

# The Importance of Vaccination: A Guide for Individuals Impacted by Lung Cancer



Respiratory viruses like the flu, COVID-19, and respiratory syncytial virus (RSV) typically circulate in the fall and winter months and are easily spread from person to person. These viruses can affect the lungs and airways, making it hard to breathe.

While anyone can get sick from an infectious respiratory virus, some individuals are at increased risk of developing severe illness. Risk factors include:

- Age
- Underlying medical conditions, including chronic lung disease or lung cancer
- Weakened immune system (immunocompromise)

There are various reasons that an individual might be immunocompromised including:

- Genetic mutation or a disease that causes a loss of immune function.
- Taking certain medications, including immunotherapy, to treat specific diseases.

Respiratory illnesses pose a serious risk to individuals with lung cancer because their body, including their lungs, are already vulnerable from cancer and its treatments, such as radiation and surgery. Many individuals with lung cancer may have weakened immune systems, meaning that they may not be able to easily fight off viral infections which can quickly become severe leading to complications like pneumonia or hospitalization. These infections can also delay cancer treatments and make it harder to distinguish between virus symptoms and cancer-related issues.

For individuals who are immunocompromised, it can take longer to recover from respiratory illnesses. This means that there may be a longer duration time that you can spread a respiratory virus to others.

## Respiratory Virus Symptoms vs Lung Cancer Symptoms

Individuals with lung cancer often do not experience noticeable symptoms until the disease is in its later stages. It's important to know which symptoms are caused by respiratory viruses, which are more commonly associated with lung cancer and when urgent medical care may be needed.



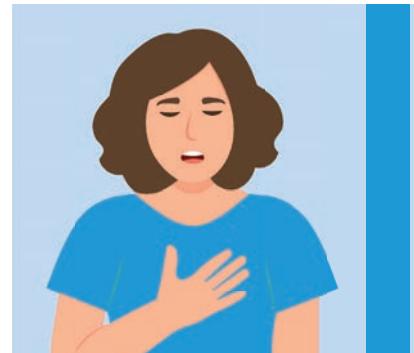
### Respiratory Virus Symptoms

**Mild:** Cough, fever, body aches, runny nose, sore throat, tiredness, headache.

**Severe:** Difficulty breathing, chest pain, wheezing, confusion, worsening cough or fever.

## Common Lung Cancer Symptoms

- A cough that doesn't go away and gets worse over time
- Hoarseness
- Constant chest pain
- Shortness of breath or wheezing
- Coughing up blood
- Loss of appetite
- Unexplained weight loss
- Frequent lung infections, such as pneumonia



## Pneumonia

Pneumonia is a serious infection in one or both of your lungs that causes inflammation and can lead to severe complications and even death. The flu, along with other respiratory viruses, is a common cause of pneumonia.

Individuals with lung cancer are at higher risk of developing pneumonia due to:

- Treatment causing a weakened immune system
- Tumors within the lungs blocking the airways
- Structural changes within the lungs

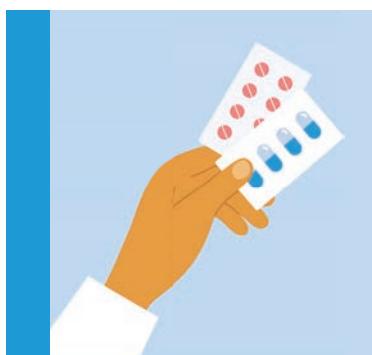
Layering prevention strategies throughout cancer treatment is important and can be lifesaving.

Individuals with lung cancer should report side effects of respiratory infections to their healthcare provider, especially if they interfere with their cancer treatment plan or overall health.

## What to Do If You Get Sick with a Respiratory Illness

It's important to know what steps to take if you do get sick with a respiratory infection so you can help prevent severe illness.

- ✓ Immediately contact your healthcare team for guidance, as they may recommend pausing current treatments to allow you to recover.
  - Inform them of your symptoms
  - Ask if there are treatment options available
- ✓ Monitor your symptoms and seek urgent care if your symptoms become severe.
- ✓ Avoid being around others until your symptoms have improved.



