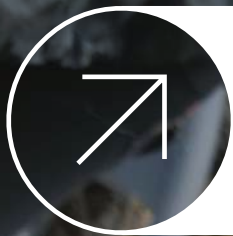


# TRAINING PROGRAMME FOR MEDICAL PRACTITIONERS IN THE MEDICAL EXAMINATIONS OF FISHERS



By the EU Social Partners in Sea Fisheries,  
Europêche and ETF, together with the  
International Maritime Health Association



Co-funded by  
the European Union

1



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# PURPOSE

**In the previous project ‘Pillars of the Sea 2: Project implementing part of the SSDC Work Programme’ (VS/2019/0013), the Social Partners for Sea Fisheries, together with the International Maritime Health Association (IMHA) developed appropriate criteria for the medical fitness for fishers within the EU to harmonise the existing systems of medical examinations of fishers within the Member States.**

A joint meeting held from 12 to 16 February 2024 in Geneva, Switzerland by the International Labour Organization (ILO) and the International Maritime Organization (IMO) brought together members of both organizations, along with government officials and representatives of fishing vessel owners, fishers and non-governmental agencies to finalize a new set of guidelines, that improves the process of undertaking medical examination of fishers worldwide,

to improve health and safety of fishers, and help to reduce fishing sector accidents and fatalities.

The outcome of the meeting will be submitted to the IMO’s Maritime Safety Committee for approval in May 2024, as well as to the Governing Body of the ILO in November 2024.

Appendix K of these new guidelines points:

- 1** The appropriate training and competency of recognized medical practitioners who perform medical examinations of fishers is essential to ensure that they perform a high quality medical examination and are aware of specific aspects of work within the fishing industry. The objective is to enhance the knowledge and skills of recognized medical practitioners and increase consistency in decision-making. This will improve the occupational safety and health of fishers.
- 2** Recognized medical practitioners should be experienced in clinical medicine, ideally with knowledge in occupational medicine or maritime medicine. They should have knowledge of the living and working conditions on board fishing vessels and the job demands on fishers, including
- 3** work involved in unloading the catch and work in port, in so far as they relate to the effects of health problems on fitness for work, gained wherever possible through special instruction, training and through knowledge based on personal experience of fishing, as per paragraph 64.
- 3** Competent authorities should address the need for a further training programme for their recognized medical practitioners to provide initial and ongoing training. Where necessary, competent authorities may develop their own programme or approve other training programmes. Competent authorities, social partners, relevant NGOs and UN agencies should work together to further develop training programmes that may be used for this purpose.

# 2



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# COURSE MODELS

The clinical competency of the practitioners should not be in doubt but assessing a fisher against set standards is a speciality that is unfamiliar to many. Hence training in such assessment and in factors specific to fishers and the fishing industry is essential.

Some countries already have training courses for medical practitioners in the medical examination of seafarers and in many cases this has been extended to fishers. Where training of medical practitioners is not yet implemented or standardized this project has developed course models:

1

## **A Basic Course for Medical Examiners of Seafarers, Fishers and other Workers at sea**

A three day course given in person and online before a recognized medical practitioner starts to examine seafarers, fishers or other workers at sea. This is supported by pre course directed learning (total around 30 hours).

2

## **A Module for Medical Examiners of Fishers**

A one day course (around 10 hours) given in person and online for recognized medical examiners who have previously been trained in medical examination of

seafarers by a basic course that has a similar programme to the basic course mentioned above. This is supported by pre course directed learning (total around 10 hours) .

3



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# REFRESHER TRAINING

## Initial training can be given before a recognized medical practitioner begins the assessment of fishers or during the early stages of such work.

It is essential that this initial training is supported by ongoing, refresher training that ensures a doctor remains up to date and familiar with current guidelines etc.

doctors conducting the medical examination of fishers provides a further opportunity for training and ensures that doctors are working in a quality controlled system.

Refresher training may be offered in the form of a seminar, repeat courses or online modules. The audit of

A refresher course can and will be developed or assembled on request of the responsible parties.



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# COURSE FACULTY



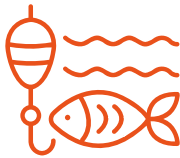
The training should be delivered by personnel with experience in



**Maritime medicine**



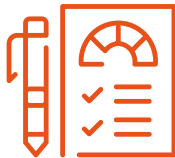
**The development of  
medical standards**



**The fishing industry**



**Life on board a fishing vessel**



**The assessment of applicants against medical standards**

A course faculty should contain several people with a range of experience to ensure a broad knowledge base. The expert panel will recruit several key personnel to support the course

and assist in the training of others in different countries, hence ensuring that the course reaches as many medical practitioners as possible, ideally in their native language.



**A course faculty manual is added to each course model. See attachments.**

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# LEARNING OUTCOMES

On completion of the training, the participants shall




1

## Be able to

-  conduct medical examinations of fishers in accordance with the requirements regarding such examinations, with which they should be entirely familiar.
-  conduct the medical examination in accordance with medical best practice and proper case consideration, obtaining relevant additional specialist advice and investigation where appropriate.
-  assess the safety risk which relates to the fisher's medical condition in general, to his or her regular and emergency duties, within a time perspective corresponding to the validity period of the medical certificate.
-  personalise the safety risk assessment relating to individual workers with medical conditions, and the consequences this may have for the individual him/herself, the safe operation of the ship and to other crew members and environmental and navigational safety.

