THE CHILDREN'S ASTHMA EDUCATION CENTRE PROGRAM

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^{*}This program has been developed by the staff and advisors of **The Children's Asthma Education Centre**. It is meant to be used within the Centre's Program.

^{**}Please read "you" and "yours" as "your child" and "your child's" where appropriate throughout this information.

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The program is administered under the Health Sciences Centre.



1997

GLOSSARY OF TERMS

Acute

Sudden in onset and therefore short term.

Action Plan

Written instructions for managing your asthma. The instructions are individualized. The plan should be developed with the help of your doctor.

Allergen

A substance that may cause an allergic reaction (eg, pollen, dust mites, animal dander).

Allergist

A doctor who specializes in diagnosing and treating allergies and allergy associated diseases such as asthma, hayfever, eczema and food allergies.

Alveoli

Small sac-like structures in the lungs where oxygen and carbon dioxide pass to and from the blood.

Anti-inflammatory Medication

A type of asthma medication used to control the swelling and inflammation inside your airways. This medication should be taken all the time, even when you are well.

Asthma Episode (attack)

An increase in asthma symptoms that makes breathing difficult and can be life-threatening.

Bronchi (airways)

They are the tubes in the lungs that carry air.

Bronchoconstriction/Bronchospasm

The narrowing of the airways (bronchi) during an asthma attack due to inflammation and muscle tightening.

Bronchodilation

The opening up of the airways.

Bronchodilator

A drug that causes the airways to open wider by relaxing the muscles that surround them. Bronchodilators provide **temporary** relief from asthma symptoms. Types of bronchodilators include: Ventolin® and Bricanyl.

Candidiasis (Thrush)

A non-serious yeast infection of the mouth and throat that sometimes results from inhaled steroid use. Using a spacer with your inhaler and rinsing your mouth and throat after use can help prevent candidiasis.

Chronic Condition

A long-lasting or constant condition.

Corticosteroids (Steroids)

Drugs that treat inflammation; corticosteroids are different from the "anabolic steroids" used by some athletes. To treat asthma they are usually inhaled. For severe asthma they may be given as tablets, syrup or intravenously. They must be used regularly to be effective. They usually take a few days to work. Using inhaled steroids will lead to better control of asthma.

Cromoglycate

A non-steroid anti-inflammatory medication, which is less powerful than corticosteroids.

Exhale

To breathe out.

Immunotherapy

Also called "allergy shots" or desensitization. Repeated injections of a person's allergen are given, in an attempt to make that person "non-allergic" to the allergen.

Inflammation

A response of the tissues in the body to irritation or injury. In the airways, inflammation involves swelling and redness of the airway lining and increased mucus.

Inhale

To breathe in.

Metered-dose Inhaler (MDI)

A small device used for taking aerosol medication (a "puffer").

Peak Flow Meter

A small, portable device used to do a simple breathing test. People with asthma can use this device at home.

Pulmonary Function Tests

A series of tests used to evaluate the functioning of the lungs and airways.

Respiratory Tract

The passageway leading from the nose or mouth all the way to the alveoli (including the bronchi).

Respirologist

A doctor who specializes in problems of the respiratory tract, including asthma.

Self-management of Asthma

Knowing how to care for your asthma. It requires knowledge and skills. Self-management is necessary for asthma control.

Spacers

Tubes of different sizes that attach to metered-dose inhalers (MDI, "puffers") to make it easier to take aerosol medication properly.

Trachea

The windpipe connecting the throat to the bronchial tubes.

Triggers

Things in the environment that may cause airway inflammation or directly cause asthma symptoms of cough, wheeze or shortness of breath.

SESSION #1

WHAT IS ASTHMA?

- Asthma is a **chronic** problem of the airways in the lungs
- Asthma can affect each person differently
- The airways of people with asthma are more sensitive than normal



• Airway **inflammation** is a major problem in asthma. Some inflammation is always present with asthma, but certain triggers may make it worse. Increased inflammation causes the airways to be even more sensitive.

