# SUMMARY OF MEDICAL EXAMINATIONS OF SEAFARERS CONDUCTED BY APPROVED DOCTORS 1 January – 31 December 2019

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	43671
	UNRESTRICTED Less than 2 years – non-medical reasons e.g. under 18 years		ENG 1	306
	UNRESTRICTED - U (TL)	Less than 2 years – medical reasons	ENG 1	4772
Cat 2	RESTRICTED - R	2 years	ENG 1 + ENG 3	1000
	RESTRICTED - R (TL)	Less than 2 years – medical reasons	ENG 1 + ENG 3	1198
Cat 3	TEMPORARILY UNFIT - TU	Any	ENG 3	824
Cat 4	FAILURE - F	Permanent	ENG 3	91
No.	of Returns entered =	TOTAL No. OF EXAMII	NATIONS	51862

#### 2. ANNUAL COMPARISON OF EXAMINATIONS AND MEDICAL REVIEWS

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

#### 3. ANALYSIS OF REFEREES' DECISIONS ON MEDICAL REVIEWS

Medical Category	AD's Decision Upheld	AD's Decision changed	Cases awaiting decision	Cases withdrawn	TOTAL
Cancers	0	0	0	0	0
Endocrine and metabolic	1	0	0	0	1
Blood disorders	0	0	0	0	0
Mental disorders	4	2	0	0	6
Diseases of the nervous system	5	0	0	0	5
Cardio-vascular system	3	1	0	0	4
Respiratory system	1	1	0	0	2
Digestive system	1	0	0	0	1
Genito-urinary conditions	0	0	0	0	0
Musculoskeletal	0	0	0	0	0
Sensory	0	0	0	0	0
General	1	1	0	2	4
Physical fitness	0	0	0	0	0
Skin	0	0	0	0	0
Unknown (geographical/incomplete)	0	0	0	0	0
TOTAL NUMBER OF CASES	16	5	0	2	23

# 4. BREAKDOWN BY MEDICAL CONDITION

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

Ref No	Condition	U(TL)	R	R(TL)	TU	F
1.0	INFECTIONS	` '		, ,		
1.1	Gastro intestinal infection	0	0	0	0	0
1.2	Other infection	2	0	1	9	0
1.3	Pulmonary TB		0	10	8	1
1.4	Sexually transmissible diseases	11 0	0	1	0	0
1.5	HIV +	23	1	1	1	0
1.6	Hepatitis A	1	0	0	0	0
1.7	Hepatitis B, C etc	34	0	1	1	0
2.0	CANCERS					
2.1	Malignant neoplasms	163	9	73	17	2
3.0	ENDOCRINE AND METABOLIC					
3.1	Endocrine disease	34	6	14	9	0
3.2	Diabetes – non insulin treated by diet	33	1	13	13	0
3.3	Diabetes - non-insulin treated by oral medication	424	9	69	20	3
3.4	Diabetes - insulin using	0	21	84	10	0
3.5	Obesity / abnormal body mass	1706	20	243	75	5
4.0	BLOOD DISORDERS					
4.1	Blood-forming organs	14	2	3	3	0
4.2	Anaemia	13	0	0	1	1
4.3	Splenectomy (history of surgery)	0	4	0	1	0
5.0	MENTAL DISORDERS					
5.1	Psychosis (acute)	2	0	4	10	3
5.2	Alcohol abuse (dependency)	5	0	14	8	2
5.3	Drug dependence / persistent substance abuse	2	0	2	3	2
5.4 a	Mood / affective disorders severe anxiety state, depression, or any other mental disorder likely to impair performance	58	5	55	36	6
5.4 b	Mood / affective disorders minor or reactive symptoms of anxiety/depression	233	11	84	27	2
5.5	Disorder of personality - clinically recognised	1	0	6	0	1
5.6	Disorder of psychological development - autism, Aspergers syndrome	1	0	1	2	0
5.7	Hyperkinetic disorders - Attention Deficit Hyperactivity Disorder	9	0	0	5	1
5.8	Other mental health and cognitive disorders	14	1	8	5	1
6.0	DISEASES OF THE NERVOUS SYSTEM					
6.1	Organic nervous disease e.g multiple sclerosis, Parkinson's disease	21	4	16	4	1
6.2	Syncope	1	0	3	3	0
6.3	Epilepsy - no provoking factors	6	17	9	16	0
6.4	Epilepsy provoked by alcohol, medication, head injury	3	2	1	1	0
6.5	Risk of seizures from intra-cranial surgery	1	0	1	2	1
6.6	Migraine	4	6	4	1	0
6.7	Meniere's disease	1	0	0	0	0
6.8	Sleep apnoea	31	1	9	5	0
6.9	Narcolepsy	0	1	0	1	0
7.0	CARDIO VASCULAR SYSTEM					
7.1	Heart – congenital and valve disease	36	2	26	29	0
7.2	Hypertension	1224	7	73	103	8
7.3	Cardiac event	162	9	84	23	2
7.4	Cardiac arrhythmias	65	21	43	38	1

