Global mental health in 2025

Mental health conditions are widespread, undertreated and under-resourced

WIDESPREAD

UNDERTREATED

UNDER-RESOURCED

Nearly
1 in 7
people globally live with
a mental disorder

71%
of people with psychosis do not
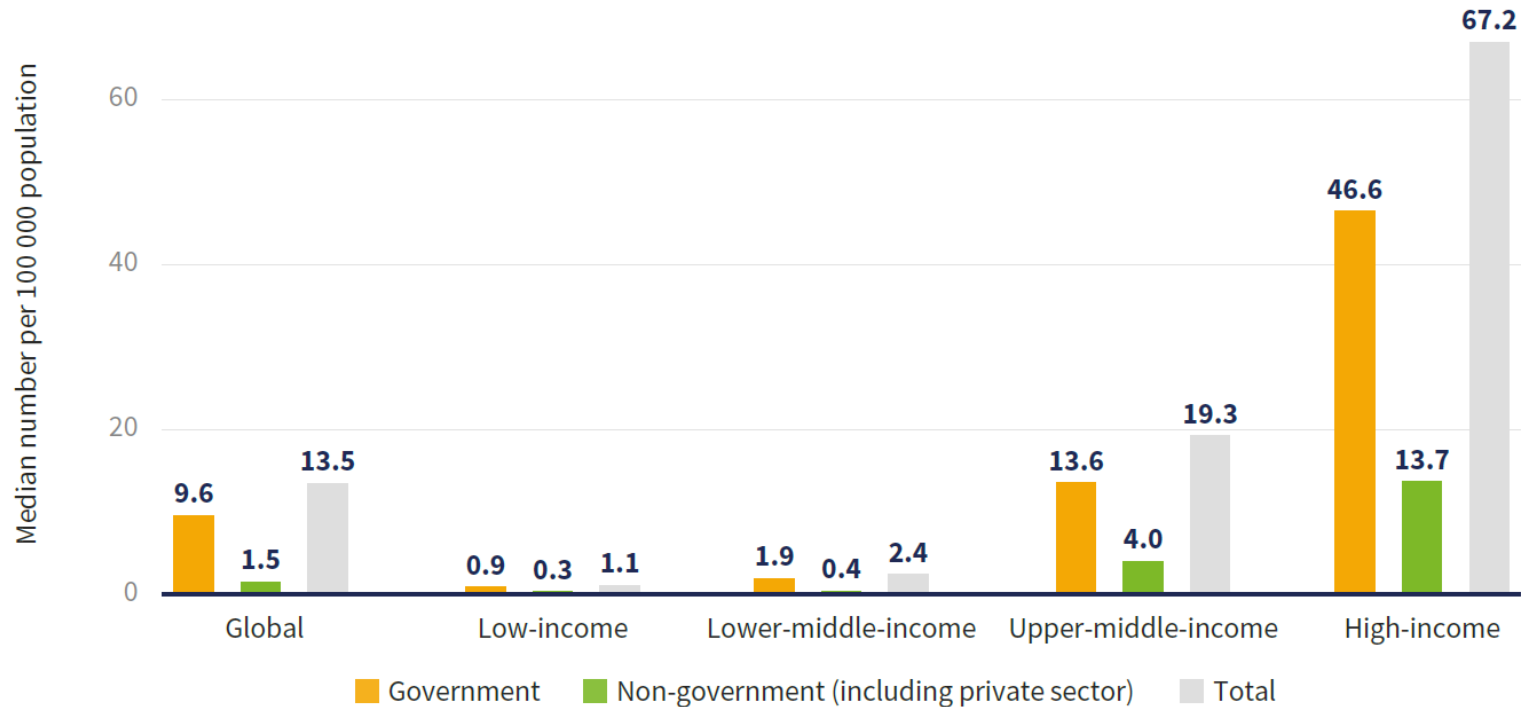receive mental health services

