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REPORT OF WORK INJURIES TO MINORS UNDER 18 YEARS OF AGE, A
STUDY OF 18 MONTHS' EXPERIENCE REPORTED BY 28 STATES,
1964-65.

BUREAU OF LABOR STANDARDS, WASHINGTON, D.C. (DOL)

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DESCRIPTORS- *INJURIES, *EMPLOYEES, *YOUTH, *STATISTICAL
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THE BUREAU OF LABOR STANDARDS FURNISHED REPORT FORMS AND
GUIDES FOR COMPLETING THEM TO THE 28 PARTICIPATING STATES.
DATA WERE COLLECTED BY MAIL ON A VOLUNTARY REPORTING BASIS
DURING THE 18-MONTH PERIOD, JANUARY 1964 THROUGH JUNE 1965.
FINDINGS INCLUDED -- (1) A TOTAL OF 16,936 INJURIES TO
EMPLOYED MINORS UNDER 18 YEARS OF AGE WAS REPORTED, (2) OF
THESE, MORE THAN 60 PERCENT OCCURRED IN THE WHOLESALE AND
RETAIL TRADE AND SERVICE INDUSTRIES, (3) MANUAL HANDLING OF
MATERIALS AND EQUIPMENT RESULTED IN THE GREATEST NUMBER OF
INJURIES, (4) MOST INJURIES, 46.4 PERCENT, OCCURRED WHEN
WORKERS WERE STRUCK BY OR AGAINST OBJECTS, AND (5) MOST
INJURIES, 42.9 PERCENT, WERE CUTS, ABRASIONS, PUNCTURES, AND
BITES, BUT MANY OTHER KINDS OF MORE SERIOUS INJURIES WERE
REPORTED. EXAMPLES OF THE FATALITIES AND INJURIES REPORTED
ARE LISTED FOR THE FIELDS OF AGRICULTURE, CONSTRUCTION,
MANUFACTURING, TRANSPORTATION, WHOLESALE TRADE, RETAIL TRADE,
SERVICES, AND GOVERNMENT. RECOMMENDATIONS WERE MADE FOR
IMPROVING SAFETY PROGRAMS IN SCHOOLS AND ON THE JOB,
PROVIDING PERSONAL PROTECTIVE EQUIPMENT, AND IMPROVING
EXISTING HAZARDOUS-OCCUPATIONS PROHIBITIONS TO INSURE THAT
THEY AFFORD SUFFICIENT PROTECTION TO EMPLOYED MINORS. (PS)

Bulletin 282

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Report of Work Injuries to Minors Under 18 Years of Age

*A Study of 18 Months' Experience
Reported by 28 States
1964-65*



U.S. DEPARTMENT OF LABOR
W. Willard Wirtz, Secretary
BUREAU OF LABOR STANDARDS
Nelson M. Bortz, Director

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
OFFICE OF EDUCATION

Bulletin 282

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Report of Work Injuries to Minors Under 18 Years of Age

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Reported by 28 States, 1964-65*



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PREFACE

This report is based on the number, nature, source, industry, and other characteristics of the injuries reported. It is hoped that this report will help to identify the how, where, and why of injury occurrence and assist in promoting safe working conditions, work attitudes, and habits for all young workers. The data in this report have statistical limitations, a discussion of which is contained in the report.

A preliminary report of this study, "Summary of Work Injuries to Minors Under 18 Years of Age, 1964," was published by the Bureau in April 1965. The statistical pattern of that report is similar to that presented here. The extended time-period coverage in this presentation further substantiates the preliminary findings. This report also contains additional information and more specific recommendations.

This report was prepared by the staff of the Branch of Youth Standards in the Division of State Services and Standards.

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REPORT OF WORK INJURIES TO MINORS UNDER 18 YEARS OF AGE

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SUMMARY

More than 5 million persons under 18 years of age are employed in the United States each year. There are no national figures which show the number of injuries occurring to these workers in the course of their employment. In an effort to develop information on the occurrence of work injuries and to improve the effectiveness of accident prevention efforts for young workers, the Bureau of Labor Standards, in cooperation with 28 States, has completed a study of work injuries to minors under 18 years of age during the 18-month period January 1964 through June 1965. Participating States were Alabama, Arkansas, California, Connecticut, Delaware, Florida, Idaho, Illinois, Indiana, Kansas, Kentucky, Maryland, Michigan, Minnesota, Montana, Nebraska, Nevada, New Jersey, New Mexico, North Dakota, Ohio, Pennsylvania, Rhode Island, South Carolina, Tennessee, Utah, Wisconsin, and Wyoming.

This study shows:

- A total of 16,936 injuries to employed minors under 18 was reported by 28 States.
- Many of these injuries were serious, resulting in fatalities, amputations, loss of use of body parts, strains, hernias, crushed body parts, burns, and fractures.
- Based on the activity in which the worker was engaged at the time of injury, manual handling of materials and equipment resulted in the greatest number of injuries. This was followed by servicing activities (oiling equipment and machinery, servicing cars, adjusting equipment, etc.); using handtools; cleaning, washing, and clearing; and operating power-driven machines.
- The largest numbers of injuries reported occurred in the wholesale and retail trade, services, and manufacturing. Agriculture and contract construction ranked fourth and fifth, respectively.

- The serious nature of injuries occurring in the various industries is indicated in this report. Food and kindred products showed a sizable proportion of injuries resulting in amputations, while strains, sprains, and hernias were high in hotels and lodging places. Crushing injuries appeared to be similarly represented in all industries. Burns and scalds occurred often in eating and drinking places and in gasoline service stations. Fractures were frequently reported in all industrial classifications.
- Machines, working surfaces (floors, stairs, roads, etc.), containers (boxes, crates, cartons, etc.), vehicles, and hot substances were the leading sources in the majority of the injuries of a more serious nature reported. Handtools, although typically not resulting in serious injuries, accounted for a large number of the reported cases.
- The leading accident type was that in which the injured person was struck by or against an object. The second most common type was falls. The third was that in which the worker was caught in, under, or between objects. Overexertion accounted for a high percentage of all reported injuries.
- The large number of back strains emphasizes the importance of proper instruction in lifting, carrying, and handling materials.
- Amputations, fractures, crushing injuries, and burns and scalds were primarily to hands, fingers, feet, and toes.

