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PART TIME in \INDUSTRY

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U. S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE Public Health Service

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Nursing

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Part Time

In Industry

A Guide for Voluntary and Official Agencies on how to

Develop — Administer — Promote — Provide Nursing Services in

Small Establishments

Prepared in cooperation with the National League for Nursing, Department of Public Health Nursing

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE **Public Health Service Division of Occupational Health** Washington, D. C. 20201

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Public Health Service Publication No. 1296 May 1965

For sale by the Superintendent of Documents, U.S. Government Printing Office Washington, D.C., 20402 - Price 35 cents

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Foreword

It was in 1946 that the National Organization for Public Health Nursing published *Part-Time Nursing in Industry*. Chapter 1 ends with this statement:

The committee has brought this project to completion with the realization that it needs to begin again and prepare a complete handbook for agencies conducting part-time industrial health programs. But it realizes that a year or two of postwar experience will add greatly to knowledge about what is good practice in such programs.

The "year or two" lengthened into sixteen before the next step was taken. In 1962, stimulated and supported by the Division of Occupational Health, Public Health Service, U.S. Department of Health, Education, and Welfare, the Department of Public Health Nursing of the National League for Nursing (successor to the National Organization for Public Health Nursing) undertook a study of part-time nursing in industry.*

The survey was conducted by Miss Irene D. Courtenay, R.N. Twenty-three agencies, serving 45 plants, participated. Data were collected by Miss Courtenay during personal interviews with agency directors, management representatives, and the nurses who provide the service. Her analysis showed that the need for the handbook, visualized in 1946, still exists.

We are pleased to offer this guide, which is a cooperative NLN-PHS project,** with the hope that all interested and concerned with well conceived, well administered, sound part-time nursing services in industry will find our efforts helpful.

We wish to thank those who served on our Advisory Committee and to acknowledge the contribution of Miss Irene D. Courtenay, Occupa-

^{*} Courtenay, Irene. Part-Time Nursing in Industry. New York: National League for Nursing, 1963. 81 pp. Available from the Division of Occupational Health, Public Health Service, U.S. Department of Health, Education, and Welfare, Washington, D.C.

^{**} This Guide was developed from the manuscript prepared by Irene D. Courtenay in fulfillment of the NLN-PHS project.

tional Health Nurse Consultant, Department of Public Health, National League for Nursing, and the assistance of Miss Margaret F. McKiever, Public Health Analyst, Division of Occupational Health, U.S. Public Health Service.

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Introduction

Approximately <u>two-thirds of all employees</u> work in industries * with less than 500 workers. With relatively few exceptions workers in these so-called *small* plants do not have the benefit of in-plant health services. Far too many of them receive only emergency care for accidents, and this service is often inadequate.

The many problems, economic and otherwise, that small businessmen face daily leave them little time for considering the advantages of protective services other than those required by law. They may recognize the value of occupational health services but find that individual programs are expensive and that other employers are hesitant to engage in cooperative projects. However, there are enough smallplant health programs in operation to show that nursing and other health services can be provided successfully and at a price small businessmen can afford.

The first contract known to specify nursing service on a part-time basis in industry was drawn up in 1908, between the Lowney Chocolate Factory and the Boston Visiting Nurse Association. The following year, the Visiting Nurse Association of Milwaukee began to serve the Pfister and Vogel Leather Company.

From these early beginnings, nursing agency ** services to industry increased slowly but steadily until World War II. The peak that was reached then continued during the early postwar years, but gradually a decline set in. In recent years few new programs have been started, and little promotional work undertaken.

The smaller the work group, the more difficult it is to arrange for health services. This is especially true where less than 300 workers are employed. These industries are too small to require a full-time nurse, but they could use to advantage part-time nursing in conjunc-



^{*} As used in these guidelines, the term *industry* is used to cover the entire field of economic activities, which are listed in the *Standard Industrial Classification Manual*, as agriculture, forestry, and fisheries; mining; construction; manufacturing; transportation; communication and other public utilities; wholesale and retail trade; finance, insurance and real estate; services; and government.

^{**} As used in these guidelines, the term *agency* means any public health nursing organization. It may be a governmental organization, such as a health department with public health nursing service, a voluntary organization, usually a visiting nurse service, or a combination public health nursing service jointly administered by government and voluntary sponsors.

tion with periodic visits to the plant by a physician. When services available through public and voluntary health agencies in the community are also used, small industries can provide health benefits that compare favorably with those in larger establishments.

Nursing Agency Services

There are many advantages to contracting for service from a nursing agency. Management can budget its nursing costs accurately, since charges are usually based upon the agency's time and overhead costs, as determined by previous experience. A company can purchase the hours of service it needs on a daily or weekly basis and is assured of continuous service by a substitute nurse when the regular nurse is absent. The agency nurse is familiar with community resources and the living customs and conditions of the working force. She can arrange for such services as medical and nursing attention at home, convalescent and hospital care, mental hygiene and rehabilitation services, and emergency treatment at neighborhood hospitals, in addition to carrying on the occupational health program activities management provides for the workers.

"Where nursing agency services to industry have been set up properly they have worked well," Dr. Robert O'Connor, Medical Director of United States Steel and former Medical Director of Liberty Mutual Insurance Company, reported at the National Health Forum in 1959. He recommended three items for special consideration by agencies providing such services: (1) the agency must recognize that industrial nursing is a special field, (2) the service must be provided under the direction of a physician acceptable to both the agency and management, and (3) the same nurse should serve a plant regularly, in order to develop the employee-nurse rapport essential to operating an effective health program.

Proper orientation, according to Dr. O'Connor, is the most significant determinant of the scope and effectiveness of a health service in industry. "To a great many doctors and nurses today industrial medicine means care of industrial injuries," he stated. "When such physicians and nurses are brought into industry, their programs are usually quite limited. If the physician or nurse, on the other hand, is aware of and understands the objectives and techniques of preventive and constructive medicine—even though both are working only part time—they can bring to a small plant employee a health service of full range and effectiveness."

Preparation of the Guide

In preparing the Guide, nursing services in industry have been considered in relation to the scope, objectives and functions of an occupational health program. One definition of occupational health is that of the American Medical Association. "Occupational health is a service provided by management to deal constructively with the health of the employees in relation to their work."¹ Occupational health programs have been developed because the employer has an obligation to provide a <u>safe work</u> environment for his employees. Occupational health programs also help to prevent work absence and decreased work-efficiency resulting from ill health. The objectives of such a program are as follows:

- 1. To protect employees against health hazards in their work environment.
- 2. To facilitate the placement and insure the suitability of individuals according to their physical capacities, mental abilities and emotional make-up in work they can perform with an acceptable degree of efficiency and without endangering their own health and safety or that of their fellow employees.
- 3. To assure adequate medical care and rehabilitation of the occupationally ill and injured.
- 4. To encourage personal health maintenance.

Nurses who work in industry either full or part time help to carry out these objectives. It is important, therefore, that nursing services be considered in relation to them; but nursing services alone do not constitute an occupational health program. A nursing agency sells nursing services to industry, not an occupational health program, and both the agency and the industry purchasing the service should realize this fact.

The Guide has been developed on the assumption that the nursing service which an agency provides will be part of a well-planned occupational health program. It attempts to cover the many aspects of such a program. For this reason, agency personnel may be somewhat overwhelmed by the scope of the items covered and the recommendations made. Such fears are groundless, for the amount and type of nursing service that an agency is prepared to provide or is asked to provide will undoubtedly vary from industry to industry. The desirability of a broad program does not minimize the value of less extensive nursing services. The important things to remember are (1) whatever services the agency provides to an industry should be in keeping with recommended standards, (2) the agency is selling nursing services not an occupational health program and (3) that continuing evaluation of both the nursing service and the occupational health program, in light of the standards, should be carried on so that the best possible program is provided for the workers.

The Guide consists of three parts. Part I considers the administrative aspects of a nursing service to industry, which apply equally to all agencies undertaking such a service regardless of how limited or extensive it may be. Part II considers the various types of service that an agency can provide, and Part III brings together miscellaneous information that should be useful in developing a program. The references and selected publications at the close of the book should be regarded as a basic reference library for each agency. All can be secured at moderate or no cost.

Nursing Part Time in Small Industrial Establishments

The chart illustrated on the next several pages has been prepared for ready reference and as an aid for agency personnel to use when describing to industry a nursing service in relation to an occupational health program. Column A lists the activities of an occupational health program; Column B, the nursing services; and Column C the responsibilities that management must fulfill if the nursing services are to be carried out by a nurse working part time in industry.

One or more of these nursing services could be contracted for by industry. For example, a nonmanufacturing industry that hires mostly female employees may be interested in a health counseling program only. A trucking firm may desire to contract for a nurse to assist with the physical examinations and with the immunization programs for their 50 truck drivers.

It is to be noted that how the nursing services are carried on is the responsibility of the nurse and the agency for whom she works. The management responsibility is outlined in the chart in concise terms to help the agency interpret to a plant manager what must be provided and to help the industrialist select the nursing service or services he wishes to purchase.

The chart and any part of the introduction to The Guide may be reproduced and used by an agency to present their nursing part time in industry program.

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| hments | MANAGEMENT RESPONSIBILITIES | (C) | | Permits the nurse to visit the work area regularly, to observe each worker and the work environment. Provides a two-way channel of communica- tion between health personnel and man- agement, to permit reporting and cor- rection of environmental problems. | | Provides preplacement and other necessary or desirable examinations by a qualified physician. |
|--|---|-----|--|---|------------------------|--|
| Nursing Part Time in Small Industrial Establishments | NURSING SERVICES | (B) | 1. Maintenance of a healthful work environment | Observes, records, and interprets changes in workers and the work place that indi- cate an unhealthy person or unhealthful work environment. | 2. Health examinations | Plans for and schedules the examinations. Assists physician with the examination and keeps examination records. |
| Nursing Pc | OCCUPATIONAL HEALTH PROGRAM ACTIVITIES | (A) | | Requires that personnel skilled in industrial hygiene perform periodic inspections of the premises, including all facilities used by employees, to detect and appraise health hazards, mental as well as physical. Such in- spections and appraisals, together with a knowledge of processes and materials used, provide current information on the health aspects of the work environment. This infor- mation will serve as a basis for appropriate recommendations to management for preven- tive and corrective measures. | | Consists of preplacement examinations to deter- mine the health status of the individual, to facilitate suitable placement, and subsequent examinations, to determine whether health is |

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|---|--|--|
| OCCUPATIONAL HEALTH PROGRAM ACTIVITIES | NURSING SERVICES | MANAGEMENT RESPONSIBILITIES |
| (A) | (B) | (C) |
| compatible with the work assignment. | Interprets findings to the employee and/or to personnel, to aid in job placement and encourage proper health practices. | Provides adequate facilities if examinations are made at work place. Provides files and personnel for record keeping. |
| | 3. Diagnosis and treatment | |
| For occupational injury and disease, diagnosis and treatment should be prompt and directed toward rehabilitation. | Gives nursing care to the worker who be- comes ill or is injured when nurse is in the plant, including care for minor nonoccu- | Complies with the State workmen's compen- sation law. |
| Diagnosis and treatment of nonoccupational in- jury and illness cases are not an occupational health program responsibility. with these li- | pational disorders. Does redressings and retreatments for in- inred workers. | Provides a qualified physician to give medical direction for nursing services to ill and injured workers. |
| mited exceptions: 1. In an emergency, the employee should be | Plans and carries out nursing activities that will hasten the return to work of ill or in- | Establishes a procedure for transportation of major emergency cases to physician's of- fice or hospital. |
| life or to relieve suffering until placed under the care of his personal physician. | stand and follow medical advice. | Furnishes a health room and adequately equips and maintains it. |

Nursing Part Time in Small Industrial Establishments--Continued

| or- bm- besignates a person or persons to be respon- sible for first aid when nurse is not in the plant, and arranges for first-aid training ters through an authorized source. | | Establishes a company policy regarding im- munization. Bxplains benefits and procedure to em- ployees, and encourages participation. ords Provides physician to administer or direct immunization procedure. | | in- Provides a satisfactory recording and filing system and purchases enough nursing time to permit proper maintenance of records. ma- cent |
|---|--------------------------|---|--------------------|---|
| Works closely with first-aid workers, in or- der to provide continuity of care for em- ployees, and strengthen first-aid services. Checks records of care by first-aid workers on next visit to plant to provide follow- up when necessary. | 4. Immunization programs | Plans for and schedules immunizations. Assists the physician or gives the immuniz- ing agent. Records immunization in the plant records and on a personal record kept by em- ployee. | 5. Medical records | Records all care that she gives and main- tains other records in health unit. Prepares narrative and statistical summa- ries monthly and annually, to show extent of nursing and other health unit activities. |
| 2. For minor disorders, first aid or palliative treatment may be given if the condition is one for which the employee would not reasonably be expected to seek the attention of his per- sonal physician, or to enable the employee to complete his current work shift before consult- ing his physician. | | The AMA Guide for Industrial Immunization Programs, offers the following principles as guides for giving immunization: (1) To em- ployees who are exposed to significant hazards against which immunizations are available; (2) To all employees in the face of impending epidemics which threaten to disable a large proportion of employees; (3) As part of a com- munity-wide program. | | An accurate and complete medical record for each employee is a basic requirement. The rec- ord is confidential and should remain in the exclusive custody and control of medical per- sonnel. Disclosure of information from an em- ployee's health record should not be made without his consent, except as required by law. |

| | MANAGEMENT RESPONSIBILITIES | (C) | | | Recognizes that health education is a proper and important nursing function, and pro- vides the nurse with enough time and a proper place for both individual and group education. | Provides bulletin boards and health educa- tion material. Encourages participation at group meetings by arranging for employee attendance and by participating in the meetings. | |
|--|---|--------------|--|---------------------|---|--|---|
| Nursing Part Time in Small Industrial Establishments-Continued | NURSING SERVICES | (B) | Reviews the records of first-aid workers and the physician, to integrate them with other health unit records and to assure proper followup for injured workers. | 6. Health education | Understands the value of health education and the importance of adapting it to the interest and learning capacity of the em- ployees, and to the health and safety problems of the individual industry. | Supplements safety education by foremen and safety personnel during her contacts with workers. <u>Makes use of health pamphlets</u> , bulletin boards, films, etc. | Arranges for, plans and schedules group |
| Nursing Part T ¹ | OCCUPATIONAL HEALTH PROGRAM ACTIVITIES | (A) | | | Occupational health personnel should educate employees in personal hygiene and health maintenance. The most favorable opportunity arises when an employee visits the health facility. | Health education appropriately goes hand in hand with safety education. Health and safety personnel should cooperate with supervisory personnel in imparting appropriate health and safety information to workers. | |

