

Slide 2

DEFINITION

An arterial blood gas analysis is a blood test taken from an artery, that measures the amount of oxygen and carbon dioxide that is found in the blood.

Slide 3

A diagram showing a horizontal axis with 'Acidic' on the left (red arrow pointing left), 'Neutral' in the center, and 'Basic' on the right (blue arrow pointing right). Below the axis are three rows of normal values: pH (7.35 - 7.45), pCO₂ (45-35) (Respiratory), and HCO₃⁻ (22-26) (Metabolic).

Slide 4

The slide contains the same normal values diagram as Slide 3. To its right is a dark box with the following text:

STEP BY STEP

- Know the normal values (note inverted CO₂)
- Determine if pH is acidosis or alkalosis
- Determine if acid-base is respiratory or metabolic
- Remember ROME-The mnemonic RO-ME
- TIC-TAC-TOE

Slide 5

DETERMINE IF PH IS ACIDOSIS OR ALKALOSIS



- PH LEVEL BELOW 7.35=ACIDOSIS
- PH LEVEL ABOVE 7.45=ALKALOSIS

Slide 6

DETERMINE IF ACID-BASE IS RESPIRATORY OR METABOLIC



- $p\text{aCO}_2$ =Respiratory
- HCO_3 =Metabolic

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REMEMBER ROME: THE MNEMONIC RO-ME



- **R**espiratory **O**pposite
 - pH **up**, PaCO_2 is **down**=alkalosis
 - pH **down**, PaCO_2 is **up**=acidosis
- **M**etabolic **E**qual
 - pH **up**, HCO_3 is **up**=alkalosis
 - pH **down**, HCO_3 **down**=acidosis

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Acidic	Normal	Basic

Slide 9

Acidic	Normal	Basic
pH		paCO ₂
HCO ₃		

Reference	Problem
	pH 7.26 ACID
	paCO ₂ 32 BASE
	HCO ₃ 18 ACID

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Acidic	Normal	Basic
pH		paCO ₂
HCO ₃		

Reference	Problem
	pH 7.26 ACID
	paCO ₂ 32 BASE
	HCO ₃ 18 ACID
