



Employee Safety Program

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INTRODUCTION TO KSMC EMPLOYEE SAFETY PROGRAM

Obligation:

The King Saud Medical City (KSMC) maintains a moral and ethical obligation to provide a safe and healthy workplace for Patients, Families, Visitors and Employees.

Prevention and Control:

The Employee Safety Program's purpose is to assist our staff to implement standard processes. The overall aim of the Safety Program is the promotion of safety awareness, safe work and the prevention and control of hazards and risks throughout the hospital.

Procedures and Guidelines:

According to National Standards (Ministry of Health) and International Standards, the Policies, Procedures and Guidelines presented in this Safety Program aim to eliminate the hazards/risks our employees are exposed to. This document also applies to the principles and techniques governing occupational health and safety.

Beliefs and Confidence:

King Saud Medical City Program Management believes that the Employee Safety Program provides a practical, visible and proven approach to implement and maintain an effective, safe and healthy work place. In addition we have confidence in our employees that the difference between accident occurrence and accident prevention can be made throughout the program.

DR. NABEEL ALGOSAIBI
Chief Executive Officer
King Saud Medical City, Riyadh

MISSION STATEMENT OF THE EMPLOYEE SAFETY MANUAL

KSMC recognizes that the responsibilities for safety and health are shared.

KSMC Management accepts the responsibility for the leadership and effectiveness of the safety and health program and for providing the necessary equipment, resources and safeguards required to ensure safe working conditions.

KSMC Supervisors are responsible for developing proper attitudes toward safety and health in them and in those they supervise, and for ensuring that all operations are performed with the utmost regard for the safety and health of all personnel involved, including them.

KSMC Employees are responsible for their full and sincere cooperation in all aspects of the safety and health program, including compliance with all the rules and regulations; and for continuously practicing safety while performing their jobs.

GOAL:

To provide a safe and healthy environment for all employees and the community, in general.

OBJECTIVES:

1. Minimize the risk of hazards, occupational injuries and illness by the use of recommended loss prevention and control techniques.
2. Establish written performance and accountability standards and objectives for managers and supervisors to reduce hazards, occupational injuries and illness and enhance workplace health and safety.
3. Provide adequate health and safety training and education for all levels of employees.

ACCOUNTABILITY and RESPONSIBILITY:

KSMC commitment to protect employee safety from workplace hazards and injuries is just as important as productivity and quality. **To exhibit this commitment, KSMC Management aims to:**


1. Ensure compliance to written performance standards and objectives for managers, supervisors, and employees regarding health and safety.
2. Integrate health and safety responsibilities within the position description of the employees.
3. Ensure Department Directors/Heads accountability for their health and safety objectives and responsibilities where rewards for good performance and correction for problem areas are taken place.
4. Provide proper allocation of hospital resources to ensure employee safety.
5. Establish clear lines of communication between management and staff regarding safety and health concerns.

Self-Protection:

The most effective means of protecting yourself and others in the work environment is knowledge. Take the time off to learn about the hazards of the work you perform or material you will be working with and the proper procedures for preventing accidents. None of the policies and procedures presented in the Employee Safety Program will be effective in controlling work hazards unless you make safety an integral part of your routine work assignment.

Environmental Safety Committee:

Provides governance and consultative authority to evaluate and monitor organizational systems and process required for a safe health care environment; thus to make recommendations for improvement of



health, safety and security programs.

Safety Manager/ Head of Environmental Safety Unit:

The Safety Manager has the responsibility and authority to manage and coordinate the general safety program, and risk management.

The responsibilities include, but not limited to the following:

1. Professional development– Keep updated with safety regulations.
2. Program Development and Administration
 - a) Develop and maintain hospital’s written safety and risk management program through the Hazard Vulnerability Assessment (HVA).
 - b) Develop and maintain injury and illness prevention program and policies to include through the Safety Department activities monitoring of:
 - Safety rules
 - Awareness programs
 - Accident investigations
 - Safety inspections/surveys
3. Training and Communication
 - a) Provide a general safety orientation program
 - b) Serve on the Environmental Management Team
4. Safety Consultant
 - a) Conduct hazard analysis of existing facilities and operations
 - b) Work with Biomedical Department on workplace hazards and workplace design.
 - c) Conduct thorough investigations of accidents where specialized knowledge

is required.

5. Measuring Performance and Results – Review the overall safety performance of the hospital.

Environmental Management Team/Safety Department:

Ensures hospital compliance to environmental health safety standards in order to provide a safe, functional and effective health care delivery system as KSMC.

WRITTEN RULES and SAFE WORK PRACTICES

Policy Statement for Safe Practice – Health and safety is a cooperative undertaking requiring participation by every hospital employee. Failure any employee to comply with safety rules will be a ground for corrective discipline.

To implement this policy statement:

1. The employee shall report all unsafe conditions and equipment to the supervisor or call:
 - a. Safety Department at King Saud Medical City General Hospital, AKU, RDC, Academic and Administration Departments extension number 2080
 - b. Pediatric Hospital and Maternity Hospital extension number (71) 2080.
2. The employee shall report all accidents, injuries and illnesses to his/ her immediate Supervisor/ Department Head.



3. In the event of fire, sound the alarm and evacuate.

Do not use the elevator.

4. Only trained employees may attempt to respond to a fire or other emergency.
5. Be familiar with fire evacuation procedures.
6. Exit doors must comply with fire safety regulations. All doors and exits shall be unblocked.



7. Stairways, aisles and corridors must be kept clear of items at all times.
8. Work areas should be maintained in a neat, orderly manner.
9. All spills shall be wiped up promptly.
10. Files and supplies should be stored properly. Heaviest items should be stored closest to the floor and lightweight items stored above in such a manner as to preclude damage to supplies.
11. Always use the proper lifting technique. Never attempt to lift or push an object which is too heavy.
12. All electrical equipment's should be plugged into appropriate wall receptacle. Three-pronged plugs should be used to ensure continuity of ground.
13. No personal appliances are allowed to be used, unless permission from the Safety & Security Department is granted.



14. Cleaning supplies and solvents must be stored in appropriate containers.
15. Hazardous materials and solutions must be kept under proper environment and properly labeled.
16. Never store combustible materials with flammable materials.
17. Safeguard your health. If you are unable to report for work because of sickness or any

Other
call your

reason,



Supervisor immediately. Seek EHC for medical treatment.

18. Follow only approved procedures in performing your job. Use only the proper tools/ equipment for the assigned task.
19. Wear the required Personal Protective Equipment's (PPE) at work.
20. If you have to climb, use a ladder. Do not use a chair or a defective/broken ladder. Report such defects to your supervisor.

21. Needles and other sharp instruments shall be disposed of by placing them in proper containers.
22. Observe hospital signs and obey “Warning Signs” eg. “Wet Floor,” “Repair Ongoing.” “No Entry.” and others.
23. If you are required to enter special areas of the Hospital, such as isolation rooms, radiation hazard area, or operating room.
24. Observe the precautions, rules and regulations for self-protection and prevent cross-contamination.



25. Noise must be kept at a minimum in the hospital environment.
26. Smoking is not allowed inside the hospital premises.
27. The possession of firearms or other dangerous weapons are not permitted.

Safety is everyone’s responsibility: Supervisors at all levels are responsible for ensuring that each employee under supervision is familiar and complies with the rules listed herein.

