

**MARITIME AND PORT AUTHORITY OF SINGAPORE
SHIPPING DIVISION**

MEDICAL GUIDELINES

1 Preamble

The Merchant Shipping (Training, Certification and Manning) Regulations 1998 requires that every candidate for certification or revalidation must be medically fit. Accordingly, these Guidelines have been developed to provide an agreed general standard for conducting medical examinations.

2 Definitions

For the purpose of these Guidelines the following definitions apply:

“certificate of competency” means a certificate of competency issued by the Director;

“certificate of service” means a certificate of competency issued by the Director;

“Director” means the Director of Marine appointed under section 4 of the Merchant Shipping Act;

“medical fitness certificate” means a certificate issued under paragraph 5;

“registered medical practitioner” means a medical practitioner registered under the Medical Registration Act.

3 Application

These Guidelines apply to every person who wishes to qualify for the issue or revalidation of a certificate of competency or of service as a deck officer or a marine engineer officer.

4 Application for Examination

Application shall be made on an application form specified by the Director obtainable at the Shipping Division, Maritime and Port Authority of Singapore (MPA).

5 Issue / Validity of Certificate

(a) Every applicant for a medical fitness certificate shall be examined by a registered medical practitioner and if the practitioner considers that the applicant is fit, having regard to the medical standards as specified in the Annex, he shall issue the applicant with a medical fitness certificate in a format specified by the Director.

(b) The period of validity of a Medical Certificate shall be 5 years. The medical practitioner may issue a certificate for a shorter period or add any other restrictions he thinks appropriate by entering such remarks on the certificate. The medical fitness certificate should be carried by the seafarer while he is serving on board the ship and he shall comply with any remarks/instructions given by the medical practitioner.

6 Periodical Examination Required

Medical fitness examination is required every 5 years from the date of completion of the medical fitness examination.

7 Review

(a) A person who is aggrieved by the failure in the medical fitness examination may apply to the Director for the matter to be reviewed. The decision taken by the Director during the review shall be final.

(b) The medical referee to whom the matter is referred to by the Director shall obtain a report from the registered medical practitioner by whom the applicant was examined and may examine the medical condition of the applicant. The medical referee shall, if the applicant so requests, disclose to the applicant the report of the registered medical practitioner and any other evidence not produced by the applicant himself except that if the medical referee considers that such disclosure would be harmful to the applicant's health the referee shall not be required to make such disclosure. The medical referee shall have regard to any relevant medical evidence, whether produced by the applicant, his employer, or otherwise, and whether or not disclosed as aforesaid.

(c) In the light of the medical evidence before him, the medical referee shall, if he considers that the applicant is fit, having regard to the medical standards, issue to the applicant a medical fitness certificate. In any other case he shall notify the applicant of his decision. Any such action by the medical referee shall be taken not later than two months from the date on which the application for review is lodged with the Director (which date shall be notified to the medical referee by him) or within such longer period as the Director may determine.

8 Records and Annual Returns

Any registered medical practitioner who conducts a medical examination in accordance with these Guidelines shall -

- (a) make and retain for six years a record of each medical examination which he carries out pursuant to these Guidelines; and
- (b) send to the Director at his direction a return of all such examinations in a format determined by the Director (which form so far as the Director considers practicable shall not include medical information which can be identified as applying to a particular person).

ANNEX
MEDICAL STANDARDS

The examination shall be conducted in accordance with these Medical Standards. A person may be graded -

- P** The standard has been met
W The standard has not been met temporarily : review in weeks
M The standard has not been met indefinitely : review in months
F The standard has not been met permanently

I INFECTIOUS DISEASES

Gastro-Intestinal Infectious Diseases – W until satisfactorily treated.

Other Infectious or Contagious Disease – W until satisfactorily treated.

Active Pulmonary Tuberculosis

When the examining doctor is satisfied, on the advice of a chest physician, that lesion is fully healed and that the patient has completed a full course of chemotherapy, then **P** should be considered six months after completion of treatment. Cases where either one or both lungs have been seriously affected resulting in poor respiratory reserves and those with higher chances of relapse should be **F**. Relapsed cases with history of poor compliance or resistant organisms should be **F**.

Inactive Pulmonary Tuberculosis

Those with minimal scarring in one or both upper zones should be considered **P**. Endorsement on the certificate of the need for periodic review to determine that disease remains in active shall be made.

Sexually Transmissible Diseases

All cases of acute infection are **W** while under treatment. In all cases evidence of satisfactory tests of cure should be produced.

AIDS – All confirmed cases – F.

II MALIGNANT NEOPLASMS

Malignant Neoplasms – including Lymphoma, Leukaemia and similar conditions.

