

# SUMMARY OF MEDICAL EXAMINATIONS OF SEAFARERS CONDUCTED BY APPROVED DOCTORS 1 January – 31 December 2021

Required in accordance with The Merchant Shipping (Medical Certification) Regulations 2010

## 1. SUMMARY OF APPROVED DOCTORS' DECISIONS

| Fitness Cat.                 | Result                 | Validity Period   | Form Issued   | Number Issued |
|------------------------------|------------------------|---|---------------|---------------|
| Cat 1                        | UNRESTRICTED           | 2 years   | ENG 1         | 38964         |
|                              | UNRESTRICTED           | Less than 2 years – non-medical reasons e.g. under 18 years | ENG 1         | 301           |
|                              | UNRESTRICTED - U (TL)  | Less than 2 years – medical reasons                         | ENG 1         | 3937          |
| Cat 2                        | RESTRICTED - R         | 2 years   | ENG 1 + ENG 3 | 1112          |
|                              | RESTRICTED - R (TL)    | Less than 2 years – medical reasons                         | ENG 1 + ENG 3 | 998           |
| Cat 3                        | TEMPORARILY UNFIT - TU | Any   | ENG 3         | 753           |
| Cat 4                        | FAILURE - F            | Permanent   | ENG 3         | 69            |
| No. of Returns entered = 206 |                        | <b>TOTAL No. OF EXAMINATIONS</b>                            |               | <b>46134</b>  |

## 2. ANNUAL COMPARISON OF EXAMINATIONS AND MEDICAL REVIEWS

| TOTAL        | 2009  | 2010  | 2011  | 2012  | 2013  | 2014  | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  |
|--------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Exams        | 42257 | 47482 | 51759 | 52200 | 54311 | 54058 | 52880 | 52483 | 53315 | 51294 | 51862 | 38567 | 46134 |
| ENG Referral | 81    | 66    | 51    | 48    | 41    | 31    | 47    | 46    | 48    | 24    | 23    | 18    | 18    |

## 3. ANALYSIS OF REFEREES' DECISIONS ON APPEAL CASES

| Medical Category                  | AD's Decision Upheld | AD's Decision changed | Cases awaiting decision | Cases withdrawn | TOTAL |
|-----------------------------------|----------------------|-----------------------|-------------------------|-----------------|-------|
| Cancers                           |                      |                       |                         |                 | 0     |
| Endocrine and metabolic           | 1                    |                       |                         |                 | 1     |
| Blood disorders                   |                      |                       |                         |                 | 0     |
| Mental disorders                  | 2                    | 1                     | 1                       |                 | 4     |
| Diseases of the nervous system    |                      | 2                     |                         |                 | 2     |
| Cardio-vascular system            |                      |                       |                         |                 | 0     |
| Respiratory system                |                      |                       |                         | 1               | 1     |
| Digestive system                  |                      |                       |                         |                 | 0     |
| Genito-urinary conditions         | 1                    | 2                     |                         |                 | 3     |
| Musculoskeletal                   |                      | 1                     |                         |                 | 1     |
| Sensory                           |                      | 2                     |                         |                 | 2     |
| General                           |                      | 4                     |                         |                 | 4     |
| Physical fitness                  |                      |                       |                         |                 | 0     |
| Skin                              |                      |                       |                         |                 | 0     |
| Unknown (geographical/incomplete) |                      |                       |                         |                 | 0     |
| <b>TOTAL NUMBER OF CASES</b>      | 4                    | 12                    | 1                       | 1               | 18    |

**Key: U(TL)** – Unrestricted (less than 2 years) **R-** Restricted (2 years);  
**R(TL)** - Restricted (less than 2 years); **F-** Failed; **TU** – Temporarily Unfit