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| meetings or conferences to convey health information. | 7. Health Counseling | Health counseling, or the health interview, is a purposeful conversation between the physician or nurse and the worker. It helps him to underated with provide provide provide professional and how to handle them. The nurse listens, gives advice, and encourages the employee to seek additional help work when necessary, but she limits counseling visors | | 8. Facilities | The extent of the facilities needed, including Creates a professional environment that is Provides |
|---|----------------------|--|--|---------------|--|
| | | Recognizes that health counseling is an important function of the nurse. Provides enough time for health counseling and the type of health room that permits private conversations. Encourages personnel department and supervisors to refer people with health or per- | sonal problems to the nurse. Establishes a policy to facilitate appoint- ments with the nurse, by an employee who wants counseling. | | Provides satisfactory space for the health |

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| OCCUPATIONAL HEALTH PROGRAM ACTIVITIES | NURSING SERVICES | MANAGEMENT RESPONSIBILITIES |
|---|---|--|
| (A) | (B) | (C) |
| scope of the occupational health program. | Develops a satisfactory working relation- ship with other departments and com- pany services. | Budgets enough funds annually to maintain facilities and operate the program properly. |
| | Checks on supplies and equipment, to see that adequate dressings, drugs, linens, etc., are on hand, and that equipment is maintained in working order. | Provides an organizational framework and a channel of communication for health unit personnel, and appoints a management representative for health unit activities. |
| | Helps in the selection of suitable supplies and in purchasing them. | Prepares a statement outlining the objectives of the company health program. |
| | Leaves the health unit ready for use by the first-aid worker. | Designates the responsibilities of physician, nurse, and first-aid worker in carrying out health unit activities |
| | Maintains a manual outlining health unit procedures. | |

Nursing Part Time in Small Industrial Establishments-Continued

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Objectives and Functions of Occupational Health Programs, published by the American Medical Association. Columns B and C are based upon

experience and the recommendations of professional and business groups.

Planning and promoting the service

When contemplating the provision of nursing service to industry, an agency must consider the following:

- 1. The ability of the agency to provide the service.
- 2. The importance of providing it as a benefit to industry, the community, and the agency.
- 3. The opportunity to extend preventive services within the community and to reach the family member most frequently missed by public health services.

If it appears feasible to undertake the service, an occupational health advisory committee should be organized to serve during the planning period as well as later.

Formation of an Advisory Committee

The advisory committee should be formed during the initial planning stage. Since it will have considerable influence, it should be composed of representative business and professional citizens, the number to be determined by the agency. Suggestions for membership include: agency representatives, a member of the county medical society interested in occupational health, someone from the local or State occupational health unit, an occupational health nurse, a liability insurance company representative, a member of a local management organization, a labor union member, and a public relations specialist.

The committee will be responsible for considering the agency potential in relation to the scope and objectives of an occupational health program, for making recommendations concerning the type and amount of service the agency is ready to provide, and for helping to evaluate community interest and develop and promote the service.

Determining the Agency's Potential

The amount and type of service that an agency can offer to industry will be determined principally by the availability of staff to provide services. Is nursing time now available? Can the current program be modified in order to release time? Will additional staff be needed and is it available? Financing must also be considered. Although properly planned services to industry should become self-supporting and a source of regular income, some initial expenditure will almost certainly be necessary for promotion, administration and training activities.

Under no circumstances should an agency overestimate its resources. It is better to begin in a small way and grow as the demand for service increases and nurses to provide it become available.

Ascertaining Community Interest

The agencies will find it worthwhile to know something about the industrial composition of the community and to estimate community attitude regarding the proposed service. The advisory committee can interpret the attitude of the various professional and commercial groups. Information regarding the number, size and type of industries can be secured from the local chamber of commerce or board of trade, management and medical associations, insurance companies, local or State occupational health units, and the State labor department.

The next step is to consider what businesses might be interested in purchasing nursing service. The most likely prospects are those with between 50 and 300 employees. It is natural to concentrate on manufacturing plants where the possibility of health and safety hazards appears to be greater, but nonmanufacturing establishments should not be overlooked. All employee groups are apt to have health and safety hazards and can benefit from a health service. In fact, some nonmanufacturing industries have high illness and injury rates.

Promoting the Service

The advisory committee can be very helpful in planning and helping to conduct a promotional campaign, to inform the community about the new nursing service and to maintain interest. It is not advisable to begin publicizing the service too far in advance of its inauguration or to create a demand that might exceed agency resources.

As a basis for action, the following three steps are recommended:

- 1. Secure the interest and endorsement of community organizations. A written announcement can be sent to all local organizations with a possible interest in the service. State health and labor groups should also be notified. A member of the agency staff or the advisory committee can offer to explain the service in detail at local meetings.
- 2. Inform the general public. Press releases describing the service when it is about to begin and items of special interest throughout the year will stimulate interest. The need for this type of publicity was mentioned frequently by management and nurses participating in the NLN study.
- 3. Make and maintain personal contacts with top management. Personal visits to industries will help to sell the service. No

industry should be visited until (1) the staff member making the contact has acquired a good understanding of occupational health as it relates to nursing service, (2) the agency's policy regarding the service to industry has been developed, and (3) nurses to provide the service are available.

The promotional visit to industry should be preceded by a letter to the senior plant executive, describing briefly the agency's interest in providing nursing service and asking for an appointment. The visit should be made by the agency director or the nurse who is to supervise the new service. The types of nursing service that the agency can provide should be summarized and left with management along with descriptive material that will permit the study of both occupational health and the proposed nursing service. (See chart p. 5.) Future contacts should be planned, since sustaining interest is important. Delays will probably occur. Management, particularly in small businesses, often has to consider a proposed outlay of funds very carefully.

Consultation Sources

In addition to help from the advisory committee, the agency will want to seek advice from other sources. Consultation regarding the total agency program can be obtained through the Department of Public Health Nursing, National League for Nursing, and the State generalized nursing consultant. Specialized consultation is available from the local, State, or Federal occupational health nursing consultants. Many insurance companies will also provide nursing consultation upon request. Each agency should determine from what sources consultation is available, then plan how to use it effectively. (See p. 68.)

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CHAPTER II

The agency's administrative responsibilities

Agency responsibility for administering nursing services to industry should be delegated to one person, who may be a special supervisor, the general supervisor, or the nursing director. Her duties will vary somewhat from agency to agency, but they may be summarized as follows:

- 1. To formulate policy and procedure, based upon the recommendations of the advisory committee and other authorities, and to prepare a written policy statement as a guide for agency personnel.
- 2. To establish and maintain contact with each industry served, to interpret the conditions under which the nursing service will be provided, and to develop an agency-management contract.
- 3. To select and prepare the nurses for service in industry.
- 4. To inaugurate and supervise the service and to evaluate it periodically.

Formulating Policy and Procedure

After the agency has determined the scope of its proposed services to industry, the various techniques involved in providing the service must be considered in order to reach decisions and make them a matter of record. The resulting policy statement should reflect the agency's own experience in administering a nursing service, as well as the recommendations of the advisory committee and other authorities in the fields of nursing and occupational health. This policy statement will be the basis on which the nurse supervisor will develop and administer the agency's services to industry. It should be decisive but should be flexible enough to adapt to the needs of the individual industry.

Determining and Scheduling Hours of Nursing Service

The agency must be prepared to advise management regarding the amount of nursing time it will need. Some authorities have estimated that at least 9 hours weekly per 100 employees will be required for a comprehensive service. A rule of thumb is 6 hours weekly nursing time per 100 employees for a minimum service. In addition to program content, other items to be considered in estimating time include type of establishment, the composition of the work force, and geographic location.

Once the service has been established, occasional temporary modifications of nursing time may be necessary for peak case loads or special programs, such as immunizations. Agency policy should require that any time modification be cleared through both management and the nurse supervisor. Occasionally management may consider reducing an already minimal amount of nursing time or increasing it beyond what is normally considered part-time. The nurse director must consider the proposed change seriously, discuss it with management, and reject proposed changes that will seriously affect the quality of nursing service.

Nursing service is most effective when time is arranged in blocks. Less than 2 hours at a time is likely to result in little more than token services and fragmented activities. The nurse should visit the plant when most of the employees are working. If possible, her hours should overlap shifts, thus permitting all employees to see the nurse.

Determining the Service Fee

When an agency is considering occupational health nursing services for the first time, the cost can be based on an estimate of the cost to the agency for maintaining the nurse. The following formula can be used:

 $\frac{\text{Total agency expenditure }^{*}}{\text{Total staff nurse hours}} = \text{Cost of maintaining a staff}$ nurse on the job 1 hour

In using this formula, agencies should realize that there will be additional agency expenditures while the program is being developed, for such items as time spent in concentrated orientation and in program planning and promotion. Some agencies have found it advisable during the first year of a program to set aside a definite sum in the budget to defray these additional costs.

When the program has been in effect for some time, the agency should review its fee for service. This can be done by NLN Cost Analysis Method II,² which is designed to compute the actual cost to the agency providing the service. When fee changes are planned, it is advisable to notify management promptly. The most acceptable method is a personal visit by the nurse director or supervisor to discuss the proposed changes and explain why they are necessary. An official statement, to be given to management at the time of the visit, will support the explanation and can be left with management for further consideration.

^{*} In official agencies, the total expenditure would be that chargeable to the nursing service and its administration.

Developing Agency-Management Relationship

The success of a nursing service will depend to a considerable extent upon the agency-management relationship. Before beginning services in an industry, the agency director should meet with management and a physician (preferably the plant doctor or one who has had industrial experience) in order to discuss program content and agency policy. She should explain to management the importance of providing proper medical direction for the nurse and of designating a policy-making member of the company to make administrative decisions regarding the nursing service.

The nurse assigned to serve an industry will function both <u>inde-</u> pendently and dependently. She will be carrying out agency policy, will be administratively responsible to management for performing her assignments in accordance with company policy, and at the same time she will be working professionally under the physician who provides medical directives. Her services must also conform with the regulations of the nurse practice act. These facts must be explained to management and the groundwork must be laid for sound interpersonal relations. The responsibilities of everyone concerned with the health unit should be clearly defined, and each person should be given authority to carry out his responsibilities.

The nurse supervisor should help to set up the nursing service in each industry. She should visit the plant periodically, the frequency of the visits being determined by need for supervision and consultation. She should meet with management and the physician serving the plant at least once a year, in order to discuss the service with them and to make meaningful suggestions.

Writing the Contract for Service

Once the basic discussions have been held and all parties concur on the scope of the nursing service, a contract should be drawn up. It can be simple, broad in scope and brief, but it should state clearly the obligations of both the company and agency. (See p. 45.) Every contract should be signed by management and the director of the agency. In preparing the contract both hours of service and the fee for service must be considered.

Selecting and Orienting Staff

The nurse who serves in industry, either full or part time, should understand the principles of occupational health nursing. It is also important that she have the ability to accept responsibility, use initiative, make decisions, and establish rapport with all levels of personnel within the plant. Although medical directives will be provided by a physician, and nursing supervision will be provided by the agency, the nurse must be sufficiently experienced and mature to work in the plant situation without direct supervision.

Both the American Nurses' Association and the American Association of Industrial Nurses have prepared statements^{3 4} on the professional and personal requirements of nurses who will be working in one-nurse units. These statements can also be used as a guide for selecting nurses who will be working in the part-time program.

Until it is possible to select nurses for this service who have had both theory and practice in occupational health nursing, the agency must prepare the nurses who will serve in industry. <u>Help</u> in planning an orientation program can be obtained from occupational health nursing consultants in State or local agencies, insurance companies, and the U.S. Public Health Service.

Before she begins to serve in industry, a nurse should receive instruction regarding the scope and objectives of an occupational health program and the nursing aspects of such a service. She should know what health services are provided to the employees of each industry in which she is to serve and be instructed regarding her responsibilities in relation to the total program. She should become familiar with the terms of the agency's contract with management, with the medical directives under which she will work, and with general agency policy regarding nursing services to industry. It is very important that she be informed regarding her place within the organizational structure of the plant.

Every nursing agency providing nursing services to industry should have a reference library on occupational health. A few well-chosen books, supplemented by current journals, will be required. (See Part III for suggestions.) Additional reference material can then be added as the need arises or funds for library expansion become available.

To insure continuity of service, as specified in the contract, it will be necessary to prepare a nurse to relieve the regular nurse for vacation and sick leave. The relief nurse should receive the same general and specific orientation as the regular nurse. She should also participate in the in-service education provided for nurses working in occupational health, keep informed by means of current literature, and attend meetings relative to occupational health.

Inaugurating the Service

Before the service in a plant begins, the nurse supervisor should inspect the facilities and equipment in the health unit, to be sure that they meet agency standards and comply with the contract. She should check the arrangements for medical direction and agency administration. She must also be sure that the nurse who will provide the service thoroughly understands her duties.

No service should be provided until the nurse is covered by professional liability insurance that protects her while working in the plant. In addition, the agency should also be protected. Agency and management should be sure that the liability policy protects the nurse, the agency, and the company against any liability or malpractice claim that may be made against the nurse.⁵ This should be discussed with the insurance agent or the legal advisor. In many instances, all that is required is the attachment of a rider clause to the regular policy. (See p. 48.)