Each case should be graded **M** on diagnosis. Later progression to Categories **P** or **F** should be dependent on assessment of progress, prognosis and measure of disability.

.II ENDOCRINE AND METABOLIC DISEASES

(1) **Thyroid Disease – W** for investigation, then **P** or **F** on case assessment.

(2) All other cases of endocrine disease – **W** for investigation, upon which assessment will depend.

(3) **Diabetes Mellitus**

All cases requiring Insulin – **F**

Where the diabetic condition is controlled by diet or by diet and oral hypoglycaemic medications may be **P** and the certificate shall be endorsed with a statement that the person is diabetic.

(4) **Obesity**

A degree of obesity, with or without complications, adversely affecting exercise tolerance/mobility/general health – **W** for treatment. Refractory or replacing cases -**F**.

Note : A standard set of height/weight tables (preferably the Metropolitan Life tables) should be used – making an allowance of up to 25 per cent excess weight.

IV DISEASES OF THE BLOOD AND BLOOD FORMING ORGANS

There should not be any significant disease of the haemopoetic system. Unexplained or symptomatic anaemia – **W**. Then **P** or **F** on case assessment.

V MENTAL DISORDERS

Acute Psychosis, whether organic, schizophrenic, manic depressive or any other psychosis listed in the International Classification of Diseases – **F**.

Alcohol Abuse (Dependency)

If persistent and affecting health by causing physical or behavioural disorder – **F**.

Drug Dependence

Dependence on dangerous drugs – **F**.

Psychoneurosis – **W** for assessment. Chronic or recurrent – **F**.

VI DISEASES OF THE NERVOUS SYSTEM AND SENSE ORGANS

Organic Nervous Disease – usually **F**, especially those conditions causing defect of muscular power, balance, mobility and co-ordination.

Some minor localised disorders not causing symptoms of incapacity and unlikely to progress, may be **P**.

Epilepsy

Any type of epilepsy since the age of 5 years – **F**.

A single fit – **W** for investigation. Then, providing that the past medical history is clear and investigation has shown no abnormality; **P** can be considered if free from an attack for a period of at least 5 years; or at the discretion of a doctor, for a period of less than 5 years but not less than 2 years.

Applicants who have had cranial surgery or significant traumatic brain damage – **M** for 12 months – **P** or **F** on case assessment.

Migraine – slight infrequent attacks responding quickly to treatment – **P**. Frequent attacks causing incapacity – **F**.

Syncope and Other Disturbances of Consciousness – **W** for assessment. Recurrent attacks with complete or partial loss of consciousness should be – **F**.

Meniere's Disease – **F**

SPEECH DEFECTS

If likely to interfere with communication – **F**.

EAR

Acute and Chronic Otitis Externa – **W** until completely healed.

Acute Otitis Media – **W**. Until satisfactorily treated.

Chronic Otitis Media – **W**. May become **P** after satisfactorily treatment or surgery.

Loss of Hearing – A degree of impairment sufficient to interfere with communication – **F**.

An applicant in whom impaired hearing acuity is found should be referred for full investigation by an ENT surgeon.

Hearing Aids. The use of a hearing aid should not be permitted.

VII CARDIOVASCULAR SYSTEM

The Cardiovascular System should be free from acute or chronic disease causing significant disability. Anyone requiring anticoagulant should be **F**.

Valvular disease causing significant impairment or having required surgery – **F**.

Satisfactorily treated patent ductus arteriosus or atrial septal defect could be accepted.

HYPERTENSION

All cases **W** for investigation.

Applicants with hypertension whose blood pressure can be maintained below 170/100mm by dietary control may be **P**.

Applicants whose blood pressure can be maintained below 170/100mm by moderate doses of diuretics and/or beta blockers without significant side effect – for annual assessment.

Where larger doses or more potent drugs are required – **F**.

ISCHAEMIC HEART DISEASE

A history of Coronary Thrombosis – **F**.

Confirmed Angina – **F**

OTHER CARDIOVASCULAR DISORDERS

Any clinically significant abnormality of rate or rhythm or disorder of conduction – **F**.

CEREBRO-VASCULAR DISEASES

Any **cerebro-vascular accident** including transient ischaemic attacks – **F**. General cerebral arteriosclerosis: including dementia and senility – **F**.

DISEASES OF ARTERIES

A history of intermittent claudication: including any case where vascular surgery was required – **F**.

DISEASE OF VEINS

Varicose Veins – slight degree – **P**. Moderate degree without symptoms or oedema may be **P**, but with symptoms – **W** for treatment. Recurrent after operation, with symptoms – **M** for further surgical opinion or, if not suitable for further treatment – **F**.

