EXPRO National Manual for Projects Management

Volume 11 , Chapter 5

Project Medical Services and Medical Management Plan

Document No. EPM-KSH-PL-000001 Rev 003

Document Submittal History:

Revision:	Date:	Reason For Issue
000	08/10/2017	For Use
001	03/12/2017	For Use
002	19/11/2018	For Use
003	09/08/2021	For Use

THIS NOTICE MUST ACCOMPANY EVERY COPY OF THIS DOCUMENT

IMPORTANT NOTICE

Table of Contents

1.0 PURPOSE

The purpose of this plan is to provide a guideline on planning and assessing medical services during the project planning and development phase. The plan does not supersede any ministerial decision or any Saudi labor regulations.

2.0 SCOPE

The scope of this procedure applies to all works performed under all Government Construction Contracts executed throughout the Kingdom of Saudi Arabia.

3.0 DEFINITIONS

Definitions	Description
Accident\Incident	An unplanned event which results in an injury or illness, damage to property, plant, products or the environment.
CDC	Center for Disease Control
CPR	Cardiopulmonary resuscitation
EMT	***Emergency medical technician***
First Aid	Emergency treatment administered to an injured or ill person before professional medical care can be administered.
HAVS	Hand-Arm Vibration Syndrome
HSSE	Health, Safety, Security and Environment
MSD	Musculoskeletal Disorders
NIHL	Noise Induced Hearing Loss
PEM	Pre-employment Medical
PPE	Personal Protective Equipment
Serious Injury	For this plan a serious injury is an occupational injury resulting in serious physical harm. Serious physical harm means impairment of the body in which part of the body is made functionally useless or substantially reduced in efficiency, such impairment may be temporary or permanent.
TWA	Time Weighted Average
UV	Ultra Violet
WHO	World Health Organization

4.0 REFERENCES

- Saudi Arabian Labor Regulation Article 134
- Ministerial Decision 404
- EPM-KS0-PR-000001 Project Incident Notification, Investigation and Reporting Procedure
- EPM-KSS-PR-000003 Project Personal Protective Equipment Procedure
- EPM-KSS-PR-000014 Project Emergency Preparedness Procedure
- EPM-KSH-PR-000003 Project Occupational Health Records Maintenance System
- EPM-KSH-PR-000004 Project Respiratory Protective Equipment
- EPM-KSH-PR-000005 Project Air Surveillance Program
- EPM-KSH-PR-000008 Project Heat Stress Management Procedure
- EPM-KSH-PR-000009 Project Asbestos Management Procedure
- EPM-KSH-PR-000010 Project Hearing Conservation Program

5.0 RESPONSIBILITIES

Contractor is responsible for verifying that Personnel engaged on the Project comply with the Contractor Occupational Health and Safety requirements in this document.

Contractor has the overall responsibility to provide a safe and healthy work environment during the construction of the Project.

5.1 Contractor Project Manager

The Contractor Project Manager shall undertake the following responsibilities in the role as “ultimate owner” of the Plan:

- Liaising with Contractor Senior HSSE and Site Management in the coordination of this Plan.
- Overseeing that HSSE Occupational Health criteria is implemented as outlined in this Plan.
- Allocating adequate funding (funds) throughout the life of the Project to maintain the Occupational Health Program (including those for assessment, “wellness checks,” surveillance activities, and medical care).
- Providing Project leadership in the identification and control of preventable occupational illness and injury.

5.2 Contractor Site Construction Manager

The Contractor Site Construction Manager shall undertake the following responsibilities:

- Being fluent in this Plan.
- Monitoring the implementation of the Occupational Health Program on the site.
- Being familiar with the status of this Plan through frequent briefings from the Contractor Site HSSE Manager.

5.3 Site HSSE Manager

Site HSSE Manager has responsibility in meeting the requirements of this document. In regards to the Plan, specific duties include overseeing the management of the following:

- Medical Services Subcontract.
- Medical Clinics.
- Occupational Disease Surveillance Processes.
- Emergency response plans, designation of roles and responsibilities, and training in regard to this Plan.
- Compliance with this Plan.

5.4 Site Superintendents

The Site Superintendent/Supervisors shall undertake the following additional responsibilities throughout the life of the Project:

- Being aware of this Plan.
- Facilitating access to medication and clinical services for personnel under their immediate control.
- Facilitating the access and application of Personal Protective Equipment (PPE) for personnel.

5.5 Medical Services Supervisor

The Medical Services Supervisor is responsible for oversight of medical services provided on-site. This individual works closely to align the level of service including the following:

- Primary contact for the contractor’s Medical Services team.
- Reviewing the Project schedule, activity, and staff/resource loading.
- Coordinating with the HSSE and Construction Managers regarding the level of work and related risk/exposure.

- Oversight of Medical Services Subcontractor compliance with scope of work.
- Leads the Medical Services team which includes the Occupational Health Coordinator and Health Services Coordinator.

