

# Hospital Occupational Health Services Study

## II. Employee Health and Safety Statistics and Records

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# **Hospital Occupational Health Services Study**

## **II. Employee Health and Safety Statistics and Records**

**U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE**

**Public Health Service**

**Center for Disease Control**

**National Institute for Occupational Safety and Health**

**Division of Technical Services**

**Cincinnati, Ohio 45202**

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This is the second of a series of reports of a national survey of hospitals. This study was performed under NIOSH Contract HSM-099-71-050 by Computer Sciences Corporation and further analyzed and edited by Applied Health Physics, Inc. The purpose of this study is to provide NIOSH with resource information on existing employee health services in hospitals and to develop an acceptable action program to protect and promote the health of hospital employees in the United States.

The following previous publication in this series is available from the Superintendent of Documents, Government Printing Office, Washington, D. C. 20402.

Hospital Occupational Health Services Study, I. Environmental Health and Safety Control. HEW Publication No. (NIOSH) 75-101.

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## FOREWORD

As the Nation's hospitals respond to the growing needs of all phases of health care delivery, these institutions have grown rapidly in size, number and complexity. Hospitals are now the third largest employer in the United States, with approximately three million employees working full and part time.

Occupational health and safety services should be an integral part of health services and be available to all groups of workers including hospital employees. Yet, data from reliable sources during the past 10 years indicate that the accident frequency rate for hospitals has increased alarmingly.

Clearly, positive action is called for. As a consequence, the National Institute for Occupational Safety and Health conceived and implemented the Hospital Occupational Health Services Study — the first such major study ever conducted.

The initial step was to develop practical criteria for effective occupational health and safety programs for hospital personnel. The next step was to determine, through a comprehensive survey of American Hospital Association members, the extent to which these criteria could be or were being applied.

The final step will be the development of a workable action program to protect and promote the health of three million hospital employees, and indirectly, to safeguard millions of hospital patients serviced by these workers.

This series of seven reports on the study is disseminated by NIOSH — in the hope and belief that you, the reader, will find the Hospital Occupational Health Services Study not only enlightening but eminently usable.



Edward J. Baier  
*Acting Director*  
*National Institute for Occupational  
Safety and Health*



## **ACKNOWLEDGMENTS**

The National Institute for Occupational Safety and Health wishes to express its appreciation to the many individuals whose cooperation made this study possible and especially to the hospital administrators who supplied data on which this and future reports are based.

Dr. Marcus M. Key, former Director of the National Institute for Occupational Safety and Health, provided the initial letter seeking the support of the hospital administrator to complete the mailed survey questionnaire. The design, distribution, and computerized analyses of the questionnaire were performed by the Computer Sciences Corporation.

Mr. John H. Morrison, Jr., assisted in the final preparation of the statistical information. Dr. Mildred Kendrick, formerly with the Center for Disease Control, provided valuable statistical assistance.

Mr. Marshall E. LaNier, M.S., Jane A. Lee, R.N., B.S., and Ruth Reifschneider, R.N., M.P.H., contributed substantially to the project. Acknowledgment is also given to Warren Smith, M.D., George W. McCarl, M.D., and Bruce Margolis, Ph.D., who assisted in developing the original criteria to plan an effective occupational health and safety program for hospital employees.



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	Number	Page	Number	Page	
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# Hospital Occupational Health Services Study

## II. Employee Health and Safety Statistics and Records

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### INTRODUCTION

The first step in improving the occupational health and safety of employees must be the development of a body of statistical information on which meaningful remedial action can be based. That is the reason why the Hospital Occupational Health Services Study was undertaken. The findings are being compiled and analyzed in a series of seven publications, of which this is the second.

The first publication, *Environmental Health and Safety Control*, reported on the extent to which hospitals provide safety and health orientation to new employees . . . the use of formally organized safety and health education programs for employees . . . the assignment of responsibility for managing hospital health and safety programs . . . the extent to which hospitals conduct periodic inspections of hospital safety equipment and of working conditions . . . and whether or not air and biological sampling procedures are regularly performed for employees.

This report, *Hospital Employee Health and Safety Statistics and Records*, presents the findings relative to the use of established systems for recording and maintaining employee health information . . . the content of such employee health records . . . assignment of responsibility, by department, for filing employee health information . . . the use of written procedures governing access to and release of such information . . . the extent to which employee absenteeism records are kept, and their content . . . rates of unscheduled absenteeisms and their most frequent causes . . . the most frequent occupational health problems and most frequent occupational injury problems . . . and, for the most recent 1-year period, the number of occupational injuries and illnesses, plus the number of cases for which Workmen's Compensation Claims were filed.

The part of the questionnaire discussed in this report is reproduced on page 2. A detailed analysis of the responses to these questions follows. The data are presented in tabular form in Appendix A.

**SECTION D. EMPLOYEE HEALTH RECORDS**

- Yes No
18. Does your hospital have an established system of recording and maintaining health information on your employees?

If the answer to question 18 is yes, please answer the following.

- a. Which of the following are included in the employee health record?  
(Check all applicable boxes)
- Personal Health History .....
  - Occupational History .....
  - Physical Examination .....
  - Report of Injury .....
  - Report of Illness .....
  - Record of Visits to Clinic, Emergency Room, or Employee Health Nurse ....
  - Referrals .....
  - Workmen's Compensation Records .....
  - Other Insurance Claims .....
- b. Where are your employee health records filed?  
(Select answer which is closest or applies to most employees)
- Employee Health Unit .....
  - Personnel Department .....
  - Emergency Department .....
  - Outpatient Department .....
  - Other (specify) \_\_\_\_\_ .....
- c. Does your hospital have written policies and procedures governing access to and the release of employee health information? .....

**SECTION E. EMPLOYEE HEALTH STATISTICS**

19. Do you keep employee absenteeism records?  
(Check one)
- Yes, Showing Specific Nature of Sickness when Absent .....
  - Yes, Showing Only the Type of Absence .....
  - Yes, Without Showing Type of Absence .....
  - No .....
20. What is your rate of unscheduled absenteeism (days per year per employee)?  
(Enter 1 as 01, 3 as 03, etc.) .....

21. What are the most frequent causes of absenteeism among your employees? (Indicate all that apply in order of frequency of occurrence by writing 1, 2, 3, 4.)
- Illness .....
  - Injuries .....
  - Family Health Problems .....
  - Other or Unspecified Personal Problems ....
22. What are the four most frequent occupational health problems, excluding injuries, which have occurred in your hospital during the most recent 1-year period for which you have records? (Indicate the four in order of frequency of occurrence by writing 1, 2, 3, 4.)
- Dermatitis .....
  - Hepatitis .....
  - Other Infection .....
  - Radiation Illness or Exposure .....
  - Respiratory Problems .....
  - Volatile Organic Solvent Exposure .....
  - Drug or Medication Reactions .....
23. What are the four most frequent types of injury occurring in your hospital during the most recent 1-year period for which you have records? (Indicate the four in order of frequency of occurrence by writing 1, 2, 3, 4.)
- Back Injuries .....
  - Strains and Sprains .....
  - Fractures .....
  - Burns .....
  - Puncture Wounds (from Needles, etc.) .....
  - Lacerations .....
  - Abrasions and Contusions .....
  - Hernias .....
  - Eye Injuries .....
24. Please provide the following data for the most recent 1-year period for which you have records.  
(Indicate 1 as 0001, 10 as 0010, etc. If you do not have data for any item, mark boxes with XXXX.)
- Number of Occupational Injuries .....
  - Number of Occupational Illnesses .....
  - Total Number of Injuries and Illnesses Involving Lost Time .....
  - Number of Cases for which Workmen's Compensation Claims were Filed .....

## SUMMARY

This summary highlights the significant findings contained in the second of seven reports of the first national survey of occupational safety and health in U.S. hospitals. This report is confined to information pertaining to hospital employee health records and statistics. These are Sections D and E of the NIOSH questionnaire sent to 3,687 hospitals in 1972.

It is of interest to note that the Occupational Safety and Health Act of 1970 (OSHA) was being implemented during the time when this survey was conducted early in 1972. Since then, most hospitals have recognized their responsibility to comply with OSHA regulations, which contain specific recordkeeping requirements concerning documentation and reporting of occupational injuries and illnesses. Thus, the situations noted in this study of hospitals will continue to improve as more hospitals voluntarily comply with new occupational health and safety standards and regulations.

Almost all hospitals responding to this part of the Questionnaire reported that they had an established system for recording and maintaining health information on their employees. The percentage of hospitals having such systems increased with the size of the hospital. Only slight variations were found in the geographical responses to this question.

Employee health records were kept in the personnel department by most small and medium-sized hospitals, while large hospitals maintained these records in the employee health unit. About half of all hospitals had written policies and procedures governing access to and release of employee health information.

Practically all hospitals studied kept employee absenteeism records, but very few recorded the specific nature of the illness or injury. The rate of unscheduled absenteeism for all hospitals was an average of 3.2 days per year per employee. The rate increased with the size of the hospital.

About 60 percent kept a record of personal health history while less than 40 percent of the hospitals included an occupational history in an employee's health record. Injuries were kept less often than illnesses. Less than half of all hospitals maintained a record of visits that employees made to the clinic, emergency room or employee health nurse. Referrals were recorded by less than one-fifth of the hospitals. Workmen's compensation records were included in the employee health records by almost three-fourths of all hospitals.

Illness was clearly the most frequent cause of absence listed by all hospitals. However, 43 percent did not respond concerning the frequency with which injuries resulted in absenteeism. Thus, injuries ranked fourth in importance according to these data. Family health problems were found to be the second most frequent cause of absenteeism.

Respiratory problems ranked first as the most frequent occupational health problem, exclusive of injuries. Other infections ranked second and dermatitis ranked third. Ranking the remaining occupational health problems was more difficult, since all ranked low, and there were wide variations as to hospital size and geographic region.

Strains and sprains were the most frequently reported types of occupational injuries listed by the total of all hospitals. However, large and medium-sized hospitals ranked puncture wounds as the leading type of occupational injury. They were the second ranking type of injury reported by all hospitals and the fourth that small hospitals listed. Abrasions and contusions took third place among the injuries that all hospitals reported most frequently.

The hospitals were asked to provide data on numbers of occupational injuries, occupational illnesses, data on lost time injury and illness and cases filed for workmen's compensation claims, in the most recent 1-year period.

The average number of occupational injuries per hospital during a 1-year period was about 70 while the number of occupational illnesses was 6. Those injuries and illnesses involving lost time totaled 18 per hospital per year in reporting hospitals. These data increase as the size of the hospital increases.

## EMPLOYEE HEALTH RECORDS

### Responses to Questions in Section D

The following is a report on responses to Questions 18, 18a, 18b and 18c, Section D of the questionnaire. The purpose of these questions was to determine, first, whether hospitals have established systems for recording and maintaining health information on employees. For those hospitals reporting that they do have such a system, the questions sought to find out

- A. What specific health data are included in employee health records?
- B. In what department of the hospital are employee health records filed?
- C. Do hospitals have written policies and procedures governing access to and release of employee health information?

The responses received to each question are analyzed below to emphasize important findings or interpretations.

**Question 18.** Does your hospital have an established system for recording and maintaining health information on your employees?

**Results:** Over 90 percent (90.9%) of all hospitals reported that they have a system for recording and maintaining health information on employees. As hospital size increases, so does the percentage of hospitals having such a system. (See Figure 1.) Small hospitals (25-99 beds) reported 88.0 percent with a recording system. Medium-sized hospitals (100-299 beds) with 93.5 percent and large hospitals (300+ beds) with 95.3 percent, reported having a system for recording employee health information.

When considered by geographic region, there was only a slight variation from 85 percent to just over 97 percent in affirmative responses to this question.

These data are presented in tabular form in Appendix A, Tables 1 and 2.

**Question 18a.** Which of the following are included in the employee health record?

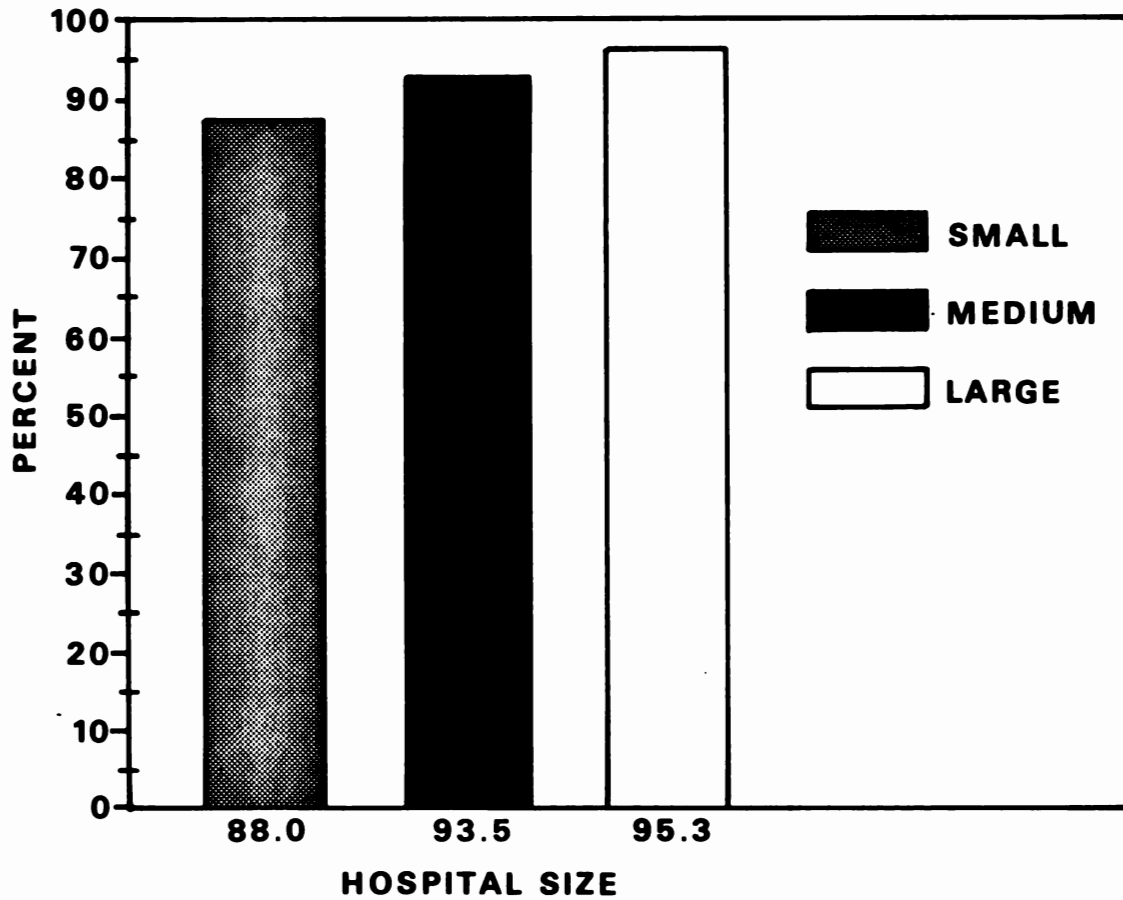
(Check all applicable boxes)

- Personal Health History .....
- Occupational History .....
- Physical Examination .....
- Report of Injury .....
- Report of Illness .....
- Record of Visits to Clinic, Emergency Room, or Employee Health Nurse .....
- Referrals .....
- Workmen's Compensation Records .....
- Other Insurance Claims .....

**Results:** Personal health histories were kept by almost 60 percent of all hospitals (59.9%), but there were major differences in percentages between the three sizes of hospitals: under 50 percent (48.4%) for small hospitals (25-99 beds); two-thirds (66.7%) for medium-sized hospitals (100-299 beds); and nearly 85 percent (84.4%) for large hospitals (300+ beds).

The occupational history (a detailed description of past employment including hazardous work exposures) was maintained in the health records of less than 40 percent (39.7%) of all hospitals. Only 30 percent (30.8%) of small hospitals kept such a history, while nearly 50 percent of medium-sized and large hospitals did so (49.1% and 49.0%, respectively).

**FIGURE 1**  
**PERCENT OF HOSPITALS WITH AN ESTABLISHED SYSTEM FOR RECORDING AND**  
**MAINTAINING HEALTH INFORMATION ON EMPLOYEES, BY HOSPITAL SIZE**  
**(RESPONSE TO QUESTION 18)<sup>1</sup>**



<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)  
These data are presented in tabular form in Appendix A, Table 1.

Source of Data: NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

Results of a physical examination were included in the employee health records by 76.6 percent of all hospitals. Here again, the percentage increased with hospital size: small hospitals, 72.3 percent; medium-sized hospitals, 78.2 percent; and large hospitals, 88.1 percent.

Maintaining reports of illness in the employee health records was the item mentioned by more hospitals than any other, with about 85 percent of all hospitals (84.9%) reporting this type of record. The percentages for various size hospitals were: small hospitals, 80.1 percent; medium-sized hospitals, 89.0 percent; and large hospitals, 91.9 percent. These figures were slightly higher than those on maintaining records of physical examinations.

The report of injury was included less often than the report of illness. Only slightly over 60 percent of all hospitals (61.8%) reported including this, with percentages increasing as hospital size increased. For small hospitals, the percentage was 55.6 percent; for medium-sized hospitals, 65.1 percent; and for large hospitals, 75.8 percent.

Less than 50 percent of all hospitals (46.0%) maintained a record of visits to the clinic, emergency room, or employee health nurse. About one-third of small hospitals (31.0%) kept such a record. For medium-sized hospitals, this figure was over 50 percent (52.9%), while over 80 percent (82.6%) of large hospitals kept visit records.

Referrals were recorded by less than 20 percent (19.6%) of all hospitals. Not quite 10 percent (8.9%) of small hospitals recorded referrals. For medium-sized hospitals, the figure was only 20 percent (20.7%); and for large hospitals, it was over 50 percent (55.1%).