PERSONAL PROTECTIVE EQUIPMENT BY JOB FUNCTION	
Department	Personal Protective Equipment
Food Service	<ol style="list-style-type: none"> 1. Heeled shoes with slip-resistant and boots for wet areas. 2. Impervious gloves for washing pots and pans and for consistently wet hands. 3. Metal mesh gloves for meat cutters and other who use knives frequently. 4. Rubber gloves and goggles for handlers of concentrated liquid ammonia drain cleaners, strong caustic solutions for cleaning reusable filters and oven cleaners. 5. Disposable mask for persons sensitive to powdered soap or detergent dust. 6. Hair nets in food preparation and serving areas to prevent contamination of food. 7. Heavy rubber aprons and impervious gloves when cleaning, removing trash in wet areas.
Housekeeping	<ol style="list-style-type: none"> 1. Heavy rubber aprons and impervious gloves for person engaged primarily in removal of trash. 2. Protective gloves for use of soaps, detergents and solvents. 3. Rubber gloves and rubber aprons mask and eye protection when using disinfectants. 4. Protective clothing such as gowns, mask and gloves when performing isolation cleaning procedures. 5. Non-skid shoes for persons

	<p>who sluice, strip, rinse and wax floors.</p> <p>6. Mask, rubber gloves for persons applying pesticide.</p>
Laboratories	<p>1. Chemical goggles, face/eye shield for protection from splashes.</p> <p>2. Chemical respirators for persons using acids, gases and organic vapors to clean spills.</p> <p>3. Aprons, which are removed when wearers leave the laboratory.</p>
Maintenance	<p>1. Gloves for handling hot, wet, or sharp objects and for chemicals.</p> <p>2. Safety goggles or glasses for protection from chips, sparks glare and splashes.</p> <p>3. Protect ears from extraordinary noise.</p> <p>4. Masks for persons who cut or handle insulating materials.</p> <p>5. Respirators for persons who work with paint or adhesives.</p> <p>6. Slip resistant footwear.</p> <p>7. Protective clothing and goggles or face shields for welders.</p> <p>8. Hard hats for construction.</p> <p>9. Mask, rubber gloves for persons applying pesticides.</p> <p>10. Mask when working with paint varnish or enamel inside an enclosed area.</p>
Materials Management	<p>1. Safety shoes to protect feet.</p> <p>2. Gloves</p> <p>3. Eye protection.</p>
Nursing Services	<p>1. Low heeled shoes with slip resistant soles.</p> <p>2. Gloves, gowns, masks and safety glasses and other protections for isolation procedures.</p>
Radiology	<p>1. Lead aprons and gloves for</p>

	<p>persons working in the direct field or where scatter radiation levels are high.</p> <p>2. Radiation exposure badges for persons exposed to ionizing radiation (when a protective aprons is worn a dosimeter should be worn on the outside of all clothes)</p> <p>3. Gloves, goggles and apron for handling film-developing chemicals.</p>
<p>Surgery</p>	<p>1. Conductive clothing when required.</p> <p>2. Conductive footwear, tested regularly for conductivity.</p> <p>3. Gloves, gowns, masks and other safety glasses and other protection for isolation procedures.</p>

PURPOSE of PROTECTIVE EQUIPMENTS (PPE)



PPE CAN PROTECT YOU IF YOU WEAR THEM.

HEALTH and SAFETY TRAINING AND EDUCATION

The Safety Training and Education program provide training and instruction:

1. To all new and old employees.
2. To all employees given new job assignments for which training has not been previously received.
3. Whenever new processes, procedures or equipment are introduced to the workplace.

All staff undergoes safety orientation within their own department and maintains a record of their training.


Safety and Health Training Record

Written documentation of safety and training record includes the following: Name of Employee, Training Date, Type of Training, and Name of Training Provider. These records are recommended to be maintained in the Training & Education and Human Resource Department.

Recommended Health and Safety Training Activities

1. Accident Prevention
2. Patient Lifts
3. Back Injury Prevention
4. Blood Borne Pathogens
5. Emergency Response/Spills
6. Emergency Training/Fire Prevention
7. Employee Rights and Responsibilities
8. Fall Assessment and Prevention
9. Fire Equipment's and Fire Extinguishing System



- 
10. Flammable and Combustible Liquids
 11. Materials Safety Data Sheet (MSDS)
 12. Hazard Waste
 13. Indoor Air Quality
 14. Radiation Safety
 15. Laboratory Safety
 16. Office Health and Safety
 17. Personal Protective Equipment
 18. Respiratory Protection

Basic Training for Fire Safety includes:

1. Reporting of fire
2. Proper use of fire equipment's
3. Relocation and evacuation of patients
4. Location of exits, emergency exits, alarm Pull or break glass stations, fire extinguishers and other fire equipment's
5. Practical handling of fire extinguishers

Fire Extinguishers – Fight the Fire when the following situations are evident.

1. Everyone who is in immediate danger has left or is leaving the area of the fire.
2. Activate the manual fire alarm; Report it by calling **1970/1888**;
 - 1.1 General Hospital, AKU, RDC, Academic and Administration Building:
Extension number **1970/1888**
 - 1.2 Pediatric Hospital and Maternity Hospital
extension number **555/188**.
3. The fire is small and confined only to the immediate area.
4. Fight the fire with your back to a safe escape route.
5. The fire extinguisher is in good working condition.
6. Proper training done in the use of the fire extinguisher.

If you have the slightest doubt about whether or not to fight the fire, **do not!** Instead, get out, close the door

behind you. **Life safety comes first.** Be sure **fire extinguishers are ready.**

1. **Never** block them.
2. **Never** put back a partially used extinguisher.
3. **Report** discharged extinguishers to the Safety Department.
4. **If the fire is small**, you might be able to fight it. But first, report the fire. Use your knowledge of how to fight fires.



Get the right extinguisher and use it by:

1. Breaking the seal and removing the pin.
2. Staying six to ten feet away from the fire.
3. Pressing the lever and aiming the nozzle or funnel at the base of the flames.
4. Continue with a steady stream, not short bursts, with sweeping movement side to side.

Be sure you **know the fastest means of escape** in case your attempt to extinguish the fire fails.

1. **Never** use elevators during a fire.
2. **Know** all the fire exits in your area.
3. **Move quickly**, but don't panic.





FIRE Fighting

مكافحة الحريق



Pull the Pin
انسحب المفتاح

Extinguish otherwise
just Evacuate or Exit



Aim low at the base of the fire
صوب نحو قاعدة اللهب

- Stay 8 feet away
from the fire
- Make sure the
door is behind you



Squeeze the handle
اضغط المقبض



Sweep side to side
حرك الخرطوم
على الجوانب

As the fire
gets smaller
you can go
nearer



FIRE

EMERGENCY RESPONSE

الاستجابة لطوارئ الحريق



انقاذ
RESCUE



Rescue:
1. The one nearest to the fire
2. Ambulatory Patients
3. Patients on Wheelchair
4. Bedridden Patients



تحذير
ALARM



Verbal Alarm:
1. Shout Code Red three times
2. Call 1970 or 555 and Operator will
announce over the Pager System
3. Pull the Fire Alarm



احتواء
CONTAIN



Follow the Checked Room Procedure
1. Evacuate Patients and Staff
2. Check the bathroom
3. Unplug the electrical equipment
4. Shut off the AC (airconditioner)
5. Close the windows
6. Evacuate the Oxygen Cylinders
7. Close the door and hang the
Room Checked sign at the level of
the door knob



إطفاء
**EXTINGUISH
OR EXIT**

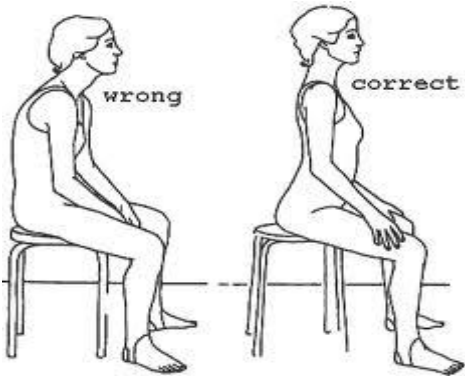


Extinguish only if trained and with the
door behind you for easy exit,
otherwise, if you have doubts just
evacuate or EXIT.

PHYSIOTHERAPY: BACK INJURY PREVENTION

Sitting

When you are seated, always support the low back curve. Most seats do not naturally allow this, so put a small, soft cushion. Maintaining a healthy and non-tiring posture for the entire back and neck is difficult at a desk or table, even when using the cushion. This can become easy by adjusting the chair down and/ or raising the desk up (not shown here). One suggestion is to add bricks or wood blocks under the table legs. The ideal desk-top height is that which is leveled with your chest.



Floor Sitting

A small cushion placed between the wall and your low back will allow you to relax and still help the low back muscles, ligaments and discs. The cushion used here, and in seats with a backrest, is best when small and soft (easily compressible like foam). If there is no wall to act as a backrest, you may sit on a thick cushion in such a way as to allow your feet and knees to rest below on the floor. The buttocks rest at a higher level. This position automatically maintains the healthy back posture, and is

more relaxing for the spine.