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| Ref No     | Condition  | U(TL) | R  | R(TL) | TU | F |
|------------|--|-------|----|-------|----|---|
| <b>1.0</b> | <b>INFECTIONS</b>  |       |    |       |    |   |
| 1.1        | Gastro intestinal infection  | 2     | 0  | 0     | 0  | 0 |
| 1.2        | Other infection  | 1     | 0  | 0     | 6  | 1 |
| 1.3        | Pulmonary TB   | 0     | 0  | 13    | 1  | 1 |
| 1.4        | Sexually transmissible diseases  | 0     | 0  | 0     | 0  | 0 |
| 1.5        | HIV +  | 8     | 1  | 1     | 2  | 1 |
| 1.6        | Hepatitis A  | 0     | 0  | 0     | 0  | 0 |
| 1.7        | Hepatitis B, C etc   | 10    | 0  | 2     | 0  | 0 |
| <b>2.0</b> | <b>CANCERS</b>   |       |    |       |    |   |
| 2.1        | Malignant neoplasms  | 122   | 9  | 50    | 6  | 4 |
| <b>3.0</b> | <b>ENDOCRINE AND METABOLIC</b>   |       |    |       |    |   |
| 3.1        | Endocrine disease  | 33    | 8  | 3     | 4  | 0 |
| 3.2        | Diabetes – non insulin treated by diet   | 29    | 0  | 13    | 10 | 0 |
| 3.3        | Diabetes - non-insulin treated by oral medication  | 335   | 34 | 51    | 28 | 3 |
| 3.4        | Diabetes - insulin using   | 0     | 15 | 83    | 10 | 0 |
| 23.5       | Obesity / abnormal body mass   | 1434  | 45 | 196   | 77 | 0 |
| <b>4.0</b> | <b>BLOOD DISORDERS</b>   |       |    |       |    |   |
| 4.1        | Blood-forming organs   | 5     | 2  | 1     | 0  | 0 |
| 4.2        | Anaemia  | 14    | 2  | 1     | 2  | 0 |
| 4.3        | Splenectomy (history of surgery)   | 0     | 4  | 1     | 1  | 0 |
| <b>5.0</b> | <b>MENTAL DISORDERS</b>  |       |    |       |    |   |
| 5.1        | Psychosis (acute)  | 0     | 2  | 4     | 3  | 1 |
| 5.2        | Alcohol abuse (dependency)   | 6     | 1  | 4     | 6  | 2 |
| 5.3        | Drug dependence / persistent substance abuse   | 2     | 0  | 2     | 6  | 3 |
| 5.4 a      | Mood / affective disorders severe anxiety state, depression, or any other mental disorder likely to impair performance | 45    | 8  | 45    | 31 | 4 |
| 5.4 b      | Mood / affective disorders minor or reactive symptoms of anxiety/depression  | 314   | 13 | 72    | 24 | 1 |
| 5.5        | Disorder of personality - clinically recognised  | 2     | 0  | 0     | 2  | 0 |
| 5.6        | Disorder of psychological development - autism, Aspergers syndrome   | 1     | 1  | 1     | 1  | 1 |
| 5.7        | Hyperkinetic disorders - Attention Deficit Hyperactivity Disorder  | 18    | 1  | 1     | 9  | 0 |