What causes asthma?

- The basic cause is not known
- It is more common in families with a history of asthma and allergies
- It is not contagious, so asthma cannot be caught from others
- It is not caused by emotional factors. It is not "all in one's head".

What are the common symptoms of asthma?

- Cough (especially at night, early morning or with exercise)
- Shortness of breath
- Wheezing

Cough may be the only symptom.

Proper treatment can help to prevent these symptoms or relieve them if they do occur. It is important to treat even mild symptoms.

What causes asthma episodes?

People with asthma have airways that are super-sensitive to certain things in the environment that do not cause problems to those without asthma. These things are called **triggers**. They may cause increased **inflammation** or acute asthma symptoms called **asthma episodes or attacks**.

What happens during an asthma episode?

- Airway inflammation and swelling increases
- Thick mucous is produced
- The muscles around the airways tighten

All of these changes make the airways smaller and block the flow of air so it is harder to breathe.

What are the common warning signs of an asthma episode?

Asthma episodes rarely occur without warning. Most children with asthma have warning signs that occur hours or days before the episodes. By recognizing warning signs and acting on them, you may be able to avoid a serious asthma episode.

Follow your asthma action plan when these signs appear:

- Waking at night ro early morning with asthma symptoms
- Feeling short of breath easily
- Chest feels "tight" or it hurts
- Decreased ability to tolerate exercise
- · Increased use of reliever medication
- Decreased peak flow reading
- · Onset of a cold

Is there a cure for asthma?

There is no cure for asthma, but it can be controlled and control should be expected. In most children, asthma improves as they get older, but they may always have some risk for asthma problems.

Can asthma result in death?

Deaths do still occasionally occur from asthma. This usually happens because of failure to recognize a serious problem, or due to incorrect use of asthma medications, i.e. use of anti-inflammatory medications "too little/too late". Most asthma deaths are preventable.

What are the goals for good asthma management?

Good asthma management means that most children who have asthma should be able to live normal lives and participate in the same activities as others their age. Specific goals include:

- No hospital admissions or emergency room, walk in clinic, or doctor's visits for asthma symptoms
- Control of asthma symptoms with the least amount of medication, and minimal or no side effects
- Participation in normal activities eg school, exercise, sports
- Sleeping through the night without getting asthma symptoms
- A healthy attitude towards asthma and a sense of control

How can these goals be achieved?

- Form a partnership with your doctor.
- Recognize your triggers and learn to avoid or reduce contact with them.
- Learn about your medicines and how to use them properly.
- Learn how to monitor your asthma and recognize early warning signs.
- Develop an action plan with the assistance of your doctor.

^{*}The artwork and some modified material has been used from "Teach Your Patients About Asthma" produced by the National Institutes of Health

SESSION #2

ASTHMA TRIGGERS

What causes asthma episodes?

- Asthma triggers are things that cause asthma sensitive airways to react.
- Triggers are different for each person, and they can change over time.
- Some triggers cause inflammation in the airways (colds, tobacco smoke, allergies). This
 makes the airways even more sensitive.
- Some triggers cause symptoms especially if the airways are inflamed (exercise, weather changes, emotions, irritants, chemicals, strong odours).
- Controlling asthma triggers improves quality of life (less medicine, better sleep and activity).

How can triggers be controlled?

- Many simple, inexpensive changes can be made in your home to control triggers.
- Other changes are harder and are more expensive to make. It would be appropriate to see an allergist before making these changes.

Respiratory Conditions:

Colds commonly cause asthma problems. Other conditions such as uncontrolled sinusitis or hayfever may also make asthma worse.

- · Avoid people with colds as much as possible.
- Practice healthy habits (rest, good diet, handwashing and exercise).
- Medicine may need to be changed at the first sign of a cold. Consult your action plan or talk to your doctor.
- Talk to your doctor about repeated nose stuffiness or discharge.