2

## Understand

-  the limitations and challenges regarding medical treatment of ill and injured fishers whilst at sea including knowledge of available medical resources on board and the possibilities for evacuation.
-  the characteristics of working places on board fishing vessels, and the different physical and mental demands which relate to different types of work on board.
-  the different roles of doctors in different positions (Recognized Medical Practitioners, General Practitioners, Specialists etc) and be aware of his/her own role whilst conducting medical examination of fishers.
-  the consequences of a declaration of unfitness for the individual.

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# BASIC COURSE CURRICULUM

**For medical practitioners who have not yet received training on medical examinations of either seafarers in the merchant fleet, or fishing vessel personnel.**



See annex 1 Basic Course for Medical Examiners of Fishers



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# FISHING MODULE CURRICULUM

For medical practitioners who have already received the basic training module for the medical examinations of seafarers in the merchant fleet, and have little or no experience with the medical examinations of fishing vessel

personnel or want to improve their skills. To determine the specific health topics that need to be discussed for fishing vessel personnel, data from research and literature review are used.



**See annex 2 Module for Medical Examiners of Fishers**



# 8



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# ASSESSMENT OF KNOWLEDGE



**At the end of the training the knowledge of the medical practitioners should be assessed to ensure that they are competent in the areas laid out above.**

Competency may be assessed by a formal test at the end of a course, by mandatory questions at the end of eLearning modules, by free text questions or by participation in the training.



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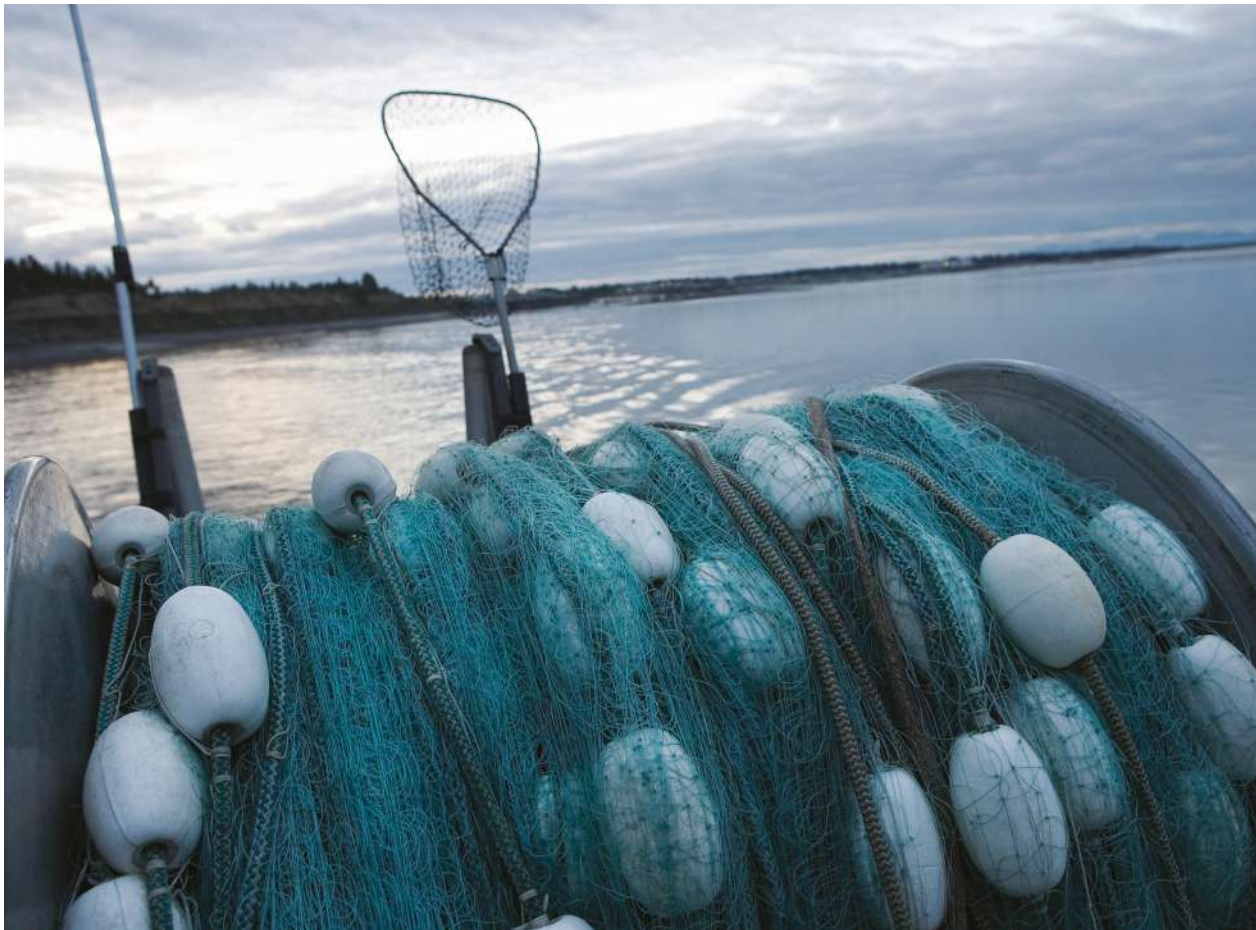
# INTERNATIONAL CONVENTIONS OF IMPORTANCE



