



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



A Disease Process Module for Nurse Aides:

Understanding COPD



Developing Top-Notch CNAs, One Inservice at a Time



A Disease Process Module:
UNDERSTANDING COPD

We hope you enjoy this inservice, prepared by registered nurses especially for nursing assistants 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 _____.
- Take the quiz. Think about each statement and pick the best answer.
- Check with your supervisor for the right answers. You need **8 correct** to pass!
- Print your name, write in the date, and then sign your name.
- Keep the inservice information for yourself and turn in the quiz page to _____ no later than _____. Show your Inservice Club Membership Card to _____ so that it can be initialed.
- Email In the Know at feedback@knowingmore.com with your comments and/or suggestions for improving this inservice.

THANK YOU!

After finishing this inservice, you will be able to:

Discuss the anatomy of the lungs and the importance of oxygen in the body.



Discuss the definition of COPD—including chronic bronchitis and emphysema.



Describe the four main symptoms of COPD and list at least four other symptoms.



List at least three factors that can cause COPD.



Describe at least six ways you can help your COPD clients in their everyday lives.



Developing Top-Notch CNAs, One Inservice at a Time

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A Disease Process Module: Understanding COPD

TAKE A DEEP BREATH!

Take a slow deep breath in through your nose. Expand your lungs. Hold it for the count of five. Now slowly blow the air out through your mouth.

Breathe in and breathe out. You don't even have to think about it when you are healthy and strong.

Breathing in brings healthy oxygen into your body. Breathing out removes poisonous carbon dioxide from your body.

Oxygen in your lungs is picked up by your blood. Oxygenated blood is pumped by the heart to every cell in the body.

- Your brain needs oxygen to think, dream, invent, talk, love, and sing!
- Your muscles need oxygen to walk, run, lift, wave, hug, and dance!
- Every organ in your body needs oxygen to function properly.
- Taking a slow deep breath even has the power to relax you when you're feeling, anxious, fearful, or stressed out!



So, what do you think happens to people who simply cannot take a deep breath?

Lung damage that results from COPD does just that. It makes the vital act of breathing extremely difficult, sometimes painful and completely inefficient.

The result is decreased brain function leading to dementia, muscle wasting, organ failure, and anxiety.

COPD is the fourth leading cause of death in the United States right now, but is expected to become the third leading cause of death by 2020.

There is no cure for COPD. But, there are some things you can do to help. Keep reading to find out how COPD damages the body, how it is treated and managed, and how you can best help your client deal with the changes that come with a diagnosis of COPD.

WHAT IS COPD?

THE TERM COPD STANDS FOR:

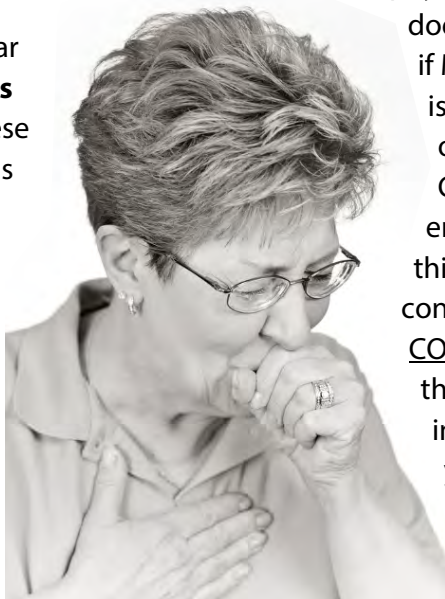
Chronic
Obstructive
Pulmonary
Disease

COPD is a chronic disease, which means that it continues over a long period of time. And it's obstructive, because it blocks the passage of air, making it hard to breathe. COPD is a pulmonary disease, which means that it affects the lungs.

COPD is also a *progressive* and *irreversible* disease. This means that it gets worse over time and that a person with COPD won't get better (once there has been damage in the lungs).

COPD is made up of two similar conditions: **chronic bronchitis** and **emphysema**. Both of these lung conditions keep the lungs from working properly—and prevent a person from breathing normally.

Many clients with COPD have both chronic bronchitis and emphysema *at the same time*—so their lungs have double the trouble!



