

JAZAN UNIVERSITY

College of Applied Medical Sciences

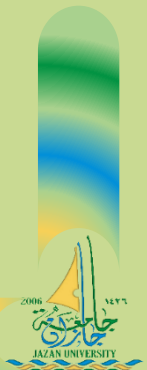
LAB SAFETY MANUAL



Respiratory Therapy Department



2018

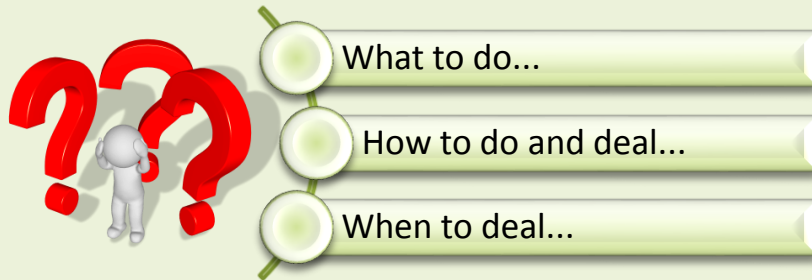


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INTRODUCTION

The clinical laboratories do exist in educational facilities to simulate hospital-based settings for students, faculty members, and clinical instructors. Here in the department of Respiratory Therapy, at the college of Applied Medical Sciences in Jazan University, almost 200 male and female students get exposed to respiratory dry laboratory every academic year. This Respiratory Therapy-Lab Safety Manual (RT-LSM) will guide the user on how to deal with dangerous materials and minimize the exposure to it. The RT-LSM is a reference document that also provides information on:

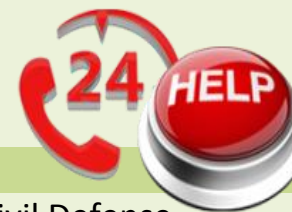


with unsafe laboratory equipment and chemicals exposure such as medical gases and sharp materials. Personal precaution is also required in the lab due to the existence of microorganisms that can be easily transmitted.



