

ADVISORY NO. 12.0: MEDICAL SURVEILLANCE PROGRAM

OCCUPATIONAL HEALTH SERVICE

Occupational Medicine has evolved over the last thirty years to encompass much more than "bump and scratch" care for employees. In those days, an "industrial clinic" or "employee health" facility was the primary provider of employment-generated injury. Today, the activities of **Occupational/Environmental Health Services** are targeted toward the preservation of worker health. This new approach includes appraisal, maintenance, restoration or improvement of the health of the worker, his or her productivity and his or her fulfilling interaction with work and living communities. This comprehensive program uses a multi-disciplinary approach providing the expertise of occupational medicine specialists, safety and industrial hygienists, occupational health nurses, toxicologists, health educators and counselors with guidance from management. While the representatives of the various disciplines composing this staff may function toward one particular facet, the overall goal is an increase in the health, well being, and sense of self worth of every employee who has professional contact with the occupational health team.

OBJECTIVES

The objectives of an occupational health service are:

- The protection of the health and well being of the worker against the stresses and potential health hazards of the work environment.
- The placement of the job applicant or current employee in work commensurate with his or her physical and emotional capacities, work that can be performed without danger to the worker or fellow employees, and without damage to property.
- The provision of emergency medical care for injured or ill workers and definitive care and rehabilitation for those persons with work-generated injuries or illnesses, in keeping with the medical or surgical expertise of the staff, medical department policy, managerial policy, and the availability of community resources.
- The maintenance or improvement of the health of the worker through promotional, educational, or informational activities, preventive health measures, and periodic clinical reviews of health status.

ACTIVITIES TO ATTAIN THESE OBJECTIVES

Maintenance of healthful work environment:

This requires personnel skilled in industrial hygiene and safety performing periodic inspections of the workplace. Such appraisals together with the knowledge of processes and materials used with on-site input from the occupational medicine physician provide current information on the health aspects of the work environment. This information serves as a basis for appropriate recommendations to management for prevention and/or corrective measures in the workplace as well as medical information as to the necessity of periodic health appraisal if hazardous exposure has occurred.

Position in organization:

Ideally, the Occupational/Environmental Health Service should be placed organizationally as close to the chief executive officer as possible. This allows for immediate decision and action in the event of a critical management or medical emergency, eliminating layers of intervening officials who may have little experience with an Occupational/Environmental Health dilemma.

Personnel:

Many disciplines may be represented on the occupational health team. It is this group that works as a team to bring substance to the objectives listed previously.

PERSONNEL OF OCCUPATIONAL HEALTH

Physicians

Occupational Medicine
Specialist
Staff Physician

Other professionals

Administrator
Clinical Psychologist
Environmental
Radiation Safety Techs
Epidemiologist
Health Educator

Nurses

Occupational Health Nurse
Nurse Practitioner

Medical Records Administrator
Sanitarian

Safety Professionals

Industrial Hygienists

Environmental Engineers
Toxicologist

Technical Staff Members

Clinical Laboratory Technologist
Emergency Medical Technician
Physical Therapy Technologist
Radiology Tech.

Clerical and other staff members

Ambulance Drivers
Maintenance Personnel
Receptionist
Records Clerks
Secretaries
Workers' Compensation Clerks

The multi-discipline environmental health team concept is threaded through every undertaking in the delivery of occupational health service. The physician and nurse plan programs together; the industrial hygienist may obtain work histories, sample and verify conditions, evaluate causal relationships; the medical director and health educator will outline important directions for the year ahead. Occupational health is the one arena of professional exercise where combined energies are needed for solidarity in programming and promotional wellness and incident avoidance.

Of particular importance is the parallelism of the effort between the clinician and the industrial hygienist. Their parallel interaction must exist because of the integral relationship of the worker and his/her work environment. The health appraisal and the environmental evaluation must be meshed for an understanding of the effects, good or bad, of work-substance exposure on the employee.

Program Elements:

Services can be divided into the following categories:

- ▶ Evaluative/Preventive
- ▶ Diagnosis and Treatment
- ▶ Rehabilitative Care
- ▶ Educational Programs

▶ Administrative Functions

The most basic provision is for the diagnosis, treatment and rehabilitation of occupational injury and illness. State and federal laws require this care as well as pay for compensation benefits to workers with time-loss work-related injuries. The Occupational Safety and Health Act of 1970 also requires careful recordkeeping of all occupational injuries and illnesses, proper reporting and an annual posting of a summary of all occupational injuries and illnesses that have occurred in an area where all employees can read it.

