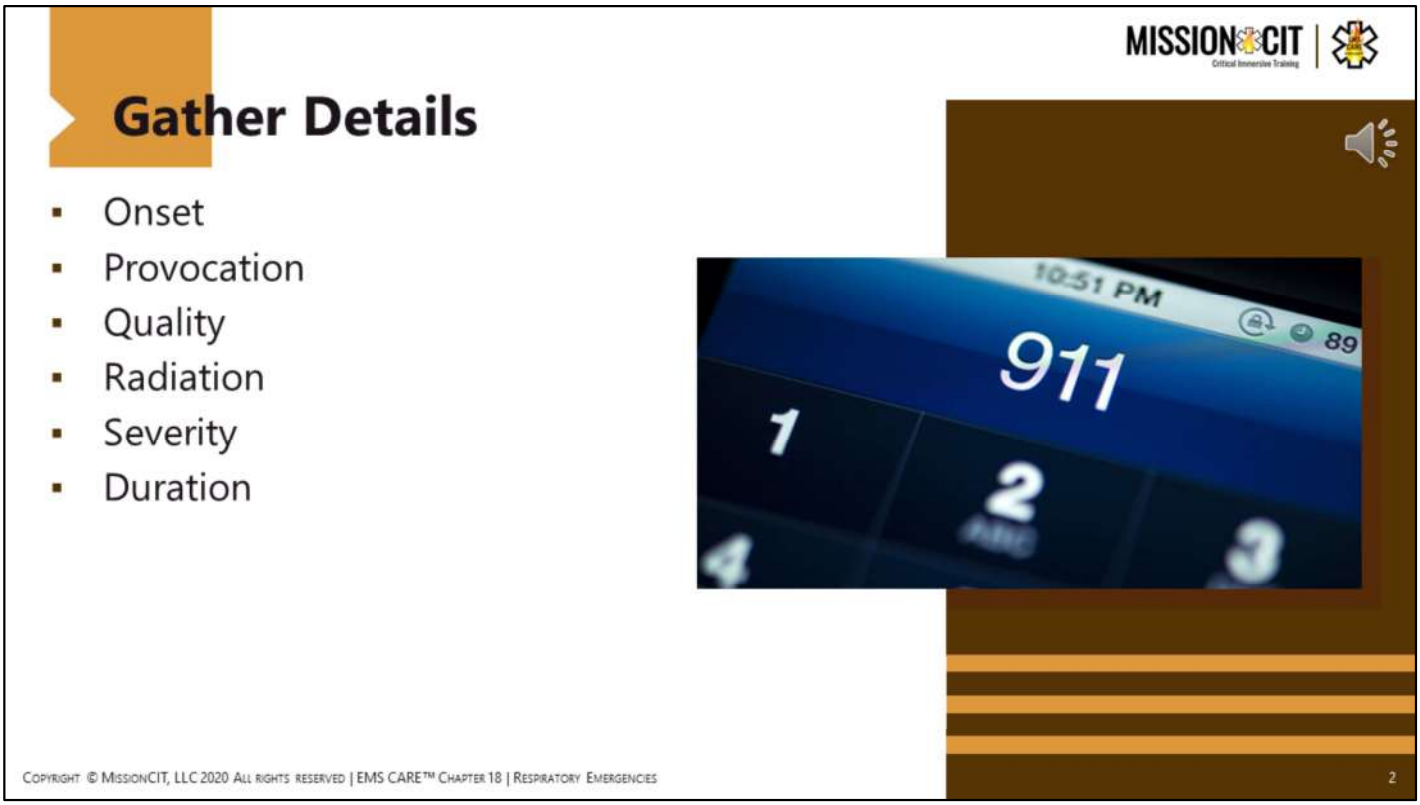


Thank you, Justin!

Welcome to this lesson where we talk about breathing difficulty and the possible care you can give to patients who are going through it.

Breathing difficulty is a subjective perception of the patient, and broadly denotes a feeling of labored or difficult breathing. The amount of stress felt may or may not reflect the actual severity of the condition.

