

SEVERE ACUTE RESPIRATORY SYNDROME (SARS) SYNDROME RESPIRATOIRE AIGU SEVERE (S.R.A.S.)

Answers to the most frequently asked questions

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What is SARS?

Severe Acute Respiratory Syndrome (SARS) is a communicable infectious disease which appeared recently and was initially discovered in Southeast Asia. It is known as an emerging (new) disease. The syndrome causes high fever (above 38°C/100.4°F) accompanied by respiratory difficulties.

What is known about the agent that causes SARS?

Coordinated by the World Health Organization, a number of virology teams--including those in the United States at the Centers for Disease Control (CDC) in Atlanta and at the Institut Pasteur in Paris, France--are actively working to identify the agent responsible for the disease. These teams have identified a new virus that belongs to the Coronavirus family. Coronaviruses are frequently the cause of benign ear, nose, and throat infections in humans (such as the common cold).

Today, the exact origin of this new Coronavirus is not known for sure.

How many people have been infected with the disease?

The epidemic has developed rapidly. Daily updates are available on the Health Ministry and the Health Watch Institute (*Institut de Veille Sanitaire*) Web sites. This information is also available on the World Health Organization and Center for Disease Control (Atlanta) Web sites.

What are the clinical signs of the disease?

The clinical signs of SARS are not very specific and may be the same as those caused by other respiratory infections. The syndrome begins with a fever (above 38°C/100.4°F) that appears very suddenly associated with respiratory signs (dry cough, shortness of breath, difficulty breathing). Other symptoms such as headaches, muscle aches, diarrhea, and general malaise may also be observed.

How does the illness develop?

The syndrome justifies systematic hospitalization. Between 10% and 20% of people infected with SARS require respiratory assistance due to the respiratory distress caused by the disease. In the majority of cases, the outcome is favorable. The WHO currently estimates the mortality rate at 15%.

Does the disease affect some populations more than others?

All of the patients who have been infected to date were contaminated through close contact (less than one meter) with a sick person infected with SARS. Epidemiological data analysis has not led to the identification of particular at-risk population groups, with the exception of healthcare workers who provided care to patients suffering from SARS as was the case at the French hospital in Hanoi. Recent studies seem to indicate that serious forms of the disease tend to affect those over the age of 60 more than younger patients.

How is the disease transmitted?

Currently, the only known way of transmitting the disease is through close, unprotected contact (see definition below) with a sick person.

The agent that causes SARS is transmitted from person to person mainly via the respiratory secretions (sneezing, coughing) of a person suffering from SARS. However, experts at the CDC in Atlanta (United States) have not ruled out the possibility of transmission via an environment (air, objects touched) contaminated by a person suffering from SARS. These experts have raised the issue of the agent's resistance in the environment, which could be higher than that of known Coronaviruses (which is a few hours) in particular temperature and hygrometry conditions. The virus appears to be sensitive to the usual disinfectants and detergents. This hypothesis serves as a reminder of the importance of taking traditional personal hygiene measures, in particular, frequent hand washing.

What is the disease's incubation period (How long after being contaminated do clinical signs appear)?

Based on current data, the disease's incubation period varies between two and ten days after contamination.

Is the disease contagious during the incubation period?

During the incubation period, the infected person does not show any sign of disease. To date, no cases of transmission during the incubation period have been formally proven.

What do the following terms mean: possible (suspected) cases, probable cases, and excluded cases?

Definitions of the different types of SARS cases have been developed by the Health Watch Institute based on WHO recommendations in order to standardize data on an international level.

The following have been defined (see definitions on the Health Watch Institute Web site):

- **Possible cases:** anyone showing all of the following signs: fever greater than 38°C/100.4°F **associated with** one or several signs of lower respiratory infection (cough, dyspnea, difficulty breathing, auscultatory abnormality, radiological abnormality if a chest x-ray has been taken or pulse oximetry) **AND** travel to an area considered by the WHO to have active local transmission of SARS (check the site <http://www.who.int/csr/sarsareas> regularly) or close contact with a probable case in the ten days preceding the onset of signs (see definition of close contact below).
- **Probable cases:** any possible case presenting radiological or pulmonary scan evidence of pneumopathy in the absence of another diagnosis.
- **Excluded cases:** any possible case for which another diagnosis explains the symptomatology or which fulfills the following four criteria: good clinical condition, no radiological or pulmonary scan evidence, lymphocyte count not low (no low leukocyte count), lack of contact with a probable case.

What do the terms “exposed person” and “close contact” mean?

An exposed person is a person who has been in contact with a possible or probable case of SARS and who therefore has an increased risk of contracting SARS. Situations for exposure to risk include providing health care to a possible or probable case of SARS without taking sufficient precautions or having close contact with the respiratory secretions or bodily fluids of a possible or probable case of SARS.

Close contact means living with a person suffering from SARS, having face-to-face contact (less than one meter) with a person suffering from SARS or direct contact with the respiratory secretions or bodily fluids of a person suffering from SARS.

Is there currently any diagnostic or screening test for the disease?

