VISION رؤيـــة 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

KEEP YOUR LABORATORY

Version.1



Swipe to Learn

SAFE

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Table of contents

Content	Pg
Laboratory Safety Program	2
Introduction of Biosafety Program	3
Restricted Laboratory Access	4
Visitors and Contractors Safety	5
Safety Training	6
Chemical Hygiene Plan	7
Disposal of Chemical Waste Process	8
Safety Data Sheets (SDS)	9
Hazards Material Risk Reduction/ Elimination Plan	10
Personal Safety	11
Prevision of Safety Equipment	12
Emergency Preparedness /Disaster Plan	13
Emergency Coding Colors	14
Internal Disaster	15
Remember the R.A.C.E	16
Remember the P.A.S.S	17

Table of contents

Content	Pg
Electrical Safety	18
Power Failure	19
Non Smoking	21
Formaldehyde Policy	22
Mercury Policy	23
Xylene Policy	24
Emergency Eyewash And Shower Equipment's	25
Compressed And Flammable Gases Control	26
Pest Control	27
Fire Prevention and Control Plan	28
Fire Extinguisher	29
Fire Blanket	30
Fire Alarm System	31
Fire Drill	32
Emergency Light and Exit Signs	33
Ergonomic Plan	34
Monitoring Safety Program	35

LABORATORY SAFETY PROGRAM

SAFETY

To Provide:



1. Understanding of safety procedures
2. Define responsibilities
3. Ensure safe environment for all departments of laboratory medicine personnel, visitors volunteers & trainees
4. Insure compliance with all OSHA and other federal, states, and local regulations and standards that effect Laboratory workers

لضمان بيئة عمل آمنه داخل المختبر للعاملين والزوار والمتدربين
وغيرهم يجب إتباع وفهم معايير ومتطلبات السلامة المهنية

The Laboratory Director and Laboratory Safety Officer are responsible for ensuring compliance with the safety program and providing the necessary resources to implement the program

INTRODUCTION Of SAFETY PROGRAM



THINK
SAFE
WORK
SAFE
Be SAFE





Safety Starts Here

1

Applies to all staff to ensure optimal safe environment

2

The management of the laboratory committed to the safety of all employees and to provide safety in working places and environment.

3

Safe practices and safety rules are the responsibility of both the employer and the employee



تقوم إدارة المختبر وقسم السلامة بالمتابعة والإشراف للتأكد من تطبيق معايير السلامة بجميع اقسام المختبر

RESTRICTED LABORATORY ACCESS

SAFETY



Persons authorized to enter the laboratory on a routine basis:

- These are employees of the lab working in the various sections of the laboratory during their work shift periods.
- However, non-laboratory personnel (e.g., visitors, vendors and contractors) can obtain access on a temporary basis from the laboratory security office.

الأشخاص المرخص لهم بدخول المختبر بشكل روتيني:

- دخول المختبر للعاملين بالمنشأه فقط.
- الزوار والمقاولين وغيرهم يحتاجون لإذن من مكتب الأمن والسلامه او الإداره.



VISITORS & CONTRACTORS SAFETY

SAFETY

- Should provide the most safety guidelines to all visitors and all contractors also all employees to reduce risks to them, while they are in the lab to protect themselves from hazards and behave safely
- All management and employees have the responsibility to ensure that this policy is enforced
- All Visitors and Contractors must comply with this policy or they should not stay on the lab premises

- يجب أن يحترم الزائر والمقاول قوانين المنشأه فيما يخص السلامه
- يجب أن يقوم الزائر أو المقاول بتعبئة النموذج الخاص قبل دخول المنشأه



1 Compliance with established laboratory policies and procedures

2 Ensure a safe visiting and working environment.

Safe Work Environment

SAFETY TRAINING

SAFETY



Start Training
Staff, Visitors, Trainees
to maintain a safe and
healthy environment

Through:
Orientation
Safety Lectures
Training Drills:
RACE, PASS
Head of Command
Center

The head of the lab is responsible for ensuring the units are comply with this general lab safety Training policy

Comply with general laboratory safety policy

يجب ان يكون هناك محاضرات و ورش عمل لضمان تطبيق معايير ومتطلبات السلامة داخل المختبر مما سيؤدي الى رفع مستوي المعرفة لدى العاملين في المنشاه وهذا سيقود الى تحقيق الهدف المنشود من الجهود المبذولة من فريق السلامة في المختبر

All Staff engaging in potentially hazardous operations in the laboratory are obligated to participate in the laboratory safety.

