## A DISEASE PROCESS MODULE:

## **UNDERSTANDING ASTHMA**





...Developing top-notch caregivers, one inservice at a time.





### **UNDERSTANDING ASTHMA**



We hope you enjoy this inservice, prepared by registered nurses especially for caregivers like you!

### **Instructions for the Learner**

If you are studying the inservice on your own, please do the following:

- Read through all the material. You may find it useful to have a highlighting marker nearby as you read. Highlight any information that is new to you or that you feel is especially important.
- If you have questions about anything you read, please ask your supervisor.
- Take the quiz. Think about each statement and pick the best answer.
- Check with your supervisor for the right answers. You need <u>8</u>
   <u>correct</u> to pass!
- Print your name, write in the date, and then sign your name.
- Email In the Know at <a href="mailto:feedback@knowingmore.com">feedback@knowingmore.com</a> with your comments and/or suggestions for improving this inservice.

## After finishing this inservice, you will be able to:

Name and describe the three main types of asthma.



List at least five triggers that can cause asthma symptoms.



Name at least four symptoms of asthma.



Name and describe the four levels of asthma.



Describe at least six ways you can help your asthma clients.

**THANK YOU!** 



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A Disease Process Module: **Understanding Asthma** 

### LIKE A FISH OUT OF WATER

Many people with asthma describe the sensation of an asthma attack as feeling "like a fish out of water."

If you've ever seen a fish flopping about on dry land, gasping for breath, then you understand the terror and physical pain one feels when an asthma attack occurs.

Fish breathe water - that's where they get their oxygen. A fish trying to breathe air is as crazy as a human trying to breathe water! It just can't happen. That's why you see the fish struggle, weaken and eventually die if oxygen is deprived too long.

During an asthma attack the airways swell and tighten, making it difficult to get enough air into the lungs. This means there is not enough oxygen to supply the rest of the body.

This feeling of being unable to get air into the lungs can cause fear and panic in a client if the symptoms are not fully understood. The fear and panic make asthma symptoms worse and can turn the attack into an emergency!

The word asthma comes from the Greek word for "wind" or "to

blow." Cases of asthma have been documented for centuries and, throughout history, there have been some strange treatments used to "cure" asthma, including:

- Herbs
- The blood of wild horses
- Caterpillars soaked in honey
- Tobacco
- Chicken soup
- Cold baths

Times have changed! So, keep reading to learn about asthma attacks, how to best treat them and how to keep your client calm in the midst of the crisis.

By the end of this inservice, you will know that while there is no cure for asthma, the symptoms can be controlled. You will gain a deeper understanding of the respiratory system and the changes that occur during an asthma attack. And, you will learn how people with asthma can live healthy and long lives with proper treatment and management.

## **WHAT EXACTLY IS ASTHMA?**

Asthma is a respiratory disease that affects the airways of the lungs. These airways carry air in and out of the lungs. When they become inflamed or irritated, the airways narrow—or become blocked—which makes it very difficult to breathe.

Asthma tends to be *chronic* which means that it continues over a long period of time — lasting months, years or even for a lifetime. Sometimes asthma can appear in childhood—then disappear for years—only to occur again in adulthood.

#### **SYMPTOMS OF ASTHMA**

- Coughing, coughing, and more coughing!
   Mucus may or may not be present.
- Wheezing or noisy breathing—like a whistling sound.
- Chest tightness and, possibly, chest pain.
- Shortness of breath.
- Feelings of air being trapped.

Symptoms of asthma can be *mild* to *severe*. Your clients may have only one symptom or many of them.

• Remember . . . not everyone feels the same way during an asthma attack.

Most asthma attacks start *slowly*. By keeping track of the symptoms, a person can learn to tell if an attack is coming on.

