Special Preview Chapter!

KINN'S THE MEDICAL ASSISTANT

the name that defined medical assisting...

...redefined for a new generation

ELEVENTH EDITION
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Cheryl Skurka, CMA(AAMA), has been working for Dr. Peter Bendt for approximately 6 months. During that time, a number of patient emergencies have occurred in the office, and even more potentially serious problems have been managed by the telephone screening staff. Cheryl is concerned that she is not prepared to assist with emergencies in the ambulatory care setting. She decides to ask Dr. Bendt for assistance, and he suggests that she work with the experienced screening staff to learn how to manage phone calls from patients calling for assistance.

Dr. Bendt is participating in a community-wide preparedness effort focused on both natural and human-made disasters, and he expects his practice and employees to be ready to respond if needed. This includes both creating plans to maintain the safety of patients and employees in the facility and providing assistance as needed in a community emergency.

While studying this chapter, think about the following questions:

- What should Cheryl learn about the medical assistant’s responsibilities in an emergency situation?
- What are some of the general rules for managing a medical emergency in an ambulatory care setting?
- What types of questions does the telephone screening staff ask if a patient calls with a medical emergency?
- What information from these phone calls should be documented?
- Is it important for Cheryl to be able to recognize life-threatening emergencies and to be prepared to respond to them?
- What are some of the typical patient emergencies that occur in a healthcare facility?
- How should Cheryl instruct a patient to control the bleeding from a hemorrhaging wound?
- What safety practices should be followed in the healthcare facility to protect patients and employees from potential harm?
- What is the medical office’s responsibility in preparing for community emergencies?
- Are there common health emergency topics for patient education that Cheryl should be prepared to present?
- What legal factors should Cheryl keep in mind when handling ambulatory care emergencies?

**LEARNING OBJECTIVES**

1. Define, spell, and pronounce the terms listed in the vocabulary.
2. Apply critical thinking skills in performing the patient assessment and patient care.
3. Describe patient safety factors in the medical office environment.
4. Evaluate the work environment to identify safe and unsafe working conditions.
5. Identify environmental safety issues in the healthcare setting.
6. Develop environmental, patient, and employee safety plans.
7. Discuss fire safety issues in a healthcare environment.
8. Demonstrate the proper use of a fire extinguisher.
9. Describe the fundamental principles for evacuation of a healthcare facility.
10. Role-play a mock environmental exposure event and evacuation of a physician’s office.
11. Discuss the requirements for proper disposal of hazardous materials.
12. Define the important features of emergency preparedness in the ambulatory care setting.
13. Describe the medical assistant’s role in emergency response.
14. Maintain an up-to-date list of community resources for emergency preparedness.
15. Summarize the typical emergency supplies and equipment.
16. Demonstrate the use of an automated external defibrillator.
17. Summarize the general rules for managing emergencies.
18. Demonstrate screening techniques and documentation guidelines for ambulatory care emergencies.
19. Recognize and respond to life-threatening emergencies in the ambulatory care setting.
20. Perform professional-level cardiopulmonary resuscitation (CPR).
21. Administer oxygen through a nasal cannula to a patient in respiratory distress.
22. Identify and assist a patient with an obstructed airway.
23. Determine the appropriate action and documentation procedures for common ambulatory care emergencies.
24. Assist and monitor a patient who has fainted.

25. Control a hemorrhagic wound.
26. Apply patient education concepts to medical emergencies.
27. Discuss the legal and ethical concerns arising from medical emergencies.

VOCABULARY

**arrhythmia** (uh-rith’-mee-uh) Any deviation in the normal pattern of the heartbeat.

**asystole** (ay-sis’-toh-le) The absence of a heartbeat.

**bradycardia** A slow heart rate (i.e., pulse below 60 beats per minute).

**cyanosis** (si-an-oh’-sis) A blue coloration of the mucous membranes and body extremities caused by lack of oxygen.

**dyspnea** Difficult or painful breathing.

**ecchymosis** (e-ki-moh’-sis) A hemorrhagic skin discoloration commonly called bruising.

**emetic** (eh-met’-ik) A substance that causes vomiting.

**fibrillation** Rapid, random, ineffective contractions of the heart.

**hematuria** (hi-ma-tuhr’-e-uh) Blood in the urine.

**idiopathic** Pertaining to a condition or disease that has no known cause.

**mediastinum** (meh-ast’-uh-nom) The space in the center of the chest under the sternum.

**myocardium** (my-ok-ar’-de-um) The muscular lining of the heart.

**necrosis** (neh-kroh’-sis) The death of cells or tissue.

**photophobia** Visual sensitivity to light.

**polydipsia** Excessive thirst.

**polyuria** The excretion of large amounts of urine.

**thrombolitics** Agents that dissolve blood clots.

**transient ischemic attack (TIA)** Temporary neurologic symptoms caused by a gradual or partial occlusion of a cerebral blood vessel.

The medical assistant typically is responsible for making the healthcare facility as accident-proof as possible. This requires attention to a number of factors. For example, cupboard doors and drawers must be kept closed; spills must be wiped up immediately; and dropped objects must be picked up. The medical assistant also should make sure all medications are kept out of sight and away from busy patient areas. If children are in the office, all sharp objects and potentially toxic substances must be kept out of reach. In addition, the medical assistant should never leave a seriously ill patient or a restless, depressed, or unconscious patient unattended.

SAFETY IN THE HEALTHCARE FACILITY

**Patient Safety**

Patient safety is a critical component of the quality of care provided in a healthcare facility. The U. S. Department of Health and Human Services (DHHS) has conducted extensive research on the features of safe patient environments in physicians’ offices. The DHHS has found the following factors to be crucial to patient safety:

- Open lines of communication must be established among all employees about possible safety issues, and employees must work together to solve these problems before a patient is injured.
- If an injury occurs (e.g., a medication is administered to the wrong patient), policies and procedures must be in place so that all employees recognize the potential for an error and protocols are established for preventing a similar problem in the future.
- Procedures must be standardized in the facility’s policy and procedures manual so that all employees can refer to specific guidelines on how procedures should be performed.

For example, in the case of a blood spill, the policy and procedures manual must outline a specific, step-by-step procedure for cleaning up the spill that safeguards both patients and staff members.

- The facility must provide ongoing staff training in patient safety factors.
- Staff members must work as a team to maintain a safe environment for patients. For example, all staff members must follow Standard Precautions to prevent the spread of disease in the facility.

Throughout this text you have learned about situations that could result in serious harm to your patients. You must constantly be on guard to protect patients from possible injury. For example, studies have shown that healthcare workers frequently confuse drug names, which results in administration of the wrong medication; they also fail to identify a patient correctly before performing a procedure and neglect to perform hand sanitization consistently, thus promoting the spread of infectious diseases. The medical assistant is an important link in the delivery of quality and safe care. Can you think of anything you have learned thus far in your studies that could help keep patients safe in the physician’s office? Procedure 36-1 presents a scenario about patient safety. Follow the step-by-step procedure to learn what you can do to protect your patients from possible harm.

**Employee Safety**

The healthcare facility should safeguard patients as well as staff members from the possibility of accidental injury. Data compiled by the Occupational Safety and Health Administration (OSHA) reveal that the leading causes of accidents in an office setting are slips, trips, and falls. You must think and work safely to prevent accidents. The following are some suggestions from OSHA for vigilant accident prevention methods (Procedure 36-2).
Developing a Patient Safety Plan: Ordering the Correct Medication from the Pharmacy

**GOAL:** To telephone the correct medication prescription into the pharmacy.

**SCENARIO:** The physician writes an order to be phoned into the pharmacy for a new patient diagnosed with depression. You think the order reads, “Avinza, 30 mg po bid.” The pharmacist asks you for the physician’s DEA number, because Avinza is a narcotic analgesic. You ask the physician for clarification and are told the order was for Avanza, an antidepressant. Look up both medications in a drug reference. What could have happened if a powerful narcotic had been ordered for the patient instead of the antidepressant the physician intended?

**EQUIPMENT and SUPPLIES**

- Notepad and pen
- Patient’s record
- PDR or other drug reference

**PROCEDURAL STEPS**

1. Review the physician’s written order for a prescription or repeat the order back to the physician if it is a verbal order. If it is a verbal order, write the order down and have the physician review it to make sure you have the correct medication before calling the pharmacy. **PURPOSE:** To make sure you can clearly read the order and/or have adequately verified a verbal order.

2. If you are unfamiliar with the medication, look it up in a drug reference. **PURPOSE:** To prevent possible errors, you should be familiar with all medications ordered.

3. After you have become familiar with the medication, if the order does not match the patient’s diagnosis, ask the physician for clarification. **PURPOSE:** If you are not absolutely sure what the physician’s handwriting means, do not hesitate to ask for clarification.

4. Refer to the office’s policy and procedures manual to review the procedure for calling in a prescription order to the pharmacy.

5. Clarify any questions with the office manager to prevent any future errors.

1. Use proper body mechanics in all situations (see Chapter 32). For example, bend your knees and bring a heavy item close to you before lifting rather than bending from your back; push heavy items rather than pulling them; and ask for assistance when transferring patients.

2. Constantly check the floors and hallways for obstructions and possible tripping hazards, such as telephone and computer cables or boxes.

3. Store supplies inside cabinets rather than on top, where they can fall off and injure someone; store heavier items on lower shelves so that they do not have to be lifted any higher than necessary.

4. Clean up spills immediately; slippery floors are a danger to everyone.

5. Use a step stool to reach for things, not a chair or a box that could collapse or move.

6. Have handrails available as needed in the facility; use them and encourage patients also to use them.

7. Do not overload electrical outlets.

8. Perform a safety check of the facility routinely; look for unsafe or defective equipment, torn carpeting that could catch heels, adequate lighting both inside and outside the facility, and so on.

A primary concern for personnel and patient safety is infection control. Chapter 27 discussed Standard Precautions in detail and the responsibility of employers to provide appropriate and adequate personal protective equipment (PPE). The goal is to protect staff members from occupational exposure to bloodborne pathogens while at the same time safeguarding patients in the facility. OSHA’s guidelines include management of sharps and providing current safety-engineered sharps devices; providing hepatitis B immunization free of charge to all employees at risk of exposure to blood and body fluids; using latex-free supplies as much as possible to prevent allergic reactions in both staff members and patients; identifying all chemicals in the facility with material safety data sheets (MSDS; see Chapter 51) and adequately storing potentially dangerous substances; and performing proper hand hygiene consistently throughout the work day.

Another serious concern that faces all of us today is the prevention of workplace violence. Unfortunately, rarely does a week go by without reports of violence in a public place. Employees in a healthcare facility are no exception. We started the text with information about and exercises in communication techniques in the workplace—problem solving, therapeutic communication, and assertive behavior. All of these are helpful in dealing with a difficult patient. Employers should provide training on how to identify potentially violent patients and discuss safe methods for managing difficult patients. Many employers offer training on how to manage assautivave behaviors.

In addition to these concerns, staff members should constantly be on the alert for possible safety hazards in and around the building, such as improper lighting, unlimited access to the facility, and inadequate use of security systems. Procedure 36-3 presents a scenario that deals with employee safety. Follow the steps of this procedure to learn how to handle such a situation.

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**Environmental Safety**

Personal safety guidelines were discussed in Chapter 12. These included numerous work safety practices, such as office security, management of smoke detectors and fire extinguishers, posting of designated fire exit routes, and the importance of securing
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PROCEDURE 36-2

Evaluating the Work Environment to Identify Safe and Unsafe Working Conditions: Developing an Environmental Safety Plan

**GOAL:** To assess the healthcare facility for possible safety issues and develop a safety plan.

**SCENARIO:** Work with a partner to evaluate environmental safety in the laboratory at your school. Record your results and discuss them with the class. After all members of the class have shared their observations, develop a safety plan for your laboratory.

**EQUIPMENT and SUPPLIES**
- Pen and paper
- Policy and procedure for environmental safety issues in the facility

**PROCEDURAL STEPS**

1. Check the floors and hallways for obstructions and possible tripping hazards, including torn carpets, possible spills, protruding electrical cords, and so on.
   **PURPOSE:** To prevent accidental falls.
2. Check storage areas to make sure the tops of cabinets are clear and that heavier items have been stored closer to the floor.
   **PURPOSE:** To prevent injuries from items falling off shelves and to limit the lifting of heavy items.
3. Assess the location and security of handrails placed around the facility. They should be placed at all stairs, in restrooms, and in any other areas where staff members or patients may need assistance.
   **PURPOSE:** Handrails help safeguard staff members and patients and provide assistance where needed.
4. Examine all electrical plugs and outlets to prevent electrical overload.
   **PURPOSE:** Overloading electrical outlets could cause a fire.
5. Check all equipment to make sure it is in safe working condition.
6. Make sure all lights are working (both inside and outside the facility), that lighting is adequate, and that light fixtures are in good condition.
   **PURPOSE:** Adequate lighting both inside and outside the facility helps prevent accidents, and faulty fixtures can be a fire hazard.
7. Check the working condition of smoke alarms and examine all fire extinguishers.
   **PURPOSE:** To monitor the function of smoke detectors and make sure fire extinguishers are charged.
8. Make sure evacuation routes are posted throughout the facility, along with floor plans with clearly marked exit routes.
   **PURPOSE:** Every room in the facility must have a map with exit routes marked on it to make sure even those who are unfamiliar with the facility’s floor plan can safely reach an exit in case of an emergency.
9. Record your observations and share them with the class.
   **PURPOSE:** To compile a comprehensive list of problem areas.
10. Based on group discussion, develop a plan of action for improving the safety of the laboratory.
    **PURPOSE:** The student-generated safety plan can be incorporated into the laboratory’s policy and procedures manual.

