

Features of health preservation of civil aviation personnel in Russia

Dr. Kolesnikova – President of AMDA

Dr. Verba – Vice President of AMDA

Dr. Zabrodina – Head of Central Clinical Hospital of Civil Aviation

Dr. Potievsky – Chairman of Central Flight Expert Medical Commission



Strategies of health preservation



- ❑ Active preventive measures in order to decrease the impact of risk factors that could impair capability and affect operating performance
- ❑ Medical rehabilitation of personnel having functional disorders caused by adverse conditions of occupational environment

Current system of preservation of airmen health in Russia includes:

- Established working hours
- Medical examination and assessment for medical certification
- Rehabilitation and prevention of incapacitation



Established working hours



- ❑ **Mitigate** fatigue development / the threat of tiredness / decreased capability
- ❑ **Support** aircrew health

Workload cannot exceed:

- **36** hours per week
- **80** hours per month
- **800** hours per year



*However, it is allowed to increase in-flight hours up to **90** per month and **900** per year provided there is an agreement signed by a pilot and trade union of airmen (except cases of sensorineural hearing loss)

3 Levels of Medical Provision of Operational Safety



1st level: Medical examination and assessment by
Flight Expert Medical Commissions

2nd level: Medical dynamic supervision

3rd level: Pre-flight and pre-shift medical check-ups

Federal level Aviation
Medicine Group

Central Flight Expert
Medical Commission
(Central Clinical
Hospital of Civil
Aviation, Moscow)

40 Flight Expert
Medical Commissions
(Aviation experts)

1st level: Medical examination and assessment

1. Assessment of medical fitness
2. Medical certification
3. Identifying early stages of illnesses, risk factors and health functional deviations

Experts: a physician, a neurologist, a surgeon, an otolaryngologist, an ophthalmologist, a psychologist

Central Clinical Hospital of Civil Aviation (CFEMC)



- regulating the strategies
- developing and implementing programs of occupational durability supervision
- monitoring of FEMC

AIRMEN

AIR TRAFFIC CONTROLLERS

FLIGHT ATTENDANTS

Statistic data on health capability of civil aviation personnel (2016)



| Age groups | Assessed | Fit | Unfit | Temp unfit |
|--------------|----------|-------|-------|------------|
| Under 29 | 3034 | 3021 | 3 | 10 |
| 30-39 | 3905 | 3871 | 6 | 28 |
| 40-49 | 5965 | 5834 | 36 | 95 |
| 50-59 | 5643 | 5167 | 321 | 155 |
| 60 and above | 867 | 673 | 124 | 70 |
| Total | 19414 | 18566 | 490 | 358 |

| Age groups | Assessed | Fit | Unfit | Temp unfit |
|--------------|----------|------|-------|------------|
| Under 29 | 888 | 843 | 41 | 4 |
| 30-39 | 740 | 719 | 20 | 1 |
| 40-49 | 816 | 786 | 16 | 14 |
| 50-59 | 2085 | 1937 | 78 | 70 |
| 60 and above | 478 | 404 | 62 | 12 |
| Total | 5007 | 4689 | 217 | 101 |

| Age groups | Assessed | Fit | Unfit | Temp unfit |
|--------------|----------|-------|-------|------------|
| Under 29 | 7857 | 6809 | 876 | 172 |
| 30-39 | 4561 | 3931 | 529 | 101 |
| 40-49 | 1552 | 1364 | 93 | 95 |
| 50-59 | 355 | 305 | 21 | 29 |
| 60 and above | 20 | 18 | 2 | — |
| Total | 14345 | 12427 | 1521 | 397 |

“Temporarily unfit” (2016)



- 932 (1.9% out of all assessed persons) conclusions of “temporarily unfit”.

- Average age - 55 years old.

Reasons for denial:

- sensorineural hearing loss
- cerebral atherosclerosis
- hypertension
- cardio vascular disease
- cancer of different localizations etc.