5.6 Occupational Health Coordinator

The Occupational Health Coordinator is responsible for managing and enforcing compliance with this Plan. The Contractor Occupational Health Coordinator interfaces with the appropriate management personnel of all entities in the following manner:

- Overseeing implementation of the Fit-for-Duty program for personnel joining the workforce and who may have limitations placed on their duties; and/or return to work for non-occupational injuries/ illnesses.
- Coordinating and monitoring the First Aid training for site employees.

5.7 Health Services Coordinator

The Contractor Health Services Coordinator is responsible for the following:

- Compiling the correct information and appropriately distributes injury/illness notifications to applicable entities.
- Assuring supervision are managing and maintain the proper case management of work-related off-site treatment for their employees.
- Developing and/or coordinate the site health promotion materials and activities on a scheduled basis.
- Attending Contractor off-site medical consults as directed by Medical Services Supervisor.

5.8 Medical Services Staff

The Medical Staff shall undertake the following responsibilities:

- Being fluent in the Plan.
- Managing the site Medical Clinic (under the oversight of the Medical Services Coordinator).
- Providing feedback to HSSE Management through use of health performance indicators.
- Liaising with designated Contractor HSSE personnel and offsite medical support services.
- Risk Assessments to determine the needs of the Project's health and hygiene program.

5.9 All Project Personnel

The Project personnel are responsible for following the guidelines of the HSSE Department and Medical Personnel in regard to the Plan. They must meet the following:

- Attending HSSE Orientation and specific occupationally related disease-prevention programs when offered throughout the changing scope and conditions of their employment.
- Reporting any signs or symptoms of any occupational diseases or injuries, immediately, to their Supervisors and Medical Personnel.
- Notifying Supervisors and if applicable Medical Personnel of non-work-related injuries / illnesses.

6.0 REQUIREMENTS

6.1 Medical Facilities

Due to the diverse Project areas and the wide range of elements involved in assessing medical facilities, the specification and necessary medical equipment should be determined against each Project in

recognition of what is available locally, job site and camp population and the applicable legislations in the Kingdom of Saudi Arabia.

6.2 Planning

As early as possible in the development of all Projects and Facilities, the following actions by the responsible parties must take place:

6.2.1 Risk Management

Medical Services, will identify acceptable candidates to serve as referral physicians knowledgeable in occupational injuries and illnesses, modified work activity, the nature of injuries and illnesses in the Project's work scope, work restrictions and light duty work accommodations applicable recordkeeping requirements, and willingness to accommodate referrals from the Project/facility. It is recommended that physicians with specialty practices, such as ophthalmology, orthopedics, internal medicine, etc., also be identified.

The following is what Medical Services shall identify:

- Contact the identified physicians to determine their accessibility, availability, and willingness to accommodate referrals from the Project/facility.
- Evaluate the standards of care and capabilities of local clinics and hospitals. Select a primary and, if possible, a secondary provider.
- Determine the appropriate level of medical facility to be established at the location.
- Determine Project/facility medical staffing needs.
- Assess the needs and availability of medical supplies and equipment.
- Establish medical protocols and standing orders.
- Establish emergency medical evacuation protocols, where applicable.

6.3 Medical Services Manager

In addition to coordinating with Risk Management, as described above, the Manager of Medical Services will:

- Determine the appropriate level of medical facility to be established at the location.
- Determine project/facility medical staffing needs.
- Assess the needs and availability of medical supplies and equipment.
- Establish medical protocols and standing orders.
- Establish emergency medical evacuation protocols, where applicable.

To support the above requirements, the Manager of Medical Services is also to assess the support provided by local or national:

- Physicians
- Clinics
- Medical Services
- Consulting Physicians
- Funding of Consultations.

6.4 Medical/First Aid Facilities

At a minimum, on Projects/Facilities where they are required and allowed (under local regulations), all medical facilities shall be of adequate size and have finished interiors, covered floors, toilet facilities, hot and cold running water, refrigeration, heating and air conditioning, and adequate illumination.

The facility should enable medical personnel to function professionally and should be centrally located and easily accessible to employees and emergency transportation. It is recommended the basic design provide both office space and an adequate treatment area according to the designated Level of Care (See Attachment 1).

6.4.1 On Site Treatment

Onsite medical personnel will provide treatment for employees incurring an occupational injury/illness in accordance with approved standing orders and medical protocols. Such treatment shall be predicated on qualifications of personnel, location, equipment, and supplies available.

The Project/Facility HSSE Supervisor, Medical provider, and referral physician will review and sign the medical protocols and standing orders at the commencement of service and on an annual basis or whenever any changes are implemented thereafter.

When necessary treatment exceeds the qualifications of the onsite medical provider, the employee will be referred to the Project designated referral physician or specialty physician as determined by the extent of the injury/illness.

