

SARS and Air Travel

Interim Guidelines for Prevention and Control

Version 2: May 8, 2003

This document has been developed in response to an urgent need for recommendations regarding the follow-up of passengers upon airplanes when a Severe Acute Respiratory Syndrome (SARS) case is detected in a person who has traveled by air. As more information about the cause, communicability and transmission of this illness becomes available, the recommendations provided in this document may change.

Key Changes in this version are:

- **Additional information provided on follow-up of flight crew**
- **Recommendations regarding follow-up required when a suspect case has been on a flight have change (based on whether the suspect case was known to have had close contact with a probable SARS case).**

The material provided on this site has been produced through consultations among federal, provincial, territorial and local public health officials across Canada and is aimed at producing scientifically sound guidelines on SARS for health professionals. Health Canada would like to acknowledge the significant and ongoing contributions of all participating stakeholders.

Principles and Assumptions

The current recommendations were based on the following principles/assumptions:

- Incubation period: 2 to 10 days
- Presentation is of a prodromal illness with sudden onset of high fever
- Lower respiratory phase begins within 3-7 days after onset of prodrome
- Close contact means having cared for, lived with or had face to face (within one metre) contact with, or direct contact with respiratory secretions and/or body fluids of a person with SARS
- Close contact with a probable case is considered to have a higher risk of transmission compared to history of travel to an “affected area”
- The cases that are the most ill are the most communicable
- There may be transmission during the prodromal period
- Transmission is occurring through close contact with a symptomatic person
- Transmission from an asymptomatic person is very unlikely
- There are some early indications that transmission during air travel have may occurred
- If it is determined that the source case does not have SARS, follow-up of passengers is no longer warranted
- All passengers should have received a Health Alert Notice (yellow card) issued by Health Canada upon arrival in Canada.

Case Definitions

Case definitions for SARS have been developed. Case definitions are subject to revision as further epidemiological and laboratory information becomes available. For the most recent case definitions please refer to the Health Canada website at: www.sars.gc.ca

Fact Sheets

General information and educational material about SARS is available on the Health Canada website at: www.sars.gc.ca

Management of Severe Acute Respiratory Syndrome (SARS): Interim Guidelines for Health Care Providers

Clinical management recommendations have been developed for clinicians managing a case of SARS and are subject to revision as further information becomes available. For detailed Clinical Management guidelines, please refer to “Management of Severe Acute Respiratory Syndrome (SARS): Interim Guidelines for Health Care Providers” on the Health Canada website at www.sars.gc.ca

Public Health Management of SARS Cases and Contacts

Public Health management recommendations have been developed. Public Health recommendations are subject to revision as further information becomes available. For full details of Public Health management guidelines, please refer to “*Public Health Management of SARS cases and Contacts*” on the Health Canada website at www.sars.gc.ca

Infection Control

Infection control guidelines have been developed for institutions, airlines/airports, and the general public. Infection control practices are subject to revision as further epidemiological and laboratory information becomes available. For full details of infection control practices for SARS cases, please refer to the Health Canada website at: www.sars.gc.ca

Diagnostic Testing

Recommended laboratory investigations for SARS have been developed. Recommended laboratory investigations are subject to revision as further information becomes available. For full details of laboratory testing recommendations, please refer to the Health Canada website at: www.sars.gc.ca

Passenger Follow-Up

The following recommendations refer to the follow-up of passengers when a suspect or probable case of SARS has been identified on an airplane.

If the SARS case was asymptomatic at the time of the flight, follow-up is not required. However, if the probable or suspect case had any symptoms of the illness during their flight, follow-up is required.

When Provincial/Territorial (P/T) public health officials are notified of a suspect or probable SARS case that was symptomatic during a flight, they should request the airplane passenger manifest from Health Canada’s, Centre for Emergency Preparedness and Response (CEPR). This should be done using the Flight Manifest Requisition Form on which the following information should be indicated:

- passenger /index case name, age, gender;
- airline company, flight number, index passenger seat number, dates of travel;
- symptoms on flight, and;
- SARS status (probable or suspect)

The P/Ts will need to follow up passengers in their respective jurisdictions who were on a flight with a symptomatic case (according to Table 1). To facilitate this process CEPR will provide the following information to the appropriate P/Ts:

- the flight number, date of the flight, and departure and destination information
- the passenger/index case seat number
- the type of case (i.e. suspect or probable) that was on the flight
- any updates on the status of the case that would affect the degree of passenger follow-up required (e.g. has moved from meeting the “suspect” to “probable” case definition)
- all demographic/locating information available on all of the passengers and crew on the flight
- the seat number assigned to each passenger

All passengers and flight crew in the plane are considered contacts of the case, however the type of contact and the appropriate public health follow-up will vary (Table 1).

Traveling companions including family members, care providers and anyone for whom there is a strong suspicion of direct contact with respiratory secretions and/or body fluids of the case would be included in the highest risk setting (Table 1). Any person (flight attendant or passenger), who provided care, including helping a case with an oxygen mask, would be considered a care provider.

Included in the table are specific recommendations for any passengers seated in close proximity to the case (i.e., who are seated in the same row as the case, two rows ahead of the case and two rows behind the case). These people, in addition to the flight attendants, are considered to be potentially at higher risk of infection than passengers seated elsewhere in the airplane with no connection to the sick passenger.