IN CASE OF EMERGENCY

WHO TO CALL FOR EMERGENCY



الدفاع المدني

998

Civil Defense

الهلال الأحمر السعودي

997

Saudi Red Crescent

عمليات أمن الجامعة

0173172193

Campus Security Police

مسؤول السلامة المناوب

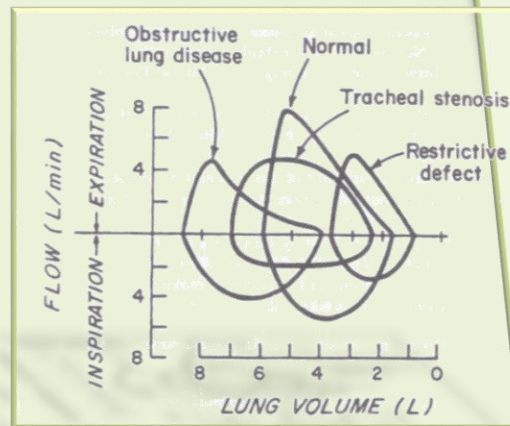
0567631333
0500747200

University Safety On-call

إدارة السلامة والصحة
المهنية بالجامعة

0173230072

Security and Safe
Management Dept



MESSAGE TO LAB INSTRUCTOR

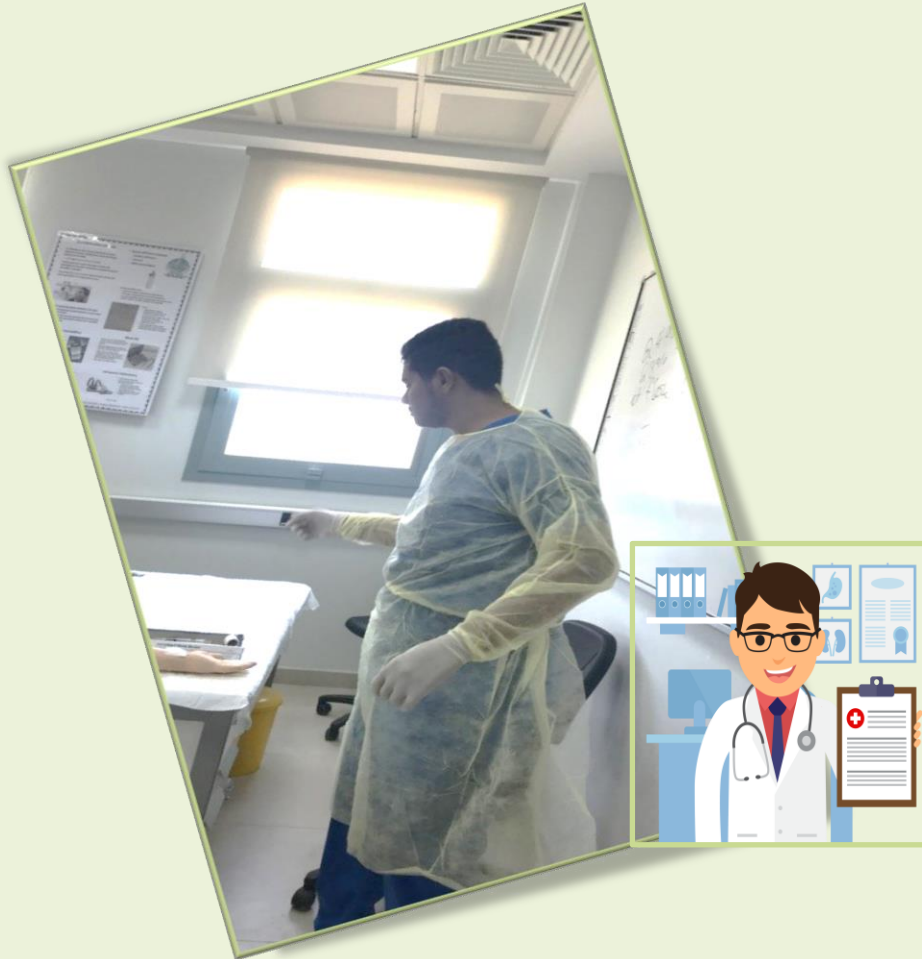
DEAR LAB INSTRUCTOR,



Being in direct contact with students gives you the opportunity to know the students as individuals, to know their strengths and weaknesses, to understand how they think, and to challenge them to improve. You have

the keys to help students develop higher-level thinking skills and problem-solving skills through active involvement, guidance and feedback. However, being a team member with other lab instructors and the faculty member in charge of the course gives you the opportunity to collaborate, share and discuss successes and problems which help in developing your work to its optimum. Responsibility, safety and professionalism are keywords that should accompany you all days in your lab journey. This RT-LSM opens the door to the appropriate safety procedures you should follow.

You are the key to make students' education a quality experience in a safe environment!



MESSAGE TO STUDENT

DEAR LAB STUDENT,



The lab offers you an opportunity to develop your team work, leadership, and communication skills. It builds your self confidence and helps you practice what you have learned so that you gain the required clinical skills. The lab helps you learn how to approach and analyze a problem, how to formulate questions and establish facts, how to determine the meanings

of observations, and how to reason. And being a member of the lab team puts on you a responsibility to learn and practice the required safety skills. This RT-LSM opens the door to the appropriate safety procedures you should follow.



LAB GENERAL RULES



NEVER EAT AND DRINK INSIDE

NEVER SMOKE INSIDE



NEVER USE THE CELL PHONE

**ALWAYS WEAR CLOSED-TOE
SHOE**



ALWAYS WEAR YOUR LAB COAT

ALWAYS WEAR YOUR PPE



**KNOW HOW TO LIFT HEAVY
OBJECTS**



DRESS CODE



Wear scrub suit or skirt that covers the legs.

Wear long sleeve lab coat.








Wear closed-toe shoes.

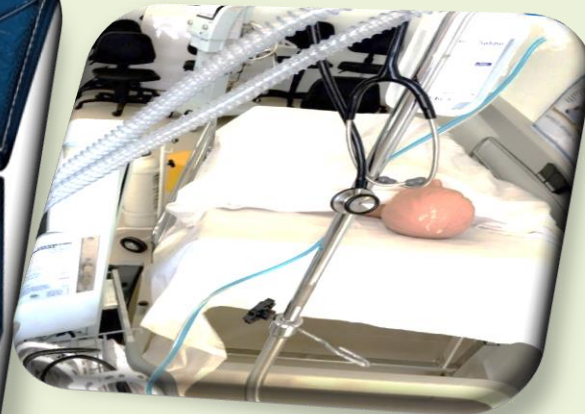
Confine long hair.