Ref No	Condition	II/TI\	D	P/TI\	TU	F
		U(TL)	R	R(TL)	TU	-
7.5	Other heart disease	54	5	31	16	3
7.6	Ischaemic cerebrovascular disease	20	9	24	11	0
7.7	Arterial – claudication	5	2	4	2	0
7.8 7.9	Varicose veins	23 7	0 6	6	6	2
	Deep vein thrombosis / pulmonary embolus	/	Ö	Ö	Ö	Z
8.0	RESPIRATORY SYSTEM					
8.1	Sinusitis / nasal obstruction	1	1	0	0	0
8.2	Throat infections	0	0	0	0	0
8.3	Chronic bronchitis and /or emphysema	22	7	9	3	0
8.4	Asthma	37	24	24	19	6
8.5	Pneumothorax	1	1	2	6	0
9.0	DIGESTIVE SYSTEM					
9.1	Oral Health	48	18	35	38	0
9.2	Peptic ulcer	3	3	3	4	0
9.3	Non infectious enteritis, colitis, Crohn's disease,	31	21	33	18	0
	diverticulitis etc.					
9.4	Stoma (ileostomy, colostomy)	3	0	5	2	0
9.5 9.6	Cirrhosis of liver Biliary tract disease, biliary colic	2	1	3	0	0
9.6	Pancreatitis	1	1	3	8	1
9.8	Anal conditions: piles (haemorrhoids) fissures,		Т.	3	0	
3.0	fistulae	8	3	2	1	0
9.9	Hernias – inguinal and femoral	10	7	15	10	0
9.10	Hernias –umbilical	6	2	5	3	0
9.11	Hernias – diaphragmetic (hiatus)	0	0	0	1	0
10.0	GENITO URINARY CONDITIONS					
10.1	Proteinuria, haematuria, glycosuria, or other	105	4	15	62	2
	urinary abnormality					
10.2	Acute nephritis	1	0	0	0	0
10.3	Sub acute or chronic nephritis or nephrosis	3	0	9	5	1
10.4	Acute urinary infection	1	12	0	8	0
10.5 10.6	Renal or ureteric calculus renal colic  Prostatic enlargement / Urinary obstruction	20 9	13 0	20 4	22	0
10.7	Removal of kidney or one non-functioning kidney	6	1	0	0	0
10.8	Incontinence of urine	0	0	1	0	0
10.9	Heavy vaginal bleeding or other gynecological					
	conditions	9	1	2	0	0
11.0	PREGNANCY					
11.1	Pregnancy	4	1	40	3	0
12.0	SKIN	<u> </u>	_			
12.1	Skin infections	0	0	0	2	0
12.2	Other skin diseases e.g. eczema, dermatitis,					
	psoriasis	12	7	9	4	0
13.0	MUSCULO SKELETAL					
13.1	Osteo arthritis, other joint diseases and					
13.1	subsequent joint replacement	45	21	25	32	11
13.2	Recurrent instability of shoulder or knee joints	7	3	8	7	1
13.3	Limb prosthesis	0	3	0	0	0
13.4	Back pain		6	14	17	4
14.0	SENSORY					
14.1	Speech defect	0	1	0	0	0
14.2	Otitis – externia and media	1	0	2	1	0
14.3	Hearing	110	30	24	36	3
14.4	Eyesight – Visual acuity	29	118	27	65	11
	Colour vision	42	497	54	17	5

Ref No	Condition	U(TL)	R	R(TL)	TU	F
	Other sight problems	35	29	17	13	1
15.0	GENERAL					
15.1	Prescribed medication	161	39	69	16	2
15.2	Transplants – kidney, heart, lung, liver	4	2	6	0	0
15.3	Progressive conditions	4	1	1	0	2
15.4	Allergies (other than allergic dermatitis and asthma)		39	15	12	5
15.5	Conditions not specifically listed		11	13	17	4
16.0	PHYSICAL FITNESS					
16.0	Physical fitness (see Appendix 2 of MSN 1839)	86	6	23	12	1

### 5. NUMBER OF FISHERMEN'S MEDICAL EXAMINATIONS

Fitness Category	1 <sup>st</sup> application	Existing ENG 1 holder	Total	% of total examinations
Cat 1	968	403	1371	89.3%
Cat 2	71	32	103	7.4%
Cat 3	34	13	47	2.9%
Cat 4	8	1	9	0.4%
Total	1081	449	1530	
Grandfather Rights applied			35	1.7%

