| Explosives. | 3.1 | 6.9 | 90.0 | 702 | 20 |
| Fertilizers | . 4 | 3.0 | 96.6 | 1,406 | 14 |
| Paints and varnishes | . 2 | 5.1 | 94.7 | 1,233 | 15 |
| Petroleum refining | 1.2 | 4.7 | 94.1 | 1,387 | 19 |
| Rayon and allied products | . 1 | 5.1 | 94.8 | 1,244 | 16 |
| Soap and glycerin | .3 | 8.4 | 91.3 | 1,063 | 14 |
| Industrial chemicals | 1.0 1.0 | 4.7 4.8 | 94.3 | 1,295 | 16 16 |
| Food products ${ }^{2}$ | .4 | 3.1 | 96.5 | 962 | 14 |
| Baking.... | .6 | 4.1 | 95.3 | 1,008 | 14 |
| Canning and preserving | . 3 | 1.8 | 97.9 | 1,037 | 13 |
| Confectionery | .2 | 3.9 | 95.9 | 612 | 14 |
| Flour, feed, and other grain-mill produ | .2 | 2.6 | 97.2 | 1,090 | 14 |
| Slaughtering and meat packing | . 1 | 3.3 | 96.6 | 921 | 12 |
| Sugar refining. | . 8 | 3.0 | 96.2 | 1,444 | 16 |
| Beverages ${ }^{\text {Dairy }}$ products. |  | 2.3 | 97.4 | 818 | 14 |
| Breweries....- | ${ }^{\text {( })} 6$ | ${ }_{8.8}$ | ${ }_{90.6}$ | 1, $\begin{array}{r}600 \\ \hline 12\end{array}$ | 13 |
| Not elsewhere classified | .4 | 1.6 | 88.0 | 1,947 | 16 |
| Iron and steel and their products ${ }^{\text {a }}$ | . 8 | 5.7 | 93.5 | 723 | 18 |
| Iron and steel | 1.6 | 7.7 | 90.7 | 732 | 25 |
| Cutlery and edge tools. | . 6 | 3.9 | 95.5 | 814 | 13 |
| Enameling and galvanizing | . 3 | 4.5 | 95.2 | 658 | 16 |
| Fabricated structural steel | . 3 | 4.2 | 95.5 | 773 | 15 |
| Forgings | .2 | 4.4 | 95.4 | 681 | 13 |
| Foundries. | . 4 | 2.4 | 97.2 | 813 | 14 |
| Hardware ------..-- | . 2 | 6.2 | 93.6 | 685 | 15 |
| Ornamental metalwork | .3 | 5.9 | 93.8 | 548 | 13 |
| Plumbers' supplies. | .7 | 4. 5 | 94.8 | 647 | 12 |
| Stamped and pressed metal products. | .2 | 9.3 | 90.5 | 672 | 12 |
| Steam fittings and apparatus. | .3 | 2.8 | 96.9 | 740 | 13 |
| Tin cans and other tinware....- | $0^{.5}$ | 3.1 7.6 | ${ }_{9} 96.4$ | 753 672 | 13 |
| Tools, except edge tools-... | . 2 | 6.3 | 93.5 | 885 | 15 |
| Wire and wire products | .2 | 3.6 | 96.2 | 549 | 14 |
| Not elsewhere classified. | . 1 | 5.2 | 94.7 | 675 | 13 |
| Beather and its products ${ }^{2}$ | . 2 | 3.6 | 96.2 | 803 | 13 |
| Leather. | . 5 | 2.3 | 97.2 | 1,325 | 15 |
| Boots and shoes | . 1 | 3.5 | 96.4 | 727 | 13 |
| Not elsewhere classifled | . 3 | 4.4 | 95.3 | 707 | 11 |
| Lumber, lumber products, and furniture | . 4 | 5.7 | 93.9 | 973 | 16 |
| Logging. | 1.3 | 1.8 | 96.9 | 1,400 | 22 |
| Planing mills- | . 2 | 5.3 | 94.5 | 901 | 16 |
| Sawmills | . 4 | 4.0 | 95.6 | 1,187 | 16 |
| Furniture, except metal | . 2 | 8.9 | 90.9 | 813 | 12 |
| Furniture, metal. - | .1 | 6.0 | 93.9 | 748 | 12 |
| Partitions, shelving, and store fixtures | (3) ${ }^{3}$ | ${ }^{8} 8.0$ | 91.7 | 770 | 19 |
| Morticians' supplies. | ${ }^{(3)}$ | ${ }^{(8)}$ | (3) | 750 | 11 |
| Wooden containers Not elsewhere classifled | .4 | 5.4 | 94.2 | 961 | 13 |
| Not elsewhere classifled | . 4 | 6.6 | 93.0 | 861 | 16 |
| Machinery (not transportation) ${ }^{2}$ | . 2 | 5.6 | 94.2 | 766 | 15 |
| Agricultural machinery and tractors. | .3 | 10.1 | 89.6 | 771 | 14 |
| Construction and mining machinery- | .4 | 2.6 | 97.0 | 903 | 15 |
| Eleetrical equipment and supplies. | .2 | 7.0 | 92.8 | 740 | 17 |
| Food-products machinery- | 0 | 8.9 | 91.1 | 1,069 | 14 |
| Metalworking machinery....-- | . 2 | 4.1 | 95.7 | 694 | 13 |
| Textile machinery...-i...-.....-. | 0 | 4.6 | 95.4 | 681 | 16 |
|  | .$^{2}$ | 4.2 | 95.6 | 661 | 14 |
| General industrial machinery-- | .2 | 4.4 | 95.4 | 840 | 13 |
| Machinery, not elsewhere classifled | 0 | 4.5 | 95.5 | 731 | 13 |
| Repair shops..- | 1.1 | 2.6 | 96.3 | 343 | 11 |

