

State of Kuwait

Directorate General of Civil Aviation

Aviation Safety Department

Civil Aviation Safety Publication (CASP-006)



Topics covered

- What do we mean by 'health promotion' in aviation?
- Why are we discussing this?
- What is the role of the AME in health promotion?
- How can aircrew examinations contribute to health promotion in aircrew / ATCOs?
- Signposting – where can the AME or pilot / ATCO look for more information?

World Health Organisation

The WHO defines health promotion as “..the process of enabling individuals and communities to increase control over the determinants of health and thereby improve their health.”

What does ICAO say?

- Historically, the approach taken to managing the risks of disease / ill-health in aircrew has been based on detecting an increased medical incapacitation risk once a condition / disease has occurred / is known about
- The risk has been mitigated with the use of operational restrictions and suspension of certification
- There has been a shift in thinking with new guidance published which focuses on prevention of disease and ill-health, with the aim of minimizing restrictions where possible and reducing the frequency and duration of medical certificate suspensions
- The guidance is focused on pilots but the principles can and should be applied to all individuals working in the aviation sector
- 'Fitness to Fly' – book published with input from ICAO, IFALPA, IATA

Why is health promotion important?

- Longer careers, ageing pilot population
- Increased annual flying hours and work-related demands
- Increased physical AND mental demands
- Increased financial pressures and worries

How can the clinical examination contribute to health promotion?

Why do we conduct a clinical examination of aircrew?

- To detect asymptomatic conditions that may result in incapacitation
- To review pre-existing conditions that might progress / deteriorate in-between medicals
- Pre-medical discussion to better understand the individual's current health
- Mental health/drug & alcohol screening questions
- General inspection
- Systems based review (cardiovascular, respiratory, musculoskeletal etc.)

Examination

- If we don't look (or listen!)....we won't find
- Develop your own routine
- It is helpful to ask yourself 'What am I looking for?' (remember, you are not being directed by a consultation / presenting complaint and applicants may be economical with any symptoms)
- CVS: BP, arrhythmias, murmurs, bruits
- Respiratory: Lung function tests? Look, feel, percuss, auscultate (smoker?)
- Abdo: Hernias, liver edge, spleen, urinalysis (diet and alcohol?)
- Skin: scars, melanomas (sun exposure?)



At each medical, ask yourself:

- Has the examination or pre-examination prompted me to discuss lifestyle and general health with the applicant?
- Have you read and responded to any cues on the application form such as alcohol intake?
- Is there an opportunity to relate any findings or discussions to health promotion?
- Have I made use of the valuable advantage of having seen and spoken to the applicant? (the Medical Assessor does not usually have this opportunity)

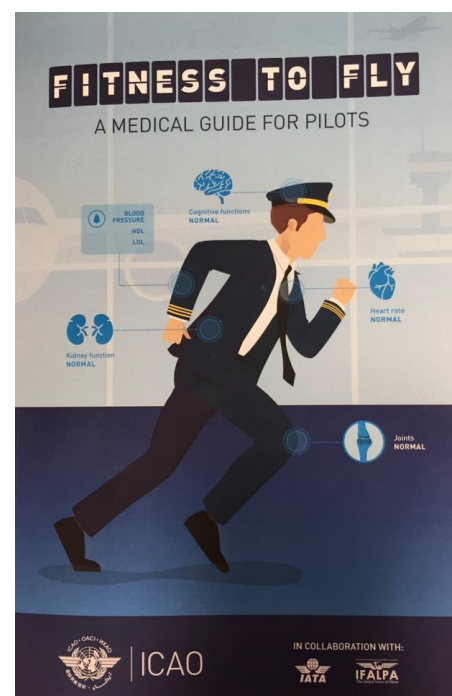
ICAO view

By promoting a healthy lifestyle, it is possible to help ensure that pilots / ATCOs pose a minimal risk to safety from the beginning of their career until they retire. This can be accomplished if they:

- Maintain a healthy heart
- Develop mental health resilience
- Adopt a low risk strategy towards alcohol
- Avoid illicit drugs
- Adopt cancer avoidance habits
- Manage diet and weight
- Manage risks associated with accidental injury
- Get sufficient sleep
- Understand and reduce travel-related risks
- Protect their hearing and vision

