

A DISEASE PROCESS MODULE:

UNDERSTANDING PNEUMONIA



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A Disease Process Module:

UNDERSTANDING PNEUMONIA

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:

Describe what happens in the lungs when someone has pneumonia.



Identify at least 6 common risk factors that make pneumonia more likely.



Apply at least 4 new measures that help prevent pneumonia in clients who are most at risk.



Monitor clients for typical and atypical symptoms of pneumonia and report observations right away so treatment can be started.



Discuss at least five ways you can help clients recover quickly from pneumonia without complications.




intheknow
CAREGIVER TRAINING

A Disease Process Module:
Understanding Pneumonia

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SADIE'S ILLNESS LINGERS

Sadie is a 68-year-old woman who lives at home with her adult daughter. She is a lifelong **smoker** with several **chronic health problems**.

One day, Sadie wakes up at 3:30 in the morning feeling sicker than she has ever felt before. She calls her daughter to the room. She has a **fever** of 102.3 but is **shivering**. She is **coughing** and having difficulty breathing. She complains of **chest pain** that gets worse with every breath.

They drive to the Emergency Department where Sadie is diagnosed with bacterial pneumonia. The doctor tells them that it was caused by a pneumococcal germ, which he explains is the most common cause of bacterial pneumonia.

The doctor starts antibiotics and orders oxygen for Sadie. Sadie is released from the hospital to recover at home. Her discharge instructions include:

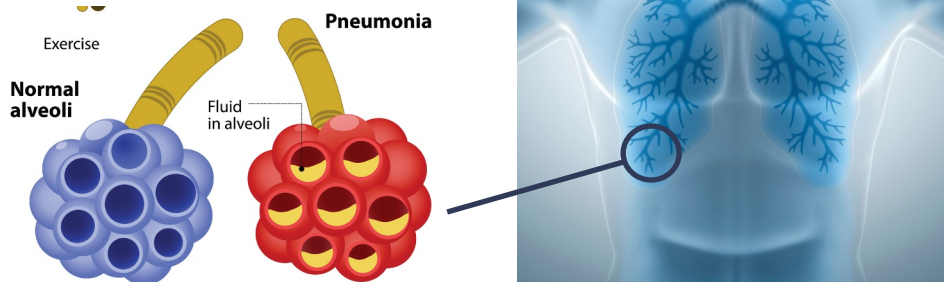
- Take all of your **antibiotics**, as prescribed, even if you start to feel better.
- Use **O2 @ 2L** via nasal cannula as needed for trouble breathing.
- **Don't smoke.** Tobacco damages your lung's ability to fight infection.
- Drink plenty of **fluids** to help loosen secretions and bring up phlegm.
- Get lots of **rest**. Have someone else do household chores.
- **Control your fever** with ibuprofen or acetaminophen.



Sadie does all the things on the discharge sheet—except one. She doesn't stop smoking. Five months later, Sadie is still feeling the effects of the illness. Since that admission, she has been diagnosed with bronchitis twice. She continues to require oxygen at home. She has a chronic, productive cough, trouble breathing, and is extremely fatigued.

In most cases pneumonia is a short-term, treatable illness. But people who are older than 65, smokers, and those with other chronic illnesses are at risk for developing other serious problems. Keep reading to learn all about pneumonia and how you can help your clients prevent and treat it.

THE ANATOMY OF PNEUMONIA



RISK FACTORS

WHO IS AT RISK?

Anyone can get pneumonia, but certain people are more at risk.

Those most at risk are people who:

- Smoke.
- Abuse alcohol.
- Have other respiratory problems, such as COPD, emphysema, or asthma.
- Are younger than 1 year of age or older than 65.
- Have a weakened or impaired immune system.
- Have recently recovered from a cold or the flu.
- Are malnourished.
- Have been recently hospitalized in an intensive care unit.
- Have any increased risk of breathing saliva, liquids, or food into the lungs because of trouble chewing and/or swallowing.

What is pneumonia?

