SUMMARY OF MEDICAL EXAMINATIONS OF SEAFARERS CONDUCTED BY APPROVED DOCTORS 1 January – 31 December 2020

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

1. SUMMARY OF APPROVED DOCTORS' DECISIONS

Fitness Category	Result	Validity Period	Form Issued	Number Issued
Cat 1	UNRESTRICTED	2 years	ENG 1	32,328
	UNRESTRICTED	Less than 2 years – non-medical reasons e.g. under 18 years	ENG 1	288
	UNRESTRICTED - U (TL)	Less than 2 years – medical reasons	ENG 1	3,514
Cat 2	RESTRICTED - R	2 years	ENG 1 + ENG 3	856
	RESTRICTED - R (TL)	Less than 2 years – medical reasons	ENG 1 + ENG 3	855
Cat 3	TEMPORARILY UNFIT - TU	Any	ENG 3	666
Cat 4	FAILURE - F	Permanent	ENG 3	60
Number c	of Returns = 226	TOTAL NUMBER OF EXAMINATIO	38,567	

2. ANNUAL COMPARISON OF EXAMINATIONS AND MEDICAL REVIEWS

TOTAL	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020
Exams	47,482	51,759	52,200	54,311	54,058	52,880	52,483	53,315	51,294	51,862	38,567
ENG Referral	66	51	48	41	31	47	46	48	24	23	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Medical Category	AD's Decision Upheld	AD's Decision changed	Cases awaiting decision	Cases withdrawn	TOTAL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	2	0	0	2
Endocrine and metabolic	1	0	0	0	1
Blood disorders	1	0	0	0	1
Mental disorders	0	4	0	0	4
Diseases of the nervous system	0	0	0	0	0
Cardio-vascular system	1	1	0	0	2
Respiratory system	1	1	1	0	3
Digestive system	0	0	0	0	0
Genito-urinary conditions	0	0	0	0	0
Musculoskeletal	0	1	0	0	1
Sensory	1	1	0	0	2
General	0	0	0	0	0
Physical fitness	0	1	1	0	2
Skin	0	0	0	0	0
Unknown (geographical/incomplete)	0	0	0	0	0
TOTAL NUMBER OF CASES	5	11	2	0	18

Ref	Condition	U(TL)	R	R(TL)	TU	F
1.0	INFECTIONS					
1.1	Gastro intestinal infection	2	0	0	0	0
1.2	Other infection	1	0	0	3	0
1.3	Pulmonary TB	4	0	5	2	2
1.4	Sexually transmissible diseases	2	0	0	0	0
1.5	HIV +	6	0	0	1	0
1.6	Hepatitis A	0	0	0	0	0
1.7	Hepatitis B, C etc	14	0	2	1	0
2.0	CANCERS					
2.1	Malignant neoplasms	123	3	45	8	3
3.0	ENDOCRINE AND METABOLIC					
3.1	Endocrine disease	33	0	11	7	0
3.2	Diabetes – non insulin treated by diet	27	1	12	13	0
3.3	Diabetes - non-insulin treated by oral medication	302	18	63	25	0
3.4	Diabetes - insulin using	0	16	84	12	2
3.5	Obesity / abnormal body mass	1323	20	147	64	0
4.0	BLOOD DISORDERS					
4.1	Blood-forming organs	9	3	4	1	0
4.2	Anaemia	12	1	0	3	0
4.3	Splenectomy (history of surgery)	1	4	1	0	0
5.0	MENTAL DISORDERS					
5.1	Psychosis (acute)	0	0	3	5	1
5.2	Alcohol abuse (dependency)	7	0	7	3	2
5.3	Drug dependence / persistent substance abuse	3	0	4	5	0
5.4 a	Mood / affective disorders severe anxiety state, depression, or any other mental disorder likely to impair performance	59	3	37	35	7
5.4 b	Mood / affective disorders minor or reactive symptoms of anxiety/depression	181	9	56	22	1
5.5	Disorder of personality - clinically recognised	3	0	1	0	0
5.6	Disorder of psychological development - autism, Aspergers syndrome	1	0	1	0	0
5.7	Hyperkinetic disorders - Attention Deficit Hyperactivity Disorder	20	0	4	24	0
5.8	Other mental health and cognitive disorders	1	1	1	2	0
6.0	DISEASES OF THE NERVOUS SYSTEM					

