VOCABULARY REVIEW
1. **Cyanosis**: Blue color of the mucous membranes and body extremities caused by lack of oxygen.
2. **Diaphoresis**: The profuse excretion of sweat.
3. **Dyspnea**: Difficult or painful breathing.
4. **Ecchymosis**: A hemorrhagic skin discoloration.
5. **Emetic**: A substance that causes vomiting.
6. **Fibrillation**: Rapid, random, ineffective contractions of the heart.
7. **Hematuria**: Blood in the urine.
8. ** Mediastinum**: Space in the center of the chest under the sternum.
9. **Myocardium**: Muscular, middle lining of the heart.
10. **Necrosis**: Pertaining to the death of cells or tissue.
11. **Photophobia**: Visual sensitivity to light.
12. **Polydipsia**: Excessive thirst.
13. **Polyuria**: Excessive urination.
14. **Transient ischemic attack**: Temporary neurologic symptoms caused by a gradual or partial occlusion of a cerebral blood vessel.
15. **First aid**
16. automated external defibrillator
17. cardiopulmonary resuscitation
18. cerebrovascular accident
19. transient ischemic attack
20. myocardial infarction
21. **Heat stroke**
22. Muscle cramps
23. heat exhaustion
24. Thrombolytics
25. asystole
26. ecchymosis
27. idiopathic
28. Bradycardia

SKILLS AND CONCEPTS
1. Answers may include:
   - Maintaining office security
   - Managing smoke detectors and fire extinguishers
   - Posting designated fire exit routes
   - Developing an emergency evacuation plan
   - Taking extra precautions to secure certain items, such as narcotics and dangerous chemicals, in locked storage areas in the facility
2. Answers may include:
   - Properly store potentially flammable chemicals and supplies according to the manufacturers’ guidelines.
   - Properly maintain electrical equipment, cords, and outlets throughout the facility.
   - If a fire is suspected, immediately disconnect oxygen supplies or turn off oxygen tanks to prevent an explosion.
   - Smoke alarms should be located throughout the facility, checked periodically, and replaced as needed.
   - Make sure fire safety equipment is available and current; fire extinguishers should be inspected at least annually; if an extinguisher is discharged, it must be replaced immediately.
   - Fire extinguishers should be located in multiple sites throughout the facility and mounted on the wall for easy access.
   - If you smell smoke or suspect a fire, immediately notify the fire department (or call 911) and evacuate the facility. Do not use elevators if a fire is suspected.

3. Pull the pin from the handle of the extinguisher and aim the discharge from the extinguisher toward the bottom of the flames. Aiming the fire extinguisher directly onto the fire may spread the flames. Squeeze the handle of the extinguisher so that it begins to discharge. Sweep the extinguisher from side to side toward the base of the fire until it is out or until fire officials arrive. Check on the safety of all patients and other personnel.

4. The evacuation plan first should identify what situations might require evacuation, such as a natural disaster or a fire. The following criteria should be included in the facility’s evacuation plan:
   - Designate an emergency action coordinator, making sure all employees know who this individual is; this person will be in charge if an emergency occurs.
   - The coordinator is responsible for managing the emergency at the facility and for notifying and working with community emergency services.
   - All combustibles (e.g., oxygen tanks) must be shut down immediately to prevent fire or explosion.
   - Evacuation routes with clearly marked exits must be posted in multiple locations throughout the facility; maps of floor diagrams with arrows pointing towards the closest exits are an easy way for even those individuals who are not familiar with the facility to find the closest door out.
   - Exit doors must be clearly marked, well lit, and wide enough for everyone to exit.
   - Designate a meeting place outside the facility for all those evacuating to make sure everyone got out of the facility safely.
   - Employees should be trained to assist any co-worker or patient with special needs.
   - A designated individual must check the entire facility, including bathrooms, before exiting, making sure to close all doors when leaving to try to contain a fire/disaster.

5. Answers may include:
   - Location and contact information for the area LEMA office
   - Telephone number for the police
   - Telephone number for the fire department
   - Telephone number for EMS services
   - Telephone number for the local Public Health Department

6. Answers may include:
   - Perform routine hand washing or use a hand sanitizer.
   - Wear disposable gloves when there is the potential for contamination with blood and body fluids.
   - Use masks/eye protection or face shields if there is potential for being splashed by secretions or blood and body fluids.
   - Wear gowns to protect skin and clothes as needed; remove them promptly and wash hands to prevent transmission of infectious material.
   - Sanitize, disinfect, and sterilize equipment, supplies, and environmental surfaces.
   - Dispose of contaminated waste in appropriate biohazard containers.
7. The CDC recommends that a facility’s safety plan consider the following:
   - Providing fact sheets for employees and patients to help them understand the dangers of emergencies and encourage employee participation in disaster drills.
   - Planning for effective communication and action in response to an emergency; the plan should include methods for coordinating a response with local and state agencies as well as media sources.
   - Putting into place a method for explaining emergency situations to patients and healthcare workers; offering evaluation and treatment of an infectious outbreak.
   - Treating acute anxiety with reassurance and explanation; providing follow-up counseling as needed for employees.
   - Consulting CDC Web sites for further information on emergency preparedness:
     - Site for emergency preparedness planning: [www.bt.cdc.gov/planning/#healthcare](http://www.bt.cdc.gov/planning/#healthcare)

8. Answers may include:
   - Proper body mechanics.
   - Constantly check the floors and hallways for obstructions and possible tripping hazards, such as telephone and computer cables or boxes.
   - Store supplies inside cabinets rather than on top, where they could fall off and injure someone; store heavier items on lower shelves so that you do not have to lift them any higher than necessary.
   - Clean up spills immediately; slippery floors are a danger to everyone.
   - Use a step stool to reach for things, not a chair or a box that could collapse or move.
   - Have handrails available as needed in the facility; use them and encourage patients to do so.
   - Do not overload electrical outlets.
   - Perform a safety check of the facility routinely; look out for unsafe or defective equipment, torn carpet that could catch heels, adequate lighting both inside and outside the facility, and so on.
   - Follow infection control procedures.
   - Store chemicals properly.