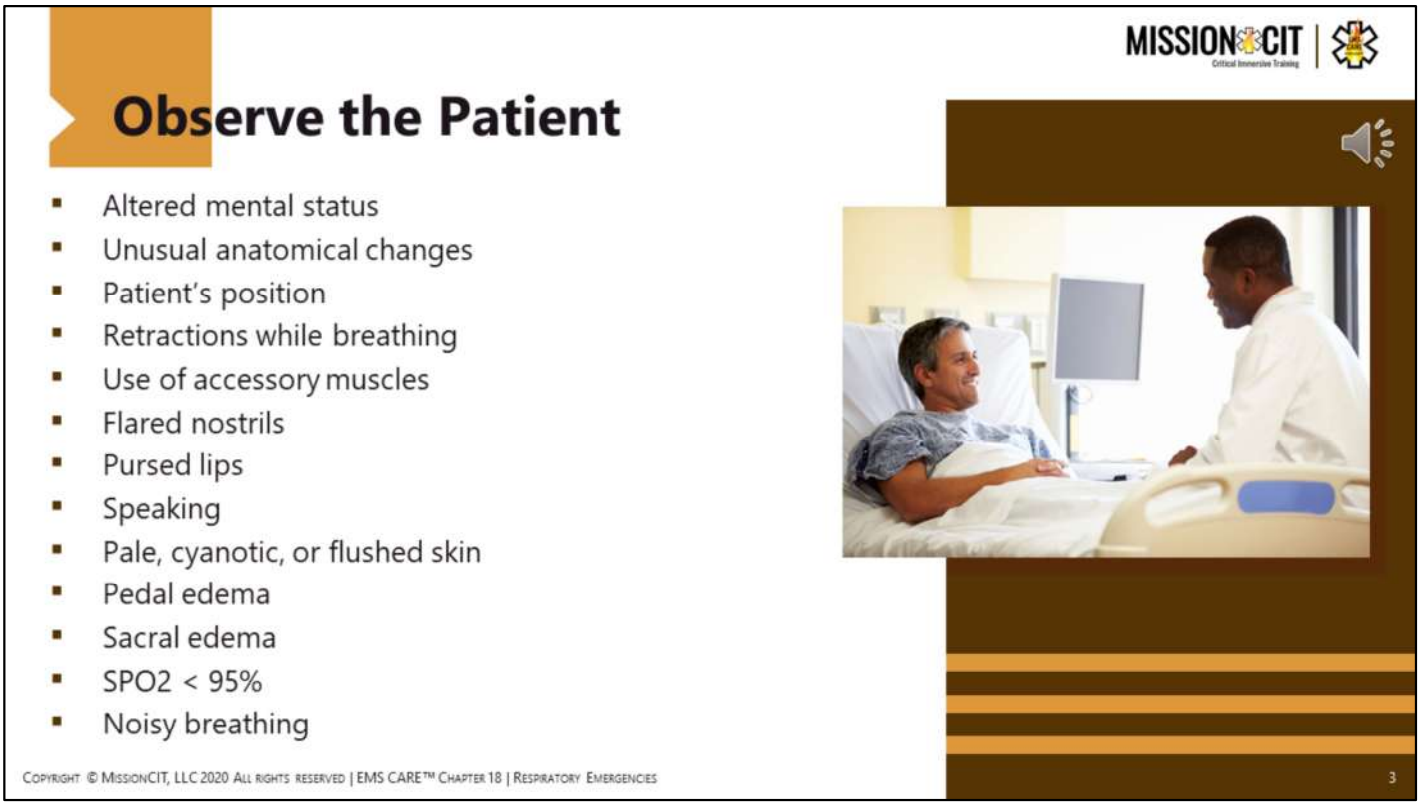
This is what makes it tricky to provide appropriate care, and in this lesson, let's see how you can zero in on the problem and what steps you can take to help the patient.



Gather as many details as possible from the dispatcher's call, bystanders, family members, and even the patient if he or she is in a position to say at least a few words. Specifically, understand

- The onset. The time when this breathing difficulty started.
- Provocation. What was the patient doing when this came on?
- Quality. Is there a cough? If so, does it throw up anything like phlegm?
- Radiation. Does the patient have any discomfort or pain in any part of the body? Does it seem to spread to other parts of the body?
- Severity. How bad is the breathing difficulty on a scale of 1 to 10, where 10 is the worst?
- Duration. How long has the patient been suffering from this condition?

Answers to these questions can help point the cause of the respiratory difficulty.



