

Acid Base Balances

Normal Ranges

pH 7.35 - 7.45

CO² 35-45

BE 0-4 (% Bicarb)

1. Look at the pH

If the pH is low the patient is Acidotic

If the pH is high the patient is Alkalotic

2. Look at the pH and Co²

If the pH and the Co² are going in the opposite directions it is Respiratory

EXAMPLE pH ↑ Co² ↓

Respiratory Alkalosis

pH ↓ Co² ↑

Respiratory Acidosis



pH



CO²

Compensation

3. Look at pH and BE

If the pH and the BE are going in the same direction it is Metabolic.

pH ↑ BE ↑

Metabolic Alkalosis

pH ↓ BE ↓

Metabolic Acidosis



pH



BE

Compensation