**METHODS OF FIRE PREVENTION AND RESPONSE**
- 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.

**CRITICAL THINKING APPLICATION 36-1**

Cheryl is in the middle of a busy day; patients are in all of the examination rooms, and the waiting room is full. She walks past the patient bathroom and smells smoke. She opens the door and sees smoke and flames coming from the waste basket. What should she do? Write down your response to this scenario and share it with your classmates.

Each facility should have a policy and procedure in place for evacuating the building. According to OSHA, the facility’s plan
SCENARIO: You are working at the admissions desk when an extremely angry patient comes storming into the office, screaming about a mistake on his bill. Although the facility uses an outside billing center, you recognize that you should attempt to help the patient and try to diffuse the situation. Remember: Call 911 immediately and alert any available security if you or one of your co-workers is being threatened with violence.

PROCEDURAL STEPS

1. Although it is important to safeguard patient privacy, do not ask an angry patient into an isolated room; do not close the door.
   PURPOSE: To protect yourself, remain in an open area. If you are in a room with an angry patient, keep the door open and stand close to the door so that you can leave the room quickly if necessary.

2. Alert other staff members to the situation, if possible.
   PURPOSE: To have assistance nearby; call 911 immediately if you feel physically threatened.

3. If you do not feel physically threatened, allow the patient to blow off steam.
   PURPOSE: Attempting to interrupt the patient to give a logical reason for the problem will only make him angrier. Allowing him to continue to yell helps him release the anger so that you can work on a reasonable solution to the problem. Call 911 if at any time you feel threatened.

4. When the patient begins to slow down, offer supportive statements, such as “I understand it is frustrating to receive a bill you think is unfair.” Continue to make supportive statements until the patient is calmer (think of it as the patient screaming his way up a mountain; sooner or later he is going to run out of steam; when he begins to slow down, you can then start offering supportive statements).

   PURPOSE: Providing verbal support helps diffuse the situation and gives the patient the opportunity to become calmer and reach a rational level where you can discuss the problem.

5. Once you can discuss the situation, ask the patient for the details of the problem. Gather as much information as possible so you can work together on a possible solution.

6. After determining the problem, suggest a possible solution to the patient. For example, tell him that you will contact the billing office with the information and make sure they get back to the patient as soon as possible.
   PURPOSE: Use therapeutic techniques, including restatement, reflection, and clarification, to gather details and work on a possible solution with the patient. Make sure you follow up with the action to prevent future outbursts.

7. Report the incident to your supervisor and document the patient’s problem and the agreed-upon action in the patient’s medical record, taking care not to use judgmental statements.
   PURPOSE: Documenting the patient’s problem and the agreed-upon solution allows for continuity of care if follow-up is needed. The patient’s medical record is a legal document, and all judgmental statements must be avoided.

8. Discuss your approach to managing the difficult patient at the next staff meeting. With your supervisor’s permission, summarize your approach and include it as part of the facility’s Employee Safety Plan.
   PURPOSE: The safety plan should be reviewed frequently, and revisions should be made as needed.

PROCEDURE 36-3

Developing an Employee Safety Plan: Managing a Difficult Patient

GOAL: To communicate with an angry patient in a safe, therapeutic manner. The following procedure is part of an overall employee safety plan.

PROCEDURAL STEPS

1. An emergency action coordinator must be designated, and all employees must know who this individual is. This person is in charge if an emergency occurs.

2. The coordinator is responsible for managing the emergency at the facility and for notifying and working with community emergency services.

3. Evacuation routes with clearly marked exits must be posted in multiple locations throughout the facility. Maps of floor diagrams with arrows pointing to the closest exits are an easy means of finding the closest door out, even for individuals unfamiliar with the facility.

4. Exit doors must be clearly marked, well lit, and wide enough for everyone to evacuate.

   • Any hazardous areas in the facility to avoid during an emergency evacuation must be identified.
   • A meeting place must be designated 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 restrooms, before exiting. He or she must make sure to close all doors when leaving to try to contain the fire or other disaster (Procedure 36-5).

DISPOSAL OF HAZARDOUS WASTE

Chapter 27 explained the management of biohazardous waste; the use of PPE when the potential exists for exposure to blood
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PROCEDURE 36-4

Demonstrating the Proper Use of a Fire Extinguisher

GOAL: To role-play the safe and proper use of a fire extinguisher.

EQUIPMENT and SUPPLIES

• Portable, office-size ABC fire extinguisher that has been discharged

PROCEDURAL STEPS

Role-play the following with a discharged ABC fire extinguisher.
1. Pull the pin from the handle of the extinguisher.
2. Aim the discharge from the extinguisher toward the bottom of the flames.

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

PROCEDURE 36-5

Participating in a Mock Environmental Exposure Event: Evacuating a Physician’s Office

GOAL: To role-play an environmental disaster and implement an evacuation plan.

SCENARIO: Role-play the following scenario with your lab group: The building next door to the physician’s office where you work is on fire. One member of the group is the designated emergency action coordinator, two individuals are responsible for helping patients with special needs out of the facility, and one person is designated to be the last to leave after the building is clear. In a community emergency situation, certain staff members may be designated to provide immediate assistance to survivors. Two medical assistants are sent to help with fire victims. How could medical assistants help in this situation? After the evacuation is complete, meet in a designated spot to discuss the process and see whether any aspects of the evacuation plan could be improved. Document the steps taken throughout the mock environmental event.

EQUIPMENT and SUPPLIES

• Pen and paper
• Policy and procedure for evacuation of the facility and response to an environmental disaster

PROCEDURAL STEPS

1. In an actual emergency, an emergency action coordinator is in charge. PURPOSE: All employees must know who this individual is (usually it is the office manager) and must follow his or her lead in safely responding to the emergency situation.
2. The coordinator is responsible for managing the emergency at the facility and for notifying and working with community emergency services. PURPOSE: The coordinator or someone designated by the coordinator must notify community emergency services of the fire; the coordinator works with emergency services to provide care at the scene.
3. Fire victims are being cared for across the street, where a triage and treatment center has been set up by the police, fire, and emergency responder units in the city. Two medical assistant staff members are sent to assist with the victims, as follows:
   • Use therapeutic communication techniques to calm and care for victims
   • Implement appropriate Standard Precautions
   • Monitor and record vital signs
   • Gather pertinent health histories
   • Observe victims for possible complications, such as breathing problems, shock, angina, and so on.
   • Immediately report any life-threatening changes in a patient’s status to emergency responders
   • Use first aid skills as needed
4. The coordinator designates an employee to shut down any combustibles (e.g., oxygen tanks) immediately. PURPOSE: To prevent an explosion if the fire spreads.
5. Using the posted evacuation routes, staff members follow floor plan diagrams to the closest safe exit. Any hazardous areas in the facility that should be avoided during the emergency evacuation are identified. PURPOSE: Evacuation routes must be posted throughout the facility, and exit doors must be clearly marked, well lit, and wide enough for everyone to evacuate. The doors facing the building on fire should not be used, because this could be a hazard.
6. Assistance is provided for employees and patients with special needs who may require extra help during the evacuation.
7. One staff member is delegated to check that everyone has left the facility and that fire doors have been closed before he or she leaves the building.
and body fluids; the importance of flushing the eyes with an eye wash unit if they are exposed to potentially infectious material; and the consistent use of sharps containers. Regardless of your individual responsibilities in the facility, every employee must be aware of potentially dangerous situations and comply with all safety measures to protect themselves and their patients.

OSHA defines regulated waste as any contaminated item that might release blood or other potentially infectious material; contaminated supplies that are caked with dried blood or other potentially infectious material; contaminated sharps; and waste products that contain blood or other potentially infectious material. Healthcare facilities must make special arrangements for the disposal of regulated waste, which often costs as much as 10 times more than regular garbage disposal. It therefore is important to put only supplies contaminated with blood or body fluids into red bag collection systems and sharps containers. Steps for the proper disposal of hazardous materials in the physician’s office include the following:

- Place signs on or near the biohazard container to identify its purpose and the materials that should be deposited there. All biohazardous waste containers should display a biohazard label.
- Make sure all biohazardous waste containers are covered and have a foot pedal for opening and closing the container. This prevents the spread of infectious material and reduces the likelihood that noninfectious material will be tossed inside. Biohazard containers should be kept only in treatment areas where contaminated materials are likely to be produced.
- Place a regular garbage container next to a biohazard container to encourage staff to use the biohazard bags only as needed.
- Place only sharps in sharps containers; gauze, bandages, and so on belong in a contaminated waste container. Noninfectious packaging material and other items belong in the regular trash.

**EMERGENCY PREPAREDNESS**

Ambulatory care centers and hospitals may be the first to recognize and initiate a response to a community emergency. If an infectious outbreak is suspected, Standard Precautions should be implemented immediately to control the spread of the infection. If the problem has the potential to affect a large number of individuals in the community (e.g., a suspected food contamination), a communication network should be established to notify local and state health departments and perhaps federal officials. Your employer may participate in an annual community disaster preparedness drill designed to help facilities improve their response to natural disasters and other emergencies.

Local governments are responsible for creating a Local Emergency Management Authority (LEMA) that coordinates police, fire, emergency medical services, public health and area health-care response to community-wide emergencies. These agencies are responsible for developing an all-hazards response plan that would be appropriate for any community emergency. Local officials turn to state, regional, or federal officials for assistance as needed.

Every healthcare facility should have a policy with specific procedures for the management of emergencies on site. When a new employee starts on the job, part of the orientation process is to review the site’s policy and procedures manual. As a new employee, be sure to clarify any questions you have about emergency management in that particular facility.

Staff members should discuss possible emergencies that may occur and should have an emergency action plan for rapid, systematic intervention. For instance, local industries may present unique problems that call for very specialized care. Plan for these and ask the physician’s advice on the procedures to follow and the supplies to have on hand. If the facility has several employees, each should be assigned specific duties in the event of an emergency. Organization and planning make the difference between systematic care for patients and complete chaos.
• Maintain up-to-date phone trees to notify staff members of an emergency.
• Educate patients on emergency preparedness.

CRITICAL THINKING APPLICATION 36-2
A chemical plant is located about 3 blocks from Dr. Bendt’s office. The office staff is brainstorming ideas about what should be done if an accident occurs at the plant. Based on what you have learned so far about emergency preparedness, what do you think should be included in the office’s emergency plan?

PROCEDURE 36-6
Maintaining an Up-to-Date List of Community Resources for Emergency Preparedness

GOAL: To develop and maintain a list of community agencies that would respond to a natural disaster or other emergency.

SCENARIO: Your employer asks you to develop a list of groups in your community who are part of the community-wide emergency preparedness plan that has been mandated by the state and federal governments. Using multiple resources, develop a comprehensive list of emergency services for your area.

EQUIPMENT and SUPPLIES
• Telephone
• Internet access
• Pen and paper
• Electronic record

PROCEDURAL STEPS
1. Start with an online search for the area Local Emergency Management Authority (LEMA) office, sponsored by the Department of Homeland Security. If available, investigate their Web site for information about the emergency preparedness plan in your community. You can begin the search at www.ready.gov/america

PURPOSE: To develop emergency preparedness plans by starting with the federal and state governments.

2. Gather contact information for local police, fire and EMS services; post this information next to all telephones in the facility.

PURPOSE: To ensure that emergency services contact information is immediately available in case of an emergency in the facility.

3. Investigate services provided by your local Public Health office and the American Red Cross.

PURPOSE: To coordinate services available to potential victims in the community.

4. Organize the information gathered about community resources for emergency preparedness. With your supervisor’s approval, post a copy of this information in all appropriate locations in the facility. Prepare a data base in the computer that can be updated as the information changes.

