



WORKING PAPER

ASSEMBLY — 42ND SESSION

TECHNICAL COMMISSION

Agenda Item 24: Aviation Safety and Air Navigation Priority Initiatives

GLOBAL FRAMEWORK FOR MANAGING IN-FLIGHT PASSENGER HEALTH EMERGENCIES: STANDARDS FOR AIRLINES AND HEALTHCARE INTEGRATION

(Presented by Kazakhstan)

EXECUTIVE SUMMARY

In-flight medical emergencies, though relatively infrequent, present unique and complex challenges due to the constraints of the cabin environment, variable training levels among cabin crew, and the lack of standardized coordination with ground-based medical support. Despite ongoing safety improvements, there remains no globally harmonized ICAO-endorsed framework for responding to such events onboard commercial aircraft.

This paper advocates for the development of international guidelines under ICAO's remit, in coordination with Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA), World Health Organization (WHO), International Air Transport Association (IATA), and other relevant bodies. These guidelines should address crew medical training, aircraft medical kit provisions, onboard use of telemedicine, and mechanisms for effective cooperation with airport medical services. Standardizing such procedures will help ensure a uniform level of preparedness and enhance global aviation health resilience.

Action: The Assembly is invited to:

- acknowledge the increasing occurrence and potential consequences of in-flight passenger health emergencies;
- encourage ICAO to work in coordination with WHO, IATA, and other relevant stakeholders to develop a global framework or guidance material for managing in-flight medical incidents;
- urge States and operators to collect and report medical incident data anonymously to support evidence-based regulatory development; and
- call for harmonization of aircraft medical kit contents, crew medical training curricula, and ground-based medical support standards across ICAO Member States.

<i>Strategic Goals:</i>	This working paper relates to <i>Every Flight is Safe and Secure</i> .
<i>Financial implications:</i>	The financial impacts will depend on approved decisions.
<i>References:</i>	Annex 6 — <i>Operation of Aircraft</i> Doc 9974, <i>Flight Safety and Volcanic Ash</i>

1. INTRODUCTION

1.1 In-flight passenger health emergencies encompass a range of conditions, from minor ailments to life-threatening situations such as cardiac arrest, strokes, or severe allergic reactions. Given the inherent challenges of high altitude, the time-critical nature of these incidents, and the resource limitations onboard aircraft, swift, standardized, and well-coordinated responses are imperative to ensure passenger safety and operational integrity.

1.2 Currently, significant variations persist among States and airline operators concerning preparedness levels, medical equipment provisions, crew training protocols, and overall response mechanisms for such emergencies.

2. DISCUSSION

2.1 Scope and nature of the problem

2.1.1 Industry estimates suggest that approximately a relatively low but non-negligible number experiences a medical emergency. This equates to a relatively low but non-negligible number of incidents annually across the global air transport network. In severe, albeit rare, instances, passengers have regrettably succumbed to medical conditions mid-air due to the absence of timely intervention or appropriate equipment.

2.2 Regulatory and operational gaps

2.2.1 Existing ICAO provisions, such as those found in Annex 6 – *Operation of Aircraft*, address the carriage of medical supplies onboard aircraft. However, these provisions generally do not prescribe detailed minimum medical training levels for cabin crew, mandates for telemedicine capability, or comprehensive specifications for aircraft medical kit contents. While some Contracting States have developed and issued their own national guidance on these matters, there remains no ICAO-endorsed global baseline or standardized best practices for comprehensive in-flight health emergency response. This regulatory void contributes to inconsistencies in preparedness and response capabilities worldwide.

2.3 Public health implications

2.3.1 Beyond immediate passenger safety, in-flight medical incidents can trigger broader operational and public health consequences. These include post-landing delays, costly aircraft diversions, and potential public health concerns, particularly in scenarios involving communicable diseases or vulnerable passenger populations. Enhanced coordination and collaboration between aviation and public health authorities, notably through frameworks like the Collaborative Arrangement for the Prevention and Management of Public Health Events in Civil Aviation (CAPSCA), are crucial to bolster preparedness and resilience against such eventualities.

2.4 Opportunities for international harmonization

2.4.1 There is a clear opportunity for ICAO-led standardization to bridge these gaps and enhance global safety. Key areas for the development of harmonized guidance include:

- a) establishing minimum standards for aircraft medical kits, differentiated by flight duration and aircraft capacity;

- b) developing required first-aid, cardiopulmonary resuscitation (CPR), and automated external defibrillator (AED) training modules for all cabin crew;
- c) instituting protocols for the seamless integration and utilization of telemedical assistance systems onboard aircraft;
- d) providing guidelines for effective coordination with ground-based medical responders and airport emergency services; and
- e) designing confidential and standardized incident reporting mechanisms to facilitate evidence-based regulatory development and continuous improvement.

3. **CONCLUSION**

3.1 The establishment of a proactive, globally harmonized framework for managing in-flight health emergencies will demonstrably enhance passenger safety outcomes, contribute to a reduction in costly flight diversions, and align aviation health protocols with broader public health objectives.

3.2 ICAO is uniquely positioned to lead the development of such a comprehensive framework. This can be achieved through collaborative engagement with all relevant stakeholders, including the World Health Organization (WHO), and by ensuring alignment with the spirit and requirements of the WHO International Health Regulations (IHR 2005).

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