Workmen's compensation records were maintained in the employee health record by almost three-fourths of all hospitals (73.3%). By size of hospital, the percentages were: small, 68.7 percent; medium-sized, 77.9 percent; and large, 78.5 percent.

Other insurance claim records were kept in the employee health record by about one-third (33.4%) of all hospitals. By size of hospital, the percentages were very similar: small, 31.8 percent; medium-sized, 36.3 percent; and large, 32.1 percent.

These data are shown in Figure 2 and are presented in tabular form in Appendix A, Table 3.

**Question 18b.** Where are your employee health records filed?

(Select answer which is closest or applies to most employees)

- Employee Health Unit .....
- Personnel Department .....
- Emergency Department .....
- Outpatient Department .....
- Other (specify) .....

**Results:** Over three-fourths of all hospitals (77.2%) reported that employee health records are kept either in the employee health unit or the personnel department.

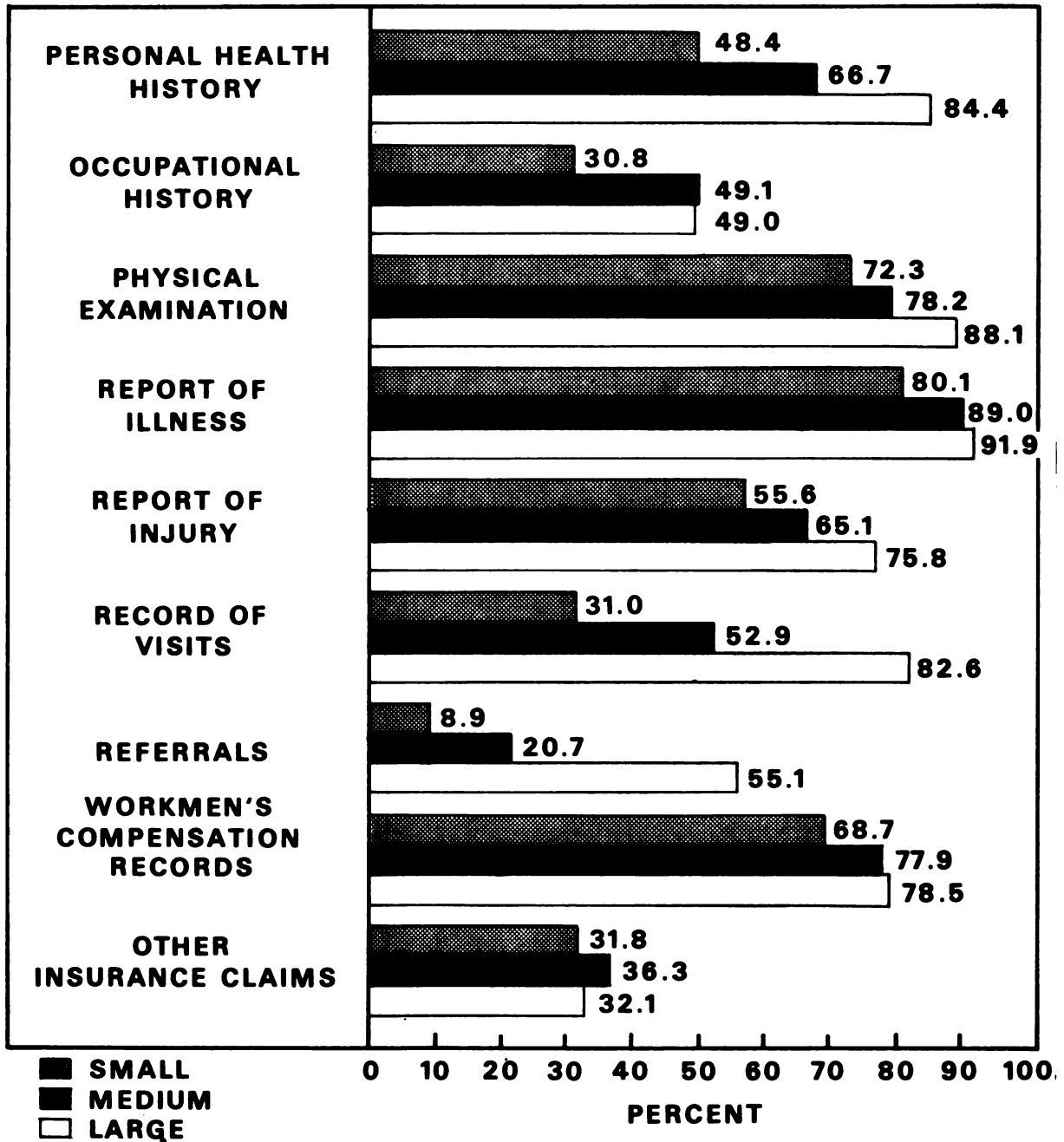
The employee health unit was the location used most frequently by large hospitals (58.0%), substantially less by medium-sized hospitals (16.7%), and very infrequently by small hospitals (2.5%).

For the personnel department the relative frequency of use was reversed by size of hospital: small hospitals, 69.3 percent; medium-sized hospitals, 64.3 percent, and large hospitals, 29.1 percent.

The two other locations specifically listed in the question were infrequently mentioned: Emergency departments, 2.0 percent; out-patient departments, 2.6 percent. These percentages were for all hospitals combined.

The "other" category, amounting to less than 10 percent (9.1%), was further analyzed to find three additional locations where employee health records were filed. These were for all hospitals: administration or business office, 3.0 percent; medical records, 2.3 percent; and nursing, 1.4 percent.

**FIGURE 2**  
**PERCENT OF HOSPITALS THAT INCLUDED VARIOUS ITEMS IN THE EMPLOYEE HEALTH**  
**RECORD, BY THE VARIOUS ITEMS, AND BY HOSPITAL SIZE**  
**(RESPONSE TO QUESTION 18a)<sup>1</sup>**



<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)  
 These data are presented in tabular form in Appendix A, Table 3.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

The employee health unit was used as a filing location for employee health records much more frequently by large hospitals than by small and medium-sized hospitals, primarily because large hospitals are more likely to be equipped with an employee health unit.

The above data are presented in tabular form in Appendix A, Table 4, and graphically in Figure 3. The location of filing places for employee health records for all size hospitals is broken down by geographic region in Appendix A, Table 5.

**Question 18c.** Does your hospital have written policies and procedures governing access to and the release of employee health information?

**Results:** Almost half of all hospitals responding (47.2%) indicated that they had written policies and procedures governing access to and the release of employee health information. About 10 percent (10.4%) of all hospitals failed to answer this question. About 40 percent (39.0%) of small hospitals (25-99 beds) reported that they had such written policies. For medium-sized hospitals (100-299 beds), the figure was over 50 percent (50.5%), while almost 70 percent (68.1%) of large hospitals (300+ beds) reported that they had such a policy.

By geographic regions, the percentages of hospitals having such a policy ranged from about 40 percent (41.5%) to almost 55 percent (53.5%).

The above data are shown in Figure 4, and presented in tabular form in Appendix A, Tables 6 and 7.

## EMPLOYEE HEALTH STATISTICS

### Responses to Questions in Section E

The following is a report on Questions 19 through 24, Section E, of the questionnaire. The purpose of these questions was to determine

- A. The extent to which hospitals keep records of employee absenteeism.
- B. The rate of unscheduled absenteeism.
- C. The most frequent causes of absenteeism.
- D. The most frequent occupational health problems.
- E. The most frequent types of occupational injuries.
- F. The number of occupational injuries and illnesses, total number of injuries and illnesses involving lost time, and the number of cases for which Workmen's Compensation claims were filed.

This section of the Study attempts to secure the statistical data which is the necessary first step in developing remedial plans of action.

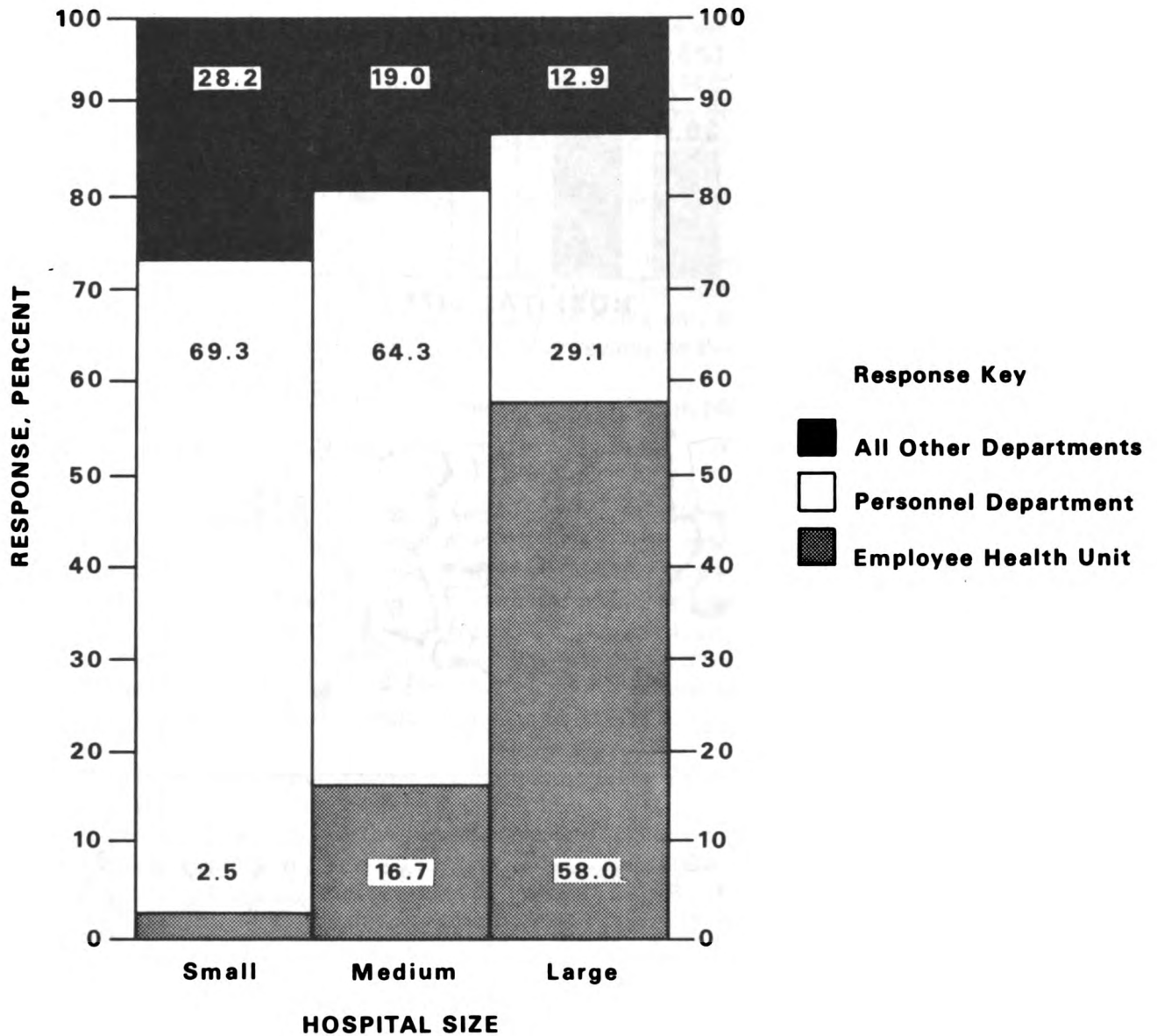
**Question 19.** Do you keep employee absenteeism records?

(Check one)

- Yes, Showing Specific Nature of Sickness when Absent .....
- Yes, Showing Only the Type of Absence .....
- Yes, Without Showing Type of Absence .....
- No .....

**Results:** Less than 10 percent (8.2%) of all hospitals reported that they keep no records on illness/absence. The percentage is about 10 percent for both small hospitals (25-99 beds) and large hospitals (300+ beds) — 10.1 percent and 9.3 percent, respectively. Only 5 percent (5.0%) of medium-sized hospitals indicated that they keep no absenteeism records.

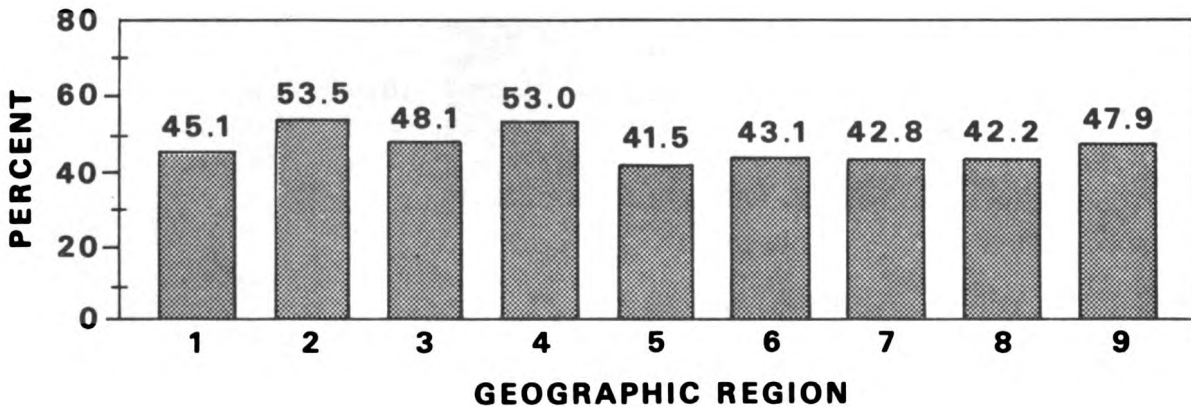
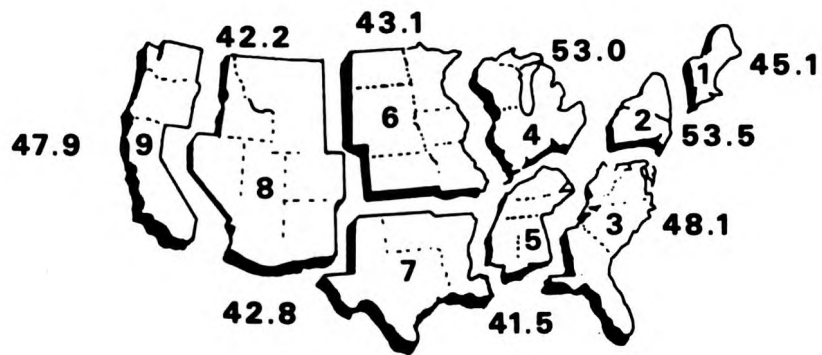
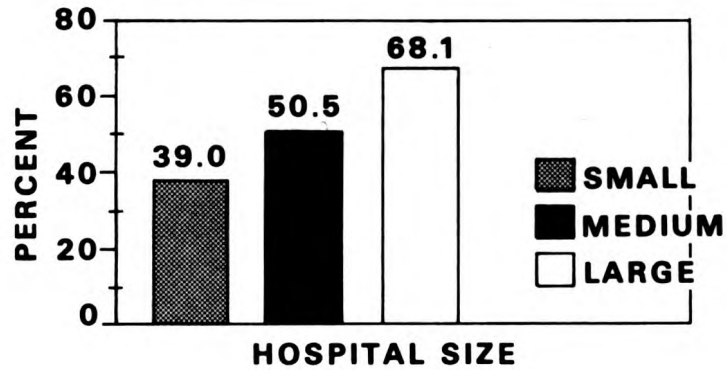
**FIGURE 3**  
**PERCENT OF HOSPITALS BY DEPARTMENT IN WHICH EMPLOYEE HEALTH**  
**RECORDS ARE FILED, AND BY HOSPITAL SIZE**  
**(RESPONSE TO QUESTION 18b)<sup>1</sup>**



<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)  
 These data are presented in tabular form in Appendix A, Table 4.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**FIGURE 4**  
**PERCENT OF HOSPITALS WITH WRITTEN POLICIES AND PROCEDURES GOVERNING ACCESS TO AND RELEASE OF EMPLOYEE HEALTH INFORMATION, BY HOSPITAL SIZE<sup>1</sup>, AND BY GEOGRAPHIC REGION<sup>2</sup> (RESPONSE TO QUESTION 18c)**



<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria in Appendix B. These data are presented in tabular form in Appendix A, Tables 6 and 7.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

Those hospitals which did keep absenteeism records have been divided into three categories by content of records kept. About 15 percent (14.7%) of all hospitals recorded the specific nature of the illness when an employee was absent from work. The keeping of such specific records differed by size of hospital. About 10 percent (10.6%) of small hospitals (25-99 beds), over 15 percent (16.7%) of medium-sized hospitals, and almost 25 percent (24.5%) of large hospitals (300+ beds) indicated the specific nature of illness when employees were absent.

Absentee records which show only the type of absence were found in half of all hospitals (50.0%), with about the same percentage for small (50.6%) and medium-sized hospitals (51.8%). Large hospitals had a slightly smaller percentage (44.0%).

Over 25 percent (27.1%) of all hospitals did not show the type of absence, with about the same percentage for small (28.8%) and medium-sized hospitals (26.5%), and slightly less for large hospitals (22.3%).

The above data are shown in Figure 5 and are presented in tabular form in Appendix A, Table 8.

The percentages by geographic regions are given in Table 9, Appendix A. Only one region had a major departure from the U.S. percentages. The West South Central Region had 70 percent (70.3%) of its hospitals in the category "showing only the type of absence", which is considerably higher than the percentages for other regions on the same question.

**Question 20.** What is your rate of unscheduled absenteeism (days per year per employee)?

(Enter 1 as 01, 3 as 03, etc.)

**Results:** The rate of unscheduled absenteeism for all hospitals was an average of 3.2 days per year per employee. Almost 40 percent (39.5%) of hospitals indicated their rate as less than 1 day per employee (0 and no response). On the other end of the scale, 2 percent of hospitals reported a rate of 12 or more days of unscheduled absences per year per employee.