Pneumonia is an infection in one or both lungs. Usually, the infection is caused by bacteria, but pneumonia can also be caused by a virus, fungi, or other germs. Rarely, pneumonia can even be caused by a parasite! Anything that can create an infection in the lungs can eventually cause pneumonia.

What's happens in the lungs?

Pneumonia-causing germs are inhaled into the lungs. These germs settle in the small air sacs called alveoli and start multiplying. The body tries to fight the germs by sending white blood cells to attack the invaders.

If the person is unable to fight off the germs, the sacs become filled with fluid and pus - causing pneumonia.

How does it affect the body?

You have difficulty breathing because oxygen is not able to enter these air sacs. Your bloodstream cannot carry enough oxygen to the rest of your body, so you feel weak and tired. In addition, since your body is fighting the infection, you have a fever.

The facts about pneumonia.

Healthy young people and adults usually recover from pneumonia with no problem, but it can be deadly for the very young, the elderly, and people with poor immune systems.

WHAT'S NEW?

Grab your favorite highlighter! As you read this inservice, **highlight five things** you learn that you didn't know before. Share this new information with your co-workers!





WHAT EXCITES YOU?

CAN WE PREVENT THE DEADLIEST FORM OF PNEUMONIA?

Influenza pneumonia results when a flu infection spreads to the lungs. Normally, the flu does not turn into pneumonia, but when it does, the results can be deadly.

This type of pneumonia kills up to 40 percent of people who contract it.

New research out of the University of Virginia School of Medicine is showing that we may be able to PREVENT this type of pneumonia!

Two drugs used to treat asthma and allergies are the key! Scientist found that early administration of the two asthma drugs, Accolate and Singulair, have the potential to prevent the infection. More research is needed, but everyone involved is excited for this new breakthrough.

WHERE, WHAT, AND HOW OF PNEUMONIA?

People can come down with pneumonia in a variety of settings, by different types of germs and through different actions. Think of it as the **WHERE, WHAT, and HOW** of pneumonia. The first important distinction doctors make when diagnosing and treating pneumonia is to start with the **WHERE** question.

WHERE did the person develop pneumonia?

- **Community Acquired Pneumonia (CAP).** This is pneumonia that spreads outside of the healthcare setting, such as in schools, movie theaters, or anywhere there are many people at one time. Generally, this type is not very serious and is the kind of pneumonia most people are familiar with. The majority of the time treatment is easy and recovery is quick, unless it strikes someone who has an existing lung or immune deficiency condition.
- **Health Care Acquired Pneumonia (HCAP).** This type of pneumonia is found in people who live in nursing homes or long-term care facilities. Symptoms may be more severe than CAP and hospitalization may be necessary. People with this type of pneumonia are usually older and may be frail with other chronic health problems.
- **Hospital-Acquired Pneumonia (HAP).** This is a pneumonia that occurs 48 hours or more after a hospital admission. HAP is the second most common hospital-acquired infection (after urinary tract infections). It is the most common cause of death among hospital-acquired infections. Here are some more facts:
 - Hospitals are more likely to have (and spread) drug-resistant bacteria. This means that pneumonia acquired in hospitals may be much more difficult to treat.
 - If a person is in the hospital for another serious health problem and then gets pneumonia on top of that, the chance of death is much greater.
- **Ventilator-Acquired Pneumonia (VAP).** This pneumonia also occurs in the hospital but, more specifically, it occurs 48 hours or more after a person has been placed on a ventilator. A ventilator is a machine that is used to help a patient breathe by giving oxygen through a tube placed in a patient's mouth or nose, or through a hole in the front of the neck. Germs can enter through the tube and go directly into the patient's lungs.
 - People who are on a ventilator are already critically ill and in the intensive care unit (ICU).
 - A person who develops VAP will have increased lengths of ICU hospitalization and between 20-30% may die.

WHERE, WHAT AND HOW OF PNEUMONIA — CONTINUED

WHAT GERMS CAUSE PNEUMONIA?