Safety officer achieve the goal of training and all supervisors are accountable to ensure compliance with this policy

Safety officer and coordinators are responsible for assisting safety officer in establishing clear local procedures that effectively identify laboratory workers and track their training requirements and their completion

CHEMICAL HYGIENE PLAN

SAFETY

Labeling Chemicals Process

Compliance with established laboratory policies and procedures

Info required to recognize hazards in the workplace and to protect themselves and others from these hazards.

All chemicals in the clinical laboratories must be labelled, workplace or laboratory label make

يجب وضع العلامات المطلوبة لتعريف المواد الكيميائية

Chemical Inventory Process

Compliance with established laboratory policies and procedures

Maintain Inventory List of all Controlled/Hazardous/ materials

In the event of a fire, or other emergency Inventory List of all Controlled/Hazardous/ Designated materials can be a helpful.

يجب إتباع متطلبات حفظ وتخزين المواد الكيميائية بالطريقة الصحيحة

Handling Chemicals Process

Compliance with established laboratory policies and procedures

All laboratory personnel must be able to safely handle chemicals belong to the six different hazard classes

Minimize the risk of exposure and good management to hazardous substances.

يجب مراعاة سياسات نقل المواد الكيميائية داخل المنشأه

Safe Work Environment

DISPOSAL OF CHEMICAL WASTE PROCESS

SAFETY

تطبيق سياسة التخلص من المواد الكيميائية بإتباع توصيات الجهات المعنية بذلك (التنظيمات الدولية والمحلية)

Chemical waste includes: flammable liquids, acids and bases



Compliance with established laboratory policies and procedures

GCC rules & regulations

Providing safety from hazardous medical waste for all workers and our environment

Safe Work Environment

The disposal of chemical waste shall be done in a manner that is safe, environmentally sensitive and compliance with the lab policies, government regulations and legislation

SAFETY DATA SHEETS (SDS)



Safety data sheet (SDS)



- The purpose of this policy is to explain the department's guidelines governing.
- To provide information for all Laboratory staff to identify and learn how to handle a chemical, any hazard may present and how to protect them from these hazards by reading SDS.



- Laboratory staff should be familiar with the SDS sheet.
- SDS is available in the work area.



لتسهيل التعامل مع المواد الكيميائية يجب الحصول على النشرة التعريفية لكل مادة يتم التعامل معها داخل المختبر

