Severe acute respiratory syndrome (SARS) is an infectious condition that can cause serious respiratory illness or death. An outbreak of SARS occurred in 2003 and started in China but progressed worldwide before it was contained. There have been no cases of SARS anywhere in the world since 2004.

Learn About Severe Acute Respiratory Syndrome (SARS)

Severe acute respiratory syndrome (SARS) is an infectious condition that can cause serious respiratory illness or death.

Key Facts

- SARS is caused by a coronavirus, the family of viruses that causes the common cold. SARS is a rapidly progressive respiratory illness that is spread from person to person.
- An outbreak of SARS occurred in 2003 and started in China but progressed worldwide before it was contained.
- There have been no cases of SARS anywhere in the world since 2004.

What Is SARS?

SARS is a severe respiratory illness that can be spread from person to person. An outbreak of SARS occurred in 2003 and started in China but progressed worldwide and caused the death of almost 1 out of every 10 people infected. SARS is highly contagious and is transmitted by respiratory droplets or contact with other bodily fluids. People develop symptoms from the infection 2 to 7 days after they are exposed.

How SARS Affects Your Body

Symptoms of infection usually occur 2 to 10 days after exposure. SARS infection initially causes a fever, headache, and fatigue. Respiratory symptoms include a dry cough and increasing shortness of breath, developing within 2 to 7 days. Most patients have pneumonia that can be seen on a chest x-ray by day 7 to 10. Some patients become very ill and require mechanical ventilation.

How Serious Is SARS?

Infection with SARS is life-threatening, especially in adults older than age 60. Overall, 1 out of 10 patients infected with SARS will die, but half of patients over the age of 60 will die. Most people infected with SARS require hospitalization and time in an intensive care unit.

SARS Symptoms, Causes, and Risk Factors

Note: An outbreak of SARS occurred in 2003 and started in China but progressed worldwide before it was contained. There have been no cases of SARS anywhere in the world since 2004.

SARS starts with symptoms that are similar to the flu but usually get worse over a few days. Seventy percent of patients with SARS develop a serious respiratory illness. Older people and those with underlying medical conditions are at increased risk for severe infection and death.

What Are the Symptoms of SARS?

The most common symptoms of SARS are:

- Fever
- Cough
- Chills or shaking
- Fatigue
- Shortness of breath
- Headache
- Diarrhea
What Causes SARS?
SARS is caused by a coronavirus, the family of viruses that causes the common cold. The virus is spread by droplets or contact with items the droplets have touched. The virus can live for several hours on surfaces, tissues, etc.

What Are the Risk Factors?
The infection is caused by exposure to someone who is infected with the virus or traveling to an area where the virus is known to be spreading. People at increased risk for severe infection are usually older, have unusual symptoms that delay recognition of the infection and proper treatment, are male, or have other medical illnesses including diabetes and chronic hepatitis B. During the original outbreak in 2003, health-care workers were also at increased risk of infection because they were exposed to infected patients.

When to See Your Doctor
You should see your doctor if there has been an outbreak of SARS, you have traveled to the area of the outbreak, or you have been exposed to someone who has traveled to the area and you have a temperature greater than 100.5, cough, chest pain, or difficulty breathing. Most importantly, try to avoid exposing other people and stay away from public areas until you know that you do not have SARS. Even if you are only mildly ill, you should report a possible SARS infection to your doctor to help control the spread of the infection.

Diagnosing and Treating SARS
There are different types of lab tests to confirm a case of SARS, including antibody tests, isolation of the virus and others. In addition, a chest x-ray or chest CT scan will often show findings of pneumonia with SARS. You should notify your doctor if you think you have SARS so that you can be tested and treated.

What to Expect
SARS can be a rapidly progressive respiratory illness. There are only a few cases of SARS in patients with no or even mild symptoms. Most patients develop persistent fever and shortness of breath, but about 30% of infected people improve within in one week.

How SARS Is Diagnosed
- The Centers for Disease Control and Prevention (CDC) has published specific guidelines for when your doctor should suspect a case of SARS.
- Lab tests to detect SARS virus include a blood test, a nasal swab or a sample from your stool or urine, or growing the virus in culture.
- Your doctor may send these lab tests if you have symptoms consistent with possible SARS and close contact within 10 days with a person suspected of having SARS, or travel within 10 days to an area with documented transmission of SARS.

How SARS Is Treated
Currently, there is no specific medication that can treat SARS. Many treatments have been studied but, due to the rapid spread and control of the infection, no definite treatment has been found.

People with mild illness can remain at home and try not to spread the virus to other people.

Sicker people are usually hospitalized, and therapy focuses on supportive treatment, including intravenous fluids, oxygen, and possible antibiotics to treat other infections.

Questions to Ask Your Doctor about SARS
- What should I do if I think I have SARS?
- What should I do if I think someone close to me has SARS?
- How can I prevent SARS?
Recovering From SARS

What to Expect
Most people who get SARS have a severe illness and can expect to be hospitalized. While in the hospital, patients will be isolated from other people to prevent the spread of the virus to other people, including other health-care workers. Patients should be isolated in a negative-pressure room. Some patients will develop an infection severe enough to be in the intensive care unit. A small percentage of patients have long-term effects, including depression or anxiety, cough, shortness of breath, lung disease, or kidney disease; however, most patients fully recover from their illness.

Managing SARS
The treatment of a patient with SARS includes supportive care and symptom management. Unfortunately, there is no drug that has been found effective to treat this disease.

Finding Support
Patients with long-term effects from SARS infection will typically develop respiratory symptoms. There are numerous support groups that can be found online for patients with long-term respiratory problems.

The Lung Association recommends patients and caregivers join our Living with Lung Disease Support Community to connect with others facing this disease. You can also call the Lung Association’s Lung HelpLine at 1-800-LUNGUSA to talk to a trained respiratory professional who can help answer your questions and connect you with additional support.

How SARS Is Prevented
Preventing SARS is similar to preventing any viral respiratory infection. The best way to prevent infections includes avoiding close contact with affected individuals. Using good hand washing with soap and water is important. Encourage people with viral respiratory infections to cover their mouth when coughing or sneezing.

With SARS, stricter measures are needed. Because patients with SARS are usually hospitalized, the health-care team will take care to ensure these proper ways to prevent spread of infection to visitors, other patients, and hospital staff. People are more likely to spread the SARS virus to others after they have started having symptoms. People are most contagious between 7 and 10 days after symptoms begin, but people can continue to shed the virus and continue to be contagious for another 2 weeks. Patients with SARS should avoid contact with other people as much as possible until 10 days after their symptoms have resolved. The virus can survive on surfaces for as long as 6 days. It can be killed by washing with bleach or other household detergents.