

## Management Aids

### Devices to Help Deliver Asthma Medications

**M**edications for asthma can be given to your child using a variety of devices including the following:

- **Nebulizer**—This is often used with younger children. This device uses an air compressor and cup to change liquid medication into a mist that can be inhaled through a mouthpiece or mask. Inhaled steroids and quick-relief medications can be given this way.
- **Metered-dose inhaler (MDI)**—This is the most commonly used device for asthma medications. However, your child will need to learn how to use it properly, which means pressing (or actuating) the device while taking a deep breath at the same time. The technique is reviewed on the following pages. Some MDIs are “breath actuated,” that is, they give out a puff of medication when you start to take a breath. These types of MDIs are much easier to use, but are only available for one type of quick-relief medication. Spacers can be used to help relieve some of the coordination problems in using MDIs and should always be used when using inhaled steroids.
- **Dry powder inhaler (DPI)**—This device is available for some medications. It is easier to use because you do not need to coordinate breathing with actuation. It also has less taste, and often has a built-in counter to help keep track of doses taken and doses left.



Photo courtesy of Andrew Silk.



Some asthma medications only come in pill form. However, inhaling the medication using one of the devices listed above is usually better because the medication passes straight into the airways. As a result, side effects are reduced or avoided altogether. Because there are several different inhalers on the market, your health care provider will suggest the one that is best for your child. There are important differences in the way they are used and in the amounts of medications they deliver to the airways. Your child will be taught how to use the inhaler, but her technique should be checked regularly to make sure she is getting the right dose of medication.

### Peak Flow Meter

To help control asthma, your child may need to use a peak flow meter. This is a handheld device that measures how fast a person can blow air out of the lungs. Asthma treatment plans using peak flow meters use 3 zones—green, yellow, and red, like traffic lights—to help you determine



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if your child's asthma is getting better or worse. Peak flow rates decrease (the numbers on the scale go down) when your child's asthma is getting worse or is out of control. Peak flow rates increase (the numbers on the scale go up) when the asthma treatment is working and the airways are opening up.

**When to Use the Peak Flow Meter** (if your health care provider has recommended one)

Check your child's asthma using the peak flow meter at the following times:

- Every morning, before he takes any medications.
- If your child's symptoms worsen or if he has an asthma attack. Check the peak flow rate before and after using medications for the attack. This will help you to see if the medications are working.
- Other times during the day, if your health care provider suggests.

Keep in mind, there are differences in peak flow rate measurements at different times of the day. These differences are minimal when asthma is well controlled. Increasing differences may be an early sign of worsening asthma. Also, children of different sizes and ages have different peak flow rate measurements.

Keep a record of your child's peak flow numbers each day. This will help you and your health care provider see how your child's asthma is doing. Bring this record with you when you visit the pediatrician.



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