



SARS OUTBREAK RESPONSE FLOWCHART 2

NICD

Please note that this information sheet is subject to change as more is learnt about this condition. Issued by the National Department of Health, 10 April 2003

Scenaria 1: Suspected SARS case during flight to SA

1.1 During flight

1. Patient presents with suspected SARS symptoms during flight
2. Air hostess notifies the pilot
3. Pilot informs operations at destination port
4. Suspected SARS patient is moved to an isolated area on the plane, a facemask should be placed over mouth.
5. Operations informs port health officers of the ill passenger
6. Port Health officers notifies:
port doctor(name.....tel.....)
CDC officer (name.....tel.....)

1.2 Once the plane has landed

1. Port Health officers board plane
2. Plane door is closed.
3. Following information obtained: no of cases, signs and symptoms and passenger list.
4. Passengers briefed that there is an ill person on board, calm them and inform them that they will be provided with the necessary contact health information. In the event of anyone experiencing fever of over 38 °C plus a cough and shortness of breath, they are requested to report to their nearest health facility and present the health alert card to the doctor.
5. Allow all passengers except the contacts¹ to depart.
6. Take the contacts to a room for briefing.
7. Hand out SARS information sheet and Health Alert Notice, request contact address for the next 14 days. Inform them of contact tracing procedure (forms 1 and 2).
8. Suspected SARS patient taken to medical room at port and examined by the doctor.
9. Contact NICD to confirm symptoms conform to SARS case definition.
10. Doctor contacts referral hospital to arrange admission and transfer of patient
11. National Department of Health, CDC informed of suspected case.
12. Port Health hand over passenger list and close contact details.
13. The ground and cleaning crews of the airline should be notified at the same time so that preparations can be made for appropriate cleaning of the aircraft after passengers have disembarked.

¹ Contacts include: those passengers sitting in the same row (aisle to aisle), two rows to front and two rows behind the SARS suspect.

1.3 At health facility

Medical personnel must contact NICD (Contact numbers Dr L Blumberg 082 807 6770, Prof BD Schoub 082 908 8049 and Dr A Puren 082 908 8048)

BEFORE sending specimens.

Specimens required

1) Nasopharyngeal aspirates or bronchoalveolar lavage in viral transport medium. Procedure: pass a small catheter or feeding tube through the patient's nose into the nasopharynx, instil 2-3ml of saline, and aspirate and place the contents directly into viral transport medium

Infection control precautions must be followed during this procedure: gloves, gown, visor, and N95 mask.

Nasopharyngeal swabs do not provide adequate material, and therefore the results may not be reliable and throat swabs are totally unsuitable.

2) 5ml of clotted blood in a plain tube

Patients need to be isolated and barrier nursed with mask (N95 mask) gown and glove precautions.

NICD should provide feedback on all laboratory results conducted on suspected SARS cases

1.4 Follow up and contact tracing

1. CDC officer conducts contact tracing of passengers for 14 days using attached form.
2. Any persons reporting SARS signs and symptoms should be referred to their nearest health facility.
3. The CDC officer should make arrangements for the patient to have further assessment. It is important the patient receives immediate attention, has minimum contact with routine patients, the doctor must contact NICD to obtain information on samples and confirm SARS case definition.
4. CDC officer updates National CDC daily.
5. CDC should obtain **all** (positive or negative) results from NICD and communicate them to CDC National.

1.5 Press releases

In the event of a suspected or confirmed positive SARS case being reported, all statements to the press should be issued by the National Department of Health, CDC in conjunction with NICD.

1.6 Updates

Weekly updates will be issued by CDC National in conjunction with NICD to all PHO and CDC on Fridays unless there is breaking news.

1.7 Communication

All port health officers are requested to keep in contact with their CDC officer regularly.

