

Understanding Flu and Vaccination

Your guide to learning
about the flu virus
and how your immune
system works with
vaccines to protect you.



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About This Guide

This guide shares facts about the flu and discusses the science behind the flu vaccine to help you better understand **why** vaccination is important and **how** it provides protection.

With knowledge comes the power to help you make a decision that is right for you, your family, and your loved ones.



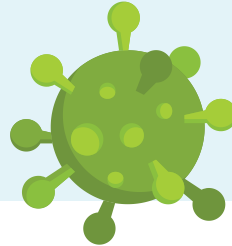
Section 1

Understanding Influenza and Vaccination

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Four Facts about the Flu

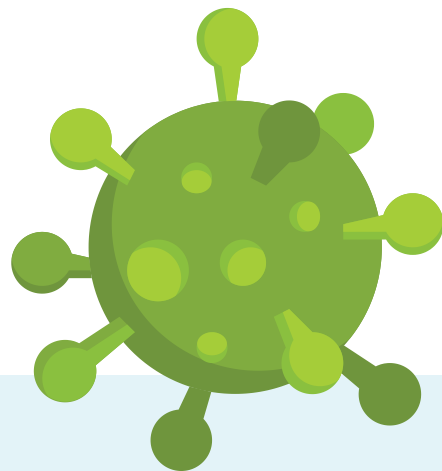
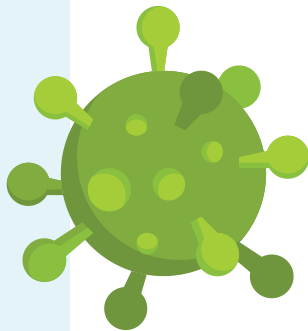
1. The Flu is a Virus



The flu is a respiratory infection caused by the influenza virus. A virus is a disease-causing agent that uses your body's cells to make more copies of itself, which causes an infection.

In response to being infected, your immune system springs into action to get rid of the virus. Many of the symptoms that occur during an infection result from your immune system trying to eliminate the infection from your body.

In the United States, the flu virus actively circulates in the fall and winter seasons. In addition to flu viruses, other respiratory viruses may cause similar symptoms such as the common cold. The best way to know if you are infected with the flu is to get tested.



COMPARING THE FLU TO OTHER RESPIRATORY ILLNESSES

Signs & Symptoms	Flu	COVID-19	Common Cold
Symptom onset after infection	1-4 days	2-14 days	1-3 days
Cough	Often	Often	Sometimes
Fever/Chills	Often	Often	Rare
Shortness of Breath	Rare	Often	Sometimes
Stuffy Nose	Sometimes	Rare	Often
Sneezing	Rare	Rare	Often
Sore Throat	Sometimes	Sometimes	Often
Headache	Often	Sometimes	Rare
Body Aches	Often	Sometimes	Sometimes
Diarrhea/Vomiting	Sometimes	Sometimes	Sometimes
Loss or Weakened Sense of Taste/Smell	Rare	Often	Sometimes

Sources: Centers for Disease Control and Prevention (CDC) and the American Lung Association

2. The Flu Spreads Easily

The flu spreads by droplets and small aerosols made when people cough, sneeze, or talk.



The droplets and aerosols can enter the body through mucous membranes in the eyes, nose, or mouth or inhaled into the lungs.

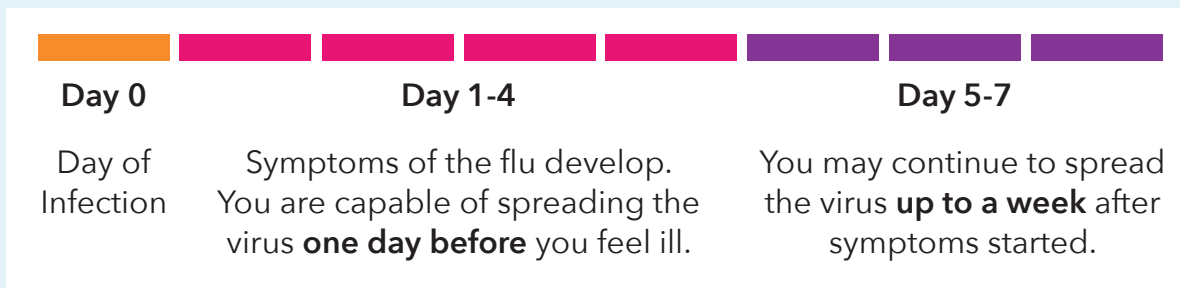


Sometimes, the flu can spread after touching a contaminated surface and then touching the eyes, nose, or mouth.