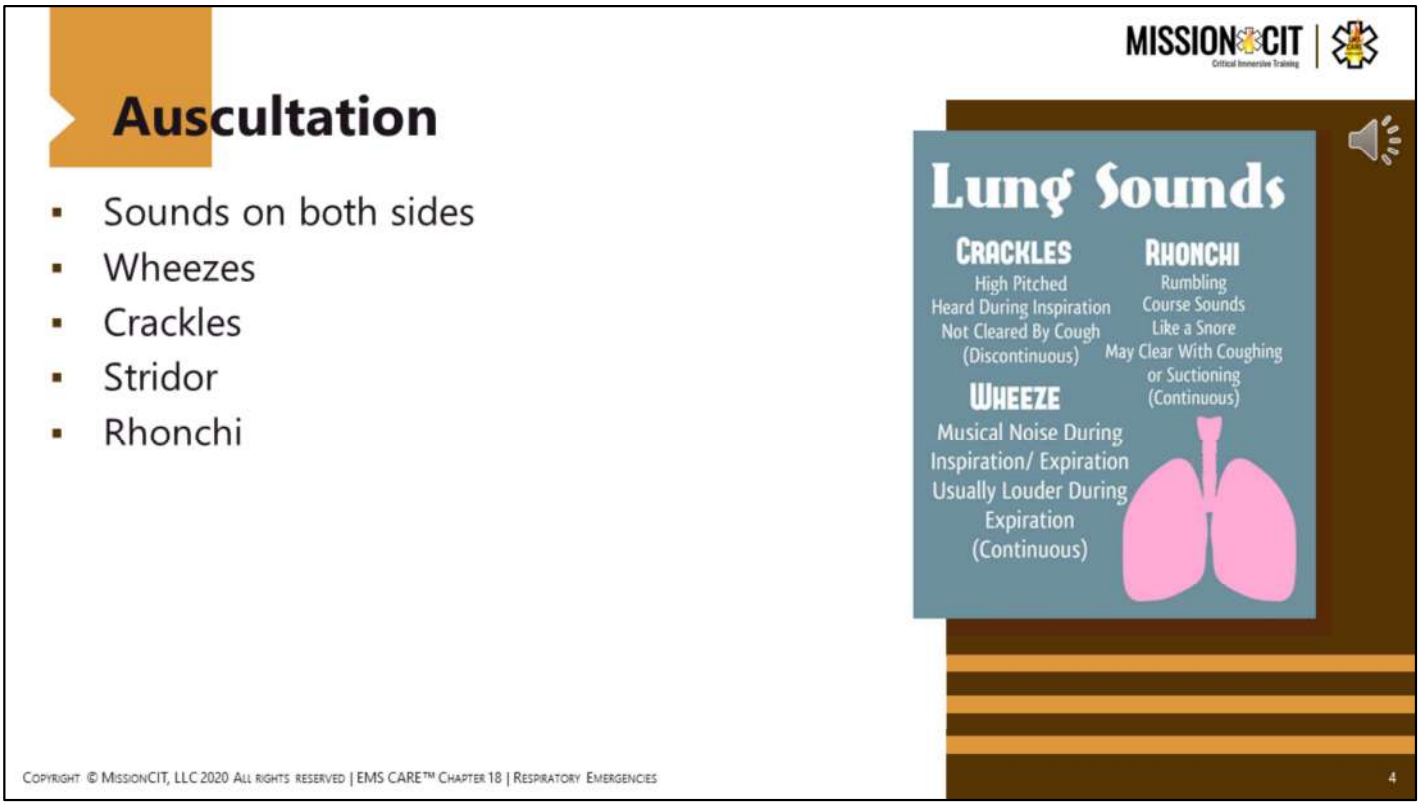
Observing the patient for a few seconds can give you a lot of information on the patient's condition.

Look for aspects such as,

- Altered mental status
- Unusual anatomical changes such as barrel chest
- The patient's position. If the patient is seated in a tripod position with feet dangling and leaning forward, it means the patient is finding it hard to breathe.
- Retractions while breathing
- Use of accessory muscles
- Flared nostrils
- Pursed lips
- The number of words that a patient can say without stopping
- Pale, cyanotic, or flushed skin
- Pedal edema

- Sacral edema
- If the oxygen saturation or SpO2 reading is less than 95 percent on the pulse oximeter
- Noisy breathing with sounds such as audible wheezing without the use of a stethoscope, gurgling, snoring, crowing, stridor, and coughing

Depending on the number of these conditions and their severity, you can decide if the patient needs ventilation support or even quick transportation to the nearest hospital.