- **CHRONIC BRONCHITIS** is an inflammation inside the breathing tubes in the lungs. When these tubes get inflamed, air has a hard time passing through. A thick mucus is produced and coughed up.
- **EMPHYSEMA** affects the tiny air sacs in the lungs. These sacs lose their elasticity—like an overused rubber band. Stale air gets trapped in them, making it harder to breathe. This causes shortness of breath and a cough.

Remember...most clients with COPD have some combination of *both* chronic bronchitis and emphysema. But, it

doesn't really matter if Mr. Smith's COPD is mostly bronchitis or Mrs. Brown's COPD is mostly emphysema. Just think of these two conditions as COPD—and follow the tips given in this inservice to help your clients live a higher quality of life.



OTHER PROBLEMS CAUSED BY COPD:

COR PULMONALE:

- With COPD, the heart has to work very hard to pump blood into the narrow passages of the lungs. After a while, the heart becomes enlarged. Clients with cor pulmonale may get tired easily, have an abnormal heart beat and suffer from chest pains.

PNEUMONIA AND OTHER CHEST INFECTIONS:

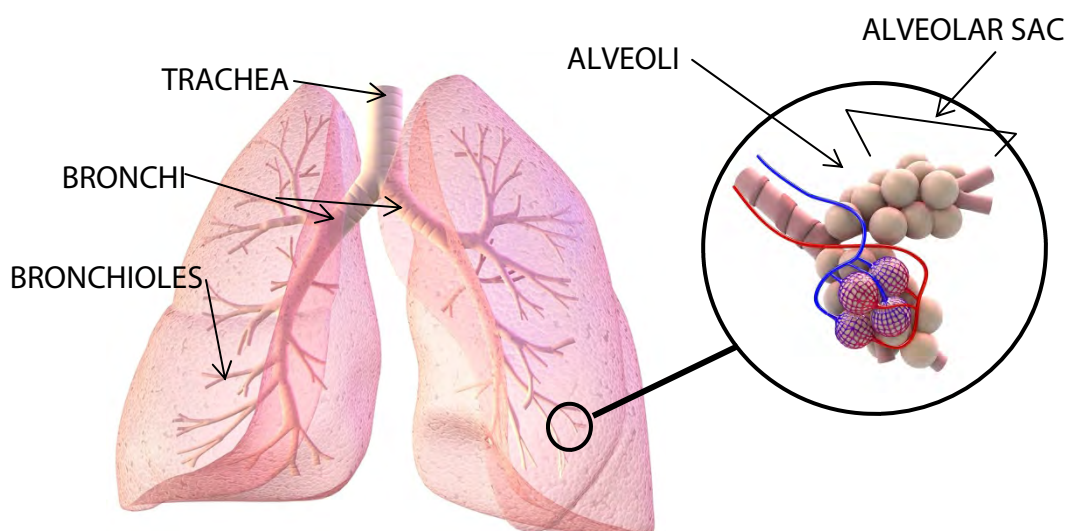
- Pneumonia is an infection of the lung tissue. When lungs have been damaged by COPD, they can become infected easily.

WHAT'S NEW?

Grab your favorite highlighter! As you read through this inservice, **highlight five things** 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 a *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!

People with COPD aren't able to use their breathing muscles properly. In addition, their lungs don't work very well!

- The walls of the small airways and the tiny air sacs become damaged and less flexible.
- The airway walls thicken, causing large airways to shrink and small airways to become totally blocked. In addition, mucus plugs up the airways and tiny air sacs throughout the lungs.
- "Stale" air gets trapped in the lungs. This stale air takes up room that should be used by fresh air.
- These blockages make it really hard for air to move in and out of the lungs.
- As a result, people with COPD have trouble getting the oxygen that their bodies need.

A FEW LUNG FACTS

- The lungs are large and cone-shaped. They look like giant sponges and are grayish-pink in color.
- In adult lungs, there are 600-800 *million* tiny air sacs (called alveoli).
- Together, both your lungs weigh about 2.5 pounds.
- Lungs move *all the time*.
- If a person's lung tissue was spread out, it would just about cover a tennis court!
- The right lung has three sections—but the left lung has only two.
- The average adult breathes about 25,000 times every day. By the age of 70, the average adult will have taken at least 600 million breaths!

SYMPTOMS OF COPD

Early symptoms of COPD often start out mild and do not cause much concern. Over time, as the symptoms worsen and fail to resolve, lung damage begins to occur.

