



## Lung Diseases or Hypoxia

### Lungs Diseased and Hippo-O<sub>2</sub>

Patients are classified in group 3 if their pulmonary hypertension is due to chronic lung disease or hypoxia. Over time, hypoxic pulmonary vasoconstriction causes destruction of the vascular bed and smooth muscle hypertrophy. Since the total cross-sectional area of pulmonary capillaries decreases, pulmonary pressures increase.

## COPD

### COPD-Cop

Chronic obstructive pulmonary disease (COPD) is a common cause of PH.

## Obstructive Sleep Apnea

### Obstructed Sleeping Ape-needs-air

Obstructive sleep apnea (OSA) is another cause of PH. Repetitive nocturnal oxygen desaturation results in the same hypoxic vasoconstriction as seen in COPD that over time will increase pulmonary vascular resistance.

## Group 4

## Chronic Pulmonary Emboli

### Crone with Lungs Elmo

Group 4 patients have chronic or recurrent pulmonary embolisms. The persistent obstruction of pulmonary vessels causes increased pulmonary vascular resistance.

## Group 5

## Multifactorial

### Multiple-factories

Group 5 PH patients have multifactorial or unique etiologies such as metabolic systemic, or hematologic disease. End-stage renal disease or extraluminal compression from a mass can also result in PH.