Tobacco Smoke:

Even the odour of smoke on clothes can be a problem.

- Do not smoke in your home or car.
- Avoid smoke-filled environments.



Allergens (allergic triggers):

A. Dust Mites

Dust mites are found in beds, carpets and upholstered funiture.

- · Mite-proof the bed with a plastic mattress cover.
- Use washable bedding. Wash once a week in HOT water. Dry in a hot dryer.
- Put pillows in the dryer every two weeks on the **HOT** cycle for 45 minutes.
- Limit stuffed toys to one in the bedroom. Treat the same as a pillow.
- Do not use a humidifier in the bedroom.
- If possible, eliminate carpeting in the bedroom.

B. Animals

All cats and dogs can cause an allergy. Material left from pet dander, urine or saliva can cause a problem for months after the animal is removed form the home.

- The best advice is not to have an animal in the home.
- If this is not possible keep the pet outside as much as possible and restrict where it goes in the home.
- Never allow your pet into the bedroom.
- Wash your pet weekly.



C. Molds

Molds are found in damp places in and outdoors. With mold allergy, medicine may need to be increased in spring and fall when outdoor mold levels are higher.

- · Avoid damp areas (basements).
- · Fix water leaks in the home.
- Clean damp areas with 125 ml of Lysol to 8 litres of hot water.
- Keep indoor humidity below 50%.
- Limit indoor plants.
- · Keep windows closed in high humidity.
- · Air conditioning may help.
- Maintain and clean air conditioners and humidifiers (according to manufacture's inspection).
- The clothes dryer should be vented outside.
- Dry damp articles before storing.
- Use mold-inhibiting paints in damp areas.
- Try to keep your yard free from excessive leaves, etc.

D. Pollen

Pollens come from trees, grasses and weeds. Different kinds of pollen are important at different times (trees - April and May; grasses - June and July; weeds - August and September). More medicine may be needed when the pollen count is high.

- · Keep home and car windows closed.
- · Air conditioning may be helpful.



E. Foods:

Food allergies rarely cause asthma problems, but they can cause severe reactions which may include wheezing.

These reactions usually occur within minutes to an hour after exposure to the food. Symptoms of severe food allergy may include anxiety, breathing problems, severe skin, nose or stomach problems and unconsciouness.



- If you are concerned about a severe food allergy speak to your doctor about further testing.
- · Strictly avoid the food of concern.
- · Wear a Medic Alert bracelet.
- Carry an EpiPen or Anakit.

Irritants:

- Avoid strong odours and aerosol sprays.
- · Avoid wood smoke.
- · Avoid a lot of dust.
- A fan that vents outdoors is recommended for gas cooking.

Exercise:

ereamagel

Exercise is important and should not be avoided. With good asthma control any kind of exercise is possible. Generally, swimming or exercise with short bursts of activity are easiest (eg baseball, football). Exercise may be harder if a person has a cold or outdoor conditions exist such as wind, cold air, high pollen levels, etc.

- Taking reliever medicine before exercise can help.
- Warm up and cool down exercises are suggested.
- Report problems to your doctor.



Emotions:

Emotions do not cause asthma. Coughing or wheezing with laughing or crying suggests asthma is not controlled. A child's asthma should not interfere with normal limit setting and consistent discipline.

Medicine:

• Never use aspirin. Use Tylenol or Tempra instead.

THE ASTHMA DIARY

- Keeping a diary when asthma problems occur can be helpful.
- It will show your doctor how often asthma problems occur and how bad they are.
- It may help to identify what has triggered the episode.
- It can help identify early warning signs of asthma.
- It can help in deciding on the need for a change in medicine.