# 6. ANNUAL COMPARISON OF REFEREES' REVIEWS

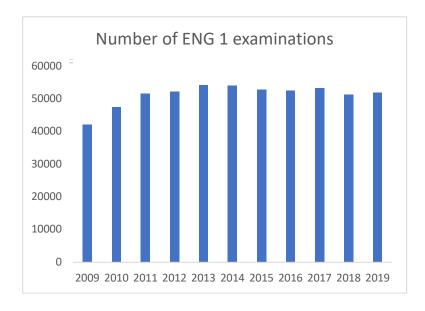
	2015	2016	2017	2018	2019
Cancers	0	0	0	0	0
Endocrine and metabolic	4	4	5	3	1
Blood disorders	2	3	3	1	0
Mental disorders	3	7	4	3	6
Diseases of the nervous system	1	2	6	4	5
Cardio-vascular system	8	4	2	2	4
Respiratory system	5	9	14	2	2
Digestive system	1	2	3	1	1
Genito-urinary conditions	1	1	0	4	0
Musculoskeletal	2	1	2	0	0
Sensory	4	9	3	0	0
General	2	3	6	2	4
Physical fitness	2	0	0	2	0
Skin	1	0	0	0	0
Unknown (geographical/incomplete)	1	1	0	0	0
TOTAL	37	46	48	24	23

# 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.

A significant change to the system in 2019 was the inclusion of fishermen in the medical examination process, following the implementation of the Work in Fishing convention 2007 (ILO 188), which requires those working in fishing to hold a medical certificate of fitness, although 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 medical fitness examinations with the application of grandfather rights in 35 cases. Only 9 were refused a certificate (about 0.6% of the total).

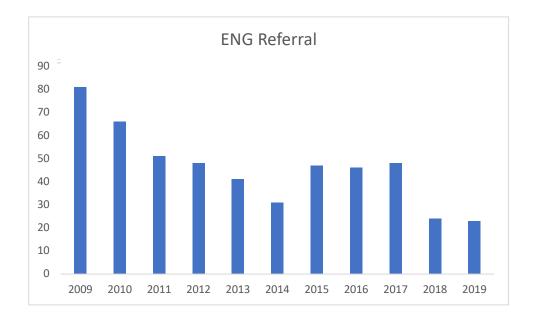
Seafarers or fishermen who either fail or are issued with a restricted certificate are entitled to seek a review of the AD's decision by an independent medical referee if they have reservations about the initial decision. The results of the referee reviews are also presented. Fuller details of the procedures for ADs and referees can be found in MSN 1883, MSN 1886, MSN 1887 and in the MCA Approved Doctors' Manual, July 2019 Edition which can be found on line at https://www.gov.uk/government/publications/the-approved-doctors-manual



Although the total number of medical examinations rose steadily from 2003 to 2013, the number is now remaining relatively steady. This year, 51,862 examinations were performed, only 568 more than last year, despite the number attributable to fishing, see graph above. Regional figures within the UK were also reviewed in order to ensure that any significantly high or low numbers are considered when renewing appointments or appointing new ADs. 41% of ENG medicals were performed overseas, mainly in either the Philippines, or areas

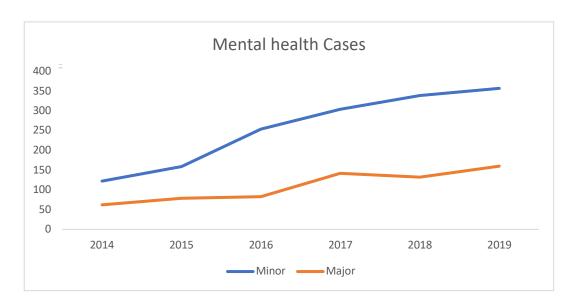
relating to the yachting sector (Mallorca, Australia, New Zealand, South Africa, France and the USA). This represents a slight reduction from the steady figure of 44% for the past few years, due to lower figures in the Philippines, USA and South Africa.

Referrals to referees, having dropped significantly after the revision of the guidelines in 2010, had remained stable at between 30 and 50 reviews each year but dropped last year to only 24 and this figure remained low at 23. The reduction was across the board, but perhaps more significant in respiratory cases. As noted last year, it is to be hoped that this trend reflects the continuing revision and improvement of guidance to ADs, along with the accessibility of advice from the Chief Medical Advisor, thus ensuring that decisions are fully understood by the seafarers and restrictions tailored to the relevant work as much as possible. The decision of the AD was upheld in the majority, and it should be noted that a change in decision may represent a different restriction, but 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, 1.59% Category 3 Temporarily unfit certificates and 0.18% Category 4 Failures. These percentages remain relatively stable year on year. The number of ADs varies during the year with ongoing retirements and new appointments. 244 sets of data were collected from 236 ADs in total, 84% of whom are on the general list and able to perform medicals for any seafarer, while 16% 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 sensory (mostly visual acuity but also hearing and colour vision) then endocrine disease (mostly obesity, but also diabetes), 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, apart from mental health was not previously noted as one of the most significant causes of unfitness. A review of figures for mental health over the past 6 years was therefore conducted, which showed a steady and significant rise in both minor and major affective disorders identified since 2014. This reflects trends previously reported in the general population. This important topic will be the theme of the next Approved Doctors' seminar.



Although every condition noted for each seafarer is recorded, as 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.

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 May 2020