Prayer

If you are unable to keep the inward curve of the low back while in seated prayer, briefly exercise your back every 15 minutes. Simply push your stomach and chest out 10 times to produce the inward curve. Then resume prayer.



Lifting

Plan ahead.

Test how heavy the load beforehand

Is it too heavy for one person to lift?

Your leg muscles are big and strong. Use these for lifting, and not the small muscles in your back.

Keep the object close to your body.

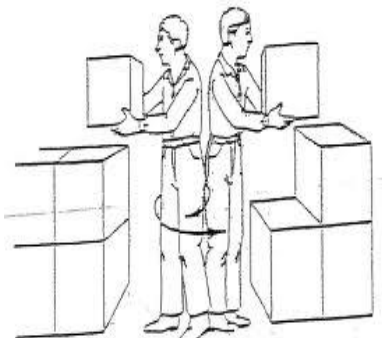
Lift carefully, not quickly.



Twist or Turn

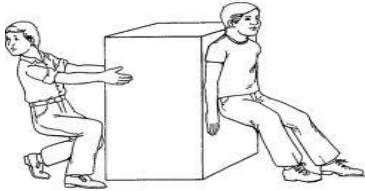
Do not twist at the waist.

Turn by moving the feet.



Push or Pull

Both are good. When you have a choice, pushing is always better than pulling. Avoid lifting if you can push or pull.



Putting Items in the Car/Laundry

Avoid placing items deep inside the trunk when possible. Use one hand to pull the item towards you while placing the other hand for support. Plastic grocery sacks with handles can be placed at the rear of the trunk with the handles sticking outside. Close the trunk lid down onto the handles. This will prevent the sacks from spilling, and they will be close to you to unload. Keep your back straight.



From standing position, slightly separate between your feet, put your hands down your back as in Figure at the right. Then bend your back. Do the exercise ten (10) times.



Bathroom/Kitchen

First, imagine any activity at home or work at any place. Second, imagine how you may correct your posture. Often you will find more than one way to protect your back. Lastly, practice using posture as you do your activities of daily living.



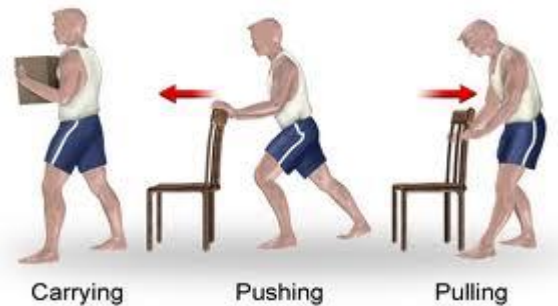
Bed making

Relieve some of the back's work by leaning on a free hand.

When the task is at low level, kneel to make it easy for the back to remain in good position.



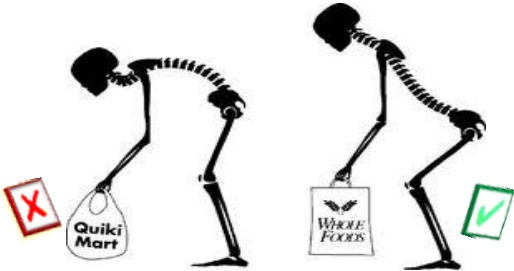
Push/ Pull



Activities include such things as mopping, shoveling, and sweeping, vacuuming, and rolling sliding forward and backward.

Shopping/Marketing

Use a free hand for support instead of allowing the back to do all the work. Raising the leg acts both to counterbalance and maintain the inward curve of the low back.



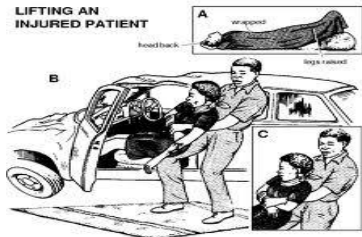
Child Care

Refer to the right side illustration.



Patient Care

Lifting Patient



Sleeping/Resting

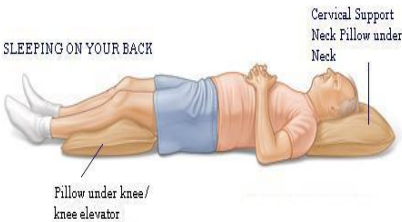
A mattress should be firm enough to prevent you from sinking, yet soft enough to conform to the body's normal curves.

The Best and Worst Sleeping Positions

SLEEPING ON YOUR SIDE



SLEEPING ON YOUR BACK



Cervical Support
Neck Pillow under
Neck

Pillow under knee/
knee elevator

SLEEPING ON YOUR STOMACH



Strain on the Neck Muscles in this position

www.neckpainsupport.com

APPENDICES: DEPARTMENTAL SAFETY GUIDELINES

OFFICE SAFETY



1. Keep the floor free of tripping hazards such as telephone cords, electrical extension cords and any other materials.
2. Keep drawers of desks and file cabinets closed when not in use.
3. Pull out only one drawer of a file cabinet at a time in order to avoid its tripping over.
4. Store materials in shelves carefully to prevent them from falling. Place heavy objects on lower shelves.
5. Never put broken glass or other sharp objects in waste baskets. Call housekeeping for assistance and to request proper containers.
6. Do not sit at the edge of a chair.
7. Do not tilt back when sitting on a straight chair.
8. Use caution when walking around blind corners, especially when carrying objects.
9. Use caution when handling hot substances such as coffee, tea and other.
10. Keep machinery away from desk or table edges.
11. Use care when utilizing sharp equipment i.e. knives, scissors and paper cutters. The arm of the paper cutter must be kept down and fastened in place when not in use.


HEALTH and SAFETY COMPLIANCE ACTIVITIES

1. **Safety and Health Record Keeping** –Employee work related injuries and illnesses are reported and recorded through the Employee Health Clinic Report. The process for risk identification, analysis, treatment, resolution, and prevention are governed within its policy and procedure guidelines. It is recommended that the above records are maintained in the Total Quality Management Department.
2. **Injury and Illness Records** – Information on occupational injuries and illnesses are recorded and maintained in the Employee Health Clinic service. The process for risk identification, analysis, treatment, resolution, and prevention are coordinated between

Employee Health, Prevention and Control of Infection and Safety Department.

3. Exposure Records

- a) **Occupational Exposure to Blood Borne Pathogens** – Needle stick injuries, eye splash, and spills are incurred as a result of staff performing their duties resulting to contact with blood and other potentially infectious materials.
 - 1) Screening and preventive measures are governed within its policy and procedure guidelines.
 - 2) Hepatitis vaccination is available in the Employee Health Clinic at no cost to the employee.
 - 3) Post exposure evaluation and follow up comprise the confidential medical evaluation available at the staff medical



record. It includes the circumstance of the exposure, source individual, type of testing

- 4) Procedure, use of post exposure prophylaxis treatment if needed.
- 5) Universal precautions – treating body fluids/materials as if infectious, biomedical and work controls are provided.
 - a) **Hazard Communication** – proper labels and signs for regulated waste are observed. A guideline exists for the use of Material Safety Data Sheet ((MSDS).
 - b) **Radiation Exposure** – Radiation badge is worn by staff working in areas where exposure to radiation is anticipated.

4. **Emergency Procedure**

- a) **Internal/External Disaster Plan** – Each department involved in the emergency response and recovery is responsible for developing departmental procedures for contacting staff, obtaining supplies and response procedures. Each department staff member should be familiar with his/her duties during an emergency disaster.
- b) **Emergency Response Personnel** – The Safety Officer on duty works 24hours a day. The members of the Safety Department respond to all fire or smoke emergencies and activations of any fire alarm around the clock. This team responds within minutes and provides the emergency; event is reported promptly and accurately.

INFECTION CONTROL

Hand washing is considered to be the most important means of preventing the spread of germs. Hands should be washed for at least 15 seconds with approved product such as alcohol-based hand rub agent, antimicrobial hand washing agent, non-antimicrobial soap or at least soap and water, with vigorous and should be rinsed well.