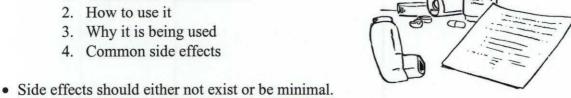


SESSION #3

ASTHMA MEDICATIONS

There are two main groups of medications used to treat asthma:

- I. anti-inflammatories
- II. bronchodilators
- These medications may come in different forms, but the best way to take them is by inhalation. Correct technique is important.
- Asthma medicine is chosen according to each person's asthma. It may need changing from time to
- The least amount of medicine needed to control symptoms is what should be used.
- You must know:
 - 1. When to use the medicine



- Contact your doctor if you are concerned about side effects. **Do not** stop taking the medicine without his/her advice.
- Your doctor must know if you feel you cannot afford the medicine prescribed.
- Let your doctor know if you are using any natural remedies for asthma.

1. ANTI-INFLAMMATORY MEDICATIONS

- Are commonly called preventers or controllers.
- Prevent or decrease swelling in the airways.
- Must be used every day for weeks, months or years.
- Use as prescribed even if the asthma seems fine.
- Do not work quickly over a few minutes or hours.
- There are two types steroids and non-steroids.
- These steroids are **not** the same as those used by athletes.



A. Steroids:

MEDICATION	ROUTE	SIDE EFFECTS
beclomethasone (Beclovent, Becloforte, Beclodisk, Vanceril) budesonide (Pulmicort) fluticasone (FloVent)	inhaled	Yeast infection in the mouth or throat, hoarseness; Rinse and spit after use and use a spacer/chamber when using an inhaler.
prednisone methylprednisolone (Medrol) prednisolone (Pediapred)	oral	Used for a few days , they may cause increased appetite and weight gain. High doses used for many weeks may cause growth, bone and blood pressure problems, diabetes or cataracts.

B. Non-Steroids:

MEDICATION	ROUTE	SIDE EFFECTS
cromoglycate (Intal)	inhaled	coughing
ketotifen (Zaditen)	oral	increased appetite, weight gain, drowsiness
nedocromil (Tilade)	inhaled	unpleasant taste, nausea, headache

II. BRONCHODILATOR MEDICATIONS

- Relax the muscles that tighten around the airways during an asthma attack.
- Main types are: short-acting β_2 -agonists, long-acting β_2 -agonists, anticholingerics, theophyllines.
- Most common ones used (short-acting β_2 -agonists) are also called relievers eg salbutamol.
- Work quickly, but do not improve inflammation.
- Usually used only for acute asthma symptoms or before exercise.
- If required every 4 hours or more, contact your doctor. Overuse of a bronchodilator can be dangerous.
- Other bronchodilators may take longer to work and are used regularly eg salmeterol, theophylline.

A. Short-Acting B2-Agonists (Relievers):

MEDICATION	ROUTE	SIDE EFFECTS
salbutamol	inhaled	Shakiness, increased heart rate, nausea,
(Ventolin, Ventodisk	oral	headache, dizziness; side effects are less
Novo-Salmol, Apo-Salvent)		likely when the drugs are inhaled.
terbutaline (Bricanyl)	inhaled	
fenoterol (Berotec)	inhaled	
pirbuterol (Maxair)	inhaled	
orciprenaline (Alupent)	oral	

B. Long-Acting β₂-Agonist:

MEDICATION	ROUTE	SIDE EFFECTS
salmeterol (Serevent)	inhaled	As above; does not provide immediate relief. Do not use for acute symptoms.

C. Anticholinergics:

MEDICATION	ROUTE	SIDE EFFECTS
ipatoprium bromide (Atrovent)	inhaled	dry mouth, unpleasant taste; avoid spraying in eyes

D. Theophylline:

MEDICATION	ROUTE	SIDE EFFECTS
Theo-Dur, Uniphyl	oral	nausea, headache, vomiting, sleep disturbance, tremor

ACTION PLAN

- An action plan says what medicine should be used. It is normally developed with the help of your physician.
- It tells you what to do when everything is normal.
- It tells you what to do at the first sign of asthma problems (cough, wheeze, shortness of breath, chest tightness, night waking, increased use of reliever) or a cold.
- More severe problems may be prevented by following the instructions given to treat symptoms early.
- It will tell you when to call your doctor or when to go to the Emergency Room.
- The school, daycare, or babysitter should have knowledge about your (child's) asthma and the action plan.
- The action plan should be reviewed with your doctor at least once a year and more often if necessary.
- The plan is not working if frequent problems with asthma continue to occur.



