Medical Issues in Aviation

Acceptable aeromedical risk for cabin crew

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- Licence
  - Provide evidence of competency
  - Training provide competency

- Medical validation
  - Try to establish fitness for the job and to prevent incapacitation
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Does your country or National Authority issue licence for Cabin Crew?
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Should Cabin Crew be issued with a licence?

YES: 17
NO: 3
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Why should Cabin Crew be issued a licence?

- Mandatory medical evaluation on a regular basis
- Standardization of medical fitness within the country
- Loss of licence benefits
- Recognition of Cabin Crew as being a profession
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Aeromedical risk is function of the direct impact of a job on flight safety

Is cabin crew incapacitation a direct threat to flight safety?

Will a periodic medical eliminate the risk of incapacitation?
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IATA Cabin Health Conference 2008

- Describe the activities of Cabin Crew that, if not carried out because of incapacitation, may interfere with the safety of a flight i.e. may lead to an aircraft accident.
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While everyone agrees that the cabin crew have a safety role to play, it is more reactive in nature and none of the activities that they do, if not carried out, would have a direct impact on flight safety i.e. could cause an accident.
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Are we aware of any cabin crew incapacitation?

- Food poisoning
- Trauma secondary to turbulence
- Trauma with catering equipment
- Burns
- Acute illnesses
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Are any of those incapacitations a direct threat to flight safety?
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Will a periodic medical eliminate the risk of those incapacitations?
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IATA Cabin Health Conference 2008

- How many aircraft accidents or serious incidents are you aware of where Cabin Crew incapacitation has been a causal factor? Please describe.
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IATA Cabin Health Conference 2008

- Do you consider that the chance of a Cabin Crew incapacitation coinciding with a major cabin incident is a realistic threat to flight safety?
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ICAO’s Position

ICAO does not have any SARPS regarding cabin crew licence or medical fitness.
ICAO reviewed the issue in 2001 and decided to leave the situation as is.
States without licences have as good or better safety record.
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Aerospace Medical Association

“Cabin crew have an important safety role but, unlike pilots, sudden incapacitation of a member of cabin crew does not have implications for the normal safe operation of the aircraft. The likelihood of sudden incapacitation in a member of cabin crew occurring at the same time as a cabin emergency which threatens the safety of the aircraft or its occupants is remote. We are not aware of an accident fatality or serious injury resulting from incapacitation of a member of cabin crew due to a medical condition that could have been detected on a periodic medical examination.”
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In spite of the lack of evidence concerning flight safety risk, it is accepted that cabin crew have a safety role and therefore, should we consider some kind of medical assessment and if so, what kind of assessment and when?
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The different medical assessments

- Pre-Placement (pre-employment)

- Fitness to return to work: post illness and/or accident

- Periodic Medical Assessment
  - Occupational Health
  - General prevention (ex: PSA testing)

- Employment termination
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Do we need:

- Pre-Employment/Pre-Placement assessments?
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If so, what kind of assessment should it be?

- Physical examination?
- Questionnaire?
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Airline A experience

- Pre 1995: questionnaire, tests, nurse technical screening, physician examination
- 1995-2001: questionnaire, nurse screening and assessment. Physician’s review if outside company established standards
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Assessment 1995-2001

- Questionnaire
- Nurse discussion
- Nurse examination
  - Height & Weight
  - BP & Pulse
  - Vision
  - “Infectious disease”
  - “Musculo-skeletal
  - Skin Health

- Tests
  - urine
  - audiometry
  - HIV

- Dental examination
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Six months audit in 1998

- No conditions were identified on physical examination that had not been disclosed on the questionnaire
- Evidence of corrected visual acuity can be provided by an optician before hiring
- Advances in treatment of HIV+ has prolonged healthy working life
- Communication difficulties created by significant deafness will become evident at interview
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After 2001

- Medical questionnaire on initial application (sent confidentially to Airline A Health Services)

- Optician and dental reports

- Follow up enquiry by nurse for positive answers only

- Final decision on “failure” made by doctor
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Eighteen months audit in 2008

- Total number assessed 1795
- Confirmed fit on questionnaire* 1790
- Deferred for further reports 3
  • Subsequently passed fit* * 2
- Unfit 2

* Questionnaire +/- phone clarification with applicant
* * One awaiting GP report
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2003-2008 Audit

- Most significant pre-existing conditions declared (91 of 106)
- Few crew referred to Occ. Health have a pre-existing medical condition (43 of 926)
- Undisclosed medical conditions almost never lead to termination (1 of 1443)
- Undisclosed medical conditions has not lead to any flight safety threat
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Fitness to return to work

After major illness and/or accident

• No consensus

• Would appear reasonable
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Periodic medical assessment?
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Airline B experience

- Cabin crew end of 2006: 7936
- Periodic assessment every 3 years until age 40, annually thereafter
- 1706 audited: 100% passed
- 4616 medical incidents onboard (470 for cabin crew)
- No cases due to undeclared conditions
- No cases lead to any flight safety threat
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Periodic Medical Assessment

• Not necessary

• Rely on fitness to return to work assessment and/or absence problems
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Periodic Medical Assessment

• Occupational Health
  - Health surveillance (medical monitoring) concept
  - More and more evidenced based
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Periodic Medical Assessment

• Occupational Health
  - Medical Monitoring

• To identify those susceptible to occupational disease and therefore prevent illness
• To halt the course of occupational disease through early diagnosis
• To provide data for epidemiological research
• To identify and correct flaws in the management of hazardous processes and substances
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Periodic Medical Assessment

• General prevention

“We recommend that the annual check-up, as practiced ritualistically for several decades in North America, be abandoned. We consider that the routine general annual check-up is nonspecific and casts a searching net far too broadly, particularly in adult, is inefficient and, at times, is potentially harmful”

The Canadian Task Force on the Periodic Health Examination 1979
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Periodic Medical Assessment

• General prevention

- What is the preventive intervention by a physician that is the most efficient and cost effective to reduce morbidity and mortality?
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Conclusion

- There is no evidence that cabin crew incapacitation represent a significant flight safety risk
- The pre-employment medical assessment for cabin crew should be limited to a questionnaire
- There is no evidence to support periodic medical assessment for cabin crew
- It seems reasonable to do fitness to return to work assessment
Thank you for your attention
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