Average absenteeism rates were calculated by hospital size and geographic region to determine if there were meaningful differences. Small hospitals (25-99 beds) had a rate of 2.8 days, slightly lower than the 3.2 rate for all hospitals. Medium-sized hospitals (100-299 beds) had a rate of 3.5 days, while large hospitals (300+ beds) reported a rate of 3.9 days per year per employee.

For geographic regions, the rates ranged from the Middle Atlantic Region's high of 4.1 days to the West South Central Region's low of 2.5.

Three other regions had an absenteeism rate higher than the nation (3.2 days): Northeast, 3.7; East North Central, 3.4; and Pacific, 3.3. Those with rates lower than the national average were: South Atlantic, 3.0; East South Central, 2.8; West North Central, 2.9; and Mountain, 2.9.

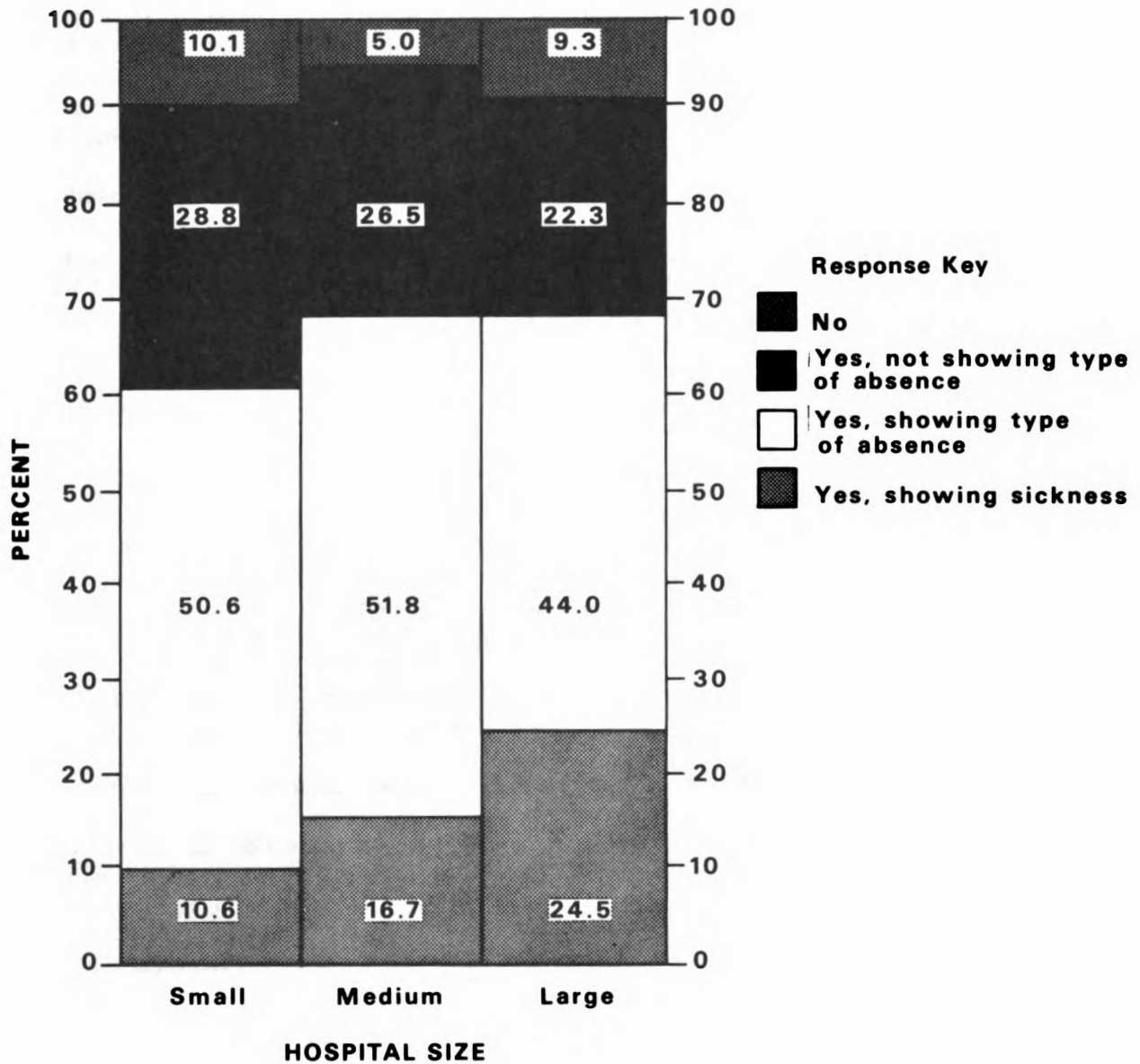
These data are shown in Figure 6 and presented in tabular form in Tables 10 and 11, Appendix A, are the numbers of hospitals for various periods of unscheduled absenteeism, as rated by hospitals in terms of days per year per employee.

**Question 21.** What are the most frequent causes of absenteeism among your employees? (Indicate all that apply in order of frequency of occurrence by writing 1, 2, 3, 4.)

Illness .....  
 Injuries .....  
 Family Health Problems .....  
 Other or Unspecified Personal Problems .....

**Results:** In this question, hospitals were asked to select from four causes of absenteeism, the

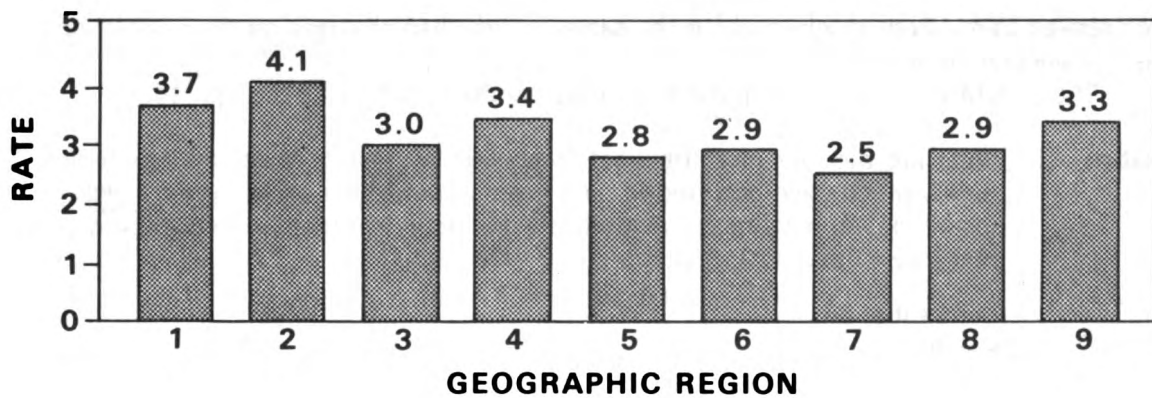
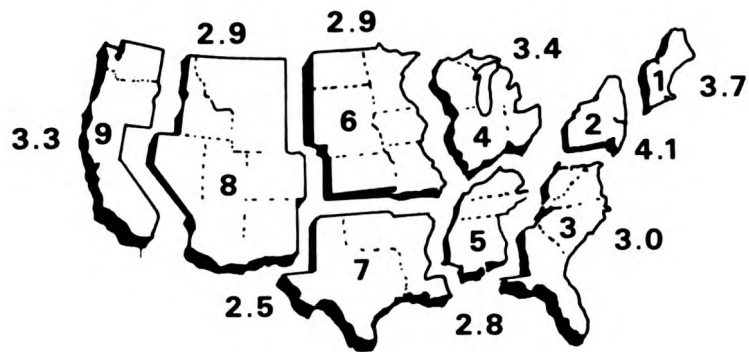
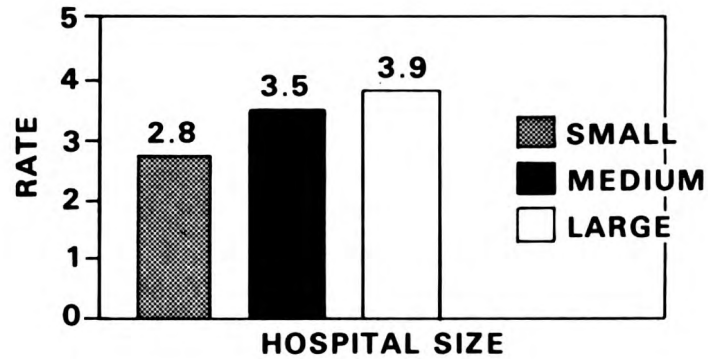
**FIGURE 5**  
**PERCENT OF HOSPITALS BY WHETHER HOSPITAL KEEPS EMPLOYEE**  
**ABSENTEEISM RECORDS, BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 19)**



<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)  
 These data are presented in tabular form in Appendix A, Table 8.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972,*

**FIGURE 6**  
**AVERAGE RATE OF UNSCHEDULED ABSENTEEISM (IN DAYS PER YEAR PER EMPLOYEE) FOR**  
**HOSPITALS, BY HOSPITAL SIZE<sup>1</sup>, AND BY GEOGRAPHIC REGION<sup>2</sup>**  
**(RESPONSE TO QUESTION 20)**



<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria in Appendix B. These data are presented in tabular form in Appendix A, Tables 10 and 11.

**Source of Data:** NIOSH Hospital Occupational Health Services Study, U.S., 1972.

one most commonly given by their employees. They were then asked to specify, in order of frequency, the next most frequent causes of absenteeism among the employees. It is important to recognize that an employee's illness or injury which results in his absence from work, may or may not be related to hospital employment.

To make analysis of responses easier, a scoring technique was devised that assigned a "weight" to each ranking, multiplied by the number of hospitals giving that ranking for a particular cause, divided by the total number of hospitals. This method of analysis is discussed in Appendix B.

The resulting "scores" for responses from all hospitals were

- Illness — 3.63
- Family Health Problems — 1.56
- Other or Unspecified Personal Problems — 1.34
- Injuries — 0.92

If all of the hospitals had indicated illness as the most frequent cause of absenteeism, then the above "score" would have been 4; while 3 would have been the score for family health problems; 2 for other or unspecified personal problems; and 1 for injuries. The total score, if all hospitals had reported this in the order as given, would add up to 10. Actually, the results totaled 7.45, which indicates that many hospitals did not respond to one or more of the rankings. In fact, 43 percent did not respond concerning frequency in which injuries were reported as a cause of absenteeism among their employees; thus, injuries ranked fourth in importance according to these data. These data also indicate small hospitals (25-99 beds) gave injuries a substantially lower score as a frequent cause of absenteeism. Medium-sized (100-299 beds) and large hospitals (300+ beds) gave injuries a score of over 1. This was also found in three of nine census regions of the country studied.

Illness was clearly the most frequent cause of absence listed by all hospitals, regardless of size or geographic region. Some hospitals did not answer the question, while others said it was not the most frequent cause. The significance of occupational illnesses and injuries as causes of absenteeism among hospital employees will become evident as hospitals comply with recordkeeping requirements of the U.S. Department of Labor's OSHA regulations. These requirements were not in effect at the time this survey was conducted.

Although family health problems were indicated as the second ranked cause of absenteeism, there was no unanimity of opinion on this or on other or unspecified personal problems, which ranked third. Both received about the same scores when analyzed on the basis of hospital sizes and geographic regions.

These data are shown in tabular form in Appendix A, Tables 12 through 14.

**Question 22.** What are the *four* most frequent occupational health problems, excluding injuries, which have occurred in your hospital during the most recent 1-year period for which you have records? (Indicate the four in order of frequency of occurrence by writing 1, 2, 3, 4.)

- Dermatitis .....
- Hepatitis .....
- Other Infection .....
- Radiation Illness or Exposure .....
- Respiratory Problems .....
- Volatile Organic Solvent Exposure .....
- Drug or Medication Reactions .....

**Results:** Seven potential occupational health risks are presented in this question which hospitals were asked to rank, in the order of frequency, indicating the four health problems most

frequently incurred by their employees within the most recent year for which records were available. The responses were analyzed as for Question 21 using the scoring method. These data are presented in tabular form in Tables 15 through 22, Appendix A. The total of the "scores" of the various occupational health problems as they were ranked 1 to 4 was 4.97 out of 10, the maximum possible score. Apparently, many hospitals failed to rank one or more of the seven health problems listed in the question. This may be indicative of a lack of records of occupational illnesses or the inability to identify an illness resulting from a worker's specific employment.

Respiratory problems ranked first for all sizes of hospitals, as well as geographic regions studied. The second most frequently recorded occupational health problem was the category, other infection. It ranked second, regardless of census region or hospital size.

Dermatitis was ranked third most frequent occupational health problem documented by all hospitals, irrespective of hospital size or geographic region. Further study shows large hospitals ranked the frequency of dermatitis almost the same as other infection.

These results raised several questions. (1) While the frequency of respiratory problems, other infection, and dermatitis appeared to be large, what is the severity of these occupational health risks? (2) To what extent is the high frequency of these problems the result of their being contracted outside the hospital, and, because of the unique nature of certain hospital job assignments, how do they interfere with the employee's ability to perform his normal duties (e.g., without possible risk to patient)? (3) To what extent are these problems nosocomial? (4) If occupationally induced, to what extent is the problem due to or made serious enough to be a reportable occupational illness as a result of irritants, fumes, vapors or sensitivities found in the hospital environment?

Ranking the remaining occupational health problems was more difficult since all had low "scores", and there were wide variations as to hospital size and geographic region. Drug or medication reactions fell into fourth place, while the frequency of hepatitis ranked fifth; however, large hospitals ranked hepatitis fourth. Apparently, hepatitis is a more recognized problem in large hospitals than elsewhere.

Volatile organic solvent exposure ranked sixth. Radiation illness or exposure ranked last. The West South Central Region reported a much higher score (0.17) for radiation illness or exposure in comparison to the 0.00 to 0.06 range for all other census regions studied. (See Appendix A, Table 22.)

**Question 23.** What are the *four* most frequent types of *injury* occurring in your hospital during the most recent 1-year period for which you have records? (Indicate the four in order of frequency of occurrence by writing 1, 2, 3, 4.)

- Back Injuries .....
- Strains and Sprains .....
- Fractures .....
- Burns .....
- Puncture Wounds (from Needles, etc.) .....
- Lacerations .....
- Abrasions and Contusions .....
- Hernias .....
- Eye Injuries .....

**Results:** Hospitals responding to this question selected, from a list of nine injuries, the four most frequently reported by their employees. Each hospital ranked these occupational injuries in descending order of frequency of occurrence, reported during the most recent year. Again, the scoring method was used to evaluate the results given in Appendix A, Tables 23 through 25.

Responses to this question were high. Based upon a possible score of 10, the total score

for all hospitals was 8.96. A few hospitals indicated more than one injury number 1; thus, the total for all hospitals listing their most frequently reported injury was 105.9 percent.

Strains and sprains were the most frequently reported types of occupational injuries listed by the total of all hospitals, and were rated number 1 by the small hospitals (25-99 beds). Seven out of nine geographic regions put strains and sprains at the top of their lists. However, large (300+ beds) hospitals and medium-sized (100-299 beds) hospitals ranked puncture wounds as the leading type of occupational injury by a substantial margin. They were the second ranking type of injury reported by all hospitals that responded to this question, but were rated fourth by small hospitals. Puncture wounds were among the top four types of injuries to be reported in all geographic regions.

Abrasions and contusions took third place among the injuries that all hospitals reported most frequently and generally ranked second or third when hospital size and geographic region were considered. Responses from the East North Central Region ranked Abrasions and Contusions in first place, while the Pacific Region dropped it to fourth place. They ranked second or third in the remaining seven geographic divisions studied.

Lacerations were ranked fourth or fifth by all size hospitals, as well as by seven out of nine of the U.S. Bureau of the Census Divisions included in this study.

Back injuries were reported fifth in frequency of occurrence by all hospitals. Small hospitals and the Pacific Region indicated that Back Injuries were third most common injury, while the Mountain Region put them second. Both medium-sized and large hospitals, plus seven geographic regions, listed Back Injuries as the fifth most prevalent occupational injury among hospital workers.

Burns ranked as the sixth most frequently reported injury, regardless of hospital size or geographic region.

Fractures, eye injuries, and hernias were ranked seventh, eighth, and ninth, respectively, in seven out of the nine U.S. Bureau of the Census Divisions studied, regardless of hospital size.

**Question 24.** Please provide the following data for the most recent 1-year period for which you have records.

Indicate 1 as 0001, 10 as 0010, etc. If you do not have data for any item, mark boxes with XXXX.)

Number of Occupational Injuries .....  
Number of Occupational Illnesses .....  
Total Number of Injuries and Illnesses Involving Lost Time .....  
Number of Cases for which Workmen's Compensation Claims were *Filed* .....

**Results:** The injuries and illnesses referred to in this question were assumed to be directly job-related. Over 85 percent (85.4%) of all hospitals reported the number of occupational injuries in the most recent 1-year period. Not surprisingly, small hospitals (25-99 beds) had the lowest average number of injuries that were recorded — under 15 per year (14.2). Medium-sized hospitals (100-299 beds) had an average of about 70 recorded injuries per year (68.5), while large hospitals (300+ beds) had nearly 225 injuries a year (224.6). For the various geographical regions, the average number of documented occupational injuries per hospital per year ranged from 35.2 to 94.2. These data are shown in Figure 7 and in Tables 26 and 27 of Appendix A.

Occupational illnesses were reported in about 65 percent (64.0%) of all hospitals. Again, the number of illnesses increased as the size of hospital increased, with 2 for small hospitals, 5.6 for medium-sized hospitals, and 17.6 for large hospitals. Again, the range was greater between geographical regions — from 1.5 to 13.3. See Figure 8 and Tables 28 and 29, Appendix A.