THEMEDTELEPHONE NOTIFICATION NUMBERS FOR EMERGENCY PREPAREDNESS

• Local hospital numbers, including the emergency department, infection control officer, administration contacts, and public affairs office
• Local and state Health Department numbers
• Centers for Disease Control (CDC) Emergency Response Office: 770-448-7100

The Centers for Disease Control and Prevention (CDC) recommends that all healthcare facilities be aware of possible agents of bioterrorism, including anthrax, botulism, plague, and smallpox. The physician is responsible for diagnosing and reporting any suspected cases, but the medical assistant may be involved in patient care and certainly will participate in preventing the spread of infection in the facility. As with any suspected infectious disease, Standard Precautions (see Chapter 27) should be used to control disease transmission. These precautions should be implemented with all patients, regardless of their diagnosis or possible infection status.

Infection control procedures for bioterrorism threats include the following:
• Sanitize hands routinely.
• Wear disposable gloves when the potential exists for contamination with blood and body fluids.
• Use masks/eye protection or face shields if the potential exists for being splashed by secretions or blood and body fluids.

Community Resources for Emergency Preparedness
Most communities have an emergency medical services (EMS) system. This system includes an efficient communications network (e.g., the emergency telephone number 911), well-trained rescue personnel, properly equipped ambulances, an emergency facility that is open 24 hours a day to provide advanced life support, and a hospital intensive care unit for victims.

More than 100 poison control centers in the United States are ready to provide emergency information for the treatment of victims of poisoning. Every healthcare facility is required to post a list of local emergency numbers. This list should be in plain sight and should be known to all office personnel. A good place to post this vital information is next to all the phones in the facility. Include on the list the numbers for the local EMS system, poison control center, ambulance and rescue squad, fire department, and police department (Procedure 36-6).
• Wear gowns to protect skin and clothes as needed; remove them promptly and wash the hands to prevent transmission of infectious material.
• Sanitize, disinfect, and sterilize equipment, supplies, and environmental surfaces.
• Dispose of contaminated waste in appropriate biohazard containers.

Community emergency preparedness plans are required by the federal government so that a coordinated response is in place if a natural disaster occurs, such as Hurricane Katrina, which devastated New Orleans. The federal government requires all healthcare facilities, including private physicians’ offices, to be prepared to provide medical services and to contribute medical supplies if a natural disaster or other emergency occurs in the area.

Emergency preparedness plans are designed to coordinate the care provided by all healthcare facilities and agencies in the community, including local emergency management agencies, EMS, fire departments, law enforcement agencies, the American Red Cross, and the National Guard. Each of these groups can provide crucial services during any community emergency.

Medical assistants also can contribute to rescue and emergency efforts. The services that might be performed by trained medical assistants include providing emergency first aid at the site of a disaster; conducting patient interviews in an empathetic manner while using therapeutic communication 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 the procedures required by Standard Precautions; assisting with patient education efforts; and performing phlebotomy and laboratory procedures according to their skill level.

### PSYCHOLOGICAL ASPECTS OF AN EMERGENCY SITUATION

Everyone involved in an emergency situation experiences a certain amount of anxiety and stress. The Centers for Disease Control and Prevention (CDC) recommends that a facility’s emergency preparedness plan consider the following steps to minimize these negative psychological effects on both healthcare workers and patients:

- Provide fact sheets for employees and patients to help them understand the dangers of certain emergencies and encourage employee participation in disaster drills.
- Plan in advance for effective communication and action in response to an emergency; the plan should include methods for coordinating a response with local and state agencies and media sources.
- Put into place a method for clearly explaining emergency situations to patients and healthcare workers; offer immediate evaluation and treatment of an infectious outbreak.
- Treat acute anxiety with reassurance and explanation; provide follow-up counseling as needed for employees.

Further information on emergency preparedness can be found at the following CDC sites:

- Emergency preparedness planning: [www.bt.cdc.gov/planning/#healthcare](http://www.bt.cdc.gov/planning/#healthcare)

### ASSISTING WITH MEDICAL EMERGENCIES

First aid is defined as the immediate care given to a person who has been injured or has suddenly taken ill. A knowledge of first aid and related skills often can mean the difference between life and death, temporary or permanent disability, and rapid recovery or long-term hospitalization. The medical assistant may be responsible for initiating first aid in the office and continuing to administer first aid until the physician or trained medical team arrives. Every medical assistant should successfully complete a course for the professional in cardiopulmonary resuscitation (CPR) and should continue to hold a current CPR card as long as he or she is employed.

Basic knowledge of CPR and life-support skills needs to be updated regularly, because procedures change as new techniques are developed. For example, both the American Red Cross and the American Heart Association (AHA) now recommend the inclusion of training on automated external defibrillators for all healthcare workers.

Medical assistants need up-to-date training in current emergency practices. They should encourage their local professional chapters to offer workshops on the management of emergencies in the ambulatory care setting, as well as community-wide emergency preparedness. Being prepared for both types of emergencies is important. The facility’s employees must be ready to respond both to emergencies on site and to natural disasters or other emergencies that affect the community.

Medical assistants are not responsible for diagnosing emergencies, especially over the telephone, but they are expected to make decisions about emergency situations based on their medical knowledge and training. If any doubt exists about how to manage a particular situation or emergency phone call, the medical assistant should not hesitate to consult the physician, the office manager, or some other more experienced member of the healthcare team.

### THE MEDICAL ASSISTANT’S ROLE IN PERFORMING EMERGENCY PROCEDURES

- Perform only the emergency procedures for which you have been trained.
- If an emergency occurs in the facility, notify the physician.
- If a physician cannot be located, immediately contact the local emergency medical services (EMS) team.

### Emergency Supplies

Emergency supplies consist of a properly equipped “crash cart” or box of items needed for a variety of emergencies (Figure 36-1). The contents vary to some degree, depending on the type of emergencies the particular office might expect to encounter.
Blood pressure and increase the respiratory rate. Antihistamines for the treatment of allergic reactions and anaphylaxis need to be available to treat any allergic responses to medications administered in the facility. Such antihistamines include Benadryl for minor reactions and Solu-Medrol, a corticosteroid, for a severe anaphylactic reactions.

Other medications also may be found on a crash cart. These include isoproterenol (e.g., Isuprel, Medihaler-ISO, Norisodrine), an antispasmodic used to treat bronchospasms (such as those experienced during an asthma attack) that also is effective as a cardiac stimulant; metaraminol (Aramine) (50%, in a prefilled syringe) for severe shock; phenobarbital, amobarbital sodium (Amytal), and diazepam (Valium) for convulsions and/or sedative effects; furosemide (Lasix) for CHF; and glucagon, which is used primarily to counteract severe hypoglycemic reactions (low blood glucose) in diabetic patients taking insulin.

Emergency supplies should be kept in an easily accessible place that is known to all personnel in the office, and the supplies should be inventoried regularly. The expiration dates of medications and sterile supplies must be checked either weekly or monthly, along with the status of available oxygen tanks and related supplies, and the cart should be replenished with fresh supplies after every use.

Emergency pharmaceutical supplies should include certain basic drugs, such as epinephrine, which has multiple uses in emergency situations. As a vasoconstrictor, it controls hemorrhage, relaxes the bronchioles to relieve acute asthma attacks, is administered for an acute anaphylactic reaction, and is an emergency heart stimulant used to treat shock. Epinephrine should be available in a ready to use cartridge syringe and needle unit. These are supplied in 1-mL cartridges.

Other drugs used include atropine, digoxin (Lanoxin), nitroglycerin (Nitrostat), and lidocaine (Xylocaine). Atropine reduces secretions, increases the respiratory rate and heart rate, and is a smooth-muscle relaxant. It is administered in a cardiac emergency for asystole, or it can be used to treat bradycardia. Digoxin is a cardiac drug used to treat arrhythmia and congestive heart failure (CHF); it is good for emergency use because it has a relatively rapid action. Nitroglycerin is a vasodilator that is given to relieve angina; it acts by dilating the coronary arteries so that an increased volume of oxygenated blood can reach the myocardium. Lidocaine is used intravenously to treat a cardiac arrhythmia and locally as an anesthetic, and sodium bicarbonate corrects metabolic acidosis, which typically occurs after cardiac arrest.

Emergency medical supplies also should include an emetic, such as syrup of ipecac, which causes vomiting soon after the syrup is swallowed, and activated charcoal, an antidote that is swallowed to absorb ingested poisons. Narcan, a antidote administered intravenously for narcotic drug overdoses, acts to raise the blood pressure and increase the respiratory rate. Antihistamines for the treatment of allergic reactions and anaphylaxis need to be available to treat any allergic responses to medications administered in the facility. Such antihistamines include Benadryl for minor reactions and Solu-Medrol, a corticosteroid, for a severe anaphylactic reactions.

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• Syringes and needles in assorted sizes and gauges
• Tongue blades
• Tubex cartridge system
• Venipuncture supplies and butterfly units

Medications
• Activated charcoal, bottle of 30-50 g
• Amobarbital (Amytal)
• Antihistamine, injectable and oral
• Atropine
• Dextrose
• Diazepam (Valium)
• Digoxin (Lanoxin), injectable
• Diphenhydramine (Benadryl)
• Epinephrine (Adrenalin), injectable
• Furosemide (Lasix)
• Glucagon and/or glucose tablets
• Ipecac syrup
• Isoproterenol (Isuprel), aerosol inhaler and injectable
• Lidocaine (Xylocaine), injectable and spray
• Metaraminol (Aramine)
• Narcan
• Nitroglycerin tablets
• Phenobarbital, injectable
• Sodium bicarbonate, injectable
• Solu-Medrol
• Sterile water and saline for injection

Defibrillators

The medical assistant may be required to assist the healthcare team with defibrillation of emergency patients. Defibrillation is indicated when a patient is in ventricular fibrillation (VF). VF is a severe cardiac arrhythmia; it is caused by an uncoordinated, rapid firing of the electrical system of the heart, which makes it impossible for the ventricles to empty. In the absence of ventricular emptying, the patient has no pulse, the blood pressure drops to zero, and the patient could die within 4 minutes unless help is given immediately.

Defibrillators are devices that send an electrical current through the myocardium by means of handheld paddles (in a healthcare facility) or self-adhesive pads applied to the chest. This electrical shock causes momentary asystole, giving the heart’s natural pacemaker an opportunity to resume the heart rate at a normal rhythm.

An automated external defibrillator (AED) has a computerized system that analyzes a cardiac rhythm and delivers voice-prompt instructions on how to operate the device (Figure 36-2 and Procedure 36-7). AEDs use self-adhesive pads that record and monitor the cardiac rhythm, and the device instructs the rescuer when to deliver the electrical charge. The apex-anterior position is the most commonly used paddle position, with the anterior (sternum) pad placed to the right of the upper sternum and the apex pad placed under the patient’s left nipple at the left middle axillary line (Figure 36-3). To defibrillate a female patient, the apex pad is placed either next to or underneath the left breast.

Precautions for Automated External Defibrillators

• Neither the patient nor the caregiver should be in contact with any metal during defibrillation. Do not place the AED pad over jewelry and remove the patient’s glasses to prevent injuries.
• When available, a pediatric-dose AED system should be used for children 1 to 8 years of age (it should not be used on infants under 1 year old). These systems deliver a reduced shock dose for victims up to about 8 years old or weighing 55 pounds.
• All clothing (including bras) must be removed; pads must be applied directly to the skin. If the individual has a great deal of hair on the chest, try to push the hair aside before applying the pads; or, apply the pads and quickly remove them to remove hair form the area, then reapply new pads. The machine will prompt you by stating “Check electrode” if the connection is poor.
• To prevent burns, make sure the patient is lying on a dry surface and the chest is dry before applying the pads.
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PROEDURE 36-7

Maintaining Provider/Professional-Level CPR Certification: Using an Automated External Defibrillator

GOAL: To defibrillate adult victims with cardiac arrest. Most adult victims in sudden cardiac arrest are in ventricular fibrillation. The survival rate for victims with ventricular fibrillation is as high as 90% when defibrillation occurs within the first minute of collapse; however, the survival rate for these patients declines 7% to 10% with every minute defibrillation does not occur.

EQUIPMENT and SUPPLIES

• Practice automated external defibrillator (AED)
• Approved mannequin

PROCEDURAL STEPS

These steps are to be performed only on an approved mannequin.

1. Place the AED near the victim’s left ear. Turn on the AED.
2. Attach electrode pads as pictured on the AED. Place the electrodes at the sternum and apex of the heart. Make sure the pads are in complete contact with the victim’s chest and that they do not overlap (see Figure 36-3).
3. All rescuers must clear away from the victim. Press the ANALYZE button. The AED analyzes the victim’s coronary status, announces whether the victim is going to be shocked, and automatically charges the electrodes (Figure 1).
4. All rescuers must clear away from the victim. Press the SHOCK button if the machine is not automated. You may repeat 3 analyze-shock cycles.
5. Deliver 1 shock, leaving the AED attached, and immediately resume CPR, starting with chest compressions.
6. After 5 cycles (about 2 minutes) of CPR, repeat the AED analysis and deliver another shock, if indicated. If a nonshockable rhythm is detected, the AED should instruct the rescuer to resume CPR immediately, beginning with chest compressions.
7. If the machine gives the No Shock Indicated signal, assess the victim. Check the carotid pulse and breathing status and keep the AED attached until EMS arrives.