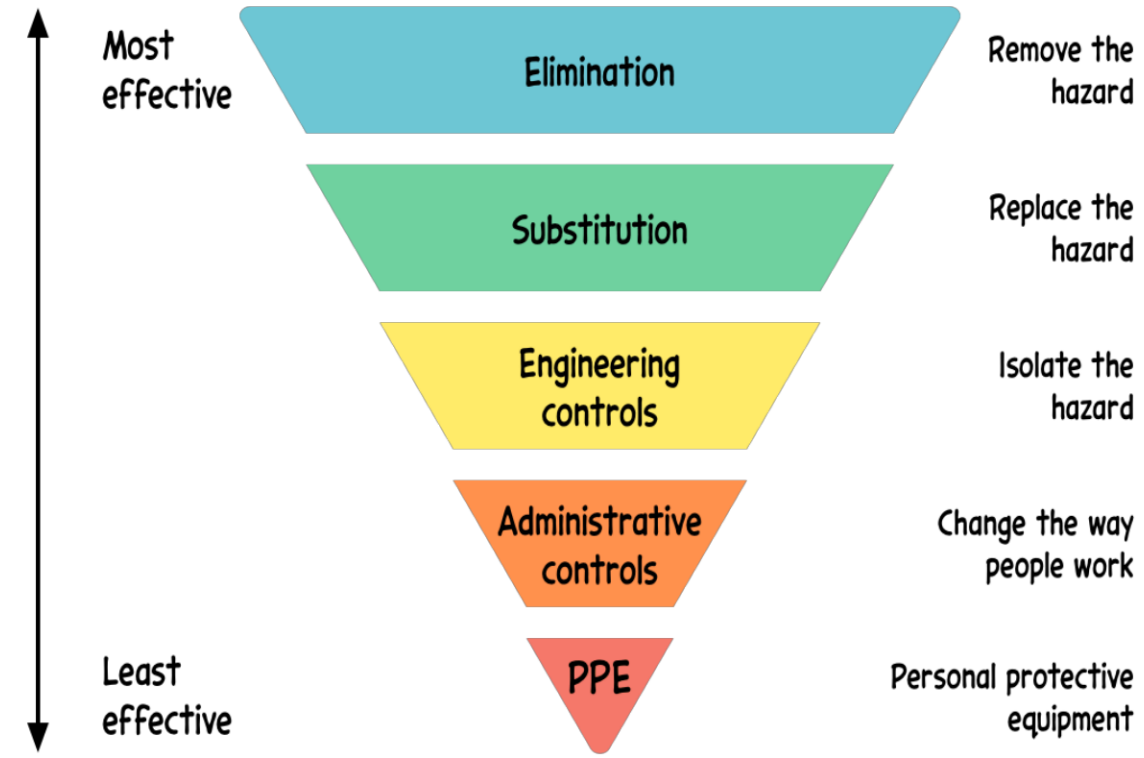


HAZARDS MATERIAL

RISK REDUCTION/ ELIMINATION PLAN

SAFETY

HIERARCHY OF CONTROLS



- Hazard identification and the steps taken to minimize the risks are a critical component of working safely.
- A hazard risk control plan will provide work safely.
- These plans require continuous evaluation to ensure that new hazards created by process changes are identified.

للتحكم والسيطرة على المخاطر الموجودة داخل المختبر يجب إتباع الخطوات المذكورة في هرم تقليل المخاطر



PERSONAL SAFETY



1. Know the emergency number to reach Security Services.
2. Be aware of what is going on around you.
3. Follow your instincts. If you feel you are at risk, try to leave the situation or area quickly.
4. If you are harassed, report the incident to security services.
5. Use the buddy system Plan to watch out for one another.
6. Lock your lab, room or office door even if you are leaving only for a few minutes.
7. Never prop open doors, even for a brief time/ this places you and everyone else in your building/area at risk.
8. Lock all purses, wallets cash and valuables in a locker, desk or cabinet.
9. If a trades person, repair person or courier requests admittance to your lab or office, ask for identification. If you are not satisfied with the person's credentials, refuse the individual access and direct him /her to your supervisor.
10. If an individual unknown to you requests or attempts to enter a locked/restricted area with you, refuse entry. Suggest to the individual, if you are told the employee's name, he/she wishes to visit, you will inform that employee that someone is waiting for them outside the secure area.
11. Report any unauthorized entry to locked or secure area to security services.
12. Be especially aware of maintaining security in your building/area after hours, and on weekends, holidays or vacation, when there are fewer people around.

لضمان السلامة الشخصية داخل المختبر يجب التأكد من تطبيق واتباع الإرشادات التالية:

- معرفة أرقام الطوارئ.
- تبليغ الجهة المعنية داخل المنشأة بأي حدث قد يشكل خطر عل سلامة العاملين.
- الحرص على غلق الأبواب عند مغادرة المختبر.
- حفظ المقتنيات في الأماكن المخصصه لها.
- معرفة هوية الأشخاص عند التعامل معهم داخل المنشأة.



PROVISION OF SAFETY EQUIPMENT

SAFETY



In the event of a fire or other emergency that requires efficient exiting of a building, it is imperative that safety equipment's and exit/emergency lighting are operational.

