Guidelines on the medical examinations of fishers

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Preface

European Union (EU) Council Directive 2017/159 Article 7 states that "No fishermen shall work on board a fishing vessel without a valid medical certificate attesting to fitness to perform their duties". In addition, the International Labour Organisation's Work in Fishing Convention 2007 requires that every fisher holding a certificate issued under the provisions of the Convention, who is serving at sea, shall hold a valid medical certificate issued in accordance with the provisions of the Convention.

The social partners requested that the International Maritime Health Association (IMHA) determine appropriatee criteria for the medical fitness for fishers within the EU and harmonise the existing systems of medical examinations of fishers within the member states. The increasing internationalisation of fishing makes such harmonisation even more desirable.

Guidelines on the Medical Examinations of Seafarers, produced by the International Labour Organisation (ILO) and the International Maritime Organisation (IMO), have been in place for many years. It was agreed that these could provide an appropriate basis for establishing medical criteria for fishers within the EU, given that the medical criteria outlined in these Guidelines are already being applied to a large number of fishing personnel currently active within the EU.

Two separate groups of IMHA experts reviewed the fitness criteria for medical conditions and other relevant sections of the ILO/ IMO Guidelines and looked critically at the criteria with the perspective of the different job descriptions and risk profiles of fishers. Hardly any changes were suggested.

The structure and much of the text of the existing ILO/IMO "Guidelines on the medical examinations of Seafarers" has been used in the production of these Guidelines for Fishers, with the permission of the ILO. The dissemination and implementation of these Guidelines should contribute towards the harmonization of standards for the medical examinations of fishers and improve the quality and effectiveness of the health care provided for fishers.

Further, according to the Work in Fishing Convention, 2007 the competent authorities are obliged to monitor the occupational health risks of all fishers. The objective of this Convention is to ensure that fishers have decent conditions of work on board fishing vessels with regard to minimum requirements for work on board, conditions of service, accommodation and food, occupational safety and health protection, medical care and social security. These Guidelines therefore include information concerning the occupational risks faced by fishers within their profession. They also suggest additional requirements in the competences of the medical practioners (Appendix I) and prompt the competent authorities to establish a continuous systematic monitoring program of the fishers' occupational health risks and their health status that cannot be covered by the two yearly health examinations (Appendix J).

Medical practitioners performing such examinations should have a clear understanding of the unique aspects of fishing, as their professional judgement is often critical to the health and safety of fishers.

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Part 1. Introduction

I. PURPOSE AND SCOPE OF THE GUIDE

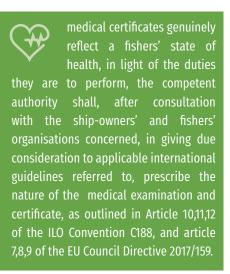
Fishers are required to undergo medical examinations to reduce risks to other crewmembers and for the safe operation of the ship, as well as to safeguard their own and their own personal health and safety. This requirement was included as long ago as the International Labour Organisation (ILO) Convention on Medical Examination (Fishermen), 1959 (C113).

These Guidelines apply to fishers in accordance with the requirements of the International Convention on Standards of Training, Certification and Watchkeeping for Fishers (STCW-F), 1995 for fishing vessel personnel, as amended, the ILO Work in Fishing Convention, 2007 (C118) and EU Council Directive 2017/159.

When implementing and utilizing these Guidelines, it is essential to ensure that:

the fundamental rights, protections, principles, and employment and social rights outlined in the ILO Declaration on Fundamental Principles and Rights at Work, 1998, are respected;

from the point of view of safety of life and property at sea and the protection of the marine environment, fishers on board fishing vessels are qualified and fit for their duties; and



These Guidelines are intended to provide maritime administrations with an internationally recognized set of criteria for use by competent authorities either directly or as the basis for framing national medical examination standards that will be compatible with international requirements. Their purpose is to help administrations establish criteria that will lead to equitable decisions about who can safely and effectively perform their routine and emergency duties at sea, provided these are compatible with their individual health- related capabilities. These Guidelines have been developed in order to reduce the differences in the application of medical requirements and examination procedures and to ensure that the medical certificates which are issued to fishers are a valid indicator of their medical fitness for the duties they will perform. Ultimately, the aim of the Guidelines is to contribute to health and safety at sea.

II. CONTENTS AND USE OF THE GUIDELINES

The Guidelines are arranged in the following manner:

Part 1 summarizes the purpose and scope of the Guidelines, their contents and the background to their preparation, and identifies the main features of a framework for medical examinations and the issue of a medical certificate to a fisher.

Part 2 provides information relevant to competent authorities to assist with the framing of national regulations that will be compatible with relevant European and international instruments on the health and fitness of fishers.

Part 3 provides information relevant to those who are carrying out the medical assessment of fishers. This may be used directly or may form the basis for national guidelines for medical practitioners.

The series of appendices includes a guidance on establish a program to monitor the health and occupational risk factors relevant to fishers, the implementation of a training program for medical practitioners, standards for different types of impairing conditions, recordkeeping and the contents of the medical certificate.

Some parts of the Guidelines are more appropriate for competent authorities than for individual medical practitioners, and vice versa. Nevertheless, it is suggested that the whole of the Guidelines be taken into consideration to ensure that all topics and information are taken into account. The Guidelines are designed as a tool to enhance medical examinations for fisher.

III. BACKGROUND TO THE PREPARATION OF THE GUIDELINES

In 1997 the ILO and WHO published the first international guidelines concerning the medical examinations of seafarers. This has been an invaluable document for maritime authorities, the social partners in the maritime industry and the medical practitioners who conduct medical examinations of seafarers. These Guidelines have been revised several times.

However, until the ILO Work in Fishing Convention, 2007 (C118) and EU 2017/159 were published and ratified in the countries there were no Guidelines for the medical examination and occupational health care for fishers.



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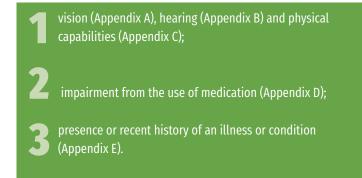
IV. FISHER MEDICAL FITNESS EXAMINATIONS

The aim of the medical examination is to ensure that the fisher being examined is medically fit to perform his or her routine and emergency duties at sea and is not suffering from any medical condition likely to be aggravated by service at sea, to render him or her unfit for service or to endanger the health of other persons on board. Wherever possible, any conditions found should be treated prior to returning to work at sea so that the full range of routine and emergency duties can be undertaken. If this is not possible, the abilities of the fisher should be assessed in relation to their routine and emergency duties and recommendations made on what the fisher is able to do and whether any reasonable adjustments could enable them to work effectively. In some cases, problems will be identified that are incompatible with duties at sea and cannot be remedied. Appendices A-E provide information on the disabilities and medical conditions which are not likely to prevent all routine and emergency duties being performed, those which require adaptation or limitation to routine and emergency duties, and those which result in either short-term or longer-term unfitness to work as a fisher. Medical examination findings are used to decide whether to issue a medical certificate to a fisher.

Consistent decision-making needs to be based on the application of criteria for fitness that are applied in a uniform way, both nationally and, because of the global nature of fishing and marine transport, internationally. These Guidelines provide the basis for establishing national arrangements that are compliant with the relevant European regulations and International Conventions.

The medical certificate is neither a certificate of general health nor a certification of the absence of illness. It is a confirmation that the fisher is expected to be able to meet the minimum requirements for performing the routine and emergency duties specific to their post at sea safely and effectively during the period of validity of the medical certificate. Hence, the routine and emergency duties must be known to the examining medical practitioner, who will have to establish, using clinical skills, whether the fisher meets the standards for all anticipated routine and emergency duties specific to their individual post and whether any routine or emergency duties need to be modified to enable them to be performed safely and effectively. The ability to safely and effectively perform routine and emergency duties depends on both a person's current degree of fitness and on the likelihood that they will develop an impairing condition during the validity period of the medical certificate. Criteria for performing routine and emergency duties safely will be higher where the person has critical safety duties, either as part of their routine or in emergencies. Other safety consequences also need to be considered, for instance whether a fisher is suffering from any medical condition likely to be aggravated by service at sea, to render the fisher unfit for such service, or to endanger the health and safety of other persons on board.

The examining medical practitioner should base the decision to issue a medical certificate on whether criteria for minimum performance requirements, as listed in the appendices to this document, are met in the following areas:



The consequences of impairment or illness will depend on the routine and emergency duties and, in some cases, on the distance from shorebased medical facilities.

Thus, the examining medical practitioner needs the skills to assess individual fitness in all these areas and the knowledge to relate their findings to the requirements of the individual's routine and emergency duties at sea whenever any limitations in fitness are identified.

Competent authorities may, without prejudice to the safety of the fisher or the vessel, differentiate between those persons seeking to start a career in the industry and those fishers already serving, and between different functions on board, bearing in mind the different duties of fishers.

Part 2. Guidance for competent authorities

V. RELEVANT STANDARDS OF AND GUIDANCE FROM THE EU, THE ILO AND THE IMO

The Guidelines have taken into account the appropriate Conventions, Recommendations and other instruments of the EU, ILO, the IMO and World Health Organisation (WHO). Competent Authorities should ensure that medical practitioners are provided with information on other relevant standards which may have been formulated after the date of adoption of these Guidelines.

ILO instruments concerning the medical examination and health of fishers

Several earlier Conventions on fishers' working conditions have been consolidated in the Work in Fishing Convention, 2007 (C188). An important objective of C188, is to safeguard the health and welfare of fishers and requirements for the competent authorities to secure a continuing monitoring of the occupational health risks of all fishers. The Convention, applies to all fishers except where expressly stated otherwise in the Convention (Article 2). Every fisher who is serving at sea must also hold a valid medical certificate issued in accordance with the provisions of Article 10,11,12 of the Convention.

IMO instruments concerning the medical examination and health of fishers

STCW-F further promotes the safety of life and property at sea and the protection of the maritime environment by establishing in common agreement international standards of training, certification and watch keeping for personnel employed on board fishing vessels.

The 2012 Cape Town Agreement outlines regulations designed to protect the safety of crews and observers and provides a level playing field for the industry while setting standards for fishing vessels of 24 meters length and over. Its entry into force is expected to improve safety at sea in the fisheries sector worldwide.

It will also be a useful tool in combatting illegal, unreported and unregulated (IUU) fishing and reducing pollution from fishing vessels, including marine debris.

EU instruments concerning the medical examination and health of fishers

EU Council Directive 2017/159 implements the Agreement concerning the implementation of the ILO Work in Fishing Convention, 2007 (C188) of the , concluded on 21 May 2012 between management and labour ('social partners') at Union level in the sea-fisheries sector, namely the General Confederation of Agricultural Cooperatives in the European Union (Cogeca), the European Transport Workers' Federation (ETF) and the Association of National Organisations of Fishing Enterprises in the European Union (Europêche).

The Directive respects the fundamental rights and principles recognised in the Charter of Fundamental Rights of the European Union, in particular Articles 20, 31 and 32 thereof. The objectives of this Directive are to improve living and working conditions and to protect the health and safety of workers in the sea-fisheries sector, a crossborder sector operating under the flags of different Member States. This cannot be sufficiently achieved by the Member States individually, but rather requires action at Union level. Therefore, the Union may adopt measures, in accordance with the principle of subsidiarity as set out in Article 5 of the Treaty on European Union. In accordance with the principle of proportionality, as set out in that Article, this Directive does not go beyond what is necessary in order to achieve those objectives.

VI. PURPOSE AND CONTENTS OF THE MEDICAL CERTIFICATE

The Work in Fishing Convention C188 specifies the information that should be included as a minimum on the medical certificate. The detailed content of these Guidelines aligns with these requirements and other, more detailed provisions of the relevant international Conventions, which should be consulted when developing procedures. The aim of the Guidelines is, wherever possible, to avoid subjectivity and to give objective criteria for decision- making.

The content of the medical certificate for fishers will be identical to that of the seafarers, except that the medical practioners will give more attention to the specific occupational health risks for fishers and offer guidance on prevention.

The period of validity of the medical certificate is not indicated in Convention C188, but Article 11 states that each member shall adopt laws, regulations or other measures providing details, among others, of the nature, the form and the frequency the medical examinations. It is recommended that the medical certificate will remain in force for a maximum period of two years from the date on which it is granted, unless the fisher is under the age of 18, in which case the maximum period of validity should be one year. Medical certificates that expire during the course of a voyage will continue to be in force until the next port of call where the fisher can obtain a medical certificate from a medical practitioner authorized by the party, provided that the period does not exceed three months. In urgent cases, the administration may permit a fisher to work without a valid medical certificate until the next port of call where a medical practitioner authorised by the party is available, provided that the period of such permission does not exceed three months and the fisher concerned is in possession of an expired medical certificate of recent date. In so far as a medical certificate relates to colour vision, it will remain in force for a period not exceeding six years from the date it is granted.