PURPOSE: Continue to monitor breathing and circulation, because these can stop at any time. Keep the AED pads in place to diagnose ventricular fibrillation quickly if it occurs.

• If the patient has an implanted defibrillator or pacemaker, it will be obvious from the bulged area under the surface of the skin on the chest. Apply the AED pads at least 1 inch away from implants to prevent interference.

GENERAL RULES FOR EMERGENCIES

A medical assistant will face two types of emergencies in the ambulatory care setting: office emergencies and home emergencies. Common office emergencies and their management are discussed later in this chapter. Besides dealing with actual emergency situations on site, a medical assistant frequently is the first person to interact with patients facing potential emergencies at home. It is estimated that one third of the telephone calls received in a physician’s office are for some type of problem that requires attention. An immediate decision must be made on how to manage that problem: by giving home care advice, scheduling an appointment or, in life-threatening cases, notifying EMS. Many facilities, under the direction and approval of the physician, create a reference list of appropriate questions for specific patient complaints.

Regardless of how emergency phone calls are managed in the facility where you work, consider the following general rules when faced with an emergency:

• It is most important to stay calm. Reassure the patient and make him or her as comfortable as possible.
• Assess the situation to determine the nature of the emergency. Decide whether the need is immediate. This decision requires calm judgment and medical knowledge.
• Obtain as much information as possible to determine the appropriate action.
• Immediately refer any concerns to the office supervisor or physician.

Telephone Screening

Each time the phone rings in a healthcare facility, a person with a possible life-or-death situation may be on the other end of the line. One of the most important tasks performed by medical
assistants every day is answering the phones and managing patients’ needs efficiently and appropriately. Emergency action principles serve as a guide for managing emergency phone calls in an ambulatory care setting:

- If the patient’s situation is life-threatening, activate EMS/911.
  - Never put a caller with a life-threatening emergency on hold and always be the last to hang up.
  - Remain on the line until help arrives and you have talked to EMS personnel.
- Immediately record the names of the caller and patient, the location, and the phone number in case the connection is lost.
- If you are unsure how to manage the emergency situation, contact the physician.
- If the patient is referred to an emergency department (ED), call the ED to notify the staff of the patient’s arrival and make a follow-up call to determine the patient’s condition.
- Gather as much information as possible about what is wrong with the patient and when the problem started. Obtain details about the patient’s condition, including:
  - What is the patient’s level of consciousness? Alert, responsive, lethargic, or confused? Did the patient lose consciousness at any time? If so, for how long?

- Details about what has been done for the patient:
  - Thoroughly document the information gathered and any actions taken, including notification of EMS, whether the patient was sent to the ED or an appointment was scheduled, all home care recommendations, and whether the physician was notified and when.

Based on the outcome of the telephone interaction, a decision is made about when the practitioner will see the patient (Procedure 36-8). Emergency calls require either activation of EMS or immediate attention as soon as the patient arrives. Urgent calls require a same-day appointment if the patient has an acute condition or is in severe discomfort. This would include a young child with a high fever or a patient who complains of moderate to severe pain.

**PROCEDURE 36-8**

**Performing Patient Screening Using Established Protocols: Telephone Screening and Appropriate Documentation**

**GOAL:** To assess the direction of emergency care and document information appropriately in the patient’s record.

**SCENARIO:** Cheryl is working with the telephone screening staff when they receive a call from the mother of a 5-year-old patient. The mother reports that her son fell and cut his arm. What type of information should Cheryl gather about the injury? What action should be taken? How should the incident be documented?

**EQUIPMENT and SUPPLIES**

- Notepad and pen or pencil
- Patient’s record
- Facility’s emergency procedures manual
- Appointment book or computer program
- Area emergency numbers

**PROCEDURAL STEPS**

1. Stay calm and reassure the caller.
   **PURPOSE:** To enable you to gather accurate details about the patient’s condition.
2. Verify the identity of the caller and the injured patient.
3. Immediately record the name of the caller and the patient, the location, and the phone number.
   **PURPOSE:** To be able to contact the caller if the connection is lost.
4. Determine whether the patient’s condition is life-threatening. Quantify the amount of blood loss, whether the patient is alert and responsive, and whether breathing is normal. Notify EMS if necessary.
   - What is the character of the patient’s respirations (and pulse if the caller is able to determine this): normal, rapid, shallow, or difficult?
   - Is there bleeding? If so, how much and from where?
   - Is there a suspected head or neck injury? If so, has the patient been moved? Is there a suspected fracture? Where?
   - Does the patient have a history of this problem?
   - Any other symptoms, such as fever, vomiting, diarrhea, or pain?
5. If EMS is notified, stay on the line with the caller until EMS personnel arrive at the scene.
   **PURPOSE:** Never break a phone connection in the case of a life-threatening emergency.
6. If emergency services are not needed, gather details about the injury to determine whether the patient can be seen in the office or should be referred to an emergency department (ED). Consider the following questions:
   - Is there a suspected head or neck injury? Has the patient been moved?
   - Is there a possible fracture? If so, where?
   - Are there any other symptoms?
   - Is there anything pertinent in the patient’s health history that would complicate the situation?
   - Has the caller administered any first aid? If so, what was done?
severe abdominal pain. The new patient will have to be worked into the day's schedule, which may cause a delay in currently scheduled appointments. Patients with other, less urgent problems can be scheduled for appointments within the next 3 to 4 days.

**Management of On-Site Emergencies**

An emergency can occur at any time to anyone. Always follow Standard Precautions when at risk for coming into contact with blood or body fluids. When an emergency occurs, it is impossible to determine the level of infection. All body fluids must be considered infectious, and appropriate precautions must be taken to prevent cross-contamination. If the situation is life-threatening, notify EMS and stay with the patient until you are relieved by the EMS provider or the physician. It is important to document all the details of the incident in the patient's record.

**PROCEDURE 36-8—cont’d**

7. Based on the information gathered, determine when the patient should be seen in the office if he or she has not been referred to an ED.
   **PURPOSE:** Most emergencies are scheduled for an immediate office visit. This may require altering the current appointment schedule.

8. At any point in this process, do not hesitate to consult the physician or experienced staff or refer to the facility's emergency procedures manual to determine how to manage the patient’s problem.

9. Always allow the caller to hang up first, just in case more information or assistance is needed.

10. Document the information gathered, the actions taken or recommended, any home care recommendations, and whether the physician was notified.

when a physician is present, the physician may order you to call 911 for immediate emergency care. Put on gloves before you begin to assess the patient, because any emergency situation may involve exposure to blood or body fluids.

**Unresponsive Patient**

If a patient is able to talk to you, he or she has an open airway. If the patient does not respond to a simple question (e.g., “Are you OK?”), gently shake the person's shoulder to check responsiveness. If the patient does not respond, you must assume that the patient is unconscious. Immediately call for help and activate EMS if that is office policy.

To care for an unresponsive patient, first assess the patient's respirations to determine whether the person is breathing. When the patient collapsed, the tongue may have gone limp and occluded the trachea. Just by changing the individual's position and opening the airway, you may provide all the assistance the patient needs to breathe independently.

Position the patient on his or her back and apply the head tilt–chin lift movement to open the airway. The tongue is attached to the lower jaw, so moving the jaw forward automatically opens the patient's airway. If a head or neck injury is suspected, the neck should be manipulated as little as possible; therefore, the airway should be open with the jaw thrust maneuver. Both of these actions relieve possible obstruction of the trachea by the tongue.

Check for breathing by looking for a rise in the chest and either listening or feeling for air exchange (Figure 36-4). Breathing may stop suddenly for a variety of reasons, including shock, disease, and trauma. If no breaths are detected, artificial ventilation must be started immediately, because death can occur within 4 to 6 minutes. Barrier devices should be kept on hand for artificial respiration (Figure 36-5), and these should be used if rescue breaths are required (Procedure 36-9).

After giving the patient 2 slow breaths, check for signs of normal breathing or movement. If there are still no signs of responsiveness, check for cardiac circulation at the carotid pulse (in an adult or child) or the brachial pulse (in an infant) (Figure 36-6). Gently feel for the pulse while continuing to assess the patient for possible signs of recovery for 5 to 10 seconds. If a pulse is present, continue ventilating the lungs with slow
breaths every 4 to 5 seconds (adult) or every 3 seconds (child or infant). If the pulse is absent, begin cycles of 30 chest compressions at a rate of about 100 per minute followed by 2 slow breaths.

When both breathing and pulse stop, the victim has suffered sudden death. Sudden death has many causes, including heart disease, choking, drowning, poisoning, suffocation, electrocution, and smoke inhalation. CPR must be started immediately to attempt to revive the patient and prevent permanent damage to body organs, especially the brain. Continue CPR until the victim begins to move, an AED is available and ready to use, professional help arrives, or you are too exhausted to continue. If the patient has a pulse but is not breathing, continue rescue breathing and occasionally monitor the pulse until help arrives.

Refer to the American Red Cross’s *Standard First Aid Manual* or the AHA’s *American Heart Association CPR Manual*, or the organizations’ Web sites, for specific procedures and precautions in the management of respiratory and cardiac emergencies. As stated earlier, all healthcare workers should have a current Certification for the Professional in CPR.

### Cardiac Emergencies

Chest pain or angina can be associated with heart and lung disease, as well as a few other conditions. It can be quite serious; a patient with chest pain is treated as a cardiac emergency until a physician has ruled this out. A heart attack, or *myocardial infarction*, usually is caused by blockage of the coronary arteries, which reduces the amount of blood delivered to the myocardium. The most common signal of a heart attack is an uncomfortable pressure, squeezing, fullness, or pain in the center of the chest. This may spread to the shoulder, neck, jaw, or arms. The pain may not be severe. The lips and fingernails may be blue, which is a sign of *cyanosis* (Figure 36-7), or the patient may have a gray, ashen appearance. Frequently the patient clutches the chest in pain. This pain may radiate from the mediastinum down the left arm.
PROCEDURE 36-9

Maintaining Provider/Professional-Level CPR Certification: Performing Adult Rescue Breathing and One-Rescuer CPR; Performing Pediatric and Infant CPR

GOAL: To restore breathing and blood circulation when respiration or pulse (or both) has stopped.

EQUIPMENT and SUPPLIES

- Disposable gloves
- CPR ventilator masks for the adult, child, and infant
- Approved mannequins

PROCEDURAL STEPS

These steps are to be performed only on approved mannequins.

To Perform CPR on an Adult Victim

1. Establish unresponsiveness. Tap the victim and ask, “Are you OK?”
   Wait for the victim to respond.
   PURPOSE: To determine whether the victim is conscious.
2. Activate the emergency response system. Put on gloves and get a ventilator mask.
   PURPOSE: As soon as it is determined that an adult victim requires emergency care, activate EMS. Most adults with sudden, nontraumatic cardiac arrest are in ventricular fibrillation. The time from collapse to defibrillation is the single most important predictor of survival.
3. Tilt the victim’s head by placing one hand on the forehead and applying enough pressure to push the head back; with the fingers of the other hand under the chin, lift up and pull the jaw forward. Look, listen, and feel for signs of breathing. Place your ear over the mouth and listen for breathing. Watch the rising and falling of the chest for evidence of breathing (Figure 1*). If breathing is absent or inadequate, open the airway and place the ventilator mask over the victim’s mouth and nose.
   PURPOSE: To open the airway and determine whether the victim is breathing.
4. Give 2 slow breaths (1½ to 2 seconds per breath for an adult; 1 to 2 seconds per breath for an infant or child), holding the ventilator mask tightly against the face while tilting the victim’s chin up to keep the airway open (Figure 2*). Remove your mouth from the mouthpiece between breaths to allow time for the patient to exhale between breaths.
5. Check the patient’s pulse (at the carotid artery for an adult or older child; at the brachial artery for an infant). If a pulse is present, continue rescue breathing (1 breath every 4 to 5 seconds—about 10 to 12 breaths per minute for an adult; 1 breath every 3 seconds—about 12 to 20 breaths per minute for an infant or child). If no signs of circulation are present, begin cycles of 30 chest compressions (at a rate of about 100 compressions per minute for an adult) followed by 2 slow breaths.
6. To deliver chest compressions, kneel at the victim’s side a couple of inches away from the chest. Hand placement is over the sternum, between the nipples but above the xiphoid process.
7. Place the heel of your hand on the chest over the lower part of the sternum.
8. Place your other hand on top of the first and either interlace or lift your fingers upward off the chest (Figure 3*).
   PURPOSE: This position gives you the most control, allowing you to avoid injuring the victim’s ribs as you compress the chest.
9. Bring your shoulders directly over the victim’s sternum as you compress downward, keeping your elbows locked (Figure 4*).
10. Depress the sternum 1½ to 2 inches in an adult victim. Relax the pressure on the sternum after each compression but do not remove your hands from the sternum.
   PURPOSE: The depth of compression is needed to circulate blood through the heart. Movement of the hands may cause injury to the victim.
11. After performing 30 compressions (at a rate of about 100 compressions per minute), perform the head tilt–chin lift maneuver to open the airway and give 2 slow rescue breaths.
12. After 5 cycles of compressions and breaths (30 : 2 ratio, about 2 minutes) recheck the breathing and carotid pulse (Figure 5). If a pulse is present but breathing is not, continue rescue breathing (1 breath every 5 seconds, about 10 to 12 breaths per minute) and re-evaluate the victim’s breathing and pulse every few minutes. If no signs of circulation are present, continue 30 : 2 cycles of compressions and ventilations, starting with chest compressions. Continue giving CPR until an AED is available or EMS relieves you.