STUDY METHOD AND LIMITATIONS

Method

The data used in this report were collected by mail on a voluntary reporting basis. To ensure as much uniformity as possible, the Bureau furnished the 28 participating States with report forms and guides for completing these forms. The reports received were edited, coded, and tabulated individually by Bureau staff, and combined uniformly to develop the 18-month totals for each injury category. Industry classifications used were from the Standard Industrial Classification manual, and occupational titles were those identified in the Dictionary of Occupational Titles.

Although presenting some limitations, this method provided a more comprehensive and detailed picture than would have been possible on an individual State basis.

Limitations

It was not possible, on the basis of the data furnished, to establish injury-frequency and severity rates, nor to make comparisons with the work injury experience of adults. To establish such rates and com-

parisons would have required data on the total number of hours worked by adults and by youth under 18 in the 28 States as well as the time lost for each injury reported. Collection of such data would have required a much more extensive study, with a much heavier reporting burden on the participating States. And lack of information on work exposure in specific industries or occupations precludes any statistical evaluation of the relative significance of any injury component treated.

Comparison of injury occurrence on an industry-to-industry basis cannot be made because of variations in individual State classification methods and injury reporting requirements.

Comparison of one State's experience with that of another is impractical because of variations in child-labor laws and regulations and differences in State injury reporting requirements; for example, a few States require reporting on all work injuries, while other States allow exemptions based on number of employees, kind of industry, amount of time lost per injury, etc. (See chart 1 below, Requirements for Reporting Work Injuries, by State.) Because of variations in State classification methods and reporting requirements, information on occupations was not sufficiently comprehensive to be included in this summary.

For the reasons stated above, the 16,936 injuries reported do not represent a nationwide experience or the total number of injuries actually occurring in these States.

CHART 1.—Requirements for Reporting Work Injuries, by State ¹

State	Type of reportable injury provision	Numerical exemption (number of employees) ²	Coverage provision in agriculture
Alabama	Compensable ³	Fewer than 8	Prohibited.
Arkansas	Lost-time or medically treated.	Fewer than 5 ⁴	Voluntary.
California	Lost-time or medically treated.	None	All farmworkers.
Connecticut	Lost-time	Fewer than 2	All farmworkers. ²
Delaware	All injuries	Fewer than 3	Voluntary.
Florida	All injuries	Fewer than 3	Partial. ⁵
Idaho	Lost-time	None	Voluntary.
Illinois	Compensable ³	None	Voluntary.
Indiana	Lost-time	None	Voluntary.
Kansas	Lost-time	Fewer than 5 ⁴	Voluntary.
Kentucky	Lost-time	Fewer than 3	Partial. ⁵

See footnotes at end of table.

CHART 1.—Requirements for Reporting Work Injuries, by State¹—Continued

State	Type of reportable injury provision	Numerical exemption (number of employees) ²	Coverage provision in agriculture
Maryland.....	Compensable traumatic or lost-time occupational disease. ³	None.....	Joint action by both the employer and the employee.
Michigan.....	Compensable ³	None.....	Voluntary.
Minnesota.....	Lost-time.....	None.....	Partial. ⁵
Montana.....	Lost-time or medically treated.	None.....	Voluntary.
Nebraska.....	All injuries.....	None.....	Voluntary.
Nevada.....	All injuries.....	Fewer than 2....	Voluntary.
New Jersey.....	Lost-time or medically treated.	None.....	All farmworkers.
New Mexico.....	All injuries.....	Fewer than 4 ⁴ ...	Voluntary.
North Dakota.....	All injuries.....	None.....	Voluntary.
Ohio.....	All injuries.....	Fewer than 3....	All farmworkers. ²
Pennsylvania.....	Lost-time.....	None.....	Voluntary.
Rhode Island.....	Compensable ³ or medically treated.	Fewer than 4....	Voluntary.
South Carolina.....	Lost-time or medically treated.	Fewer than 15...	Voluntary.
Tennessee.....	Compensable ³	Fewer than 5....	Law silent on subject.
Utah.....	Lost-time or medically treated.	None.....	Voluntary.
Wisconsin.....	Compensable ³	Fewer than 3....	Partial. ⁵
Wyoming.....	Lost-time.....	None.....	Partial. ⁵

¹ Reports from the majority of those States participating in this injury study were submitted by that State's workmen's compensation agencies. Therefore, the injuries referred to in these reports were influenced by the provisions of those State's workmen's compensation laws in the three areas covered by this table. The information contained in this table was extracted from the following sources: "Guide To Work Injury Reporting, United States and Canada, 1960," "International Association of Industrial Accident Boards and Commissions," and "State Workmen's Compensation Laws," U.S. Department of Labor, Bureau of Labor Standards, 1964.

² Workers exempted if employers have fewer employees than number indicated (however, in most of these States such workers may be brought under act voluntarily).

³ A waiting period ranging from 3 to 7 days applies for compensation purposes, but in some cases may be retroactive for periods of disability extending from 10 days to 4 weeks.

⁴ Application varies under certain prescribed conditions and for specified industries.

⁵ In Florida, employees performing agricultural labor on the farm of a bona fide farmer or association of farmers are exempt; coverage in Kentucky, Minnesota, and Wyoming extends only to those engaged in certain mechanized or power occupations; and coverage in Wisconsin is dependent upon the number of workers and the length of time they work.

INJURY CHARACTERISTICS

Knowledge of the kinds of injuries occurring is essential to a complete evaluation of the work injury experience of young workers. The discussion that follows presents the major observations resulting from this survey and includes detailed tabulations in the appendix tables cited for each category treated.