INTER PORT COMMITTEE

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For tomorrow contact T Seleka at (018) 387 5713 Fax: (018) 387 5625

LIST OF DESIGNATED HOSPITALS FOR SARS

Province	Hospital
Eastern Cape	Provincial Hospital [PE]
	Frere Hospital
	Umtata Gen Hospital
Gauteng	Johannesburg Gen Hospital
Free State	Pelanomi Hospital
	Univesitas Hospital
Limpopo	Messina Hospital
	Polokwane\Mankweng Complex
KwaZulu-Natal	Addington Hospital
North West	Klerksdorp Hospital
Northen Cape	Kimberly Hospital
Western Cape	Will Send Today
	Will Send Today
Mpumalanga	Witbank Hospital
	Rob Fereira Hospital

Pretoria East Hospital
 St Augustine
 Milnarpark Hospital
 Christiaan Barnaard Hospital

Pretoria
 Durban
 Johannesburg
 Cape Town



NO 2



NICD

SEVERE ACUTE RESPIRATORY SYNDROME (SARS) INFORMATION SHEET FOR PORT HEALTH OFFICERS AND AIRLINE CREW

Please note that this information sheet is subject to change as more is learnt about this condition.

Issued by the National Department of Health, 10 April 2003

Introduction

Severe Acute Respiratory Syndrome (SARS) is a respiratory illness caused by a virus recently described in patients from Asia, North America and Europe. The World Health Organisation is currently coordinating a global response to reported outbreaks of SARS. Cases have been reported from **seventeen** countries since 1 November 2002. As of **10 April 2003**, **2781 probable cases** of SARS (incl **111 deaths**) have been reported to WHO. Local transmission has been confined to Canada, Hong Kong Special Administrative Region of China (Hong Kong SAR), Singapore, Taiwan (China) and Vietnam. The first probable case of SARS in South Africa was reported on 7 April 2003.

General Travel recommendations by WHO

- Persons traveling to Hong Kong Special Administrative Region and Guangdong Province, China should consider postponing all but essential travel.
- Travelers departing from affected areas (listed above) should be screened for signs and symptoms of SARS (<http://www.who.int/csr/sars/travel/en/>)
- All persons should keep abreast of current information regarding the disease, its distribution and transmission.

How is the disease spread?

Based on current evidence, **close contact** with an infected person is needed for the infective agent to spread from one person to another. The infective agent is spread via droplet transmission. Due to their large size droplets do not travel a long distance before they settle. Droplet transmission may occur when someone sick with SARS coughs or sneezes droplets into the air and someone else breathes them in or when droplets land on objects/surfaces that are touched by another person. As the virus may be spread when a person touches a contaminated object/surface, **CDC recommends that people wash their hands thoroughly and often with soap and water.** (for more information <http://www.cdc.gov/od/oc/media/pressrel/fs021025.htm>)

Persons in **close contact** with those infected on an airplane are those persons sitting next to a passenger, sitting in the same row, or sitting two rows in front or two rows behind. Stewardesses and flight attendants are also included as close contacts.

Current information suggests that people are most likely to be infectious when they have symptoms such as a fever or cough. Additional symptoms include: chills, malaise, headache and myalgia.

Risk to individuals who may share a plane with a suspected SARS patient

Cases of SARS continue to be reported primarily among persons who have had direct close contact with an infected person, such as those sharing a household with a SARS patient and health care workers who did not use infection control procedures while attending to a SARS patient. SARS has also occurred among air travelers, primarily travelers to and from Hong Kong, Hanoi, Singapore, and mainland China.

Port health officers (as in line with CDC) will request locating information from travelers who are on flights with people suspected of having SARS. Port Health Officers with the assistance of Communicable Disease Officers will attempt to follow-up with these travelers for 14 days to make sure no one develops symptoms consistent with SARS.

