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Influenza, the flu, is a common, very infectious viral infection. Over the years, many people have used the term "the flu" to describe anything from a stomach bug to a bout of food poisoning, but influenza is a respiratory illness and doesn't have anything to do with the gastrointestinal system — the system that runs from your mouth to your rectum.

People who are infected with an influenza virus may develop a serious condition called sepsis. Sometimes incorrectly called blood poisoning, sepsis is the body's often deadly response to infection or injury. Sepsis kills and disables millions and requires early suspicion and rapid treatment for survival.

Sepsis and septic shock can result from an infection anywhere in the body, such as pneumonia and urinary tract infections, and viral infections like the flu. Worldwide, one-third of people who develop sepsis die. Many who do survive are left with life-changing effects, such as post-traumatic stress disorder (PTSD), chronic pain and fatigue, organ dysfunction (organs don't work properly) and/or amputations. Doctors have found that rates of sepsis and severe sepsis tend to go up during so-called flu season.

WHAT IS INFLUENZA?

There are different types of influenza. There is the annual seasonal influenza and others, such as the H1N1 influenza, avian flu, and swine flu. There are three separate types of viruses:

Type A: Type A influenzas affect both people and animals, such as birds. The animals help spread the virus. The type A flus are the ones that cause most of the flu pandemics or epidemics. In 1918, the world was hit with the "Spanish flu," which killed millions of people. It was feared in 2009 that the H1N1 virus would have similar outcomes.

Type B: Type B influenzas do not infect animals and do not cause epidemics or pandemics. They are generally not as serious as the type A flu, but they still can cause harm on occasion.

Type C: Type C influenzas are milder than either types A or B. They do not cause epidemics or pandemics and they only affect humans.

The viruses that cause influenza are not static, which means they do not stay the same. They can change and mutate, turning into new viruses. This is why if you catch the flu one year, you can catch it again the next — because the virus has changed enough from the year before that your body doesn't recognize it.

The most commonly known influenza is the seasonal one, Type B. This is a different virus that moves around the world each year.

INFLUENZA VS. THE COMMON COLD

It's important to understand the difference between influenza and colds. With the common cold, symptoms usually come on gradually, but with the flu, the symptoms appear quite suddenly. They can include:

- Fever (although not always present) and chills
- Coughing and/or sore throat
- Runny or stuffy nose
- Muscle aches, body aches
- Headache, sometimes severe
- Fatigue
- Vomiting and diarrhea, more likely in young children

HOW DO YOU GET INFLUENZA?

Influenza is a highly contagious respiratory infection. It is caught when the virus comes in contact with the mucus membranes in your nose. This could be contamination of the air (someone next to you sneezing) or by touch. Someone who has the flu touches his nose or mouth and then touches an object, which you then pick up. If you don't wash your hands, at some point if you touch your mouth or nose, you have brought the virus close enough to infect yourself.

TREATMENT

If you are like most people, a bout with influenza may hit you hard. After a week or two, you will begin to recover, although it could take several weeks before you feel that you are back to normal. However, for some people the flu can cause serious complications and even death. Complications may range from secondary infections (infections that occur as a result of the flu) to dehydration to sepsis.

If you think you have the flu, it's always best to check with your doctor or nurse practitioner to see if you should be treated with antiviral medications. If you are not at high risk of developing complications, your doctor may tell you just to manage the flu at home, but to go to the emergency if you seem to get worse or develop new symptoms.

At-home care means managing symptoms and preventing dehydration:

- **Rest.** Stay in bed to let your body restore itself and to prevent spreading your infection.
- Drink a lot of fluids. It is easy to become dehydrated when you have the flu. These should be water and clear fluids, such as broths.
- Take over-the-counter medications, such as acetaminophen or ibuprofen if you are allowed to. If the sick person is a child or teen, do not give aspirin because of a rare, but fatal complication that can occur, called Reyes syndrome. Over-the-counter cold-and-flu remedies are not recommended for children under the age of six years, as per the FDA.

Anyone who has the flu and develops the following signs, should seek medical help as soon as possible, regardless of age or usual state of health:

- Difficulty breathing or shortness of breath
- Pain or pressure in the chest or abdomen
- Sudden dizziness
- Confusion
- Severe or persistent vomiting
- Flu-like symptoms improve but then return with fever and worse cough
- High fever for more than three days

If you are at high risk for developing complications, your doctor may want you to take antiviral medications, such as Tamiflu. These medications must be taken within the first 72 hours of exposure to the virus for them to be effective. You may still feel ill before they begin to take effect.

PRECAUTIONS

In many cases, influenza can be prevented with a vaccination and a few simple precautions:

- Hand washing is the number one weapon against influenza. Washing your hands after touching your face if you have the flu or after touching potentially contaminated objects (such as door handles, public phones) has been proven to effectively reduce the chances of passing on or developing the flu.
- Sneezing or coughing into your elbow is a good way to reduce transmission of the flu virus. Unlike sneezing or coughing into your hand, your elbow won't touch common objects that will be touched by others.
- If you have the flu, avoid others while you have symptoms and for 24 hours after the symptoms have gone.
- Get your annual flu vaccination. Every year, a new vaccine is developed based on the information about the new influenza strain that is circling the globe. Getting a vaccination is your best protection, although it may not be 100%. If you cannot get the vaccine for health reasons, encourage your family members, friends, and coworkers to be vaccinated. If they reduce their risk of getting the flu, your risk of catching it becomes lower.

SEPSIS is the body's overwhelming and life-threatening response to infection, which can lead to tissue damage, organ failure, and death. For a person with the flu, any infection that is anywhere in your body can lead to sepsis.

What are the signs and symptoms of sepsis?

Sepsis is a toxic response to an infection. There is no single sign or symptom of sepsis. It is, rather, a combination of symptoms. Symptoms can include ANY of the following:

- S Shivering, fever, or very cold
- **E** Extreme pain or general discomfort ("worst ever")
- **P** Pale or discolored skin
- **S** Sleepy, difficult to rouse, confused
- I "I feel like I might die"
- **S** Short of breath

What should I do if I think a loved one or I have sepsis?

If you suspect sepsis, call 9-1-1 or go to a hospital and tell your medical professional, "I AM CONCERNED ABOUT SEPSIS."



GET IMMUNIZED, STAY IMMUNIZED

SEPSIS IS A MEDICAL EMERGENCY

IF YOU SUSPECT SEPSIS, CALL 9-1-1 OR GO TO A HOSPITAL RIGHT AWAY

To learn more about sepsis, or to read tributes and survivor stories, visit us online at Sepsis.org



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