Two years is the period over which fitness should normally be assessed. However, if the examining medical practitioner considers that more frequent surveillance of a condition that may affect health or performance at sea is indicated, a medical certificate of shorter duration should be issued and arrangements made for reassessment. The examining medical practitioner should only issue a medical certificate with a duration of less than two years if they can justify their reasons in a particular case.

The medical practitioner should indicate on the medical certificate whether the fisher is fit for all duties worldwide within their department, whether they can undertake all routine and emergency duties but are only able to work in specified waters, or whether adaptation of some routine and emergency duties is required. Safety-critical visual capabilities such as lookout duties should be specifically indicated.

If the fisher cannot perform routine and emergency duties safely and effectively and adaptation of duties is not possible, the fisher should be notified that they are "not fit for duty". If adaptation is possible then they should be notified that they are "fit for duty with restrictions". The notification must be accompanied by an explanation of the fisher's right to appeal as provided in section IX.

Where illnesses and injuries may impair the ability of a fisher with a valid medical certificate to perform routine and emergency duties safely, their current fitness may need to be assessed. Such examinations may be considered in various circumstances such as more than 30 days incapacitation, disembarkation for medical reasons, hospital admission or requirement for new medication. Their current medical certificate may be revised accordingly.

Before training commences, it is in the best any person who intends to subsequently work as a fisher to be medically examined to confirm that they meet the required medical fitness standards. **o**)



VII. RIGHT TO PRIVACY

All persons involved in the conduct of medical examinations, including those who come into contact with medical examination forms, laboratory results and other medical information, should ensure the right to privacy of the examinee. Medical examination reports should be marked as confidential and so treated, and all medical data collected from a fisher should be protected. Medical records should only be used for determining the fitness of the fisher for work and for enhancing health care; they should not be disclosed to others without prior written informed consent from the fisher. Personal medical information should not be included on medical certificates or other documents made available to others following the medical examination. The fisher should have the right of access to and receipt of a copy of their personal medical data.

VIII. AUTHORIZATION OF MEDICAL PRACTITIONERS

The competent authority should maintain a list of authorized medical practitioners to conduct medical examinations of fishers and issue medical certificates. The competent authority should consider the need for medical practitioners to be personally interviewed and for clinic facilities to be inspected before authorisation to conduct medical examinations of fishers is given. A list of medical practitioners authorised by the competent authority should be made available to competent authorities in other countries, companies and fishers' organisations on request.

The competent authority, when developing guidance for the conduct of medical fitness examinations, should take into consideration that medical practitioners need detailed guidance. In addition, the provision of an expert helpline can aid decision-making on novel or complex problems and can be a source of information that may be used to improve the quality of assessments.

The names of any medical practitioners whose authorisation has been withdrawn during the previous 24 months should continue to be included, with a note to the effect that they are no longer authorised by the competent authority to conduct medical examinations of fishers. A medical practitioner so authorised by the competent authority:

- should be a qualified medical practitioner currently accredited by the medical registration authority for the place where they are working;
- **2.** should be experienced in general and occupational medicine or maritime occupational medicine;
- **3.** should have knowledge of the living and working conditions on board fishing vessels and the job demands on fishers in so far as they relate to the effects of health problems on fitness for work, gained wherever possible through special instruction and through knowledge based on personal experience of fishing.
- 4. should have facilities for the conduct of examinations that are conveniently situated for access by fishers and enable all the requirements of the medical fitness examination to be met and conducted with respect for confidentiality, modesty and cleanliness;
- should be provided with written guidance on the procedures for the conduct of medical examinations of fishers, including information on appeals procedures for fishers denied a medical certificate as a result of an examination;
- **6.** should understand their ethical position as examining medical practitioners acting on behalf of the competent authority, ensuring that any conflicts with this are recognised and resolved;
- 7. should refer any medical problems found, when appropriate, for further investigation and treatment, whether or not a fisher is issued with a medical certificate; and
- 8. should enjoy professional independence from owners, fishers, and their representatives in exercising their medical judgement in terms of the medical examination procedures. Those employed by, or contracted to, a maritime employer or crewing agency should have terms of engagement that ensure that an assessment is based on statutory standards.

It is further recommended that such medical practitioners:

- **1.** should be provided with information on the standard of competence for fishers designated to take charge of medical care on board fishing vessels in relevant national laws and regulations; and
- **2.** should be familiar with the latest edition of the International Medical Guide for Ships, or an equivalent medical guide for use on fishing vessels.
- **3.** The competent authority should have in place, quality assurance procedures to ensure that medical examinations meet the required standards. These should include publicised arrangements for:
- **4.** the investigation of complaints from owners, fishers, and their representatives concerning the medical examination procedures and the authorized medical practitioners;
- **5.** collection and analysis of anonymised information from medical practitioners about the numbers of examinations undertaken and their outcomes; and
- **6.** the introduction, where practical, of a nationally agreed review and audit program for examining medical practitioners' practices and recordkeeping undertaken by, or on behalf of, the competent authority. Alternatively, they could endorse appropriate external clinical accreditation arrangements for those undertaking fishers' medical examinations, the results of which would be made available to the authority.

Authorised medical practitioners who are found by the competent authority as a result of an appeal, complaint, audit procedure, or other reasons to no longer meet the requirements for authorisation should have their authorisation to conduct fishers' medical examinations withdrawn.

IX. APPEALS PROCEDURES

An appeals procedure should be in place to provide that the fisher who has been refused a medical certificate or had a restriction or time limitation imposed on their ability to work, is given the opportunity to have a further examination by another independent medical practitioner or by an independent medical referee.

The competent authority may delegate the arrangements for appeals, or part of them, to an organization or authority exercising similar functions in respect of fishers generally.

The appeals procedure may include the following elements:

- the medical practitioner or referee undertaking the review should have at least the same qualifications as the medical practitioner who conducted the initial examination;
- the medical practitioner or referee undertaking the review process should be provided access to other medical experts;
- the appeals procedure should not result in unnecessary delays for the fisher or vessel operator;
- 4. the same principles of confidentiality called for in the handling of medical records should apply to the appeals procedure; and
- **5.** quality assurance and review procedures should be in place to confirm the consistency and appropriateness of decisions taken at appeal.

Part 3. Guidance to persons authorised by competent authorities to conduct medical examinations and to issue medical certificates

X. ROLE OF THE MEDICAL EXAMINATION IN FISHING SAFETY AND HEALTH

The medical practitioner should be aware of the role of the medical examination in the enhancement of safety and health at sea and in assessing the ability of fishers to perform their routine and emergency duties and to live on board:

- **1.** The consequences of impairment from illness while working at sea will depend on the routine and emergency duties of the fisher and on the distance of the vessel from shore-based medical care. Such impairments may adversely affect vessel operations, as both the individual and those who provide care will not be available for normal duties. Illness at sea can also put the individual at risk because of the limited care available on board. Even though a medical chest must be carried on board, it contains only basic medical supplies and fishers only receive basic first aid or medical training. Medication used by fishers needs to be carefully assessed as it can lead to impairment from side effects that cannot be readily managed at sea. Where medication is essential to control a potentially life- threatening condition, inability to take it may lead to serious consequences (see Appendix D for more detailed information).
- **2.** Infectious diseases may be transmitted to others on board. This is particularly relevant to food-borne infections in those who prepare or handle food or drinks. Screening for relevant infections may be undertaken at the medical examination or at other times.
- **3.** Limitations to physical capability may affect a fisher's ability to perform routine and emergency duties (e.g. using breathing apparatus). Such limitations may also make rescue in the event of injury or illness difficult.

- 4. The medical examination can be used to provide an opportunity to identify early disease or risk factors for subsequent illness. The medical practioner may advise the fisher on preventive measures or refer them for further investigation or treatment in order to maximize their potential to continue their career as a fisher. However, the fisher should be made aware that such advice or referral does not replace the need for other clinical contacts or necessarily provide the main focus for advice on health maintenance.
- **5.** If a medical condition is identified, any adverse consequences may be reduced by increasing the frequency of surveillance, restricting duties to those where the medical condition is not relevant or limiting the pattern of voyages to ensure that health care is readily available.
- **6.** Fishers need to be able to adjust to living and working conditions on board fishing vessels, including the requirement to keep watches at varying times of the day and night, the motion of the vessel in bad weather, the need to live and work within a limited space, to climb and lift weights and to work under a wide variety of weather conditions (see Appendix C, table B-1/9, for examples of relevant physical abilities).
- **7.** Fishermen should be able to live and work closely with the same people for prolonged periods of time and under occasionally stressful conditions. They should be capable of dealing effectively with isolation from family and friends and, in some cases, from persons of their own cultural background.

Fishing operations and duties on board vary substantially. For a greater understanding of the physical demands of particular categories of work on board, medical practitioners should consult the ILO 'Handbook for improving living and working conditions on board fishing vessels 2010, as amended', and appropriate national requirements and should consult the relevant national authority, fishing company and trade union representatives and otherwise endeavor to learn as much as possible about life as a fisher.

XI. TYPE AND FREQUENCY OF MEDI-CAL EXAMINATIONS

For most medical conditions, the same criteria are appropriate for medical examinations undertaken at all stages of a fishing career. However, where a condition is present that is likely to worsen in the future and thus limit a trainee's ability to undertake the range of duties and assignments that are essential for complete training, there may be less flexibility in the application of fitness standards than for serving fishers, in order to ensure that all training requirements can be met.

Examinations are normally performed every two years. Where there is a health condition that requires more frequent surveillance, they may be performed at shorter intervals. It is important to recognize that the requirement for more frequent examinations may limit the ability of a fisher to obtain employment and lead to additional costs for the fisher or their employer. If examinations are at intervals of less than two years, they may solely concern the condition under surveillance and, in this case, any reissued medical certificate should not be valid for more than two years from the previous full examination.

Any examination requirements of employers or insurers should be distinguished from statutory fitness examinations; the fisher should be informed if both are being assessed at the same time and should consent to this. A medical certificate should be issued if statutory standards are met, irrespective of compliance with any additional employer requirements.

Fishers' medical examinations may also provide an opportunity to take measures to correct or mitigate medical conditions that could adversely affect the health of fishers and should include measures of a preventive character. Tests necessary to evaluate the occupational exposure at work on board ship may, when appropriate, be performed at the same time as the periodic examinations.



XII. CONDUCT OF MEDICAL EXAMINATIONS

The following suggested procedures do not aim to replace in any way the judgement or experience of the medical practitioner. They will, however, serve as a tool to assist in the conduct of examinations of fishers. A suggested format for recording medical examinations of fishers has been provided in Appendix F.

- **1.** The medical practitioner should determine whether there is any special purpose for the examination, for example return after illness or follow-up for continuing health problem, and, if so, should conduct the examination accordingly.
- **2.** The identity of the fisher to be examined should be verified. The number of their seaman's book, passport or other relevant identity document should be entered on the examination form.
- **3.** The fisher's intended position on board and, as far as practicable, the physical and mental demands of this work and the anticipated voyage pattern should be established. This may give insights that enable work to continue but with limitations based on the location of the vessel, for example, fit for near coastal only) and the job to be held.
- 4. Information should be collected from the fisher on their previous medical history. Point-by-point questions on the details of previous diseases and injuries should be asked and the results recorded. Details of other diseases or injuries not covered should also be recorded. After the information is collected, the fisher should sign the form to certify that to the best of their knowledge it is a true statement. An individual should not, however, bear the burden of proof concerning the consequences of illness, past or present, on their fitness for work.
- **5.** The fisher's previous medical records, where appropriate and available, should be reviewed.
- **6.** The physical examination and the necessary additional examinations should be checked and recorded according to set procedures (see Appendix F).
- 7. Hearing, eyesight and colour vision should be checked and recorded if necessary. Eyesight should be in compliance with the international eyesight standards for fishers set out in Appendix A for vision standards. Hearing should be in compliance with the standards set out in Appendix B. In examinations, appropriate equipment should be used in the assessment of hearing capacity, visual acuity, colour vision and night blindness, particularly regarding those fishers who will be engaged in lookout duties.
- **8.** Physical capability should be assessed where the medical examination identifies that it may be limited by an impairment or medical condition (see Appendix C).
- **9.** Testing for the presence of alcohol and drugs in the course of a medical examination does not form part of these Guidelines. Where it is performed, as a requirement of national authorities or employers, the procedures used should follow national, if available, or international good practice guidelines. These should provide adequate procedural and ethical safeguards for the fisher. Consideration should be given to the Guiding Principles on Drug and Alcohol Testing Procedures for Worldwide Application in the Maritime Industry, and any subsequent revisions.

