Welcome Note  (By Farouk Merhebi – EHSRM Director)

Dear Readers,

Since February 2014, EHSRM has been conducting fire and evacuation drills in Campus buildings to educate staff and students about how to behave during emergencies. So far, 17 out of the 23 fire and evacuation drills conducted by the ERT were successful whereby building occupants evacuated the buildings and assembled in the pre-designated assembly areas within less than 5 minutes.

EHSRM continued its outreach of safety education by organizing, over three consecutive weeks, three safety lectures for the University for Seniors and took part of the new employee orientation program organized by the HR at both AUB and AUBMC. EHSRM is also actively participating in the Faculty of Health Sciences summer field training by providing lectures and practical trainings.

After completing the First Aid training (8 hours) for 72 safety wardens, EHSRM organized a “First Responders” training course (42 hours) through the Lebanese Red Cross for 14 safety wardens and ERT members. The training sessions cover lifting and moving, basic life support and defibrillation, airway management, dealing with traumas, bleeding and burns, vital signs assessment and are being provided on a weekly basis for a period of 14 weeks.

Article of the Month

Personal Protective Equipment (PPE) - Respirators

When engineering controls are not feasible, workers must use respirators to protect against adverse health effects caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. Respirators generally cover the nose and mouth or the entire face or head and help prevent illness and injury. A proper fit is essential for respirators to be effective. Respirators must be NIOSH-approved and medical evaluation and training must be provided before use. There are two major types of respirators, Air Purifying and Atmosphere Supplying Respirators:

**Particulate respirators:**
- capture particles in the air, such as dusts, mists, and fumes;
- do not protect against gases or vapors;
- require replacement when user finds it difficult to breathe through them.

**Combination respirators:**
- are used in atmospheres that contain hazards of both particulates and gases;
- have both particulate filters and gas/vapor filters.

**Gas & Vapor respirators:**
- protect against specific hazardous gases and vapors;
- use chemical cartridges or canisters to remove dangerous gases or vapors;
- do not protect against airborne particles;
- provide protection only as long as the filter’s absorbing capacity is not depleted.

**Air line respirators:**
- use a hose to deliver clean, safe air from a stationary source of compressed air.
- are used when extended work periods are required in atmospheres that are not immediately dangerous to life and health (IDLH).

**Combination respirators:**
- have an auxiliary self-contained air supply that can be used if the primary supply fails;
- can be used for entry into confined spaces;
- are used when extended work periods are required in atmospheres that are or may be immediately dangerous to life and health (IDLH).

**Self-Contained Breathing Apparatuses (SCBAs):**
- consist of a wearable, clean-air supply pack;
- are used when there is a short-time need to enter and escape from atmospheres which are or may be immediately dangerous to life and health (IDLH).

Think Safe

1. As long as you wear a surgical mask, you are protected from patients with airborne diseases such as tuberculosis and flu viruses.
   - **a) True**  
   - **b) False**

2. N95 respirators and masks are used when dealing with patients can also provide excellent protection when applying pesticides.
   - **a) True**  
   - **b) False**

3. Facial hair (e.g. beard) can prevent the proper fit of a respirator.
   - **a) True**  
   - **b) False**

Answers are on page 2

Safety Tips

- Aerosols with a diameter of 5 μm or less, produced by coughing, sneezing or improper lab practices, can remain airborne for a long period of time and can be easily inhaled.
- The cartridges of chemical respirators are assigned colors to indicate the type of contaminant they filter (Refer to page 2).
- Cartridges, filters, and masks get old. Their efficiency varies depending on the concentration of the hazard, the storage conditions and age of the filter.
1. False. Surgical masks are primarily intended to protect others. They do not form a tight seal against the skin or filter airborne pathogens.

2. False. N95 respirators will only provide protection against particulates; they do not work against chemicals. N95 respirators can filter out dusts and airborne pathogens such as tuberculosis, rubeola, varicella, SARS.

3. True. Tight-fitting respirators can be ineffective when used with beards, facial hair, or anything that prevents a good seal to the face.

The Environmental and Chemical Safety Unit conducted laboratory inspections in Chemistry, Geology, Biology & Agriculture; provided environmental, chemical and electrical safety session for University for Seniors program; contributed to the summer field training for FHS students; prepared guidelines for the safe handling and disposal of Ethidium Bromide; conducted occupational exposure monitoring in different departments at AUB and AUBMC; carried on the baseline assessment on healthcare waste management at AUBMC; and started weekly beach safety inspections.

The Health Physics Services Unit followed up on the renewal of licenses of the DRD and the licensing of one new X-Ray Diffractometer by the LAEC; issued yearly radiation dose notification letters for 420 personnel; provided radiation safety sessions for University for Seniors program, CCL, residents, FHS, and research; inspected CCL, DRD, NM, and PET, and issued corresponding reports; issued a report to the Chief of Staff regarding radiation safety in Sawwaf; supervised the internship of one FHS student, and the “Radiation Safety Officer Formation” training of two radiographers from Kesserverane MC.

The Life and Fire Safety Unit followed up on the testing and commissioning of the safety related systems/features in the IOEC; conducted a Life safety Code Review for the Architecture Building Renovation project; reviewed several materials submittals and conducted site inspections in the DTS renovation, the MAB, and the New Women Dorm projects; inspected the safety features of the panoramic elevator in the west wing of B23; reviewed 8 in-house renovation projects at AUB and AUBMC; conducted a fire safety training session for the “University for Seniors” program.

The Occupational Safety Unit conducted safety inspection and fume hood testing in the Pathology and Laboratory Medicine department; conducted the Semi Annual Life and Fire Safety Inspection Round at AUBMC; performed exposure monitoring in PLM, participated in the preparations for CAP inspection, provided fire safety sessions to residents and new employees.

The Risk Management Unit followed up on the received incidents; provided training sessions on incident reporting during the AUBMC HR new employee orientation and on sharps safety during the GME orientation for the new residents and fellows.

The Sanitation and Biosafety Unit participated in several meetings at AUBMC regarding detergents/disinfectants selection; followed up on PLM preparations for CAP audit; provided training sessions for the AUBMC staff regarding HAZMAT plan and Universal Precautions; offered a food safety training session in preparation for AUB outdoors; coordinated with the CPDC for the fit testing of the Nursing staff; conducted weekly monitoring of the beach water quality; conducted rounds at AUBMC facilities to raise awareness regarding recycling; tested and commissioned three biosafety cabinets.

In the spotlight

Nada Zantout

Executive Secretary (1992)

After working for three years in the Chemistry department, Mrs. Zantout joined EHSRM in 1997 as a Secretary handling secretarial and clerical work. In 2004, Mrs. Zantout was promoted to Administrative Assistant to start carrying out various administrative, secretarial, technical duties, and providing assistance to the director and staff in the EHSRM department. She is responsible for preparing staff monthly payroll, monitoring budget expenditures, keeping and updating files, maintaining department’s petty cash and office supplies and performing data entry of incident reports. For over 10 years, she assisted in providing travel insurance coverage for University faculty and staff on business leaves. Nada’s professional attitude, confidentiality, and high quality of service, have always been valued by her colleagues, supervisors, and AUB community.