The nurse assigned to a plant should be introduced to both management and workers. She should be given a conducted tour of the plant in order to become familiar with work processes. It is very important that she establish contact with the department to which she will report on administrative activities and with the personnel and safety departments. She should be briefed on programs and activities that are concerned with plant policies regarding employment, sick leave, group insurance, maternity leave, and workmen's compensation procedures. While she may not be confronted with emergency situations during short schedules in the plant, she should be prepared to handle them from the start, by knowing emergency medical resources and means of transporting injured or ill employees.

A nurse replacement in an established health service should make several visits to the plant, to become familiar with the health center and to observe the work of the incumbent nurse. She should study nursing procedures in the health unit and work under supervision until she is ready to undertake total responsibility.

In each industry, the nurse's responsibilities should be described in a written statement. In effect this statement will be an adaptation of the agency's policy and procedure regarding nursing service in industry. It should be included in the <u>nurse's manual</u> along with the medical directives and other important instructions. Where the nursing service is closely coordinated with other health services, this statement will become a part of a policy and procedure manual covering the plant's entire occupational health program.⁶

The basic record and report forms required for an employee health service are discussed in detail in Chapter VII. The nurse supervisor should prepare herself to discuss records with management and the plant physician in order to determine what records should be kept and the nurse's responsibility for them.

The agency will find it worthwhile to require that each nurse serving in industry provide the agency with the type of information that can be used in evaluating the nursing service and preparing periodic reports for management. This is important in order to determine how successfully the contract is being fulfilled and whether the service is meeting the health needs of employees. The nurse supervisor will be responsible for evaluating these reports and making recommendations to the agency and to industry.

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CHAPTER III

Management's responsibilities in preparing for a nursing service

Management's responsibilities in preparing for a nursing service include such items as assigning responsibility for program administration, providing medical direction, formulating program policy, and providing satisfactory facilities and equipment.⁷

Administration and Medical Direction

One member of management should be made responsible for administering the management aspects of the service, as distinguished from the professional administrative responsibilities of the physician and nurse. This person should be a policy-making, senior officer with an understanding of and interest in employee health services. He should be given enough time to administer the service properly and the authority to make policy decisions when necessary.

Management must also arrange for proper medical direction. Advice on securing the services of a qualified physician can be obtained from the local medical society and the State or local department of public health. Many companies already have an arrangement with a physician who visits the plant on call, accepts referrals, or provides consultation upon request. The limitations that this type of arrangement will place upon the nursing service should be pointed out to management.

Although the nurse can function under written medical directives, prepared and periodically reviewed by a qualified physician, additional direction is preferable. According to the AMA,⁸ an occupational health program is best accomplished when the physician spends a stipulated amount of time in the plant and has continuing responsibility for administering as well as working in the plant occupational health program in which other personnel are engaged. It suggests 2 physicianhours per week in the plant for the first 1,000 employees and 1 additional physician-hour per week for each additional 100 employees. Modifying this formula to meet the needs of a specific establishment is also discussed in the AMA publication.

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Formulating policy

Management should prepare a written statement describing its objectives in providing a nursing service and outlining the relationship between this service and other company services and programs. Preferably, this should be done in cooperation with the nurse director and the company physician. This statement will become a part of the nurse's policy and procedure manual. Along with medical directives from a physician, it defines the scope of the nursing service and provides the nurse with the authority needed to carry out her activities. Like the medical directives, management's statement of objectives should be reviewed periodically and revised when necessary.

Management should also put in writing the regular policy it wishes the nurse to follow and should designate a representative who will be responsible for determining company policy under special circumstances. For example:

- 1. Supervision of first-aid workers.—If the nurse is to be responsible for supervising first-aid workers, the extent of her responsibility should be determined, and any division of responsibility between the nurse and safety personnel should be put in writing.
- 2. Notification of absenteeism due to illness.—The nurse's responsibilities regarding sickness absenteeism are discussed in Chapter VIII. Policy to insure proper cooperation between the personnel department and the health unit is very important. The nurse should not be made responsible for accumulating or recording absentee records, but she should be notified when employees are absent because of illness or injury and when they return to work.
- 3. Notification about hazardous materials and processes.—If the nurse is to provide appropriate preventive or emergency care she should know what potentially hazardous materials and processes are used in the plant. Management can help protect its employees by providing the nurse with a list of such materials and establishing a policy whereby she is notified when new materials are introduced into the plant or work processes are changed.
- 4. Policy regarding transportation.—Management's policy regarding transportation of ill or injured workers should be well known to the nurse and the first-aid workers. The company may prefer to use a company car, a local ambulance service, the local police or rescue squad ambulance, or a commercial taxi service. A responsible person should be delegated to accompany the ill or injured employee. Ill employees should be advised not to drive their own cars, especially when there is a complaint of vertigo or chest pain.

Provision and Maintenance of a Health Center

Management is responsible for providing, equipping, and maintaining a health unit at the establishment, and the nursing service should not begin until the center has been completed and equipped. While the health unit is being set up, the agency supervisor should be prepared to provide guidance and should give consultation regarding what the nurse will need in order to function properly.

Information regarding plans, equipment and cost of a health center is available from several sources.⁸ ⁹ Consultation is also available from occupational health nursing consultants, insurance companies, and representatives of industrial medical supply companies. The facilities need not be extensive or expensive.

The size of the health center will depend upon the number of employees to be served and the type of service to be provided. One publication ⁹ recommends a minimum space of 12 by 20 feet. Another recommendation is for one square foot of floor space per employee up to 1,000 employees. In plants with more than one shift, space is determined by the number of employees on the largest shift.

The available space should be divided into a minimum of two rooms —a treatment room and a waiting room. The treatment room should have an area partitioned or screened off to provide privacy for examinations and to serve as a recovery area for sick employees. There must be good lighting, adequate heating and ventilation, available hot and cold running water, and toilet facilities. If it is impossible to have a toilet in the health center, one should at least be easily accessible for sick employees. Some small plants have been able to provide enough space to include a waiting room, treatment room, examining room, recovery room(s) (male and female), and bathroom.

The health facilities should be located in a quiet area, readily accessible to employees and to transportation. If health examinations are performed on the business premises, it may be practical to have the health facilities near the personnel office. However, a compromise may be necessary in order to have the health center readily accessible to the majority of workers. It must be located at a safe distance from plant operations that have a catastrophe potential.

Some equipment and medical supplies are regarded as basic⁸⁹ for a health center. The need for supplies will vary according to the type of health program required to meet the needs of the individual establishment and the type of operations within the establishment.

The cost of a health center will vary according to required space, equipment, and supplies. In establishments that already have a firstaid or health room, the only expenditures necessary may be for the additional equipment and supplies required for the nursing service. During the NLN survey, some companies reported spending as little as \$500 to \$1,000 for facilities and equipment when the program began.

A health center ideally should consist of a waiting room, treatment room, toilet, and bed cubicle. Detailed figures on equipment costs, as well as sample floor plans for various-sized departments are available from commercial firms.

Management must provide for the proper maintenance of the health unit by arranging for cleaning and laundry service, and by establishing a procedure for ordering supplies. Clerical assistance for the nurse will also be necessary.

Notifying the Employees of the New Service

When plans for the program have been completed, management and the agency representative should discuss the ways in which employees will be informed of the service. This can be done in several ways, such as a notice on the bulletin board, an announcement in the company paper or at a management-employee meeting, or in a special letter or memorandum. It is important that the notification provide a good explanation of the service, how it is to be utilized, and the hours the nurse will be at the plant.

CHAPTER IV

The nursing aspects of the employee health service

The nurse's activities will have been determined in advance and outlined in the contract between the agency and the company she is to serve. Within the limitations of this agreement and the medical directives of the company physician, the nurse will be responsible largely for developing her own routine. The following outline describes the *usual* activities of the occupational health nurse:

- 1. Give emergency and palliative care
 - a. Treat each emergency illness or injury according to written medical directives signed by the plant physician.
 - b. Give palliative care for minor illnesses according to written medical directives signed by the plant physician.
- 2. Do followup and health counseling
 - a. Set up a card file for quick reference to those who need to be contacted on certain dates.
 - b. Review first-aid records and confer with first-aid workers.
 - c. Check employees who have received first-aid care since last visit, if need for check is indicated.
 - d. Check and treat employees who require redressings or treatments according to medical directives and policy of the program.
 - e. Check employees referred to physician or health agencies. Do necessary additional followup.
 - f. Hold individual health conferences.
 - g. Check employees who have returned to work following absence due to injury or illness in accordance with company policy and medical directives.
- 3. Make plant rounds in order to
 - a. Observe the employees at their work and note signs of unmet health and safety needs.
 - b. Followup employees who have not reported back to the health center.
 - c. Remind the workers that she is available to help them.

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- 4. Keep records and reports
 - a. Record immediately on his health record every visit of an employee to the health center.
 - b. Transfer first-aid records into the employees' individual health records.
 - c. See that the person responsible for compensation receives all pertinent information on industrial injury cases referred to a physician.
 - d. Once a month take accum<u>ulated summary</u> sheets to the nursing agency for preparation of the monthly or annual report.
- 5. Maintain the health unit
 - a. Ready the unit for work.
 - b. Check equipment.
 - c. Order supplies.
 - d. Leave the unit ready for the first-aid workers—put out adequate supplies, equipment, record forms; lock up all other supplies and records until the next visit.
- 6. Carry out special activities Special activities should be planned in advance and may include:
 - a. Scheduling and assisting with health examinations.
 - b. Planning and assisting with immunization clinics.
 - c. Conducting group health education.
 - d. Attending safety committee meetings.
 - e. Holding scheduled conferences with a policy making official of the company about administrative and personnel matters relating to the health service.
 - f. Holding scheduled conferences with the company physician about particular employee problems, policies and medical directives for service and other program planning matters.

Once a work pattern has evolved, the nurse will want to list the general and special activities in the industry's policy and procedure manual. This will provide continuity of service when the nurse is absent or replaced.

Details regarding the nurse's activities are provided in the following chapters. The information presented in these chapters represents an effort to outline the fundamentals of good occupational health nursing and to help in their application to nursing on a part-time basis. The application to each company's program and how the nurse provides the service will vary from industry to industry.

CHAPTER V

Nursing care for illness and injury

There are a variety of services that a nurse serving in industry can perform. The scope of the nursing service will be determined in advance by management and the agency. How the nurse performs her activities will depend principally upon the medical direction ¹⁰ provided, the attitude of management, her professional education, her familiarity with recommended standards for occupational health nursing, and her initiative and resourcefulness.

Industries are most apt to be interested in nursing care for illness and injury occurring at the workplace. The majority of these conditions are minor, and the nurse working under written medical directives can care for them or check upon services by others when she is not in the health unit. She must also be prepared to give emergency care¹¹ for serious injuries and illnesses that occur. In addition, the nurse can work with first-aid workers to assure proper care to major emergency cases when she is absent and can speed an employee's return to work by giving retreatment and doing redressings as directed by an authorized physician. She can also render a valuable service to both employers and employees by making the followup contacts that promote continuity of services for workers with major injuries and long-term illnesses.

The care for illness and injury that a nurse provides in a health unit will be more valuable if she acquires knowledge of a workmen's compensation legislation. Within recent years employee benefits under these laws have been broadened. Most States now permit compensation for occupational diseases as well as injuries, and this fact has special significance for the nurse. She can protect both employer and employee by learning to handle serious illness and injury promptly and according to established procedure, and by remembering that apparently minor conditions can have very serious consequences and occupational implications.

Caring for Injuries

Minor conditions.—Examples of the many minor injuries that a nurse in industry handles regularly are superficial lacerations, first and second degree burns that involve limited areas, minor contusions and abrasions, and foreign bodies in the eyes. The nurse working part time in industry should exercise professional judgment and follow the intent of standing orders. (See p. 47.) When an injured employee reports to the nurse, she observes his symptoms and evaluates the situation, taking into consideration the worker's story of what happened and how he feels. Whenever the nurse is in doubt, or if the worker appears to be concerned, she should send him to the doctor. If there is a question about the worker's continuing on the job, she should seek advice from a physician.

After satisfying herself that the condition is one that she is authorized to care for, the nurse will provide the service, as directed. The nurse's professional education and experience will have acquainted her with the proper method of caring for most conditions, but she may need special instructions in some instances. For example, emergency care of eye injuries requires special skill. Many occupational health nurses work under standing orders for care of eye injuries written by a consulting ophthalmologist. Frequently, companies arrange to have the nurse spend time with the ophthalmologist for observation and training. Information on eye care should be kept on hand in the health unit.¹² ¹³

The nurse may also need special instructions about the type of dressing to be used and their application. The injured worker will usually return to his job, and the dressing she chooses must be comfortable and impervious to moisture, grease, oil, and contaminants. If she applies a wet dressing and the worker is required to wear a protective glove at his job, she should wrap the wound accordingly and tell him how to care for the dressing during the rest of the day. If he has to work on a machine where a glove or a large bandage might be hazardous, either the dressing must permit him to continue his work safely or his supervisor must be asked to assign him to another job temporarily.

Major traumatic injuries.—Major traumatic injuries may require immediate life-saving measures, but care beyond that point will probably not be provided in the plant. The nurse's principal duties, in addition to emergency care, will be to supervise transportation to a physican or hospital, according to company regulations, and to record accurately what has occurred.

Preparing for possible emergencies is as important as caring for them when they occur.¹⁴ By making plant rounds, reviewing injury reports, and discussing the nature of the work with supervisory and safety personnel, the nurse can anticipate emergency situations. Preparation for them should be a combined management-physician-nurse project. The main points to consider are the kinds of emergencies likely to occur, the necessary equipment and supplies required, and the written medical directives and first-aid procedures needed. Once these have been determined, policies, procedures, and medical directives can be written and the personnel prepared to meet major emergency situations.

