

## SPIROMETRY PROPER TECHNIQUE

- Enter patient information into device
- Have patient loosen tight clothing, remove dentures or gum, and relax
- Have patient stand up next to the exam table
- Explain that the purpose of the test is to see how much air a person's lungs can hold and how quickly that air can be expelled with forceful effort
- Demonstrate the maneuver for the patient
- First ask patient to blow all air out of their lungs (exhale completely)
- Then have patient take the deepest breath in, filling their lungs completely
  - They should feel like their lungs are balloons filled so full they might pop
- Tell patient to place the mouthpiece just inside their mouth between their teeth and seal their lips tightly around it to prevent air from leaking out
- Encourage patient to exhale as hard, fast, and long as they can
  - Tell them to "blast" the air out
  - For at least 6 seconds in adults and 3 seconds in children – the device will beep when it's time to stop
  - They should try to force as much air as possible out in the first second then keep exhaling until every last air molecule has escaped
  - Tell patient to "keep going" or "keep blowing" until their lungs are completely empty
- Have the patient rest for a few seconds until they feel ready to repeat the test
- Perform the test 3 times
  - Test may need to be repeated for poor effort (often times machine will indicate this)
    - Examples: if patient coughs, laughs, breaths in, or does not exhale for the full period of time
- Print the results
- Look at the flow-volume curve (top)
  - The curve should be relatively smooth without significant "bumps" (these signify inhalations) – repeat if needed
- Look at the flow-time curve (bottom)
  - The curve should go to at least 6 seconds for adults and 3 seconds in children – repeat if needed