There are four *main* symptoms of COPD:

1. **CHRONIC COUGH** that may produce mucus. This is usually the earliest symptom. It can start out mild, then gradually increase in frequency and produce more and more mucus. (See section on "Smoker's Cough.")
2. **SHORTNESS OF BREATH** with minimal exertion. This usually develops later on and continues to get worse as COPD progresses.
3. **CHEST TIGHTNESS.**
As lung damage progresses, breathing becomes more difficult. There may be a feeling of painful tightness in the chest.
4. **WHEEZING** or a whistling sound that occurs while breathing is common if the airways become swollen or blocked.



OTHER SYMPTOMS OF COPD MAY INCLUDE:

- Fatigue, depression, and anxiety.
- Weight loss.
- Enlarged chest (also called "barrel chest").
- Too little oxygen can cause COPD clients to have a bluish color to their skin, lips, and nails.
- Headache, irritability, and problems thinking and learning.

WARNING SIGNS THAT COPD IS GETTING WORSE INCLUDE:

- *More or less* mucus than usual.
- A change in the color of the mucus—from clear to brown, yellow, or green.
- A change in the stickiness of the mucus—from less to more sticky.
- Blood in the mucus.
- Increased shortness of breath.
- Ankles that swell up suddenly.
- An unusual gain or loss of weight.
- Being extra tired.
- Having morning headaches, dizzy spells, restlessness, and sleeplessness.

WHAT IS A SMOKER'S COUGH?

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 elevator*." It's just like an elevator in a tall building, except mucus is the passenger!

When you feel the need to clear your throat, you remove this mucus. Most people just swallow it back down. It's completely normal.

Smoking damages the cilia by gunking it up, sort of like getting maple syrup in your hair. When this happens, the ciliary elevator can no longer remove the mucus from the lungs.

So, instead of just clearing the throat, the smoker has to cough, sometimes forcefully, to get the mucus out.

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

WHAT CAUSES COPD?

COPD is usually caused by long term exposure to things that irritate the lungs, and over time, cause irreversible damage.

- **SMOKING:** By far, cigarette smoking is the main cause of COPD! In the United States, 85 percent of COPD cases are related to smoking.
- **SECONDHAND SMOKE:** Non-smokers who are exposed to secondhand smoke are also at risk. Living with a smoker, or working in an enclosed area like a restaurant or bar that allows smoking increases the likelihood of developing lung infections and bronchitis which can lead to COPD.
- **CHEMICALS AND DUST:** COPD can also be caused by occupational exposure, meaning that some people get COPD from their workplace. Chemical fumes and organic dusts (like grain, cotton, wood, metal, and coal dust) can contribute to COPD.



- **AIR POLLUTION:** For smokers, air pollution can be a factor, too. It can lead to the development of COPD and it can make the symptoms of COPD worse.

- **HISTORY OF INFECTIONS:** People who have a history of childhood respiratory infections like colds,

pneumonia, or acute bronchitis may be more likely to develop COPD.

- **HEREDITY:** Heredity also plays a role in COPD. There is a type of emphysema called AAT (*alpha 1 antitrypsin*) that runs in families. AAT is a substance that helps protect the lungs. Some people are born *without* AAT and when this happens there is a good chance that they will have emphysema. The number of Americans with AAT emphysema is small.

PREVENTION IS THE KEY

Having COPD impacts your client's life in many ways. Most COPD patients say their condition limits their ability to work, do household chores, and sleep.

Since there is no cure for COPD, the best defense is prevention!

Encourage your clients who smoke to quit! The benefits of quitting are immediate!

Most public places like restaurants and hospitals are now smoke-free because of laws that were put in place to protect people from secondhand smoke.

Laws banning TV and magazine ads that promote cigarettes have reduced the number of young people who ever start smoking.

OSHA protects people who work with harsh chemicals by requiring protective gear like masks and ventilation while on the job.



Most smokers are NOT concerned about the effects of smoking on their health even though nearly half of all smokers have one or more symptoms of COPD.

- Why do you think smokers are in denial about the effects of smoking on their health?
- Why do you think it is so hard for smokers to quit smoking?

THE FACTS ABOUT SMOKING

Have you ever wondered exactly what's in a cigarette? Believe it or not, cigarettes and cigarette smoke contain over 4000 chemicals! At least 63 of these chemicals are known to cause cancer in people. Here are just a few of the ingredients that you'll find in just one cigarette.