Hands should be washed:

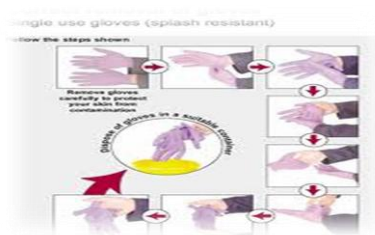
1. When you get to work
2. When you leave work
3. Before and after every patient contact
4. Before and after eating
5. As required by your particular job
6. After contact with medical equipment
7. After used of restrooms breaks



Hand Wash and Gloves Removal– Hand washing keeps you from transferring hazardous material from your hands to other areas of your body, patients or the environment.

1. When dealing with any potentially hazardous material, always wash your hands before and after handling.
2. No barrier is 100% effective. After each activity, remove gloves and wash hands before putting on a new pair.
3. When removing gloves, peel one glove off from outside top and hold in gloved hand with exposed hand, peel second glove down from top tucking first glove inside second. Do not touch outside of glove. Dispose entire bundle promptly

in the proper waste receptacle.



4. Wash all surfaces of the hands with soap, friction and running water for a minimum of 15 seconds.



Needle Stick Prevention – The employee should have knowledge regarding:

1. Hazards and risks associated with blood borne pathogens.
2. Hospital policies and procedures on needle use and disposal.
3. Reporting and follow-up on needle stick injuries.
4. Components of the needle stick prevention program.

Components of Needle Stick Prevention

1. Safety policies and procedures aimed to include universal precautions and protocols outlining the safe work practices for all risk groups.
2. Written exposure control plan.
3. Reporting and recording requirement.



4. Methods of Prevention:
 - a. Biomedical controls
 - b. Education and training campaign
 - c. Ban on traditional recapping by two-handed method
 - d. Use of appropriate and approved needle
 - e. and syringe disposal containers
 - f. Prompt replacing/emptying of disposal
 - g. containers before they overflow
 - h. Frequent inspection of disposal containers
 - i. Well trained housekeeping staff
 - j. Ensuring vaccinations for all high risk groups.

Guidelines for Needle Stick Injury prevention (APP – 192 - V2)

1. Get vaccination for Hepatitis B before an injury occurs.
2. “Used” sharp is a dangerous sharp.
3. Handle sharps as little as possible.
4. Always direct the sharp point away from yourself. Always pass sharps with the sharps end pointing away from others.
5. No recapping of needles.
6. Wear personal protective equipment for the hands

- and face to ensure respiratory protection.
7. Ensure the availability of sharp containers for ease of replacement and prevent its overflow.
 8. Be alert for hidden sharps.
 9. Handle trash carefully. Carry trash and laundry away from your body.
 10. If you incurred needle stick injury, immediately wash the area with soap and water. Get medical assistance and promptly report the incident to your Supervisor.



احتياطات يديه

يجب اتباع كافة الاحتياطات الوبائية المتخذة بكل الدم وسوائل الجسم الملوثة من قبل جميع الموظفين عند وجود احتمال للتعرض للدم، أو لسوائل الجسم، أو الإفرازات، أو الأنسجة. أضع كافة الاحتياطات من أجل سلامتك.

Universal blood and body fluid precautions should be used by ALL staff whenever there is potential for exposure to blood and body fluids, excretions or tissues.

لا تقم مطلقاً بكسر، أو إعادة تعقيم الإبر المستخدمة. تخلص من المواد الحادة والإبر بوضعها في صندوق مخصص لذلك.



Never break, or recap a used needle
Dispose of sharps in puncture-resistant container designed for such use.

أغسل يديك باستمرار قبل وبعد ملامسة أي مريض، وكذلك بعد لزج القفازات كما هو مذكور في الوثيقة من المحتوى مع كل مريض بعد الاتصال بالمرضى وبعدهم بعد إزالة القفازات.

Wash your hands routinely before and after contact with each patient and after glove removal.

ضع القفازات قبل ملامسة أي مريض وكذلك عند ظهور اليباضات الملونة، أو السدات التي قد تتعرض فيها للدم أو لسوائل الجسم، أو الإفرازات، أو الأنسجة أو الأغشية المخاطية.

Wear latex gloves when contact with patient or soiled linen, or equipment may expose you to blood, body fluids, secretions, excretions, tissue or mucous membranes.



ارتدي الملابس والنظارات و الأقنعة الواقية عند احتمال التعرض لأي من المواد التي يجب الوقاية منها مثل الدم و سوائل الجسم الأخرى.

Wear gowns, goggles and mask when there is potential for blood or body fluid splatters or spraying.

HEALTH AND SAFETY INSPECTIONS

At KSMC, this responsibility is delegated to the Environmental Safety Inspection and FMS Monitoring Team, a multidisciplinary group composed of the following, Hospital Administration, Director of Nursing, Hospital Engineer and Safety Manager, Manager of warehouse/Materials Management, Infection Control Coordinator, Housekeeping Asst. Manager, and Total Quality Management Department.

Purpose: To identify environment risks and hazards (actual and potential) that could pose harm and/or injury to patients, visitors, employees, including the building and properties of the hospital; so as to prevent and rectify these environmental safety issues. The ultimate goal is to provide a healthy and safe environment.

Environmental safety inspections include all hospital areas, clinical, non-clinical, offices, including that of the immediate building premises and staff housing compounds. The team also conducts such an inspection in other healthcare facilities where some of our patients are accommodated.

A yearly plan of inspection is conducted every week to cover all departments/ services, taking into priority high risk and problem prone areas.


The **environmental safety inspection utilizes criteria** based on the required safety and environmental standards as stipulated under the Ministry of Interior, Accreditation Canada and other regulatory bodies in Saudi Arabia.

Environmental safety findings, actions and recommendations are documented and communicated to Hospital, Medical, Nursing Administration, and Environmental Management Team and to all relevant services immediately after the inspection is conducted. Any actions taken are followed up and monitored in an ongoing basis. All documented reports are kept and maintained at the Total Quality Management Department.

LOSS PREVENTION and CONTROL TECHNIQUES to MINIMIZE RISKS

At KSMC, various policies, procedures, and techniques are in place to prevent loss and minimize risks. These are:


1. **Biomedical/Ergonomic Controls** - eliminate or control the source of the hazard by use of the following:
 - a) Ergonomically designed tools, equipment and workstations
 - b) Mechanical exhausts systems
 - c) Substitution of products that is not hazardous or less hazardous
 - d) Placement of safe equipment that meet safety standards
 - e) Electrical or mechanical safety interlocks and guards for machine hazards
 - f) Fire prevention systems
2. **Administrative Controls**– Department Directors/Heads/Managers ensure that policies and procedure are implemented regarding job rotation, overtime, and floating.
3. **Procedural Controls**– the following techniques should be used to ensure that employees always follow the procedure controls.
 - a) Work practice training with focus on precautions.
 - b) Positive reinforcement to promote and encourage safe work habits.
 - c) Correction of unsafe performance.
 - d) Disciplinary action if needed to enforce safety rules and protect patients and employees.
4. **Personal Protective Equipment (PPE)** – Management has to ensure the availability of PPE such as safety glasses, goggles, face shields, metal shields, aprons, hard hats, chemical resistant clothing, gloves, and protective boot/shoes. Managers and Supervisors need to reinforce the use of these PPE at workplace.

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5. **Medical Program-** This includes the availability of first aid and emergency medical assistance, including the code blue team that responds immediately to any cardio-respiratory events around the hospital.
 - a) Training and education is provided to physicians, nurses, and ancillary staff for Basic Life Support (BLS), Advanced Cardiac Life Support (ACLS), Pediatric, and Neonatal Resuscitation.
 6. **Emergency Planning** – includes activities such as fire drills, chemical spills and decontamination procedures.
 7. **Planned Periodic Preventive Maintenance (PPM)** – Preventive Maintenance Program aims to extend equipment life, reduce costly failures, and to attain greater performance and efficiency. Preventive maintenance program includes:
 - a) Comprehensive survey of maintenance needs at each workplace
 - b) Establishing a maintenance schedule and assign responsibility
 - c) Carrying out the maintenance schedule and planning work activities
 - d) Documenting maintenance works to verify completion
 8. **Good Housekeeping Program** – ensures all work places are clean and tidy.