1.4%
or less of health budgets in LMICs,
on average, go to mental health

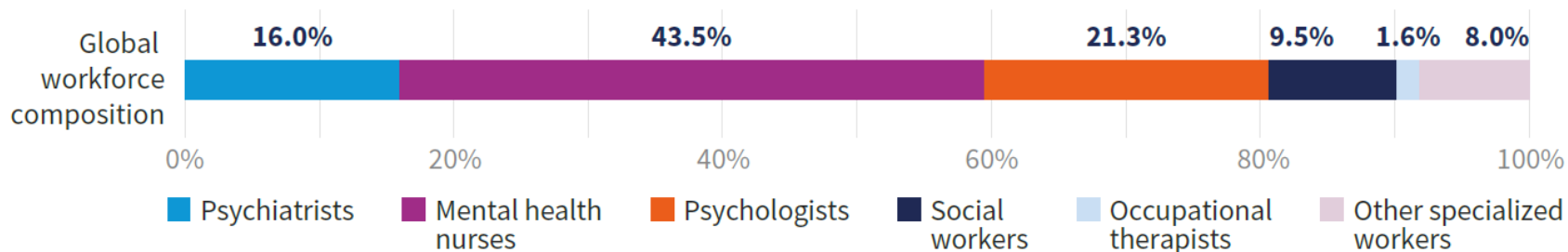Source: IHME, 2024 *(3, 4)*; WHO, 2025 *(2)*.

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The specialized mental health workforce

Median number per 100 000 population

	Government	Non-government (including private sector)	Total
Global	9.6	1.5	13.5
Low-income	0.9	0.3	1.1
Lower-middle-income	1.9	0.4	2.4
Upper-middle-income	13.6	4.0	19.3
High-income	46.6	13.7	67.2

Source: WHO, 2025 (2).

The specialized mental health workforce

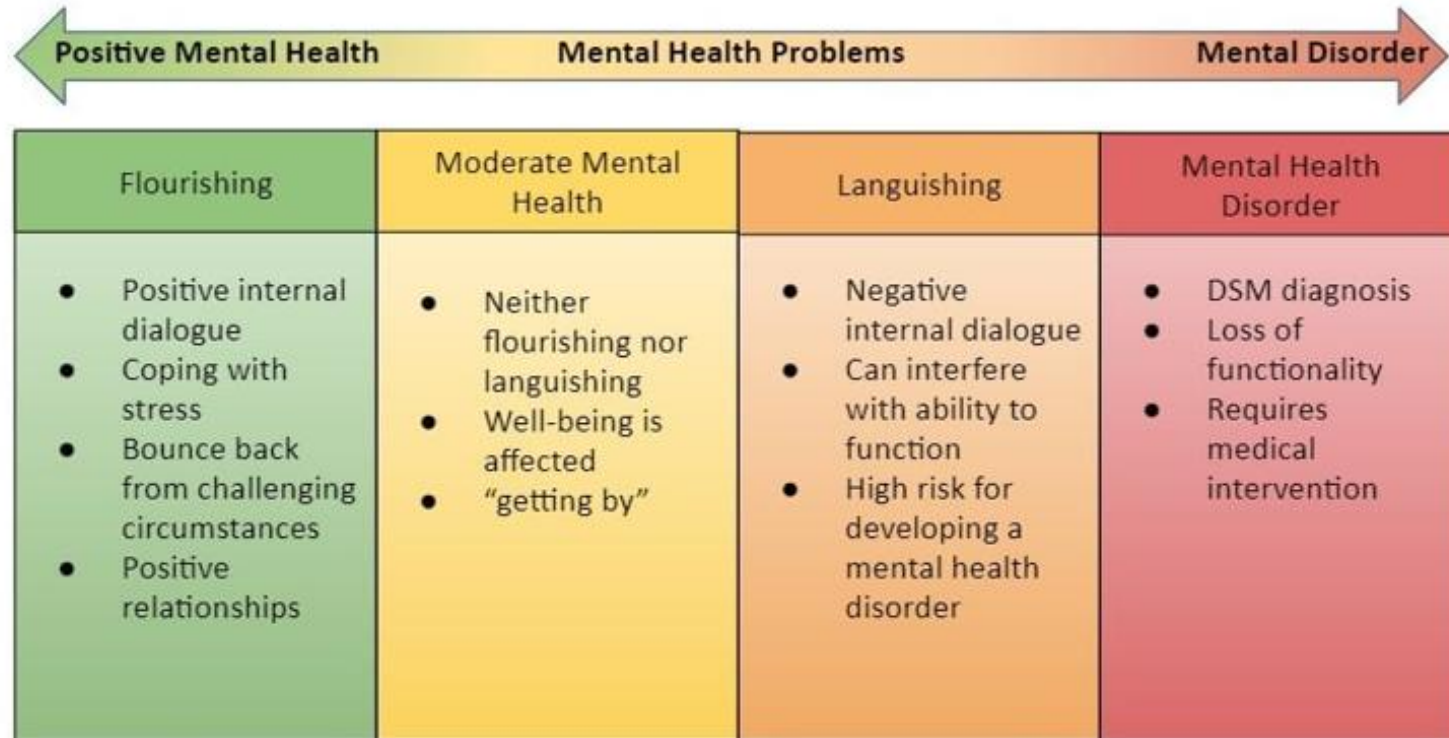| Global workforce composition | Psychiatrists 16.0% | Mental health nurses 43.5% | Psychologists 21.3% | Social workers 9.5% | Occupational therapists 1.6% | Other specialized workers 8.0% |