[^3]Table 5.-Disability Distribution and Average Days Lost per Disability, by Industry, 1942-Continued

| Industry | $\underset{\text { Percent of injuries resulting }}{\text { in }}$ |  |  | Average days lost per disability |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Death and permanent total disability ${ }^{1}$ | $\left\|\begin{array}{c} \text { Perma- } \\ \text { nent } \\ \text { partial } \\ \text { disability } \end{array}\right\|$ | $\begin{gathered} \text { Tem- } \\ \text { porary } \\ \text { tistal } \\ \text { disability } \end{gathered}$ | $\begin{gathered} \text { Perma- } \\ \text { nent } \\ \text { partial } \\ \text { disability } \end{gathered}$ | Temporary total disability |
| Manufacturing-Continued |  |  |  |  |  |
| Paper and allied products ${ }^{\text {2 }}$ | 0.3 | 4.0 | 95.7 | 990 | 16 |
| Pulp.- | 1.5 | 2.7 | 95.8 | 1,031 | 17 |
| Paper-.-.-.-.--- | .3 | 4.1 | ${ }^{95.6}$ | 1,122 | 16 |
| Paper and pulp (integrated) | .7 | 4.0 | 95.3 95.3 | 1,135 | 18 |
| Folding boxes | $0^{.6}$ | 4.1 | ${ }_{95.5}^{95.3}$ | 698 | 12 |
| Corrugated boxes | 0 | 2.4 | 97.6 | 860 | 14 |
| Fiber boxes-... | 0 | 2.1 | 97.9 | 1,230 | 7 |
| Not elsewhere classified. | . 2 | 5.0 | 94.8 | 853 | 15 |
| Printing and publishing 2 . | . 2 | 5.3 | 94.5 | 1,151 | 15 |
| Book and job.-.- | .2 | 4.3 | 95.5 | 1,165 | 14 |
| News and periodical | $\stackrel{3}{3}^{3}$ | 4.2 | 95.5 | 1,066 | 16 |
| Bookbinding. | 0 | 10.0 | 90.0 | 1,275 | 15 |
| Rubber and its products ${ }^{2}$. | . 3 | 4.5 | 95.2 | 976 | 24 |
| Rubber tires.-..--..- | .5 | 4.2 | 95.3 | 995 | ${ }^{32}$ |
| Rubber boots and shoes | . 2 | 5.0 4.7 | ${ }_{95.1}^{95.0}$ | 1, 128 | 18 |
| Stone, clay, and glass products ${ }^{2}$ | 1.0 | 3.0 | 96.0 | 974 | 17 |
| Brick, tile, and terra cotta | . 6 | 1.7 | 97.7 | 1,037 | 13 |
| Cement | 3.7 | 8.3 | 88.0 | 1,109 | 32 |
| Glass.- | . 1 | 2.8 | 97.1 | 906 | 13 |
| Pottery- | 1.6 | 1.2 | 97.2 | 778 | 17 |
| Concrete, gypsum, and plaster produ | . 7 | 2.7 | 96.6 | 1,222 | 15 |
| Cut stone and cut-stone products. | 3.7 | 1.5 | 94.8 | 1,300 | 16 |