Pneumonia is not a single disease. There are over 30 different causes that fit into 5 categories:

1. **Bacteria.** Dozens of different types of bacteria can cause pneumonia.
 - ⇒ Streptococcus (pneumococcus) is the most common cause of bacterial pneumonia in adults and there is a vaccine available for it. (More about vaccines on page 10.)
 - ⇒ Tuberculosis pneumonia is a very serious lung condition caused by bacteria that are often drug resistant, and treatment can take more than a year!
2. **Virus.** Most respiratory viruses attack the upper respiratory tract, but some cause pneumonia. Most of these pneumonias are not serious and last a short time. But some can be serious.
 - ⇒ Viruses such as the flu and Respiratory Syncytial Virus (RSV) can eventually cause pneumonia, as these conditions can weaken the immune system and allow further infection of the lungs.
 - ⇒ Half of all pneumonia cases (especially among children) are believed to be caused by viruses. Most of these cases are not serious and do not last long. The treatment is easy: just get some rest!
3. **Fungus.** People with depressed immune systems are also more likely to get pneumonia from fungi like *Pneumocystis jiroveci*. In fact, fungal pneumonia is often the first sign of health complications among people with AIDS.
4. **Mycoplasma.** *Mycoplasma pneumoniae* is usually less severe and is the main cause of “walking pneumonia.”
5. **Parasitic.** Parasitic pneumonia is an infection of the lungs by parasites. It is an extremely rare cause of pneumonia.

HOW DO YOU GET PNEUMONIA?

The most common ways germs get into the lungs where they can cause pneumonia include:

- Breathing the germs into the lungs from the air.
- Breathing bacteria from the nose, mouth, and throat into the lungs (usually during sleep).
- Breathing in food particles, stomach juices, or vomit due to difficulty swallowing.

Most of the time, the body keeps germs from getting to the lungs with the help of filters in the nose and the airway. When germs get past the body’s filter system, it is probably because:

- **Weakened Immune systems.** Your clients will often be sick from another disease or illness, which makes it easier for bacteria and viruses to infect their lungs.
- **The germ is too strong.** There are some bugs out there that are hard to stop, even when all the precautions are taken. They include MRSA and other drug-resistant organisms.
- **Your client’s body is not capable of filtering air.** This is often the case with smokers and people with COPD. Their respiratory systems are often too damaged to filter out the germs.



THE SYMPTOMS OF PNEUMONIA

Pneumonia symptoms can range from mild to severe, depending on the type of pneumonia, and the age and health of the infected person.

The symptoms usually begin slowly. The first signs are similar to those of a light cold. The person may just have a runny nose and a sore throat. **Later, as the infection takes hold, you'll see:**

- **Wet Cough.** This is when mucus comes from the lungs when the person coughs. It can be greenish or yellow, or even bloody mucus.
- **Fever.**
- **Shaking chills.**
- **Shortness of breath.**

Some people (but not everyone) may also experience:

- **Sharp chest pain** (that gets worse with breathing or coughing).
- **Headache.**
- **Excessive sweating and clammy skin.**
- **Loss of appetite, low energy, and fatigue.**
- **Confusion** (especially in older people).

Is It Viral or Bacterial?

- **Bacterial Pneumonia.** Pneumonia caused by a bacteria generally causes high fevers. You may see temperatures as high as 105° F. In addition, the person may have profuse sweating, increased respirations, and increased pulse rate. Lips and nailbeds may appear bluish because of lack of oxygen.
- **Viral Pneumonia.** Viral pneumonia often looks like the flu, at first. You'll see a fever, a dry cough, headache, muscle pain, and weakness. Then, within 12 to 36 hours, you'll notice shortness of breath, wet cough, and like the bacterial type, there may be a high fever and blueness of the lips.

What about "Walking Pneumonia?"

"Walking pneumonia" is a non-medical term for a mild case of pneumonia. It can be caused by a virus or a bacteria. Symptoms are usually mild. Sometimes people might not even notice they are sick! Most people will be able to continue with normal daily activities, that's why it's called "walking" pneumonia! The symptoms can be a low fever, slight cough, and shortness of breath. It often comes on gradually and recovery is quick.



CONNECT IT!