HEALTH and SAFETY PROMOTION AND AWARENESS CAMPAIGN

At KSMC, different techniques for communicating safety and health information and increasing employee awareness levels include the following/:

1. Hospital wide safety awareness sessions covering various safety topics
2. Intranet informational bulletin
3. Posters and standardized hospital signs
4. Brochures, videos, newsletters, bulletin boards

- 
5. Safety symposiums
 6. Safety meetings
 7. Safety displays and demonstrations
 8. Recognition systems for outstanding safety performance

INVESTIGATIONS of ACCIDENTS and NEAR MISS

A primary tool used at KSMC for reporting and investigating adverse incidents/accidents is the **Occurrence, Variance and Accidents Report (OVAR)**. The process is anonymous reporting through the OVAR system.

Adverse event – is defined as any unfavorable and unintended sign including an abnormal laboratory finding, symptom or disease associated with the use of medical treatment or procedure, regardless of whether it is considered related to the medical treatment or procedure, that occurs during the course of patient management.

Serious adverse event (sentinel event) refers to any untoward medical occurrence that results in death, is life threatening that requires inpatient hospitalization or prolongation of existing hospitalization, results in persistent or disability/incapacity, physical or psychological.

Near-miss reporting is a means of proactively reporting events that could have resulted in an incident but did not because of timely intervention. Near-miss reporting allows the hospital to identify and remedy potential incidents before harm befalls any patient.

The process for risk identification, analysis, treatment, resolution, and prevention are governed within its policy and procedure guidelines.

EMPLOYEE SICK LEAVE POLICY and EARLY RETURN to WORK

KSMC provides sick leave to contracted employees for the purpose of providing wage protection in case of sickness and injury. Terms and conditions of sick leave benefit vary depending on the type/nature of illness and/or injury as supported by a sick leave certificate or medical report.

NURSING

Principles of Safety


1. Staff awareness, education and compliance to the following hospital wide employee safety programs:
 - a) Immunization Program
 - b) Needle Stick Injury Prevention
 - c) Back Care Program
2. Staff awareness, education and compliance to the following Hospital Administrative Policy & Procedure Guidelines:
 - a) No Smoking (APP - KSMC - 011 - V3)
 - b) Neglect and Abuse (APP - KSMC - 032 - V2)
 - c) OVAR Reporting (APP - KSMC - 005 - V3)
3. Staff awareness, education and compliance to the following Nursing Administrative Policy Procedure Guidelines regarding Medication Administration (APP - KSMC - 158 - V2).
4. Staff awareness, education and compliance to Infection Control Policy and Procedure Guidelines.
5. Safety related responsibilities of the Head Nurse
 - a) Environmental Rounds – report any environmental variations.
 - b) Equipment Preventive Maintenance Program – report any equipment failure/breakage.
 - c) Facility tour – report any variances or failure in

utilities.

Central Sterilization Supply Department (CSSD)

Since CSSD staff does not know the origin of contamination, it must be assumed that every item received in the decontamination area can pose as a risk.

1. **Cleaning** is the first and most important step in the sterilization process. **Decontamination** is the process by which contaminated items are rendered safe for handling by CSSD staff who is not wearing protective attire. It is the first and most critical step in breaking the chain of disease transmission. To prevent cross contamination and possible transmission of disease thru the contaminated item/supplies, appropriate attire (PPE), effective work practices, proper cleaning and disinfection procedures, and adequate staff training are very important.
2. **Staff Personal Requirements**
 - a. Adequate personal hygiene
 - b. Proper hand washing
 - c. Change wet/soiled garments immediately.
 - d. Wear proper attire-head cover, shoe cover apron gloves, and face mask.
3. **Cleaning of surfaces** is regularly scheduled and when needed spot cleaning of soiled areas are carried out. Special attention to the sequence of cleaning is necessary to avoid transferring contaminants from dirty to clean surfaces.
4. **Collection and transport** of used supplies and equipment need to be contained using close door trolley or cart. When these items are received in the decontamination area, its transport should be in the same manner as not to contaminate the staff and the environment.
5. All **sharp items** must be separated and put into another container to prevent accidental cut or puncture and reduce blood borne exposure. The container must contain “biohazard label” and needs



to be visible to the worker.

6. **Prior to packaging the instruments**, it must be carefully inspected for cleanliness, proper functioning and alignment. Instruments that are non-functional are taken out for repair or marked as condemned.
7. **Sterile Packing** – After instruments and devices are cleaned, dried and inspected those requiring sterilization must be properly arranged and assembled. Items may be wrapped separately as a group or sets and be placed in a tray for sterile access and aseptic presentation during sterilization.
8. **Packaging** – includes all types of materials available for healthcare use that are designed to wrap, package and contain reusable supplies and medical devices for sterilization, storage and aseptic presentation. By protecting sterile supplies from microbiological contamination, packaging reduces the risk of hospital acquired infection. Knowledge of packaging principles is a major responsibility of CSSD staff.
9. **Maintenance of Sterility** – The sterility of the contents is maintained until it is intentionally opened. This concept of sterility maintenance is called “Event Related” which means that the package is sterile unless it is torn, damaged or wet.
10. **Equipment Monitoring**
 - a. Equipment usage monitoring is generated for each piece of equipment, to include its aggregate summary by equipment type. Daily checks and operates this equipment’s for efficient functioning.
 - b. Preventive maintenance forecast and completion – the system generates list of equipment’s that is due for preventive maintenance, past completion, including date of equipment removal and need for repair and parts.

HOUSEKEEPING

1. Use only the specific amount and type of cleaner for a particular job. Excessive quantities or the wrong type may cause accidents, or the article/ item being cleaned will be damaged.
2. Use only relatively safe organic solvent degreasing agents and spot removers.
3. Use of gasoline, benzene and carbon tetrachloride are prohibited.
4. The least toxic and least flammable types of spot cleaners should be used for removal of water immiscible substances.
5. Use only approved solvents, e.g. high flash point solvents or relatively low toxicity liquids such as methyl chloroform.
6. Do not mix cleaning solutions, e.g. chlorine bleach and vinegar; toilet bowl cleaner or ammonia will produce chlorine dioxide which is extremely toxic.
7. Do not pour water into acids or alkalis. The mixing of acids or alkalis may produce a violent reaction.
8. If foreign substances spray into the eyes/ skin, flush the area with considerable quantities of water for at least 10 minutes and seek medical attention immediately.
9. Use only slip resistant floor waxes. Any floor coatings used on a conductive floor must be approved and checked for conductivity.
10. Label all containers for cleaning agents and flammable liquids and shall be handled in approved safety cans
11. **Insect and Pest Control** – There are specific guidelines for the use of pesticides to control

insects, rodents and other vermin. It is important that their use is minimized by eliminating the opportunity for pests to enter the building, sources of harborage and food.

Collection and Disposal of Waste and Trash

1. Ensure all materials and wastes are labeled.
2. Wear gloves.
3. Never dig into a waste basket.



4. Close plastic liners securely before transferring a wastebasket contents to collection receptacles.
5. Grasp a waste basket by the sides and tip to let contents fall into the receptacle.
6. Dispose of broken glass in accordance with established procedures in a separate container labeled "Glass only".
7. Chemical spills should be reported and absorbed with suitable material and neutralizing agents.
8. Pathologic spills should be restricted, cleaned up immediately by employees wearing protective masks, gowns, and gloves, and suitable disinfectants should be applied immediately.
9. Follow the hospital waste color coding system.



FOOD SERVICE

1. Do not overload trays or liquid containers. Place the heaviest objects and liquid containers in center to keep them from falling or spilling.
2. Clean up spilled food promptly. Floors should always be dry.
3. Remove trays as soon as possible after patients had finished their meals.
4. Be cautious when wheeling food carts; use extra care at intersecting corridors.
5. When passing through doorways always pull, not push the carts through the door.
6. Only authorized persons shall operate the powered vehicles and adhere to the policies and procedures regarding its operation. Do not let the cart block corridors or doorways.
7. Slicing, chopping, mixing machines, and other equipment's should have guards and be used each time the machine is operated.
8. Electrical equipment should be grounded. Do not use adaptors.
9. Keep pots and pans for loose handles.
10. Inspect pots and pans for loose handles.
11. Report any signs of skin irritation to the Supervisor.
12. Leaking or sweating pipes should be reported immediately.
13. A "Wet Floor" sign should be posted to alert all employees.
14. Prevent back flow of floor drains.
15. Keep appliances and equipment from accumulating a film of grease which could



ignite.