Source: WHO, 2025 (2).

Understanding mental health

Exists on a complex continuum, experienced differently by different persons

Positive Mental Health	Mental Health Problems		Mental Disorder
Flourishing	Moderate Mental Health	Languishing	Mental Health Disorder
• Positive internal dialogue • Coping with stress • Bounce back from challenging circumstances • Positive relationships	• Neither flourishing nor languishing • Well-being is affected • "getting by"	• Negative internal dialogue • Can interfere with ability to function • High risk for developing a mental health disorder	• DSM diagnosis • Loss of functionality • Requires medical intervention

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Mental health and work (WHO)

- 15% of working-age adults have a mental disorder at any point in time
- Meaningful work protective for mental health: sense of accomplishment, confidence
- Negative effects of poor mental health: cognitive, behavioural, emotional, social, relational well-being & functioning, physical health, personal identity
- **Negative effects of poor mental health on work**
  - Impaired capacity to participate in work
  - Reduction in productivity and performance
  - Reduction in the ability to work safely
  - Difficulty in retaining or gaining work

WHO guidelines on mental health at work
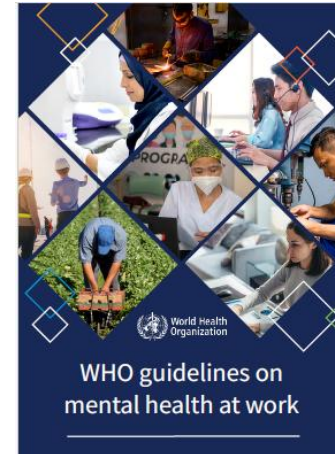
Factors affecting mental health in aviation

Mental health challenges in aviation

- Stigma and discrimination (perceived and real)
- Self-esteem and self-confidence
- Reluctance to seek help
- Seeking help, but declining treatment
- Obtaining treatment, but non-disclosure
- Peers hesitant to report concerns to employer
- Increasing stress and isolation
- Adverse effect on the progression of disease
- Increased risk to aviation safety