## Antiviral Medications

Antiviral medications are available for COVID-19 and flu. They are specific to the virus they treat and target the virus in your body so they cannot multiply. This helps reduce the severity of symptoms and often aids in a faster recovery. These treatments work best if they are taken as soon as possible after symptoms begin, within two days for flu and within five to seven days for COVID-19.

## Ways to Prevent Respiratory Viruses

There are many ways to help protect yourself and your loved ones from respiratory illness. If you have been diagnosed with lung cancer and are currently undergoing treatment, talk with your doctor about which immunizations are recommended for you based on your specific cancer, treatment plan, and risk factors, they can help guide you through options, timing and whether multiple doses may be needed.

If you are a caregiver or family member of someone with lung cancer, talk with your doctor about any vaccines that are due to help provide additional protection.

## Respiratory Virus Prevention Strategies

Primary Strategies				
Immunizations 	Wash Your Hands, Cover Your Coughs & Sneezes & Clean Frequently Touched Surfaces 	Steps for Clean Air 	Treatment 	Stay Home & Prevent Spread 
Additional Strategies			Stay Home & Away From Others Until,	
Masks 	Distancing 	Tests 	 and  Your Symptoms Are Getting Better You Are Fever-free (without meds)  For 24 Hours Then Take Added Precaution For The Next 5 Days	

## What to Know About Vaccinations to Protect Against Respiratory Illness

### Benefits of Vaccination

Vaccines are the best form of protection because they help prepare the body to defend itself from viruses and severe illnesses. When a person receives a vaccine, it helps teach the immune system what the virus looks like so the body's natural defenses can prepare to protect against it. The body learns how to defend itself without the dangers of the actual infection.

### Vaccines help to:

- ✓ Reduce risk of infection
- ✓ Prevent long-term effects
- ✓ Prevent severe illness and hospitalization
- ✓ Protect those around you
- ✓ Provide quicker recovery

## Vaccination Recommendations

The following recommendations include individuals who are immunocompromised. Individuals should talk to their healthcare provider about which vaccinations are recommended for them.

**It's important to discuss vaccination options with your healthcare provider.**

**Flu Vaccination:** Recommended annually for everyone six months and older. Individuals 19 through 64 receiving immunosuppressive medications can receive all recommended flu vaccines (except the nasal spray vaccine) including the high-dose and adjuvanted flu vaccines indicated for adults 65+. The nasal spray vaccine is not recommended for individuals with cancer because it is a live vaccine and carries the risk of uncontrolled and severe infection.

**2025-26 COVID-19 Vaccination:** Recommended for everyone six months and older through shared clinical decision-making, which is a discussion between a patient or caregiver and their healthcare provider. Individuals with weakened immune systems should be revaccinated six months after their initial dose. The vaccination schedule differs depending on prior vaccination status, you may need additional doses.

**RSV Vaccination:** Recommended for all adults ages 50 to 74 who are at an increased risk of severe RSV illness, adults ages 75 or older and adults living in nursing homes. A single RSV vaccine is only recommended for individuals who have not previously received one at this time.

Additional vaccinations that may be recommended by your healthcare provider:

- **Pneumococcal** – to protect against pneumococcal disease which can cause pneumonia (lung infection), blood and brain infections.
- **Tdap** – to protect against tetanus, diphtheria and pertussis (whooping cough).

There may be additional recommended vaccines for you. This list is not exhaustive.

## The Best Time to Get Vaccinated

Individuals with lung cancer should ideally receive recommended vaccinations before starting cancer treatment to achieve the best possible protection before the immune system is affected by treatment. The recommended timing for flu vaccination is generally September and October, but vaccination in later months can still provide benefits as long as the virus continues to circulate. Ideal timing for RSV vaccination is in August through October, but it can be given any time of the year. COVID-19 vaccination should be received once they become available in the fall.

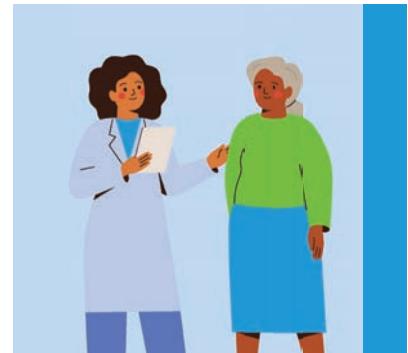
If an individual with lung cancer is already undergoing treatment, their healthcare provider can advise on the best timing and dosing for vaccination to maximize protection.

