A student presents at the school Health Office with report of respiratory symptoms

Could it be viral?

**Maybe?**

- Assess for additional viral symptoms
  - Fever of over 100.4
  - Cough with/without wheeze
  - Nasal congestion
  - Nausea/vomiting/diarrhea
  - Headache/Fatigue
  - Myalgia
  - Poor appetite
  - Swelling/rash on hands & feet

- Important to note student’s anxiety level
- School Nurse should wear appropriate Personal Protective Equipment (PPE)

**No**

- Assess for additional asthma symptoms
  - Past history of asthma
  - No fever
  - Audible wheeze / Cough
  - Chest congestion or tightness
  - Breath sounds on auscultation: expiratory wheeze
  - Fatigue, Mental status
  - Reports not feeling able to fully participate in daily activities
  - Stops talking to catch breath

- If confirmed COVID-19:
  - Assess risk
  - Consult local health officials
  - Consider 2-5 day Building Dismissal to clean, disinfect & contact trace (CDC guidance as of 5/20)

**Yes**

- Assess for asthma issues & treat as needed,
  - Isolate student
  - Call parent
    - Dismiss, refer to healthcare provider, (where possible, provide student with mask)

- Follow Asthma Action Plan
  - Green – Follow plan, observe
  - Yellow – Administer medication as directed, notify parent
  - Red – Administer medication as directed
  - Call parent as needed
  - Call 911 if symptoms are or become severe

**No**

- Observe
  - Return to class as appropriate

Please see Page 2 for Asthma Care Notes
Asthma Care Notes:

<table>
<thead>
<tr>
<th>Green Zone</th>
<th>No symptoms of an asthma flare, able to perform daily activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yellow Zone</td>
<td>Moderate severity – Cough, wheeze, chest tightness or shortness of breath, and/or waking at night due to asthma, can do some, but not all, usual activities, need to use quick relief medication</td>
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<tr>
<td>Red Zone</td>
<td>Severe – Very short of breath, nasal flaring, hunched over, quick relief medications have not fully relieved symptoms, frequent use of quick relief medications, cannot do usual activities, symptoms are the same or get worse after 24 hours in Yellow Zone</td>
</tr>
</tbody>
</table>

Emergency symptoms: Trouble walking or talking due to shortness of breath, lips or fingernails are blue

Post COVID-19 School Care:

- Anxiety may be a major issue for students experiencing shortness of breath.
- Administer medication at school using individual inhaler and spacer/valved holding chamber.
- Avoid use of nebulizers as they spread droplets and are not advised. Nebulizers are often not required for children over the age of 6 (MDI inhalers are equally effective in delivering medication). Viral droplets persist in the air for 1 – 2 hours.
- Respiratory viruses are a common trigger for asthma flares – student’s parent/guardian should contact healthcare provider if COVID-19 is suspected or change in care is needed.

Pulse Oximeters:

- Appropriate to use as a portion of a full nursing assessment for both COVID-19 and/or asthma.
- Provides the registered nurse with objective data on pulse rate and oxygen saturation.
- Reasonable expense for schools, smaller & more portable - more commonly used in the school setting.
- School district should ensure that the nurse is fully trained with a protocol in place to guide interpretation of data and how to respond to the results of pulse oximetry. Maintenance of the unit should be included. Ideally, the school nurse would participate in writing the clinical guideline.
- Oxygen saturations change late in asthma flare, if symptoms are present & saturation level normal, still treat asthma.

Peak Flow Meters:

- Peak flow has been found to have variable results and is not recommended for use in routine care.

School Considerations:

- Schools should create a plan in the event that a symptomatic student needs to be isolated.
- In the event of a confirmed case of COVID-19 among schools or staff, cleaning and educational plans should be in place to close classrooms, schools or districts in compliance with health department and CDC guidance.
- Group size should be limited and social distancing in place per health department and CDC guidance.

The information in this document is developed from guidelines-based asthma care information. Each school nurse must exercise clinical judgement when assimilating into her/his practice. Nurse Practice Acts vary from state to state and each school nurse must ensure that anything related to the practice of nursing must be consistent with applicable laws, regulations and guidance as well as school district policies and procedures.