- **10.** The application of multiple biochemistry or hematology tests or the use of imaging techniques applied to all fishers is not recommended, other than where indicated in Appendices A–E. Such tests should only be used where there is a clinical indication. The validity of any test used for the identification of a relevant medical condition will depend on the frequency with which the condition occurs. Use is a matter for national or local judgement, based on disease incidence and test validity. In addition, decisions about fitness based solely on the results of single or multiple screening tests in the absence of a specific diagnosis or impairment are of limited predictive value. Unless tests have very high validity, use will result in inappropriate certification of a proportion of those tested.
- **11.** The medical practitioner should be aware that there are no well-validated tests for the assessment of mental aspects of working ability that are suitable for inclusion in the medical examinations of fishers.
- **12.** The results of the examination should be recorded and assessed to determine if the fisher is fit for the work that will be undertaken. Appendices A–E contain guidance on medical criteria used to consider whether a fisher is fit or currently unfit for work at sea. The age and experience of the fisher to be examined, the nature of the duties to be performed and the type of fishing operation should be taken into account. There are defined numerical criteria for some aspects of vision (Appendix A) and hearing (Appendix B). Here, decisions on fitness will depend on achieving the levels of perception that are listed, taking note of the explanatory information in the appendices. For other conditions, where such numerical criteria do not exist, the criteria have been classified in three categories, depending on the likelihood of recurrence at different stages and the severity of each condition.

Case-by-case assessment is recommended in the appendices where a specialist view on prognosis is needed or where there is considerable diversity in capability or likelihood of recurrence or progression.

(A) INCOMPATIBLE WITH THE RELIABLE PERFORMANCE OF ROUTINE AND EMERGENCY DUTIES SAFELY OR EF-FECTIVELY:

- **1.** expected to be temporary (**T**), i.e. less than two years;
- **2.** expected to be permanent (**P**), i.e. more than two years.

For fishers who are determined by the medical practitioner to have a medical condition where such a finding has been made, a medical certificate would not normally be issued.

This category means that the medical condition is such that the fisher may cause a danger to the safety of the vessel or to other persons on board; they may not be able to perform their routine and emergency duties on board; or their health or life may be put at greater risk than would be the case if they were on shore. The category may be used temporarily until a condition has been treated, returns to normal, or a period without further episodes indicates that the likelihood of recurrence is no longer increased. It may be used on a permanent basis where the fisher has a condition that can be expected to render them unable to meet the standards in the future.



(B) ABLE TO PERFORM SOME BUT NOT ALL ROUTINE AND EMERGENCY DUTIES OR TO WORK IN SOME BUT NOT ALL WATERS (R): A RESTRICTED MEDICAL CERTIFICATE WOULD NORMALLY BE ISSUED. INCREASED SURVEILLANCE NEEDED (L)

If increased surveillance is required, a medical certificate of limited duration would normally be issued. This category may mean that the fisher has a condition that requires more frequent medical assessment than the twoyear normal interval between medical certificates – i.e. a time-limited medical certificate (L).

Alternatively, they may be capable of performing the routine and emergency duties required of all fishers but need some of their own duties to be adapted because they are expected not to be able to perform some of the duties specific to the work they normally undertake. They may also be more likely to suffer serious adverse effects from working in certain climates or beyond a certain distance from onshore medical care. In these cases,

the job adaptations needed are specified and the medical certificate is restricted (R).

Use of this category can enable fishers to remain working despite the presence of certain health-related impairments. However, it should be used only when clearly indicated as it may lead to the possibility that an employer will choose not to engage a fisher even for duties that are within their capabilities or where duties can readily be adjusted.

(C) ABLE TO PERFORM ALL DUTIES WORLDWIDE WITHIN A DESIGNATED DEPARTMENT: AN UNRESTRICTED MEDICAL CERTIFICATE OF FULL DURATION WOULD NORMALLY BE ISSUED.

This category means that the fisher can be expected to be fit for all duties within their department on board and can fully discharge all routine and emergency duties for the duration of the medical certificate.

If the fisher is found fit for the work to be performed, a medical certificate should be issued. Any restrictions concerning work, that is, the job the fisher will perform, the trade area, the time limit or other considerations, should be reflected on the medical certificate in the description of the work he or she is fit to undertake. Further information on the medical certificate is provided in Appendix G.

If the fisher is found temporarily or permanently unfit for service or has restrictions or limitations placed on their duties, he or she should be given an explanation of the reasons and should be advised of the right to appeal and on how to make an appeal. Additional guidance on appeals procedures is provided in section IX of these Guidelines. If "temporarily unfit", advice should be given on the need to undergo additional tests, to obtain opinions from specialists or to complete dental or other treatment, rehabilitation and/or appropriate medical care. The fisher should be informed when to return for another examination.

As appropriate, the fisher should be counselled on lifestyle (limiting alcohol intake, stopping smoking, modifying diet, losing weight, etc.) and on the dangers of and methods of prevention of malaria, hepatitis, HIV/AIDS and other communicable diseases. Printed health educational materials on drug and alcohol abuse prevention, smoking cessation, diet, communicable diseases prevention, etc., should also be provided, if available.

The medical examination records should be clearly marked as confidential and retained, according to national regulations, in the custody of the health establishment where the medical certificate was issued. The file should be kept confidential and should not be used for any purpose other than facilitating the treatment of fishers and should be made available only to persons duly authorised in accordance with national data protection laws.

Relevant information on their health should be given to the fisher on request and the fisher should be advised to take it to the next medical examination or when they are treated for an illness or injury. If possible, a card indicating blood type, any serious allergies and other vital information should also be given to the fisher to facilitate emergency treatment.

A copy of the medical certificate should be kept in the files of the health institution in which it was issued.

1/2

A. Vision standards

TESTING

All tests needed to determine the visual fitness of a fisher are to be reliably performed by a competent person and use procedures recognized by the relevant national authority. Quality assurance of vision-testing procedures at a fisher's first examination is particularly important to avoid inappropriate career decisions; competent authorities may wish to specify this in detail:

- Distance vision should be tested using Snellen test type or equivalent.
- Near vision should be tested with reading test type.
- Colour vision should be tested by colour confusion plates (Ishihara or equivalent). Supplementary investigations such as lantern tests may be used when appropriate (see the International Recommendations for Colour Vision Requirements for Transport of the International Commission on Illumination (CIE-143-2001, including any sub- sequent versions)). The use of colour-correcting lenses will invalidate test results and should not be permitted.
- Visual fields may initially be assessed using confrontation tests (Donders, etc.) and any indication of limitation or the presence of a medical condition where visual field loss can occur should lead to more detailed investigation.
- Limitations to night vision may be secondary to specific eye diseases or may follow ophthalmological procedures. They may also be noted during other tests or found as a result of limitations to low-contrast vision testing. Specialist assessment should be undertaken if reduced night vision is suspected.

VISUAL CORRECTION

Medical practitioners should advise fishers required to use spectacles or contact lenses to perform duties that they should have a spare pair or pairs, as required, conveniently available on board the vessel.

ADDITIONAL GUIDANCE

If laser refractive surgery has been undertaken, recovery should be complete and the quality of visual performance, including contrast, glare sensitivity and the quality of night vision, should have been checked by a specialist in Ophthalmology.

All fishers should achieve the minimum eyesight standard of 0.1 unaided in each eye. This standard may also be relevant to other persons on board to ensure visual capability under emergency conditions when visual correction may be lost or damaged.

TABLE A-I/9: EU MINIMUM IN-SERVICE EYESIGHT STANDARDS FOR FISHERS

Category of fisher	Category of fisher Distance vision aided ¹		Colour vision ³	Colour vision Visual fields⁴	Visual fields⁴	Night blindness ⁴	Diplopia (double vision)⁴
	One eyes	Other eyes	Both eyes together, aided or unaided				
Masters, deck officers and ratings required to undertake look-out duties	0.5 ²	0.5	Vision required for ship's navigation (e.g. chart and nautical publication reference, use of bridge instrumentation and equipment, and identification of aids to navigation)	See Note 6	Normal visual fields	Vision required to perform all necessary functions in darkness without compromise	No significant condition evident
All engineer officers, electro- technical officers, electro-tech nical ratings and ratings or others forming part of an engineroom watch	0.4 ⁵	0.45	Vision required to read in struments in close proximity, to operate equipment, and to identify systems/components as necessary	See Note 7	Sufficient visual fields	Vision required to perform all necessary functions in darkness without com- promise	No significant condition evident

NOTES:

¹Values given in Snellen decimal notation.

² A value of at least 0.7 in one eye is recommended to reduce the risk of undetected underlying eye disease.

³ As defined in the International Recommendations for Colour Vision Requirements for Transport by the Commission Internationale de l'Eclairage (CIE-143-2001, including any subsequent versions).

⁴ Subject to assessment by a clinical vision specialist where indicated by initial examination findings.

⁵ Engine department personnel shall have a combined eyesight vision of at least 0.4.

⁶ CIE colour vision standard 1 or 2.

⁷CIE colour vision standard 1, 2 or 3.

B. Hearing standards

TESTING

Hearing capacity for fishers, apart from those identified below, should be an average of at least 30 dB (unaided) in the better ear and an average of 40 dB (unaided) in the less good ear within the frequencies 500, 1,000, 2,000 and 3,000 Hz (approximately equivalent to speech-hearing distances of 3 meters and 2 meters, respectively).

It is recommended that hearing examinations should be made by a pure tone audiometer. Alternative assessment methods using validated and standardized tests that measure impairment to speech recognition are also acceptable. Speech and whisper testing may be useful for rapid practical assessments. It is recommended that those undertaking deck/ bridge duties are able to hear whispered speech at a distance of 3 meters.

Hearing aids are only acceptable in serving fishers where it has been confirmed that the individual will be capable of safely and effectively performing the specific routine and emergency duties required of them on the vessel that they serve on throughout the period of their medical certificate. This may well require access to a back-up hearing aid and sufficient batteries and other consumables. Arrangements need to be in place to ensure that they will be reliably aroused from sleep in the event of an emergency alarm.

If noise-induced hearing loss is being assessed as part of a health surveillance programme, different criteria and test methods will be required.

It is recommended that national authorities indicate which tests for hearing are to be used, based on national audiological practices, using the above thresholds as criteria. Procedures should include the methods to be adopted in deciding if the use of a hearing aid is acceptable.

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C. Physical capability requirements

INTRODUCTION

The physical capability requirements for work on board a fishing vesssel vary widely and have to take account of both routine and emergency duties. The functions that may require assessment include:

- strength;
- stamina;
- flexibility;
- balance and coordination;
- · size compatible with entry into confined areas;
- exercise capacity heart and respiratory reserve; and
- fitness for specific tasks wearing breathing apparatus.

MEDICAL CONDITIONS AND PHYSICAL CAPABILITY

Limitations may arise from a range of conditions, such as:

- high or low body mass/obesity;
- severely reduced muscle mass;
- musculoskeletal disease, pain or limitations to movement;
- a condition following an injury or surgery;
- lung disease;
- · heart and blood vessel disease; and
- some neurological diseases.

C

PHYSICAL CAPABILITY ASSESSMENT

Physical capability testing should be undertaken when there is an indication for it, for instance, because of the presence of one of the above conditions or because of other concerns about a fisher's physical capabilities. The aspects that are tested will depend on the reasons for doing it. Table B-I/9 gives recommendations for physical abilities to be assessed for fishers, based on the tasks undertaken at sea.

The following approaches may be used to assess whether the requirements in Table B-I/9 are met:

- Observed ability to do routine and emergency duties in a safe and effective way.
- Tasks that simulate normal and emergency duties.
- Assessment of cardio-respiratory reserve, including spirometry and ergometric tests. This will predict maximum exercise capacity and hence the fisher's ability to perform physically demanding work. A large reserve will also indicate that heart and lung performance is less likely to be compromised in the next few years. The bench- mark test is maximum oxygen uptake (VO2 max) but this requires dedicated equipment. Step tests, such as the Chester or the Harvard, are simpler alternatives that may be used for screening. If step tests are abnormal, they should be further validated, for example with VO2 max or treadmill stress tests.
- Informal testing of reserve, for instance climbing three to six flights of stairs and assessing any distress, plus the speed of pulse rate decline on stopping. This is not readily reproducible but can be used for repeat assessment at the same location by the same medical practitioner.
- Clinical assessment of strength, mobility, coordination, etc.

Additional information may come from activities recently or regularly undertaken, as described by the fisher, such as:

- physically demanding duties on the vessel, e.g. carrying weights or handling mooring equipment;
- attendance at a physically demanding course within the last two years, e.g. firefighting, helicopter escape or STCW basic training; and
- confirmed personal pattern of regular strenuous exercise.