Injury Occurrence

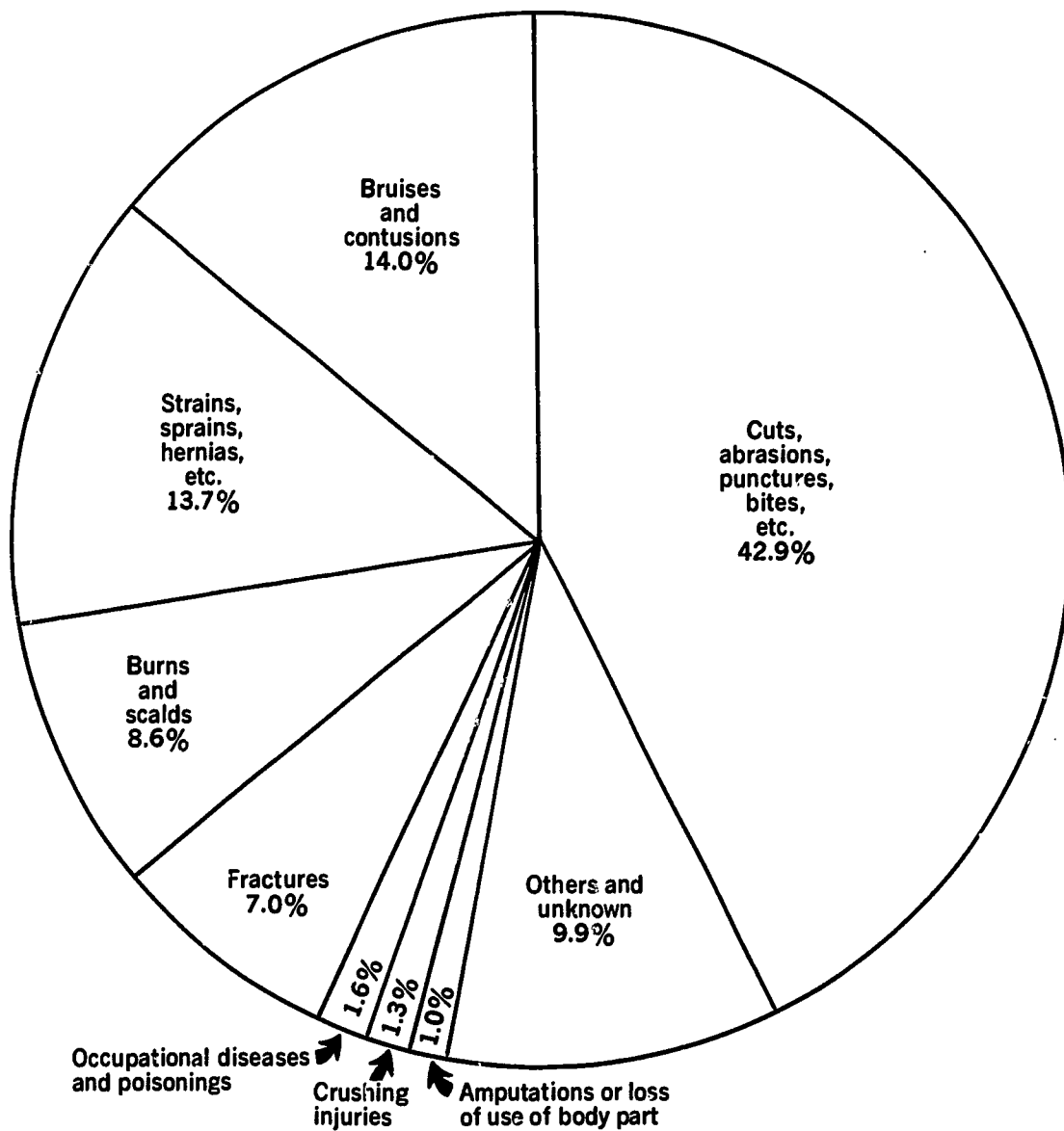
The total number of injuries reported in the major industrial classifications appears in table 1. Of the total, more than 60 percent occurred in the wholesale and retail trade and service industries. However, large numbers of injuries were reported in each of the other classifications shown.

Caution should be used in interpreting the rankings indicated. For example, the conclusion that wholesale and retail trade is more hazardous than agriculture would be unjustified because of the limitations of the data described in the previous section.

Nature of Injuries

The nature of all reported injuries is shown in chart 2, p. 6. Most injuries were cuts, abrasions, punctures, bites, etc., but, as the chart shows, many strains, sprains, hernias, and other kinds of more serious injuries were reported.

Table 2 gives some indication of the serious nature of injuries occurring in various industries. Generally, among injuries of a serious nature, amputations and loss of use of a body part accounted for only 1 percent of injuries reported from all industries combined, but were more than 3 percent of all injuries for workers in lumber, wood products, and furniture, and over 2 percent of those in food and kindred products. Strains, sprains, and hernias comprised more than 19 percent of the injuries in hotels and lodging places. Injuries of this type were also high in personal services; in transportation, communications, etc.; and in contract construction; agriculture; and manufacturing. Crushing injuries accounted for slightly more than 1 percent of the injuries in all industries combined, but were 2 percent and above in agriculture, manufacturing, wholesale trade, and the transportation, communications, gas, electric, and sanitation industry. However, lumber, wood products, and furniture manufacturing, with 4.6 percent crushing injuries, showed a considerably higher percentage than the others reported.