16. Remove grease drippings from broiler trays immediately after each use.
17. Keep the oil level of deep fryers at least three inches below the top.
18. Remove spilled fats, oil, sugar, sauces and other flammable substances from grills or ranges.
19. Food handlers with cuts or intestinal ailments should not handle food.
20. Food handlers should wear hairnets.
21. For walk-in coolers and freezers, ensure floor units are in good condition. Ensure door, lock system and alarm work safely.

Thermostat and monitoring device should be operational. An inspection record shall be maintained.

22. Classification of storage for materials and weights should be followed and maintained.
23. Employee training in the operation of all types of machines should be conducted before employees are assigned to work with specific equipment. Training documents should be maintained.

LABORATORY

Chemical Hygiene Plan (CHP)– is a written program that sets forth work policies, procedures and practices that are capable of protecting employees from the health hazards presented by chemicals used in laboratories. The CHP is revised as laboratory operations and procedures change and can be done on a yearly basis, or when necessary.



1. Only authorized persons are allowed in the laboratory
2. Never work alone in the laboratory or chemical storage area.
3. Laboratory employees are provided proper medical examination.
4. Circumstances under which prior approval from your supervisor must be obtained before a particular laboratory operation is performed.

Methods of Hazard Identification– Ensure knowledge of container labeling and Material Safety Data Sheet (MSDS). All chemical containers must be completely and accurately labeled. The labels on the incoming container of hazardous chemicals must not be removed or defaced.

The MSDS received with incoming containers must be kept and made easily available to anyone working in the laboratory that might be potentially exposed to the material.

Handling Patient Specimens

1. All samples must be treated as potentially infectious and should be handled as if they are capable of transmitting disease.
2. Use both hands when handling large bottles, and never lift them by the top alone.
3. Wrist jewelry, watches and rings should not be worn when handling infectious materials.
4. No drinking, eating or applying cosmetics in laboratory.



Handling Chemicals

1. Uses both hands when handling large bottles and never lift them by the top alone.
2. The use of chemicals producing noxious odors or vapor must be confined to fume hoods.
3. Water immiscible organic solvents must be collected (e.g. in beakers) taken to a fume hood for evaporation.
4. Chlorinated organic solvents (dichloromethane, chloroform, carbon tetrachloride) must not be mixed with other water immiscible solvents. They should be evaporated in the fume hood separately.
5. Phenol and phenol/chloroform mixture must be used in fume hoods, not in the open air.
6. It is not acceptable to dispose water immiscible

organic solvents down the drain.

Storage of Chemicals

1. All chemicals should be placed in their assigned storage areas at the end of each working day.
2. Chemicals in storage are inspected on a regular basis.
3. Containers of corrosive chemicals are stored in trays large enough to contain spills.
4. Biological safety cabinets should be provided for the protection of employees who handle specimens containing known or suspected highly virulent microorganisms.
5. Refrigerators where flammable items are stored should be equipped with explosion proof motors.
6. Toxic chemicals, carcinogenic and teratogens should be kept in a locked cabinet accessible to authorized personnel only.
7. Explosive chemicals must be isolated from other chemicals and kept in a locked cabinet.
8. Only approved safety cans/containers should be used for flammable liquids
9. Always carry large containers of acids in an acid carrier.
10. Supplies of hazardous chemicals within the Laboratory should be kept to a minimum.

Processing of Chemicals

1. Care should be taken to segregate chemicals that react violently when mixed together, for example, ammonia and mercury, chlorine and ammonia, hydrogen, or metal powders, oxidants and most metal powders or flammable liquids, alkaline metals and water, and so on.
2. When working with flammable chemicals, be certain that there are no sources of ignition near

enough to cause a fire.

Disposal of Chemicals– At the end of each working day, the contents of all unlabeled containers are to be considered waste.

Preventive Maintenance of Equipment's

1. Eyewash fountains and safety showers are inspected at least monthly and records are maintained. Fume hood windows should be lowered at all times except when necessary to raise them.
2. The hood fan should be kept on whenever a chemical is inside the hood.



3. Centrifuges should be covered when operated.
4. When microtome blades are not in use, they should be store in appropriate a containers.
5. All electrical heating equipment's should be equipped with over-temperature shutoff controls.
6. Equipment's in the laboratory shall be checked for proper function periodically and records are kept on file.
7. Defective equipment shall be reported for immediate repair or replacement.
8. Use mechanical pipette aide to draw material into a pipette. Do not ever use the mouth to suck any material into a pipette.
9. Chain gas cylinders in place; if empty label them.
10. Never remove materials and equipment from one laboratory to another laboratory without permission.
11. Return each instrument to its prescribed space.
12. Protect hands when cleansing sharp objects or instruments.

HAZARDOUS MATERIALS CLASSIFICATION

HEALTH HAZARD

- 4-Deadly
- 3-Extreme danger
- 2-Hazardous
- 1-Slightly hazardous
- 0-Normal material

FIRE HAZARD

Flash Points

- 4-Below 73 F
- 3-Below 100 F
- 2-Below 200 F
- 1-Above 200 F
- 0-Will not burn



SPECIFIC HAZARD

- | | |
|------------------|-------------------------------|
| Oxidizer | OXY |
| Acid | ACID |
| Alkali | ALK |
| Corrosive | COR |
| Use NO WATER | W |
| Radiation Hazard | A ⁺ A ⁻ |

INSTABILITY

- 4-May detonate
- 3-Shock and heat may detonate
- 2-Violent chemical change
- 1-Unstable if heated
- 0-Stable



HYDROGEN PEROXIDE



LIQUID OXYGEN



SULFUR



NITROGLYCERINE



BUTANE

PHARMACY

1. **Review prescriber's original order**, refill or duplicate before dispensing the initial dose of medication.
2. **Fill only one prescription at a time** to prevent mislabeling and other errors.
3. **Exercise care in filling the prescription** of any tablet available in several sizes to others in appearance.
4. **Label medication** container with patient's full name, MRN physician name, amount, frequency expiry date and other restriction information before release to the patient.



5. **Check container labels three times**: when the container is removed from the shelf, when it is actually used, and when it is returned to the shelf.
6. **Maintain and update spill plan** with spill kit available at all times. All wastes from Chemotherapy medications shall be disposed of hazardous wastes.
7. **Handle cytotoxic drugs** with special precautions according to manufacturer's instructions.

8. **Periodic inspection** of all drugs stored and medication carts on nursing care units must be maintained and a record kept of all inspections to verify that:
 - a) Disinfectants and drugs for external use are stored separately from oral and injectable medications.
 - b) Drugs requiring special storage conditions to ensure stability are stored accordingly. For example, biological and other thermo-labile medications should be stored in a refrigerator in a separate compartment capable of maintaining the required temperature.
9. **Distribution and administration of controlled drugs** are documented.
10. **Emergency drugs** are adequate and there is an appropriate supply.
11. **Pharmacy refrigerators** are available for drugs. Ensure it is equipped with thermometers and the temperature range should be 2°C to 8°C.
12. **Explosive and Flammable Safety Measures**
 - a. Care should be taken to pour liquids below eye level and to avoid splashing.
 - b. Corrosive chemicals require extreme care. A bottled liquid should be poured at such an angle that it does not spill on the label and obscure it.
 - c. Whenever there is a heating process to material, it should be constantly attended.
 - d. To prevent breakage, delivery carts should be compartmentalized.
 - e. Discontinued and outdated drugs and containers that have illegible, worn labels or that lack labels should be disposed of through the incineration process.
 - f. Under no circumstances should the contents of partially empty bottles of a drug be combined.
 - g. Ether, alcohol and other flammables should be kept in safety containers and should be stored in secure areas.

