

BOX 12-6 SAFETY MEASURES TO PREVENT SUFFOCATION—cont'd**Children—cont'd**

- Do not let toddlers sleep on soft surfaces. This includes couches, chairs, and regular beds.
- Do not feed an infant while he or she is lying down.
- Have children sit when they eat. They should not eat or suck on anything while lying down or playing.
- Do not give infants and young children small, round, or hard foods. This includes hot dogs, peanuts, popcorn, nuts, grapes, raisins, hard candy, jellybeans, gum, raw vegetables, raw and unpeeled fruit slices, dried fruits, and chunks of meat.
- Cut foods into small pieces.
- Give infants soft foods that do not require chewing.
- Practice balloon safety:
 - Use Mylar balloons instead of latex ones.
 - Store latex balloons where children cannot see or reach them.
 - Do not let children inflate or deflate latex balloons.
 - Deflate and discard latex balloons after use.
 - Pick up and discard broken balloon pieces at once. Do not let children near them.

Children—cont'd

- Check floors for small objects—buttons, coins, beads, marbles, pins, tacks, nails, screws, jewelry, and so on. Keep them out of a child's reach. Pick up and store or discard such objects. Children can choke on them. When checking floors, it is best to get on the floor on your hands and knees—the child's eye level.
- Check toys for removable parts.
- Do not string or hang any object on or near a crib. This includes a mobile, toy, or diaper bag. The child could get caught in it and strangle.
- Never tie pacifiers or teethingers around a child's neck.
- Do not use bibs that tie around the baby's neck.
- Remove bibs and necklaces whenever the child is put in a crib or playpen.
- Keep appliance doors closed—ovens, clothes dryers, washing machines, refrigerators, freezers, dishwashers, coolers, and so on.
- Remove rubber knobs or tips from door stops.

PREVENTING SUFFOCATION

Suffocation is when breathing stops from the lack of oxygen. Death occurs if the person does not start breathing. Common causes include choking, drowning, inhaling gas or smoke, strangulation, and electrical shock (p. 167).

Measures to prevent suffocation are listed in Box 12-6. Clear the airway if the person is choking.

Choking

Foreign bodies can obstruct the airway. This is called *choking* or *foreign-body airway obstruction (FBAO)*. Air cannot pass through the airways into the lungs. The body does not get enough oxygen. It can lead to cardiac arrest. *Cardiac arrest* is when the heart stops suddenly and without warning (Chapter 51).

Choking often occurs during eating. A large, poorly chewed piece of meat is the most common cause. Laughing and talking while eating also are common causes. So is excessive alcohol intake.

Unconscious persons can choke. Common causes are aspiration of vomitus and the tongue falling back into the airway. These also occur during cardiac arrest.

Foreign bodies can cause mild or severe airway obstruction. With *mild airway obstruction*, some air moves in and out of the lungs. The person is conscious and usually can speak. Often forceful coughing can remove the object. Breathing may sound like wheezing between coughs. For mild airway obstruction:

- Stay with the person.
- Encourage the person to keep coughing to expel the object.
- Do not interrupt the person's efforts to clear the airway. If the person is breathing and coughing, abdominal thrusts are not needed.
- If the obstruction persists, call for help.



Fig. 12-13 A choking person clutches at the throat.

A person with *severe airway obstruction* has difficulty breathing. Air does not move in and out of the lungs. The person may not be able to breathe, speak, or cough. If able to cough, the cough is of poor quality. Infants cannot cry. When the person tries to inhale, there is no noise or a high-pitched noise. The person may appear pale and cyanotic (bluish color).

The conscious person clutches at the throat (Fig. 12-13). Clutching at the throat is often called the “universal sign of choking.” The conscious person is very frightened. If the obstruction is not removed, the person will die. Severe airway obstruction is an emergency.

Relieving Choking. Abdominal thrusts are used to relieve severe airway obstruction. Abdominal thrusts are quick, upward thrusts to the abdomen. They force air out of the lungs and create an artificial cough. They are done to try to expel the foreign body from the airway.

Abdominal thrusts are not used for very obese persons or pregnant women. Chest thrusts are used (Box 12-7 and Fig. 12-14, p. 164).

BOX 12-7 CHOKING—CHEST THRUSTS FOR OBESE OR PREGNANT PERSONS

- 1 Stand behind the person.
- 2 Place your arms under the person's underarms. Wrap your arms around the person's chest.
- 3 Make a fist. Place the thumb side of the fist on the middle of the sternum (breastbone).
- 4 Grasp the fist with your other hand.
- 5 Give chest thrusts until the object is expelled or the person becomes unresponsive.
- 6 If the person becomes unresponsive, activate the Emergency Medical Services (EMS) system or the agency's Rapid Response Team (RRT). This team quickly responds to give care in life-threatening situations. Start cardiopulmonary resuscitation (CPR). See Chapter 51.