ICAO health promotion

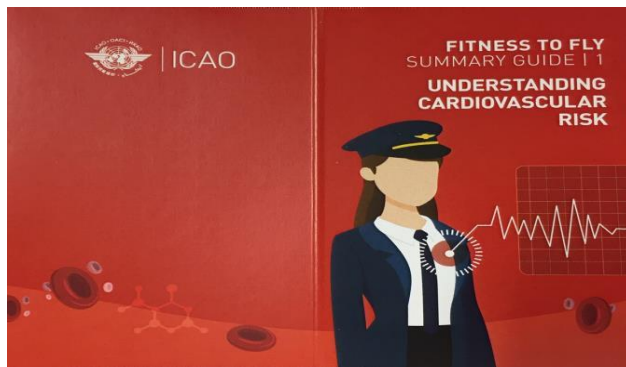
- ICAO publication for pilots
- Good practice to remind ourselves of the principles in a busy practice!
- Written by ICAO, IFALPA and IATA
- It explains the switch in emphasis from detecting and managing incapacitation risk with established disease to preventing this occurring in the first place
- AMEs are expected to deliver health promotion material to their applicants
- This document is pilot focused, evidenced based and importantly..... realistic.
- In principal, it can be applied to all aviation workers



Understanding cardiovascular risk

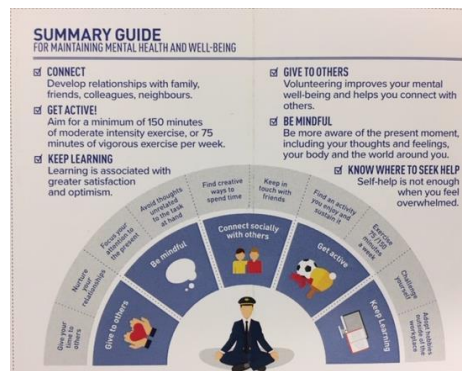
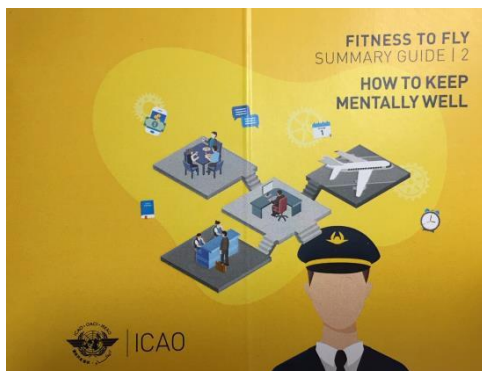
- Get active – dose response (150 minutes moderate exercise vs 75 minutes intense)
- Understand your blood fat levels
- Manage your blood pressure
- Eat a healthy diet
- Maintain a healthy weight
- Understand the risk of diabetes
- Stop smoking
- Talk to your pilot / ATCO about why we are so interested in the CVS!

.....heart attack, stroke, hypertension, arrhythmias



How to keep mentally well

- Connect (relationships, friends, family, colleagues)
- Get active (150 minutes moderate exercise per week)
- Keep learning – this is associated with greater satisfaction and optimism
- Give to others – volunteering improves your mental well being and helps you connect with others (STEM)
- Be mindful – be more aware of the present moment, including your thoughts and feelings, your body and the world around you
- Know where to seek help - self-help is not enough when you feel overwhelmed