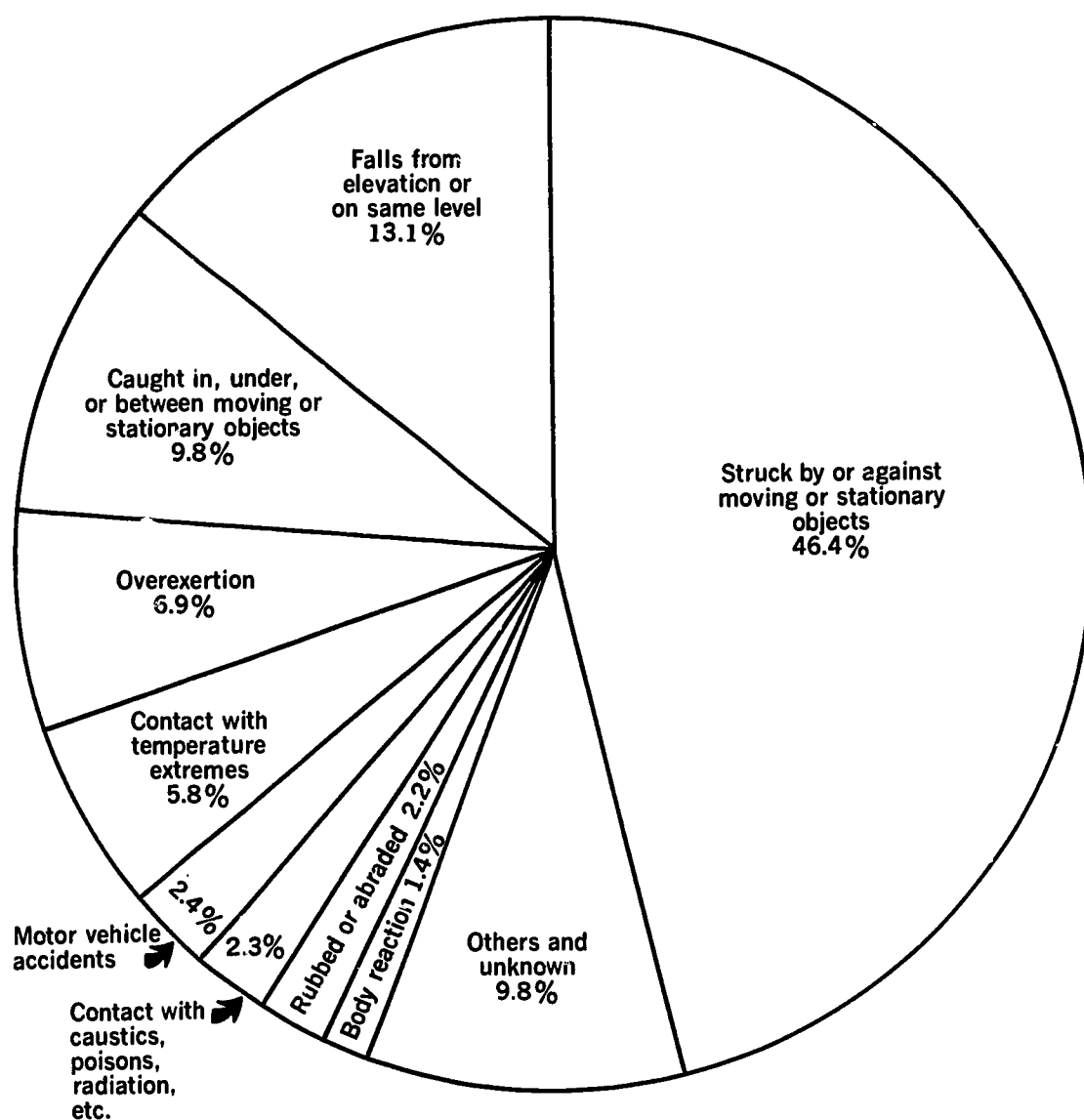


U.S. DEPARTMENT OF LABOR
Bureau of Labor Standards

Source: Based on a
compilation of 16,936
injuries

CHART 2.—*Nature of Work Injuries to Minors Under 18, January 1964–June 1965.*

Injuries frequently considered of a less serious nature were numerous in a variety of industrial classifications. For example, burns and scalds were considerably greater in eating and drinking places and in automobile service stations (22.9 and 20.5 percent, respectively), while they averaged 8.6 percent for all industries. Fractures, cuts, and bruises and contusions were substantial for all industries.



U.S. DEPARTMENT OF LABOR
Bureau of Labor Standards

Source: Based on a
compilation of 16,936
injuries

CHART 3.—Types of Accidents to Employed Minors Under 18, January 1964–June 1965.

The activity in which the worker was engaged at the time of injury is shown in table 3. Manual handling showed that 28.7 percent of all injuries were strains, sprains, hernias, etc. This percentage was exceeded only by the category cuts, abrasions, punctures, bites, etc. Strains, sprains, hernias, etc., also accounted for a large percentage of injuries received while the worker was climbing (28.5 percent) and walking (20.8 percent). The categories mentioned also show a high

percentage of bruises and contusions among the total injuries attributed to these activities.

Information about the nature and source of injuries is shown in table 4. Of all amputations, 117 were caused by machines. Strains, sprains, hernias, etc., were recorded for 481 injuries from working surfaces and 447 from containers, etc.; bodily motion and vehicles also figured prominently in these injuries.

Many injuries were classified as cuts, abrasions, punctures, bites, etc.; bruises and contusions; and burns and scalds. Among these three classifications, the excessive number of cuts, etc., attributed to non-powered handtools (1,695) and machines (1,039) was most notable.

Table 5 contains details on the part of the body that sustained injury. Of the total reported number of amputations or loss of use of a body part, 126 were finger injuries. The large number of strains, sprains, hernias, etc., were concentrated in 1,086 trunk injuries, 761 of which were to the back. Crushing injuries seem noteworthy, especially those resulting in multiple body injuries. Most of the 1,193 fractures were confined to the upper and lower extremities (arms, wrists, fingers, legs, feet, toes, etc.).

Accident Types

Chart 3 and table 6 (pp. 7 and 24) give detailed information on the types of accidental injuries reported in this study. Most injuries (46.4 percent) occurred when the workers were struck by or against objects. Falls were the second most common type of injury, followed by workers getting caught in, under, or between objects. This pattern appeared in all the major industry classifications. Nearly 52 percent of the injuries reported for retail trade was in the category "struck by or against" an object; in contract construction, the figure was 46.4 percent; wholesale trade, 45.6; and services, 43.9 percent.

Machine Injuries

Injuries of a potentially serious nature involving the use of machines were frequently reported in this study. The table on p. 9 shows examples of the machines which were identified and the selected nature of the 1,651 injuries caused by them.

Outstanding are the 381 injuries from meat slicers, 109 from saws, and 53 from meat grinders. These three types of machines accounted for 54 of the amputations reported, while slicers alone accounted for 30.

The largest number of machine injuries were cuts. Two machines, meat slicers and saws, were the chief sources of these injuries.

Machines	Nature of injury			
	Total	Amputations or loss of use of body part	Cuts, abrasions, punctures, bites, etc.	All others ¹
Total.....	1, 651	117	1, 024	510
Agitators.....	49	5	18	26
Buffers.....	52	2	26	24
Meat grinders.....	53	15	28	10
Lawnmowers.....	60	10	34	16
Saws.....	109	9	87	13
Meat slicers.....	381	30	337	14
Other machines.....	328	22	145	161
Machines, n.e.c.....	619	24	349	246

¹ Includes bruises and contusions, burns and scalds, crushing injuries, fractures, strains and sprains, others, and unclassified.

EXAMPLES OF ACCIDENTS

The following accident cases are illustrative of the fatalities and injuries reported during the course of the study.

Agriculture

- A 15-year-old maintenance worker was electrocuted when a pipe he was moving touched a high-voltage wire.
- A power mower amputated parts of three toes of a 15-year-old boy when his foot slipped while he was working as a grounds helper.
- The left foot of a 15-year-old farm laborer was partially amputated when it was caught in the drive mechanism of a conveyor.
- A 16-year-old boy had his great toe amputated when it was caught under a power lawnmower.
- The hand of a 16-year-old ranch hand was caught in a haybaler and crushed.

