

Foreign Body Airway Obstruction (FBAO) Procedure

History of the Heimlich Maneuver

Henry Judah Heimlich (February 3, 1920 – December 17, 2016) was an American thoracic surgeon and medical researcher. He is widely credited for the discovery of the Heimlich maneuver, a technique of abdominal thrusts for releasing FBAO, first described in 1974.

From 1976 to 1985, the FBAO rescue guidelines of the American Heart Association (AHA) and of the ARC taught rescuers to first perform a series of back blows to remove the foreign body airway obstruction. If back blows failed, then rescuers learned to proceed with the Heimlich maneuver (aka "abdominal thrusts").

After a July 1985 American Heart Association (AHA) conference, back blows were removed from FBAO-rescue guidelines. From 1986 to 2005, the published guidelines of the AHA and the ARC recommended the Heimlich maneuver as the recommended treatment for choking. After 2005, the ARC switched from the Heimlich to back blows. However the AHA, the National Institutes of Health, and the National Safety Council continue to endorse the use of the Heimlich maneuver for conscious individuals over one year of age.

Health and Safety Institute (HSI)

Southern Oregon Head Start is an authorized Adult and Pediatric First Aid-CPR-AED training center by the HSI, a nationally accredited organization of the Commission on Accreditation of Pre-Hospital Continuing Education (CAPCE). CAPCE is the national accrediting body for Emergency Medical Services (EMS), continuing education classes and class providers. HSI, ARC and AHA are the largest providers of first aid and CPR training in the United States. HSI supports the use of the Heimlich maneuver for conscious individuals over the age of 1 who are confirmed to be choking. As an HSI training center, Southern Oregon Head Start staff are to use the Heimlich maneuver on children over the age of one who are confirmed to be choking. Children ages birth to 1 year use the back slap-chest thrust method.

I. Signs of FBAO (Choking) in a Child

Pay close attention to the following signs so you know when to intervene:

A. Violent Coughing

- a. When a child coughs, it should pass quickly. If the child coughs for a long period of time and it gets more violent, this is a sign that they are struggling to clear their airway.

B. Being Unable to Cough, Speak, Cry, or Breathe

- a. A child who is truly choking and in need of immediate assistance will not be able to speak, cry, breathe, or cough at all.

C. A High-Pitched Sound While Breathing In

- a. This means that the child is struggling to breathe and their airway is severely restricted.

D. A Pale or Blue-Tinted Face

- a. When the body is deprived of oxygen, the skin pales and turns blue. This is a sign that the child has been choking for a while and the situation is critical.

E. The Child is Clutching at Their Throat

- a. Children do not often understand how to clear their airway and they begin to panic and grab at their throats. Adults do this sometimes, too. It is a reflex response to choking.

II. Assessing the Child

- a. After observing a child with possible signs of choking, immediately go to the child and get right in front of their face and ask, “Are you choking?”, “Can you cough?”, “Can you breathe?”. Assess the color of their face. Once you have determined the child is choking, tell someone to call **911** and proceed with performing the Heimlich Maneuver.

III. Performing the Heimlich Maneuver on Children Above 1 Year of Age

The National Safety Council, AHA, and the American College of Emergency Physicians endorse the following steps to help a conscious child over the age of 1 who is choking:

1. For a child, move down to their level and keep your head to one side.
2. Put your arms around the child and locate their belly button.
3. Place the thumb side of one fist against the stomach just above their belly button.

4. Grasp your fist with your other hand and thrust inward and upward into the child's stomach. Use quick, thrusting movements until the item is expelled or the child becomes unresponsive.
5. If the child becomes unresponsive, begin CPR.

IV. Assisting a Choking Infant

Infant choking victims (who are conscious and responsive) are treated with a combination of back blows and chest thrusts. Always call **911** when you realize an infant is choking.

1. With your forearm resting on your thigh, place the infant face down on your forearm. His head should be lower than the level of his chest. Support the child's weight by holding the chest and head—keep the throat straight and do not put pressure directly on the throat.
2. Deliver five back blows to the infant's back between the two shoulder blades. Move the infant to your other forearm, this time facing upward. Again, the victim's head should be lower than his chest.
3. Using two fingers of your free hand, deliver five chest thrusts to the bottom half of his breastbone. In both cases, you are trying to rapidly increase the pressure inside the lungs to expel the airway obstruction.
4. After these five back blows and chest thrusts, take a moment to determine if the obstruction has been cleared. The infant should immediately start crying. If the infant is still choking, repeat the process (five back blows followed by five chest thrusts) until the obstruction is cleared or emergency help has arrived.

V. Aftermath

1. After the object is expelled, comfort the child but do not allow them to eat anything.
2. Call the parent to come to the center.
3. EMS will arrive to assess the child. EMS will always take a child to the ER when an ambulance is called, unless a refusal form is signed by the parent. If the parent has not arrived to the center in time, EMS will take the child to the ER.
 - a. SOHS staff cannot sign a refusal form, even if the child appears to be fine.
4. A staff member will need to accompany child in the ambulance. If the parent arrives in time, they can choose to sign the form if they don't want their child transported in the ambulance to the ER. We do however recommend at a minimum the parent take child to an urgent care clinic to be fully assessed.

5. Documentation is required from the presiding clinician (and sent to Health Services), fully releasing child to return to the center, but only after Health Services officially clears child to return.
6. Complete an Incident Report accessible via the Staff Zone, and notify the Health Services Manager by phone.
7. Although the Heimlich maneuver is a life-saving action, injuries such as broken or cracked ribs or abdominal injuries can occur. Injuries can also occur when performing back slaps and chest thrusts on an infant. This is why it is imperative for a medical assessment to occur after performing this maneuver on a child or the back slaps-chest thrusts on an infant. This is also why it is necessary to take the time to assess a child or infant to ensure they cannot breathe before performing the Heimlich maneuver on children above 1 year of age, or the back slap-chest thrust method on children ages birth to 1.

VI. Suction Devices on the Market

There are products on the market such as DeChoker, and Lifevac that are non-invasive suction rescue devices that claim to release an object causing an air obstruction. Anecdotally, these devices have been shown to work effectively. However, there are no reliable studies conducted on these devices in order for organizations such as the AHA, National Institutes of Health, and the National Safety Council to endorse their use. As a HSI Training Center for Pediatric First Aid-CPR-AED, we cannot use these devices in our program until it is approved and integrated into the HSI curriculum we use to certify staff.