**The International Maritime Organization  
Convention on Standards of Training,  
Certification and Watchkeeping for Fishing  
Vessel Personnel, 1995 (IMO STCW-F) R1**



**The International  
Labour Organization  
Convention Work in  
Fishing (ILO C188) R2**



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# INTERNATIONAL GUIDELINES OF IMPORTANCE



**ILO/IMO Guidelines on the Medical Examinations of Fishers R3**



**ILO/IMO Guidelines on the Medical Examinations of Seafarers R4**



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# RELEVANT PUBLICATIONS TO BE USED AS REFERENCE MATERIALS



International Medical Guide for Seafarers and Fishers, International Medical Guide for Ships, or national equivalent medical guide T1



Textbook of Maritime Health T2



Tim Carter: Fitness to drive T3



IMHA/NCMM Handbook for seafarer medical examiners – [handbook.ncmm.no](http://handbook.ncmm.no) T4



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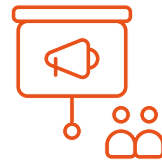
# RESEARCH



Further research into the health and welfare of fishers should be conducted and could include:



**Expansion of existing recognized medical practitioners' training programmes.**



**Review of national training programmes (if any) must be analyzed and may be of use as best practices for a uniform European training programme**



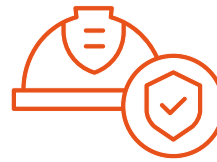
**Review of literature on injuries and diseases of fishers in systematic reviews**



**Review of abstracts of studies presented at the 16th International Symposium on Maritime Medicine, not yet published (see annex)**



**Workshop(s)**



**Analysis of TMAS data for patterns of disease and injury in fishing vessel personnel**



**Publications in IMH Journal**

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# RECOMMENDATIONS



**Organising (a) workshop(s) to consult stakeholders on particular health issues and concerns**



**More literature review on health and mental risks of fishing vessel personnel**



**Organize pilot courses and/or technical support programmes to help developing and organizing courses in different regions of the world**





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# ANNEX 1

Basic Course for Medical  
Examiners of fishers

## Syllabus

NR	Subject	Taught course (hours)	Distance learning (hours)
1	Working at sea	1	
2	The fishing industry	1	
3	Medical treatment possibilities at sea	1	
4	Guidelines for the medical examination of fishers	0,5	1
5	National regulations on the medical examination of fishers	0,5	1
6	Introduction to medical selection	1	
7	Risk assessment in medical assessment	1	
8	Vision and eye disorders	0,5	1
9	Hearing and ear disorders	0,5	1
10	Cardiovascular disease	1	1
11	Epilepsy, loss of consciousness, altered awareness and sleep disorders.	1	
12	Degenerative neurologic conditions	1	
13	Respiratory disease	1	
14	Gastrointestinal disease	1	
15	Genito urinary medicine/Gynecology	0,5	1
16	Musculoskeletal diseases. Physical demands and physical testing.	1	1
17	Infectious diseases	1	1
18	Obesity	0,5	
19	Diabetes mellitus and other endocrine disorders	0,5	
20	Blood disorders	0,5	0,5
21	Malignancies (including leukemia and lymphoma) and immunosuppression	1	
22	Allergies	1	
23	Psychological demands and mental health conditions	1	
24	Medication including complimentary therapies	0,5	
25	Alcohol and drug abuse	1	
26	Oral health and dental inspection	0,5	0,5
27	General Questions and answers	0,5	
28	Evaluation	0,5	
29	Examination	1	
		<b>23</b>	<b>9</b>

1

# Working at sea

learning outcome	time / lecture type	content	documentation
Understand the working environment on board fishing vessels and the demands it places on fishers	Class room teaching 1h	The working environment on board fishing vessels and the demands it places on fishers	Textbook of maritime medicine
		The physical and mental demands placed on fishers	National Fishing Fleet Statistics
		The psycho social challenges for fishers and the impact of isolation and loneliness	
		The key occupational health risks to fishers	
		The pattern of illness and injuries in fishers	The impact of fatigue and sleep deprivation

2

# The fishing industry

learning outcome	time / lecture type	content	documentation
		The regulation of the fishing industry on a national and international basis	Basic fishing methods - a comprehensive guide to commercial fishing methods
		The role of the owner, the insurer, and the skipper	Textbook of maritime medicine
		Fishing areas	National fishing fleet statistics
Understand the nature of the fishing industry	Class room teaching 1h	The different types of vessels	
		The different types of fishing, the equipment used, and the risks involved	
		The different roles on board, numbers of crew, how many roles may be done by one person	

3

## Medical treatment possibilities at sea

learning outcome	time / lecture type	content	documentation
Understand the limited access to medical care on board, and the assistance from ashore and medical evacuation	Class room teaching 1h	The limited access to medical care on board	ICS International Medical Guide for Seafarers and Fishers or national equivalent
		The content of the ship medicine chest	ILO Work in Fishing Convention 2007 C188
		The qualifications of the person in charge of medical care on board	IMO International Convention on ST-CW-F, 1995 as amended
		The potentially limited access to medical assistance from ashore	Cape Town Agreement, 2012
		The capability of telemedical advice to fishing vessels – the limitations and possibilities	
		The limitations and possibilities in maritime sar	
		The different evacuation options, their possibilities and limitations	
The potential impact of any delay in medical assistance from ashore and medical evacuation			