WHEN SYMPTOMS ARE NOT TYPICAL

Think about someone you know who has had pneumonia. What were the symptoms?

Were the symptoms typical (like those described on this page)? If not, there may be a reason!

Did you Know? Children and the elderly may have none of the classic symptoms of pneumonia such as the wet cough.

- In infants, pneumonia can cause poor feeding, a fever, and baby "grunting" (a kind of cough for an infant).
- In the elderly, a common sign of pneumonia is a low temperature! Also, since the lungs can't provide adequate oxygen to the brain, you may see confusion and delirium from the infection.



THE NEXT STEP!

HOW WOULD YOU HELP SADIE?

Remember Sadie from the beginning of this module? She had lingering problems after a bout of pneumonia.

What would you do if Sadie was your client? How might you help her get better?

You suggest Sadie cut back or even quit smoking, but she tells you she doesn't believe that smoking is the problem. She explains that smoking actually makes her lungs feel better. What will you tell her?

Discuss this situation with your co-workers and find out what they would do.

HOW IS PNEUMONIA TREATED?

Treatment for pneumonia depends on the type and severity of the infection. The goal is to cure the infection and prevent complications. Most people can be treated at home. Here's what doctors recommend:

- **Drink plenty of fluids.** This helps to loosen mucus so it is easier to cough it up and out!
- **Get lots of rest.**
- **Control fever.** Ibuprofen or acetaminophen can help reduce fevers.
- **Take anti-infective medication.** Bacterial pneumonia will require antibiotics. Sometimes doctors will prescribe anti-viral medications for viral pneumonia.
- **Don't smoke.** Tobacco damages your lung's ability to fight infection.
- **Additional treatments.** In some cases, the person may require oxygen, medication to ease chest pain and/or medication to provide relief from severe cough.

Sometimes, being treated at home is not enough. People are more likely to be admitted to the hospital for pneumonia if they:

- Have another serious medical problem.
- Have severe symptoms.
- Are unable to care for themselves at home.
- Are under 1 year of age or older than 65.
- Have been taking antibiotics at home and are not getting better.

POSSIBLE COMPLICATIONS OF PNEUMONIA

Older adults or very young children, people with weakened immune systems, and people with chronic health conditions may suffer from complications of pneumonia. Possible complications include:

- **Respiratory failure.** This is a medical emergency that requires a breathing machine or ventilator.
- **Sepsis.** Sepsis is a complex condition that happens when the body's immune system over-reacts to an infection. There is uncontrolled inflammation throughout the body, which may lead to organ failure.
- **Acute respiratory distress syndrome (ARDS).** This is a severe form of respiratory failure.



YOU CAN HELP PREVENT PNEUMONIA

- **Observe Your Clients.** Because you spend so much time with your clients, you may be the first person to notice changes that signal the onset of pneumonia. Keep in mind: any respiratory changes that linger for two or more days should be reported to your supervisor immediately.
- **Protect Your Clients from Illness.** Chances are, your clients are either elderly and/or weakened by illness or surgery. This puts them at high risk for pneumonia. If you notice that friends or family members seem sick with a respiratory illness, don't be shy about asking them to wash their hands frequently and to cough into a tissue or their sleeve.
- **Handwashing.** As you probably know, the number one way to stop the spread of any infection is with proper handwashing. Wash your hands often, according to your workplace policy or use alcohol-based sanitizer if a sink is not readily available.
- **Help Your Clients Become Non-Smokers.** Smokers are more vulnerable to lung infections because their natural defense against bacteria is worn down. A smoker's lungs and windpipe lack the hair-like cells that catch germs. This puts them at a higher risk for developing pneumonia. Encourage your clients and anyone close to them to cease smoking. *(There's more about helping clients quit smoking on page 11.)*
- **Encourage Vaccinations.** Because pneumonia can develop as a complication of the flu, it is important for both you and your clients to get the annual flu vaccine. There is also a shot for the most common bacterial pneumonia. *(Learn more about important vaccines on page 10.)*
- **Provide Frequent Mouth Care.** Have you heard that there is a direct link between proper mouth care and pneumonia? Research has shown that providing oral care to people who are unable to do it themselves helps reduce their risk for pneumonia infection. By removing bacteria from the mouth, there is less chance of it entering the lungs.
- **Promote Healthy Living.** Pneumonia prevention is easier if the immune system is functioning normally. The easiest way to have a healthy immune system is to be in good overall health. Encourage your clients to eat right, get adequate rest, and to maintain a reasonable weight. In addition, light exercise has many benefits, including assisting with weight control and giving the immune system a boost.



