## **Health Personnel Training Program for Air Ambulances Health Personnel Training Program for Air Ambulances**

| MODULE 1: Flight Physiology and Flight Environment  1. Basic Aviation Information and Terminology  1.1. Basic Aerodynamics  1.2. Aircraft Components  1.3. Navigation  1.4. Meteorology  2. Introduction to Aviation Medicine  3. Atmospheric physics and gas laws  4. Hypoxia and hyperventilation  5. Atmospheric pressure changes (Barotraumas, Decompression sickness, Hyperbaric Oxygen Therapy basic principles)  6. acceleration  7. Oxygen systems and cabin pressurization  8. Systems that provide spatial orientation  9. Spatial Disorientation (SD)  10. Loss of Situational Awareness-SA  11. Jet-Lag and Shift-Lag  12. Motion Sickness  13. cosmic radiation  14. electromagnetic radiation  15. thermal stresses  16. Noise and vibration  MODULE 2: Operational and Clinical Aviation Medicine  1. Human Factors in Aviation  2. Crew Resource Management  3. Accidents: Escape, Escape and Survival  4. Conditions Interfering with Flight  5. Decompression Diseases and Intervention Methods  6. Flight Hygiene | SUBJECTS   | DURATION (ST) |
|--|--|---------------|
| 1.1. Basic Aerodynamics  1.2. Aircraft Components  1.3. Navigation  1.4. Meteorology  2. Introduction to Aviation Medicine  3. Atmospheric physics and gas laws  4. Hypoxia and hyperventilation  5. Atmospheric pressure changes (Barotraumas, Decompression sickness, Hyperbaric Oxygen Therapy basic principles)  6. acceleration  7. Oxygen systems and cabin pressurization  8. Systems that provide spatial orientation  9. Spatial Disorientation (SD)  10. Loss of Situational Awareness-SA  11. Jet-Lag and Shift-Lag  12. Motion Sickness  13. cosmic radiation  14. electromagnetic radiation  15. thermal stresses  16. Noise and vibration  MODULE 2: Operational and Clinical Aviation Medicine  1. Human Factors in Aviation  2. Crew Resource Management  3. Accidents: Escape, Escape and Survival  4. Conditions Interfering with Flight  5. Decompression Diseases and Intervention Methods   | MODULE 1: Flight Physiology and Flight Environment   | 10 hours      |
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| Crew Resource Management     Accidents: Escape, Escape and Survival     Conditions Interfering with Flight     Decompression Diseases and Intervention Methods   | MODULE 2: Operational and Clinical Aviation Medicine | 10 hours      |
| 3. Accidents: Escape, Escape and Survival 4. Conditions Interfering with Flight 5. Decompression Diseases and Intervention Methods   | Human Factors in Aviation                            |               |
| Conditions Interfering with Flight     Decompression Diseases and Intervention Methods   | 2. Crew Resource Management                          |               |
| Decompression Diseases and Intervention Methods  | 3. Accidents: Escape, Escape and Survival            |               |
| -  | 4. Conditions Interfering with Flight                |               |
| 6. Flight Hygiene  | 5. Decompression Diseases and Intervention Methods   |               |
|  | 6. Flight Hygiene                                    |               |

|             | 7. fatigue and sleep   |         |
|-------------|--|---------|
|             |  |         |
|             | 8. Medication and flight   |         |
|             | 9. Flight Psychology   |         |
|             | 10. Aviation Toxicology  |         |
|             | 11. Flight Accidents   |         |
| MOD         | OULE 3: Medical Transport  | 5 hours |
| 1.<br>World | Medical Transplant Operations and Development in Turkey and the    |         |
| 2.          | Air Ambulance Organizations, Related Organizations and             |         |
| Legis       | lation   |         |
| 3.          | Orientation to Aviation and Aircraft                               |         |
| 4.          | Around Aircraft and Flight Safety                                  |         |
| 5.          | Mass Accidents/Disasters and Search and Rescue Operations          |         |
| MOD         | OULE 4: Basic Flight Operations Information                        | 5 hours |
| 7.          | Communications and Basic Flight Operations Management              |         |
| 8.          | Pre- and Post-Transplant Briefing                                  |         |
| 9.          | Air Ambulance Patient Transport Environment                        |         |
| 10.<br>Ambı | Medical Devices, Consumables and Medicines Used in Air alance      |         |
| 11.         | Preparing the Patient for Transport and Packing                    |         |
| 12.         | Form and Documentation Used in Air Ambulance Operations            |         |
| 13.         | Receiving and Delivering the Patient                               |         |
| 14.         | Contaminated and Infected Patient Management and Control           |         |
|             | OULE 5: Management of Special Patient Groups in the Flight conment | 5 hours |
| 24.         | Management of the Trauma Patient in the Flight Environment         |         |
|             | 24.1.Head Trauma   |         |
|             | 24.2. Chest Trauma   |         |
|             | 24.3.Abdominal Trauma  |         |
|             | 24.4.Spinal Trauma   |         |
|             | 24.5. Limb Trauma  |         |
|             | 24.6.Trauma in Special Patient Groups (Pregnant, Geriatric and     |         |
| Pedia       |  |         |
| 25.         | Burn Patient Management in the Flight Environment                  |         |
| 26.         | Management of the Obese and Bariatric Patient in the Flight        |         |

| Environment   |  |
|---|--|
| 27. Management of the Newborn in the Flight Environment         |  |
| 28. Management of Risky Pregnancy and Birth Tendency Patient in |  |
| Flight Environment  |  |

| MODULE 6: Flight and Aircraft Skills Practices   | 5 hours |
|--|---------|
| 1. Introducing the Flight Operations Center and Creating Air Ambulance Flight Plans, Observing the Processes |         |
| 2. Introduction of Air Ambulances  |         |
| 2.1. cockpit   |         |
| 2.2. Medical Kit   |         |
| 2.3. Introduction of Medical Devices Used from Aircraft  |         |
| 2.3.1. Oxygen Tubes and Regulator,   |         |
| 2.3.2.Adult Mechanical Ventilator,   |         |
| 2.3.3.Monitor, Defibrator  |         |
| 2.3.4.Infusion Pump  |         |
| 2.3.5.Perfusion Pump   |         |
| 2.3.6. Incubator and Newborn Ventilator  |         |
| 3. Creation of a Safe Operating Environment in and Around the  |         |
| Aircraft   |         |
| 4. Patient Safe Embarkation Procedures in Aircraft   |         |
| 5. Introduction and Use of Air Ambulance Communication (Intercom)  |         |