Class 1 and 2 aeromedical history and examination

Class 1 initial assessment

- History and mental health examination to cover the areas described in AMC1

MED.B.055 (a) and GM1 MED.B.055

Class 1 revalidation/renewal assessment

- History and mental health examination to cover the areas described in AMC1

MED.B.055 (b) and GM1 MED.B.055

Class 2 assessment

- History and mental health examination to cover the areas described in AMC2

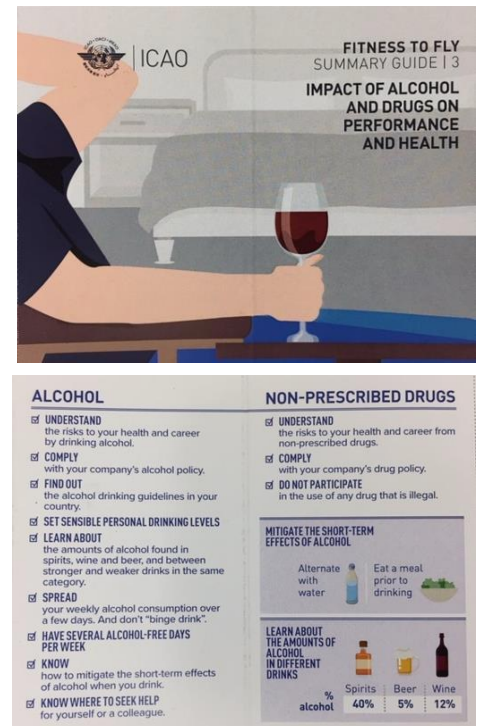
MED.B.055 (a)

- CAP-402 "Aero-Medical Guidance Manual" updated on our website

Advice for Aircrew / ATCOs

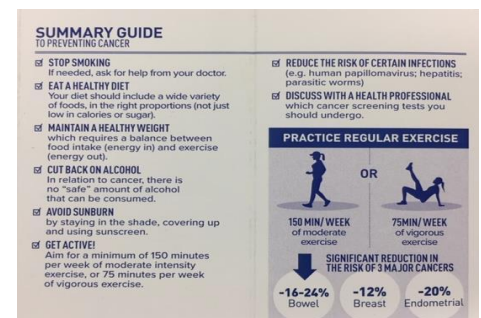
Impact of alcohol and drugs on performance and health

- Understand the risks to your health and career by drinking alcohol
- Comply with your company's alcohol policy
- Set sensible personal drinking levels
- Learn about the amounts of alcohol in various drinks
- Spread your alcohol consumption- don't binge drink
- Have several alcohol free days per week
- Know how to mitigate the short term effects of alcohol when you drink
- Know where to seek help for yourself or a colleague
- Understand the risks to your health or career from non prescribed drugs
- Comply with your company drug policy
- Don't use any drug that is illegal



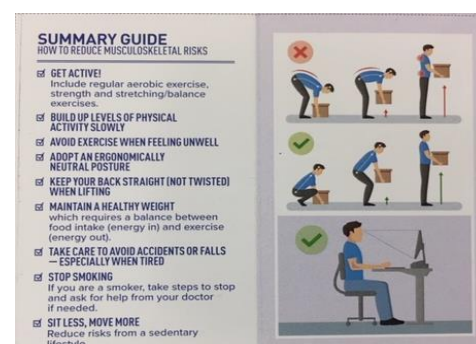
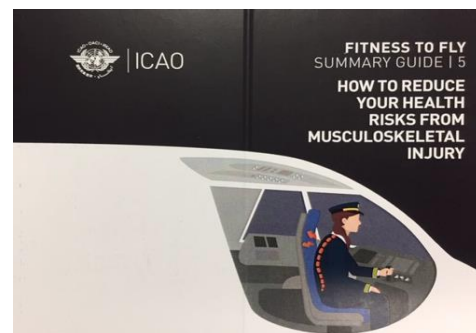
Reducing the risk of developing cancer

- Stop smoking
- Eat a healthy diet
- Maintain a healthy weight
- Cut back on alcohol
- Avoid sunburn
- Get active (150 minutes moderate exercise per week)
- Reduce the risk of certain types of infection (HPV, Hepatitis, parasitic worms)
- Discuss with health professional which cancer screening test you should undergo



How to reduce your health risks from musculoskeletal injury

- Get active
- Build up levels of physical activity slowly
- Avoid exercise when feeling unwell
- Adopt an ergonomically neutral position
- Keep your back straight when lifting
- Maintain a healthy weight
- Take care to avoid accidents or falls (especially when tired)
- Stop smoking
- Sit less, move more