| Ref No     | Condition   | U(TL) | R   | R(TL) | TU  | F |
|------------|---|-------|-----|-------|-----|---|
| 5.8        | Other mental health and cognitive disorders                         | 10    | 0   | 0     | 0   | 0 |
| <b>6.0</b> | <b>DISEASES OF THE NERVOUS SYSTEM</b>                               |       |     |       |     |   |
| 6.1        | Organic nervous disease e.g multiple sclerosis, Parkinson's disease | 10    | 6   | 2     | 4   | 1 |
| 6.2        | Syncope   | 0     | 1   | 1     | 2   | 0 |
| 6.3        | Epilepsy - no provoking factors                                     | 3     | 12  | 8     | 13  | 0 |
| 6.4        | Epilepsy provoked by alcohol, medication, head injury               | 1     | 2   | 1     | 2   | 1 |
| 6.5        | Risk of seizures from intra-cranial surgery                         | 2     | 0   | 4     | 1   | 0 |
| 6.6        | Migraine  | 1     | 1   | 2     | 2   | 0 |
| 6.7        | Meniere's disease   | 1     | 0   | 2     | 0   | 0 |
| 6.8        | Sleep apnoea  | 27    | 1   | 13    | 2   | 0 |
| 6.9        | Narcolepsy  | 0     | 0   | 2     | 0   | 0 |
| <b>7.0</b> | <b>CARDIO VASCULAR SYSTEM</b>                                       |       |     |       |     |   |
| 7.1        | Heart – congenital and valve disease                                | 26    | 5   | 15    | 16  | 0 |
| 7.2        | Hypertension  | 1118  | 189 | 73    | 120 | 8 |
| 7.3        | Cardiac event   | 160   | 6   | 83    | 38  | 2 |
| 7.4        | Cardiac arrhythmias   | 32    | 10  | 23    | 28  | 0 |
| 7.5        | Other heart disease   | 35    | 4   | 26    | 5   | 0 |
| 7.6        | Ischaemic cerebrovascular disease                                   | 26    | 8   | 27    | 10  | 1 |
| 7.7        | Arterial – claudication   | 4     | 0   | 5     | 2   | 0 |
| 7.8        | Varicose veins  | 6     | 1   | 0     | 0   | 0 |
| 7.9        | Deep vein thrombosis / pulmonary embolus                            | 0     | 0   | 7     | 2   | 0 |
| <b>8.0</b> | <b>RESPIRATORY SYSTEM</b>   |       |     |       |     |   |
| 8.1        | Sinusitis / nasal obstruction                                       | 0     | 0   | 0     | 0   | 0 |
| 8.2        | Throat infections   | 0     | 0   | 0     | 0   | 0 |
| 8.3        | Chronic bronchitis and /or emphysema                                | 8     | 1   | 12    | 2   | 2 |
| 8.4        | Asthma  | 16    | 27  | 18    | 11  | 1 |
| 8.5        | Pneumothorax  | 0     | 3   | 0     | 2   | 0 |
| <b>9.0</b> | <b>DIGESTIVE SYSTEM</b>   |       |     |       |     |   |
| 9.1        | Oral Health   | 27    | 21  | 16    | 11  | 0 |

