

## Abstract

Approaches to the assessment of the risks associated with the health of flight crews. The prevalence of various diseases depending on sex, age, region of residence among the pilots of the European Union Civil Aviation

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### Introduction.

Use of Risk Assessment as a decision-making tool respecting pathology prevalence continues to evolve.

### Background:

Six distinctive Legal Codes are used across Europe. ICAO was adopted by Europe after 1948. JAR, a pan-European Regulation adopted in 37 states in the 1990 was replaced by EU Regulations Basic Regulation 2008 (2018) and its Implementing Rules 1178/2012 and 340/2015 superseding National Law. The move from a prescriptive rule to a performance-based rule is ongoing.

### Methods

We applied an Alternative Means of Compliance (AltMoC) to reflect therapeutic changes of AF and VTE making the rule reflect the spirit of the Regulation. A retrospective study of all medical assessments between 2014 and 2017 were analysed. All Medical Assessments of Irish Licence holders are overseen by the Medical Assessor from over 1000 AMEs in 28 States.

### Results

A study of c.20,000 medical assessments across Europe showed BMI >30 as the commonest risk factor. Average age 28 years, (19-78).

Our Pilot population is 95% male, mostly under 40 years of age. The top 5 reasons for unfitness are Musculoskeletal, Cardiovascular, Psychological, Oncology and Gastro-Intestinal. Only Cardiovascular stood out as a substantial difference in the groups.

### Conclusions

The routine medical assessment identifies rising BMI as a risk factor but rarely identifies pathology other than in interim assessments.

Increased co-operative oversight should enhance our knowledge and recognition of trends impacting decreased fitness improving timely intervention.