

## Lub ntsuas pa “peak flow meter” (Hmong)

## Peak flow meter (English)

### Lub ntsuas pa “peak flow meter” yog dab tsi?

### What is a peak flow meter?

Lub “peak flow meter” yog ib yam khoom siv los ntsuas seb tshuab cua tawm hauv ob lub ntsws los zoo npaum li cas. Nws kuj muaj ob peb yam thiab.

Lub “peak flow meter” no siv los ntsuas nej tus minyuam qhov mob “asthma,” zoo li nej siv tus (thermometer) los ntsuas qhov kub sov hauv neeg lub cev.

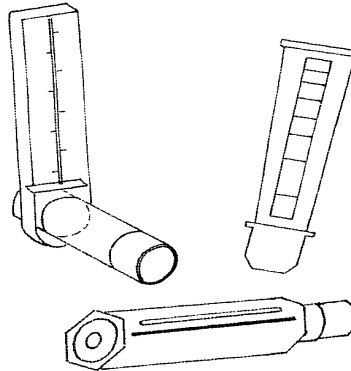
Thaum mob “asthma” ua pa nyuab, mas nws cov hlab ntsws khoob me thiab tej zaum cov lej ntawm lub ntsuas pa yuav poob qis, qhia tau tias cua dhau mus los ntawm lub ntsws tsis yooj yim.

Kev siv lub ntsuas pa “peak flow meter” no yuav pab nej thiab nej tus minyuam tus kws khomob:

- txiav txim seb qhov npaj tseg rau siv hauv dai ntawv mob hawb pob puas ua hauj lwm zoo
- txiav txim seb thaum twg yuav ntxiv los yog txo tshuaj
- txiav txim seb thaum twg thiaj yuav nrhiav kev pab cawm thaum mob ceev (emergency)

A peak flow meter is a device that measures how well air moves out of the lungs. Many different types of meters are available.

A peak flow meter is used to check your child’s asthma, as a thermometer is used to check a temperature.



During an asthma episode the airways in the lungs become narrow and the peak flow number may be low, showing that air is not moving easily through the lungs.

Using a peak flow meter can also help you and your child’s doctor:

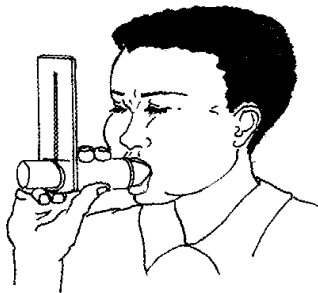
- decide if the Asthma Action Plan is working well
- decide when to add or stop medicine
- decide when to seek emergency care

## Kuv tus minyuam yuav siv lub “peak flow meter” li cas?

Xyuas kom meej tias koj tus minyuam yuav tau tshuab kom zoo tshaj plaws txhua zaus. Qhov nyeem tawm uas koj pom ntawm lub ntsuas pa yuav nyob ntawm koj tus minyuam qhov peev xwm ua tau npaum li cas.

Thaum siv lub ntsuas pa “peak flow meter” no nej tus minyuam yuav tau ua raws li cov them nram no:

1. Muab tus tes tsuas txav rau puag hauv qab ntawm cov lev teev qhia.
2. Sawv ntsug los yog zau kom ntseg.
3. Nqus ib pas loj loj.
4. Muab lub raj ntsuas rau hauv qhov ncauj thiab qhaws di ncauj ncig ntog npuav ntawm qhov ncauj. Tsis txhob muab nplaig taum rau hauv lub qhov raj. Tsis txhob pos lub qhov tom tog tw raj kawg thaum tuav lub raj.
5. Tshuab tawm sib sib zog thiab ceev npaum li ceev tau. Txhob hnoos los tshuab lwjliam li chim rau lub ntsuas cua nov, ua li no ces tus kaj qhia yuav txav tsis yog
6. Sau tseg cov lej ntawm lub raj.
7. Ua ntxiv raws li nqe 1 mus txog nqe 6 ob zaug ntxiv.
8. Sau qhov siab tshaj ntawm 3 tug lej ntawm koj tus minyuam lub ntsuas pa txhua hnuv, los sis ua raws li kws khomob hais.



## How should my child use a peak flow meter?

Be sure your child tries to do his or her best every time. The reading you see on the meter depends on your child's effort.