THINK ABOUT IT!

The (WHO) World Health Organization reports that every year, 1,800,000 children under 5 years old die from pneumonia worldwide.

Pneumonia is identified as a "forgotten killer of children" by the United Nations Children's Fund (UNICEF) and WHO.

These organizations estimate that by giving out medication to the worst affected areas, almost half of these deaths could be avoided.

The cost for the medicine is estimated at \$600 million dollars.

Should something be done? Of course! ***But who should pay for it?***

The areas that need the most help are the poorest areas of sub-Saharan Africa and South Asia.

Discuss the topic as a group and come up with an answer. Does anyone disagree? Why?

HOW CAN YOU HELP CLIENTS WITH PNEUMONIA?

General Recovery Tips

- **Encourage Fluids.** Being hydrated helps recovery by loosening and thinning the mucus in the lungs.
- **Cough it out!** If you notice clients trying to hold back their cough, explain to them that coughing is the body's way of clearing the lungs of mucus. So, encourage them to cough. If they complain that coughing keeps them from sleeping at night, let your supervisor know. They need to balance clearing the lungs with getting enough rest!
- **Report fevers.** Fevers can be controlled with medication. Report any abnormal temperature reading to your supervisor so treatment can be ordered.
- **Rest, rest, rest!** Try to allow the client as much rest as possible. If rest is ignored, the infection may worsen and recovery will take longer.

Chest Therapy

If required, you might be ordered to help with, or monitor, chest therapy. Chest therapy includes:

- **Incentive Spirometry.** Your client might be given a device similar to the object in this picture. A spirometer is a plastic tube with a measuring canister. It improves breathing and loosens mucus. Watch your client inhale as quickly and powerfully as possible through the tube, and take note of the measurement. The higher the amount, the better your client's lung capacity. Share praise with the client and encourage regular use of a spirometer.
- **Breathing.** Encourage the client to take deep breaths, inhaling and exhaling as much and as deeply as possible. This will promote coughing.
- **Coughing.** Encourage coughing and make sure there is a container or tissue nearby that your client can use for sputum collection. Notify your supervisor if you see blood in the sputum.



Nutrition

- Eating well-balanced meals is very important. Encourage your clients to continue to eat properly as they recover from pneumonia.
- 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 (instead of filling up with fluid before meals); or have liquid meals (like a smoothie) or soft foods.
- 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 clients to get some type of regular exercise—even if it's only a short, slow-paced walk. (Of course, you need to follow each client's plan of care regarding their activity limitations.)
- Be sure to remind your clients to take rest periods during exercise time, especially if they become short of breath.
- Never let your clients exercise on a full stomach! It takes too much energy.

General Safety

- Remind your clients to be cautious about being around people who are sick with colds, the flu, and especially pneumonia. These infections are all passed easily from one person to another.
- Avoid wearing strong perfumes or using strong-smelling cleaning fluids around clients with pneumonia. Their respiratory systems are already compromised and strong odors may make them cough or feel short of breath.





GET OUT!

THINK OUTSIDE OF THE BOX!

Working with clients in the home often requires coming up with creative solutions to uncommon problems.

THE PROBLEM: You are caring for 67-year-old Mrs. Sinclair who has pneumonia. She becomes short of breath quickly with activity and is becoming frustrated and depressed because she can't seem to do anything for herself anymore.

WHAT YOU KNOW: You know there are certain times of the day when your client has more energy and endurance.

GET CREATIVE: Think of three creative solutions to help Mrs. Sinclair with her energy levels, depression, and discouragement.