يجب على جميع العاملين في المختبر معرفة أماكن معدات السلامة وكذلك طريقة استخدام هذة المعدات

Eyewash



Emergency shower



A telephone



First aid kit



Spill kit



Fire Blankets



Fire Alarm



Fire Extinguishers



EMERGENCY PREPAREDNESS PLAN

SAFETY

Out-Source
Disaster Alert

Receive Alert:
Head of Command Center

Activate Alert through
(Safety and Security Room)
Activate Disaster Control Team

Disaster Coordinator
Implementing Disaster Plan

Head of Department
Implementing Disaster Plan protocol

Head of Dept. Inform:
Disaster Coordinator
Command Person
Disaster Control Room
Situation Clear

Command Person
announce CLEAR
Through
Communication
Control Room



في حال حدوث كارثة خارجية سيتم التعامل معها حسب الأدوار الموضحة لكل عضو في فريق إدارة الكوارث



EMERGENCY CODING COLORS

SAFETY

FIRE	Red
HAZMAT SPILL	Orange
CARDIAC ARREST	Blue
ARMED PERSON	Silver
EXTERNAL DISASTER	Yellow
INFANT/CHILD ABDUCTION	Pink
BOMB THREATNING	Black
SERVICE DISTURBENCE	Browne
CLEAR	cancellation notice
WEATHER	Gray
Mr./Mrs. STRONG	White

في حال حدوث أي مشكلة داخل المختبر سيتم الإعلان عن طريق قائد فريق الكوارث حسب نوع المشكلة بإتباع الرموز والألوان التي تبين نوع الحدث عند وقوعه

INTERNAL DISASTER

SAFETY

In the event of a fire, training schedule, or other internal disaster staff must be familiar with evacuation procedures and duties of designated personnel.

All laboratory and blood bank staff blood donors, trainees or visitors present in the laboratory during any type of emergency that requires the removal of individuals from the affected areas

Assistance for non-ambulatory personnel, patients and visitors are included

في حال حدوث أي مشكلة داخل المختبر يقوم العاملون بتوجيه الزوار والمراجعين للوصول الى نقاط التجمع الآمنة وذلك باتباع خطوات الإخلاء الصحيحة R.A.C.E



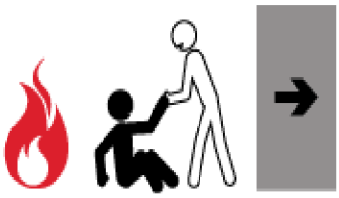
INTERNAL DISASTER

SAFETY

Remember the R.A.C.E

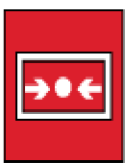
Rescue

Rescue any persons in immediate danger



Alarm

alert others by activating alarm and call ####



Contain

contain the emergency by closing doors



Evacuate

extinguish the fire if trained and safe to do so



INTERNAL DISASTER

SAFETY

Remember the P.A.S.S

Pull

Pull the pin (or other motion) to unlock the extinguisher.



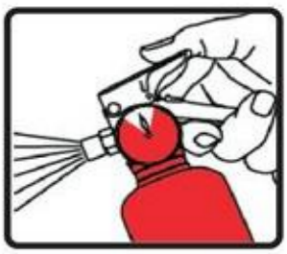
Aim

Aim at the base (bottom) of the fire and stand 6–10 feet away.



Squeeze

Squeeze the lever to discharge the agent.



Sweep

Sweep the spray from left to right until the flames are totally extinguished.



All laboratory personnel must learn how to operate a portable fire extinguisher.

ELECTRICAL SAFETY



- It is essential to have adequate knowledge of electrical safety as it applies to the various types of equipment used during operation, maintenance and trouble shooting.
- New, modified, or repaired equipment shall be checked for safe operation before being placed into service.
- These and all electrical devices used in the lab setting present a potential danger of injury due to electric shock, fires due to poorly installed or maintained systems and fires due to sparks serving as an ignition source for flammable or combustible materials.
- The policy provides direction for all staff to do their part to ensure a safe and healthy work environment.

Compliance with established laboratory policies and procedures

Precautions required when working with electrical equipment

Electrical Safety Tips

Safe Work Environment



- التأكد من سلامة الأجهزة المتصلة بالتيار الكهربائي ورفع مستوى الوعي فيما يخص التعامل مع مصادر التيار الكهربائي لتجنب حدوث أي صدمة كهربائية أو حريق ناتج عن إلتماس كهربائي .
- المحافظة على تخزين المواد القابلة للإشتعال بعيداً عن أي مصدر كهربائي .
- التأكد من عزل الأسلاك الكهربائية .
- عدم استخدام التوصيلات الكهربائية .