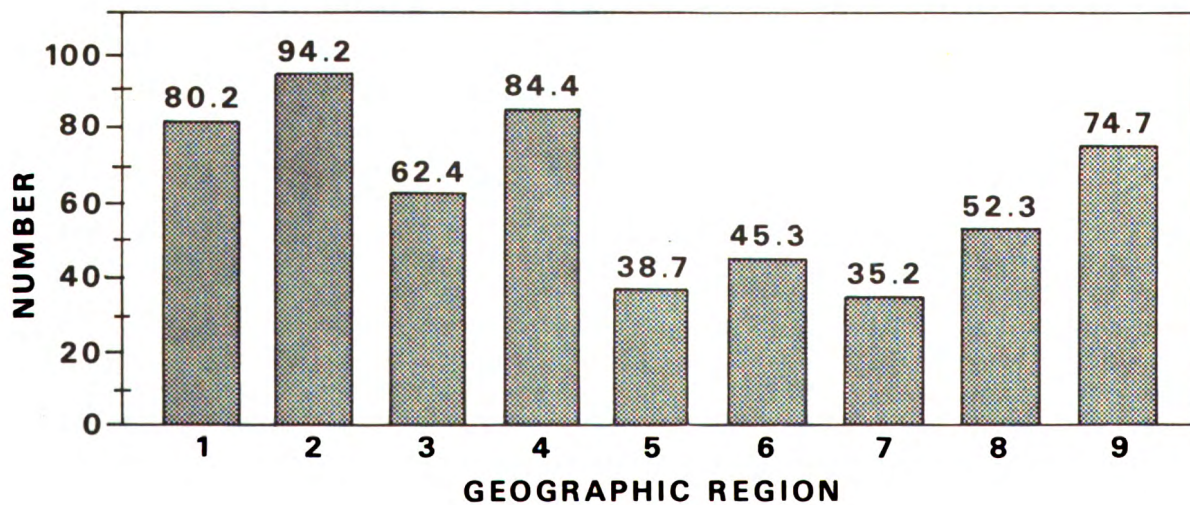
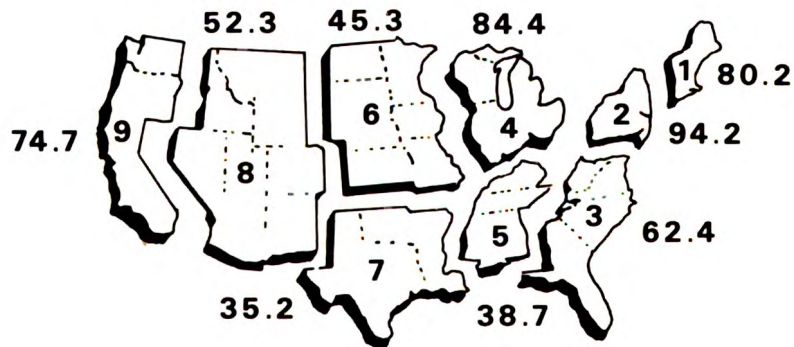
Hospital-incurred injuries and illnesses involving lost time were reported by over 80 percent (80.7%) of all hospitals. The number per hospital increased with size of hospital: 7.4 for small hospitals, 18.3 for medium-sized hospitals, and 50.2 for large hospitals. Figure 9 presents these data, and they are presented in tabular form in Tables 30 and 31, Appendix A.

When the data were evaluated by geographical region two general groupings developed: a high group of average numbers between 18.8 and 34.5, and a low group of average numbers between 9.4 and 12.1.

Nearly 85 percent (83.7%) of the hospitals reported on the number of cases for which workmen's compensation claims were filed in the most recent 1-year period. Again, the average number of cases increased with hospital size. There were under 10 (6.4) cases per year per hospital for small hospitals, nearly 30 (29.7) for medium-sized hospitals, and 75 (75.8) for large hospitals. Geographically, there was a high and a low group of regions. The low group had an average number between 10.3 and 18.4, while the high group had between 24.8 and 43.8. These data are shown graphically in Figure 10, and in tabular form in Appendix A, Tables 32 through 34.

Responses to Question 24 are summarized in Table 34, Appendix A.

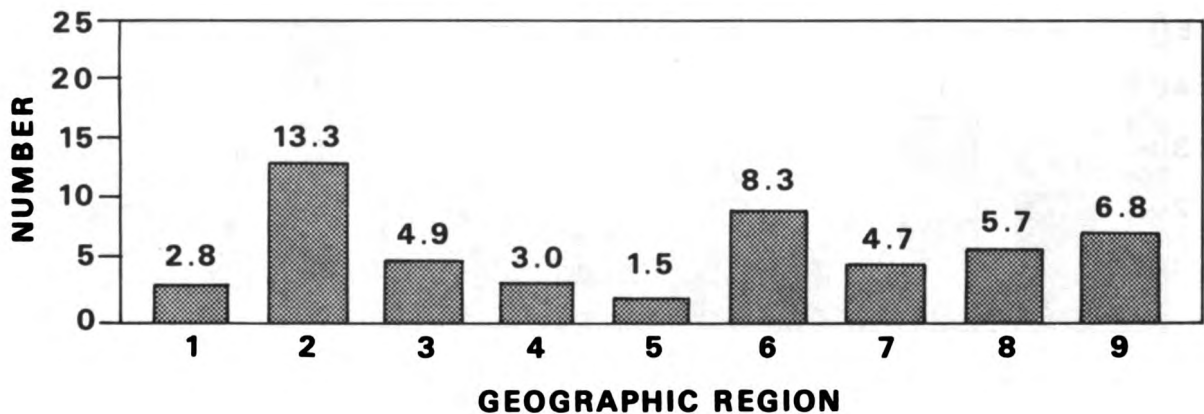
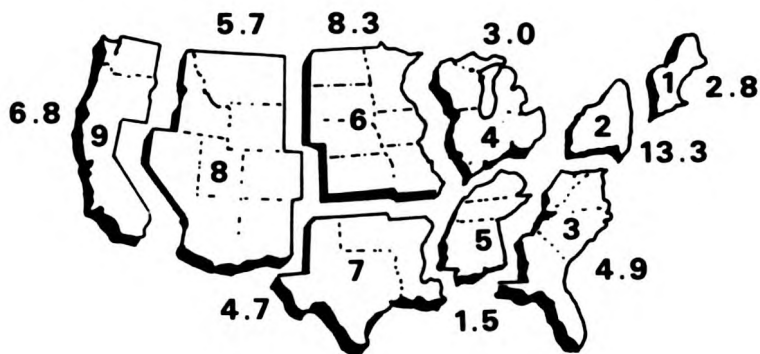
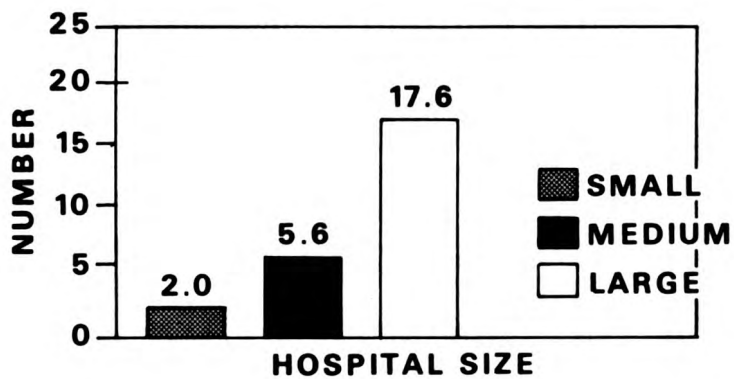
**FIGURE 7**  
**AVERAGE NUMBER OF OCCUPATIONAL INJURIES PER HOSPITAL PER YEAR, BY HOSPITAL**  
**SIZE<sup>1</sup> AND BY GEOGRAPHIC REGION<sup>2</sup>**  
**(RESPONSE TO QUESTION 24)**



<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)  
<sup>2</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B. These data are presented in tabular form in Appendix A, Tables 26, 27 and 34.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**FIGURE 8**  
**AVERAGE NUMBER OF OCCUPATIONAL ILLNESSES PER HOSPITAL PER YEAR,**  
**BY HOSPITAL SIZE<sup>1</sup> AND BY GEOGRAPHIC REGION<sup>2</sup>**  
**(RESPONSE TO QUESTION 24)**

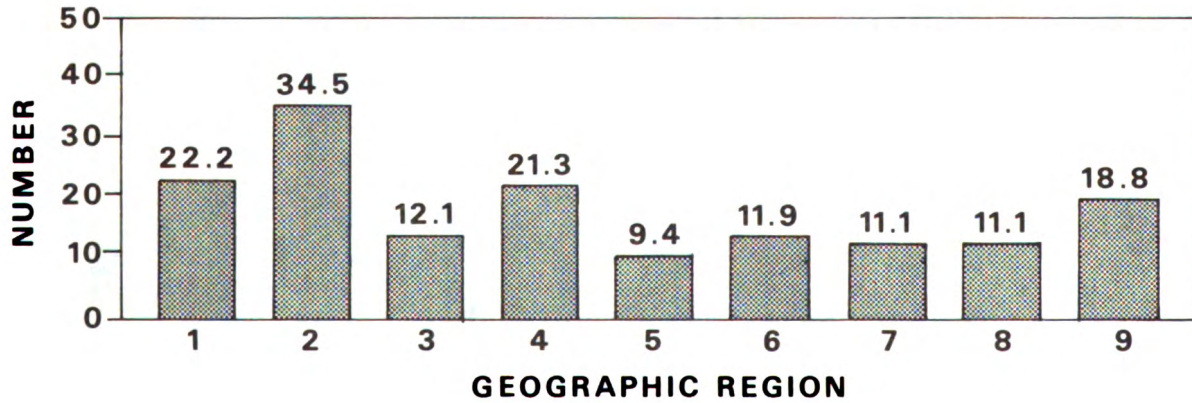
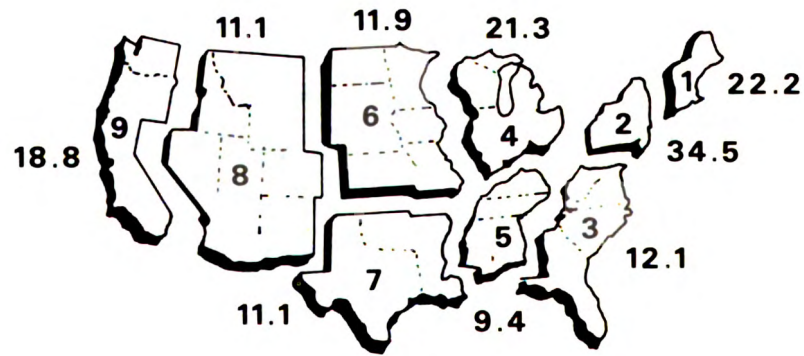
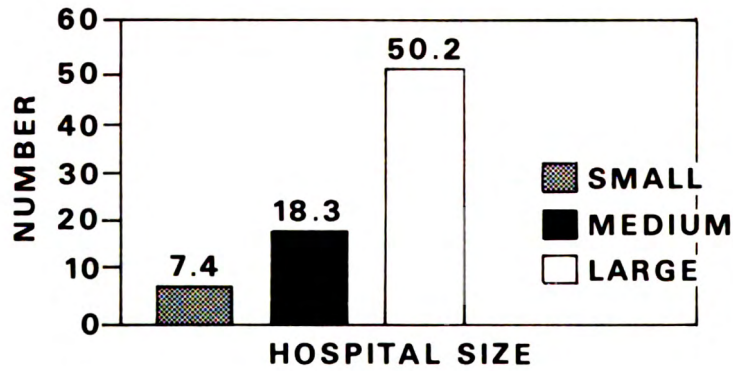


<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B. These data are presented in tabular form in Appendix A, Tables 28, 29 and 34.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**FIGURE 9**  
**AVERAGE NUMBER OF INJURIES AND ILLNESSES INVOLVING LOST TIME**  
**PER HOSPITAL PER YEAR, BY HOSPITAL SIZE<sup>1</sup> AND BY GEOGRAPHIC REGION<sup>2</sup>**  
**(RESPONSE TO QUESTION 24)**

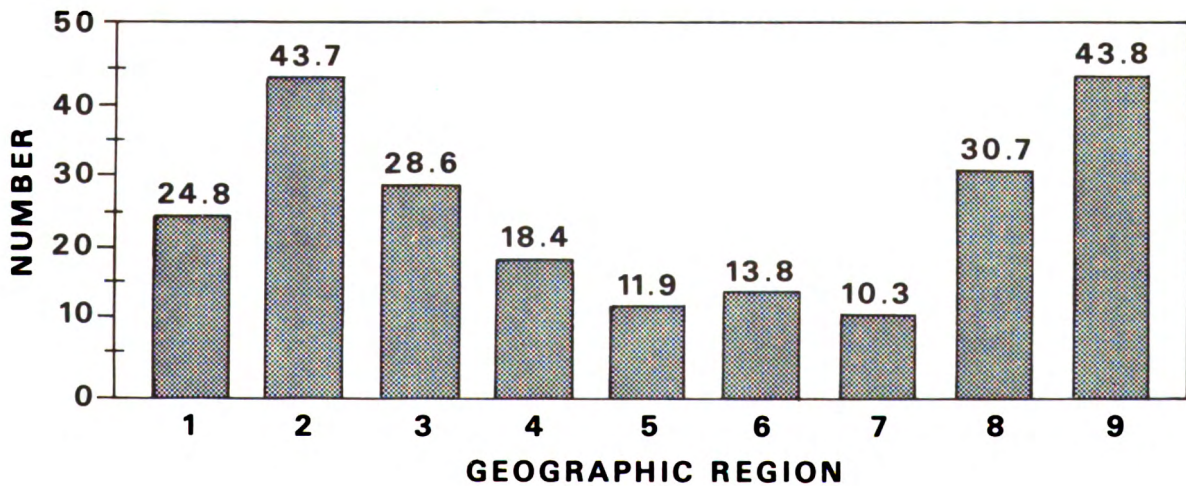
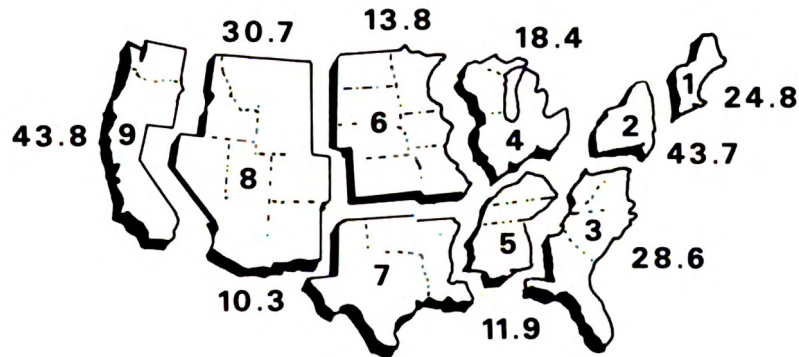
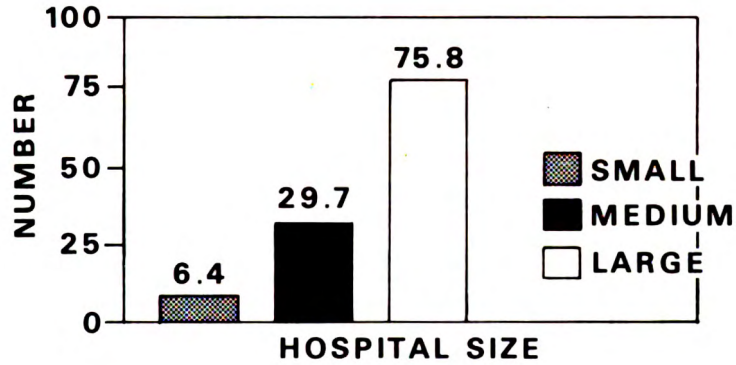


<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B. These data are presented in tabular form in Appendix A, Tables 30, 31 and 34.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**FIGURE 10**  
**AVERAGE NUMBER OF WORKMEN'S COMPENSATION CLAIMS FILED PER HOSPITAL PER YEAR,**  
**BY HOSPITAL SIZE<sup>1</sup> AND BY GEOGRAPHIC REGION<sup>2</sup>**  
**(RESPONSE TO QUESTION 24)**



<sup>1</sup>Hospital size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B. These data are presented in tabular form in Appendix A, Tables 32, 33 and 34.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.



## **APPENDIX A — STATISTICAL TABLES**

**TABLE 1**

**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY PRESENCE OF AN ESTABLISHED SYSTEM FOR RECORDING AND MAINTAINING HEALTH INFORMATION ON THE EMPLOYEES, AND BY HOSPITAL SIZE<sup>1</sup>**

**(RESPONSE TO QUESTION 18)**

Is there an established system?	Number					Percent		
	Total	Hospital size <sup>1</sup>			All hospitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
Yes .....	4,818	2,384	1,706	728	90.9	88.0	93.5	95.3
No .....	480	326	118	36	9.1	12.0	6.5	4.7

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

**Source of Data:** NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

**TABLE 2**

**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY PRESENCE OF AN ESTABLISHED SYSTEM FOR RECORDING AND MAINTAINING HEALTH INFORMATION ON THE EMPLOYEES, AND BY GEOGRAPHIC REGION<sup>1</sup>**

**(RESPONSE TO QUESTION 18)**

Geographic region	Employee health information system					
	Total	Number		All hospitals	Percent	
		Yes	No		Yes	No
Total .....	5,298	4,818	480	100.0	90.9	9.1
New England .....	277	247	30	100.0	89.2	10.8
Middle Atlantic .....	663	646	17	100.0	97.4	2.6
South Atlantic .....	718	635	83	100.0	88.4	11.6
E. N. Central .....	878	839	39	100.0	95.6	4.4
E. S. Central .....	422	363	59	100.0	86.0	14.0
W. N. Central .....	694	620	74	100.0	89.3	10.7
W. S. Central .....	703	607	96	100.0	86.3	13.7
Mountain .....	289	246	43	100.0	85.1	14.9
Pacific .....	654	615	39	100.0	94.0	6.0

<sup>1</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

**TABLE 3**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT INCLUDED**  
**VARIOUS ITEMS IN THE EMPLOYEE HEALTH RECORD, BY THE**  
**VARIOUS ITEMS, AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 18a)**

Items included	Number				All hospitals	Percent		
	Total	Hospital size <sup>1</sup>				Small	Medium	Large
		Small	Medium	Large				
All hospitals .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
Personal health history ....	3,174	1,312	1,217	645	59.9	48.4	66.7	84.4
Occupational history .....	2,105	835	896	374	39.7	30.8	49.1	49.0
Physical examination .....	4,060	1,960	1,427	673	76.6	72.3	78.2	88.1
Report of illness .....	4,497	2,171	1,624	702	84.9	80.1	89.0	91.9
Report of injury .....	3,274	1,507	1,188	579	61.8	55.6	65.1	75.8
Record of visits <sup>2</sup> .....	2,436	840	965	631	46.0	31.0	52.9	82.6
Referrals .....	1,039	241	377	421	19.6	8.9	20.7	55.1
Workmen's compensation records .....	3,881	1,861	1,420	600	73.3	68.7	77.9	78.5
Other insurance claims .....	1,771	863	663	245	33.4	31.8	36.3	32.1

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>To clinic, emergency room, or employee health nurse.