To date, there is currently no screening test available for everyday use. SARS is currently diagnosed based on the clinical development of the disease and test results (blood test, chest x-ray and pulmonary scan). The Institut Pasteur has developed a biological test using a particular technique known as PCR (the test detects genetic material from the virus) and has made the test available to several French hospitals. The test is used to detect the presence of the Coronavirus in possible or probable cases. A serological test (a test to detect the presence of SARS antibodies in the blood) is currently being developed.

What treatment is available?

There is currently no specific curative treatment available anywhere in the world. Antiviral treatments are used based on the viral theory of the disease, but they have not been proven effective. Antibiotics, which are only active against bacteria, are not recommended for the treatment of viral infections, unless there is bacterial cross infection. Treatment is essentially symptomatic with respiratory assistance for severe cases with major respiratory distress.

Can I take a preventive treatment to protect myself before traveling to an affected area?

To date, there is no preventive medicated treatment available.

How do masks help?

Protective masks help to limit the risk of transmitting the virus through respiratory secretions (coughing, sneezing). Two types of mask may be used:

- Surgical masks may be used by those suffering from SARS in order to limit environmental contamination and the contamination of close members of the sick person's entourage
- Special protective masks (type FFP2, or, if not available then FFP1) may be used by hospital caregivers providing care to a suspected or probable case of SARS and for healthy people if there is close contact (less than one meter) with a suspected or probable case of SARS.

With the exception of these situations, the use of masks is not currently recommended in France.

What precautions are recommended for those traveling to an affected area (or for those already in an affected area)?

In affected areas, following recommendations issued by local health authorities is essential. French nationals living in these areas may contact their local consular service to obtain information on local recommendations. For more complete information regarding recommendations for French nationals living in SARS-affected areas, see the Medical Information Committee (*Comité d'Informations Médicales* or *CIMED*) Web site: <http://www.cimed.org>. *CIMED* is a work group that reports to the *Maison des Français de l'Etranger*, a department of the French Foreign Affairs Ministry. In all cases, traditional personal hygiene measures should be taken, in particular frequent hand washing.

Recommendations

What are the recommendations for those returning from an affected area?

In all cases, monitoring your temperature, watching carefully for the appearance of a cough, difficulty breathing or shortness of breath are recommended. Monitoring should continue for ten days following your return.

I have just returned from a trip to an affected area. I have a fever and respiratory symptoms. What should I do?

According to a protocol established by French health authorities, you should contact your local Emergency Medical Services (by dialing 15) right away so that the doctor in charge can perform an initial evaluation over the phone. When you call, it is absolutely essential to indicate that you have returned from a SARS-affected area within the last ten days. The EMS doctor on duty will then decide if hospitalization is necessary. You should avoid all close contact with those around you until you receive instructions from EMS.

If I have just returned from an affected area and have SARS-like symptoms, why shouldn't I just go directly to my local hospital or family doctor?

Going through an EMS team enables you to avoid transmitting the disease to people you might come into contact with if you were to go to your local hospital or doctor's office.

Furthermore, EMS will provide the appropriate care and take you to a specialized hospital unit.

A member of my family has just returned from an affected area. What should I do?

You must remind them to monitor their health in order to detect any onset of SARS-like symptoms (fever above 38°C/100.4°F, cough, difficulty breathing) for ten days after their return to France.

If there are no signs of the disease, then those returning from affected areas and their family members may pursue their normal professional and personal activities.

If signs of the illness do appear within ten days of their return to France, you must call EMS right away (by dialing 15 in France). You should also avoid any close contact with the person until you receive instructions from EMS (see previous question).

Is it possible to return to work or to school after a trip to an affected area?

If there are no SARS-like signs, normal professional activity is possible. Isolation measures or absence from work are not recommended.

It is necessary to monitor your health in order to detect any onset of SARS-like symptoms for the ten days following your return to France.

If signs of the illness do appear during the ten-day period, you must contact EMS (by dialing 15). You should also avoid any close contact with those around you until you receive instructions from EMS (see previous question).

Which people affected by SARS should be subject to isolation or quarantine measures?

- **Isolation** means confining those likely to transmit the infectious agent to the hospital. This measure applies to possible or probable cases (see definitions above).

- **Quarantine** means confining a person to their home. As recommended by the WHO, quarantine is used for those who have had close unprotected contact with a probable case (see definition above). Quarantine conditions for such cases are established by the Regional Flu Observation Group (*Groupes Régionaux d'Observation de la Grippe* or *GROG*) doctors in charge of monitoring the medical condition of exposed persons.

I have just returned from an affected area but I haven't had any contact with a sick person and I am not sick myself. Are there any particular instructions I should follow (absence from work, isolation)?

No. The only measure you must take is to monitor your health for ten days following your return. There is no reason to take isolation measures or to have blood tests or other special examinations. However, if SARS-like signs do appear within ten days after your return, you must contact EMS (by dialing 15).

I import products from an affected area. Is contact with these products a risk factor?

This issue has been evaluated recently by several teams under the aegis of the WHO. The resistance of the virus suspected to be responsible for SARS does not enable it to survive for more than 48 hours on non-biological surfaces in optimal temperature and hygrometry conditions. Based on this data, the WHO does not recommend taking particular measures other than individual hygiene measures, particularly frequent hand washing. For workers who handle the products, wearing gloves (usual procedure to avoid injury to the hands) should remain the rule.

