

Table 1.

**Predicted Mean Values For Healthy Australian Adults
Peak Expiratory Flow Rates (PEFR)**

Male PEFR (litres/minute)

Age	Height									
	1.50 m ≈ 4'11"	1.55 m ≈ 5'1"	1.60 m ≈ 5'3"	1.65 m ≈ 5'5"	1.70 m ≈ 5'7"	1.75 m ≈ 5'9"	1.80 m ≈ 5'11"	1.85 m ≈ 6'1"	1.90 m ≈ 6'3"	
16	438	456	474	495	509	527	545	563	581	
18	493	511	529	547	564	582	600	618	636	
20/25	536	554	572	590	607	625	643	661	679	
30	525	542	560	577	595	612	630	647	665	
35	513	531	548	565	582	599	616	633	650	
40	502	519	536	553	569	586	603	619	636	
45	491	507	524	540	556	573	589	606	622	
50	480	496	512	528	544	560	576	592	608	
55	468	484	500	515	531	547	562	577	593	
60	457	472	488	503	518	533	549	564	579	
65	443	468	483	498	513	528	543	558	573	
70	435	449	464	478	493	507	522	536	551	
75	423	438	452	466	480	494	508	522	536	
80	412	426	440	453	467	481	495	508	522	
85	410	414	428	441	454	468	481	495	508	

Female PEFR (litres/minute)

Age	Height									
	1.40 m ≈ 4'7"	1.45 m ≈ 4'9"	1.50 m ≈ 4'11"	1.55 m ≈ 5'1"	1.60 m ≈ 5'3"	1.65 m ≈ 5'5"	1.70 m ≈ 5'7"	1.75 m ≈ 5'9"	1.80 m ≈ 5'11"	
16/25	358	377	395	414	433	451	470	489	508	
30	348	366	385	404	422	441	460	478	497	
35	337	356	374	393	412	430	449	468	487	
40	327	345	364	383	401	420	439	457	476	
45	316	335	353	372	391	409	428	447	466	
50	306	324	343	362	380	399	418	436	455	
55	295	314	332	351	377	388	407	426	445	
60	285	303	322	341	359	378	397	415	434	
65	274	293	311	330	349	367	386	405	424	
70	264	282	301	320	338	357	376	394	413	
75	253	272	290	309	328	346	365	384	403	
80	243	261	280	299	317	336	355	373	392	
85	232	251	269	288	307	325	344	363	382	

Gibson J. et al. Med. J. Aust. 1979; 1:292-296

Predicted Mean Values For Healthy Australian Children

Male / Female PEFR (litres/minute)

L/min	Height							
	120 cm	125 cm	130 cm	135 cm	140 cm	145 cm	150 cm	
	250/221	264/244	279/266	296/290	315/314	336/338	358/361	
L/min	155 cm	160 cm	165 cm	170 cm	175 cm	180 cm	185 cm	
	389/385	409/411	438/428	471/443	515/456	549/-	579/-	

Hibbert M.E., et al, Pediatric Pulmonology 1989; 7:101-109



The Breath-A-Tech® Peak Flow Meter assists
in the management of asthma.

**BREATH-A-TECH®
PEAK FLOW METER**



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To be used as directed by your doctor.



INSTRUCTIONS FOR USE & CLEANING

Intended use

The Breath-A-Tech® Peak Flow Meter is used to measure peak expiratory flow rate (PEFR) which is the fastest speed a person can blow air out of the lungs after taking in as big a breath as possible. It is useful in recognising early warning signs of asthma attacks.

Warning

The Breath-A-Tech® Peak Flow Meter is not to be used for diagnostic purposes or for fully evaluating patient respiratory function. Spitting or coughing may affect its function, particularly with small diameter mouthpieces. When taking measurement before and after using a pressurised metered dose inhaler, wait 10 minutes. Except for the mouthpiece, the Peak Flow Meter must not be dismantled as there are no serviceable components.

It is not recommended to be dropped or compressed to ensure no damage to the internal parts required for accurate assessment of PERF.