To Perform CPR on a Child

The procedure for giving CPR to a child ages 1 through 8 is essentially the same as that for an adult. The differences are as follows:

- Perform 5 cycles of compressions and breaths on the child (30 : 2 ratio, about 2 minutes) before calling 911 or the local emergency number or using an AED. If another person is available, have that person activate EMS while you care for the child.
- Use only one hand to perform chest compressions (Figure 6).
  PURPOSE: The pediatric sternum requires less force to achieve the needed depression.
- Breathe more gently.
- Use the same compression-to-breath ratio as used for adults, 30 compressions followed by 2 breaths per cycle; after 2 breaths, immediately begin the next cycle of compressions and breaths.
- After 5 cycles (about 2 minutes) of CPR without response, use a pediatric AED if available.
- Continue until the child responds or help arrives.
Infant CPR
Infant cardiac arrest typically is caused by a lack of oxygen from drowning or choking. If you know the infant has an airway obstruction, clear the obstruction; if you do not know why the infant is unresponsive, perform CPR for 2 minutes (about 5 cycles) before calling 911 or the local emergency number. If another person is available, have that person call for help immediately while you attend to the baby.

Rescue breathing for an infant
Use an infant ventilator mask or cover the baby’s mouth and nose with your mouth.
• Give 2 rescue breaths by gently puffing out the cheeks and slowly breathing into the infant’s mouth, taking about 1 second for each breath (Figure 7).

To perform CPR on an infant
• Draw an imaginary line between the infant’s nipples. Place two fingers on the sternum just below this intermammary line.
• Gently compress the chest.
• Compression rate should be 100 to 120 per minute.
• Administer 2 slow breaths after every 30 compressions.
• After about five 30:2 cycles, activate EMS.
• Continue CPR until the child responds or help arrives.

13. Remove your gloves and the ventilator mask valve and discard them in the biohazard container. Disinfect the ventilator mask per the manufacturer’s recommendations. Sanitize your hands.
and up the left side of the neck. The pulse may be rapid and weak, and the patient often complains of nausea. Other symptoms include sweating (diaphoresis); indigestion; shortness of breath (SOB); cold, clammy skin; and a feeling of weakness (general malaise). Unfortunately, most people deny that the problem is serious until they require immediate medical attention.

**SIGNS AND SYMPTOMS OF MYOCARDIAL INFARCTION IN WOMEN**

Women may experience symptoms that are different from those traditionally associated with a heart attack. These include a combination of the following:

- 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
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Immediately report any of these signs or symptoms to the physician. If the physician is not available, activate EMS. Use a wheelchair to move the patient to an examination room. Breathing will be easier if the patient’s head is slightly elevated or if the patient is in Fowler’s position. Keep the patient quiet and warm. Loosen all tight clothing. Take vital signs, including both apical and radial pulses. The physician may order oxygen started on the patient to relieve dyspnea (Procedure 36-10). Bring the emergency cart into the room and open the medication drawer so that the physician can quickly prepare the medications needed. These may include epinephrine (adrenaline), atropine, digitalis, calcium chloride, or morphine.

If the patient is conscious, ask about any medication he or she has recently taken or is carrying. If the patient has an established heart disorder, the person may be carrying nitroglycerin tablets; these tablets are administered sublingually and may be given with the patient’s consent (Figure 36-8). If the physician is in the office or on the way, connect the patient to the electrocardiograph machine and record a few tracings. If the patient becomes unresponsive before the physician or EMS arrives, it may be necessary to start rescue breathing if there is no evidence of respirations. If chest pain progresses to cardiac arrest and loss of circulation, CPR must be performed until help arrives.

**Choking**

Choking is usually caused by a foreign object, often a bolus of food, lodged in the upper airway. The victim may clutch the neck between the thumb and index finger (Figure 36-9); this universal distress signal should be viewed as a sign the victim needs help. If the victim has good air exchange or only partial airway obstruction and can speak, cough, or breathe, do not interfere but encourage the patient to continue coughing until the object is expelled. Monitor the patient for signs of respiratory distress, such as pallor and cyanosis. If the patient has a pronounced wheeze or a very weak cough, he or she has a partial airway obstruction with poor air exchange and may need help. If the patient is unable to speak, breathe, or cough, a complete airway obstruction exists, and quick action must be taken to clear the

**PROCEDURE 36-10**

**Performing First Aid Procedures: Administering Oxygen**

**GOAL:** To provide oxygen for a patient in respiratory distress.

**EQUIPMENT and SUPPLIES**

- Portable oxygen tank
- Pressure regulator
- Flow meter
- Nasal cannula with connecting tubing
- Physician’s order
- Patient’s chart

**PROCEDURAL STEPS**

1. Gather equipment and sanitize your hands.
2. Greet and identify the patient, introduce yourself, and explain the procedure.
   **PURPOSE:** A nasal cannula is applied with a nasal prong in each nostril and the tab resting above the upper lip. Patients who will be using oxygen at home need to be taught how to open an oxygen tank or to use an oxygen compressor. It is vital that patients and their families understand the dangers of oxygen use in the home. They must avoid open flames and not smoke when oxygen is in use, because it is combustible. The physician typically writes an order for the number of liters of oxygen to be delivered and for home healthcare services to set up the equipment in the patient’s home.
3. Check the pressure gauge on the tank to determine the amount of oxygen in the tank.
4. If necessary, open the cylinder on the tank one full counterclockwise turn, then attach the cannula tubing to the flow meter.
5. Adjust the administration of the oxygen according to the physician’s order. Usually the flow meter is set at 12 to 15 liters per minute (LPM). Check to make sure oxygen is flowing through the cannula.
6. Insert the tips of the cannula into the nostrils and adjust the tubing around the back of the patient’s ears (Figure 1).
7. Make sure the patient is comfortable and answer any questions he or she may have.
8. Sanitize your hands.
9. Document the procedure, including the number of liters of oxygen being administered and the patient’s condition. Continue to monitor the patient throughout the procedure and document any changes in condition.

7/24/XX 3:05 pm R – 28 and labored. Oxygen initiated at 4L/min via nasal cannula per physician order. Pt observed for signs of dyspnea and tachypnea. Cheryl Skurka, CMA(AAMA)
airway. With a complete obstruction, the patient eventually loses consciousness from lack of oxygen to the brain. This condition may lead to respiratory and cardiac arrest. If the object is not removed, the victim may die within 4 to 6 minutes. Procedure 36-11 presents the steps involved in clearing an obstructed airway in an adult. The procedure for removal of a foreign airway obstruction is exactly the same for a child over the age of 1 year.

To dislodge a foreign object from the airway of an infant up to 1 year of age, place the baby face down over your forearm and across your thigh. The head should be lower than the trunk, and you should support the baby’s head and neck with one hand. Using the heel of your other hand, deliver 5 blows to the back, between the infant’s shoulder blades (Figure 36-10, A). Holding the baby between your arms, turn the infant face up, keeping the head lower than the trunk. Using two fingers, deliver 5 thrusts to the midsternal area at the infant’s nipple line (Figure 36-10, B). Examine the infant’s mouth, and if the object is visible, pluck it out with your fingertips, *Never perform a finger sweep on an infant.* A baby’s oral cavity is too small for a finger sweep, and such an action may only push the obstruction farther into the airway. If the obstruction is not visible, administer 2 rescue breaths by covering both the baby’s nose and mouth with your mouth or use a pediatric ventilator mask if available. Repeat the sequence until the foreign body is expelled or help arrives.
Performing First Aid Procedures: Responding to an Airway Obstruction in an Adult

**GOAL:** To remove an airway obstruction and restore ventilation.

**EQUIPMENT and SUPPLIES**
- Disposable gloves
- Ventilation mask (for unconscious victim)
- Approved mannequin to practice unconscious foreign body airway obstruction (FBAO) removal

**PROCEDURAL STEPS**

The technique for an unresponsive victim is to be performed only on an approved mannequin.

1. Ask “Are you choking?” If the victim indicates yes, ask “Can you speak?” If the victim is unable to speak, tell the victim you are going to help.
   **PURPOSE:** If the victim is unable to speak, is coughing weakly, and/or is wheezing, he or she has an obstructed airway with poor air exchange, and the obstruction must be removed before respiratory arrest occurs.

2. Stand behind the victim with your feet slightly apart.
   **PURPOSE:** With an obstructed airway, the victim may lose consciousness at any time. The rescuer must be prepared to lower the unconscious victim to the floor safely.

3. Reach around the victim’s abdomen and place an index finger into the victim’s navel or at the level of the belt buckle. Make a fist of the opposite hand (do not tuck the thumb into the fist) and place the thumb side of the fist against the victim’s abdomen above the navel. If the victim is pregnant, place the fist above the enlarged uterus. If the victim is obese, it may be necessary to place the fist higher in the abdomen. It may be necessary to perform chest thrusts on a victim who is pregnant or obese.
   **PURPOSE:** The fist should be placed in the soft tissue of the abdomen to avoid injury to the sternum or rib cage.

4. Place the opposite hand over the fist and give abdominal thrusts in a quick inward and upward movement (Figure 1).
   **PURPOSE:** Abdominal contents pushing against the diaphragm force trapped air out of the lungs and with it the obstruction.

5. Repeat the abdominal thrusts until the object is expelled or the victim becomes unresponsive.

6. If a choking victim is in the late stages of pregnancy, chest compressions should be delivered to prevent possible trauma to the infant. If the patient is obese and you are unable to wrap your arms around the abdomen, perform chest compressions as you would for a pregnant woman.

   The abdominal thrust maneuver also can be performed on yourself if you are choking and no one is nearby to help you. Press your fist into your upper abdomen with quick, upward thrusts or lean forward and press the abdomen quickly against a firm object, such as the back of a chair.

   **Cerebrovascular Accident (Stroke)**

A cerebrovascular accident (CVA), or stroke, is a disorder of the cerebral blood vessels that results in impairment of the blood supply to part of the brain. This interruption in normal circulation of blood through the brain leads to some degree of...
neurologic damage, either temporary or permanent, depending on the severity of the oxygen deprivation to the brain cells.

A minor stroke, or transient ischemic attack (TIA), usually does not cause unconsciousness, and symptoms depend on the location of the circulatory problem in the brain as well as the amount of brain damage. TIA symptoms are temporary and may include headache, confusion, vertigo, ringing in the ears (tinnitus), temporary paralysis or weakness of one side of the body, transient limb weakness, slurred speech, and vision problems. TIA episodes indicate that the patient is at risk for a major stroke.

Symptoms of a major stroke include unconsciousness, paralysis on one side of the body, difficulty breathing and swallowing, loss of bladder and bowel control, unequal pupil size, and slurring of speech.

Home recommendations for a patient who has suffered a major stroke should begin with notifying the physician and/or activating EMS. Keep the patient lying down and lightly covered. Maintain an open airway. To prevent choking, position the head so that any secretions drain from the side of the mouth. If the patient is lying on the floor, did not fall, and shows no indications of a head or neck injury, he or she can be placed in the recovery position as follows:

1. Place the patient’s arm that is farthest from you alongside and above the head; place the other arm across the chest.
2. Bend the leg that is closest to you, and after placing one arm under the patient’s head and shoulder and the other hand on the flexed knee, roll the patient away from you while you stabilize the head and neck. The patient’s head should be resting on the extended arm.

The recovery position uses gravity to drain fluids from the mouth and keep the trachea clear. Keep the patient in this position until the person is alert or help arrives. Do not give the patient anything to eat or drink. Vital signs should be measured at regular intervals and recorded for the physician.

Advances in the early treatment of strokes show great promise in preventing long-term neurologic deficits. However, to prevent permanent brain damage, thrombolytics must be administered intravenously within 3 hours of the onset of symptoms. If a patient does not know when the symptoms began (e.g., the person woke up with the symptoms) or cannot accurately tell the physician when the symptoms started, the time allotted for administration begins from the point at which the patient last was known to be asymptomatic. Intracranial hemorrhage must be ruled out before treatment begins. The earlier the treatment starts, the better the neurologic outcomes. The best possible outcomes are seen in patients who received thrombolytic therapy within 90 minutes of the onset of symptoms.