Medical Conditions

Conditions such as headache, coryza, sore throat, gastric upset and dysmenorrhea are usually treated by the nurse, according to written medical directives by the plant physician, but the treatments should not be provided indefinitely. An employee who visits the health unit repeatedly should be referred to his family physician.

Occupational disease.*—Only a small percent of the visits to the health center will be due to illness that is directly associated with the work process. Nevertheless the nurse should be on the alert for symptoms that indicate a possible environmental exposure. She should remember that it is the circumstances under which an illness is contracted, and not the type of illness, that determine whether or not it is occupational. Respiratory conditions, skin cancers, tuberculosis, and even heart disease are examples of illnesses that may be either occupational or nonoccupational according to how they have been contracted.

The worker who complains of headache and nausea because of "the fumes" might be a chronic complainer, but the possibility of a toxic hazard should not be overlooked. An ocular or respiratory irritation may be an allergy, but similar complaints by several workers doing the same type of work or working in the same part of the plant indicates a possible occupational health hazard. There will also be workers with symptoms that are continuous but are so vague that a review of his work history is advisable as an aid in early medical diagnosis.

The nurse should not attempt to diagnose an illness as occupational or nonoccupational, but she should be aware of the possible influence of the work environment and familiarize herself with occupational diseases that are apt to occur in industries of the type she is serving. Where an occupational disease is suspected, she should secure information regarding the employee's work history, and make referrals to the family or plant physician as indicated. The following example suggests how the nurse who works alone can proceed when caring for an illness that might be occupational.

A worker presents himself complaining of headache, nausea, a burning sensation in the stomach region, and a cough. The nurse must attempt to ascertain the type and location of the headache. Is it severe or dull, frontal or occipital? Is it accompanied by other symptoms or signs, dizziness, or visual disturbances? Is the nausea associated with vomiting, and what is the nature of the abdominal pain? Take the patient's temperature, pulse and respirations. Is it elevated, with a slow, weak pulse, or is the pulse rapid, irregular, and thready? Are the respirations labored? A few more pertinent questions may be asked. Does the patient have frequent headaches similar to the present one; if so, for how

^{*} Further information is available in Occupational Diseases, Public Health Service Publication No. 1097.

long have they been occurring, and do they follow any particular exertion or activity on the job or at home? What are his eating habits? Has he recently had an upper respiratory infection?

The nurse must be in a position to evaluate the worker's symptoms in the light of the information he gives and in relation to her knowledge of his occupation. She must decide, without alarming the patient or making undesirable suggestions, either to consult the company physician immediately or to follow the general routines already established by the physician for the care of the slightly ill worker. (See p. 52.) If immediate attention by a physician is necessary, the nurse must make the necessary arrangements.

It is important for the nurse to record in a clear, concise manner all the information, including the signs and symptoms, she has gathered regarding the case. These data become a part of her permanent record of the visit, and a source of information if litigation should arise. They also furnish the attending physician with information that will help him diagnose the illness.

Where occupational illness is suspected, a talk with the employee's foreman can be very worthwhile. For example, the nurse may learn that the man whose symptoms were mentioned above, has been working with a toxic substance for several days. No nurse working alone in industry will be criticized for following up on possible hazards that are suggested by a patient's symptoms. She cannot fulfill her responsibilities or make a significant contribution to the worker's health if she fails to correlate clinical signs and symptoms with her patient's work. This will involve alerting management to the possible hazardous condition and conferring with the physician about the worker's symptoms.

Major illness.—Hitherto healthy employees as well as those with chronic conditions, may become seriously ill while at work. If the nurse is in the plant, she should provide emergency care as stipulated in her written medical directives and make the necessary referral to physician or hospital. When the emergency is due to nonoccupational causes, the employee should be referred to the care of his personal physician as soon as possible. Policy regarding referrals of all types of conditions should be established for each plant in which the nurse serves. It is important to keep accurate records of all major illnesses and to remember that a major medical condition such as a heart attack may have occupational significance.

Every employee should be encouraged to have a personal physician for general medical care. This is important for health maintenance and for the correction of nonoccupational health conditions which may be detected by occupational health personnel. It also insures prompt referral if a major medical emergency occurs while the employee is at work.

If the nurse is in the plant, she should direct the handling and transporting of the individual. She should also expedite matters by notifying

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the proper authorities, as the personnel director or foreman, the physician on call, the hospital or family physician, and the employee's family. Necessary phone numbers should be listed and posted, including the fire department, the police department, and members of the clergy. In the absence of the nurse, similar duties should be carried out by the person whom management has delegated with this authority.

If the nurse is aware of the health status of an employee she can prepare for emergency services that might be needed. This is one reason why it is important for her to know the results of preplacement and other physical examinations. Employees with known defects, such as cardiac conditions, epilepsy, or diabetes may experience the adverse effects of these conditions during working hours. If the nurse is familiar with their health history, she can anticipate the need for special medical directives in order to care for them.

Many companies permit the nurse to give care for certain chronic conditions when the service is requested by the employee's personal physician. No nurse should give nonemergency care to an employee who is under the care of a physician unless the physician has provided written medical directives and they have been approved by the plant physician.

Followup and Rehabilitation

Followup services for the ill or injured employees are important. At the plant, the nurse should see employees who received care by a firstaid worker during her absence. She should schedule revisits to the health unit for employees when dressings need to be changed or the employee's condition suggests that followup is advisable.

Contributing to the continuity of care is a service that the nurse can give to workers with major industrial injuries or long-term illnesses. How the nurse carries out this responsibility will depend upon a number of facts, not the least of which are (1) company policy and (2) her own awareness of how important continuity of services can be to both employee and employer. The nurse who works part time in industry can make phone calls to the worker's family, to the hospital or to his physician. She may suggest to management the services of the agency and arrange for followup care, if home visits are necessary. She can interpret the illness or injury to members of the family and advise them regarding health insurance and other benefits to which the worker is entitled. Prior to his return to work, she can interpret the nature of the employee's work for the doctor and the rehabilitation process to his supervisor.

Rehabilitation services are extremely important to both the company and the worker. Their principal objective is to restore the employee's health and work capacity. When the employee is suffering from an occupational illness or injury, the employer has a direct responsibility for rehabilitation, but he also has a considerable interest in helping to rehabilitate employees with nonoccupational conditions. Work absence is costly regardless of cause.

Where a nurse is in the plant, physicians often permit an earlier return to work because of her ability to give professional care and help in other ways. She can give authorized medications, supervise restorative exercises and build up morale. She can check upon the employee's physical and emotional reactions, act as liaison between physician and management, and confer with personnel directors and supervisors regarding the amount and type of work to be undertaken. Where an employee cannot return to his old job, either temporarily or permanently, the nurse can help him adjust to the situation by providing reassurance and understanding and by explaining the necessity for the change.

First Aid

It is important for both management and the agency director to remember that illness and injury will occur when the nurse is *not* in the plant and to take continuity of service into consideration when they are developing the contract. One or two first-aid workers with current first-aid certificates from the American Red Cross or some other authorized agency should always be on duty when the nurse is not there.

The day-to-day picture of first aid in the workplace has been described as a stream of minor injuries and ailments, small cuts and burns, colds and headaches. Serious accidents are more rare, but the person providing first aid must know how far to go. Prompt action can save a life. In undertaking full treatment of even minor illnesses and injuries, the firstaid worker is shouldering a serious responsibility. He must know his job and his limits and when to call for help.

The nurse can greatly increase the effectiveness of first-aid services by working with first-aid workers, but it will be necessary for management to explain her responsibilities to them. They should be told that her presence in the plant will increase, not minimize, their importance. She will be able to provide them with professional guidance, review the records of services given when she is not in the plant, and provide followup care or make referrals to a physician.

The nurse's duties—The nurse's duties in carrying out a good first-aid program will include all or most of the following activities:

- 1. Provide emergency care when she is in the plant.
- 2. Contact a physician or arrange for transportation of major emergency cases to the physician's office or hospital.
- 3. Report accidents promptly to management, according to company policy.
- 4. Assist the physician in developing directives for first-aid workers. Separate directives for the first-aid workers and for the nurses are necessary since the nurse's professional competence

enables her to provide certain services that the first-aid worker should not be authorized to give.

- 5. Interpret for first-aid workers the physician's instructions and company policy relating to the care and transportation of sick and injured workers.
- 6. Follow up on services provided when she is not at the plant. This includes a check of first-aid records and of the persons who received care, and referral to a physician when advisable.
- 7. Arrange for first-aid training or refresher courses.
- 8. Check first-aid kits throughout the plant, if these have been installed, to see that they are kept properly and supplied with needed articles. The indiscriminate use of first-aid kits should be discouraged as medically and economically unsound. However, there are extenuating circumstances; e.g. where the work-place is remote from the health unit or where the work is quite hazardous.

Several guides for setting up and providing first-aid services in industry are listed in the reference list. Literature of this type should be on file in every health unit as an aid to the nurse in program planning. For example, the Detroit Industrial First Aid Advisory Committee recommends that the "plant medical director be asked to provide written recommendations for specific first-aid procedures. The recommendations should include types of medications to be used for minor injuries. If management wishes to include temporary relief for nonoccupational ailments, such as colds, headaches, etc., the plant physician should also provide appropriate written procedures."¹⁵

If possible, all first-aid care should be given in the health unit. The nurse should equip the unit for services by first-aid workers during her absence and should familiarize them with what is available and where it is kept. The amount of equipment and supplies left for the first-aid worker's use should be in accord with requirements specified in the written medical directives. Stock supplies and supplies kept for use by the physician and nurse should be kept in locked cupboards.

Having supplies under the control of the nurse, (1) guards against the contamination of large quantities of sterile equipment, (2) insures that contaminated equipment and supplies will be routinely replaced, (3) prohibits the use of drugs, medications, and solutions by unauthorized persons, including first-aid workers, (4) prohibits waste of supplies.

All care given by first-aid workers must be recorded. Because the individual record forms are medically confidential, first-aid record forms should be provided for the use of the first-aid workers. These forms can be filed in the individual health record by the nurse.

Health Unit Routine

The adequacy of the nurse's services will depend to a considerable extent upon the routine she establishes for providing services and for maintaining the health unit. A well-run, well-kept health unit is essential. Although management is responsible for providing maid and janitorial service, the nurse must supervise the services. She will also be responsible for organizing the health unit in such a way that both supplies and equipment are kept properly and are available for immediate use by her or by the first-aid worker in her absence.

Supplies should be checked and replenished routinely. In ordering supplies, the nurse must be sure that they are suitable and practical. The use of an already packaged, sterile dressing is economical. Buying disposable equipment when possible—such as syringes, needles, sheets, and drapes—is also more efficient. Many special medical supplies are marketed for industrial use. When the nurse is in doubt about a particular item, she should seek competent advice.

CHAPTER VI

Nursing activities in relation to health maintenance

This chapter deals with the health maintenance services that many industries now provide as part of their occupational health services. The nurse's activities will vary according to industry, but assume an important part of her service in any case.

Health Evaluation

Preplacement or preemployment examinations are now a common industrial practice and each nurse serving in industry should understand the purpose, content, and application of these and other employee health examinations.⁸ Many industries now provide periodic examinations for all employees or special groups, such as older workers, top and middle management, or workers in hazardous positions. To a lesser extent companies give examinations to employees transferring from one job category to another, returning from illness, or upon retirement.

Small plants that provide health examinations usually use one of the following methods:

- 1. The examination is conducted in the plant and supplementary services, such as chest X-rays, special laboratory tests, electrocardiograms, audiograms, and other special screening tests, are conducted where available in the community.
- 2. The examination is conducted in the physician's office or clinic with additional supplementary screening procedures given where the necessary facilities are available.

The plant nurse is not likely to participate in examinations made outside the plant, but she should receive a copy of the physician's report for her information and for filing. She may also assist in explaining the findings of the examination to management and to the employee and in following up to see that remedial conditions are corrected. Where the examinations are given at the plant she is likely to assist the physician in the following ways:

- 1. Planning and scheduling examinations.
- 2. Taking health and work histories.

- 3. Performing or scheduling screening activities.
- 4. Explaining findings to the employee and to the personnel director, to aid in job placement, at the request of the plant physician.
- 5. Maintaining records and filing them, or copies, in the health unit.
- 6. At the request of the plant physician, following up on employees with defects.

Health Counseling

Health counseling is an important service that the nurse can provide for employees. A worker feels that he can discuss his problems with the nurse without fear of jeopardizing his job. To insure that this trust is justified, the nurse must be fully aware that each employee is an individual. She must recognize the various physical and emotional problems that can beset him and realize how much they can affect his work.^{16 17} The nurse should be both friendly and professional and should provide opportunities for employees to receive counseling at a place or time that insures privacy. She must be alert to underlying problems and be prepared to help the employee seek more expert help when it is needed. More than one visit by an employee may be required before a problem is clarified, but a series of conferences suggests a need for a referral.

In working with employees, particularly in health counseling, it is important for the nurse and the supervisor to work together. The nurse must recognize that the supervisor is responsible for his department's production. His cooperation is required if an employee is to be detained from his job for nonemergency conditions or if the employee's condition indicates a change in his work situation.

Health Education

Health education is recognized as a very impotrant part of health maintenance in industry.¹⁸ It can increase work efficiency, improve morale, and otherwise benefit both employer and employee. The nursing agency can promote health education in industry by explaining its importance to management, collecting health education material, and encouraging the nurse to make use of it. Education should always be directed toward the interests of employees. Suggestions for program planning are given on pages 60-61.