Features

- Easy to use
- Individually tested
- Accuracy: $\pm 7.5\%$
- Standard range: 50-800 L/min (adults and older children); Low range: 40-350 L/min (children)
- Manufactured to meet International Standards for accuracy
- Includes daily recording card and colour coded stickers
- Does not require calibration/maintenance to ensure correct function

Measuring airway performance

Narrowing of the airways (breathing tubes) reduces the ability to move air in and out of the lungs. Tests have been designed to indicate the extent of the narrowing of the airways and also measure improvement with treatment. A simple but important test is to measure how quickly air can be forced from the lungs. This is called the Peak Expiratory Flow Rate (PEFR). The narrower the tubes, the lower the PEFR. The expected PEFR will also depend upon age, height, and sex. 'Average' or 'Normal' PEFR values have been published as a guide for doctors, taking into account these variables. **Refer to Table 1.**

When to use the Breath-A-Tech® Peak Flow Meter

First consult your doctor. They will advise how to correctly use the Peak Flow Meter and determine the positioning of the colour coded stickers provided. To provide a baseline measurement of the usual breathing capacity with the normal morning and evening (diurnal) variation, the PEFR is recorded before and after the use of medication, twice daily for about two weeks. Your doctor may advise you to commence recording peak flow meter readings for approximately one week before a scheduled consultation.

Every asthmatic should initially use the Breath-A-Tech® Peak Flow Meter for several weeks to establish his or her usual breathing pattern. Based on this and other tests, the doctor will create a specific 'Action Plan' for that patient.

Immediately consult your doctor if the PEFR does not improve in the usual way with first line asthma medication, or if the PEFR falls in spite of treatment, or if there is a large variation in the PEFR between morning and evening.

Instructions For Use

NOTE: The Breath-A-Tech® Peak Flow Meter is simple to use, however you should have your technique checked by your doctor. This device is recommended for single patient use.

1. Ensure the white pointer is at the L/MIN position and the mouthpiece is securely attached.
2. When holding the Peak Flow Meter ensure the slot faces upward and that you don't disturb the movement of the pointer.
3. Inhale a deep breath until your lungs are full.
4. Holding the Peak Flow Meter horizontally, place the mouth piece in your mouth with the lips forming a tight seal. Take care not to place your fingers near the slot.
5. Blow out as hard and as fast as possible. Try to get all the air out of your chest within one second.
6. Note the scale reading from the position reached by the raised line on the pointer, then return the pointer to the L/MIN position. Record the best of 3 readings. **(A chart for recording PEFR readings is included).**
7. The difference between the highest and lowest of three readings should not vary by more than 20 L/min. If this occurs, disregard the two lower readings and repeat with a further two tests. If within the acceptable range, record the largest value.

If the results vary by > 20 L/min, check that the Peak Flow Meter is clean and the longitudinal slot is not obstructed; the pointer is correctly aligned and moves freely along the length of the slot; the six openings in the base are not obstructed and the octagonal nut within the top section has not been loosened.

8. A large diameter mouthpiece is supplied with the Standard Range model. The mouthpiece supplied with the Low Range model has a smaller diameter. It should not be used with the Standard Range model as it may produce false readings.
9. Colour coded stickers are included. Red indicates **URGENT MEDICAL ATTENTION IS NEEDED OR CALL AN AMBULANCE**. Yellow and orange indicates **CAUTION**. Green indicates your asthma is under control.

Cleaning

- Except for the mouthpiece, the Breath-A-Tech® Peak Flow Meter must not be dismantled as there are no serviceable parts.
- Always wash mouthpiece thoroughly in clean warm water with a mild detergent.
- Rinse thoroughly shake excess fluid and allow to dry completely on its side.

NOTE: After cleaning, the non-return valve may adhere to the seat due to surface tension caused by moisture. If this occurs, free the valve by carefully inserting the blunt end of a narrow rod (such as a knitting needle) through the small openings at the mouth end. Care should be taken not to damage the valve.

Warranty

The Breath-A-Tech® Peak Flow Meter has a warranty of 1 year.

Storage

Store away from sunlight in a clean dry area.

Replace

The Breath-A-Tech® Peak Flow Meter should be replaced after 12 months.

Disposal

There are no special disposal instructions for the Breath-A-Tech® Peak Flow Meter.