- **Acetone**—a chemical used in nail polish remover.
- **Ammonia**—a chemical used in cleaning solutions. (It's added for flavor.)
- **Lead**—a very poisonous metal. It can cause serious damage to the brain, kidneys, red blood cells, and nervous system.
- **Nicotine**—the chemical that makes cigarettes so addictive. Many believe that it's more addictive than heroin!
- **Formaldehyde**—a chemical that's used to preserve dead bodies. Formaldehyde is known to cause cancer and other problems.



- **Carbon Monoxide**—an odorless, colorless toxic gas. In small doses, it causes increased heart rate, and shortness of breath.
- 90% of people with smoking-related diseases began smoking when they were teenagers.
- The CDC (*Centers for Disease Control and Prevention*) rates secondhand smoke as the most dangerous indoor pollutant.
- Approximately 4.5 million teenagers in the United States are cigarette smokers.
- Around 22 million American women are smokers.
- Smoking during pregnancy causes babies to be born too small and/or too early. It's also responsible for about 10% of all infant deaths.
- According to the American Lung Association, over 430,000 Americans die each year from smoking-related diseases.
- Secondhand smoke kills at least 3,000 non-smokers every year.

FAMOUS PEOPLE WHO DIED FROM SMOKING-RELATED DISEASES

- **Desi Arnaz**—actor on "I Love Lucy" (died in 1986 of lung cancer)
- **Humphrey Bogart**—actor (died at age 57 of cancer of the esophagus)
- **T.S. Elliot**—poet and writer (died in 1965 of emphysema)
- **Betty Grable**—movie actress (died at age 56 of lung cancer)
- **Amanda Blake**—actress on "Gunsmoke" (died at age 60 of throat cancer)
- **Babe Ruth**—baseball player (died at age 53 of nose/throat cancer)
- **Walt Disney**—animator (died at age 65 of lung cancer)
- **Andy Kaufman**—actor (died at age 35 of lung cancer)

The benefits of quitting are IMMEDIATE:

- After 20 minutes, blood pressure can return to normal.
- In 8 hours, oxygen levels return to normal.
- In just 48 hours, all nicotine is gone from the body.
- In 3 days, bronchial tubes relax and energy levels increase.



**DID
YOU
KNOW?**



WHAT'S IT LIKE TO HAVE COPD?

COPD develops gradually *over a long period of time*. It usually takes years of cigarette smoking before symptoms become noticeable. Keep in mind that not everyone with COPD will progress in the same way...and the severity of symptoms can vary from person to person, too.

COPD might develop something like this:

- Jim started smoking cigarettes when he was 19. Now, he's 27. His wife wants him to quit smoking, but Jim hasn't noticed any symptoms of lung damage, so he keeps on smoking.
- At age 31, Jim starts to develop a chronic cough. Sometimes he coughs up a small amount of mucus.
- When Jim turns 40, he begins to notice some occasional shortness of breath. As the years go by, his shortness of breath gets worse and worse.



- When he turns 47, Jim finally sees a doctor who diagnoses COPD and starts Jim on some treatments. Jim notices a little bit of improvement at first—less coughing and fewer episodes of shortness of breath. He decides it's okay to continue smoking—just a few cigarettes a day.
- In his early 50s, Jim starts to slowly get worse. His COPD is progressing—in spite of medical treatments. Jim has repeated coughing attacks and constant shortness of breath. He loses his job and can no longer support his family.
- Now, each time Jim has a coughing attack, it takes longer and longer for him to feel better. (Unfortunately, his lungs suffered a lot of damage *before* he finally went to a doctor. This makes it harder to manage the COPD.)
- By age 55, Jim's damaged lungs barely work. He has to gasp for every breath of air. Jim dies at the young age of 56—leaving a wife and two teenaged children.

UNDERSTANDING THE THREE LEVELS OF COPD

1. MILD COPD

- Beginnings of a chronic cough.
- Excess mucus production.
- There may be no other early signs of COPD.

2. MODERATE COPD

- Shortness of breath after moderate exercise.
- Coughing happens more often and mucus production increases.
- Frequent respiratory infections like pneumonia.

3. SEVERE COPD

- Severe shortness of breath with even the smallest amount of exercise.
- Coughing continues to get worse and there is too much mucus.
- Respiratory infections get worse and tend to keep coming back.
- Skin may have a bluish color to it.
- Chest may get larger—taking on the shape of a barrel. A barrel chest occurs when the lungs stay overinflated because of poor air movement out of the lungs.

