Standard Operating Procedure (SOP) for flight personnel and ground medical personnel for the measures to be taken for flights from countries with possible transmission of the severe acute respiratory syndrome (SARS) - status: 02 April 2003

1 Introduction

From November 2002 until February 2003 several hundred cases of a respiratory disease were reported from the province of Guangdong in China. Partially, these diseases took a severe course, the cause could not be identified. Since the end of February 2003 similar diseases occurred at first mainly in Hongkong and Viet Nam, but now many other countries have reported the illness which the World Health Organization has named "severe acute respiratory syndrome" or SARS. To limit importation and spread of SARS in Germany, it is important that new cases that are possibly imported via air travel from abroad are identified to facilitate rapid medical assistance and effective protection of contact persons.

2 What is the "severe acute respiratory syndrome" (SARS)?

According to the World Health Organisation (WHO) a suspected case of the severe acute respiratory syndrome (SARS) is defined as:

Onset of disease after 1 November 2002 AND Fever more than 38°C (100F) AND Cough or shortness of breath or difficulty breathing AND Within 10 days prior to symptom onset travel to a region in which there are reported foci of transmission of SARS OR close contact with a person who has been diagnosed with SARS

This case definition refers to "suspect" cases of SARS. To be a "probable" case of SARS a chest X-ray has to show signs of pneumonia.

This case definition may change in the following days or weeks. Please ask your flight dispatcher or medical ground personnel.

The list of the countries or regions with a possible or probable transmission of SARS in the population are according to the WHO (02 April 2003):

- Viet Nam (Hanoi),
- Singapore,
- China (Hongkong SAR, and the provinces Guandong and Shanxi)
- Taiwan
- Canada (Toronto).

Please note that also this list is subject to change on an almost daily basis. If you have questions, please refer to your flight dispatcher or the medical ground personnel.

"Close contact" is defined as: having cared for, having lived with or having had direct contact with respiratory secretions and body fluids of a person with probable SARS, but also having been in proximity with the ill person less than approximately 2 meters. The latter applies for example to passengers sitting less than approximately 2 meters apart from a passenger and a flight attendant serving him/her.

The incubation period is the time from infection until onset of first symptoms and is 2-7 days, but can be up to 10 days.

3 Goals of the SOP

The SOP has the following goals:

(1) to provide aid for the assessment of the personal risk and possibility for transmission of SARS(2) to provide guidance for the actions to be taken in the case a passenger or flight attendant has symptoms compatible with SARS

(3) to provide the basis for the reassurance of other passengers

4 For whom are these SOP?

This document is written for flight attendants, pilots and medical ground personnel. It is meant for flights coming from countries where according to WHO definition local transmission of SARS occurs. Again, the above list of countries may change on a daily basis.

5 Standard operation procedures (SOP)

5.1 Estimation of risk of SARS

The most cases of SARS known to date have occurred either in medical personnel, that is nurses and physicians, who were in direct, mostly unprotected, contact with a patient with SARS, or family contacts of SARS cases. At present, it is believed that transmission occurs almost exclusively when patients with SARS are symptomatic. However, please note that a person with above symptoms is really more likely to have a respiratory disease of another cause, such as the flu, which can present very similar to SARS. Nevertheless, to protect passengers, flight attendants and to prevent importation of SARS to Germany, cases with the above characteristics should be treated as suspect cases of SARS.

5.2 Measures to be taken when a passenger is suffering from an acute respiratory disease

Action is requested in the following situations:

(1) A passenger turns to a flight attendant because of above symptoms (fever; cough or shortness of breath)

(2) A passenger is obviously ill with of above symptoms (fever; cough or shortness of breath)

Flight attendant:

