

## Respiratory Gas Volumes

Measurement	Adult Male Average Value	Adult Female Average Value	Description
Tidal Volume (TV)	500mL	500mL	Amount of air inhaled or exhaled with each breath under resting conditions
Inspiratory Reserve Volume (IRV)	3100mL	1900mL	Amount of air that can be forcefully inhaled after a normal tidal volume inhalation
Expiratory Reserve Volume (ERV)	1200mL	700mL	Amount of air that can be forcefully exhaled after a normal tidal volume exhalation
Residual Volume (RV)	1200mL	1100mL	Amount of air remaining in the lungs after a forced inhalation
<b>Total Lung Capacity (TLC)</b>	<b>6000mL</b>	<b>4200mL</b>	Maximum amount of air contained in the lungs after a maximum inspiratory effort:
<b>Vital Capacity (VC)</b>	<b>4800mL</b>	<b>3100mL</b>	Maximum amount of air that can be expired after a maximum inspiratory effort: $VC = TV + IRV + ERV + RV$
<b>Inspiratory Capacity (IC)</b>	<b>3600mL</b>	<b>2400mL</b>	Maximum amount of air that can be inspired after a maximum inspiratory effort: $IC = TV + IRV$
<b>Functional Residual Capacity (FRC)</b>	<b>2400mL</b>	<b>1600mL</b>	Volume of air remaining in the lungs after a tidal volume expiration: $FRC = ERV + RV$