Every visit an employee makes to the health unit offers the nurse an opportunity for health education. Often she is the only member of the health professions with whom the employee comes in regular contact. She can answer questions considerately and intelligently and thereby encourage the employee and his fellow workers to seek advice on other occasions. The nurse can also observe the employees who visit the health unit and make suggestions regarding health practices. Where health education is needed but the nurse is less sure of its reception, she must be tactful but might bring up subjects that will encourage the employee to ask questions. There will be occasions when the nurse must seek an opportunity to provide health education to an individual upon the request of the supervisor or some other official. This, too, requires diplomacy. Supervisors, also, need to be educated regarding certain matters affecting the health of employees; e.g., employees returning to work after an illness, employees working under certain conditions, and women employees who are pregnant.^{19 20 21}

The part-time nurse can make special use of pamphlets as a means of health education. They are also an excellent supplement to health counseling. Attractive pamphlets on many health subjects are available from public and voluntary health agencies at national, state, and local levels. The American Medical Association, the National Safety Council, insurance companies and other sources also make pamphlets available. Every health unit should have an attractive, well-arranged pamphlet rack, displaying material of special interest to the worker and his family, which he can read while waiting to see the nurse or take home with him.

A small kit of well-selected material can be given to each new employee visiting the health unit as part of the orientation process. Later the nurse can contact the new worker and offer to answer questions on subjects covered in the pamphlets. This is a good way to establish a nurse-employee rapport.

Group meetings can be a very effective means of health education, since they provide an opportunity for individuals to ask questions and participate in discussions. Such meetings may be held for all employees or for small groups with some specific interest or health problem. A management-employee committee will be useful in planning group meetings, for they can advise the nurse regarding items in which the employees have a special interest. These subjects should receive priority when a series of meetings is planned. Health education programs have sometimes failed because the first problems to be considered have been based on what the persons in charge think employees need to know rather than on what the employees have expressed an interest in knowing.

Films may be used very effectively in group education. To be of value, they must be carefully selected, shown with technical efficiency, and supplemented with discussion and interpretation. Films are available from various sources. The nurse should be familiar with each film and be prepared to lead a group discussion. A knowledgeable person to stimulate discussion can be very helpful. Posters, bulletin board displays and the company paper are also useful media.

Immunization

Immunization services as a health maintenance practice are increasing and are apt to be provided by the industries an agency serves. Legal conditions and local conceptions of good nursing practices will help determine the nurse's activities. For example, in some areas she will be restricted to assisting a physician, in others she can give the injection if a physician is present.

The kinds of preventive protection given most frequently in industry are for tetanus, influenza, and poliomyelitis and special immunizations for employees traveling overseas. Some employers also provide immunizations for personnel working in outside areas, where they are exposed to poison ivy and poison oak.

The International Certificates of Vaccination can be used as an individual record card. This can be obtained from the U.S. Government Printing Office. The AMA Personal Health Information Card, or something similar, can also be used for this purpose. The individual record can be stamped at the time of immunization, and returned to the employee as his personal immunization record. A company record should also be kept.

CHAPTER VII

Records and reports

The records kept in an occupational health unit can provide information needed for proper job placement and health maintenance. They supply essential information relating to illness and injury occurring at the workplace. While this information has many uses, the confidentiality of certain records must be maintained. "The records," according to the Council on Occupational Health, American Medical Association, "should remain in the custody of the physician and nurse and be kept confidential except as otherwise provided by law. This is often extremely difficult to accomplish in a small plant, but a locked file can be provided for the physician and nurse. Where the personnel department must have access to these files for legitimate reasons, certain confidential medical information can be kept in sealed envelopes. Some medical information cannot ethically be made available to management without the consent of the individual involved and this should be clearly understood by the employer when the occupational health program is being planned."

Two organizations have developed guides especially for small plants: A Guide to the Development of an Industrial Medical Records System ²² by the American Medical Association, and A Guide to Records for Health Services in Small Industries,²³ by the American Conference of Governmental Industrial Hygienists. In view of the completeness of these guides, only four sample record forms are included in this publication. (See p. 53.) Copies of both guides should be secured by every nursing agency interested in providing nursing service to industry.

The nurse will use some forms regularly and others only occasionally. She should be familiar with the types of records that are usually kept in health units, their purpose, and her responsibility for maintaining them and keeping them confidential.

Individual Health Folders

It is recommended that a folder be used for each worker and that all information pertaining to his health be filed in it. This method makes it possible to maintain a more comprehensive and effective service than could otherwise be carried out. Individual folders will alert the nurse to classified health conditions or idiosyncracies including allergies or chronic conditions. This system will also permit a quick evaluation to detect signs and symptoms of underlying or impending illness, either physical or emotional.

The nurse's responsibilities in maintaining health folders are:

Recording

All data should be recorded clearly in ink, dated and signed by the nurse. Services should be recorded in chronological order in concise and accurate statements. The emergency care given by the first-aid worker should be recorded in his handwriting and signed by him. (See p. 55.) The nurse uses the same form to record occupational injuries and illnesses she treats, filling out the form completely, giving precise information and using correct anatomical nomenclature and other medically accepted terminology.

The individual health record is the form the *nurse* uses to record her evaluation of worker visits to the health unit for nonoccupational reasons, as counseling, minor complaints. (See p. 54.) For example, the nurse records a blood pressure reading of a worker with frequent headaches, the employee's history of headaches, and uses any past information in his health folder as a means of suggesting a referral to his family physician. In this instance, the First Aid Record would *not* be used.

Filing

Additional information will be filed in the health folder, as:

Health examination record

Laboratory and X-ray reports

Letters from personal physicians

Immunization records

All First-aid records

The health folders should be kept in a locked file in the health center; only the physician and nurse should have access to them. However, some of the information will be needed by management, such as data concerning compensation cases, or absenteeism. A publication by the American Association of Industrial Nurses, Principles of Privileged Communications for Industrial Nurses ²⁴ will help the agency and the nurse determine how such matters can be handled.

When an employee leaves the company, the health records are still considered medically confidential. They should be kept in a locked "dead file" as long as specified by local legal requirements.

Monthly and Annual Reports

The agency should prepare a monthly and annual report of the nursing service in order to keep management informed on nursing activities within the health unit.

The tangible benefits to be derived from nursing and other health services are made readily apparent in comparisons of data, such as the company's insurance premium rates, sickness absence rates, labor turnover, and per capita health unit costs. (See pp. 62-67.)

CHAPTER VIII

Cooperation with allied company programs

The nurse is responsible for coordinating her services with other company activities, especially those related to employee health and welfare, such as personnel, safety, industrial hygiene and sanitation. She must know what these programs provide and have the ability and the willingness to work out cooperative procedures. To achieve the best results, the extent of the nurses activities outside of the health unit should be determined by either management or professional authority, according to the activity, and made known to everyone concerned.

In working with other company programs, as well as in her contacts with all company employees, the nurse's attitude is an important element. She must always be friendly, courteous and objective. The nurse will avoid becoming involved in controversial issues, such as labormanagement points of view and be willing to serve the company and its employees on a sound professional basis.

Because her time at the plant is limited, the part-time nurse may find that it will take her some time to work out satisfactory referrals and other cooperative arrangements. The relationships she builds will reflect nursing in general. She will be judged by her professional ability and gain the confidence of others if she avoids abruptness and unwarranted assumption of authority and actions that can erect barriers against her. Establishing a good relationship with others in the plant will make the nurse's role more rewarding and will contribute to the success of her program.

Personnel Department

Cooperation between the personnel department and the health unit must follow a routine procedure and be based upon a definite understanding of what information of a medical nature the health unit can provide and what must be considered confidential.

The nurse can work very effectively with the personnel department in a number of ways, including the following:

1. Orienting new employees. Each new employee should be referred to the nurse for an interview in which available health services can be explained.

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- 2. Planning for the health examination. If the pre-employment examination is part of the in-plant program, the nurse may plan for and schedule the examination.
- 3. Following up on ill or injured employees.
 - a. Post-illness conferences can be scheduled for the first time the nurse is in the establishment following the employee's return to work.
 - b. Medical certificates submitted upon return to work should be routed to the nurse for review by the nurse or physician. They may be filed either with the employee's health records in the health unit or with the insurance records in the personnel department, according to company policy.
 - c. Where a contract provides for the service, the agency can provide home visits to an ill or injured employee. Such visits must be made for the purpose of assisting the employee and his family and not as a check on his absence from work. As a rule the visits should not be made on time regularly provided for services at the plant.
- 4. Understanding workmen's compensation. Workmen's compensation insurance is a responsibility of the personnel department in small plants. The nurse cooperates by promptly reporting illness or injury, by understanding the workmen's compensation laws ²⁵ as they pertain to the establishment in which she works, by being on the alert for occupational health hazards, by keeping accurate records, and by making an objective report of all medical and lost-time cases for which she cares. She should not become involved in questions regarding whether a particular claim is compensable. All questions of actual coverage should be referred to management, the insurance carrier or the state compensation agency.
- 5. Rehabilitating workers. In many instances workers who have been ill or injured can return to work sooner if a nurse is in the plant to give care as directed by the physician. The nurse can also help disabled workers adjust to the work environment, and she can explain the limitations of certain rehabilitated workers to their supervisors.
- 6. Participating in absentee control programs. The preceding activities help control sickness absenteeism. In addition, the nurse should attempt to understand the underlying causes of absenteeism that have to do with the health of the employees. She also provides health education and promotes activities that will help alleviate health problems causing absenteeism.
- 7. Familiarizing Employees With the Group Insurance Program. Most employers provide some type of medical and hospital insurance to help defray the expense of nonoccupational illness or

injury. The benefits provided by group insurance vary with each establishment; printed material describing these benefits is provided by the personnel office. The nurse should obtain a copy of this descriptive material and become familiar with the benefits provided and the details required for payment of claims. By working closely with the person responsible for group insurance in the establishment, the nurse is able to provide health supervision or consultation regarding community health and welfare resources.

Safety Program

The nurse can contribute to a formal safety program by:

- 1. Actively participating in the establishment's safety program by a. attending committee meetings.
 - b. reporting on accidents and possible work hazards, and
 - c. discussing preventive measures.
- 2. Coordinating activities with the safety program by
 - a. counseling employees on health in relation to safety and on safe work habits,
 - b. encouraging the use of appropriate protective clothing, safety equipment, and other safety protective measures and instructing employees on correct usage,
 - c. reporting unsafe or hazardous conditions to appropriate person. Information can come from personal observations or from discussions with employees following accidents or "near misses."
- 3. Encouraging the development of adequate safety programs in establishments without such programs. This may include working with the personnel director and insurance company safety representatives.

Industrial Hygiene Program

The American Industrial Hygiene Association has defined industrial hygiene as "that science and art devoted to the recognition, evaluation and control of those environmental factors or stresses, arising in or from the workplace, which may cause sickness, impaired health and well being, or significant discomfort and inefficiency among workers or among the citizens of the community."

Industrial hygiene is the responsibility of specially trained engineers and chemists. However, the nurse's value to an industry will be increased if she knows about the processes and materials used in the establishment in which she works, the medical and engineering methods of control, physiological effects of exposure to toxic substances, early signs and symptoms of exposure, and emergency care.²⁶ ²⁷ ²⁸ She should know what to do under certain conditions and when and how to call on other members of the occupational health team in a consultation capacity. This kind of interrelationship is especially important in the small establishment that cannot directly employ all the members of the occupational health team.

Consultation in industrial hygiene is available to all plants from compensation insurance carriers, official agencies, and private consultants. Subsidiary plants of large corporations may have these services available from the home office. Unrequested routine industrial hygiene surveys are also made from time to time by the official agency. Ideally, the industrial hygienist should have a conference with the nurse each time he comes to the plant to make a survey. However, this may be difficult to arrange when the nurse is in the plant only part time.

The nurse can expect to assume some responsibility for activities within the areas of sanitation and housekeeping. The health and safety reasons for this are obvious. The degree of her responsibility should be cleared through management before it is assumed.

Sample contract

AGREEMENT BETWEEN THE (Name of Nursing Agency) AND THE (Name of Company).

The (Nursing Agency) will provide a supervised part-time occupational health nursing service to the employees of the (Company) at an hourly rate of \$.....

THE (NURSING AGENCY) AGREES TO PROVIDE:

- 1. The services of a registered professional nurse who has special preparation in public health nursing and/or occupational health nursing for hours per day days per week. As the nursing service develops, or as the company employment changes, the amount of nursing time may be adjusted with the approval of both the (Company) and (Nursing Agency).
- 2. A registered nurse with the same qualifications as the regular nurse to relieve during the absence of the regularly assigned nurse because of vacation, sickness, or for any other reason. The relief nurse will receive the same orientation and inservice education as the regular nurse, and will be given the opportunity to become familiar with the plant health program. Every effort will be made to provide an uninterrupted service.
- 3. Full responsibility for and protection of the nurse and relief nurse according to the personnel policies of the (Nursing Agency). This will include provision of workmen's compensation, group insurance, professional liability insurance, accident insurance, and regular health examinations.
- 4. Supervision of the nurse and assistance in developing the employee health program in cooperation with management and the plant physician.
- 5. A monthly and annual statistical and narrative report of the total health service, including care given by the first-aid workers, nurse, and physician.
- 6. A regular cost analysis of the nursing service. Management to be notified promptly of changes in the cost of providing the occupational health nursing services.

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THE (COMPANY) AGREES TO PROVIDE:

- 1. A licensed physician who will be responsible for the medical direction of the health service: visit the establishment at least once a week, provide written medical directives for the nurse and first-aid workers, and provide medical consultation on plant health problems which occur between his visits to the establishments.
- 2. A written statement of the program and policies of the employee health service worked out in cooperation with the plant physician and the (Nursing Agency).
- 3. A health center adequately equipped and maintained in accord with the requirements indicated for the size and type of establishment.
- 4. A member of management who will be responsible for the nonmedical administration of the health service, and with whom the physician and nurse may confer.
- 5. Health records of the type required for both the legal and health aspects of the health service.
- 6. Opportunities for conferences between the part-time nurse, nurse supervisor or occupational health nursing consultant, management, and physician for periodic review of the health service.
- 7. Two employees on each shift with current first-aid certificates, one to be delegated the responsibility for providing first-aid care in the absence of the part-time nurse and whose activities will be supervised by her.
- 8. A rider clause attached to the company liability insurance policy protecting both the nurse and company.