3. The Flu is Contagious

You may be able to spread the flu to someone else before you even know you are sick, while you are sick, and even after you recover from your symptoms.

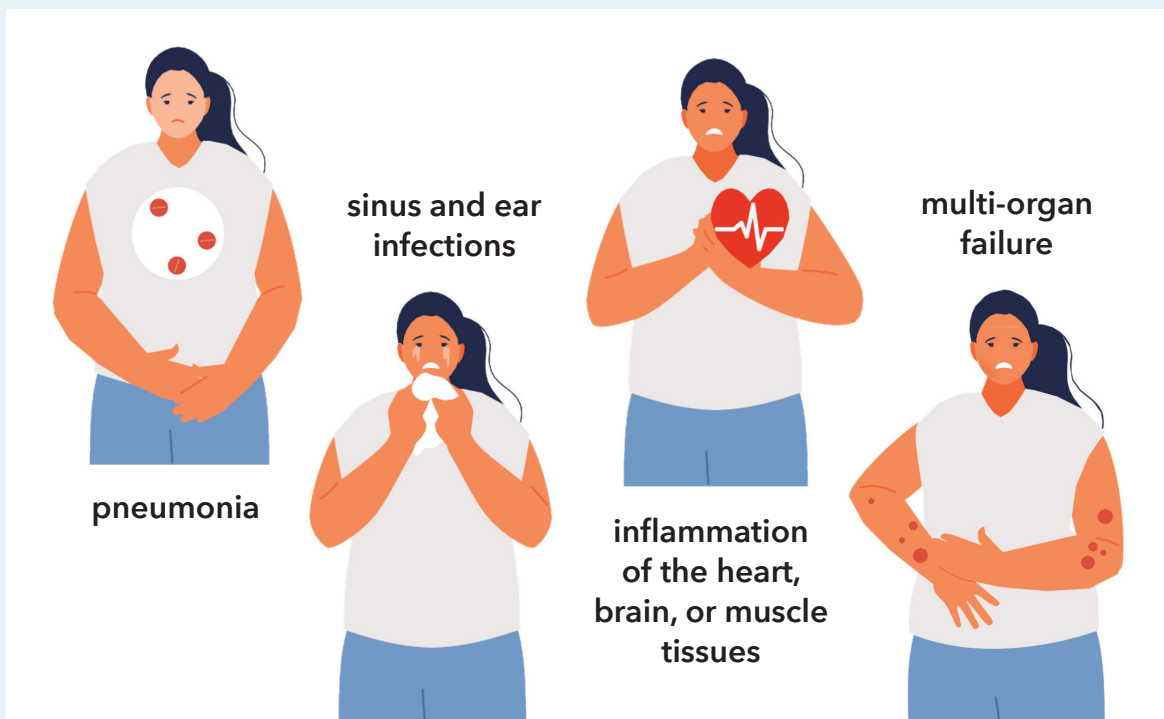


Some people, especially young children and people with weakened immune systems, might be able to spread the flu to others for an even longer time.

4. The Flu Can Lead to Serious Complications

Most people who get flu will recover in less than 2 weeks, but some people may develop complications that can be life-threatening and may result in death.

Serious complications from the flu can include:



Between 3,000 and 49,000 Americans die from the flu and its complications every year in the United States.

Some people are more vulnerable and are at higher risk for severe illness from the flu, and may require hospitalization and intensive care. This includes pregnant people; people 65 years and older; children and infants; and people with chronic medical conditions, like asthma, diabetes, or heart disease.

How the Flu Virus Causes Infection



When the flu virus enters the body, it attaches to cells in the respiratory tract (nose, mouth, throat, and lungs) and invades them.