| Ref No      | Condition   | U(TL) | R  | R(TL) | TU | F |
|-------------|---|-------|----|-------|----|---|
| 9.2         | Peptic ulcer  | 3     | 0  | 6     | 1  | 0 |
| 9.3         | Non infectious enteritis, colitis, Crohn's disease, diverticulitis etc. | 26    | 15 | 27    | 9  | 1 |
| 9.4         | Stoma (ileostomy, colostomy)  | 2     | 2  | 3     | 0  | 0 |
| 9.5         | Cirrhosis of liver  | 2     | 0  | 2     | 1  | 0 |
| 9.6         | Biliary tract disease, biliary colic                                    | 22    | 1  | 1     | 3  | 1 |
| 9.7         | Pancreatitis  | 1     | 0  | 6     | 1  | 0 |
| 9.8         | Anal conditions: piles (haemorrhoids) fissures, fistulae                | 4     | 1  | 2     | 2  | 0 |
| 9.9         | Hernias – inguinal and femoral  | 12    | 13 | 14    | 11 | 0 |
| 9.10        | Hernias –umbilical  | 5     | 2  | 1     | 1  | 0 |
| 9.11        | Hernias – diaphragmatic (hiatus)  | 0     | 0  | 0     | 0  | 0 |
| <b>10.0</b> | <b>GENITO URINARY CONDITIONS</b>  |       |    |       |    |   |
| 10.1        | Proteinuria, haematuria, glycosuria, or other urinary abnormality       | 61    | 1  | 13    | 52 | 0 |
| 10.2        | Acute nephritis   | 0     | 0  | 0     | 0  | 0 |
| 10.3        | Sub acute or chronic nephritis or nephrosis                             | 3     | 2  | 7     | 1  | 0 |
| 10.4        | Acute urinary infection   | 3     | 0  | 0     | 2  | 0 |
| 10.5        | Renal or ureteric calculus renal colic                                  | 16    | 9  | 20    | 23 | 3 |
| 10.6        | Prostatic enlargement / Urinary obstruction                             | 6     | 0  | 2     | 2  | 0 |
| 10.7        | Removal of kidney or one non-functioning kidney                         | 1     | 0  | 3     | 0  | 0 |
| 10.8        | Incontinence of urine   | 0     | 0  | 0     | 0  | 0 |
| 10.9        | Heavy vaginal bleeding or other gynecological conditions                | 5     | 1  | 0     | 1  | 0 |
| <b>11.0</b> | <b>PREGNANCY</b>  |       |    |       |    |   |
| 11.1        | Pregnancy   | 3     | 1  | 8     | 2  | 0 |
| <b>12.0</b> | <b>SKIN</b>   |       |    |       |    |   |
| 12.1        | Skin infections   | 0     | 1  | 0     | 2  | 0 |
| 12.2        | Other skin diseases e.g. eczema, dermatitis, psoriasis                  | 9     | 3  | 2     | 3  | 0 |
| <b>13.0</b> | <b>MUSCULO SKELETAL</b>   |       |    |       |    |   |
| 13.1        | Osteo arthritis, other joint diseases and subsequent joint replacement  | 17    | 22 | 18    | 31 | 2 |
| 13.2        | Recurrent instability of shoulder or knee joints                        | 1     | 1  | 2     | 7  | 1 |
| 13.3        | Limb prosthesis   | 1     | 2  | 0     | 1  | 0 |
| 13.4        | Back pain   | 8     | 6  | 13    | 11 | 2 |

| <b>Ref No</b> | <b>Condition</b>                                      | <b>U(TL)</b> | <b>R</b> | <b>R(TL)</b> | <b>TU</b> | <b>F</b> |
|---------------|---|--------------|----------|--------------|-----------|----------|
| <b>14.0</b>   | <b>SENSORY</b>  |              |          |              |           |          |
| 14.1          | Speech defect   | 1            | 0        | 1            | 1         | 0        |
| 14.2          | Otitis – externa and media                            | 1            | 2        | 1            | 2         | 0        |
| 14.3          | Hearing   | 38           | 23       | 14           | 28        | 1        |
| 14.4          | Eyesight – Visual acuity                              | 5            | 79       | 21           | 66        | 5        |
|               | Colour vision   | 12           | 435      | 50           | 15        | 5        |
|               | Other sight problems                                  | 18           | 23       | 15           | 3         | 0        |
| <b>15.0</b>   | <b>GENERAL</b>  |              |          |              |           |          |
| 15.1          | Prescribed medication                                 | 62           | 33       | 61           | 4         | 0        |
| 15.2          | Transplants – kidney, heart, lung, liver              | 0            | 6        | 4            | 0         | 0        |
| 15.3          | Progressive conditions                                | 6            | 0        | 0            | 1         | 0        |
| 15.4          | Allergies (other than allergic dermatitis and asthma) | 2            | 44       | 5            | 14        | 12       |
| 15.5          | Conditions not specifically listed                    | 59           | 10       | 25           | 24        | 0        |
| <b>16.0</b>   | <b>PHYSICAL FITNESS</b>                               |              |          |              |           |          |
| 16.0          | Physical fitness (see Appendix 2 of MSN 1839)         | 29           | 11       | 10           | 16        | 4        |

## Chief Medical Advisor's COMMENTARY

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Each year all MCA Approved Doctors (ADs) complete a return. This lists the number of medical examinations performed, and how many medical certificates have been issued in each category (fit for service worldwide and fit for restricted duties whether for two years or a limited time) as well as how many seafarers are made temporarily or permanently unfit. The medical reasons for all restricted certificates and decisions of unfitness are anonymously noted. The MCA then analyses these returns and produces this summary report. At this stage, this information is collected from paper records and so only limited analysis is possible. It does however enable the pattern of illnesses to be noted and any major trends to be highlighted.