TALK ABOUT IT: Share your ideas with your co-workers and supervisor and find out how they would solve the problem.

SPOTLIGHT: ASPIRATION PNEUMONIA

Aspiration pneumonia is a type of pneumonia that is not caused by a germ. It is caused by breathing food, fluids, or vomit into the lungs.

⇒ Aspiration pneumonia accounts for as much as 15 percent of pneumonia cases acquired outside of hospitals.

Who is at risk for aspiration?

- Clients who have had a stroke.
- People with missing teeth, no teeth, or poorly fitting dentures.
- Clients who are unable to get out of bed (eating in a reclined position).
- People who are in a coma.
- People who “pass out” after drinking large amounts of alcohol.
- People with dysphagia (problems with swallowing).

What are the symptoms of aspiration pneumonia?

The symptoms are similar to other types of pneumonia. They include:

- Chest pain
- Shortness of breath, wheezing
- Fatigue
- Cough, possibly with green sputum, blood, or a foul odor.

How can you help prevent aspiration pneumonia?

- Whenever possible, have clients sit in an upright position for meals. Sitting in a chair at a table is best.
- Monitor for any signs of coughing or choking during meal times.
- If your clients starts to cough while eating, stop the meal. Allow him time to cough as much as he needs.
- Never offer a sip of water (or any other fluid) while the person is coughing. The fluid can easily be sucked into the lungs.
- Report immediately if your client has an episode of coughing or choking during mealtimes. He will need to be monitored closely for the next few days for signs and symptoms of aspiration pneumonia.
- For clients who need your assistance with feeding, only fill the spoon about half full. Place the food on the center of the tongue, using a slight downward pressure. Allow time for your clients to chew and swallow each bite.
- Always check for “pocketing” of food (in the cheeks) after each bite and when the meal is over.
- Keep clients sitting upright for at least 20 minutes after eating.

THE IMPORTANCE OF VACCINES

There are two main vaccines that help prevent infection by some of the bacteria and viruses that can cause pneumonia. They are the flu shot and the pneumococcal vaccine.

What is the Pneumococcal Vaccine?

The pneumococcal (pronounced noo-mo-cock-el) vaccine prevents diseases caused by a bacteria known as the Streptococcus pneumoniae bacteria. This dangerous bacteria can lead to serious infections of the lungs (pneumonia), blood (bacteremia), and covering of the brain (meningitis).

The CDC recommends vaccination with the pneumococcal vaccine (PPSV23 or Pneumovax23®) for:

- All adults 65 years or older.
- People 2 through 64 years old who are at increased risk for disease due to certain medical conditions.
- Adults 19 through 64 years old who smoke cigarettes.

Why do seniors need this vaccine?

Pneumococcal diseases are responsible for the highest rates of death among elderly people who have other chronic illnesses such as lung, heart, and kidney disease, diabetes and alcoholism, or are living in special environments such as long-term care facilities.

How is it given?

The vaccine is recommended as a one time injection for everyone over the age of 65. However, a second dose may be needed if the first dose was given before the age of 65 or longer than 5 years ago.



Are there any side effects?

About half of people who get this vaccine have mild side effects, such as redness or pain where the shot is given. Less than 1% develop a fever, muscle aches, or more severe local reactions.

Why is an annual flu shot so important?

The flu often can lead to pneumonia, especially in older adults or in people who have other long-term (chronic) diseases. So, getting the flu shot protects against the flu and pneumonia!



TALK ABOUT IT!

WHY AREN'T MORE SENIORS VACCINATED?

Despite the safety and effectiveness of vaccines for the flu and pneumonia, vaccination rates among people over age 65 remains low.

- Just over half (about 65%) of seniors receive a flu shot every year.
- About 61% of adults in this age range have received the pneumonia shot.

Why do you think this rate is so low?

What can you do to encourage your clients to get vaccinated?

Discuss your thoughts with your supervisor and co-workers. Find out what they think!



FIVE KEY POINTS!

REVIEW WHAT YOU LEARNED!