- Please ask physicians on board to assist with the following measures
- The ill passenger is asked to wear a so-called surgical mask as long as he/she is still able to breathe properly. Possibly the ill passenger needs to be given oxygen.
- If possible the passenger is seated separately, i.e. with as much distance as possible, from other passengers.
- If the passenger is very symptomatic, e.g. has a severe cough, also passengers within approximately 2 meters (2 yards) of the ill passenger as well as the crew caring for the ill passenger should use a surgical mask.
- The ill passenger should be assigned, if possible, a separate toilet exclusively to be used by him/her.
- Collection of the following information for later reporting to the ground personnel:
 - name
 - date of birth
 - symptoms (fever, cough, shortness of breath)
 - seat number
 - countries, in which the ill passenger stayed within the last 10 days
- Information of the ill passengers and reassurance of other passengers: there is a possibility that the ill passenger has SARS, but this is only a suspicion that is not confirmed. Further measures will be taken as directed by the local medical personnel and the local health authority.

It must be granted that the following materials can be distributed as directed by the local health authority

(1) For all passengers (in case they have not received the information sheet yet at departure):

"Important health information from the German National Public Health Institute for international travel guests"

(2) For passengers sitting within 2 meters of the ill passenger and the crew caring for the ill passenger: the information sheet "Important health information for contacts of possible cases of severe acute respiratory syndrome (SARS)"

(3) For passengers sitting within 2 meters of the ill passenger and the crew caring for the ill passenger: the **registration card**.

Pilot:

• Notification of the arrival airport.

Airport medical services or local health authority:

• The ensuing measures will be given by the local health authority or the airport medical services.

Cleaning and further use of the airplane

- The airline company must make sure that the seat and the contact surfaces of the ill passenger (including the back of the seat, the foldable table etc.) as well as the toilet used by the ill passenger (including door handle, toilet seat, faucet etc.) are cleaned with a disinfectant containing aldehydes, peracetic acid or another disinfectant as recommended by the local health authority.
- After cleaning and disinfection the airplane can be continued to be used.
- 5.3 Measures to be taken when a flight attendant is suffering from an acute respiratory disease
- Should a flight attendant develop the above mentioned symptoms (fever; cough or shortness of breath) he must not accompany the flight but shall be referred to a physician as soon as possible.
- If the symptoms (fever; cough or shortness of breath) become apparent only during the flight he/she shall not continue with serving the passengers.
- For this flight attendant the same rules apply as for ill passengers: he/she shall wear a surgical mask, be seated separately and use a separate toilet.
- One, at maximum two, colleagues are to be assigned to assist the ill flight attendant. Should the ill flight attendant be very ill, e.g. have severe cough, they should wear a mask while assisting him/her.
- For the ill flight attendant the above information is to be collected, provided to the pilot and as soon as possible transmitted to the tower of the airport of arrival.
- Unless medical ground personnel or the local health authority decides different, all passengers and flight attendants are considered "close" contacts of the ill flight attendant with the consequence that all of the above obtain the "Important health information for contacts of possible cases of severe acute respiratory syndrome (SARS)" and the "registration card".
- All other flight attendants, also those who have contact with the ill flight attendant, can continue with serving the passengers, given they are free of symptoms.
- Cleaning and disinfection as described under 5.2 above.

Situation	(1) Passenger reports to flight attendant with fever + cough or shortness of breath;(2) A passenger is obviously ill with fever + cough of shortness of breath
Flight attendant	Enlist help of a person with medical education
Flight attendant	Passenger shall wear a surgical mask
Flight attendant	If possible, separate the passenger from other passengers
Flight attendant	Should the ill passenger have strong symptoms, e.g. cough, also neighbouring passengers and the crew should use surgical masks
Flight attendant	Report to the pilot (1) name, (2) date of birth, (3) seat number, (4) stay in countries within the last 10 days, (5) symptoms
Flight attendant	Information and reassurance of ill and other passengers
Pilot	Inform ground personnel
Ground personnel	Inform ground medical services who in turn informs the local health authority
Local health authority; ground medical personnel	Distribution of information leaflets and registration cards to passengers and, as appropriate, to the crew members caring for the ill passenger according to the directions of the local health authority

Flowchart for the situation "Possible case of SARS in an airplane coming to Germany"