Construction

- A plumber's helper, aged 15, was electrocuted when he picked up the sewer auger while holding an electric drill.
- A 16-year-old laborer fell and was crushed under the descending hoist platform he was unloading on an upper floor.

- A cave-in resulted in the suffocation of a 17-year-old laborer employed by a plumbing and heating firm.
- A jointer amputated three fingers of a 17-year-old laborer who was employed by a general building contractor.
- A 17-year-old construction laborer, attempting to brush wood chips away from the blade of a saw, lost the first finger of his left hand.
- An earthmoving machine amputated the foot of a 16-year-old construction laborer.
- A metal worker, aged 16, employed by a heating and air-conditioning firm, lost the middle finger of his right hand when he slid his hand under the guard blade of a squaring shear.
- A finger of a 17-year-old construction worker was amputated when it was caught under a wooden beam that was being moved.
- A 17-year-old carpenter of a construction firm had a finger amputated when it was caught in the backhoe of a tractor.
- A 16-year-old laborer had his finger amputated by a saw as he was removing boards.

Manufacturing

- A punch press operator, aged 17, lost three fingers while operating the press.
- The legs of a 17-year-old press operator, employed by a corrugated box manufacturer, were crushed when they were caught in a press.
- A box manufacturing firm employee, a 17-year-old boy, had his finger amputated when it was caught between the roll and the cylinder.
- A 17-year-old girl, employed as a cutter by a manufacturer of children's wear, had a finger amputated while showing another employee how to use the cutting machine.
- A laborer, aged 17, employed by a firm engaged in lumbering, amputated two fingers while ripping a board in the carpentry shop.
- The fingers of a 17-year-old laborer were amputated while he was mitering a board in a furniture and millwork establishment.
- A 16-year-old laborer had one finger and part of another amputated while using a jointer.
- While he was operating a moulding machine, a 16-year-old machine operator's three fingers were crushed and later surgically removed.

Transportation

- A laborer, aged 17, was killed when the truck he was driving overturned.
- The thumb of a 16-year-old helper, employed by a refuse collection firm, was amputated when it was caught in a container.

- As a result of a truck accident, the 17-year-old driver's leg was amputated.
- A refuse collection firm's helper, aged 16, was absent from work for almost 500 days as a result of multiple fractures he received when struck by a truck.

Wholesale Trade

- While lighting a torch, a scrapyard worker received fatal burns from a flareback.
- A laborer, aged 16, had five toes amputated by a grain auger when he slipped into the pit from a truck at a grain elevator.
- A 15-year-old employee of a wholesale grocery firm lost a finger when it was caught in a meat grinder that he was operating.

Retail Trade

- A 16-year-old employed in an eating and drinking establishment was fatally injured when he fell against a knife.
- A fountain clerk, aged 17, was fatally injured in a motor vehicle accident as he was making deliveries.
- Fatal injuries were sustained by a 17-year-old service station attendant when the automobile he was driving ran off the road and struck a concrete abutment.
- A meat clerk, aged 16, employed in a retail meat and grocery store, apparently turned on a meat grinder while cleaning it to run out excess meat. He became caught in the grinder and amputated his right arm 2 to 3 inches below the elbow.
- A finger of a 16-year-old butcher was amputated when he struck it against a meat saw.
- A 12-year-old boy had his hand amputated while operating a meat grinder in a grocery store.
- A 17-year-old employee in a retail establishment had two fingers amputated by an ice-cube machine he was operating.
- A meat grinder amputated two fingers of a 16-year-old meatcutter while he was cleaning the machine in a retail food store.
- An assistant cook, aged 17, amputated a finger while cutting meat with a meat saw.
- A 16-year-old restaurant waiter amputated his finger in a meat grinder.
- A drive-in restaurant cook, aged 17, amputated a finger while he was cleaning a meat patty machine.
- A 17-year-old clerk in a grocery store had his left hand amputated by a meat grinder.

Services

- A 17-year-old employee of a funeral home was killed when the car he was driving ran off the road.
- A newsboy, aged 14, died of injuries sustained when he was struck from behind by a car while riding his bicycle.
- A 12-year-old newspaper delivery boy was killed when struck by a bolt of lightning.
- A counselor, 16 years old, was electrocuted while putting up a radio aerial when the wire he was installing touched a high voltage line.
- A 16-year-old parking attendant at an amusement park received multiple internal injuries when he was struck by a car.
- A 17-year-old girl, employed as a kitchen helper in a hospital, had a finger amputated in a laundry machine.

Government

- A member of the Youth Corps amputated a toe with an axe he was using.

CONCLUSIONS AND RECOMMENDATIONS

More comprehensive information on injuries to minors is presented in this report than has heretofore been available to the Bureau. It will be helpful in appraising the special training needs and regulatory requirements for safeguarding young workers, and it can also aid in assessing the effectiveness of established safety training programs and safety promotional campaigns.

The data show that in all industries a large number of minors experience injuries during the course of their employment. The volume of these injuries—amputations; strains, sprains, and hernias; crushing injuries; and fractures—indicates that many are serious. The data are not complete; systematic nationwide reporting of injuries to minors is an important need.

Based on the information contained in this report and on other data available on youth employment, it is recommended that all agencies, groups, and individuals responsible or concerned with the work experience, education, and employment of youth initiate the following actions to minimize injuries to employed minors:

1. Broaden and intensify occupational safety training in schools, youth serving institutions, work experience programs, and in all other educational settings.
2. Conduct on-the-job safety training as early as possible, particularly in the areas of lifting, manual materials handling, house-

keeping, use of handtools, and in helping youth to realize that their physical abilities have limitations.

3. Provide the type of supervision that will gain the respect of the young worker and at the same time set a safety example.

4. Provide personal protective equipment (such as for the eyes, feet, and hands) and require its use where needed.

5. Stress sound safety practices in the use and servicing of machines, especially saws, meat slicers, meat grinders, and similar machines.

6. Evaluate, update, and improve existing hazardous-occupations prohibitions to insure that they afford sufficient protection to employed minors.