#### **SOME FACTS ABOUT ASTHMA**

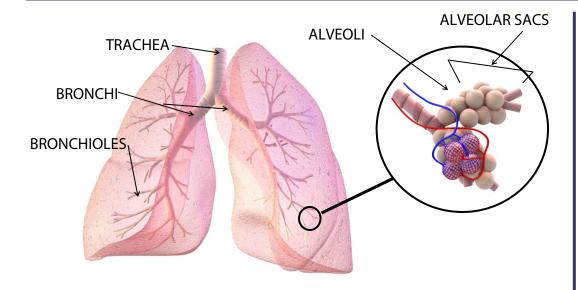
- Asthma is a common problem for millions of American children and adults. Anyone can have asthma!
- It usually occurs in children by age 5 and in adults in their 30's. Even older adults can develop asthma. About 10% of asthma clients are 65 years old or older.
- 70% of people with asthma have allergies, too.
   Most asthma is a result of allergies!
- African Americans and Hispanics seem to get asthma more often.
- Before age 10, asthma appears to be more common in boys than girls. But, that changes between the ages of 20 through 50, when women asthmatics outnumber the men 2 to 1.
- Asthma tends to be hereditary (runs in families) and it occurs more often in people who are overweight.
- Asthma causes children to miss more than 10 million school days and adults to miss about 3 million days of work a year!
- There is no cure for asthma, but there <u>are</u> ways to treat it. With the proper care and treatment, asthmatics can live very productive and happy lives.



Grab your favorite highlighter! As you read through this inservice, <u>highlight five things</u> you learn that you didn't know before. Share this new information with your supervisor and co-workers!



## **HOW DO THE LUNGS WORK?**



Each time a person breathes, air enters the nose and airways. It goes through the **trachea** to the lungs. Then, the air goes through the **bronchi** to the **bronchioles** which spread out like the branches of a tree. From there, millions of very small airways carry the air to tiny air sacs called **alveoli**. From these tiny air sacs, the air is absorbed into blood vessels.

- In the normal lung, air has no problem getting through to the air sacs because the muscles that wrap around the airways are very loose and thin. This gives the airways plenty of room to open up.
- When the airways are open, it's easy for air to move in and out of the tiny air sacs. In other words...it's easy to breathe!

- The airways in people with asthma tend to react strongly to certain substances like dust, mold, pet dander, cold air or even to stress by swelling or becoming inflamed.
- Once swelling begins, the body first reacts by producing more mucus. Then, the muscles that wrap around the airways tighten up or contract.
- The airways become smaller from the swelling and the tightening of the muscles and end up getting clogged with all that extra mucus.
- Sometimes there is so much mucus that it forms into sticky plugs!
- The swollen and clogged airways make it very hard to move air in and out of the lungs, so it's difficult to breathe!!!

#### **LUNG FACTS!**

- Together, the lungs in an adult weigh about 2.5 pounds.
- In babies, the lungs are one of the last parts of the body to develop.
- The lungs are large, cone-shaped and look like grayishpinkish balloons.
- The right lung is slightly larger than the left lung because the left lung shares some of the chest cavity with the heart.
- We lose half a liter (about 2 cups) of water a day through breathing.
- If all our lung tissue was spread out, it would almost cover a tennis court!
- The lungs aren't mirror image...the left lung has two lobes (sections) and the right lung has three lobes.
- There are 600-800 <u>million</u> alveoli in the adult lungs.

## WHAT CAUSES ASTHMA?

No one really knows what causes asthma. Doctors and researchers believe it is caused by a combination of genetics and environment.

Clients who have parents with asthma are much more likely to develop asthma themselves. So, this means most people who have asthma were born with it. But, not everyone will have symptoms.

The symptoms of asthma are brought on by "triggers" and everyone with asthma has unique and varied triggers.

An asthma attack is brought on by:

- Smooth muscle "spasms" of the airways.
- Increased mucus within the airways.
- Infection of the airways, such as bronchitis or sinusitis.
- Sensitivity to certain allergens or "triggers".



It can be difficult for doctors to diagnose asthma because it can seem similar to other illnesses.

