

Nebulizer Guidance for the 2021-22 School Year



Prior to COVID-19, nebulizer treatments were often frequently given in the school nurse clinic. In response to the COVID-19 pandemic and concerns related to aerosolizing procedures in the nurse clinic, guidance has been provided to avoid use of nebulizer treatments whenever possible.

Asthma is a chronic health condition affecting an estimated 6.1 million children younger than age 18. Students with asthma may have triggers that cause their asthma to flare up. Children react differently to their asthma triggers, but those children in the school environment who have asthma as a chronic health concern should have an asthma action plan on file in the nurse clinic along with a rescue inhaler and spacer. Being prepared for a student's asthma attack can ensure there is an emergency plan in place and helps provide a consistent plan for routine care of a student with asthma.

As you write your student's asthma care plan, encourage open discussion with the student's family to explain that metered dose inhaler (MDI) and spacer is now preferred in the school's clinic and give rationale. Include the primary care physician or pediatrician in the discussion if possible. MDI and spacer/mask have been shown to be clinically effective in most instances as nebulizer treatment.

Ask questions during the case conference to ensure that the nursing staff is familiar with the specific concerns regarding the student's asthma and open discussion with the family by considering the following questions during your discussion:

- Is the child too ill to be at childcare/school? Children with chronic lung disease are at increased risk of complications and child care attendance may not be in his or her best interest.
- If a doctor determines nebulizer treatments are necessary, can they be done at home and inhaler be used during day (adding spacer and mask for younger children)?
- Has there been discussion with switching to an MDI with spacer per the American Academy of Pediatrics recommendations for children older than 12 months? Share written recommendation with the family. Here are two publications that may be helpful for families to share with healthcare providers:
 - <https://cts-sct.ca/wp-content/uploads/2018/07/2018-03-15-Ronly-Har-Even.pdf>
 - https://pediatrics.aappublications.org/content/142/1_MeetingAbstract/582

If necessary, the procedure for nebulizer use should be as follows:

1. Use a room that has limited other use, with nearby sink.
2. Staff need to have full PPE: gown, gloves, N95 mask and goggles or face shield
3. Child needs to have clothing covering that can be removed for laundering/disposal after treatment.
4. During the treatment, staff should be only as close as necessary, taking care to keep their face as far away from and above the nebulizer as possible.
5. If child is old enough to hold nebulizer, nurse may step out of room and allow student to self-administer, but should continue to wear minimum of gloves, mask and eye protection in case child needs assist and for room tear down.
6. After the treatment rinse the tubing and washable components.

7. Remove any PPE carefully, caring for the child first. Take care not to shake any pieces. Dispose of properly in trash or bag for laundry.
8. Both the adult and child should their wash hands.
9. Close door to treatment room and let it remain unused for at least 2-½ hours (preferably overnight) to allow for droplets to fall prior to cleaning.
10. Return child to classroom.
11. Wear gloves and mask to disinfect surfaces in the room.

References:

- <https://www.cdc.gov/coronavirus/2019-ncov/hcp/infection-control-recommendations.html>
- <https://pubmed.ncbi.nlm.nih.gov/21194171/>
- <https://www.lung.org/lung-health-diseases/lung-disease-lookup/asthma/living-with-asthma/creating-asthma-friendly-environments/back-to-school-with-asthma-toolkit>
- https://www.aaaai.org/Aaaai/media/MediaLibrary/PDF%20Documents/Libraries/SchoolAsthmaCoid_Final.pdf

