Choking Treatment

Self Care at Home

Choking is an emergency. Call 911 emergency medical services. Do not attempt to drive a choking person to a hospital emergency department.

What to do if a person starts to choke:

- It is best not to do anything if the person is coughing forcefully and not turning a bluish color. Ask, "Are you choking?" If the person is able to answer you by speaking, it is a partial airway obstruction. Stay with the person and encourage him or her to cough until the obstruction is cleared.

- Do not give the person anything to drink because fluids may take up space needed for the passage of air.

Someone who cannot answer by speaking and can only nod the head has a complete airway obstruction and needs emergency help.

The treatment for a choking person who begins to turn blue or stops breathing varies with the person's age. In adults and children older than one year of age, abdominal thrusts (formerly referred to as the "Heimlich maneuver") should be attempted. This is a thrust that creates an artificial cough. It may be forceful enough to clear the airway.

The quick, upward abdominal thrusts force the diaphragm upward very suddenly, making the chest cavity smaller. This has the effect of rapidly compressing the lungs and forcing air out. The rush of air out will force out whatever is causing the person to choke.

How to perform abdominal thrusts


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• **Lean the person forward slightly and stand behind him or her.** Make a fist with one hand. Put your arms around the person and grasp your fist with your other hand in the midline just below the ribs. Make a quick, hard movement inward and upward in an attempt to assist the person in coughing up the object. This maneuver should be repeated until the person is able to breathe or loses consciousness.

• **If the person loses consciousness** gently lay him or her flat on their back on the floor. To clear the airway, kneel next to the person and put the heel of your hand against the middle of the abdomen, just below the ribs. Place your other hand on top and press inward and upward five times with both hands. If the airway clears and the person is still unresponsive, begin CPR.

• **For babies** (younger than one year of age), the child will be too small for abdominal thrusts to be successful. Instead, the infant should be picked up and five back blows should be administered, followed by five chest thrusts. Be careful to hold the infant with the head angled down to let gravity assist with clearing the airway. Also be careful to support the infant’s head. If the infant turns blue or becomes unresponsive, CPR should be administered.

• **If you are in doubt about what to do**, and you are witnessing someone choking, call for emergency help immediately, do not delay. You may be able to successfully stop the choking before help arrives using techniques discussed here, but it is best for the choking person to be evaluated by the emergency medical team when they arrive. If something is still in the person's throat, the emergency medical team can begin care immediately and take the person to the hospital for further treatment.

Variations of abdominal thrusts for special circumstances:

• **The victim is seated:** The maneuver may be performed with the victim seated. In this instance, the back of the chair acts as a support for the victim. The rescuer still wraps his or her arms around the victim and proceeds as described above. The rescuer will often have to kneel down. In the event that the back of the chair the victim is sitting in is too high, either stand the victim up or rotate the victim 90 degrees, so that the back of the chair is now to one side of the victim.

• **For small rescuers and large victims, particularly children rescuing an adult:** Instead of standing behind the victim, have the victim lie down on his or her back. Straddle the victim’s waist. Place one hand on the belly, halfway between the belly button and the edge of the breastbone. Thrust inward and upward. This is the same technique used in unconscious people.

• **You are choking and you are alone:** You may deliver an abdominal thrust on yourself. This can be done in one of two ways.
  o You can deliver a true “self”–abdominal thrust with your own hands. This is done by positioning your hands in the same fashion as if you
were performing the maneuver on another person and delivering an inward and upward thrust.
  - Another option is to bend your belly over a firm object, such as the back of a chair, and thrust yourself into the object.

You may pass out before you expel the object and before help arrives. In most communities, the 911 emergency system has what is known as enhanced 911. Whenever a call is placed through 911 to the dispatch center, the dispatcher has the phone number, address of the telephone, and owner of the line of the incoming call. This allows for rapid location of an incident and allows interrupted calls to be investigated.

By dialing 911 and leaving the phone line open in communities where this protocol is followed, you could be ensuring the arrival of rescue personnel in the event your "self"–abdominal thrust fails to clear the foreign body and you do pass out. If the dispatcher has no response on an open line, the call must be investigated.

Check with your local police department and find out if your 911 dispatch center follows these procedures. If you live in a community that does not have a 911 system, check with your local police department both for the emergency number, and to find out if they follow these procedures.

- **Pregnant/obese people:** Abdominal thrusts may not be effective in people who are in the later stages of pregnancy or who are obese. In these instances, chest thrusts can be administered. For the conscious person sitting or standing, take the following steps:
  - Place your hands under the victim's armpits.
  - Wrap your arms around the victim's chest.
  - Place the thumb side of your fist on the middle of the breastbone.
  - Grab your fist with your other hand and thrust backward. Continue this until the object is expelled or until the person becomes unconscious.

- **For the unconscious pregnant or obese person:** The sequence of events is the same as those for an unconscious adult. Chest thrusts, rather than abdominal thrusts, are delivered. To position yourself for chest thrusts, take the following steps:
  - Kneel on one side of the victim.
  - Slide two fingers up the bottom edge of the rib cage until you reach the bottom edge of the breastbone called the xiphoid process.
  - With your two fingers on the xiphoid, place your other hand on the breastbone, just above your fingers. The thrusts should be quick and forceful to remove the object.
  - Care should be taken because complications such as rib fractures and heart muscle damage have been known to occur with chest thrusts.
If at all possible, subdiaphragmatic (below the ribcage) abdominal thrusts should be used in the pregnant woman, especially if there is still room between the enlarging uterus and baby, and the rib cage to perform the maneuver.

**Special Note:** The American Heart Association and the American Red Cross (the two main certifying bodies for teaching medical professionals and lay-people about first aid) differ on the initial treatment of conscious adults who are choking. The guidelines given above follow the American Heart Association recommendations. The American Red Cross guidelines include five back blows on conscious adults prior to administering abdominal thrusts. This has been a controversial topic in the field of choking treatment for many years. There is scientific evidence for and against back blows as initial treatment in adults. For more information on this treatment variation please consult the American Red Cross website.

**Medical Treatment**

Treatment begins when local emergency medical services (EMS) arrive on the scene. They have several ways to treat a choking person. In addition to being skilled in the choking treatment and CPR, they also may have several tools to assist them in clearing the airway.

- **Intubation:** A breathing tube is passed into a person’s windpipe (trachea). This may push the object that is obstructing the airway out of the way enough to provide air to the lungs.
  - To perform intubation, a metal scope is inserted into the back of the throat to aid in seeing the vocal cords, which mark the opening of the trachea.
  - If, while using this scope, the object causing the obstruction can be seen, it may then be removed with a long instrument called a Magill forceps.

- If attempts to intubate a person with a complete airway obstruction are unsuccessful, EMS personnel may have to perform a surgical procedure called a cricothyrotomy. This involves cutting the neck and making a hole in the trachea just below the Adam's apple, through which a breathing tube is inserted. This tube should enter the trachea below the spot that is blocked by the foreign body.

- Once at the hospital, a doctor may use a bronchoscope to remove the object. Bronchoscopy involves inserting a flexible fiberoptic scope into the airway (trachea). If something is found, this scope also has attachments that the doctor can use to remove the object.
  - To perform this procedure, the person is heavily sedated and the nose numbed with a topical gel. The flexible scope is placed
through the nose into the back of the throat and then guided into the trachea.

- Most people do not remember this procedure being done. It can be performed quickly if a person is in distress, and sedation is always used.
- If all of these maneuvers fail, the choking person will be taken to the operating room to have the foreign body removed and a clear airway established surgically.


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