#### OTHER ILLNESSES THAT CAN LOOK LIKE ASTHMA INCLUDE:

- COPD: This is a disease of the lung <u>tissue</u> (usually the air sacs in the lungs). You may have heard it called emphysema. People who have this disease get short of breath and may eventually require the use of oxygen. Most people with COPD were heavy cigarette smokers and smoked for a long time.
- **Pneumonia**: This is an infection of the lung tissue. Symptoms are very similar to asthma. In adults, it's usually caused by bacteria, and in children it's usually caused by a virus.
- **Bronchitis**: People with bronchitis have a problem with inflammation of the large airways inside the lungs. This leads to extra mucus production in the airways. It is usually caused by viruses or exposure to irritants.
- **Cystic Fibrosis**: This is an *inherited* disease in which the mucus glands produce an unusual amount of mucus all through the body. In children, this condition is very similar to asthma.



## UNDERSTANDING THE HYGIENE HYPOTHESIS

In the late 1990's researchers began looking at allergy and asthma rates in different parts of the world. What they found was amazing!

Researchers learned that children who live in "clean" places are MORE likely to develop allergies and asthma!

Children who are exposed to other children, allergens and animals early in life develop a stronger immune system.

According to this "hygiene hypothesis," a person whose immune system does not have enough practice fighting bacteria and viruses, overreacts to harmless substances like pollen, leading to a diagnosis of allergies or asthma!

- What do you think about the "hygiene hypothesis"?
- Share your thoughts with your co-workers!

## **DIFFERENT TYPES OF ASTHMA**

#### **ALLERGIC ASTHMA**

When asthma is caused by allergies, the symptoms result from exposure to certain "triggers". People have a reaction to certain materials called *allergens*. There are three main types of triggers:

- <u>Indoor Triggers</u>: house dust, dust mites, feathers, molds, pets, rodents, and other animals.
- Outdoor Triggers: molds, pollens, grasses, and flowers.
- Foods: milk, soy, eggs, additives and preservatives placed in the foods.
- Skin testing helps determine which allergen(s) are bothering a person.
   There is also an allergy blood test called RAST.

#### **NON-ALLERGIC ASTHMA**

Non-allergy asthma symptoms often result from an *infection* that settles in the chest. Usually, these infections are caused by a virus—not by bacteria. (Remember that antibiotics don't help viral infections. Antibiotics only kill bacteria.)

- Asthma symptoms may also come about from weather changes, cold air, exercise, and pollutants.
- Examples of pollutants include:
  - <u>Indoor Irritants</u>: household cleaners, household chemicals, and cigarette smoke.
  - Outdoor Irritants: ozone, carbon monoxide and strong odors such as fresh paint, mothballs, and perfumes.

#### **MIXED-TYPE ASTHMA**

- People with mixed-type asthma have symptoms from a combination of allergic and non-allergic asthma factors.
- Most people fall into this category! They have a little of both types of asthma.
- Mixed-type asthma makes the diagnosis even more difficult!

#### **EXERCISE INDUCED ASTHMA**

- This is a very common form of asthma.
- People are free of symptoms when they are at <u>rest</u>. When they run or exert themselves, asthma symptoms occur within 5 to 8 minutes.
- Running triggers an asthma attack in 80% of children who have asthma.
- Running is the <u>least</u> tolerated sport for asthmatics and swimming is the best tolerated.

#### **OCCUPATIONAL ASTHMA**

- This asthma results from work-related triggers.
   Only 2% of people with asthma have work-related asthma.
- Many people notice that their symptoms are better on days off from work! This makes diagnosis difficult because the symptoms are gone by the time they get to the doctor's office.
- Under the "Freedom of Information Act", it's possible to check on all chemical agents in the workplace by looking at the <u>Material and Safety Data Sheets</u>.

### OTHER FORMS OF ASTHMA

#### **NOCTURNAL ASTHMA**

Some people only have night-time asthma attacks.

#### **ASPIRIN INDUCED ASTHMA**

- Very few people (only 3 to 4%) have major asthmatic symptoms when they take aspirin or similar pain relievers like Motrin and Advil.
- These people usually have a very difficult time managing their

#### **WEATHER INDUCED ASTHMA**

Often, very cold weather triggers asthma. A windy day can trigger it, too.