POWER FAILURE

SAFETY

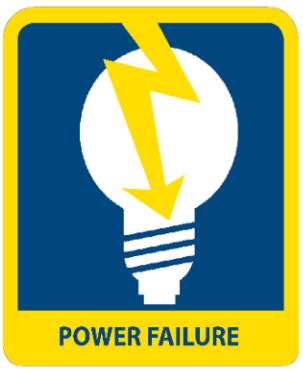
IN CASE OF POWER FAILURE IN THE LAB:

- If the electrical supply in the lab has been interrupted, the lab emergency generator will provide Power to the building within 30seconds.
- If the electrical supply to the lab has been interrupted, AND none of the emergency generator is started or they have stopped working, resulting in NO POWER available throughout the building. Battery Pack Emergency Lights and Systems Supplied with Back-Up. Battery Systems such as Uninterruptible Power System (UPS) Supplies will work for limited duration.

في حال انقطاع التيار الكهربائي إما :

- يبدأ مولد الطوارئ العمل على توفير الطاقة للمختبر خلال ٣٠ ثانية.
- في حال لم يتم بدء عمل مولدات الطوارئ فإن الإضاءات وبطاريات الطوارئ الإحتياطية (UPS) تعمل على توفير الطاقة لمدة محدودة.

Staff should be aware of actions to be taken in the event of a power failure



POWER FAILURE

SAFETY

RECOMMENDED ACTION IF YOU SUSPECT A POWER FAILURE:

1. In a part of the lab immediately, inform that your area has experienced a power failure, on emergency call (####)
2. Give your location, area/Department and describe the extent of the power failure (e.g. total or only some lights off, all or some equipment off, nothing works, only some lights have come back on, etc.).
3. Locating will determine if this is a LOCAL issue or a wide power problem based on the number of calls and their location.
4. If only a single area reports a problem, Non-Conforming Event Report (NCER), locating may conclude it is a local problem and will dispatch Building Services personnel to your Area/Department.

في حال وجود مشكلة كأنقطاع التيار الكهربائي يجب اتباع التعليمات التالية:

١. التبليغ والاتصال على رقم الطوارئ ####
٢. تحديد الموقع مع وصف نوع المشكلة
٣. سيتم تحديد حجم المشكله من خلال عدد البلاغات الواردة من خلال مكتب الامن والسلامة
٤. وفي حال البلاغ من قسم او جهة واحدة سيتم التعامل مع البلاغ بالطرق المتبعة لحل مثل هذه المشاكل ومن ثم كتابة تقرير وقوع حادثة (نسر)



NON SMOKING

SAFETY

All personal in the institution will flow the prohibition criteria of no smoking inside this laboratory even in the outdoor places or any place related to surrounding walls in the lab property

Any person will penetrate this law or rule will be punished by law

١. على جميع العاملين توقيع اقرار عدم التدخين في المنشأه
٢. في حال عدم الالتزام بساسية عدم الاتدخين في المنشأه سيكون هناك عقوبة مالية قدرها (٢٠٠ريال)



FORMALDEHYDE POLICY

SAFETY

This policy was developed to minimize exposure to formaldehyde.

Health Effects:

1. irritates the skin, eyes, throat, and respiratory system
2. an acute toxin,
3. a potential carcinogen.
4. can also cause allergic sensitization of the respiratory system and skin after an individual receives an initial high exposure.

A formaldehyde management system must be based primarily on exposure prevention.



يجب التقليل من التعرض لمادة الفورمالين وذلك لأثرها على الصحة كتهيج الجلد والتأثير على العين والجهاز التنفسي وكذلك تعتبر مادة سامه ومسرطنه

MERCURY POLICY

SAFETY

This policy was developed to eliminate the use of mercury in the lab

Health Effects:

Methyl mercury effects: impairment of the peripheral vision: disturbances in sensations (pins-and-needles feelings, usually in the hands, feet and around the mouth): lack of coordination of movements: impairment of speech, hearing, walking: and muscle weakness



Mercury is used in thermometers, oven thermometers, barometers, blood pressure cuffs, thermostats, fluorescent light bulbs and some electrical switches.



