

## Using a Peak Flow Meter

### What is a peak flow meter?

A peak flow meter is a portable, easy to use, device that measures how well air moves out of the lungs. By blowing hard through a mouthpiece on one end, the peak flow meter measures the force of air in liters per minute. It gives a result on a numbered scale. A peak flow meter can be used to help track asthma control.

Regular use of a peak flow meter can help track asthma control. It can find airway narrowing even before any symptoms are felt. This gives you time to adjust medicine or take steps before symptoms get worse. A peak flow meter is useful for adults and children over age 5.

### The peak flow meter measures day to day changes in breathing. It can help:

- Track asthma control over time.
- Show how well a treatment plan is working.
- Recognize signs of a flare before symptoms appear.
- Know the steps to take when there are signs of a flare.
- Decide when to call the doctor or get emergency care.



### When to use a peak flow meter?

1. Use it to find the best peak flow rate. The personal best peak flow is the highest peak flow rate reached in a 2 week period. It is done when asthma is under good control and may be different than the predicted peak flow rate. It could be higher or lower. A predicted rate is the normal or average rate based on a person's size and age.
2. Do it once a day so the peak flow rates can be compared. When first using the peak flow meter use it at the same time every day. The best time to check your peak flow is when you first get up in the morning and before bed in the evening. Always check your peak flow before you use your daily (controller) inhaler.
3. If a rescue inhaler, albuterol or Xopenex, is taken, take a reading before the inhaler is used. Check for a response to the medicine by taking another peak flow reading 15-20 minutes after using the inhaler.
4. Use as taught by the provider. If asthma is well controlled, you may be told to check a peak flow reading every few days. If your asthma is not well-controlled, you may need to measure peak flow readings more the one time a day.

5. Other times you may need to check a peak flow reading include:
- Asthma symptoms are waking you up at night.
  - Increased asthma symptoms during the day.
  - You have a cold, flu or other illness affecting your breathing.

Track peak flow readings in an asthma diary and bring the diary to all clinic visits. At the next visit, the provider can use the personal best to set the peak flow zones . We use a colored coded system based on symptoms and the peak flow readings.

### How to use a peak flow meter?

1. Move the marker to the bottom of the numbered scale and connect the mouthpiece if it is not already connected.
2. Stand up.
3. Take a deep breath filling the lungs completely.
4. Place the lips tightly around the mouthpiece.
5. Blow as hard and as fast as you can with a single breath.
6. The arrow or indicator will move up the peak flow meter scale. Note the final spot of the marker. This is the peak flow rate.
7. Repeat steps #2 through #6 two more times. Record the highest number of the three.

To get correct readings, make sure the peak flow meter is used properly. Ask any questions about using a peak flow meter when you are at a clinic visit. The way to use the peak flow meter can also be reviewed. Keep the peak flow meter clean by following the manufacturer's directions. Most peak flow meters require weekly cleaning with warm water and a mild detergent.

### If peak flow numbers change

- Let the provider know when peak flow readings change
- The most important thing about peak flow readings is how much the personal best number changes from one reading to another
- A decrease in peak flow of 20-30% of the personal best peak flow may mean the start of an asthma attack. Follow the Asthma Management Plan if this happens.



**ALERT:** Call your child's doctor, nurse, or clinic if you have any questions or concerns or if you or your child has:

- A personal best peak flow rate that falls in the red zone.
- Symptoms of an asthma attack.

**Special health care needs that were not covered by this information. This teaching sheet is meant to help you care for your child. It does not take the place of medical care. Talk with your healthcare provider for diagnosis, treatment, and follow-up.**