HEALTH EVALUATIONS

Diagnosis and Treatment should be prompt and directed toward rehabilitation as indicated.

Treatment services:

- Emergency or definitive medical care for occupational illness or injury
- Emergency or definitive medical care for non-occupational illness or injury
- Ambulance transportation
- Referral to local sources of specialty care or consultation
- Counseling for acute emotional disorder
- Short-term counseling and referral for repetitive episodes of emotional disorder
- Short-term counseling and referral for treatment of chronic illness states or impairment caused by illness or injury residual
- Interviews with illness or injury-absence recidivists
- Physical or occupational therapy for injured employees

MEDICAL EXAMINATIONS

Mandatory examinations, complete:

- Preplacement medical examination
- Periodic medical examinations, specifically:
 - Hazardous exposure, asbestos
 - Hazardous exposure, lead
 - Hazardous exposure, mercury
 - Hazardous exposure, other
 - Return-to-work examination, post-injury
 - Return-to-work examination, post-illness
 - Motor vehicle operator examination
 - Employee fitness evaluation, determination of
 - Disability/retirement examination
 - Transfer examination

Mandatory examinations, partial:

- Placement, subsequent to:
 - Crane operation vision test

- Hazardous exposure, noise-audiometry
- Microwave exposure, slit-lamp examination

PLACEMENT:

Examinations performed to determine the health status of individuals prior to their assignment to a job in order achieve an appropriate placement match. This exam should include a history and job-specific physical exam as well as an in-depth occupational history. Tests to be included in each job category should be determined by the occupational medicine physician in charge of the occupational health program. Generally the assessment should include:

- personal and family medical history
- occupational history
- such physical examination and lab tests as are appropriate and advisable.

PERIODIC MEDICAL EVALUATIONS:

These types of evaluations are performed at appropriate intervals to determine whether the employee's health remains compatible with job assignment and to detect any evidence of ill health, which might be attributable to employment. Certain employees and groups may require examinations more frequently than others (i.e. Asbestos Surveillance Program). Other factors which influence the necessity for these exams include the age, physical condition, current illnesses, nature of the work and any specific hazards involved in the workplace.

Median surveillance of workers exposed to known specific health-hazardous substances are given special attention. The target organ or organ systems potentially subject to the untoward effects of absorption, ingestion or inhalation to toxic substances will be monitored closely. The goals of the biological monitoring portion of the medical surveillance are:

- To ensure that current or past exposures are "safe" (i.e. does not entail an unacceptable health risk).
- To detect potential excessive exposure before the occurrence of detectable adverse health effects.

FITNESS EVALUATIONS:

May be requested by a department head because of observed changes in a worker's performance, excessive absences, personality change, injury repetition, or any altered work behavior that may have a medical basis. (As in conduct of the preplacement examination, the physician determines if the incumbent is physically or emotionally fit to carry out the tasks called for in his or her job description. The medical conclusion is added to other evidence obtained by the department head, such as attendance records, production levels, or previous performance evaluations, and administrative action is taken if indicated).

RETURN TO WORK EVALUATIONS:

In complicated cases, the occupational physician may be requested to evaluate employees who are returning to work from an illness or injury. If a system for these evaluations is in place, the private practitioner will be encouraged to allow the patient to return to work at the **earliest** possible time. The occupational physician can then determine whether partially disabled employees or the employees who have not completely recovered from illness can return to their job safely. An **early** return to the workplace is psychologically and physiologically beneficial to the ill or injured employee.

DISABILITY/IMPAIRMENT EXAMINATION:

Disability is any temporary or long-term reduction of a person's activity as a result of an acute or chronic condition. The physician is called upon to determine impairment or the loss of some measurable physical or mental function. This kind of examination often takes several hours.

EVALUATIVE/PREVENTIVE SERVICES:

Non-occupational Illness/Injury Care

Diagnosis and treatment of these are generally not considered responsibilities of an occupational health program with certain exceptions:

- In an emergency the employee should be given the attention required to prevent loss of life or limb or to relieve suffering until he/she can be placed under the care of his/her personal physician or transported to the emergency room.
- For minor disorders, first aid or palliative treatment which might be given if the condition is one for which the employee would not reasonably be expected to seek attention of his/her personal physician or to enable the employee to complete his/her current work shift before consulting their private medical physician.

Fitting and Issuing of Respirators

See Advisory 11.1: Respiratory Protection Guidelines"

Health Education

Occupational health personnel should provide education for employees in personal hygiene and health maintenance. This activity would be coordinated with a Wellness/Fitness Program if already in existence.