| Not elsewhere classified. | . 6 | 3.6 | 95.8 | 937 | 19 |
| Textiles and textile-mill products ${ }^{\text {2 }}$ | . 2 | 2.5 | 97.3 | 820 | 13 |
| Carpets and rugs | .3 | 8.5 | 91.2 | 1,259 | 17 |
| Clothing, men's.; | . 1 | 1.2 | 98.7 | 1, 253 | 11 |
| Cothing, Women's | ${ }^{0} .3$ | 1.8 | 98.2 96.6 | ${ }_{889}^{488}$ | 9 16 |
| Dyeing and finishing. | . 4 | 2.4 | 97.2 | 1,370 | 14 |
| Knit goods.........- | . 1 | 1.9 | 98.0 | 681 | 13 |
| Silk and rayon products, not elsewher | . 1 | 1.2 | 98.7 | 539 | 14 |
|  | $\stackrel{.}{2}$ | 3.6 3.7 | 96. 98 | 815 707 | 17 |
| Transportation equipment ${ }^{2}$. | . 3 | 3.8 | 95.9 | 900 | 16 |
| Motor vehicles. | . 5 | 6.5 | 93.0 | 688 | 14 |
| Shipbuilding | . 5 | 2.2 | 97.3 | 960 | 20 |
| Railroad equipment. | .5 | 5.1 | 94.4 | 672 | 24 |
| Aircraft------.-. | . 1 | 3.9 | 96.0 | 1,019 | 13 |
| Motor-vehicle parts | . 1 | 2.0 | 97.9 | 572 | 8 |
| Boatbuilding-.. | 0 | 16.3 | 83.7 | 925 | 15 |
| Aircraft parts...--- | .2 | 7.9 | 91.9 | 851 | 14 |
| Not elsewhere classified. | . 2 | 3.0 | 96.8 | 600 | 13 |
| Miscellaneous manufacturing ${ }^{2}$ | . 3 | 5.7 | 94.0 | 868 |  |
| Tobacco products.- | .2 | 4.0 | 95.8 | 733 | 12 |
| Radios and phonographs | . 4 | 6.0 | 93.6 | 771 | 12 |
| Smelting and refining (nonferrous) | . 6 | 4.0 | 95.4 | 1,268 | 18 |
| Nonferrous metal products. | . 2 | 6.7 | 93.1 | 741 | 14 |
| Brushes...---. |  | $\left.{ }^{3}\right)$ | ${ }^{3}$ | 581 | 11 |
| Brooms. |  |  |  | 600 | 9 |
| Coke ovens. | 1.4 | 2.5 | 96.1 | 1,071 | 17 |
| Not elsewhere classified. | . 2 | 6.5 | 93.3 | 897 | 13 |
| Ordnance and accessories ${ }^{\text {a }}$. | .4 | 8.2 | 91.4 | 717 | 14 |
| Guns and related equipment. | . 4 | 8.2 | 91.4 | 773 | 13 |
| Ammunitition, except for small arms. | . 3 | 5.5 | 94.2 | 593 | 14 |
| Tanks, military .-.--------------1. | . 4 | 7.9 | 91.7 | 767 | 19 |
| Sighting and fire-control equipment | .3 | 13.1 | 86.6 | 1,327 | 16 |
| Small arms.- | 1.3 | 15.9 | 82.8 | ${ }_{6}^{660}$ | 15 |
| Tank parts, military--- | $0^{.9}$ | 6.8 | 92.3 96 | 771 | 12 |

See footnotes at end of table.

