Why Measure Peak Flow

Testing your peak expiratory flow (PEF) at home may help measure how well your lungs are working if you have a long-term (chronic) lung disease, such as COPD and asthma. Test your peak expiratory flow if you are experiencing breathing problems and report your readings to your doctor.

How To Prepare

To perform the peak expiratory flow (PEF) test, you need a peak flow meter. A peak flow meter is an inexpensive handheld device you breathe into as hard and as fast as you can.

Read and follow the instructions included with the peak flow meter. Ask your doctor to show you how to use this device before you use it at home. If you have questions about how to use a peak flow meter or how to read the results, talk with your doctor. Your doctor will tell you what your normal peak flow reading should be.

A person measures PEF by taking a deep breath and then breathing into a tube on the meter as hard and as fast as possible. PEF results depend on how hard you try.

The peak flow meter should be used 3 times and the best results recorded.

Peak expiratory flow meter results are not as accurate as spirometry (done in a doctor's office), but both measure lung function. People who use a home peak flow meter need to use the same meter over time because different brands of meters give different values for results. Ask your doctor for step by step directions for using your peak flow meter.
Measurable Changes in Breathing

A peak flow meter can alert you to a pending acute episode. Be sure you always know your baseline measurement that reflects your best breathing.

Your doctor should tell you what your baseline number should be and what action plan to follow when your reading is not normal.

- If your peak flow meter shows numbers between 50% and 80% of your personal best, an attack has likely begun.
- A number below 50% signals an emergency that needs immediate attention.
- Call 911 if you have trouble walking or talking due to shortness of breath, or if your lips are blue or gray.

Follow Your Action Plan

An action plan tells you how to deal with symptoms of an acute episode.

- Based on peak flow measurements, an action plan shows you what medicines to take and when. It’s important to follow the plan and use the medications exactly as prescribed.
- If the symptoms still get worse after following the plan, call your doctor. Also, follow the plan’s emergency instructions.

It is an emergency if: You cannot talk in complete sentences, you’re having a hard time catching your breath; you’re not mentally alert, your heartbeat is very fast; the lips or the skin under the nails appear grayish or bluish. These are all signs of extreme oxygen deprivation. Get immediate emergency treatment.

Sources:

http://www.webmd.com/lung/home-lung-function-test