4

## Guidelines for the medical examination of fishers

learning outcome	time / lecture type	content	documentation
Understand the ILO/IMO guidelines and how to apply the guidelines in medical selection	Distant learning 1h and 1/2h class room teaching	ILO/IMO Guidelines for medical examinations of fishers	ILO/IMO Guidelines for medical examinations of fishers
		National equivalent if available	National equivalent if available

5

## National regulations on the medical examination of fishers

learning outcome	time / lecture type	content	documentation
Understand the national regulations for the issue of a medical certificate to fishers	Distant learning 1h and 1/2h class room teaching	National legislation	National legislation on the medical examination of fishers
		Regulation procedure	ILO/IMO Guidelines for medical examinations of fishers
		The procedure for appeals	

6

# Introduction to medical selection

learning outcome	time / lecture type	content	documentation	
Understand the background and principles of medical selection and how to conduct a fisher medical	Class room teaching 1h	Ethical aspects	Brackenridge's Medical Selection – ISBN 978 14039 06762	
		The different role of the doctor in medical selection		
		Types of medical selection		
		Insurances		
		Sound clinical decision-making		
Assessment of physical and mental demands related to job position				
Confidentiality and information				

7

## Risk assessment in medical selection

learning outcome	time / lecture type	content	documentation
		Definition of risk	
		Risk calculation and evaluation	
		Risk matrix	
		Assessment of physical and mental demands related to job position	
Understand the principles of assessing risk with regards to individuals, roles and maritime conditions.	Class room teaching 1h	Evidence-based prognosis assessment of different medical conditions related to job position and demands	
		Confidentiality and information	
		Specialist assessment	
		Individualized risk assessment based on the detailed knowledge of degree of condition, type of treatment, compensatory measures, job position, trade areas and demands	
		Comparison with statutory requirements	

## Vision and eye disorders

learning outcome	time / lecture type	content	documentation
Understand the requirements for visual standards in fishers	Distant learning 1h and 1/2h class room teaching	Standards for vision	ILO/IMO Guidelines for medical examinations of fishers - Appendix A and Table A I/9
		Visual acuity and distance vision	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - H00-99
		Colour vision	
		Visual field	
		Contrast and night vision	
		Monocularity	
		Diplopia and squint	
		Assessment of vision	
		Risk assessment specific to that individual and role	

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# Hearing and ear disorders

learning outcome	time / lecture type	content	documentation
Understand the requirements for hearing for fishers	Distant learning 1h and 1/2h class room teaching	Standards for hearing	ILO/IMO Guidelines for medical examinations of fishers - Appendix B
		Risks of reduced hearing	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - H00-99
		Pure tone audiometry and other methods of assessment	Textbook of maritime medicine
		Decision tree for hearing	
		Noise induced hearing loss	
		Assessment of hearing when using hearing aids	
		Otitis	
Vertigo			

## Cardiovascular disease

learning outcome	time / lecture type	content	documentation
Understand the different disease processes and the risk assessment of fishers with cardiovascular disease	Distant learning 1h and class room teaching 1h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - 100-99
		Risk factors in the general population	Textbook of maritime medicine
		Specific risks for fishers	
		Ischemic heart disease	
		Valvular disease – untreated and after valve replacement	
		Arrhythmia	
		Hypertension	
		CVA/TIA	
		Cardiomyopathy	
		Thromboembolic disease	
The fisher with an AED/pacemaker			
Risk calculation in the certificate period			
Agreed management plan for follow-up care and the impact on certification			

# Epilepsy, loss of consciousness, altered awareness and sleep disorders

learning outcome	time / lecture type	content	documentation
Understand the possible diagnoses and risk assessment of patients with history of a sudden neurological fit/event	Class room teaching 1h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - G00-99
		Differential diagnosis of a sudden loss of consciousness	
		Cerebral vascular accident and transient ischaemic attack	
		Epilepsy and efficacy of treatment	
		Observation periods	
		Risk assessment of fishers with a sudden loss of consciousness	
		Risk calculation in the certificate period	
Management plan for follow-up care and the impact on certification			

## Degenerative neurologic conditions

learning outcome	time / lecture type	content	documentation
Understand the disease progression and risk assessment of patients with a degenerative neurological condition	Class room teaching 1h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - G00-99
		Early signs of possible dementia	
		When is a cognitive test needed?	
		Appropriate tests to screen for dysfunction	
		Risk assessment in cases of reduced cognitive function	
		Risk calculation in the certificate period	
		Agreed management plan for follow-up care and the impact on certification	



# Respiratory disease

learning outcome	time / lecture type	content	documentation
Understand the disease processes and the risk assessment of fishers with respiratory disease	Class room teaching 1h	Cases  Pulmonary Tuberculosis	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - J00-99
		Asthma and COPD	
		Pneumothorax	
		Use of X-ray and pulmonary function tests  Risk calculation in the certificate period  Agreed management plan for follow-up care and the impact on certification	

## Gastrointestinal disease

learning outcome	time / lecture type	content	documentation
Understand the different disease processes and the risk assessment of fishers with gastrointestinal disease	Class room teaching 1h	Hernias	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - K00-99
		Liver and biliary tract disease	Textbook of maritime medicine
		Peptic ulcer	
		Inflammatory bowel disease	
		Return to work after surgery or treatment	
		Risk calculation in the certificate period	
		Agreed management plan for follow-up care and the impact on certification	