SESSION #4

SELF-MANAGEMENT

What is Self-Management?

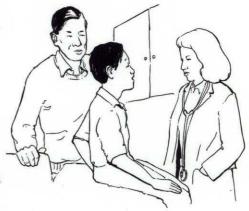
- Self-Management means participating in your asthma care.
- It means having the knowledge, skills and tools to take control of asthma.
- With self-management, control of asthma is possible.
- Control of asthma is necessary for leading a normal life.

What is needed for Self-Management?

- A partnership with your physician
- An understanding of what asthma is
- A recognition of asthma triggers and how to avoid them
- An understanding of your asthma medications
- The ability to recognize warning signs of asthma problems
- Knowing what to do when problems appear
- Ongoing asthma education

What is meant by developing a partnership with your physician?

- Seeing one doctor means your care can be more consistent. Using walk in clinics or the emergency room does not result in consistent care!
- A plan for care is best developed by working together. Your doctor knows about asthma, but you know about your life.
- It is important for you to feel comfortable giving information and asking questions.
- It is important for you to know who to call when you are having problems.
- You have the right to expect your doctor to listen to your concerns about asthma and answer your questions.



- It is your responsibility to communicate your concerns, problems and questions so your doctor understands how best to advise you regarding care.
- You have the right to expect your doctor to help you develop a good management plan.
- You have the responsibility to follow through with the plan you make together.

Why must I continue to learn about asthma?

- As children mature things will change with their asthma, lives and environments.
- Asthma treatment is being continuously improved thanks to research.

What resources are available for continuing asthma education?

- Your health care providers eg doctor, pharmacist, nurse
- The Manitoba Lung Association (774-5501)
- The Children's Hospital Family Information Library (787-1012)



THE PEAK FLOW METER

What is a peak flow meter?

- It is a small device used to do a simple breathing test.
- It can be used easily at home to monitor asthma.

Who should use a peak flow meter?

- Not everyone with asthma needs a peak flow meter.
- It is most helpful for those with severe asthma and those who have trouble knowing when their asthma is getting worse.
- The test must be done correctly each time to give useful results.

What do the results mean?

- Each person has a personal best result. It is the highest number you can blow when feeling well.
 Your personal best will likely change over time.
- Results are compared to your personal best to monitor for asthma changes.
- When asthma problems are beginning the number you blow will drop.
- This information can be used in your action plan.
- Guidelines can be given by your doctor for use of the numbers.

How do I use a peak flow meter?

- 1. Stand up straight.
- 2. Place the pointer at zero.
- 3. Hold the meter with fingers out of the way of the pointer's movement.
- 4. Take in a deep breath.
- 5. Place your lips tightly around the mouthpiece (keep tongue and teeth out of the way).
- 6. Blow out hard and fast. Do not cough into the meter.
- 7. Do three tests. Record the highest number.



- 8. Use first thing in the morning and before bed, always before medicine, unless given other instructions.
- 9. Clean as instructed by the manufacturer.

Where do I get a peak flow meter?

•	Manitoba Lung Association	MiniWright	\$35.00
	629 McDermot Ave (774-5501)		
•	Medigas Manitoba Ltd.	Assess	\$32.72
	150 McPhillips (786-4719)		
•	VitalAire	MiniWright	\$32.00
	1703 Dublin Ave (633-2186		
		Assess	\$35.00
		DeVilbiss Vitalograph Pocket Peak Flow	
		Meter	\$21.50
•	Trudell Medical	Tru Zone	\$26.13
	1497 Erin St (786-6361)		

All models come with either a low range scale or a regular range scale except for the Tru Zone which has a full range scale.

