

TUBERCULOSIS *and* AIR TRAVEL



GUIDELINES FOR PREVENTION AND CONTROL

THIRD EDITION



World Health
Organization

Tuberculosis and air travel

Guidelines for prevention and control

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Preface

Air travel is now widely accessible, with a resulting increase in the numbers of international air travellers and a consequently greater risk of communicable diseases being spread by infectious travellers. The transmission of airborne infections between people in confined spaces such as aircraft cabins is of particular concern to health officials and the general public.

In the early 1990s, several reports concerning the transmission of tuberculosis (TB) infection including its then most dangerous form, multidrug-resistant TB (MDR-TB), from infectious travellers to other passengers and crew during long flights, caused anxiety among travellers and serious concern among public health officials and airline companies. The World Health Organization (WHO) published guidelines in 1998 defining the extent of the problem and the potential risks, and providing recommendations for travellers, physicians, health authorities and airline companies. The recommendations were based on the limited evidence available at the time: investigations involving seven contagious TB patients and some 2600 potentially exposed air travellers. A second edition of the guidelines was published in 2006.

The emergence of MDR-TB and extensively drug-resistant TB (XDR-TB) has raised special concerns in relation to the international spread of particularly dangerous strains of *Mycobacterium tuberculosis*. Since the 2006 edition was published, several incidents have occurred involving air travel and potential transmission of TB. The revision of the International Health Regulations (IHR), which entered into force in June 2007, provides for the introduction of new measures that might potentially apply to international events involving TB. The IHR provide a legal framework for a more effective and coordinated international response to public health emergencies and risks, including those caused by outbreaks of communicable diseases. Several IHR provisions are relevant to the detection and control of TB during air travel, strengthening the role of WHO and of national public health authorities in this domain.

Following these important recent developments, WHO has prepared this third edition to address current public health risks that may arise from

the potential transmission of TB during air travel, and new approaches to international collaboration. This edition builds upon the 2006 edition and adds to it in providing: (i) greater clarity in the definition of infectious index cases; (ii) procedures for the follow-up of contacts of infectious cases; and (iii) a more detailed definition of the roles and responsibilities of the agencies involved. The recommendations recognize that the response needs to be proportional to the risk, so that public confidence is preserved and unnecessary restrictions are avoided.

The guidelines were developed with the collaboration of public health authorities and international experts in the prevention and control of TB, travel medicine and air travel. Implementing the recommendations will help to reduce the international spread of TB and decrease the risk of infection among individual travellers. Although the role of air travel-related transmission of TB is minimal compared with the overall transmission of TB worldwide, these guidelines may nevertheless be useful for national authorities, especially in countries with a low TB burden, and for the airline industry, to facilitate procedures involving multiple actors.

A handwritten signature in black ink, appearing to read 'M. Raviglione', with a long, sweeping horizontal stroke extending from the bottom of the signature.

Mario Raviglione
Director
Stop TB Department
World Health Organization

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