

Inhaler with and without a Spacer or Valved-holding Chamber Procedure

Things to consider:

- Attempt to provide the student with as much privacy as possible, given the urgency of the situation

Needed supplies:

- Inhaler
- Spacer
- Student's Individualized Health Plan/Asthma Action Plan and/or healthcare provider's order

Instructions for inhaler administration with and without spacer:

1. Gather needed supplies and place on a clean surface.
2. Position student, providing as much privacy as possible.
3. Wash hands.
4. If student will be administering medication, have student wash hands.
5. Check for authorization forms or record. Review the medication administration form, the medical provider form, and the parent/guardian consent form.
6. Check for the albuterol and order to be sure it is"
 - a. For the right child
 - b. The right medication
 - c. The right dose
 - d. Being given at the correct time
 - e. Being given by the right route
7. Be sure to check the medication to ensure that it has not expired.
8. Make sure the inhaler and spacer are free of foreign objects.
9. Shake the inhaler for 10 seconds to mix the medicine.
10. Remove the cap from the mouthpiece.
11. Prime the inhaler if indicated.
 - a. When the MDI is brand new or has not been used for a while, the medication may separate from the other ingredients in the canister and the metering chamber. Shaking the MDI will mix the ingredients in the drug reservoir but may not produce enough turbulence to re-blend the ingredients in the metering chamber. Priming, or releasing one or more sprays into the air, ensures your next dose will contain the labeled amount of medication.
12. Quickly review the five rights once again while checking the albuterol to be sure it is:
 - a. For the right child
 - b. The right medication
 - c. The right dose
 - d. Being given at the right time
 - e. Being given by the right route

PROCEDURE FOR INHALER WITH SPACER:

1. Place the inhaler mouthpiece onto the end of the spacer.
2. Hold the inhaler between your index finger and thumb.
3. Have the student stand up and take a deep breath in, and breathe out.
4. Have the student place the spacer between their teeth and place their lips around it (follow the individual spacer instructions).
5. Press down on the top of the inhaler once.
6. Instruct the student to breathe in very slowly until they have taken a full breath.
7. If you hear a whistle sound, instruct the student to breathe slower—the breath in should take at least 3 to 5 seconds.
8. Instruct the student to hold their breath for 5 to 10 seconds.
9. Instruct the student to breathe out slowly through their mouth.

10. Wait 1 minute before having the student take a second puff, if ordered.*
11. Repeat earlier steps if taking a second puff.

PROCEDURE FOR INHALER WITHOUT SPACER:

1. Hold the inhaler between your index finger and thumb.
2. Have the student stand up and take a deep breath in, and breathe out.
3. Have the student put the inhaler in their mouth, between their teeth and above their tongue.
4. Have the student close their lips around the inhaler.
5. Press down on the top of the inhaler once as the student breathes in very slowly until they have taken a full breath.
6. Instruct the student to hold their breath for 5 to 10 seconds.
7. Instruct the student to breathe out slowly through their mouth.
8. Wait 1 minute before having the student take a second puff, if ordered.*
9. Repeat previous steps if taking a second puff.

Instructions post medication administration with and without spacer:

1. Have student rinse out their mouth with water and spit, as needed.
2. Wash hands.
3. Document medication administration in student's medication administration log.
4. Follow up, as needed, with parents or guardian and healthcare provider.

Cleaning the inhaler:

1. Remove the canister from the actuator.
2. Run warm water through the top and bottom of plastic actuator (do not boil or place the actuator in the dishwasher).
3. Shake off the excess water.
4. Allow the actuator to air dry on a clean surface prior to putting canister back in.

Procedure for Cleaning the Spacer

1. It is recommended to clean the spacer every 1 to 2 weeks, or more often if needed.
2. Remove the mouthpiece and the rubber piece that holds the inhaler.
3. Soak the mouthpiece, rubber piece and plastic chamber in warm water and a small amount of dish soap.
4. Rinse with clean water.
5. Shake off excess water and dry on a clean surface in a vertical position, with the mouthpiece side up.
6. Do not dry with a cloth or paper towel.
7. Once dry, store in a clean container or bag.

*Waiting one minute between inhaler puffs is currently recommend by the inhaler manufacturer and the American Lung Association. DPI recommends following the student specific medication order. If medication order specifies second puff, but does not specify if student is to wait one minute between puff or not, follow current best practice guidelines and manufacturer's instructions.

<https://www.lung.org/getmedia/1a58adde-c10a-4925-bd89-cd5c61767897/how-to-use-your-inhaler-and.pdf.pdf>

<https://www.ventolin.com/about-ventolin-hfa/how-to-use.html>

