

Using a Metered Dose Inhaler (MDI) with a Spacer

It takes a lot of practice to use an inhaler correctly without a spacer. Incorrect use can cause most of the medicine to hit the tongue and back of the throat. This means your child will not receive the correct dose of medicine. Using a spacer with a MDI is recommended and makes treatment easier and more effective.

Spacers hold the medicine until your child is ready to breathe it in. This helps the medicine travel into the smaller airways and reduces side effects. You may also hear the spacer called an AeroChamber.

Directions for using a spacer:

Read through all steps before administering the medication.

Step 1 – Prepare your MDI per manufacturer instructions. Remove the cap on the spacer's mouthpiece

Step 2 - Shake the MDI rapidly for 2 seconds

Step 3 – Insert the MDI into the spacer

Step 4 – Blow air out of lungs and put spacer in mouth

Step 5 – Press down on the inhaler, releasing medicine to fill the spacer

Step 6 – Seal your lips around the mouthpiece of the spacer. Take in a slow, deep breath to inhale the medicine. There should not be a whistle sound

Step 7 – Hold your breath and slowly count to 10

Step 8 – Release your breath and breathe normally

Step 9 – Shake the MDI again and repeat the steps, starting at step 4, for each additional prescribed puff



Weekly cleaning of the spacer:

- Remove the rubber-like ring from the end of the spacer
- Soak the parts for 15 minutes in a mild liquid dish soap and lukewarm water
- Rinse in clean water
- Allow to air dry
- Reassemble when dry

What are the signs of breathing difficulty or respiratory distress?

The best way to measure your child's breathing difficulty is to know the amount of "work" or effort your child is using to breathe.

1. Know your child's normal breathing pattern while sleeping and at rest.
2. Be aware of the important warning signs that show increased work of breathing.
3. Call and speak to your healthcare provider if you are unsure if your child is working hard to breathe or if your child shows any of the signs listed below.

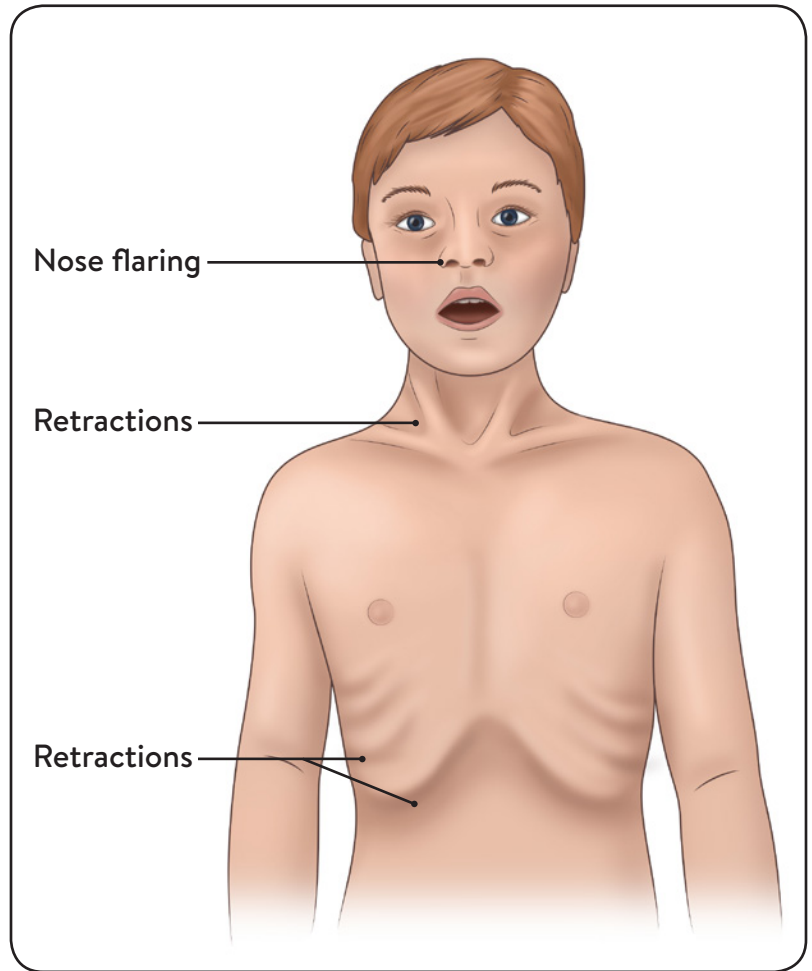
How your child might look:

- Nose flaring
- Grunting or wheezing while breathing out
- Retractions – muscles pulling in visibly above/between/ below the ribs or using belly muscles to push air out
- Increase or decrease in breathing rate (see table below)
- Fussy or agitated behavior
- Increased sleepiness
- Dry cough that won't stop

How your child might act:

Some behavioral signs that your child may be working harder to breathe:

- Waking up from sleeping with cough
- Unable to eat/play/run comfortably due to difficulty breathing
- Acting tired or weak
- Fussy behavior
- Eating less than normal or having to rest while eating
- In babies, pulling off the breast or away from the bottle to take a breath while feeding



Concerning breathing rates

Some children breathe faster with an asthma episode. Concerning breathing (respiratory) rates are:

Age	Rate
0-2 months.....	>60
2 months-1 year.....	>50
1-5 years.....	>40
6-12 years.....	>30
12-18 years.....	>20

To find your child's breathing (respiratory) rate:

When your child's sleeping or at rest, count the number of times their stomach/chest rises and falls in 60 seconds. One rise and fall equals one breath. That number is the breathing (respiratory) rate per minute.