6.4.2 Off Site Treatment

The following guidelines should be followed in utilizing the recommended Authorization for Medical Treatment Form (Sample form can be found in Attachment 2):

- The Project/Facility medical provider or the HSSE Supervisor must enter the employee's name and date, and sign the form in the applicable space on the top part of the form.
- Project/facility medical provider or the HSSE Supervisor will give the Authorization for Medical Treatment Form to the employee at the time of departure for offsite treatment.
- The employee will be instructed to provide the Authorization for Medical treatment form to the referral physician.
- The physician/clinic will complete the bottom portion of the Authorization for Medical Treatment Form to document the treatment rendered and to serve as authorization to return to work with or without restrictions.
- Upon discharge from the physician's office/clinic, the employee will return the completed form to the project HSSE Supervisor or medical provider for review.
- Transportation, compensation, and follow-up visits for occupational related injury/illness are to be determined by each project in accordance with applicable labor, local, and country laws. Subcontractors, joint venture partners and client/owners utilizing the medical provider are required to provide their own transportation for offsite medical treatment unless other contractual provisions have been addressed.

7.0 RETURNING TO WORK AUTHORIZATION

Employees who, because of an occupational injury or illness, are to see a medical professional offsite must, in all cases, obtain authorization to return to work as follows:

- The lower half of the Authorization for Medical Treatment Form is to be completed by the physician who renders medical treatment. In the absence of this form, the physician may provide other documentation to substantiate the employee's ability to return to work with a definition or explanation of any work restrictions.
- The employee will return the appropriate medical documentation substantiating his/her ability to return to work to the Project/Facility medical provider or the HSSE Supervisor prior to the start of work.

7.1 Modified Work Assignments

Upon returning to work an employee to productive work following an occupational injury or illness in keeping with the restrictions established by the treating physician and in a manner, that will not expose the employee and/or other employees to additional harm or injury. Attachment 3 provides a sample of a Modified Duty Work Assignment Form.

Duration of modified work assignments will be based on the written recommendations of the treating physician and the availability of productive work assignments.

The employee will report to the Project/Facility HSSE Supervisor or medical provider after each follow-up visit to review their current medical status.

7.2 Physicals

Medical Services, in co-ordination with Human Resources will maintain a database for recommended physical examination parameters for the following:

- Employees relocating outside their country of origin.
- Authorized business travelers (traveling to a project with specific request for physicals or immunizations).
- Authorized dependents of employees relocating outside their country of origin.
- Repatriation of employees and dependents upon assignment completion.
- Pre-assignment physicals where applicable by project requirements or country laws.

8.0 FITNESS FOR WORK

8.1 Medical Assessment Program

The Medical Assessment Program is designed to detect current and future health risks and assists in managing a worker's ongoing fitness-for-work. This will be achieved by providing all Project personnel an opportunity for access to thorough medical and health assessments including treatment of medical conditions, investigations, health education, and surveillance. The Contractor has responsibilities as detailed below.

8.1.1 Pre-placement Medicals

All Project personnel assigned to full-time basis will undergo a pre-placement medical assessment to verify that the individual is able to undertake the inherent requirements of the job and not put themselves or others at risk. This assessment, as applicable to job function, includes a baseline health and medical information check, a medical questionnaire, physical assessment and investigations, functional capacity exams, face fit testing, and follow-up, if necessary.

8.1.2 Medical History

A medical history will be taken from each person undertaking a PEM. Proof of identity of the prospective Personnel (i.e., passport, drivers' license) will be requested to exclude false certification at the time of the exam. Responses will be evaluated by a Physician and followed up accordingly per medical protocol, which may require further testing procedures.

8.1.3 Medical and Physical / Functional Capacity Assessment

The examining Physician shall conduct the assessment in accordance with recognized occupational health standards. The content of Pre-placement Medical Examinations will vary depending upon:

- Type of proposed employment duty/role.
- Work environment (geographical, exposure to travel and/or health risk).
- Local government and industry standards that apply to the type of tasks.
- Past medical history.
- Person's age.

8.2 Fitness-for-Duty Criteria

The Physician performing the pre-placement examination will evaluate the information from the examination, the proposed position's physical demands, and the work environment to decide as to the applicant's risk, relative to the general population, of developing or aggravating a condition while performing the proposed duties and to provide a written Physician's Opinion of Fitness-to-Work form.

Examples of conditions that may impinge on safe work ability include:

- Musculoskeletal conditions that may limit functional tolerances or task safety.
- Potential pre-existing medical conditions that may be impacted by the work environment.
- Medical conditions that may episodically change functioning, such as sudden loss of consciousness, hypoglycemic episodes, sleep disorders, episodic cardiac conditions etc.
- Disorders or medications that impair fluid balance or cardiovascular reflexes may increase the risk of heat stress.
- Active asthma and adult history of asthma.
- Implanted and external electronic devices such as pacemakers, insulin pumps may restrict work in some areas and require specific evaluation.

