



EFFECTIVE PULMONARY FUNCTION TESTING

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Why do we do PFTs?

- Diagnosis
- Trend/treat pulmonary disease
- Disability evaluation
- Pre-op clearance

SPIROMETRY

- **Spirometry** is used to assess how well your lungs work by measuring how much air you inhale, how much you exhale and how quickly you exhale.

LUNG VOLUMES

- **Lung volume tests** are the most accurate way to measure how much air your lungs can hold
- Used to differentiate between restrictive and obstructive lung disease when spirometry is abnormal

DIFFUSING CAPACITY

- **DLCO** measures the ability of the lungs to transfer gas from inhaled air to the red blood cells in pulmonary capillaries
- Is one of the most clinically valuable tests of lung function.

WHAT IS NEEDED FOR A GOOD TEST?

Pt understanding

Pt cooperation

Technician skills

Where to start?

- Get a feel for your patient
- Explain test
- Demonstrate good effort

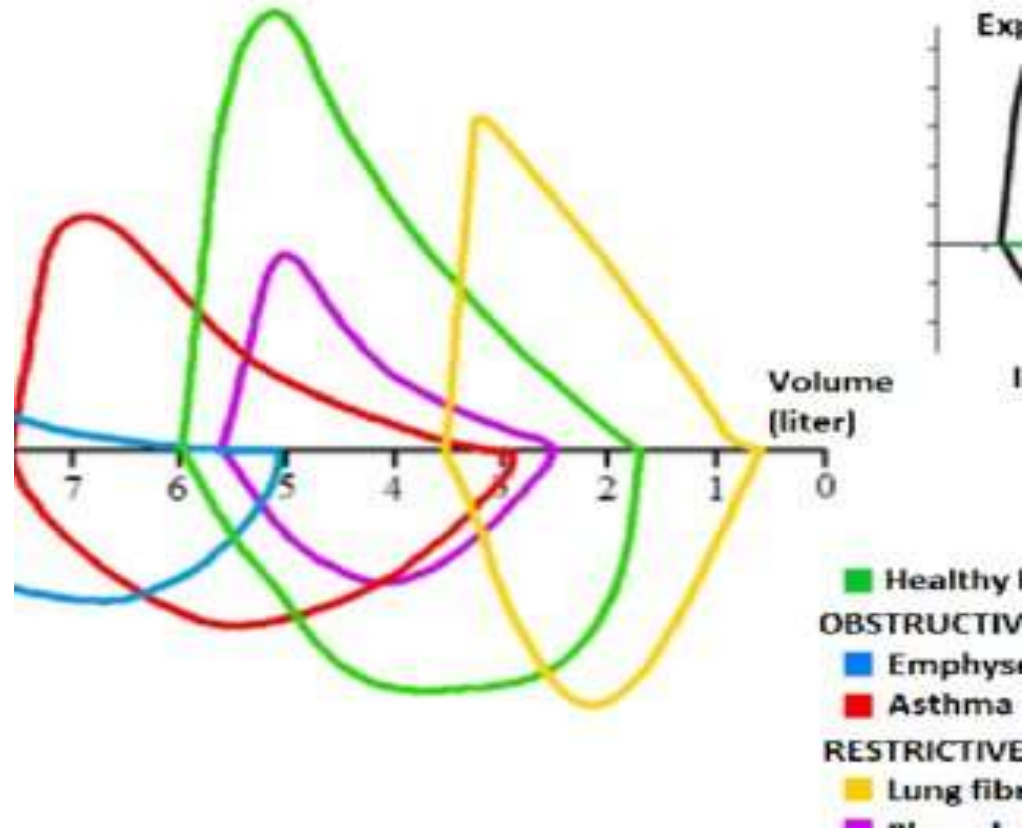
DEEPEST BREATH POSSIBLE



BLAST OUT



Inconsistent effort



TGV; N2 washout; He dilution

- Lung volumes may take some finesse
- Try to put patient at ease
- Explain how long the test takes and that lips must be kept tight and nose clips worn the entire time.

DLCO

- Off of O₂ for at least 10 minutes
- No cigarette smoking the day of testing
- Valsalva; Muller maneuver

Q&A

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