

Spirometry Terminology

Spirometry Term	Definition
%PRED	Ratio of patient's actual results compared to predicted normal values, expressed as a percentage. Abnormality is defined by using one standard deviation for each variable rather than any specific percentage below the predicted value. Results above 100% are above average.
ATS	American Thoracic Society, a scientific medical organization active in pulmonary research and care of patients with lung diseases. The ATS has recommended standards for Spirometry.
Bronchodilator	A type of drug (i.e. albuterol) usually administered in an aerosol spray that is used to dilate air passages to reduce any restrictions to airflow.
BTPS	Body Temperature and Pressure, Saturated: A number, which uniformly expresses all Spirometry results at body temperature and pressure, fully saturated with water.
Calibration Syringe	A syringe which injects a measured amount of air into the mouthpiece. Many syringes have a stop ring on the plunger, which allows injecting various calibrated amounts of air.
COPD	Chronic Obstructive Pulmonary Disease. This term refers to two lung diseases, chronic bronchitis and emphysema, that are characterized by obstruction to airflow that interferes with normal breathing (ALA).
EOTV	End-of-test Volume
ERS	European Respiratory Society
Ex Time	Expiratory Time, expressed in seconds – time elapsed between the beginning and completion of expiration.
FEF	Forced Expiratory Flow. It is the rate of flow, expressed in liters per second, at various points in the volumetric flow, i.e. FEF25%, FEF50%, FEF75%
FEF 25%-75%	Forced expiratory flow during the middle half (25-75%) of the FVC (formerly called the maximum middle expiratory flow rate) expressed in liters per second. This is the most sensitive measure of small airways obstruction (typically seen in smokers).
FEFxx%	Forced Expiratory Flow at xx% point of the FVC, expressed in liters per second.
FET	Forced Expiratory Time
FEV(t)	Forced Expiratory Volume (timed). Maximal volume of air, expressed in liters, which can be expelled in specific time in a forced capacity test.
FEV1/FEV6	Ratio of FEV6 exhaled in one second. May be used as a surrogate for FEV1/FVC.
FEV6 (L)	Forced expiratory volume – measured six seconds after commencement of expiration. May be used as a surrogate for FVC.

FEV_x/FVC%	The percentage ratio of Forced Expiratory Volume (timed) to Forced Expiratory Vital Capacity, expressed as a percentage.
FIF	Forced Inspiratory Flow. Inspiratory rate of flow, expressed in liters per second, at various points in the volumetric flow, i.e. FIF25%, FIF50%, FIF75%.
FIF .2-1.2	Forced Inspiratory Flow between 200 ml and 1200 ml. Flow of inspired air measured after the first 200 ml. And during the next 1000 ml
FIF 25%-75%	Forced Inspiratory flow during the middle half (25-75%) of the FIVC expressed in liters per second.
FIF_{xx}%	Forced Inspiratory Flow at xx% point of the FIVC, expressed in liters per second.
FIVC	Forced Inspiratory Vital Capacity. Total volume of air, expressed in liters, which can be inhaled during a rapid forced inhalation after a maximal expiration.
FIV_x/FIC%	The percentage ratio of Forced Inspiratory Volume (timed) to Forced Inspiratory Vital capacity, expressed as a percentage.
Flow vs. Volume Curve	Graph obtained by forced exhalation test. Flow is plotted on the vertical axis and volume on the horizontal axis.
FVC	Forced Vital Capacity. Total volume of air, expressed in liters, which can be exhaled during a rapid forced exhalation after a maximal inspiration.
LLN	Lower limit of normal.
MVV	Maximum Voluntary Ventilation. The maximum volume of air that can be inhaled and exhaled repeatedly through the lungs over a period of time (usually 12 seconds) and extrapolated to one minute.
Obstruction	Limitation of airflow. It is shown by the FVC test. Low FEV ₁ /FVC% ratio is the main indication of airways obstruction. Reductions in FEV ₃ /FVC% and FEF _{25-75%} best demonstrate obstruction of small airways.
PEFR	Peak Expiratory Flow Rate. Maximum instantaneous flow in the FVC test.
PFT	Pulmonary Function Test.
PEFT	Peak Expiratory Flow Time.
PIFR	Peak Inspiratory Flow Rate, expressed in liters per second.
Predictor	Predicted value according to the “normal” equations used.
Restriction	Prevents air from diffusing into the pulmonary arteries because of blockages in the lungs. FEV ₁ and FVC are both decreased, leaving a normal FEV ₁ /FEV%.
RR	Respiratory Rate. The average number of inhalations/exhalations per minute performed during a test.
SVC	Slow Vital Capacity. Total volume of air, expressed in liters, which can be exhaled during a slow exhalation after a maximal inspiration. Amount may be decreased because of disorders that cause volume restriction in the lung.