7. Develop and tailor safety educational materials to the interests of youth.

APPENDIX TABLES

TABLE 1.—Reported Injuries Occurring to Minors Under 18 Years of Age, by Major Industry,¹ 28 States, January 1964–June 1965

Industry	Number	Percent
Total.....	16, 936	100. 0
Agriculture.....	1, 849	10. 9
Contract construction.....	1, 240	7. 3
Manufacturing.....	2, 550	15. 1
Wholesale and retail trade.....	7, 631	45. 1
Services.....	2, 613	15. 4
Miscellaneous ²	1, 053	6. 2

¹ Comparisons between industries are not valid because of variations in State industry classification methods, differences in reporting coverage, and diversity in child-labor laws and regulations.

² Includes mining, transportation, finance, government, and unknown industries.

TABLE 2.—*Nature of Reported Injuries to Workers Under 18, by Industry,¹ 28 States, January 1964-June 1965*

Industry	Total reported injuries	Nature of injury—percent distribution								
		Amputations or loss of body part	Fractures	Occupational diseases and poisonings	Crushing injuries	Cuts, abrasions, punctures, bites, etc.	Strains, sprains, hernias, etc.	Bruises and contusions	Burns and scalds	Others and unknown
Total: Number.....	16,936	175	1,193	276	220	7,261	2,314	2,370	1,457	1,670
Percent.....	100.0	1.0	7.0	1.6	1.3	42.9	13.7	14.0	8.6	9.9
Agriculture.....	1,849	.6	11.0	4.8	2.0	42.8	14.1	11.2	2.3	11.1
Commercial farms.....	1,506	.7	11.9	4.4	2.2	40.4	15.1	11.7	2.4	11.1
Others.....	343	.3	7.3	6.7	1.2	53.3	9.3	8.7	2.0	11.1
Mining ²	43									
Contract construction.....	1,240	1.8	8.2	1.0	.6	39.3	15.2	15.5	6.0	12.3
Building construction.....	250	1.6	7.2	1.6	1.2	42.0	15.2	14.6	4.8	12.4
Highway, street, and heavy construction ³	61									
Special trades.....	542	1.3	11.8	.4	.5	36.2	15.9	14.4	7.6	12.0
N.e.c.....	387	2.1	3.6	1.0	.5	42.9	13.9	17.8	4.4	13.7
Manufacturing.....	2,550	1.5	7.6	1.3	2.0	40.0	13.1	16.3	5.1	12.0
Food and kindred products.....	607	2.3	4.4	2.0	2.5	44.0	13.8	12.0	7.1	11.9
Textile and fabric products.....	267	1.1	4.1		.4	37.1	15.3	23.2	3.4	15.3
Lumber, wood products, and furniture.....	195	3.1	7.7	1.0	4.6	42.0	15.4	12.8	4.1	9.2
Printing (includes newsboys).....	392	.2	16.8	.2	2.8	32.7	15.0	13.0	4.1	15.0
Machinery (includes electrical).....	219	1.4	6.8	.9	.4	44.3	8.2	16.0	5.0	16.9
N.e.c.....	870	1.3	6.9	1.9	1.5	40.0	11.7	19.4	8.0	9.2

Transportation, communications, gas, electrical, and sanitation.....	313	1.6	9.9	.6	2.2	36.7	16.0	18.2	2.9	11.8
Wholesale trade.....	456	1.3	9.6	2.0	2.2	43.4	15.6	12.9	3.7	9.2
Retail trade.....	7,175	.9	4.5	.8	1.0	47.0	13.5	12.7	11.9	7.5
Building materials, hardware, and farm equipment.....	228	.9	6.1	1.3	2.2	53.9	10.5	14.0	2.6	8.3
General merchandise.....	484	-----	6.8	1.0	.6	39.0	19.2	16.1	8.9	8.5
Food.....	2,265	1.3	4.5	.7	1.1	55.0	15.7	12.7	3.3	5.7
Automobile dealers and gasoline service stations.....	747	.3	8.3	1.5	1.2	31.2	11.8	11.5	20.5	13.8
Eating and drinking places.....	2,248	1.0	2.4	.7	.6	46.4	9.9	10.6	22.9	5.4
N.e.c.....	1,203	.7	5.0	.7	1.5	45.0	15.5	15.6	5.3	10.6
Finance, insurance, and real estate ²	88	-----	-----	-----	-----	-----	-----	-----	-----	-----
Services.....	2,613	.6	8.1	1.4	.9	38.1	13.3	17.4	10.0	10.2
Hotels and lodging places.....	273	.7	6.9	1.8	.7	37.4	19.4	13.5	9.9	9.5
Personal services.....	114	.9	3.5	-----	1.7	33.3	18.4	12.3	15.8	14.0
Automobile repair and services.....	334	-----	10.2	2.1	2.4	33.2	8.4	21.2	10.5	12.0
Amusement and recreation.....	498	.6	16.3	1.2	.8	35.5	12.8	17.7	5.4	9.6
Medical services.....	583	.3	2.2	.8	.2	37.7	13.4	20.1	17.7	7.5
Educational services.....	206	1.0	9.7	1.4	1.0	45.6	13.1	14.1	5.3	8.7
N.e.c.....	605	1.1	6.6	1.8	.7	41.8	12.7	16.2	6.8	12.2
Government.....	428	1.4	12.1	6.1	1.6	34.8	14.7	8.6	4.0	16.6
Type unknown.....	181	1.1	8.3	4.4	.5	47.5	7.7	14.4	4.4	11.6

¹ Comparisons between industries are not valid because of variations in State industry classification methods, difference in reporting coverage, and diversity in child-labor laws and regulations.

² Percent not shown where base is less than 100.

NOTE.—Because of rounding, percents may not add to 100.

TABLE 3.—*Nature of Reported Injuries to Workers Under 18, by Activity, 28 States, January 1964-June 1965*

Activity	Total reported injuries	Nature of injury—percent distribution								
		Ampu- tations or loss of use of body part	Frac- tures	Occupa- tional diseases and poi- sonings	Crush- ing injuries	Cuts, abra- sions, punc- tures, bites, etc.	Strains, sprains, hernias, etc.	Bruises and contu- sions	Burns and scalds	Others and un- known
Total: Number.....	16, 936	175	1, 193	276	220	7, 261	2, 314	2, 370	1, 457	1, 670
Percent.....	100.0	1.0	7.0	1.6	1.3	42.9	13.7	14.0	8.6	9.9
Walking (forward, backward, etc.).....	341	—	8.2	.3	.3	36.9	20.8	25.2	4.7	3.5
Running, rushing, etc. ¹	42	—	—	—	—	—	—	—	—	—
Climbing (up or down).....	207	.5	13.5	—	1.0	22.7	28.5	22.2	2.4	9.2

Walking (forward, backward, etc.).....
Running, rushing, etc.¹.....
Climbing (up or down).....

