

24th ASIAN CONGRESS ON OCCUPATIONAL HEALTH 2026 (ACOH 2026)

PRE-CONGRESS WORKSHOP ON AVIATION MEDICINE

Date: 5 August 2026

Time: 0830 – 1300

Trainers:

- Dr Jaseema Begum Nazir Khan
- Dr Nazrul Safiq Abd Rahim

1. Introduction

The Airline Doctor plays a critical role in ensuring aviation safety by integrating aviation medicine, occupational health, and regulatory compliance into airline operations. The practitioner supports airline management in safeguarding flight crew, ground personnel, and safety-sensitive employees through medical risk assessment, hazard evaluation, and return-to-duty decision-making aligned with national and international aviation standards.

2. Course Objectives

1. Explain the regulatory framework governing aviation medical practice in Malaysia.
2. Apply Occupational Safety and Health (OSH) principles within aviation ground and flight operations.
3. Conduct Hazard Identification, Risk Assessment and Risk Control (HIRARC) in aviation environments.
4. Assess medical incapacitation risks among licence holders and safety-sensitive personnel.
5. Formulate defensible fitness-for-duty and return-to-work recommendations in accordance with Civil Aviation and OSHA requirements.

3. Course Content Outline

Module 1: Aviation Regulatory & Legal Framework

- Civil Aviation Act 1969
- Civil Aviation Regulations 2016
- Civil Aviation Directive (CAD 1004) – Medical Requirements
- ICAO Annex 1 – Personnel Licensing
- Role and responsibilities of Aviation Medical Examiner (AME)

Module 2: Occupational Safety & Health in Aviation Operations

- Occupational Safety and Health Act (OSHA) 1994
- Occupational Safety and Health (Amendment) Act 2022
- Application of OSHA in aviation ground operations

- Safety-sensitive roles in aviation industry
- Risk exposure in Above-the-Wing, Below-the-Wing, Engineering, Catering & Cargo operations

Module 3: Hazard Identification & Risk Assessment (HIRARC)

- Principles of hazard identification in aviation settings
- Risk profiling methodology
- Risk matrix application
- Hierarchy of control
- Group HIRARC exercise based on operational scenarios

Module 4: Medical Incapacitation & Fitness-to-Fly Assessment

- Concept of medical incapacitation
- Temporary vs permanent unfitness
- Cardiovascular risk stratification
- Psychiatric fitness and aviation safety
- Anaemia, metabolic disorders and hypertension considerations
- Case-based medical evaluation

Module 5: Clinical Case Analysis & Return-to-Duty Decisions

- Colour vision deficiency in pilot applicants
- Post-coronary intervention case
- Major Depressive Disorder in flight crew
- Cabin crew with anaemia
- Air Traffic Controller with elevated blood pressure
- Writing defensible aeromedical reports aligned with CAD 1004 and OSHA