WHAT DOCTORS KNOW ABOUT COPD

The earlier that COPD is detected the better! Early treatment may help slow down the disease—at least a little bit.

Recent advances in technology have put the tools to detect lung damage, in its earliest stages, into the hands of Primary Care Doctors. Now, during a routine physical exam, many doctors can perform a simple test, called **Spirometry**, right in the office!

- Any person 45 years of age or older who currently smokes or recently quit should have a spirometry test performed, even if there are no symptoms.



- 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 health of the lungs.

Unfortunately, doctors say that many people ignore the warning signs of COPD. The symptoms are there, but people don't pay attention to them because they are so mild. For example, they may think it's *normal* to become short of breath as they get older. Or they may believe that their cough is just a little "*smoker's cough*"—and that it's not serious.

Because symptoms tend to be so mild, it can be very difficult for doctors to catch COPD early on.

So, most of the time, doctors diagnose COPD after the client's lung function has been cut in half! By then, much of the damage has been done.

Doctors look carefully for symptoms of COPD. After a complete medical exam, including questions about the client's health (like, "*Do you cough every day?*" or "*Do you ever feel short of breath?*") the doctor will most likely order certain tests:

- Pulmonary Function Tests (PFTs)** measure the amount of air the lungs can hold and how quickly air moves in and out of the lungs.
- A blood test called **Arterial Blood Gas (ABGs)** measures how good the lungs are at getting oxygen into the bloodstream.
- A **Pulse Oximetry** test also measures the amount of oxygen in the blood—but without using any needles. It uses light waves instead. The test is done by putting a special clip on a person's finger, earlobe, or forehead.
- Chest x-rays and CAT scans.** These tests show lung damage. They may not be helpful in the early stages of COPD.



Doctors often perform these tests on several *different* days. Then, the doctor compares the results to see if the diagnosis of COPD is correct.

A person with COPD will probably have these tests done regularly to check if the disease is getting better...or worse.

Researchers are still looking for better ways to detect COPD. Someday they hope to develop tests that can tell who is likely to get COPD. This would allow doctors to begin treatment before permanent damage occurs.

TREATMENT FOR COPD

So far, there is no *cure* for COPD, but there are several ways to help manage the symptoms.

If people with COPD follow a complete lung care program, it can help lessen their disability, reduce attacks, keep them out of the hospital, and maybe even help prevent some early deaths. But, no therapy can stop COPD from getting worse once the lungs have been damaged.

Home oxygen therapy can improve the quality of life for people with advanced COPD—and may help them survive longer. This treatment decreases shortness of breath, improves heart function and tolerance to exercise—and generally helps people feel and think better.

Oxygen requires a doctor's prescription and is considered a *medicine*. Oxygen usually comes in a tank or humidifier and reaches the client through a face mask or nose tube.

- Since tanks can hold only a few hours worth of oxygen, a machine called a *concentrator* can be useful. (A concentrator pulls oxygen out of the air. It's about the size of a regular TV.)
- There are portable liquid oxygen systems and tanks, too, which clients can carry over their shoulders or push in a cart.

Other medications used for COPD include:

- **Bronchodilators** help open the airways. *Inhalers* are the most common way for adults to get this medication.
- **Steroids** help reduce mucus production and inflammation of the airway walls. Your client might take steroid pills or use a steroid inhaler.



- **Expectorants** help loosen and get rid of mucus from the airways.
- **Antibiotics** help fight bacterial infections. They are usually given at the first sign of infection—when mucus changes from clear to yellow or green. There are many different types of antibiotics.
- **Diuretics** (sometimes called “water pills”) help the body get rid of extra fluid.
- **Digitalis** strengthens the force of each heartbeat.

Some other treatments include lung reduction surgery and transplant surgery. Lung reduction surgery removes the damaged areas of the lung so that the normal parts can function better. Transplant surgery involves putting the healthy lungs from a person who has died into the chest of a person with COPD.

Remember: the best treatment is to try to **prevent** the disease in the first place. One of the most important steps is to stop smoking! *Not smoking almost always prevents COPD from developing and quitting smoking often slows it down.*

Another way to treat symptoms is to avoid environmental hazards like pollution, second-hand smoke, strong odors, and weather changes. These hazards can make COPD worse.