Current snapshot of mental health in aviation

- <u>Magnitude</u> of mental health problems and disorders in aviation unknown
- <u>Majority of mental disorders</u>: depression, anxiety, alcohol and drug dependence
- <u>Potential certification consequences</u>
  - Additional costs – examinations & treatment
  - Grounding
  - Loss of income
  - Loss of medical certification
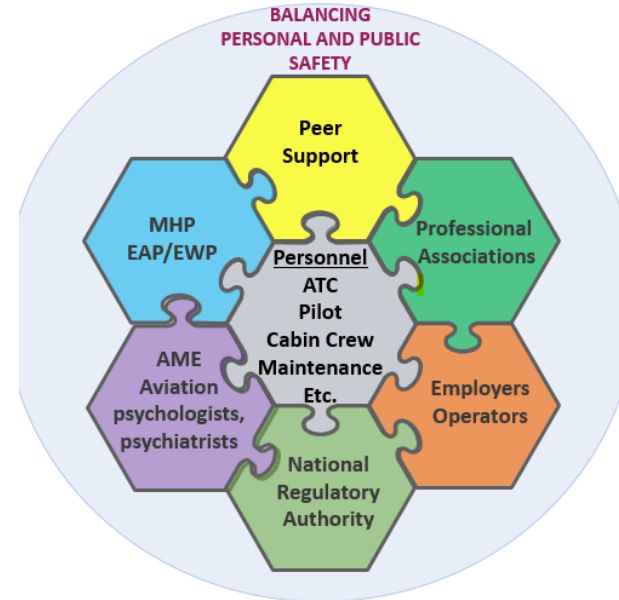 - Loss of employment
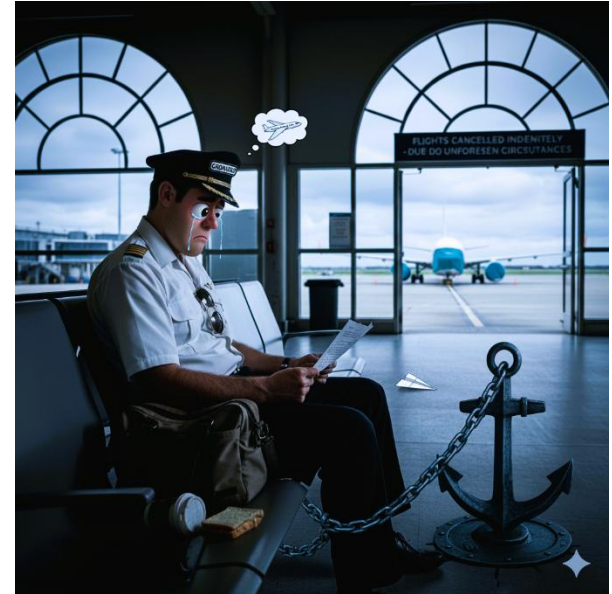
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Promoting, maintaining and supporting mental health during the Covid-19 pandemic

Responsibilities of all stakeholders

- Multi-stakeholder collaboration
- Recognize different cultural approaches
- Promote a common understanding of supportive behaviors and activities
- Provide a psycho-socially safe and supportive environment

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Promoting, maintaining and supporting mental health during the Covid-19 pandemic

Responsibilities of National Aviation Authorities

- Ensure collaboration: aviation medical examiners, healthcare professionals, peer support groups, aviation personnel

- Provide guidance and support to aviation medical examiners

- Encourage stakeholders to make available appropriate resources and tools

- Communicate on a regular basis to all stakeholders the means to maintain licensing and proficiency to enable safe performance of duties

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Promoting, maintaining and supporting mental health during the Covid-19 pandemic

Responsibilities of Industry Service Providers

- Raise awareness to leadership and management
- Offer resources such as EAP or other programs
- Inform aviation personnel of other available resources
- Facilitate access to support programs
- Educate on fitness for duty and self-care
- Encourage development and provisions of training programmes
- Ensure safety management system addresses concerns

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Promoting, maintaining and supporting mental health during the Covid-19 pandemic

Responsibilities of aviation personnel

- Practice self-care in all dimensions: nutrition, exercise, sleep, reduce stressors, healthy behaviour, interaction with a personal support network

- Seek support pro-actively to maintain well-being and encourage fellow employees to seek support as needed.
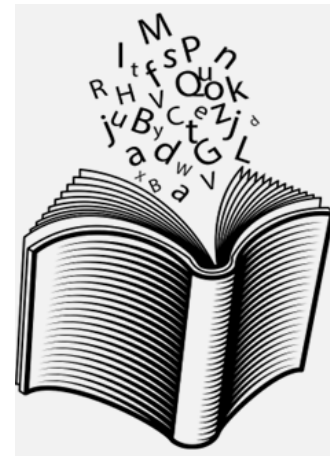
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Promoting, maintaining and supporting mental health during the Covid-19 pandemic

Responsibilities of Aviation Medical Examiners & Healthcare Professionals

- Provide a supportive environment

- Proactively discuss work-related challenges

- Refer for further appropriate support

- Update contact details to facilitate referral

- Refer to health professionals as appropriate where peer support groups are not available or where more professional support is needed.