Table 5.-Disability Distribution and Average Days Lost per Disability, by Industry, 1942-Continued

| Industry | Percent of injuries resulting |  |  | Average days lost per disability |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Death and permanent total disability ${ }^{1}$ | $\begin{gathered} \text { Perma- } \\ \text { nent } \\ \text { partial } \\ \text { disability } \end{gathered}$ | Tem- porary total disability |  | Temporary total disability |
| Construction Nonmanufacturing |  |  |  |  |  |
| Building - | 1.8 | 1.8 | 97.4 | 1,499 | 16 |
| Heavy engineering | 1.1 | 3.1 | 95.8 | 1,175 | 15 |
| Highway--......--- | 1.1 | 1.7 | 97.2 | 1,218 | 13 |
| Not elsewhere classified | 1.2 | 3.0 | 95.8 | 1,304 | 14 |
| Communication: Telephone.. | . 7 | . 2 | 99.1 | 638 | 17 |
| Transportation. | . 9 | 6.4 | 92.7 | 1,063 | 17 |
| Streetcar | . 8 | 1.0 | 98.2 | 1,300 | 19 |
| Bus. | . 7 | 4.2 | 95.1 | 1,333 | 14 |
| Both streetcar and bus. | 1.2 | 1.1 | 97.7 | 1,587 | 18 |
| Trucking and hauling. | . 9 | .$^{7}$ | 98.4 | 1,325 | 14 |
| Warehousing and storage. | (2) 5 | ${ }^{0}$ | 99.5 | ${ }^{0}$ | 11 |
| Pipe lines (except natural gas) | (8) | (3) | (3) | 750 0 | ${ }_{16}^{17}$ |
| Heat, light, and power- | 1.8 | 2.3 | 95.9 | 1,524 | 20 |
| Electric light and power | 2.2 | 2.5 | 95.3 | 1,554 | 21 |
| Gas.. | . 6 | 1.4 | 98.0 | 1,328 | 16 |
| Waterworks | ${ }^{(8)}$ | ${ }^{(3)}$ | ${ }^{(3)}$ | 300 | 13 |
| Personal services. | .4 | 1.9 | 97.7 | 1,135 | 14 |
| Dry cleaning | 1.0 | 1.0 | 98.0 | 750 | 12 |
| Laundries.-- | 2 | 2.8 | 97.0 | 920 | 14 |
| Laundry and dry cleaning combined | . 5 | 2.4 | 97.1 | 1,438 | 15 |
| Amusements and related services.- | (3) | ${ }^{(8)}$ |  | 0 | 20 |
| Hoters, and eating and drinking places | (3) 4 | (3) 9 | 98.7 | 729 | 14 |
| Miscellaneous personal services........ | (3) ${ }^{\text {a }}$ | (3) |  | 500 | 16 |
| Business services. | . 7 | 1.1 | 98.2 | 1,210 | 16 |
| Banks and other financial agencies. |  | (3).9 | 99.1 | 1,200 | 15 |
| Insurance. | ${ }^{(3)}$ | ${ }^{(3)}$ | ${ }^{(3)}$ | 0 | 19 |
| Real estate. | 0 | .9 | 99.1 | 300 | 19 |
| Miscellaneous business services. | 1.4 | 1.7 | 96.9 | 1,580 | 13 |
| Educational services | (3) | (8) | ${ }^{(3)}$ | 0 | 8 |
| Trade : | . 3 | 1.8 | 97.9 | 914 | 15 |
| Wholesale distributors | . 4 | 1.8 | 97.8 | 873 | 14 |
| Retail, general merchandise. | . 1 | 1.1 | 98.8 | 1,220 | 14 |
| Retail, , 0 d- | . 1 | 2.0 | 97.9 | 795 | 16 |
| Wholesale and retail dairy products. | . 4 | 1.3 | 98.3 | 1,136 | 15 |
| Retail, automobiles.. |  |  | \%8.3 | 814 | 13 |
| Filling stations.- | (3) | ${ }^{(3)} 1.4$ |  | 950 | 17 |
| Retail, apparel and accessories | ${ }^{0}$ | 1.4 | 98.6 | 800 781 | 18 |
| Miscellaneous retail stores....-. Wholesale and retail trade combined. | .6 .4 | 2.8 1.3 | 96.6 98.3 | 781 600 | 17 14 |