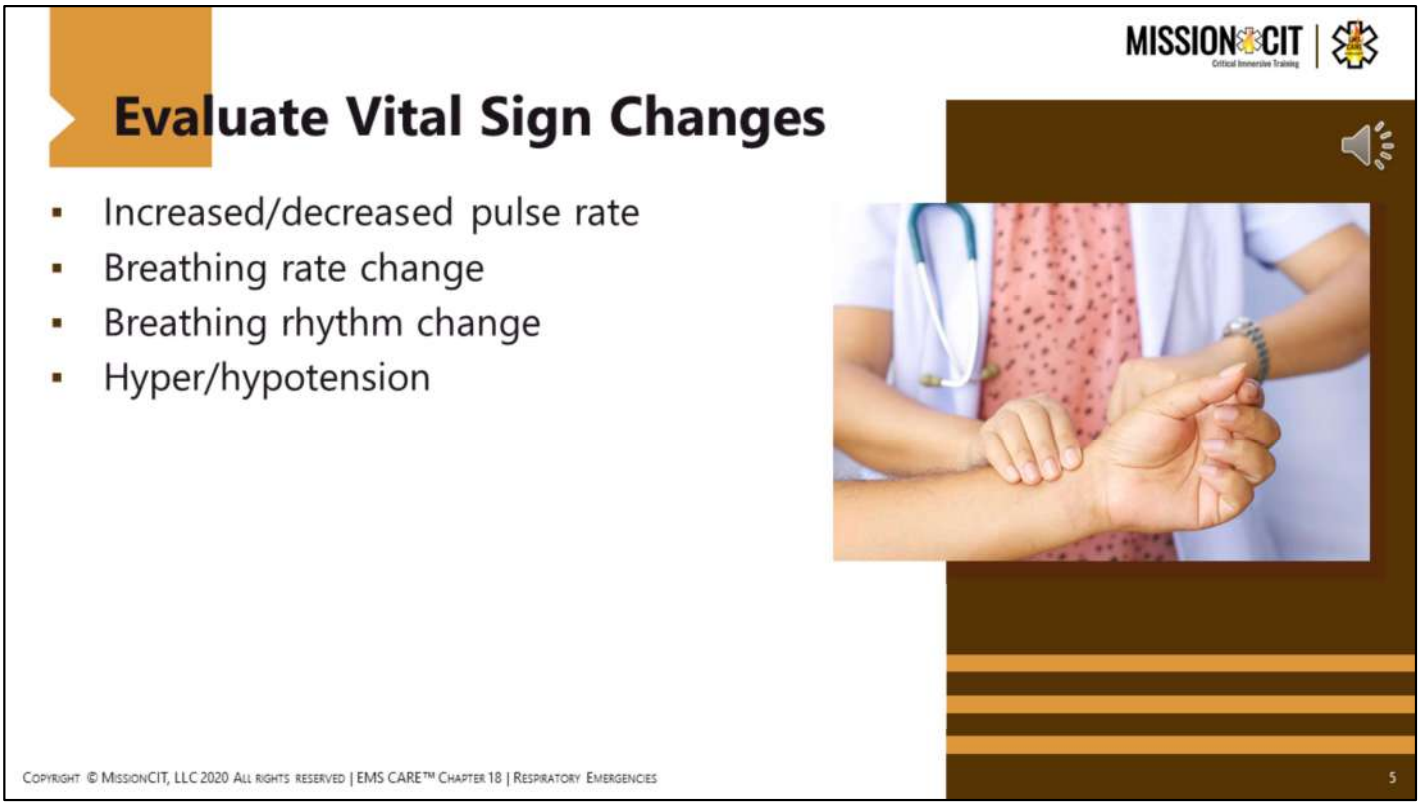


Auscultation is when lung sounds are heard on both sides during inspiration and expiration. The prominent sounds you'll hear are wheezes, crackles, stridor, and Rhonchi.

Wheezes are high-pitched sounds created by air that's moving through narrowed air passages while crackles are fine crackling or bubbling sounds heard on inspiration and caused by fluid in alveoli or by the opening of closed alveoli.