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Promoting, maintaining and supporting mental health during the Covid-19 pandemic
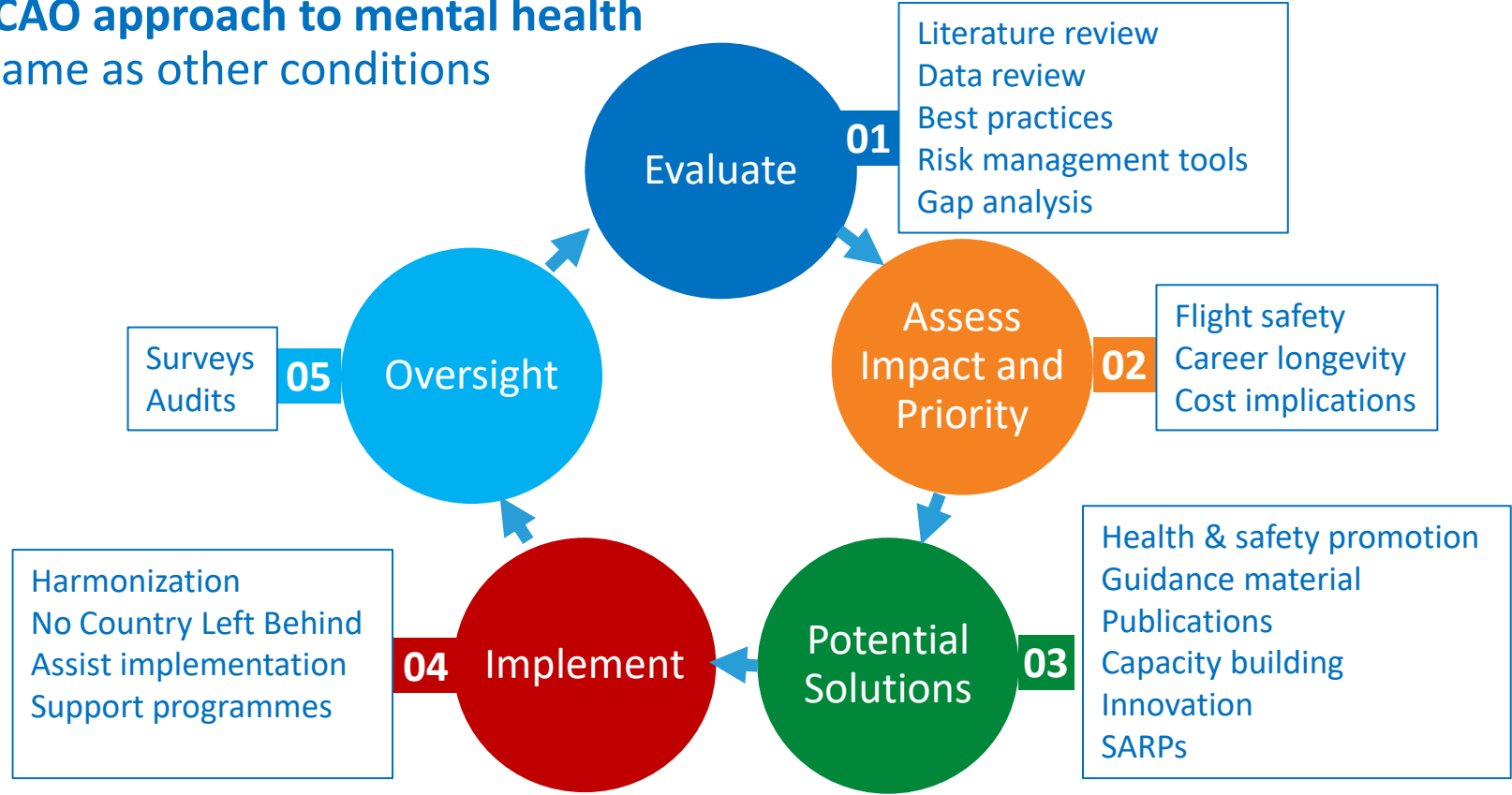
Peer support

