**EMS SKILL**

**AIRWAY EMERGENCY: ADULT/CHILD AIRWAY OBSTRUCTION**

**PERFORMANCE OBJECTIVES**

Demonstrate competency in recognizing and managing a foreign body airway obstruction in an adult or child who is choking

**CONDITION**

Recognize and manage an airway obstruction in an adult or child who is found choking. Necessary equipment will be adjacent to the manikin or brought to the field setting.

**EQUIPMENT**

Adult & child CPR manikin, adult & child bag- mask-ventilation (BMV) or barrier device, O2 connecting tubing, oxygen source with flow regulator, suction, goggles, various masks, gown, gloves, timing device, airway bag.

**PERFORMANCE CRITERIA**

• Items designated by a diamond (⧫) must be performed successfully to demonstrate skill competency.

• Items identified by double asterisks (\*\*) indicate actions that are required, if indicated.

• Items identified by (§) should be practiced.

• Ventilations and compressions must be performed at the minimum rate required.

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| **PREPARATION** |
| **Skill Component** | **Key Concepts** |
| ⧫ Establish body substance isolation precautions (BSI) | • Mandatory (minimal) personal protective equipment – gloves |
| ⧫ Assess for scene safety/scene size-up  |  |
| ⧫ Evaluate the need for additional BSI precautions | • Situational - goggles, mask, gown |
| ⧫ Approach and introduce yourself to the patient and/or caregivers – *if circumstance, time and resources allow* | * Establishing rapport with the patient confidence provides reassurance to the patient.
* When introducing yourself to a child, use age-appropriate techniques.
* Caregivers should hold a young child during the assessment if the patient is coughing.
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| **RESPONSIVE ADULT** |
| **PROCEDURE** |
| **Skill Component** | **Key Concepts** |
| ⧫ Establish thatthe patient is choking:***\*\* Call for additional resources –*** *if needed*  | • Mild Obstruction: - adequate air exchange  - coughing  - gagging - wheezing (May wheeze between coughs)• Severe Obstruction: - poor or no air exchange - increased work of breathing - weak, ineffective cough or no cough - stridor (high-pitched upper airway noise while inhaling - inability to speak - clutching the neck (universal sign of choking) - cyanosis - decreasing level of consciousness |

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| **Skill Component** | **Key Concepts** |
| ⧫ Attempt to remove foreign body obstruction: • **Mild obstruction** - Do not interfere with the patient’s attempt to relieve the obstruction (coughing) • **Severe obstruction** - Perform abdominal thrusts (Heimlich maneuver)* Stand or kneel in an athletic position behind the patient and place thumb side of fist against the patient’s abdomen, in the midline, slightly above the navel and well below the breastbone. (between the patient’s xiphoid and umbilicus)

 - Grasp his/her fist with other hand and press your fist into the patient’s abdomen with a quick, forceful upward thrust. give quick forceful inward and upward thrusts *as many times as needed* | • **DO NOT** interfere if the patient has an effective cough. Stay with the patient and monitor the patient’s condition.• If the patient is sitting or standing, place the patient in a position that allows for balance and supports the patient when performing abdominal thrusts.* Fever, congestion, hoarseness, or drooling are signs of infection. If present in the adult, immediate transport to the Most Accessible Receiving (MAR) must occur. In the child, immediate transport to an Emergency Department Approved for Pediatrics (EDAP) must occur as foreign body airway maneuvers will not resolve this type of condition.
* An athletic position is defined as standing behind the patient with the rescuers knees slightly flexed and their body slightly rotated off to one side of the patient.
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| ⧫ Repeat abdominal thrusts until the obstruction is relieved or the patient becomes unresponsive. | * Abdominal thrusts must continue until the object is expelled, the patient starts to breathe, or becomes unresponsive. Give each thrust with the intention of relieving the obstruction.
* Each thrust must be delivered as a separate and distinct movement with sufficient force to relieve the obstruction.
* The obstruction may have been relieved if the patient becomes unresponsive due to muscle relaxation.
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| **UNRESPONSIVE ADULT** |
| **PROCEDURE** |
| **Skill Component** | **Key Concepts** |
| * Lower the patient gently to the ground or a firm surface in a supine position.

\*\* ***Call for additional resources***   | * If the patient is on a soft surface, compressions will be less effective.

• If the patient is found in a prone position with suspected trauma, the patient should be turned using the log-roll method to avoid flexion or twisting of the neck and back. |
| ⧫ Initiate compressions without checking for a pulse: * Begin with compressions
* Rate of 100-120/minute
* Compress to a depth of at least two (2) inches in the

 adult* Compresses to a depth of about two (2) inches in the child

  | * **DO NOT PERFORM A PULSE CHECK** prior to initiating chest compressions
* Chest compressions may create as much force as abdominal thrusts so the patient may expel the object
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| ⧫ Open the airway by performing a head tilt/chin lift maneuver after 30 compressions ***\*\* Check the mouth for an object in the back of the throat. If the object is seen and can be easily removed, remove it.*** | • Each time you open the airway to give breaths, open the patient’s mouth and look for the object. If you see the object, remove it. * **DO NOT** perform a blind finger sweeps, as this may force the object further down the trachea.
* The tongue is the most common cause of airway obstruction due to decreased muscle tone.

