Measuring Peak Flow

Peak flow meters are used to check your asthma the way that blood pressure cuffs are used to check high blood pressure. A peak flow meter is a device that measures how well (how fast) air moves out of your lungs. Measuring your peak flow is a good way to tell if your asthma is getting better or worse.

As an asthma attack begins, the windpipes or airways become narrow causing the peak flow reading to go down. Using your peak flow meter, helps you find out about narrowing in the airways hours, sometimes even days, before you have any asthma symptoms.

Starting additional medicine(s) recommended by your doctor when your peak flows begin dropping may stop an episode from becoming a severe asthma attack.

The peak flow meter also can be used to help you and your doctor:
- Learn what makes your asthma worse
- Decide if your treatment plan is working well
- Decide when to add or stop medicine
- Decide if your breathing is ok to exercise
- Decide when to call your doctor or seek emergency care

Anyone age 5 and older can use a peak flow meter. If you have a peak flow meter, ask your doctor, respiratory therapist, pharmacist or nurse to show you how to use it correctly. You should use the same peak flow meter every time.
How to use your peak flow meter:

1. Move the indicator to the bottom of the numbered scale (0 liters / minute).

2. Hold the peak flow meter making sure your fingers do not touch the numbered (scale) area. Stand up if you are able, or sit up straight, and keep the same position for all steps.

3. Take in as deep a breath as possible, filling your lungs completely. DO NOT breathe in through the meter).

4. Place the mouthpiece in your mouth and make a tight seal by closing your lips tightly. Be careful so your tongue does not close the hole.

5. Blow out as hard and fast as you can in a single blow.

6. Write down the number you get next to the white arrow. If you cough or make a mistake, do not write down the number. Reset the indicator to the bottom of the scale and do it over again.

7. Repeat steps 1 to 6, two more times, for a total of three readings. Write down the highest of the three readings.

How do I find my personal best peak flow number?

Your personal best peak flow number is the highest peak flow number you get over a 2 to 3 week period when your asthma is under good control. Good control is when you feel good and do not have any uncontrolled asthma symptoms.

Your best peak flow may be higher or lower than the peak flow of someone of your same size and sex. Your doctor will base your treatment plan on your personal best peak flow number.

To find out your personal best peak flow number, take peak flow readings two times each day for 2 to 3 weeks. This should be done when you wake up before you take your asthma medicine and again between 12 noon and 2:00 pm. If you use your quick-acting (Beta-agonist) inhaler take you peak flow readings before and after to see how well the
medicine is working. Write down the highest of 3 blows each time you take a peak flow reading. Also write down any asthma symptoms you are having and medicines you use to treat the symptoms.

Bring your peak flow log to your doctor during your next visit. Your doctor will check your personal best peak flow rate and give you an asthma action plan to follow. The asthma action plan tells you how to treat asthma symptoms and when to call the doctor or go to the emergency room.

**Care of Your Peak Flow Meter**

- Do not drop or crush your peak flow meter.
- Be sure that the white arrow always slides free. Always return the arrow to zero (0) after measuring your peak flow rate.
- Each peak flow meter is only for one user to prevent the spread of infection. **Please do not share your peak flow meter with others.**
- Your peak flow rates may change with time and age. It is best to find out your personal best peak flow rates every year or when you get a new meter by measuring your peak flows two times each day for two weeks.
- Keep the peak flow meter clean. Wipe the surface with mild soap and water. Then rinse, shake out excess water, and allow it to dry. Do not stick objects inside the slot opening or take it apart.

**How do I get another peak flow meter?**

You can get another peak flow meter at your local pharmacy with a doctor’s prescription.

**Note:** Peak flow rates are only a guide to therapy. There are many lung diseases that can cause asthma-like symptoms without affecting peak flow rates. For this reason, severe breathing problems should always be reported to your doctor regardless of the peak flow rate measurement.
# Peak Flow and Asthma Symptom Log

<table>
<thead>
<tr>
<th>Date</th>
<th>AM</th>
<th>PM</th>
<th>Other Times</th>
<th>Peak Flow</th>
<th>Asthma Symptoms</th>
<th>Medicines Used</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Quick Relief</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Cromolyn</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Inhaled Steroids</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Oral Steroids</td>
</tr>
<tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Theophylline</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Comments</td>
</tr>
</tbody>
</table>
## Wheeze

<table>
<thead>
<tr>
<th>None</th>
<th>Mild</th>
<th>Medium</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

## Cough

<table>
<thead>
<tr>
<th>None</th>
<th>Occasional</th>
<th>Frequent</th>
<th>Continuous</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

## Activity Level

<table>
<thead>
<tr>
<th>Normal</th>
<th>Can run short distance or climb 3 flights of stairs</th>
<th>Can walk only</th>
<th>Missed school or work or stayed indoors</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

## Ability to Sleep

<table>
<thead>
<tr>
<th>Fine</th>
<th>Slept well, slight wheeze or cough</th>
<th>Awake 2 to 3 times, wheeze or cough</th>
<th>Bad night, awake most of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>

### Your Asthma Action Plan

Your doctor will use your personal best peak flow to develop an Asthma Action Plan. This plan helps you know what to do when your peak flow numbers change.

My personal best peak flow number is __________.

- Your **Green Zone** is when your peak flow number is near your personal best number. This means your asthma is in **good** control. Take your medicines as usual.

  **My Green Zone is a peak flow of at least __________.**

  **My doctor’s instructions:**

  __________________________________________________________
  __________________________________________________________
  __________________________________________________________
  __________________________________________________________
• Your **Yellow Zone** is when your peak flow reading indicates that your asthma is not under good day-to-day control. The yellow zone signals **caution**. The Asthma Action Plan that you and your doctor developed should list what steps to take.

  **My Yellow (caution) Zone is a peak flow of _______ to _______.**

  **My doctor’s instructions:**
  
  ___________________________________________________________
  ___________________________________________________________
  ___________________________________________________________

• Your **Red Zone** is when your peak flow reading is less than half of your personal best number. This means that your asthma is not under good day-to-day control and signals a **medical alert**. **Treatment is needed right away.** Call your doctor or emergency room and ask what to do, or go directly to a hospital emergency room.

  **My Red (alert) Zone is a peak flow of less than _________.**

  **My doctor’s instructions:**
  
  ___________________________________________________________
  ___________________________________________________________
  ___________________________________________________________

* Talk to your doctor or others on your health care team if you have questions. You may request more written information from the Library for Health Information at (614) 293-3707 or email: health-info@osu.edu.