- <u>Definition</u> of peers
- <u>Dimensions</u> of peer support
- <u>Principles</u>: emotionally safe, non-judgmental, confidential, independence, supervision, consideration of SMS aspects

Critical Incident Response
Mitigating the effects of trauma

Medical Certification Concerns
Liaise with AME and Regulator

Wellbeing & Life Crises
Assist to structure dilemmas and identify solutions

Peers
- Actively Listen
- Build Trust
- Offer Support
- Refer, if needed

Professional Standards
Facilitate conflict resolution (pilots only)

Training Issues
Collaborate with Training to identify feasible solution

Substance Addiction
Triage with Regulator, Management and AME over recovery process

ICAO approach to mental health
Same as other conditions

01 Evaluate
- Literature review
- Data review
- Best practices
- Risk management tools
- Gap analysis

02 Assess Impact and Priority
- Flight safety
- Career longevity
- Cost implications

03 Potential Solutions
- Health & safety promotion
- Guidance material
- Publications
- Capacity building
- Innovation
- SARPs

04 Implement
- Harmonization
- No Country Left Behind
- Assist implementation
- Support programmes

05 Oversight
- Surveys
- Audits

Risk management

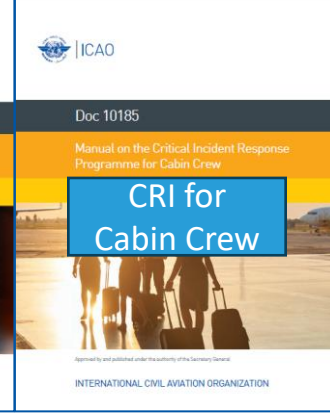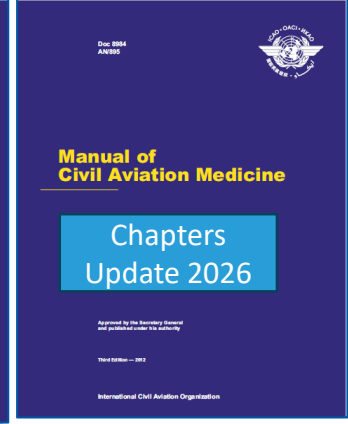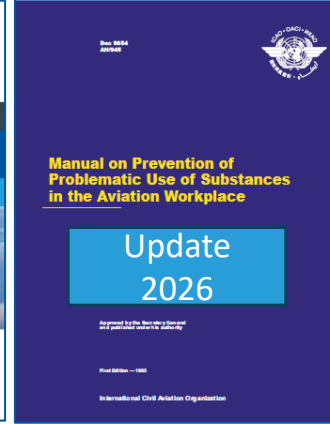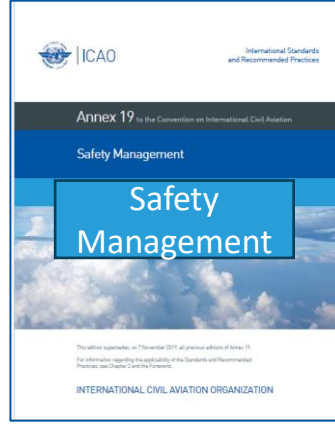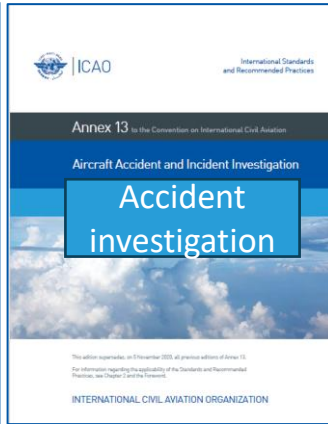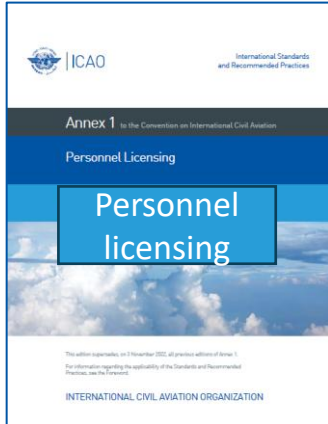|	
Sudden & subtle incapacitation	• Literature review, incident and accident data, performance data, medical examination data, peer reports
Cognitive functioning	• Literature review, performance data, cognitive testing, peer reports
Risk mitigation	• Qualitative and quantitative, bow-tie, risk matrices, Swiss Cheese mitigation measures, acceptable risk threshold
The future	• Research, data analysis, data driven algorithmic risk modelling, consider new types of operations: single pilot, remote pilots, etc.