Note: Hospitals included all applicable items; therefore, the sum of the items is much greater than the totals for all hospitals.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 4**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY WHERE EMPLOYEE**  
**HEALTH RECORDS ARE FILED, AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 18b)**

Where filed	Number				All hospitals	Percent		
	Total	Hospital size <sup>1</sup>				Small	Medium	Large
		Small	Medium	Large				
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
Employee health .....	814	67	304	443	15.4	2.5	16.7	58.0
Personnel .....	3,272	1,878	1,172	222	61.8	69.3	64.3	29.1
Emergency .....	104	28	72	4	2.0	1.0	3.9	0.5
Outpatient .....	140	74	42	24	2.6	2.7	2.3	3.1
Other: <sup>2</sup> .....	483	324	120	39	9.1	12.0	6.6	5.1
Administrative/ business .....	(158)	(132)	(25)	(1)	(3.0)	(4.9)	(1.4)	(0.1)
Medical Records ....	(124)	(65)	(33)	(26)	(2.3)	(2.4)	(1.8)	(3.4)
Nursing .....	(73)	(49)	(19)	(5)	(1.4)	(1.8)	(1.0)	(0.7)
Miscellaneous .....	(128)	(78)	(43)	(7)	(2.4)	(2.9)	(2.4)	(0.9)
Blank .....	485	339	114	32	9.2	12.5	6.3	4.2

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>"Other" consists of four categories; data shown below in parentheses.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 5**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY WHERE EMPLOYEE**  
**HEALTH RECORDS ARE FILED, AND BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 18b)**

Where filed	Number									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
Total .....	5,298	277	663	718	878	422	694	703	289	654
Employee health .....	814	84	246	75	199	29	60	32	18	71
Personnel .....	3,272	114	318	473	541	278	469	443	182	454
Emergency .....	104	7	31	23	21	4	9	3	0	6
Outpatient .....	140	10	5	16	13	16	18	29	8	25
Other .....	483	32	48	48	70	30	72	83	32	68
Blank .....	485	30	15	83	34	65	66	113	49	30

	Percent									
	Total	(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
All hospitals .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Employee health .....	15.4	30.3	37.1	10.4	22.7	6.9	8.6	4.6	6.2	10.9
Personnel .....	61.8	41.2	48.0	65.9	61.6	65.9	67.6	63.0	63.0	69.4
Emergency .....	2.0	2.5	4.7	3.2	2.4	0.9	1.3	0.4	—	0.9
Outpatient .....	2.6	3.6	0.8	2.2	1.5	3.8	2.6	4.1	2.8	3.8
Other .....	9.1	11.6	7.2	6.7	8.0	7.1	10.4	11.8	11.1	10.4
Blank .....	9.2	10.8	2.3	11.6	3.9	15.4	9.5	16.1	17.0	4.6

<sup>1</sup>Numbers correspond to U.S. Bureau of the Census Divisions. See Appendix B.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 6**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY WHETHER**  
**HOSPITAL HAS WRITTEN POLICIES AND PROCEDURES GOVERNING**  
**ACCESS TO AND RELEASE OF EMPLOYEE HEALTH INFORMATION,**  
**AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 18c)**

Policies	Number					Percent			
	Total	Hospital size <sup>1</sup>			All hos- pitals	Hospital size <sup>1</sup>			
		Small	Medium	Large		Small	Medium	Large	
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0	
Yes .....	2,500	1,058	922	520	47.2	39.0	50.5	68.1	
No .....	2,248	1,293	753	202	42.4	47.7	41.3	26.4	
Blank .....	550	359	149	42	10.4	13.2	8.2	5.5	

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 7**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY WHETHER**  
**HOSPITAL HAS WRITTEN POLICIES AND PROCEDURES GOVERNING**  
**ACCESS TO AND RELEASE OF EMPLOYEE HEALTH INFORMATION,**  
**AND BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 18c)**

Geographic region <sup>1</sup>	Written policies and procedures							
	Total	Number			All hos- pitals	Percent		
		Yes	No	Blank		Yes	No	Blank
Total .....	5,298	2,500	2,248	550	100.0	47.2	42.4	10.4
New England .....	277	125	119	33	100.0	45.1	43.0	11.9
Middle Atlantic .....	663	355	287	21	100.0	53.5	43.3	3.2
South Atlantic .....	718	345	287	86	100.0	48.1	40.0	12.0
E. N. Central .....	878	465	361	52	100.0	53.0	41.1	5.9
E. S. Central .....	422	175	174	73	100.0	41.5	41.2	17.3
W. N. Central .....	694	299	318	77	100.0	43.1	45.8	11.1
W. S. Central .....	703	301	279	123	100.0	42.8	39.7	17.5
Mountain .....	289	122	119	48	100.0	42.2	41.2	16.6
Pacific .....	654	313	304	37	100.0	47.9	46.5	5.7

<sup>1</sup>Based upon U.S. Bureau of Census Divisions, and selection criteria specified in Appendix B.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 8**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY WHETHER**  
**HOSPITAL KEEPS EMPLOYEE ABSENTEEISM RECORDS,**  
**AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 19)**

Keep records	Number				All hos- pitals	Percent			
	Total	Hospital size <sup>1</sup>				All hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large			Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0	
Yes, specific sickness .....	779	287	305	187	14.7	10.6	16.7	24.5	
Yes, only type of absence .....	2,650	1,370	944	336	50.0	50.6	51.8	44.0	
Yes, not showing type of absence .....	1,434	780	484	170	27.1	28.8	26.5	22.3	
No records kept .....	435	273	91	71	8.2	10.1	5.0	9.3	

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 9**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY WHETHER**  
**HOSPITAL KEEPS EMPLOYEE ABSENTEEISM RECORDS,**  
**AND BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 19)**

Keep records	Number									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
Total .....	5,298	277	663	718	878	422	694	703	289	654
Yes, specific sickness ..	779	40	107	82	162	49	119	80	18	122
Yes, only type of absence .....	2,650	106	335	372	393	222	277	494	152	299
Yes, not showing type of absence .....	1,434	102	190	191	255	118	212	105	85	176
No records kept .....	435	29	31	73	68	33	86	24	34	57
	Percent									
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yes, specific sickness ..	14.7	14.4	16.1	11.4	18.5	11.6	17.1	11.4	6.2	18.7
Yes, only type of absence .....	50.0	38.3	50.5	51.8	44.8	52.6	39.9	70.3	52.6	45.7
Yes, not showing type of absence .....	27.1	36.8	28.7	26.6	29.0	28.0	30.5	14.9	29.4	26.9
No records kept .....	8.2	10.5	4.7	10.2	7.7	7.8	12.4	3.4	11.8	8.7

<sup>1</sup>Numbers correspond to U.S. Bureau of the Census Divisions. See Appendix B.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

**TABLE 10**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS WITH**  
**UNSCHEDULED ABSENTEEISM, IN DAYS PER YEAR**  
**PER EMPLOYEE, BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 20)**

Days per year per employee	Number					Percent			
	Total	Hospital size <sup>1</sup>			All hos- pitals	Hospital size <sup>1</sup>			
		Small	Medium	Large		Small	Medium	Large	
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0	
0 & Blank .....	2,091	1,051	717	323	39.5	38.8	39.3	42.3	
1 .....	539	406	116	17	10.2	15.0	6.4	2.2	
2-3 .....	957	596	281	80	18.1	22.0	15.4	10.5	
4-7 .....	1,338	539	555	244	25.3	19.9	30.4	31.9	
8-11 .....	264	75	106	83	5.0	2.8	5.8	10.9	
12-15 .....	81	28	43	10	1.5	1.0	2.4	1.3	
16-19 .....	5	5	0	0	0.1	0.2	—	—	
20+ .....	23	10	6	7	0.4	0.4	0.3	0.9	

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

**Source of Data:** NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

**TABLE 11**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS WITH**  
**UNSCHEDULED ABSENTEEISM, IN DAYS PER YEAR**  
**PER EMPLOYEE, BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 20)**

Days per year per employee	Number									
	Total	Geographic region								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
Total .....	5,298	277	663	718	878	422	694	703	289	654
0 and Blank .....	2,091	110	248	281	336	174	235	320	115	272
1 .....	539	12	40	72	84	43	102	111	34	41
2-3 .....	957	34	76	152	157	104	180	117	54	83
4-7 .....	1,338	97	209	174	227	75	147	118	74	217
8-11 .....	264	15	66	26	51	16	17	34	5	34
12-15 .....	81	7	18	11	15	8	9	0	6	7
16-19 .....	5	0	0	0	0	0	2	3	0	0
20+ .....	23	2	6	2	8	2	2	0	1	0
Percent										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0 and Blank .....	39.5	39.7	37.4	39.1	38.3	41.2	33.9	45.5	39.8	41.6
1 .....	10.2	4.3	6.0	10.0	9.6	10.2	14.7	15.8	11.8	6.3
2-3 .....	18.1	12.3	11.5	21.2	17.9	24.6	25.9	16.6	18.7	12.7
4-7 .....	25.3	35.0	31.5	24.2	25.9	17.8	21.2	16.8	25.6	33.2
8-11 .....	5.0	5.4	10.0	3.6	5.8	3.8	2.4	4.8	1.7	5.2
12-15 .....	1.5	2.5	2.7	1.5	1.7	1.9	1.3	—	2.1	1.1
16-19 .....	0.1	—	—	—	—	—	0.3	0.4	—	—
20+ .....	0.4	0.7	0.9	0.3	0.9	0.5	0.3	—	0.3	—

<sup>1</sup>Numbers correspond to U.S. Bureau of the Census Divisions. See Appendix B.

Source of Data: NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 12**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS, BY CAUSES**  
**OF ABSENTEEISM AND THEIR ORDER OF FREQUENCY,**  
**AND BY HOSPITAL SIZE<sup>1</sup>**

**(RESPONSE TO QUESTION 21)**

Cause of absenteeism and order of frequency	Number				Percent			
	Total	Hospital size <sup>1</sup>			All hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Illness: .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1st .....	4,636	2,307	1,651	678	87.5	85.1	90.5	88.7
2nd .....	175	107	46	22	3.3	3.9	2.5	2.9
3rd .....	78	43	26	9	1.5	1.6	1.4	1.2
4th .....	8	4	1	3	0.2	0.1	0.1	0.4
Blank .....	401	249	100	52	7.6	9.2	5.5	6.8
Injuries: .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1st .....	47	25	15	7	0.9	0.9	0.8	0.9
2nd .....	566	263	179	124	10.7	9.7	9.8	16.2
3rd .....	585	227	252	106	11.0	8.4	13.8	13.9
4th .....	1,841	782	768	291	34.7	28.9	42.1	38.1
Blank .....	2,259	1,413	610	236	42.6	52.1	33.4	30.9
Family health: .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1st .....	230	156	58	16	4.3	5.8	3.2	2.1
2nd .....	1,642	751	647	244	31.0	27.7	35.5	31.9
3rd .....	1,099	443	457	199	20.7	16.3	25.1	26.0
4th .....	226	70	90	66	4.3	2.6	4.9	8.6
Blank .....	2,101	1,290	572	239	39.7	47.6	31.4	31.3
Other problems: .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1st .....	346	190	111	45	6.5	7.0	6.1	5.9
2nd .....	800	287	371	142	15.1	10.6	20.3	18.6
3rd .....	1,264	591	468	205	23.9	21.8	25.7	26.8
4th .....	808	364	305	139	15.3	13.4	16.7	18.2
Blank .....	2,080	1,278	569	233	39.3	47.2	31.2	30.5

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 13**  
**"SCORES" AND RANK OF CAUSES OF ABSENTEEISM,**  
**BY HOSPITAL SIZE<sup>1</sup>**

**(RESPONSE TO QUESTION 21)**

Cause of absenteeism	Hospital size <sup>1</sup>							
	All hospitals		Small		Medium		Large	
	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"
Illness .....	1	3.63	1	3.56	1	3.73	1	3.66
Family health .....	2	1.56	2	1.41	2	1.74	2	1.65
Other problems .....	3	1.34	3	1.17	3	1.53	3	1.51
Injuries .....	4	0.92	4	0.78	4	1.02	4	1.18
Total .....	—	7.45	—	6.92	—	8.02	—	8.00

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 14**  
**"SCORES" AND RANK OF CAUSES OF ABSENTEEISM,**  
**BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 21)**

Cause of absenteeism	Geographic region									
	All regions		New England		Mid. Atlantic		So. Atlantic		E.N. Central	
	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"
Illness .....	1	3.63	1	3.66	1	3.76	1	3.58	1	3.70
Family health .....	2	1.56	2	1.62	2	1.51	2	1.63	2	1.73
Other problems .....	3	1.34	3	1.58	3	1.52	3	1.38	3	1.43
Injury .....	4	0.92	4	1.18	4	1.07	4	0.82	4	0.97
Total	—	7.45	—	8.04	—	7.86	—	7.41	—	7.83
	E.S. Central		W.N. Central		W.S. Central		Mountain		Pacific	
	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"
	Illness .....	1	3.53	1	3.63	1	3.65	1	3.58	1
Family health .....	2	1.75	2	1.55	2	1.29	2	1.56	2	1.48
Other problems .....	3	1.36	3	1.24	3	1.16	3	1.22	3	1.26
Injury .....	4	0.76	4	0.97	4	0.61	4	0.93	4	1.14
Total	—	7.40	—	7.39	—	6.71	—	7.29	—	7.40

<sup>1</sup>Based upon U.S. Bureau of Census Divisions, and selection criteria specified in Appendix B.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 15-A**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL DERMATITIS, BY THE RANK, AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Rank for dermatitis	Number				Percent			
	Total	Hospital size <sup>1</sup>			All hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1. ....	520	162	217	141	9.8	6.0	11.9	18.5
2. ....	330	105	102	123	6.2	3.9	5.6	16.1
3. ....	596	248	226	122	11.2	9.2	12.4	16.0
4. ....	278	123	107	48	5.2	4.5	5.9	6.3
No response <sup>2</sup> .....	3,574	2,072	1,172	330	67.5	76.5	64.3	43.2

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Dermatitis not among first four occupational health problems, or hospital keeps no records of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 15-B**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL DERMATITIS, BY THE RANK,**  
**AND BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Geographic region <sup>1</sup>	Total	Number					All hos- pitals	Percent				
		Rank of frequency				No re- sponse <sup>2</sup>		Rank of frequency				No re- sponse <sup>2</sup>
		1	2	3	4			1	2	3	4	
U.S. Total .....	5,298	520	330	596	278	3,574	100.0	9.8	6.2	11.2	5.2	67.5
New England .....	277	35	25	43	11	163	100.0	12.6	9.0	15.5	4.0	58.8
Middle Atlantic .....	663	97	51	85	23	407	100.0	14.6	7.7	12.8	3.5	61.4
South Atlantic .....	718	43	42	64	50	519	100.0	6.0	5.8	8.9	7.0	72.3
E. North Central .....	878	97	64	126	43	548	100.0	11.0	7.3	14.4	4.9	62.4
E. South Central .....	422	15	14	31	16	346	100.0	3.6	3.3	7.3	3.8	82.0
W. North Central .....	694	50	33	78	35	498	100.0	7.2	4.8	11.2	5.0	71.8
W. South Central .....	703	96	21	33	46	507	100.0	13.7	3.0	4.7	6.5	72.1
Mountain .....	289	21	23	31	15	199	100.0	7.3	8.0	10.7	5.2	68.9
Pacific .....	654	66	57	105	39	387	100.0	10.1	8.7	16.1	6.0	59.2

<sup>1</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B.

<sup>2</sup>Dermatitis not among first four occupational health problems, or hospital keeps no records of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 16-A**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL HEPATITIS, BY THE RANK,**  
**AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Rank for hepatitis	Number				All hos- pitals	Percent		
	Total	Hospital size <sup>1</sup>				Small	Hospital size <sup>1</sup>	
		Small	Medium	Large			Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1. ....	136	30	49	57	2.6	1.1	2.7	7.5
2. ....	95	6	43	46	1.8	0.2	2.4	6.0
3. ....	157	66	40	51	3.0	2.4	2.2	6.7
4. ....	198	53	64	81	3.7	2.0	3.5	10.6
No response <sup>2</sup> .....	4,712	2,555	1,628	529	88.9	94.3	89.3	69.2

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Hepatitis not among first four occupational health problems, or hospital keeps no record of same.