Secure loose clothing and jewelry.



LAB ORGANIZATION

-  **Keep your lab space clean and organized**
-  **Maintain unobstructed access to all exits, fire extinguishers, electrical panels, emergency showers, and eye washes**
-  **Keep bags in one place recommended by the lab manager**
-  **Do not store heavy items above table height. Any overhead storage of supplies on top of cabinets should be limited to lightweight items only**
-  **Turn off all ignition sources and lock the doors if leaving a lab unattended**
-  **Never work alone in laboratory**
-  **Put back all the materials to its original place**



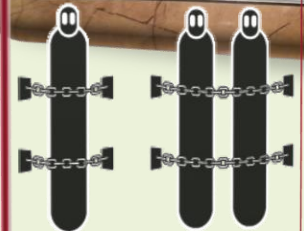
EQUIPMENT HANDLING

- Read labels carefully.
- Do not use any equipment unless you are trained and approved as a user by your supervisor.
- Do not try to use any of the lab equipment on yourself. This might spread infection.
- Return the equipment you use to its place after finishing from it.
- Don't misuse lab equipment or damage it. Be responsible!
- If at any time you are not sure how to handle a situation, ask your instructor for advice.
- **DO NOT TOUCH ANYTHING THAT YOU ARE NOT COMPLETELY FAMILIAR WITH!!!**
- It is always better to ask questions than to risk harm to yourself or damage to the equipment.





Restrain Cylinders



*Restrain no more than two cylinders in any restraint configuration

Secure up to two cylinders with
TWO chains at 1/3 and 2/3 height

TWO chains at 1/3 and 2/3 height
secure up to two cylinders with

SAFETY EQUIPMENT





MECHANICAL SAFETY



When using compressed air, use only approved nozzles and never directs the air towards any person.



Guards on machinery must be in place during operation.



Exercise care when working with or near hydraulically- or pneumatically-driven equipment.



Sudden or unexpected motion can inflict serious injury.



DEALING WITH GAS CYLINDERS

Follow the steps below when you deal with gaseous cylinders:



Read all information labeled on the cylinder to make sure you are using the proper gas.



Secure Cylinder cart with chain



Remove Cylinder Cap.



Crack cylinder valve by turning valve handle counterclockwise sharply and return to the off position.



Position valve away from you and others when cracking it.



Attach regulator with proper Compressed Gas Association (CGA) fitting.



Transport Cylinders with care.



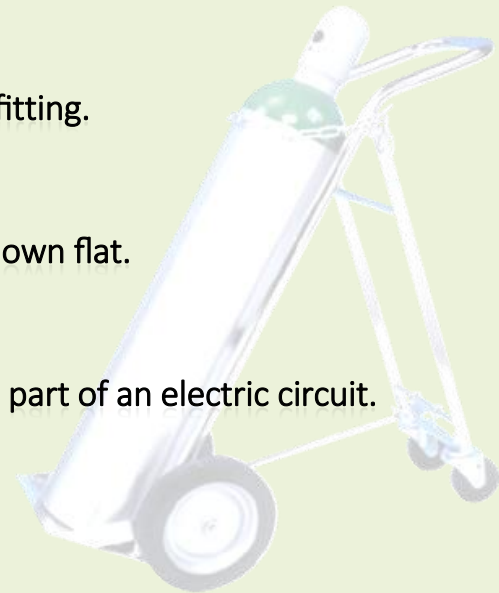
Leave cylinders in stand and stand cart up straight, have wheels down flat.



Do not place cylinder near heat source such as heating system.



Do not place cylinder near an electric outlet to prevent becoming part of an electric circuit.





NEEDLE SAFETY



All drawers with needles will be locked at the end of a lab session and containers, bags or equipment with needles will also be secured.



Needles provided for practice of injection are used in the lab only when the teaching assistants or faculty are present for assistance.