In some circumstances, it may be appropriate to seek further information from treating medical practitioners to confirm the medical history, particularly with regards to disorders that may be episodic in nature, such as hypoglycemia in insulin dependent diabetes, chest pain in cardiovascular disease, epilepsy or other disorders such as narcolepsy or sleep disorders.

A written Physician's opinion of fitness-for-work based on the pre-placement physical examination. When the Physician's opinion indicates that a person is not fit-for-work, the person shall not be sent to the Project. Any exceptions to this policy shall be reviewed and approved by the Project HSSE Manager with consultation from the Medical Services Occupational Physician, prior to a person being offered a position on the Project.

All personal information gathered because of the medical examination is retained by the Medical Services and the prospective Employer. This information is to be maintained in a confidential manner.

8.3 Managing Individuals Unfit for Work

Where Project personnel are considered unfit-for-work at the work site/area, the following actions will take place:

- Removal from the work area if safe environmental or physical condition allows
- Escort to the closest medical facility or call site ambulance
- Not permitted to return to the work area until deemed fit-for-work by the Medical Services Subcontractor via return-to-work information from licensed health care provide.

If an individual is unfit for work due to a job-related injury or illness, the appropriate designated personnel will coordinate with Medical Services, and the individual to develop a return-to-work plan.

9.0 WORK RELATED HEALTH RISKS

Musculoskeletal conditions, asbestos related diseases and the effects of noise and vibration exposure are the dominant work-related health conditions in construction.

The following sections provide a brief overview of those health risks that can result from work processes within the Construction Industry.

9.1 Hand-Arm Vibration Syndrome (HAVS)

The hand-arm vibration syndrome causes changes in sensory perception which can lead to permanent numbness of fingers, muscle weakness and, in some cases, bouts of white finger. It is caused by working with vibrating tools. It would be unusual for personnel to develop hand-arm vibration syndrome unless they had used vibrating tools for at least ten years. If personnel stop working with vibrating tools it may prevent mild symptoms from becoming worse.

HAVS causes symptoms in fingers, hands and arms, because of using vibrating tools. It used to be called vibration white finger. The name was changed to HAVS, as other symptoms may occur in addition to white fingers.

HAVS is caused by repeated and frequent use of hand-held vibrating tools - for example, power drills, chainsaws, pneumatic drills, etc. It may also be caused by holding or working with machinery that vibrates. It is not clear how vibration causes the condition. It is probably due to slight but repeated injury to the small nerves and blood vessels in the fingers. Over time these may gradually lose some of their function and cause symptoms. Possibly, up to 1 in 10 people who work regularly with vibrating tools may develop HAVS.

The following steps are thought to help prevent HAVS in workers who use vibrating tools:

- Hold tools as loosely as possible and in varying positions.
- Ensure that tools are well maintained.
- Use tools correctly and use the right tool for the job. The aim is not to need to use excessive grip, nor to use a tool for longer than necessary.
- Take regular breaks of at least 10 minutes away from the tool. Short bursts of work are better than long periods of work without a break.
- Keep warm while at work - especially your hands.
- Personnel should not smoke - the chemicals in tobacco can affect blood flow.

9.2 Noise Induced Hearing Loss (NIHL)

NIHL can also be caused by extremely loud bursts of sound, such as gunshots or explosions, which can rupture the eardrum or damage the bones in the middle ear. This kind of NIHL can be immediate and permanent. Loud noise exposure can also cause tinnitus a ringing, buzzing, or roaring in the ears or head.

People at an increased risk for acoustic trauma include those who:

- Work at a job where loud industrial equipment operates for long periods of time.
- Live or work where other high-decibel sounds continue for long periods of time.
- Frequently attend music concerts and other events with high-decibel music.
- Use gun ranges.
- Encounter extremely loud sounds without proper equipment, such as earplugs.

People continually exposed to noise levels over 85 decibels are at an increased risk for acoustic trauma. Your doctor may provide an estimate of the decibel range of normal daily sounds, like an estimate of around 90 decibels for a small engine. They'll do this to help assess whether the sounds that personnel encounter put them at a higher risk for acoustic trauma and hearing loss.

The main symptom of acoustic trauma is hearing loss. In many cases, people first begin to have difficulty hearing high-frequency sounds. Difficulty hearing sounds at lower frequencies may occur later. Your doctor may test your response to different frequencies of sound to assess the extent of acoustic trauma.

One of the most important symptoms that can signal the onset of acoustic trauma is called tinnitus. Tinnitus is a type of injury to the ear that causes a buzzing or ringing sound. Those with mild to moderate tinnitus will most often be aware of this symptom when they're in silent environments. Tinnitus can be caused by drug use, changes to blood vessels, or other factors, but it's often a precursor to acoustic trauma when it's caused by exposure to loud noises.

