

Spirometry Quality Checklist



Before you begin, ensure:

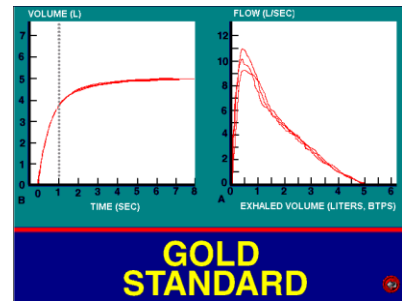
1. Patient's correct date of birth, gender, and height are entered
2. Patient is sitting to perform the spirometry test
3. Calibrate machine (if necessary)
4. You have fully explained the procedure to the patient

Activities to avoid before spirometry test:

- Smoking within 1 hour
- Consuming alcohol within 4 hours
- Performing vigorous exercise within 30 minutes
- Wearing restrictive clothing
- Eating large meal within 2 hours
- Having myocardial infraction in previous month

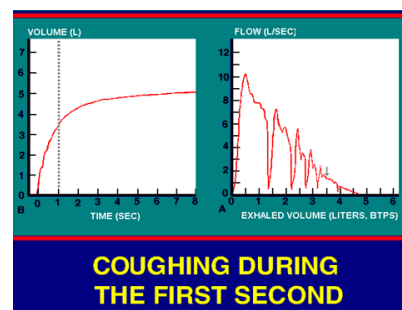
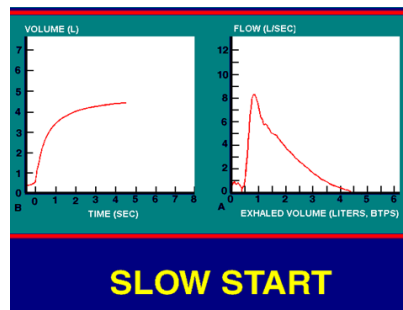
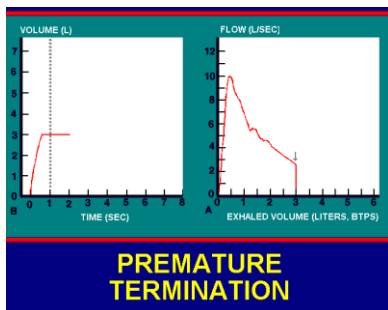
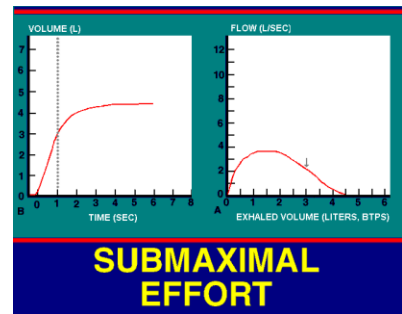
Spirogram MUST have:

1. Good clean start
2. Extrapolated volume < 5% of FVC or 150 ml
3. Plateau in volume / time curve (no change in volume in 1 sec)
4. Exhalation of ≥ 6 sec for age > 10 yrs
5. Exhalation of ≥ 3 sec for age < 10 yrs



Efforts are NOT acceptable*, if the test has:

1. Submaximal effort
2. Early termination or cut off
3. Hesitation / slow start at beginning
4. Cough during the first second of exhalation
5. Obstructed mouthpiece
6. Leak
7. Glottis closure
8. Baseline error – baseline shift
9. Extra breath



* Data for most common spirometry mistakes provided by Ed Corazalla, MS, RPFT, Director, University of Minnesota Pulmonary Lab. Data is from 236 spirometry tests conducted by 49 spirometry techs in allergy practices (60%) and primary care practices (40%) from 2002-2012. Of the 236 tests reviewed, 196/236 (83%) did NOT meet ATS criteria for three acceptable maneuvers.

Thank you to QRS for providing the spirometry flow loop pictures.