# Genito urinary medicine/Gynecology

learning outcome	time / lecture type	content	documentation
Understand the disease process of common GU disorders and their impact on the seafarer and vessel	Distant learning 1h and 1/2h class room teaching	Renal calculi	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - N00-99
		Renal impairment	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - O 00-99
		Gynaecological disease	Textbook of maritime medicine
		Pregnancy	
		Urine testing	
		Risk calculation in the certificate period	Agreed management plan for follow-up care and the impact on certification

## Musculoskeletal diseases. Physical demands and physical testing

learning outcome	time / lecture type	content	documentation
		Physical demands of life at sea – routine tasks and emergency duties	ILO/IMO Guidelines for medical examinations of fishers - Appendix C and Table B 1/9
		Evaluation of the minimal physical abilities of fishers	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - M00-99
		Testing of physical capability	Textbook of maritime medicine
Understand the physical demands, the common musculoskeletal complaints and the assessment of physical ability	Distant learning 1h and class room teaching 1h	Musculoskeletal diseases: lower back pain, osteoarthritis, recurrent soft tissue inflammation	
		Return to work after surgery or treatment	
		Risk calculation in the certificate period	
		Agreed management plan for follow-up care and the impact on certification	

# Infectious diseases

learning outcome	time / lecture type	content	documentation
		HIV and AIDS	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - A00-B99
		Hepatitis	Textbook of maritime medicine
Understand the disease process of infectious diseases and their impact on the fisher and vessel	Distant learning 1h Class room teaching 1h	Risk calculation in the certificate period	Agreed management plan for follow-up care and the impact on certification
		Acute infections & STI	

## Obesity

learning outcome	time / lecture type	content	documentation
Understand obesity and the risks to the fisher and vessel.	Class room teaching 1/2 h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix C and Table B I/9
		BMI and more easy-to-use indexes for highlighting seafarers who need more testing	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - M00-99
		Risks of obesity	Textbook of maritime medicine
		Management strategy	
		Weight itself as problem	
		Man hole, Life boats and rafts	
		Assistance by crew members in cases of injury or illness	
		Problems with MEDEVAC	
		Reduced physical ability	
		Risk calculation in the certificate period	
Agreed management plan for follow-up care and the impact on certification			

# Diabetes mellitus and other endocrine disorders

learning outcome	time / lecture type	content	documentation
Understand the diseases, their treatments and the risks involved for fisher and vessel	Class room teaching 1/2 h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - E00-90
		Insulin-dependent vs non-insulin dependent diabetes	Textbook of maritime medicine
		Impact of new technology to keep glycemia under control	
		Assessing the risk of hypoglycaemia	
		Assessing the risk of long term complications – macro and microvascular	
		Risk calculation in the certificate period	
		Agreed management plan for follow-up care and the impact on certification	

# Blood disorders

learning outcome	time / lecture type	content	documentation
<p>Understand the different disease processes and the risk assessment of fishers with blood disorders</p>	<p>Distant learning 1/2h and Class room teaching 1/2 h</p>	<p>Cases</p>	<p>ILO/IMO Guidelines for medical examinations of fishers - Appendix E - D50-89</p>
		<p>Coagulation disorders</p>	
		<p>Anaemia and haemoglobinopathies</p>	
		<p>Splenectomy</p>	
		<p>Risk calculation in the certificate period</p>	
		<p>Agreed management plan for follow-up care and the impact on certification</p>	



## Malignancies and immunosuppression

learning outcome	time / lecture type	content	documentation
		Assessment of clinical course and prognosis	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - C00-48
		Current treatment and follow-up	
Understand the disease processes and the risk assessment of fishers with a malignant disease	Class room teaching 1h	Limitations and restrictions	
		Risk calculation in the certificate period	
		Agreed management plan for follow-up care and the impact on certification	

# Allergies

learning outcome	time / lecture type	content	documentation
Understand the triggers of allergy and the range of reactions. Assess the risk to the fisher and vessel if a reaction occurs	Class room teaching 1h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix E T78-Z88
		Presentation of allergic reaction and severity	
		Causal factors and possible avoidance	
		Allergic dermatitis	
Risk calculation in the certificate period			
Agreed management plan for follow-up care and the impact on certification			

# Psychological demands and mental health conditions

learning outcome	time / lecture type	content	documentation
Understand the psychological demands on fishers and the impact and risk assessment of mental health issues in fishers	Class room teaching 1h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - F00-99
		The mental demands of life at sea	Textbook of maritime medicine
		Possible assessment tools	
		The role of psychometric testing	
		How to cope with stress and strain	
		Depression and anxiety	
		Bipolar disorders	
		Psychosis	
		Developmental disorders	
		Risk assessment in safety-critical jobs on board ships	
Risk calculation in the certificate period			

## Medication including complimentary therapies

learning outcome	time / lecture type	content	documentation
Understand the benefit and potential adverse effects of various medications within the specific context of the fisher's environment.	Class room teaching 1/2 h	Adverse effects that can be a safety risk to user of the vessel	ILO/IMO Guidelines for medical examinations of fishers - Appendix D
		Use of anticoagulants	
		Need for monitoring of different medications	
		Risk related to discontinuation of medication	
		Difficulties of replenishment in different countries	
		Risk of abuse of certain types of medication	
		Declarations of medication at embarkation	
		Special classes of medication	
		Risk calculation in the certificate period	
		Agreed management plan for follow-up care and the impact on certification	