All other passengers on the flight are considered at lower risk however further public health follow-up may be indicated in certain circumstances (Table 1).

Health Canada will notify the appropriate authorities regarding any passengers who do not, or will not, be residing in Canada during the 10 days following the flight and will share the applicable Canadian public health management recommendations with these authorities.

Follow-up of flight crew

Information on the flight crew will be collected by CEPR at the same time that the manifest is requested. If a crew member resides in Canada, the P/Ts in which they reside will receive the appropriate information from CEPR (as indicated for passengers above) in order to facilitate follow-up. These individuals should be followed up according to the recommendations in Table 1. If active surveillance of a crew member is required, the public health authority must ensure that it is implemented. The public health authority may, through collaboration with the airline company, choose to delegate this activity to the occupational health representatives within airline company.

If the crew members reside outside of Canada, or will not be residing in Canada during the contact monitoring time period (i.e. 10 days following the flight), Health Canada will ensure

that the appropriate authorities are notified of the persons exposure to a suspect or probable case. Health Canada will also share the applicable Canadian public health management recommendations with these authorities

Follow-up when source of exposure is an ill flight attendant

If a flight attendant is symptomatic during a flight and is subsequently found to meet the suspect or probable case definition, the recommendations regarding the follow up of passengers will be more active. Specifically, all passengers on a flight with a symptomatic flight attendant who is identified as a SARS case should be followed in the same way as if they were seated in close proximity to a case (see second row of Table 1). The exception being that if the ill flight attendant's work activities were limited to a specific and easily identified section of the plane, for example first class, then only passengers in those sections need to be followed up using the more stringent recommendations and the rest of the passengers can be followed up according the bottom row of Table 1.

Note: See "Public Health Management of SARS Cases and Contacts: Interim Guidelines" for details about isolation in the home and active daily surveillance. Anyone on home isolation should also be on active daily surveillance.

Table 1: Passenger and Crew Follow-up

		Type of SARS case the passenger was exposed to:		
Risk Setting	Probable Case	Suspect Case – known contact of a case*	Suspect Case – travel history only**	
<p>Traveling Companions, Care Provider, or Strong Suspicion of Contact with Respiratory Secretions</p>	<p>If contact is symptomatic: isolation in hospital, home or designated health care site as per management of probable or suspect cases or persons under investigations, depending on symptoms (see Public Health Management guidelines)</p> <p>If contact is asymptomatic: home quarantine with active daily surveillance* for 10 days from last exposure to the probable case or until symptoms develop (then assess as “symptomatic”)</p>	<p>If contact is symptomatic: isolation in hospital, home or designated health care site as per management of probable or suspect cases or persons under investigations, depending on symptoms (see Public Health Management guidelines)</p> <p>If contact is asymptomatic: active daily surveillance* for 10 days or until symptoms develop (then assess as “symptomatic”) or until source case progresses to “probable” and then should be managed as contacts of a probable case.</p>	<p>If contact is symptomatic: isolation in hospital, home or designated health care site as per management of probable or suspect cases or persons under investigations, depending on symptoms (see Public Health Management guidelines)</p> <p>If contact is asymptomatic: active daily surveillance* for 10 days or until symptoms develop (then assess as “symptomatic”) or until source case progresses to “probable” and then should be managed as contacts of a probable case.</p>	
<p>Passengers seated in close proximity to case and flight attendants</p>	<p>If contact is symptomatic: isolation in hospital, home or designated health care site as per management of probable or suspect cases or persons under investigations, depending on symptoms (see Public Health Management guidelines)</p> <p>If contact is asymptomatic: active daily surveillance* for 10 days or until symptoms develop (then assess as “symptomatic”)</p>	<p>If contact is symptomatic: isolation in hospital, home or designated health care site as per management of probable or suspect cases or persons under investigations, depending on symptoms (see Public Health Management guidelines)</p> <p>If contact is asymptomatic: active daily surveillance* for 10 days or until symptoms develop (then assess as “symptomatic”)</p>	<p>No active follow-up by public health unless source case progresses to “probable”, then manage these people as contacts of a probable case.</p> <p>Note: All passengers should have received information about SARS on the Health Alert Notice (i.e., yellow card).</p>	
<p>Other passengers and other crew on the flight (e.g. pilots)</p>	<p>If contact is symptomatic: isolation in hospital, home or designated health care site as per management of probable or suspect cases or persons under investigations, depending on symptoms (see Public Health Management guidelines)</p> <p>If contact is asymptomatic: If passenger is asymptomatic, confirm how to reach passenger in future and provide a follow up number for them to use if they develop symptoms; passengers should be instructed to self-monitor temperature and to be alert for presence of symptoms for 10 days (or until symptoms develop then assess as symptomatic).</p>	<p>No active follow-up by public health unless source case progresses to “probable”, then manage these people as contacts of a probable case.</p> <p>Note: All passengers should have received information about SARS on the Health Alert Notice (i.e., yellow card).</p>	<p>No active follow-up by public health unless source case progresses to “probable”, then manage these people as contacts of a probable case.</p> <p>Note: All passengers should have received information about SARS on the Health Alert Notice (i.e., yellow card).</p>	

*Note: Person must have had or reported to have had close contact with a probable SARS case that meets the Canadian case definition in terms of “affected areas”.

**Note: Refers to a person who has travelled to an affected area but who has no known contact with a probable SARS case.