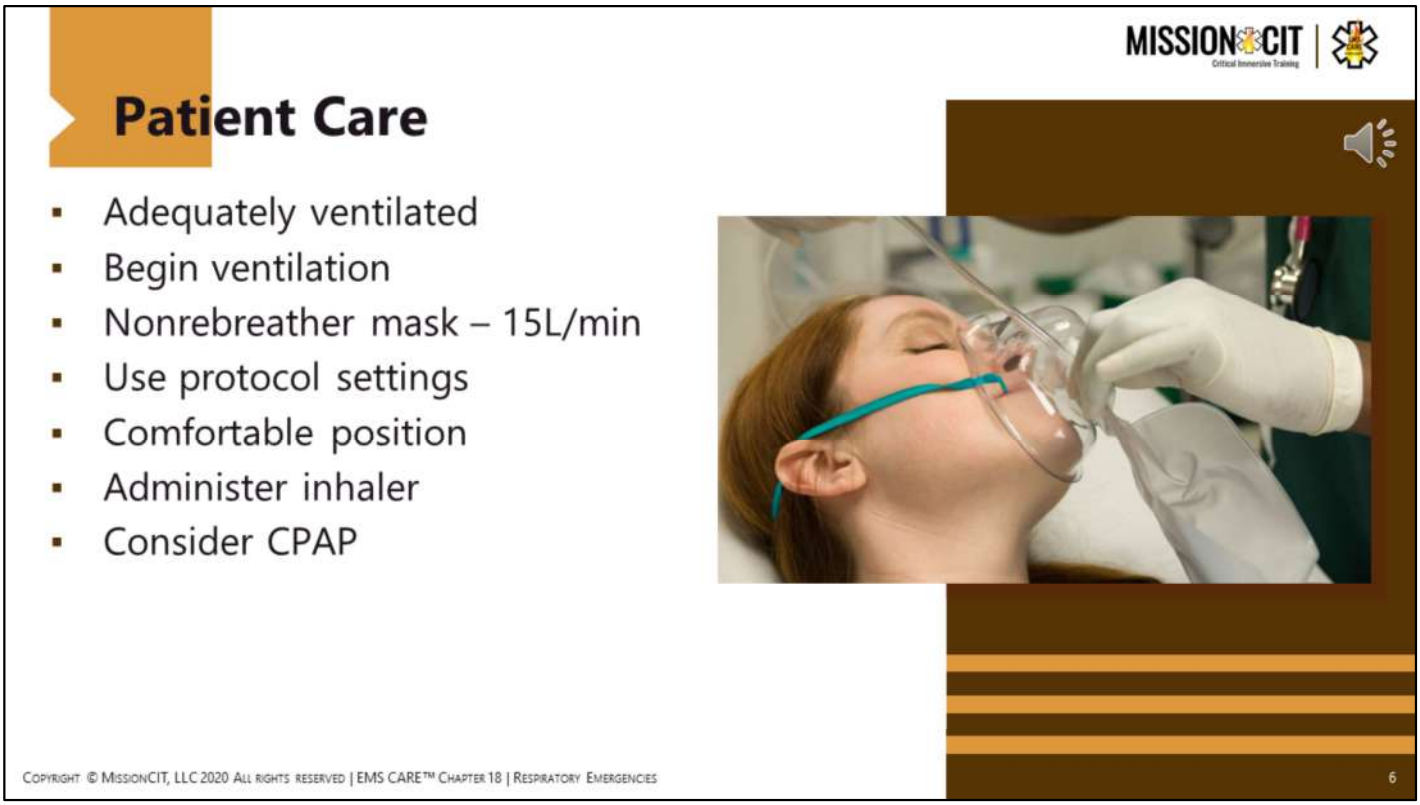
Rhonchi is lower-pitched sounds resembling snoring or rattling and is caused by secretions in the larger airways while stridor is a high-pitched upper-airway sound indicating a partial obstruction of the trachea or larynx.

The presence of these sounds can give you clues about the underlying problem.