Source of Data: NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 16-B**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL HEPATITIS, BY THE RANK,**  
**AND BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Geographic region <sup>1</sup>	Total	Number						Percent				
		Rank of frequency				No re- sponse <sup>2</sup>	All hos- pitals	Rank of frequency				No re- sponse <sup>2</sup>
		1	2	3	4			1	2	3	4	
U.S. Total .....	5,298	136	95	157	198	4,712	100.0	2.6	1.8	3.0	3.7	88.9
New England .....	277	13	8	11	14	231	100.0	4.7	2.9	4.0	5.1	83.4
Middle Atlantic .....	663	18	24	21	43	557	100.0	2.7	3.6	3.2	6.5	84.0
South Atlantic .....	718	16	10	17	30	645	100.0	2.2	1.4	2.4	4.2	89.8
E. North Central .....	878	17	16	25	26	794	100.0	1.9	1.8	2.8	3.0	90.4
E. South Central .....	422	2	3	4	10	403	100.0	.5	.7	.9	2.4	95.5
W. North Central .....	694	4	5	8	18	659	100.0	.6	.7	1.2	2.6	95.0
W. South Central .....	703	35	18	31	11	608	100.0	5.0	2.6	4.4	1.6	86.5
Mountain .....	289	2	3	9	12	263	100.0	.7	1.0	3.1	4.2	91.0
Pacific .....	654	29	8	31	34	552	100.0	4.4	1.2	4.7	5.2	84.4

<sup>1</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B.

<sup>2</sup>Hepatitis not among first four occupational health problems, or hospital keeps no record of same.

Source of Data: NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 17-A**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL "OTHER INFECTIONS" PROBLEMS, BY THE RANK,**  
**AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Rank for "other infections"	Number				Percent			
	Total	Hospital size <sup>1</sup>			All hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1. ....	757	397	264	96	14.3	14.6	14.5	12.6
2. ....	1,448	704	509	235	27.3	26.0	27.9	30.8
3. ....	219	66	65	88	4.1	2.4	3.6	11.5
4. ....	81	26	28	27	1.5	1.0	1.5	3.5
No Response <sup>2</sup> .....	2,793	1,517	958	318	52.7	56.0	52.5	41.6

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+).

<sup>2</sup>Other Infections not among first four occupational health problems, or hospital keeps no record of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 17-B**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL "OTHER INFECTIONS" PROBLEMS, BY THE RANK,**  
**AND BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Geographic region <sup>1</sup>	Number						Percent					
	Total	Rank of frequency				No re- sponse <sup>2</sup>	All hos- pitals	Rank of frequency				No re- sponse <sup>2</sup>
		1	2	3	4			1	2	3	4	
U.S. Total .....	5,298	757	1,448	219	81	2,793	100.0	14.3	27.3	4.1	1.5	52.7
New England .....	277	23	89	19	3	143	100.0	8.3	32.1	6.9	1.1	51.6
Middle Atlantic .....	663	76	194	30	22	341	100.0	11.5	29.3	4.5	3.3	51.4
South Atlantic .....	718	101	194	28	5	390	100.0	14.1	27.0	3.9	.7	54.3
E. North Central .....	878	109	262	51	13	443	100.0	12.4	29.8	5.8	1.5	50.5
E. South Central .....	422	59	104	6	3	250	100.0	14.0	24.6	1.4	.7	59.2
W. North Central .....	694	116	203	26	8	341	100.0	16.7	29.3	3.7	1.2	49.1
W. South Central .....	703	136	155	15	8	389	100.0	19.3	22.0	2.1	1.1	55.3
Mountain .....	289	45	72	10	9	153	100.0	15.6	24.9	3.5	3.1	52.9
Pacific .....	654	92	175	34	10	343	100.0	14.1	26.8	5.2	1.5	52.4

<sup>1</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B.

<sup>2</sup>Other Infections not among first four occupational health problems, or hospital keeps no record of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 18-A**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL RADIATION ILLNESS OR EXPOSURE, BY THE RANK,**  
**AND BY HOSPITAL SIZE<sup>1</sup>**

**(RESPONSE TO QUESTION 22)**

Rank for radiation illness or exposure	Number				Percent			
	Total	Hospital size <sup>1</sup>			All hospitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1. ....	33	23	7	3	.6	.8	.4	.4
2. ....	5	0	4	1	.1	—	.2	.1
3. ....	4	1	1	2	.1	.0	.1	.3
4. ....	33	24	6	3	.6	.9	.3	.4
No response <sup>2</sup> .....	5,223	2,662	1,806	755	98.6	98.2	99.0	98.8

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Radiation Illness/Exposure not among first four occupational health problems, or hospital keeps no record of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

**TABLE 18-B**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL RADIATION ILLNESS OR EXPOSURE, BY THE RANK,**  
**AND BY GEOGRAPHIC REGION<sup>1</sup>**

**(RESPONSE TO QUESTION 22)**

Geographic region <sup>1</sup>	Number						Percent					
	Total	Rank of frequency				No response <sup>2</sup>	All hospitals	Rank of frequency				No response <sup>2</sup>
		1	2	3	4			1	2	3	4	
U.S. Total .....	5,298	33	5	4	33	5,223	100.0	0.6	0.1	0.1	0.6	98.6
New England .....	277	0	0	1	0	276	100.0	—	—	.4	—	99.6
Middle Atlantic .....	663	10	0	0	0	653	100.0	1.5	—	—	—	98.5
South Atlantic .....	718	0	4	0	0	714	100.0	—	.6	—	—	99.4
E. North Central .....	878	0	0	2	4	872	100.0	—	—	.2	.5	99.3
E. South Central .....	422	0	1	0	0	421	100.0	—	.2	—	—	99.8
W. North Central .....	694	0	0	1	0	693	100.0	—	—	.1	—	99.9
W. South Central .....	703	23	0	0	24	656	100.0	3.3	—	—	3.4	93.3
Mountain .....	289	0	0	0	3	286	100.0	—	—	—	1.0	99.0
Pacific .....	654	0	0	0	2	652	100.0	—	—	—	0.3	99.7

<sup>1</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B.

<sup>2</sup>Radiation Illness/Exposure not among first four occupational health problems, or hospital keeps no record of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

**TABLE 19-A**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL RESPIRATORY PROBLEMS, BY THE RANK,**  
**AND BY HOSPITAL SIZE<sup>1</sup>**

**(RESPONSE TO QUESTION 22)**

Rank for respiratory problems	Number				Percent			
	Total	Hospital size <sup>1</sup>			All hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1. ....	2,197	1,196	692	309	41.5	44.1	37.9	40.4
2. ....	322	170	103	49	6.1	6.3	5.6	6.4
3. ....	96	28	43	25	1.8	1.0	2.4	3.3
4. ....	73	16	30	27	1.4	.6	1.6	3.5
No response <sup>2</sup> .....	2,610	1,300	956	354	49.3	48.0	52.4	46.3

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Respiratory Problems not among first four occupational health problems, or hospital keeps no record of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 19-B**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL RESPIRATORY PROBLEMS, BY THE RANK,**  
**AND BY GEOGRAPHIC REGION<sup>1</sup>**

**(RESPONSE TO QUESTION 22)**

Geographic region <sup>1</sup>	Total	Number					All hos- pitals	Percent				
		Rank of frequency				No re- sponse <sup>2</sup>		Rank of frequency				No re- sponse <sup>2</sup>
		1	2	3	4			1	2	3	4	
U.S. Total .....	5,298	2,197	322	96	73	2,610	100.0	41.5	6.1	1.8	1.4	49.3
New England .....	277	114	11	8	5	139	100.0	41.2	4.0	2.9	1.8	50.2
Middle Atlantic .....	663	321	15	28	9	290	100.0	48.4	2.3	4.2	1.4	43.7
South Atlantic .....	718	296	41	5	9	367	100.0	41.2	5.7	.7	1.3	51.1
E. North Central .....	878	369	66	9	8	426	100.0	42.0	7.5	1.0	.9	48.5
E. South Central .....	422	156	30	8	3	225	100.0	37.0	7.1	1.9	.7	53.3
W. North Central .....	694	319	62	10	1	302	100.0	46.0	8.9	1.4	.1	43.5
W. South Central .....	703	251	42	10	5	395	100.0	35.7	6.0	1.4	.7	56.2
Mountain .....	289	112	32	4	3	138	100.0	38.8	11.1	1.4	1.0	47.8
Pacific .....	654	259	23	14	30	328	100.0	39.6	3.5	2.1	4.6	50.2

<sup>1</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B.

<sup>2</sup>Occupational Respiratory Problems not ranked among first four occupational health problems, or hospital keeps no records of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 20-A**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL VOLATILE ORGANIC SOLVENT EXPOSURE PROBLEMS,**  
**BY THE RANK, AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Rank for volatile organic solvent exposure	Number				All Hos- pitals	Percent		
	Total	Hospital size <sup>1</sup>				Small	Hospital size <sup>1</sup>	
		Small	Medium	Large			Small	Medium
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1. ....	59	17	24	18	1.1	.6	1.3	2.4
2. ....	53	31	13	9	1.0	1.1	.7	1.2
3. ....	92	21	46	25	1.7	.8	2.5	3.3
4. ....	65	25	21	19	1.2	.9	1.2	2.5
No response <sup>2</sup> .....	5,029	2,616	1,720	693	94.9	96.5	94.3	90.7

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Volatile Organic Solvent Exposure not among first four occupational health problems, or hospital keeps no record of same.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 20-B**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL VOLATILE ORGANIC SOLVENT EXPOSURE PROBLEMS,**  
**BY THE RANK, AND BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Geographic region <sup>1</sup>	Total	Number					All hos- pitals	Percent				
		Rank of frequency				No re- sponse <sup>2</sup>		Rank of frequency				No re- sponse <sup>2</sup>
		1	2	3	4			1	2	3	4	
U.S. Total .....	5,298	59	53	92	65	5,029	100.0	1.1	1.0	1.7	1.2	94.9
New England .....	277	7	6	6	5	253	100.0	2.5	2.2	2.2	1.8	91.3
Middle Atlantic .....	663	1	10	4	15	633	100.0	.2	1.5	.6	2.3	95.5
South Atlantic .....	718	10	0	9	11	688	100.0	1.4	—	1.3	1.5	95.8
E. North Central .....	878	6	1	27	17	827	100.0	.7	.1	3.1	1.9	94.2
E. South Central .....	422	8	2	12	4	396	100.0	1.9	.5	2.8	.9	93.8
W. North Central .....	694	10	5	5	7	667	100.0	1.4	.7	.7	1.0	96.1
W. South Central .....	703	4	25	14	0	660	100.0	.6	3.6	2.0	—	93.9
Mountain .....	289	3	2	3	0	281	100.0	1.0	.7	1.0	—	97.2
Pacific .....	654	10	2	12	6	624	100.0	1.5	.3	1.8	.9	95.4

<sup>1</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B.

<sup>2</sup>Volatile Organic Solvent Exposure not ranked among first four occupational health problems, or hospital keeps no records of same.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 21-A**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL DRUG OR MEDICATION REACTIONS,**  
**BY THE RANK, AND BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Rank for drug or medication reactions	Number				Percent			
	Total	Hospital size <sup>1</sup>			All Hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1. ....	74	41	24	9	1.4	1.5	1.3	1.2
2. ....	95	33	41	21	1.8	1.2	2.2	2.7
3. ....	347	177	120	50	6.5	6.5	6.6	6.5
4. ....	397	185	133	79	7.5	6.8	7.3	10.3
No response <sup>2</sup> .....	4,385	2,274	1,506	605	82.8	83.9	82.6	79.2

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)  
<sup>2</sup>Drug or Medication Reactions not among first four occupational health problems, or hospital keeps no record of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

**TABLE 21-B**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS THAT RANKED**  
**OCCUPATIONAL DRUG OR MEDICATION REACTIONS,**  
**BY THE RANK, AND BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 22)**

Geographic region <sup>1</sup>	Number						Percent					
	Total	Rank of frequency				No re- sponse <sup>2</sup>	All hos- pitals	Rank of frequency				No re- sponse <sup>2</sup>
		1	2	3	4			1	2	3	4	
U.S. Total .....	5,298	74	95	347	397	4,385	100.0	1.4	1.8	6.5	7.5	82.8
New England .....	277	0	0	5	17	255	100.0	—	—	1.8	6.1	92.1
Middle Atlantic .....	663	12	19	31	29	572	100.0	1.8	2.9	4.7	4.4	86.3
South Atlantic .....	718	16	8	67	48	579	100.0	2.2	1.2	9.3	6.7	80.6
E. North Central .....	878	9	23	48	86	712	100.0	1.0	2.6	5.5	9.8	81.1
E. South Central .....	422	4	4	27	32	355	100.0	.9	.9	6.4	7.6	84.1
W. North Central .....	694	11	13	47	62	561	100.0	1.6	1.9	6.8	8.9	80.8
W. South Central .....	703	5	5	77	54	562	100.0	.7	.7	11.0	7.7	79.9
Mountain .....	289	4	5	25	19	236	100.0	1.4	1.7	8.7	6.6	81.7
Pacific .....	654	13	18	20	50	553	100.0	2.0	2.8	3.1	7.6	84.6

<sup>1</sup>Based upon U.S. Bureau of the Census Divisions, and selection criteria specified in Appendix B.

<sup>2</sup>Occupational Drug or Medication Reactions not ranked among first four occupational health, or hospital keeps no records of same.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

TABLE 22

**“SCORES” AND RANK OF OCCUPATIONAL HEALTH PROBLEMS,  
EXCLUDING INJURIES, BY HOSPITAL SIZE<sup>1</sup>,  
AND BY GEOGRAPHIC REGION<sup>2</sup>  
(RESPONSE TO QUESTION 22)**

Occupational health problem	All hospitals	Hospital size <sup>1</sup>									Geographic region <sup>2</sup>														
		Small			Medium			Large			New Eng. (1)	Mid. Atl. (2)	So. Atl. (3)	E.N.C. (4)	E.S.C. (5)	W.N.C. (6)	W.S.C. (7)	Mountain (8)	Pacific (9)						
		Rank	Score	Score	Rank	Score	Score	Rank	Score	Score	Rank	Score	Score	Rank	Score	Score	Rank	Score	Score	Rank	Score	Score			
Respiratory problems .....	1	1.89	1.98	1	1.75	1.91	1	1.91	1.84	1	2.10	1	1.85	1	1.94	1	1.74	1	2.14	1	1.64	1	1.92	1	1.78
Other infections .....	2	1.49	1.42	2	1.50	1.69	2	1.69	1.44	2	1.46	2	1.46	2	1.52	2	1.33	2	1.63	2	1.49	2	1.47	2	1.48
Dermatitis .....	3	.86	.58	3	.95	1.60	3	1.60	1.13	3	1.10	3	.66	3	1.00	3	.43	3	.71	3	.80	3	.80	3	1.05
Drug or medication reactions .....	4	.32	.30	4	.32	.36	6	.36	.10	5	.30	4	.37	4	.33	4	.27	4	.34	5	.35	4	.35	5	.30
Hepatitis .....	5	.25	.12	5	.26	.72	4	.72	.40	4	.35	5	.22	5	.22	6	.08	6	.09	4	.38	5	.16	4	.36
Volatile organic solvent exposure .....	6	.12	.08	6	.14	.22	5	.23	.09	6	.09	6	.10	6	.11	5	.16	5	.10	6	.17	6	.08	6	.12
Radiation illness or exposure .....	7	.04	.04	7	.03	.03	7	.03	.01	7	.06	7	.02	7	.01	7	.01	7	.00	6	.17	7	.01	7	.00
Total .....	—	4.97	4.52	—	4.95	6.53	—	6.53	5.15	—	5.46	—	4.68	—	5.13	—	4.02	—	5.01	—	5.00	—	4.79	—	5.09

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Numbers correspond to U.S. Bureau of the Census Divisions. See Appendix B.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 23**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS INDICATING**  
**RANKING FOR VARIOUS INJURIES, BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 23)**

Injuries and ranking	Number				All Hos- pitals	Percent		
	Total	Hospital size <sup>1</sup>				Small	Medium	Large
		Small	Medium	Large				
<b>Back injuries:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	862	490	281	91	16.3	18.1	15.4	11.9
2 .....	596	318	183	95	11.2	11.7	10.0	12.4
3 .....	561	276	209	76	10.6	10.2	11.5	9.9
4 .....	701	247	301	153	13.2	9.1	16.5	20.0
Blank .....	2,578	1,379	850	349	48.7	50.9	46.6	45.7
<b>Strains and Sprains:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	1,302	815	376	111	24.6	30.1	20.6	14.5
2 .....	1,034	557	335	142	19.5	20.6	18.4	18.6
3 .....	917	321	402	194	17.3	11.8	22.0	25.4
4 .....	689	190	336	163	13.0	7.0	18.4	21.3
Blank .....	1,356	827	375	154	25.6	30.5	20.6	20.2
<b>Fractures:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	50	36	11	3	.9	1.3	.6	.4
2 .....	35	22	10	3	.7	.8	.5	.4
3 .....	44	32	12	0	.8	1.2	.7	—
4 .....	68	40	19	9	1.3	1.5	1.0	1.2
Blank .....	5,101	2,580	1,772	749	96.3	95.2	97.1	98.0
<b>Burns:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	123	97	22	4	2.3	3.6	1.2	0.5
2 .....	201	120	73	8	3.8	4.4	4.0	1.0
3 .....	356	181	138	37	6.7	6.7	7.6	4.8
4 .....	505	240	166	99	9.5	8.9	9.1	13.0
Blank .....	4,113	2,072	1,425	616	77.6	76.5	78.1	80.6
<b>Puncture wounds:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	1,322	412	580	330	25.0	15.2	31.8	43.2
2 .....	693	261	309	123	13.1	9.6	16.9	16.1
3 .....	821	344	330	147	15.5	12.7	18.1	19.2
4 .....	481	220	185	76	9.1	8.1	10.1	9.9
Blank .....	1,981	1,473	420	88	37.4	54.4	23.0	11.5

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 23—Continued**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS INDICATING**  
**RANKING FOR VARIOUS INJURIES, BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 23)**

