The book provides an up-to-date overview of the history of aviation medicine and the development of medical requirements for licensing. The bulk of the book is the clinical part which contains several chapters and sub-chapters on clinical aviation medicine with detailed guidance, written by Medical Examiners for Medical Examiners, on how to examine aircrew and how to determine their fitness for flight, especially in cases where the medical requirements are not fully met. Focussing on cardiology, ophthalmology, otology, neurology, psychology and psychiatry, Principles and Practice of Aviation Medicine provides an in-depth discussion of many diseases and medical conditions, frequently encountered in aeromedical practice, with emphasis on how they relate to the demands of contemporary aviation, both with regard to airline pilots and private pilots. Throughout particular consideration is given to how and when flexibility can be applied to the medical certification. Also the physiological foundation for flight, the physiology of the sensory organs, exposure to cosmic radiation, the preventative aspects of aviation medicine, the role of medical factors in accident investigation, and passenger health issues are covered.

In addition, the book includes a chapter on the international medical requirements and other pertinent rules and regulations for medical certification set by the Joint Aviation Authorities (JAA) and the Federal Aviation Administration of the United States (FAA), as well as the latest revised medical standards and recommended practices of the International Civil Aviation Organization (ICAO).