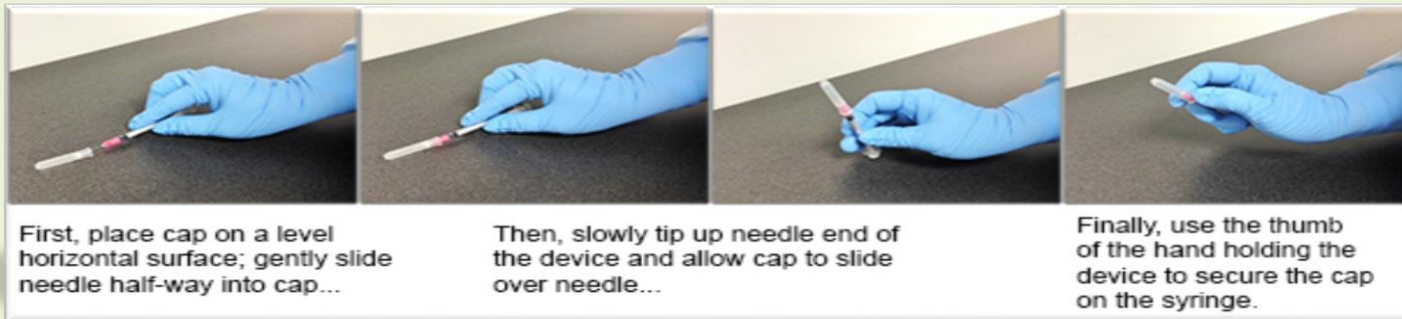
Students must demonstrate safety precautions while utilizing needles during practice as instructed in class.



Needles will never be recapped after use. Used needles are to be disposed in the Sharps containers provided throughout the lab space.



Needles and other sharp objects must not be discarded in the trash or left out openly in the lab at any time.



NEVER!!!





HAND SANITIZER



Apply a palmful of the product in a cupped hand, covering all surfaces;



Wet hands with water;



Right palm over back of left hand with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rub with clasped fingers of right hand in left palm, and vice versa;



Once dry, your hands are safe.



HAND WASH



Wet hands with water;



Apply enough soap to cover all hand surfaces;



Rub hands palm to palm;



Right palm over back of left hand with interlaced fingers and vice versa;



Palm to palm with fingers interlaced;



Backs of fingers to opposing palms with fingers interlocked;



Rotational rubbing of left thumb clasped in right palm and vice versa;



Rub with clasped fingers of right hand in left palm, and vice versa;



Rinse hands with water



Dry hands thoroughly with a single use towel;



Use towel to turn off faucet;



You may begin the next care episode: your hands are now safe.



BODY POSTURE



Students will be instructed in principles of body mechanics prior to practice.



Students should be cautious when lifting equipment, manikins, or other students and should not lift without assistance



The wheels of all equipment (wheelchairs, stretchers and beds) are to be locked during practice and demonstration.





ALWAYS CALL FOR HELP!

Evacuation Instructions

- R** - Rescue and relocate anyone in immediate danger
- A** - Alert others by activating the building fire alarm
- C** - Confine the emergency by closing the doors
- E** - Evacuate immediately. Do not use elevators. Use stairs.

HOW TO USE A FIRE EXTINGUISHER

Remember the Phrase **PASS**

1 Pull
the pin



2 Aim at
the base
of the fire



3 Squeeze
the handle



4 Sweep
from side
to side





AGAIN !!
TRY TO REMEMBER THESE NUMBERS
OR WRITE THEM DOWN

الدفاع المدني	998	Civil Defense
الهلال الأحمر السعودي	997	Saudi Red Crescent
عمليات أمن الجامعة	0173172193	Campus Security Police
مسؤول السلامة المناوب	0567631333 0500747200	University Safety On-call
إدارة السلامة والصحة المهنية بالجامعة	0173230072	Security and Safe Management Dept

FIRST AID

Medical emergencies can happen every day, in any setting. But remember that most of the accidents are preventable. THEREFORE,

you **MUST** adhere to and comply with all instructions provided in this manual. In case of an emergency, **DO** these steps:

- STEP 1:** Recognize that an emergency kit exists
- STEP 2:** Decide to ACT
- STEP 3:** Activate the local emergency number
- STEP 4:** Give Care Until help takes over



To ensure you are prepared to provide First Aid, The RT instructor will ensure students to take the Basic Life Support Provider Course at Jazan University prior to the lab practice.



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