

Patient Education – Respiratory Infections

(Upper Respiratory Infections like colds, sinusitis, and bronchitis; Lower Respiratory Infections like pneumonia, bronchitis, and lung infections)

1. What It Is

A respiratory infection is an illness that affects your breathing system—your nose, throat, sinuses, airways, or lungs.

- **Upper respiratory infections (URI)** include the nose, sinuses, and throat.
- **Lower respiratory infections (LRI)** affect the lungs and airways, like bronchitis and pneumonia.

2. Causes and Risk Factors

Causes:

- Viruses (like the common cold or flu)
- Bacteria (like strep or pneumonia)
- Fungi (less common, but can happen in weak immune systems)

Risk Factors:

- Smoking or secondhand smoke
- Weak immune system (due to illness, age, or medications)
- Chronic illnesses (COPD, asthma, diabetes)
- Poor handwashing or being around sick people
- Cold or damp environments

3. Signs and Symptoms

Early Warning Signs:

- Stuffy or runny nose
- Sneezing or sore throat
- Cough (dry or with mucus)
- Mild fever or chills
- Feeling tired

More Serious Symptoms:

- High fever
- Shortness of breath or trouble breathing
- Chest pain
- Cough with yellow/green/bloody mucus
- Confusion (especially in older adults)

4. Complications if Untreated or if You Don't Follow Treatment

- Infection spreading to lungs (pneumonia)
- Asthma or COPD flare-ups
- Lung damage or scarring
- Sepsis (life-threatening infection in the blood)

5. Treatment and Self-Care Measures

Medical Treatments:

- **Antibiotics** (only if bacterial—don't work for viruses)
- **Antivirals** (for flu, only if started early)
- **Inhalers** or breathing treatments for airway swelling
- **Cough medicines** (to help you rest)

Self-Care at Home:

- Rest and get plenty of sleep
- Drink lots of fluids
- Use a humidifier or steam from a shower to loosen mucus
- Avoid smoking and strong odors
- Take medications as prescribed—finish antibiotics completely

6. Common Types of Medications

- **Antibiotics** – Kill bacteria (possible side effects: diarrhea, nausea, allergic reaction)
- **Antivirals** – Shorten flu duration (possible side effects: nausea, dizziness)
- **Bronchodilators** – Help open airways (possible side effects: fast heartbeat, shakiness)
- **Steroids** – Reduce swelling in airways (possible side effects: weight gain, high blood sugar, mood changes)

7. Dietary Needs

- Warm soups and teas can soothe the throat and help hydration
- High-protein foods (chicken, eggs, beans) to help healing
- Avoid alcohol and excess caffeine (can dehydrate you)

8. Lifestyle Changes

- Quit smoking
- Wash hands often
- Get yearly flu shots and recommended vaccines (pneumonia, COVID-19)
- Stay away from sick people when possible

9. Safety Considerations

- Use caution with over-the-counter cold medicines if you have heart disease, high blood pressure, or diabetes
- Avoid mixing alcohol with medications
- If using inhalers, make sure to use proper technique

10. Prevention & Maintenance Tips

- Stay up-to-date with vaccines
- Eat healthy to keep your immune system strong
- Practice good hand hygiene
- Use a mask in crowded areas during cold/flu season

When to Call for Help

Call Your Home Health Nurse or Doctor if:

- Fever over 100.4°F that lasts more than 3 days

- Worsening cough or mucus that changes color
- Mild shortness of breath
- Sore throat or ear pain not improving
- Side effects from medication

Call 911 or Go to the Emergency Room if:

- Trouble breathing or shortness of breath at rest
- Chest pain or pressure
- Confusion, dizziness, or fainting
- Lips or face turn blue or gray
- Coughing up large amounts of blood

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Patient Homework / Assessment

Choose True or False. Correct any false statements.

1. True or False: Most respiratory infections are caused by bacteria.
2. True or False: Antibiotics work for both viruses and bacteria.
3. True or False: Smoking can make respiratory infections worse.
4. True or False: Drinking fluids helps loosen mucus.
5. True or False: A humidifier can help you breathe easier.
6. True or False: You should stop antibiotics as soon as you feel better.
7. True or False: Fever and chills can be signs of a respiratory infection.

8. True or False: If you have trouble breathing, you should call 911.
9. True or False: Handwashing is one way to prevent respiratory infections.
10. True or False: A cough that gets worse could mean the infection is spreading.
11. True or False: The flu can sometimes lead to pneumonia.
12. True or False: Green or yellow mucus always means you need antibiotics.
13. True or False: Over-the-counter cold medicines are safe for everyone.
14. True or False: Rest helps your body fight infection.
15. True or False: You should avoid alcohol while taking most medications.
16. True or False: Using an inhaler incorrectly can make it less effective.
17. True or False: Vaccines can help prevent some respiratory infections.
18. True or False: People with COPD should be extra careful during cold and flu season.
19. True or False: It is safe to share inhalers with family members.
20. True or False: Trouble breathing is a medical emergency.

Individualized Patient Questions

- Do you know what type of respiratory infection you have—upper or lower?
- Have you been told your infection is caused by bacteria or a virus?
- Are you up-to-date with flu, pneumonia, and COVID-19 vaccines?
- What medications are you taking for this infection, and do you know their purpose?
- Have you experienced any side effects from your medications?
- Do you have other lung conditions, such as asthma or COPD?
- Have you noticed any changes in your mucus color, thickness, or amount?

- Are you able to drink enough fluids each day?
- Do you have access to a humidifier or steam therapy?
- Do you smoke or live with someone who smokes?
- Have you been taught how to use your inhaler correctly?
- Do you know when to call your nurse versus when to go to the ER?

Answer Sheet – Respiratory Infections

(Answers with Explanations)

1. **True** – Respiratory infections can be caused by bacteria, viruses, or fungi.
2. **False** – Washing your hands **often** helps prevent respiratory infections, not just once a day.
3. **True** – People with weak immune systems are more likely to get respiratory infections.
4. **True** – Smoking damages the lungs and makes respiratory infections more likely and harder to recover from.
5. **True** – Fever, cough, and sore throat can all be signs of a respiratory infection.
6. **False** – You should finish your antibiotics exactly as prescribed, even if you start to feel better early.
7. **True** – A productive cough means you are coughing up mucus or phlegm.
8. **True** – Staying hydrated helps thin mucus and makes it easier to clear from your airways.
9. **False** – It's important to avoid close contact with others **when you are sick** to prevent spreading germs.
10. **True** – Difficulty breathing is a warning sign that you may need urgent medical care.

11. **True** – Lower respiratory infections, such as pneumonia, can be more serious than upper ones.
12. **False** – Over-the-counter cough medicine may help some symptoms, but it does not cure the infection itself.
13. **True** – Getting a yearly flu shot can help prevent some respiratory infections.
14. **True** – Using tissues or coughing into your elbow helps stop the spread of germs.
15. **False** – Antibiotics do not work for viral infections like the common cold or flu.
16. **True** – Shortness of breath that is getting worse should be reported right away.
17. **True** – A sudden high fever can mean the infection is getting worse or has become more serious.
18. **False** – You should not share cups, utensils, or drinks with others when you have a respiratory infection.
19. **True** – Chest pain when breathing can be a sign of pneumonia or another serious infection.
20. **True** – Regular cleaning of high-touch surfaces can help prevent spreading respiratory infections.