[^4]
## PARTS OF BODY PERMANENTLY.IMPAIRED

Because of the considerable interest displayed by safety men in injuries to various parts of the body-evidencing needs for hard hats, goggles, safety shoes, etc.-the distribution of permanent impairments according to body part injured is again given this year. On the whole, table 6 reveals little change from that for the year 1941.


Table 6.-Distribution of All Reported Injuries Resulting in Permanent Partial Disability, According to Part of Body Affected, by Industry, 1942

| Industry | Total | Percent of permanent partial disability cases involving the loss, or loss of use, of- |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\begin{gathered} \text { An } \\ \text { arm } \end{gathered}$ | $\begin{gathered} \text { A } \\ \text { hand } \\ \text { or } \\ \text { fin. } \\ \text { gers } \end{gathered}$ | A leg | $\left.\begin{gathered} \text { A foot } \\ \text { or } \\ \text { toes } \end{gathered} \right\rvert\,$ | $\underset{\text { eyn }}{\text { An }}$ | One or both ears (hear | Other |
| Manufacturing |  |  |  |  |  |  |  |  |
| Total, manufacturing | 100 | 3 | 79 | 2 | 8 | 5 | (1) | 3 |
| Ohemical products | 100 | 5 | 68 | 3 | 10 | 7 | ( ${ }^{\text {d }}$ | 7 |
| Drugs, toiletries, and insecticides | 100 | 2 | 83 | 2 | 4 | 0 | 0 | 9 |
|  | 100 | ${ }_{2}^{2}$ | 88 | 2 | 1 | 5 | 2 | 0 |
| Fertilizers | 100 | 12 | 55 | ${ }_{8}$ | 12 | 15 | 0 | 3 |
| Paints and varnishe | 100 | 2 | 40 | 8 | 15 | 10 | 0 | 25 |
| Petroleum refining---.-- | 100 100 | 3 5 5 | 57 58 58 | 1 | 12 | 10 10 | 0 0 | ${ }^{6}$ |
| Soap and glycerin- | 100 | 6 | 76 | 3 | ${ }_{3}$ | ${ }_{6}^{6}$ | 0 | 6 |
| Industrial chemicals | 100 | 8 | 66 | 2 | 11 | 5 | 1 | 7 |
| Not elsewhere classified. | 100 | 4 | 84 | 1 | 3 | 8 | 0 | 0 |
| Food products | 100 | 5 | 67 | 4 | 12 | 3 | (1) | 9 |
| Baking | 100 | 5 | 80 | 1 | 8 |  | 0 | 6 |
| Canning and preserving | 100 | ${ }_{3}$ | 75 | 5 | 5 | 5 | 0 | 7 |
| Confectionery- | 100 | 2 | 92 | 0 | 4 | 0 | 0 | 2 |
| Flour, feed, and other grain-mill prod | 100 |  | 88 | 2 | ${ }_{8}^{0}$ |  |  | 0 |
| Slaughtering and meat packing----- | 100 | 3 7 | 79 56 | 4 7 | 8 19 | 3 9 9 | (1) | 3 |
| Breweries | 100 | 6 | 44 |  | 22 | 2 | 0 | 21 |
| Iron and steel and their products | 100 | 1 | 80 | 2 | 7 |  |  |  |
| Iron and steel | 100 | 2 | 78 | 3 | 6 | 7 | (1) | 4 |
| Cutlery and edge tools | 100 |  | 92 | 0 | 0 |  |  | 0 |
| Fabricated structural steel | 100 | 1 | $\stackrel{69}{88}$ | 2 | 18 | ${ }_{6}^{6}$ | 0 | 4 |