Ref	Condition	U(TL)	R	R(TL)	TU	F
6.1	Organic nervous disease e.g multiple sclerosis, Parkinson's disease	23	2	6	5	2
6.2	Syncope	3	3	4	3	0
6.3	Epilepsy - no provoking factors	3	9	9	10	0
6.4	Epilepsy provoked by alcohol, medication, head injury	0	1	1	5	0
6.5	Risk of seizures from intra-cranial surgery	1	2	0	4	0
6.6	Migraine	7	4	6	3	0
6.7	Meniere's disease	0	0	0	0	0
6.8	Sleep apnoea	25	1	10	4	0
6.9	Narcolepsy	0	0	0	0	0
7.0	CARDIO-VASCULAR SYSTEM					
7.1	Heart – congenital and valve disease	36	1	11	13	1
7.2	Hypertension	817	114	43	103	0
7.3	Cardiac event	169	8	75	29	1
7.4	Cardiac arrhythmias	43	15	31	23	5
7.5	Other heart disease	37	3	18	4	1
7.6	Ischaemic cerebrovascular disease	14	4	31	8	1
7.7	Arterial – claudication	4	2	3	0	2
7.8	Varicose veins	10	0	0	0	0
7.9	Deep vein thrombosis / pulmonary embolus	4	5	9	3	0
8.0	RESPIRATORY SYSTEM					
8.1	Sinusitis / nasal obstruction	2	0	0	0	0
8.2	Throat infections	0	0	0	0	0
8.3	Chronic bronchitis and /or emphysema	14	5	2	3	0
8.4	Asthma	27	24	13	21	2
8.5	Pneumothorax	3	0	1	1	0
9.0	DIGESTIVE SYSTEM					
9.1	Oral Health	16	15	19	11	1
9.2	Peptic ulcer	0	0	1	1	0
9.3	Non infectious enteritis, colitis, Crohn's disease, diverticulitis etc.	27	10	27	13	2
9.4	Stoma (ileostomy, colostomy)	0	4	5	0	0
9.5	Cirrhosis of liver	2	0	0	0	0
9.6	Biliary tract disease, biliary colic	2	1	0	1	1

Ref	Condition	U(TL)	R	R(TL)	TU	F
9.7	Pancreatitis	3	0	2	1	0
9.8	Anal conditions: piles (haemorrhoids) fissures, fistulae	2	1	1	1	0
9.9	Hernias – inguinal and femoral	6	11	14	6	0
9.10	Hernias –umbilical	7	1	1	1	0
9.11	Hernias – diaphragmetic (hiatus)	0	1	1	0	0
10.0	GENITO-URINARY CONDITIONS					
10.1	Proteinuria, haematuria, glycosuria, or other urinary abnormality	43	0	11	50	0
10.2	Acute nephritis	0	0	0	0	0
10.3	Sub acute or chronic nephritis or nephrosis	4	1	6	1	0
10.4	Acute urinary infection	1	0	0	0	0
10.5	Renal or ureteric calculus renal colic	20	7	20	12	0
10.6	Prostatic enlargement / Urinary obstruction	10	3	4	4	0
10.7	Removal of kidney or one non-functioning kidney	2	1	2	3	0
10.8	Incontinence of urine	0	0	0	0	0
10.9	Heavy vaginal bleeding or other gynecological conditions	2	3	2	3	0
11.0	PREGNANCY					
11.1	Pregnancy	3	1	2	3	0
12.0	SKIN					
12.1	Skin infections	0	_			
	Other skin diseases a green dermetitis	U	0	0	2	0
12.2	Other skin diseases e.g. eczema, dermatitis, psoriasis	7	3	4	1	0
12.2 13.0	_				_	
	psoriasis				_	
13.0	psoriasis MUSCULO-SKELETAL Osteo arthritis, other joint diseases and	7	3	4	1	0
13.0 13.1	psoriasis MUSCULO-SKELETAL Osteo arthritis, other joint diseases and subsequent joint replacement	7 51	7	4 18	1 27	5
13.0 13.1 13.2	psoriasis MUSCULO-SKELETAL Osteo arthritis, other joint diseases and subsequent joint replacement Recurrent instability of shoulder or knee joints	7 51 2	7	4 18 3	27 2	5 0
13.0 13.1 13.2 13.3	psoriasis MUSCULO-SKELETAL Osteo arthritis, other joint diseases and subsequent joint replacement Recurrent instability of shoulder or knee joints Limb prosthesis	7 51 2 0	3 7 1 0	4 18 3 0	27 2 0	5 0 0
13.0 13.1 13.2 13.3 13.4	psoriasis MUSCULO-SKELETAL Osteo arthritis, other joint diseases and subsequent joint replacement Recurrent instability of shoulder or knee joints Limb prosthesis Back pain	7 51 2 0	3 7 1 0	4 18 3 0	27 2 0	5 0 0
13.0 13.1 13.2 13.3 13.4 14.0	psoriasis MUSCULO-SKELETAL Osteo arthritis, other joint diseases and subsequent joint replacement Recurrent instability of shoulder or knee joints Limb prosthesis Back pain SENSORY	7 51 2 0 2	3 7 1 0 4	4 18 3 0 8	27 2 0 6	0 5 0 0 2
13.0 13.1 13.2 13.3 13.4 14.0	psoriasis MUSCULO-SKELETAL Osteo arthritis, other joint diseases and subsequent joint replacement Recurrent instability of shoulder or knee joints Limb prosthesis Back pain SENSORY Speech defect	7 51 2 0 2	3 7 1 0 4	4 18 3 0 8	1 27 2 0 6	0 5 0 0 2
13.0 13.1 13.2 13.3 13.4 14.0 14.1 14.2	psoriasis MUSCULO-SKELETAL Osteo arthritis, other joint diseases and subsequent joint replacement Recurrent instability of shoulder or knee joints Limb prosthesis Back pain SENSORY Speech defect Otitis – externia and media	7 51 2 0 2	3 7 1 0 4	4 18 3 0 8	1 27 2 0 6	0 5 0 0 2

