



Unit 4

Respiratory Problems

Learning Outcomes

By the end of this unit the learner will be able to:

- ✓ Identify the potential warning signs that a child may be choking
- ✓ Take appropriate action when choking is suspected to clear the blockage
- ✓ Perform life-saving CPR and know when to call the emergency services

Unit 4

Respiratory Problems

Choking

What is choking?

When a child is choking, their airway is partly or completely blocked, meaning that they may be unable to breathe properly. They might be able to clear it by coughing, but if they can't, you will need to help them straight away.

Choking child

When a child is choking, they may be unable to breathe properly. Find out what to look for and what to do.

Signs and symptoms

Look for:

- difficulty breathing, speaking or coughing
- a red puffy face
- signs of distress and they may point to their throat or grasp their neck.

What to do



1. **If you think a child is choking, ask them 'Are you choking?'**

If they can breathe, speak, or cough then they might be able to clear their own throat. If they cannot breathe, cough, or make any noise, then they need your help straight away.



2. **Cough it out.** Encourage them to cough and remove any obvious obstruction from their mouth.



- 3. Slap it out.** If coughing fails to work, you need to give five sharp back blows. To do this, help them to lean forwards, supporting their upper body with one hand. With the heel of your other hand give them five sharp back blows between their shoulder blades.

After each back blow, check their mouth and pick out any obvious obstruction.

- Do not sweep the mouth as this could push the object further down the throat.



- 4. Squeeze it out.** If back blows fail to clear the obstruction, give five abdominal thrusts. To do this, stand behind them and put your arms around the child's waist. Place one hand in a clenched fist between their belly button and the bottom of their chest. With your other hand, grasp your fist and pull sharply inwards and upwards up to five times.

Check their mouth again, each time.



- 5. If the blockage has not cleared, call 999 or 112 for emergency help straight away.** Repeat five back blows and five abdominal thrusts until help arrives, rechecking their mouth each time.

- If they become unresponsive at any point prepare to start child CPR.

Caution

- If the child loses consciousness at any stage and is not breathing, begin CPR with chest compressions to try to relieve the obstruction.
- Seek medical advice for any child who has been given abdominal thrusts.

Recognition

Ask the child: "Are you choking?"

Mild Obstruction:

- Child able to speak, cough, and breathe

Severe Obstruction:

- Child unable to speak, cough or breathe, with eventual loss of consciousness.

Your Aims

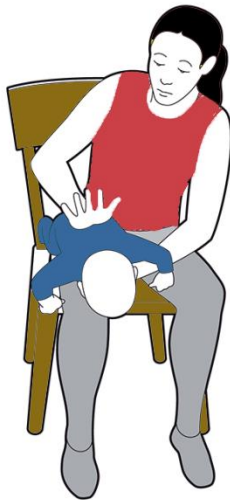
- To remove the obstruction
- To arrange urgent removal to the hospital if necessary

Choking Infant under One Year

An Infant Is More Likely to choke on food or small objects than an adult. The infant will rapidly become distressed, and you need to act quickly to clear any obstruction. When a baby is choking, their airway is partly or completely blocked, meaning that they may be unable to breathe properly.

What to do

If you think the baby is choking then they need your help straight away. If they can breathe, are making noises, or coughing, then they may be able to clear their own throat.



1. **Slap it out.** If the baby cannot breathe, cry, or cough, they may be choking and you will need to give five back blows.

Lay the baby face down along your forearm and thigh, making sure you support their head and neck. Give five sharp back blows between the shoulder blades with the heel of your hand.



2. **Turn them over on your thigh and check their mouth.** Pick out any obvious obstructions you can see with your fingertips.
 - Do not sweep the mouth as this could push the object further down the throat.



3. **Squeeze it out.** If back blows fail to clear obstruction, give five chest thrusts with your baby facing upwards, making sure you're supporting their head and neck. Put two fingers in the centre of their chest just below the nipple line and give five sharp chest thrusts.

Check their mouth again, each time.



- 4. Call 999 or 112 for emergency help if the obstruction hasn't cleared.** Take the baby with you to make the call.

Keep repeating five back blows and five chest thrusts until help arrives, checking their mouth each time.

- If the baby becomes unresponsive at any point, prepare to start baby CPR.

Recognition

Mild Obstruction:

- Infant able to cough, but has difficulty crying or making any other noise

Severe Obstruction:

- Unable to make any noise, or breathe, with eventual loss of consciousness

Your Aims

- To remove the obstruction
- To arrange urgent removal to the hospital if necessary

Drowning

Drowning can result in death from hypothermia due to immersion in cold water, sudden cardiac arrest due to cold water, spasm of the throat blocking the airway and/or inhalation of water and consequent airway obstruction.

A casualty rescued from a drowning incident should always receive medical attention even if she seems to have recovered at the time. Any water entering the lungs causes them to become irritated, and the air passages may begin to swell several hours later—a condition known as secondary drowning. The casualty may also need to be treated for hypothermia.