يجب التقليل أوالتخلص من مادة الزئبق وذلك لأثرها على الصحة كالتأثير على الرؤية والتركيز والإحساس والحركة وكذلك الكلام والسمع...الخ

XYLENE POLICY

SAFETY



Exposure to xylene can occur via inhalation, ingestion, eye or skin contact, and, to a small extent, by absorption through the skin



يتركز خطر الزيلين في حال استنشاقة او بلعه او ملامسة للعين والجلد
في حال تعرض احد العاملين لخطر الزيلين يجب ان يكون هناك تدخل طبي بصورة عاجلة وذلك على حسب نوع التعرض

Emergency procedures: In the event of an emergency, remove the victim from further exposure, send for medical assistance, and initiate the following emergency procedures:

Eye exposure: immediately flush the eyes with large amounts of water for a minimum of 15 minutes, lifting the lower and upper lids occasionally.

Skin exposure: the contaminated skin should be washed with soap and water. If irritation persists, get medical attention.

Inhalation: move the victim at once to fresh air and get medical care as soon as possible. If the victim is not breathing, perform cardiopulmonary **Resuscitation:** if breathing is difficult, give oxygen. Keep the victim warm and quiet until medical help arrives.

Ingestion: DO NOT INDUCE VOMITING. give the victim several glasses of water to drink. Get medical help immediately.

Rescue: All workers should be familiar with emergency procedures and the location and proper use of emergency equipment

EMERGENCY EYEWASH AND SHOWER EQUIPMENT'S

SAFETY

The purpose of the policy and procedure is intended to provide guidance concerning the minimum performance requirements, use test procedures, and training of emergency eyewash and shower equipment



التأكد من توفر معدات السلامة في حالات الطوارئ مثل محطات غسيل العين و دش السلامة

COMPRESSED AND FLAMMABLE GASES CONTROL

SAFETY

Compressed, liquefied and cryogenic gases are routinely used in laboratories. These guidelines are applicable to all workers and staff, and visitors at the laboratory who will be using and handling cylinders of compressed gases.

Compressed and liquefied gases have the potential for creating hazardous working environments.



تعتبر إسطوانات الغاز بكافة أنواعها المستخدمه داخل المختبر أحد مصادر الخطوره على العاملين والبيئة لذلك يجب الحرص أثناء التعامل معها والتأكد من صيانتها بشكل دوري

PEST CONTROL

SAFETY

The aim of this policy is to ensure that the lab is exposed to minimum risk relating to pest infestation.

١. للحصول على بيئة عمل آمنه يجب التأكد من خلو المنشأه من القوارض والحشرات

٢. التعاقد مع أحد الشركات ذات الإختصاص للقيام بعمليات الرش بشكل دوري



Its obligation to take necessary measures to prevent the risk of pest infestation in all lab to ensure good standards of pest control



There is a contract with pest company:

- Every tow month they cover the lab
- Whole inspection of premises

FIRE SAFETY

FIRE PREVENTION AND CONTROL PLAN

The purpose of this policy is to ensure fire prevention, is a functional process for eliminating hazards from the workplace in compliance with Occupational Safety and Health Administration (OSHA) regulations.





All staff of the laboratory are responsible for respecting this procedure to prevent fire and for familiarizing themselves with the locations of fire alarms and evacuation routes in the areas they occupy.

Emergency code announced

Apply R.A.C.E procedure and P.A.S.S

Partial Evacuation
Total Evacuation

Exits Routes to Assembly Points

Assembly Points All Clear Announce

- لضمان سلامة المختبر من مخاطر الحريق يجب ان يكون هناك خطة واضحة يتم التدريب عليها
- معرفة دور كل موظف في المختبر عند حدوث الحريق يسهل من عملية السيطرة عليه

FIRE SAFETY

FIRE EXTINGUISHER

- A fire extinguisher is a "first aid" device and is very effective when used while the fire is small.
- The use of a fire extinguisher that matches the class of fire, by a person who is well trained, can save both lives and property.





