

Bacterial Pneumonia – Patient Education

What It Is

Bacterial pneumonia is an infection in one or both lungs caused by bacteria.

The bacteria cause the air sacs in your lungs (alveoli) to fill with fluid or pus, making it harder to breathe.

Causes and Risk Factors

You can get bacterial pneumonia when harmful bacteria enter your lungs, often after a cold, flu, or other illness that weakens your immune system.

You are at higher risk if you:

- Are 65 or older
- Have a weakened immune system (from illness, medicines, or treatments)
- Smoke cigarettes
- Have chronic illnesses like COPD, asthma, diabetes, or heart disease
- Have trouble swallowing or choke easily
- Recently had surgery or were in the hospital
- Live in a nursing home or long-term care facility

Signs and Symptoms

Early warning signs:

- Fever or chills
- Cough that produces yellow, green, or rust-colored mucus

- Shortness of breath, especially when moving around
- Fatigue or weakness
- Sharp chest pain when breathing deeply or coughing

Other symptoms:

- Fast heartbeat
- Confusion (especially in older adults)
- Sweating or clammy skin
- Loss of appetite

Complications if Untreated or Not Following Care Plan

If bacterial pneumonia is not treated promptly, or if treatment is not followed as prescribed, it can lead to:

- Worsening lung infection
- Lung abscess (pocket of pus in the lung)
- Sepsis (serious blood infection)
- Respiratory failure
- Death in severe cases

Treatment and Self-Care Measures

- **Antibiotics** – Kill the bacteria causing the infection. Take them exactly as prescribed. Finish the full course, even if you feel better.
- **Rest** – Give your body time to heal.

- **Fluids** – Drink plenty of water to help thin mucus.
- **Deep Breathing and Coughing Exercises** – Helps clear mucus from your lungs.
- **Use of Oxygen Therapy** – If ordered by your doctor.
- **Pain or Fever Medicine** – Such as acetaminophen or ibuprofen (as directed).

Common Types of Medications

- **Antibiotics** – Example: azithromycin, amoxicillin, levofloxacin.
 - **Purpose:** Kill or stop bacteria from growing.
 - **Side Effects:** Upset stomach, diarrhea, rash, yeast infection.
- **Fever Reducers/Pain Relievers** – Example: acetaminophen, ibuprofen.
 - **Purpose:** Lower fever, relieve pain.
 - **Side Effects:** Upset stomach, liver or kidney problems if overused.
- **Cough Medicine** – Sometimes used to help rest, but coughing helps clear mucus, so use only if prescribed.

Dietary Needs

- Eat balanced meals with plenty of fruits, vegetables, and protein to help your body fight infection.
- Limit processed foods and sugar.
- If appetite is low, try small, frequent meals.
- Avoid alcohol, which can weaken your immune system and interfere with medicines.

Lifestyle Changes

- Quit smoking and avoid secondhand smoke.
- Stay active when able, but rest as needed.
- Keep up with vaccines (flu, pneumococcal).
- Wash hands often and avoid sick contacts when possible.

Safety Considerations

- Use oxygen only as prescribed—never smoke near oxygen.
- Watch for side effects from antibiotics or other medications.
- Prevent falls by moving slowly and using assistive devices if weak.

Prevention and Maintenance Tips

- Get your yearly flu shot.
- Get pneumococcal vaccine as recommended by your doctor.
- Maintain good hygiene—wash hands, cover coughs.
- Follow up with your healthcare provider after treatment to make sure the infection has cleared.
- Treat underlying illnesses that increase risk.

When to Call for Help

Call your Home Health Agency or Doctor if:

- Fever returns or gets worse
- Cough is getting worse or mucus changes color/thickness
- Shortness of breath increases during normal activities

- Feeling weaker or more tired than usual
- Side effects from medication (rash, diarrhea, nausea)
- Swelling in legs or sudden weight gain (could indicate heart strain)

Call 911 or Go to the Emergency Room if:

- Severe trouble breathing or unable to speak in full sentences
- Chest pain that is new or worse
- Blue or gray lips/fingertips
- Confusion or sudden trouble staying awake
- Very high fever (over 103°F) that does not improve with medicine

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Patient Homework/Assessment

Instructions: Choose “True” or “False” for each statement. Correct any false statements.