# Alcohol and drug abuse

learning outcome	time / lecture type	content	documentation
<p>Understand how to assess and identify fishers who misuse or abuse alcohol and drugs and the individual risk assessment of the situation</p>	<p>Class room teaching 1h</p>	<p>Cases</p> <p>Effects of alcohol and drugs in the fishing industry</p>	<p>Textbook of maritime medicine</p>
		<p>Signs that need further investigation</p>	
		<p>Methods of assessment</p>	
		<p>Company procedures for drug testing related to medical examination of fishers</p>	
		<p>Risk assessment in case of known alcohol and drug abuse</p>	
		<p>Risk calculation in the certificate period</p> <p>Agreed management plan for follow-up care and the impact on certification</p>	

## Oral health and dental inspection

learning outcome	time / lecture type	content	documentation
Understand the prevalence and risks of dental disease to the fisher and vessel		Impairment and risks	Textbook of maritime medicine
		Limited care available to fishers	ILO/IMO Guidelines for medical examinations of fishers - Appendix D - K01-K06
	Distant learning 1/2 h and Class room teaching 1/2 h	Need for Dental consultation	
		Risk calculation in the certificate period	
		Agreed management plan for follow-up care and the impact on certification	

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## General questions and answers

learning outcome	time / lecture type	content	documentation
To clarify any questions from the pre course self directed learning	Class room 1/2 h	As requested by participants	

28

## Evaluation

learning outcome	time / lecture type	content	documentation
	Class room 1/2 h	To complete evaluation forms prior to completion of course	

29

## Examination

learning outcome	time / lecture type	content	documentation
	Multiple choice test	1 hour open book examination	



# Course faculty manual

## 1. General considerations

---

- 1.1** The course "package" should be studied carefully; in particular, the course syllabus and associated material must be attentively and thoroughly studied. This is vital if a clear understanding is to be obtained of what is required, in terms of resources necessary to successfully implement the course.
- 1.2** Ensure that all necessary actions and activities are being carried out in good time and in an effective manner. Allow the status of the preparation procedures to be monitored, and help in identifying the remedial actions necessary to meet deadlines. It will be necessary to hold meetings of all those concerned in presenting the course from time to time in order to assess the status of the preparation and "trouble-shoot" any difficulties.
- 1.3** The course syllabus should be discussed with the teaching staff who are to present the course, and their views received on the particular parts they are to present. A study of the syllabus will determine whether the incoming trainees need preparatory work to meet the entry standard. The detailed teaching syllabus is constructed in "training outcome" format. Each specific outcome states precisely what the trainee must do to show that the outcome has been achieved.
- 1.4** The teaching staff who are to present the course should construct notes or lesson plans to achieve these outcomes.
- 1.5** It is important that the staff who present the course convey, to the person in charge of the course, their assessment of the course as it progresses.

## 2. Specific considerations

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### 2.1 Scope of course

2.2.1 In reviewing the scope of the course, the instructor should determine whether it needs any adjustment in order to meet additional local or national requirements.

### 2.2 Course objective

2.2.1 The course objective, as stated in the course material, should be very carefully considered so that its meaning is fully understood. Does the course objective require expansion to encompass any additional task that national or local requirements will impose upon those who successfully complete the course? Conversely,

are there elements included which are not validated by national industry requirements?

2.2.2 It is important that any subsequent assessment made of the course should include a review of the course objectives.

### 2.3 Entry standards

2.3.1 If the entry standard will not be met by your intended trainee intake, those entering the course should first be required to complete an upgrading course to raise them to the entry level. Alternatively, those parts of the course affected could be augmented





by inserting course material which will cover the knowledge required.

2.3.2 If the entry standard will be exceeded by your planned trainee intake, you may wish to abridge or omit those parts of the course the teaching of which would be unnecessary, or which could be dealt with as revision.

2.3.3 Study the course material with the above questions in mind and with a view to assessing whether or not it will be necessary for the trainees to carry out preparatory work prior to joining the course. Preparatory material for the trainees can range from refresher notes, selected topics from textbooks and reading of selected technical papers, through to formal courses of instruction. It may be necessary to use a combination of preparatory work and the model course material in modified form. It must be emphasized that where the model course material involves an international requirement, such as a regulation of the International Convention on Standards of Training, Certification and Watchkeeping (STCW) 1978, as amended, the standard must not be relaxed; in many instances, the intention of the Convention is to require review, revision or increased depth of knowledge by candidates undergoing training for higher certificates.

## **2.4 Course certificate, diploma or document**

Where a certificate, diploma or document is to be issued to trainees who successfully complete the course, ensure that this is available and properly worded and that the industry and all authorities concerned are fully aware of its purpose and intent.

## **2.5 Course intake limitations**

2.5.1 The course designers have recommended limitations regarding the number of trainees who may participate in the course. As far as possible, these limitations should not be exceeded; otherwise, the quality of the course will be diluted.

2.5.2 It may be necessary to make arrangements for accommodating the trainees and providing facilities for food and transportation. These aspects must be considered at an early stage of the preparations.

## **2.6 Staff requirements**

2.6.1 It is important that an experienced person, preferably someone with experience in course and curriculum development, is given the responsibility of implementing the course.

2.6.2 Such a person is often termed as “course- coordinator” or “ course director” Other staff, such as lecturers, instructors, workshop instructors, etc., will be needed to implement the course effectively. Staff involved in presenting the course will need to be properly briefed about the course work they will be dealing with, and a system must be set up for checking the material they may be required to prepare. To do this, it will be essential to make a thorough study of the syllabus and apportion the parts of the course work according to the abilities of the staff called upon to present the work.

