

Asthma

(CLSM 8:4-5)

Asthma is a condition that affects about 5% of adults and 10% of children in North America. Some of the things that could trigger an asthma attack include an allergic reaction, respiratory infection, cold environment, emotional distress, heavy exercise, and more. An asthma attack is caused by the _____ of air passageways (*bronchospasm*) that makes it increasingly difficult to breathe.

Signs & Symptoms:

- Medical history
- Difficulty breathing
- Wheezing or gasping
- Whistling noises while breathing (*stridor*)
- Anxiety

Treatment:

- Medication (broncodilator): Ventolin
- Rest & Reassurance
- Position of comfort
- EMS if no immediate recovery
- Pursed-lip breathing

Anaphylactic Shock

(CLSM 8:3)

Anaphylactic shock (or *anaphylaxis*) is a severe allergic reaction that often causes difficulty in breathing due to swelling of the respiratory tract. It can be sudden and life-threatening.

Signs and Symptoms:

- Medical History
- Itching, numbness, tingling
- Blotchy areas or hives
- Swelling of _____
- Difficulty breathing
- Discomfort in chest area
- Rapid, weak pulse
- Weakness, dizziness, anxiety

Treatment:

- Medication: EpiPen or Ana-Kit
- Call EMS
- Maintain ABC's (Oral Airway)
- Remove Stinger (if applicable)
- Treat for Shock

Hyperventilation

(CLSM 8:3)

Hyperventilation is defined as _____. The CO₂ level in the blood _____ as CO₂ is expired, however the O₂ level does not usually change significantly. The decrease in CO₂ level causes the body to depress the breathing centre in the brain and can result in a loss of consciousness.

Signs & Symptoms:

- Rapid, shallow breathing
- Anxiety, Emotional stress
- Lightheadedness, headache
- Numbness and Tingling

Treatment:

- Rest & Relaxation
- Coaching breaths (“Breathe with me”)
- “Pursed-lip” breathing
- NO paper bags!
- EMS if necessary

Inadequate Breathing

(CLSM 8:3)

A patient has inadequate breathing if they are breathing less than _____ (breaths per minute) or has ineffective breathing (too shallow). Someone who is breathing over _____ may also have inadequate breathing if they are in obvious distress. This can be caused by any of the above conditions and diseases, as well as by other things such as head trauma or decreased LOC.

Note: This significant lack of effective breathing should be noticed and assessed in the primary survey, and critical intervention started ASAP.

Signs & Symptoms:

- Absent/Slow respiration (<10bpm)
- Shallow/Ineffective Respirations (>30bpm)
- Pale, cool, clammy, cyanosis
- Distress, anxiety
- Difficulty breathing (straining neck muscles)

Treatment:

- Call EMS
- _____ with a pocket mask
Time your breaths with theirs (ie. try not to breathe into them when they are trying to breathe out) at approximately every 3-5 seconds.
- Oxygen Therapy

C.O.P.D.

(CLSM 8:3)

COPD stands for _____, and is a condition characterized by difficulty breathing. The most common forms of COPD are emphysema and chronic bronchitis. The main cause of COPD is cigarette smoking.

A small percentage of patients with advanced COPD lose their sensitivity to carbon dioxide are triggered to breathe by _____. This rare condition may have some implications for oxygen therapy. If oxygen is applied to a patient with COPD, it should be given at the same litre flow, but if the patient's respiratory condition begins to worsen the litre flow should be turned down to 1-2 lmp. If ventilations are necessary, the oxygen litre flow should be maintained at 15 lmp.

**Do not withhold oxygen from a patient who may benefit from its use