

Managing Passengers with Respiratory Disease Planning Air Travel
2004 British Thoracic Society Recommendations
Summary of changes since 2002

1. The flight environment and effects of altitude

- Reference to the lower cabin altitude of 6000 feet in Concorde has been removed.
- A reference has been added to the introduction of the new Airbus 380, which will expose passengers to a cabin altitude of up to 8000 ft for up to and in some cases exceeding 20 hours.
- A detailed explanation has been added of the effect of Boyle's law in relation to humidified gas, and a previous error relating to the degree of expansion of a bulla at 8000 ft has been corrected.

2. Pre-flight assessment for adults

- This is essentially unchanged but there is now a reference to SARS infection. Passengers from an area with recent local transmission of SARS and symptoms compatible with SARS, and contacts of probable or confirmed SARS within the last ten days, should not fly.

3. Pre-flight assessment for children

- As a result of new data from Roger Buchdahl and Andy Bush's group at the Brompton Hospital, recommendations have been altered. For children with cystic fibrosis or other chronic lung disease and FEV₁ <50% predicted, hypoxic challenge testing is recommended. If SpO₂ falls below 90% during hypoxic challenge, supplementary in-flight oxygen is recommended.

4. Logistics of air travel with oxygen

- Reference has been made to the fact that some airlines now prohibit the use of supplementary in-flight oxygen during take-off and landing.
- Reference has been made to the fact that international regulations permit passengers to use their own oxygen on board aircraft and to carry small, full oxygen cylinders with them (for medical purposes) with them as baggage, provided they have the approval of the airline concerned. Passengers must check with the airline first, and a charge may be made for this service.

5. The Frequent Traveller's Medical Card (FREMEC) and medical insurance

- Emphasis has been placed on passengers arranging adequate medical insurance, and details are given of the FREMEC card.

6. Respiratory Disorders

Asthma

Reference is made to the change in law which as from April 2004 requires all aircraft on flights to and from the US to carry bronchodilator inhalers as part of the mandatory medical kit. Requirements on flights to other destinations vary.

Cardiac disease

Reference has been made to a new study of children with Down's syndrome suggesting that careful evaluation of these patients would appear prudent.

Diffuse parenchymal lung disease

Reference is made to two studies, but the data do not yet warrant any change in our previous recommendations.

Infections-SARS

An entire new section has been added on SARS and there is a hyperlink to the WHO site, so that case definitions for use during an outbreak of SARS (probable and confirmed) can be kept up to date.

Patients on permanent (24 hour) ventilation

Reference is made to the fact that the airline may insist on the ventilator being switched off for take-off and landing. This makes the presence of a medical escort, who is competent to ventilate the patient by hand for up to an hour, absolutely essential.

Pneumothorax

The arbitrary 'six week rule' has been discarded. A minimum delay of one week after full radiographic resolution on CXR is recommended before air travel, or two weeks in the case of a traumatic pneumothorax or thoracic surgery

Venous thromboembolism

Reference is made to the fact that there is further new evidence of benefit from low molecular weight heparin in high risk patients, thus strengthening our recommendations.