These provisions may be modified upon mutual agreement or the arrangement may be discontinued upon 30 days written notice by either party.

By..... By..... By..... (Nursing agency) (Company)

Dated this day of, 19.....

Malpractice in occupational health nursing

A distinction must be made between malpractice and the practice of medicine without a license. Liability for malpractice stems from the idea that the welfare of the citizen requires that persons practicing medicine possess and exercise that reasonable degree of learning and skill which ordinarily is possessed by other members of the profession practicing in the locality....

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More and more procedures are now being delegated to a nurse working under a physician's direction. The phrase "under the doctor's direction" is all important as a nurse may not practice medicine, for the practice of medicine means to diagnose, treat, operate upon or prescribe for a disease or other abnormal physical condition. However, when the doctor has seen the case and made a diagnosis and prescribed treatment the nurse may carry out his orders even though that means performing acts that are in fact treatments. It is in this realm—carrying out the doctor's orders on a case already diagnosed—that the scope of nursing has broadened. It is generally accepted that the work of the nurse must be carried out under the supervision of the doctor except in emergency or catastrophe.

This brings into focus the fact that a nurse acting on her own without a doctor's supervision is very limited as to what she can do but under a doctor's supervision her activity may be considerably extended. This leads to a discussion of whether signed, standing orders for the nurse in industry constitute adequate medical supervision.

The term "standing orders" arose in hospital work. When a physician has seen a patient, made a diagnosis, and written down what he wishes the nurse to do for the patient, this is a proper and valuable use of standing orders. When instructions are written for a nurse in industry they are not for an individual patient whom the doctor has seen and diagnosed. They are intended to guide the nurse in handling patients whom the doctor has not seen. Thus the term "standing orders" would be a misnomer for what should be called more properly "guiding principles and procedures." The important point is that while standing orders extend the scope of nursing activities in a hospital considerably they cannot so extend them in industry because they merely serve to guide the nurse's acts before the case has been seen by the physician. Proper medical supervision is the only valid way to extend the scope of case handling for the occupational health nurse....

Lately there is an increasing tendency to consider the nurse an independent agent responsible for her own acts. Thus the malpractice scene is changing for the nurse. It had been considered that the employer would be liable for the improper acts of an occupational nurse, but in such a situation the employer could recover from the nurse whatever damages for negligence were assessed against him. Lately, with increasing acceptance of the nurse as an independent agent she is being sued directly.

It should be noted that the patient is expected to exercise ordinary care to protect himself. When he has been negligent concurrent with the alleged negligence of the physician or nurse, this "contributory negligence" will bar his recovering damages in a malpractice suit. However, it has been found difficult to prove such contributory negligence. Because of such suits the nurse should see that she is properly protected. One means of protection is malpractice insurance. It is possible for management to have a rider on its Public Liability insurance policy to cover the acts of the nurse. Such coverage is implied in a Public Liability policy only as it relates to suits against the company. To cover suit against the nurse coverage would have to be added specifically to the policy. It is possible to purchase malpractice insurance as such. Malpractice insurance will not protect a nurse in the event of an illegal act. Practicing without a license is an illegal act. In the event that a nurse has gone beyond the legal confines of the practice of nursing malpractice insurance will not protect her.

The two most important ways for the nurse to guard against malpractice suits are good case handling and good records. Malpractice suits almost invariably stem from dissatisfied patients. If each patient is handled with tact, sympathy, friendliness, and the exercise of all necessary care and concern the likelihood of trouble will be very slight indeed. Any early evidence of questioning or dissatisfaction on the part of the patient should prompt the nurse to refer the case immediately. It goes without saying that professional competence is automatically expected but competence today requires continued study to keep abreast of new developments in the field.

Many times the difference between adequate and inadequate defense of a malpractice case lies in the adequate or inadequate records that have been kept. If a nurse can prove what she did by well-kept records that alone may defeat a claim for alleged malpractice.

Source: Liberty Mutual Loss Prevention Medical Department. An Introduction to Occupational Nursing. Boston: The Company. Undated.

Workmen's compensation and the nurse

I. What workmen's compensation laws say and do

The laws vary widely from State to State, and the administration of them varies more widely still, but in actual practice here are the things which any workmen's compensation law says and does:

- 1. The employer is directly liable to his employee for certain specified medical and disability benefits necessitated by an industrial injury.
- 2. The costs of these benefits are assessed with varying directness upon the employer, the particular industry, industry as a whole, and the general public.
- 3. The injury, to be compensable, must arise out of, and in the course of, the employment.

- 4. Negligence is not considered; the injured employee is entitled to the same benefits whether or not the injury was suffered by his own fault.
- 5. The aim of the law is not to reward a man for getting hurt, or even to attempt to pay him (as is done in negligence cases) for his pain and suffering. The purpose is simply to give him necessary medical care, plus enough money so he won't starve to death while he is getting well.

II. What the nurse needs to realize

- 1. Any employee can do business as safely, and with just as little chance of being short-changed, with a modern insurance company as he can with a modern bank. However, it is the adjuster's job, and the nurse's, to protect the employer, industry, and the public against improper loss whether through carelessness, greed or just plain theft.
- 2. There is no field of law that has not been made a field for laziness and dishonesty. The workmen's compensation laws are no exception. A good plant nurse is just about the biggest bulwark against such things. She is usually the first person to whom the employee brings his injury for attention. She has the first chance to get the true history of how he sustained it and the first story is most apt to be the true one. She knows personnel and has already formed an idea of who are sheep and who are goats. She has the confidence of the foreman and department heads.
- 3. Remember that the proportion of worthless claims to worthy claims is much higher than the proportion of worthless claims to worthy employees. This is because the neurotic or hypochondriac or flat faker is far more apt to claim injury. The honest employee must wait for an accident to happen.
- 4. The first thing to do after giving necessary medical attention is to make a permanent record, in detail, of the accident. This should recite the exact story given by the employee, as nearly as possible in his own words, with the time of the accident and the names of the witnesses as nearly as he himself can give them, and—of course—the exact time of coming to the health unit. This record is just as important in the case of nonindustrial visits as with industrial claims. An employee who comes with an injury sustained at home might later claim that it is industrial. The nurse's record is the only thing to stop him. Do not point out inconsistencies in an employee's story or he might streamline it when the adjuster interviews him.
- 5. The nurse should not attempt to determine questions of liability. Nurses who do can get themselves and their employers into beautiful jams.

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III. Basic principles to guide the nurse

- 1. Establish confidence in the employee. Resolve all doubts regarding the seriousness of an injury by making referral to physician.
- 2. Make an accurate history of the case.
- 3. Check the employee's file, particularly the preplacement examination record, for facts that throw light on present injury.
- 4. No industrial nurse should deal in dilemmas. If there is any doubt about a case, shift the responsibility from herself to the doctor or her superior.
- 5. Check with the employee's overseer or supervisor, immediately after conferring with or treating an injured employee, regardless of whether or not the employee says the supervisor sent him to the nurse.
- 6. Do not:
 - a. Try to interpret the law.
 - b. Make commitments to employees.
 - c. Discuss the case with the employee.
 - d. Try to diagnose the case.
 - e. Try to decise when an employee is able to return to work. This is the province of the doctor and is always an important factor in contended cases.
 - f. Give credence to gossip.
 - g. Authorize medical treatment. Emergency cases should be sent to a doctor immediately and employees may be referred to a doctor for examination. Many times medical treatment is authorized in cases which are clearly not compensable. On doubtful cases clearance should be had, if possible, from the personnel director, adjuster, or company attorney.
 - h. Authorize hospital bills. To authorize hospital care or hospital bills in a noncompensable case can convert the case into one that is compensable.
 - i. Treat or authorize treatment of conditions where there has been a lapse of time without checking to be sure that workmen's compensation is still in force. If compensation has lapsed, authorization could constitute a waiver.
 - j. Treat disputed cases. For the nurse to treat such cases may easily convert a noncompensable case into one that is compensable.

Sources:

Items I and II, adapted from Whitman, Digby: Industrial nursing and workmen's compensation. Nursing World, December 1956.

Item III, Bryant, Eugene: Legal aspects of industrial nursing as applied to workmen's compensation. *Nursing World*, September 1955.

Example of nursing procedures and medical standing orders for care of workers with occupational injuries

Laceration

Laceration—a wound made by cutting or tearing.

- A. Definition of Major Conditions:
 - 1. Laceration involving deeper structures (nerves, tendons and muscles) or about the face.
 - 2. Extensive hemorrhage (often indication of embedded foreign body).
 - 3. Infected lacerations.
 - 4. Contaminated wounds.
- B. Nursing Procedures for Care of Major Lacerations:

(These are the conditions that must be seen by the physician immediately.)

- 1. Make patient comfortable on chair or table.
- 2. Wash hands before giving care.
- 3. Make careful examination to determine extent of injury (take into consideration cause of injury as well as objective signs).
- 4. Control bleeding by direct pressure (tourniquet is seldom needed).
- *5. Cover injured area with sterile gauze, cleanse surrounding area with hexachlorophene.
 - 6. Again check for bleeding.
 - 7. Apply dry sterile dressing; immobolize as indicated, prepare patient for transfer to the doctor's office or to the hospital.
 - 8. Prepare all required records and reports.
 - 9. Arrange for transport of injured worker in taxi or ambulance, arrange for someone to accompany worker.
- 10. Call doctor and brief him on condition of worker.

C. Definition of Minor Conditions:

- 1. Superficial lacerations.
- 2. Simple lacerations whose edges approximate easily and evenly.
- 3. Those in which tests of sensation and function show that nerves and tendons are intact.
- 4. Noncontaminated wounds.
- D. Nursing Procedures for Care of Minor Lacerations:
 - 1. Make patient comfortable on chair or table.
 - 2. Wash hands before giving care.
 - 3. Make careful examination to determine extent of injury (take into consideration cause of injury as well as objective signs).

* Doctor's standing orders.

- 4. Control bleeding by direct pressure.
- *5. Cover injured area, cleanse surrounding area with hexachlorophene.
- *6. Irrigate wound with sterile normal saline solution.
- 7. Again check for bleeding; recheck extent of injury.
- *8. Approximate edges of laceration, using "butterfly" closures.

N.B. Do not continue adhesive strips around member; use only number necessary to bring edges together.

- 9. Apply dry sterile dressing.
- 10. Record all pertinent information.
- 11. Make appointment for followup care.
- E. Followup Care for Lacerations:

*(Lacerations are to be redressed daily.)

1. Check carefully; evaluate healing process and the worker's attitude about the injury and care being given.

N.B. If a question arises about any of the above make an appointment for worker to be seen by the physician.

- 2. Apply dry sterile dressing.
- 3. Counsel worker concerning the need for adequate care.
- 4. Record all pertinent information.
- 5. Make appointment for followup care.

*N.B. Nurse may continue to redress as necessary all *minor* lacerations. Any that are not completely healed in three days are to be seen by the physician.

Major conditions may be redressed by the nurse per doctor's orders. Workers whose wounds have been sutured are to be seen by the doctor every second day. Nurse may redress as necessary.

Source: Brown, Mary Louise. Occupational Health Nursing. New York: Springer Publishing Company, Inc. 1956. 276 pp.

Example of nursing procedures and medical standing orders for care of workers with nonoccupational condition

Headache-pain in head

This condition may have many physical and emotional causes. A. Major Conditions:

1. Early symptom of industrial intoxication by chlorinated hydrocarbons, or carbon monoxide (include only those associated with the industry).

* Doctor's standing orders.

- 2. Headache associated with vertigo.
- 3. Headache associated with elevated T.P.R. or blood pressure.
- B. Minor Conditions:
 - 1. Simple headache—uncomplicated.
- C. Nursing Procedures for Care of Workers with Headaches:
 - 1. Take careful history.

N.B. Nurse must consider each request for an aspirin carefully. She should take time to talk with each worker.

- *2. Take temperature, pulse and respiration. When temperature is 100° or more, worker should be urged to go home and to consult his family physician. With a temperature of 101° or more, worker may not return to work.
- *3. Take blood pressure. When history or symptoms indicate, take blood pressure. If this deviates from "normal" and from that recorded by physician on worker's medical examination, counsel worker to check with his family physician.
- *4. When history and symptoms indicate that headache, as far as nurse can determine, is uncomplicated, give aspirin, gr. X. This may be repeated once after a time lapse of at least 4 hours.
 - 5. Record all pertinent information on worker's record.

D. Followup Care:

- 1. Take history.
- *2. Check record (make appointment for worker who reports frequently to be seen by plant physician).
- 3. Counsel worker and urge that he see his family doctor.
- *4. Repeat medication (aspirin, gr. X) if indicated to help worker be more comfortable and thus be able to continue work.
 - 5. Record all pertinent information.

Source: Brown, Mary Louise. Occupational Health Nursing. New York: Springer Publishing Company, Inc. 1956. 276 pp.

Sample record and report forms

The record and report forms shown here are modified versions of forms now being used in occupational health. When a record system is being developed or revised it is recommended that the two publications References 22 and 23, be obtained and studied. Modification of the sample forms usually is necessary to meet the needs of a particular

^{*} Doctor's standing orders.

health program. When in doubt about the efficiency of a new form it is advisable to have a trial run before printing the forms in quantity.

SAMPLE: 1. Individual Health Record.

- 2. First-aid Record.
- 3. Daily Record or Log.
- 4. Statistical Summary Report.

Individual Health Record Form

Since this form is used quite often, many companies prefer to have the patient's name at the top for handy reference rather than the title of the form and the name of the company as in many other types of forms. The title is not too important in this instance, since the form consists mainly of horizontal ruled lines, which makes it easily recognizable in the patient's medical record folder. This form provides a continuous record of all of the employee's visits to the medical department for nonoccupational complaints. The value of this form is that it acts as a sort of barometer of the employee's health. It can be of great help to the physician in making a diagnosis, in employee health maintenance, and in health education and counseling.