**Shock**

Shock is a state of collapse caused by failure of the circulatory system to deliver enough oxygenated blood to the body’s vital organs. An injury, hemorrhage, infection, anesthesia, drug overdose, burns, pain, fear, or emotional stress can cause this physiologic reaction. Shock can be immediate or delayed, and it is potentially fatal. Many different types of shock can occur, but the signs and symptoms are universal. The most common indicators are a pale, gray, or cyanotic appearance; moist but cool skin; dilated pupils; a weak, rapid pulse; marked hypotension; shallow, rapid respirations; lethargy or restlessness; nausea and vomiting; and extreme thirst.

If a patient shows signs of shock, maintain an open airway and check for breathing and circulation. Place the patient supine with the legs elevated approximately 1 foot to return the blood from the legs to vital organs. Loosen all tight clothing and cover the patient with a blanket for warmth. Do not move the patient unnecessarily. Fluids may be given by mouth if the patient is alert. Because shock can evolve into a life-threatening situation, only basic first aid should be administered, and the patient should be transported to the hospital as soon as possible.

**TYPES AND CAUSES OF SHOCK**

- Anaphylactic—a severe allergic reaction
- Insulin—severe hypoglycemia caused by an overdose of insulin
- Psychogenic or mental—excessive fear, joy, anger, or emotional stress
- Hypovolemic or hemorrhagic—excessive loss of blood
- Cardiogenic—myocardial infarction, pulmonary embolism, or severe congestive heart failure
- Neurogenic—dilation of blood vessels as a result of brain or spinal cord injuries
- Septic—systemic infection

**COMMON OFFICE EMERGENCIES**

The remainder of this chapter highlights typical emergencies seen either in the ambulatory care setting or in telephone triage situations. Table 36-1 summarizes common emergencies, the questions that should be asked, and possible actions for home care.

**Fainting (Syncope)**

Fainting, or syncope, is a common emergency. It usually is caused by a transient loss of blood flow to the brain (e.g., a sudden drop in blood pressure), which results in a temporary loss of consciousness. It can occur without warning, or the patient may appear pale; may feel cold, weak, dizzy, or nauseated; and may have numbness of the extremities before the incident. The greatest danger to the patient is an injury from falling during the attack. Therefore, if a patient has syncopal symptoms, immediately place the individual in a supine position. Loosen all tight clothing and maintain an open airway. Apply a cold washcloth to the forehead. Measure and record the patient’s pulse, respiratory rate, and blood pressure and report the findings to the physician. Keep the patient in a supine position for at least 10 minutes after the...
TABLE 36-1 Telephone Screening of Possible Emergency Situations

<table>
<thead>
<tr>
<th>EMERGENCY SITUATION</th>
<th>SCREENING QUESTIONS</th>
<th>HOME CARE ADVICE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Syncope</td>
<td>Was the patient injured? Does the patient have a history of heart disease, seizures, or diabetes?</td>
<td>Does not necessarily indicate a serious disease. If injured by a fall, the patient may need to be evaluated and treated. The patient should get up very slowly to prevent a recurrence, take it easy, and drink plenty of fluids. If the patient is to be seen, someone should accompany him or her to the physician’s office.</td>
</tr>
<tr>
<td>Animal bites</td>
<td>What kind of animal (pet or wild)? How severe is the injury? Where are the bites? When did the bite occur?</td>
<td>The health department or police should be notified. Every effort must be made to locate the animal and monitor its health. If the skin is not broken, wash well and observe for signs of infection.</td>
</tr>
<tr>
<td>Insect bites and stings</td>
<td>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?</td>
<td>If the patient has a history of anaphylaxis and an EpiPen, the EpiPen should be used immediately and emergency medical services (EMS) notified. Activate EMS if the patient is having systemic symptoms. An antihistamine (Benadryl) relieves local pruritus.</td>
</tr>
<tr>
<td>Asthma</td>
<td>Does the patient show signs of cyanosis? Has the patient used prescribed inhalers?</td>
<td>If a patient with asthma is unable to speak in sentences, has poor color, and is struggling to breathe even after using an inhaler, he or she should be seen immediately or EMS should be activated.</td>
</tr>
<tr>
<td>Burns</td>
<td>Where are the burns located and what caused them? Are signs of shock present: moist, clammy skin, altered consciousness, rapid breathing and pulse? Are signs of infection present (foul odor, cloudy drainage) in a burn more than 2 days old?</td>
<td>Activate EMS for burns on the face, hands, feet, or perineum; those caused by electricity or a chemical; and burns associated with inhalation. Activate EMS if signs of shock are present. The patient must receive a tetanus shot if he or she has not had one in more than 10 years. Schedule an urgent appointment if signs of infection are reported.</td>
</tr>
<tr>
<td>Wounds</td>
<td>Is the bleeding steady or pulsating? How and when did the injury occur? Does the patient have any bleeding disorders or is the patient taking anticoagulant drugs? Is the wound open and deep?</td>
<td>Pulsating bleeding usually indicates arterial damage; activate EMS. If the injury was caused by a powerful force, other injuries also may have resulted. For patients taking anticoagulants or with diabetes or anemia, schedule an urgent appointment. A gaping, deep wound requires sutures.</td>
</tr>
<tr>
<td>Head injury</td>
<td>Did the patient pass out or have a seizure? Is the patient confused or vomiting? Is a clear fluid draining from the nose or ears?</td>
<td>If the answer is ‘yes’ to any of these symptoms, EMS should be activated.</td>
</tr>
</tbody>
</table>

person regains consciousness. A complete patient history can help determine the possible causes of the attack (e.g., a history of heart disease or diabetes). Document the details of the episode and how long it took the patient to recover completely (Procedure 36-12).

If the patient does not recover quickly, the physician may activate EMS for transport to the hospital. Syncope might be a brief episode in the development of a serious underlying illness, such as an abnormal heart rhythm, that could lead to sudden cardiac death.

Poisoning

Poisonings are considered medical emergencies and are the sixth leading cause of accidental pediatric death in the United States. Poisoning can occur by oral intake, absorption, inhalation, or injection. Over-the-counter (OTC) medications (e.g., acetaminophen); detergents and bleach; plants; cough and cold medicines; and vitamins cause most cases of poisoning seen in young children. Other typical household poisons include drain cleaner, turpentine, kerosene, furniture polish, and paint (Figure 36-11). Signs and symptoms of poisoning, which vary greatly, include burns on the hands and mouth, stains on the victim’s clothing, open bottles of medicines or chemicals, changes in skin color, nausea or stomach cramps, shallow breathing, convulsions, heavy perspiration, dizziness or drowsiness, and unconsciousness.

If you receive a phone call about a suspected poisoning, tell the caller not to hang up and not to leave the victim unattended. Call the local poison control center and forward all directions to the caller. Syrup of ipecac, which causes vomiting within 15 to 20 minutes, should be used only if ordered by the physician or poison control center, because some chemicals can cause serious
PROCEDURE 36-12

Performing First Aid Procedures: Caring for a Patient Who Has Fainted

GOAL: To provide emergency care for and assessment of a patient who has fainted.

EQUIPMENT and SUPPLIES

- Patient’s record
- Sphygmomanometer
- Stethoscope
- Watch with second hand
- Blanket
- Foot stool or box
- Pillows
- Oxygen equipment, if ordered by physician:
  - Portable oxygen tank
  - Pressure regulator
  - Flow meter
  - Nasal cannula with connecting tubing

PROCEDURAL STEPS

1. If warning is given that the patient feels faint, have the patient lower the head to the knees to increase the blood supply to the brain (Figure 1). If this does not stop the episode, either have the patient lie down on the examination table or lower the patient to the floor. If the patient collapses to the floor when fainting, treat with caution because of possible head or neck injuries.

2. Immediately notify the physician of the patient’s condition and assess the patient for life-threatening emergencies, such as respiratory or cardiac arrest. If the patient is breathing and has a pulse, monitor the patient’s vital signs.

3. Loosen any tight clothing and keep the patient warm, applying a blanket if needed.

4. If a head or neck injury is not a factor, elevate the patient’s legs above the level of the heart using the footstool with pillow support if available (Figure 2).

PURPOSE: Elevating the legs assists with venous blood return to the heart. This may relieve symptoms of fainting by elevating the blood pressure and increasing blood flow to vital organs.

5. Continue to monitor vital signs and apply oxygen by nasal cannula if ordered by the physician.

6. If vital signs are unstable or the patient does not respond quickly, activate EMS.

PURPOSE: Fainting may be a sign of a life-threatening problem.

7. If the patient vomits, roll the patient on his or her side to prevent aspiration of vomitus into the lungs.

8. Once the patient has completely recovered, assist the patient into a sitting position. Do not leave the patient unattended on the examination table.

9. Document the incident, including a description of the episode, the patient’s symptoms and vital signs, the duration of the episode, and any complaints. If oxygen was administered, document the number of liters and how long oxygen was administered.

FIGURE 1 (From Bonewit-West K: Clinical procedures for medical assistants, ed 5, Philadelphia, 2000, Saunders.)

FIGURE 2 (From Bonewit-West K: Clinical procedures for medical assistants, ed 5, Philadelphia, 2000, Saunders.)

7/29/XX 4:18 pm Pt in waiting room states she feels faint. Pt lowered to floor, clothing loosened, legs elevated. Physician notified. P = 88 and regular, R = 22, BP = 112/60. Syncopal episode persisted for 90 sec, feeling of vertigo lasted 10 min postsyncope. Pt transferred to exam room via wheelchair after recovery. Cheryl Skurka, CMA(AAMA).
irritation to the tissues if vomited. Do not induce vomiting if the victim is semiconscious or experiencing convulsions because of the risk of aspiration of stomach contents into the lungs. If syrup of ipecac is recommended, give 2 teaspoons to infants 9 to 12 months old after the child drinks about 4 ounces of warm water. For a child 1 to 4 years old, administer 1 tablespoon after the child drinks 4 to 8 ounces of warm water. If the patient is to be seen by the physician or sent to the hospital, tell the caller to bring the container of poison or a sample of the vomitus with them so that the chemical contents of the substance can be verified.

### WHAT TO ASK WHEN A POISONING IS REPORTED
- The victim’s name, weight, and age
- The name of the poison taken and any information on the label
- How much was taken
- How long ago the poison was ingested
- Whether vomiting has occurred
- Any pertinent symptoms, such as difficulty breathing or an altered state of consciousness
- Any first aid that has been given

### CRITICAL THINKING APPLICATION 36-5
A young mother calls in a panic to report that her 18-month-old daughter swallowed at least half a bottle of cough syrup. The child is fussy and very sleepy, and the mother wants to give her ipecac immediately. What should Cheryl do?

#### Animal Bites
Potential complications from animal bites include rabies, tetanus, and local skin infections. Any animal bite that is extensive or deep should be seen by a physician. Human infection with rabies is rare; however, if the bite is made by a domestic animal, the animal should be kept quarantined and under observation for 10 days for monitoring for signs of the disease. The animal should not be killed, because a positive rabies identification is almost impossible to make if the animal has been dead for a period of time. If the bite is from a bat, raccoon, or any other wild animal, the animal is assumed to be rabid, and the patient must undergo a series of rabies vaccine injections. Local skin infections can be prevented by immediately cleansing the area with antimalarial soap and water. If the bite breaks the skin (including human bites), the patient’s tetanus immunization status must be checked and, if needed, a booster or the entire four-dose tetanus series must be administered as indicated.

### Insect Bites and Stings
The bite or sting of an insect can be irritating and painful because of the chemical toxin injected by the insect, but it usually is not serious. Typical symptoms—inflammation, itching (pruritus), and edema—are local and confined to the area of the bite. In rare cases a severe allergic reaction may occur; this is a potentially dangerous situation that can lead to anaphylaxis. Signs and symptoms of a systemic allergic reaction include a dry cough, a feeling of tightening in the throat or chest, swelling or itching around the eyes, widespread hives (urticaria), wheezing, dyspnea, and hypotension. Difficulty talking is a sign of urticaria or edema in the throat and may indicate the onset of complete airway obstruction. This is a sign of a true emergency. Epinephrine and oxygen should be ready for immediate administration on the physician’s orders. Antihistamines and corticosteroids may be used, but these agents act considerably slower than epinephrine. If acute anaphylactic shock develops, death may occur within 1 hour without medical intervention.

If the stinger is still lodged in the skin, scrape it off with a dull knife, credit card, or fingernail. Be careful not to squeeze the stinger, because that injects more venom into the skin. Apply an ice bag to the site to relieve pain and slow absorption of the venom. Calamine lotion or hydrocortisone cream may be applied to relieve itching. If the patient has a history of allergies, especially to insect venom, he or she should have access to an EpiPen injection system; this should be used immediately after the sting. The patient should be transported to the nearest hospital for immediate care.