Manual handling (lifting, carrying, etc.)	2,741	.3	6.9	.6	.6	30.7	28.7	18.7	6.2	7.2
Operating or using handtool (not power-driven)	1,185	.1	1.7	.1	.1	86.8	2.1	4.7	1.0	3.4
Operating or using handtool (power-driven) ¹	51									
Operating machine (not power-driven) ¹	93									
Operating machine (power-driven)	1,016	5.6	6.2	.1	1.9	55.7	2.6	11.5	2.3	14.1
Riding (in or on)	184		21.2		.5	24.4	15.8	25.0	1.1	11.9
Cleaning, washing, clearing, etc.	1,086	1.0	3.6	2.8		55.4	6.1	10.3	15.1	5.7
Mixing, blending, etc. ¹	22									
Servicing (oiling, waiting table, servicing cars, adjusting equipment, etc.)	1,334	.4	7.0	2.4	.7	33.0	7.0	16.6	24.3	8.5
Bending, kneeling, squatting, etc. ¹	23									
Repairing, sharpening, etc.	472	.2	7.0	.8	1.0	44.9	5.1	16.7	9.9	14.2
N.e.c.	8,139	1.1	7.9	2.3	2.0	40.1	13.6	12.8	8.3	11.9

¹ Percent not shown when base is less than 100.

NOTE.—Because of rounding, percents may not add to 100.

TABLE 4.—*Nature and Source of Reported Injuries to Workers Under 18, 28 States, January 1964–June 1965*

Source of injury	Nature of injury									
	Total	Amputations or loss of body part	Fractures	Occupational diseases and poisonings	Crushing injuries	Cuts, abrasions, punctures, bites, etc.	Strains, sprains, hernias, etc.	Bruises and contusions	Burns and scalds	Others and unknown
Total.....	16,936	175	1,193	276	220	7,261	2,314	2,370	1,457	1,670
Animals, insects, birds, reptiles (live).....	273		20	3	1	171	25	31		22
Bodily motion (no lifting, pulling, pushing, etc.).....	134		2			1	169	1	2	9
Containers, boxes, cans, bags, crates, etc. (full or empty).....	1,344	5	82		6	490	447	222	17	75
Buildings and structures (not floors, working surfaces, etc.).....	216		26	7	9	47	79	27	3	18
Ceramic items, n.e.c.....	33		13		2	46	14	10	2	6
Chemicals and chemical compounds (solids, liquids, and gases).....	266			74					149	43
Coal and petroleum products.....	85			2		3		3	70	7
Conveyors.....	133	7	16			40	14	34	3	9
Food products (including animal foods).....	88		4	12	10	19	23	5	21	4
Furniture, fixtures, furnishings, etc.....	480	2	26	1	6	144	88	157	21	35
Glass items, n.e.c. (not bottles, jars, etc.).....	550	1	1	1		517	1	5	1	23
Handtools, not powered.....	2,013	7	39	4	7	1,696	49	119	16	77
Handtools, powered.....	171	1	5			112	11	7	22	13
Hot objects and substances.....	481			2					451	28

Heating equipment, n.e.c.	142			3			18	7	2	109	3
Hoisting apparatus.	135	1		17			46	13	43	1	10
Ladders (fixed and portable)	166			39		4	13	49	36		29
Liquids, n.e.c.	280				1					277	2
Machines.	1,651	117		116	1	37	1,039	44	160	34	103
Mechanical power transmission apparatus.	88	3		10		6	39	5	16	2	7
Metal items, n.e.c. (nails, nuts, bolts, wire, etc.)	1,276	4		47	1	8	922	69	119	22	84
Mineral items, metallic, n.e.c.	869	4		27	1	4	631	44	92	12	54
Mineral items, nonmetallic, n.e.c. (dirt, clay, sand, etc.)	92			9	2	2	22	16	17	6	18
Particles (unidentified)	233						52	3	2	1	175
Plants, trees, vegetation (natural condition)	169			2	85		44	11	12	1	14
Pumps and prime movers	33	1		4			11	1	5	7	1
Vehicles, n.e.c.	1,051	7		199	2	59	211	146	214	31	182
Wood items, n.e.c. (lumber, poles, posts, chips, etc.)	320	2		39		10	121	51	66	1	30
Working surfaces (surfaces in use as supports for people)	1,498			221	1	3	240	491	341	9	202
Windows, doors, etc. (buildings, vehicles)	338	1		24		7	128	23	134		21
Persons (other than injured)	80			14			12	23	11		20
N.e.c.	2,138	12		188	76	36	427	408	473	166	346

TABLE 5.—*Nature of Reported Injuries to Workers Under 18, by Part of Body Injured, 28 States, January 1964-June 1965*

Body part	Nature of injury									
	Total	Amputations or loss of use of body part	Fractures	Occupational diseases and poisonings	Crushing injuries	Cuts, abrasions, punctures, bites, etc.	Strains, sprains, hernias, etc.	Bruises and contusions	Burns and scalds	Others and unknown
Total.....	16,936	175	1,165	276	226	7,261	2,314	2,370	1,457	1,670
Body.....	770	1	20	105	46	123	36	135	165	139
General.....	190			56	1	28	3	15	24	63
Multiple.....	580	1	20	49	45	95	33	120	141	76
Head.....	1,963	3	70	31		735	35	228	201	680
Brain or skull.....	73		14							59
Scalp or forehead.....	310					201		88	1	20
Eye.....	690	3		11		158		36	70	412
Multiple.....	69			2		22	2	6	26	11
N.e.c.....	821		56	18		354	33	98	104	158