Fig. 12-14 Chest thrusts to relieve choking in a pregnant woman.

You may observe a person choking. And you may perform emergency measures to relieve choking. Relief of choking occurs when the foreign body is removed. Or it occurs when you feel air move and see the chest rise and fall when giving rescue breaths. The person may still be unresponsive.

If you assist a choking person, report and record what happened. Include what you did and the person's response. See Figure 12-15.

See *Focus on Children and Older Persons: Choking*.

FOCUS ON CHILDREN AND OLDER PERSONS

Choking

Children

Children can choke on small objects. Pieces of hot dogs, marbles, hard candy, peanuts, apples, and grapes are examples. Peanut butter and popcorn also can cause choking. So can coins and small toys and toy parts. FBAO in children is marked by the *sudden* onset of symptoms.

Respiratory infections can cause airway obstruction in infants and children. Airway structures become swollen. The airway narrows or becomes completely obstructed. Air cannot enter the airway. The child needs emergency care at once.

The procedures that follow will not relieve airway obstruction caused by an infection. Do not try them if the child has a fever, rash, congestion, hoarseness, or other signs and symptoms of respiratory infection. You will waste precious time. Activate the EMS system or the agency's RRT. Give rescue breaths if the child is not breathing but has a pulse. Start CPR if the child is not responding, not breathing or not breathing normally (gaspings), and has no pulse. See Chapter 51.

Abdominal thrusts are not given to infants. They can damage the liver and other organs. Back slaps (back blows) and chest thrusts are used for infants. See the procedure *Relieving Choking—In the Infant (Less Than 1 Year of Age)* (p. 166).

Older Persons

Older persons are at risk for choking. Weakness, dentures that fit poorly, dysphagia (difficulty swallowing), and chronic illness are common causes.

Date	Time	Nursing Margin	Other Depts Margin
9-10	1215	<p>While eating lunch, Mrs. Rand began coughing and clutching at her throat. Her tablemate shouted "she's choking." I went to Mrs. Rand's table. She mouthed the words "I can't breathe." I performed abdominal thrusts with Mrs. Rand sitting in her chair. After three abdominal thrusts, she coughed out a piece of meat. She then began breathing. Mary Jones, RN arrived and took over the care of Mrs. Rand.</p> <p>Ben Armas, CNA. ←</p>	

Fig. 12-15 Charting sample for choking.

RELIEVING CHOKING—ADULT OR CHILD (OVER 1 YEAR OF AGE)

PROCEDURE

- 1 Ask the person if he or she is choking. Help the person if he or she nods “yes” and cannot talk.
- 2 Have someone call for help:
 - a *In a public area*, have someone activate the EMS system by calling 911. Send someone to get an automated external defibrillator (AED). See Chapter 51.
 - b *In an agency*, have someone call the RRT. Send someone to get the AED.
- 3 *If the person is standing or sitting*, give abdominal thrusts:
 - a Stand or kneel behind the person.
 - b Wrap your arms around the person’s waist.
 - c Make a fist with one hand.
 - d Place the thumb side of the fist against the abdomen. The fist is slightly above the navel in the middle of the abdomen and well below the end of the sternum (breastbone). See Figure 12-16, A.
 - e Grasp the fist with your other hand (Fig. 12-16, B).
 - f Press your fist into the person’s abdomen with a quick, upward thrust (Fig. 12-17, p. 166).
 - g Repeat thrusts until the object is expelled or the person becomes unresponsive.
- 4 *If the person is lying down but responsive*, give abdominal thrusts (Fig. 12-18, p. 166):
 - a Straddle the person’s thighs.
 - b Place the heel of one hand against the abdomen. It is in the middle slightly above the navel and well below the end of the sternum (breastbone).
 - c Place your second hand on top of your first hand.
 - d Press both hands into the abdomen with a quick, upward thrust.
 - e Repeat thrusts until the object is expelled or the person becomes unresponsive.
- 5 *If the object is dislodged*, encourage the person to go to the hospital. Injuries can occur from abdominal thrusts.
- 6 *If the person becomes unresponsive*, lower the person to the floor or ground. Position the person supine (lying flat on the back). Make sure EMS or the RRT was called (step 2). If alone, provide 5 cycles (2 minutes) of CPR first. Then call EMS or the RRT.
- 7 Start CPR. See Chapter 51.
 - a Do not check for a pulse. Begin with compressions. Give 30 compressions. Chest compressions help dislodge an obstruction. (See Chapter 51 for 2-rescuer child CPR.)
 - b Use the head tilt-chin lift method to open the airway (Fig. 12-19, p. 166). Open the person’s mouth. The mouth should be wide open. Look for an object. Remove the object if you see it and can remove it easily. Use your fingers.
 - c Give 2 breaths.
 - d Continue cycles of 30 compressions and 2 breaths. Look for an object every time you open the airway for rescue breaths.
- 8 *If you relieve choking in an unresponsive person*:
 - a Check for a response, breathing, and a pulse.
 - 1 *If no response, normal breathing, or pulse*—continue CPR. Attach an AED (Chapter 51).
 - 2 *If no response and no normal breathing but there is a pulse*—give rescue breaths. For an adult, give 1 breath every 5 to 6 seconds (10 to 12 breaths per minute). For a child, give 1 breath every 3 to 5 seconds (12 to 20 breaths per minute). Check for a pulse every 2 minutes. If no pulse, begin CPR.
 - 3 *If the person has normal breathing and a pulse*—place the person in the recovery position if there is no response (Chapter 51). Continue to check the person until help arrives. Encourage the person to go to the hospital if the person responds.