RADIOLOGY

1. Mechanical/ electrical defects shall be reported immediately.
2. Before equipment's are put in operation, it is essential to ensure that all required procedures and guidelines will be followed.
3. Only authorized personnel shall be in the radiography room.
4. All persons must be properly protected.
5. Patients on wheeled stretchers must be secured.
6. A minimum of six feet should be maintained between staff and source of radiation.
7. The door should be closed when the radiography room is in use.
8. All radiological equipment's must be calibrated periodically.
9. X-ray machines should be checked regularly to ensure proper positioning of secondary radiation filters.
10. Stored film must be kept in metal storage cabinets.
11. All inspection results shall be maintained in written records.



Diagnostic Radiology

1. Equipment is energized from a control booth.
2. An x-ray room is to be used only for one radiological examination. Except for those persons whose presence is essential for the examination, no person should be in the x-ray room when the exposure is carried out.
3. Operators remain inside the control booth or behind protective screens during an x-ray exposure. In cases where this is impractical, protective clothing must be worn.
4. When there is a need to support children or weak patients, holding devices should be used. If parents, escorts, or other personnel are called to assist, they must be provided with protective aprons and if possible, protective gloves and positioned so as to avoid the primary beam.
5. All entrance doors to x-ray rooms must be kept closed while a patient is in the room.
6. The entrance doors of x-ray rooms must be labeled with warning sign "Caution x-rays."
7. Radiology personnel to wear dosimeter (film badge on TLD monitor.)

Dental Radiology

The operator should always energize the x-ray tube from a location where he is adequately protected. The risk of radiation exposure in dental radiology is much lower because of a lower output of the x-ray tube. Safety guidelines are the same as that of diagnostic radiology.

Radiation Safety


1. Avoid excessive hurrying, assuming awkward positions that might hinder your efficiency is performing a task, or causing undue harm to the patient.

2. Maintain distance from the patient.
3. Disposable gloves should be worn to perform routine patient care and when handling potentially contaminated items, such as dressings, urine, containers and others.
4. Whenever a patient receives Iodine-131(¹³¹I) therapy, an appropriate Physician Order Form will be completed and placed in the patient' chart. Affix "Caution Radioactive Materials" label to the chart. Post sign "Caution Radioactive Materials" label to the chart. Post sign "Caution Radioactive Materials" on the patient's door. Instruct the staff not to remove any material from the patient's room.
5. Unless it is necessary, a bath should be postponed for the first 48 hours for Iodine-131 (¹³¹I). If possible, the patient should bathe himself and should rinse the shower or tub thoroughly afterward.
6. Nursing care is to be restricted for the term of the treatment to those activities essential to the well-being of the patient.
7. If special nursing care is required, the problem will be worked out by Nuclear Medicine, and the unit Head Nurse will be informed.
8. Disposable dishes and utensils should be used.
9. Telephone in the patient's room should be covered with a small plastic bag to prevent contamination.
10. Toilets facilities in the patient's room should be used. Instruct the patient to flush the toilet three times to clear the waste lines and dilute the radioactivity. The sink should be rinsed after use, especially after brushing teeth.
11. Housekeeping should be done only under the supervision of Nuclear Medicine or Infection Control staff.

12. If a patient who has received Iodine-131 (^{131}I) should vomit or be incontinent during the first 48 hours, call Infection Control and Nuclear Medicine staff immediately. Do not attempt to clean up the spill. Take interim steps to check the spread of contamination as follows:
 - a) Restrict the area; allow no one to enter except for urgent treatment of the patient.
 - b) Keep people two meters from the spill
 - c) Persons who have been in the contaminated area should stay there until it has been surveyed and cleared.
13. For MRI procedures, all metal objects must be removed before entering the MRI scan room.
14. Personnel should be aware on the policy and procedure for equipment and area decontamination in the preparation and injection of radiopharmaceutical. The decontamination Kit should be kept supplied and ready for use at all times.
15. At the conclusion of the use of a room for this type of therapy, prior to having the room cleaned, a radiation survey must be done.

ANESTHESIOLOGY

1. Anesthetic apparatus must be inspected and tested by the anesthetist before use. If a leak or any defect is observed, the equipment must not be used until the fault is repaired.
2. When electrical equipment (cautery or coagulation equipment) employs an open spark, and is to be used during an operation, only non-flammable agents shall be used for anesthesia or for the pre-operative preparation of the surgical field.
3. The results of any required monthly conductivity testing shall be made known to personnel who work primarily in these areas.
4. Each anesthetizing location shall be identified by a




prominently posted permanent sign, clearly stating whether the anesthetizing location is designed for non-flammable anesthetic agents.

5. All equipment's intended for use in anesthetizing areas should be labeled by the manufacturer to indicate whether it may be used in a flammable anesthetizing location
6. The condition of all operating room electrical equipment's shall be inspected regularly preferably on a monthly basis and a written record of the results and any required corrective action shall be maintained.
7. Anesthesia personnel shall familiarize themselves with the rate, volume and mechanism of air exchange within the surgical and obstetrical suits as well as with humidity control.
8. Each anesthetizing area should be provided with an isolated power system and each O.R. should be provided with its own isolation transformer.

SURGERY

1. All isolated electric power supplies should be equipped with a line isolation monitor that is tested weekly.
2. If any equipment is dropped or has liquid spilled on its surface, Biomedical Department shall be notified and shall test the equipment prior to further use.
3. There are written policies and procedures established for testing all electric and electronic patient-care equipment's, with particular emphasis on life-support equipment.
4. There are written procedures indicating the type of action to be taken during the failure of essential equipment and major utility services.
5. Operating rooms shall be maintained at a positive




pressure relative to surrounding areas.

6. Operating room personnel who wear surgical garments outside the surgical suite shall not be
7. Allowed to re-enter without changing garments.
8. When Povidone, or similar is used, the following shall be practiced:
 - a. Patients should wear hats intra operatively.
 - b. Staff should attend an in service on how to apply Povidone as per manufacturer's instructions.
 - c. Apply Povidone solution to operative site per manufacturer's instructions.
 - d. Place absorbent towels underneath the patient for prepping, to absorb excess prep solution. Remove and discard after completion of prep.
 - e. Wait for solution to completely dry before beginning the procedure.
9. There should be a written procedure for the disposition of residual ether in the anesthesia machine or unused ether in containers that have been opened.

LASER THERAPY

1. A physician properly accredited to perform laser techniques will be designated operator for the procedure.
2. Secure the laser when not in use. Lasers should never be left unattended during operation. During set-up, avoid aiming the beam into potentially occupied areas.
3. Position the laser so that the beam is directed towards the wall if the patient is not positioned in the beam path.
4. Do not permit persons to the side or behind operator during laser treatment unless they wear eye protection.
5. During laser operation, laser warning signs shall be



posted at the door and the door shall be closed. Warning signs should also be attached to the equipment.

6. At all times that a laser is in use, all personnel in the room, including patients, must wear eye protection for the appropriate optical type of laser being used prior to powering the laser system during the entire procedure.
7. Ensure laser is on standby when not in use.
8. During set up, avoid aiming the beam into potentially occupied areas.
9. Flammable or combustible material should not be stored in areas of laser use.
10. Medical surveillance for all persons working with lasers should be established and maintained.
11. The physician shall test the focusing and limits of the power range intended for the procedure before using the laser.
12. Flammable anesthetics must not be used in conjunction with laser surgery.
13. The anesthesiologist shall be knowledgeable of the procedures to follow in the event of an endotracheal tube fire.
14. Routine inspection, cleaning and preventive maintenance shall be conducted in pre-scheduled program by the Biomedical Department.

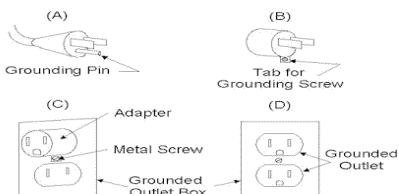
MEDICAL EQUIPMENT SAFETY

1. Procedures for monitoring equipment performance includes the following:
 - a) Data collection and documentation.
 - b) Data analysis to detect biomedical problems and to find ways to strengthen the equipment management program.

