Asthma *Check*®

with Asthma Management Zone System

Introduction

Monitoring peak expiratory flow (PEF) accurately is an important part of the management of respiratory conditions such as asthma. Daily readings can help detect even subtle changes in lung function that might otherwise go unnoticed. Used correctly, Asthma Check provides consistent, accurate readings that can help your doctor or licensed healthcare professional determine the best treatment for your condition.

Asthma Check is convenient and easy to use. Simply blow into Asthma Check; the exhaled air causes the piston to rise. As the piston rises, the indicator rises to your peak flow value and remains there.

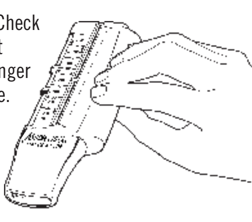
Patients with respiratory conditions such as asthma should consult a qualified healthcare professional before using a peak flow meter to monitor their condition. A physician or licensed healthcare professional can advise you how to use your peak flow meter properly and maintain accurate records.

Read the following Instructions for Use carefully. If you have any questions, please call Respironics Customer Service. Based on your peak flow measurements, your physician will provide a management plan that may include the zone system (color-coded indicators on the left side of the scale).

You should use this meter and set its color zone indicators according to a treatment plan developed for you by your physician or licensed healthcare professional.

How to Use Asthma Check

It's easy to measure your peak flow rate with Asthma Check. Just follow these simple directions:



1. Hold Asthma Check with your right hand by the finger grip on its side.
2. If the indicator is not at the bottom of the scale (closest to the mouthpiece), gently slide it down into the correct starting position.

3. A standing position is preferable, however, Asthma Check may be used while you are sitting. **Inhale as deeply as possible.** Place the mouthpiece in your mouth between your teeth, and seal it tightly with your lips.
4. **Exhale as quickly and completely as you can.** The indicator will move up the scale. The number beside the indicator is your peak flow measurement.
5. To repeat this test, return the indicator to its original position by gently sliding it down to the bottom of the scale and repeat steps 3 and 4.
6. After **three readings**, record the **highest** one with the date and time in your Daily Diary. (If your healthcare professional would like you to use the zone system, he or she will show you how to use it as part of your asthma management plan.)

Instrucciones para el uso en Español

Como se usa el medidor Asthma Check

Con el Asthma Check es muy fácil medir su flujo máximo. Simplemente, siga estas instrucciones sencillas:

1. Sostenga el Asthma Check con su mano derecha, sujetándolo con los dedos por el agarre del lado.
2. Si el indicador no está en el fondo de la escala (más cerca de la boquilla), deslícelo suavemente hacia abajo hasta la posición correcta de inicio.
3. Es preferible que esté de pie, sin embargo, el Asthma Check puede usarse cuando está sentado. **Inhale bien profundo.** Ponga la boquilla en la boca entre los dientes y apriétela firmemente con los labios.
4. **Exhale totalmente tan rápido como pueda.** El indicador subirá por la escala. El número al lado del indicador es la medida de su flujo máximo.
5. Para repetir esta prueba, ponga de nuevo el indicador en su posición inicial, deslizándolo suavemente hasta el fondo de la escala y repita los pasos 3 y 4.
6. Después de **medir tres veces**, anote en su Diario la medida **más alta** junto con la fecha y la hora. (Si su profesional médico desea que usted use el sistema de zonas, le explicará como usarlo como parte de su plan de control del asma.)

Límpielo por lo menos una vez a la semana. Lavado a mano: Para limpiar el Asthma Check debe usar agua tibia y jabón en líquido suave. Enjuáguelo bien y séquelo totalmente al aire antes de usar.

En lavaplatos: Use la parrilla superior solamente. No hierva el Asthma Check.

How to Maintain Asthma Check

Routine Examination

A routine examination of Asthma Check will ensure that it is in proper working order. Make sure the meter is free of foreign objects such as food particles. The indicator and piston should move smoothly and freely. The indicator should remain in place when moved to a position on the scale. **Do not use a damaged meter.**

Clean at least once per week.

Hand Wash: Warm water and a mild liquid soap should be used to clean Asthma Check. Rinse thoroughly and air dry completely prior to use.

Dishwasher Safe: **Use the top rack only. Do not boil Asthma Check.**

One-Year Warranty

Asthma Check is unconditionally warranted for one full year. During the warranty period, Respironics will replace any unit that is performing unsatisfactorily for any reason – free of charge. With proper care, your peak flow meter should last at least two years.