1. True or False – Bacterial pneumonia is caused by viruses.
2. True or False – You should stop taking antibiotics once you feel better.
3. True or False – Drinking water can help loosen mucus in your lungs.
4. True or False – Smoking increases your risk of getting pneumonia.
5. True or False – Chest pain when breathing deeply can be a symptom of pneumonia.
6. True or False – If untreated, pneumonia can lead to sepsis.
7. True or False – Fever, chills, and cough are common symptoms.
8. True or False – You can share antibiotics with a family member if they have similar symptoms.

9. True or False – Getting the flu shot may help prevent pneumonia.
10. True or False – Confusion can be a warning sign of pneumonia, especially in older adults.
11. True or False – It is safe to drink alcohol while taking antibiotics.
12. True or False – You should do deep breathing and coughing exercises as recommended.
13. True or False – Pneumococcal vaccine can help prevent certain types of pneumonia.
14. True or False – Bacterial pneumonia only affects people over age 65.
15. True or False – Taking all your prescribed antibiotics is important to fully kill the bacteria.
16. True or False – You should call 911 if you have severe trouble breathing.
17. True or False – Rest is important to help your body heal from pneumonia.
18. True or False – Avoiding sick people can help prevent pneumonia.
19. True or False – Shortness of breath is not a concern unless you faint.
20. True or False – Side effects like diarrhea or rash should be reported to your doctor.

Individualized Patient Questions

1. What bacteria caused your pneumonia?
2. Do you know what your latest chest X-ray or lab results showed?
3. What antibiotics are you taking, and when is your last dose scheduled?
4. How many glasses of water are you drinking each day?
5. Have you received your flu and pneumonia vaccines?
6. Are you doing your deep breathing and coughing exercises as instructed?
7. What foods are you eating to help your body heal?

8. Have you noticed any medication side effects?
9. How are you keeping track of your temperatures?
10. Do you know the signs that mean you should go to the ER right away?

Answer Key with Explanations

1. **False** – Bacterial pneumonia is caused by bacteria, not viruses. Viral pneumonia is a different illness.
2. **False** – You should finish all your antibiotics as prescribed, even if you feel better. Stopping early can cause the infection to come back or worsen.
3. **True** – Drinking plenty of water helps thin the mucus in your lungs so it can be cleared more easily.
4. **True** – Smoking damages your lungs and weakens your immune system, increasing the risk of pneumonia.
5. **True** – Chest pain, especially when breathing deeply or coughing, is a common symptom of pneumonia.
6. **True** – Untreated pneumonia can cause sepsis, a serious infection that spreads in the blood.
7. **True** – Fever, chills, and cough with mucus are common signs of bacterial pneumonia.
8. **False** – Antibiotics should never be shared because the medication and dosage may not be right for others and it can cause resistance.
9. **True** – Flu shots can reduce the chance of getting flu-related pneumonia.
10. **True** – Confusion or sudden mental changes can be signs of pneumonia in older adults and require prompt attention.
11. **False** – Alcohol can interfere with antibiotics and weaken the immune system, so it is best avoided during treatment.

12. **True** – Deep breathing and coughing exercises help clear mucus and improve lung function.
13. **True** – Pneumococcal vaccines protect against common bacteria that cause pneumonia.
14. **False** – Pneumonia can affect people of all ages, though risk is higher in older adults and those with health problems.
15. **True** – Taking the full course of antibiotics helps ensure all bacteria are killed and reduces the risk of resistance.
16. **True** – Severe trouble breathing is an emergency and you should call 911 immediately.
17. **True** – Rest allows your body to fight infection and recover.
18. **True** – Avoiding sick people and good hygiene helps reduce your risk of pneumonia.
19. **False** – Shortness of breath is a serious symptom and should be reported to your doctor even if you do not faint.
20. **True** – Side effects like diarrhea or rash can be signs of medication problems and should be reported to your healthcare provider.