Injuries and ranking	Number				Percent			
	Total	Hospital size <sup>1</sup>			All Hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
<b>Lacerations:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	703	297	301	105	13.3	11.0	16.5	13.7
2 .....	936	356	398	182	17.7	13.1	21.8	23.8
3 .....	724	340	262	122	13.7	12.5	14.4	16.0
4 .....	626	280	245	101	11.8	10.3	13.4	13.2
Blank .....	2,309	1,437	618	254	43.6	53.0	33.9	33.2
<b>Abrasions and contusions:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	1,218	603	461	154	23.0	22.3	25.3	20.2
2 .....	861	339	346	176	16.3	12.5	19.0	23.0
3 .....	608	242	228	138	11.5	8.9	12.5	18.1
4 .....	563	227	235	101	10.6	8.4	12.9	13.2
Blank .....	2,048	1,299	554	195	38.7	47.9	30.4	25.5
<b>Hernias:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	14	4	9	1	.3	.1	.5	.1
2 .....	4	4	0	0	.1	.1	—	—
3 .....	11	9	2	0	.2	.3	.1	—
4 .....	51	45	2	4	1.0	1.7	.1	.5
Blank .....	5,218	2,648	1,811	759	98.5	97.7	99.3	99.3
<b>Eye injuries:</b>								
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
1 .....	16	10	5	1	.3	.4	.3	.1
2 .....	25	24	1	0	.5	.9	.1	—
3 .....	28	13	8	7	.5	.5	.4	.9
4 .....	91	49	37	5	1.7	1.8	2.0	.7
Blank .....	5,138	2,614	1,773	751	97.0	96.5	97.2	98.3

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 24-A**  
**ESTIMATED NUMBER OF HOSPITALS INDICATING RANKINGS**  
**FOR VARIOUS INJURIES, BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 23)**

Injuries and ranking	Total	Number								
		Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
<b>Back injuries:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	862	35	103	133	105	69	123	63	60	171
2 .....	596	27	71	79	102	22	76	32	38	149
3 .....	561	27	61	65	90	33	58	106	37	84
4 .....	701	46	89	106	124	48	75	100	39	74
Blank .....	2,578	142	339	335	457	250	362	402	115	176
<b>Strains and Sprains:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	1,302	67	131	196	184	73	204	192	90	165
2 .....	1,034	52	118	147	148	84	143	136	63	143
3 .....	917	51	144	103	169	65	93	107	44	141
4 .....	689	46	125	98	139	61	64	46	27	83
Blank .....	1,356	61	145	174	238	139	190	222	65	122
<b>Fractures:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	50	7	3	4	5	1	3	23	4	0
2 .....	35	0	7	9	2	6	6	3	2	0
3 .....	44	0	7	9	9	3	5	7	2	2
4 .....	68	7	5	9	17	10	8	6	3	3
Blank .....	5,101	263	641	687	845	402	672	664	278	649
<b>Burns:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	123	10	8	13	20	10	19	30	3	10
2 .....	201	11	33	21	39	20	39	9	13	16
3 .....	356	31	43	53	94	20	57	20	17	21
4 .....	505	33	66	55	94	37	64	52	31	73
Blank .....	4,113	192	513	576	631	335	515	592	225	534
<b>Puncture wounds:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	1,322	78	228	181	223	86	118	138	53	217
2 .....	693	43	83	97	133	45	86	93	27	86
3 .....	821	37	137	114	136	59	102	73	46	117
4 .....	481	25	51	66	122	49	58	23	27	60
Blank .....	1,981	94	164	260	264	183	330	376	136	174

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

Source of Data: NIOSH *Hospital Occupational Health Services Study*, U.S., 1972.

**TABLE 24 A—Continued**  
**ESTIMATED NUMBER OF HOSPITALS INDICATING RANKINGS**  
**FOR VARIOUS INJURIES, BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 23)**

Injuries and ranking	Number									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
<b>Lacerations:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	703	41	70	119	142	70	122	54	35	50
2 .....	936	58	176	104	183	68	106	138	51	52
3 .....	724	43	81	122	116	67	73	68	39	115
4 .....	626	23	87	89	99	36	58	88	24	122
Blank .....	2,309	112	249	284	338	181	335	355	140	315
<b>Abrasions and contusions:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	1,218	64	169	169	242	85	149	209	45	86
2 .....	861	56	113	123	147	70	73	87	44	148
3 .....	608	38	86	89	108	52	57	47	33	98
4 .....	563	29	111	65	93	25	64	36	49	91
Blank .....	2,048	90	184	272	288	190	351	324	118	231
<b>Hernias:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	14	2	1	0	8	2	1	0	0	0
2 .....	4	0	0	0	3	0	0	1	0	0
3 .....	11	2	3	0	0	0	6	0	0	0
4 .....	51	0	0	2	4	1	4	26	1	13
Blank .....	5,218	273	659	716	863	419	683	676	288	641
<b>Eye injuries:</b>										
Total .....	5,298	277	663	718	878	422	694	703	289	654
1 .....	16	1	6	1	3	0	2	0	3	0
2 .....	25	3	2	3	0	0	1	2	1	13
3 .....	28	0	6	1	5	4	4	5	3	0
4 .....	91	5	11	9	4	9	12	7	2	32
Blank .....	5,138	268	638	704	866	409	675	689	280	609

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 24-B**  
**ESTIMATED PERCENT OF HOSPITALS INDICATING RANKINGS**  
**FOR VARIOUS INJURIES, BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 23)**

Injuries and ranking	Percent									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
<b>Back injuries:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	16.3	12.6	15.5	18.5	12.0	16.4	17.7	9.0	20.8	26.1
2 .....	11.2	9.7	10.7	11.0	11.6	5.2	11.0	4.6	13.1	22.8
3 .....	10.6	9.7	9.2	9.1	10.3	7.8	8.4	15.1	12.8	12.8
4 .....	13.2	16.6	13.4	14.8	14.1	11.4	10.8	14.2	13.5	11.3
Blank .....	48.7	51.3	51.1	46.7	52.1	59.2	52.2	57.2	39.8	26.9
<b>Strains and Sprains:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	24.6	24.2	19.8	27.3	21.0	17.3	29.4	27.3	31.1	25.2
2 .....	19.5	18.8	17.8	20.5	16.9	19.9	20.6	19.3	21.8	21.9
3 .....	17.3	18.4	21.7	14.3	19.2	15.4	13.4	15.2	15.2	21.6
4 .....	13.0	16.6	18.9	13.6	15.8	14.5	9.2	6.5	9.3	12.7
Blank .....	25.6	22.0	21.9	24.2	27.1	32.9	27.4	31.6	22.5	18.7
<b>Fractures:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	.9	2.5	.5	.6	.6	.2	.4	3.3	1.4	—
2 .....	.7	—	1.1	1.3	.2	1.4	.9	.4	.7	—
3 .....	.8	—	1.1	1.3	1.0	.7	.7	1.0	.7	.3
4 .....	1.3	2.5	.8	1.3	1.9	2.4	1.2	.9	1.0	.5
Blank .....	96.3	94.9	96.7	95.7	96.2	95.3	96.8	94.5	96.2	99.2
<b>Burns:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	2.3	3.6	1.2	1.8	2.3	2.4	2.7	4.3	1.0	1.5
2 .....	3.8	4.0	5.0	2.9	4.4	4.7	5.6	1.3	4.5	2.4
3 .....	6.7	11.2	6.5	7.4	10.7	4.7	8.2	2.8	5.9	3.2
4 .....	9.5	11.9	10.0	7.7	10.7	8.8	9.2	7.4	10.7	11.2
Blank .....	77.6	69.3	77.4	80.2	71.9	79.4	74.2	84.2	77.9	81.7
<b>Puncture wounds:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	25.0	28.2	34.4	25.2	25.4	20.4	17.0	19.6	18.3	33.2
2 .....	13.1	15.5	12.5	13.5	15.1	10.7	12.4	13.2	9.3	13.1
3 .....	15.5	13.4	20.7	15.9	15.5	14.0	14.7	10.4	15.9	17.9
4 .....	9.1	9.0	7.7	9.2	13.9	11.6	8.4	3.3	9.3	9.2
Blank .....	37.4	33.9	24.7	36.2	30.1	43.4	47.6	53.5	47.1	26.6

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 24-B—Continued**  
**ESTIMATED PERCENT OF HOSPITALS INDICATING RANKINGS**  
**FOR INJURIES, BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 23)**

Injuries and ranking	Percent									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
<b>Lacerations:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	13.3	14.8	10.6	16.6	16.2	16.6	17.6	7.7	12.1	7.6
2 .....	17.7	20.9	26.5	14.5	20.8	16.1	15.3	19.6	17.6	8.0
3 .....	13.7	15.5	12.2	17.0	13.2	15.9	10.5	9.7	13.5	17.6
4 .....	11.8	8.3	13.1	12.4	11.3	8.5	8.4	12.5	8.3	18.7
Blank .....	43.6	40.4	37.6	39.6	38.5	42.9	48.3	50.5	48.4	48.2
<b>Abrasions and contusions:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	23.0	23.1	25.5	23.5	27.6	20.1	21.5	29.7	15.6	13.1
2 .....	16.3	20.2	17.0	17.1	16.7	16.6	10.5	12.4	15.2	22.6
3 .....	11.5	13.7	13.0	12.4	12.3	12.3	8.2	6.7	11.4	15.0
4 .....	10.6	10.5	16.7	9.1	10.6	5.9	9.2	5.1	17.0	13.9
Blank .....	38.7	32.5	27.8	37.9	32.8	45.0	50.6	46.1	40.8	35.3
<b>Hernias:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	.3	.7	.2	—	.9	.5	.1	—	—	—
2 .....	.1	—	—	—	.3	—	—	.1	—	—
3 .....	.2	.7	.5	—	—	—	.9	—	—	—
4 .....	1.0	—	—	.3	.5	.2	.6	3.7	.3	2.0
Blank .....	98.5	98.6	99.4	99.7	98.3	99.3	98.4	96.2	99.7	98.0
<b>Eye injuries:</b>										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1 .....	.3	.4	.9	.1	.3	—	.3	—	1.0	—
2 .....	.5	1.1	.3	.4	—	—	.1	.3	.3	2.0
3 .....	.5	—	.9	.1	.6	.9	.6	.7	1.0	—
4 .....	1.7	1.8	1.7	1.3	.5	2.1	1.7	1.0	.7	4.9
Blank .....	97.0	96.8	96.2	98.1	98.6	96.9	97.3	98.0	96.9	93.1

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 25-A**  
**"SCORES" AND RANK OF OCCUPATIONAL INJURIES,**  
**BY HOSPITAL SIZE<sup>1</sup>**

**(RESPONSE TO QUESTION 23)**

Occupational injury	All hospitals		Hospital size <sup>1</sup>					
			Small		Medium		Large	
	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"
Strains and sprains .....	1	2.04	1	2.13	2	2.00	3	1.86
Puncture wounds .....	2	1.79	4	1.23	1	2.24	1	2.70
Abrasions and contusions .....	3	1.74	2	1.53	3	1.96	2	1.99
Lacerations .....	4	1.45	5	1.19	4	1.73	4	1.72
Back injuries .....	5	1.33	3	1.37	5	1.31	5	1.25
Burns .....	6	0.44	6	0.50	6	0.41	6	0.28
Fractures .....	7	0.09	7	0.12	7	0.06	7	0.04
Eye .....	8	0.05	8	0.07	8	0.04	8	0.03
Hernias .....	9	0.03	9	0.03	9	0.02	9	0.01
Total .....	—	8.96	—	8.17	—	9.77	—	9.88

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 25-B**

**"SCORES" AND RANK OF OCCUPATIONAL INJURIES,  
BY GEOGRAPHIC REGION<sup>1</sup>  
(RESPONSE TO QUESTION 23)**

Occupational injury	Geographic region <sup>1</sup>																	
	New. Eng. (1)		Mid. Atl. (2)		So. Atl. (3)		E.N.C. (4)		E.S.C. (5)		W.N.C. (6)		W.S.C. (7)		Mountain (8)		Pacific (9)	
	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"	Rank	"Score"
Strains and sprains .....	1	2.06	3	1.95	1	2.13	3	1.89	1	1.74	1	2.15	1	2.04	1	2.30	1	2.22
Puncture wounds .....	2	1.95	1	2.24	2	1.82	2	1.92	4	1.53	3	1.43	3	1.42	4	1.43	2	2.17
Abrasions and contusions .....	3	1.91	2	1.96	3	1.79	1	1.96	2	1.61	3	1.43	2	1.75	3	1.48	4	1.64
Lacerations .....	4	1.61	4	1.59	4	1.56	4	1.65	3	1.55	2	1.46	4	1.21	5	1.37	5	1.08
Back injuries .....	5	1.16	5	1.26	5	1.40	5	1.17	5	1.08	5	1.31	5	.94	2	1.62	3	2.10
Burns .....	6	.61	6	.43	6	.38	6	.55	6	.42	6	.53	6	.34	6	.40	6	.31
Fractures .....	7	.13	7	.08	7	.10	7	.07	7	.09	7	.07	7	.17	7	.09	9	.01
Eye injuries .....	8	.06	8	.07	8	.03	9	.03	8	.04	8	.04	9	.03	8	.08	7	.11
Hernias .....	9	.04	9	.02	9	.00	8	.05	9	.02	9	.03	8	.04	9	.00	8	.02
Total .....	—	9.53	—	9.60	—	9.21	—	9.29	—	8.08	—	8.45	—	7.94	—	8.77	—	9.66

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 26**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS**  
**WITH OCCUPATIONAL INJURIES REPORTED IN MOST RECENT**  
**1-YEAR PERIOD, BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 24)**

Number of injuries	Number				All Hos- pitals	Percent		
	Total	Hospital size <sup>1</sup>				Small	Medium	Large
		Small	Medium	Large				
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
0 .....	196	173	21	2	3.7	6.4	1.2	.3
1-9 .....	1,504	1,241	239	24	28.4	45.8	13.1	3.1
10-49 .....	1,445	769	570	106	27.3	28.4	31.3	13.9
50-99 .....	480	44	375	61	9.1	1.6	20.6	8.0
100-199 .....	493	29	288	176	9.3	1.1	15.8	23.0
200-499 .....	357	0	82	275	6.7	—	4.5	36.0
500+ .....	48	0	1	47	.9	—	.1	6.2
No response <sup>2</sup> .....	775	454	248	73	14.6	16.8	13.6	9.6

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Blank or no records.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 27**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS**  
**WITH OCCUPATIONAL INJURIES REPORTED IN MOST RECENT**  
**1-YEAR PERIOD, BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 24)**

Number of injuries	Number									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
Total .....	5,298	277	663	718	878	422	694	703	289	654
0 .....	196	11	10	28	23	25	44	39	15	1
1-9 .....	1,504	58	101	213	195	147	270	300	90	130
10-49 .....	1,445	76	189	190	228	104	157	192	76	233
50-99 .....	480	37	96	53	97	30	26	40	25	76
100-199 .....	493	36	107	58	115	18	43	20	16	80
200-499 .....	357	27	67	47	84	14	24	18	18	58
500+ .....	48	2	9	7	12	1	6	6	3	2
No response <sup>2</sup> .....	775	30	84	122	124	83	124	88	46	74
Percent										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0 .....	3.7	4.0	1.5	3.9	2.6	5.9	6.3	5.5	5.2	0.2
1-9 .....	28.4	20.9	15.2	29.7	22.2	34.8	38.9	42.7	31.1	19.9
10-49 .....	27.3	27.4	28.5	26.5	26.0	24.6	22.6	27.3	26.3	35.6
50-99 .....	9.1	13.4	14.5	7.4	11.0	7.1	3.7	5.7	8.7	11.6
100-199 .....	9.3	13.0	16.1	8.1	13.1	4.3	6.2	2.8	5.5	12.2
200-499 .....	6.7	9.7	10.1	6.5	9.6	3.3	3.5	2.6	6.2	8.9
500+ .....	.9	.7	1.4	1.0	1.4	.2	.9	.9	1.0	.3
No response <sup>2</sup> .....	14.6	10.8	12.7	17.0	14.1	19.7	17.9	12.5	15.9	11.3

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

<sup>2</sup>Blank or no records.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 28**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS**  
**WITH OCCUPATIONAL ILLNESSES REPORTED IN MOST RECENT**  
**1-YEAR PERIOD, BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 24)**

Number of illnesses	Number				Percent			
	Total	Hospital size <sup>1</sup>			All Hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
0 .....	2,095	1,235	696	164	39.5	45.6	38.2	21.5
1-9 .....	1,126	347	466	313	21.3	12.8	25.5	41.0
10-19 .....	111	29	37	45	2.1	1.1	2.0	5.9
20-99 .....	44	8	14	22	.8	.3	.8	2.9
100+ .....	16	2	4	10	.3	.1	.2	1.3
No response <sup>2</sup> .....	1,906	1,089	607	210	36.0	40.2	33.3	27.5

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Blank or no records.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 29**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS**  
**WITH OCCUPATIONAL ILLNESSES REPORTED IN MOST RECENT**  
**1-YEAR PERIOD, BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 24)**

Number of illnesses	Number									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
Total .....	5,298	277	663	718	878	422	694	703	289	654
0 .....	2,095	105	230	304	379	186	291	286	127	187
1-9 .....	1,126	83	206	113	175	57	125	116	43	208
10-49 .....	139	3	25	13	23	4	18	13	14	26
50-99 .....	16	1	1	0	0	0	2	1	0	11
100+ .....	16	0	5	2	1	0	4	1	1	2
No response <sup>2</sup> .....	1,906	85	196	286	300	175	254	286	104	220

Percent										
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0 .....	39.5	37.9	34.7	42.3	43.2	44.1	41.9	40.7	43.9	28.6
1-9 .....	21.3	30.0	31.1	15.7	19.9	13.5	18.0	16.5	14.9	31.8
10-49 .....	2.6	1.1	3.8	1.8	2.6	.9	2.6	1.8	4.8	4.0
50-99 .....	.3	.4	.2	—	—	—	.3	.1	—	1.7
100+ .....	.3	—	.8	.3	.1	—	.6	.1	.3	.3
No response <sup>2</sup> .....	36.0	30.7	29.6	39.8	34.2	41.5	36.6	40.7	36.0	33.6