Counseling Program (EAP)

An occupational health service must be prepared to assist management in:

- The recognition of employees with behavioral and performing difficulties.
- Referral to an appropriate provider of counseling/mental health services.
- Provide reassurance to the affected employees as well as supportive counseling.

Workplace Education

The OSHA Act of 1970 states that there shall be "programs for the education and training of employers and employees in the recognition, avoidance, and prevention of unsafe or unhealthful working conditions". It is the duty of the more articulate members of the occupational health service to conduct a program in health education. The effort may be targeted toward a change in health behavior, so that illness, particularly of an occupational origin, can be averted. Workers must know the nature of the work substances to which they are exposed, the disease states that may result from undue contact, the procedures involved in medical surveillance, the meaning of various test results, and the measures to be taken to avoid the ill effects from the absorption, ingestion or inhalation of toxic substances.

REHABILITATIVE CARE

Occupational

Referral for correction of impairment precluding or limiting performance.

- Substance abuse
- Orthopedic support
- Sensory deficit aids

- Community resources

ADMINISTRATIVE SERVICES

- Recommendations to personnel office regarding placement.
- Initiation and maintenance of health/medical records -The accurate and complete medical records of each employee from the time of first examination or treatment is a basic requirement. Confidential character of these records including results of health examinations should be rigidly observed by all members of the occupational health staff. These records can be vitally important in the maintenance of a medical program that falls within OSHA compliance.
- Entry into statistical record of examinations and procedures completed resultant findings and changes in health-status classification.
- Entry into statistical record of health education activities, environmental surveillance procedures, and sanitation reviews.
- Entry into statistical record of number and kind of employees completing first aid or cardiopulmonary resuscitation training.
- Maintenance, review, and recording of results of bioassays conducted on employees at hazard contact risk.
- Maintenance of supplies for examinations, surveillance, training, health education, and first aid and antidote cabinets.
- Preparation and forwarding of first reports of injury or other workers' compensation of accident reports.
- Entry into statistical record of illnesses or injuries treated, with associated diagnosis and identifying variables.
- When illness or injury is accompanied by absence, coordination with payroll department.
- Coordination with Environmental Health and Safety (EH&S).
- Maintenance of statistical record Morbidity and Mortality.
- Clinical photography of injury lesions, when indicated, at first visit, at intervals, and when patient is discharged as "well".
- Notification of local health authority of animal bites sustained by employees.
- Notification of University Administration, local authorities, and next of kin in event of death of employee at the University or en route for care.

OTHER SERVICES

- Consultation with managerial personnel regarding problems in group morale, lowered productivity, disaffection, increased turnover, etc.
- Consultation with supervisors regarding absence of control efforts for individual workers.
- Research projects involving special studies of employees with occupational illness or injury:
 - Educational field experience for graduate students involving work with ill, injured, or current employees.
 - Research projects involving study of current employees.

ORGANIZATION AND STAFFING

In order to provide a satisfactory occupational health program it is essential that a qualified physician formally trained in occupational medicine be engaged to direct the program. The medical director should have a major role in development, interpretation and implementation of occupational medicine policies. He/She shall administer the occupational health program and be organizationally responsible to a designated official at the highest administrative level of management. The nurses involved in occupational health programs should be graduates of accredited schools of nursing, preferably with occupational health experience. Cooperation among physicians, industrial hygienists, nurses, technicians and other occupational health personnel responsible for the employment, safety and well being of employees is paramount.

FACILITIES

The extent of facilities including equipment depends upon the needs of the employees and the scope of the occupational health program. Minimum requirements would include:

- Waiting, consultation, examining treatment rooms and professional office space. Laboratory facilities to ensure adequate patient privacy and comfort.
- Appropriate medical laboratory and other identified testing equipment.
- An observation or recovery room and facilities for other types of laboratory and radiological examinations as found to be necessary.

MEDICAL SURVEILLANCE - OCCUPATIONAL INJURY/EXPOSURE

WEST CAMPUS

Dr. W. Kenneth Stephens
Asst. Medical Director
University Health Services
Lindner Athletic Center – 3rd Floor
West Campus **556-2564**

EAST CAMPUS

Dr. John S. Andrews, Jr.
Asst. Sr. Vice President & Director
University Health Services
Holmes Hospital
East Campus **584-4457**

Emergency Room - University Hospital Inc., 584-5700

Drug and Poison Information Center 558-5111

Occupational Health Services

Occupational & Environmental Medicine
Holmes Hospital, 1st Floor **584-1234**