INTERPRETATION OF RESULTS

- Is there any evidence that the fisher is not able to perform their routine and emergency duties effectively?
- Are there any observed limitations to strength, flexibility, stamina or coordination?
- What is the outcome of any test for cardio-respiratory reserve?
 - o Test performance limited by shortness of breath, musculoskeletal or other pain, or exhaustion. Causes need to be investigated and taken into account in deter- mining fitness.
 - o Unable to complete test.
 - o Completed but stressed or with poor recovery after stopping.
 - o Completed to good or average standard.
- Discuss subjective feelings during the test with the fisher and go over experiences of fitness and capability when doing normal tasks and emergency drills. Obtain corroboration from others if performance at work uncertain.

DECISION-MAKING

Information from a range of sources may be required and many of these are not easily accessed in the course of a medical examination:

 Is there any indication that physical capability may be limited, for example, stiffness, obesity or history of heart disease?

No – do not test.

- Yes consider what tests or observations will enable the fisher's capability to perform their routine and emergency duties to be determined. Go to (2).
- Do the test results indicate that capabilities may be limited?
 - No provided there are no underlying conditions that affect conduct of assessment. Able to perform all duties worldwide within designated department.
 - Yes but duties can be modified to enable safe working, without putting excess responsibilities on others. Able to perform some but not all duties (R).
 - Yes but cause of limitation can be remedied. Incompatible with reliable performance of essential duties safely or effectively (T).
 - Yes but cause of limitation cannot be remedied. Incompatible with reliable performance of essential duties safely or effectively (P).

APPENDIX C

TABLE B-I/9: ASSESSMENT OF MINIMUM ENTRY LEVEL AND IN-SERVICE PHYSICAL ABILITIES FOR FISHERS³

	Shipboard task, function, event or condition ³	Related physical ability	A medical examiner should be satisfied that the candidate:4
Note 1 applies to this row	Routine movement around vessel: • on moving deck • between levels • between compartments	 Maintain balance and move with agility Climb up and down vertical ladders and stairways Step over coamings (e.g. Load Line Convention requires coamings to be 600 mm high) Open and close watertight doors 	 Has no disturbance in sense of balance Does not have any impairment or disease that prevents relevant movements and physical activities Is, without assistance, 5 able to: climb vertical ladders and stairways step over high sills manipulate door closing systems
Note 1 applies to this row	Routine tasks on board: • use of hand tools • movement of ship's stores • overhead work • valve operation • standing a four-hour watch • working in confined spaces • responding to alarms, warnings and instructions • verbal communication	 Strength, dexterity and stamina to manipulate mechanical devices Lift, pull and carry a load (e.g. 18 kg) Reach upwards Stand, walk and remain alert for an extended period Work in constricted spaces and move through restricted openings Visually distinguish objects, shapes and signals Hear warnings and instructions Give a clear spoken description 	 Does not have a defined impairment or diag- nosed medical condition that reduces ability to perform routine duties essential to the safe operation of the vessel Has ability to: work with arms raised stand and walk for an extended period enter confined space fulfil eyesight standards (table A-1/9) fulfil hearing standards set by competent authority or take account of international guidelines hold normal conversation
Note 2 applies to this row	Emergency duties6 on board: • escape • firefighting • evacuation	 Don a lifejacket or immersion suit Escape from smoke-filled spaces Take part in fire-fighting duties, including use of breathing apparatus Take part in vessel evacuation procedures 	 Does not have a defined impairment or diag- nosed medical condition that reduces ability to perform emergency duties essential to the safe operation of the vessel Has ability to: don lifejacket or immersion suit crawl feel for differences in temperature handle fire-fighting equipment wear breathing apparatus (where required as part of duties)

NOTES:

¹Rows 1 and 2 of the above table describe: (a) ordinary shipboard tasks, functions, events and conditions; (b) the corresponding physical abilities which may be considered necessary for the safety of a fisher, other crew members and the ship; and (c) high-level criteria for use by medical practitioners assessing medical fitness, bearing in mind the different duties of fishers and the nature of shipboard work for which they will be employed.

² Row 3 of the above table describes: (a) emergency shipboard tasks, functions, events and conditions; (b) the corresponding physical abilities which should be considered necessary for the safety of a fisher, other crew members and the ship; and (c) high-level criteria for use by medical practitioners assessing medical fitness, bearing in mind the different duties of fishers and the nature of shipboard work for which they will be employed.

³ This table is not intended to address all possible shipboard conditions or potentially disqualifying medical conditions. Parties should specify physical abilities applicable to the category of fishers. The special circumstances of individuals and for those who have specialized or limited duties should receive due consideration.

 ⁴ If in doubt, the medical practitioner should quantify the degree or severity of any relevant impairment by means of objective tests, whenever appropriate tests are available, or by referring the candidate for further assessment.
 ⁵ The term "assistance" means the use of another person to accomplish the task.

⁶ The term "emergency duties" is used to cover all standard emergency response situations such as abandon ship or firefighting as well as the procedures to be followed by each fisher to secure personal survival.

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D. Fitness criteria for medication use

INTRODUCTION

Medication can play an important part in enabling fishers to continue to work at sea. Some medications have side effects that can affect safe and effective performance of duties and some have other complications that will increase the likelihood of illness whilst on board.

This appendix is only concerned with the use of continuing prescribed medication that is identified at the medical examination. Vessel operators need policies in place to reduce the impairing effects from short-term use of prescribed medication or the use of over-the- counter preparations.

The use of oral medication at sea may be prevented by nausea and vomiting, and illness may arise if an oral medication is used to suppress the harmful effects of a condition, for example, epilepsy, or if it is used to replace essential body chemicals, for example, hormones.

The examining medical practitioner will need to assess the known adverse effects of each medication used and the individual's reaction to it. The use of specific medication for some conditions listed in Appendix E is noted with the condition.

If medication is clinically essential for the effective control of a condition, for example, insulin, anticoagulants and medication for mental health conditions, it is dangerous to stop it in an attempt to be fit for work at sea.

The medical practitioner should be alert to the need for the fisher to have written documentation for the use of their medications. This should be in a form that can be shown to any official who may question the presence of the medication on board. This is particularly important for those medications that are legally prescribed controlled drugs or those drugs that may be abused.

D

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MEDICATIONS THAT CAN IMPAIR ROUTINE AND EMERGENCY DUTIES

- Medication affecting the central nervous system functions, for example, sleeping tablets, antipsychotics, some analgesics, some anti-anxiety and anti-depression treatments and some antihistamines.
- Agents that increase the likelihood of sudden incapacitation, for example, insulin, some of the older anti- hypertensives and medications predisposing to seizures.
- Medication impairing vision, for example, hyoscine and atropine.

MEDICATIONS THAT CAN HAVE SERIOUS ADVERSE CONSEQUENCES FOR THE USER AT SEA

- Bleeding from injury or spontaneously, for example, warfarin. An individual assessment of likelihood is needed. Anticoagulants such as warfarin or dicoumarin normally have a likelihood of complications that is incompatible with work at on board but, if coagulation values are stable and closely monitored, work that is near to onshore medical facilities and that does not carry an increased likelihood of injury may be considered.
- Dangers from cessation of medication use, for example, metabolic replacement hormones including insulin, anti-epileptics, anti-hypertensives and oral antidiabetics.
- Antibiotics and other anti-infection agents.
- Anti-metabolites and cancer treatments.
- Medications supplied for use at individual discretion, for example, asthma treatments and antibiotics for recurrent infections.

MEDICATIONS THAT REQUIRE LIMITATION OF PERIOD AT SEA BECAUSE OF SURVEILLANCE REQUIREMENTS

A wide range of agents, such as anti-diabetics, endocrine replacements and anti- hypertensives.

ISSUE OF MEDICAL CERTIFICATES

Incompatible with the reliable performance of routine and emergency duties safely or effectively (P) (T):

- on the recommendation of the examining medical practitioner, based on reliable information about severe impairing side effects;
- oral medication where there are life-threatening consequences if doses are missed because of sickness;
- evidence indicating the likelihood of cognitive impairment when taken as prescribed;
- established evidence of severe adverse effects likely to be dangerous at sea, for example, anticoagulants.

Able to perform some but not all duties or to work in some but not all waters:

- **R**: medication can cause adverse effects but these only develop slowly, hence work in coastal waters will allow access to medical care.
- L: surveillance of medication effectiveness or side effects needed more frequently than the full duration of medical certificate. See guidelines on individual conditions in Appendix E.

Able to perform all duties worldwide within designated department:

No impairing side effects; no requirements for regular surveillance of treatment.

E. Fitness criteria for common medical conditions

INTRODUCTION

The medical practitioner should bear in mind that it is not possible to develop a comprehensive list of fitness criteria covering all possible conditions and the variations in their presentation and prognosis. The principles underlying the approach adopted in the table below may often be extrapolated to conditions not covered by it. Decisions on fitness when a medical condition is present depend on careful clinical assessment and analysis and the following points need to be considered whenever a decision on fitness is taken:

- The recommendations in this appendix are intended to allow some flexibility of interpretation while being compatible with consistent decision-making that aims to maintain safety at sea.
- The medical conditions listed are common examples of those that may render fishers unfit. The list can also be used to determine appropriate limitations to fitness. The criteria given can only provide guidance for physicians and should not replace sound medical judgement.
- The implications for working and living at sea vary widely, depending on the natural history of each condition and the scope for treatment. Knowledge about the condition and an assessment of its features in the individual being examined should be used to reach a decision on fitness.

The table in this appendix is laid out as follows:

- Column 1: WHO International Classification of Diseases, 10th revision (ICD-10). Codes are listed as an aid to analysis and, in particular, international compilation of data.
- Column 2: The common name of the condition or group of conditions, with a brief statement on its relevance to work at sea.
- Column 3: The guideline recommending when work at sea is unlikely to be indicated, either temporarily or permanently. This column should be consulted first when the table is being used to aid decisions about fitness.
- Column 4: The guideline recommending when work at sea may be appropriate but when restriction of duties or monitoring at intervals of less than two years is likely to be appropriate. This column should be consulted if the fisher does not fit the criteria in column 3.
- Column 5: The guideline recommending when work at sea within a fisher's designated department is likely to be appropriate. This column should be consulted if the fisher does not fit the criteria in columns 3 or 4.

For some conditions, one or more columns are either not relevant or not an appropriate certification category. These are identified by the term "Not applicable".

ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent ()	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department
A00-B99	Infections			
A00-09	Gastrointestinal infection Transmission to others, recurrence	T – If detected while onshore (current symptoms or awaiting test results on carrier status); or con- firmed carrier status until elimination demonstrated	Not applicable	Non-catering department: When satisfactorily treated or resolved Catering department: Fitness decision to be based on medical advice – bacteriological clearance may be required
A15-16	Pulmonary TB Transmission to others, recurrence	 T - Positive screening test or clinical history, until investigated If infected, until treatment stabilized and lack of infectivity confirmed P - Relapse or severe residual damage 	Not applicable	Successful completion of a course of treatment in accordance with WHO Treatment of Tuberculosis guidelines
A50-64	Sexually transmissible infections Acute impairment, recurrence	 T - If detected while onshore, until diagnosis con- firmed, treatment initiated and impairing symptoms resolved P - Untreatable impairing late complications 	R – Consider near coastal if oral treatment regime in place and symptoms non-incapacitating	On successful completion of treatmer
B15	Hepatitis A Transmissible by food or water contamination	T – Until jaundice resolved and liver function tests returned to normal	Not applicable	On full recovery
B16-19	Hepatitis B, C, etc. Transmissible by contact with blood or other bodily fluids. Possibility of permanent liver impair- ment and liver cancer	 T – Until jaundice resolved and liver function tests returned to normal P – Persistent liver impairment with symptoms affecting safe work at sea or with likelihood of complications 	R, L – Uncertainty about total recovery or lack of infectivity. Case-by-case decision-making based on duties and voyage patterns	On full recovery and confirmation of low level of infectivity
B20-24	HIV+ Transmissible by contact with blood or other bodily fluids. Progression to HIV- associated diseases or AIDS	 T – Until stabilized on treatment with CD4 level of > 350 or when treatment changed and tolerance of new medication uncertain P – Non-reversible impairing HIV- associated dis- eases. Continuing impairing effects of medication 	R , L – Time limited and/or near coastal: HIV+ and low likelihood of progression; on no treatment or on stable medication without side effects, but requiring regular specialist surveillance	HIV+, no current impairment and very low* likelihood of disease progressio No side effects of treatment or requirements for frequent surveilland
A00-B99 Not listed separa- tely	Other infections Personal impairment, infection of others	 T - If detected while onshore: until free from risk of transmission and capable of performing duties P - If continuing likelihood of repeated impairing or infectious recurrences 	Case-by-case decision based on nature of infection	Full recovery and confirmation of low level of infectivity
C00-48	Cancers		-	
C00-48	Malignant neoplasms – including lymphoma, leukaemia and related con- ditions Recurrence – especially acute complications, e.g. harm to self from bleeding and to others from seizures	T – Until investigated, treated and prognosis assessed P – Continuing impairment with symptoms affecting safe work at sea or with high likelihood of recurrence"	L - Time limited to interval between specialist reviews if: - cancer diagnosed < 5 years ago; and - there is no current impairment of performance of normal or emergency duties or living at sea; and - there is a low likelihood of recurrence and minimal risk of requirement for urgent medical treatment" R - Restricted to near coastal waters if any continuing impairment does not interfere with essential duties and any recurrence is unlikely to require emergency medical treatment	Cancer diagnosed more than 5 years ago, or specialist reviews no longer required and no current impairment or low continuing likelihood of impairment from recurrence To be confirmed by specialist report with evidence for opinion stated

