Spirometry Interpretation Guide

(Consider patient history in all interpretation decision making)

1. Pre β₂-agonist 
2. FEV₁/FVC Ratio
3. Reduced: < LLN (or <0.70)
4. Consistent with obstruction
5. β₂-agonist
6. Improved FEV₁ 12% and 200mL
7. Consistent with Asthma or COPD or Asthma COPD Overlap (ACO)
8. Consistent with COPD
9. Consider methacholine challenge

10. FEV₁/FVC Normal ≥ LLN (or ≥0.70)
11. Not consistent with COPD
12. Improved FEV₁ 12% and 200mL
13. Consistent with Asthma
14. Consider FULL PFT (+/- referral to specialist)

15. FVC Normal ≥ LLN
16. Consistent with restriction
17. Improved FEV₁ 12% and 200mL
18. Suspect Asthma
19. Normal Spirometry

LLN=Lower Limit of Normal

1. 200mL criteria only necessary for adults and children ≥ 12 years
2. Reversibility criteria not met. May occur with chronic asthma - consider methacholine challenge or referral
3. Normal Spirometry: in the context of persistent symptoms consider further clinical testing i.e. methacholine challenge
4. LLN may not be available on outdated systems – use 80% predicted
5. If the LLN is not available use 0.70 in an adult if COPD is suspected and 0.80 in a child
6. If FVC < LLN (or < 80%) predicted, consider combined obstructive and restrictive defect and full PFT.

Note: Recommended reference equations: GLI, CHMS, and NHANES III

Adapted and revised with permission from Primary Care Respiratory Alliance of Canada (PCRAC)

© 2018 Ontario Lung Association