| Forgings | 100 | 1 | 88 | 1 | 7 | 3 | 0 | 0 |
| Hardware. | 100 | 2 | ${ }_{93}^{72}$ | 1 | 10 | 10 | 0 | 5 |
| Ornamental metalwork | 100 | 0 | 75 | 0 | 10 | 5 | 0 | 10 |
| Plumbers' supplies | 100 | 0 | 89 | 0 | 6 | 3 | 0 | 2 |
| Stamped and pressed metal products | 100 | 1 | 92 | 0 | 2 | 2 | 0 | 3 |
| Steam fittings and apparatus. | 100 | 0 | 69 | 2 | 13 | 8 | 0 | 8 |
| Stoves and furnaces, not electric | 100 | 0 | 91 | 0 | 2 | 5 | 0 | 2 |
| Tin cans and other tinware | 100 | 0 | 97 | 3 | 0 | 0 | 0 | 0 |
| Tools, except edge tools- | 100 100 | 2 0 | 80 89 | 1 0 | 12 2 | 5 9 | 0 0 | 0 |
| Not elsewhere classified. | 100 | 1 | 83 | 0 | 2 | 5 | 0 | 7 |
| Leather and its products. | 100 | 1 | 90 | 1 | 1 | 6 |  |  |
| Leather --- | 100 | 2 | 90 | 2 | 2 | 4 | 0 | 0 |
| Boots and shoes | 100 | 1 | 90 | 0 | 0 | 8 | 0 | 1 |
| Lumber, lumber products, and furniture | 100 | 3 | 82 | 3 | 5 | 4 | 0 | 3 |
| Logging. | 100 |  | 53 | 9 | 9 | 10 | 0 | 12 |
| Planing mills | 100 | 3 | 85 | 1 | 7 | 2 | , |  |
| Sawmills- | 100 | 4 | 72 | 7 | 5 | 7 | 0 | 5 |
| Furniture, except metal | 100 | 2 | 88 | 1 | 4 | 3 | , |  |
| Furniture, metal ----- | 100 | 0 | 93 | 0 | 0 | 7 | 0 | 0 |
| Partitions, shelving, and store fixtures | 100 | 0 | 96 <br> 88 <br> 8 | 4 | 0 | 4 | 0 | 0 |
| Wooden containers---- | 100 100 | 2 | 88 | 4 | 2 | 4 | 0 | 0 |
| Not elsewhere classified | 100 | 3 | 87 | 1 | 4 | 4 | 0 | 1 |
| Machinery (not transportation) | 100 | 2 | 82 |  | 7 | 5 |  |  |
| Agricultural machinery and tractors. | 100 | 2 | 86 74 | 2 | 5 | 5 | 0 | 1 |
| Construction and mining machinery- | 100 | $\stackrel{2}{2}$ | 74 | 2 | 8 | 13 | 0 | 1 |
| Electrical equipment and supplies | 100 | 2 | 88 | 1 | 5 | 2 | 0 | 2 |
| Food-products machinery- | 100 | 7 | 73 79 | $\stackrel{0}{2}$ | 17 | 0 |  | ${ }_{2}$ |
| Textile machinery--.-.-.-.-.-. | 100 | 0 | 85 | 3 | 3 | 6 | 0 | 3 |
| Special industry machinery, not elsewh sified | 100 |  | 84 |  |  |  |  |  |
| General industrial machinery--.-.-. | 100 | 2 | 81 | 2 | 6 | 6 | (1) | 3 |
| Machinery, not elsewhere classifed | 100 | 2 | 88 | 0 | 5 | 5 | 0 | 0 |
| Paper and allied products_ | 100 | 5 | 81 | 3 | 6 | 3 |  |  |
| Paper | 100 | 6 | 75 | 2 | 8 | 4 | 1 | 4 |
| Paper and pulp (integrated) | 100 | 4 | 79 |  | 5 | 5 | 0 | 2 |
| Folding boxes | 100 | 7 | 80 | 5 | 5 | 5 | 0 | 0 |
| Set-up boxes...- | 100 100 | 7 | 89 <br> 90 <br> 8 | 0 5 | 4 5 | 0 | 0 | 0 |
| Not elsewhere classified. | 100 | 4 | 87 | 1 | $\stackrel{5}{5}$ |  | 0 | 2 |

