**Lung Auscultation/Respiratory Skill Validation Tool**
For Health Office Staff

**Lung Auscultation/Respiratory Assessment**

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| 1.  | Describe when auscultation of lungs is indicated:  
   - when student presents with symptoms (and LSN or LPN is present). |
| 2.  | Describe purpose of auscultation  
   a. to check quality of air exchange  
   b. to assess symptoms and severity of asthma episode |
| 3.  | Describe location of underlying lungs and their lobes in relation to chest wall  
   (see diagram on back).  
   a. Apex of each lung rises 2-4 cm above inner third of clavicle (Anterior)  
   b. Inferior border crosses the 6th rib at midclavicular line (Anterior)  
   c. Apex of each lung above scapulas (Posterior)  
   d. Lower border is at level of 10th thoracic spinous process. (Posterior) |
| 4.  | Describe breath sounds  
   a. Crackles:  
      - Coarse Crackles: discontinuous, interrupted explosive sounds, loud, low in pitch (heard when air passes through larger airways containing liquid).  
      - Fine Crackles: discontinuous, interrupted explosive sounds, less loud and of shorter duration; higher in pitch than coarse crackles (heard when air passes through smaller airways containing liquid).  
   b. Wheeze: continuous sounds, high pitched; a hissing sound (airway narrowed by asthma or partially obstructed by tumor or foreign body).  
   c. Rhonchus: continuous sounds, low-pitched; a snoring sound (caused by large upper airway partially obstructed by thick secretions). |
| 5.  | Describe how to assess severity of asthma episode with regard to Inspiration/Expiration Ratio, Wheezing and Retractions.¹  
   a. Inspiration/Expiration Ratio  
      - Normal: inspiration takes twice as long as expiration  
      - Mild: hardly a difference between inspiration and expiration.  
      - Moderate: Inspiration is equal to expiration  
      - Severe: Expiration is longer than inspiration  
   b. Wheezing  
      - Mild: wheezing noted at end of expiration  
      - Moderate: wheezing throughout expiratory phase. Eventually wheezing is noted on inspiration also.  
      - Severe: wheezing is not apparent because the bronchial tubes are so constricted that air exchange is blocked.  
   c. Retractions  
      - Mild: retractions are not present  
      - Moderate: very mild retractions, if any, are noted.  
      - Severe: retractions are indicative of a severe episode. In some cases, the skin in between the ribs gets drawn in when the child inhales. |
| 6.  | Demonstrates procedure for auscultation  
   a. demonstrates position of student when assessing lung status (sitting or standing)  
   b. location and sequence of auscultation. Compare symmetrical areas of the lungs from above down. Be alert for student discomfort secondary to hyperventilation and allow rest as needed.  
   c. with stethoscope, listen to lungs as student breathes through his mouth more deeply than normal  
   d. listen at least one full breath in each location. |

¹ Reprinted from *AIR CURRENTS;* Volume 1, No. 5: September, 1990
7. Describes components of Physical Respiratory Inspection.

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<tr>
<td>a. Respiratory rate: 4 years: 23/min; 6 years: 21; 8 years: 20; 10 – 14 years: 19; 16 years: 17; 18 years: 16 to 18.</td>
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<td>b. Rhythm: (regular, irregular or periodic)</td>
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<td>c. Depth (deep or shallow)</td>
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<td>d. Quality (effortless, automatic, difficult, or labored)</td>
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<td>e. Character (noisy, grunting, snoring, or heavy)</td>
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8. Documents findings on appropriate record including location of abnormal breath sounds (anterior, posterior, right upper lobe, right lower lobe, left upper lobe, left lower lobe): AVN, SHOAR, AMR (if indicated)

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<td>Demonstrated Competency</td>
<td>□ Yes</td>
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