ICD-10 (diagnostic codes)	-10 Condition of routine and emergency duties safely duties or to work in some but not a nostic (justification or effectively waters (R)		Increased frequency of surveillance	Able to perform all duties worldwide within designated department		
D50-89	Blood disorders					
D50-59	50-59Anaemia/ Haemoglobinopathies Reduced exercise tolerance. Episodic red cell breakdownT – Distant waters, until haemoglobin normal and stable P – Severe recurrent or continuing anaemia or impairing symptoms from red cell breakdown that are untreatableR, L – Consider restriction to near 		Normal levels of haemoglobin			
D73	Splenectomy (history of surgery) Increased susceptibility to certain infections	T – Post surgery until fully recovered	R – Case-by-case assessment. Likely to be fit for coastal and temperate work but may need restriction on service in tropics	Case-by-case assessment		
D50–89 Not listed sepa- rately	Other diseases of the blood and blood- forming organs Varied recurrence of abnormal bleeding and also possibly reduced exercise tolerance or low resistance to infections	T – While under investigation P – Chronic coagulation disorders	Case-by-case assessment for other conditions	Case-by-case assessment		
E00-90	Endocrine and Metabo	lic				
E10	Diabetes – Insulin using Acute impairment from hypoglycaemia. Complications from loss of blood glucose control Increased likelihood of visual, neurological and cardiac problems	 T - From start of treatment until stabilized P - If poorly controlled or not compliant with treatment. History of hypoglycaemia or loss of hypoglycaemic awareness. Impairing complications of diabetes 	R, L – Subject to evidence of good control, full compliance with treatment recommendations and good hypoglycaemia awareness Fit for near coastal duties without solo watch- keeping. Time limited until next specialist check-up. Must be under regular specialist surveillance	Not Applicable		
E11-14	Diabetes – Non-insulin treated, on other medication Progression to insulin use, increased likelihood of visual, neurological and cardiac problems	T – Distant waters and watchkeeping until stabilized	 R - Near coastal waters and non- watchkeeping duties until stabilized R - Near coastal waters, no solo watchkeeping if minor side effects from medication. Especially when using sulphonylureas L - Time limited if compliance poor or medication needs frequent review. Check diet, weight and vascular risk factor control 	When stabilized, in the absence of impairing complications		
	Diabetes - Non-insulin treated, treated by diet alone Progression to in- sulin use, increased likelihood of visual, neurological and cardiac problems	T – Distant waters and watchkeeping until stabilized	R – Near coastal waters and non- watchkeeping duties until stabilized L – Time limited when stabilized, if compliance poor. Check diet, weight and vascular risk factor control	When stabilized, in the absence of impairing complications		
E65-68	"Obesity/abnormal body mass – high or low Accident to self, reduced mobility and exercise tolerance for routine and emergency duties. Increased likelihood of diabetes, arterial diseases and arthritis"	 T - If safety-critical duties cannot be performed, capability or exercise test (Appendix C) perfor- mance is poor P - Safety-critical duties cannot be performed; capability or exercise test performance is poor with failure to achieve improvements Note: Body mass index is a useful indicator of when additional assessment is needed. National norms will vary. It should not form the sole basis for decisions on capability 	R , L – Time limited and restricted to near coastal waters or to restricted duties if unable to perform certain tasks but able to meet routine and emergency capabilities for assigned safety-critical duties	Capability and exercise test (Appendix E) performance average or better, weight steady or reducing and no co-morbidity		
E00-90 Not listed separa- tely	Other endocrine and metabolic disease (thyroid, adrenal including Addison's disease, pituitary, ovaries, testes) Likelihood of recurrence or complications	 T - Until treatment established and stabilized without adverse effects P - If continuing impairment, need for frequent adjustment of medication or increased likelihood of major complications 	R, L – Case-by-case assessment with specialist advice if any uncertainty about prognosis or side effects of treatment. Need to consider likelihood of impairing complications from condition or its treat- ment, including problems taking medication, and consequences of infection or injury while at sea	If medication stable with no problems in taking at sea and surveillance of conditions infrequent, no impairment and very low likelihood of complications Addison's disease: The risks will usually be such that an unrestricted certificate should not be issued		

ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent ()	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department
F00-99	Mental, cognitive and			
F10	10Alcohol abuse (dependency) Recurrence, accidents, erratic behaviour/safety performanceT - Until investigated and stabilized and criteria for fitness met. Until one year after initial diagnosis or one year after any relapseR, L - Time limited, not to work as master in charge of vessel or without close supervision and continuing medical monitoring, provided that: treating physician reports successful participation in rehabilitation programme; and there is an improving trend in liver function tests		After three years from end of last episode without relapse and without co-morbidity	
F11-19	Drug dependence/ persistent substance abuse, includes both illicit drug use and dependence on prescribed medications Recurrence, accidents, erratic behaviour/safety performance	 T - Until investigated and stabilized and criteria for fitness met. Until one year after initial diagnosis or one year after any relapse P - If persistent or there is co- morbidity likely to progress or recur while at sea 	R, L - Time limited, not to work as master in charge of vessel or without close supervision and continuing medical monitoring, provided that: - treating physician reports successful partici- pation in rehabilitation programme; and - evidence of completion of unannounced/ random programme of drug screening for at least three months with no positives and at least three negatives; and - continuing participation in drug screening programme	After three years from end of last episode without relapse and without co-morbidity
F20-31	Psychosis (acute) – whether organic, schizophrenic or other category listed in the ICD. Bipolar (manic depressive disorders) Recurrence leading to changes to perception/ cognition, accidents, erratic and unsafe behaviour	 Following single episode with provoking factors: T - Until investigated and stabilized and conditions for fitness met. At least three months after episode Following single episode without provoking factors or more than one episode with or without provoking factors: T - Until investigated and stabilized and condi- tions for fitness met. At least two years since last episode P - More than three episodes or continuing likelihood of recurrence. Criteria for fitness with or without restrictions are not met 	 R, L - Time limited, restricted to near coastal waters and not to work as master in charge of vessel or without close supervision and continuing medical monitoring, provided that: fisher has insight; is compliant with treatment; and has no adverse effects from medication R, L - Time limited, restricted to near coastal waters and not to work as master in charge of vessel or without close supervision and continuing medication R, L - Time limited, restricted to near coastal waters and not to work as master in charge of vessel or without close supervision and continuing medical monitoring providing that: the fisher has insight; is compliant with treatment; and has no impairing adverse effects from medication 	Case-by-case assessment at least one year after the episode, provided that provoking factors can and will always be avoided Case-by-case assessment to exclude likelihood of recurrence at least five years since end of episode if no furthe episodes; no residual symptoms; and no medication needed during last two years
F32-38	Mood/affective disorders Severe anxiety state, depression, or any other mental disorder likely to impair performance Recurrence, reduced performance, especially in emergencies	 T - While acute, under investigation or if impairing symptoms or side effects of medication present. At least three months on stable medication P - Persistent or recurrent impairing symptoms 	 R, L - Restrict to near coastal waters and not to work as master in charge of ship, only when fishers have: good functional recovery; insight; is fully compliant with treatment, with no impairing side effects; and a low* likelihood of recurrence 	Case-by-case assessment to exclude likelihood of recurrence after at least two years with no further episodes an with no medication or on medication with no impairing effects
	Mood/affective disorders Minor or reactive symptoms of anxiety/depres sion Recurrence, reduced performance, especially in emergencies	 T - Until symptom free. If on medication to be on a stable dose and free from impairing adverse effects P - Persistent or recurrent impairing symptoms 	R , L – Time limited and consider geographical restriction if on stable dose of medication and free from impairing symptoms or impairing side effects from medication	Case-by-case assessment after one year from end of episode if symptom free and off medica- tion or on medication with no impairing effects
F00-99	Other disorders, e.g. disorders of personality, attention (e.g. ADHD), de velopment (e.g. autism) Impairment of performance and reliability and impact on relationships	P – If considered to have safety-critical consequences	R – As appropriate if capable of only limited duties	No anticipated adverse effects while at sea. No incidents during previous periods of sea service

ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent (*)	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department
G00-99	Diseases of the nervo	us system		
G40-41	Single seizure Harm to ship, others and self from seizures	Single seizure T – While under investigation and for one year after seizure	R – One year after seizure and on stable medication. Non-watchkeeping duties in near coastal waters	One year after seizure and one year after end of treatment. If provoked, there should be no continuing exposure to the provoking agent
	Epilepsy – No provoking factors (multiple seizures) Harm to ship, others and self from seizures	 T - While under investigation and for two years after last seizure P - Recurrent seizures, not controlled by medication 	R – Off medication or on stable medication with good compliance: case-by-case assessment of fitness, restricted to non-watchkeeping duties in near coastal waters	Seizure-free for at least the last ten years, has not taken anti-epilepsy drugs during that ten-year period and does not have a continuing likelihood of seizures
	Epilepsy – provoked by alcohol, medication, head injury (multiple seizures) Harm to ship, others and self from seizures	 T - While under investigation and for two years after last seizure P - Recurrent fits, not controlled by medication 	R – Case-by-case assessment after two years' abstention from any known provoking factors, seizure-free and either off medication or on stable medication with good compliance; restricted to non-watchkeeping duties in near coastal waters	"Seizure-free for at least the last five years, has not taken anti-epilepsy drugs during that five-year period, provided there is not continuing exposure to the provoking agent"
G43	Migraine (frequent attacks causing incapacity) Likelihood of disabling recurrences	P – Frequent attacks leading to incapacity	R – As appropriate. If only capable of limited duties	No anticipated incapacitating adverse effects while at sea. No incidents during previous periods of sea service
G47	Sleep apnoea Fatigue and episodes of sleep while working	 T - Until treatment started and successful for three months P - Treatment unsuccessful or not being complied with 	L – Once treatment demonstrably working effectively for three months, including compliance with CPAP (continuous positive airway pressure) machine use confirmed. Six-monthly assessments of compliance based on CPAP machine recording	Case-by-case assessment based on job and emergency requirements, informed by specialist advice
	Narcolepsy Fatigue and episodes of sleep while working	 T - Until controlled by treatment for at least two years P - Treatment unsuccessful or not being complied with 	R, L – Near coastal waters and no watchkeeping duties, if specialist confirms full control of treat- ment for at least two years Annual review	Not Applicable
G00-99 Not listed separa- tely	Other organic nervous disease, e.g. multiple sclerosis, Parkinson's disease Recurrence/ progression. Limitations on muscular power, bal- ance, coordination and mobility	 T – Until diagnosed and stable P – If limitations affect safe working or unable to meet physical capability requirements (Appendix C 	R, L – Case-by-case assessment based on job and emergency requirements, informed by specialist advice"	Case-by-case assessment based on job and emergency requirements, informed by specialist advice

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ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent ()	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department
R55	Syncope and other disturbances of consciousness Recurrence causing injury or loss of control	 T - Until investigated to determine cause and to demonstrate control of any underlying condition Event is: (a) simple faint; 		Simple faint; if no incapacitating recurrences
		(b) not a simple faint; unexplained disturbance, not recurrent and without any detected underlying cardiac, metabolic or neurological cause T – Four weeks	R, L – Case-by-case decision, near coastal with no lone watchkeeping	Three months after event if no recurrences
		 (c) Disturbance; recurrent or with possible under- lying cardiac, metabolic or neurological cause T - With possible underlying cause that is not identified or treatable; for six months after event if no recurrences T - With possible underlying cause or cause found and treated; for one month after successful treatment" 	R, L – Case-by-case decision, near coastal with no lone watchkeeping	With possible underlying cause but no treatable cause found; one year after event if no recurrences
				With possible underlying cause found and treated; three months after successful treatment
		(d) Disturbance of consciousness with features indicating a seizure. Go to G40-41		With seizure markers – not applicable
		P – For all of above if recurrent incidents persist despite full investigation and appropriate treatment		
T90	Intracranial surgery/ injury, including treatment of vascular anomalies or serious head injury with brain damage Harm to ship, others and self from seizures. Defects in cognitive, sensory or motor function. Recurrence or complication of underlying condition	 T - For one year or longer until seizure likelihood low,* based on advice from specialist P - Continuing impairment from underlying condi- tion or injury or recurrent seizures 	R – After at least one year, near coastal, no lone watchkeeping if seizure likelihoods low* and no impairment from underlying condition or injury Conditional on continued compliance with any treatment and on periodic review, as recom- mended by specialist	No impairment from underlying condition or injury, not on anti- epilepsy medications. Seizure likelihood very low* Conditional on continued compliance with any treatment and on periodic review, as recom- mended by specialist

ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent ()	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department
H00-99	Diseases of the eyes a	nd ears		
H00-59	Eye disorders: Progressive or recurrent (e.g. glaucoma, maculopathy, diabetic retinopathy, retinitis pigmentosa, keratoconus, diplopia, blepharospasm, uveitis, corneal ulceration and retinal detachment) Future inability to meet vision standards, risk of recurrence	 T – Temporary inability to meet relevant vision standards (Appendix A) and low likelihood of subsequent deterioration or impairing recurrence once treated or recovered P – Inability to meet relevant vision standards (Appendix A) or, if treated, increased likelihood of subsequent deterioration or impairing recurrence 	 R - Near coastal waters if recurrence unlikely but foreseeable and treatable with early medical intervention L - If risk of progression foreseeable but unlikely and can be detected by regular monitoring 	Very low likelihood of recurrence. Progression to a level where vision standards (Appendix A) are not met during period of certificate is very unlikely
H65-67	Otitis – External or media Recurrence, risk as infection source in food handlers, problems using hearing protection	T – Until treated P – If chronic discharge from ear in food handler	Case-by-case assessment. Consider effects of heat, humidity and hearing protection use in otitis externa	Effective treatment and no excess likelihood of recurrence
H68-95	Ear disorders: Progressive (e.g. otosclerosis)	 T – Temporary inability to meet relevant hearing standards (Appendix B) and low likelihood of sub- sequent deterioration or impairing recurrence once treated or recovered P – Inability to meet relevant hearing standards (Appendix B) or, if treated, increased likelihood or subsequent deterioration or impairing recurrence 	L – If risk of progression foreseeable but unlikely and it can be detected by regular monitoring	Very low likelihood of recurrence. Progression to a level where hearing standards (Appendix B) are not met during period of certificate is very unlikely
H81	Ménière's disease and other forms of chronic or recurrent disabling vertigo Inability to balance, causing loss of mobility and nausea See table B-1/9 in Appendix C	T – During acute phase P – Frequent attacks leading to incapacity	R – As appropriate. If only capable of limited duties R, L – If frequent specialist surveillance required	Low* likelihood of impairing effects while at sea

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ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent (Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department
100-99	Cardiovascular system			
105-08 134-39	Congenital and valve disease of heart (including surgery for these con- ditions) Heart murmurs not previously investigated Likelihood of progression, limitations on exercise	 T – Until investigated and, if required, treated P – If exercise tolerance limited or episodes of incapacity occur or if on anticoagulants or if per- manent high likelihood of impairing event 	 R - Near coastal waters if case-by-case assessment indicates either likelihood of acute complications or rapid progression L - If frequent surveillance is recommended 	Heart murmurs – Where unaccompanied by other heart abnormalities and considered benign by a specialist cardiologist following examination. Other conditions – Case-by-case assessment based on specialist advice
110-15	Hypertension Increased likelihood of ischemic heart disease, eye and kidney damage and stroke. Possibility of acute hypertensive episode	T - Normally if >160 systolic or >100 diastolic mm Hg until investigated and treated in accordance with national or international guidelines for hypertension management P - If persistently >160 systolic or >100 diastolic mm Hg with or without treatment	L – If additional surveillance needed to ensure level remains within national guideline limits	If treated in accordance with national guidelines and free from impairing effects from condition or medication
120-25	Cardiac event, i.e. myocardial infarction, ECG evidence of past myocardial infarction or newly recognized left bundle-branch block, angina, cardiac arrest, coronary artery bypass grafting, coronary angioplasty Sudden loss of capability, exercise limitation. Problems of managing repeat cardiac event at sea	 T - For three months after initial investigation and treatment, longer if symptoms not resolved P - If criteria for issue of certificate not met and further reduction of likelihood of recurrence improbable 	L - If excess likelihood of recurrence is very low* and fully compliant with risk reduction recommendations and no relevant co- morbidity, issue six-month certificate initially and then annual certificate" R , L - If excess likelihood of recurrence is low.* Restricted to: - no lone working or solo watchkeeping; and - operations in near coastal waters, unless working on vessel with ship's doctor Issue six-month certificate initially and then annual certificate R , L - If likelihood of recurrence is moderate* and asymptomatic. Able to meet the physical require- ments or their normal and emergency duties: - no lone working or watchkeeping/ lookout; and - operating within one hour of port, unless working on vessel with ship's doctor Case-by-case assessment to determine restrictions Annual review	Not Applicable
144-49	Cardiac arrhythmias and conduction defects (including those with pacemakers and implanted cardioverter defibrillators (ICD)) Likelihood of impairment from recurrence, sudden loss of capability, exercise limitation. Pacemaker/ICD activity may be affected by strong electric fields	 T - Until investigated, treated and adequacy of treatment confirmed P - If disabling symptoms present or excess likelihood of impairment from recurrence, including ICD implant 	L – Surveillance needed at shorter intervals and no impairing symptoms present and very low* excess likelihood of impairment from recurrence, based on specialist report R – Restrictions on solo duties or for distant waters if low* likelihood of acute impairment from recurrence or foreseeable requirement for access to specialist care Surveillance and treatment regime to be specified. If pacemaker fitted, duration of certificate to coincide with pacemaker surveillance	Surveillance not needed or needed at intervals of more than two years; no impairing symptoms present; and ver low* likelihood of impairment from recurrence, based on specialist report

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ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent ()	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department
l61-69 G46	Ischaemic cerebrovascular disease (stroke or transient ischaemic attack Increased likelihood of recurrence, sudden loss of capability, mobility limitation. Liable to develop other circulatory disease causing sudden loss of capability	 T - Until treated and any residual impairment stabilized and for three months after event P - If residual symptoms interfere with duties or there is significant excess likelihood of recurrence 	R , L – Case-by-case assessment of fitness for duties; exclude from lone watchkeeping. Assessment should include likelihood of future cardiac events. General standards of physical fitness should be met (Appendix C). Annual assessment	Not Applicable
73	Arterial-claudication Likelihood of other circulatory disease causing sudden loss of capability. Limits to exercise capacity	T – Until assessed P – If incapable of performing duties	R , L – Consider restriction to non- watchkeeping duties in coastal waters, provided symptoms are minor and do not impair essential duties or if they are resolved by surgery or other treatment and general standard of fitness can be met (Appendix C). Assess likelihood of future cardiac events (follow criteria in 120–25). Review at least annually	Not Applicable
83	Varicose veins Possibility of bleeding if injured, skin changes and ulceration	T – Until treated if impairing symptoms. Post- surgery for up to one month	Not applicable	No impairing symptoms or complications
180.2-3	Deep vein thrombosis/ pulmonary embolus Likelihood of recurrence and of serious pulmonary embolus Likelihood of bleeding from anticoagu- lant treatment	 T - Until investigated and treated and normally while on short-term anticoagulants P - Consider if recurrent events or on permanent anticoagulants 	R , L – May be considered fit for work with a low liability for injury in national coastal waters, once stabilized on anticoagulants with regular monitoring of level of coagulation	Full recovery with no anticoagulant use
100-99 Not listed separa- tely	Other heart disease, e.g. cardio-my- opathy, pericarditis, heart failure Likelihood of recurrence, sudden loss of capability, exercise limitation	 T - Until investigated, treated and adequacy of treatment confirmed P - If impairing symptoms or likelihood of impair- ment from recurrence 	Case-by-case assessment, based on specialist reports	Case-by-case assessment, very low* likelihood of recurrence



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ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent (Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department	
J00-99	Respiratory system				
J02-04 J30-39	Nose, throat and sinus conditions Impairing for individual. May recur. Transmission of infection to food/other crew in some conditions	T – Until resolved P – If impairing and recurrent	Case-by-case assessment	When treatment complete, if no factors predisposing to recurrence	
40-44	Chronic bronchitis and/ or emphy- sema Reduced exercise tolerance and impairing symptoms	 T - If acute episode P - If repeated severe recurrences or if general fitness standards cannot be met or if impairing shortness of breath 	R, L – Case-by-case assessment More stringency for distant water duties. Consider fitness for emergencies and ability to meet gen- eral standards of physical fitness (Appendix C) Annual review	Not Applicable	
45-46	Asthma (detailed assessment with information from specialist in all new entrants) Unpredictable episodes of severe breathlessness	 T - Until episode resolved, cause investigated (including any occupational link) and effective treatment regime in place In person under age 20 with hospital admission or oral steroid use in last three years P - If foreseeable likelihood of rapid life-threat- ening asthma attack while at sea or history of uncontrolled asthma, i.e. history of multiple hospital admissions 	R, L – Near coastal waters only or on ship with doctor if history of moderate** adult asthma, with good control with inhalers and no episodes requiring hospital admission or oral steroid use in last two years, or history of mild or exercise-in- duced asthma that requires regular treatment	Under age 20: If history of mild or moderate** childhood asthma, but with no hospital ad- missions or oral steroid treatment in last three years and no requirements for continuing regular treatment Over age 20: If history of mild** or exercise-in- duced** asthma and no requirements for continuing regular treatment	
J93	Pneumothorax (spontaneous or traumatic) Acute impairment from recurrence	 T - Normally for 12 months after initial episode or shorter duration as advised by specialist P - After recurrent episodes unless pleurectomy or pleurodesis performed 	R – Duties in harbour areas only once recovered	Normally 12 months after initial episode or shorter duration as advised by specialist Post surgery - based on advice of treating specialist	

ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent ()	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department			
K00-99	Digestive system	Digestive system					
K01-06	Oral health Acute pain from toothache. Recurrent mouth and gum infections"	 T - If visual evidence of untreated dental defects or oral disease P - If excess likelihood of dental emergency remains after treatment completed or fisher non-compliant with dental recommendations 	R – Limited to near coastal waters, if criteria for full fitness not met, and type of operation will allow for access to dental care without safety-crit- ical manning issues for vessel	If teeth and gums (gums alone of edentulous and with well-fitting dentures in good repair) appear to be good. No complex prosthesis; or if dental check in last year, with follow- up completed and no problems since.			
K25-28	Peptic ulcer Recurrence with pain, bleeding or perforation	 T - Until healing or cure by surgery or by control of helicobacter and on normal diet for three months P - If ulcer persists despite surgery and medication 	R – Consider case-by-case assessment for earlier return to near coastal duties	When cured and on normal diet for three months			
K40-41	Hernias – Inguinal and femoral Likelihood of strangulation	 T – Until surgically investigated to confirm no likeli- hood of strangulation and, if required, treated 	R - Untreated: Consider case-by-case assess- ment for near coastal waters	When satisfactorily treated or exceptionally when surgeon reports that there is no likelihood of strangulation			
K42-43	Hernias – Umbilical, ventral Instability of abdominal wall on bending and lifting	Case-by-case assessment depending on severity of symptoms or impairment. Consider implications of regular heavy whole-body physical effort	Case-by-case assessment depending on severity of symptoms or impairment. Consider implications of regular heavy whole-body physical effort	Case-by-case assessment depending on severity of symptoms or impairment. Consider implications of regular heavy whole-body physical effort			
K44	Hernias – Diaphragmatic (hiatus) Reflux of stomach contents and acid causing heartburn, etc.	Case-by-case assessment based on severity of symptoms when lying down and on any sleep disturbance caused by them	Case-by-case assessment based on severity of symptoms when lying down and on any sleep disturbance caused by them	Case-by-case assessment based on severity of symptoms when lying down and on any sleep disturbance caused by them			
K50, 51, 57, 58, 90	Non-infectious enteritis, colitis, Crohn's disease, diverticulitis, etc. Impairment and pain	T – Until investigated and treated P – If severe or recurrent	R – Does not meet the requirements for unrestricted certificate but rapidly developing recurrence unlikely: near coastal duties	Case-by-case specialist assessment. Fully con- trolled with low likelihood of recurrence			
K60-184	Anal conditions: Piles (haemor- rhoids), fissures, fistulae Likelihood of episode causing pain and limiting activity	 T - If piles prolapsed, bleeding repeatedly or causing symptoms; if fissure or fistula painful, infected, bleeding repeatedly or causing faecal incontinence P - Consider if not treatable or recurrent 	Case-by-case assessment of untreated cases for near coastal duties	When satisfactorily treated			
K70, 72	Cirrhosis of liver Liver failure. Bleeding oesophageal varices	T – Until fully investigated P – If severe or complicated by ascites or oesoph- ageal varices	R, L – Case-by-case specialist assessment	Not Applicable			
K80-83	Biliary tract disease Biliary colic from gallstones, jaundice, liver failure	 T - Biliary colic until definitely treated P - Advanced liver disease, recurrent or persistent impairing symptoms 	R, L – Case-by-case specialist assessment. Does not meet requirements for unlimited certificate. Sudden onset of biliary colic unlikely	Case-by-case specialist assessment. Very low likelihood of recurrence or worsening in next two years			
K85-86	Pancreatitis Likelihood of recurrence	T – Until resolved P – If recurrent or alcohol related, unless confirmed abstention	Case-by-case assessment based on specialist reports	Case-by-case assessment based on specialist reports, very low likelihood of recurrence			
Y83	Stoma (ileostomy, colostomy) Impairment if control is lost – need for bags, etc. Potential problems during prolonged emergency	T – Until stabilized P – Poorly controlled	R – Case-by-case assessment	Case-by-case specialist assessment			

ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent (T)	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed ()	Able to perform all duties worldwide within designated department		
N00-99	Genito-urinary conditions					
NOO, N17	Acute nephritis Renal failure, hypertension	P – Until resolved	Case-by-case assessment if any residual effects	Full recovery with normal kidney function and no residual damage		
N03–05, N18–19	Sub-acute or chronic nephritis or nephrosis Renal failure, hypertension	T – Until investigated	R, L – Case-by-case assessment by specialist, based on renal function and likelihood of complications	Case-by-case assessment by specialist based on renal function and likelihood of complications		
N20-23	Renal or ureteric calculus Pain from renal colic	 T – Until investigated and treated P – Recurrent stone formation 	R – Consider if concern about ability to work in tropics or under high temperature conditions. Case-by-case assessment for near coastal duties	Case-by-case assessment by specialist with normal urine and renal function without recurrence		
N33, N40	Prostatic enlargement/ urinary obstruction Acute retention of urine	T – Until investigated and treated P – If not remediable	R – Case-by-case assessment for near coastal duties	Successfully treated; low* likelihood of recurrence		
N70-98	Gynaecological conditions – Heavy vaginal bleeding, severe menstrual pain, endometriosis, prolapse of genital organs or other Impairment from pain or bleeding	T – If impairing or investigation needed to deter- mine cause and remedy it	R – Case-by-case assessment if condition is likely to require treatment on voyage or affect working capacity	Fully resolved with low* likelihood of recurrence		
R31, 80, 81, 82	Proteinuria, haematuria, glycosuria or other urinary abnormality Indicator of kidney or other diseases	 T - If initial findings clinically significant P - Serious and non-remediable underlying cause e.g. impairment of kidney function 	L – When repeat surveillance required R, L – When uncertainty about cause but no immediate problem	Very low likelihood of serious underlying condition		
Z90.5	Removal of kidney or one non-func- tioning kidney Limits to fluid regulation under extreme conditions if remaining kidney not fully functional	 P – Any reduction of function in remaining kidney in new fisher. Significant dysfunction in remaining kidney of serving fisher 	R – No tropical or other heat exposure. Serving fisher with minor dysfunction in remaining kidney	Remaining kidney must be fully functional and not liable to progressive disease, based on renal investigations and specialist report		
000-99	Pregnancy					
000-99	Pregnancy Complications, late limi- tations on mobility. Potential for harm to mother and child in the event of premature delivery at sea	T – Late stage of pregnancy and early postnatal period Abnormality of pregnancy requiring high level of surveillance	R, L - Case-by-case assessment if minor im- pairing effects. May consider working until later in pregnancy on near coastal vessel	Uncomplicated pregnancy with no impairing effects – normally until 24th week Decisions to be in accord with national practice and legislation. Pregnancy should be declared at an early stage so that national recommendations on antenatal care and screening can be followed		
L00-99	Skin					
L00-08	Skin infections Recurrence, transmis- sion to others	T – Until satisfactorily treated P – Consider for catering staff with recurrent problems	R, L - Based on nature and severity of infection	Cured with low likelihood of recurrence		
L10-99	Other skin diseases, e.g. eczema, dermatitis, psoriasis Recurrence, some- times occupational cause	T – Until investigated and satisfactorily treated	Case-by-case decision R – As appropriate if aggravated by heat, or substances at work	Stable, not impairing		

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ICD-10 (diagnostic codes)	Condition (justification for criteria)	Incompatible with reliable performance of routine and emergency duties safely or effectively – expected to be temporary (T) – expected to be permanent ()	Able to perform some but not all duties or to work in some but not all waters (R) Increased frequency of surveillance needed (1)	Able to perform all duties worldwide within designated department
M00-99	Musculoskeletal			
M10-23	Osteoarthritis, other joint diseases and subsequent joint replacement Pain and mobility limitation affecting normal or emergency duties. Possibility of infection or dislocation and limited life of replacement joints	 T – Full recovery of function and specialist advice required before return to sea after hip or knee replacement P – For advanced and severe cases 	R – Case-by-case assessment based on job requirements and history of condition. Consider emergency duties and evacuation from ship. Should meet general fitness requirements (Appendix D)	Case-by-case assessment. Able to fully meet routine and emergency duty requirements with very low likelihood of worsening such that duties could not be undertaken
M24.4	Recurrent instability of shoulder or knee joints Sudden limitation of mobility, with pain	T – Until satisfactorily treated	R – Case-by-case assessment of occasional instability	Treated; very low* likelihood of recurrence
M54.5	Back pain Pain and mobility limitation affecting normal or emergency duties. Exacerbation of impairment	T – In acute stage P – If recurrent or incapacitating	Case-by-case assessment	Case-by-case assessment
Y83.4 Z97.1	Limb prosthesis Mobility limitation affecting normal or emergency duties	P - If essential duties cannot be performed	R – If routine and emergency duties can be performed but there are limitations on specific non-essential activities	If general fitness requirements are fully met (Appendix C). Arrangements for fitting prosthesis in emergency must be confirmed
General				
R47, F80	Speech disorders Limitations to communication ability	P – Incompatible with reliable performance of routine and emergency duties safely or effectively	R – If assistance with communication is needed to ensure reliable performance of routine and emergency duties safely and effectively Specify assistance	No impairment to essential speech communication
T78 Z88	Allergies (other than allergic dermatitis and asthma) Likelihood of recurrence and increasing severity of response. Reduced ability to perform duties	 T - Until fully investigated by specialist P - If life-threatening response reasonably foreseeable 	Case-by-case assessment of likelihood and se- verity of response, management of the condition and access to medical care R – Where response is impairing rather than life-threatening, and reasonable adjustments can be made to reduce likelihood of recurrence	Where response is impairing rather than life-threatening, and effects can be fully controlled by long-term non-steroidal self-medication or by lifestyle modifications that are practicable at sea with no safety- critical adverse effects
294	Transplants – Kidney, heart, lung, liver (for prosthetics, i.e. joints, limbs, lenses, hearing aids, heart valves, etc. see condition-specific sections) Possibility of rejection. Side effects of medication	T – Until effects of surgery and anti- rejection medication stable P – Case-by-case assessment, with specialist advice	R, L - Case-by-case assessment, with specialist advice	Not Applicable
Classify by condition	Progressive conditions, which are currently within criteria, e.g. Huntington's chorea (including family history) and keratoconus	 T – Until investigated and treated if indicated P – Consider at pre-sea medical if likely to prevent completion or limit scope of training 	Case-by-case assessment, with specialist advice. Such conditions are acceptable if harmful pro-gression before next medical is judged unlikely	Case-by-case assessment, with specialist advice. Such conditions are acceptable if harmful pro- gression before next medical is judged unlikely
Classify by condition	Conditions not specifically listed	T – Until investigation and treated if indicated P – If permanently impairing	Use analogy with related conditions as a guide. Consider likelihood of sudden incapacity, recurrence or progression and limitations on performing normal and emergency duties. If in doubt, obtain advice or consider restriction and referral to referee	Use analogy with related conditions as a guide. Consider excess likelihood of sudden incapacity, of recurrence or progression and limitations on performing normal and emergency duties. If in doubt, obtain advice or consider restriction and referral to referee

NOTES:

* Recurrence rates: Where the terms very low, low and moderate are used for the excess likelihood of a recurrence. These are essentially clinical judgements but, for some conditions, quantitative evidence on the likelihood of recurrence is available. Where this is available, e.g. for seizure and cardiac events, it may indicate the need for additional investigations to determine an individual's excess likelihood of a recurrence. Quantitative recurrence levels approximate to:

- Very low: recurrence rate less than 2 % per year;
- Low: recurrence rate 2-5 % per year;
- Moderate: recurrence rate 5–20 % per year.
- ** Asthma severity definitions:

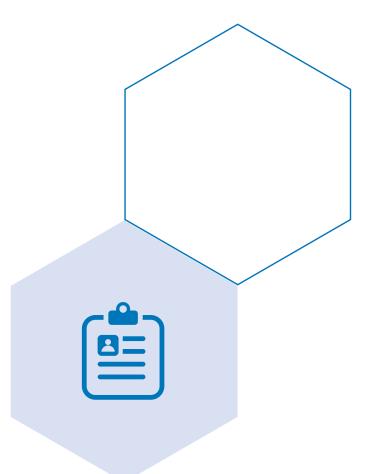
Childhood asthma:

- Mild : Onset age > 10 years, few or no hospitalizations, normal activities between episodes, controlled by inhaler therapy alone, remission by age 16, normal lung function.
- Moderate : Few hospitalizations, frequent use of reliever inhaler between episodes, interference with normal exercise activity, remission by age 16, normal lung function.
- Severe : Frequent episodes requiring treatment to be made more intensive, regular hospitalization, frequent oral or IV steroid use, lost schooling, abnormal lung function.

Adult asthma:

Asthma may persist from childhood or start over the age of 16. There is a wide range of intrinsic and external causes for asthma developing in adult life. In late-entry recruits with a history of adult onset asthma, the role of specific allergens, including those causing occupational asthma, should be investigated. Less specific inducers such as cold, exercise and respiratory infection also need to be considered. All can affect fitness for work at sea.

- Mild intermittent asthma : Infrequent episodes of mild wheezing occurring less than once every two weeks, readily and rapidly relieved by beta agonist inhaler.
- Mild asthma : Frequent episodes of wheezing requiring use of beta agonist inhaler or the introduction of a corticosteroid inhaler. Taking regular inhaled steroids (or steroid/long-acting beta agonists) may effectively eliminate symptoms and the need for use of beta agonist treatment.
- **Exercise-induced asthma** : Episodes of wheezing and breathlessness provoked by exertion, especially in the cold. Episodes may be effectively treated by inhaled steroids (or steroid/long-acting beta agonist) or other oral medication.
- Moderate asthma : Frequent episodes of wheezing despite regular use of inhaled steroid (or steroid/long acting beta agonist) treatment requiring continued use of frequent beta agonist inhaler treatment, or the addition of other medication, occasional requirement for oral steroids.
- Severe asthma : Frequent episodes of wheezing and breathlessness, frequent hospitalization, frequent use of oral steroid treatment.



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F. Suggested format for recording medical examinations of fishers

Name (last, first, middle):
Date of birth (day/month/year)://
Sex: 🗌 Male 📄 Female
Home address:
Method of confirmation of identity, e.g. Passport No. or other relevant identity document No.:
Department (deck/engine/radio/food handling/other):
Routine and emergency duties (if known):
Type of ship (e.g. trawler):

EXAMINEE'S PERSONAL DECLARATION (ASSISTANCE SHOULD BE OFFERED BY MEDICAL STAFF)

Have you ever had any of the following conditions?