Once inside these cells, the virus replicates and invades surrounding cells.



The body's immune system detects these invaders and responds quickly by sending immune cells to fight them off.



This cycle continues and the interaction between the immune cells and the virus causes symptoms, such as fever, sore throat, body aches, and cough.



As the body begins to recover after a few weeks, it's left with memory immune cells and antibodies that could fight off the flu virus if it enters the body again.



Some people can recover from the flu without treatment, but others may need flu medication to relieve symptoms or care in a hospital.

How Flu Vaccines Work

The flu vaccine helps your body build protection against flu viruses before you come into contact with them so that your immune system is prepared to fight the flu virus.



Once the vaccine enters the body, the immune system responds to it and rushes to the site to begin developing antibodies!



Building immunity takes up to 2 weeks.



Side effects like fever, headache, body aches, redness or pain at the vaccination site are normal responses which mean the immune system is building protection.



After vaccination, an army of antibodies and immune cells are ready to fight the flu virus to help reduce symptoms and prevent severe illness!



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What to Expect After Vaccination

Similar to other vaccinations, it is normal for someone to experience side effects after getting the flu vaccine.

Side effects are signs that your immune system is working to create antibodies and build protection.

Common Side Effects



Tenderness or redness at the injection site



Fatigue or weakness



Body aches



Fever

Side effects are temporary and may last for 1 to 2 days after vaccination. Remember, **the flu vaccine will not make you sick with the flu.**

Speak with your healthcare provider if you have any concerns regarding potential allergies to what is in the flu vaccine or if you have a history of an allergic reaction after the vaccine.

Get Vaccinated Annually

Influenza viruses can mutate or change over time. The flu vaccine is developed each year based on which flu viruses are circulating in other countries and which viruses will most likely circulate during the coming season in the United States. Getting vaccinated each flu season helps your immune system prepare for the flu viruses that will most likely spread.



The Centers for Disease Control and Prevention (CDC) recommends that adults and children older than 6 months **get vaccinated by the end of October**. Even if you wait until after October, it is still important to get vaccinated during flu season to help protect yourself, your family, and your loved ones.



Seven Steps to Stay Safe Throughout Flu Season



1. **Get your flu vaccine.**



2. **Avoid close contact** with people who are sick.



3. **Stay home if you feel sick** and avoid interacting with others to help prevent spreading your illness to others.



4. **Cover your mouth and nose** when coughing or sneezing.



5. **Clean your hands frequently** using soap and water or alcohol-based hand sanitizer.



6. **Avoid touching your eyes, nose or mouth.** The flu virus can be spread through mucous membranes after touching a contaminated surface.



7. **Practice other good health habits.** Routinely clean and disinfect commonly touched surfaces, get plenty of sleep, be physically active, manage your stress, drink plenty of fluids, and eat nutritious food.

What to Do if You Think You Have the Flu



Avoid contact with others.



Wear a face mask if you are around others.



Contact your healthcare provider who may be able to prescribe you specific anti-viral medicine.



Seek medical care to get tested for the flu.



Stay home for at least 24 hours after your fever is gone except to get medical care or other necessities.



Trusted Sources for Information

It is important to use scientific sources to check the facts about vaccines in order to avoid false or misleading information.

A few trusted sources you can use are:



NYC Health + Hospitals

www.nychealthandhospitals.org/services/flu-vaccination



NYC Department of Health

nyc.gov/flu/vaccination



New York State Department of Health

health.ny.gov/flu



CDC

cdc.gov/flu/prevent/flushot.htm



FDA

fda.gov/news-events/public-health-focus/seasonal-flu-influenza-and-fda

The Importance of Being Vaccinated Against the Flu

Provides your body with protection ahead of time and before you come in contact with the flu virus

Prevents severe illness from the flu

Reduces the chance of hospitalization from the flu

Protects people with certain health conditions that could make them at higher risk for severe infection

Provides protection against the flu during and after pregnancy

Protects your family and loved ones

Talk to your healthcare provider if you have questions about the flu vaccine.

**Get vaccinated.
Stay safe.**





SPECIAL PATHOGENS PROGRAM