### REMOVAL OF A TICK
Ticks can cause a number of diseases, including Rocky Mountain spotted fever and Lyme disease. The tick embeds its head into the skin to obtain blood, and it should be removed intact by the following method:
1. Do not handle ticks with uncovered fingers; use tweezers to prevent personal contamination.
2. Place the tips of the tweezers as close as possible to the area where the tick has entered the skin.
3. With a slow, steady motion, pull the tick away from the skin. Try not to squeeze or crush the tick. If the tick's entire body is not removed, make an appointment with a physician to have the site evaluated.
4. After removal, place the tick directly into a sealable container. Disinfect the area around the bite site using standard procedures.
5. If the tick is removed at home, the physician may suggest that it be brought to the office to be tested for disease.
Asthma Attacks

Asthma is characterized by expiratory wheezing, coughing, a feeling of tightness in the chest, and SOB. During an asthma attack, two different physiologic responses occur. The lining of the respiratory tract becomes inflamed and edematous and produces mucus, which results in narrowing of the air passages. At the same time, bronchospasms occur, which also constrict the airways. The quality and severity of attacks vary greatly among patients, and treatment must be individualized to minimize or eliminate chronic symptoms (see Chapter 44.) If the patient is prescribed a bronchodilator inhaler, it should be used at the first indication of symptoms. Depending on the severity of the attack, give the patient an appointment for the same day as the call or consult the physician. The physician may recommend that the patient go directly to the ED for emergency respiratory care.

Seizures

Seizures may be idiopathic, or they may result from trauma, injury, or metabolic alterations, such as hypoglycemia or hypocalcemia. A febrile seizure is transient and occurs with a rapid rise in body temperature over 101.8°F (38.8°C). Febrile seizures typically occur in children between 6 months and 5 years of age. Many different types of seizures occur, but they are all caused by a disruption in the electrical activity of the brain. (The different types of seizures are discussed in Chapter 44.)

If a patient suffers a grand mal seizure, which involves uncontrolled muscular contractions, the most important point is to protect the patient from possible injury. Clear everything away from the patient that could cause accidental injury and observe him or her until the seizure ends. Do not place anything in the person’s mouth, because it may damage the teeth or tongue and force the tongue back over the trachea. Do not hold the patient down, because that may result in muscle injuries or fractures. If unconsciousness persists after the seizure has subsided, place the patient in the recovery position to maintain an open airway and allow drainage of excess saliva. After the seizure is over, let the patient rest or sleep but never leave the person alone. If the physician is not in the office, check the office policy and procedures manual to determine how to manage the situation.

Call 911 for emergency assistance in any of the following situations:
• The patient does not regain consciousness within 10 to 15 minutes.
• The seizure does not stop within a few minutes.
• The patient begins a second seizure immediately after the first one.
• The patient is pregnant.
• Signs of head trauma are present.
• The patient is known to have diabetes.
• The seizure was triggered by a high fever in a child.

Abdominal Pain

Abdominal pain is a symptom caused by many different problems, which can range from acute discomfort to life-threatening complications. The clinician should see every patient who reports abdominal pain; the question is how soon the patient should be seen. A patient with acute onset of severe, persistent abdominal pain, especially when this is accompanied by fever, should receive medical attention as soon as possible. Abdominal pain has a variety of causes, including intestinal infections, appendicitis, ectopic pregnancy, inflammation, hemorrhage, obstruction, and tumors.

Treatment in the ambulatory care setting depends on the cause of the pain; however, the medical assistant should observe the following general guidelines:
• Keep the patient warm and quiet.
• Have an emesis basin available.
• Administer nothing by mouth (NPO)
• Do not apply heat to the abdomen unless so instructed by the physician.
• Administer analgesics as ordered.
• Check and record the patient’s vital signs and follow the physician’s orders.

Sprains and Strains

Sprains are tears of the ligaments that support a joint; strains are injuries to a muscle and its tendons. Both types of injury also may damage surrounding soft tissues and blood vessels, as well as nearby nerves. With a sprain the victim develops edema and ecchymosis around the injury, and any movement of the joint, especially a twisting one, produces pain. Usually no swelling or discoloration is seen with a strain, and only mild tenderness is noted unless the injured muscle or tendon is used.

Tendon strains and ligament sprains take several weeks to heal, whereas muscle tears usually heal in 1 to 2 weeks, because muscle has such a rich blood supply. (The details of orthopedic injuries are discussed in Chapter 43.) These injuries are treated by elevating the affected area and applying mild compression and ice. Swelling is reduced if ice is applied within 20 to 30 minutes of the injury. After 24 to 36 hours, alternating applications of mild heat and ice usually are indicated. The patient may be advised to immobilize the part.
**Fractures**

A fracture is a break or crack in a bone, which can result from trauma or disease. Fractures are very painful and affect the patient’s ability to freely move the injured part. When a patient with a fracture is brought into the office, the medical assistant should make the patient as comfortable as possible. Place the patient in a position that supports the affected area at the joints above and below the suspected fracture and does not place strain on the injury. Notify the physician immediately and proceed according to the orders given. Emergency treatment for fractures includes preventing movement of the injured part through splinting, elevation of the affected extremity, application of ice, and control of any bleeding. If a patient with an open fracture is seen in an ambulatory care setting, he or she should be transported to the ED. (Fractures are discussed in more detail in Chapter 43.)

**Burns**

Burns are among the most common causes of injury in the United States. Burn injuries can result from flame, heat, scalds, electricity, chemicals, or radiation. The skin surface may be reddened, blistered, or charred. The depth and extent of a burn are the major determinants in classifying its severity. The extent of the pain is directly proportional to the extent of the surface area burned, as well as the depth and nature of the burn.

To screen a burn injury, the medical assistant must know what caused the burn, its location and approximate size, the depth of the burn, and whether any additional injuries occurred. If the patient reports a chemical burn, it is important to have the person immediately remove all clothing that may have come into contact with the chemical and to flood the affected area with running water to flush the irritant off the skin. If the chemical is not quickly flushed away or remains in the patient’s clothing, the agent will continue to burn the skin and may do very serious damage.

The percentage of the body surface area burned can be estimated using the Rule of Nines (Figure 36-12). This is an assessment tool that helps caregivers quickly calculate the amount of burned tissue. With the Rule of Nines, the body is divided into areas approximately equal to 9% of the total body surface area. When a burn victim is assessed, the affected regions are combined to estimate the total percentage of burned tissue. Partial-thickness burns over 15% of the total body surface and full-thickness burns of less than 2% can be treated in the ambulatory care setting if the patient can be seen immediately. Patients with larger body surface area involvement or other complications should be transported immediately to a hospital, preferably one with a burn unit. (A complete description of burns and their management is given in Chapter 38.)

**Tissue Injuries**

Patients may report any of several different types of wounds. A **contusion** is a closed wound with no evidence of injury to the skin; it typically is caused by blunt trauma and appears swollen, discolored, and is painful. A contusion results in a painful bruise, but the skin remains intact. A scrape on the surface of the skin (e.g., a skinned knee or rug burn) is called an **abrasion**. A deeper, more jagged wound is called a **laceration**. Additional tissue damage may occur around a laceration, and depending on its depth, the wound may need to be repaired surgically. A **puncture** wound occurs when an object is forced into the body (e.g., stepping on a nail). If an object is lodged in body tissues, the best course is to leave it there, stabilize it as much as possible with rolled-up material, and transport the individual to a clinic or ED.

The puncture may have severed blood vessels, and if the object is removed, considerable bleeding may occur. An injury in which tissue is torn away (e.g., complete or partial removal of a finger) is known as an **avulsion**.

Lacerations are a common presentation in a primary care physician’s office. A lacerated wound shows jagged or irregular tearing of the tissues. The severity depends on the mechanism, the site, the extent of the injury, and whether foreign bodies or contamination in the wound. The injury that caused the laceration also may have damaged blood vessels, nerves, bones, joints, and organs in the body cavities.

When the patient arrives at the facility, put on gloves and notify the physician immediately. Have the patient lie down, and cover the injured area with a sterile dressing; use a dressing that is thick enough to absorb the bleeding (Procedure 36-13). Reassure the patient and explain your actions as much as possible. Ask the patient when he or she last received a tetanus inoculation, and record the date in the patient’s record. If it has been longer than 10 years, the physician probably will want a booster injection given.

Wounds that are not bleeding severely and that do not involve deep tissue damage should be cleaned with antimicrobial soap and water to remove bacteria and other foreign matter. If the laceration is extremely dirty, the physician may want the area irrigated with sterile normal saline solution.

A butterfly closure strip may be used over small lacerations to hold the edges together. If the wound is superficial and has...
A nosebleed, or epistaxis, is a hemorrhage that usually results from the rupture of small vessels in the nose. Nosebleeds can be caused by injury, disease, hypertension, strenuous activity, high altitudes, exposure to cold, overuse of anticoagulant medications (e.g., aspirin), and nasal recreational drug use. Bleeding from the anterior nostril area usually is venous, whereas bleeding from the posterior region usually is arterial and more difficult to stop. The treatment of epistaxis varies according to the amount of bleeding and the presence of other conditions, as well as the use of anticoagulant medications.

If the bleeding is mild to moderate and from one side of the nose, the patient should sit up, lean slightly forward, and apply direct pressure to the affected nostril by pinching the nose. Continue constant pressure for 10 to 15 minutes to allow clotting to take place. Repeat if the bleeding cannot be controlled, insert a clean gauze pad into the nostril, and notify the physician. If the physician is not available, proceed with standard EMS protocols. Bleeding should be considered a medical emergency if it is bilateral and continuous or if it occurs in a patient who has a bleeding disorder or who is undergoing anticoagulant therapy.

### Head Injuries

The severity of a head injury can vary greatly. The history of the injury (i.e., the details about what it is and how it happened) is crucial for determining the appropriate management. With a head injury, the patient may appear normal; may experience dizziness, severe headache, mental confusion, or memory loss; or may even be unconscious. The loss of consciousness may be brief or prolonged; it may appear immediately or may be delayed. The victim may experience vomiting; loss of bladder and bowel control; and bleeding from the nose, mouth, or ears. The pupils of the eyes may be unequal and nonreactive to light.

All head injuries must be considered serious. Notify the physician or contact EMS immediately. If there is evidence of a neck injury, stabilize the neck and do not attempt to move the victim. Do not administer anything by mouth. Keep the patient warm and quiet. Watch the pupils of the eyes and record any changes. Measure vital signs and record the extent and duration of any unconsciousness. If the patient is at home or is sent home after...
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the physician’s assessment, he or she should be watched closely for 24 hours after the injury for any change in mental status.

### Foreign Bodies in the Eye

The eye is a delicate organ with a unique structure that demands special handling. This kind of emergency is most uncomfortable, and it often is extremely difficult to keep the patient from rubbing the eye. Tell the patient not to touch the eye in any way. The physician may order ophthalmic topical anesthetic drops to relieve pain. The patient should be placed in a darkened room to wait for the physician because photophobia is common with eye irritations. If a contusion and swelling are present, cold, wet compresses can help. Ask the patient to close both eyes and cover them with eye pads until the physician arrives. The physician may order an eye irrigation to remove the object. Unless the foreign object is clearly visible, do not attempt to search for it or to remove it. (Eye care is presented in greater detail in Chapter 37.)

### Heat and Cold Injuries

Exposure to extremes in temperature can cause minor to severe injuries. Heat injuries occur most often on hot, humid days and result in cramps, heat exhaustion, or heat stroke. Heat-related muscle cramps may be the first sign of heat exhaustion, which is a serious heat-related condition. Patients with heat exhaustion appear flushed and report headaches, nausea, vertigo, and weakness. Heat stroke, the most dangerous form of heat-related injury, results in a shutdown of body systems. Patients with heat stroke have red, hot, dry skin; altered levels of consciousness; tachycardia; and rapid, shallow breathing. This is a true medical emergency. If heat-related problems are recognized in the early stages and adequately treated, the patient does not usually develop heat stroke. Management of heat-related illnesses includes getting the person out of the heat; loosening clothing or removing perspiration-soaked clothing; and giving the person cool drinks if he or she is alert. An effective way to lower the victim’s temperature is to apply cool, wet cloths and then fan the moist skin so that heat is released from the body by evaporation.

The two types of cold-related injuries are frostbite and hypothermia. Frostbite, which is the actual freezing of tissue, occurs when the skin temperature falls to a range of 14° to 25° F (–10 to –3.9° C). Prolonged exposure of the skin to cold causes damage similar to a burn. The tissue may appear gray or white, may be swollen, may have clear blisters or, in full-thickness frostbite, may show signs of tissue necrosis, including blackened areas and severe deformity. The more advanced the frostbite, the more serious the tissue damage and the more likely the body part will be lost. Frozen tissue has no feeling, but as thawing occurs, the patient reports itching, tingling, and burning pain. Mild frostbite can be managed by applying constant warmth to the affected areas, either by immersing the area in warm water (no warmer than 105° F [40.6° C]) or by wrapping it in warm, dry clothing. Friction should never be used, because this would increase tissue damage. If blisters have formed or if evidence of full-thickness frostbite is seen, the patient should be transported to the nearest ED.

