

Cardiopulmonary Demand Factors: Document These!!

External Related Factors: gravity, thermal/humidity, emotional stress, sleep, pain, etc.

Internal Related Factors: infection/fever, healing process, fluid balance, hemoglobin, ingestion status, PVD, movement efficiency, muscular work, age, and tissue extraction of O<sub>2</sub>.

**Relationship Between Age, PaO<sub>2</sub>, and Saturation**

<u>Age</u>	<u>PaO<sub>2</sub> (mmHg)</u>	<u>SaO<sub>2</sub> (%)</u>
10	95-103	97%
20	91-99	97%
30	87-95	95-97%
40	83-91	94-97%
	80	94%
50	78-86	93-95%
60	74-82	93-94%
	70	92%
70	70-78	92-93%
80	66-74	91-93%
90	62-70	90-92%
	60	90%
	50*	85%
	45	80%
	40	75%

ref: adapted from

Burton, G, Gee, G., and Hodgkin, J.E.: Respiratory Care, a Guide to Clinical Practice. Philadelphia, 1977, J.B. Lippincott Co.

Wilkins, R.L., et al. Clinical Assessment in Respiratory Care. The C.V. Mosby Co., St. Louis, 1985.

**Clinical Application:**

\* titrate exercise to maintain at least: 85% (pO<sub>2</sub>=50) in patients with a good heart  
88% (pO<sub>2</sub>=55) in patients with a bad heart