What to do

1. Do not put yourself in danger when trying to rescue a child.
2. When the child has been rescued from the water, you should first perform a primary survey. If this establishes that they are unresponsive and not breathing, you should ask a helper to call 999 or 112 for emergency help while you start CPR. Ask a helper to find and bring a defibrillator, if available.
 - If you're on your own, you need to give one minute of CPR before calling on a speaker phone. Do not leave the child to look for a defibrillator yourself, the ambulance will bring one.
3. **Start CPR.** Place the child on a firm surface and open their airway. To do this, place one hand on their forehead to tilt their head back and use two fingers from the other hand to gently lift the chin.

Only pick out any visible obstructions from the mouth and nose.

4. **Give Five Initial Rescue Breaths.**

Take the hand from the forehead and pinch the soft part of the nose closed. Allow the mouth to fall open. With the head still tilted, take a breath and put your mouth around the child's, to make a seal. Blow into their mouth gently and steadily for up to one second, until the chest rises. Remove your mouth and watch the chest fall. That's one rescue breath. Do this five times.

- If the chest doesn't rise, check the airway is open.
5. You will then need to give 30 chest compressions. Kneel by the child and put one hand in the centre of the child's chest. Push down a third of the depth of the chest. Release the pressure allowing the chest to come back up. Repeat this 30 times at a rate of 100 to 120 compressions per minute.
 - The beat of the song 'Nellie the Elephant' can help you keep the right rate.
 6. After 30 compressions, you need to give two rescue breaths.

Continue to perform CPR, alternating 30 chest compressions with two rescue breaths, (30:2) until:

- emergency help arrives and takes over.
 - the child starts showing signs of life and starts to breathe normally.
 - you are too exhausted to continue - if there is a helper, you can change over every one-to-two minutes, with minimal interruptions to chest compressions.
 - or a defibrillator is ready to be use - if the helper returns with a defibrillator, ask them to switch it on and follow the voice prompts while you continue with CPR.
7. Beware, many casualties that drown may bring up stomach contents, so be prepared to roll them onto their side to clear their airway.
 8. If the child shows signs of becoming responsive, such as coughing, opening eyes, speaking, and starts to breathe normally, put them in the recovery position.
You may also need to treat them for hypothermia, covering them with warm clothes and blankets. If possible, replace the wet clothes with dry clothes.
 9. Monitor the child's level of response, and prepare to give CPR again if necessary.
 - If you have used a defibrillator, leave it attached.

Asthma

In an asthma attack, the muscles of the air passages in the lungs go into spasm. As a result, the airways become narrowed, which makes breathing difficult. Sometimes, there is a recognized trigger for an attack, such as an allergy, a cold, a particular drug, or cigarette smoke. At other times, there is no obvious trigger. Many sufferers have sudden attacks. People with asthma may be treated, depending on the severity of their condition, with rescue inhalers or nebulizers on a regular basis.

Signs and Symptoms

Look for:

- difficulty breathing
- wheezing and coughing
- a tight chest, it may feel like a band is tightening around it
- distress and anxiety
- difficulty speaking, shown through short sentences and whispering
- signs of hypoxia such as grey-blue tinge to the lips, earlobes and nailbeds
- exhaustion, in the case of a severe attack.

What to Do

1. Reassure the casualty and ask them to take their usual dose of their reliever inhaler (usually blue). Ask them to breathe slowly and deeply.
 - If they have a spacer available, ask them to use it with their inhaler. The inhaler is more effective with a spacer, especially when being used for young children.
 - If they have no inhaler call 999 or 112 for emergency help.
2. Sit them down in a comfortable position.
3. A mild attack will normally ease after a few minutes. However, if they don't improve within a few minutes, it may be a severe attack. Ask them to take a puff every 30 to 60 seconds, until they have had 10 puffs. Help the casualty to use their inhaler if they need assistance.
4. If the attack is severe, and they are getting worse, becoming exhausted, or if this is their first attack, call 999 or 112 for emergency help.
5. Monitor their breathing and level of response. If the ambulance hasn't arrived within 15 minutes, repeat step 3.
 - If they become unresponsive at any point prepare to give CPR.
6. If their symptoms improve and you do not need to call 999, advise the patient to get an urgent same-day appointment to see their GP or asthma nurse.

Special Case Using a Spacer

A spacer device can be fitted to an asthma inhaler to help a casualty inhale the medication more effectively. They are especially useful when giving medication to young children.

Caution

- If this is a first attack and the casualty has no medication call 999 for emergency help immediately.
- If the casualty loses consciousness and is not breathing normally, begin CPR with chest compressions.

Your Aims

- To ease breathing
- To obtain medical help if necessary

Croup

Croup in babies and Children

Croup is a childhood condition, where there is inflammation of the windpipe and the voice box.

Signs and Symptoms

Look for:

- distressed breathing
- a short, barking cough
- rasping noise when breathing in
- a croaky voice
- blue-grey skin (due to lack of oxygen).

What to do



Sit the child on your knee, supporting their back, and calmly reassure them.



If the croup is severe, or the breathing is distressed and not improving, or the child has a high temperature, call 999 or 112 for emergency medical help. The child may have epiglottitis.

- Monitor their breathing and level of response until help arrives.

Further Reading:

- ✓ *Pediatric First Aid/ CPR/ AED Ready Reference Cards – March 15, 2011 by American Red Cross*
- ✓ *Infant CPR Anytime: Light Skin Kit Cards – August 1, 2011 by American Academy of Pediatrics*