Trunk.....	1,650		77	18	6	60	1,086	223	35	145
Spine (ribs, etc.).....	132		70		1		51			10
Chest.....	125			10	2	11	28	50	9	15
Abdomen.....	265			5	1	15	185	27	5	27
Back (muscles, etc.).....	995			3		24	761	120	14	73
Multiple.....	20		1			1	5	8	1	4
N.e.c.....	113		6		2	9	56	18	6	16
Upper extremities.....	8,273	151	573	85	113	4,880	486	898	760	327
Wrist.....	547		103	4	1	217	119	59	18	26
Hand.....	1,932	5	73	17	19	1,182	43	191	328	74
Finger.....	3,910	126	222	14	73	2,828	71	401	69	106
Multiple.....	639	18	30	38	17	268	38	65	137	28
N.e.c.....	1,245	2	145	12	3	385	215	182	208	93
Lower extremities.....	4,039	20	451	23	53	1,438	649	867	281	257
Ankle.....	573		61	1		68	349	61	11	22
Foot.....	1,434	4	109	4	20	732	85	271	136	73
Toe.....	444	12	140		19	95	10	140	4	24
Multiple.....	225	2	23	8	3	44	15	53	58	19
N.e.c.....	1,363	2	118	10	11	499	190	342	72	116
Part unknown.....	241		2	14	2	25	22	19	15	142

TABLE 6.—*Accident Type of Reported Injuries to Workers Under 18, by Industry,¹ 28 States, January 1964-June 1965*

Industry	Total reported injuries	Accident type—percent distribution										
		Struck by or against moving or stationary objects	Falls from elevation or same level	Caught in, under, between moving or stationary objects	Rubbed or abraded	Body reaction (voluntary or involuntary)	Overexertion	Contact with electrical current	Contact with temperature extreme	Contact with radiation, caustics, poisons, etc.	Motor vehicle accidents	Others and unknown
Total: Number.....	16,936	7,863	2,212	1,657	373	231	1,166	25	988	392	399	1,630
Percent.....	100.0	46.4	13.1	9.8	2.2	1.4	6.9	.1	5.8	2.3	2.4	9.6
Agriculture.....	1,849	39.1	15.8	9.3	1.8	1.0	7.7	.1	1.7	4.8	3.7	14.9
Commercial farms.....	1,506	40.6	16.9	9.9	2.0	.9	8.8	.1	1.7	4.5	3.4	11.0
Others.....	343	32.6	11.1	6.7	1.2	1.2	2.6	—	2.0	6.1	4.7	31.8
Mining ²	43	—	—	—	—	—	—	—	—	—	—	—
Contract construction.....	1,240	46.4	13.9	7.7	4.7	1.9	6.9	.2	4.1	2.1	2.3	9.6
Building construction.....	250	45.6	16.8	7.2	4.4	2.0	8.4	.8	2.8	2.8	1.2	8.0
Highway, street, and heavy construction ²	61	—	—	—	—	—	—	—	—	—	—	—
Special trades.....	542	46.1	14.6	8.7	3.9	2.2	7.4	.2	6.4	.7	2.2	7.6
N.e.c.....	387	48.6	10.8	5.9	6.7	1.8	5.2	—	1.8	2.6	2.3	14.2
Manufacturing.....	2,550	39.8	12.0	15.1	4.1	1.4	7.6	.1	3.4	2.4	2.9	11.1
Food and kindred products.....	607	43.5	10.5	14.2	2.0	1.8	7.7	.2	6.1	2.3	1.8	9.9
Textile and fabric products.....	267	28.5	8.2	15.0	3.7	2.2	13.1	.4	2.2	.7	—	25.8
Lumber, wood products, and furniture.....	195	51.3	8.7	17.4	3.1	1.0	9.2	—	.5	2.6	.5	5.6
Printing (includes newsboys).....	392	26.5	30.1	11.7	1.3	1.8	3.6	—	2.8	.2	12.2	9.7
Machinery (includes electrical).....	219	39.7	6.4	14.1	10.9	.9	8.7	.4	2.3	3.2	1.4	11.9
N.e.c.....	870	44.2	8.2	17.1	5.4	.8	7.0	.1	3.0	3.8	1.3	9.1

Transportation, communications, gas, electric, and sanitation	313	41.8	20.1	12.5	.6	.9	5.1	.3	2.9	2.5	6.4	6.7
Wholesale trade	456	45.6	12.1	11.4	3.3	1.3	10.5	.2	2.8	3.3	1.7	7.9
Retail trade	7,175	51.8	11.4	8.2	1.3	1.4	7.1	.1	8.4	1.2	1.4	7.6
Building materials, hardware, farm equipment	228	58.3	9.2	11.8	1.3	1.3	2.2	---	.9	2.6	3.1	9.2
General merchandise	484	49.6	13.4	8.0	.8	1.6	10.1	---	5.4	1.6	1.2	8.0
Food	2,265	58.7	9.8	9.2	.7	1.5	9.7	.2	2.1	.5	.6	7.0
Automobile dealers and gasoline service stations	747	42.0	10.4	9.2	4.8	1.1	5.2	.3	15.3	2.9	2.1	6.5
Eating and drinking places	2,248	48.3	12.4	7.2	.8	1.3	4.5	.1	16.3	1.3	.7	7.2
N.e.c.	1,203	51.0	13.1	6.9	1.6	1.4	7.6	.1	3.8	1.2	3.6	9.5
Finance, insurance, and real estate ²	88	---	---	---	---	---	---	---	---	---	---	---
Services	2,613	43.9	14.6	10.2	2.0	1.5	5.2	.1	6.8	2.2	3.1	10.2
Hotels and lodging places	273	41.7	19.0	4.4	1.8	2.2	5.5	1.1	7.3	1.8	3.3	11.7
Personal services	114	38.6	14.0	19.3	1.7	.9	9.6	---	5.3	---	5.3	5.3
Automobile repair and services	334	39.8	6.9	20.6	3.3	1.2	2.1	---	7.5	3.3	6.3	9.0
Amusement and recreation	498	49.0	19.5	9.0	1.0	1.8	4.0	.2	4.0	2.4	1.8	7.2
Medical services	583	44.8	10.8	10.5	1.7	1.7	8.1	---	11.8	2.0	.3	8.2
Educational services	206	48.5	19.4	8.2	2.9	.5	4.8	---	5.8	1.9	2.9	4.8
N.e.c.	605	41.5	15.0	6.9	2.1	1.5	4.1	---	4.1	2.5	4.8	17.3
Government	428	43.4	18.4	6.3	1.2	.5	5.4	---	2.8	8.2	2.8	11.0
Type unknown	181	49.2	11.6	11.1	2.8	1.1	4.4	---	2.2	1.6	1.1	14.9

¹ Comparisons between industries are not valid because of variations in State industry classification methods, difference in reporting coverage, and diversity in child-labor laws and regulations.

² Percent not shown where base is less than 100.

NOTE.—Because of rounding, percents may not add to 100.