


<b>Name of Policy:</b> <u>Symbols and Abbreviations</u> <b>Policy Number:</b> 3364-136-PF-02 <b>Department:</b> Respiratory Care <b>Approving Officer:</b> Associate VP Patient Care Services / Chief Nursing Officer <b>Responsible Agent:</b> Director, Respiratory Care <b>Scope:</b> The University of Toledo Medical Center Respiratory Care Department	 <p><b>Effective Date:</b> June 1, 2020 Initial Effective Date: July 1, 1979</p>
<input type="checkbox"/> New policy proposal <input checked="" type="checkbox"/> Minor/technical revision of existing policy <input type="checkbox"/> Major revision of existing policy <input type="checkbox"/> Reaffirmation of existing policy	

**(A) Policy Statement:**

The terms, symbols, abbreviations, and metrology definitions used when referring to pulmonary function procedures, test reporting, and test interpretation are based on a report of the American College of Chest Physicians / American Thoracic Society (ATS) and European Respiratory Society (ERS) Joint Committee on Pulmonary Nomenclature. Metrology definitions used are in accordance with the International Standards Organization (ISO) recommendations.<sup>i ii iii</sup>

**(B) Purpose of Policy:**

To provide uniform and clear reference to technical and clinical staff responsible for performing pulmonary function test procedures and interpreting of their results.

**Selected Specific Terms**

- Accuracy** is the closeness of agreement between the result of measurement and the true value.
- Reproducibility** is the closeness of agreement between the results and successive measurements of the same method, same observer, same instrument, same location, same condition of use, and time. If a test subject is given a bronchodilator drug and tested again after a period of 20 minutes, one needs to know the reproducibility of the test in order to make a decision of comparison.
- Repeatability** is when a technician tests a subject several times.

**Selected Symbols and Abbreviation**

**Spirometry**

FVC: Force vital capacity

FEV1: Forced exhaled volume in one second

FEF25-75: Mean forced expiratory flow between 25% and 75% of forced vital capacity

FEFmax: Maximal forced expiratory flow rate

FIVC: Forced inspiratory vital capacity

FIFX%: Instantaneous forced inspiratory flow at point where X% of the FVC has expired

### **Lung Volume**

TLC: Total lung capacity

SVC: Slow vital capacity

FRC: Functional residual capacity

TGV (or VTG): Total thoracic gas volume

IC: Inspiratory capacity

ERV: Expiratory reserve volume

RV: Residual volume

### **Diffusing Capacity**

DLCO: Diffusing capacity for the lung measured using carbon monoxide, also known as transfer factor

DLCO<sub>cor</sub>: Diffusing capacity adjusted for hemoglobin

DLCO/VA: Diffusing capacity for carbon monoxide per unit of alveolar volume, also known as KCO

### **Body Plethysmography**

Raw: Airways resistance

sRAW: Specific airways resistance (resistance / unit of lung volume)

Gaw: Airways conductance

sGaw: Specific airways conductance (conductance / unit of lung volume)

### **Cardiopulmonary Exercise Testing**

AT: Anaerobic threshold

HR: Heart Rate

MET: Metabolic equivalent

O<sub>2</sub> pulse: Oxygen pulse

PETCO<sub>2</sub>: End-tidal Pco<sub>2</sub>

PETO<sub>2</sub>: End-tidal PO<sub>2</sub>

RER or R: Respiratory exchange ratio:

RQ: Respiratory quotient

SpO<sub>2</sub>: Arterial oxygen saturation as indicated by pulse oximetry

V<sub>D</sub>: Physiologic dead space

V<sub>D</sub>/V<sub>T</sub>: Ratio of physiologic dead space to tidal volume

V<sub>O<sub>2</sub></sub>: Oxygen uptake (consumption)

V<sub>E</sub>: Minute ventilation

V<sub>E</sub>/MVV: Ventilatory Reserve

V<sub>E</sub>/V<sub>O<sub>2</sub></sub>: Ventilatory equivalent for oxygen

V<sub>E</sub>/V<sub>CO<sub>2</sub></sub>: Ventilatory equivalent for carbon dioxide

V<sub>T</sub>: Tidal volume

WR: Work rate or power

### **Selected Metrology Definitions**

BTPS: Body temperature, ambient pressure, saturated with water vapor

L: Liters

L/min: Liters per minute

L/sec: Liters per second

mL: Milliliters

Hz: Hertz; cycles per second

Lb: Pounds weight