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

<sup>2</sup>Blank or no records.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 30**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS**  
**WITH OCCUPATIONAL INJURIES AND ILLNESSES INVOLVING LOST**  
**TIME, IN MOST RECENT 1-YEAR PERIOD, BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 24)**

Number of injuries and illnesses involving lost time	Number				Percent			
	Total	Hospital size <sup>1</sup>			All Hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
No lost time .....	545	476	63	6	10.3	17.6	3.5	.8
1-9 .....	2,405	1,357	907	141	45.4	50.1	49.7	18.5
10-19 .....	642	145	340	157	12.1	5.4	18.6	20.5
20-99 .....	590	114	166	310	11.1	4.2	9.1	40.6
100+ .....	94	10	38	46	1.8	.4	2.1	6.0
No response <sup>2</sup> .....	1,022	608	310	104	19.3	22.4	17.0	13.6

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Blank or no records.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 31**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS**  
**WITH OCCUPATIONAL INJURIES AND ILLNESSES INVOLVING LOST**  
**TIME REPORTED IN MOST RECENT 1-YEAR PERIOD,**  
**(RESPONSE TO QUESTION 24)**

Number of lost time illness and injury	Number									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
Total .....	5,298	277	663	718	878	422	694	703	289	654
0 .....	545	19	27	84	78	63	97	117	30	30
1-9 .....	2,405	109	272	340	426	171	322	376	141	248
10-49 .....	1,115	93	208	110	185	61	107	91	46	214
50-99 .....	117	5	24	18	21	3	15	3	5	23
100-199 .....	58	10	6	5	15	4	6	3	3	6
200-499 .....	16	0	6	3	3	0	1	1	0	2
500+ .....	20	1	11	0	6	0	0	2	0	0
No response <sup>2</sup> .....	1,022	40	109	158	144	120	146	110	64	131
		Percent								
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0 .....	10.3	6.9	4.1	11.7	8.9	14.9	14.0	16.6	10.4	4.6
1-9 .....	45.4	39.4	41.0	47.4	48.5	40.5	46.4	53.5	48.8	37.9
10-49 .....	21.0	33.6	31.4	15.3	21.1	14.5	15.4	12.9	15.9	32.7
50-99 .....	2.2	1.8	3.6	2.5	2.4	.7	2.2	.4	1.7	3.5
100-199 .....	1.1	3.6	.9	.7	1.7	.9	.9	.4	1.0	.9
200-499 .....	.3	—	.9	.4	.3	—	.1	.1	—	.3
500+ .....	.4	.4	1.7	—	.7	—	—	.3	—	—
No response <sup>2</sup> .....	19.3	14.4	16.4	22.0	16.4	28.4	21.0	15.6	22.1	20.0

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

<sup>2</sup>Blank or no records.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 32**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS WITH CASES**  
**FOR WHICH WORKMEN'S COMPENSATION CLAIMS WERE FILED**  
**IN MOST RECENT 1-YEAR PERIOD, BY HOSPITAL SIZE<sup>1</sup>**  
**(RESPONSE TO QUESTION 24)**

Workmen's compensation cases filed	Number				Percent			
	Total	Hospital size <sup>1</sup>			All Hos- pitals	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	100.0	100.0	100.0	100.0
0 .....	731	583	135	13	13.8	21.5	7.4	1.7
1-9 .....	2,167	1,338	663	166	40.9	49.4	36.3	21.7
10-49 .....	1,070	277	529	264	20.2	10.2	29.0	34.6
50-99 .....	208	9	112	87	3.9	.3	6.1	11.4
100-199 .....	158	6	84	68	3.0	.2	4.6	8.9
200-499 .....	89	0	14	75	1.7	—	.8	9.8
500+ .....	14	0	6	8	.3	—	.3	1.0
No response <sup>2</sup> .....	861	497	281	83	16.3	18.3	15.4	10.9

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Blank or no records.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*

**TABLE 33**  
**ESTIMATED NUMBER AND PERCENT OF HOSPITALS WITH CASES**  
**FOR WHICH WORKMEN'S COMPENSATION CLAIMS WERE FILED**  
**IN MOST RECENT 1-YEAR PERIOD, BY GEOGRAPHIC REGION<sup>1</sup>**  
**(RESPONSE TO QUESTION 24)**

Cases filed	Number									
	Total	Geographic region <sup>1</sup>								
		(1) New Eng.	(2) Mid. At.	(3) So. At.	(4) E.N.C.	(5) E.S.C.	(6) W.N.C.	(7) W.S.C.	(8) Mt.	(9) Pacific
Total .....	5,298	277	663	718	878	422	694	703	289	654
0 .....	731	29	42	97	120	103	95	193	32	20
1-9 .....	2,167	113	235	279	409	152	331	300	110	238
10-49 .....	1,070	78	189	108	160	69	126	81	63	196
50-99 .....	208	14	60	20	37	5	20	11	16	25
100-199 .....	158	10	49	26	10	4	11	3	12	33
200-499 .....	89	5	18	21	12	3	3	1	8	18
500+ .....	14	0	3	2	0	0	0	2	0	7
No response <sup>2</sup> .....	861	28	67	165	130	86	108	112	48	117
	Percent									
Total .....	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
0 .....	13.8	10.5	6.3	13.5	13.7	24.4	13.7	27.5	11.1	3.1
1-9 .....	40.9	40.8	35.4	38.9	46.6	36.0	47.7	42.7	38.1	36.4
10-49 .....	20.2	28.2	28.5	15.0	18.2	16.4	18.2	11.5	21.8	30.0
50-99 .....	3.9	5.1	9.0	2.8	4.2	1.2	2.9	1.6	5.5	3.8
100-199 .....	3.0	3.6	7.4	3.6	1.1	.9	1.6	.4	4.2	5.0
200-499 .....	1.7	1.8	2.7	2.9	1.4	.7	.4	.1	2.8	2.8
500+ .....	.3	—	.5	.3	—	—	—	.3	—	1.1
No response <sup>2</sup> .....	16.3	10.1	10.1	23.0	14.8	20.4	15.6	15.9	16.6	17.9

<sup>1</sup>Geographic region number corresponds to U.S. Bureau of the Census Divisions. See Figure 11, Appendix B.

<sup>2</sup>Blank or no records.

**Source of Data:** NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 34**  
**AVERAGE NUMBER OF OCCUPATIONAL INJURIES, OCCUPATIONAL**  
**ILLNESSES, INJURIES AND ILLNESSES INVOLVING LOST TIME,**  
**AND WORKMEN'S COMPENSATION CLAIMS FILED BY HOSPITAL**  
**SIZE<sup>1</sup> AND GEOGRAPHIC REGION<sup>2</sup>**  
**(RESPONSE TO QUESTION 24)**

Hospitals	Average number per hospital			
	Occupational injuries	Occupational illnesses	Total injuries and illnesses involving lost time	Workmen's compensation claims filed, cases
Total .....	68.1	5.8	17.9	25.1
Hospital size <sup>1</sup> :				
Small .....	14.2	2.0	7.4	6.4
Medium .....	68.5	5.6	18.3	29.7
Large .....	224.6	17.6	50.2	75.8
Geographic region <sup>2</sup> :				
New England .....	80.2	2.8	22.2	24.8
Middle Atlantic .....	94.2	13.3	34.5	43.7
South Atlantic .....	62.4	4.9	12.1	28.6
E. N. Central .....	84.4	3.0	21.3	18.4
E. S. Central .....	38.7	1.5	9.4	11.9
W. N. Central .....	45.3	8.3	11.9	13.8
W. S. Central .....	35.2	4.7	11.1	10.3
Mountain .....	52.3	5.7	11.1	30.7
Pacific .....	74.7	6.8	18.8	43.8
Percentage of hospitals responding .....	86.9	64.0	80.7	83.7

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

<sup>2</sup>Based upon U.S. Bureau of Census Divisions, and selection criteria specified in Appendix B.

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*



## **APPENDIX B—TECHNICAL NOTES**

## METHOD USED IN SELECTING AND CONTACTING SURVEY RESPONDENTS

The following is an excerpt of the protocol used by the contractor in performing the survey of hospitals described in this report.

### A. Population studied

In order to achieve the objectives of this study within the constraints of available time and funds, it was decided to arbitrarily limit selection of hospitals to be included in the study. According to the *Journal of the American Hospital Association*, August 1, 1971:

Data compiled for the period 1960-1970 showed a major shift in utilization among various types of hospitals. An indication of this shift is apparent in the decline in the number of beds maintained by non-community hospitals, including Federal, psychiatric, tuberculosis, and other long-term institutions.

Based on this finding, it was decided that only short-term hospitals would be included in the study. Further, the decision was made to exclude alcoholism, psychiatric, tuberculosis and other respiratory disease hospitals since these hospitals are assumed to have employee health problems which are sufficiently different from other short-term hospitals, and their inclusion in the survey might distort the findings.

Employees of hospitals operated by the Federal Government are covered by employee health benefit plans of the U.S. Government. Since information on these plans, as well as their utilization, is available from other and less expensive sources, Federally-owned hospitals were not included in the survey.

In order to be eligible to be included in the survey, a hospital must:

1. Be located in the continental United States
2. Be a member of the American Hospital Association (A.H.A.)
3. Have 25 or more beds, excluding bassinets
4. Have an average length of patient stay of 30 days or less
5. Be classed as non-Federal by the A.H.A.
6. Be other than an alcoholism, psychiatric, tuberculosis or other respiratory disease hospital, or hospital unit of an institution.

The study group is believed to represent a relatively homogeneous selection of hospitals defined by the A.H.A. as "community hospitals".

### B. Sampling Procedures

Hospital data for each of the 48 states (continental U.S.) were examined, and the total number of hospitals eligible included in the study population as defined above was determined. If the total number of hospitals for a particular state was 120 or less, then every eligible hospital in that state was included; i.e., a 100 percent sample was used. There are 15 states with more than 120 eligible hospitals. Hospitals in these 15 states were stratified by hospital size according to the following grouping:

<u>Strata</u>	<u>Number of Beds</u>
Small .....	25-99
Medium .....	100-299
Large .....	300 or more

Random sampling was conducted within each strata according to the following rules:

1. If no fewer than about 40 hospitals fall in a hospital size group, all hospitals in that group were included.
2. If about 40 or more hospitals fall in a hospital size group, the contractor selected 40 at random from that group for inclusion in the study.

Application of the sampling procedure resulted in the selection of 3,699 hospitals as a representative sample of 5,298 hospitals in the 48 contiguous states (Alaska and Hawaii omitted). Due to the closing or merging of 12 hospitals, the sampling size became 3,687 and remained constant throughout the study.

## METHODS USED FOR ANALYZING AND INTERPRETING RESPONSES

The NIOSH **Hospital Occupational Health Services Study** is based upon the statistical analyses of responses received in 2,664 questionnaires that NIOSH received by September 15, 1972. These data have been extrapolated to 5,298 hospitals which conform to the criteria described in Appendix C of Publication 1 of this study.

The overall response rate was 72.4%. The percentage response between states ranged from a low of 43.8% to a high of 92.0%. The range of response by geographic division was from 60.2% to 83.5%. The overall response, by size of hospital, was: small, 65.2%; medium, 76.7%; large, 83.9%. The population estimates for a particular response were obtained for each hospital size group within each state, rounded to the next highest integer, and accumulated as necessary for regional and national estimates. The sample response was multiplied by the result of dividing the number of hospitals for the population by the number of hospitals in the sample.

Most of the responses to questions contained in the NIOSH Questionnaire have been analyzed by conventional statistical techniques and are presented in tabular or graphic form as percentages. However, a few questions involved ranking frequencies of a particular problem or cause. To make analyses of these responses easier, "scores" were developed, whereby certain weights were given to each of the particular parts of the answers to a question. Since these "scores" are artificial, the results have been presented only in tabular form. Scores were obtained using this method:

- 1.) Weights were given to the responses as follows:

No response	—0
Ranked 1st	—4
Ranked 2nd	—3
Ranked 3rd	—2
Ranked 4th	—1

- 2.) The number of hospitals giving a particular response was multiplied by the weight.
- 3.) The results were then added and divided by the total number of hospitals (in a particular category, such as small hospitals). This then is the score.

### EXAMPLE

Question 21 has been analyzed as follows:

For all sizes of hospitals, the number of hospitals indicating illness as the most common cause of absenteeism was 4,636; the number of hospitals indicating this is the second most common cause was 175; third was 78; and fourth was 8. There were 401 hospitals which did not answer the question at all. Since 4,636 hospitals indicated illness as first, we multiply 4,636 times the weight of 4. The complete set of multiplications are

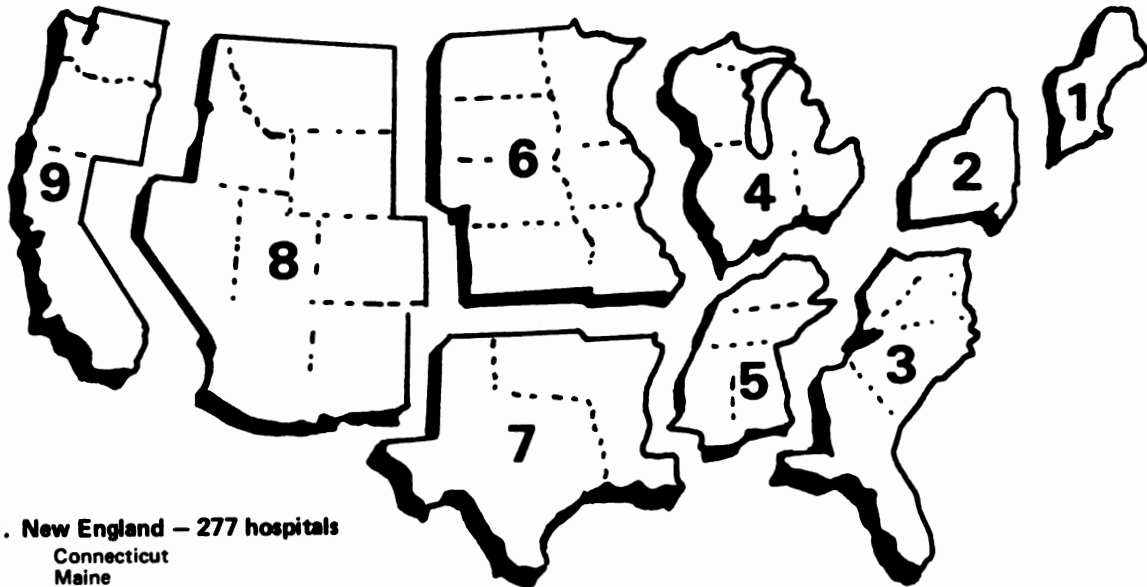
$$\begin{array}{r} 4,636 \times 4 = 18,544 \\ 175 \times 3 = 525 \\ 78 \times 2 = 156 \\ 8 \times 1 = 8 \\ 401 \times 0 = 0 \end{array}$$

The total is 19,233. This total is divided by the number of hospitals—5,298. The result is 3.63.

If this had been small hospitals, the division would have been by 2,710—the number of small hospitals.

**FIGURE 11**  
**REGIONAL DISTRIBUTION OF THE 5,298 HOSPITALS INCLUDED IN THE STUDY**  
**POPULATION**

**U.S. BUREAU OF THE CENSUS DIVISIONS**



**1. New England – 277 hospitals**

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- Rhode Island
- Vermont

**2. Middle Atlantic – 663 hospitals**

- New Jersey
- New York
- Pennsylvania

**3. South Atlantic – 718 hospitals**

- Delaware
- District of Columbia
- Florida
- Georgia
- Maryland
- North Carolina
- South Carolina
- Virginia
- West Virginia

**4. East North Central – 878 hospitals**

- Illinois
- Indiana
- Michigan
- Ohio
- Wisconsin

**5. East South Central – 422 hospitals**

- Alabama
- Kentucky
- Mississippi
- Tennessee

**6. West North Central – 694 hospitals**

- Iowa
- Kansas
- Minnesota
- Missouri
- Nebraska
- North Dakota
- South Dakota

**7. West South Central – 703 hospitals**

- Arkansas
- Louisiana
- Oklahoma
- Texas

**8. Mountain – 289 hospitals**

- Arizona
- Colorado
- Idaho
- Montana
- Nevada
- New Mexico
- Utah
- Wyoming

**9. Pacific – 654 hospitals**

- \*Alaska
- California
- \*Hawaii
- Oregon
- Washington

\* States omitted from this study

Source of Data: NIOSH Hospital Occupational Health Services Study, U.S., 1972.

**TABLE 35**  
**HOSPITAL POPULATION FROM WHICH SAMPLE WAS SELECTED,**  
**BY U.S. BUREAU OF THE CENSUS DIVISION,**  
**AND BY SIZE OF HOSPITAL<sup>1</sup>**

U.S. Bureau of the Census division	Hospital population				Sample of hospitals			
	Total	Hospital size <sup>1</sup>			Total	Hospital size <sup>1</sup>		
		Small	Medium	Large		Small	Medium	Large
Total .....	5,298	2,710	1,824	764	3,687	1,799	1,221	667
New England .....	277	110	128	39	242	110	93	39
Middle Atlantic .....	663	162	327	174	341	99	127	115
South Atlantic .....	718	355	245	118	596	256	222	118
East North Central .....	878	338	365	175	557	205	198	154
East South Central .....	422	264	119	39	375	217	119	39
West North Central .....	694	449	174	71	591	345	174	72
West South Central .....	703	477	174	52	412	238	122	52
Mountain .....	289	186	77	26	289	186	77	26
Pacific .....	654	369	215	70	284	143	89	52

<sup>1</sup>Hospital Size based upon number of beds: (Small: 25-99) (Medium: 100-299) (Large: 300+)

**Source of Data:** NIOSH *Hospital Occupational Health Services Study, U.S., 1972.*