It is not necessary to illustrate here the reverse side of this form, since it merely provides space for additional entries.

| Name (Last) (First) (Initial) | | | Social Security or Employee No. Sheet No. | | |
|-------------------------------|------|-------------|---|---------------------|--|
| Date | Time | Temperature | Diagnosis, complaint, treamtent, and | d advice Treated by | |
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Health Record*

Health Record

XYZ Company

First-Aid Record

Purpose: To record the original record of all injuries and illnesses by the first-aid worker or the nurse at the time of the visit.

To serve as a guide to the first-aid worker in recording pertinent information.

^{*}American Medical Association. Council on Occupational Health. Guide to Development of an Industrial Medical Records System. Chicago: The Association, 1962.

To protect both the employer and the employee in case of litigation.

To ensure continuity of care and followup.

To provide the basis for the detection of unsafe practices within the plant.

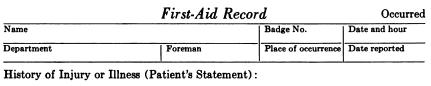
Directives for use: The form should be completed by the first-aid worker and/or the nurse whenever he or she gives any treatment to an employee. Each block should be filled out, in ink and signed by the person attending.

The history of injury or illness will tell a short story of what happened in the worker's own words as to how the injury occurred, or his personal health complaint.

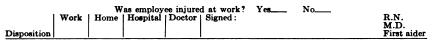
The nature of injury or illness will give the complaint or findings of the part of the body injured, type of injury and how severe it seems to be.

Treatment given, any medication given and whether the worker was sent back to work, home, doctor or hospital will be recorded.

The first-aid record should be reviewed by the part-time nurse, before it is filed in the health folder. Also, it should be considered an active record as long as the worker is under care. Notations can be made under treatment and progress to date until the condition is completely improved and the patient discharged from care. The date for discharge is entered at the bottom of the record.



Nature of Injury or Illness:



Treatment and Progress Remarks

Date

Date Discharged from Health Service:

Daily Record or Log*

Purpose: Since the individual health records will include complete information regarding visits to the Health Service, the daily record or log is to be used primarily to obtain minimum statistics for periodic reports and to provide a chronological record of services given. If periodic report forms are used for tallying events as they occur, the daily record or log might not be necessary.

^{*}American Conference of Governmental Industrial Hygienists, Sub-Committee on Plant Records. Guide to Records for Health Services in Small Industries. Cincinnati, Ohio. 1960.

Directives for use: A bound book or individual sheets may be used for this purpose. Reason for visit or service given should be as brief as possible. Using the same terminology as in periodic report forms will facilitate tallying or tabulating reports. If desired, another column with the heading "By whom given" may be added to the form.

Daily Log

Date.....

| Time Department | | Name | Reason for visit; service given; disposition | | |
|-----------------|---|------|--|--|--|
| | | | | | |
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Summary Report

Name of Company

| *Employees: | Occupational conditions: | Nonoccupational conditions: |
|-------------|--------------------------|-----------------------------|
| Total | Total | Total |
| Male | 1st visit | 1st visit |
| Female | Revisit | Revisit |

Seen by: Physician.... Nurse.... First-aid Worker.... Referred to Others.... Examinations.... (Count separate) Laboratory Work.... X-rays....

| Occupational* | This Month | Last Month | Nonoccupational* | This Month | Last Month |
|--|---------------|---------------|---|---------------|---------------|
| Lost time cases Injury frequency rate Injury severity rate | | | Sickness absenteeism (days). Frequency rate Severity rate | | |

Special Activities During Month:

Narrative Report:

* Statistics obtained from Personnel Department.

Injury frequency and severity rates

The American Standards Association * has established the formula for determining the figures used in computing injury frequency and severity rates. Only disabling (lost-time) injuries (including occupational diseases) are included in the computations. Disabling or losttime injuries are of four types:

- 1. Death: Any death that is the result of injury, no matter how long after the injury it occurs.
- 2. Permanent total disability: Loss of, or complete loss of use of, both eyes; loss of one eye and one hand, arm, or foot; loss of two of the following not on the same limb: hand, foot, leg, or arm.
- 3. Permanent partial disability: Loss of, or permanent impairment in the use of, any part of the body, except as described under permanent total disability. Not included are: inguinal hernia if repaired, loss of fingernails or toenails, loss of tip of finger without bone involvement, loss of teeth, and disfigurement.
- 4. Temporary total disability: Injuries which do not result in death or permanent impairment but do render the injured person unable to perform a regularly established job, which is open and available to him during the entire time interval corresponding to his regular shift on any one or more days (including Sundays, days off, or plant shutdowns) subsequent to the date of injury.

Disabling injuries on which the standards are based are limited to those that occur in the course of and arise out of employment. All injury totals are adjusted to the standard unit of one million man hours worked. This makes it possible to make direct comparisons of the injury rates of different operating units regardless of their size.

Injury frequency rate: The injury frequency rate is a statement of the number of injuries that would be expected to occur if the employees in the establishment worked exactly one million man hours. The rate is based on the assumption that the number of injuries in any operation will be proportionate to the amount of exposure (hours worked). In other words, a plant that had two injuries in 100,000 man hours worked would probably have ten times as many, or 20 injuries, if its exposure had been increased to one million man hours worked.** The injury frequency rate is the number of disabling (lost-time) injuries per million man-hours worked. Mathematically, this is shown as:

 $FREQUENCY = \frac{\text{Number of disabling injuries} \times 1,000,000}{\text{Number of man-hours worked}}$

^{*} American Standards Association, Inc. Recording and Measuring Work Injury Experience, Z16. 1-1954. 10 E. 40th St.. New York, N. Y. 10017.

^{**} Summarized from U.S. Department of Labor. Work Injury Rates. Washington: U.S. Governmnt Printing Office, pp. 2-4.

Injury severity rate: The injury severity rate indicates the rate at which manpower losses are occurring because of injuries. For example, a severity rate of 100 means that injuries are causing the loss of 100 man-days in every 1,000,000 employee-hours actually worked. Because the severity rate expresses these losses in terms of a standard unit of exposure, it is possible to use this rate in direct comparisons between establishments, industries, and other operating units. For example: an establishment may compare its severity rate directly with the average severity rate for its industry to determine whether its injury loss ratio is better or worse than the general experience of its competitors. Similarly, comparisons between the current severity rate and those of previous periods for the same operations will indicate whether progress is being made in reducing that loss ratio.*

The severity rate is not a measure of the severity of injury; technically it is a weighted frequency rate in which each injury is given a weight corresponding generally with the relative severity of that injury.

Two different sets of statistics are required in computing the injury severity rate:

- 1. Temporary total disability cases: The total number of days lost by all employees for temporary total disability. In each case, the actual calendar working days, including holidays and plant shutdowns, on which the injured person was unable to work because of the disability are counted. The day of injury and the day of return to work are *not* counted.
- 2. Deaths, permanent total, and permanent partial disabilities: Computation is by a scheduled time charge established by the American Standards Association.** The actual time lost from work is *not* counted. Briefly, the Standard has established a uniform economic loss value of 6,000 man-days for each death . . . This represents the average working-life expectancy of all persons in the labor force.

For each death and permanent total disability, the Standard therefore charges 6,000 man-days.

Permanent-partial disabilities are established through a sliding time charge or percentage rating of working ability lost by a person. The loss of an arm at any point above the elbow, for example, is considered as equivalent to the loss of 75 per cent of full productivity ability and such an impairment is, therefore, indicated at 4,500 man-days.***

^{*} Ibid.

^{**} Ibid. Pp. 7-8.

^{***} Copies of the scheduled time charge may be obtained from management, or by writing to the American Standards Association for the Z16. 1-1954 publication.

The formula for computing the injury severity rate is: the number of days charged for disabling (lost-time) injuries per million man-hours worked. Mathematically this is shown as:

 $\frac{\text{SEVERITY} = \text{Total days charged} \times 1,000,000}{\text{Number of man-hours worked}}$

Sickness frequency and severity rates

The methods of measuring work absence due to sickness are described in the following passage: "The severity rate, frequency rate, and disability rate are the three measures which have been selected to promote uniformity in the collection, recording and interpretation of sick absence statistics... The frequency rate is the average number of absences per thousand workers. The severity rate is the average number of days lost per absence, and the disability rate is the average number of days lost per worker per year." * (When comparing sickness absenteeism rates, note the day on which absenteeism is first counted, i.e., first day, third day...) The formulas for determining these rates are:

Frequency rate = number of absences per 1,000 employees per unit of time (month or year)

 $\frac{\text{Number of absences per (month or year)} \times 1,000}{\text{Average number of employees}}$

Severity rate = number of calendar days lost per absence

Number of calendar days lost Number of absences

Disability rate = number of calendar days lost per employee per unit of time

Number of calendar days lost per employee per month or year ** Average number of employees

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^{*} Abstracts on absence from work and its relation to private practice. Journal of the American Medical Association, 168:8, 3-4, 1958.

^{**} Johnstone, Rutherford T., and Miller, Seward E. Occupational Diseases and Industrial Medicine. Philadelphia: W. B. Saunders Company, 1960. p. 25.

Example of health education program for six months

| 89 | ow to ,, hour, | ' in | urvey |
|------------------|---|---|---|
| Other Activities | Show film, "How to Catch a Cold," during lunch hour, Jan. 19-20. | Display "The Heart of the Home" in the lobby. | Chest X-ray survey Mar. 23. |
| Other | Show f Catcl durin Jan. | Display of th the l | Chest X-r Mar. 23. |
| Paper | e Com- ,," by the | print article from American Heart Association Bulletin. | ticle by union representative. "Let's All Take Part." Outline of program—(how, when, where worker can take part)—by nurse. |
| Company Paper | Article, "the Com- mon Cold," by the physician. | Reprint article from American Heart Associat Bulletin. | Article by union representative. "Let's All Take Part." Outline program—(how, when, where worker can take part)—by nurse. |
| s Rack | ammon d. fruit s. | Disease. eight. aatic | om T.B. on and ociety. |
| Literature Rack | Pamphlets: 1. The common cold. 2. Drink fruit juices. 3. Rest. | Pamphlets: 1. Heart Disease. 2. Overweight. 3. Rheumatic Fever. | Booklets from T.B. Association and Cancer Society. |
| loards | from from ng. | n Heart n. | F.B. and er. An- nts of e of t. |
| Bulletin Boards | Cold posters using characters from film. Announce film showing. | Posters from Heart Association. | Posters on T.B. and lung cancer. An- nouncements of time, place of X-ray unit. |
| | t the ld. | kers t heart | the d the icipa- kers in y |
| Aim | To help workers learn about the common cold. | To help workers learn about heart disease. | To stimulate the interest and the active participa- tion of workers in chest X-ray program. |
| | | | |
| Month | | | |
| | January | February | March |

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| Show films during lunch hour. "Time and Two Women." Apr. 16–"Man Alive," Apr. 20. | Display—use weight Reduction Poster, put near scale. Promote com- petition. | Safety meeting on home safety. | 076 mm |
|--|---|---|--|
| List Seven Danger Signals. Article by nurse, "What Is Early Detec- tion." | Article by Nurse on ''Eat a Good Breakfast'' or ''Optimum weight.'' | Reprint article from National Safety Council News- letter. | 1056 Tuo 1056 |
| Booklets from Cancer Society: 1. How your Doctor Detects Cancer. 2. Cancer Facts for women. 3. Cancer Facts for men. | Pamphlets: Nutrition- up-to- date, up to you Eat a good Break- fast. | Child Safety. A Safe Home. Home accidents from a "do-it- yourself" hobby. | O anitaltud ana ina 0 |
| Lucky Seven—play up idea that the 7 danger signals can be lucky if people recognize signs and go to their physician im- mediately. An- nounce film showing. | Posters on Nutri- tion, of good and poor Breakfast, from U.S. Depart- ment of Agricul- ture. | Chart showing home accident problems. Posters from In- surance Co., showing problems. | and the second |
| To help workers learn the Cancer Beven Danger Signals. | To help workers know good nutri- tion. | To cut down number of home accidents. | |
| April | May | June | ÷ D M |

* Brown, Mary Louise. Occupational Health Nursing. New York: Springer Publishing Company, Inc. 1956. 276 pp.

Tangible benefits of occupational health programs

It is important for each agency to gather data that will indicate the tangible benefits to be derived from a health program. Management is always more interested in the benefits achieved by its own company or by other companies in the locality, than it is in the data from other parts of the country. Moreover, reliable data that can be used to evaluate the benefits of employee health services are difficult to obtain. There is need for current information to substantiate the claim that occupational health services can reduce compensation and other group insurance premiums, lessen absenteeism due to illness and injury, and to some extent affect labor turnover.

Agencies should secure from the companies they serve figures that will enable them to make yearly comparisons of insurance premiums, sickness absence rates, labor turnover, and per capita health program costs. These figures can be used to compare the experience of a company from year to year, as well as the experience of various companies the agency is serving. If possible, comparable information for years immediately prior to the inauguration of a health program should be secured, since, other conditions being equal, greater differences should be observed

| | | Comp anies | |
|--|--------|-------------------|--|
| Benefits reported in survey | Number | Percent | |
| Total companies replying | 96 | 100.0** | |
| Less absenteeism | | 57.3 | |
| Improved employee health | 46 | 47.9 | |
| Improved employee relations | 46 | 47.9 | |
| Reduced compensation insurance costs | 38 | 39.6 | |
| Reduced sick benefit insurance costs | | 30.2 | |
| Better job placement | 22 | 22.9 | |
| Improved safety program | 17 | 17.7 | |
| Improved productivity | | 12.5 | |
| Less turnover | 7 | 7.3 | |
| Beneficial factor in instituting executive health plans | 5 | 5.2 | |
| Better management | 6 | 6.3 | |
| Helpful guide for company decisions when employee health is a factor | 4 | 4.2 | |
| Community relations value | 4 | 4.2 | |
| Stabilization of sick benefit insurance rates | 2 | 2.1 | |
| Miscellaneous | 3 | 3.1 | |

How Companies Feel About Their Medical Programs*

* National Industrial Conference Board, Inc. Company Medical and Health Programs (Studies in Personnel Policy No. 171). New York: The Board, 1959. 60 pp. ** The percentages exceed 100 because some companies cite more than one benefit. between years with and without a program, than between the years in which the program has been operating.