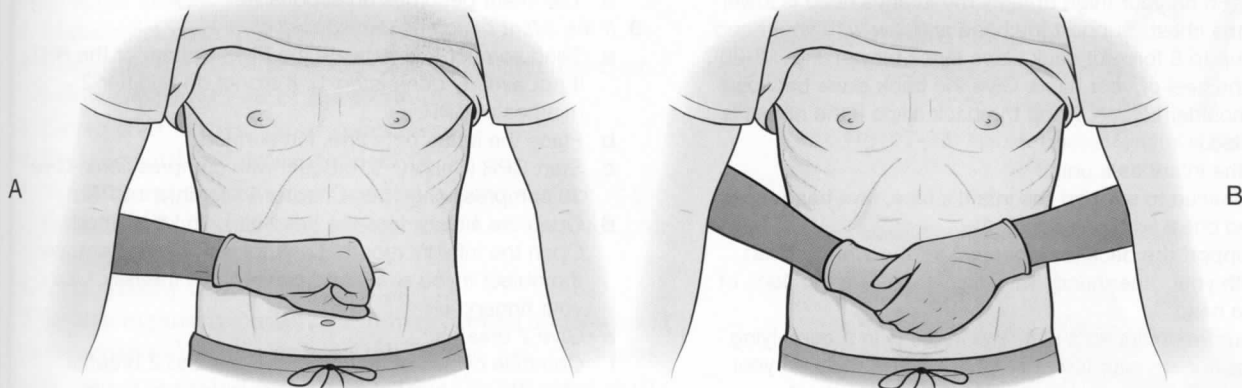


Fig. 12-16 Hand positioning for abdominal thrusts. **A**, The fist is slightly above the navel in the midline of the abdomen. **B**, The other hand clasps the fist.



Fig. 12-17 Abdominal thrusts with the person standing.



Fig. 12-18 Abdominal thrusts with the person lying down.

Airway closed



Airway open

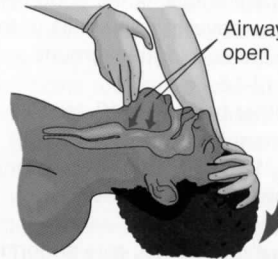


Fig. 12-19 The head tilt–chin lift method opens the airway. One hand is on the person's forehead. Pressure is applied to lift the head back. The chin is lifted with the fingers of the other hand.

RELIEVING CHOKING—IN THE INFANT (LESS THAN 1 YEAR OF AGE)

PROCEDURE

- 1 Have someone call for help:
 - a *In a public area*, have someone activate the EMS system by calling 911. Send someone to get an AED. See Chapter 51.
 - b *In an agency*, have someone call the agency's RRT and get a defibrillator (AED).
- 2 Kneel next to the infant. Or sit with the infant in your lap.
- 3 Expose the infant's chest and back. Perform this step only if it can be done easily.
- 4 Hold the infant facedown over your forearm. (Support your arm on your thigh or lap.) The infant's head is lower than the chest. Support the head and jaw with your hand.
- 5 Give up to 5 forceful back slaps (back blows) (Fig. 12-20). Use the heel of your hand. Give the back slaps between the shoulder blades. (Stop the back slaps if the object is expelled.)
- 6 Turn the infant as a unit:
 - a Continue to support the infant's face, jaw, head, neck, and chest with one hand.
 - b Support the back and the back of the infant's head with your other hand. Your palm supports the back of the head.
 - c Turn the infant as a unit. The infant is in a back-lying position on your forearm. Your forearm rests on your thigh. The infant's head is lower than the chest.
- 7 Give up to 5 chest thrusts (Fig. 12-21). The chest thrusts are quick and downward.
 - a Locate hand position as for chest compressions (Chapter 51). The location is just below the nipple line in the center of the chest.
 - b Give chest thrusts at a rate of about 1 every second.
 - c Stop chest thrusts if the object is expelled.
- 8 Continue giving 5 back slaps followed by 5 chest thrusts until:
 - a The object is expelled.
 - b The infant becomes unresponsive.
- 9 *If the infant becomes unresponsive:*
 - a Send someone to activate the EMS system or the RRT if not already done (step 1). If alone, do so after 2 minutes of CPR.
 - b Place the infant on a firm, flat surface.
 - c Start CPR (Chapter 51). Begin with compressions. Give 30 compressions. (See Chapter 51 for infant CPR.)
 - d Open the airway. Use the head tilt–chin lift method. Open the infant's mouth. Look for an object. Remove the object if you see it and can remove it easily. Use your fingers.
 - e Give 2 breaths.
 - f Continue cycles of 30 compressions and 2 breaths. Look for an object each time you open the airway.
 - g Continue CPR until help arrives or until choking is relieved.