Actions for aircraft crew, operations and port health

- Should a passenger or crew member meet the criteria listed below on a flight, the aircraft pilot (as outlined under International Health Regulations) should alert the destination airport. (operational control).
- Operations control are requested to alert the Port Health Officers of the possible SARS case on board of the flight.
- The person presenting with the symptoms should be isolated, designated a toilet for their personal use and be given a mask (N95 particulate respirator) to wear. If a mask is not available the person should be given a tissue and asked to place the tissue over their mouth and nose. This will cut down risk of exposure.
- The flight crew member attending the patient should wear a mask, gloves and wash their hands regularly with an alcohol-based disinfectant.
- The routine use of masks or other personal protective equipment for the flight crew or healthy passengers is not currently recommended. (http://www.cdc.gov/ncidod/sars/flight_crew_guidelines.htm).
- It is important to pay careful attention to hand washing after contact with the ill passenger.
- Re-assure passengers around that all possible precautions are being taken and not to panic. SARS information flyers should be handed out to them on arrival in South Africa.
- On arrival the sick passenger should be referred to airport health authorities (port health and airport doctor) for assessment and management.
- Isolation is recommended for travelers with suspected cases of SARS until appropriate medical treatment can be provided or until they are no longer infectious.

- The aircraft passengers and crew should be informed of the person's status as a suspect case of SARS.
- The passengers and crew should provide all contact details for the subsequent 14 days to the airport health authorities.
- There are currently no indications to restrict the onward travel of healthy passengers, but all passengers and crew should be advised to seek medical attention if they develop the symptoms listed below. There is currently no indication to provide passengers and crew with any medication or investigation unless they become ill.
- The ground and cleaning crews of the airline should be notified at the same time so that preparations can be made for appropriate cleaning of the aircraft after passengers have disembarked.

More information can be accessed at site:
<http://www.cdc.gov/ncidod/sars/airpersonnel.htm>

<u>Symptoms and signs of SARS</u>
<ul style="list-style-type: none"> • High fever (greater than 38°C)
AND
<ul style="list-style-type: none"> • One or more respiratory symptoms including cough, shortness of breath, difficulty breathing.
AND one or more of the following:
<ul style="list-style-type: none"> • Close contact with a person who has been diagnosed with SARS • Recent history of travel to areas reporting cases of SARS
Incubation period: 2-7 days but may be up to 10 days.

General precautions

- The best precaution is a personal understanding of the disease. If someone is coughing, looks like they are sick, the best thing to do is to move away from them. Refer to sources of information below for updates on the current situation.
- When traveling to an affected area: Wash hands frequently, avoid touching the eyes, mouth or nose and wipe down with rubbing alcohol. A mask can be worn as long as the face is not touched when readjusted.
- The routine use of masks or other personal protective equipment for the flight crew or healthy passengers is not currently recommended.
- More information can be obtained from http://www.cdc.gov/ncidod/sars/travel_advice.htm

Disinfection of aircrafts

- As a general precaution, the aircraft may be disinfected in the manner described in the WHO Guide to Hygiene and Sanitation in Aviation.

- Routine post-flight cleaning of passenger aircraft should incorporate appropriate hand hygiene to minimize risks of disease transmission. CDC has issued interim guidelines for airline cleaning crews conducting routine cleaning on passenger aircraft without a recognized SARS case. Cleaning of aircraft used for air medical (air-ambulance) transport of active SARS patients requires higher level cleaning as described in the air medical transport guidance detailed at site <http://www.cdc.gov/ncidod/sars/airtransport-sarspatients.htm>

When cleaning commercial passenger aircraft after a flight with a possible SARS patient:

- Compressed air that might re-aerosolize infectious material should not be used for cleaning the aircraft. There currently is no evidence to suggest that special vacuuming equipment or procedures are necessary.
- Cleaning personnel should wear non-sterile disposable gloves while cleaning the passenger cabin and lavatories.
- Gloves should be removed and discarded if they become soiled or damaged and after cleaning activities are concluded.
- Hands should be washed with soap and water or an alcohol-based hand sanitizer immediately after gloves are removed.
- Frequently touched surfaces in the passenger cabin (e.g., armrests, seatbacks, tray tables, light and air controls, and adjacent walls and windows) and passenger lavatory surfaces should be wiped down with an EPA-registered low- or intermediate-level chemical household germicide* and allowed to air dry in accordance with manufacturer's instructions.
- Special cleaning of upholstery, carpets, or storage compartments is not indicated.

Occupational health for cleaning crews

Cleaning crew managers should be aware of the symptoms described and should direct cleaning personnel to report to their occupational health service if they develop symptoms within ten days of cleaning an aircraft after a flight that had a possible SARS patient on board.