Tinnitus can be persistent or chronic. Long-term tinnitus is a good reason to suspect acoustic trauma.

9.3 Respiratory Disease

Occupational respiratory diseases include a broad spectrum of conditions, of which perhaps the most well-known is occupational asthma.

Respiratory diseases amongst construction workers may also include pneumoconiosis arising from silica (silicosis) or asbestos exposure, as well as asthma and other allergic reactions (e.g. due to isocyanate paint or resin exposure) and chronic obstructive pulmonary disease. Smoking may contribute to the respiratory damage and the risk of some allergic responses.

9.3.1 Occupational Asthma

Occupational asthma (OA) is an important occupational health problem with serious implications for both affected individuals and their employers. For the affected individual, continued exposure to the causative agent usually leads to deteriorating asthma and the risk of severe (or, on rare occasions fatal) asthma attacks. Even if exposure ceases, the more severely affected individuals may still be left with persistent asthma and chronic disability.

9.3.2 Silica

Occupational exposure to silica in construction work occurs in concrete removal, demolition work, tunnel construction, concrete or granite cutting, drilling, sand and grinding. Where workers are regularly exposed to respirable crystalline silica levels greater than 0.1mg/m3,8 hour TWA, then health surveillance which includes a respiratory questionnaire and lung function testing should be provided. The requirement for mandatory chest X-rays may be required.

9.3.3 Asbestos

Asbestos is a serious, long-term lung disease caused by inhaling asbestos dust over a prolonged period. Asbestosis is one of several conditions that can be caused by exposure to asbestos. Other related conditions include cancer, mesothelioma (a malignant tumor in the lung) and benign pleural thickening (the lining of the lung is thickened and hardened). Refer to EPM-KSH-PR-000009 Project Asbestos Management Procedure for more information.

9.3.4 Musculoskeletal Disorders

Musculoskeletal disorders (MSD's) are problems affecting the muscles, tendons, ligaments, nerves or other soft tissues and joints. MSD's are the most common occupational illness affecting millions of people a year. They include problems such as low back pain, joint injuries and repetitive strain injuries of various sorts. Injury can happen while doing any activity that involves some movement of the body, from heavy lifting to typing. There a certain tasks and factors that increase the risk such as:

- Repetitive and heavy lifting.
- Bending and twisting.
- Repeating an action too frequently.
- Uncomfortable working position.
- Exerting to much force
- Working to long without breaks.

- Adverse working environment (e.g. hot, cold)
- Psychosocial factors (e.g. high job demands, time pressures, and lack of control)
- Whole body vibration.

9.3.5 Work Related Stress

Pressure is part and parcel of all work and helps to keep us motivated, but excessive pressure can lead to stress, which undermines performance, is costly to employers and can make people ill.

The most stressful aspects of work for respondents are:

- Having too much work to do in the time available.
- Travelling or commuting.
- Being responsible for the safety of others at work.
- Working long hours.
- Having a dangerous job.

10.0 ENVIRONMENTAL HEALTH RISKS

Responsible Contractors shall perform a health based risk assessment for their scope of work and develop plans and procedures to control and mitigate the risk and associated hazards.

10.1 Poisonous Bites

10.1.1 Snakes & Spiders

Workers shall maintain awareness of their surroundings, in areas of low light, and during warm weather when snakes tend to be more active. When working in areas where the risk of snake bite exists, and when practical, workers shall wear heavy, ankle high or higher boots, and long pants when walking outdoors at night in areas possibly inhabited by venomous snakes.

Snake gaiters will be required for those undertaking work such as undergrowth clearance where the frequency of snake encounters is likely to be high.

In regards to spiders, personnel shall be provided awareness training of common spiders in the work area and to always seek medical attention for any suspected Mouse or Redback spider bite and for any other bite if symptoms develop or persist.

10.2 Sun and Ultra-Violet (UV) Radiation

Project health campaigns include prevention of skin cancer awareness information. And because temperatures can also be high and the possibility of heatstroke and dehydration are dangerous for newcomers unless precautions are taken, the Medical Services Staff will assist in the communication of precautions.

10.2.1 Heat Related Illness

Heat related illnesses are discussed in detail in EPM-KSH-PR-000008 Project Heat Stress Management Procedure.

Additionally, Responsible Contractors shall assess their scope of work for heat stress hazards/occasions and develop a Heat Stress Prevention Plan.

10.3 Immunizations

Medical Services will co-ordinate with Human Resources recommended country and Project specific immunizations. Medical Services will maintain a database, which will include:

- Required and recommended immunizations as indicated by the Centers for Disease Control (CDC), World Health Organization (WHO), etc., and Project-specific recommendations.
- Current disease outbreaks.
- Health risk associated with a particular area.
- Notice of immunization expiration dates.

