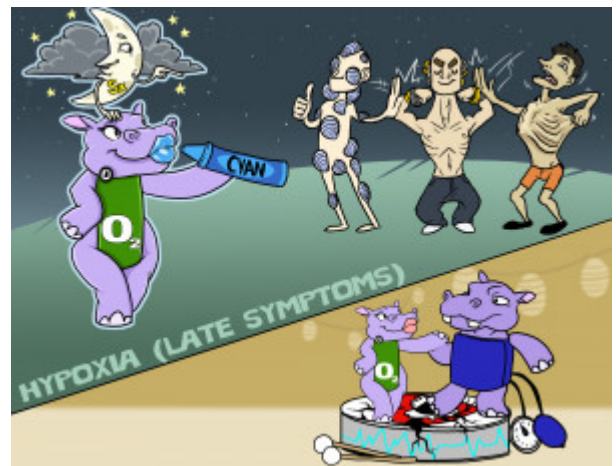


## Hypoxia (Late Symptoms)

Hypoxia is a condition in which the body is deprived of adequate oxygen supply. Early symptoms were discussed in another Picmonic. Depending on the underlying causes of hypoxia patients often show varying degrees of symptoms. Common assessment findings during the late stage of hypoxia include symptoms such as cyanosis, cool, clammy skin, use of accessory muscles, retractions, hypotension, and arrhythmias.



PLAY PICMONIC

### Cyanosis

#### Cyan-Crayon

This is a bluish discoloration of the skin, which is caused by a decreased amount of oxygenated hemoglobin on red blood cells. Cyanosis is not always present as hypoxia is decreased oxygen at the cellular level.

### Cool, Clammy Skin

#### Cool, Clammy Skin-suit-man

Also commonly called "diaphoretic," compensatory responses release catecholamines like epinephrine and norepinephrine into the bloodstream, which cause increased perspiration. This increased perspiration cools the skin. Unpleasantly wet skin is also termed "clammy."

### Use of Accessory Muscles

#### Accessories Muscle-man

Accessory muscles are additional muscles that can help increase the amount of air that is inspired. These muscles are used to increase the volume and rate of respiration. Along with dyspnea at rest, patients may appear as if they are pausing for breath between words as the effort to breath becomes increasingly difficult.

### Retractions

#### Retractions at Ribcage

Visualization of muscles pulling into the body cavity in the neck and intercostals can be seen during inspiration. This occurs as patients attempt to increase the force, rate and volume of inspired air. Retractions are more easily visible in thin patients and children.

### Hypotension

#### Hippo-BP

In the early stages of hypoxia, blood pressure is typically increased as a compensatory mechanism, but with sustained or severe hypoxia, the body can no longer meet the demands for oxygen and tissues are unable to compensate, resulting in low blood pressure. Blood pressure changes are not a good indicator of hypoxia.

### Arrhythmias

#### Broken Arrhythmia-drum

The heart is very sensitive to low oxygen levels because it has a high extraction percentage of oxygen from the blood. When oxygenation decreases slightly, the cardiac muscle can be immediately affected. This can occur in early stages, as well as late stages. Sustained hypoxia can lead to lethal

arrhythmias.