9. Answers should include:
   - Place signs on or near the biohazard container to identify its purpose and what materials should be deposited there. All biohazardous waste containers should display a biohazard label.
   - All biohazardous waste containers should be covered and have a foot pedal for opening and closing them. This prevents the spread of infectious material and reduces the likelihood of noninfectious materials being tossed inside.
   - Biohazard containers should be placed only in treatment areas where contaminated materials are likely to be produced.
   - Put a regular garbage container next to a biohazard one to encourage staff members to use the biohazard bags only as needed.
   - Place only sharps in sharps containers; gauze, bandages, and other such materials belong in a container for contaminated waste; noninfectious packaging material and other items belong in the regular trash.

10. The services that might be performed by trained medical assistants include emergency first aid at the site of a disaster; conducting patient interviews in an empathetic manner while using therapeutic communication tools to help calm victims and gather important health-related information; helping with mass vaccination efforts or antibiotic distribution; performing documentation and electronic health record management; ensuring compliance with Standard Precautions procedures; assisting with patient education efforts; and performing phlebotomy and laboratory procedures according to the individual's skill level.

11. a. Sweating (diaphoresis)
    b. Nausea or indigestion
    c. Shortness of breath
    d. Cold, clammy skin
    e. Feeling of weakness (general malaise)
12. Women may experience symptoms different from those traditionally associated with a heart attack, such as a combination of:
   - Back pain or aching and throbbing in the biceps or forearms
   - Shortness of breath (SOB)
   - Clammy perspiration
   - Dizziness (vertigo)—unexplained lightheadedness or syncopal episodes
   - Edema, especially of the ankles and/or lower legs
   - Fluttering heartbeat or tachycardia
   - Gastric upset
   - Feeling of heaviness or fullness in the mediastinum

13. See page 734 in your textbook for types and causes of shock.
   a. Anaphylactic
e. Cardiogenic
b. Insulin  f. Neurogenic
c. Psychogenic  g. Septic
d. Hypovolemic

14. a. Rest  c. Compression
b. Ice  d. Elevation

15. Answers may include:
   - Symptoms related to shock
   - Severe, constant pain or waves of pain
   - Bloody or tarry stools
   - Pregnancy or a missed menstrual period
   - Continuous vomiting or severe constipation
   - Chest pain, SOB, or continuous cough

16. Answers may include:
   a. Syncope—Was the patient injured? Does the patient have a history of heart disease, seizures, or diabetes?
   b. Head injury—Did the patient pass out or have a seizure? Is the patient confused or vomiting? Is there clear drainage from nose or ears?
   c. Insect bites or stings—Does the patient have a history of anaphylactic reaction to insect stings? Does the patient have difficulty breathing, have a widespread rash, or have trouble swallowing?
   d. Burns—Where are the burns located and what caused them? Are there signs of shock (moist, clammy skin; altered consciousness; rapid breathing and pulse)? Are there signs of infection (foul odor, cloudy drainage) in a burn more than 2 days old?
   e. Wounds—Is the bleeding steady or pulsating? How and when did the injury occur? Does the patient have any bleeding disorders or is the patient on anticoagulant drugs? Is the wound open and deep?
   f. Animal bites—Is the bite extensive or deep? Is the bite from a domestic animal? Is the animal being quarantined? Is the bite from a bat, raccoon, or any other wild animal? Was the area cleansed with antimicrobial soap and water? Did the bite break the skin? What is the patient’s tetanus immunization status?
   g. Asthma—What is the quality and severity of the attack? Does the patient have an individualized treatment plan? Has the patient been prescribed a bronchodilator inhaler? Has it helped relieve symptoms?
   h. Poisoning—What is the victim’s name, weight, and age? What is the name of the poison and label information? How much was taken, and how long ago was it ingested? Has vomiting occurred? What are the symptoms, such as difficulty breathing or an altered state of consciousness? Has any first aid been given?
4. The most important factor is protecting the patient from possible injury. Cheryl should clear away everything near the patient that could cause accidental injury and observe the patient until the seizure ends. She should not place anything in the patient’s mouth, because it may damage the teeth or tongue and force the tongue back over the trachea. She should not hold the patient down, because that may result in muscle injuries or fractures. If the patient remains unconscious after the seizure has subsided, Cheryl should place the patient in the recovery position to maintain an open airway as follows:

- The patient’s arm that is farthest from Cheryl is placed alongside and above the patient’s head; the other arm is placed across the patient’s chest.
- She should bend the patient’s leg that is closest to her, and after placing one arm under the patient’s head and shoulder and the other hand on the flexed knee, she should roll the patient away from her while stabilizing the head and neck. The patient’s head should be resting on the extended arm.
- She should maintain the patient in this position until the person is alert or help arrives.