Asthma Check and its accompanying literature meet or exceed the 1997 updated National Asthma Education and Prevention Program (NAEPP) recommended technical guidelines for peak flow meters based on the Standardization of Spirometry: 1994 Update. Official Statement of the American Thoracic Society.

Asthma Check Standards

	Whichever is greater
Accuracy	+/- 10% or 20 L/min
Reproducibility	≤ 5% or 10 L/min
Interdevice Variability	≤ 10% or 20 L/min

Caution

Monitoring changes in your peak flow readings is important. Consult your physician or other licensed healthcare professional immediately if a change in your peak flow readings occurs or if you are experiencing asthma symptoms regardless of your peak flow reading. Your physician or healthcare professional will advise you how to manage your overall asthma condition.

Recording Peak Flow Readings

Record your peak flow readings in the attached Daily Diary by following the directions on the chart.

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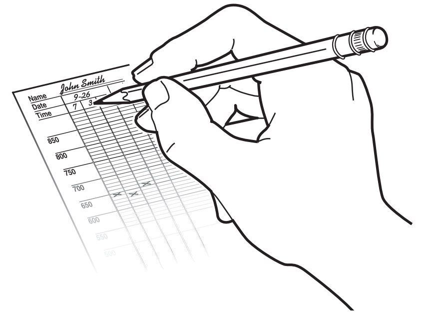

Peak Flow Daily Diary

A comprehensive record of your peak flow readings will help your doctor make important decisions about your asthma treatment. This Daily Diary is designed to help you record your peak flow readings quickly and easily.

Follow these steps to record your daily readings:

1. **Ask your healthcare provider to help you determine your personal best reading** and fill in your treatment plan at the top of your diary.
2. **Every day, fill in the date and the time of your reading in the space provided at the top of the page.** This chart provides space to record three readings per day.
3. **Put an "X" on the line next to your reading for each date and time. Refer to the first example and record your reading as shown.**
4. **In the "Notes" section, put the dates of when you experience A. coughing, B. wheezing, C. difficulty performing regular activities, or D. interrupted sleep. Rate the severity of each from 1 - 3 (1 = mild, 2 = moderate, 3 = severe). Refer to the example shown.**

Instrucciones para el uso en Español

Diario de Flujo Máximo

El Diario está diseñado para ayudarle a llevar un registro fácil y rápido de sus medidas de flujo máximo.

Siga estos pasos para anotar su medidas diarias:

1. **Pida a su proveedor de atención de salud que le ayude a determinar su mejor lectura y complete su plan de tratamiento a la cabeza de su diario.**
2. **Todos los días, ponga la fecha y la hora en que toma su lectura en el espacio correspondiente en la parte superior de la página.** Esta tabla le da espacio para anotar tres lecturas por diá.
3. **Ponga una "X" en la línea a continuación de su lectura para cada fecha y hora.** Refiérase al primer ejemplo y anote sus lecturas como se muestra.
4. **En la sección de "Notas" ponga las fechas cuando presentó: A. tos, B. jadeos, C. dificultad en realizar sus actividades cotidianas, o D. sueño interrumpido. Clasifique la severidad en cada caso usando un puntaje de 1 a 3 (1 = leve, 2 = moderado, 3 = severo). Refiérase al ejemplo que se presenta.**

Notes

August 8

B=2 (moderate wheezing)

A=3 (severe coughing)

D=1 (mild interruption of sleep)

EXAMPLE

Name ____________ Personal Best Reading ____________ Asthma Plan: Green ____________ Yellow: ____________ Red: ____________

EXAMPLE

Date	8/8				
Time	8	4	8		Time
850					850
800					800
750					750
700					700
650					650
600					600
550					550
500					500
450					450
400					400
350	X	X	X		350
300					300
250					250
200					200
150					150
100					100

Notes

Name _____ Personal Best Reading _____ Asthma Plan: Green _____ Yellow: _____ Red: _____

Date / Time		Date / Time
850		850
800		800
750		750
700		700
650		650
600		600
550		550
500		500
450		450
400		400
350		350
300		300
250		250
200		200
150		150
100		100

Predicted Average Peak Expiratory Flow Rates (Liters per Minute)

*Normal Males**

Age (Years)	(m) 60" (cm) 152	65" 165	70" 178	75" 191	80" 203
		Height			
20	554	575	594	611	626
25	580	603	622	640	656
30	594	617	637	655	672
35	599	622	643	661	677
40	597	620	641	659	675
45	591	613	633	651	668
50	580	602	622	640	656
55	566	588	608	625	640
60	551	572	591	607	622
65	533	554	572	588	603
70	515	535	552	568	582
75	496	515	532	547	560