10.4 Personal Protective Equipment

- The employer will provide appropriate personal protective equipment, not limited to gloves, eye protection, masks, gowns, resuscitation bags, and ventilation devices.
- Personal protective equipment in appropriate sizes, allergen free, will be made available to employees.
- Personal protective equipment will be replaced as needed to maintain the effectiveness of the exposure control plan.
- Contaminated clothing with blood or other potentially infectious materials must be removed and replaced immediately or as soon as feasible
- Impervious gloves will be worn when reasonably anticipated that the employee may have contact with blood or other potentially infectious materials
- Disposable (single use) impervious gloves will be replaced as soon as practical when contaminated or as soon as possible if they are torn or punctured.
- Masks in combination with eye protection devices, such as goggles or glasses with attached side shields or full face shields will be worn whenever splashes, spray, spatter of blood or other infectious materials may be generated and eye, nose mouth contamination can be reasonably anticipated.

11.0 ADMINISTRATION

The Medical Facility provider shall retain both electronic and filed medical reports, inoculation renewals, first aid treatments, etc.

Health records system is the essential component of Medical Services. Such records are created by gathering and documenting employee pertinent health information accurately and objectively. This information is vital in assessment, treatment, referral and evaluation of occupational and non-occupational injuries and illnesses.

The Confidentiality Policy applies to all aspects of delivery of health services at the Project.

Health information regarding the status of an employee is privileged and confidential. This information is only released based on pertaining legislations; as authorized by informed consent or implied consent of the employee; or where there is a serious and imminent risk that the health or safety of the employee or others would be jeopardized.

Information released to the management for statistical reporting and input to health promotion and injury prevention does not identify an injured worker.

11.1 Record Keeping

A medical file shall be kept for each employee who requires treatment. This file includes details of any first aid treatments or clinic visits, and details of any fitness to work/fitness for duty assessments (including the sign on medical form) and health surveillance that may be undertaken. All occupational and non-occupational visits will be recorded.

The Occupational Health Nurse is responsible for advising Line Management & HSSE Specialists of any serious occupational injuries/illnesses that occur.

The Occupational Health Nurse will complete:

- First Aid Treatment form (see Appendix A "First Aid Summary");
- If off-site treatment is required, the "Off-Site Medical Treatment Form" (see Appendix B); and a "Employer's Report of Injury/Illness". A copy will be maintained on file with the employer.
- All visits to the health center including non-occupational issues will be logged in a confidential data base.
- (Sub) contractors, with the assistance of the nurse, will be required to complete "Employer's Report of Injury/Illness" for their employees.
- The nurse will provide a daily report to line management detailing occupational first aid activities, and ensure that such reports do not have any personal identifiers.
- Copies of all assessment/treatment records and medical files will be retained at the central health facility and satellite facility in a secure locked storage area and be kept confidential and accessible to only authorized project health staff.
- When the satellite facility is not in use, the files will be taken by the nurse to the Central facility storage area and placed in the secure locked cabinet.
- The project will implement a computer based occupational injury/illness and incident management system. Health Services staff will input injury and illness assessment and treatment into the system. Health Services will prepare a daily and weekly occupational injuries/illnesses summary for the information of line supervision and ensure that such reports do not have any personal identifiers.

12.0 ATTACHMENTS

1. Recommended Levels of Care and Equipment
2. EPM-KSH-TP-000017 - Authorization for Medical Treatment Form Template
3. EPM-KSH-TP-000018 - Modified Duty Work Assignment Template

Attachment 1 - Recommended Levels of Care and Equipment

ALL MEDICAL FACILITIES SHOULD BE OF ADEQUATE SIZE, HAVE FINISHED INTERIORS, COVERED FLOORS, TOILET FACILITIES, HOT AND COLD RUNNING POTABLE WATER, REFRIGERATION AND AIR CONDITIONING, AND ADEQUATE ILLUMINATION.

Level I
A Level 1 Medical Facility will allow basic first-aid to be rendered. Staffing could be accomplished with basic first aid and CPR certification.

Recommended supplies and equipment:

- Examination table and chair
- Secure storage for first aid material
- Potable drinking water and disposable cups
- Soap and disposable towels
- Pillows and blankets
- Medical waste container, properly labeled
- Disposable examination gloves
- Antiseptic wipes
- Non-prescription first aid cream
- Non-prescription burn cream
- Assorted size adhesive tape
- Assorted sizes sterile wound dressings
- Assorted size Band-Aids
- Triangular bandages
- Safety pins
- Sterile eye pads
- Sterile, individual use eye irrigating solution
- Tweezers
- Scissors
- Ammonia inhalants
- Cold packs, disposable or reusable
- Assorted splinting material
- Thermometer- disposable or sheath covers

Level II
The intent of this Level facility is to provide treatment for more than minor injuries, but does not provide advance life support. It should contain all the equipment and supplies as a Level 1, plus the additional supplies listed below. It could be staffed by an EMT, paramedic, nurse, nurse practitioner, physician assistant, or physician.