Chronic varicose ulceration – **F**. Thin unhealthy scars of healed ulcers or unhealthy skin of varicose eczema – **F**.

Recurrent or persistent deep vein thrombosis or thrombophlebitis – **F**.

Haemorrhoids – not prolapsed, bleeding or causing symptoms – **P**. Other cases should be **W** until satisfactory treatment has been obtained.

Varicocele – symptomless – **P**. With symptoms – **W** for surgical opinion.

VIII RESPIRATORY SYSTEM

The respiratory system should be free from acute or chronic disease causing significant disability.

Acute Sinusitis – **W** until resolved.

Chronic Sinusitis – if disabling and frequently relapsing despite treatment – **F**.

Nasal Obstruction. Septal abnormality or polypus – **W**. Until satisfactorily treated.

A history of frequent sore throats or unhealthy tonsils with adenitis – **W**. Until satisfactorily treated.

Chronic Bronchitis and/or Emphysema – Class depends on severity. Mild uncomplicated cases with good exercise tolerance may be **P**, but cases with recurring illness causing significant disability should be **F**.

Bronchial Asthma – **W** for investigation. If confirmed – **F**.

Except for a history of bronchial asthma resolving, without recurrence, before the age of 16. **P** should be considered for mild well controlled asthma.

Pneumothorax

All cases to be classified **M** for at least 12 months. With recurrences – **F**.

IX DISEASE OF DIGESTIVE SYSTEM

DISEASES OF THE ORAL CAVITY

Mouth or gum infection – **W** until satisfactorily treated.

Dental defects – **W** until satisfactorily treated. Applicants should be dentally fit.

DISEASES OF THE OESOPHAGUS, STOMACH AND DUODENUM

Peptic Ulceration – **W** for investigation.

Where there has been gastro-intestinal bleeding, perforation or recurrent peptic ulceration (in spite of maintenance H2 blocker treatment) or an unsatisfactory operation result – normally **F**.

Recurrent attacks of Appendicitis – **W** pending surgical removal.

Hernia – **W** until repaired.

The wearing of a truss is not acceptable in place of a curative operation.

Diaphragmatic Hernia – To be assessed according to the disability.

Non-Infective Enteritis and Colitis

Severe or recurrent or requiring special diet – **F**.

Intestinal Stoma – **F**

DISEASES OF THE LIVER AND PANCREAS

Cirrhosis of the Liver – **W** for investigation, then where condition is serious or progressive and/or where complications such as oesophageal varices or ascites are present – **F**.

Biliary Tract Diseases

After complete surgical cure – **P**.

Pancreatitis

Recurrent pancreatitis and all cases where alcohol is an aetiological factor – **F**.

X DISEASES OF THE GENITO-URINARY SYSTEM

All cases of proteinuria, glycosuria or other urinary abnormalities should be referred for investigation.

Acute Nephritis – **W** until resolved.

Subacute or Chronic Nephritis or Nephrosis – **W** for investigation, upon which assessment will depend.

INFECTIONS OF KIDNEY

Acute urinary infection – **W** until satisfactorily treated. Recurrent cases – **F** unless full investigation has proved satisfactory.

Renal or Ureteric Calculus – **W** for investigation and any necessary treatment. An isolated attack of renal colic with passage of small calculus may be **P** after a period of observation, provided urine and renal function remain normal and there is no clinical and radiological evidence of other calculi. Recurrent stone formation – **F**.

Urinary Obstruction – from any cause – **W** for investigation, **F** if not remediable.

Renal Transplant – **F**.

Incontinence of Urine – **W** for investigation. If irremediable – **F**.

Enlarged Prostate – **W** for investigation.

Hydrocoele

Small and symptomless – **P**.

Large and/or recurrent **W** or, if untreated, **F**.

Abnormality of the Primary and Secondary Sexual Characteristic – **W** for investigation, upon which final assessment will rest.

GYNAECOLOGICAL CONDITIONS

There should be no gynaecological disorder or disease such as heavy vaginal bleeding, lower abdominal pain or prolapse of the genital organs likely to cause trouble on the voyage or affect working capacity.

XI PREGNANCY

The doctor should discuss with the seafarer the implications of continuing to work at sea, particularly if it is a first pregnancy. A seafarer with normal pregnancy before the 28th week may be permitted to work on short haul trips or a long haul trip on a vessel carrying a doctor – to allow for ante-natal care.

Abnormal Pregnancy, on diagnosis – **M**

XII SKIN

Any condition liable to be aggravated by heat, sea air, oil, caustics or detergents – or due to specific occupational allergens may be **P**, **W**, **M**, or **P** on case assessment.

