

The following guideline recommends assessment for and diagnosis of COPD.

DIAGNOSING COPD

A diagnosis of COPD should be considered in any individual who has dyspnea, chronic cough or sputum production, and/or history of exposure to risk factors for the disease, especially cigarette smoking. (See Figure 5.1-1)

Figure 5.1-1. Key Indicators for Considering a Diagnosis of COPD

Consider COPD, and perform spirometry, if any of these indicators are present in an individual over age 40. These indicators are not diagnostic themselves, but the presence of multiple key indicators increases the probability of a diagnosis of COPD. Spirometry is needed to establish a diagnosis of COPD.

Dyspnea that is: Progressive (worsens over time)
 Usually worse with exercise
 Persistent (present every day)
 Described by the patient as an "increased effort to breathe," "heaviness," "air hunger," or "gasping."

Chronic Cough May be intermittent and may be unproductive.

Chronic sputum production: Any pattern of chronic sputum production may indicate COPD.

History of exposure to risk factors, especially: Tobacco smoke.
 Occupational dusts and chemicals
 Smoke from home cooking and heating fuels.

The diagnosis should be confirmed by spirometry.

The diagnosis of COPD should be made using all available tools. Clinical symptoms and signs (abnormal shortness of breath and increased forced expiratory time) can be used to help with the diagnosis. A low peak flow is consistent with COPD but has poor specificity since it can be caused by other lung diseases and by poor performance. In the interest of improving the accuracy of a diagnosis of COPD, every effort should be made to provide access to standardized spirometry.

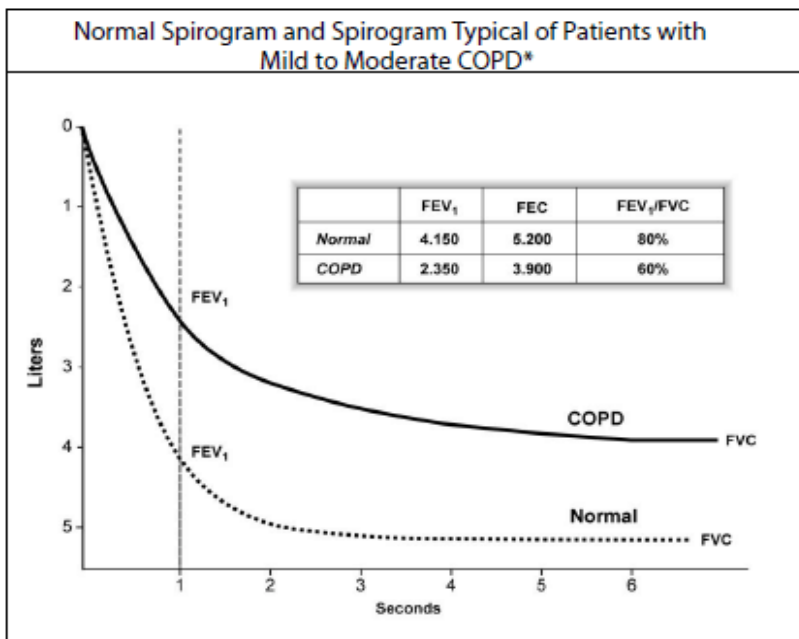
When performing spirometry measure:

- Forced Vital Capacity (FVC) and
- Forced Expiratory Volume in one second (FEV₁).

* Postbronchodilator FEV₁ is recommended for the diagnosis and assessment of severity of COPD.