Although many things can affect cost and sick-absence data, making it difficult to assign an exact value to the benefits to be derived from a health program, many companies have been able to demonstrate that their health programs have reduced both the cost of providing protection against illness and injury and the amount of sick-absence employees experienced.

Check Your Thinking Concerning Your Employees' Health*

As a starting point the owner-manager will want to analyze his own thinking, concerning the health of his employees. By answering these questions you should be better able to appreciate your existing health program more. Or if you do not have a program, you may see more clearly the importance of starting one.

Yes No

| (1) | Do you now or have you ever provided any type of employee health | |
|----------|---|----------|
| | program in your business? | |
| (2) | Do you value your employee investment as much as your invest- | |
| | ment in equipment? | |
| 7 (3) | Do you make any effort to ascertain the health status of your employees? | |
| :~(4) | Do you realize that the morale and production efficiency of em- | |
| | ployees improve when they are reassured as to their health? | |
| 7 (5) | Do you know that an employee health program can decrease | |
| | absenteeism and labor turnover by as much as 50 percent? | |
| ୍ମ (6) | Do you realize that a full-time or a part-time plant physician can | |
| | encourage your employees to maintain better relations with their | |
| | faimly physician? | |
| -> (7) | Do you know that an employee health program may improve your | |
| | compensation experience and costs? | |
| > (8) | Do you make any effort to determine whether an employee is | |
| | physically qualified or suited for the job to which he is assigned? | |
| 7(9) | Do you know that you are liable for "aggravation" as well as | |
| | "causation" of symptoms in your employees? | |
| ッ(10) | Do you accept the employee's word that he is able to return to his | |
| | usual job following an illness, injury or operation? | |
| ु (11) | Have you considered the prime asset of your company to be the | |
| <i>i</i> | health of your employees? | |
| | | |
| A | nswer the following questions if you already have some form of | employee |
| heal | th program. | |
| (1) | De very have a designated commonly advertision? | |
| • • | Do you have a designated company physician? | |
| (2) | Does your physician have regularly scheduled hours to be on the premises? | |

⁽³⁾ Has he familiarized himself with the nature of all employees' work? _____

^{*}Small Business Administration. Health Maintenance Programs for Small Business, 2d ed. Washington: U.S. Government Printing Office, 1964. 64 pp.

| | | Yes | No |
|----|---|-----|-------|
| |) Do you feel that you and your physician have a clear understanding of the State laws as to the choice of physician in compensation cases? | | |
| (5 |) Are pre-placement physical examinations required of all applicants | | |
| | for employment? | | |
| (6 |) Are these examinations performed on company premises? | | |
| (7 |) Do you have a part- or full-time nurse? | | |
| (8 |) Has the nurse been provided a set of standard procedures for an | | |
| | occupational health program? | | |
| т | for a second a maintee of these superiors ("so " these second in the second s | | monle |

If you answered a majority of these questions "no," then you will want to work with your doctor or nurse and rewrite your medical policy. You will receive the greatest benefit from your health program by making it an integral part of your business. You will want to see that your medical personnel are thoroughly familiar with all of your plant's operating conditions as well as with your State's workmen's compensation code.

How Companies Determine Health Needs*

Before embarking on a health maintenance program, a small firm must review its own facilities and situation to determine its health needs. . . . The varying requirements of nine companies in different industries are illustrated in the following paragraphs and summarized in the accompanying table. These companies were considering the purchase of services through a cooperative health program.

Company A produces a chemical product and has 150 employees. It is expanding and expects to require about 10 preplacement examinations a month. In one department a toxic hazard exists which impels the management to insist upon a medical examination of workers in the department every 60 days. In the opinion of the management, other employees in the plant should avail themselves of the opportunity for a physical checkup once a year. Upon these premises it is estimated that about 250 periodic examinations a year will be required. During the past 5 years, known emergencies have arisen which demanded medical attention about once a week. It is estimated that, with nearby facilities at hand which the workers know they can use without charge, the demand for emergency treatment services will increase considerably. As an estimate, it is judged there will be a threefold increase. This will be due, primarily, to the treatment of minor ailments under this health service category.

Company B processes a food product sold in sealed containers and is so small that each case of absenteeism is especially burdensome. During the past year nearly 85 percent of the absences were due to sickness. The company's president has become convinced that much of this could be prevented by the use of proper preventive medical services. He estimates the probable number of required preplacement examinations, periodic

^{*} Small Business Administration. Health Maintenance Programs for Small Business, 2d. ed. Washington: U.S. Government Printing Office, 1964. 64 pp.

health appraisals, and emergency treatments in a manner similar to that used by the management of plant A, although more conservatively.

Company C manufactures electrical control apparatus. Although it has a full-time nurse and a panel of "on call" physicians, it has desired for sometime to increase its medical services. About 150 preplacement and 200 periodic health appraisals a year are estimated. Other visits to the doctor are calculated at an average of 1 per employee per year, and visits to the nurse at a total of 2,000.

Company D makes automotive parts. With 350 employees on the pay roll, and a nurse, but no in-plant physician, the board of directors considers the provision of better health maintenance services to be an opportunity for increasing the productivity of the plant.

Company E is a knitting mill with 100 employees. Its management is interested in the health of its workers but has been unable to offer health maintenance services similar to its larger competitors because of its small site.

Company F, a vitreous enameling works with 250 employees, estimates its annual requirements at 100 preplacement examinations, 150 periodic health appraisals, 250 emergency treatments, and 1,300 visits to the nurse.

Companies G. H. and I, in addition to the manufacturing plants, a public utility, a drug wholesaler, and a dry-cleaning service company, respectively expressed interest and submitted their estimates. The public utility company with 200 employees has no special health hazards, no nurse, and no regular physician. But it desires to join a group for the

| Company | Number of employees | Number of pre- placement examina- tions | Number of periodic health appraisals | Number of treatments for minor ailments by doctor | Number of visits to nurse |
|---|---------------------------|---|--|---|---------------------------------------|
| A. Chemical Co | 150 | 120 | 250 | 150 | 900 |
| B. Food Processing Co | 80 | 30 | 40 | 40 | 400 |
| C. Electrical Machinery Co | 300 | 150 | 200 | 300 | 2.000 |
| D. Automotive Parts Co | 350 | 180 | 200 | 350 | 3,000 |
| E. Knitting Mill | 100 | 50 | 50 | 100 | 500 |
| F. Enamel Products Co | 250 | 100 | 150 | 250 | 1,500 |
| G. Public Utility Co | 200 | 80 | 150 | 100 | 1.000 |
| H. Drug Wholesaling Co | 40 | 10 | 20 | 40 | 150 |
| I. Dry Cleaning Service Co | 30 | 20 | 10 | 30 | 100 |
| Total for figuring cooperative activities | 1,500 | 740 | 1,070 | 1,360 | 9.550 |

Quantitative estimates of health maintenance service requirements for 1 year for 9 companies using cooperative health services

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purpose of providing extra benefits for its workers. The neighboring drug wholesaler has only 40 employees, but wishes to participate on a limited basis. He will not have the services of a full-time nurse and expects a physician to call at his establishment far less frequently than at those with a larger number of employees. In like manner, the dry cleaner with 30 employees anticipates a considerably smaller need.

Factors Influencing Sickness Absenteeism*

Studies have shown that, of all absences from work attributed to illness and injury, about 90 percent are due to nonoccupational conditions. The loss to industry and the worker resulting from sickness absence is great. All absenteeism cannot be eliminated, and a certain amount of it can be used profitably in the interest of the health of employees. The plant physician and nurse will be called upon to authorize absence, to check employees returning to work, and to refer employees to their physicians or other sources for treatment. It is important for the nurse to become familiar with the various factors that influence sickness absenteeism.

Factors Influencing Sickness Absenteeism

- A. Intrinsic, i.e., within the worker
 - 1. Health status
 - a. Physical
 - b. Emotional
 - c. Social
 - 2. Adjustment to job
 - a. Innate ability or intelligence
 - b. Education and/or training
 - c. Proper assignment
- B. Extrinsic, i.e., worker's environment
 - 1. Biological environment Kunner
 - a. Supervisor
 - b. Associates on the job
 - c. Family
 - d. Union officers, club associates, church associates, etc.
 - e. Friends and neighbors
 - 2. Physical environment
 - a. Health hazards on and off the job
 - b. Housing and housekeeping, both on and off the job
 - c. Economic climate, etc.
 - (1) Salary and benefit programs

^{*} Abstracts on absence from work and its relation to private practice, Journal American Medical Association 168:8, 1019-1138, 1958.

- (2) Availability and use of medical services
 - (a) Preventive
 - (b) Constructive
 - (c) Curative
 - (d) Educative

"Factors related to absence are 'Time of day or shift; Day of week; Month of year; Year-to-year changes; Age, sex, and marital status of employees; Income of employees; Length of service of employees; Type of work done by employees; Type of operation performed by firm; Geographic location of firm, and Personnel practices of firm.""

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| tional health | Interest or service | Occupational Health Nursing Literature—Guides —Publish: Industrial Nurses Journal. | Health education material: literature, posters, films, speakers. Help in preparing programs for professional personnel and employees. | Occupational Health (all disciplines) Committee work—publications—guides i.e., "Guide to Records for Health Services in Small Indus- tries," Prepare list of "Threshold Limit Values." | Cardiovascular health education material avail- able through local heart associations. | Industrial Hygiene: Publish: American Industrial Hygiene Association Journal. | Industrial Medicine: Occupational Health—Oc- cupational Health. Nursing: Excellent material on all subjects. Publish: Archives of Environ- mental Health. | Texts, manuals, films. (First-Aid Training in Plants.) |
|---|---------------------|---|---|---|---|--|--|---|
| oncerned with occupa | Address | 170 East 61st St., New York, N. Y. 10021 | 521 West 57th St., New York, N. Y. 10019 | Governmental Indus- 1014 Broadway, Cincinnati, Ohio 45200 | 44 East 23rd St., New York, N. Y. 10010 | 14125 Prevost St., Detroit 27, Mich. | 535 North Dearborn St., Chicago 10, Ill. Attn: Dept. of Occupational Health | 17th and D Sta., N.W., Washington, D.C. 20006 |
| National organizations concerned with occupational health | Name | American Association of Industrial Nurses. | American Cancer Society. | American Conference of Governmental Indus- trial Hygienists. | American Heart Association. | A merican Industrial Hygiene Association. | American Medical Association. | American National Red Cross. |

à

| American Nurses, Association, Occupational 10 Columbus Circle, New York, N.Y., Occupational Health Nurses Health Nurses Section. 10019 10019 10019 Guides—Newsletter for Members. | 1790 Broadway, New York, N.Y. 10019 Occupational Health (all disciplines) Newsletter to members. | 10 East 40th St., New York, N.Y. 10016 Coordinating agency for all organizations inter- ested in providing national standards. Publi- cations available on general work standards and standards pertaining to specific industries. | 55 East Washington St., Chicago 2, Ill. Industrial Medicine. Publish: Journal of Occu- pational Medicine. | 277 Park Ave., New York, N.Y. 10017 Promotes industrial medical programs and com- ments on national issues related thereto through its Employee Health and Safety Committee. | 2 East 103rd St., New York, N.Y. 10029 Literature for industry—employees—occupa- tional health nurses. Educational materials on loan. | 460 Park Ave., New York 22, N.Y. Periodic Studies of company medical programs. | s Circle, New York, N.Y. Occupational Health Nursing Literature—Stud- ies—Guides—Newsletter for Members. | 425 North Michigan Ave., Chicago, Ill. Industrial safety: Annual Publication: "Accident 60611 Facts." Prepare national injury frequency and severity rates by type of industry. Bulletin and |
|---|--|---|--|--|---|--|---|--|
| 10 Columbus 10019 | | 10 East 40th | 55 East Wash | 277 Park Ave | 2 East 103rd | 460 Park Ave | - 10 Columbus 10019 | 425 North M 60611 |
| merican Nurses, Association, Occupational Health Nurses Section. | American Public Health Association, Section on Occupational Health. | American Standards Association. | Industrial Medical Association. | National Association of Manufacturers. | National Committee on Alcoholism | National Industrial Conference Board, Inc. | National League for Nursing, Council on Occu- pational Health Nursing [10019] 10019 | National Safety Council. |

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| Хаше | Address | Interest or service |
| National Society for the Prevention of Blindness. 1790 Broadway, New York, N.Y. 10019 | 1790 Broadway, New York, N.Y. 10019 | Pamphlets and other publications. |
| Occupational Health Institute, Inc., (non-profil educational organization created by the IMA). | 28 Jackson Blvd., Chicago 2, Ill. | Literature—Accreditation of Medical Services in Industry: Program of evaluation and approval certification of Medical Services in industry. (Small establishments with part-time medical/ nursing service also eligible for accreditation appraisal upon request.) |
| U.S. Government Superintendent of Documents, Printing Office. | Washington D.C. 20401 | All governmental publications. List of publica- tions available on request. |
| United States Department of Health, Education and Welfare, Public Health Service, Bureau of State Services, Division of Occupational Health. | Washington, D.C. 20201 | Occupational health—all areas. Research—serv- ice—training—consultation—preparation and compilation of occupational health literature. |
| United States Department of Labor. | Washington, D. C. 20210 | Collects and publishes data on the subject of labor: hours, wages, promotion of good work standards. |
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National organizations concerned with occupational health-continued

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- 4. American Nurses' Association, Occupational Health Nurses Section. Functions, Standards and Qualifications for Occupational Health Nurses. New York: The Association, 1961. 32 pp. No charge.
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Public Health Service Publication No. 1296