To use a peak flow meter your child should follow these steps:

1. Place the marker at the bottom of the scale.
2. Stand up or sit up.
3. Take a deep breath.
4. Put the meter in the mouth and close the lips around the mouthpiece. Do not put the tongue inside the hole. Do not cover the hole on the back end of the peak flow meter when holding it.
5. Blow out as hard and as fast as possible. Don't cough or huff into the peak flow meter, as this will give a false reading
6. Write down the number from the meter.
7. Repeat steps 1 through 6 two more times.
8. Write the best (highest) of the 3 numbers in your child's peak flow diary every day, or as instructed by the doctor.

## Cov leb dhia mus los yog?

Koj tus minyuam cov leb yuav qhia tau ntawm kev kwv yees tus nqi ntsuas pa raws li tej neeg tsis mob hawb pob tib lub hnoob nyoog thiab qhov siab. Saib tus kaj hauv qab kawg ntawm daim ntawv no rau qhov ntsuas cua zoo tha mab das rau cov minyuam ua zoo neej thiab cov hluas.

Koj tus minyuam cov neeg saib xyuas kev noj qab haus huv yuav nrhiav tau koj tus minyuam cov leb ntsuas pa los ntawm nws tus kheej qhov kev ntsuas. Nyob rau qhov no koj tus minyuam tus kws khomob mam ua num nrog nej los nrhiav cov leb ntsua pa.

## Tej ntu hauv lub peak flow ua hauj lwm li cas?

Thaum koj paub tus leb zoo tshaj plaws ntawm koj tus minyuam qhov ntsuas pa, tus kws khomob yuav siv tau los pab teev ua ke rau kev mob hawb pob daim ntawv npaj rau siv. (saib kev mob hawb pob daim ntawv npaj tseg ua raws) Cov leb ntawm lub peak flow kho mob asthma zoo li ib lub teeb ntawm kev tsav tsheb. Qhov no yuav pab kom koj paub yuav ua li cas thaum koj tus minyuam tus leb ntsuas pa hloov.

**Ntu ntsuab** (80 rau 100 percent yog qhov koj tus minyuam tus leb zoo tshaj) tej cim qhia puav leeg kaj tag nrho. Koj tus minyuam ua tau yam ub yam no li qub thiab pw los tsis muaj tej kev mob hawb pob xws li hnoos, hawb pob, txog siav, los yog hauv siab ceev ceev. Ua raws li qhov npaj tseg **Ntu Ntuab**.

**Ntu daj** (50 rau 80 percent yog qhov nej tus minyuam tus leb zoo tshaj) tej cim yuav tau ceev faj paub. Koj tus minyuam muaj tej cim qhia kom ceev faj paub tias tej zaum nws yuav rov mob hawb pob tuaj xws li hnoos, hawb pob, txog siav, hauv siab ceev ceev, los ntswg. Koj tus minyuam kuj yuav muaj teebmeem pw tsis tsaug zog dhau hmo. Ua raws li qhov npaj tseg ntawm **ntu daj**.

## What should my child's peak flow number be?

Your child's number can be determined from predicted normal peak flow values for people of the same age and height. See the chart at the end of this sheet for average peak flows for healthy children and teenagers.

Your health care professional can also determine your child's peak flow number based on a personal baseline. In this case your doctor will work with you to determine the peak flow numbers.

## How does the peak flow zone system work?

Once you know your child's predicted peak flow number, the doctor can use it to help put together an Asthma Action Plan. (See Asthma Action Plan.) The peak flow numbers on the Asthma Action Plan are set up like a traffic light. This will help you know what to do when your child's peak flow number changes.

**Green Zone** (80 to 100 percent of your child's predicted number) signals all clear. Your child is able to do usual activities and sleep without asthma symptoms such as cough, wheeze, shortness of breath, or chest tightness. Follow the **Green Zone** plan.

**Yellow Zone** (50 to 80 percent of your child's predicted number) signals caution. Your child has warning signs of an asthma episode that may include cough, wheeze, shortness of breath, chest tightness, or runny nose. Your child may have trouble sleeping through the night. Follow the **Yellow Zone** plan.

**Ntu liab** (tsawg tshaj 50 percent ntawm qhov koj tus minyuam tus leb zoo tshaj) cov cim mob ceev. Koj tus minyuam kuj yuav muaj tej cim ua pa nyuab, tawv nqajj saus rau cov kis tav thaum ua pa, muaj teeb meem mus kev los yog tham lus, los yog ntxim li cov tshuaj tsis ua hauj lwm. Ua raws li qhov npaj tseg ntawm **ntu liab**.