1. Pneumonia is an infection in one or both lungs caused by bacteria, virus, fungi, or a foreign substance like food.
2. Report the symptoms of pneumonia right away so treatment can be started. Symptoms include: fever, chills, wet cough, shortness of breath, chest pain, and/or fatigue.
3. In most cases pneumonia is a short-term, treatable illness. But people who are older than 65, smokers, and those with other chronic illnesses are at risk for developing other serious problems.
4. The most common ways germs get into the lungs is by breathing them in from the air or inhaling them from the nose, mouth and throat.
5. Smoking is a leading cause of pneumonia and smokers are more likely to have severe complications from pneumonia.

HELPING SMOKERS QUIT

Current research reveals that active **smoking is a leading cause of pneumonia**. What's worse? Smokers are more likely to have severe complications and even die more often from pneumonia than non-smokers.

How does smoking make pneumonia more likely?

Remember, most of the time, the body keeps germs from getting to the lungs with the help of filters in the nose and the airway. But the chemicals in cigarette smoke irritate and damage the fragile lining of the respiratory tract. Here's how:

1. Tiny hairs (called cilia) line the respiratory tract. These hairs catch germs and move mucus (and germs) from the airway and lungs up to the back of the throat, so they can be coughed out. This is called the "ciliary escalator."
2. 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. Bacteria get stuck in the airway where they can begin to colonize (grow and multiply).

How can you help smokers quit?

The best way to decrease the risk of developing pneumonia is to QUIT SMOKING! There's no one right way to quit for every smoker. But there are some tried-and-true steps you can take to increase your clients chance at succeeding. They are:

1. **Help clients make the decision to quit.** You can't make this decision for anyone but yourself. However, if your client tells you he is thinking about quitting, you can steer him toward making the decision to quit by saying:
 - I can give you some information to help you make your decision.
 - I'm here to support you, whatever you decide.
2. **Set a quit date and make a plan.** Once your client decides to quit, it's important to pick a Quit Date. Circle the date on the calendar. Then get to work on the plan! Some common plans include using:
 - Prescription medication like Zyban or Chantix
 - Nicotine replacement products, like gums or patches.
 - Counseling through a quit line, such as 1-800-QUIT-NOW.
3. **Prepare for the Quit Day!** Encourage your client to tell friends and family about the Quit Day. Being accountable to others increases the likelihood of success. Get rid of all the cigarettes and ashtrays in the home and car. If using Zyban or Chantix, it must be started in advance and taken as directed each day leading up to the Quit Day.
4. **On the Quit Day.** Keep your client active—try walking, exercising, or doing other activities or hobbies. Begin using nicotine replacement if that's part of the quit plan. Help your client avoid situations where the urge to smoke is strong. Help him avoid people who are smoking.



A Disease Process Module:
Understanding Pneumonia

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.

Are you "In the Know" about Pneumonia? Circle the best choice or fill in your answer. Then check your answers with your supervisor!

- All of the following are possible symptoms of pneumonia, except:**
 - A. Fever.
 - B. Confusion.
 - C. Chills.
 - D. Vomiting.
- Which of the following is a risk factor for pneumonia?**
 - A. Smoking.
 - B. Weak Immune System.
 - C. COPD.
 - D. All of these.
- Your client tells you she has been thinking of quitting smoking but doesn't know how to do it. You should:**
 - A. Help her set a quit date and make a plan.
 - B. Tell her it's not safe to try and quit on her own.
 - C. Immediately take away all of her cigarettes before she changes her mind.
 - D. Tell her it's too hard to quit and it's not even worth it to try.
- Aspiration pneumonia is caused by breathing in**
 - A. Bacteria
 - B. Food, Fluid or Vomit.
 - C. A virus.
 - D. None of the above.
- True or False**
There's no way to prevent pneumonia.
- True or False**
The best treatment for pneumonia is to continue your normal routine.
- True or False**
Confusion can be a symptom of pneumonia in seniors.
- True or False**
Antibiotics are prescribed for all types of pneumonia.
- True or False**
In most cases, pneumonia is a short-term, treatable illness.
- True or False**
The pneumonia vaccine is given as a series of 3 injections over six months.