#### STRESS INDUCED ASTHMA

- In some people, anxiety and stress factors can lead to asthma symptoms.
- Even laughing or crying can bring on symptoms!
- An asthma episode itself can cause panic which in turn may cause rapid breathing. This can make an attack even worse.

#### **CO-EXISTING ASTHMA**

- Some people have both asthma and COPD and this is called coexisting asthma.
- Often, aggressive treatment of the asthma will help a lot in improving the person's quality of life.

#### **LEVELS OF ASTHMA**

- **MILD ASTHMA**: Symptoms happen on and off during the day or night...no more than two times a week.
- **MILD PERSISTENT ASTHMA**: Symptoms occur more than two times a week and nighttime symptoms more than twice a month.
- **MODERATE ASTHMA:** Symptoms come and go every day *or* at least five nights a month.
- **SEVERE ASTHMA:** Symptoms are present *all the time* during the day and often at night.



for who have asthma.

What type of asthma does your client have?

What is your client's level of asthma?

What medication(s) does your client use to control asthma symptoms?

What "triggers" your client's asthma?

How can <u>you</u> help your client avoid the "triggers" you listed above?

## **HOW IS ASTHMA DIAGNOSED?**

Doctors diagnose asthma based on the symptoms the client is experiencing. A physical exam will be performed, along with a lung function test called **spirometry**.

Recent advances in technology have made it easy and affordable to put equipment needed to perform spirometry tests into the hands of Primary Care Doctors. Now, during a routine physical exam, many doctors can perform this simple test right in the office!

Spirometry testing is quick, easy and painless. The
person simply takes a deep breath and exhales into
a machine that is connected to a computer. The
computer gives the doctor an immediate report on
the client's ability to move air into and out of the
lungs.

Other tests that doctors may perform before diagnosing asthma include allergy testing and/or a chest x-ray to rule out other problems that can cause similar symptoms.

Once a diagnosis of asthma is made, the doctor will determine if the case is mild, moderate or severe and prescribe medications accordingly.

#### **BUT, TESTING DOESN'T STOP THERE!**

Doctors will also recommend clients keep a peak flow meter.

A **peak flow meter** is a small plastic tool that measures how well an asthmatic is breathing. It can tell a person when an asthma attack is coming— even before symptoms are felt. To use the peak flow meter, asthmatics should:

600

 Take a deep breath and put their mouth on the mouthpiece of the meter. Hold it vertically (straight up) and breathe <u>out</u> as deeply as possible. The final position of the indicator is the *peak flow*.



According to the American Lung Association, most cases of fatal asthma appear to be related to *under-medication*, that is, not taking enough medication. Many times, when people feel good, they think they don't need their medicines so they skip some doses. This can cause serious problems.

- **THE PROBLEM:** You are caring for a client who you visit twice a week. On the days you are there, she takes her asthma medication. However, she skips her doses on the days you are not there.
- When you question her about it she says, "I feel fine, I don't like to take medications if I don't need to."
- WHAT YOU KNOW: You know the prescription instructs the client to take the medication daily.
- You also know she is on a fixed income and worries about the cost of all her medications.
- GET CREATIVE: Think of 3 creative solutions you could suggest to this client to get her to take her medication as prescribed.
- TALK ABOUT IT: Share your ideas with your co-workers and supervisor and find out how they would solve the problem.

## **HOW IS ASTHMA TREATED?**

One of the best treatments is to **avoid** any triggers which set off asthma symptoms.

Another way is to *control* those triggers by using medications that open the airways and treat inflammation.

Asthma medications are offered in pill, liquid and inhaled forms. **Inhalers** are the most common form of medication.

There are two main types of medications for asthma, *maintenance* medication and *rescue* medication:

- MAINTENANCE MEDS are drugs that help with long-term control. These drugs are given to people who have moderate to acute asthma—to reduce inflammation in their airways and prevent future asthma attacks.
- RESCUE MEDS are drugs that help with <u>quick</u>
   relief. These medications are used right before
   exposure to a trigger or when asthma symptoms
   start to occur.