Calculate the FEV₁/FVC ratio

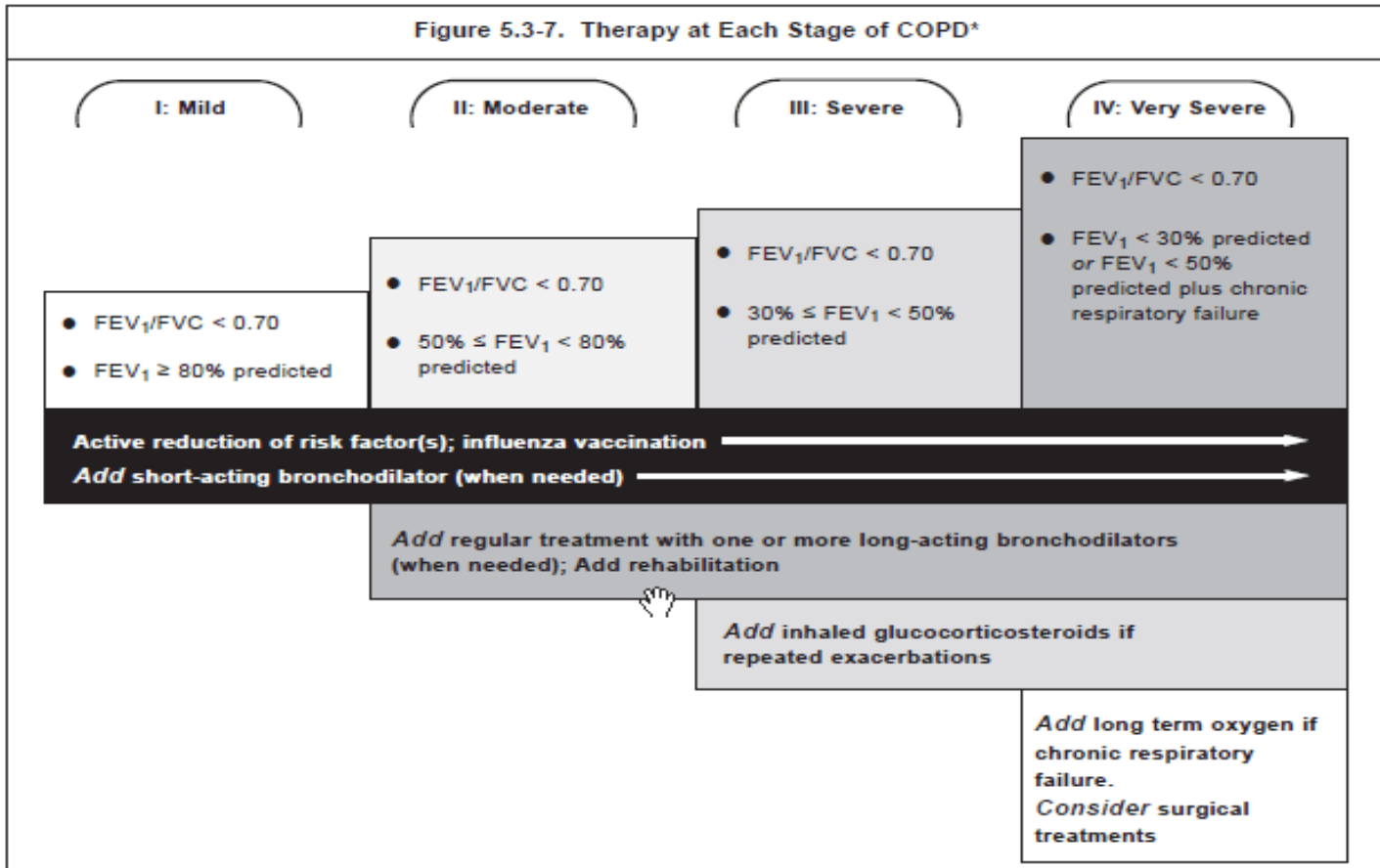
Spirometric results are expressed as a % Predicted using appropriate normal values for the person's sex, age, and height.



Patients with COPD typically show a decrease in both FEV₁ and FEV₁/FVC. The degree of spirometric abnormality generally reflects the severity of COPD. However, both symptoms and spirometry should be considered when developing an individualized management strategy for each patient.

Use of Spirometry in Diagnosis of COPD

THERAPY AT EACH STAGE OF COPD



*Postbronchodilator FEV₁ is recommended for the diagnosis and assessment of severity of COPD.

Recommendations for Management of COPD

Intervention	Recommendation
Smoking Cessation	Only intervention proven to affect the long-term decline in lung function.
Bronchodilators	Inhaled treatment is preferred, regularly or as needed depending on symptoms. B ₂ agonist or anticholinergic alone or in combination. There is increasing evidence for the role of long-acting B ₂ agonist or anticholinergic as maintenance therapy. Xanthines are a second-line option.
Inhaled corticosteroids	Evidence for a role as second-line therapy, but not for a long-term effect on lung function.
Oral corticosteroids	Treatment of acute exacerbations.
Mucolytics, cromones, antibiotics, antitussives	Not recommended for routine management

Please refer to the entire GOLD COPD guideline by following this link: <http://www.goldcopd.org/Guidelineitem.asp?l1=2&l2=1&intId=1116>

This guideline is based on content from the Use of Spirometry in the diagnosis of COPD guideline used with permission from the Global Initiative for Chronic Obstructive Lung Disease (GOLD), www.goldcopd.org Individual patient considerations and advances in medical science may supersede or modify these recommendations. Approved by the RMHP QIC January 2011.