Fig. 12-20 Back slaps (back blows). The infant is held face down and supported with one hand. The rescuer's forearm is supported on his or her thigh. Back slaps are given between the shoulder blades with the heel of one hand.



Fig. 12-21 Chest thrusts. The infant is in the back-lying position. Hand position for chest thrusts is the same as for chest compressions (Chapter 51).

Self-administered abdominal thrusts. You may choke when by yourself. Perform abdominal thrusts to relieve the obstructed airway.

- 1 Make a fist with one hand.
- 2 Place the thumb side of the fist above your navel and below the lower end of the sternum.
- 3 Grasp your fist with your other hand.
- 4 Press inward and upward quickly.
- 5 Press the upper abdomen against a hard surface if the thrust did not relieve the obstruction. Use the back of a chair, a table, or a railing.
- 6 Use as many thrusts as needed.

The unresponsive adult. You may find an adult who is unresponsive. You did not see the person lose consciousness, and you do not know the cause. Do not assume the cause is choking. Check to see if the person is responding. If not, start CPR (Chapter 51).

PREVENTING EQUIPMENT ACCIDENTS

All equipment is unsafe if broken, not used correctly, or not working properly. This includes hospital beds. Inspect all equipment before use. Check glass and plastic items for cracks, chips, and sharp or rough edges. They can cause cuts, stabs, or scratches. Follow the Bloodborne Pathogen Standard (Chapter 15).

Electrical Equipment

Electrical items must work properly and be in good repair. Frayed cords (Fig. 12-22) and over-loaded electrical outlets (Fig. 12-23) can cause fires, burns, and electrical shocks. *Electrical shock* is when electrical current passes through the body. It can burn the skin, muscles, nerves, and other tissues. It can affect the heart and cause death.

Three-pronged plugs (Fig. 12-24) are used on all electrical items. Two prongs carry electrical current. The third

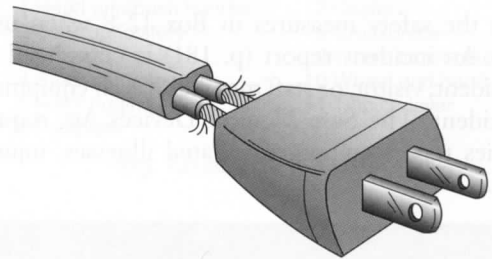


Fig. 12-22 A frayed electrical cord.

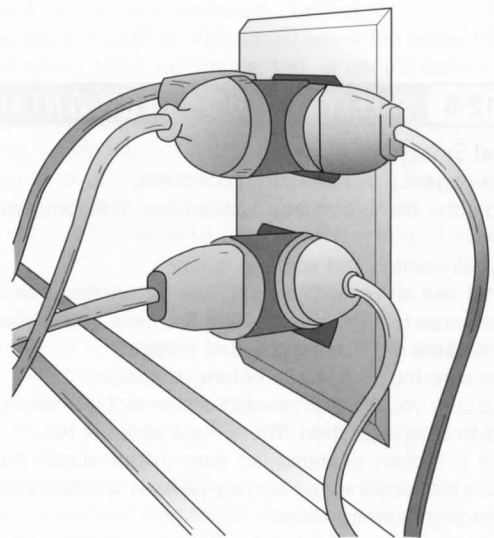


Fig. 12-23 An over-loaded electrical outlet.

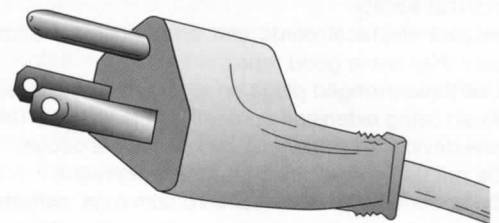


Fig. 12-24 A three-pronged plug.