2.7 Education Lab/Training Center CPR Manikin Training

Purpose

To provide Cardiopulmonary resuscitation (CPR) training with manikins and provide guidelines for appropriate manikin disinfection between users, and maintenance after courses.

Audience

All employees of UTMB hospitals and clinics, contract workers, volunteers, and students who use CPR manikins

Policy

- Participants shall be told in advance that the training sessions will involve “close physical contact” with their fellow participants.
- Participants or instructors shall postpone CPR training if they are known to be in the active stages of an infectious disease, have reason to believe they have been exposed to an infectious disease, or have open sores on their hands, mouth, or face. To protect other participants from exposure, anyone with a known chronic infection is required to notify the Education Lab Staff or BLS instructor prior to class. BLS course completion options shall be explained at this time.
- Options may include but are not limited to:
  - The participant may be asked to return within 30 days to complete manikin performance.
  - The participant performs manikin performance at the end of the class day after all other participants complete manikin performance. If more than one optional participant, then manikins shall be cleaned between participants following end of class procedure.
- If more than one CPR manikin is used in a particular training class, participants shall be assigned in pairs when possible, with each pair having contact with only one manikin. This lessens the possibility of contamination of several manikins by one person and, therefore, limits possible exposure of other class members.
- All persons responsible for CPR training shall be thoroughly familiar with hygienic concepts (e.g., washing hands thoroughly before manikin contact, not eating during class to avoid contamination of manikins with food particles) as well as procedures for cleaning and maintaining manikins and accessories (e.g., face shields, face mask). Manikins shall be routinely inspected for signs of physical deterioration, such as cracks or tears in plastic surfaces that could make thorough cleaning difficult or impossible. The clothes and hair of manikins shall be washed periodically, e.g., monthly or if obviously

soiled.

- During the teaching of two-rescuer CPR, there is no opportunity to disinfect the manikin between participants when the switching procedure is practiced. To limit the potential for disease transmission during this exercise, the second participant taking over ventilation on the manikin shall simulate ventilation instead of blowing into the manikin.
- During training in the obstructed airway procedure, the participant shall not use his or her finger to sweep foreign matter out of the manikin's mouth. The sweeping action could contaminate the participant's finger with exhaled moisture and saliva from previous participants in the same class and or contaminate the manikin with material from the participant's finger. When practicing this procedure, the finger sweep shall be simulated.
- Each time a different participant uses the manikin in a training class, the individual protective shield, if used, shall be changed. Between participants or after the instructor demonstrates a procedure, such as clearing an obstruction from the airway, the manikin face and the inside of the mouth shall be wiped vigorously with the clean, absorbent material (e.g., a 4-inch x 4-inch gauze pad) moistened with either the hypochlorite solution described in the recommendation below or with 70% alcohol (isopropanol or ethanol). The surfaces shall remain wet for at least 30 seconds before they are wiped dry with a second piece of clean, absorbent material.

Manikin Decontamin-ation

- At the end of each class, the procedures listed below shall be followed as soon as possible to avoid drying of contaminated secretions on manikin surfaces. **Personnel conducting manikin disassembly and decontamination shall wear protective gloves during these procedures:**
  - Disassemble the manikin as directed by the manufacturer.
  - As indicated, thoroughly wash all external and internal surfaces (also reusable protective face shields) with warm soapy water and brushes.
  - Rinse all surfaces with fresh water.
  - Wet all surfaces with a sodium hypochlorite solution having at least 500 ppm free available chlorine (e.g., 1/4 cup [approximately 4 mL] liquid household bleach [approximately 5% sodium hypochlorite] per gallon [approximately 4L] of tap water) for 10 minutes. This solution shall be made fresh for each class

and discarded after each use.

- Rinse with fresh water and immediately dry all external and internal surfaces; rinsing with alcohol will aid drying of internal surfaces, which shall prevent the survival and growth of microorganisms if the manikins are to be stored for more than one day.

- Those responsible for the use and maintenance of CPR manikins shall be encouraged not to rely totally on the mere presence of a disinfectant to protect them and the participants from cross-infection during training programs. Emphasis shall be placed on the necessity of thorough physical cleaning (scrubbing, wiping) as the first step in an effective decontamination protocol. Microbial contamination is easily removed from smooth, non-porous surfaces by using a disposable cleaning cloth moistened with a detergent solution, and there is no evidence that a soaking procedure alone in any liquid is as effective as the same procedure accompanied by vigorous scrubbing.

Reference

1. American Heart Association: Fighting Heart Disease and Stroke: Basic Life Support. Instructors Manual, 1994.