I have just returned from an affected area. Are there any special instructions for blood donors?

Since April 15, 2003 the French Blood Institute (*l'Établissement Français du Sang* or *EFS*) has been following procedures taking Coronavirus risk into account. A pre-donation interview temporarily excludes donors having traveled to an affected area.

The International Situation

Are there any recommendations for upcoming trips to affected areas?

Given the progression of the situation in the areas concerned, the General Directorate for Health recommends postponing non-essential trips to areas considered to be at risk by the WHO.

You should consult the WHO, Ministry of Health, and Health Watch Institute Web sites on a regular basis for information on the affected areas.

Are there any special recommendations for members of my family or one of my employees currently traveling to an affected area?

The General Directorate for Health is not in a position to state its opinion on the possible repatriation of French nationals currently in affected areas. It is up to individuals to evaluate how important their presence is in the area, local health conditions, and the risks they may run in those conditions. In all cases, following recommendations issued by local health authorities is essential. French nationals living in these areas may contact their consulate in order to find out more about local recommendations.

What is the current situation for those returning to France?

The World Health Organization recommends that all passengers departing from airports in affected areas undergo a health interview in order to determine whether or not they have a fever or signs of respiratory infection. If there are symptoms, returning to France is not possible. Airlines and pilots have made a commitment to use their authority to refuse boarding to any person showing symptoms.

If there are no SARS-like signs, it is possible to return to France:

- People who have come directly from an affected area to France must listen to information provided by the airline, give their full contact information (address and telephone number), and follow self-monitoring instructions by watching their health closely for any SARS-like signs for ten days after their return and by calling EMS if any signs do appear.
- If the onset of signs occurs during the flight, the person must inform the flight crew so that measures may be taken to protect the rest of the passengers and so that appropriate care provided by the airport medical service can be made available as soon as the flight lands.

These instructions, which were issued by French health authorities, are not necessarily the same for flights with a change in aircraft in a country not affected by SARS or in Europe.

Measures taken by the General Directorate for Health

What measures are the airlines taking to ensure that their flights are safe?

The General Directorate for Health has requested that the airlines provide information on individual passengers traveling directly from affected areas. Contact information is systematically collected from all passengers so that they may be informed, if health officials feel it is necessary, in the ten days following their arrival in France.

A protocol has been established in order to anticipate the measures to be taken if a case of SARS were to appear during a flight:

- All passengers are to be informed of the situation
- The sick person is to be isolated and must wear a mask in order to protect the environment around him
- The arrival airport is to be informed so that appropriate care can be provided as soon as the flight lands.

What measures have French airports taken to keep passengers coming from affected areas informed?

The General Directorate for Health has established the following protocol to be applied following the arrival of all flights coming directly from affected areas:

- Verify that the airline has communicated the informational message to passengers
- Collect contact information (address and telephone number) for all passengers (including the cabin crew) by filling out an identification sheet
- Obtain the passenger manifest from the airline.

For non-direct flights, it is possible to come from a SARS-affected area via an unaffected country by changing flights during a stopover. Such flights are identified as coming from unaffected areas. Under such conditions, and because it is not possible to provide specific information to all flights arriving in France, information has been posted in all international airports and informational brochures on the disease and what measures should be taken have been made available to travelers.

How would I be informed after the fact if during the flight I had been seated next to someone later hospitalized with SARS?

General information would be provided in the form of a press release instructing passengers on the concerned flight on what measures to take.

Individual information would be provided using the contact information provided on the passenger identification sheets.

What kind of organization has been implemented in France for the monitoring and care of those who become ill in France?

The Health Watch Institute is in charge of epidemiological supervision.

Initial care for suspected SARS cases is provided by EMS.

Preference is given to specialized hospital units for any hospitalizations.

The epidemiological monitoring of patients hospitalized with SARS is carried out by the Health Watch Institute. Persons exposed to SARS are monitored by doctors from the *GROG* network.

Why not ban flights coming from affected areas?

International health regulations stipulate that this type of decision can only be made by an international authority (WHO).

Where can I find day-to-day information on the development of the disease (by phone, on the internet)?

The General Directorate for Health issues press releases on a regular basis. The press releases have also been made available on line on the Health Ministry Web site.

The Health Watch Institute regularly updates its Web site with new information on the international epidemiological situation.

A toll-free number is available to anyone seeking medical information prior to travel to or from affected areas:

0800-150-160

Regularly updated information is available on the following Web sites:

French Health Ministry (Ministère de la santé): <http://www.sante.gouv.fr>

Health Watch Institute (Institut de Veille Sanitaire): <http://www.invs.sante.fr>

Medical Information Committee; health issues related to expatriates and travelers (Comité d'informations médicales): <http://www.cimed.org>

World Health Organization: <http://www.who.int>

Centers for Disease Control: <http://www.cdc.gov>

Health Canada/Santé Canada: <http://www.hc-sc.gc.ca>

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