#### OTHER TYPES OF MEDICATION

- A **nebulizer** is a device that needs a compressed air machine. It allows the client to take the asthma medicine in the form of a *mist*. It is used mostly by very young children, clients with severe asthma, and those who have problems with
- Immunotherapy
  (allergy shots) are
  sometimes used to
  reduce sensitivity to
  triggers. (But...allergy injections are not a
  substitute for avoiding triggers or for following
  doctor's orders for treating asthma attacks.)

regular inhalers.

#### **PROPER INHALER USE**

Using an inhaler seems simple, but most people don't use it correctly. When it is used the wrong way, less medicine gets to the lungs. To use an inhaler, asthmatics should:

Shake inhaler. Breathe out all the way. Hold inhaler one to two inches in front of mouth. Breathe in slowly through mouth and press down on inhaler one time. Hold breath and count to 10.



 If using a spacer or holding chamber, first press down on inhaler, then wait five seconds before breathing in. (Spacers allow the medicine to get deep into the lungs. They are usually recommended for children.)

#### SIDE EFFECTS OF ASTHMA MEDICATIONS

When using medications, it is important to take the <u>correct</u> amount as prescribed by the doctor.

- If too much medication is taken, an overdose may occur causing seizures, dizziness or lightheadedness, fast heartbeat, and vomiting.
   Watch for these changes in your asthma clients!
- If not enough medication is taken, asthma symptoms may become worse and worse.

## **ASTHMA IN SPECIAL POPULATIONS**

#### **ASTHMA IN CHILDREN**

Asthma is the most common chronic childhood disease.

- About 6.8 million children under age 18 have asthma.
- 50% of people with asthma are under age 10.
- 75 to 80% of children also have allergies along with asthma.
- Any child who has non-stop coughing or lots of respiratory infections like pneumonia or bronchitis should be checked for asthma.
- Infants (under age 1) who have asthma may sound "rattle-y" when coughing and may have many "chest colds".
- Obvious wheezing may not be noticed until after age 2.
- When on proper medication to control their asthma, children should exercise and play sports—just like kids without asthma.
- Studies have shown that children with moderate to severe asthma will usually have it as adults, too.



"Asthma doesn't seem to bother me any more unless I'm around cigars or dogs. The thing that would bother me most would be a dog smoking a cigar!"

~ Steve Allen

#### **ASTHMA IN ADULTS**

About 8% of adults in America have asthma—but most have *mild* asthma.

- In women, pregnancy can sometimes cause asthma. If a woman already has asthma, pregnancy can cause it to worsen.
- About 1/3 of women with asthma will have worse symptoms at some point during pregnancy.
- If asthma is uncontrolled during pregnancy, it can result in premature births and lower birth weight of the baby due to the lack of oxygen during the pregnancy.
- Asthma that begins in adult years is often stubborn and doesn't respond to the usual medications.

#### **ASTHMA IN THE ELDERLY**

- Many people develop asthma at retirement age! More than 10% of people over the age of 65 have asthma.
- Asthma can be harder to diagnose and treat in this age group.
- Doctor's have found that older people are more likely to have side affects from asthma medicines. Recent studies show that older adults who take high doses of inhaled steroid medicines for a long time may increase their chance of getting glaucoma.
- Regular exercise is very important in managing asthma in the elderly. When people breathe deeply during exercise, it helps exercise the lungs—keeping them in good shape!

## **HOW SMOKING EFFECTS ASTHMA**

Cigarette smoke is a violent irritant for people with asthma. Just one puff of smoke contains over 4000 harmful chemicals! Smoking can have a devastating effect on the fragile lining of the respiratory tract of people with asthma.

Not only should people with asthma QUIT SMOKING, but they should also avoid places where they can be exposed to second-hand smoke.

Second-hand smoke is the smoke from a cigarette that someone else is smoking. In some cases, second-hand smoke can be more of an irritant to asthmatics than first hand smoke!

And, as if avoiding smoking and smokers was not hard enough, people with asthma can be effected by people who just have the smell of smoke on their clothing! This is known as third-hand smoke!