When you notice any of the above symptoms, evaluate the vital sign changes of the patient. It may include,

- Increased or decreased pulse rate
- Changes in the breathing rate
- Changes in the breathing rhythm
- Hypertension or hypotension

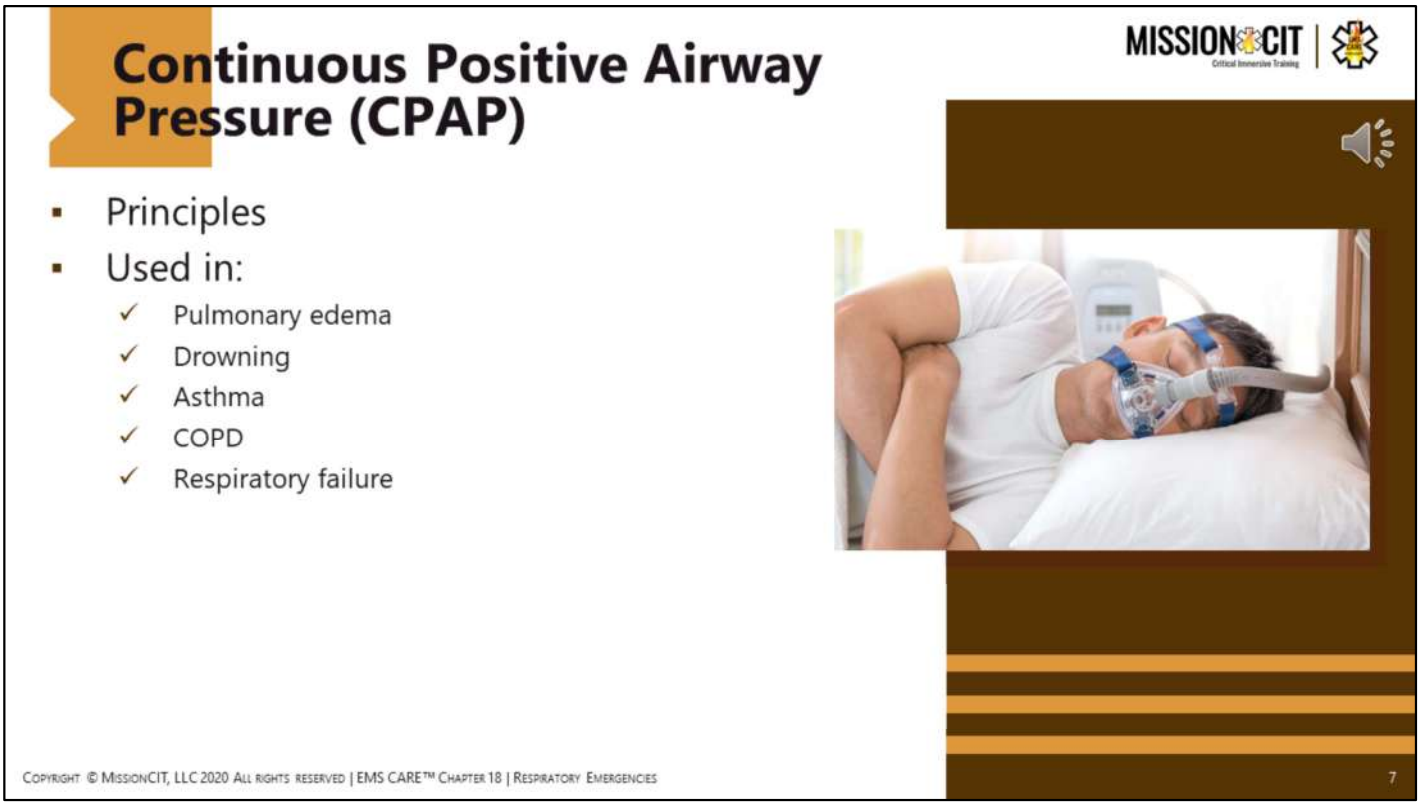


So, what can you do?

Ensure that the patient is adequately ventilated to prevent further deterioration. Begin artificial ventilation, if the patient's breathing is inadequate. On the other hand, if the patient's breathing is adequate but labored, use a nonrebreather mask at 15 liters per minute.

Make sure to use the settings mentioned in your local protocol.