2.6.3 The person responsible for implementing the course should consider monitoring the quality of teaching in such areas as variety and form of approach relationship with trainees, and communicative and

interactive skills; where necessary, this person should also provide appropriate counselling and support.

## 2.7 Teaching facilities and equipment

### *Rooms and other services*

2.7.1 It is important to make reservations as soon as is practicable for the use of lecture rooms, laboratories, workshops and other spaces.

### *Equipment*

2.7.2 Arrangements must be made at an early stage for the use of equipment needed in the spaces mentioned in 3.7.1 to support and carry through the work of the course.



## 2.8 Teaching aids

Any training aids specified as being essential to the course should be constructed, or checked for availability and working order.

## 2.9 Audio-visual aids

Audio-visual aids (AVA) may be recommended in order to reinforce the learning process in some parts of the course.

Check through any illustrations provided in the course and arrange them in order of presentation.

If you order power points or video indicated in the course framework, check through them and arrange them in order of presentation.

Computers are checked on compatibility with the projector and screens with the available software.

Any useful supplementary source material is identified by the course designers and listed. This list should be supplied to the participants so that they are aware where additional information can be obtained.

If a timetable is provided in a model course, it is for guidance only. It may only take one or two presentations of the course to achieve an optimal timetable. However, even then it must be borne in mind that any timetable is subject to variation, depending on the general needs of the trainees in any one class and the availability of instructors and equipment.





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# ANNEX 2

Module for Medical  
Examiners of Fishers

Syllabus

NR	Subject	Taught course (hours)	Distance learning (hours)
1	Working at sea	1	
2	The fishing industry	1	
3	Medical treatment possibilities at sea	1	
4	Guidelines for the medical examination of fishers		1
5	National regulations on the medical examination of fishers		1
6	Respiratory disease	0,5	
7	Musculoskeletal diseases. Physical demands and physical testing.	0,5	
8	Allergies	0,5	
9	Dermatology	0,5	
10	Psychological demands and mental health conditions	0,5	
11	Medication including complimentary therapies	0,5	
12	Alcohol and drug abuse	0,5	
13	General Questions and answers	0,25	
14	Evaluation	0,25	
15	Examination	1	
		<b>8</b>	<b>2</b>

1

# Working at sea

learning outcome	time / lecture type	content	documentation
Understand the working environment on board fishing vessels and the demands it places on fishers.	Class room teaching 1h	The working environment on board fishing vessels and the demands it places on fishers	Textbook of maritime medicine
		The physical and mental demands placed on fishers	National fishing fleet statistics
		The psycho social challenges for fishers and the impact of isolation and loneliness	
		The key occupational health risks to fishers	
		The pattern of illness and injuries in fishers	
The impact of fatigue and sleep deprivation			

2

## The fishing industry

learning outcome	time / lecture type	content	documentation
		The regulation of the fishing industry on a national and international basis	Basic fishing methods - a comprehensive guide to commercial fishing methods
		The role of the owner, the insurer, and the skipper	Textbook of maritime medicine
		Fishing areas	National fishing fleet statistics
Understand the nature of the fishing industry.	Class room teaching 1h	The different types of vessels	
		The different types of fishing, the equipment used, and the risks involved	
		The different roles on board, numbers of crew, how many roles may be done by one person	

3

## Medical treatment possibilities at sea

learning outcome	time / lecture type	content	documentation
Understand the limited access to medical care on board, and the delay in medical assistance from ashore and medical evacuation	Class room teaching 1h	The limited access to medical care on board	ICS International Medical Guide for Seafarers and Fishers or national equivalent
		The content of the ship medicine chest	ILO Work in Fishing Convention 2007 C188
		The qualifications of the person in charge of medical care on board	IMO International Convention on ST-CW-F, 1995 as amended
		The potentially limited access to medical assistance from ashore	Cape Town Agreement, 2012
		The capability of telemedical advice to fishing vessels – the limitations and possibilities	
		The limitations and possibilities in maritime SAR	
		The different evacuation options, their possibilities and limitations	
The potential impact of any delay in medical assistance from ashore and medical evacuation			



4

## Guidelines for the medical examination of fishers

learning outcome	time / lecture type	content	documentation
Understand the ILO/IMO guidelines and how to apply the guidelines in medical selection	Distant learning 1h	ILO/IMO Guidelines for medical examinations of fishers	ILO/IMO Guidelines for medical examinations of fishers
		National equivalent if available	National equivalent if available

5

## National regulations on the medical examination of fishers

learning outcome	time / lecture type	content	documentation
Understand the national regulations for the issue of a medical certificate to fishers	Distant learning 1h	National legislation	national legislation on the medical examination of fishers
		Regulation procedure	ILO/IMO Guidelines for medical examinations of fishers
		The procedure for appeals	

6

# Respiratory disease

learning outcome	time / lecture type	content	documentation
Understand the disease processes and the risk assessment of fishers with respiratory disease	Class room teaching 1/2 h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - J00-99
		Causal factors related to fishing and possible avoidance	
		Pulmonary Tuberculosis	
		Asthma and COPD	
		Pneumothorax	
		Use of X-ray and pulmonary function tests	
		Risk calculation in the certificate period	
Agreed management plan for follow-up care and the impact on certification			