Some chemicals that can be found on the clothing of smokers include hydrogen cyanide (used in chemical weapons), butane (which is used in lighter fluid), and toluene (found in paint thinners).

#### THE "CILIARY ESCALATOR"

Tiny hairs (called cilia) line the healthy respiratory tract and help to move mucus from the lungs up through the trachea to the back of the throat. This is known as the "ciliary escalator." It's just like an escalator in a tall building, except mucus is the passenger!

The cilia constantly grab mucus and move it, like a wave, upward and out of your lungs. This is especially useful while you are asleep and not thinking about clearing your throat... the ciliary escalator does it for you!

When you feel the need to clear your throat, you give a little "eh hem" and the cilia help you remove the mucus. Most people just swallow it back down. That's completely normal.

In smokers, the cilia become gunked up, sort of like getting maple syrup in your hair. When this happens, the ciliary escalator can no longer move the mucus up from the lungs.

So, instead of just clearing the throat, the smoker has to cough, sometimes forcefully to get the mucus out. This is known as the "smoker's cough."

The smoker's cough is always worse first thing in the morning after a long period of inactivity.

## TOP 10 BENEFITS OF SMOKING

- #10 You take more sick days off of work.
- #9 You don't have to worry about losing money in the stock market since you have nothing left to invest.
- #8 Where else can you get a mini vacation like the one you get at the hospital?
- #7 When I get an x-ray of my chest I can connect the dots.
- #6 Your family will be able to take that cruise with your life insurance!
- #5 You don't have to worry about contributing to your old age pension.
- #4 To feel good, knowing no one else can get hurt from this cigarette, you're really taking one for the team.
- #3 Smokers are less likely to get Alzheimer's they don't get that old.
- #2 It's a cheap way to take a vacation, only 5 dollars to get to Marlboro country.

and the #1 benefit of smoking...

#1 If you get throat cancer, you get that cool voice-box with it!

~various contributors, from www.quitsmoking.com

## TIPS FOR CARING FOR CLIENTS WITH ASTHMA

#### **HELP WITH MEDICATIONS**

- Watch how your clients use their medications, especially inhalers.
   Let your supervisor know if you think they may be using them wrong.
- Encourage your clients to carry their asthma medications at all times—just in case they need them.
- Remind your clients to always take their asthma medications as prescribed by their doctor—no more and no less—even if they feel fine!
- Ask to look at your client's inhaler. If you see a "powder" around the
  hole where the medicine comes out, the inhaler needs to be
  cleaned. You do this by removing the medication canister from the
  mouthpiece and rinsing the mouthpiece and cap in warm water. It's
  best to do this in the evening so the mouthpiece can "air dry"
  overnight.
- If you notice that your clients are mixing their asthma medications with other prescription and/or over-the-counter medications, let your supervisor know immediately!
- Help your clients follow the rules in taking their medications! If asthma is well-managed with proper medications and a doctor's supervision, it's possible for your clients to lead normal lives.
- Remind your clients not to share their asthma medications with anyone.

#### **PAY ATTENTION TO SYMPTOMS**

- Watch your clients for early symptoms and respond quickly. This may help prevent a serious asthma attack.
- Help your clients keep track of their symptoms: how many of them, how bad they are, and when they occur. It is helpful if your clients can learn to tell when they are having an attack.
- Watch your clients for asthma symptoms when they are exercising. They may need to take extra medication. Ask your supervisor.





## There have been many Olympic athletes with asthma!

- Bruce Davidson—Olympic equestrian
- Kurt Grote— Olympic medalist in swimming
- Jackie Joyner-Kersee— Olympic medalist in track and field
- Bill Koch —Olympic medalist in cross country skiing
- Greg Louganis Olympic medalist in diving
- Amy Van Dyken Olympic swimmer



**<u>A</u>**void triggers that aggravate asthma in your clients.

<u>S</u>tay indoors during very cold weather, high winds, and high pollen counts.

<u>T</u>ake precautions to <u>prevent</u> attacks.

<u>H</u>elp remind your clients to take their medications as ordered!