تعتبر طفاية الحريق من أهم
معدات السلامة في المنشأة لذلك
يجب التدريب عليها ومتابعتها
والحرص على إتباع الخطوات
الصحيحة عند استخدام أي طفاية
حريق P.A.S.S

FIRE SAFETY

FIRE BLANKET

- A fire blanket is a safety device designed to extinguish incipient (starting) fires.
- It consists of a sheet of fire-retardant material, which is placed over a fire in order to smother it





تعتبر بطانية الحريق من ضمن معدات السلامة التي يجب توفيرها في المنشأة والتدريب على طريقة استخدامها

FIRE SAFETY

FIRE ALARM SYSTEM

A fire alarm system has a number of devices working together to detect and warn people through visual and audio appliances when smoke, fire, carbon monoxide or other emergencies are present





- عند حدوث أي حاله طارئه كالحريق مثلاً سيتم تفعيل نظام الإنذار بشكل أتوماتيكي أو يدوي
- يتم متابعة وصيانة نظام أجهزة الإنذار بشكل دوري من قبل فريق الصيانه بالمنشأه

FIRE DRILL

SAFETY

The purpose of fire drills is to ensure the efficient and safe exit of facilities in the case of an emergency.

١. الهدف من عمل فرضية وجود حريق في المنشأه ومن ثم الإخلاء هو التأكد من ان جميع العاملين على اتم الإستعداد لمواجهة مثل هذه المشاكل

٢. القيام بعملية إخلاء افتراضية تساعد على التأكد من جاهزية معدات السلامة



1. Proper drills ensure orderly exit under control and prevent panic.

2. Order, speed in emptying buildings, and control are the primary purposes of the drill.

3. A fire drill is a method of practicing how a building would be evacuated in the event of a fire or other emergency.

4. Usually, the building's existing fire alarm system is activated and the building is evacuated as if the emergency had occurred

FIRE DRILL (EMMERGENCY CODE ANNOUNCED)

Apply R.A.C.E procedure and P.A.S.S

Partial Evacuation
Total Evacuation

Exits Routes to Assembly Points

Assembly Points
Announce
Clear

EMERGENCY LIGHTAND EXIT SIGNS

SAFETY



Emergency lighting' is the generic term for equipment that provides illumination in the event of failure of supply to the normal lighting.



Emergency escape lighting is defined as "that part of emergency lighting that is provided to enable safe exit in the event of failure of the normal supply".



Escape route: A route designated for escape to a place of safety in the event of an emergency.



Emergency exit: A way out that is used during an emergency



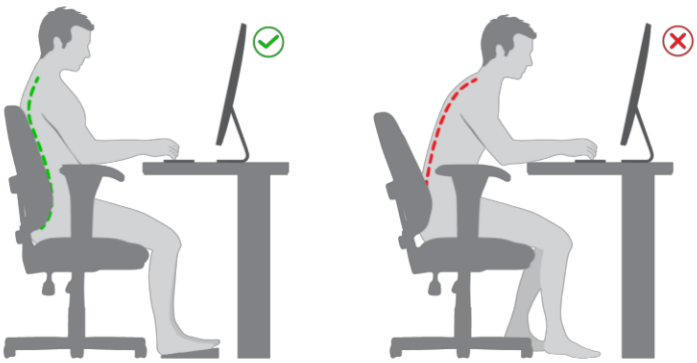
اثناء حدوث اي حاله طارئه
تتطلب إخلاء المنشأه سيكون
هناك علامات ارشادية مضيئه
تساعد في الوصول الى الأماكن
الأكثر آماناً (نقاط التجمع)

ERGONOMIC PLAN

SAFETY



يجب ان يكون هناك خطه
كامله للتقليل من إصابات
العمل الناتجه عن القيام
بالمهام اليوميه داخل المختبر



To help laboratory staff to reduce repetitive motion injuries and wrong postures in the laboratory environment during performing laboratory procedures in routine work.



MONITORING SAFETY PROGRAM

SAFETY



١. يكون هناك متابعه بشكل دوري لكامل المنشأه للتأكد من سلامتها
٢. الرفع بتقرير مفصل لصاحب الصلاحيه لإيجاد حلول للملاحظات المرصوده

The monitor the laboratory safety program in the lab to develop laboratory safety monitoring

Start Auditing:
Safety Officer or Safety Coordinators

Using Monitoring Checklist

REPORT FINDING TO:
Head of Laboratory
Other concerned

Approved Action by Head of Laboratory

رؤيـــة VISION 2030
المملكة العربية السعودية
KINGDOM OF SAUDI ARABIA

SAFETY
is
Everybody's
Business