

1. Record Nr.	UNINA9910960610703321
Titolo	The airliner cabin environment and the health of passengers and crew / / Committee on Air Quality in Passenger Cabins of Commercial Aircraft, Board on Environmental Studies and Toxicology, Division on Earth and Life Studies, National Research Council
Pubbl/distr/stampa	Washington, D.C., : National Academy Press, c2002
ISBN	9786610209620 9780309170239 0309170230 9781280209628 1280209623 9780309567701 030956770X
Edizione	[1st ed.]
Descrizione fisica	1 online resource (344 p.)
Disciplina	613/.5
Soggetti	Aeronautics - Health aspects Travel - Health aspects Travelers
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Description based upon print version of record.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	""THE AIRLINER CABIN ENVIRONMENT AND THE HEALTH OF PASSENGERS AND CREW""; ""Copyright""; ""OTHER REPORTS OF THE BOARD ON ENVIRONMENTAL STUDIES AND TOXICOLOGY""; ""Preface""; ""Contents""; ""The Airliner Cabin Environment and the Health of Passengers and Crew""; ""Summary""; ""THE CHARGE TO THE COMMITTEE""; ""THE COMMITTEE's APPROACH TO ITS CHARGE""; ""THE COMMITTEE's EVALUATION""; ""Aircraft Systems""; ""Exposures on Aircraft""; ""Health Considerations""; ""Findings""; ""RECOMMENDATIONS""; ""1 Introduction""; ""EXPOSURES ON AIRCRAFT""; ""REGULATORY ASPECTS OF CABIN AIR QUALITY"" ""HISTORY OF PREVIOUS CABIN AIR-QUALITY STUDIES""" ORGANIZATION OF THE REPORT""; ""REFERENCES""; ""2 Environmental Control""; ""ENVIRONMENTAL CONDITIONS""; ""Pressure"";

""Contamination""; ""Contaminants Originating in the Cabin"";
""Contaminants Originating Outside the Cabin""; ""Transient Response
of Cabin Environmental Conditions""; ""Reactive Contaminants"";
""Temperature Control""; ""Air Distribution and Circulation"";
""Recirculation""; ""Relative Humidity""; ""ENVIRONMENTAL CONTROL
SYSTEMS""; ""Bleed-Air Supply""; ""Auxiliary Power Unit""; ""Air-
Conditioning Packs""
""Air Distribution System""""Ground-Based Systems""; ""ALTERNATIVE
ENVIRONMENTAL CONTROL SYSTEMS""; ""ENVIRONMENTAL CONTROL
SYSTEM DESIGN AND OPERATIONAL STANDARDS""; ""CONCLUSIONS"";
""RECOMMENDATIONS""; ""REFERENCES""; ""3 Chemical Contaminants
and Their Sources""; ""CONTAMINANTS WITH EXTERNAL SOURCES"";
""Ground-Level Pollution""; ""Pollution During Ascent and Descent"";
""Ozone During Cruise""; ""Atmospheric Ozone Concentrations"";
""Ozone Chemistry""; ""Methods of Controlling Ozone in Aircraft"";
""Measurements of Ozone in Aircraft""; ""CONTAMINANTS WITH
INTERNAL SOURCES""
""Passengers and Belongings""""Aircraft Component Materials"";
""Cleaning Materials and Dust""; ""Pesticides""; ""Disinsection
Procedures""; ""Composition of Pesticide Sprays""; ""Pesticide
Exposure""; ""CONTAMINANTS FROM AIRCRAFT SYSTEMS"";
""CONCLUSIONS""; ""RECOMMENDATIONS""; ""REFERENCES""; ""4
Biological Agents""; ""GENERAL INFORMATION ON BIOAEROSOLS"";
""Biological Agents in Outdoor Air Near the Ground""; ""Biological
Agents in Outside Air in Flight""; ""People""; ""Arthropods, Pets, and
Service Animals""; ""Arthropods""; ""Pets and Service Animals""; ""Settled
Dust""
""Microbiological Growth""""Contaminated Fluids""; ""Other Reservoirs of
Potential Infectious Agents""; ""ENVIRONMENTAL SAMPLING ON
AIRCRAFT""; ""Sampling for Culturable Bacteria and Fungi""; ""Sampling
for Allergens""; ""Evaluation of Available Information on Bioaerosols"";
""Microorganisms Sampled in Cabin Air""; ""Other Biological Agents"";
""Bacterial Endotoxin""; ""Fungal Toxins""; ""Microbial Volatile Organic
Compounds (MVOCs)""; ""Recommended Sampling for Biological
Agents""; ""NIOSH-Sponsored Review""; ""Allergens""; ""Infectious
Agents""; ""HEALTH EFFECTS OF EXPOSURE TO BIOAEROSOLS""
""Hypersensitivity Disease""

Sommario/riassunto

Although poor air quality is probably not the hazard that is foremost in peoples (TM) minds as they board planes, it has been a concern for years. Passengers have complained about dry eyes, sore throat, dizziness, headaches, and other symptoms. Flight attendants have repeatedly raised questions about the safety of the air that they breathe. The Airliner Cabin Environment and the Health of Passengers and Crew examines in detail the aircraft environmental control systems, the sources of chemical and biological contaminants in aircraft cabins, and the toxicity and health effects associated with these contaminants. The book provides some recommendations for potential approaches for improving cabin air quality and a surveillance and research program.