During the pandemic, when the provision of medical certificates has been difficult and exceptional exemption from regulation has allowed for expired certificates to be accepted on board ship for 6 months as opposed to the 3 months allowed for in regulation, these statistics are understandably significantly affected. Those who had previously been made fit for two years without restriction may have delayed the renewal of their certificate, seafaring in the leisure sector has been very much reduced and those with conditions resulting in increased risk from Covid 19 may not have been working. For these reasons, although numbers have increased since last year they have not yet reached pre-pandemic levels. Trends in specific areas of seafarer health therefore remain skewed.

Since 2019 UK fishermen working on larger vessels have been included in the medical examination process, following the implementation of the Work in Fishing convention 2007 (ILO 188). Fishermen on smaller vessels which meet certain parameters will not require a medical certificate until 2023. A policy on Grandfather Rights for existing fishermen who had worked safely with stable medical conditions prior to the introduction of the medical certificates was developed in order to minimise the impact on industry. A total of 1267 fishermen attended for ENG medical fitness examination this year, 27 of whom were certified using Grandfather rights, and only 5 were made permanently unfit.

Seafarers or fishermen who either fail or are issued with a restricted certificate are entitled to seek a review of the AD's decision by an independent medical referee if they have reservations about the initial decision. The results of the referee reviews are also presented. Fuller details of the procedures for ADs and referees can be found in MSN 1883, MSN 1886, MSN 1887 and in the MCA Approved Doctors' Manual, July 2020 Edition which can be found on line at <https://www.gov.uk/government/publications/the-approved-doctors-manual>

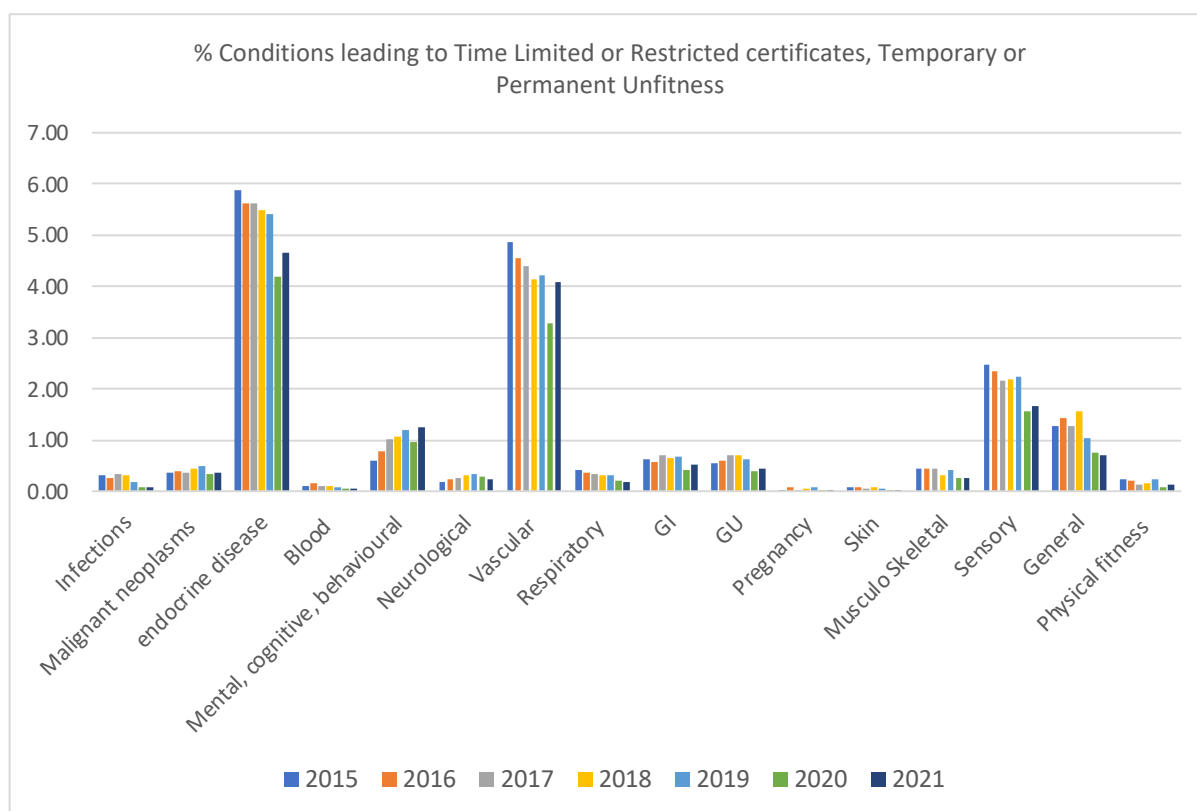
For the 9 years prior to the pandemic, the total number of medical examinations had been remaining relatively steady between approximately 51,000 and 54,000 but last year dropped to 38,567. Although as the leisure industry recovers numbers have started to rise, they have not yet reached pre-pandemic figures, partly due to the effect of ongoing travel restrictions on leisure sectors and partly because emergency measures have been put in place to allow seafarers to continue to work when it was hard to obtain a medical certificate.