INFECTIONS OF SKIN – **W** until satisfactorily treated.

Acne. Most cases **P** but severe pustular cystic acne – **F**.

OTHER INFLAMMATORY SKIN CONDITIONS

Atopic Dermatitis and related conditions – **W** until satisfactorily treated.

Contact Dermatitis – **W**. Refer for dermatological opinion.

Acute Eczema – **W** until skin is healthy.

Recurrent Eczema of more than minimal extent – **F**.

Psoriasis – Most cases can be **P** but some widespread or ulcerated cases should be **W** for treatment. Severe cases resistant to treatment, frequently relapsing or associated with joint disease – **F**.

XIII MUSCULO-SKELETAL SYSTEM

It is essential that applicants should not have any defect of the musculo-skeletal system which might interfere with the discharge of their duties; muscular power, balance, mobility and co-ordination should be unimpaired.

Osteo-arthritis – **W** for assessment.

Advanced cases where disability is present – **F**.

Normally a limb prosthesis would not be acceptable.

Back Pain

Recurrent incapacitating back pain – **F**.

XIV EYESIGHT STANDARDS

Distant vision or colour vision tests, or both, may be taken with or without visual aids (spectacles or contact lenses). Applicants who need to use visual aids must reach the necessary standard for both unaided and aided vision given below. Unaided vision should be tested first. Each eye must be tested separately.

VISUAL

If any irremediable morbid condition of either eye, or the lids of either eye, is present and liable to the risk of aggravation or recurrence, a person should be considered to be unfit.

Binocular vision is necessary for all officers. However, monocular marine engineer officers with a satisfactory record of service prior to 1 October 1988 should be considered to meet the standards.

In all cases where visual aids (spectacles or contact lenses) are required for the efficient performance of duties, a spare pair must be carried when seafaring. Where different visual aids are used for distant and near vision, a spare pair of each must be carried.

COLOUR VISION

Colour vision may be regarded as normal, when using the Ishihara method, if plates 1,11,15,22 and 23 are read correctly.

The eyesight standards to be met are as follows:

	<u>Distant vision</u>		<u>Near vision</u>	<u>Colour vision</u>
	Better eye	Other eye	both eyes together aided or unaided vision	
1. Deck Officer				
With or without visual aids	6/6	6/9	A visual acuity sufficient to carry out duties efficiently	-
Unaided vision	6/60	6/60		
Unaided vision*	6/12	6/24		
2. Marine Engineer Officer				
Aided vision if necessary	6/18	6/60	A visual acuity sufficient to carry out duties efficiently	Normal

* All new entrants (persons joining the deck department for the first time) under the age of 22.

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APPENDIX 2
dated 01 Jan 1999

APPLICATION FOR MEDICAL FITNESS EXAMINATION

Part A to be completed by the Applicant who is responsible for answering each question accurately.

A. APPLICANT'S PARTICULARS

Name in Full (BLOCK CAPITALS)					
Address					Tel No:
NRIC/Passport No.	Date of Birth	Place of Birth	Nationality	Sex: Male/Female	Dept: DECK/ENGINE Rank:

APPLICANT'S DECLARATION

(please tick)

	Yes	No	If yes, provide dates and details.
1. Have you ever had:			
a. occasions to be admitted to hospital for whatever reason at all in the past?	<input type="checkbox"/>	<input type="checkbox"/>	_____
b. an operation?	<input type="checkbox"/>	<input type="checkbox"/>	_____
c. an accident needing hospital treatment?	<input type="checkbox"/>	<input type="checkbox"/>	_____
d. tuberculosis or abnormal chest X-ray?	<input type="checkbox"/>	<input type="checkbox"/>	_____
e. sexually transmitted diseases? (eg. syphilis, gonorrhoea, aids, etc)	<input type="checkbox"/>	<input type="checkbox"/>	_____
f. mental illness like depression, schizophrenia other psychosis or neurosis?	<input type="checkbox"/>	<input type="checkbox"/>	_____
g. convulsions, fits or epilepsy?	<input type="checkbox"/>	<input type="checkbox"/>	_____
h. ear or hearing problem?	<input type="checkbox"/>	<input type="checkbox"/>	_____
i. high blood pressure?	<input type="checkbox"/>	<input type="checkbox"/>	_____
j. chest pain at rest or on exertion, or other heart trouble?	<input type="checkbox"/>	<input type="checkbox"/>	_____
k. asthma or wheezing attacks, or pneumothorax (air in the chest)?	<input type="checkbox"/>	<input type="checkbox"/>	_____
l. stomach/duodenal ulcer, 'gastric', or blood in the vomit or stool?	<input type="checkbox"/>	<input type="checkbox"/>	_____
m. kidney disease or problem passing urine?	<input type="checkbox"/>	<input type="checkbox"/>	_____
n. pain in the spine, back or any joint?	<input type="checkbox"/>	<input type="checkbox"/>	_____
o. occasion to wear contact lens or glasses?	<input type="checkbox"/>	<input type="checkbox"/>	_____
p. allergic reactions to food, drugs, etc.?	<input type="checkbox"/>	<input type="checkbox"/>	_____
q. diabetes or sugar in the urine	<input type="checkbox"/>	<input type="checkbox"/>	_____
2. Social Habits -Do you take alcohol, drug or smoke?	<input type="checkbox"/>	<input type="checkbox"/>	_____
3. Has any member of your family or relative ever had mental illness, epilepsy, blood disorder, diabetes, tuberculosis, heart trouble or any other disorder?	<input type="checkbox"/>	<input type="checkbox"/>	_____
4. Have you had <u>any</u> medical attention (eg.consulted a doctor) for anything at all during the last 12 months?	<input type="checkbox"/>	<input type="checkbox"/>	_____
5. Do you have a medical or other condition not already mentioned above?	<input type="checkbox"/>	<input type="checkbox"/>	_____