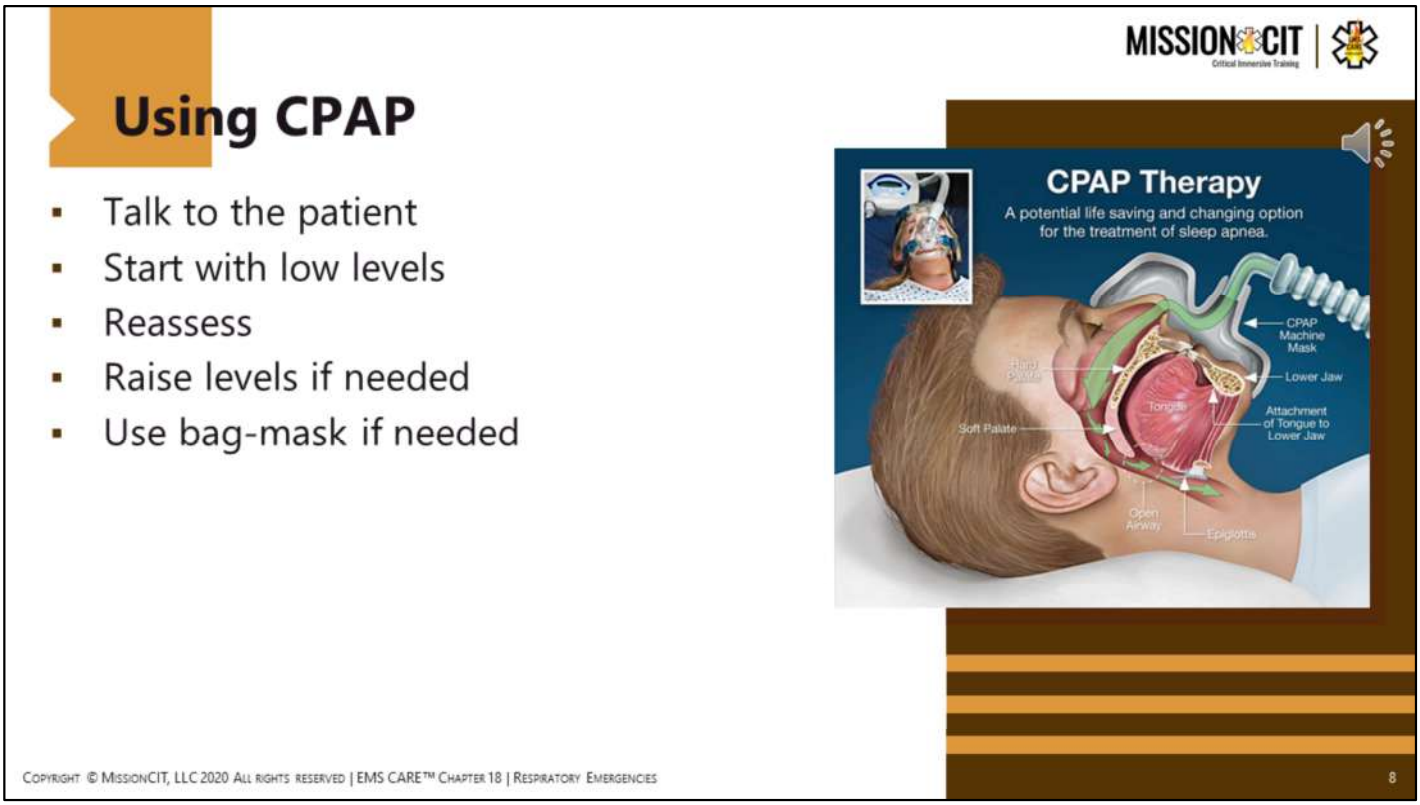
You can also place the patient in a comfortable position and administer the prescribed inhaler. Also, consider CPAP if needed.



Continuous Positive Airway Pressure, or CPAP, is based on some simple principles such as,

- Blowing oxygen or air continuously at low pressure into the airway prevents the alveoli from collapsing at the end of exhalation.
- It can prevent fluid from shifting into alveoli from the surrounding capillaries.

Due to these two principles, CPAP is used widely in conditions such as pulmonary edema, drowning, asthma, COPD, and general respiratory failure.