Regional figures continue to be reviewed annually in order to ensure that any significantly high or low numbers are considered when renewing appointments or appointing new ADs. As usual, 40% of ENG medicals were performed overseas, the majority of these taking place in areas associated with yachting with the exception of the Philippines, where many crew work in the cruising sector. Figures in the former areas are almost back to pre-pandemic levels, while although they have risen slightly in the Philippines they have not regained pre pandemic levels.

Referrals to referees had remained stable at between 30 and 50 reviews each year but dropped in the two years prior to the pandemic and are now stable at 18 per year, no doubt due to the lower number of medicals performed. Decisions were altered in 12 out of the 18 cases reviewed, but it should be noted that a change in decision may represent a different restriction, and does not necessarily mean that the end result was more lenient.

Analysis of the type of certificate issued showed 93% Category 1 Unrestricted certificates, 4% Category 2 Restricted certificates, and 2% temporarily or permanently unfit. These percentages remain relatively stable year on year. The total number of ADs varies during the year with ongoing retirements and new appointments. 208 sets of data were collected from 205 ADs in total, most of whom are on the general list and able to perform medicals for any seafarer, while 19 performed medicals only for one or more named companies, data being collected separately for each company.

On reviewing the conditions underlying a decision of temporary or permanent unfitness, the majority were caused by vascular disease (mostly hypertension), followed by endocrine disease (mostly obesity, but also diabetes), then sensory (mostly visual acuity but also hearing). When restricted certificates are considered, a significant majority represented defective colour vision, followed by vascular and endocrine conditions. These trends remain relatively constant year on year although last year it was commented that mental health was becoming more significant as a cause of unfitness or restriction. The skewing of figures due to the pandemic means analysis of trends should be treated with caution at present however.



Although every condition noted for each seafarer is recorded, one seafarer may have several different conditions leading to their fitness decision. It is not possible to report whether specific conditions were linked, although it is likely for instance that hypertension was seen with other diagnoses such as obesity or diabetes.

Since the introduction of Colour Assessment and Diagnosis (CAD) testing as a supplementary test for deck candidates failing the Ishihara screening test for colour vision, statistics around the pass rate have been gathered. The pass rate for this test is low, at around 2%. This is similar to the low pass rate for Holmes Wright B Lantern testing, and illustrates the fact that most of those who fail the Ishihara test do indeed have defective colour vision.

The potential for analysis of the useful data collected by ADs remains limited when working with paper systems, but an electronic system of certification has been developed and implementation has already begun. This will eventually allow the automatic collection of data represented within the annual returns system, and will allow for a much simpler review of data regarding health patterns and trends.

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**UK Maritime and Coastguard Agency**