Precautions for persons who may be exposed to SARS at the work place

- Observe standard hand hygiene by washing hands frequently, avoid touching eyes, mouth and nose. Mask use is currently not recommended but is optional.
- Monitor for signs and symptoms of SARS and refer to a health facility for appropriate assessment.
- Clean-up crews do not need to wear masks and gowns to protect themselves against SARS. Safety measures already in use—washing hands, wearing gloves while working with cleaning fluids in lavatories—should be enough. Crews cleaning up after a flight that had a passenger suspected of having SARS should wear disposable gloves. As with all

infectious illnesses, the best way to avoid infection is careful hand hygiene. You should wash your hands frequently with soap and water. If soap and water are not available and your hands do not look dirty, you can use alcohol-based hand rubs instead. (<http://www.cdc.gov/ncidod/sars/airlinecleanupcrew.htm>).

Visit site <http://www.cdc.gov/ncidod/sars/faq.htm> for information on frequently asked questions.

Persons traveling by ships

Ships or cruise liners entering any of South African ports from the SARS transmission areas (Canada, Singapore, Vietnam, China, China Taiwan, China Hong Kong SAR) should be issued with a travel alert notice. If any of crew or passengers report signs and symptoms of SARS they should be dealt with as procedures outline for aircraft passengers.

In order to respond as WHO and CDC recommend, **airlines will have to ensure that flights serving SARS-affected areas are provided sufficient gloves, face masks (N95 particulate respirator) and alcohol-based disinfectant and that a seat in an isolated area can be made available when needed.**

Please note:

People should be cautious, keep updated on the current situation and not panic. Refer to the websites listed below for updated information.

<http://www.who.int>, <http://health.gov.za>, <http://www.cdc.gov>

Sources of information: <http://www.who.int> and <http://www.cdc.gov>

N-95 MASK

These masks are recommended for use by the World Health Organisation and the National Institute for Communicable Diseases (SA).

The user must ensure the mask is the appropriate size and fits correctly. To test for fitting:

- Place both hands over the mask and exhale vigorously
- If air leaks around the nose adjust the nosepiece
- If air leaks at mask edges, reposition the straps for a better fit
- Recheck

The mask is not suitable for persons with beards.

The masks are re-usable – for up to about 8 hours in total.

Standard operating procedures for Port Health Officers for SARS outbreak response

1.1 During flight

1. Patient presents with suspected SARS symptoms during flight
2. Air hostess notifies the pilot
3. Pilot informs operations at destination port
4. Suspected SARS patient is moved to an isolated area on the plane, a facemask should be placed over mouth.
5. Operations informs port health officers of the ill passenger
6. Port Health officers notifies:
port doctor(name.....tel.....)
CDC officer (name.....tel.....)

1.2 Once the plane has landed

1. Port Health officers board plane
2. Plane door is closed.
3. Following information obtained: no of cases, signs and symptoms and passenger list.
4. Passengers briefed that there is an ill person on board, calm them and inform them that they will be provided with the necessary contact health information. In the event of anyone experiencing fever of over 38 °C plus a cough and shortness of breath, they are requested to report to their nearest health facility and present the health alert card to the doctor.
5. Allow all passengers except the contacts¹ to depart.
6. Take the contacts to a room for briefing.
7. Hand out SARS information sheet and Health Alert Cards, request contact address for the next 14 days. Inform them of contact tracing procedure.
8. Suspected SARS patient taken to medical room at port and examined by the doctor.
9. Contact NICD to confirm symptoms conform to SARS case definition.
10. Doctor contacts referral hospital to arrange admission and transfer of patient
11. National Department of Health, CDC informed of suspected case.
12. Port Health officer hands over passenger list and details of close contacts.
13. The ground and cleaning crews of the airline should be notified at the same time so that preparations can be made for appropriate cleaning of the aircraft after passengers have disembarked.

Contact the National Department of Health (012) 312-0104 for further information.

¹ Contacts include: those passengers sitting in the same row (aisle to aisle), two rows to front and two rows behind the SARS suspect.