Recommended supplies and equipment:

- Office furniture, e.g., as desk, chair, filing cabinet, etc.
- Sphygmomanometer - 1 regular adult, 1 large adult
- Stethoscope
- Examination light
- Dressing tray
- Emesis basin
- Oxygen cylinder with regulator and flow meter
- Oxygen cannula, and mask - disposable
- Burn Kit
- Diagnostic set with ophthalmoscope
- Magnifying light
- Alcohol Solution

- Disinfectant
- Assorted finger splints
- Tube dressing- assorted sizes with applicators
- Steri-strips
- Tongue depressors
- Q- tips
- Crutches
- Stretcher
- Assorted disposable sterile syringes and needles
- Suture kits
- Suture removable kits
- Autoclave or sterilizing equipment
- Sterile examination gloves
- Surgical gowns, mask, drapes

Any medication specific to an area or region as well as the following:

- Antacid
- Lomotil or loperamide
- Paracetamol
- Aspirin
- Penicillin - oral and injectable
- Ampicillin - oral and injectable
- Doxycycline capsules
- Tetracaine
- Benadryl - oral and injectable
- Nitroglycerin - tablet paste, parental
- Ventolin spray
- Lidocaine 2%
- Lidocaine 2% with epinephrine oxymetazoline nasal solution
- Hydrocortisone cream
- Tetanus toxoid
- Epinephrine 1:1000
- Epinephrine 1:10000
- Assorted IV catheters and needles
- Sterile IV solutions (e.g., normal saline, glucose, lactated ringers)
- IV tubing

Level III

This facility should be capable of sustaining life when local facilities are within reasonable distance for transporting. It should be staffed by paramedic, nurse, nurse practitioner, physician assistant, or physician. In addition to the equipment listed in the previous Levels, the following is recommended:

- Bag valve mask
- Intubation kit with assorted ET tubes sand stilettos
- Laryngoscope with assorted blade sizes
- Portable ventilator
- Nebulizer
- Pulse oxymeter
- Cardiac monitor/defibrillator with pacing capabilities
- 12- lead electrocardiogram machine
- Glucometer
- Chest tubes
- Portable suction and accessories
- Hare traction splint
- Casting material
- Portable x-ray machine

Any medications specific to an area or region, those from level II, and the additions listed below:

- Activated charcoal
- Adenosine
- Albuterol
- Aminophylline
- Atropine sulfate
- Bretylium
- Calcium chloride
- Cetacaine spray
- Dexamethasone
- Dextrose 50%
- Diazepam
- Dopamine
- Droperidol
- Furosemide tablet and injectable
- Glucagon
- Ipecac
- Isuprel
- IV solution Hemacel
- Lidocaine 100mg
- Morphine sulfate
- Naloxone
- Nifedipine
- Pethidine
- Potassium chloride
- Procainamide
- Rocephen
- Sodium bicarbonate
- Solumedrol
- Streptokinase
- Succinylcholine
- Terbutaline
- Thiamine

Level IV
Level IV Facilities are recommended when geographic location or acceptable facilities are unavailable within a reasonable amount of time to sustain life.

A Level IV facility is a full-service facility staffed with paramedics, nurses, nurse practitioners, physician assistants, physicians and appropriate auxiliary staff such as x-ray, laboratory, anesthesia etc.

Equipment and supplies listed in Levels 1 through 3 should be available as well as the following additional recommendations.

Emergency Room:
Should be accessible by two sets of double doors wide enough to allow easy access into the room. It is recommended to contain the following equipment:

- Patient stretchers
- Cardiac crash cart
- Suction
- Oxygen
- Intubation kit
- Dressing tray

Treatment Room:
The treatment room should be in the general vicinity of the ER. Recommended equipment is as follows:

- Surgical light
- Examination table
- Dressing table
- Casting sink
- Minor surgery kit

Waiting Room:
The project population shall dictate the size. Recommended equipment:

- Reception desk
- Chairs
- Filing cabinets
- Computer station
- Lavatory

Consulting Room:
The number of consulting rooms is directly proportional to the project population. Equipment should include:

- Examination Table
- Examination light
- Diagnostic set with ophthalmoscope
- Wall mounted sphygmomanometer
- Desk and chair
- X-ray view box
- Lavatory

Diagnostic Room:
A room with sufficient space to accommodate the following equipment, and located next to the consulting room, shall be provided:

- Desk and chair
- Twelve lead EKG machine
- Vitalograph
- Audioscope
- Eye tester
- Diagnostic set with ophthalmoscope
- Stethoscope
- Wall mounted sphygmomanometer
- Lavatory

X-Ray Room:
Access should be through a double door to accommodate a patient carried on a stretcher. The dark room must be totally light proof and fitted with x-ray safe light, hot and cold water and a large sink. The walls and doors shall be shielded with lead, in accordance with local regulations. Equipment will include:

- X-ray machine
- Chest stand
- File processor, manual or automatic
- ID flasher
- Film storage
- Echography when required

Laboratory:
A room will be fitted with counters to support the equipment, two sinks, office space and running water to accommodate the laboratory equipment. Special attention will be made to the laboratory waste. Recommended Equipment:

- Microscope and accessories
- Centrifuge
- Incubator
- Chemical analyzer
- Coulter counter
- Gas analyzer when required
- Blood bank refrigerator when required

Sterilization:
A Sterile Supplies Department will require two rooms, one clean where sterile supplies and equipment are stored and a dirty room where equipment is cleaned and sterilized. Recommended equipment for each room is as follows:

Clean -
- Storage bins and racks
- Storage trolleys

Dirty -
- Triage table
- Washer and dryer
- Autoclave
- Sealing machine

Note: The room with the autoclave will need a special vent system to dissipate the heat produced by the autoclave.

Operating Room:
The operating room area should include a patient access room, a patient recovery room, a sterile room, a dirty room, a preparation room and the operating room itself. The floor of the operating room must be reinforced to support the weight of the patient and the operating table. The ceiling should be high enough to accommodate suspended operating lights. It should also be equipped with a positive air pressure system to ensure air quality. Recommended equipment is as follows:

- Operating table
- Operating light
- Anesthesia machine
- Electrosurgical unit
- Cardiac monitor
- Suction
- Surgical instrumentation
- Blood/IV solution warming device
- Instrument sterilize
- X-ray view box

Intensive Care Unit (ICU):
It is recommended the ICU be separate from the regular ward. The size and configuration will be dictated by the hospital size. It should have its own bathroom and power source. The room(s) should be equipped with a positive air pressure system to improve the quality of ambient air. Recommended equipment includes:

- Bed(s)
- Ventilator
- Oxygen

- Suction
- Cardiac monitor/defibrillator
- Pulse oxymeter
- IV pump (s)
- Crash cart with cardiac emergency drugs

Ward:
The size and configuration of the ward(s) will be determined by the project population and anticipated requirements. It is recommended one or more rooms be set aside as isolation rooms for the treatment of communicable diseases. Recommended equipment includes:

- Beds
- Night stands
- Bathrooms
- Privacy screens
- Portable oxygen
- Blood pressure monitors
- Treatment trays
- Wheelchairs
- Stretchers

Nurses' Station:
In addition to all the above it is recommended a Level IV Facility include the following:

- Administrative offices
- Stores
- Laundry
- Kitchen and mess hall
- Biomedical shop
- Pharmacy
- Maintenance shop
- Incinerator for medical waste disposal
- Morgue

Attachment 2 - EPM-KSH-TP-000017 - Authorization for Medical Treatment Form Template

COMPANY NAME: _____ DATE: _____

TO: DR. _____

ADDRESS: _____

_____

FROM: JOB. NO. _____ JOB NAME: _____

LOCATION: _____
STREET CITY STATE ZIP TELEPHONE

PLEASE RENDER MEDICAL TREATMENT TO:

EMPLOYEE: _____ HOME ADDRESS: _____
STREET

_____ _____
CITY STATE TELEPHONE NUMBER

DATE OF INJURY: _____ TIME OF INJURY: _____
AM/PM

NATURE OF INJURY: _____

HOW INJURY OCCURRED: _____

_____

ISSUED BY: _____

SIGNATURE: _____ DATE: _____

DOCTOR'S FINDINGS AND DISPOSITION

PATIENT: _____

HAS BEEN TREATED FOR: _____

INJURY OR ILLNESS

_____ABLE TO RESUME REGULAR DUTIES

_____ABLE TO RESUME DUTIES WITH THE FOLLOWING RESTRICTIONS:

_____

_____

_____UNABLE TO RETURN TO WORK

_____DISABLED FOR APPROXIMATELY _____DAYS

_____TO RETURN FOR TREATMENT ON _____

_____ _____
DOCTOR'S SIGNATURE DATE

Attachment 3 - EPM-KSH-TP-000018 - Modified Duty Work Assignment Template

TO: (*Project Superintendent*)_____ DATE OF INJURY: _____

FROM:_____ TODAY'S DATE: _____

****

_____(*Employee Name*)_____ has been placed on the following work restrictions by the medical provider:

_____

_____

_____

_____

_____

Indicate in the space provided, the work the employee will perform while on these restrictions.
(Note: The project will provide actual craft related work only).

_____

_____

_____

_____

_____

Site Manager notified by HSE Services **Safety Rep's Initials** _____

Anticipated release from Modified Duty ___ Released to full duty _____

_____ _____
Project Superintendent General Foreman

_____ _____
Foreman Employee

(Please return to the Safety Department)