Other treatments that help get rid of extra mucus include chest percussion (*lightly tapping the chest and back*), controlled coughing, and using special inhalers.

Special breathing techniques—such as pursed lip breathing—may also help lung function. (See *Breathing Activity Handout*.)

TIPS FOR HELPING YOUR CLIENT WITH COPD

HELPING WITH MEDICATIONS

Watch your clients when they use their inhalers. It's important that they know how to use them properly. Let your supervisor know if you think they may be using them wrong.

Using an inhaler seems simple, but you would be surprised at how many people forget to take off the cap! When an inhaler is used the wrong way, less medicine gets to the lungs. To use an inhaler, COPD clients should:

- Shake the inhaler for five to ten seconds and remove the cap. Breathe out all the way. Hold the inhaler one or two inches in front of the mouth (about the width of two fingers). Breathe in slowly and deeply through the mouth while pressing down on the inhaler one time. Hold their breath and count to 10 (if possible).
- If a spacer or holding chamber is being used, the opening of the spacer actually goes in the mouth (just between the lips). The medication is sprayed into the spacer. The client breathes in slowly and deeply for a count of 5, and then removes the spacer from the mouth and holds the breath for 10 seconds (if possible).

Ask to see your client's inhaler. If you notice a "powder" around the hole where the medicine comes out, the inhaler needs to be cleaned.

- Clean the canister 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 COPD clients are mixing their medications with other prescription and/or over-the-counter medications, let your supervisor know immediately! Mixing medications can cause unexpected and sometimes serious side effects.

OXYGEN SAFETY

- It's very important **not** to smoke near oxygen. 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.
- Encourage your clients to change the nose tubes (*nasal cannulas*) often, especially if the prongs become dirty or uncomfortable.
- If your clients have portable oxygen units, make sure they know exactly how much oxygen they have so that they don't run short during an outing.



Many people with COPD fear any type of exercise, believing that exercise will make symptoms worse. In fact the opposite is true! Regular, low impact exercise can actually help strengthen the lungs, improve endurance, and reduce anxiety.

- Recent research shows YOGA may be the perfect exercise for people suffering from symptoms of COPD. Yoga can be done sitting or standing. It involves slow fluid movements with controlled breathing.
- Talk to the nurse, doctor, physical therapist, and your client about adding yoga to the COPD treatment plan!

MORE TIPS FOR HELPING YOUR CLIENT WITH COPD

ACTIVITY/ENERGY CONSERVATION

- Encourage your COPD clients to control their breathing. It's helpful to use breathing control during physical activities to help reduce shortness of breath and fatigue. (See *Breathing Activity Handout*.)
- Encourage your clients to sit for as many activities as possible. Believe it or not, sitting uses 25% less energy than standing.
- Help your clients do their most important chores or activities *first*—when they have the most energy.
- Try not to let your clients with COPD do too much in one day. Ask them what they *want* or *need* to do that day and then help them decide what they can realistically get done.
- Remind your clients that you are there to help. Some tasks may be too hard for them to do alone or they may dislike doing something. You can do it for them and this will help them save some energy.
- When organizing your client's area, put items your client uses most often within easy reach—and keep them at waist or shoulder level.
- Let your clients know that it's best to alternate difficult and easy tasks...and to alternate activities with rest periods.
- Slow down and encourage your clients not to do things too fast. A slow, steady pace uses less energy. You can help, too, by not rushing them to hurry and finish their activity. Be patient.
- Encourage your clients to do one activity at a time and to use slow, smooth movements. Rushing could make them more uncomfortable.
- Suggest that your clients use "tools or gadgets" to help conserve energy. For example: Use long-handled grabbers to avoid reaching or bending over, and use small push carts to carry things around.

WEATHER-RELATED TIPS

- Remember that cold weather and high winds can be bothersome to a client with COPD. Encourage your clients to take precautions like wearing a scarf over the nose and mouth to warm the air before breathing in.
- Encourage your clients to dress in layers. This helps maintain body heat.
- Remind your clients to avoid air pollution. Encourage them to remain indoors if the air quality is poor. Even low amounts of ozone can worsen respiratory diseases.



You are caring for a 67 year old woman who has COPD. She becomes short of breath with very little activity and is becoming frustrated and depressed because she can't seem to do anything for herself anymore.