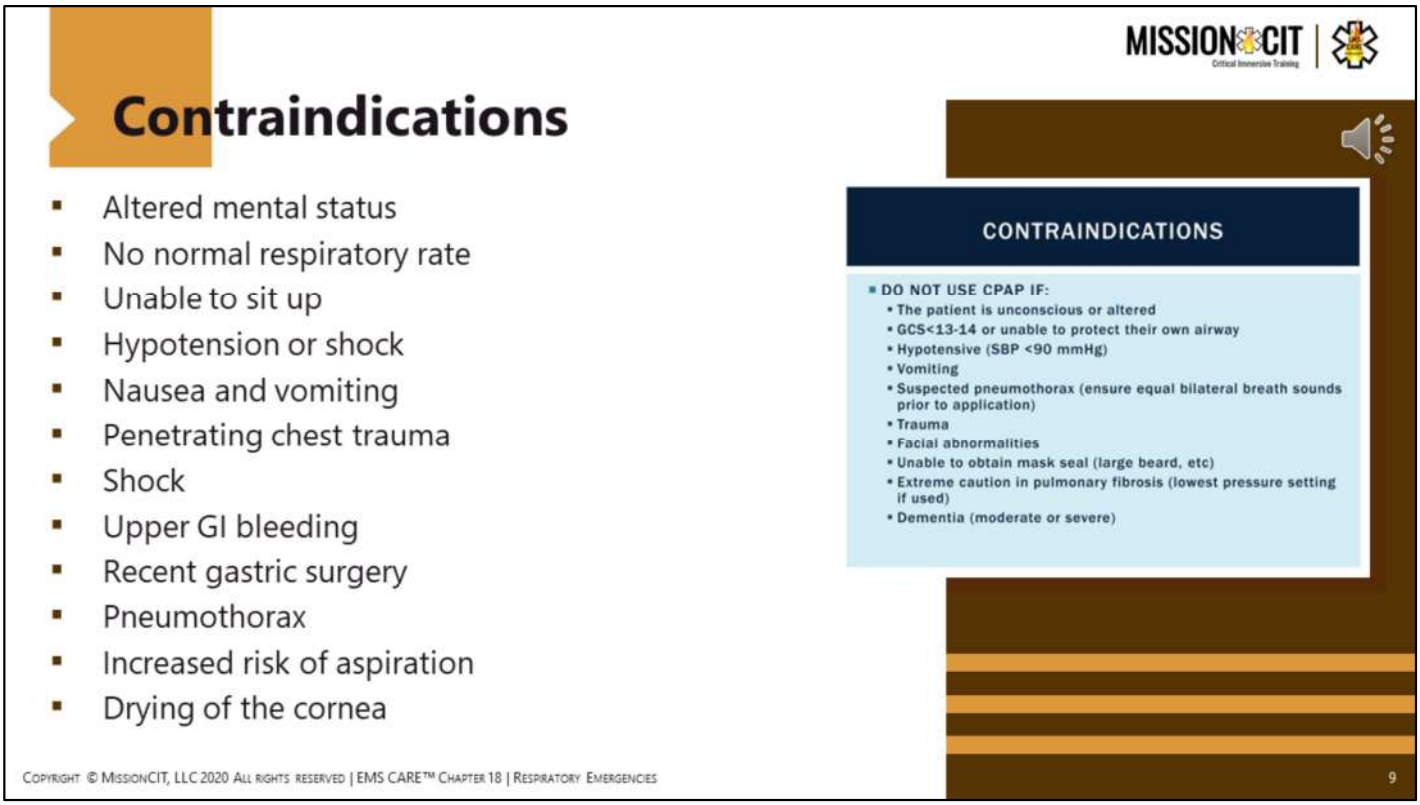


Before using CPAP, explain the procedure to the patient, and inform him or her that the mask and snug seal may cause the patient to feel smothered and anxious.

Start with low levels of CPAP and reassess the patient's mental status, vital signs, and dyspnea level frequently.

Based on these signs, raise the CPAP level if there's no relief within the first few minutes.

If you notice that the patient's condition is deteriorating, remove the CPAP, and start ventilating with a bag-mask.



While using CPAP, look out for the following contraindications and stop administering when you notice any of them.

- Severely altered mental status
- Lack of normal or spontaneous respiratory rate
- Inability to sit up
- Hypotension or shock
- Nausea and vomiting
- Penetrating chest trauma
- Shock
- Upper GI bleeding
- Recent gastric surgery
- Conditions preventing a good mask seal
- Pneumothorax
- Increased risk of aspiration, and

- Drying of the cornea

With this, we come to the end of this lesson. Next, Justin will take you through different respiratory conditions.