CONDITION	Yes	No	
1. Eye/vision problem			
2. High blood pressure			If you answered "yes" to any of these questions,
3. Heart/vascular disease			please give details:
4. Heart surgery			
5. Varicose veins/piles			
6. Asthma/bronchitis			
7. Blood disorder			
8. Diabetes			
9. Thyroid problem			
10. Digestive disorder			
11. Kidney problem			
12. Skin problem			
13. Allergies			
14. Infectious/contagious diseases			
15. Hernia			
16. Genital disorder			
17. Pregnancy			
18. Sleep problem			
19. Do you smoke, use alcohol or drugs?			
20. Operation/surgery			
21. Epilepsy/seizures			
22. Dizziness/fainting			
23. Loss of consciousness			
24. Psychiatric problems			
25. Depression			
26. Attempted suicide			

CONDITION 27. Loss of memory 28. Balance problem 29. Severe headaches 30. Ear (hearing, tinnitus)/nose/throat problem 31. Restricted mobility 32. Back or joint problem 33. Amputation 34. Fractures/dislocations	Yes		If you answer please give d	ed "yes" to an etails:	y of the these	questions,
ADDITIONAL QUESTIONS 35. Have you ever been signed off as sick or re 36. Have you ever been hospitalized? 37. Have you ever been declared unfit for sea 38. Has your medical certificate even been res 39. Are you aware that you have any medical p 40. Do you feel healthy and fit to perform the 41. Are you allergic to any medication?	duty? tricted or re problems, di	voked? seases	or illnesses?	n/occupation?	Yes	No
Comments:						
ADDITIONAL QUESTIONS 42. Are you taking any non-prescription or pre If yes, please list the medications taken, and					Yes	No
42. Are you taking any non-prescription or pre If yes, please list the medications taken, and I hereby certify that the personal declaration above is a true statement to the best of my knowledge.	the purpose I hereby any heal to Dr	e(s) and r author th profe	dosage(s): ize the release essionals, heal	e of all my prev th institutions (the appr	vious medical	records fro uthorities
 42. Are you taking any non-prescription or pre If yes, please list the medications taken, and I hereby certify that the personal declaration above is a true statement to the best of my 	the purpose I hereby any heal	e(s) and r author th profe	dosage(s): ize the release essionals, heal	th institutions	vious medical	records fro uthorities
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42. Are you taking any non-prescription or pre If yes, please list the medications taken, and I hereby certify that the personal declaration above is a true statement to the best of my knowledge. Signature of examinee:	the purpose I hereby any heal to Dr Signatur Date (da	e(s) and r author th profe e of exa y/mont	dosage(s): ize the release essionals, heal minee:	th institutions	vious medical	records fro uthorities

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MEDICAL EXAMINATION

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Use of glasses or contact lenses: [Yes No	(if yes, specify which type and for what purpos	se)

Visual acuity

	Unaided				
	Right eye	Left eye	Binocular		Right eye
Distant					
Near					

	Aided	
Right eye	Left eye	Binocular

Visual fields

	Normal	Defective
Right eye		
Left eye		

Colour vision

🗌 Not tested 🔄 Normal

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🗌 Doubtful
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Defective

HEARING

	Pure tone and audiometry (threshold values in dB)				
	500 Hz 1'000 Hz 2'000 Hz 3'000 Hz				
Right ear					
Left ear					

	Speech and whisper test (metres)			
	Normal Whisper			
Right ear				
Left ear				

CLINICAL FINDINGS

Height: (cm) Blood pressure:..... Glucose: Weight:(kg) Systolic:(mm Hg) Protein:

Pulse rate:/(minute) Diastolic:(mm Hg) Blood: Rhythm: Urinalysis:

	Normal	Abnormal
Head		
Sinuses, nose, throat		
Mouth/teeth		
Ears (general)		
Tympanic membrane		
Eyes		
Ophthalmoscopy		
Pupils		
Eye movement		
Lungs and chest		
Breast examination		
Heart		
Skin		
Varicose veins		
Vascular (inc. pedal pulses)		
Abdomen and viscera		
Hernia		
Anus (not rectal exam)		
G-U system		
Upper and lower extremities		
Spine (C/S, T/S and L/S)		
Neurologic (full/brief)		
Psychiatric		
General appearance		

CHEST X-RAY

Not performed

Performed on (day/month/year): . . / . . . / . . .

Results:

OTHER DIAGNOSTIC TEST(S) AND RESULT(S)

Test:	. Result:
Medical practitioner's comments and assessment of	fitness, with reasons for any limitations:

ASSESSMENT OF FITNESS FOR SERVICE AT SEA

On the basis of the examinee's personal declaration, my clinical examination and the diagnostic test results recorded above, I declare the examinee medically:

Fit for look-out duty	Not fit for look-out duty			
Fit Unfit	Deck service	Engine service	Catering service	Other services
☐ Without restrictions	With restrictions	Visual aid required : 🔲 Yes 🔲 No		
Medical certificate's date of Date medical certificate issu Number of medical certifica Signature of medical practit Medical practitioner inform	ied (day/month/year): / te:	/ er, address):		

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G. Medical certificate for service at sea

The minimum requirements for medical certificates for fishers form a suitable framework for all medical certificates. Only information directly relevant to the functional requirements of the fisher's duties should be included. Details of any medical conditions identified or test results, other than those listed, should not be recorded on the certificate. It is recommended that the certificate is in a format which minimizes the likelihood of alteration of its contents or fraudulent copy.

- 1. Authorizing authority and the requirements under which the document is issued
- 2. Fisher information
 - 2.1. Name: (last, first, middle)
 - 2.2. Date of birth: (day/month/year)
 - 2.3. Gender: (male/female)
 - 2.4. Nationality
- 3. Declaration of the authorized medical practitioner
 - 3.1. Confirmation that identification documents were checked at the point of examination: Yes/No
 - 3.2. Hearing meets the standards? : Yes/No/Not applicable
 - 3.3. Unaided hearing satisfactory? Yes/No
 - 3.4. Visual acuity meets standards ? Yes/No
 - 3.5. Colour vision meets standards ? Yes/No
 - 3.5.1. (testing only required every six years)
 - 3.5.2. Date of last colour vision test: .
 - 3.6. Fit for lookout duties? Yes/No
 - 3.7. No limitations or restrictions on fitness? Yes/No
 - 3.7.1. If "no", specify limitations or restrictions:
 - 3.8. Is the fisher free from any medical condition likely to be aggravated by service at sea or to render the fisher unfit for such service or to endanger the health of other persons on board? Yes/No
 - 3.9. Date of examination: (day/month/year)
 - 3.10. Expiry date of certificate: (day/month/year)
- 4. Details of the issuing authority
 - 4.1. Official stamp (including name) of the issuing authority
 - 4.2. Signature of the authorized person
- 5. Fisher's signature Confirming that the fisher has been informed of the content of the certificate and of the right to a review.
- 6. The certificate should indicate that it is issued to meet the requirements of both the STCW-F Convention, as amended, and the EU Council Directive 2017/159.

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H. Extract from EU Council Directive 2017/159

MEDICAL EXAMINATION

Article 7

- 1. No fisher shall work onboard a fishing vessel without a valid medical certificate attesting to fitness to perform their duties.
- 2. The competent authority, after consultation, may grant exemptions from the application of paragraph 1 of this Article, taking into account the safety and health of the fisher, size of the vessel, availability of medical assistance and evacuation, duration of the voyage, area of operation, and type of fishing operation.
- 3. The exemptions in paragraph 2 of this Article shall not apply to a fisher working on a fishing vessel of 24 meters in length and over or which normally remains at sea for more than three days. In urgent cases, the competent authority may permit a fisher to work on such a vessel for a period of a limited and specified duration until a medical certificate can be obtained, provided that the fisher is in possession of an expired medical certificate of a recent date.

Article 8

Each Member State shall adopt laws, regulations or other measures providing for:

- the nature of medical examinations;
- the form and content of medical certificates;
- the issue of a medical certificate by a duly qualified medical practitioner or, in the case of a certificate solely concerning eyesight, by a person recognized by the competent authority as qualified to issue such a certificate; these persons shall enjoy full independence in exercising their professional judgement;
- the frequency of medical examinations and the period of validity of medical certificates;

- the right to another, binding, examination by an independent medical practitioner, who has been appointed by the Member State as referee,
 - o in the event that a person has been refused a certificate or has had limitations imposed on the work he or she may perform;
 - o in the event that a person, during his or her examination, has indicated that he or she finds himself or herself unfit to perform his or her duties on board a fishing vessel, but the medical examiner issues a medical certificate nonetheless attesting that the person is medically fit to perform his or her duties on board a fishing vessel;
 - o in the event that a person has been refused a certificate or has had limitations imposed on the work he or she may perform, in case the medical reasons for such refusal have disappeared.
- Other relevant requirements.

Article 9

In addition to the minimum requirements set out in Article 7 and Article 8, on a fishing vessel of 24 meters in length and over, or on a vessel which normally remains at sea for more than three days the medical certificate of a fisher shall state, at a minimum, that:

- the hearing and sight of the fisher concerned are satisfactory for the fisher's duties on the vessel, and
- the fisher is not suffering from any medical condition likely to be aggravated by service at sea or to render the fisher unfit for such service or to endanger the safety or health of other persons on board;
- the medical certificate shall be valid for a maximum period of two years unless the fisherman is under the age of 18, in which case the maximum period of validity shall be one year;
- if the period of validity of a certificate expires in the course of a voyage, the certificate shall remain in force until the end of that voyage.

Training of authorised medical practitioners

As authorised medical practioners who perform medical examinations of fishers may also perform occupationa health examinations, their competency is of crucial importance to the fishing industry.

The medical practitioners should be experienced in general and occupational medicine and in the fisher's occupational health risks and prevention. They should have knowledge of the living and working conditions on board fishing vessels and the job demands on board and in the harbor in so far, they relate to the effects of health. There is evidence that the fishers often operate under stressful working conditions, long-work hours, lack of good sleep, unhealthy diet and lack of physical exercises, that contribute to fatigue, impaired well-being, mental ill- health, stress and chronic diseases.

Competent authorities should ensure that authorised medical practitioners undertake initial and continuing training in the specific occupational health risks for fishers and the notification of diseases and injuries that may be identified as part of the medical examination. Medical practioners should also be familiar with the work involved in unloading the catch and work in port.

As the medical practitioners may not be trained in health and safety prevention in fishing it is recommend that the competent authorities develop a training program in order to comply with the requirements including initial training when first authorised and further training to ensure ongoing knowledge and competency.

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A monitoring programme on the health of fishers and occupational risk factors

Medical practitioners performing medical examinations of fishers should have a clear understanding of the special requirements of the life of a fisher and receive appropriate initial and further training. The professional judgement of the practioners is often critical to the lives of fishers.

According to the Convention C188 and the ILO Handbook for Improving living and working conditions on board fishing vessels 2010, Article 33, competent authorities are require to establish systematic monitoring of the health status of fishers and their health risks in the working environment. This is in addition to the two yearly medical examination.

Land based occupations have implemented such monitoring schemes for many years but currently most European countries do not monitor the health status and the occupational risk indicators for fishers.

The intention of a more detailed clinical health examination is to focus on occupational safety and health at sea, including bullying and wellbeing. Monitoring should include risk indicators related to diet, smoking, alcohol and exercise, the safety climate and the psychosocial environment.

A monitoring program should provide the required monitoring and provide knowledge of and trends in the health of fishers, their work efficiency and job retention. Such a program should help to develop and strengthen the competence and competitiveness of the European fishing sector.

PURPOSE

- To establish monitoring of all fishers' health risk indicators and working environment to be used to revise and establish optimal working conditions.
- To highlight the context and development of occupational health and health risk factors in relation to the spectrum of diseases seen in fishers and their job retention.
- To provide systematic and accessible up-to-date knowledge of the working environment and the fishers' health for use in the work to improve the working environment on fishing vessels.

DESIGN

The program is designed to monitor the health and safety of all European fishers at four to five-year intervals. In addition to a clinical examination, fishers should complete a survey on their occupational health risks in fishing during the consultation.

METHODS

Clinical examination

The content of the clinical examination is similar to the fishers' medical examination in order to:

- ascertain the health of the fisher
- identify any medical conditions
- determine whether the fisher is suited to the psychological and physical demands of the job
- ensure the safety of the rest of the crew
- ensure safety of navigation
- · ensure the occupational health and safety onboard

Questionnaire

A validated questionnaire should be used, and specific questions, including demographic information, selected in specific groups, in order to ensure valid response rates. These may include:

- · Safety culture on board
- Negative workplace experiences
- Noise, vibration and wet work
- Ergonomic loads and claims
- Indoor climate on board
- · Exposure to chemicals during work on board
- Sleep on board
- Health, including dental health
- Tobacco and alcohol on board and at home
- Food and drink

DATA PROCESSING

Data should remain anonymous and be handled confidentially in line with local regulations. All data should be stored in a secure database for the purpose of use in subsequent studies.

ETHICAL REQUIREMENTS

As the study involves the taking of blood samples, the local ethical committees should be asked to evaluate the project. Guidelines for best research practice should be followed. The anonymity of the participants should be ensured in every way and this be clear in the project description and the schedule.

DEVELOPMENT OF JOB EXPOSURE MATRICES AT SEA

In the field of occupational and environmental medicine research, increasing demands are being made for welldesigned, epidemiological studies to also estimate reliable expressions of exposure.

For example, when assessing possible causes of hearing loss and tinnitus, it is key to estimate the exposure of the fisher to noise over several years.

Such methodology is developing rapidly in occupational health and safety research in shore based occupations but has not previously been used at sea. This is despite the fact that the method seems particularly applicable to the working environments on ships, as the design of many different types of ships is very similar.

There is also the potential opportunity for a productive international collaboration on current descriptions of exposures within the fishing industry.



These guidelines on medical examination of fishers were developed by the International Maritime Health Association with the support of the European Transport Workers' Federation and the Association of National Organizations of Fishing Enterprises in the European Union as a pillar of the EU co-funded project "Pillars of the Sea 2: Pillars of the Sea 2: project implementing part of the SSDC Work Programme" (VS/2019/0013)



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