• The tongue and epiglottis may obstruct the entrance of the trachea due to inspiratory efforts creating negative pressure in the airway.  |

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| **Skill Component** | **Key Concepts** |
| ⧫ Attempt to ventilate the patient by administering two (2) breaths (one (1) second each) | * Making a ventilation attempt may facilitate the foreign body into a position where air may be able to be passed around the foreign body and into the lungs.
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| ⧫ Resume compressions until: * the object is removed
* ALS assumes care
 | * Complete 5 cycles or approximately 2 minutes of CPR at 30:2.
* Open the airway before delivering breaths. If the object is seen, remove it, if possible.
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| ⧫ Re-assess patient if obstruction is relieved and check for:- **R**esponsiveness to stimuli- **P**ulse - **B**reathing***\*\* Provide rescue breathing – See adult or child BMV or Mouth-to-Mask skills*** ***\*\*Deliver oxygen – if indicated, per Los Angeles County EMS Agency Reference No. 1302*** | • Responsive patients should be placed in a position of comfort.• A breathing non-responsive patient should be placed in a position to reduce the chance of the airway occlusion by the tongue, and aspiration of mucus or vomit. |
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| **RE-ASSESSMENT****(Ongoing Assessment)** |
| **Skill Component** | **Key Concepts** |
| § Re-assess the patient at least every five (5) minutes or sooner once the obstruction is relieved • Respirations and circulation continually * Primary assessment

• Relevant portion of the secondary assessment• Vital signs ***\*\*Manage patient condition as indicated.*** | • Patients requiring resuscitation from chocking are critical and must be re-evaluated at least every five (5) minutes or sooner. * Evaluating and comparing results from the previous assessment assists with recognizing if the patient is improving, responding to treatment, or if their condition is deteriorating.
* The need for additional treatment is based upon information gained during reassessment.
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| § Explain the care being delivered and transport destination to the patient/caregiver | • Communication is important when dealing with the patient, family, or caregiver. This is a very critical and frightening time for all involved and providing information helps in decreasing the stress they are experiencing.  |
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| **PATIENT REPORT AND DOCUMENTATION** |
| **Skill Component** | **Key Concepts** |
| § Give patient report to equal or higher level of care personnel  | • The patient report should consist of all pertinent information regarding the assessment findings, treatment rendered, and the patient’s response to care provided. |

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| **Skill Component** | **Key Concepts** |
| § Verbalize/Document:• Cause of obstruction - identify foreign body• Observed or reported signs of obstruction:- skin signs- absent or inadequate respirations• Response to obstruction maneuver Reassessment of airway• Additional treatment provided | • Re-assessment of the airway includes:- chest rise and fall- skin color- airway patency• Documentation must be on either the Los Angeles County EMS Report, ePCR, or departmental Patient Care Record.  |

Developed: 10/01 Revised: 10/2018

**AIRWAY EMERGENCY: ADULT AIRWAY OBSTRUCTION**

**Supplemental Information**

**INDICATIONS:** Patients who show signs of mild or severe airway obstruction

**CONTRAINDICATIONS:** None when the above condition applies.

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| **COMPONENTS OF AN AIRWAY BAG:** |
| **BMV devices – adult, child, infant** | **Portable suction**  |
| **OP/NP airways – all sizes** | **Suction equipment– various sizes** |
| **Nasal cannula** | **Portable oxygen cylinder and oxygen regulator** |
| **Simple face mask – adult, child, and infants** | **Pulse Oximeter** |
| **Non-rebreather – adult, child, and infants** | **Water soluble lubricant** |

**NOTES:**

• Perform chest thrusts for responsive patients who are pregnant or obese.

• Responsive patients with a pulse should be placed in a position of comfort, unless spinal motion restriction is indicated.

• Unresponsive patients with a pulse should be placed in the recovery position to reduce the chance of the airway being occluded by the tongue and the aspiration of mucus or vomitus.

• Remove dentures **only** if they cannot be kept in place. Fitted dentures provide a good seal while using a BMV.

• If the obstruction is relieved, there may be a potential that not all foreign body fragments are completely removed.

* Patients who received abdominal thrusts should be encouraged to seek medical evaluation to ensure there are no complications, injuries, or retained foreign body fragments.

• **DO NOT** hyperventilate. Hyperventilation reduces the success of survival due to cerebral vasoconstriction resulting in decreased cerebral perfusion. In addition, hyperventilation increases intrathoracic pressure and decreases venous return to the heart resulting in diminished cardiac output. ***Rescuers have a tendency to ventilate too rapidly*.**

• Critical patients are patients who have abnormal vital signs, signs/symptoms of poor perfusion, or if there is a suspicion that the patient’s condition may deteriorate.