Some insurance plans will cover peak flow meters as medical devices. A doctor's request may be necessary for coverage.

Non-Insured Health Services will cover the devices for children with treaty numbers. A prescription should be written. The agency supplying the device can call 983-8886 to have the request okayed.

^{*} Prices are as of December 1996

RELAXATION AND BREATHING EXERCISES

How can relaxation and breathing exercises help asthma?

- It is normal to feel upset or scared when it is hard to breathe. This can make breathing even harder.
- Learning to relax and focus on breathing exercises may help to control your breathing during an asthma attack.
- These techniques must be practiced, so they are easy to use when an attack occurs. Find a quiet place to practice and make yourself as comfortable as possible.

What can young children do for breathing exercises?

- Ask your child to:
 - 1. Close their eyes and think of something nice.
 - 2. Take 3 slow breaths in through the nose and out through the mouth.
 - 3. Tighten their arms and legs for 5 seconds.
 - 4. Go limp like a rag doll.
 - 5. Repeat a few times.
- Rhythmic breathing can be taught by having the child:
 - 1. Breathe in slowly, and say "ha" while breathing out.
 - 2. Breathe in slowly, and say "who" while breathing out.
 - 3. Repeat a few times.
- Blowing bubbles can be used as an exercise. Encourage the child to blow out gently and slowly.

What can school-age children and adolescents do?

- "Pursed-lip" breathing:
 - 1. Sit in a chair.
 - 2. Relax and let arms hang loosely.
 - 3. Breathe in slowly through the nose and push stomach muscles out.
 - 4. Let the air out very slowly and evenly through rounded lips (like whistling). Stomach muscles should be pulled in while breathing in. It should take 2-3 times longer to breathe out than in.
 - 5. Repeat until the child feels in better control.
- Muscle relaxation and tightening:
 - 1. Tighten muscles starting with the face and working down to the feet.
 - 2. Tighten each group of muscles for a count of 2 and then relax each group for a count of 4.
 - 3. At the end, relax all over for a count of 4.
 - 4. Continue to breathe while tightening the different muscles.
 - 5. Repeat this exercise 2 to 3 times.

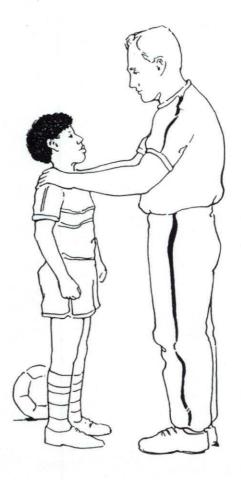
Talking to Others About Asthma



It is important to talk about asthma to others. Family, friends, and teachers or coworkers can give you a lot of support if they know the facts and how they can help.

When You Talk About Asthma to Others

- Do not make a big deal out of it, and do not encourage people to feel sorry for you.
- Explain that a person whose asthma is under control can perform just like other people.
- Explain that you know how to take care of asthma when you are having symptoms.
- Describe the steps you take to prevent and control symptoms. Tell them what, if anything, you would like them to do to help.
- Choose the right time to tell each person about asthma. For instance,
 - —Tell teachers and coaches at the beginning of the school year.
 - —Tell friends and coworkers in private, and when you are not having symptoms.



From: "Teach Your Patients About Asthma"
National Institute of Health



Visiting the Doctor:

A Guide for Patients With Asthma

Before going for your visit, think about the following:

Your recent symptoms

- Are they better or worse since your last visit?
- Are they constant or do they come and go?
- Keep a diary of symptoms, peak flow rates, and what you think triggered the symptoms. Bring your diary to the doctor's office.

Your medications

- & Do the medications seem to be working?
- Are you feeling any side effects?
- Check on your supply of medications. How many refills are remaining?
- Bring medications with you to the doctor's office.