### Hypothermia

Hypothermia is a medical emergency that may result in death unless the patient receives immediate assistance. Systemic hypothermia occurs when the core body temperature drops below 95° F(35° C). Signs and symptoms of hypothermia include shivering, numbness, apathy, and loss of consciousness. If hypothermia is suspected, activate EMS and care for any life-threatening conditions until help arrives. Remove the victim’s wet clothing and wrap the victim in blankets while moving him or her to a warm place. If the victim is alert, give warm liquids and apply heating pads (using a barrier to prevent burns) to help slowly raise the core body temperature.

### Dehydration

A person dehydrates when more water is excreted than is taken in. Dehydration can be a very serious health emergency, leading
to convulsions, coma, and even death. Infants, young children, and older adult patients are at greatest risk of developing serious complications from dehydration. Severe dehydration may be caused by excessive heat loss, vomiting, diarrhea, or lack of fluid intake. Symptoms include vertigo; dark yellow urine or no urine output for 8 to 10 hours; extreme thirst; lethargy or confusion; and abdominal or muscle cramps. If the patient shows any of these symptoms and is unable to retain fluids, schedule an urgent appointment or recommend that the patient be taken to the ED. Replacement of lost fluids is vital, so the patient should be encouraged to drink water, tea, sports drinks, fruit juice, or Pedialyte.

Diabetic Emergencies

Diabetes mellitus is caused either by a malfunction in the production of insulin in the pancreas or by an inability of the cells to use insulin. Insulin is required on the cellular level so that glucose can be used for energy. Two different diabetic emergencies are caused either by hyperglycemia (high blood glucose levels) or by hypoglycemia (low blood glucose levels).

Insulin shock is caused by severe hypoglycemia, because the patient with diabetes has taken too much insulin, has not eaten enough food, or has exercised an unusual amount. Signs and symptoms, which have a rapid onset, include tachycardia, profuse sweating (diaphoresis), headache, irritability, vertigo, fatigue, hunger, seizures, and coma. It is important to provide glucose immediately, preferably in the form of glucose tablets, because they have a known concentrated quantity of glucose.

Diabetic coma results from severe hyperglycemia, which develops because the body is not producing enough insulin; the patient ate too much food or is very stressed; or the patient has an infection. Symptoms of impending diabetic coma develop more slowly than those of insulin shock; these include general malaise, dry mouth, polyuria, polydipsia, nausea, vomiting, SOB, and breath with an acetone (or “fruity”) smell. If the patient or caregiver calling for an appointment reports these symptoms, notify the physician immediately, because the patient typically would be admitted to the hospital.

In an emergency situation, if a patient diagnosed with diabetes mellitus shows signs and symptoms of a diabetic emergency, the patient should be given glucose. If the problem is caused by insulin shock (hypoglycemia), the patient will improve quickly after receiving glucose; if it is caused by diabetic coma (hyperglycemia), a small amount of added glucose will not affect the patient’s condition, and he or she must be transported to the hospital regardless. (Diabetes mellitus is covered in detail in Chapter 45.)

Legal and Ethical Issues

The medical assistant works in the healthcare environment as the physician’s agent. Although you are responsible for your own actions, the physician is legally responsible for the care you administer to patients while working in the healthcare facility. You are responsible for knowing the limitations placed on medical assistants in your state and for adhering strictly to your employer’s emergency care policies and procedures. Medical assistants are not qualified to diagnose a patient problem but are responsible for acting appropriately in a medical emergency. In addition to legal responsibilities, you have an ethical responsibility to your patients to provide the highest standard of care. Always act in the best interest of the patient and never hesitate to ask the physician and/or office manager for immediate assistance when faced with a medical emergency.

Most states have enacted Good Samaritan laws to encourage healthcare professionals to provide medical assistance at the scene of an accident without fear of being sued for negligence. These statutes vary greatly, but all have the intent of protecting the caregiver. A physician or other healthcare professional is not legally obligated to provide emergency care at the site of an accident, regardless of the ethical and moral considerations. Legal liability is limited to gross neglect of the victim or willfully causing further injury to the victim. As a caregiver, you are required to act as a reasonable person and cannot be held liable for personal injury resulting from an act of omission. Good Samaritan statutes provide for the evaluation of the caregiver’s judgment but are only in effect at the site of an accident, not at your place of employment.

If you have not been trained in CPR, you cannot be expected to perform the procedure at the emergency site. However, in many states, a healthcare provider with CPR training and skills who is present at the scene can be declared negligent if cardiac arrest occurs and he or she does not administer CPR to the victim.
Cheryl has learned through her work with the telephone screening team and involvement with emergencies in the office how important it is to gather complete information about emergency situations and to act calmly and knowledgeably when managing patient problems. She knows she needs to maintain her certification in CPR for the Professional and continue to participate in workshops on emergency care to be prepared for the wide variety of patient problems seen in the ambulatory care setting. Working with the screening staff also has reinforced the importance of documenting all interactions on the telephone and information gathered during patient visits.

Cheryl recognizes that medical assistants in the office must follow the facility’s policy and procedures manual for handling emergencies. They must plan ahead and complete their designated duties if an emergency occurs; use equipment well stocked and ready for any potential emergency situation. She recognizes that understanding first aid practices for common patient emergencies allows her to assist patients either through instruction by phone or by performing specific skills when emergencies occur in the facility.

Cheryl has investigated her legal standing as a medical assistant in her home state and recognizes her responsibilities when a patient either calls or shows up at the office with a medical emergency. She will continue to refer to the more experienced screening staff or Dr. Bendt when she has questions, but she now feels more confident in managing emergency situations at work. She also recognizes her role as part of the healthcare team if an emergency situation arises in her community.

SUMMARY OF LEARNING OBJECTIVES

1. Define, spell, and pronounce the terms listed in the vocabulary.
   Spelling and pronouncing medical terms correctly bolster the medical assistant’s credibility. Knowing the definitions of these terms promotes confidence in communication with patients and co-workers.

2. Apply critical thinking skills in performing the patient assessment and patient care.
   Completing the Critical Thinking Application exercises throughout the chapter can help the student medical assistant become more adept at critical analysis of real-life situations.

3. Describe patient safety factors in the medical office environment.
   The medical assistant must be constantly on guard to protect patients from possible injury. Methods for achieving this goal include communicating openly about patient safety issues; following standard procedures when delivering patient care; and working as part of a team to secure patients’ safety (see Procedure 36-1).

4. Evaluate the work environment to identify safe and unsafe working conditions.
   See Procedure 36-2.

5. Identify environmental safety issues in the healthcare setting.
   Medical assistants must be constantly on the alert for potentially unsafe conditions; must consistently follow the guidelines established by the Occupational Safety and Health Administration (OSHA) for infection control; and must follow safety procedures to prevent workplace violence.

6. Develop environmental, patient, and employee safety plans.
   See Procedures 36-1 to 36-3.

7. Discuss fire safety issues in a healthcare environment.
   Combustibles should be stored properly; electrical equipment must be monitored for safety; smoke detectors and fire extinguishers should be checked routinely; and the facility should be evacuated if a fire breaks out.

8. Demonstrate the proper use of a fire extinguisher.
   See Procedure 36-4.

9. Describe the fundamental principles for evacuation of a healthcare facility.
   An emergency action coordinator should be designated. This person is in charge of delegating duties to staff members. Exit maps should be posted in multiple areas around the facility. Patients and staff members should be evacuated safely and should meet in a designated spot to make sure all staff members and patients have escaped.

10. Role-play a mock environmental exposure event and evacuation of a physician’s office.
    See Procedure 36-5.
11. Discuss the requirements for proper disposal of hazardous materials.

OSHA has established specific rules about biohazard waste disposal including the use of sharps containers and red bag collection systems. These must be used properly to avoid disease transmission.

12. Define the important features of emergency preparedness in the ambulatory care setting.

Ambulatory care centers may be the first to recognize and initiate a response to a community emergency. Standard Precautions should be implemented immediately to control the spread of an infection. A communication network should be established to notify local and state health departments and perhaps federal officials. Every healthcare facility should have a standard policy with specific procedures for the management of emergencies on site. The CDC recommends that a facility’s safety plan consider multiple steps to minimize the negative psychological effects of an emergency situation.

13. Describe the medical assistant’s role in emergency response.

Medical assistants can be of considerable help in a community emergency. They can provide therapeutic communication to gather patient data; monitor injured victims; perform first aid and monitor vital signs; and help with any medically related service.

14. Maintain an up-to-date list of community resources for emergency preparedness.

See Procedure 36-6.

15. Summarize the typical emergency supplies and equipment.

A physician’s office must have a centrally located crash cart or emergency bag stocked with all emergency supplies, equipment, and medication. This material must be inventoried consistently and maintained. The chapter provides a detailed list of materials that should be readily available for an on-site emergency, including a defibrillator if indicated by the physician’s practice.

16. Demonstrate the use of an automated external defibrillator.

See Procedure 36-7.

17. Summarize the general rules for managing emergencies.

Management of emergencies requires a calm, efficient approach. The medical assistant should assess the nature of the emergency and determine whether EMS should be activated or whether the patient requires an immediate or urgent appointment. As many details about the situation as possible should be gathered, and the physician should be consulted when the medical assistant is in doubt.

18. Demonstrate screening techniques and documentation guidelines for ambulatory care emergencies.

Telephone screening is one of the medical assistant’s most important tasks. Emergency action principles should be used to determine the level of a patient’s emergency. These include determining whether the situation is life-threatening and obtaining the patient’s contact information, as well as all pertinent information about the injury and the patient’s signs and symptoms. This information must be shared with the physician, and all details must be documented in the patient’s chart (see Procedure 36-8).

19. Recognize and respond to life-threatening emergencies in the ambulatory care setting.

Life-threatening emergencies require immediate assessment, referral to the physician and, if the physician is not present, activation of EMS. While waiting for assistance, the medical assistant should check for breathing and circulation. Rescue breaths or cardiopulmonary resuscitation (CPR) is administered if indicated. Depending on the patient’s signs and symptoms, the patient should be monitored for signs of a heart attack; the Heimlich maneuver is performed for an airway obstruction; the patient is evaluated for signs of a CVA and assessed for shock. The medical assistant should ask for help when indicated and perform appropriate procedures based on the patient’s presenting condition.

20. Perform professional-level cardiopulmonary resuscitation (CPR).

See Procedure 36-9 for instruction on performing adult, pediatric, and infant rescue breathing and CPR.

21. Administer oxygen through a nasal cannula to a patient in respiratory distress.

See Procedure 36-10.

22. Identify and assist a patient with an obstructed airway.

Procedure 36-11 presents instructions for assisting an adult with an obstructed airway. Infants with an obstructed airway should receive alternating back blows and chest thrusts with attempted rescue breaths until the item is dislodged or help arrives.

23. Determine the appropriate action and documentation procedures for common ambulatory care emergencies.

The medical assistant should always follow Standard Precautions when caring for a patient with a medical emergency. Documentation of emergency treatment should include information about the patient; vital signs; allergies, current medications, and pertinent health history; the patient’s chief complaint; the sequence of events, including any changes in the patient’s condition since the incident; and any physician’s orders and procedures performed.

24. Assist and monitor a patient who has fainted.

See Procedure 36-12.

25. Control a hemorrhagic wound.


26. Apply patient education concepts to medical emergencies.

Patients should know how to contact emergency personnel, and families with young children should have telephone numbers for poison control posted. Educating patients about how to care for minor emergencies at home is an important part of telephone triage in the ambulatory care setting. Encouraging patients to participate in community safety workshops and to become certified in CPR may help prevent emergencies and save lives.

27. Discuss the legal and ethical concerns arising from medical emergencies.

Good Samaritan laws, which vary from state to state, are designed to protect any individual from liability, whether a healthcare professional or layperson, if he or she provides assistance at the site of an emergency. The law does not require a medically trained person to act, but if emergency care is given in a reasonable and responsible manner, the healthcare worker is protected from being sued for negligence. This protection, however, does not extend to the workplace.
CONNECTIONS

📚 Study Guide Connection: Go to the Chapter 36 Study Guide. Read the Case Study and Workplace Applications and complete the assignments. Do online research for answers to the questions in the Internet Activities associated with assisting with medical emergencies.

🌐 Evolve Connection: For more information related to assisting with medical emergencies, go to evolve.elsevier.com/kinn and visit related Web links for Chapter 36. Click on the Medical Assisting Exam Review and do the practice questions to sharpen your test-taking skills.