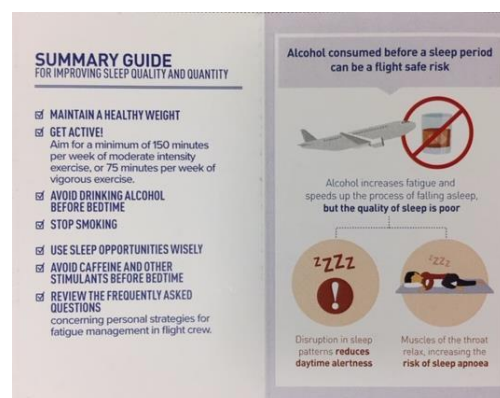
Nutrition and weight management

- Consume the number of calories required
- Minimize the intake of food with high refined sugar content (biscuits, cakes, sugary soft drinks and ice cream)
- Eat a balanced diet:
 - Most calories should be derived from a mixture of fresh fruits and vegetables, whole grains and legumes, nuts and lean protein
 - Fiber is also important
- Reduce salt intake
- Make healthy choices when eating away from home
- Take an interest in reading and understanding food labels
- Lower your risk of developing type 2 diabetes



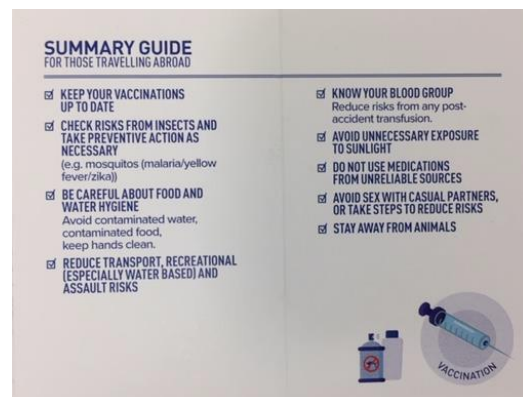
Sleep and the impact of medical conditions

- This chapter contains advice on sleep and the medical conditions that may affect it
- Maintain a healthy weight
- Get active – 150 minutes moderate exercise vs 75 minutes vigorous per week
- Avoid drinking alcohol before bedtime
- Stop smoking
- Use sleep opportunities wisely
- Avoid caffeine and other stimulants before bedtime
- Review the frequently asked questions concerning the personal strategies for fatigue management in flight crew



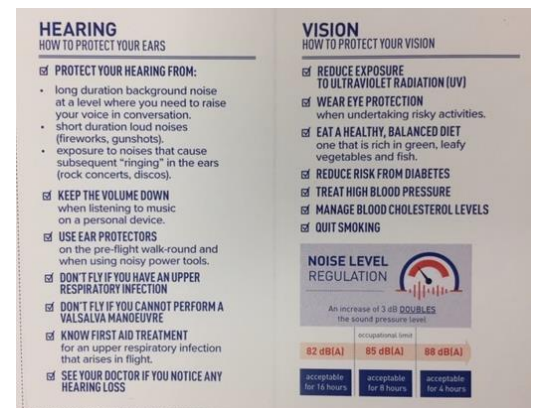
Travel health

- Keep your vaccinations up to date
- Check risks from insects and take preventative action as necessary
- Be careful about food and water hygiene
- Reduce transport, recreational (especially water based) and assault risks
- Know your blood group
- Avoid unnecessary exposure to sunlight
- Don't use medication from unreliable sources
- Avoid sex with casual partners or take steps to reduce the associated risks
- Stay away from animals



Hearing and vision

- Protect your hearing
- Keep the volume down
- Use ear protectors
- Don't fly with an URTI
- Don't fly if you can't perform a Valsalva
- Know first aid treatment for an URTI that occurs during flight
- See your doctor when you notice any hearing loss
- Reduce exposure to UV light
- Wear eye protection
- Eat a healthy balanced diet
- Reduce risk from diabetes
- Treat high BP, manage cholesterol levels, quit smoking



AMEs - Where to get help?

- Fitness to Fly book- photocopy advice cards
- Posters in your practice
- Online resources
- Watch it, try it, put it into practice
- Record as CPD, set as learning objectives etc
- DGCA AME refresher training
- Peer groups
- Colleagues
- Encourage pilots and ATCOs to take a proactive approach to their health and ultimately their career

Summary

- Ultimately it is the individual's responsibility to take ownership for their health and well being
- BUT!..... We can encourage pilots and ATCOs to take responsibility for their health TODAY, not tomorrow
- Be able to guide and point in the direction of health promotion information