

Early care and education nebulizer guidance

Young children in child care have a number of reasons why they might need to have inhaled medication. The need may be due to a chronic respiratory condition or as a part of supporting the child's recovery from an acute illness, even after the child is no longer contagious. All these children should have a special health care plan, often for ease of reference called an "asthma action plan."

These plans should be written by the families and the health care provider to ensure continuity of care while at child care. These plans need to include possible triggers to respiratory issues, the rationale for any medication and how the medication is to be delivered. The plan should discuss how the child care should respond during a respiratory emergency. The American Lung Association offers [asthma action plans](#) in English and Spanish.

As these plans are developed, the child care should have discussion with families to reduce the need for nebulizer use during child care attendance. Some things that need to be considered are:

- Is the child too ill to be at child care? Children with chronic lung disease are at increased risk of complications and child care attendance may not be in their best interest.
- Nebulizer treatments require an adult-to-child ratio of 1:1 for up to 15 minutes or more. Can this be supported at child care?
- If nebulizer treatments are necessary, can they be done at home?
- Has there been discussion with switching to a metered dose inhaler with spacer per American Academy of Pediatrics recommendations for children over 12 months (perhaps even just during child care hours)? Benefits include:
 - Accurate and consistent dosing
 - More convenient and portable
 - Reduced risk of bacterial contamination
 - More efficient
 - Fewer side effects
 - Less exposure to aerosols for others

Publications that may be helpful for families to share with health care providers:

- [Metered-Dose Inhaler is superior to nebulizer for treatment of acute asthma in preschool children](#), Canadian Thoracic Society
- [Parental perceptions about the use of Metered dose inhaler vs Nebulizer in children with acute asthma exacerbation](#), American Academy of Pediatrics

Nebulizer use procedure

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

1. Keep in mind that nebulizer use can produce aerosolized particles. These particles may contain germs that can be inhaled and infect others.
2. Use a room that has limited use, away from other children, with a nearby sink.
3. Staff should wear surgical mask and eye protection. Gowns and gloves may be used as needed.
4. The child may wear clothing protection.
5. 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.
6. If the child is old enough to hold the nebulizer, staff may step away and allow the student to self-administer but should continue to wear personal protective equipment in case the child needs assistance and for room tear-down.
7. After the treatment, rinse the tubing and washable components.
8. Remove PPE carefully, the child first. Take care not to shake any pieces. Dispose of PPE properly in the trash or a bag for laundry.
9. Wash hands, both adult and child.
10. Close the door to treatment room and let it remain unused for as long as possible, ideally a couple of hours, to allow for droplets to fall prior to cleaning.
11. Return the child to the classroom.
12. Wear gloves and a mask to clean, then disinfect, surfaces in the room.