### **Thaum twg thiaj tsim nyog kuv hu rau kws khomob?**

- Koj tus minyuam nyob rau ntawm ntu daj ntev tshaj li 12 rau 24 teev.
- Nws tus mob heev zuj zus.
- Koj tus minyuam nyob rau ntawm ntu liab.

### **Thaum twg thiaj tsim nyog kuv hu rau 911?**

- Koj tus minyuam muaj teeb meem mus kev los yog hais lus.
- Koj tus minyuam cov rau tes los yog di ncauj xiav los thim xem txho.
- Koj txhawj xeeb tias koj tus minyuam yuav zoo li cas 30 nasthis tom ntej no.
- Koj tus minyuam tsis ua pa lawm.

### **Lus nug?**

Daim ntawv no tsis cob coos rau koj tus minyuam nkaus xwb, tab sis yog muab xovxwm thoob plaws. Yog koj muaj lus nug ab tsi, thov hu rau nej lub chaw khomob.

Rau tej ntaub ntawv nyeem ntxiv txog qhov no thiab lwm yam mob/kev noj qab haus huv, thov hu los yog mus saib ntawm Lub Chaw Loj Pab Tsev Neeg lub Chaw Cia Ntawv los yog mus saib pib qhov Web site: [www.childrensmn.org](http://www.childrensmn.org).

**Red Zone** (less than 50 percent of your chi predicted number) signals an emergency. Your child may have signs of difficult breathing, retractions (skin sucking in with each breath), trouble walking or talking, or medicines may not be working. Follow the **Red Zone** plan.

### **When should I call the doctor?**

- Your child is in the Yellow Zone for more than 12 to 24 hours.
- Symptoms are getting worse.
- Your child is in the Red Zone.

### **When should I call 911?**

- Your child is having trouble walking or talking.
- Your child's fingernails or lips are blue or gray.
- You are worried about how your child will get through the next 30 minutes.
- Your child stops breathing.

### **Questions?**

This sheet is not specific to your child, but provides general information. If you have any questions, please call your clinic.

For more reading material about this and other health topics, please call or visit the Family Resource Center library, or visit our Web site: [www.childrensmn.org](http://www.childrensmn.org).

**Cov leb tawm hauv lub “peak flow meter” rau cov minyuam yaus tsis muaj mobthiab cov tub ntxhais hluas** *(Average peak flow rate for healthy children and teens)*

Cov leb hauv qab no yog muab qhov nruab nrab los ntawm kev ntsuas ntawm neeg coob tus los, thiab tsuas siv qhia kom nej paub txog cov leb no xwb. Lub peak flow kuj muaj txawv lwm hom nrog rau siv hom meter uas siv.

(All tables are averages based on tests with a large number of people, and should be used as a guide only. Peak flows vary with the type of meter used.)

<b>Siab ntawm ib them</b> <i>(Height in inches)</i>	<b>Nruab nrab peak flow</b> <i>(Average peak flow)</i>	<b>Ntu daj: 50-80% nruab nrab ntawm peak flow</b> <i>(Yellow Zone: 50-80% of average peak flow)</i>	<b>Ntu liab: Qis dua 50% nruab nrab ntawm peak flow</b> <i>(Red Zone: less than 50% of average peak flow)</i>
43	147	74 - 118	< 74
44	160	80 - 128	< 80
45	173	87 - 139	< 87
46	187	94 - 150	< 94
47	200	100 - 160	< 100
48	214	107 - 171	< 107
49	227	114 - 182	< 114
50	240	120 - 192	< 120
51	254	127 - 203	< 127
52	267	134 - 214	< 134
53	280	140 - 224	< 140
54	293	147 - 234	< 147
55	307	154 - 246	< 154
56	320	160 - 256	< 160
57	334	167 - 267	< 167
58	347	174 - 278	< 174
59	360	180 - 288	< 180
60	373	187 - 298	< 187
61	387	194 - 310	< 194
62	400	200 - 320	< 200
63	413	207 - 330	< 207
64	427	214 - 342	< 214
65	440	220 - 352	< 220
66	454	227 - 363	< 227

Cov leb no muab los ntawm (Source): Polgar G, Promadht V. *Pulmonary function testing in children: Techniques and Standards*, Philadelphia, WB Saunders Company, 1979.

