Table 1: Diagnosis of Asthma: Pulmonary Function Criteria

PULMONARY FUNCTION MEASUREMENT	CHILDREN (6 YEARS OF AGE AND OVER)	ADULTS
Preferred: Spirometry showing reversible airway obstruction Reduced FEV_1/FVC **AND** Increase in FEV_1 after a bronchodilator or after course of controller therapy	Less than lower limit of normal based on age, sex, height and ethnicity (< 0.8-0.9)* **AND** ≥ 12%	Less than lower limit of normal based on age, sex, height and ethnicity (< 0.75-0.8)* **AND** ≥ 12% (and a minimum ≥ 200 mL)
Alternative: Peak expiratory flow variability Increase after a bronchodilator or after course of controller therapy **OR** Diurnal variation†	≥ 20% **OR** Not recommended	60 L/min (minimum ≥ 20%) **OR** > 8% based on twice daily readings; > 20% based on multiple daily readings
Alternative: Positive challenge test Methacholine challenge **OR** Exercise challenge	PC_{20} < 4 mg/mL (4 mg/mL-16 mg/mL is borderline; > 16 mg/mL is negative) **OR** ≥ 10%-15% decrease in FEV_1 postexercise	

* Approximate lower limits of normal ratios for children and adults; †Difference between minimum morning prebronchodilator value in 1 week and maximum nighttime value as % of recent maximum. FEV_1 Forced expirator volume in 1s; FVC Forced vital capacity; PC_{20} Provocative concentration of methacholine producing a 20% fall in FEV_1.

Source: Reprinted from "Canadian Thoracic Society Asthma Management Continuum—2010 Consensus Summary for Children Six Years of Age and Over, and Adults," by M. D. Lougheed et al., 2010, *Canadian Respiratory Journal, 17*(1), 15–24. Reprinted with permission.

Note: It is important to note that the initial assessment questions used to identify persons with asthma may also identify persons with COPD, and they are *not* meant to diagnose or differentiate between the two conditions. Establishing a diagnosis of COPD and/or asthma requires pulmonary function testing, and cannot be based on a medical history alone. Asthma and COPD can present similarly in terms of symptom experience (i.e., cough, dyspnea, shortness of breath) and the medications used to manage the conditions (i.e., bronchodilators[G] and corticosteroids[G]). A diagnosis of asthma and/or COPD must be made by the appropriate health-care provider.