7

## Musculoskeletal diseases. Physical demands and physical testing

learning outcome	time / lecture type	content	documentation
Understand the physical demands, the common musculoskeletal complaints and the assessment of physical ability	Class room teaching 1/2 h	Physical demands of life at sea – routine tasks and emergency duties	ILO/IMO Guidelines for medical examinations of fishers - Appendix C and Table B I/9
		Evaluation of the minimal physical abilities of fishers	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - M00-99
		Testing of physical capability	Textbook of maritime medicine
		Causal factors related to fishing and possible avoidance	
		Return to work after surgery or treatment	
		Risk calculation in the certificate period	
Agreed management plan for follow-up care and the impact on certification			

# Allergies

learning outcome	time / lecture type	content	documentation
<p>Understand the triggers of allergy and the range of reactions. Assess the risk to the fisher and vessel if a reaction occurs</p>	<p>Class room teaching 1/2 h</p>	<p>Presentation of allergic reaction and severity</p> <p>Causal factors related to fishing and possible avoidance</p>	<p>ILO/IMO Guidelines for medical examinations of fishers - Appendix E T78-Z88</p>
		<p>Risk calculation in the certificate period</p>	
		<p>Agreed management plan for follow-up care and the impact on certification</p>	

9

# Dermatology

learning outcome	time / lecture type	content	documentation
		Presentation of dermatologic reaction and severity	ILO/IMO Guidelines for medical examinations of fishers - Appendix E L00-99
Understand the triggers of skin diseases in fishing and the range of reactions. Assess the risk to the fisher and vessel if a reaction occurs	Class room teaching 1/2 h	Causal factors related to fishing and possible avoidance	
		Allergic dermatitis	
		Risk calculation in the certificate period	
		Agreed management plan for follow-up care and the impact on certification	

## Psychological demands and mental health conditions

learning outcome	time / lecture type	content	documentation
Understand the psychological demands on fishers and the impact and risk assessment of mental health issues in fishers	Class room teaching 1/2 h	Cases	ILO/IMO Guidelines for medical examinations of fishers - Appendix E - F00-99
		The mental demands of life at sea	Textbook of maritime medicine
		Possible assessment tools	
		The role of psychometric testing	
		How to cope with stress and strain	
		Depression and anxiety	
		Bipolar disorders	
		Psychosis	
		Developmental disorders	
		Risk assessment in safety-critical jobs on board ships	
Risk calculation in the certificate period			
Agreed management plan for follow-up care and the impact on certification			

# Psychological demands and mental health conditions

learning outcome	time / lecture type	content	documentation
Understand the benefit and potential adverse effects of various medications within the specific context of the fisher's environment.	Class room teaching 1/2 h	Adverse effects that can be a safety risk to user of the vessel	ILO/IMO Guidelines for medical examinations of fishers - Appendix D
		Use of anticoagulants	
		Need for monitoring of different medications	
		Risk related to discontinuation of medication	
		Difficulties of replenishment in different countries	
		Risk of abuse of certain types of medication	
		Declarations of medication at embarkation	
		Special classes of medication	
		Risk calculation in the certificate period	
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## Alcohol and drug abuse

learning outcome	time / lecture type	content	documentation
Understand how to assess and identify fishers who misuse or abuse alcohol and drugs and the individual risk assessment of the situation	Class room teaching 1/2 h	Cases	Textbook of maritime medicine
		Effects of alcohol and drugs in the fishing industry	
		Signs that need further investigation	
		Methods of assessment	
		Company procedures for drug testing related to medical examination of fishers	
		Risk assessment in case of known alcohol and drug abuse	
Risk calculation in the certificate period			
Agreed management plan for follow-up care and the impact on certification			



13

## General questions and answers

learning outcome	time / lecture type	content	documentation
	Class room 1/4 h	As requested by participants	

14

## Evaluation

learning outcome	time / lecture type	content	documentation
	Class room 1/4 h	To complete evaluation forms prior to completion of course	

15

## Examination

learning outcome	time / lecture type	content	documentation
	Multiple choice test	1 hour open book examination	



# Course faculty manual

## 1. General considerations

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- 1.1** The course “package” should be studied carefully; in particular, the course syllabus and associated material must be attentively and thoroughly studied. This is vital if a clear understanding is to be obtained of what is required, in terms of resources necessary to successfully implement the course.
- 1.2** Ensure that all necessary actions and activities are being carried out in good time and in an effective manner. Allow the status of the preparation procedures to be monitored, and help in identifying the remedial actions necessary to meet deadlines. It will be necessary to hold meetings of all those concerned in presenting the course from time to time in order to assess the status of the preparation and “trouble-shoot” any difficulties.
- 1.3** The course syllabus should be discussed with the teaching staff who are to present the course, and their views received on the particular parts they are to present. A study of the syllabus will determine whether the incoming trainees need preparatory work to meet the entry standard. The detailed teaching syllabus is constructed in “training outcome” format. Each specific outcome states precisely what the trainee must do to show that the outcome has been achieved.
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This training programme for medical practitioners in the medical examinations of fishers has been developed by the **International Maritime Health Association with the support of the European Transport Workers' Federation (ETF) and the Association of National Organizations of Fishing Enterprises in the European Union (Europêche)** as a pillar of the EU co-funded project called 'Pillars of the Sea 3: Project implementing part of the SSDC Work Programme roadmap towards socially sustainable fishing.





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