Your questions & expectations

- Keep a list of your questions for the doctor or nurse. Bring it to the doctor's office.
- What specific expectations do you have for the visit? For example, do you:
 - -simply want a checkup and prescription refill?
 - —want to talk about problems following the treatment plan at home? school? work?
 - —have specific questions or some fears or concerns to discuss?
 - -want to change medications?

At the doctor's office:

Your questions & expectations

- Let the doctor know about your expectations for the visit.
- Ask all your questions. Show your list to the doctor or nurse. You may want to write down the answers to refer to later.
- Be assertive. You have a right and a responsibility to understand answers to your questions.

Your recent symptoms

- Be sure you describe all your symptoms to the doctor, even if they seem unimportant to you.
- A diary of your symptoms can help you be specific in recalling what happened, when, where, and what you did (for example, which medication did you take?).

Your medications

- Review all medications, including:
 - -time and dose
 - -side effects
 - technique (eg, how to use a metered-dose inhaler or nebulizer)
- Review any instructions your doctor gives you. For example:
 - -environmental control
 - -exercise
 - —premedication/emergency medications
- Review prescriptions, including:
 - -how much is advisable to keep on hand
 - -the number of tablets or inhalers in each refill
 - -the number of refills
 - -the advisability of using generic drugs

Continued on following page



Tips:

- If you use a metered-dose inhaler, have the doctor or nurse observe you using it every time you visit the office. This helps make sure you continue using it correctly.
- Don't be embarrassed to bring up issues of cost and convenience.
- Let the doctor know if you think the treatment recommendations will be too hard or inconvenient to follow. Ask for choices. Work with your doctor to get the best plan for you.
- Bon't be afraid to think over important decisions (unless it is an emergency). Perhaps get a second opinion.

Your plan of action

- Do you know what to expect from your treatment? (Can you expect symptoms to get better, go away, stay the same, or be unpredictable? Can you participate fully in any activity you choose? Can you sleep through the night without symptoms?)
- Do you have written instructions for daily asthma management? Have you read and understood them before you leave?
- If any changes in your doctor's instructions were made:
 - —do you know why?
 - -do you know what to expect from these changes?
 - -do you know what side effects to look for?

- Do you know when to return?
- Under what circumstances are you expected to call the office or hospital between visits? Do you know how to call during the day/night/weekend?
- 55 Do you have a written emergency plan that includes:
 - -what medications to take
 - -where to go
 - -whom to call
- When you travel:
 - —do you carry your written medical information with you?
 - —do you know what medications you should take with you?
 - —do you know where/what kind of emergency care you should look for?
- —do you know about exposure to things that could aggravate symptoms?

Tip:

- Ask your doctor for:
- —written materials about your condition, such as pamphlets or books
- information about support groups or asthmaeducation classes

Looking ahead:

- Schedule regular visits to your doctor. Avoid waiting until the last minute to seek help. Periodic checkups help prevent acute episodes and problems with your medication plan.
- Sometimes your doctor may not allot enough time for all of the above. There are ways around this. You can call ahead and state you have a lot of questions and you want some extra time, or you can schedule a return visit. Ask if there is someone else in the office to talk with.

On the telephone:

- Know the doctor's office procedure for calling during the day/night/weekend.
- © Call whenever you think you need medical attention. Don't wait it out or be afraid to bother the doctor. Let the doctor or nurse help you decide if a visit is needed.
- Be clear about the reason for the call.
- Report symptoms and peak flow rates (use your diary).
- Report what and what time medication was taken. Have the medication by the telephone.
- Have your pharmacy's phone number ready.

Repeat back to the doctor your understanding of his/her instructions.

Prepared by Ginny Taggart, MPH, and Greg Newman, MPH (Georgetown University School of Medicine, Center for Interdisciplinary Research of Immunologic Diseases), and Laurie Smith, MD (Walter Reed Medical Center).

(Adapted from Grace Doherty, MD, Center for Asthma Management, Massachusetts Respiratory Hospital.)

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