[^5]Table 6.-Distribution of All Reported Injuries Resulting in Permanent Partial Disability, According to Part of Body Affected, by Industry, 1942-Continued


1 Less than half of 1 percent.

## Trend of Disabling Injuries in Manufacturing Industries

The year 1942 was the fourth such period showing an upward trend in disabling work injuries in manufacturing. The experience of about 21,000 identical establishments which reported both in 1941 and 1942 indicates an increase in the all-injury index of 9 percent, from 85.8 to 93.5. As already pointed out, however, all of this increase came in the group of temporary total disabilities. Death and permanent total disabilities, reversing the upward trend since 1939, dropped from an index point of 80.3 to 70.7. Permanent partial disabilities dropped similarly, from 93.7 to 83.4. Only the index for temporary total disabilities continued upward, from 86.3 in 1941 to 94.1 in 1942.

The data from 1926 (the base year for the index) onward, are shown in table 7 and graphically on chart 3.


Table 7.-Indexes of Injury Frequency Rates in Manufacturing, 1926-42, by Extent of Disability ${ }^{1}$

| [1926 $=100$ ] |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| Year | All injuries | Death and permanent total | $\underset{\text { partial }}{\text { Permanent }}$ | $\underset{\text { total }}{\text { Temporary }}$ |
| 1926 | 100.0 | 100.0 | 100.0 | 100.0 |
| 1927. | 93.6 | 107.1 | 96.3 | 93.3 |
| 1928 | 93.2 | 107.1 | 104.6 | 92. 5 |
| 1929 | 99.2 | 92.9 | 109.2 | 98.7 |
| 1930 | 95.5 | 107.1 | 111.0 | 94.6 |
| 1931 | 78.0 | 92.9 | 102.8 | 76.5 |
| 1932. | 80.9 | 107.1 | 113.8 | 78.9 |
| 1933 | 91.8 | 85.7 | 110.1 | 90.8 |
| 1934 | 93.6 | 107.1 | 128.4 | 91.6 |
| 1935 | 88.1 | 92.9 | 121.1 | 86.2 |
| 1936 | 85.7 | 85.7 | 114.7 | 84.1 |
| 1937 | 85.8 | 85.7 | 122.0 | 83.7 |
| 1938. | 71.7 | 71.4 | 78.9 | 68.1 |
| 1939 | 73.4 | 71.4 | 80.7 | 73.9 |
| 1940 | 75.3 | 71.4 | 84.8 | 75.6 |
| 1941 | 85.8 | 80.3 | 93.7 | 86.3 |
| 1942 | 93.5 | 70.7 | 83.4 | 94.1 |

${ }^{1}$ Beginning with 1937, the indexes are based on the percent of change of the frequency rates of identical establishments in each pair of successive years.


[^0]:    ${ }^{1}$ Figures in parentheses show the number of permanent-total disability cases included.
    2 The frequency rate is the average number of disabling injuries for each million employee-hours worked. The severity rate is the average number of days lost for each thousand employee-hours worked. The standard time-loss ratings for fatalities and permanent disabilities are given in Method of Compiling Industrial Injury Rates, approved by the American Standards Association, 1937.
    ${ }^{3}$ Weighted by Bureau of Labor Statistics employment data. ${ }^{4}$ Tabulated by operating units instead of by establishment. s Tabulated by company instead of by establishment.

[^1]:    1 Weighted by Bureau of Labor Statistics employment data.
    Less than 0.5.
    ${ }^{2}$ Totals include figures for industries not shown separately.
    4 Tabulated by operating units instead of by establishment.
    ${ }^{3}$ Tabulated by company instead of by establishment.

[^2]:    ${ }^{1}$ Includes data for industries not shown separately because of insufficient coverage upon which to bas ${ }^{\text {e }}$ industry estimates.
    ${ }^{3}$ This classification includes construction, mining, and food-products machinery.

[^3]:    See footnotes at end of table.

[^4]:    ${ }^{1}$ Each death or permanent total disability is charged with a time loss of 6,000 days.
    $\$$ Weighted by Bureau of Labor Statistics employment data.
    i Computations not given because of small number of injuries.

[^5]:    ${ }^{1}$ Less than half of 1 percent.