I declare that the information given above is correct to the best of my knowledge. I consent to the examining doctor to endorse any medical information on the Medical Fitness Certificate (To be signed only in the presence of the examining doctor.)

Date

Signature of Applicant

B. RESULTS OF EXAMINATION

1. Height/Weight	<input type="text"/>	Metres	<input type="text"/>	Kilos	
2. Hearing	<input type="text"/>	Right	<input type="text"/>	Left	
3. Eyesight (without aids)	<input type="text"/>	Right	<input type="text"/>	Left	
	<input type="text"/>	Right	<input type="text"/>	Left	<input type="text"/> Colour Vision
4. Urinalysis	<input type="text"/>	Sugar	<input type="text"/>	Albumin	<input type="text"/> Microscopy
5. Full blood count	<input type="text"/>	Hb	<input type="text"/>	WBC	<input type="text"/> Platelets
6. VDRL	<input type="text"/>	Negative	<input type="text"/>	Positive	
7. Chest X-ray Report (Last x-ray within 2 months)	<input type="text"/>	Normal	<input type="text"/>	Abnormal	
8. Electrocardiogram (ECG) (EDG)	<input type="text"/>	Normal	<input type="text"/>	Abnormal	
9. Pulse	<input type="text"/>	per min.			
10. Blood Pressure	<input type="text"/>				

	Normal	Abnormal	If abnormal give details
11. Cardiovascular system	<input type="checkbox"/>	<input type="checkbox"/>	_____
12. Respiratory system	<input type="checkbox"/>	<input type="checkbox"/>	_____
13. Central Nervous system	<input type="checkbox"/>	<input type="checkbox"/>	_____
14. Intelligence, Mental state	<input type="checkbox"/>	<input type="checkbox"/>	_____
15. Digestive system	<input type="checkbox"/>	<input type="checkbox"/>	_____
16. Gastrointestinal system (eg. Hernia)	<input type="checkbox"/>	<input type="checkbox"/>	_____
17. Locomotor system (eg. spine & limbs)	<input type="checkbox"/>	<input type="checkbox"/>	_____
18. Physique - Deformities	<input type="checkbox"/>	<input type="checkbox"/>	_____
19. Skin (including varicosities)	<input type="checkbox"/>	<input type="checkbox"/>	_____
20. Urogenital system (eg. Hydrocoele)	<input type="checkbox"/>	<input type="checkbox"/>	_____
21. Endocrine system (eg. Thyroid)	<input type="checkbox"/>	<input type="checkbox"/>	_____
22. Mouth/Teeth	<input type="checkbox"/>	<input type="checkbox"/>	_____
23. Ears/Nose/Throat	<input type="checkbox"/>	<input type="checkbox"/>	_____
24. Eyes	<input type="checkbox"/>	<input type="checkbox"/>	_____

C. DOCTOR'S REMARKS

FIT / UNFIT subject to the following restrictions

_____ Date

_____ Signature of Approved Medical Practitioner

MEDICAL FITNESS CERTIFICATE

Name in Full NRIC / PP No.

I certify that I have examined the person named above to the Medical Standards of the Shipping Division, Maritime and Port Authority of Singapore and have found *him / her *FIT / UNFIT.

Remarks (if any)

.....

Official Stamp

Date of Examination

.....
Signature and Name of Approved
Medical Practitioner & Registered
Number

* Delete as appropriate