2. Equipment inventory on a database to include all patient care equipment, regardless of ownership.
3. Testing procedures – Each type of patient care equipment identified in an inventory shall be tested and maintained for maximum performance.
4. Reporting and correcting device malfunctions for the safe delivery of medical care. Any sign of defect of equipment malfunction must be reported to the concerned department immediately.



5. Through training about the proper use, the capabilities and limitations of equipment. The training and education process shall begin with the initial decision to purchase equipment.
6. If medical equipment is dropped or has liquid spilled on its surface or inside, notify Biomedical Department.
7. Report to Biomedical Department any of the following:
 - a) damaged equipment
 - b) medical equipment, plugs or sockets that overheat when used
 - c) medical equipment that gives a shock



ELECTRICAL SAFETY

1. Do not overload electrical circuits or sockets.
2. Electrical adapter will provide to be used with lap top or cell phone.
3. Using adapter for medical equipment or any kind of heaters is strictly not allowed.
4. Do not use “octopus” adapters. Too many cords in one outlet can overload the circuit.
5. Keep all fluids and chemicals away from electrical equipment.
6. Never roll equipment over power cords.
7. Inspect all the outlet for cracks, signs of burning or looseness.



8. Know the electrical voltage in your area.
9. Be sure switches are in off position before plugging equipment into the outlet. Plug and unplug all electrical equipment by holding the plug cap.
13. In case of power outage or a planned electrical shutdown, make sure you know what procedures to follow ahead of time.
14. Losing electrical power can be a matter of life and death.
15. Avoid pulling out of receptacles by the power cord.

Always use the plug



16. Never touch Electrical Technician pulls the nearest manual station.
17. Avoid touching exposed metal surface with one hand and a patient with other hand.
18. Never touch electrical equipment with both hands while the power is on. This creates a natural current path across.
19. Always shut off valves when working with steam or hot water lines.

ELECTRICAL CHECKLIST

1. Are electrical connections tight?
2. Is wire insulation is in good condition?
3. Are machine and tools properly lubricated?
4. Only approved lamps used.
5. Is the work area clean?
6. Is equipment tagged out before testing or repair?
7. Is electrical equipment grounded?
8. Are plugs that fit the outlet the only ones used?



9. Are manufacturer's instructions for all electrical equipment followed?
10. Are only skilled maintenance personnel and licensed electrical performing electrical repairs?
11. Are all visible signs of damage to switches, meters, indicating lights, etc. inspected regularly?
12. Inspect power cord insulation for signs of fraying or damage.
13. Are plugs that fit the outlet the only ones used?
14. Are manufacturer's instructions for all electrical equipment followed?
15. Are only skilled maintenance personnel and licensed electrical performing electrical repairs?
16. Are all visible signs of damage to switches, meters, indicating lights, etc. inspected regularly?
17. Inspect power cord insulation for signs of fraying or damage.
18. Inspect the plug to make certain each prong is firm and straight.
19. Inspect the wall outlet for looseness or cracks in the cover plate. A damaged receptacle can cause a short circuit. Report it for immediate correction.



• تعرف على أماكن توصلات الأسلاك العلوية
Know where overhead wires are located !

• افحص الأسلاك للكشف
عن مواضع التلف
Check wires for
damage

• افصل التيار عن
المعدات
De-energize
equipment

• لا تستخدم السلالم
المعدنية في أعمال
الكهرباء

Never use metal
ladders around
electricity

• ارتد معدات الوقاية
الشخصية المناسبة

Wear the correct
Personal Protective
Equipment (PPE)

• استخدم الأسلاك
المؤرضة بطريقة
صحيحة

Use correctly
grounded cords

• صليح الاعطال
Repair defects

• سحب المقابس
ولا تسحب السلك
Pull the plug,
not the cord

• لاحظ جميع
علامات التحذير
Observe all
warning signs

• استخدم مصادر طاقة
محمية بقواطع دوائر
لاعتقال الارضية في
الامثال الرطبة

Use ground fault
circuit interrupters
(GFCI) protected
circuits in damp

• لا تحمل المقابس
باكبر من طاقتها
Don't overload
electrical outlets



لا تلاتي .. هذا المصير

اتبع قواعد السلامة لهمايتك من اخطار الكهرباء أياً كان محل عملك

Don't end up like ...

Practice electrical safety wherever you work.

HEAVY EQUIPMENT/MATERIAL HANDLING

1. Plan ahead when moving equipment. Determine places to stop and rest. Make sure the object is stable, has no sharp parts and, it is not too high for clear vision.
2. Use mechanical aids and get help. Break the load into smaller parts if possible.
3. When moving things from high places, use the right equipment to do the job. Push the load to check how heavy it is and get help if necessary.
4. Move drums, barrels and cylinders cautiously using a hand truck.
5. Use proper lifting techniques.

How to lift and Carry Equipment's/Materials

1. Take the following precautions.
 - a. Ensure the floor is clean and dry.
 - b. The object to be moved has no jagged edges, is not slippery and has no protruding nails or silvers.



- c. Wear gloves to get a better grip and protect your hands.
2. Team / Group Lift
 - a. Adjust the load for even weight distribution.
 - b. Test the lift before proceeding.
 - c. Each person has an equal part of the load.
 - d. Lift slowly and smoothly.

3. A toolbox or holder is the safest way to carry tools and not by hands.




Gas Cylinder Handling

1. Cylinders must never be dropped off or rolled off the tailgate of the delivery vehicle. A suitable lifting device such as a forklift truck or crane must be used. After offloading, cylinders must be stood upright and secured.
2. All gas cylinders, when full must be stored in the upright positions.
3. All gas cylinders, when full, must be chained in position to solid wall or support member.
4. Non-flammable gas should not be stored with flammable gas.



5. All gas cylinder valve protection sealed caps are supplied; they should be secured tightly in place unless the cylinder is connected for use safety caps should be always on the valve when not in use to protect the thread.

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6. No Smoking or open flame in areas where gases are being used.

Forklift Operation

1. Operators should have a valid Saudi driving license.
2. Only authorized persons with documentation shall operate the forklift.
3. Strict supervision to ensure both safety and usage aspects are adhered to is required.
4. Forklifts are not designed as road carriers. They should only be utilized in the immediate area of operation such as warehouses and the immediate hospital area as necessary.
5. A safety checklist for forklift operators should be developed.
6. When you are in the driver's seat, adhere to the following safety rules.
 - a) Check the state of the battery.
 - b) Check the conditions of the tires, if pneumatic tires are fitted, check the pressure.
 - c) Check that all controls and instruments are in good working condition.
 - d) Never exceed the rated capacity of the forklift.
 - e) Always spread the forks to the widest possible adjustment for maximum stability.
 - f) Make sure the load is stable and will not shift when traveling.
 - g) Never pick up a load on a broken pallet or boxes in poor condition.



- h) Do not push boxcars or other vehicles with a forklift.
- i) Always keep arms and legs inside the forklift to prevent injury.
- j) Be aware of the overhead clearances in your work area.
- k) Known the height of the mast.
- l) Ensure that the overhead guard is in place.
- m) Look over both shoulders before backing up.

Storage of Materials

1. The lower shelves in storage areas shall be either sealed for any dirt or dust accumulation.



2. Materials will not be stored in front or around fire alarm, water valves, electrical panels, or safety equipment.

3. Materials storage height will be such as not to interfere with lighting fixtures, fire suppression equipment or other building systems and equipment and must be a minimum of 40cm below from the ceiling level or sprinkle nozzle level where fitted; 20cm above the floor, away from dust or water spills; 5cm from walls, to have enough space for fire extinguishing agents.

TRANSPORTATION

1. Never work under the vehicle or start the engine while the jack is being used as the only means of support.
2. Do not rely on a jack when working under the vehicle. Always use approved jack stands to support the weight of the vehicle.
3. Do not attempt to loosen extremely tight fasteners i.e., wheel lug nuts, while the vehicle is on a jack. It may fall.
4. Do not attempt to drain the engine oil until you are sure it has cooled to the point that it will not burn you.
5. Do not allow spilled oil or gases to remain on the floor. Wipe it up before someone slips on it.
6. Do not attempt to lift a heavy component alone, get someone to help you.
7. Do not rush or make unsafe shortcuts to finish a job.
8. Do get someone to check on you periodically when working alone.





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