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ICAO Annexes and Manuals

ICAO — International Standards and Recommended Practices

Annex 1 to the Convention on International Civil Aviation — Personnel Licensing

Personnel licensing

ICAO — International Standards and Recommended Practices

Annex 13 to the Convention on International Civil Aviation — Aircraft Accident and Incident Investigation

Accident investigation

ICAO — International Standards and Recommended Practices

Annex 19 to the Convention on International Civil Aviation — Safety Management

Safety Management

Manual on Prevention of Problematic Use of Substances in the Aviation Workplace

Update 2026

Manual of Civil Aviation Medicine

Chapters Update 2026

ICAO — Doc 10151 — Manual on Human Performance (HP) for Regulators

Human Performance

ICAO — Doc 9756 — Manual of Aircraft Accident and Incident Investigation

Accident investigation

ICAO — Doc 9859 — Safety Management Manual

Safety Management

ICAO — Doc 10185 — Manual on the Critical Incident Response Programme for Cabin Crew

CRI for Cabin Crew

NEW: Health Promotion and Mental Wellbeing (Chapter on) 2026

ICAO 2025 Report on the State of Global Aviation Safety

Article: The role of Health Promotion and Mental Wellbeing in Enhancing Aviation Safety

The value of health promotion, mental wellbeing advocacy and the ultimate effective application of individualized risk management should not be underestimated in terms of building trust within the aviation medical system and the resultant effect of enhanced aviation safety

Peer support Programmes (PSPs)

- Importance of implementing PSPs
- Licence holders and safety-sensitive workers
- Collaboration between all aviation stakeholders
- Caution: do not link PSPs to medical certification

Substances

- Framework for evaluating use of psycho-active substances

Health promotion and assessment

- Value of national preventive activities
- Include in aviation medical examinations

