NORMAL FLOW-VOLUME LOOP

FLOW (L/sec)

INSPIRATORY

VOLUME (L)

EXPIRATORY

TLC

RV

FEF25%

FEF50%

FEF75%

FIF50%

PEFR

VARIABLE

EXTRA-THORACIC OBSTRUCTION

Concave upward or “scooped out” expiratory flow with decreased FEF25-75% and persevered FEV1

INTRA-THORACIC OBSTRUCTION

Truncated or flattened inspiratory flow & reduced FEF50/FIF50 ratio

Fixed OBSTRUCTION

Truncation or flattening of BOTH the inspiratory and expiratory flows and an increase in FEF50/FIF50 ratio

Typically the lesion must restrict the trachea to <1cm for this occur

EARLY AIRFLOW OBSTRUCTION

Concave upward or “scooped out” expiratory flow with decreased FEF25-75% and persevered FEV1

AIRFLOW OBSTRUCTION

Concave upward or “scooped out” expiratory flow with reduced FEV1

RESTRICTION