*Normal Females**

Age (Years)	(m) 55" (cm) 140	60" 152	65" 165	70" 178	75" 191
		Height			
20	444	460	474	486	497
25	455	471	485	497	509
30	458	475	489	502	513
35	458	474	488	501	512
40	453	469	483	496	507
45	446	462	476	488	499
50	437	453	466	478	489
55	427	442	455	467	477
60	415	430	443	454	464
65	403	417	430	441	451
70	390	404	416	427	436
75	377	391	402	413	422

Normal Children and Adolescents†

Height (In)	(Cm)	Males & Females	Height (In)	(Cm)	Males & Females
43	109	147	55	140	307
44	112	160	56	142	320
45	114	173	57	145	334
46	117	187	58	147	347
47	119	200	59	150	360
48	122	214	60	152	373
49	124	227	61	155	387
50	127	240	62	157	400
51	130	254	63	160	413
52	132	267	64	163	427
53	135	280	65	165	440
54	137	293	66	168	454

*Nunn AJ, Gregg I. *Brit Med J* 298:1068-70; 1989.

†Polgar G, Promadhat V. *Pulmonary Function Testing in Children: Techniques and Standards*. Philadelphia, W.B. Saunders Co., 1971.

Use the tables of normal peak flow values only as a guideline since predicted normal lung function varies across racial and ethnic populations. The most clinically useful standard for ongoing monitoring of asthma is the patient's personal best PEF value.

Important Information for Patients

This meter was designed to make following your asthma treatment plan easy. Your doctor will set the color zone indicators to your own personalized zones based on your personal best peak expiratory flow rate value (the best peak flow value you can achieve on a good day when your asthma is under control).

When you blow into your peak flow meter, the indicator will rise to your peak flow value. Your peak flow will fall into one of three zones. Think of these zones as traffic symbols.

Green means "go" – follow your regular medication plan and go ahead with normal activities.

Yellow means "caution" – your asthma might be worsening. Follow your medication instructions to get back to your green zone.

Red means "stop" – get medical advice and attention immediately.

Your goal should be to stay in the green zone as long as possible and to take action whenever you enter the yellow zone, so you never enter the red zone.

Important Information for Healthcare Professionals

Asthma Check was designed with a three-zone asthma management system recommended by the NAEPP to help patients comply with treatment regimens. Color-coded indicators are located to the left of the scale and can be adjusted to delineate a patient's green, yellow, and red zones. (These indicators are designed to resist inadvertent movement.)

If you prefer a four-zone system, the yellow zone is typically divided in half with different treatment instructions given for high-yellow and low-yellow zones.

The zone system is based on a patient's maximum peak flow rate, which is determined after medication on a day when the asthmatic condition is under good control. Zones should be tailored to individual patients' needs and PEF patterns. When the Green Zone range is determined to be 80% to 100% of the patient's maximum peak flow; the Yellow Zone, 50% to 80%; and the Red Zone, anything below 50%; the Green/Yellow indicator should be set at 80% and the Yellow/Red indicator at 50%. These percentages are given only as an example.

Disposable one-way valve safety mouthpieces must be used when a single Asthma Check unit is used repeatedly as a screening device. Patients should be advised to inhale before placing the instrument in their mouths. (Disposable One-Way Valve Safety Mouthpieces, Reorder No. HS714.) After each patient use, Asthma Check should be cleaned as directed.

Warning: Never boil or autoclave Asthma Check.

RESPIRONICS

Envisioning tomorrow. Improving today.™

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RESPIRONICS

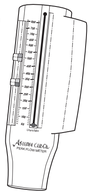
Asthma*Check*®

Peak Flow Meter with Asthma Management Zone System

Instructions for Use

Universal Range: 60-810 L/min

- Helps monitor respiratory conditions such as asthma by measuring peak expiratory flow.
- Designed for single patient use.
- Disposable mouthpieces are available for multi-patient screening (Reorder No. HS714).



Caution: Patients using a peak flow meter to monitor respiratory conditions such as asthma should be under the care of a physician or other licensed healthcare professional.

This peak flow meter carrying case contains:

- Asthma Check Peak Flow Meter
- Instructions for Use
- Daily Diary (with instructions)

Reorder No. HS740