- You know there are certain times of the day when your client has more energy and endurance.
- How can you help? ***Think of three creative solutions*** to help with energy levels, depression, and discouragement.
- Share your ideas with your co-workers and supervisor.

MORE TIPS FOR HELPING YOUR CLIENT WITH COPD

NUTRITION

- Eating well-balanced meals is very important. Encourage your COPD clients to eat properly.
- If your clients experience shortness of breath during mealtimes, you can suggest that they: eat several small meals instead of three big ones; rest before eating; eat slowly and chew foods well; breathe evenly when chewing; take plenty of time to eat; and avoid hard to eat foods.
- If your clients don't feel like eating, you can suggest that they try: eating small amounts of high calorie foods; drink fluids after eating; and have liquid meals or soft foods.
- Staying *hydrated* is important, too. Encourage your clients to drink plenty of fluids. This is a good way to keep the mucus loose so that it can be brought up by coughing.
- If you cook for your client, remember to use the exhaust fan or make sure there is good ventilation in the kitchen.

EXERCISE

- It's important for your COPD clients to get some type of exercise—even if it's only a short, slow-paced walk.
- Remind your clients to check with their doctor before starting any type of exercise program.
- It's always a good idea for your clients to exercise in moderation—so they avoid doing too much.
- Be sure to remind your COPD clients to take rest periods during exercise time.
- Never let your clients exercise on a full stomach! It takes too much energy.

GENERAL SAFETY

- Encourage your clients to get a flu shot every year! People with COPD are more likely to get the flu and they will be sicker for much longer than someone who doesn't have COPD.
- Have your clients check with their doctor about getting a one-time pneumonia vaccination, too.
- Remind your clients to be cautious about being with people who are sick with colds or the flu. These infections are passed easily from one person to another.
- Avoid wearing strong perfumes or using strong-smelling cleaning fluids around clients with COPD.
- Many people with COPD also have allergies or asthma. If your clients suffer from allergies, try to be aware of the things that bother them—such as house dust, pollen, strong odors, cigarette smoke, and pets. Help them avoid these allergy “triggers.”
- Watch your clients for signs of breathlessness. If you see that they are short of breath, have them stop and rest in a comfortable position. Tell them to breathe in and blow out slowly through their mouths. (*See Breathing Activity Handout.*)
- Remember...encourage your clients and their family members not to smoke. Tell them that over one million smokers successfully quit the habit each year. Of course, it isn't easy to quit. Most smokers make five attempts to stop before they actually do it. But, there are plenty of products on the market to help, such as nicotine patches, nicotine gum, nicotine nasal spray, and nicotine inhalers. Offer praise and support when your clients quit smoking. (*And be a good example yourself by not smoking!*)



Developing Top-Notch CNAs, One Inservice at a Time

A Disease Process Module:

Understanding COPD

Are you “In the Know” about COPD?

Circle the best choice. Then check your answers with your supervisor!

EMPLOYEE NAME

(Please print):

DATE: _____

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

EMPLOYEE SIGNATURE:

SUPERVISOR SIGNATURE:

Inservice Credit:

<input type="checkbox"/> Self Study	1 hour
<input type="checkbox"/> Group Study	1 hour

File completed test in employee's personnel file.

1. True or False

People with COPD can be completely cured with medication.

2. True or False

Having COPD makes it difficult to move air into and out of the lungs.

3. True or False

It's normal for smokers to cough and is not a cause for concern.

4. True or False

Air pollution and inherited traits are the biggest causes of COPD.

5. A client in this stage of COPD may have a “barrel chest”:

- A. Stage 1: Mild COPD
- B. Stage 2: Moderate COPD
- C. Stage 3: Severe COPD
- D. Barrel chest is not a symptom of COPD.

6. True or False

Spirometry is a test that can detect COPD early, before damage occurs.

7. Proper use of an inhaler includes all of the following EXCEPT:

- A. Remove the cap.
- B. Inhale puff of medication slowly.
- C. Exhale immediately after puff.
- D. Keep canister clean.

8. True or False

It is unsafe for a client with COPD to do even mild amounts of exercise.

9. True or False

Drinking fluids and staying well hydrated keeps mucus thin and easier to cough up.

10. True or False

People with COPD are more likely to get the flu and they will be sicker for much longer than someone who doesn't have COPD.