

SARS

(Severe Acute Respiratory Syndrome)

Severe acute respiratory syndrome (SARS) is a respiratory illness caused by a virus called SARS associated coronavirus (SARS-CoV). SARS was first reported in Asia in February 2003. Over the next few months the illness spread to more than two dozen countries in Asia, North America, South America and Europe, before the SARS global outbreak of 2003 was contained. There was a second small outbreak in China in 2004.

There is no evidence at this stage of ongoing transmission anywhere in the world. It is not known if a SARS epidemic will recur.

The organism that causes SARS is a new type of virus belonging to the family of viruses, coronaviruses, which are one of the virus families that cause the common cold. Coronaviruses have been found in many different animal species including birds and mammals. SARS-CoV is thought to have passed from animals to humans through close contact, butchering or eating undercooked meat in parts of Southern China.

SARS is spread from someone who is unwell with the illness via contaminated droplets produced when coughing or sneezing, or via contaminated hands. People in very close contact with a sick SARS patient are at most risk. Rarely, the virus may be spread in the air from very ill patients.

Symptoms of SARS include:

- > SARS usually begins with a high fever (temperature greater than $>38^{\circ}\text{C}$)
- > cough
- > pneumonia
- > breathing difficulties (about 20% require artificial ventilation in an intensive care unit)
- > headache
- > chills
- > muscle aches
- > poor appetite
- > dizziness
- > diarrhoea (10-20 % of patients)
- > sore throat.

These symptoms are commonly seen with other types of infection and are not specific to SARS. During the outbreak, SARS was suspected if a patient had a fever of 38°C or greater, respiratory symptoms and a history of travel to a SARS affected area or close contact with a known SARS patient within 10 days before the fever or respiratory symptoms started.

There are several laboratory tests used to detect SARS-CoV and other causes of respiratory illness.

The main way that SARS seemed to spread was by close person-to-person contact. The virus that causes SARS is thought to be transmitted most readily by respiratory droplets (droplet spread) produced when an infected person coughs or sneezes. Droplet spread can happen when droplets from the cough or sneeze of an infected person are propelled a short distance (generally up to 1 metre) through the air and deposited on the mucous membranes of the mouth, nose or eyes of persons nearby.

The virus also can spread when a person touches a surface or object contaminated with infectious droplets and then touches his or her mouth, nose or eyes. In addition, it is possible that the SARS virus might spread more broadly through the air or by other ways that are not now known.

Incubation period

(time between becoming infected and developing symptoms)

Usually 2 – 7 days, although it may be up to 10 days.

Infectious period

(time during which an infected person can infect others)

This is not known for sure, but is thought to be for less than 21 days after the onset of symptoms. People who are infected with the virus but do not yet have symptoms are not thought to be infectious.

SARS (Severe Acute Respiratory Syndrome) (cont.)

Treatment

No specific antiviral treatment is available for SARS.

Control of spread

- > Special precautions are needed for people who are suspected of having SARS and their carers. These will be made available by public health authorities if SARS recurs.
- > In general, to reduce spread of respiratory infections:
 - stay at home if you are sick
 - wash your hands often and well, with soap and running water
 - wash your hands especially after going to the toilet, after blowing your nose or sneezing, and before preparing food
 - cover your nose and mouth with a tissue when you sneeze or cough and dispose of it appropriately.



SARS is a notifiable disease

- > **Hand Hygiene**