## Questions to Ask Your Healthcare Provider

It's very important to talk to your healthcare provider about which vaccines are recommended for you and how you can prepare for potential respiratory illness.

Some questions to ask include:

- What vaccinations are recommended for me based on my diagnosis?
- When should I receive the recommended vaccinations?
- Can I receive more than one vaccine at the same time?
- Will the vaccinations interfere with my current treatment plan?
- How might my current lung cancer treatment affect my response to vaccines?
- Are there any vaccines I should avoid because of my treatment plan or weakened immune system?
- What side effects can I expect from vaccines?
- What respiratory illness symptoms should I be concerned about?
- How can I manage vaccine side effects without disrupting my treatment plan?
- If I get sick with a respiratory virus, what treatment options are available for me?
- If I get sick with a respiratory virus, how could it affect my cancer treatment schedule?
- What other strategies can help protect me from respiratory illness?



For individuals with moderate to severe immunocompromise who are unlikely to have an adequate immune response from COVID-19 vaccination alone, there is a preventive COVID-19 antibody, pemivivart. This is not a substitute for vaccination and is given as an IV.

## Ways Caregivers and Loved Ones Can Help

As a caregiver or loved one of someone impacted by lung cancer, there are many ways you can provide support to help prevent respiratory illness. Supportive actions include:

- ✓ Stay up to date on recommended vaccinations to provide protection for yourself and those around you. Encourage others to do the same!
- ✓ Coordinate vaccinations and medical appointments by helping schedule vaccines at the recommended time relative to cancer treatment and keeping a [vaccination record](#) to share with healthcare providers.
- ✓ Support treatment plans and management by ensuring medications are taken on schedule and assist with managing side effects related to treatment.
- ✓ Prioritize and encourage healthy habits by practicing good hygiene, getting plenty of sleep, maintaining regular physical activity, and ensuring proper nutrition and hydration as approved by the healthcare team.
- ✓ Maintain a clean living environment by cleaning frequently touched areas and limiting visitors when immunocompromised.
- ✓ Communicate with the healthcare team so that you know what steps to take if you or your loved one gets sick, or when treatment may be needed.
- ✓ Help monitor symptoms, even mild changes, and watch for signs of respiratory illness and treatment-related



- ✓ Know when to seek urgent care and keep a list of emergency contacts, medications, and vaccination records readily accessible.
- ✓ Provide emotional and psychosocial support for anxiety or stress, encourage participation in lung cancer support groups or palliative care, and take care of your own mental health to reduce caregiver burn out.
- ✓ Avoid smoking and minimize exposure to secondhand smoke.

## Resources to Learn More

The American Lung Association has a variety of resources to support individuals who are impacted by lung cancer, including:

**Lung Health Navigators** – health experts who provide free and customized one-on-one education and support for individuals and their loved ones facing lung cancer or other lung diseases. [Lung.org/helpline](https://Lung.org/helpline)

**Patient Caregiver Network** – online support program providing direct access to lung disease management tools, education, and connection to other patients and caregivers. [Lung.org/pcn](https://Lung.org/pcn)

**Lung Cancer** – resources to learn more about lung cancer including screening, diagnosis and treatment, and support. [Lung.org/lungcancer](https://Lung.org/lungcancer)

**Infectious Lung Diseases** – resources to learn more about infectious respiratory diseases, how they spread, treatment options, and prevention strategies. [Lung.org/viruses](https://Lung.org/viruses)

## Quotes from healthcare providers

*Because some treatments for lung cancer can weaken your immune system, staying up to date with vaccines for respiratory viruses (flu, COVID-19, etc.) is one of the most effective ways to prevent complications that can arise with serious respiratory infections. Respiratory infections can cause treatment delays or lead to hospitalizations, so vaccines are a simple step that helps keep your cancer care on track and protects your lungs.*

— Jorge Gomez, M.D., Medical Director, Thoracic Oncology Program and World Trade Center oncology clinic, Mount Sinai.

*I encourage all patients to keep up with the recommended vaccine indications to minimize any lung complications that can be prevented.*

— Mark Socinski, MD, Executive Medical Director of the AdventHealth Cancer Institute, Orlando, Florida

This educational resource was created with support from Moderna.