Ref	Condition	U(TL)	R	R(TL)	TU	F
	Other sight problems	21	17	6	6	2
15.0	GENERAL					
15.1	Prescribed medication	106	16	42	13	0
15.2	Transplants – kidney, heart, lung, liver	0	3	8	0	0
15.3	Progressive conditions	9	1	1	1	1
15.4	Allergies (other than allergic dermatitis and asthma)	4	23	8	12	8
15.5	Conditions not specifically listed	104	11	9	17	2
16.0	PHYSICAL FITNESS					
16.0	Physical fitness (see Appendix 2 of MSN 1839)	29	3	10	7	2

Chief Medical Advisor's COMMENTARY

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 this extraordinary pandemic year, 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, the main change that can be seen is a drop in the provision of medical certificates despite the fact that many MCA Approved Doctors have been able to provide a service throughout the year. Trends in specific areas of seafarer health will be skewed as a result, with those who were previously found to be fully fit underrepresented.

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. By the end of 2019, over 1500 fishermen had attended for their first ENG medical fitness examination with the application of grandfather rights in 35 cases. Only 9 were refused a certificate (about 0.6% of the total). In 2020 over 1000 further medicals were performed, 17 with grandfather rights applied, and none were found 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

The total number of medical examinations had been remaining relatively steady between approximately 51,000 and 54,000 but dropped to 38,567 in 2020 due to the pandemic. Regional figures within the UK were reviewed in order to ensure that any significantly high or low numbers are considered when renewing appointments or appointing new ADs. 40% of ENG medicals were performed overseas, with the majority of these taking place in areas associated with the yachting sector as usual. Numbers in the Philippines dropped by nearly 50%, this change being likely to be due to the effect of the pandemic on the cruising sector.

Referrals to referees had remained stable at between 30 and 50 reviews each year but dropped in the past two years. This dropped further as a result of the lower number of medicals performed. Decisions were

altered in 11 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 94% Category 1 Unrestricted certificates, 4% Category 2 Restricted certificates, 1.7% Category 3 Temporarily unfit certificates and 0.2% Category 4 Failures. These percentages remain relatively stable year on year. The total number of ADs varies during the year with ongoing retirements and new appointments. 226 sets of data were collected from 222 ADs in total, most of whom are on the general list and able to perform medicals for any seafarer, while 23 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 and colour vision) and mental health. When restricted certificates are considered, a significant majority represented defective colour vision, followed by endocrine and vascular conditions. These trends remain relatively constant year on year although last year was the first time that mental health was noted as one of the most significant causes of unfitness. The skewing of figures this year means that this trend cannot helpfully be analysed. This important topic was to have been the theme of the Approved Doctors' seminar in 2020 which has been postponed and is now planned for later in 2021.

Although every condition noted for each seafarer is recorded, they 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 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, with 3 passes out of a total of 67 tests in 2018 and 1 out of 50 in 2019. During 2020, 30 tests were performed with only a single pass. 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 our work towards the development of a fully electronic system of certification continues. This will automatically collect the data represented within the annual returns system, and will allow for a much simpler review of data regarding health patterns and trends.

Sally Bell Chief Medical Advisor UK Maritime and Coastguard Agency March 2021