Aviation security personnel

- Global guidance for mental health risk assessment
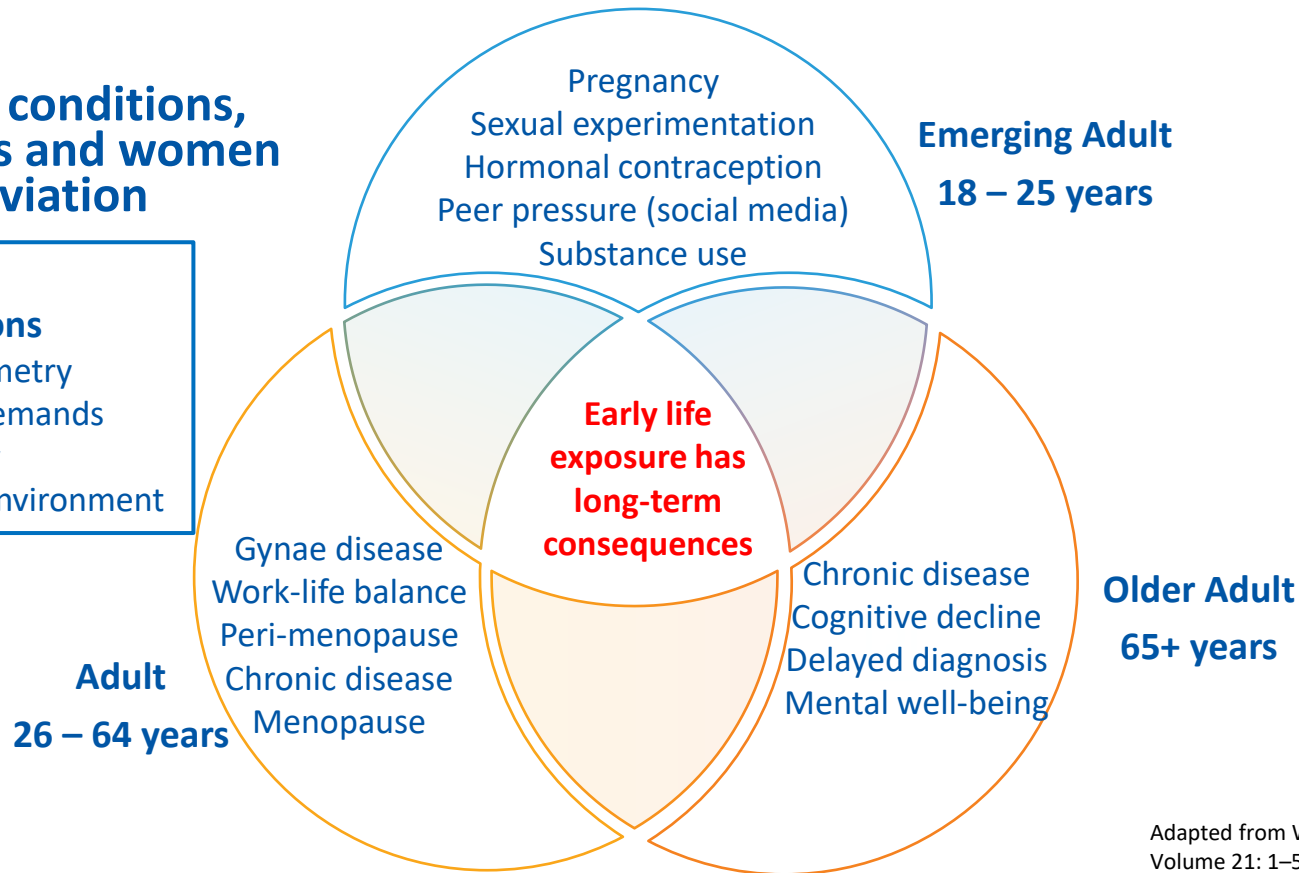- No psychological/ mental health screening by AME

Data-based risk management and decision-making in aviation medicine

- **Standardized data** collection to inform evidence-based SARPs

- Global framework for managing **in-flight passenger health emergencies**

- Guidance to implement **Aviation Health Management system** based on SMS principles

- Enhance data generation and collection, strengthen the aviation medical system to safely support considering a future increase in the **age limit**

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Medical conditions, life stages and women in aviation

General considerations
- Anthropometry
- Physical demands
- Physiology
- Working environment

Emerging Adult 18 – 25 years

Pregnancy
Sexual experimentation
Hormonal contraception
Peer pressure (social media)
Substance use

Early life exposure has long-term consequences

Adult 26 – 64 years

Gynae disease
Work-life balance
Peri-menopause
Chronic disease
Menopause

Older Adult 65+ years

Chronic disease
Cognitive decline
Delayed diagnosis
Mental well-being

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What about support for women in Aviation Medicine ?

1. ICAO Medical Assessor Peer Support Programme

2. ICAO Women in Aviation Medicine Support Programme

- Virtual networking

- Physical networking opportunities

- Mentorship programs

- Advice on career progression pathways

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Summary of plans

- **International Health Regulations (IHR) published by WHO**
- **ICAO Annexes 6, 9, 11, 14, 18 & PANS-ATM Document**

- **National Public Health Emergency Contingency Plan**
- **National Aviation Regulations with standards related to public health**
- **National Aviation Plan for a Public Health Emergency**
- **Airport (PoE) Public Health Emergency Contingency Plan**

Aerodrome Emergency Plan and Aerodrome Manual including public health emergencies	**Air Traffic Services (ATS)** contingency plan including public health emergencies	**ATS** Procedures for notification of suspected public health risk on board an aircraft	**Aircraft Operators** Procedures for managing suspected public health risk on board an aircraft

Business Continuity Management Plans and Procedures for Airports, Airlines & ANSPs

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Thank You