<u>Manage asthma by following doctor's orders.</u>

**<u>A</u>**ct quickly if you witness an asthma attack. Call for help!

## MORE TIPS FOR CARING FOR CLIENTS WITH ASTHMA

#### **SMOKING AND ASTHMA**

- It is very important <u>not</u> to smoke near someone with asthma. Encourage your clients and their family members not to smoke at all.
- If your client is using oxygen, make sure the equipment is being used correctly. Call your supervisor if the client seems to need help.

#### **NUTRITION AND ASTHMA**

- Eating well-balanced meals is very important.
   Encourage your asthmatic clients to eat properly.
- Staying hydrated is important, too. Encourage your asthmatic clients to drink plenty of fluids even in the winter.
- Some asthmatics are very sensitive to food additives and preservatives. Additives are chemicals added to our food on purpose for extra flavor, sweetness, and coloring. Preservatives are added to make our food stay fresh longer. If you cook for your clients, do your best to avoid serving them these things.

#### **ASTHMA AND ENERGY**

- Help your clients do the most important chores or activities first—when they have the most energy.
- Try not to let your clients with asthma do too much in one day. You can help them by asking what they want to do that day and then helping them decide what they can realistically get accomplished.
- Slow down... encourage your clients not to do things too fast. You can help, too, by not rushing them to hurry and finish up their activity. Have patience!



#### ASTHMA AND WEATHER

- Remember that cold weather and high winds can bring on asthma symptoms. Encourage your clients to take
  - your clients to take precautions such as wearing a scarf over their mouths and noses to warm the air before breathing in.
- Encourage your clients to dress in layers. This will help maintain body heat.



#### **AVOID TRIGGERS**

- Remain <u>calm</u> if you witness an asthma attack.
   Encourage your client to *breathe* and to take any prescribed asthma medication. Call for help!
- Encourage your asthmatic clients (children, too) to get a flu shot every year and a pneumonia vaccine as ordered.
- Help your clients control the triggers that irritate their asthma by encouraging them to <u>avoid</u> those triggers. You can help by checking their living areas for adequate ventilation (helps with strong odors), and cleanliness (gets rid of dust).
- If you dust and vacuum your asthmatic client's living area, try to do so when the client is in another room—away from the dust!
- Avoid wearing strong perfumes or using strongsmelling cleaning fluids around clients with asthma.
- Encourage them to keep their windows closed during allergy season and to use the airconditioning instead. Masks will help, too.



# intheknow caregiver training

## A Disease Process Module: Understanding Asthma

Are you "in the know" about asthma? <u>Circle the best choice or fill in your answer.</u>

<u>Then check your answers with your supervisor!</u>

1.	True	or	False

Doctors know exactly what causes asthma and can cure most cases.

#### 2. True or False

In the normal lung, airways are loose and thin.

#### 3. Fill in the Blank

The best sport or exercise for people with asthma is \_\_\_\_\_\_.

#### 4. True or False

Cold weather or a windy day can trigger asthma in some people.

#### 5. All of the following are ways to manage asthma, EXCEPT:

- A. Avoid exposing clients to known triggers.
- B. Encourage clients to take asthma medications as prescribed.
- C. Advise your client not to get a flu shot, it could trigger an asthma attack.
- D. Help your client get the most done early in the day, when energy is highest.

#### 6. True or False

It's a good idea to open the windows in the springtime to air out the house.

#### 7. Allergic asthma may be caused by:

A. Running. B. Perfume. C. Stress. D. Dust mites.

#### 8. True or False

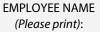
The "Hygiene Hypothesis" says that less people would have asthma if homes were kept cleaner.

#### 9. True or False

Wheezing and coughing are two common asthma symptoms.

#### 10. True or False

People with asthma should never be allowed to play sports or perform vigorous exercise.



DATF:		

- I understand the information presented in this inservice.
- I have completed this inservice and answered at least eight of the test questions correctly.

SUPERVISOR SIGNATURE:

Inservice Credit:				
Self Study	1 hour			
Group Study	1			

File completed test in employee's personnel file.