2nd level: medical dynamic supervision and follow-up observation

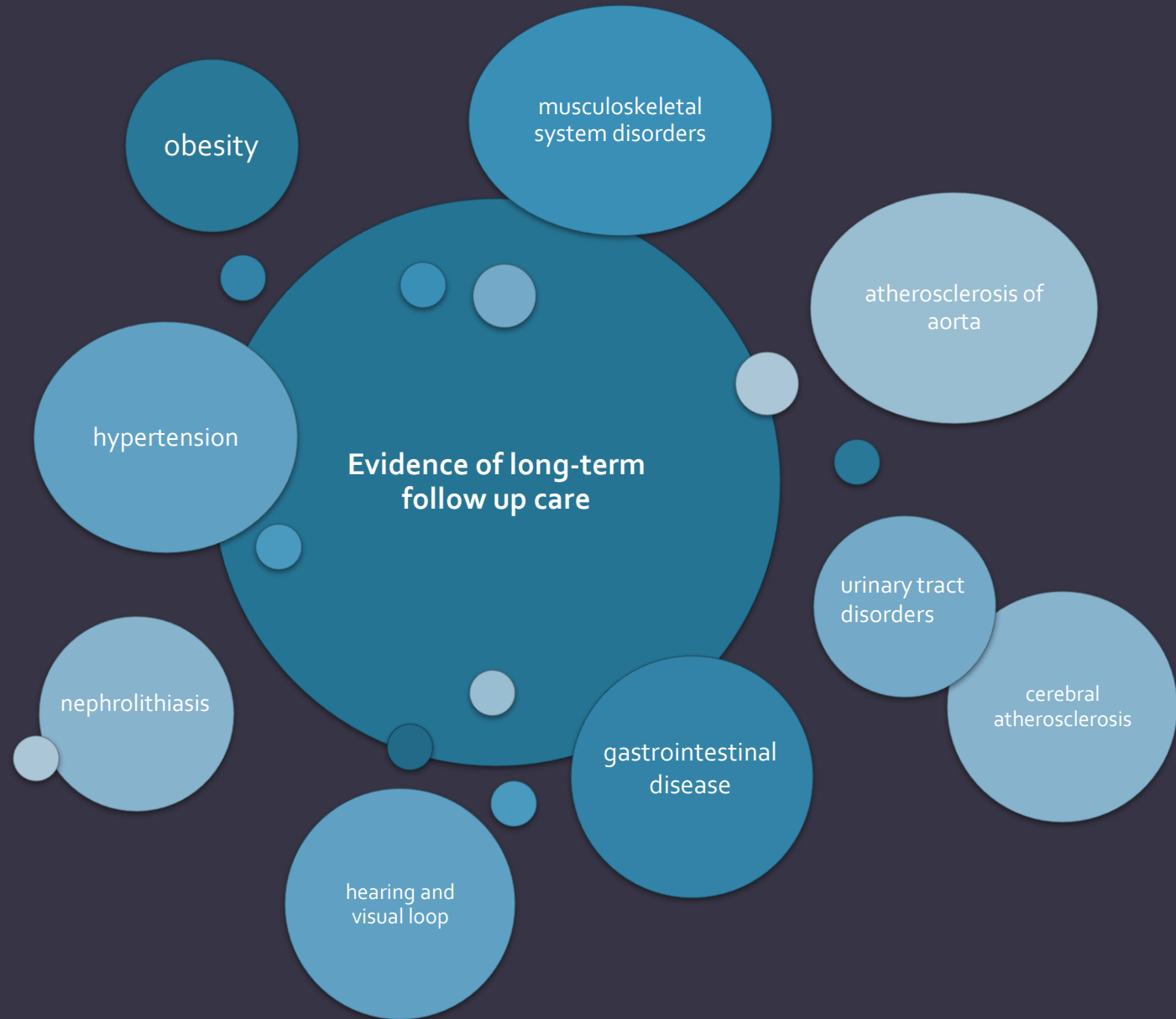


- Monitoring aviation personnel health within the period between medical examination at Flight Expert Medical Commission and semi-annual medical observations
- Providing treatment activities
- Delivering preventive procedures

54 111
examinations
49 532
additional
examinations



4465 pilots
were treated
in 2016



3rd level: pre-flight and pre-shift health check-ups



Statistic data

pre-flight pre-shift medical check-ups



| Number of check-ups and reasons for suspension | Aviation staff | | | Total |
|---|----------------|------------|--|---------|
| | Flight crew | Cabin crew | Air traffic controllers/ Student pilots | |
| Overall check-ups | 900505 | 1450888 | 583178/31610 | 2966181 |
| Suspended (total) | 182 | 1047 | 54/6 | 1283/6 |
| • Acute disease | 90 | 737 | 28 | 855 |
| • Acute exacerbation of chronic illness | 17 | 155 | 12 | 184 |
| • Alcohol misuse | 1 | 19 | - | 20 |
| • Other substance misuse | - | - | 1 | 1 |
| • Non-sufficient pre-flight rest | 4 | 10 | 1/6 | 15/6 |
| • Failed to pass medical examination by aviation practitioner | 9 | 4 | 2 | 15 |
| • Absence of valid medical | 5 | 4 | - | 9 |

Aviation Medicine Doctors Association (AMDA)

- Developing aviation medicine to boost operational safety
- Exchanging research results and experience
- Establishing relations with responsible institutions
- Promoting official acknowledgement of aviation medicine



125367, Moscow, Russia
7 Ivankovskoe shosse,

Tel.: +7 495 490 0391

www.avam-avia.ru



**Aviation Medicine
Doctors Association**

First International Congress

**CURRENT ISSUES
OF AVIATION MEDICINE**

Moscow 2018
www.avam-avia.ru



AVIATION MEDICINE DOCTORS ASSOCIATION



**First International Congress on
CURRENT ISSUES OF
AVIATION MEDICINE**

Moscow 2018
www.avam-avia.ru

Thank you for your
attention!

